PART A

IONOSPHERIC DATA

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

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NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
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IONOSPHERIC DATA

The CRPL-F series bulletins are issued as part of the responsibility of the Central Radio Propagation Laboratory for the exchange and dissemination of ionospheric and related geophysical data. While originally a by-product of the collection of data by the CRPL for use in radio propagation studies, the CRPL-F series bulletins, Part A, "Ionospheric Data," and Part B, "Solar-Geophysical Data," have provided useful service by collecting and making available a wide variety of data in convenient form for use in research, not only on radio propagation and the ionosphere, but also on a wide variety of geophysical problems. Beginning with this issue CRPL-F 211, Part A, "Ionospheric Data," a number of changes have been made in the tables of ionospheric data which, by providing more information, should increase their usefulness.

The new form of the tables provides the monthly medians and, in addition, the number of values entering into median determination (count) for all ionospheric characteristics listed. Also, the upper and lower quartile values, indicated by UQ and LQ in the tables, are listed for foF2, h'F2, h'F, and (M3000)F2. Quartile values are not listed for the other characteristics because of space limitations. The tables are prepared by IBM machine methods, which, by improving the speed and efficiency of preparation, permit earlier publication of the data.

Graphs of critical frequencies and (M3000)F2 will continue to appear as in past issues. Graphs of percentage of time of occurrence for fEs and virtual heights of the regular ionospheric layers will no longer appear. This change is necessary to provide space for the enlarged tables. Data on percentage of time of occurrence of fEs above 3, 5, and 7 Mc will still be available from the CRPL and the IGY World Data Center A for Airglow and Ionosphere.

For many years, the tables of ionospheric data appearing in the F-series, Part A, listed values of medians recomputed at CRPL. While this practice enforced a certain uniformity, it is subject to some valid criticism for tampering with original data. The tables and graphs now show the ionospheric data just as they are provided by the originating laboratory. Responsibility for the accuracy and reliability of the data now rests entirely with the originator.

Gaps in the tables when data normally might be expected indicate the data were not provided by the originator. Following the recommendation of the World-Wide Soundings Committee, only values of median foEs are listed. In the few cases where fEs is still reported instead of foEs, the data will not be printed. Data will appear in the F-series, Part A, only when the complete daily-hourly tabulations have been received by the CRPL or the IGY World Data Center A for Airglow and Ionosphere.

Information on symbols, terminology, and conventions may be found in the "URSI Handbook of Ionogram Interpretation and Reduction, of the World-Wide Soundings Committee," edited by W. R. Piggott and K. Rawer (Elsevier, 1961), which supersedes previous documents. A list of symbols is available from CRPL on request.

The following table contains the latest available information on smoothed observed Zurich sunspot numbers, beginning with the minimum of April 1954. Final numbers are listed through June 1961, the succeeding values being based on provisional data.

Smoothed Observed Sunspot Number

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	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	109	102	98	93	88	84
1961	80	75	69	64	60	56	53	52				
1962												

Units of Ionospheric Data Tables

foF2, foF1, foEs - Tenths of a megacycle
foE - - - - - - - Hundredths of a megacycle
h'F2, h'F, h'E - - Kilometers
(M3000)F2 - - - - Hundredths

MED - Median
CNT - Count
UQ - Upper Quartile
LQ - Lower Quartile

WORLD-WIDE SOURCES OF IONOSPHERIC DATA

The ionospheric data given here in tables 1 to 88 and figures 1 to 88 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:

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

Australian Department of National Development, Bureau of Mineral Resources, Geology and Geophysics:
- Mundaring, Western Australia

University of Graz:
- Graz, Austria

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

British Department of Scientific and Industrial Research, Radio Research Board:
- Halley Bay
- 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

Universidad de Concepcion:
- Concepcion, Chile

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

Czechoslovak Academy of Sciences:
Pruhonice, Czechoslovakia

General Direction of Posts and Telegraphs, Helsinki, Finland:
Nurmijarvi, 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
Tananarive, Madagascar
Terre Adelie

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

Christchurch Geophysical Observatory, New Zealand Department of Scientific and Industrial Research:
Christchurch, New Zealand

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

Manila Observatory:
Baguio, P. I.

Institute of Terrestrial Magnetism, Ionosphere and Radio Propagation, Moscow, U.S.S.R.:
Murmansk

South African Council for Scientific and Industrial Research:
Marion I., Union of South Africa

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

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

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

United States Army Signal Corps:
Adak, Alaska
White Sands, New Mexico

National Bureau of Standards (Central Radio Propagation Laboratory):
Anchorage, Alaska
Boulder, Colorado
Byrd Station, Antarctica
Pole Station, Antarctica

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 AF8, PUERTO RICO 60 W 1 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	2	2	2	2	2	2	2	2	1	1	1	0
HMIN	248	251	219	218	201	198	216	108	109	103	109	108
SCAT	46.3	36.6	45.3	45.5	36.5	60.8	50.3	42.7	34.3	44.1	40.8	30.2
HMAXF	343	323	305	291	257	305	321	258	246	255	258	254
SHMAX	98	87	116	95	62	90	77	283	384	545	681	653
KM												
350	158											
340	158											
330	155	183					110					
320	148	183					109					
310	138	177	206			118	108					
300	125	165	205	182		118	105					
290	107	144	200	182		117	98.9					
280	85.2	112	190	179		114	91.8					
270	59.5	75.2	176	172		109	83.4					
260	35.5	37.2	151	161	155	102	73.0	428		779	1022	1131
250	12.4		116	141	153	94.7	60.2	424	621	777	1012	1127
240			75.6	109	146	84.6	44.8	408	617	757	972	1073
230			40.4	62.9	135	70.2	29.9	381	588	718	901	957
220			12.4	18.4	102	51.5	15.0	339	533	660	791	769
210					47.9	32.5		270	440	556	623	549
200						12.4		205	339	431	453	397
190								151	269	325	340	325
180								112	218	260	283	286
170								87.2	179	214	248	259
160								70.9	149	177	219	231
150								61.6	125	144	186	198
140								58.2	110	127	157	168
130								54.1	97.4	118	141	152
120								47.5	86.2	114	127	143
110								20.5	32.9	97.5	37.2	43.7

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 1 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	0	0	2	A2	A2	A1	S1	1	A0	A0	0	0
HMIN	109	103	102	106	109		100	215	200	237	238	231
SCAT	42.7	33.6	36.6	34.4	34.3		41.0	32.5	30.9	50.7	53.1	54.5
HMAXF	258	256	249	253	248		283	282	251	340	343	337
SHMAX	678	649	593	575	473		430	290	104	107	113	120
KM												
350										163	163	
340										163	163	171
330										161	161	170
320										156	156	167
310										148	148	160
300										137	137	151
290							642	710		121	120	138
280							641	710		98.0	100	121
270							627	686		73.4	79.2	98.1
260	980	985		898			592	631	283	50.7	56.8	73.2
250	972	978	911	897	894		540	530	283	32.3	33.7	49.5
240	936	931	896	866	883		480	365	274	15.4	12.4	27.8
230	876	839	846	797	834		408	155	250			
220	777	694	762	689	748		324	41.0	208			
210	626	543	631	549	578		235		131			
200	460	419	480	418	357		162		12.4			
190	348	347	367	327	234		109					
180	294	307	298	269	183		76.3					
170	258	281	261	234	149		56.4					
160	222	257	235	209	124		43.7					
150	192	228	206	189	107		35.6					
140	170	190	172	160	95.0		30.7					
130	156	161	147	132	87.0		28.2					
120	149	147	134	118	83.2		26.9					
110	37.2	92.2	108	83.4	25.1		24.2					
100							13.0					

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 2 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	0	0	2	2	2	2	2	2	A2	A2	2	A1
HMIN	258	269	243	222	204	207	227	109	108	107	105	
SCAT	49.7	36.1	38.8	37.1	26.4	43.2	42.4	35.4	34.2	35.1	48.6	
HMAXF	353	343	321	287	251	272	317	244	253	260	273	
SHMAX	103	83	100	93	59	54	61	218	456	592	745	
KM												
360	163											
350	163	170										
340	160	170										
330	154	165	197									
320	145	152	197				103					
310	132	135	193				102					
300	113	108	182				98.8					
290	89.4	76.5	165	211			92.5					
280	63.6	45.2	139	209		108	83.0				923	
270	38.2	12.4	103	200		108	70.3			967	922	
260	12.4		65.8	183	188	106	56.1		744	967	907	
250			33.1	151	188	101	41.2	364	742	947	871	
240				103	179	93.0	27.2	363	715	885	813	
230				45.6	157	80.1	12.4	350	658	789	742	
220					102	58.9		322	556	635	646	
210					34.4	25.5		281	429	471	538	
200								230	331	347	435	
190								176	261	272	348	
180								129	212	224	286	
170								93.0	177	186	242	
160								70.1	148	152	203	
150								59.8	125	133	169	
140								54.7	111	123	149	
130								46.4	99.7	117	138	
120								39.8	87.4	110	133	
110								12.4	30.1	39.4	94.2	

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 2 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	1	A1	A1	A1	A1	A1	A1	1	2	A2	A2	3
HMIN	107				107			200	219	282	229	238
SCAT	36.2				40.3			48.2	38.7	42.7	38.1	48.0
HMAXF	273				256			282	298	354	311	334
SHMAX	711				662			203	92	86	97	100
KM												
360										167		
350										166		
340										162		155
330										153		155
320										139	188	152
310										117	188	145
300									179	88.3	184	136
290	*							356	177	44.8	173	122
280	1031							356	169		156	105
270	1029							351	156		131	85.1
260	996				1080			338	135		99.6	63.0
250	923				1073			318	104		67.7	37.0
240	807				1036			288	68.6		38.3	12.4
230	637				966			239	39.0		12.4	
220	474				854			166	12.4			
210	370				685			81.6				
200	314				491			12.4				
190	283				318							
180	264				226							
170	248				186							
160	218				156							
150	186				131							
140	163				113							
130	150				102							
120	144				95.7							
110	63.4				42.2							

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO — 60 W — 3 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	3	3	2	2	2	1	1	1	0	A0	0	0
HMIN	277	237	220	232	210	207	248	111	108	110	105	108
SCAT	41.9	34.9	44.9	45.9	23.6	49.9	56.1	36.2	33.0	39.3	38.5	35.6
HMAXF	359	315	308	316	252	313	339	255	249	256	263	261
SHMAX	94	100	120	117	56	73	69	252	396	557	662	725
KM												
360	170											
350	168											
340	161						106					
330	150						105					
320	133	206		206		103	103					
310	108	205	214	205		103	98.8					
300	80.2	196	213	199		101	93.0					
290	50.4	179	205	189		97.6	83.8					
280	21.4	153	194	174		91.6	68.9					
270		120	174	148		83.9	51.1				985	1147
260		80.2	144	115	193	74.5	33.2	428		819	984	1146
250		43.3	102	75.8	193	63.8	12.4	426	747	815	958	1117
240		16.2	61.5	35.8	182	52.3		410	732	787	897	1041
230			32.3		152	39.5		378	682	730	805	922
220					88.7	26.9		319	594	652	661	736
210					12.4	12.4		244	429	546	506	505
200								179	276	429	380	382
190								131	195	336	308	315
180								97.6	148	269	265	277
170								76.4	111	220	234	249
160								63.8	95.5	183	204	227
150								56.6	89.4	155	168	201
140								52.7	85.7	133	145	172
130								44.5	83.8	120	135	154
120								36.2	81.8	114	129	145
110									28.9	12.4	56.9	81.7

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO — 60 W — 3 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	0	A0	A0	A0	A0	A1	A1	A1	1	1	1	0
HMIN	107				108			199	209	254	243	237
SCAT	46.4				35.6			42.9	60.3	44.2	48.3	39.5
HMAXF	280				265			284	331	336	325	320
SHMAX	874				611			139	107	96	110	96
KM												
340									128	171		
330									128	170	187	178
320									127	165	186	178
310									124	156	182	175
300									120	142	174	167
290								257	113	120	163	152
280	1115							256	106	91.3	143	132
270	1103				1031			250	96.8	60.4	117	106
260	1064				1026			237	86.6	31.4	83.2	76.2
250	999				983			216	74.7		38.1	43.3
240	905				897			182	61.2			16.2
230	771				771			138	46.9			
220	620				595			84.7	31.8			
210	493				428			41.8	4.7			
200	387				302			12.4				
190	322				228							
180	287				182							
170	259				146							
160	230				116							
150	199				98.1							
140	171				68.9							
130	154				83.2							
120	146				80.0							
110	109				57.2							

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO — 60 W — 4 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	0	0	0	0	0	A0	0	0	0	0	0	1
HMIN	250	229	242	220	209	199	238	110	103	105	105	109
SCAT	44.4	43.9	33.0	31.5	29.1	59.3	51.6	27.1	39.1	30.5	40.1	38.8
HMAXF	328	320	310	280	258	295	331	237	247	245	253	267
SHMAX	102	107	93	87	70	74	67	195	438	485	621	798
KM												
340							103					
330	187						103					
320	185	186					102					
310	179	184	213				98.9					
300	168	177	208			103	93.9					
290	151	165	193			103	86.9					
280	125	147	170	226		102	76.2					
270	90.1	122	134	220		98.7	61.6					1126
260	50.6	89.8	84.4	203	206	94.3	45.4				894	1115
250	1.7	58.9	37.2	170	202	88.6	30.4		701	782	893	1069
240		33.9		107	186	81.0	12.4	411	696	777	872	987
230		4.7		49.7	154	70.2		403	669	734	824	855
220				1.7	82.6	55.1		368	621	650	747	687
210					12.4	38.4		307	544	534	633	545
200						12.4		217	428	423	500	429
190								136	305	341	379	355
180								90.8	228	283	308	309
170								69.0	178	238	266	280
160								58.9	144	204	238	255
150								54.1	120	177	209	230
140								51.8	105	155	178	202
130								42.3	92.1	133	155	174
120								37.9	81.6	118	136	148
110								12.4	66.4	92.9	115	56.4

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO — 60 W — 4 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	1	1	2	2	A2	S3	A3	3	3	3	3	3
HMIN	107	106	108	103	103			200	209	229	251	271
SCAT	36.2	41.3	40.4	47.9	40.9			38.4	70.2	60.3	48.3	40.3
HMAXF	262	271	253	274	262			271	325	331	346	346
SHMAX	691	789	616	688	632			165	149	134	109	87
KM												
350											176	169
340										166	175	168
330									176	186	171	162
320									176	184	163	151
310									174	180	152	134
300									170	173	133	110
290									165	165	110	78.3
280		1075		858				342	158	152	82.3	41.8
270	999	1075		856	941			341	148	132	53.5	
260	998	1057	923	839	940			334	137	107	28.3	
250	970	1008	922	803	922			315	123	75.2		
240	902	927	901	746	875			284	102	42.2		
230	805	810	848	672	799			234	74.3	12.4		
220	670	664	771	578	698			166	42.6			
210	533	528	647	477	561			88.8	12.4			
200	422	414	490	385	428			12.4				
190	343	335	358	313	309							
180	294	288	287	261	235							
170	263	261	250	224	194							
160	233	237	219	191	161							
150	201	206	188	154	134							
140	177	172	159	133	114							
130	161	153	141	122	101							
120	151	146	133	116	91.1							
110	88.1	85.5	80.4	83.5	85.8							

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 5 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	3	3	3	3	3	3	83	3	A5	5	5	A3
HM1N	267	218	221	228	249	189		109	105	108	107	105
SCAT	45.9	43.8	33.8	43.7	48.2	58.1		34.6	41.9	38.7	38.1	58.6
HMAXF	355	311	287	305	336	281		249	265	266	256	289
SHMAX	98	109	86	98	104	84		253	454	693	643	936
KM												
360	162											
350	161											
340	158				176							
330	150				175							
320	138	188			171							
310	122	188		187	163							
300	102	185		186	152							
290	77.8	177	202	181	132	121						1022
280	52.3	165	200	171	105	121						1016
270	21.5	145	189	156	74.4	120			648	1080		996
260		120	169	130	41.8	117			645	1073	1017	961
250		87.3	133	91.4	12.4	112		428	626	1033	1010	911
240		57.9	81.3	47.5		105		421	588	956	970	845
230		33.1	38.9	16.8		96.8		397	531	846	895	762
220		12.4				85.9		354	445	682	786	644
210						71.1		290	359	490	618	528
200						49.9		223	288	354	462	427
190						12.4		163	228	275	332	350
180								120	179	227	252	298
170								92.8	140	191	204	263
160								75.8	112	158	165	231
150								64.8	98.8	133	148	198
140								59.9	76.8	120	138	171
130								50.4	69.9	113	133	153
120								41.7	66.9	109	126	144
110								23.4	60.2	70.6	56.9	111

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 5 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	A3	A3	2	2	2	S4	S4	4	3	3	3	4
HM1N			107	107	109			229	229	200	211	249
SCAT			56.6	43.1	47.5			37.0	47.5	48.8	41.7	73.4
HMAXF			295	281	271			314	328	308	292	380
SHMAX			1204	1055	835			229	246	248	173	163
KM												
390												176
380												176
370												175
360												173
350												169
340												163
330									342			156
320								450	389			146
310								449	378	392		134
300			1411					433	358	390	335	121
290			1408	1533				401	330	379	335	105
280			1387	1532	1131			353	291	361	329	85.4
270			1344	1508	1131			284	237	334	313	65.5
260			1275	1441	1116			205	176	294	287	40.4
250			1191	1338	1075			129	116	238	247	12.4
240			1072	1168	1005			62.7	58.4	176	185	
230			914	932	922			12.4	12.4	108	106	
220			729	702	820					63.0	41.8	
210			557	514	697					31.8		
200			417	386	541							
190			330	310	385							
180			277	261	264							
170			243	227	196							
160			220	201	162							
150			194	177	136							
140			167	153	116							
130			148	131	100							
120			138	117	92.1							
110			100	93.6	38.1							

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 6 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	4	4	5	5	5	4	A4	S4	2	A2	2	1
HM1N	249	247	249	244	208	179	257	108	107	104	107	106
SCAT	60.0	43.7	57.1	48.4	33.3	75.7	61.8	34.5	44.9	44.1	37.3	35.0
HMAXF	352	342	350	332	266	286	358	250	260	270	273	249
SHMAX	142	134	153	128	99	75	82	240	498	576	899	699
KM												
360	197						112					
350	196	225	223				112					
340	195	224	221	214			110					
330	190	220	216	214			106					
320	183	210	207	211			102					
310	173	195	197	203			95.1					
300	159	172	178	191			84.6					
290	137	143	151	172		85.8	70.9					
280	111	110	119	144		85.7	54.4				1457	
270	79.2	73.9	78.9	109	243	84.8	37.3		714	782	1455	
260	46.8	42.6	41.5	65.1	241	83.3	16.0		714	773	1413	
250	12.4	16.2	12.4	28.5	228	80.9		424	705	743	1319	1179
240					205	77.4		416	678	694	1152	1160
230					165	73.7		390	634	622	895	1094
220					99.9	69.7		344	570	515	644	978
210					26.2	65.2		270	473	402	458	788
200						58.8		194	365	318	359	569
190						45.0		140	276	257	302	392
180						12.4		101	211	217	263	309
170								76.5	165	177	225	265
160								62.8	133	137	186	232
150								55.2	113	121	152	203
140								52.0	102	113	138	171
130								44.8	88.6	108	130	149
120								39.6	76.4	105	126	140
110								19.3	39.4	99.2	77.4	125

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 6 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	1	1	1	A1	1	A2	S2	2	3	3	3	3
HM1N	108	105	103	104	106			200	199	249	250	245
SCAT	52.4	43.8	39.5	31.6	37.7			52.1	61.7	55.4	44.6	49.7
HMAXF	280	282	273	256	248			281	316	360	349	344
SHMAX	760	946	979	762	556			150	122	122	112	127
KM												
370										169		
360										169		
350										167	182	196
340										163	180	195
330										156	173	192
320									148	147	161	184
310									148	132	146	173
300									146	115	124	156
290	819	1217						244	142	93.7	97.9	134
280	819	1217	1470					244	136	72.0	72.4	107
270	812	1194	1468					241	128	50.5	48.7	77.2
260	789	1139	1431	1491				234	118	30.4	28.0	45.7
250	751	1053	1344	1476	923			222	106	6.4	1.9	20.7
240	699	929	1213	1391	913			206	93.8			
230	634	771	1020	1230	871			182	79.1			
220	560	614	781	931	796			146	61.1			
210	486	488	561	559	691			94.8	40.1			
200	419	398	407	356	533			12.4	12.4			
190	364	340	328	270	376							
180	319	301	282	227	259							
170	284	271	252	194	198							
160	255	245	224	165	161							
150	225	219	198	144	131							
140	191	195	171	130	109							
130	165	168	153	122	95.3							
120	153	150	142	117	88.8							
110	81.0	129	134	113	80.8							

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 7 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	3	3	4	4	4	5	5	S5	4	4	4	5
HMIN	248	239	229	202	200	249	237		108	107	105	105
SCAT	42.9	52.1	39.9	35.8	67.2	57.4	65.3		35.0	40.8	51.8	45.6
HMAXF	331	332	310	261	301	348	350		245	263	299	285
SHMAX	116	131	119	114	104	102	131		385	644	925	1014
KM												
360							167					
350						146	167					
340	210	204				145	166					
330	210	204				142	163					
320	206	201	226			137	158					
310	197	195	226		130	130	152					
300	183	185	222		130	119	142				1031	
290	161	170	211		129	104	128				1024	1292
280	131	149	194		127	84.3	110				997	1289
270	93.9	119	167	271	123	63.2	87.6			882	950	1258
260	55.8	82.2	133	271	117	40.1	64.1			881	885	1195
250	17.2	46.0	90.1	265	111	12.4	40.9		619	859	803	1102
240		12.4	50.5	248	104		16.2		616	810	704	980
230			12.4	219	96.1				591	736	610	823
220				168	85.9				542	639	504	660
210				73.6	62.0				462	527	410	527
200					12.4				365	426	341	418
190									279	341	293	345
180									221	283	254	299
170									182	243	219	262
160									150	209	185	229
150									127	177	156	197
140									107	157	143	164
130									93.0	131	136	151
120									84.5	115	132	145
110									49.0	90.6	106	125

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 7 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	5	A5	A6	[illegible]	6	5	55	5	[illegible]	[illegible]	6	4
HMIN	105	107	103	[illegible]	105	105	100	200	[illegible]	[illegible]	[illegible]	214
SCAT	47.7	39.4	48.1	48.9	49.3	49.5	53.5	42.3	47.4	[illegible]	[illegible]	[illegible]
HMAXF	303	285	289	298	282	292	304	294	28[illegible]	[illegible]	303	352
SHMAX	1279	1240	1279	1187	961	912	853	611	199	[illegible]	129	176
KM												
370										265		
360										255		214
350										2[illegible]		214
340										2[illegible]		214
330										2[illegible]		209
320										[illegible]		202
310	1547						1168			[illegible]	326	93
300	1545			1491		1234	1167	714		137	329	182
290	1517	1877	1554	1450	1249	1234	1149	712	326	96.9	313	169
280	1455	1869	1542	1439	1239	1216	1110	695	324	60.4	287	152
270	1361	1808	1496	1367	1221	1174	1047	657	315	18.4	237	130
260	1228	1684	1413	1263	1177	1105	971	600	298		164	106
250	1063	1502	1305	1127	1104	1013	860	519	274		95.7	79.8
240	880	1243	1159	963	1014	836	723	420	239			57.0
230	701	925	979	775	903	757	582	310	136			36.1
220	555	667	788	606	767	599	371	190	48			12.4
210	449	474	621	473	609	430	231	86.6	90.3			
200	378	375	479	373	493	284	143	12.4	12.4			
190	329	317	377	303	335	197	88.8					
180	294	281	311	253	234	136	56.9					
170	267	255	267	216	201	102	44.0					
160	241	233	231	184	164	93.3	4.6					
150	215	209	199	152	137	70.5	29.0					
140	181	181	172	127	116	60.9	15.7					
130	158	159	152	116	101	55.8	24.2					
120	148	146	141	111	95.4	53.2	22.9					
110	137	61.4	126	82.2	82.4	43.9	20.5					
100							13.0					

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 8 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	4	4	4	4	4	2	2	S2	3	A3	3	A1
HMIN	300	278	223	210	208	237	257		104	107	110	108
SCAT	46.8	45.0	43.1	21.9	61.9	55.4	57.8		37.9	32.7	53.4	41.1
HMAXF	402	383	413	253	318	350	361		255	254	291	275
SHMAX	129	160	167	83	96	114	138		530	652	1064	972
KM												
410	197											
400	196											
390	193	254										
380	186	254										
370	174	249					196					
360	158	237					196					
350	137	219				155	194					
340	114	196				153	189					
330	88.6	166				150	181					
320	62.5	131	295		123	143	172					
310	38.4	93.4	294		123	135	156					
300	3.1	57.9	288		121	123	134				1240	
290		33.1	274		117	107	105				1240	
280		12.4	252		112	88.7	72.8				1227	1353
270			221		105	70.3	41.8				1192	1348
260			180	297	95.5	52.2	16.2		915	1131	1135	1306
250			124	296	83.4	34.2			912	1127	1056	1224
240			68.5	271	68.2	15.8			881	1081	960	1101
230			31.1	207	51.1				823	985	840	937
220				91.3	32.8				713	823	703	752
210				12.4	12.4				550	624	568	588
200									375	442	459	462
190									251	325	372	376
180									185	259	306	317
170									144	222	256	275
160									113	190	219	241
150									94.3	160	184	210
140									86.0	134	151	178
130									81.7	117	135	152
120									79.5	110	116	139
110									64.2	66.3	12.4	62.7

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W [illegible] NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	[illegible]	2200	2300
Q,KP	1	A1	3	A3	A3	A3	53	3	3	3	3	[illegible]
HMIN	109	109	107				99	200	229	229	211	1[illegible]
SCAT	38.2	43.8	35.4				36.8	61.0	47.0	51.5	26.8	[illegible]
HMAXF	267	270	263				256	319	323	32[illegible]	[illegible]	[illegible]
SHMAX	974	698	838				370	273	137	165	44	[illegible]
KM												
330									221	246		
320								326	220	245		
310								324	216	240		153
300								318	208	230		153
290								308	194	216		149
280		1240						292	174	196	271	141
270	1561	1240	1347					274	148	170	270	131
260	1546	1223	1344				666	253	117	138	254	116
250	1475	1174	1300				664	230	84.1	103	219	96.8
240	1346	1090	1200				643	203	46.8	49.7	157	76.0
230	1145	981	1046				594	172	12.4	12.4	65.2	57.1
220	884	836	825				527	137			12.4	40.9
210	627	662	619				435	88.4				27.1
200	453	495	458				321	12.4				12.4
190	354	374	358				201					
180	305	307	295				121					
170	272	266	253				76.9					
160	247	231	219				52.7					
150	222	198	188				39.2					
140	195	171	160				31.8					
130	166	153	142				28.3					
120	149	144	133				26.8					
110	33.5	29.7	87.7				24.2					
100							12.4					

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO — 60 W — 9 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	A2	A2	4	4	4	2	2	2	2	2	2	2
HMIN	259	268	255	229	217	139	229	110	109	109	108	104
SCAT	41.0	40.6	54.9	49.2	40.2	40.7	45.8	37.0	34.3	38.4	41.7	39.5
HMAXF	344	344	348	312	296	284	309	263	248	243	275	267
SHMAX	85	86	113	108	91	85	80	303	434	582	879	923
KM												
350	146	163	170									
340	146	163	170									
330	142	159	166									
320	133	149	160	187								
310	122	135	151	187			142					
300	108	114	137	184	171		140					
290	91.5	87.8	117	177	170	156	136					
280	70.8	54.8	93.9	168	165	156	128				1179	
270	41.8	17.2	64.9	151	154	151	116	467			1175	1360
260	12.4		29.4	125	138	142	98.6	466			1142	1350
250				87.2	116	128	73.9	453	747	999	1071	1298
240				43.5	89.6	106	43.9	421	737	997	975	1201
230				12.4	54.8	81.5	12.4	375	696	969	846	1055
220					19.9	54.8		314	623	907	687	836
210						30.7		251	513	797	543	617
200						6.4		197	377	596	443	468
190								153	274	402	372	379
180								119	206	290	321	325
170								91.5	163	232	282	292
160								73.0	136	195	246	267
150								61.5	113	166	207	241
140								54.0	91.1	144	168	210
130								49.3	83.1	128	144	169
120								45.3	79.4	116	134	149
110									.4	25.1	57.6	102	140

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO — 60 W — 9 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	2	2	3	3	A3	1	S1	1	2	2	2	3
HMIN	103	107	109	103		108	100	214	199	248	232	231
SCAT	37.0	37.2	45.2	39.4		39.7	36.6	37.2	39.6	97.1	50.8	54.5
HMAXF	264	262	268	265		261	268	286	267	406	327	337
SHMAX	937	855	797	740		536	448	215	131	200	113	124
KM												
410										179		
400										179		
390										178		
380										176		
370										173		
360										169		
350										165		
340										161		181
330										153	178	180
320										143	178	177
310										129	174	170
300										112	166	160
290								471		91.0	156	147
280								469		69.5	139	126
270	1404	1298	1080	1080		850	782	451	283	49.1	116	99.8
260	1400	1297	1072	1075		850	773	416	281	30.7	87.2	71.6
250	1354	1264	1039	1038		833	734	358	270	12.4	55.9	46.7
240	1256	1103	978	966		789	668	261	251		28.9	25.8
230	1107	1056	892	861		718	570	129	217			
220	908	881	776	719		622	459	43.5	155			
210	710	680	640	569		501	327		69.9			
200	537	507	492	435		363	219		12.4			
190	413	396	368	343		256	137					
180	343	322	296	284		180	89.3					
170	302	280	252	244		133	62.4					
160	269	251	219	206		105	46.8					
150	234	220	180	168		88.9	36.9					
140	208	193	152	134		77.5	30.6					
130	180	163	139	115		70.2	27.9					
120	157	147	132	107		64.9	26.1					
110	143	103	41.7	97.7		37.0	22.3					
100							1.9					

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO — 60 W — 10 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	3	3	1	A1	1	A1	1	1	1	1	1	81
HMIN	225	222	231	237	204	210	217	107	105	106	109	
SCAT	41.1	26.5	52.2	41.8	37.7	49.2	67.4	50.3	40.4	43.1	44.5	
HMAXF	311	284	315	323	273	300	327	253	267	267	274	
SHMAX	110	87	133	109	89	68	87	259	475	702	899	
KM												
330				196			107					
320	203		223	195			107					
310	203		222	191			105					
300	200		218	180		108	103					
290	190	236	209	164		106	98.8					
280	175	235	199	142	193	103	93.7				1234	
270	151	220	178	114	193	97.9	87.4		714	1022	1232	
260	121	187	144	80.9	187	90.1	79.2	374	708	1015	1206	
250	83.0	137	98.6	43.3	175	80.2	68.6	374	682	981	1148	
240	46.7	75.7	43.4	16.2	155	67.6	54.6	368	633	919	1060	
230	20.7	34.9			120	50.7	36.5	355	565	826	932	
220					73.7	30.8	16.0	335	469	674	765	
210					31.4	1.1		304	357	510	589	
200								251	270	382	448	
190								188	205	300	352	
180								128	153	246	294	
170								88.4	110	206	254	
160								67.0	92.5	171	220	
150								56.8	86.2	143	189	
140								50.1	82.5	122	160	
130								44.8	80.3	111	141	
120								39.6	78.4	105	132	
110								24.2	45.8	86.8	59.7	

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO — 60 W — 10 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	A1	1	0	0	A0	S0	S0	0	0	A0	0	0
HMIN		104	107	109	104		100	209	210	252	219	229
SCAT		42.0	39.0	41.9	42.3		38.8	33.7	49.7	44.9	38.5	53.5
HMAXF		263	257	256	267		269	271	306	338	300	330
SHMAX		780	666	591	616		387	179	133	130	134	129
KM												
340										226		
330										224		187
320										217		185
310									206	204	259	180
300									205	186	259	172
290									201	158	255	161
280								430	192	123	241	146
270		1031			882		602	430	179	83.2	219	125
260		1030	980	846	876		593	418	161	40.2	188	101
250		1005	972	842	847		563	387	137		147	72.8
240		951	932	816	794		517	335	109		95.2	42.0
230		867	860	765	710		458	239	78.4		51.5	12.4
220		752	742	647	585		387	125	41.6		12.4	
210		620	597	573	459		314	23.4	3.1			
200		509	460	451	356		235					
190		419	359	355	280		163					
180		355	296	290	225		109					
170		306	258	242	186		73.2					
160		267	229	208	157		50.7					
150		238	201	180	134		39.5					
140		207	174	149	117		32.1					
130		171	152	130	106		27.8					
120		154	140	124	101		25.9					
110		134	56.9	33.1	74.6		23.6					
100							15.6					

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 11 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
O,KP	0	0	1	1	1	0	A0	SO	0	0	0	1
HMIN	229	219	212	210	189	198	247		109	104	106	107
SCAT	47.0	32.7	26.7	25.2	59.9	53.6	48.6		34.1	38.2	38.1	37.0
HMAXF	318	289	269	262	284	284	332		239	244	259	254
SHMAX	120	93	70	62	79	57	58		351	471	658	701
KM												
340							96.3					
330							96.2					
320	197						94.9					
310	195						91.5					
300	190						86.2					
290	179	212			106	89.8	78.5					
280	165	207			106	89.7	67.3					
270	146	193	197	188	105	88.4	53.4					
260	122	169	191	187	102	85.5	34.7				976	1131
250	90.6	132	172	177	97.1	80.9	16.0			747	961	1127
240	53.4	87.5	134	150	91.5	75.0			594	745	912	1088
230	12.4	45.1	83.1	104	84.6	65.9			582	722	830	1007
220		12.4	37.9	47.8	76.6	53.0			546	677	695	880
210				3.1	66.4	35.2			483	593	542	677
200					51.9	12.4			389	462	410	470
190					23.4				293	339	330	343
180									221	260	285	286
170									171	214	252	253
160									138	178	221	226
150									118	152	190	200
140									108	130	163	165
130									89.7	119	142	145
120									80.9	114	132	138
110									36.6	91.4	97.1	82.6

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 11 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
O,KP	1	1	1	1	1	S2	S2	2	3	3	3	3
HMIN	108	103	107	108	108	111	100	199	210	208	249	269
SCAT	41.0	37.5	34.8	44.2	42.8	32.0	30.9	40.1	30.7	45.7	55.9	44.3
HMAXF	251	256	256	263	268	247	257	281	267	295	349	355
SHMAX	583	608	556	620	617	376	299	186	123	99	114	94
KM												
360												163
350											163	163
340											163	159
330											159	150
320											153	137
310											144	118
300										163	132	93.9
290								358		163	114	65.7
280								358		159	93.8	38.8
270				842	890			351	926	151	69.9	12.4
260	846	854	819	841	862		554	334	322	139	40.9	
250	846	849	814	824	841	681	546	305	302	124	12.4	
240	830	817	778	786	796	673	506	282	283	103		
230	790	753	707	725	712	634	449	201	188	79.9		
220	723	658	603	646	581	561	375	130	87.4	47.9		
210	618	541	482	528	451	462	283	59.7	12.4	16.5		
200	479	433	386	419	340	345	204	12.4				
190	371	352	321	323	264	244	142					
180	301	302	278	266	217	176	93.1					
170	260	268	244	226	182	133	64.1					
160	231	242	212	195	154	106	47.3					
150	178	218	180	166	131	88.7	36.8					
140	156	191	151	141	111	76.6	29.9					
130	149	162	138	129	100	68.6	26.3					
120	144	144	132	122	95.9	64.2	24.8					
110	109	99.0	102	54.3	52.7		22.5					
100							12.4					

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 12 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
O,KP	3	3	3	3	3	2	2	2	3	3	3	3
HMIN	259	227	213	208	211	204	207	113	107	108	107	108
SCAT	50.6	44.9	28.6	23.4	73.2	52.8	63.8	32.1	29.5	34.6	37.1	43.7
HMAXF	351	327	279	251	344	302	329	245	248	257	272	277
SHMAX	107	114	89	46	102	73	84	206	389	556	759	814
KM												
360	169											
350	169				108							
340	167				108							
330	162	188			107		98.5					
320	153	186			105		98.0					
310	141	181			102	108	96.3					
300	123	170			97.9	107	93.5					
290	98.6	155			93.3	106	89.1					
280	70.7	132	224		87.5	103	84.0				1131	1080
270	40.4	103	219		80.4	97.5	77.6				1130	1074
260	12.4	73.6	200	155	72.4	90.3	69.7			858	1100	1041
250		49.2	165	155	63.4	80.1	60.9	363	681	850	1027	975
240		30.2	120	147	52.0	66.8	51.2	360	668	808	916	891
230		12.4	69.7	124	38.4	52.0	40.5	342	615	730	762	774
220			31.8	77.1	24.6	35.2	27.2	306	525	624	589	630
210				20.6		20.2	12.4	252	406	502	440	500
200								194	304	397	347	389
190								145	237	315	290	317
180								109	190	254	252	272
170								82.9	156	212	220	238
160								66.8	133	178	191	203
150								58.2	116	150	163	171
140								54.8	104	131	143	154
130								43.6	95.9	118	131	146
120								32.3	80.4	108	124	139
110									41.4	53.1	84.3	53.6

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 12 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
O,KP	3	3	2	A2	A2	A3	S3	3	3	3	3	1
HMIN	109	104	107	103	106		99	212	199	219	228	221
SCAT	37.4	44.8	47.5	38.1	45.4		40.6	32.8	38.6	45.4	45.1	41.1
HMAXF	271	274	287	275	282		269	287	282	331	334	301
SHMAX	875	863	870	784	734		346	205	150	165	154	118
KM												
340										247	246	
330										247	246	
320										244	241	
310										235	229	226
300										219	212	226
290			1031		1022			471	284	198	187	222
280	1298	1110	1026	1131	1022			466	284	173	156	212
270	1298	1108	999	1127	1005		529	439	278	145	120	194
260	1271	1082	949	1089	964		522	390	262	115	84.0	169
250	1198	1029	875	1008	897		499	312	237	83.3	54.9	131
240	1078	948	783	898	804		459	201	201	56.0	32.2	82.2
230	914	833	664	742	676		412	102	158	33.7	12.4	38.1
220	717	699	552	589	516		349	37.7	108	12.4		
210	540	562	455	463	385		274		56.0			
200	416	444	381	366	298		201		12.4			
190	341	361	328	300	236		139					
180	297	311	289	254	191		97.1					
170	267	276	258	219	158		69.0					
160	237	248	230	191	131		51.0					
150	203	221	202	164	109		39.2					
140	171	189	173	141	92.9		32.1					
130	152	159	147	125	82.7		27.8					
120	143	146	133	116	77.3		26.1					
110	41.7	120	95.2	93.1	62.9		23.5					
100							12.4					

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 13 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	A1	A1	1	1	1	1	1	S1	0	0	0	0
HMIN	219	222	216	214	212	218	209	100	104	108	107	107
SCAT	42.8	31.2	28.5	53.9	132	56.5	47.8	25.8	33.8	54.4	33.7	57.3
HMAXF	314	285	270	299	387	322	303	235	256	280	238	261
SHMAX	123	94	77	114	251	101	79	221	462	719	467	672
KM												
390					179							
380					179							
370					178							
360					177							
350					176							
340					173							
330					171	142						
320	206				168	142						
310	205				164	141	129					
300	200			186	160	137	128					
290	190	233		185	156	131	126			850		
280	173	232	218	180	150	123	121			850		
270	153	220	218	172	143	112	114			843		815
260	126	196	212	162	134	95.7	101		782	821		815
250	92.0	154	192	143	122	76.0	83.6		776	785		807
240	62.2	102	149	115	103	54.4	62.8	446	739	733	782	787
230	38.2	40.6	82.6	74.5	75.4	32.2	42.1	442	667	668	770	754
220	12.4		27.8	32.2	40.2	12.4	25.6	408	539	592	724	712
210							3.1	342	395	509	641	645
200								252	294	409	501	533
190								183	232	315	371	407
180								133	191	247	292	315
170								101	159	194	245	267
160								81.4	133	153	211	237
150								68.7	111	123	177	208
140								60.8	99.1	114	148	175
130								57.0	81.8	110	132	148
120								41.4	75.4	104	125	138
110								32.1	55.3	49.0	88.4	87.9
100								12.4				

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 13 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	0	0	A1	1	1	1	S1	1	2	2	2	4
HMIN	105	107	107	104	109	109	97	200	207	268	267	239
SCAT	42.7	37.4	38.7	42.2	33.3	32.9	31.3	34.3	50.4	39.5	45.8	37.9
HMAXF	252	256	259	256	257	256	246	256	320	359	359	322
SHMAX	561	608	644	560	570	458	284	86	90	93	117	113
KM												
360										163	196	
350										161	194	
340										154	187	
330									124	141	176	225
320									124	124	160	224
310									123	103	137	219
300									119	79.6	109	206
290									112	55.5	76.2	185
280									104	32.7	43.3	150
270									93.3	12.4	16.2	109
260	790	850	932	782	1022	894		205	80.9			63.4
250	789	844	919	779	1011	887	572	203	67.8			36.4
240	773	810	874	756	957	843	567	193	53.9			4.7
230	733	744	798	709	857	757	531	175	40.4			
220	675	647	682	643	677	605	475	143	27.2			
210	564	529	550	559	473	399	388	98.1	12.4			
200	438	423	421	454	324	257	283	12.4				
190	347	357	332	351	244	172	173					
180	298	311	278	268	198	127	106					
170	264	277	244	221	167	101	68.6					
160	232	245	224	191	146	84.2	47.4					
150	199	214	203	167	130	73.0	35.0					
140	150	189	173	145	113	64.9	29.0					
130	134	155	143	118	99.5	61.5	26.6					
120	128	142	128	110	94.3	59.4	25.0					
110	118	109	99.0	87.0	33.3	22.0	22.1					
100							12.4					

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 14 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	4	4	FS	FS	FS	2	2	A2	1	A1	A1	1
HMIN	222	234	237	229	209	199	254	100	108	108	109	104
SCAT	40.4	41.4	42.8	36.6	38.4	44.8	61.5	34.8	28.7	35.6	46.6	39.5
HMAXF	323	327	335	299	273	285	366	253	227	247	267	275
SHMAX	122	118	124	90	77	73	103	274	305	432	621	724
KM												
370							133					
360							133					
350							131					
340			204				126					
330	206	214	204				122					
320	206	218	197				115					
310	201	210	185				105					
300	189	196	169	188			91.2					
290	172	173	149	185		123	75.9					
280	149	138	125	176	170	123	59.2					898
270	123	98.3	93.7	159	169	120	40.4				812	895
260	93.6	58.4	61.1	137	165	114	21.6	436			808	868
250	65.3	32.5	36.5	106	155	105		435		672	786	810
240	41.7	5.4	16.0	55.0	138	92.0		422		665	744	729
230	23.8			12.4	107	74.8		387	651	633	686	635
220					62.3	54.3		342	641	575	604	543
210					12.4	36.9		286	595	478	501	463
200						12.4		223	498	376	397	397
190								171	328	304	317	346
180								131	213	251	263	307
170								100	154	212	226	273
160								79.5	121	175	194	241
150								65.8	101	145	158	211
140								59.3	96.2	122	135	180
130								54.5	86.2	111	128	156
120								41.8	68.4	102	115	144
110								36.0	27.3	37.6	24.5	95.2
100								12.4				

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 14 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	A1	1	A2	A2	A2	A2	A2	A2	A0	0	A0	A1
HMIN	109	104							207	212	217	
SCAT	48.8	40.9							29.6	65.8	45.6	
HMAXF	292	271							269	326	334	
SHMAX	910	794							88	131	127	
KM												
340											187	
330										168	187	
320										168	183	
310										166	174	
300	1080									162	162	
290	1079									156	144	
280	1063	1080								148	124	
270	1023	1080							225	137	102	
260	961	1061							220	119	80.7	
250	875	1009							203	97.7	60.7	
240	767	925							171	71.7	42.3	
230	638	808							124	47.0	27.2	
220	516	667							66.4	25.3	12.4	
210	419	533							22.5			
200	352	419										
190	308	343										
180	276	294										
170	249	259										
160	219	229										
150	188	198										
140	161	166										
130	143	144										
120	131	135										
110	24.1	119										

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 15 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	A1	A1	A0	0	0	0	0	S0	0	0	0	0
HMIN	217	222	210	203	200	249	229	100	107	107	109	105
SCAT	43.1	27.8	46.2	28.9	65.5	45.2	47.3	35.5	36.2	32.3	38.2	38.3
HMAXF	313	283	300	260	307	327	313	239	236	237	266	256
SHMAX	141	109	163	92	112	66	70	224	319	368	613	565
KM												
330						118						
320	236					118	118					
310	236				148	114	118					
300	231		281		147	108	116					
290	220	297	278		145	98.7	112					
280	202	297	264		142	84.5	105					
270	181	282	252	247	136	65.2	93.8				858	
260	153	248	228	247	130	39.9	78.6				852	819
250	117	189	192	240	119	12.4	59.0				819	815
240	78.4	106	140	217	103		34.8	358	534	619	755	784
230	42.6	41.5	80.3	178	82.8		4.7	352	535	612	664	727
220	16.2		39.7	115	57.1			332	512	577	546	635
210			3.9	39.4	32.2			298	468	511	432	506
200								252	398	415	350	393
190								201	303	321	296	321
180								155	217	249	261	280
170								120	163	201	231	247
160								94.2	130	164	203	217
150								77.2	107	129	172	185
140								65.3	95.5	117	145	155
130								60.0	83.5	111	134	142
120								43.4	76.2	107	122	136
110								35.2	45.6	55.6	41.7	47.2
100								12.4				

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 15 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	A0	A0	A0	A0	A0	S1	S1	1	0	0	0	0
HMIN	109				105	109	94	138	207	246	197	214
SCAT	33.6				44.6	41.0	28.5	36.8	52.8	41.3	38.8	44.4
HMAXF	247				258	260	243	278	304	336	290	312
SHMAX	528				647	501	262	86	69	79	84	83
KM												
340										135		
330										135		
320										130		132
310									103	122		132
300									103	110	149	129
290									101	93.6	149	123
280								171	97.6	75.7	147	115
270						815		169	92.3	56.4	139	103
260					885	815		161	84.7	35.8	126	88.0
250	819				911	803	546	146	74.1	18.1	110	71.2
240	809				844	766	544	124	59.8		89.0	53.2
230	764				788	706	514	95.5	42.6		68.3	36.3
220	682				802	614	456	65.2	27.6		47.6	20.6
210	563				660	476	368	38.2	12.4		29.9	
200	436				473	338	257	12.4			12.4	
190	342				326	231	170					
180	298				237	157	112					
170	258				130	117	75.6					
160	228				159	92.4	53.5					
150	198				134	77.5	40.5					
140	169				115	67.8	32.0					
130	150				103	62.3	27.2					
120	143				96.1	59.7	25.3					
110	39.4				47.2	22.0	23.5					
100							15.1					

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 16 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	0	0	F0	0	0	A0	0	S0	A0	A0	A0	A0
HMIN	231	240	220	209	208	200	199	100	109			104
SCAT	48.4	34.9	42.5	28.3	38.6	46.4	40.7	31.7	34.0			39.5
HMAXF	320	317	311	269	276	273	262	231	232			274
SHMAX	84	79	116	91	72	67	52	180	313			664
KM												
320	135	160	205									
310	134	159	205									
300	130	151	201									
290	123	136	192									
280	113	114	177			153	121					827
270	98.8	89.0	157	247	152	121	112					825
260	80.2	63.0	128	241	146	119	112					802
250	59.4	34.1	90.5	219	136	114	109					748
240	35.0		53.8	177	118	106	104	338	541			680
230			29.2	114	88.1	93.6	94.5	338	541			589
220			.4	45.5	49.3	74.7	72.0	328	524			493
210				12.4	16.8	51.9	43.0	301	486			412
200						12.4	12.4	258	414			353
190								194	320			318
180								131	240			291
170								87.5	183			264
160								62.2	147			233
150								52.2	123			199
140								46.5	104			164
130								43.6	90.1			145
120								40.8	83.4			135
110								36.4	25.9			130
100								12.4				

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 16 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	A0	A0	A1	41	1	3	53	3	2	2	2	2
HMIN	107	107		107	109	108	99	202	198	217	233	228
SCAT	48.6	47.5		38.7	40.9	38.1	37.3	24.3	46.6	44.3	37.2	33.5
HMAXF	262	276		273	264	255	261	242	293	313	318	300
SHMAX	556	705		792	666	440	308	105	89	94	85	82
KM												
320										159	168	
310										159	166	
300									142	156	158	179
290									142	148	144	176
280		894		1184					139	137	123	164
270	621	891		1183	1017		517		133	119	97.7	144
260	621	869		1152	1014	710	517		124	94.4	67.2	117
250	613	828		1082	986	707	506	374	111	68.7	35.7	82.7
240	591	770		971	927	682	476	374	93.9	46.6	5.4	45.1
230	554	665		801	836	631	427	350	71.6	29.0		16.5
220	508	531		612	704	557	356	291	50.8	12.4		
210	455	410		457	537	458	275	123	32.8			
200	399	332		348	383	353	200		12.4			
190	351	284		282	265	255	142					
180	311	254		241	224	181	99.7					
170	280	235		215	186	135	71.0					
160	252	216		193	159	107	52.7					
150	224	178		173	135	88.6	41.0					
140	196	153		156	116	74.6	33.4					
130	171	140		141	102	64.4	30.0					
120	156	134		124	96.4	60.1	28.5					
110	136	120		77.4	41.7	35.0	25.5					
100							12.4					

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 17 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	2	2	1	1	1	1	1	S1	4	A4	4	4
HM1N	204	220	253	246	242	210	218	100	108	108	108	105
SCAT	46.8	46.9	44.3	57.6	41.4	36.7	48.6	30.2	32.6	38.9	33.4	37.9
HMAXF	303	300	343	343	325	292	304	235	244	258	250	265
SHMAX	95	86	99	116	85	75	78	190	355	522	524	586
KM												
350			163	169								
340			163	169								
330			161	167	156							
320			155	162	156							
310	148	155	146	155	151		133					
300	148	155	131	146	141	140	133					
290	145	153	104	131	128	149	131					
280	138	147	80.5	110	110	145	126					
270	128	139	51.2	84.3	83.2	135	118					782
260	117	125	25.6	52.7	51.5	120	106			819		779
250	101	100		22.5	26.2	97.0	86.2		594	811	854	751
240	82.1	69.8				71.2	59.3	338	591	776	836	694
230	60.7	38.4				46.1	34.9	336	567	716	780	618
220	38.4	3.9				27.0	12.4	319	514	609	681	526
210	21.0					2.4		282	436	448	533	434
200								235	347	332	392	356
190								179	268	262	310	304
180								131	206	219	262	269
170								96.9	164	185	228	237
160								75.5	136	154	200	206
150								62.0	113	124	177	171
140								53.9	97.7	111	149	149
130								49.2	83.3	106	126	137
120								45.4	74.0	97.9	119	130
110								35.5	28.9	31.7	59.9	103
100								19.7				

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 17 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	4	4	A2	2	2	5	S5	5	5	5	5	4
HM1N	108	107	108	110	108	109	100	202	198	259	231	221
SCAT	41.7	55.4	34.3	37.1	37.3	45.3	35.4	45.7	41.2	30.1	46.0	37.4
HMAXF	270	304	280	280	254	270	260	298	304	339	327	311
SHMAX	600	894	771	832	545	444	289	220	159	139	152	130
KM												
340										268		
330										264	247	
320										251	246	245
310		976							259	230	239	245
300		975						366	258	200	225	240
290		961		1287				363	252	157	207	226
280		932	1080	1287		651		352	237	109	179	204
270	734	887	1063	1263		651	517	332	215	60.5	145	173
260	724	826	1012	1192	894	643	517	302	187	12.4	107	137
250	693	736	924	1074	892	619	506	261	155		70.4	95.1
240	640	620	803	894	864	580	475	211	122		37.1	55.1
230	570	500	656	693	806	522	424	150	88.7			29.1
220	489	398	504	509	709	440	354	83.1	60.7			
210	415	337	392	367	566	341	270	35.9	36.6			
200	355	300	319	291	416	245	182		12.4			
190	313	275	273	246	303	171	114					
180	281	254	244	218	221	127	75.7					
170	255	232	219	197	175	99.0	52.9					
160	229	202	192	178	148	81.3	39.3					
150	198	169	167	157	127	69.1	31.9					
140	163	151	145	131	108	60.1	27.1					
130	144	141	132	116	96.5	54.7	24.4					
120	137	135	125	109	91.9	52.2	23.1					
110	55.6	49.0	33.5	12.4	48.1	12.4	21.7					
100							13.0					

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 18 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	4	4	F6	F6	6	H6	A6	S6	5	5	5	5
HM1N	231	249	206	218	200	197	196	100	108	106	108	105
SCAT	35.7	39.2	34.0	37.9	31.2	53.1	59.3	33.6	38.4	35.9	45.3	58.2
HMAXF	294	329	345	298	253	308	324	248	267	273	254	277
SHMAX	98	97	89	111	61	64	72	180	426	792	650	645
KM												
350			183									
340			182									
330		186	174				83.8					
320		183	159				83.7					
310		175	137			81.9	82.6					
300	226	160	110	224		81.5	80.3					
290	225	138	78.1	221		79.6	76.5					
280	217	108	47.2	211		76.2	72.0			1229		681
270	201	74.6	18.8	193		72.0	66.5		613	1226		679
260	172	42.9		166	158	65.9	60.1		608	1186	936	666
250	124	12.4		128	158	62.5	53.4	297	582	1101	935	644
240	58.4			79.0	151	58.9	46.6	294	536	964	915	610
230				39.9	136	50.1	39.6	277	471	788	873	569
220				12.4	110	36.8	32.2	247	395	602	807	516
210					69.2	25.7	23.9	205	319	450	711	453
200					12.4	12.4	12.4	158	254	354	582	387
190								118	203	291	437	328
180								86.1	163	246	307	281
170								64.4	134	208	239	246
160								53.6	112	176	206	217
150								48.8	94.8	148	180	190
140								45.3	81.4	125	148	161
130								41.5	72.8	106	123	133
120								36.0	69.1	96.7	114	127
110								31.5	49.3	74.1	53.9	113
100								12.4				

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 18 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	5	5	5	A5	A5	A3	S3	3	4	A4	4	3
HM1N	107	104	107	108				211	199	230	231	236
SCAT	39.0	38.3	42.2	42.6				40.0	36.0	46.0	44.2	45.1
HMAXF	275	265	277	277				293	276	324	318	340
SHMAX	813	634	731	815				242	160	151	135	152
KM												
350												236
340												236
330										243		233
320										242	236	224
310										237	234	209
300								469		225	227	189
290								468		209	213	164
280	1126		976	1173				456	340	186	192	135
270	1121	898	969	1166				429	338	157	164	105
260	1085	895	935	1128				388	324	127	127	75.0
250	1011	865	873	1056				326	297	90.8	80.7	43.9
240	895	803	784	951				241	253	44.9	38.3	18.4
230	744	713	665	804				145	191	3.1		
220	600	597	534	634				49.0	116			
210	481	474	425	471					51.9			
200	391	370	347	348					12.4			
190	329	306	293	273								
180	286	264	252	226								
170	251	233	221	194								
160	223	204	194	169								
150	196	175	165	146								
140	169	147	132	124								
130	147	128	118	106								
120	134	119	111	96.9								
110	103	58.4	77.4	49.0								

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 19 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	A3	3	A3	3	A3	2	2	S2	A2	2	2	0
HM1N	252	199	199	199	266	266	263	100	108	108	105	107
SCAT	38.3	24.2	29.0	47.2	57.9	45.5	50.8	34.5	34.9	42.0	31.5	29.5
HMAXF	337	260	253	298	376	362	363	266	257	269	258	253
SHMAX	157	148	70	108	115	109	122	232	444	670	658	644
KM												
380					156							
370					156	178	188					
360					153	178	188					
350					148	175	185					
340	297				141	168	178					
330	295				132	157	168					
320	282				117	140	154					
310	259				98.1	118	131					
300	228			168	77.5	90.1	106					
290	187			167	57.8	63.0	75.7					
280	135			162	37.8	39.4	46.2					
270	78.1	450		152	18.1	18.1	23.1	358		985		
260	36.6	450	197	140				355	747	972	1131	1131
250		430	196	124				338	740	932	1115	1128
240		370	187	104				306	703	864	1044	1075
230		260	166	79.7				262	636	762	915	959
220		120	126	55.6				212	535	613	719	763
210		47.7	58.5	31.6				165	403	458	519	553
200		12.4	12.4	5.9				129	288	340	377	397
190								100	215	264	300	317
180								78.5	171	220	255	273
170								63.7	139	189	222	246
160								53.2	113	161	194	221
150								46.0	93.5	135	168	196
140								41.5	81.8	113	143	173
130								39.4	76.8	102	123	148
120								37.2	69.6	95.7	116	128
110								33.2	39.6	53.0	106	109
100								19.7				

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 19 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	0	0	0	A0	0	S0	A0	A0	0	A0	0	2
HM1N	108	109	108		109	108		199	209	248	246	218
SCAT	32.5	30.3	41.4		36.9	36.8		38.7	64.6	35.6	41.7	33.8
HMAXF	253	242	251		250	238		268	311	322	321	293
SHMAX	687	528	480		447	346		76	77	60	85	80
KM												
330										124	162	
320									101	124	162	
310									101	120	159	
300									101	111	152	171
290									98.6	98.6	139	171
280									95.5	80.6	120	164
270								156	91.1	57.3	94.0	151
260	1184		645					154	85.6	33.5	63.5	128
250	1182	958	645		754			147	78.1	12.4	26.3	97.0
240	1140	957	634		741	701		136	68.1			64.3
230	1041	923	604		698	693		117	54.8			38.2
220	877	838	555		632	659		90.3	36.4			12.4
210	649	678	486		515	601		52.1	4.7			
200	456	489	411		365	463		12.4				
190	337	354	345		257	247						
180	282	286	290		195	143						
170	250	251	247		162	105						
160	225	222	218		136	84.1						
150	199	187	190		117	70.3						
140	173	155	156		104	62.9						
130	152	137	132		89.1	60.2						
120	137	120	124		80.3	53.5						
110	81.8	24.1	38.1		41.7	31.5						

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 20 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	2	2	4	4	4	3	A3	S3	4	4	4	3
HM1N	229	220	239	224	210	199	199	110	108	108	107	108
SCAT	39.1	42.7	35.1	37.0	33.0	52.4	65.5	31.2	33.4	31.0	32.5	31.1
HMAXF	316	311	313	297	283	292	325	241	238	252	256	255
SHMAX	93	105	89	98	77	91	95	180	294	475	620	661
KM												
330							108					
320	170	186	188				107					
310	169	186	187				106					
300	163	183	181	206		140	103					
290	151	175	167	204	171	140	99.7					
280	134	162	144	195	171	139	94.3					
270	111	142	109	179	164	134	88.2					
260	84.7	114	77.6	151	150	128	80.5			782	1003	1080
250	56.9	81.5	43.0	115	127	118	71.7	322		782	994	1074
240	33.5	52.2	12.4	69.3	93.8	103	61.8	322	482	754	939	1020
230	5.9	28.0		30.7	56.3	83.7	51.9	312	476	684	836	910
220		1.9			30.4	62.4	41.8	285	445	576	686	754
210						39.0	31.3	244	400	449	531	588
200						12.4	12.4	191	333	342	393	444
190								143	259	272	307	345
180								107	203	228	260	288
170								81.4	160	198	233	252
160								64.6	130	171	211	228
150								55.1	108	147	187	207
140								50.6	91.9	129	160	180
130								41.8	83.5	120	140	151
120								31.7	71.6	104	124	135
110								19.7	61.7	40.4	71.9	92.2

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 20 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	3	3	2	2	A2	3	S3	A3	A3	A3	A3	A3
HM1N	109	108	109	107		109		199	198	257	258	259
SCAT	41.1	36.3	47.2	34.5		31.2		30.5	42.4	48.1	46.5	43.8
HMAXF	271	270	250	254		251		263	281	359	358	353
SHMAX	736	786	515	479		323		127	74	86	111	122
KM												
360										133	178	197
350										132	177	196
340										129	172	192
330										121	162	182
320										112	149	167
310										99.4	130	150
300										82.6	105	130
290									132	61.6	76.3	105
280	985	1184							132	42.8	49.9	76.2
270	985	1184						309	130	27.4	30.6	41.8
260	969	1160		714		572		308	124	12.4	12.4	12.4
250	924	1091	710	711		572		295	114			
240	849	976	703	682		554		265	101			
230	744	799	680	624		504		218	83.8			
220	611	620	641	538		440		156	59.8			
210	482	468	584	439		355		82.0	34.9			
200	388	360	496	351		258		12.4	12.4			
190	323	308	384	289		182						
180	284	277	286	244		136						
170	262	253	234	211		106						
160	241	227	201	182		84.4						
150	214	195	174	158		70.9						
140	176	165	147	134		62.1						
130	149	148	128	111		58.2						
120	139	126	120	104		50.2						
110	59.7	54.2	41.7	61.7		19.7						

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 21 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	F3	F3	F1	F1	A1	A1	A1	A1	A0	0	0	1
HM1N	249	242		219	207	199	217		110	109	108	109
SCAT	36.6	30.8		29.5	38.6	49.3	90.5		35.1	32.0	34.4	27.7
HMAXF	334	316		284	300	282	319		252	252	261	234
SHMAX	106	89		94	113	89	103		383	497	587	478
KM												
340	195											
330	194											
320	187	201					160					
310	173	199					159					
300	154	186			202		154					
290	133	165		229	199	148	147					
280	108	134		228	189	148	136					
270	75.8	97.8		216	172	146	119				894	
260	40.7	56.7		192	148	140	97.0		621	842	894	
250	12.4	28.9		156	121	132	72.1		621	841	873	
240				108	92.2	121	49.2		603	812	814	898
230				52.9	60.7	105	29.9		559	734	717	893
220				12.4	35.5	82.7	12.4		493	630	589	840
210					16.0	52.9			401	487	462	728
200						12.4			308	356	361	562
190									231	276	297	398
180									181	228	256	295
170									146	191	226	250
160									120	160	197	223
150									103	137	168	197
140									92.5	119	140	165
130									77.4	102	120	135
120									69.5	95.4	114	126
110									13.0	41.7	38.8	39.4

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 21 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	1	1	1	A1	1	A2	A2	A2	2	2	A2	A0
HM1N	108	108	107		109		100	207	209	248		249
SCAT	29.1	34.3	38.0		29.9		40.1	40.1	52.5	55.8		37.0
HMAXF	241	253	246		240		244	298	306	359		329
SHMAX	444	495	459		394		211	84	76	110		98
KM												
360										148		
350										147		
340										144		
330										138		193
320										130		190
310									115	120		180
300								149	114	106		163
290								147	112	90.2		140
280								141	107	70.8		109
270								130	101	51.1		69.1
260		714						116	92.0	31.8		38.8
250	697	712	672				381	95.5	79.3	12.4		12.4
240	697	689	668		714		380	71.4	62.3			
230	674	636	644		695		369	48.9	44.8			
220	609	546	596		636		347	29.5	26.8			
210	512	445	524		538		306	12.4	3.1			
200	413	361	422		415		234					
190	337	307	331		307		158					
180	291	271	274		231		101					
170	258	246	238		183		64.4					
160	231	221	210		152		43.4					
150	206	193	183		129		32.4					
140	176	163	149		112		27.0					
130	148	135	126		98.8		24.6					
120	132	126	113		90.5		23.3					
110	73.8	86.9	93.9		25.3		21.2					
100							13.0					

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 22 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	0	A0	A1	A1	F1	A1	A1	S1	1	1	1	1
HM1N	242	227	199	202	198	220	197	100	108	105	108	104
SCAT	30.9	34.9	29.5	28.2	36.7	53.2	37.4	40.5	34.6	36.7	29.5	35.8
HMAXF	310	302	256	262	271	300	276	250	228	247	239	238
SHMAX	86	99	71	72	61	64	51	186	266	435	480	455
KM												
320	197											
310	197	214										
300	191	214				108						
290	175	208				107						
280	151	193			124	104	101					
270	121	166		195	124	99.2	101					
260	85.5	127	188	195	121	92.5	96.4	297				
250	37.9	81.2	186	186	114	81.2	88.7	297		619		
240		41.3	174	166	102	63.1	76.4	293		613	858	660
230		16.2	151	127	85.0	37.9	59.6	279	450	587	838	652
220			112	70.7	62.5	3.9	42.0	256	444	536	770	620
210			60.2	33.5	36.8		27.2	223	419	466	638	559
200			12.4		12.4		12.4	174	375	389	452	473
190								126	312	321	341	384
180								83.9	238	269	279	316
170								53.4	181	230	241	276
160								42.8	143	199	212	249
150								38.0	116	171	187	222
140								35.5	99.9	148	169	193
130								34.2	84.5	125	140	164
120								31.8	75.4	107	122	143
110								27.4	39.5	92.4	108	131
100								13.0				

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 22 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	1	1	0	0	A0	A0	S0	R0	0	0	F0	F0
HM1N	109	109	108	109	109			189	215	286	250	252
SCAT	38.8	30.7	35.1	40.4	48.0			55.7	76.5	50.3	38.0	29.2
HMAXF	253	260	243	262	279			273	335	369	341	314
SHMAX	497	613	488	535	690			83	76	78	85	71
KM												
370										127		
360										126		
350										123	151	
340									81.9	117	151	
330									81.8	108	148	
320									81.1	94.8	138	179
310									79.7	77.3	126	178
300									77.6	54.6	110	169
290									74.8	26.0	88.5	149
280					941			124	71.5		66.3	119
270		1031		710	932			124	66.9		46.4	75.2
260	648	1031		710	903			122	61.9		27.5	35.5
250	647	1002	782	694	854			119	55.8		2.4	
240	629	916	780	656	784			113	48.4			
230	588	772	754	596	653			105	37.6			
220	529	567	697	517	511			95.2	20.1			
210	455	404	595	431	383			83.2				
200	385	316	460	357	292			67.3				
190	329	273	349	302	233			25.1				
180	290	249	275	259	197							
170	262	231	237	226	171							
160	237	210	211	197	147							
150	212	181	182	173	125							
140	184	151	152	143	103							
130	156	131	134	123	90.2							
120	137	122	125	114	86.9							
110	39.4	41.7	43.3	41.7	41.7							

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 23 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
O,KP	F0	F0	F0	F0	F0	F0	0	S0	1	1	1	1
HMIN		230		217	202	180	240	110	110	109	108	109
SCAT		36.9		36.4	39.9	22.5	40.8	31.0	38.4	53.0	27.1	89.0
HMAXF		302		289	283	216	317	235	236	250	233	295
SHMAX		82		101	88	28	44	157	282	417	390	700
KM												
320							81.9					
310		170					81.4					
300		169					78.6					567
290		165		214	168		73.2					566
280		154		210	168		65.6					563
270		137		199	163		55.3					556
260		112		180	153		42.9			515		545
250		80.3		154	139		26.8			515		531
240		40.5		113	119		2.4	278	489	510	714	512
230		3.1		59.0	87.1			276	486	496	711	492
220				19.9	52.3	103		260	467	473	670	467
210					26.4	101		231	433	441	579	436
200						90.4		195	368	396	436	398
190						67.5		149	267	341	323	356
180						12.4		110	184	283	265	314
170								82.4	130	233	229	278
160								65.0	95.5	190	197	249
150								55.2	85.1	159	164	221
140								51.8	81.4	132	139	189
130								41.9	79.5	110	129	156
120								31.1	70.0	103	125	138
110								19.7	13.0	33.0	49.3	59.7

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 23 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
O,KP	1	1	A1	A1	1	1	S1	1	1	1	F1	0
HMIN	107	108	108		109	110		193	200	227	231	200
SCAT	62.0	43.0	33.3		41.8	31.5		26.8	53.2	48.2	43.2	44.4
HMAXF	275	269	250		231	246		245	281	352	321	237
SHMAX	711	605	524		486	313		83	67	93	116	117
KM												
360										124		
350										124		
340										122		
330										118	195	
320										110	195	
310										101	192	
300										90.2	184	192
290									107	78.5	170	191
280	758								107	65.6	153	185
270	756	782							106	52.9	132	173
260	747	775			747				103	41.7	106	158
250	727	746	834		747	594		235	98.4	31.7	69.1	138
240	699	696	817		735	588		233	91.2	22.3	34.9	111
230	660	623	759		702	556		218	82.0	9.5		82.8
220	594	520	670		649	493		184	68.4			53.5
210	508	420	548		567	394		134	49.0			29.2
200	424	342	409		445	280		70.6	12.4			.4
190	354	292	312		319	194						
180	305	257	259		230	136						
170	270	228	229		184	102						
160	246	204	199		154	80.4						
150	225	174	169		131	66.1						
140	201	152	143		112	59.1						
130	173	143	125		99.8	56.1						
120	150	138	122		95.2	54.5						
110	121	81.5	89.1		25.3	13.0						

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 24 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
O,KP	0	0	1	1	F1	F0	F0	S0	S0	0	A0	1
HMIN	238	229	214	216	235	201	200	110	109	108	106	104
SCAT	38.8	35.1	32.8	30.0	37.4	29.1	40.5	28.7	26.7	28.6	27.1	38.8
HMAXF	318	305	287	274	324	269	281	246	229	233	226	233
SHMAX	125	133	122	83	93	90	84	201	281	353	393	403
KM												
330					165							
320	236				165							
310	234	271			159							
300	223	270			148							
290	205	259	271		134		144					
280	182	237	268	215	115		144					
270	151	206	253	214	93.4	209	142					
260	109	168	225	203	71.8	204	133					
250	55.6	121	185	180	46.7	185	123	383				
240	16.5	60.7	132	138	20.7	161	109	379		621		541
230		12.4	69.4	80.8		132	93.5	353	621	620	714	540
220			30.7	27.8		89.7	77.1	303	604	591	704	525
210						42.3	59.1	236	547	524	648	489
200							12.4	174	417	430	545	442
190								126	255	336	419	391
180								91.7	171	263	323	343
170								70.2	131	213	267	298
160								57.5	108	176	230	258
150								49.6	93.0	141	197	223
140								45.6	81.7	117	167	194
130								39.4	72.0	108	142	169
120								30.0	58.9	104	124	142
110								19.7	30.3	72.7	84.1	114

ELECTRON DENSITY

RAMEY AF8, PUERTO RICO 60 W 24 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
O,KP	1	1	1	A1	A1	A1	A1	A1	A1	A1	C1	C1
HMIN	106	107	107		108	107				238		
SCAT	36.8	32.5	35.3		31.9	31.7				48.8		
HMAXF	257	260	261		250	249				338		
SHMAX	563	596	612		437	368				106		
KM												
340										163		
330										162		
320										157		
310										150		
300										139		
290										124		
280										105		
270		923	898							83.2		
260	747	923	898							56.6		
250	740	901	875		714	734				32.7		
240	705	834	817		696	717				12.4		
230	643	718	723		641	665						
220	551	551	596		559	561						
210	451	420	465		454	394						
200	372	336	368		355	250						
190	320	291	305		275	170						
180	289	264	265		219	126						
170	268	244	239		182	97.8						
160	250	223	215		154	82.1						
150	230	197	189		131	72.3						
140	210	156	155		113	65.3						
130	171	140	142		102	60.7						
120	148	133	135		95.9	57.8						
110	114	113	93.9		49.3	46.0						

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 25 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	C1	C1	C2	C2	C2	C2	C2	C2	C1	C1	C1	A1

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 25 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	A1	1	1	1	1	0	S0	0	0	0	0	F1
HMIN		108	105	107	108	109		198	199	226	216	262
SCAT		42.8	63.8	47.3	33.7	45.7		50.3	49.7	37.9	59.2	46.9
HMAXF		259	294	279	251	253		306	283	312	337	359
SHMAX		626	862	831	520	368		124	72	90	138	142
KM												
360												224
350												221
340											178	214
330											177	201
320										170	174	184
310								178		170	168	163
300			858					178		166	160	138
290			857					174	118	156	149	108
280			847	1080				167	118	140	134	66.6
270			827	1070				156	116	118	116	29.3
260		890	797	1036	898	567		140	112	90.0	93.8	
250		881	754	974	898	566		121	105	62.3	71.1	
240		848	703	895	875	556		100	96.3	38.3	49.9	
230		792	642	792	813	532		79.9	83.9	18.1	31.3	
220		703	573	661	710	496		58.0	64.4		15.1	
210		562	497	519	562	439		34.0	39.3			
200		413	421	388	416	351		12.4	12.4			
190		325	353	299	303	251						
180		279	299	246	225	168						
170		249	254	212	180	113						
160		221	214	186	148	84.6						
150		186	167	157	120	66.6						
140		159	144	131	102	59.4						
130		144	136	123	94.0	56.3						
120		137	132	119	90.7	54.7						
110		39.5	93.0	57.0	43.9	20.8						

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 26 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	1	1	1	1	1	F2	2	S2	1	1	1	1
HMIN	224	219	211	205	211	188	210	100	109	108	108	108
SCAT	36.9	35.2	29.6	46.1	32.3	52.1	56.1	34.6	34.6	34.9	36.8	46.4
HMAXF	313	293	271	284	279	289	296	228	233	239	244	257
SHMAX	141	123	118	150	109	110	103	181	276	401	459	559
KM												
320	271											
310	271											
300	263	269					159					
290	244	268		270		155	159					
280	216	259	310	270	259	154	156					
270	177	240	310	264	254	150	151					
260	131	207	300	252	237	143	143					681
250	85.8	157	273	234	206	134	132				740	677
240	47.5	94.3	225	206	156	120	114		467	616	738	658
230	22.3	44.4	150	166	87.0	102	89.9	337	466	605	714	623
220		12.4	55.3	106	38.3	86.2	58.8	332	450	568	666	572
210				32.8		73.1	12.4	314	415	507	577	505
200						59.6		280	356	424	436	433
190						31.5		217	281	341	321	369
180								154	212	274	257	319
170								105	164	229	221	280
160								73.8	132	195	187	249
150								58.0	111	170	150	218
140								50.4	93.7	149	130	190
130								47.2	78.5	122	120	153
120								37.9	71.5	105	115	137
110								29.1	22.2	61.1	53.8	91.9
100								13.0				

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 26 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	A1	A1	A1	A1	A1	A2	S2	2	2	2	2	0
HMIN					107			190	201	227	234	205
SCAT					38.8			37.0	75.4	76.7	54.4	34.4
HMAXF					238			270	322	363	339	294
SHMAX					424			124	122	170	175	132
KM												
370										186		
360										186		
350										185		
340										182	257	
330									130	177	255	
320									130	171	249	
310									129	165	238	
300									127	154	224	258
290									124	137	202	257
280								235	120	117	171	248
270								235	114	95.7	134	227
260								231	108	72.9	92.7	198
250								218	101	49.6	51.3	162
240					672			196	93.3	30.2	23.1	123
230					665			166	84.4	12.4		79.3
220					635			134	72.8			45.2
210					583			100	51.2			20.2
200					513			64.4				
190					422							
180					309							
170					215							
160					170							
150					140							
140					118							
130					103							
120					96.3							
110					78.1							

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 27 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	0	0	1	1	1	A1	A1	S1	A1	A1	A1	A1
HMIN	210	230	208	192	228	207	209	108				103
SCAT	39.6	42.5	43.0	41.5	48.5	50.3	48.1	31.1				31.2
HMAXF	296	315	294	256	320	319	302	231				259
SHMAX	150	150	172	113	127	141	124	161				579
KM												
330					196							
320		271			196	206						
310		270			193	204	190					
300	284	263	310		187	199	190					
290	283	247	304		176	189	187					
280	273	225	302		161	175	180					
270	254	196	286		140	157	168					
260	226	152	261	246	112	132	155					834
250	184	95.1	225	245	82.1	105	139					818
240	133	40.5	174	237	49.7	76.1	118	309				756
230	78.6	3.1	115	225	17.2	51.4	91.7	309				662
220	39.7		58.8	199		32.4	57.7	300				547
210	3.1		16.8	146		15.3	12.4	276				442
200				52.7				232				369
190								178				320
180								127				287
170								86.8				260
160								59.7				234
150								51.1				207
140								47.5				174
130								40.9				151
120								31.4				140
110								17.3				125

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 27 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	A1	A1	A2	2	A2	A0	S0	A0	0	A0	0	0
HMIN		107		109			100	200	199	230	235	253
SCAT		49.9		38.5			31.4	37.7	47.8	40.2	45.0	35.9
HMAXF		277		263			239	266	295	313	330	339
SHMAX		664		620			251	123	79	95	113	101
KM												
340											188	197
330											188	194
320										179	185	183
310										179	178	165
300									118	174	166	139
290									118	164	150	107
280		744							115	148	127	76.8
270		740		886				259	110	123	100	47.6
260		723		885				257	102	94.2	69.1	23.7
250		691		860				247	92.8	61.7	41.9	
240		642		809			541	229	81.2	32.4	20.1	
230		579		719			529	198	67.1			
220		503		605			489	154	52.0			
210		435		486			418	97.7	36.9			
200		375		382			315	12.4	12.4			
190		329		308			193					
180		293		259			101					
170		263		225			59.6					
160		232		196			39.8					
150		197		172			28.8					
140		166		155			25.3					
130		147		139			23.9					
120		138		122			22.6					
110		66.5		41.7			19.9					
100							13.0					

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 28 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	0	0	0	0	F0	F0	A0	S0	A0	A0	A0	A1
HMIN	266	238	211	209	213	209	215	100	108	106	107	107
SCAT	50.0	37.3	36.5	32.9	38.9	50.3	44.0	36.1	38.4	24.6	37.2	38.6
HMAXF	361	320	284	267	304	309	303	236	242	236	242	246
SHMAX	137	119	125	104	109	112	82	176	300	345	459	491
KM												
370	214											
360	213											
350	211											
340	204											
330	193											
320	177	236										
310	154	232			197	170	140					
300	125	220			196	168	140					
290	95.2	199	271		191	164	137					
280	62.3	170	271		178	155	130					
270	26.0	129	262	271	160	145	120					
260		79.0	243	268	137	130	107					
250		39.9	211	252	109	111	87.6		450		714	697
240		12.4	160	224	78.9	84.8	65.2	278	450	697	713	693
230			93.5	156	49.2	56.4	42.2	276	440	689	696	667
220			40.0	61.6	24.3	31.6	20.1	264	415	628	653	619
210				12.4		5.9		242	374	508	581	541
200								210	320	352	472	444
190								170	256	249	362	352
180								132	204	197	283	298
170								103	164	152	234	262
160								81.6	136	130	198	233
150								65.7	119	119	165	206
140								55.5	101	112	144	174
130								50.6	81.6	108	133	151
120								43.1	67.2	105	126	139
110								32.8	35.2	80.8	70.8	65.4
100								13.0				

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO 60 W 28 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	A1	A1	A2	A2	A2	A1	A1	A1	1	A1	F1	F2
HMIN	108	107						200	198	247	287	266
SCAT	37.6	40.8						36.2	44.7	62.6	38.1	47.5
HMAXF	247	250						262	283	363	379	361
SHMAX	483	490						88	61	85	85	138
KM												
380											149	
370										106	147	215
360										106	140	215
350										105	127	213
340										102	113	205
330										98.4	96.2	192
320										93.1	75.1	176
310										86.5	51.6	156
300										78.0	33.1	132
290									105	67.1	15.4	101
280									105	53.6		61.3
270								197	103	40.0		23.6
260								196	98.4	27.1		
250	651	621						191	91.1	12.4		
240	646	613						178	80.5			
230	619	586						156	66.6			
220	568	539						122	51.4			
210	495	478						73.4	33.9			
200	414	409						12.4	12.4			
190	346	352										
180	301	308										
170	273	276										
160	248	251										
150	224	226										
140	197	196										
130	166	162										
120	148	141										
110	81.2	110										

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 29 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	F2	2	1	1	1	A0	A0	S0	0	0	0	0
HMIN	230	234	224	219	221	200	197	100	107	104	104	104
SCAT	28.8	34.3	40.5	31.0	36.4	56.8	46.3	38.4	28.9	33.0	31.2	35.3
HMAXF	292	308	303	281	297	283	298	236	235	243	235	232
SHMAX	80	93	112	99	93	86	68	169	288	446	449	412
KM												
310		197	215									
300	204	194	215		188		103					
290	204	183	210	247	186	130	102					
280	194	164	198	247	178	130	99.0					
270	173	135	179	235	162	128	92.9					
260	140	103	154	219	142	125	85.4					
250	96.2	63.8	115	184	112	119	76.1			747		
240	43.1	28.8	63.2	129	75.3	111	63.9	270	494	746	819	591
230	3.1		27.6	54.8	36.4	102	50.7	268	490	719	815	590
220				12.4		89.3	37.5	258	462	658	774	574
210						69.8	26.0	238	404	555	692	533
200						12.4	12.4	210	329	424	527	471
190								166	263	316	351	402
180								123	211	250	271	341
170								91.6	170	208	235	292
160								71.6	140	178	208	255
150								59.3	117	151	169	229
140								54.6	103	130	135	200
130								44.2	94.0	118	126	162
120								34.7	75.0	111	121	138
110								30.3	47.4	75.4	94.3	119
100								19.7				

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 29 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	A0	A0	A0	A0	A0	A1	S1	1	1	1	1	0
HMIN	106						100	200	212	207	209	198
SCAT	43.1						26.3	28.9	47.6	39.6	45.1	46.2
HMAXF	248						231	248	280	300	312	294
SHMAX	491						237	86	52	71	96	94
KM												
320											154	
310											154	
300										124	151	149
290									97.6	122	145	149
280									97.6	116	136	146
270									96.5	106	121	139
260									93.2	93.3	101	129
250	619							245	88.1	76.8	77.9	116
240	613						607	241	80.0	58.7	55.8	98.5
230	592						607	222	66.3	41.8	38.6	77.3
220	551						580	185	40.0	27.2	24.6	54.6
210	500						509	115		12.4	4.0	32.6
200	435						371	12.4				12.4
190	374						197					
180	323						106					
170	283						63.5					
160	251						43.0					
150	225						31.3					
140	202						25.8					
130	149						23.8					
120	135						22.1					
110	121						19.3					
100							13.0					

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 30 NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
Q,KP	F0	0	1	1	A1	A0	A0	S0	A0	0	0	0
HMIN	200	212	207	218	239	238	218	100	105	107	106	105
SCAT	37.6	39.3	35.7	33.2	34.0	33.5	33.3	31.4	39.1	36.7	36.2	41.2
HMAXF	289	301	281	283	319	311	305	243	247	236	229	250
SHMAX	89	95	119	105	97	92	119	214	369	425	420	492
KM												
320					197	197						
310		174			193	197	236					
300		174			182	191	235					
290	163	170	259	245	162	177	225					
280	161	160	259	245	138	155	203					
270	153	146	253	236	109	126	176					
260	138	125	237	217	70.3	90.2	143					
250	120	99.5	210	184	36.4	51.2	102	389	580			648
240	95.3	69.7	162	136	4.7	16.5	64.9	388	576	704		639
230	69.1	44.5	103	74.2			37.2	371	553	698	707	611
220	46.1	24.7	54.0	20.5			12.4	337	513	669	696	564
210	27.0		19.9					272	436	614	657	491
200	2.4							203	338	511	592	414
190								148	258	381	452	351
180								107	199	283	327	306
170								82.8	158	225	259	270
160								66.9	130	188	223	235
150								57.1	111	158	192	199
140								51.8	97.5	132	164	155
130								48.0	90.4	120	143	142
120								38.4	76.5	114	132	139
110								31.1	54.6	63.7	59.2	107
100								12.4				

ELECTRON DENSITY

RAMEY AFB, PUERTO RICO — 60 W — 30 NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
Q,KP	0	A0	A1	A1	A1	1	A1	A1	A0	0	0	2
HMIN	108	106	104	110		108			199	197	248	231
SCAT	48.3	45.1	37.8	37.8		42.6			42.5	44.3	45.4	41.8
HMAXF	268	257	259	252		269			268	288	345	344
SHMAX	689	597	643	526		618			76	78	88	121
KM												
350											141	182
340											141	181
330											137	177
320											131	167
310											120	153
300											105	136
290										133	87.9	119
280										132	69.5	100
270	815					976			153	128	51.0	80.1
260	810	747	890	782		965			151	120	32.1	57.9
250	787	742	876	782		928			146	108	12.4	38.3
240	747	720	831	764		865			137	91.6		22.8
230	691	681	755	719		767			121	70.7		
220	600	620	656	646		620			94.0	48.7		
210	502	541	546	538		447			60.3	29.9		
200	418	459	440	423		311			12.4	12.4		
190	357	385	359	334		211						
180	318	327	304	273		154						
170	291	287	265	232		121						
160	270	258	234	201		98.9						
150	247	228	210	178		84.1						
140	214	193	188	162		73.9						
130	173	151	137	140		68.0						
120	153	139	124	123		65.5						
110	88.8	75.5	119	12.4		25.7						

AVERAGE ELECTRON DENSITY — KP BELOW 4.5

RAMEY AFB, PUERTO RICO — 60 W — NOV 1961

TIME	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100
COUNT	28	29	24	26	26	27	26	24	26	25	25	25
KP	1.8	1.7	1.7	1.6	1.6	1.2	1.2	1.3	1.2	1.3	1.3	1.1
HMIN	240	234	222	216	215	208	224	105	108	107	107	106
RATIO	6.0	6.8	7.0	7.5	6.4	5.8	5.5	5.9	5.8	5.4	5.3	5.0
SCAT	42.5	37.8	38.3	37.0	46.7	49.0	50.2	34.4	34.8	37.4	37.9	40.7
NMAX	198	217	227	218	169	135	131	368	627	794	947	920
HMAXF	328	313	297	284	301	296	318	244	244	252	257	259
SHMAX	112	107	111	98	97	83	84	215	372	515	637	652
SHINF	670	721	750	712	574	464	454	1252	2141	2755	3308	3247
KM												
950	14.6	14.8	14.3	12.8	11.0	8.7	9.3	17.9	30.6	40.2	49.8	48.3
900	18.7	19.0	18.3	16.4	14.1	11.1	11.9	22.9	39.2	51.6	63.9	62.0
850	24.0	24.3	23.5	21.1	18.1	14.2	15.2	29.4	50.3	66.2	82.0	79.6
800	30.7	31.2	30.1	27.1	23.1	18.3	19.5	37.8	64.6	84.9	105	102
750	39.3	39.9	38.6	34.7	29.6	23.4	25.0	48.4	82.8	109	135	131
700	50.3	51.1	49.4	44.4	37.9	29.9	32.0	62.0	106	139	173	168
650	64.0	65.1	63.1	56.7	48.3	38.2	40.7	79.4	136	178	221	214
600	81.1	82.6	80.2	72.2	61.4	48.5	51.6	101	173	228	282	273
550	102	104	101	91.3	77.4	61.3	64.9	129	221	289	358	347
500	126	129	127	115	96.4	76.5	80.6	163	279	365	451	438
450	152	158	156	142	118	93.8	97.8	204	349	456	561	545
440	157	164	162	147	122	97.4	101	213	364	476	585	569
430	163	169	168	153	127	101	105	222	380	496	610	593
420	168	175	174	159	131	105	108	232	396	517	635	617
410	172	181	180	165	135	108	111	241	413	538	660	642
400	177	186	186	171	140	112	115	251	429	560	686	666
390	181	191	192	176	144	115	118	261	446	581	711	691
380	185	196	197	182	148	118	120	271	463	603	737	716
370	188	200	202	187	151	121	123	281	480	624	762	741
360	190	204	207	193	155	124	125	291	497	646	787	765
350	191	207	212	197	157	126	126	301	514	666	811	789
340	191	209	216	202	160	128	127	310	530	687	834	811
330	190	210	219	206	162	130	127	320	546	706	856	832
320	186	209	221	209	163	130	127	329	561	724	876	852
310	179	205	222	211	162	130	124	337	575	741	894	870
300	167	198	220	212	160	129	120	345	588	756	910	885
290	152	186	215	212	156	126	113	351	600	769	922	898
280	131	168	205	209	150	121	104	357	610	779	930	907
270	106	143	189	201	140	114	92.0	362	617	786	934	912
260	78.6	114	165	187	127	104	77.9	365	622	789	927	908
250	50.9	81.7	133	165	111	92.0	62.3	365	623	783	903	888
240	29.5	48.5	94.5	132	91.1	78.0	46.9	360	614	760	856	844
230	13.5	22.8	57.3	89.0	68.0	62.9	32.9	345	586	712	782	771
220	5.5	6.5	26.1	45.5	41.5	47.1	20.3	314	533	630	677	667
210	1.8	1.6	6.6	16.1	15.7	30.5	8.7	267	450	521	554	545
200	.1	.4	1.0	2.3	3.0	13.5	2.4	213	354	406	433	435
190					.9	5.8		160	265	314	338	353
180						.9		117	201	252	279	301
170							86.8	158	209	240	265	
160							68.3	129	175	208	235	
150							57.9	109	147	176	206	
140							52.5	96.5	129	150	176	
130							46.3	85.7	116	134	152	
120							38.3	76.1	107	125	139	
110							22.8	38.4	63.0	71.7	90.9	
100							6.7					

AVERAGE ELECTRON DENSITY — KP BELOW 4.5

RAMEY AFB, PUERTO RICO — 60 W — NOV 1961

TIME	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
COUNT	23	22	19	16	20	11	12	25	27	28	26	28
KP	1.0	1.1	1.4	1.4	1.0	1.3	1.5	1.6	1.5	1.5	1.5	1.8
HMIN	108	107	107	107	108	109	99	203	206	236	236	235
RATIO	4.8	4.9	5.0	5.1	5.5	6.0	6.2	6.9	5.8	5.4	5.8	5.8
SCAT	41.3	40.5	41.3	39.8	39.2	36.6	34.9	38.9	49.1	50.4	44.6	44.7
NMAX	922	964	962	1006	908	736	570	309	178	175	194	191
HMAXF	263	265	263	265	258	253	255	277	296	337	329	329
SHMAX	676	700	690	687	578	422	319	150	105	115	114	115
SHINF	3276	3419	3405	3526	3138	2498	1951	1021	608	608	660	653
KM												
950	49.3	52.1	51.3	54.5	47.3	37.4	29.8	17.8	11.1	13.4	14.2	14.2
900	63.3	66.9	66.4	69.7	60.7	48.0	38.2	22.9	14.2	17.2	18.2	18.2
850	81.2	85.8	85.3	89.8	77.9	61.7	49.1	29.4	18.3	22.0	23.4	23.3
800	104	110	109	115	100	79.1	62.9	37.7	23.4	28.3	30.0	29.9
750	134	141	140	148	128	101	80.7	48.3	30.0	36.2	38.4	38.3
700	171	181	180	189	164	130	103	61.8	38.4	46.2	49.0	48.9
650	219	231	230	242	210	166	132	79.0	49.0	58.8	62.4	62.3
600	279	295	293	308	268	212	169	101	62.4	74.3	79.1	78.8
550	354	374	371	391	340	270	214	127	78.8	93.2	99.3	99.0
500	446	471	468	493	429	340	270	160	98.5	115	123	122
450	555	586	582	613	535	425	337	198	121	138	149	148
440	579	611	607	639	558	443	352	206	126	143	154	153
430	603	636	632	665	582	462	367	214	131	147	159	158
420	628	662	657	692	605	482	382	223	135	151	164	163
410	652	688	683	719	630	501	397	231	140	155	169	167
400	677	714	709	747	654	521	413	239	145	159	173	172
390	702	740	735	774	679	541	429	248	149	163	177	176
380	727	766	761	801	704	561	444	256	154	166	181	179
370	752	792	787	828	728	581	460	264	158	168	184	182
360	776	817	812	854	752	601	475	271	162	170	187	185
350	799	841	836	879	776	620	490	278	166	171	188	186
340	822	864	859	903	798	639	505	285	169	171	189	187
330	843	885	880	926	819	657	518	291	171	169	187	185
320	862	905	900	945	837	673	531	296	173	165	184	181
310	879	922	917	964	857	689	543	300	174	157	177	174
300	893	937	932	980	873	702	553	303	174	146	166	162
290	905	948	943	992	886	714	562	303	172	131	151	147
280	913	955	950	1000	896	724	568	301	167	112	132	126
270	915	956	950	1000	901	730	572	296	160	93.3	111	101
260	907	946	940	985	899	733	570	287	150	72.3	86.0	75.8
250	880	915	914	949	884	727	558	271	135	50.4	58.4	53.0
240	829	854	862	879	846	703	532	214	115	31.8	34.9	33.4
230	748	761	779	774	776	651	484	164	89.5	17.1	15.3	18.0
220	639	639	669	642	671	566	427	113	60.1	8.5	6.4	8.6
210	521	513	546	502	539	448	344	69.9	28.7	3.2	1.3	3.9
200	416	407	428	388	402	324	250	45.0	5.5	.4	.5	.9
190	342	336	340	310	295	219	160	1.0				
180	298	292	283	258	223	153	101					
170	267	261	246	222	180	115	67.1					
160	239	234	217	193	150	91.8	47.7					
150	210	202	188	167	127	77.0	36.3					
140	182	174	160	144	109	67.6	30.0					
130	157	150	139	126	96.5	62.4	26.9					
120	144	138	130	116	91.0	58.6	25.3					
110	80.8	85.6	61.9	65.2	49.3	24.8	22.7					
100							12.2					

TABLES OF IONOSPHERIC DATA

TABLE 1

RESOLUTE BAY, CANADA (74.7N, 94.9W)

TIME 90.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	52	50	48	48	48	50	49	50	52	50	52	52	53	50	50	52	52	52	52	50	53	51	51	52
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31
	UQ																								
	LQ																								
h'F2	MED				U 270	U 295	290	295	320	330	355	380	360	370	375	350	360	360	320	300	290	300			
	CNT	1	1		7	8	15	18	24	28	30	31	29	31	28	27	29	27	29	27	18	12	4	3	1
	UQ																								
	LD																								
h'F	MED	245	240	230	230	230	230	220	215	210	205	205	205	200	200	205	205	205	210	210	220	230	240	230	240
	CNT	29	30	31	30	29	29	28	26	30	26	26	29	29	30	29	28	27	31	31	31	31	30	31	30
	UQ																								
	LQ																								
(M3000)F2	MED	300	310	310	300	310	310	310	300	300	290	290	300	280	280	300	300	290	300	300	300	300	300	310	300
	CNT	18	18	20	23	22	25	24	24	20	24	21	18	20	16	18	20	23	24	24	25	26	23	21	18
	UQ																								
	LQ																								
foF1	MED						U 330	360	370	390	400	400	410	410	410	400	410	400	390	380	U 350				
	CNT				1	3	8	13	16	24	29	31	31	31	31	31	31	29	29	18	8	1			
foE	MED	U 160	160	170	190	200	210	230	240	260	280	290	290	300	290	290	280	270	250	240	220	200	190	180	U 170
	CNT	8	12	13	19	21	25	22	23	24	25	25	27	26	25	26	26	27	28	29	26	22	18	14	7
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 1.6 MC TO 20.0 MC IN 15 SECONDS.

AUGUST, 1961

TABLE

TROMSO, NORWAY (69.7N, 19.0E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED				44	42	46	48	51	51	54	54	58	58	57	58	56	57	54	53	54	53	54		
	CNT	1		3	8	5	10	12	9	11	14	15	14	13	15	10	12	12	12	14	12	10	4	1	3
	UQ				48	51	49	52	55	56	58	58	53	60	59	59	60	58	60	58	57	55			
	LQ				40	40	41	44	48	49	51	50	55	54	51	56	53	50	51	49	49	45			
h'F2	MED							460	405	370	385	380	345	360	360		310					260			
	CNT			1	3	2	4	5	6	5	12	13	13	10	11	3	5	1			2	5	2		
	UQ							570	440	445	420	440	420	405	495		360					300			
	LQ							400	350	350	350	345	335	340	340		290					250			
h'F	MED				280		250	245	220	215	230	210	210	210	210	210	220	230	245	245					325
	CNT	2	3	4	6	4	7	9	8	9	10	11	11	13	11	8	11	10	10	10	4	1	3	3	6
	UQ				295		250	245	235	240	245	225	225	235	230	210	240	240	245	260					340
	LQ				250		230	240	210	210	210	205	205	210	205	205	210	215	240	240					305
(M3000)F2	MED				270		290	280	290	290	280	290	290	285	290	305	300								
	CNT			1	6	3	7	10	7	9	13	15	14	11	15	7	12	4	5	8	16	4			1
	UQ				280		290	290	310	300	290	300	305	305	305	310	310		305	310					
	LQ				270		270	270	270	280	270	270	270	270	275	290	290		290	290					
foF1	MED							385	400	410	420	430	440	440	430		410								
	CNT				1		4	5	6	5	12	13	13	10	11	3	5	1							
foE	MED														300	300	290	280	255	240					
	CNT			3	1	2	4	4	4	1	2	2	1	3	5	5	0	10	8	6		1	1		
h'E	MED							110	105	105	100	100	100	105	100	100	105	105	105	105					
	CNT			2		2	3	8	7	9	9	9	9	10	10	8	10	11	10	9	4				
foEs	MED	44	40	29	36	32	30	30		29	31	32	32	32	32	27	26	31	32	30	31	38	43	42	40
	CNT	19	15	16	16	13	12	11	7	9	9	9	10	12	12	13	15	15	16	17	17	15	17	14	15

SWEEP 0.7 MC TO 25.0 MC IN 5 MINUTES, AUTOMATIC OPERATION.

AUGUST, 1961

TABLE

KIRUNA, SWEDEN (67.8N, 20.4E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	53	44	34	38	40	46	49	50	55	58	60	60	60	59	58	58	56	56	55	54	56	55	52	52
	CNT	2	3	5	10	15	24	25	28	28	27	27	28	27	28	27	26	28	29	29	26	20	10	4	2
	UD																								
	LD																								
h'F2	MED						385	340	350	345	330	320	315	310	310	305	300	300	270	270					
	CNT					2	11	18	26	27	26	25	26	26	26	21	22	13	9	11	2				
	UD																								
	LD																								
h'F	MED	295	285	270	270	250	230	225	220	210	210	205	205	205	205	205	210	215	225	235	245	250	260	285	290
	CNT	21	21	22	22	24	24	26	28	27	26	26	27	25	27	25	27	26	26	28	26	25	22	22	23
	UQ																								
	LQ																								
(M3000)F2	MED	285	290	290	290	290	290	300	300	300	310	300	300	300	310	320	320	320	320	320	320	310	300	300	295
	CNT	2	3	5	8	13	24	24	28	27	27	27	28	27	28	27	26	28	28	28	26	20	10	4	2
	UQ																								
	LQ																								
foF1	MED					330	340	360	400	420	435	440	440	440	440	430	420	400	360	340					
	CNT					2	11	19	26	28	26	26	26	25	25	21	22	11	7	9	1				
foE	MED									270	280	290	300	300	300	280	280	270	240	220	195	170	140		
	CNT					160	200	230	260	23	20	21	23	23	22	19	24	25	23	19	12	7	1		
h'E	MED																								
	CNT																								
foEs	MED	40	40	36	32	39	34	36	33	32	40	38	36	34		30		31	33	30	36	28	33	40	46
	CNT	23	26	25	26	28	25	24	28	28	26	25	26	24	24	25	28	28	30	30	31	25	22	23	24

SWEEP 0.8 MC TO 15.0 MC IN 30 SECONDS.

AUGUST, 1961

TABLE

LULEA, SWEDEN (65.6N, 22.1E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	49	44	35	37	40	46	51	52	55	61	62	62	62	60	59	59	58	61	59	57	58	55	47	U 49
	CNT	17	9	11	20	23	23	24	26	25	26	28	27	28	28	28	27	29	27	29	26	20	15	14	9
	UQ																								
	LQ																								
h'F2	MED					38	430	44	47	47	340	325	330	325	340	345	325	350	385	480					
	CNT					1	3	1	13	7	29	32	31	22	27	10	7	3	2	4					
	UQ																								
	LQ																								
h'F	MED	280	295	260	275	260	240	235	237	245	260	415	215	215	210	215	215	220	240	245	250	250	250	265	275
	CNT	22	24	23	24	24	27	25	27	23	24	4	26	24	26	23	20	23	25	29	27	27	26	25	25
	UQ																								
	LQ																								
(M3000)F2	MED	290	300	300	300	300	300	300	290	290	290	300	290	300	290	300	300	300	300	300	300	300	300	290	300
	CNT	8	6	7	14	21	23	5	34	27	24	27	25	28	27	26	27	29	26	29	24	18	11	10	7
	UQ																								
	LQ																								
foF1	MED					300	330	360	400	420	440	440	440	450	430	430	410	390	370	340					
	CNT					1	9	5	12	18	25	23	26	22	17	10	5	3	1	1					
foE	MED				180	170	220	240	270	290	300	320	310	320	310	310	280	280	260	220	190	180	160		
	CNT				6	15	20	18	18	13	13	15	17	17	21	19	17	20	22	13	15	3	3		
h'E	MED				130	145	130	125	120	115	115	110	110	110	110	110	110	110	125	135	145	150	125		
	CNT				3	9	17	15	18	11	13	16	17	16	21	20	17	18	18	9	11	2	1		
foEs	MED	24	22	20	17	17	22	24	27	30	30	31	31	32	31	31	28	28	26	22	19	22	23	35	37
	CNT	18	12	21	20	20	23	23	23	21	25	22	26	24	24	23	21	24	26	28	26	21	18	14	18

SWEEP 0.65 MC TO 25.0 MC IN 5 MINUTES, AUTOMATIC OPERATION.

AUGUST, 1961

TABLE 5

LYCKSELE, SWEDEN (64.7N, 18.8E) TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	41	40	36	36	38	43	50	52	55	59	61	62	61	60	59	58	60	61	59	57	58	55	50	45
	CNT	28	27	28	26	29	29	27	27	31	30	29	30	30	30	30	31	31	30	30	30	29	30	30	29
	UQ																								
	LQ																								
h'F2	MED					305	355	350	340	340	320	315	315	315	320	300	315	300	305	290	275				
	CNT					2	8	15	24	29	30	29	29	31	28	26	24	15	10	3	1				
	UQ																								
	LQ																								
h'F	MED	265	260	260	260	250	230	225	210	205	205	205	200	200	200	200	205	210	225	230	240	240	240	250	255
	CNT	27	23	25	26	29	27	28	28	30	30	30	29	30	29	29	30	27	28	27	30	29	27	29	28
	UQ																								
	LQ																								
(M3000)F2	MED	280	270	270	280	280	280	280	280	280	290	300	290	290	300	290	300	300	305	310	300	300	290	280	280
	CNT	28	26	28	26	29	30	29	28	30	30	29	31	31	31	31	31	31	30	30	30	29	29	28	27
	UQ																								
	LQ																								
foF1	MED					285	335	375	295	420	435	440	440	440	440	430	420	400	390	350	310				
	CNT					2	10	18	24	30	30	30	30	31	30	28	25	15	10	3	1				
foE	MED			U 80	U 130	140	195	230	250	270	290	300	300	300	300	300	280	260	240	220	180	130	120	120	
	CNT	1		1	3	15	26	26	28	29	28	25	24	24	25	24	27	27	26	27	22	7	1	1	
h'E	MED					105	110	105	100	100	100	100	100	100	100	100	100	100	100	110	115	120			
	CNT					5	10	20	27	28	29	29	30	29	29	27	28	27	26	23	12	4	1		
foEs	MED	31	30	30	30	30	35	40	37	39	44	54	42	40	40	39	39	37	35	35	29	24	23	24	30
	CNT	31	30	31	31	31	29	27	28	29	30	29	31	31	31	30	29	30	31	30	30	30	28	28	31

SWEEP 0.33 MC TO 20.0 MC IN 3 MINUTES. AUGUST, 1961

TABLE 6

NUMIJARVI, FINLAND (60.5N, 24.6E) TIME 30.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	54	49	43	42	37	39	45	50	56	58	63	67	65	64	63	62	59	60	62	62	66	64	65	60
	CNT	6	6	7	4	9	17	19	18	26	25	22	24	28	28	28	29	27	26	24	18	14	13	8	8
	UQ	57	50	48	43	39	43	53	58	60	65	70	71	70	67	67	64	65	64	65	67	71	68	69	62
	LQ	51	37	31	40	31	37	42	46	52	54	59	60	59	59	58	58	57	57	58	58	62	61	62	58
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	280	290	300	295	290	270	230	220	215	220	210	210	210	205	205	210	210	220	240	260	270	250	240	270
	CNT	30	31	31	30	29	30	30	30	30	30	30	30	31	31	31	30	31	31	31	31	31	31	30	30
	UQ	290	300	300	300	300	280	240	230	230	230	230	220	230	230	220	215	215	230	260	270	280	280	270	280
	LQ	270	280	290	280	280	260	230	210	205	210	205	205	200	200	200	205	205	215	230	240	250	240	230	250
(M3000)F2	MEQ	295	288	285	280	295	310	310	310	305	305	315	318	315	315	315	315	315	315	320	315	320	320	310	300
	CNT	6	6	7	4	8	17	19	18	26	24	21	24	28	28	28	29	28	26	23	18	13	13	8	9
	UQ	305	300	290	285	300	320	320	320	315	310	322	323	320	320	320	325	320	330	325	320	320	320	313	310
	LQ	290	285	280	273	290	290	300	300	290	298	295	308	308	305	310	305	310	310	310	310	310	302	305	300
foF1	MED						310	330	370	400	430	440	450	450	450	460	450	420	410						
	CNT						1	3	5	14	27	28	30	27	25	11	14	6	3						
foE	MED						175	200	240	267	290	300	295	320	300	300	310	265	250	235	200				
	CNT						2	18	20	20	19	10	5	1	1	1	1	2	11	20	11				
h'E	MED																								
	CNT																								
foEs	MEQ	33	37	37	31	31	22	23	26	30	34	38	45	46	44	46	43	41	28	28	29	31	43	33	44
	CNT	4	2	7	6	5	7	19	23	23	20	14	16	9	9	5	5	8	14	23	23	15	8	6	2

SWEEP 1.0 MC TO 25.0 MC IN 1 MINUTE. AUGUST, 1961

TABLE 7

UPPSALA, SWEDEN (59.8N, 17.6E) TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	46	42	38	37	37	45	50	53	59	60	65	66	65	64	63	61	61	62	64	66	67	65	58	50
	CNT	26	26	28	29	31	28	28	31	30	30	31	31	31	31	31	31	31	31	31	30	29	30	27	27
	UQ																								
	LQ																								
h'F2	MED						490	400	345	340	310	310	305	315	325	300	310	300	295	290					
	CNT						5	11	20	26	27	29	29	28	28	28	21	20	10	1					
	UQ																								
	LQ																								
h'F	MED	265	275	270	270	260	240	225	220	210	210	210	200	200	205	205	205	215	225	240	245	245	245	245	245
	CNT	29	29	27	26	26	28	25	25	25	26	28	27	29	27	27	28	28	27	24	24	25	28	29	29
	UQ																								
	LQ																								
(M3000)F2	MEQ	270	270	265	270	280	300	295	300	295	300	300	310	300	300	300	300	300	300	300	300	300	290	290	290
	CNT	24	24	26	27	29	27	28	28	28	29	29	29	29	29	29	29	29	28	28	28	28	28	25	25
	UQ																								
	LQ																								
foF1	MED						320	380	420	430	450	450	470	460	465	450	430	440	400	340					
	CNT						6	12	23	28	30	31	31	29	31	29	21	19	10	2					
foE	MEQ	80	110	95	U 115	140	190	230	250	280	305	310	320	320	320	315	300	280	255	220	175	130	100	U 75	90
	CNT	1	1	1	3	11	23	29	29	22	26	24	19	19	20	22	22	25	27	28	11	8	7	2	1
h'E	MED			135	125	120	115	110	105	105	100	100	100	100	100	100	100	105	105	110	115	115	120	135	
	CNT		1	1	3	3	11	19	24	27	25	29	28	24	24	23	25	24	22	23	8	6	6	2	1
foEs	MEQ	23	24	30	31	31	34	39	45	47	47	47	48	49	47	44	44	44	40	37	30	25	24	25	24
	CNT	29	31	31	30	30	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	29	27

SWEEP 0.33 MC TO 20.0 MC IN 3 MINUTES. AUGUST, 1961

TABLE 8

CHURCHILL, CANADA (58.8N, 94.2W) TIME 90.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	43	42	40	38	39	41	44	45	49	54	56	57	58	58	59	60	62	61	60	58	49	46	45	42
	CNT	24	26	27	26	26	27	26	23	24	26	25	30	29	31	31	31	31	31	31	31	31	29	31	28
	UQ	46	45	45	43	42	45	47	52	54	56	62	63	63	64	66	66	66	68	68	63	56	52	47	48
	LQ	38	37	35	35	37	38	40	44	45	47	49	49	50	51	52	53	55	56	53	49	45	43	4_	39
h'F2	MEQ							U 410	385	380	400	390	385	400	400	380	360	340	330	305					
	CNT						1	9	14	21	21	24	28	29	28	29	31	30	28	23	4				
	UQ																								
	LQ																								
h'F	MED	280	300	300	300	285	300	275	240	230	220	210	205	200	200	210	220	220	240	250	280	290	295	280	280
	CNT	22	20	21	22	23	19	22	13	14	19	22	27	29	28	27	26	26	25	23	29	30	25	28	19
	UQ																								
	LQ																								
(M3000)F2	MEQ	U 300					300	300	290	280	290	290	290	280	280	280	290	290	290	300	300	300	U 300	U 290	
	CNT	7	3	4	4	2	10	10	12	16	19	21	23	24	23	27	29	29	26	28	22	16	6	10	5
	UQ																								
	LQ																								
foF1	MEQ							340	400	430	430	440	440	450	450	450	440	420	410	U 380					
	CNT						1	10	11	21	26	27	30	31	31	31	31	28	21	9	1				
foE	MEQ						U 240	250	U 270	300	320	330	330	330	330	330	320	300	300	250	240	U 230			
	CNT		1				6	15	9	13	19	21	26	29	30	29	28	26	26	21	14	8	2		
h'E	MEQ																								
	CNT																								
foEs	MEQ																								
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 1.0 MC TO 17.0 MC IN 16 SECONDS. AUGUST, 1961

TABLE 9

INVERNESS, SCOTLAND (57.4N, 4.2W)

TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	51	46	42	36	33	38	45	50	54	60	60	60	60	60	60	60	61	63	63	65	65	62	62	56
	CNT	23	21	22	25	28	30	29	29	28	30	29	30	30	30	30	29	31	31	30	29	25	22	19	20
	UQ																								
	LQ																								
h'F2	MED								350	340	335	310	325	320	330	340	330	315	310	285					
	CNT							2	15	20	29	28	30	30	26	29	26	26	17	8					
	UD																								
	LQ																								
h'F	MED	270	270	280	280	280	250	240	225	220	210	205	200	200	200	205	220	220	230	240	250	250	250	250	265
	CNT	31	30	30	28	29	29	28	26	25	24	26	25	27	28	25	27	29	26	25	26	31	31	31	31
	UD																								
	LQ																								
(M3000)F2	MED	270	270	270	275	275	290	295	295	295	290	295	290	295	290	290	290	290	290	295	295	295	290	285	280
	CNT	20	16	18	23	27	28	28	29	28	29	29	30	30	30	30	29	31	31	28	25	19	22	16	15
	UQ																								
	LQ																								
foF1	MED								390	410	440	450	460	460	460	450	440	410	410						
	CNT							2	11	16	23	20	26	24	21	16	19	11	6	1					
foE	MED						170	220	250	280	300	315	330	335	340	330	320	305	275	245	205	165			
	CNT						17	24	21	20	15	19	22	23	26	24	22	25	22	19	12	3			
h'E	MED						130	115	110	105	105	100	100	100	100	100	100	105	110	115	120				
	CNT						8	24	28	27	30	29	30	29	29	27	25	27	26	25	15				
foEs	MED	E 10	E 11	16	12	12	17	23	28	30	35	36	34	34	E 33	35	E 29	30	32	29	24	18	E 16	E 16	E 16
	CNT	14	30	30	31	28	29	30	29	28	30	29	30	30	29	30	29	31	31	31	31	29	31	31	31

SWEEP 0.67 MC TO 25.0 MC IN 5 MINUTES. AUTOMATIC OPERATION.

AUGUST, 1961

TABLE 10

SLOUGH, ENGLAND (51.5N, 0.6W)

TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	54	50	48	45	42	43	50	56	61	62	64	65	64	64	64	63	66	67	67	72	72	70	62	57
	CNT	28	27	28	28	26	26	29	28	27	30	30	31	31	30	30	31	30	31	28	30	25	30	30	29
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UD																								
	LQ																								
(M3000)F2	MED	275	280	275	275	285	295	310	315	315	315	315	310	300	300	305	300	305	305	300	305	300	300	290	280
	CNT	26	26	27	28	26	25	27	27	27	29	25	30	29	30	29	30	29	31	24	20	16	21	29	26
	UQ																								
	LQ																								
foF1	MED							370	400	420	440	450	470	470	480	480	460	440	U 410						
	CNT							9	7	12	21	17	23	21	20	20	13	9	5						
foE	MED						150	225	270	310	320	340	345	340	345	340	320	300	280	250	185				
	CNT						16	20	18	18	20	21	22	16	17	19	20	18	24	16	7				
h'E	MED																								
	CNT																								
foEs	MED	J 18	J 16	14	16	15	18	25	32	36	36	38	39	30	36	36	37	34	32	30	J 33	J 23	J 24	J 20	J 21
	CNT	29	29	29	29	29	29	28	29	29	31	30	31	31	30	30	31	31	31	31	31	31	31	31	30

SWEEP 0.69 MC TO 25.0 MC IN 5 MINUTES. AUTOMATIC OPERATION.

AUGUST, 1961

TABLE 11

DOURBES, BELGIUM (50.1N, 4.6E)

TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	51	49	46	42	41	45	54	60	66	70	68	68	68	67	67	64	66	68	68	75	74	67	59	54
	CNT	26	25	24	24	25	25	24	22	20	23	25	26	26	27	25	27	28	28	25	25	27	24	27	24
	UD	55	54	50	46	45	50	60	65	70	74	70	71	71	70	70	70	70	70	72	81	77	69	64	60
	LD	45	42	38	37	34	40	48	51	59	62	59	62	62	62	61	57	59	62	64	68	57	60	54	48
h'F2	MED						350	312	308	292	300	310	310	322	330	325	310	305	292	265					
	CNT						3	12	16	18	18	21	24	22	21	22	21	21	14	1					
	UQ						395	345	388	315	320	350	342	345	350	335	338	320	315						
	LQ						335	272	280	280	285	298	300	310	312	310	300	295	285						
h'F	MED	280	280	285	282	272	252	238	U 224	U 212	U 212	206	205	202	208	211	222	226	234	254	262	253	252	260	270
	CNT	26	25	25	24	25	25	25	24	21	21	24	27	27	25	26	27	28	28	26	27	28	24	25	24
	UD	300	300	300	300	291	265	260	265	260	285	235	218	212	220	225	270	255	258	285	270	269	264	278	279
	LD	270	270	268	260	265	246	230	260	215	206	205	200	200	200	205	220	220	230	250	255	245	243	245	250
(M3000)F2	MED	288	290	288	282	292	300	320	325	325	330	315	315	310	305	310	305	315	312	305	315	305	305	292	290
	CNT	26	24	24	24	24	25	23	22	19	18	23	25	26	26	25	27	28	28	25	25	27	25	24	24
	UD	290	290	295	295	302	312	335	330	335	335	330	330	320	320	320	320	320	320	315	320	320	315	305	300
	LD	280	280	280	275	282	290	300	300	315	320	300	298	295	295	302	295	308	305	305	310	300	290	280	280
foF1	MED						320	365	400	435	450	468	478	480	470	450	452	442	385						
	CNT						3	7	10	11	11	18	16	17	14	18	10	8	2						
foE	MED					E 110	155	220	260	300	322	332	340	345	340	335	318	292	250	195	E 160				
	CNT					1	9	8	15	11	14	6	5	8	8	13	14	16	22	11	5				
h'E	MED					111	E 130	115	111	109	107	107	107	106	106	106	107	107	110	U 117	E 123				
	CNT					1	20	25	24	22	22	23	26	26	26	27	28	27	27	25	9				
foEs	MED	20	16	14	16	15	21	27	33	36	38	40	36	37	37	35	34	34	32	32	30	31	26	19	18
	CNT	26	25	25	25	25	25	25	24	22	24	24	28	26	26	27	28	28	27	28	27	28	26	27	26

SWEEP 1.0 MC TO 25.0 MC IN 5 MINUTES. AUTOMATIC OPERATION.

AUGUST, 1961

TABLE 12

PRUHONICE, CZECHOSLOVAKIA (50.0N, 14.6E)

TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	50	48	44	41	41	46	58	63	69	69	70	68	68	67	67	66	68	69	71	75	70	63	59	54
	CNT	30	29	30	29	30	27	24	23	24	27	29	29	30	27	27	27	28	28	29	28	27	29	30	28
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	270	261	263	255	250	230	210	200	200	200	200	200	200	200	200	210	225	240	250	240	245	240	250	275
	CNT	26	24	27	27	25	21	15	15	16	17	18	23	23	14	21	18	15	11	23	20	23	20	18	12
	UD																								
	LQ																								
(M3000)F2	MED																								
	CNT																								
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	28	24	23	25	22	27	30	35	38	38	38	38	38	38	38	34	31	32	34	44	38	36	44	50
	CNT	24	26	30	19	23	27	27	24	26	27	29	30	30	27	29	27	30	30	28	22	38	17	13	7

SWEEP 1.0 MC TO 18.0 MC.

AUGUST, 1961

TABLE 13

WINNIPEG, CANADA (49.9N, 97.4W)

TIME 90.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	33	32	30	31	28	29	40	47	52	54	58	59	59	60	60	62	60	62	62	62	62	62	52	40
	CNT	24	26	26	22	22	20	24	25	25	23	26	29	30	29	29	30	31	30	30	28	27	28	29	27
	UD	42	36	33	33	33	31	44	50	56	59	62	63	64	66	68	65	65	65	67	66	69	65	59	50
	LD	31	27	24	25	23	26	36	42	46	49	51	54	52	54	54	54	54	54	55	57	56	55	44	36
h'F2	MED							U 430	355	370	370	380	350	385	375	370	355	340	320	295	U 280				
	CNT							5	11	21	21	25	25	30	27	27	29	29	28	20	8				
	UD							510	500	430	430	420	420	405	440	420	400	380	350	325	295				
	LD							340	300	330	330	320	315	330	350	335	330	320	295	270	260				
h'F	MED	280	300	300	300	300	290	230	210	210	200	200	200	200	200	200	205	205	210	220	250	240	235	250	255
	CNT	22	21	19	17	15	17	22	24	23	21	21	21	25	22	23	22	23	28	28	25	26	27	29	26
	UD																								
	LD																								
(M3000)F2	MED	290	290	290	290	290	U 310	320	310	300	290	290	300	290	290	290	290	290	300	300	300	300	300	300	300
	CNT	17	16	14	12	10	9	20	20	18	18	21	18	23	21	21	26	27	25	26	23	22	18	19	16
	UD																								
	LD																								
foF1	MED								U 360	420	430	460	460	460	480	470	450	440	410	U 380					
	CNT							4	8	22	23	26	29	30	30	27	28	29	23	8					
foE	MED							200	250	290	300	340	340	350	350	350	330	320	300	260	220				
	CNT							13	20	20	16	16	16	20	21	20	22	25	25	23	10				
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 1.6 MC TO 20.0 MC IN 15 SECONDS.

AUGUST, 1961

TABLE 14

ST. JOHNS, NEWFOUNDLAND (47.6N, 52.7W)

TIME 60.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	44	40	38	36	30	40	50	54	54	57	58	60	60	60	60	60	61	65	64	70	58	54	50	46
	CNT	21	23	22	18	20	29	30	31	30	31	28	29	29	29	30	31	30	29	26	24	19	18	20	18
	UD	48	46	42	40	37	44	55	61	63	66	64	66	65	66	65	66	68	71	76	76	65	62	54	50
	LD	38	35	33	32	27	34	42	44	49	50	52	52	53	53	54	53	55	55	58	58	50	44	40	39
h'F2	MED							385	330	300	315	320	330	335	345	340	350	300	300						
	CNT							10	21	27	28	27	28	26	24	29	26	26	12	3					
	UD																								
	LD																								
h'F	MED	280	290	285	270	270	240	230	215	205	200	200	200	200	200	205	210	210	230	260	245	250	250	250	270
	CNT	23	22	21	15	19	28	29	29	27	26	24	24	23	26	28	25	26	22	26	29	26	28	24	22
	UD																								
	LD																								
(M3000)F2	MED	290	290	290	300	300	330	320	320	310	320	310	310	300	300	290	290	300	300	300	300	300		290	300
	CNT	16	17	17	16	13	29	25	25	25	22	23	22	24	22	27	27	27	24	17	15	8	2	9	7
	UD																								
	LO																								
foF1	MED							350	400	420	440	450	460	460	450	450	430	400							
	CNT							5	13	18	19	22	22	24	20	19	17	12	1						
foE	MED							250	290	300	320	340	350	350	345	335	310	300	255						
	CNT					2	14	13		12	8	6	10	11	12	12	15	19	6						
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 1.6 MC TO 20.0 MC IN 15 SECONDS.

AUGUST, 1961

TABLE 15

GRAZ, AUSTRIA (47.1N, 15.5E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 55	51	50	47	U 43	44	55	U 60	U 64	U 70	U 68	U 68	U 70	U 68	U 67	U 67	U 64	U 67	U 71	U 75	U 78	D 57	U 58	56
	CNT	26	26	26	25	27	26	27	25	24	27	26	28	24	27	27	26	26	28	26	27	21	27	27	28
	UD	50	47	43	42	38	38	50	56	57	62	61	66	60	60	59	60	59	61	60	61	66	57	56	51
	LD	57	57	53	49	47	46	60	66	71	77	72	72	74	74	73	73	72	71	74	79	81	65	60	57
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED																								
	CNT																								
	UD																								
	LD																								
(M3000)F2	MED																								
	CNT																								
	UD																								
	LD																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	J 28	J 28	J 30	J 25	J 23	J 26	J 28	J 38	J 38	J 38	J 42	J 45	34	J 45	33	33	33	35	J 34	J 26	J 37	J 32	J 26	J 42
	CNT	29	29	29	29	29	29	29	28	28	22	21	15	12	11	16	16	16	28	28	28	28	28	28	28

SWEEP 2.0 MC TO 18.0 MC IN 50 SECONDS.

AUGUST, 1961

TABLE 16

SOTTENS, SWITZERLAND (46.6N, 6.7E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	55	51	50	47	44	42	47	57	63	67	66	68	67	69	68	68	68	68	68	69	74	69	65	57
	CNT	26	28	31	31	31	30	30	29	27	29	27	30	29	26	27	28	28	29	28	31	28	24	24	24
	UD																								
	LD																								
h'F2	MED							370	315	280	280	280	300	310	320	330	325	300	295	280	280				
	CNT							6	16	26	27	25	30	29	28	24	27	26	28	22	3				
	UD																								
	LO																								
h'F	MED	270	275	280	280	280	270	250	230	220	210	200	200	200	200	200	210	210	225	240	250	250	250	250	260
	CNT	25	25	25	26	26	22	27	18	17	13	17	22	24	23	22	20	19	19	22	28	27	26	25	24
	UD																								
	LO																								
(M3000)F2	MED	295	290	285	285	285	285	310	315	325	320	315	315	315	305	310	300	310	315	320	315	330	330	315	300
	CNT	23	25	28	30	30	27	30	28	27	28	27	30	29	26	27	28	28	29	28	31	26	23	24	19
	UD																								
	LO																								
foF1	MED							320	370	430	440	450	470	480	500	480	470	450	420	380					
	CNT							6	12	21	23	22	25	27	25	24	25	24	22	13	1				
foE	MED							185	230	280	310	330	340	340	340	340	330	310	290	260	195				
	CNT							4	24	28	29	26	24	21	21	26	20	26	22	21	9				
h'E	MED							130	120	100	100	100	100	100	100	100	100	100	110	115	125				
	CNT							4	24	28	29	26	24	21	21	26	20	26	22	21	9				
foEs	MED	30	29	E	30	E	27	21	31	44	43	39	41	42	41	38	40	38	37	29	42	32	35	37	35
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31

SWEEP 1.0 MC TO 25.0 MC IN 30 SECONDS.

AUGUST, 1961

TABLE 17

KAKIOKA, JAPAN (36.4N, 141.7E)

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	53	53	50	50	48	53	61	72	75	69	66	64	66	66	65	68	66	65	68	77	76	72	63	56
	CNT	23	23	24	24	27	31	30	28	28	28	28	28	28	29	29	29	29	29	29	29	28	26	26	26
	UQ	60	57	54	53	51	56	66	76	80	74	72	68	71	73	71	71	70	72	74	81	81	76	69	63
	LQ	53	50	48	44	43	48	53	62	62	62	60	56	58	60	61	62	58	60	60	66	69	66	58	53
h'F2	MED						375	335	285	285	290	310	350	360	340	325	320	300	310						
	CNT						4	13	26	25	25	28	27	27	29	30	30	19	11						
	UD																								
	LQ																								
h'F	MED	295	300	300	295	290	260	250	240	230	225	220	210	220	230	235	235	250	250	270	265	270	275	270	285
	CNT	29	29	30	30	29	26	19	14	12	16	19	19	24	25	26	25	20	20	19	22	22	24	26	28
	UD																								
	LQ																								
(M3000)F2	MED	280	280	285	285	285	300	300	315	315	320	320	295	295	295	300	300	310	305	300	290	290	290	295	285
	CNT	2	23	24	24	27	31	30	28	28	28	29	29	29	29	30	30	29	29	29	29	28	26	26	26
	UQ																								
	LD																								
foF1	MED						310	370	420	430	450	460	470	480	480	470	450	430	400						
	CNT						2	7	12	15	19	25	25	27	29	30	24	7	4						
foE	MED					E																			
	CNT					1	170	230	280	300	310	310	310	310	300	320	305	300	250	200					
							20	27	29	29	28	25	25	21	22	22	23	24	23	5					
h'E	MED																								
	CNT																								
foEs	MED	24	26	26	23	23	26	36	52	62	55	50	52	43	43	40	42	42	42	43	43	45	43	33	31
	CNT	31	31	31	31	31	28	30	30	30	30	30	30	30	30	30	30	30	30	28	30	31	31	31	31

SWEEP 1.0 MC TO 18.0 MC IN 1 MINUTE.

AUGUST, 1961

TABLE 18

OTTAWA, CANADA (45.4N, 75.9W)

TIME 75.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	37	34	32	30	28	31	43	50	55	58	60	58	60	60	59	60	62	65	67	70	70	60	52	43
	CNT	31	30	30	29	26	30	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31
	UD																								
	LQ																								
h'F2	MED							U 510	340	350	360	350	400	395	380	390	370	350	310	300					
	CNT							9	23	29	30	30	30	31	31	31	31	31	29	27	1				
	UD																								
	LQ																								
h'F	MED	290	300	300	300	300	280	250	235	230	210	200	200	200	200	200	210	220	240	250	260	260	260	260	270
	CNT	30	28	31	29	27	30	30	29	29	31	28	28	27	30	30	31	30	27	26	31	31	31	31	29
	UD																								
	LQ																								
(M3000)F2	MED						U 310	320	310	310	310	310	290	290	290	290	290	290	300	300	300	300	300	U 300	
	CNT	4	3		1	2	7	14	17	20	21	18	20	20	23	23	25	28	27	26	21	17	13	10	6
	UD																								
	LQ																								
foF1	MED							U 320	400	420	450	460	470	480	480	460	450	430	U 400	U 370					
	CNT							9	22	30	31	31	30	31	31	31	30	31	25	10					
foE	MED						U 150	210	U 270	U 300	U 320	U 340	U 350	U 360	350	340	320	300	280	220	U 160				
	CNT						6	11	7	7	7	6	5	8	12	12	16	17	10	11	7				
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 1.0 MC TO 20.0 MC IN 16 SECONDS.

AUGUST, 1961

TABLE 19

ROME, ITALY (41.8N, 12.5E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	55	55	53	52	49	44	52	61	68	72	72	71	74	74	75	73	76	74	75	U 82	U 81	70	U 63	55
	CNT	20	21	23	21	21	24	24	20	22	20	20	23	25	28	27	28	29	21	23	16	17	11	13	18
	UQ	60	57	58	55	51	48	60	70	74	79	79	77	77	81	81	80	80	81	80	85	87	87	69	59
	LQ	52	49	47	46	44	40	45	53	63	68	64	65	65	66	66	68	68	72	71	72	69	66	55	52
h'F2	MED											340	310	335	335	340	320								
	CNT							2		4	4	5	7	14	12	15	8	2							
	UD											345	350	390	355	340	340								
	LD											310	290	290	315	320	300								
h'F	MED	300	300	300	290	270	275	250	230	230	230	210	215	205	210	230	220	240	240	255	260	255	250	260	270
	CNT	25	22	24	25	23	22	21	16	15	12	10	16	18	17	19	17	21	15	20	23	22	18	22	21
	UD	305	300	310	300	290	310	270	240	240	240	240	240	210	230	240	235	240	240	260	270	260	260	270	290
	LD	280	280	285	270	260	260	240	220	220	220	200	200	200	200	210	210	230	220	245	250	250	230	240	250
(M3000)F2	MED	265	265	270	270	280	275	305	310	315	305	300	300	295	295	290	295	295	295	290	290	U 300	295	U 285	280
	CNT	20	20	23	20	21	24	22	20	20	18	20	22	24	28	27	28	29	20	18	14	15	9	12	17
	UQ	275	270	280	280	290	285	310	320	325	330	315	310	300	300	305	300	300	300	300	295	305	300	295	285
	LQ	260	260	265	265	270	270	290	295	305	300	290	285	285	285	280	285	290	295	290	280	285	270	270	265
foF1	MED											470	470	470	490	480	470								
	CNT							2		4	4	5	7	14	12	15	9	2							
foE	MED							200	250	290	310	330	340	340	340	350	330	320	280	230					
	CNT							15	24	24	23	21	15	22	20	20	16	17	20	16	2				
h'E	MED							120	110	110	110	110	110	110	110	110	110	110	110	110					
	CNT							15	25	25	26	28	26	30	30	29	29	29	26	27	1				
foEs	MED																								
	CNT	28	28	27	26	25	25	25	25	25	26	28	27	30	29	29	29	29	27	28	26	27	28	28	28

SWEEP 1.0 MC TO 15.0 MC IN 5 MINUTES. AUTOMATIC OPERATION.

AUGUST, 1961

TABLE 20

AKITA, JAPAN (39.7N, 140.1E)

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	56	55	53	51	50	50	61	78	73	70	68	68	69	70	73	72	72	70	72	80	74	71	64	60
	CNT	13	11	11	13	16	23	25	26	27	27	29	29	31	30	29	30	30	30	30	29	27	18	14	13
	UQ	60	58	55	54	52	54	70	82	80	75	74	72	73	77	79	79	77	79	82	86	80	74	69	64
	LQ	52	50	49	49	46	45	57	68	66	62	63	58	60	65	66	66	64	63	64	70	67	62	57	53
h'F2	MED						345	295	280	260	295	300	340	350	345	325	310	300	295	295					
	CNT						3	16	24	25	25	26	27	29	30	29	30	30	29	10					
	UD																								
	LD																								
h'F	MED	290	295	290	280	280	255	250	U 240	225	205	200	205	210	220	U 230	240	240	250	275	255	255	270	280	290
	CNT	24	19	27	27	27	27	20	16	17	15	15	17	16	19	20	24	20	18	19	25	25	25	24	26
	UD																								
	LQ																								
(M3000)F2	MED	280	285	280	290	290	295	310	315	330	320	310	300	295	290	305	310	310	310	305	300	300	295	285	280
	CNT	13	11	11	13	16	23	25	26	27	29	29	29	31	30	29	30	30	30	30	29	27	18	14	13
	UQ									300	300	295	295	305	300	295	295	295	295	295	295				
	LQ									285	285	280	285	290	295	290	280	285	285	285	285				
foF1	MED							U 270	410	450	460	470	480	490	480	470	460	430	400						
	CNT							2	9	15	16	17	18	22	27	25	27	16	5						
foE	MED							235	280	315	340	330	330	355	355	340	330	300	255	185					
	CNT							14	15	16	14	9	3	6	13	10	11	13	17	3					
h'E	MED																								
	CNT																								
foEs	MED	32	31	25	27	20	23	38	51	54	60	65	58	60	56	51	43	39	52	53	50	39	44	49	36
	CNT	28	29	29	29	29	29	29	29	29	31	31	31	31	31	30	29	30	30	30	30	30	30	29	29

SWEEP 1.0 MC TO 20.0 MC IN 20 SECONDS.

AUGUST, 1961

TABLE 21

TOKYO, JAPAN (35.7N, 139.5E) TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	60	58	56	54	50	50	62	79	80	72	70	70	71	80	81	79	76	76	82	81	76	62	63	62
	CNT	28	27	28	28	29	30	30	29	28	26	24	26	27	28	30	30	29	29	29	30	30	29	29	30
	UQ	64	62	64	57	54	54	68	84	86	78	74	80	81	85	89	88	83	83	88	91	83	74	67	66
	LQ	53	54	49	46	44	44	57	68	73	67	62	63	68	70	75	73	72	69	71	74	67	58	54	54
h'F2	MEO						355	275	265	260	275	305	320	330	335	305	300	290	285	270					
	CNT						1	11	18	18	18	17	19	20	23	25	27	25	19	6					
	UQ																								
	LQ																								
h'F	MEO	300	309	290	280	260	255	250	245	240	205	220	205	240	225	240	235	245	250	255	250	250	275	300	290
	CNT	26	27	30	30	30	28	26	21	17	15	16	14	20	24	22	25	25	24	23	26	24	26	24	26
	UQ																								
	LQ																								
(M3000)F2	MED	275	275	280	285	285	290	310	315	320	320	300	290	285	285	295	295	305	300	305	305	300	280	275	275
	CNT	28	27	26	27	29	30	30	29	28	26	25	25	27	28	30	30	29	29	29	30	30	29	29	30
	UQ																								
	LQ																								
foF1	MEO								U 420 1	450 3	U 460 3	470 4	480 4	510 7	510 8	480 8	470 11	440 5	390 1						
	CNT																								
foE	MEO						210 3	U 225 13	U 270 15	310 16	320 10	330 4	U 360 2	U 350 6	350 6	U 335 15	330 14	300 14	260 12	U 185 1					
	CNT																								
h'E	MEO																								
	CNT																								
foEs	MED	44	40	30	23	21	34	37	50	50	63	57	53	46	44	45	41	40	39	40	39	51	40	42	46
	CNT	28	24	28	27	30	19	28	29	29	31	31	31	30	30	31	31	30	31	30	30	29	26	28	28

SWEEP 1.0 MC TO 20.0 MC IN 20 SECONDS. AUGUST, 1961

TABLE 22

YAMAGAWA, JAPAN (31.2N, 130.6E) TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	58	57	56	51	45	46	52	76	76	70	68	72	82	88	91	92	90	87	90	92	79	68	60	U 57
	CNT	15	17	18	23	23	25	28	27	28	31	29	30	30	30	31	30	30	30	30	29	29	29	21	17
	UQ	62	62	60	57	55	52	56	84	82	76	76	81	89	97	102	100	98	95	96	102	90	74	62	62
	LQ	52	50	49	46	39	38	49	69	69	63	62	66	72	79	82	82	80	79	81	78	72	57	52	52
h'F2	MED								280	260	280	305	350	350	350	340	320	310	295	290					
	CNT								11	24	23	22	28	30	30	31	30	29	25	22					
	UQ																								
	LQ																								
h'F	MED	310	300	290	275	285	290	255	240	235	220	210	200	230	225	230	240	240	250	250	255	250	250	300	310
	CNT	27	25	27	29	29	28	29	27	21	19	23	20	19	18	20	19	18	22	23	25	27	27	27	26
	UQ																								
	LQ																								
(M3000)F2	MED	280	285	290	300	290	290	315	335	335	330	310	290	280	280	285	295	300	300	300	310	310	295	275	U 275
	CNT	15	17	18	23	23	25	28	27	28	31	29	30	30	30	31	30	30	30	30	29	29	29	21	17
	UQ																								
	LQ																								
foF1	MED								400 4	420 7	450 9	480 14	510 19	510 24	510 27	500 25	490 27	400 23	440 15	400 2					
	CNT																								
foE	MED							180 3	240 25	290 24	320 25	340 23	350 19	360 16	365 14	360 13	345 17	330 17	290 17	230 16					
	CNT																								
h'E	MEO																								
	CNT																								
foEs	MEO	52	31	26	24	23	26	25	33	46	52	54	49	52	54	48	52	50	52	42	40	38	34	37	50
	CNT	24	20	29	29	28	20	25	29	29	31	30	30	31	30	31	31	30	31	31	28	28	28	25	22

SWEEP 1.0 MC TO 20.0 MC IN 30 SECONDS. AUGUST, 1961

TABLE 23

FORMOSA, CHINA (25.0N, 121.5E) TIME 120.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 69	68	U 68	U 56	U 50	44	62	70	74	73	78	96	U 110	U 114	U 116	U 120	U 123	U 124	O 95	U 113	U 82	69	65	67
	CNT	25	22	25	25	24	23	30	30	31	29	29	30	31	31	30	31	30	31	29	29	30	29	25	22
	UQ	90	77	80	66	60	54	66	80	79	81	88	102	128	130	137	140	131	130	132	116	88	79	77	75
	LQ	59	61	59	46	43	35	57	65	65	67	73	88	83	92	99	103	110	103	109	90	73	61	60	59
h'F2	MED							U 270 2	250 7	U 255 10	U 320 8	365 13	350 21	345 26	U 345 29	325 26	310 29	290 28	275 25	U 260 5					
	CNT																								
	UQ																								
	LQ																								
h'F	MED	295	270	U 240	250	250	U 260	240	220	U 210	200	U 200	210	E 235	E 250	U 215	U 220	U 225	U 230	250	230	U 220	265	310	U 310
	CNT	29	29	29	29	28	26	29	28	28	25	27	21	18	13	17	22	21	19	26	29	30	30	27	27
	UQ																								
	LQ																								
(M3000)F2	MED	280	290	310	300	300	305	335	345	330	300	275	275	U 280	285	290	300	305	U 320	325	325	300	275	270	275
	CNT	20	21	21	22	20	19	29	27	30	28	27	26	23	26	25	23	18	16	11	16	27	23	20	21
	UQ	290	300	315	330	310	320	345	355	340	320	280	280	290	290	300	305	315	320	330	330	315	295	275	285
	LQ	270	280	290	290	275	295	325	330	320	280	255	265	265	275	280	285	295	300	295	310	280	265	260	265
foF1	MED									U 480 4	U 500 11	U 500 12		U 520 10	U 520 10	500 12	U 500 16	U 450 6	U 410 3						
	CNT																								
foE	MEO								U 325 1								U 345 2	320 1							
	CNT																								
h'E	MED								E 111 4	109 15	E 109 15	E 111 10	E 110 14	109 8	U 107 6	U 108 9	U 109 8	E 109 4							
	CNT																								
foEs	MED		24	21	22	18		22	34	40	45	46	43	55	49	50	49	44	45	40	38	30			
	CNT	30	30	30	30	30	30	17	26	30	31	29	26	28	30	28	31	30	29	28	28	30	30	28	28

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS. AUGUST, 1961

TABLE 24

BAGUIO, P. I. (16.4N, 120.6E) TIME 120.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEO	72	76	68	55	46	37	54	76	83	88	95	98	98	102	105	110	116	120	115	100	95	90	85	79
	CNT	26	25	25	27	30	28	31	31	31	29	26	28	28	28	28	24	21	15	15	26	29	29	29	26
	UQ																								
	LQ																								
h'F2	MEO									300 5	360 7	385 10	400 12	425 16	410 20	405 19	370 18	350 16	325 11						
	CNT																								
	UQ																								
	LQ																								
h'F	MEO	330	290	245	240	245	255	265	250	225	210	210	210	210	210	220	225	240	250	275	270	285	300	315	345
	CNT	30	30	29	29	27	25	28	28	15	20	19	21	20	22	20	18	15	20	28	31	31	31	28	27
	UQ																								
	LQ																								
(M3000)F2	MEO	270	290	320	310	320	320	315	315	285	250	230	230	235	245	250	260	275	300	305	280	280	270	260	265
	CNT	26	23	25	26	30	26	31	30	31	29	27	27	28	28	26	20	21	10	14	14	24	27	22	23
	UQ																								
	LQ																								
foF1	MED										440 1	480 2	490 7	500 8	490 12	470 3	430 1	440 1							
	CNT																								
foE	MEO							U 185 4	U 260 9	U 320 8	U 340 7	U 360 4	U 380 8	U 385 6	U 375 7	U 370 8	U 335 7	U 310 14	U 265 4						
	CNT																								
h'E	MEO							149 3	121 12	121 10	121 11	121 3	121 10	121 10	121 13	119 10	119 9	121 10	129 3						
	CNT																								
foEs	MEO	30	30	30	31	31	22 31	24 30	45 30	56 31	56 29	58 27	55 27	56 28	59 27	43 26	48 27	46 26	45 29	44 30	32 30	25 29	22 30	18 30	30

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS. AUGUST, 1961

TABLE 25

SINGAPORE, BRITISH MALAYA (1.3N, 103.8E)

TIME 105.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	74	59	54	45	36	31	41	76	96	108	115	116	110	107	107	107	107	108	104	105	106	105	102	89
	CNT	28	29	28	28	27	24	29	31	31	31	28	26	27	31	30	30	31	31	26	27	25	23	25	26
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
(M3000)F2	MED	320	325	320	325	315	325	305	310	300	275	250	250	240	235	230	240	255	270	280	280	300	325	335	330
	CNT	27	29	27	27	24	22	29	31	31	31	28	26	27	31	30	30	31	31	26	27	24	21	25	24
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED							140	245	310	340	370	380	385	380	370	350	310	245	200					
	CNT							3	13	16	22	22	25	26	27	27	23	25	26	10					
h'E	MED																								
	CNT																								
foEs	MED	25	26	26	20	20	29	17	31	36	39	38					28		28	22	21	31	25	25	28
	CNT	16	14	16	13	20	22	31	31	31	31	31	31	31	31	31	30	31	31	31	19	17	17	15	14

SWEEP 0.67 MC TO 25.0 MC IN 5 MINUTES. AUTOMATIC OPERATION.

AUGUST, 1961

TABLE 26

BRISBANE, AUSTRALIA (27.5S, 152.9E)

TIME 150.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	43	42	43	42	37	34	36	65	76	81	84	82	77	75	76	76	71	67	60	53	49	47	45	44
	CNT	21	22	17	20	21	24	23	24	24	25	27	26	27	27	27	27	26	27	27	27	26	24	23	25
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
(M3000)F2	MED	280	280	285	305	285	270	285	325	320	320	315	320	320	310	300	310	315	315	295	290	280	280	280	280
	CNT	21	22	17	20	20	24	23	24	24	25	27	26	27	27	27	27	26	27	27	27	26	24	23	25
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT	25	25	25	25	24	24	24	24	24	25	27	26	26	27	27	27	26	27	27	27	27	27	27	27

SWEEP 1.0 MC TO 16.0 MC IN 1 MINUTE 55 SECONDS.

AUGUST, 1961

TABLE 27

MUNDARING, W. AUSTRALIA (32.0S, 116.2E)

TIME 120.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	34	35	35	37	37	34	32	50	63	70	72	76	78	80	80	79	74	70	60	52	41	38	36	35
	CNT	25	25	25	23	26	26	24	26	25	24	25	19	18	21	22	19	22	28	26	27	27	27	27	26
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	255	255	245	235	225	230	230	230	225	225	220	220	210	200	220	220	220	230	220	210	220	240	230	245
	CNT	26	25	24	21	26	26	24	24	24	22	20	18	16	15	16	17	21	28	24	25	26	24	27	25
	UQ																								
	LQ																								
(M3000)F2	MED	310	310	315	320	330	320	320	340	350	350	340	340	340	330	335	340	340	340	335	330	320	315	315	310
	CNT	25	25	25	22	25	26	23	26	24	22	25	19	17	20	21	16	22	27	26	26	27	26	27	26
	UQ																								
	LQ																								
foF1	MED										400	450	460	470	460	450	440								
	CNT										5	13	14	15	15	10	6	2							
foE	MED								180	240	290	310	330	340	340	320	300	265	205						
	CNT								15	18	16	14	17	16	19	22	16	14	17	2					
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT	25	26	26	26	26	26	25	22	24	23	17	20	20	21	24	22	19	24	26	26	27	26	28	27

SWEEP 1.6 MC TO 20.0 MC IN 18 SECONDS.

AUGUST, 1961

TABLE 28

CANBERRA, AUSTRALIA (35.3S, 149.0E)

TIME 150.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	37	38	41	40	37	35	32	53	65	68	71	74	76	76	80	75	70	65	58	52	50	45	41	39
	CNT	27	26	25	27	26	25	26	25	26	26	25	23	22	22	22	23	24	25	26	26	26	28	27	28
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
(M3000)F2	MED	310	300	300	310	320	320	310	340	350	340	340	340	330	330	330	335	340	330	320	310	310	310	305	305
	CNT	24	23	19	24	23	23	23	22	25	26	24	22	22	22	22	23	24	25	26	26	23	27	24	27
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT	27	27	26	27	26	26	26	25	26	27	25	23	22	22	22	23	24	25	26	26	27	28	28	28

SWEEP 1.0 MC TO 25.0 MC IN 30 SECONDS.

AUGUST, 1961

TABLE 29

HOBART, TASMANIA (42.9S, 147.2E)

TIME 150.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	30	29	29	28	28	23	22	37	56	62	64	U 70	U 72	74	74	72	68	64	60	54	43	40	34	32
	CNT	24	19	19	18	19	27	22	30	30	28	30	29	31	31	31	31	30	30	30	30	30	27	26	24
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
(M3000)F2	MED	310	310	305	310	315	310	310	345	365	360	365	355	350	350	350	355	350	350	340	335	330	330	320	310
	CNT	18	10	12	12	11	15	13	25	29	28	26	24	22	22	20	25	26	27	27	29	25	21	21	18
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT	30	30	30	30	29	30	29	30	30	29	30	28	29	31	31	31	30	30	30	30	30	30	30	30

SWEEP 1.0 MC TO 16.0 MC IN 1 MINUTE 55 SECONDS.

AUGUST, 1961

TABLE 30

CHRISTCHURCH, NEW ZEALAND (43.6S, 172.8E)

TIME 180.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	38	38	U 36	35	31	31	U 25	32	52	61	63	69	69	73	74	72	70	67	58	53	53	48	41	40
	CNT	23	18	22	18	17	21	21	25	27	27	26	26	27	27	27	27	28	28	27	26	26	23	24	25
	UQ																								
	LQ																								
h'F2	MED										U 240	250	260	270	260	260	260	250	U 230						
	CNT										4	13	22	25	24	22	21	17	3						
	UQ																								
	LQ																								
h'F	MED	U 290	280	280	270	U 260	250	U 250	250	230	230	230	220	210	220	220	220	220	230	230	250	250	260	260	270
	CNT	11	12	16	12	15	12	8	20	26	26	25	20	17	21	20	17	23	25	26	23	24	23	22	16
	UQ																								
	LQ																								
(M3000)F2	MED	270	270	280	275	290	295	300	300	335	340	335	320	325	330	325	325	330	330	310	290	285	285	285	275
	CNT	19	16	19	15	16	19	15	21	27	27	25	26	27	26	27	27	28	28	27	25	25	22	20	23
	UQ																								
	LQ																								
foF1	MED											U 400	U 410	U 420	440	420	U 400	U 380							
	CNT											1	7	9	9	10	6	1							
foE	MED								U 140	220	U 260	U 300	U 310	U 320	U 320	310	U 300	270	220	U 140					
	CNT								2	13	15	14	10	7	10	11	13	16	16	5					
h'E	MED									110	110	110	105	105	105	105	105	110	110						
	CNT									7	15	20	22	18	20	15	15	12	6						
foEs	MED	E	E	E	E	E	E	E	E	24	28	33	34	37	36	36	33	30	22	17	E 18	E 17	E 17	E 17	E 17
	CNT	28	27	28	28	28	27	28	27	26	27	27	27	26	28	29	27	28	28	28	27	27	27	27	27

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS.

AUGUST, 1961

TABLE 31

TROMSO, NORWAY (69.7N, 19.0E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED		48	49	48	49	50	52	53	52	54	55	57	56	55	54	54	53	52	54	52	51	50	50	
	CNT	4	6	7	10	10	13	11	14	14	16	17	19	21	21	19	18	20	20	20	19	18	13	6	3
	UQ		51	53	51	53	54	54	57	57	56	60	61	60	60	58	55	54	54	56	54	53	52	53	
	LQ		46	46	44	45	48	49	46	49	52	53	54	54	53	52	52	50	50	51	50	50	46	44	
h'F2	MED	310				390	380	385	390	395	400	395	370	390	390	370	390	360	345	345					
	CNT	5	4	5	4	6	9	11	12	13	15	17	14	20	21	14	11	6	7	6	2	1	1	3	3
	UQ	310				395	440	445	460	465	445	425	420	405	430	415	445	410	385	355					
	LQ	285				370	355	340	360	355	380	350	345	350	350	355	350	345	340	300					
h'F	MED				265	245	245	230	210	225	215	240	210	210	205	215	225	230	240	245	250	260	295		
	CNT	4	3	1	5	8	10	8	9	7	7	9	11	9	8	9	11	15	10	8	7	5	5	3	2
	UQ				290	250	245	240	250	240	245	245	220	210	225	225	240	245	250	255	260	290	315		
	LQ				255	245	240	220	205	220	205	220	210	200	200	200	210	215	225	240	245	250	270		
(M3000)F2	MED				270	275	280	275	275	275	280	280	285	290	290	290	290	290	305	305	305	300	285	290	
	CNT	1	1	4	7	8	12	10	13	12	15	17	17	20	21	18	16	18	16	16	13	10	9	5	2
	UQ				280	280	290	290	290	290	285	290	300	290	290	290	290	290	310	310	310	305	300	295	
	LQ				270	270	270	255	260	270	265	270	275	285	275	280	275	280	290	290	290	290	275	290	
foF1	MED					350	370	385	410	420	430	435	440	440	440	440	425	425	405	385					
	CNT				4	6	9	11	13	12	15	17	14	19	21	13	11	7	7	6	1				
foE	MED							265	270									290	270	260	240				
	CNT		1		2	3	2	5	5	3	3		3	3	3	4	3	6	6	6	5	3	1	2	
h'E	MED							210	105	105	100	105	105	105	105	105	105	105	105	105	105	105			
	CNT	2	3		1	1	4	5	6	7	6	8	10	10	8	9	7	13	14	7	6	5	2	2	1
foEs	MED	31	30	40	40	38	38	28	30	29	32	32			33		30	32	34	37	34	36	37	35	37
	CNT	16	15	20	15	14	10	11	7	8	7	10	11	11	10	11	12	18	21	19	19	18	16	13	16

SWEEP 0.7 MC TO 25.0 MC IN 5 MINUTES, AUTOMATIC OPERATION.

JULY, 1961

TABLE 32

SOTTENS, SWITZERLAND (46.6N, 6.7E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	55	51	50	46	44	42	49	52	52	62	62	68	66	65	61	63	63	60	61	67	67	68	67	59
	CNT	26	27	26	27	28	30	29	26	23	19	17	15	16	11	13	16	18	15	22	23	26	23	23	23
	UQ																								
	LQ																								
h'F2	MED						420	370	340	360	355	350	340	330	330	350	350	320	330	300	310				
	CNT						3	19	23	23	18	17	13	17	11	13	16	17	16	19	8				
	UQ																								
	LQ																								
h'F	MED	290	280	280	280	280	280	250	240	220	210	U 210	200	U 200	U 200	U 205	U 215	U 220	230	U 230	270	260	250	250	270
	CNT	24	26	26	26	29	30	22	23	13	13	8	11	9	7	6	8	9	14	9	17	20	20	18	22
	UQ																								
	LQ																								
(M3000)F2	MED	280	280	275	275	280	285	290	290	290	295	295	295	300	300	295	300	310	305	300	305	310	315	300	290
	CNT	23	24	23	23	25	29	28	25	21	19	16	15	16	10	13	15	18	15	22	23	25	21	20	14
	UQ																								
	LQ																								
foF1	MED						260	340	390	420	450	460	470	480	470	470	460	450	430	400	360				
	CNT						3	19	20	19	14	8	10	11	5	8	11	11	9	11	7				
foE	MED							205	250	290	310	330	330	340	340	340	340	320	300	270	225				
	CNT						2	22	27	27	27	21	20	17	14	13	11	15	13	15	10	2			
h'E	MED							120	110	100	100	100	100	100	100	100	100	100	110	110	120				
	CNT						2	22	27	27	27	21	20	17	14	13	11	15	13	15	10	2			
foEs	MED			25				25	38	42	46	46	40	43	40	42	41	39	37	43	46	43	37	43	29
	CNT	30	31	31	31	31	31	31	31	31	31	28	24	22	19	22	20	24	24	30	30	31	31	31	31

SWEEP 1.0 MC TO 25.0 MC IN 30 SECONDS.

JULY, 1961

TABLE 33

WAKKANAI, JAPAN (45.4N, 141.7E)

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	58	55	50	50	48	54	61	64	59	58	59	56	58	60	59	60	58	59	61	66	71	68	64	60
	CNT	24	23	21	21	24	30	30	30	26	24	22	21	20	21	25	28	28	27	28	29	29	26	22	21
	UQ	62	58	57	54	52	58	65	71	68	62	61	60	60	63	63	63	63	63	64	74	74	74	72	66
	LQ	54	50	49	46	43	50	55	57	54	52	55	52	54	54	54	55	54	55	58	61	65	64	63	58
h'F2	MED					425	390	350	330	360	420	390	440	435	430	400	375	365	350	340	350				
	CNT					4	16	25	27	23	22	22	21	19	22	25	27	26	21	12	3				
	UQ																								
	LQ																								
h'F	MED	300	300	300	305	300	270	250	250	U 235	225	230	230	230	230	235	230	250	260	260	275	275	290	300	290
	CNT	26	27	29	30	29	23	17	14	12	13	13	15	15	18	20	19	20	18	16	17	21	22	26	27
	UQ																								
	LQ																								
(M3000)F2	MED	285	280	280	280	280	285	290	300	300	280	285	280	275	280	285	290	295	295	290	290	285	285	290	280
	CNT	24	23	21	21	24	30	30	30	25	24	23	22	21	23	25	28	28	27	28	29	29	26	22	21
	UQ																								
	LQ																								
foF1	MED					250	340	380	420	440	460	460	480	470	470	460	450	430	410	360	280				
	CNT					3	12	14	14	13	15	16	18	17	23	22	19	20	12	4	2				
foE	MED					130	210	250	295	310	320	320	320	320	325	325	320	310	275	215					
	CNT					11	27	30	30	29	29	26	25	23	22	23	24	24	22	17					
h'E	MED																								
	CNT																								
foEs	MED	30	30	33	23	21	30	44	53	53	66	56	53	50	43	43	49	45	53	53	48	43	43	34	30
	CNT	31	31	31	30	25	29	30	30	29	29	29	27	27	27	28	28	29	28	28	28	31	31	31	31

SWEEP 1.0 MC TO 18.0 MC IN 1 MINUTE.

JULY, 1961

TABLE 34

ROME, ITALY (41.8N, 12.5E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	57	56	55	50	47	45	54	61	62	65	66	72	75	70	70	70	70	68	70	U 75	U 73	U 68	61	U 58
	CNT	22	23	26	24	27	26	28	26	21	24	24	18	24	27	27	27	28	27	26	21	11	14	14	17
	UQ	65	61	59	56	53	50	59	66	72	71	72	74	80	79	77	75	75	73	77	84	83	75	73	65
	LQ	51	50	46	47	43	41	47	52	55	59	62	60	66	65	65	68	66	64	64	67	61	66	52	50
h'F2	MED							480	350	345	360	350	350	350	350	345	340	320							
	CNT						1	5	9	12	9	11	11	15	20	18	20	8	3	1					
	UQ							510	520	415	365	390	370	380	365	390	355	350							
	LQ							415	310	305	335	320	330	340	335	330	330	300							
h'F	MED	310	310	300	290	290	280	240	240	230	220	230	230	200	210	210	230	240	240	240	260	260	260	270	290
	CNT	25	26	26	24	24	23	23	15	12	9	7	13	13	16	16	21	21	15	13	22	19	24	20	19
	UQ	330	330	300	300	310	290	250	250	250	240	240	250	230	240	240	240	250	250	250	270	270	270	300	310
	LQ	290	290	280	280	290	260	240	240	230	210	210	210	200	200	210	210	230	220	240	250	250	250	260	270
(M3000)F2	MED	265	265	270	270	270	285	290	295	300	295	295	285	295	290	290	290	300	290	285	U 290	U 295	290	280	270
	CNT	21	23	26	24	27	26	27	23	21	23	21	18	22	26	27	27	28	27	25	20	9	12	13	17
	UQ	280	280	275	285	285	290	305	315	320	305	310	290	300	300	300	295	305	295	295	300	300	300	285	280
	LQ	255	260	260	260	260	270	275	285	275	275	280	275	285	275	275	285	290	285	285	290	285	270	265	260
foF1	MED							320	400	440	460	490	480	480	490	480	470	460							
	CNT						1	5	9	14	7	10	11	15	19	18	18	8	3	1					
foE	MED						170	220	270	300	330	340	350	350	350	350	340	320	300	250	180				
	CNT						7	26	26	26	25	27	21	18	25	21	19	27	26	22	16				
h'E	MED						130	120	110	110	110	110	110	110	110	110	110	110	110	120	130				
	CNT						7	24	27	27	29	29	28	27	29	27	25	28	28	26	20				
foEs	MED																								
	CNT	30	29	29	28	28	28	29	28	29	28	30	28	27	30	28	25	28	28	28	29	24	29	29	29

SWEEP 1.4 MC TO 15.0 MC IN 5 MINUTES, AUTOMATIC OPERATION.

JULY, 1961

TABLE 35

AKITA, JAPAN (39.7N, 140.1E)

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	59	54	53	49	47	54	63	65	65	61	60	60	60	64	65	65	65	64	65	68	70	66	61	60
	CNT	19	15	16	18	23	26	30	30	28	28	26	28	27	27	28	30	30	30	30	30	27	24	21	21
	UQ	61	60	56	53	53	56	66	73	71	66	65	66	69	69	70	68	69	68	69	75	80	71	66	66
	LQ	54	52	49	45	44	50	57	61	58	58	55	58	56	60	59	58	59	59	61	64	66	58	57	56
h'F2	MED						345	315	320	340	350	380	395	U 395	370	380	360	350	335	300	375				
	CNT						15	29	29	28	26	23	24	24	26	28	30	28	26	24	2				
	UQ																								
	LQ																								
h'F	MED	290	295	300	300	300	265	250	U 240	U 230	220	210	210	U 220	225	230	240	240	245	U 260	270	255	290	295	295
	CNT	29	28	29	30	30	24	17	13	10	13	16	20	16	15	19	17	19	22	21	26	29	27	29	30
	UQ																								
	LQ																								
(M3000)F2	MED	280	280	280	280	280	280	290	305	300	290	290	285	280	290	290	290	295	295	295	300	290	280	275	275
	CNT	19	15	16	18	23	26	30	30	28	28	26	26	27	27	28	30	30	30	30	30	27	24	21	21
	UQ																								
	LQ																								
foF1	MED						320	380	U 420	U 450	460	460	480	U 480	470	460	450	430	410	350					
	CNT						9	15	16	15	17	16	19	17	16	20	23	24	18	5					
foE	MED						200	255	300	U 325	350	U 355	355	U 360	U 355	355	330	305	270	205					
	CNT						3	14	14	9	5	2	5	3	6	7	10	17	19	8					
h'E	MED																								
	CNT																								
foEs	MED	30	32	35	28	23	28	41	53	64	70	82	60	62	57	51	47	49	41	43	49	50	36	30	34
	CNT	31	30	31	31	31	31	31	31	31	31	31	31	30	30	29	30	30	31	31	31	31	30	30	30

SWEEP 1.6 MC TO 20.0 MC IN 20 SECONDS.

JULY, 1961

TABLE 36

TOKYO, JAPAN (35.7N, 139.5E)

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	59	55	54	51	50	52	62	69	67	64	U 62	64	67	69	71	70	68	70	72	74	72	66	62	61
	CNT	28	28	28	27	29	30	30	29	26	24	22	23	24	27	28	28	27	26	28	28	29	28	27	27
	UQ	66	60	58	58	56	55	70	76	77	74	66	68	74	75	78	79	76	74	80	86	78	72	69	71
	LQ	54	54	48	45	45	50	56	64	60	58	58	59	62	65	65	64	64	64	66	68	63	57	56	56
h'F2	MED						315	310	300	305	345	355	405	375	355	320	355	340	310	300					
	CNT						8	19	22	10	13	9	13	19	18	23	25	20	20	20					
	UQ																								
	LQ																								
h'F	MED	300	E 310	305	305	300	270	255	250	U 250	210	220	230	245	240	240	240	250	255	250	260	265	305	305	310
	CNT	25	29	28	29	29	28	24	19	17	11	12	11	11	10	15	13	15	14	15	23	27	24	25	24
	UQ																								
	LQ																								
(M3000)F2	MED	275	275	275	275	275	280	290	300	300	290	U 280	275	280	280	285	285	290	290	295	290	290	275	270	270
	CNT	27	27	27	27	29	30	29	28	25	22	21	23	22	26	27	27	26	26	27	27	28	27	26	26
	UQ																								
	LQ																								
foF1	MED						310	370	430	480	470	470	U 480	500	480	480	460	440	420	U 330					
	CNT						1	4	10	8	9	8	8	8	6	9	10	10	6	1					
foE	MED						U 190	U 240	U 280	310	U 325	U 340	U 365	U 375	370	350	335	310	U 275						
	CNT						8	19	24	25	20	16	12	11	15	17	20	21	17						
h'E	MED																								
	CNT																								
foEs	MED	40	33	34	34	22	30	37	45	60	66	66	56	52	55	52	46	52	50	49	49	50	45	34	35
	CNT	26	29	28	27	26	21	30	28	29	27	27	27	30	28	28	29	26	28	27	25	26	28	27	28

SWEEP 1.0 MC TO 20.0 MC IN 20 SECONDS.

JULY, 1961

TABLE 37

YAMAGAWA, JAPAN (31.2N, 130.6E)

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	64	62	58	58	54	51	54	64	66	64	63	66	73	77	82	80	80	80	84	82	74	66	61	62
	CNT	14	13	17	20	23	27	29	30	28	29	30	31	31	31	30	30	31	30	30	29	29	27	24	15
	UQ	74	70	66	65	57	56	60	72	71	74	70	72	77	85	92	93	92	95	94	90	84	72	64	74
	LQ	60	56	52	50	50	45	50	56	60	59	60	61	68	67	71	71	73	74	76	72	68	57	58	58
h'F2	MED							350	300	300	320	390	405	395	370	360	355	345	315	300	275				
	CNT							3	20	26	24	27	28	27	27	29	31	29	28	28	5				
	UQ																								
	LQ																								
h'F	MED	310	300	300	290	290	280	255	240	235	240	230	225	220	230	250	250	250	250	250	265	250	270	305	315
	CNT	28	28	29	30	30	30	29	26	20	22	20	22	19	20	21	21	20	21	23	27	29	27	28	29
	UQ																								
	LQ																								
(M3000)F2	MED	270	270	270	280	285	280	305	315	310	305	285	270	280	270	275	280	285	290	295	300	295	265	265	260
	CNT	14	13	17	20	23	27	28	30	28	29	30	31	28	29	29	30	31	30	30	29	29	27	24	15
	UQ																								
	LQ																								
foF1	MED								U	450	480	480	500	500	500	500	480	460	430	U					
	CNT								410	17	18	22	22	25	23	24	24	23	22	380					
									9											10					
foE	MED							195	250	300	325	345	360	370	370	370	355	330	290	240	185				
	CNT							12	25	27	27	28	26	22	22	22	23	22	22	21	2				
h'E	MED																								
	CNT																								
foEs	MED	38	30	38	26	30	32	32	37	46	54	61	54	50	54	48	48	50	48	40	40	28	30	26	34
	CNT	27	30	29	30	30	21	28	29	30	31	31	30	30	29	30	30	30	31	30	28	27	24	29	27

SWEEP 1.0 MC TO 20.0 MC IN 30 SECONDS.

JULY, 1961

TABLE 38

ANCHORAGE, ALASKA (61.2N, 149.9W)

TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 38	U 385	U 40	U 35	U 38	U 44	48	50	535	53	55	535	535	54	54	555	555	57	555	54	55	505	46	40
	CNT	21	20	17	22	20	22	24	23	22	21	19	22	22	21	23	22	24	25	26	25	21	24	24	23
	UQ	42	44	43	40	43	47	50	55	58	62	64	60	60	62	64	64	62	62	65	63	62	56	54	46
	LQ	30	32	32	27	32	42	44	49	48	48	49	50	50	52	50	53	52	52	52	48	50	42	37	37
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
(M3000)F2	MED	U 2575	U 250	U 255	U 250	U 255	U 260	2525	250	250	255	260	U 255	2525	255	255	2675	2775	2775	290	290	295	U 285	U 275	U 265
	CNT	20	17	15	21	20	20	24	22	21	20	17	21	22	20	22	22	22	24	25	23	21	24	24	23
	UQ	270	260	265	260	270	270	270	260	265	260	270	270	265	270	280	275	285	290	300	300	300	295	280	280
	LQ	250	240	245	240	240	250	230	235	240	220	240	240	225	235	240	255	265	265	280	280	290	275	265	255
foF1	MED						330	360	390	415	430	440	450	460	460	460	440	U 430							
	CNT						8	16	20	18	20	21	24	23	22	19	15	9	3	1					
foE	MED						205	245	270	300	305	3175	320	340	3325	325	320	300	280	U 240					
	CNT					3	12	15	17	15	17	10	11	12	14	17	16	15	17	11	3	2	1		
h'E	MED						119	115	111	110	109	109	107	107	109	109	109	111	115	119	U 133				
	CNT					4	15	21	20	20	20	16	21	25	23	23	21	17	22	17	7	4	1		
foEs	MED	245	31	25	235	20			31					27			26	23				205	29	305	28
	CNT	24	25	25	22	22	23	23	22	23	21	23	25	25	26	25	24	23	25	24	23	24	27	28	29

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.

AUGUST, 1960

TABLE 39

AQAK, ALASKA (51.9N, 176.6W)

TIME 180.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	47	44	43	38	35	44	515	54	57	59	57	55	56	58	58	58	61	59	59	59	60	605	57	515
	CNT	27	29	27	25	29	30	30	31	31	31	30	31	31	31	31	30	31	31	31	31	31	30	29	28
	UQ	53	50	48	44	42	47	57	61	61	66	66	70	70	70	68	67	69	69	68	66	68	67	60	55
	LQ	40	37	33	34	32	39	47	50	50	53	53	51	53	53	53	55	56	55	54	55	54	53	48	42
h'F2	MED						4765	450	4725	4875	445	475	486	445	440	458	410	3625	U 364						
	CNT						14	20	24	26	27	26	30	29	26	25	17	16	6						
	UQ						590	562	581	580	560	558	695	648	510	635	488	444	425						
	LQ						440	402	438	419	400	390	375	372	380	374	360	334	310						
h'F	MED	294	300	305	3135	340	285	252	235	228	E 225	E 219	212	210	210	215	222	230	240	255	267	267	265	270	280
	CNT	31	31	31	30	31	31	31	30	31	31	29	31	31	31	29	29	31	31	31	31	31	31	31	31
	UQ	310	320	345	355	362	305	265	249	255	253	228	220	219	222	222	232	235	248	275	275	285	300	283	302
	LQ	280	280	280	303	305	269	240	230	220	216	210	201	200	205	208	123	224	235	244	255	244	250	264	260
(M3000)F2	MED	270	270	265	265	260	2625	270	250	260	270	265	260	270	280	275	2925	300	300	300	300	290	290	280	280
	CNT	27	29	27	25	28	30	30	31	31	31	30	31	31	31	31	30	30	31	31	31	31	30	28	28
	UQ	285	280	275	270	270	275	290	270	270	280	290	290	290	295	300	305	305	315	315	310	305	300	300	300
	LQ	260	260	250	250	250	250	250	230	240	240	245	235	225	250	245	280	280	285	290	295	280	275	270	265
foF1	MED						315	380	420	440	460	480	485	490	490	480	470	460							
	CNT						14	20	23	25	26	25	26	26	26	22	17	16	4						
foE	MED						200	250	2875	315	U 340	350	360	U 365	360	U 345	3325	310	285	240					
	CNT						13	23	28	29	27	26	21	15	19	17	24	27	28	17	3				
h'E	MED						122	109	105	104	103	103	100	104	103	105	1045	105	105	114	1215				
	CNT					1	28	31	30	31	31	31	31	31	31	31	30	31	31	30	20				
foEs	MED				16	16	22	29	34	37	42	41	39	38	37	37	34	33	30	28	27	33	29	28	17
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.

AUGUST, 1960

TABLE 40

BOULDER, COLORADO (40.0N, 105.3W)

TIME 105.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	48	45	43	43	385	375	495	57	65	695	69	70	73	76	76	74	71	71	70	67	655	60	54	50
	CNT	21	19	21	19	24	24	28	27	25	28	27	27	29	28	25	26	29	29	29	29	28	27	25	25
	UQ	52	49	47	46	42	40	53	63	75	75	76	80	84	84	83	79	78	77	76	72	68	64	56	54
	LQ	46	43	39	38	35	36	44	50	57	56	60	63	65	68	66	66	64	64	64	63	62	56	48	45
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
(M3000)F2	MED	265	2625	270	2625	2675	280	290	2875	2825	275	270	270	270	270	2725	280	285	290	300	300	290	2875	275	265
	CNT	17	16	17	18	20	22	27	26	22	27	25	22	27	27	24	26	29	28	28	26	28	26	25	23
	UQ	275	265	275	275	280	285	310	300	290	290	285	285	280	285	280	295	300	300	305	305	305	295	285	275
	LQ	255	255	255	255	260	265	270	260	260	250	250	260	260	260	260	260	275	280	290	295	280	280	270	260
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED							23	30	38	375	37	355	38	36			28	30	265	30		305		
	CNT	28	28	28	28	29	27	28	28	27	28	28	28	29	29	26	27	29	29	28	25	28	28	26	27

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECOND .

AUGUST, 1960

TABLE 41

WHITE SANDS, NEW MEXICO (32.3N, 106.5W) TIME 105.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	53	53	51	50	46	43	55	69	78	815	81	85	91	91	94	90	84	82	78	75	68	63	565	55
	CNT	30	29	30	31	31	31	31	31	31	30	31	31	29	30	29	30	31	31	31	31	31	31	30	31
	UQ	59	57	54	53	51	49	59	76	85	87	89	95	98	102	104	97	94	90	85	80	73	66	63	59
	LQ	48	48	47	45	43	40	51	59	67	72	76	80	83	82	84	79	75	75	71	65	63	56	51	48
h'F2	MED								3425	340	3285	3725	374	375	370	345	338	325	303						
	CNT							3	14	15	20	26	31	27	29	29	30	29	19	4					
	UQ							420	390	381	396	405	400	394	406	375	365	344	313	292					
	LQ							346	300	315	296	329	345	355	350	335	320	307	290	272					
h'F	MED	E 315	310	E 300	295	300	310	268	240	229	215	218	212	213	220	225	2255	225	238	256	252	247	263	281	305
	CNT	31	31	31	31	31	31	31	31	31	31	28	30	28	29	27	30	29	29	31	31	31	31	30	31
	UQ	340	325	320	320	316	335	280	250	240	229	230	220	225	232	230	236	235	245	260	260	261	282	300	320
	LQ	290	285	285	280	279	285	298	235	220	209	210	201	201	210	219	220	220	234	250	240	240	250	268	287
(M3000)F2	MED	260	260	270	270	265	265	295	295	285	275	2675	265	265	2675	270	2775	285	290	300	300	285	280	270	260
	CNT	31	30	30	30	31	30	31	31	30	30	30	31	29	30	29	30	31	31	31	31	31	31	30	30
	UQ	270	270	275	275	275	275	305	300	300	290	275	280	270	275	280	285	290	300	305	305	295	285	280	270
	LQ	255	260	260	260	260	260	280	280	275	265	255	260	255	260	260	265	275	280	290	290	275	265	260	260
foF1	MED									460	480	U 520	530	535	520	520	490	500							
	CNT							2	4	5	9	13	19	18	19	19	15	5	1						
foE	MED							U 2125	U 275	U 320	350		U 3875	390	400	385	370	340	300						
	CNT							A	12	11	10	2	10	9	8	9	16	15	20	3					
h'E	MED							U 124	110	110	109	108	108	109	108	1075	108	108	109	115					
	CNT							23	31	31	29	2H	30	28	28	30	27	29	26	25					
foEs	MED			22				24	32	35	39	45	40	39	40	40	365	34	33	28	22	22			
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. AUGUST, 1960

TABLE 42

BAGUIO, P. I. (16.4N, 120.6E) TIME 120.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 110	U 106	U 94	80	68	53	675	845	95	1035	109	U 112	U 114	U 116	U 116	U 119	U 120	U 113	U 110	U 105	U 108	U 104	U 100	U 104
	CNT	27	27	27	29	30	30	30	30	30	30	31	31	31	30	30	29	29	29	30	29	30	24	23	24
	UQ	117	120	114	90	75	67	74	90	99	112	118	120	124	122	120	123	126	119	115	110	110	108	107	110
	LQ	94	89	83	72	60	48	60	80	88	95	99	102	106	107	110	112	112	110	105	100	102	100	97	98
h'F2	MED													425	U 460	4625	U 410	U 375							
	CNT									1		4	3	11	6	10	8	6	2						
	UQ											390	440	440	460	490	470	430							
	LQ											370	410	415	450	430	375	355							
h'F	MED	300	270	2415	255	265	265	2775	2525	240	230	U 230	U 230	U 235	U 230	U 2375	U 240	U 250	265	2875	325	335	330	310	310
	CNT	30	30	30	30	31	31	30	30	30	30	29	30	31	29	30	29	28	29	30	30	31	31	31	31
	UQ	312	280	280	285	300	310	285	260	250	240	250	240	250	255	270	255	260	270	295	345	375	360	335	325
	LQ	286	260	440	435	295	245	270	250	235	225	225	220	220	220	225	230	240	255	280	310	310	285	290	300
(M3000)F2	MED	U 290	U 305	U 310	300	290	300	300	305	2775	245	240	U 235	U 235	U 230	U 240	U 250	U 260	U 260	U 260	U 265	U 250	U 260	U 265	270
	CNT	22	26	27	28	29	29	30	29	30	30	30	29	28	25	26	24	24	13	13	14	25	17	18	21
	UQ	300	310	325	310	315	315	315	315	285	260	255	260	250	250	250	260	265	270	270	255	260	265	270	275
	LQ	275	295	287	280	280	270	290	300	260	240	230	220	230	220	225	240	245	250	250	230	240	250	260	260
foF1	MED												1	U 540											
	CNT													5	3	4	1								
foE	MED								U 275	U 330	U 360	U 375					U 3625	U 340	U 280						
	CNT							1	17	18	9	5		1		1	12	17	9	1					
h'E	MED								125	125	121	120					121	123	123						
	CNT						2	17		18	13	5	1	2		2	13	17	9	1					
foEs	MED						20	23	385	39	D 38							32	33	D 26	24				
	CNT	30	30	30	30	31	31	30	30	31	31	31	30	31	29	30	29	29	29	30	30	31	31	31	31

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS. AUGUST, 1960

TABLE 43

CONCEPCION, CHILE (36.6S, 73.0W) TIME 75.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	50	49	49	50	43	355	37	715	82	95	100	114	110	110	108	105	1015	100	86	D 75	74	L 50	54	54
	CNT	29	29	29	27	28	26	26	28	29	31	31	31	31	31	31	30	30	31	29	29	29	29	29	29
	UQ	64	62	60	57	50	43	43	76	94	102	111	125	125	123	118	115	120	120	100	88	86	74	66	65
	LQ	42	42	40	38	38	31	27	61	78	81	93	100	90	96	92	90	89	86	76	65	60	55	46	44
h'F2	MED											U 255	2625	2625	260	265	U 260								
	CNT									1	6	16	16	16	13	12	7	1							
	UQ											260	270	280	280	270	300								
	LQ											240	260	250	250	240	250								
h'F	MED	310	290	280	260	230	2825	280	2375	225	230	220	E 220	E 2175	2175	220	E 2275	230	240	220	230	240	250	290	320
	CNT	29	29	29	28	28	28	28	28	30	31	31	31	30	30	31	30	30	31	29	29	29	29	29	29
	UQ	320	320	310	280	270	310	290	240	230	230	220	225	220	230	235	240	240	240	230	240	250	270	320	340
	LQ	295	280	270	240	210	240	265	230	210	220	215	205	205	205	205	210	225	230	210	220	230	240	275	290
(M3000)F2	MED	270	280	280	300	305	270	290	335	340	330	330	325	320	320	320	320	3175	320	315	290	300	2825	270	260
	CNT	29	29	29	27	28	24	26	28	29	31	31	31	31	31	31	30	30	30	28	27	27	29	29	29
	UQ	270	280	290	310	350	300	295	350	355	340	340	340	340	330	335	330	330	330	320	300	305	300	280	270
	LQ	260	260	265	280	270	260	275	330	330	325	315	310	310	300	300	310	310	310	300	280	290	270	250	255
foF1	MED												L 2	2	1	1									
	CNT																								
foE	MED								225	270	320	3375	355	360	355	345	315	2675	210						
	CNT							2	23	30	29	30	29	27	28	26	19	24	16						
h'E	MED							161	U 135	111	109	109	109	109	111	111	111	E 119	E 151						
	CNT							5	22	30	31	31	30	30	31	30	26	24	14						
foEs	MED	23	24	26	245	235	205				33	37	40	40	39	35	345	30	23	23	24	24			
	CNT	29	29	29	28	28	28	28	28	30	31	31	31	31	31	31	30	30	31	29	29	29	29	29	29

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. AUGUST, 1960

TABLE 44

BYRD STATION (80.0S, 120.0W) TIME 120.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 475	D 44	U 515	48	42	33	24	38	U 425	U 52	U 54	U 63	U 62	U 52	U 425	U 38	U 41	U 45	U 45	U 46	U 47	U 48	U 51	U 47
	CNT	8	10	10	13	13	5	5	9	12	21	25	21	22	19	22	16	15	11	7	14	13	12	10	8
	UQ	50	52	57	54	51	42	36	40	49	61	68	72	74	54	54	43	44	51	57	57	56	61	57	50
	LQ	42	39	40	41	40	30	30	35	32	34	36	47	44	38	34	35	38	37	40	40	41	42	46	40
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	3425	E 3425	E 3675	L 320	E 300	E 290	U 2725	U 250	E 245	E 260	S 260	265	270	265	E 2875	E 3275	E 305	E 340	U 370	340	S 3075	E 320	U 315	
	CNT	16	12	10	13	14	13	8	9	12	20	25	22	25	21	24	22	14	12	15	19	18	18	18	17
	UQ	390	370	405	365	330	333	310	300	285	295	270	280	305	320	335	400	355	400	420	410	380	390	330	370
	LQ	300	320	310	280	265	260	250	240	225	235	240	245	245	235	260	290	270	290	315	270	305	260	285	270
(M3000)F2	MED	U 260	U 260	U 265	U 270	E 280	U 295		U 290	U 255	U 3075	U 305	U 310	U 325	U 305	U 245	U 275	U 280	U 265	U 265	U 2675	U 2575	U 260	U 2725	
	CNT	7	6	5	9	11	7	6	6	12	30	43	19	22	16	15	13	9	8	5	8	10	9	6	4
	UQ	245	280	270	290	290	325	310	295	310	320	315	325	320	310	305	300	290	275	305	280	270	270	285	280
	LQ	240	255	255	260	270	270	290	285	290	290	295	300	290	295	270	245	255	260	240	250	235	250	260	240
foF1	MED																								
	CNT																								
foE	MED				1										1	2	1	1						1	1
	CNT																								
h'E	MED	1		1	1										1	2	1	1						1	1
	CNT																								
foEs	MED	27	24	375	39	37	25											32	34	36	28	255	24	24	
	CNT	21	21	14	19	17	13	8	12	12	21	24	23	26	19	25	27	27	26	25	31	26	28	25	26

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. AUGUST, 1960

TABLE 45

POLE STATION (90.0S) TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	U 36	U 405	U 415	U 45	U 45	U 40	U 48	W 42	U 39	U 365	U 36	U 38	U 40	U 375	U 39	U 385	U 38	U 29	U 39	U 36	U 36	U 315	U 38	U 38
	CNT	11	8	10	9	11	9	7	9	6	6	10	7	5	4	7	4	3	3	5	3	5	6	3	1
	UQ																								
	LQ																								
h'F2	MEQ																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	2275	260	250	240	260	250	U 255	U 285	U 3025	U 290	U 300	U 3125	U 2825	E 300	U 310	U 280		U 310	U 270	U 295	U 290	U 235	U 245	2375
	CNT	20	21	24	25	25	25	21	19	12	11	13	8	8	7	7	6	4	8	7	9	9	13	19	14
	UQ																								
	LQ																								
(M3000)F2	MEQ	U 270		U 2775					U 270					U 310									U 285		
	CNT	7	4	6	4	2	4	4	7	2	2	2	1	5	2	4	2	1		4	2	2	5	2	1
	UQ																								
	LQ																								
foF1	MEQ																								
	CNT																								
foE	MEQ																								
	CNT			1						1	1	2	3	2	3	3	1	3	1	2	U 230 5	3	2	3	1
h'E	MEQ																				119				
	CNT			1					1	1	1	3	3	1	3	2	2	3	1	2	5	3	3	3	1
foEs	MEQ	20	16	18	20	20	16	19	21	22	20	295	38	44	38	345	285	20	23	22	23	24	37	24	20
	CNT	28	29	27	30	31	30	31	28	31	28	28	28	23	21	20	24	23	27	31	31	30	31	31	29

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. JULY, 1960

TABLE 46

ST. JOHNS, NEWFOUNDLAND (47.6N, 52.7W) TIME 60.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	46	42	44	41	40	35	40	66	85	102	112	118	120	120	118	117	109	93	77	68	62	55	51	50
	CNT	20	23	26	23	21	23	26	30	30	30	30	29	30	29	29	29	29	27	26	26	25	23	20	18
	UQ																								
	LQ																								
h'F2	MEQ																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	300	300	283	281	264	254	268	231	229	224	226	227	230	230	233	230	226	224	230	250	265	265	290	295
	CNT	28	28	28	29	26	26	30	29	30	30	30	30	30	29	29	30	30	29	30	30	30	30	30	29
	UQ																								
	LQ																								
(M3000)F2	MEQ	265	275	270	280	280	290	290	325	330	320	315	310	305	305	305	310	305	300	295	290	285	270	260	270
	CNT	14	19	21	19	19	21	23	27	28	27	28	29	29	28	29	29 /	29	25	25	22	20	17	17	12
	UQ																								
	LQ																								
foF1	MEQ																								
	CNT																								
foE	MED								200	260	290	310	310	310	300	280	240								
	CNT							1	10	16	21	19	18	19	17	19	15	1							
h'E	MEQ								112	112	110	112	110	111	110	111	119								
	CNT							1	10	18	21	19	21	19	17	19	15	2							
foEs	MED									26	29	31	31	31	30	28	24								
	CNT	30	28	28	29	26	26	30	29	29	29	29	30	30	28	29	30	30	29	30	30	30	30	30	29

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS. NOVEMBER, 1959

TABLE 47

OOURBES, BELGIUM (50.1N, 4.6E) TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	61	58	56	54	50	55	60	66	78	74	81	80	80	79	78	74	74	78	81	84	80	74	70	65
	CNT	25	26	25	26	27	26	28	28	25	24	25	26	26	27	27	27	27	28	26	26	27	24	27	30
	UQ	67	64	61	57	53	61	72	78	85	88	92	91	90	88	88	85	84	85	89	88	85	80	74	69
	LQ	55	55	50	45	45	50	56	61	64	68	66	69	71	66	68	66	68	72	76	80	75	70	63	58
h'F2	MEQ						375	430	340	358	358	365	355	378	380	400	405	340	330						
	CNT						2	5	7	10	10	13	17	18	17	13	6	4	1						
	UQ							450	400	480	390	422	392	410	435	465	440	380							
	LQ							352	285	300	355	330	322	350	350	352	360	325							
h'F	MEQ	302	312	305	302	295	270	250	235	230	U 225	U 220	U 220	V 215	222	225	228	238	252	260	262	265	265	280	294
	CNT	26	26	25	26	27	27	29	29	26	26	26	27	27	28	27	27	28	28	26	27	27	26	28	30
	UQ	320	332	321	315	320	280	258	245	245	250	250	300	230	238	235	240	246	262	275	275	275	270	305	322
	LQ	290	290	290	290	280	255	242	230	220	220	215	220	210	215	220	225	230	250	260	255	255	260	262	280
(M3000)F2	MEQ	250	250	250	250	260	285	292	288	290	282	280	280	275	275	275	275	285	285	285	290	275	270	260	255
	CNT	26	26	24	26	27	26	28	28	25	24	23	26	26	27	27	27	27	28	26	20	27	24	27	30
	UQ	255	255	255	260	270	290	302	305	295	285	290	290	280	280	280	280	285	285	290	295	290	285	270	260
	LQ	240	245	245	245	250	270	278	275	270	275	275	265	270	265	265	270	270	275	280	280	270	260	250	245
foF1	MEQ						350	425	460	498	U 535	515	550	550	560	530	510	495							
	CNT						1	4	3	4	5	6	5	8	8	11	5	3							
foE	MEQ					132	178	U 260	300	335	350	380	385	U 380	385	370	340	330	285	218	E 160				
	CNT					2	6	9	21	14	13	2	2	4	4	1	11	17	19	6	4				
h'E	MEQ					U 114	U 110	108	107	105	105	104	104	105	105	105	107	108	108	113	E 134				
	CNT					6	16	25	29	27	27	25	25	26	26	27	27	27	26	20	2				
foEs	MEQ	J 13	12	14	J 13	15	22	29	35	40	40	41	42	41	40	39	38	36	34	33	J 31	J 33	J 26	J 22	J 18
	CNT	26	26	24	24	25	25	27	29	27	27	26	26	27	27	26	26	28	28	26	28	26	27	28	28

SWEEP 1.0 MC TO 20.0 MC IN 3 MINUTES. AUGUST, 1959

TABLE 48

CONCEPCION, CHILE (36.6S, 73.0W) TIME 75.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	60	56	555	54	49	49	54	76	107	118	1255	116	115	122	Q 120	114	1055	105	93	82	84	70	645	64
	CNT	29	29	30	30	27	28	29	27	29	30	28	28	28	29	30	31	30	30	28	29	28	30	30	30
	UQ	68	66	66	60	52	53	60	90	119	128	134	120	125	135	125	120	118	118	109	92	91	84	80	72
	LQ	54	52	50	49	45	40	40	68	99	110	116	108	106	112	112	101	96	92	85	74	76	67	60	56
h'F2	MEQ												2	2	2	2	1								
	CNT																								
	UQ																								
	LQ																								
h'F	MEQ	305	E 2925	280	2775	255	300	E 300	2375	230	230	2275	220	215	215	220	230	230	240	2275	235	E 240	240	2775	300
	CNT	30	30	30	30	29	29	29	28	29	30	28	28	29	29	30	31	30	30	30	30	29	30	30	30
	UQ	325	310	320	310	330	340	310	255	235	230	230	230	230	240	240	240	245	250	240	245	250	250	280	320
	LQ	280	280	260	250	230	260	250	230	225	220	220	210	210	200	200	220	225	230	220	220	220	225	250	280
(M3000)F2	MEQ	260	270	275	2775	270	260	275	320	330	330	325	320	305	300	310	310	310	310	3075	295	300	285	270	260
	CNT	29	27	29	30	26	28	27	24	26	27	28	26	23	29	26	28	27	27	26	21	24	26	28	29
	UQ	270	280	290	290	300	270	290	330	340	340	335	335	315	320	320	320	320	320	325	310	320	295	280	270
	LQ	250	260	255	260	250	250	270	300	325	320	320	305	290	290	295	295	300	300	300	280	290	275	260	250
foF1	MED																								
	CNT																								
foE	MEQ								220	290	3275	355	370	U 370	U 3725	355	325	280	U 205						
	CNT				1	1			21	25	24	22	21	16	20	20	17	18	16						
h'E	MEQ								E 135	109	109	107	107	109	109	109	109	111	E 141						
	CNT				1	1			22	27	29	26	25	27	25	29	29	21	15						
foEs	MEQ											38	39				33		25	26	249	21	20		
	CNT	27	27	26	26	26	26	26	26	29	30	28	26	27	27	28	29	27	25	26	26	27	27	27	27

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. AUGUST, 1959

TABLE 49

CHURCHILL, CANADA (58.8N, 94.2W)

TIME 90.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	52	52	50	51	50	50	50	54	52	54	60	61	62	62	65	65	67	66	63	62	60	58	53	54
	CNT	28	27	27	29	28	29	28	26	28	29	26	29	29	30	28	29	27	29	29	29	29	30	29	29
	UQ																								
	LQ																								
h'F2	MED						460	470	480	510	480	520	540	540	500	480	460	460	450	430	U 470				
	CNT				1	4	13	16	16	15	16	20	22	24	24	26	24	24	25	18	6	2			
	UQ																								
	LQ																								
h'F	MED	284	320	300	307	300	250	250	240	240	240	220	220	210	210	210	220	220	240	250	280	300	300	310	300
	CNT	23	24	22	24	22	22	22	22	22	23	24	24	28	27	26	24	20	21	20	20	28	26	23	22
	UQ																								
	LQ																								
(M3000)F2	MED									U 240		U 240	240	U 240	240	250	U 250		U 260	U 260		U 280			
	CNT	1	1					2	1	6	4	7	10	7	11	10	7	4	5	7	4	6	1		1
	UQ																								
	LQ																								
foF1	MED					U 320	380	430	450	480	500	500	520	520	520	510	500	500	480	450	U 400				
	CNT				1	5	19	26	26	28	27	28	29	29	30	30	29	28	28	22	7	3			
foE	MED		U 150	180	180	220	260	310	320	360	390	390	390	390	390	380	370	350	330	320	300	290	270	190	U 160
	CNT	4	7	10	15	18	21	24	25	25	27	27	28	28	28	27	26	23	23	23	25	27	24	17	5
h'E	MED				U 110	120	120	110	110	105	105	100	100	100	105	105	105	110	110	110	115	120	130	U 130	
	CNT	1		2	5	10	16	20	22	17	20	18	22	23	21	22	21	22	21	22	20	22	13	6	1
foEs	MED	60	66	60	45	43	45	46	47	47	46	46	48	47	46	46	47	45	45	38	40	30	50	59	70
	CNT	30	30	30	30	30	29	30	29	30	29	29	29	29	30	30	30	29	28	28	29	29	30	30	29

SWEEP 1.0 MC TO 17.0 MC IN 16 SECONDS.

JUNE, 1959

TABLE 50

POITIERS, FRANCE (46.6N, .4E)

TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 80	U 78	U 72	U 68	68	74	U 80	80	80	83	87	87	86	87	84	86	86	85	U 86	U 87	U 88	U 85	U 86	U 86
	CNT	30	30	30	30	30	30	29	30	30	30	29	29	26	30	30	32	24	29	30	29	28	29	30	30
	UQ																								
	LQ																								
h'F2	MED					U 400	385	350	400	38.	410	435	440	425	430	425	415	395	370	330	E 335				
	CNT					4	7	17	17	27	25	23	27	25	29	28	25	29	25	15	6				
	UQ																								
	LQ																								
h'F	MED	E 320	E 318	E 310	E 318	305	265	253	249	E 242	232	230	230	230	235	235	230	250	250	250	270	270	E 290	E 300	E 318
	CNT	30	30	29	30	29	31	27	24	22	23	20	24	22	18	21	21	23	21	23	21	26	26	28	30
	UQ																								
	LQ																								
(M3000)F2	MED	230	238	235	238	248	255	260	260	250	250	250	245	250	250	250	250	250	260	260	268	E 265		U 220	U 228
	CNT	12	12	17	20	21	25	16	16	20	21	18	20	20	19	25	21	24	15	13	4	2		1	4
	UQ																								
	LQ																								
foF1	MED					U 270	U 370	U 460	U 520	550	560	580	590	600	600	580	560	560	U 540	U 470					
	CNT					4	9	18	20	23	26	28	26	26	28	27	24	28	22	13					
foE	MED					E 23	220	280	325	360	375	390	400	400	400	392	385	360	330	280	205	E 28			
	CNT						29	29	30	30	27	30	29	29	24	26	25	26	28	29	28				
h'E	MED					E 24	120	105	105	105	105	100	100	100	100	102	105	105	105	110	120	E 28			
	CNT						29	29	30	30	28	30	30	29	29	29	30	30	29	30	26				
foEs	MED	24	22	25	22	26	29	34	44	48	47	51	47	48	50	46	46	44	44	43	38	36	36	35	28
	CNT	30	30	30	30	30	30	30	30	30	29	30	30	30	30	29	30	30	29	30	30	30	30	30	30

SWEEP 1.0 MC TO 17.0 MC IN 1 MINUTE.

JUNE, 1958

TABLE 51

RABAT, MOROCCO (30.9N, 6.8W)

TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 95	95	U 91	90	83	77	80	90	90	90	92	100	103	104	103	102	102	96	100	98	90	L 90	U 92	U 95
	CNT	21	22	22	22	23	22	21	21	23	19	22	20	21	23	23	23	21	21	22	22	18	21	21	21
	UQ																								
	LQ																								
h'F2	MED						U 450	U 525	290	300	385	362	412	398	400	400	400	375	360	330	U 310				
	CNT						2	1	7	9	5	12	16	18	23	18	21	20	15	9	1				
	UQ																								
	LQ																								
h'F	MED	E 350	E 330	E 310	E 320	E 305	300	250	240	240	218	220	215	218	245	220	235	250	250	E 270	E 300	E 290	E 305	E 320	E 340
	CNT	21	23	22	23	22	22	20	19	19	12	14	14	12	14	15	17	14	11	13	23	17	20	22	21
	UQ																								
	LQ																								
(M3000)F2	MED	250	250	255	245	250	260	270	285	290	268	260	250	250	255	255	260	260	265	270	270	258	250	250	250
	CNT	5	11	8	11	17	20	17	19	21	18	20	18	19	22	21	23	21	17	17	14	10	8	12	6
	UQ																								
	LQ																								
foF1	MED						U 240	U 360	U 430	U 540	U 610	600	620	620	630	600	600	580	U 540						
	CNT						1	1	1	2	4	9	14	10	19	15	15	9	3						
foE	MED							230	300	345	378	395	410	425	422	412	400	380	345	295	205				
	CNT							19	22	19	20	13	6	8	8	8	14	16	20	18	9				
h'E	MED							120	110	105	100	105	102	100	100	100	105	105	105	110	120				
	CNT							18	21	22	21	18	10	6	7	8	19	19	18	18	6				
foEs	MED	32	32	30	34	24	26	32	39	47	53	59	55	58	49	50	48	47	47	46	46	35	32	34	34
	CNT	22	22	22	22	22	23	23	22	23	23	20	17	16	13	14	20	20	21	22	22	20	23	23	22

SWEEP 1.0 MC TO 17.0 MC IN 1 MINUTE.

JUNE, 1958

TABLE 52

TAMANRASSET, FRENCH W. AFRICA (22.8N, 5.5E)

TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D 120	D 86	95	D 82	75	82	90	93	95	106	115	124	135	140	144	145	149	D 145	U 142	U 130	U 130	D 131	D 126	D 124
	CNT	15	18	21	24	24	27	26	25	27	27	27	29	28	29	29	29	27	28	27	27	24	19	16	14
	UQ																								
	LQ																								
h'F2	MED										U 475	418	420	430	420	420	410	390	U 358	U 350					
	CNT										1	6	21	13	26	25	23	19	8	1					
	UQ																								
	LQ																								
h'F	MED	315	305	291	280	275	270	245	235	222	215	215	215	215	210	215	225	240	250	280	330	370	372	360	338
	CNT	28	26	25	27	27	27	27	25	25	25	25	25	23	24	25	25	27	28	26	25	26	23	25	28
	UQ																								
	LQ																								
(M3000)F2	MED	U 240	245	U 272	U 260	275	282	315	298	270	245	245	245	252	250	250	255	U 260	255	U 255	U 245	U 240	U 235	U 240	U 230
	CNT	4	4	10	9	14	18	22	23	26	26	27	29	27	27	20	15	16	10	10	7	3	3	3	3
	UQ																								
	LQ																								
foF1	MED										U 640	U 720	U 640	U 660	660	640	U 610	U 540							
	CNT										1	2	4	8	14	10	3	2							
foE	MED	E	E	E	E	E	E	268	330	L 375	398	420	425	430	425	405	U 380	342	U 285	175	E	E	E	E	E
	CNT	4	6	8	10	17	11	20	11	16	16	21	25	23	21	22	17	16	19	15	18	12	6	2	4
h'E	MED	E	E	E	E	E	E	110	105	100	100	100	100	100	100	100	100	100	105	E	E	E	E	E	E
	CNT	4	6	8	10	17	24	20	19	22	21	24	22	21	22	24	21	16	21	21	20	13	6	3	4
foEs	MED	20	22	24	22	24	31	34	49	55	57	54	56	56	51	52	46	43	33	31	24	24	24	20	20
	CNT	28	26	26	27	27	26	27	26	26	25	28	28	28	28	28	25	27	28	27	28	28	27	26	28

SWEEP 1.2 MC TO 17.0 MC IN 1 MINUTE.

JUNE, 1958

TABLE 53

DAKAR, FRENCH W. AFRICA (14.8N, 17.4W)

TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 58	U 46	U 54	51	56	63	60	70	86	95	105	114	122	U 127	U 124	U 128	U 129	U 128	U 124	U 124	U 111	90	U 76	U 62
	CNT	1	1	4	8	5	11	14	15	10	11	12	16	15	9	5	3	4	6	7	11	12	8	5	1
	UQ																								
	LQ																								
h'F2	MED													U 385	U 385	U 372	410	U 410	U 400						
	CNT													1	4	2	5	1	2						
	UQ																								
	LQ																								
h'F	MED	380	358	360	350	320	300	230	230	210	210	200	190	185	190	188	190	200	200	220	245	300	390	425	405
	CNT	21	21	20	21	21	21	21	21	12	7	9	12	11	10	6	12	13	17	19	21	20	21	23	23
	UQ																								
	LQ																								
(M3000)F2	MED	U 250	U 240	U 275	260	275	275	302	330	335	300	275	265	260	U 260	U 260	U 250	U 265	U 255	262	U 250	U 242	U 230	U 230	U 245
	CNT	1	1	4	8	5	11	14	14	9	10	11	15	15	9	4	3	4	6	6	10	12	8	5	1
	UQ																								
	LQ																								
foF1	MED													U 630	U 650	U 670	U 630		U 590						
	CNT													1	3	1	3		2						
foE	MED							E		U								U				E	E		
	CNT							1	195 14	290 7	345 5	385 5	410 9	420 11	420 11	420 8	415 11	390 9	350 14	305 17	232 16	105 9	1		
h'E	MED							E		U	U											E	E		
	CNT							1	120 7	110 1	100 3	95 5	95 9	95 13	95 11	95 9	95 13	95 12	95 15	100 13	110 11	7	1		
foEs	MED	21	18	34	31	20	39	25	47	52	51	50	48	48	48	49	45		38	40	36	32	E	E	20
	CNT	21	22	21	21	21	21	21	19	13	11	13	16	18	18	15	18	15	20	20	19	18	20	23	22

SWEEP 1.25 MC TO 20.0 MC IN 10 MINUTES.

JUNE, 1958

TABLE 54

BANGUI, FRENCH EQUATORIAL AFRICA (4.6N, 18.6E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 133	U 124	U 115	U 68	U 58	54	86	125	138	144	142	140	140	131	125	128	124	125	120	0 108	U 97	U 80	U 111	U 112
	CNT	1	1	2	4	9	17	19	24	23	23	24	20	21	16	13	17	23	24	25	24	4	3	2	2
	UQ																								
	LQ																								
h'F2	MED										U 300	U 388	U 400	U 495	U 472	U 425	U 435								
	CNT										1	2	1	4	4	2	3								
	UQ																								
	LQ																								
h'F	MED	U 300	U 265	U 260	250	228	235	268	245	230	225	210	210	205	202	205	225	235	255	290	370	U 365	U 325	U 350	U 370
	CNT	9	9	10	12	14	23	22	24	20	20	17	20	19	22	23	23	23	24	24	25	7	4	4	5
	UQ																								
	LQ																								
(M3000)F2	MED				300	295	300	280	285	275	258	235	215	210			210	210	210	215					
	CNT	1	1	2	6	6	16	18	24	22	22	23	23	24	26	26	25	24	24	23	20	6	2		1
	UQ																								
	LQ																								
foF1	MED												U 550		U 620										
	CNT												1		2										
foE	MED					E	U	U												E	E				
	CNT					1	90 1	215 12	310 15	360 19	400 21	410 21	425 21	430 20	420 24	405 22	372 18	330 13	270 18	7	5				
h'E	MED					E	E																		
	CNT					1	1	130 7	105 14	105 17	105 19	100 21	100 19	100 20	100 24	100 25	105 23	105 16	110 15	E 9	E 5				
foEs	MED	20	E	20	25	30	31	45	50	80	50	60	48	50	44	43	47	47	46	32	24	E	E	E	
	CNT	21	22	23	24	24	24	22	24	23	23	24	21	22	26	26	25	24	25	26	25	25	24	24	18 23

SWEEP 1.2 MC TO 17.0 MC IN 1 MINUTE.

JUNE, 1958

TABLE 55

LWIRO, CONGO (2.3S, 28.8E)

TIME 30.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	0 114	0 110	0 105	0 92	0 66	0 60	78	0 118	145	141	137	141	146	143	139	141	U 143	U 144	O 140	O 140	0 114	0 100	0 110	0 130
	CNT	27	27	27	27	26	25	25	25	23	23	24	25	25	27	25	27	27	27	28	28	27	27	27	27
	UQ									149	149	149	147	150	149	147	147								
	LQ							66						133	131	130									
h'F2	MED									262	280	300	380	390	425	450	440	430							
	CNT							1	1	6	8	7	16	21	21	23	16	12							
	UQ									270	287	330	385	412	450	460	470	450							
	LQ									260	275	270	357	382	390	420	430	410							
h'F	MED	220	220	220	235	230	230	267	250	235	230	220	220	215	215	220		245	250	277	292	295	245	235	235
	CNT	25	25	24	27	26	23	24	25	21	18	14	18	21	17	14	2	13	17	20	28	27	24	26	27
	UQ																								
	LQ																								
(M3000)F2	MED		U 298	287	292	300	315	299	312	318	299	283	268	259	247	242	234	239	241						
	CNT	2	9	12	12	16	20	22	21	22	22	23	23	25	25	25	25	21	18	4	4	3		1	1
	UQ			299	301	312	331	313	320	322	305	296	278	265	256	250	243	250	257						
	LQ				273	288	303	292	297	309	294	274	262	253	238	235	228	230	236						
foF1	MED												U 560	U 550	U 520										
	CNT											3	5	9	8	3									
foE	MED							E		330	375	400	415	420	415	400	375	340	280						
	CNT							23	265 19	18	22	21	22	23	25	22	23	13	9	3					
h'E	MED							E		115	109	109	109	109	109	111	111	113	119						
	CNT							24	123 10	11	10	13	14	11	17	15	12	18	9						
foEs	MED	27	27	28	24	24	25	24	30	38	40						42	42	39	35	30	28	19	23	23
	CNT	27	27	27	27	25	25	25	24	21	23	23	25	26	27	28	26	27	27	26	28	27	27	27	26

SWEEP 1.25 MC TO 20.0 MC IN 3 MINUTES.

JUNE, 1958

TABLE 56

TAHITI, SOCIETY IS. (17.7S, 149.3W)

TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	110	96	80	68	52	50	61	103	139	140	138	140	133	136	136	135	142	150	159	D	O	O	143	114
	CNT	25	26	23	23	26	26	25	26	23	23	26	23	25	27	26	26	25	25	26	25	26	28	28	23
	UQ																								
	LQ																								
h'F2	MED													250	250	250	U 268	325	368	355	U 355	U 360	U 300		
	CNT													7	8	5	4	6	16	12	13	2	1		
	UQ																								
	LQ																								
h'F	MED	230	228	238	225	250	250	270	255	245	235	225	230	225	230	238	240	250	260	255	258	240	230	215	225
	CNT	28	28	28	27	27	28	29	26	23	21	22	22	20	25	26	25	23	23	27	26	27	27	27	27
	UQ																								
	LQ																								
(M3000)F2	MED	280	298	300	298	275	280	295	310	315	320	300	282	275	265	260	260	265	268	280	280	270	280	290	300
	CNT	25	26	23	24	26	26	25	26	23	20	25	22	23	27	25	24	22	20	16	10	9	13	21	21
	UQ																								
	LQ																								
foF1	MED														U 650										
	CNT														4										
foE	MED	E	E	U	E	U	E	U		E	E	E								E	E	U	U	U	E
	CNT	6	6	110 12	10	110 10	16	120 26	220 22	305 23	350 21	375 21	390 18	395 18	390 25	375 19	350 20	300 19	212 14	6	4	120 5	120 7	120 6	8
h'E	MED	E	E	E	E	E	E	E	125	105	105	100	105	100	100	105	105	115	122	E	E	E	E	E	E
	CNT	6	6	12	10	10	16	26	22	23	22	21	20	22	23	19	19	20	12	6	4	5	7	6	8
foEs	MED	24	23	26	29	24	28	27	31	31	31			42	41	40	37	31	31	31	31	31	31	28	26
	CNT	28	28	26	25	26	28	28	24	22	21	23	21	23	28	25	25	23	24	27	26	26	26	27	26

SWEEP 1.2 MC TO 17.0 MC IN 1 MINUTE.

JUNE, 1958

TABLE 57

TANANARIVE, MADAGASCAR (18.8S, 47.5E) TIME 45.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	34	31	29	27	24	26	U 42	90	115	123	120	120	116	112	111	110	106	107	94	78	60	56	U 51	42
	CNT	24	27	29	28	27	28	29	23	22	27	27	26	24	26	23	24	23	23	21	25	25	22	25	27
	UQ																								
	LQ																								
h'F2	MED			U 600				U 350				U 278	U 290	U 315	330	360									
	CNT			1				1				2	1	3	5	5									
	UQ																								
	LQ																								
h'F	MED	E 240	E 260	E 270	E 330	E 300	E 278	265	238	230	230	220	220	220	230	235	235	235	240	225	222	240	245	235	230
	CNT	27	29	30	27	29	28	30	30	28	28	26	20	15	17	18	25	26	26	25	24	24	27	28	26
	UQ																								
	LQ																								
(M3000)F2	MED	300	275	280	280	275	288	U 270	312	312	310	295	275	270	260	265	270	275	285	300	U 300	295	308	U 305	295
	CNT	24	25	26	23	24	28	29	18	18	25	23	21	19	22	18	18	21	18	12	21	15	14	21	25
	UQ																								
	LQ																								
foF1	MED			U 200								U 620			U 590	U 500									
	CNT			1								1			2	2									
foE	MED	E	E	E	E	E	E	E	220	300	335	U 365	U 380	U 390	U 372	U 365	332	290	188	E	E	E	E	E	E
	CNT	9	14	19	19	21	26	28	30	26	27	9	5	2	6	13	26	21	12	8	5	7	3	3	5
h'E	MED	E	E	E	E	E	E	E	120	110	110	105	105	100	105	105	110	115	130	E	E	E	E	E	E
	CNT	9	14	19	20	22	27	29	22	24	27	28	27	20	24	23	19	16	7	8	5	7	2	3	5
foEs	MED	25	19	17	25	17	25	27				35	45	47	47	44	38	35	33	32	31	30	31	28	28
	CNT	29	29	30	29	29	29	29	29	26	27	15	12	10	15	18	29	28	29	24	24	25	22	25	29

SWEEP 1.25 MC TO 20.0 MC IN 10 MINUTES. JUNE, 1958

TABLE 58

PORT LOCKROY (64.8S, 63.5W) TIME 60.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	23	23	23	23	22	22	22	23	31	U 55	75	88	96	98	84	74	66	52	34	24	21	23	22	23
	CNT	27	25	24	22	22	21	24	26	15	20	23	24	26	25	25	24	24	22	20	26	26	27	28	26
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	380	395	390	385	355	330	320	300	265	230	220	215	220	215	220	220	210	220	230	250	105	355	360	380
	CNT	28	27	25	26	25	26	25	24	23	29	29	37	28	29	30	30	30	30	25	47	26	23	26	26
	UQ																								
	LQ																								
(M3000)F2	MED	235	235	240	240	240	250	260	270	270	300	310	330	335	340	330	330	320	335	330	285	270	250	245	240
	CNT	19	20	20	18	20	17	18	16	11	16	16	23	23	22	20	17	19	18	15	20	20	21	21	20
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED			100	90	10	100	90	U 120	U 120	150	180	200	210	200	190	160	90	140	100	105	U 130	U 160	140	U 130
	CNT			1	1	2	1	1	2	3	5	7	9	9	10	4	5	1	1	2	3	2	3	2	1
h'E	MED																								
	CNT																								
foEs	MED	9	11					14	14	16	19	24	28	24	24	22	20	19		12	12	15	17	12	12
	CNT	29	30	30	30	30	30	29	29	30	30	28	27	28	26	28	26	27	28	29	30	29	27	30	28

SWEEP 0.67 MC TO 25.0 MC IN 5 MINUTES, AUTOMATIC OPERATION. JUNE, 1958

TABLE 59

HALLEY BAY (75.5S, 26.6W) TIME 30.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	195	U 21	27	26	37	40	40	415	37	U 37	405	48	U 585	58	U 53	44	38	30	225	19	17	14	20	202
	CNT	17	21	19	19	11	16	17	16	21	25	26	28	28	29	28	29	26	26	25	23	19	11	22	21
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	455	440	415	400	380	370	330	285	250	265	250	240	235	230	235	230	250	250	270	305	330	380	410	400
	CNT	17	19	20	17	16	19	18	17	20	22	23	24	28	28	28	29	28	25	24	22	19	21	24	22
	UQ																								
	LQ																								
(M3000)F2	MED	225	230	235	235	240	U 240	245	250	U 270	U 260	280	U 290	U 300	U 310	330	U 320	325	320	310	270	280	270	255	240
	CNT	13	11	11	13	6	10	11	10	11	14	18	16	21	26	18	24	20	17	18	16	13	15	18	15
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	J 115	J 22	J 22	J 225	J 14	J 125	J 13	125	J 115	J 135	14	13	12	J 12	J 12	11	12	115	12	12	105	135	125	13
	CNT	25	26	23	24	22	19	17	15	15	17	19	22	17	17	17	21	19	21	20	21	19	27	25	24

SWEEP 0.65 MC TO 25.0 MC IN 5 MINUTES, AUTOMATIC OPERATION. JUNE, 1958

TABLE 60

LWIRO, CONGO (2.3S, 28.8E) TIME 30.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D 155	D	D 117	D 110	D 91	U 78	84	122	139	142	141	150	153	155	155	154	155	U 157	D 152	D 140	D 134	D 133	D 134	D 140
	CNT	29	28	28	28	28	27	27	27	23	21	26	25	29	26	28	28	29	29	29	25	25	29	29	29
	UQ						087	90	125	143	151	150	153	150	15	158	156	154	160						
	LQ						65	77	113	130	134	140	145	140	150	150	151	149							
h'F2	MED								385	420	425	435	445	450											
	CNT								2	2	2	1	2	14	23	18	16	6							
	UQ													435	400	465	470	420							
	LQ													400	415	420	410	400							
h'F	MED	225	215	215	220	220	245	260	245	235	225	220	215	210	210	220	230	240	250	280	305	320	260	240	235
	CNT	26	28	25	28	27	25	27	27	23	16	20	22	21	21	15	17	17	23	23	27	9	18	27	29
	UQ	227	220	222	230	230	230	265	250	240	230	220	220	212	217	230	240	240	260	240	335	340	275	250	242
	LQ	212	200	205	210	215	215	245	245	230	220	215	210	205	205	210	220	235	250	280	300	300	250	230	225
(M3000)F2	MED	293	297	U 274	296	299	302	292	308	306	286	275	262	254	245	235	231	234	238	244	248	U 241	U 264		U 285
	CNT	15	14	13	14	16	19	24	25	23	21	25	28	25	26	28	28	27	22	17	11	6	5	4	11
	UQ	303	309		308	313	320	303	314	312	299	281	269	258	252	247	245	245	251	256	255				
	LQ	274	288		284	295	286	285	294	297	276	264	255	245	236	228	225	227	227	239					
foF1	MED								U 530	U 540	U 520														
	CNT								11	8	13	3	1												
foE	MED							E	270	335	375	400	415	420	410	395	370	330	275						
	CNT							15	27	23	21	26	28	26	27	27	26	26	23						
h'E	MED							E	121	115	111	111	109	109	109	111	111	113	117						
	CNT							15	6	10	11	15	15	12	14	9	9	12	13						
foEs	MED	19	14	18	18	19	17	23	32	38	41	40						38	35	29	25	21	16	17	19
	CNT	28	28	28	28	28	27	27	27	23	21	26	28	24	29	28	28	28	29	29	29	29	29	29	29

SWEEP 1.25 MC TO 20.0 MC IN 3 MINUTES. MAY, 1958

TABLE 61

MURMANSK. U. S. S. R. (69.0N, 33.0E)

TIME 30.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	58	60	63	62	64	70	65	72	78	81	81	86	90	90	91	85	79	76	70	73	69	62	62	66
	CNT	9	12	9	12	14	9	16	16	21	22	25	25	25	26	22	26	27	22	25	19	22	19	12	6
	UQ																								
	LQ																								
h'F2	MED				440	250	450	E 400	355	415	445	450	450	470	450	440	465	410	350	330					
	CNT				1	1	1	4	3	4	5	8	9	10	13	9	9	8	9	10					
	UQ																								
	LQ																								
h'F	MED	450	400	340	400	320	280	265	250	250	240	250	250	250	250	245	250	250	265	285	295	330	400	410	405
	CNT	9	10	8	11	7	7	8	6	13	10	13	15	18	15	17	14	17	14	10	18	18	17	11	7
	UQ																								
	LQ																								
(M3000)F2	MED	225	220	225	245	240	250	250	255	250	250	250	240	240	245	245	260	250	265	260	265	250	240	240	240
	CNT	8	12	7	11	12	5	14	10	20	14	19	21	24	21	19	24	26	21	21	17	16	16	6	4
	UQ																								
	LQ																								
foF1	MED						400		490	540	530	540	540	560	540	540	480	500							
	CNT								1	2	4	6	6	6	10	5	7	4							
foE	MED	180	E 180	195	200	E 200	235	270	300	310	310	340	340	350	340	320	320	300	300	280	230	200	245	250	440
	CNT	1	1	2	3	3	4	6	4	7	6	4	4	6	2	5	8	7	9	6	6	4	2	1	1
h'E	MED	149		E 125	159	119	125	119	115	115	112	113	105	109	117	115	109	115	115	115	129	129	E 145	149	145
	CNT	1		1	2	1	3	6	5	6	8	6	6	4	4	9	7	11	8	7	5	1	1	1	1
foEs	MED	40	E 39	38	36	38	E 36	E 36	E 30	E 36	E 38	E 40	E 40	E 38	E 40	E 35	E 37	E 32	E 31	E 40	37	33	40	40	42
	CNT	24	16	15	20	17	13	16	13	20	19	21	25	25	27	25	25	26	24	24	24	24	22	21	14

SWEEP 1.0 MC TO 20.0 MC IN 30 SECONDS.

APRIL, 1958

TABLE 62

LWIRO, CONGO (2.3S, 28.8E)

TIME 30.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D 163	D 143	147	137	04	05	U 86	125	117	85	96	125	141	147	145	152	162	163	161	160	159	162	159	O 149	140	140	172	D 168
	CNT	14	14	13	13			12	12	13	12	12	12	12	14	15	15	15	15	14	15	16	16	16	16	16	15	15	15
	UQ			156	148			108	99					147	151	151	158	166	169	165	163	162	165	167					
	LQ			134						110	82	67	110	131	140	139	149	155	156	154	153	158							
h'F2	MED								250									430	450	445	440								
	CNT								5					2			4	10	11	11	11	4							
	UQ								255									460	460	475	480								
	LQ								250									410	425	430	440								
h'F	MED	220	215	220	220	225	215	247	247	235	230	220	217	210	U 220	U 225	227	240	260	300	345	337	270	245	230
	CNT	14	14	13	13	13	12	12	12	12	14	13	14	10	9	9	10	12	14	13	15	14	15	15	15
	UQ	225	220	235	230	230	227	257	250	240	235	225	220	215	225	230	230	240	265	300	350	350	300	250	240
	LQ	220	210	215	210	212	212	240	240	230	225	220	210	205	212	220	220	232	255	290	330	320	260	230	220
(M3000)F2	MED	U 270	U 289	273	283	289	296	U 286	306	292	280	261	249	247	240	233	226	229	231	239				U 255	U 264
	CNT	7	7	12	12	12	11	9	12	12	13	14	14	14	14	13	14	15	12	11	4	2	3	5	5
	UQ	284	294	281	288	303	310	293	315	298	285	265	254	250	242	238	235	241	245	241					
	LQ	263	268	262	276	275	281	275	279	283	273	250	244	241	233	222	225	223	224	234					
foF1	MED											4	4	4	3		1								
	CNT																								
foE	MED							E 9	275 10	345 12	385 13	410 14	420 12	430 13	420 11	405 10	375 12	345 15	275 13						
	CNT																								
h'E	MED							E 9	1	4	2	3	1	1	2	2	4	111 9	117 11						
	CNT																								
foEs	MED	17	17	16	16	18	18	19	32	39	44			15	14	14	15	39	36	31	29	25	17	17	18
	CNT	14	14	13	13	13	12	12	11	12	13	15	15					16	15	16	16	16	15	15	15

SWEEP 1.25 MC TO 20.0 MC IN 3 MINUTES.

APRIL, 1958

TABLE 63

HALLEY BAY (75.5S, 26.6W)

TIME 30.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 45	42	43	U 47	45	475	47	50	60	66	75	84	↑ 93	106	110	112	109	103	88	74	55	U 44	42	U 39
	CNT	10	9	10	15	16	16	21	21	24	25	27	28	29	30	28	27	27	26	22	16	14	13	12	15
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	412	448	410	430	415	415	358	315	265	250	250	250	250	240	242	245	245	240	255	315	380	400	358	365
	CNT	18	20	17	21	19	21	20	19	21	23	24	27	28	29	28	28	28	29	29	27	25	21	20	19
	UQ																								
	LQ																								
(M3000)F2	MED	U 220	U 200	U 210	U 210	U 200	U 210	215	240	260	285	285	285	290	290	295	290	300	300	305	U 290	U 270	U 250	U 275	U 225
	CNT	4	5	6	9	7	6	11	12	18	23	25	25	26	28	28	26	22	23	16	13	6	8	8	9
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED								150	U 145	U 170	190	220	230	235	190	170	160	165	U 145	115	U 105			
	CNT								4	6	6	7	7	9	11	9	13	8	8	4	3	1			
h'E	MED								168	145	115	120	120	115	128	130	145	160	152	165	210	200			
	CNT								4	6	3	3	7	8	8	6	8	7	4	5	1	1			
foEs	MED	J 22	235	J 25	J 265	225	13	14	E 15	E 145	E 17	21	E 22	E 23	E 235	E 19	E 17	E 16	12	14	12	J 23	J 26	J 24	24
	CNT	22	21	23	25	22	18	14	12	8	12	13	12	13	14	13	18	15	14	18	23	25	26	28	26

SWEEP 0.65 MC TO 25.0 MC IN 5 MINUTES. AUTOMATIC OPERATION.

APRIL, 1958

TABLE 64

MURMANSK. U. S. S. R. (69.0N, 33.0E)

TIME 30.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 58	56	U 61	U 74	U 63	U 68	U 61	U 65	U 78	U 78	88	98	97	100	96	93	U 85	66	U 62	70	60	53	U 58	U 63
	CNT	2	6	5	6	3	5	9	10	13	18	23	15	29	24	18	15	16	13	13			7	6	5
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	E 420	E 450	E 425	E 410	E 375	E 320	E 280	E 300	E 280	E 290	E 295	E 280	E 270	E 290	E 270	E 270	E 265	E 300	E 300	E 350	E 435	E 390	E 415	E 405
	CNT	15	20	14	12	15	11	11	17	14	21	28	24	25	28	26	24	23	25	21	21	22	21	22	20
	UQ																								
	LQ																								
(M3000)F2	MED	U 245	U 240	U 235	240	U 250	U 250	U 275	280	U 275	270	265	260	265	270	265	270	U 290	275	U 280	285	200	230	U 235	U 240
	CNT	2	6	5	6	3	4	8	9	11	15	20	13	21	24	17	13	16	13	12	7	8	7	6	5
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED						E 110	E 100	E 160	E 200		E 270		E 300	E 300	E 280	E 310	E 260	E 200	160	255	E 200			
	CNT						1	1	1	1		1		3	1	1	3	2	4	2	2	1			
h'E	MED							E		E 129	E 127						E 125			E 149	119				
	CNT							1		1	1						1			1	1				
foEs	MED	44	41	40	35	E 40	E 32	E 26	E 40	E 38	E 40	E 48	E 42	E 41	E 40	E 42	E 38	E 40	E 39	38	40	41	40	40	40
	CNT	20	24	21	16	17	14	12	16	14	21	29	24	25	28	26	24	23	25	22	22	25	25	25	24

SWEEP 1.0 MC TO 20.0 MC IN 30 SECONDS.

MARCH, 1958

TABLE 65

KERGUELEN I. (49.4S, 70.3E)

TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	42	34	32	33	44	55	60	63	65	66	68	67	68	72	72	68	68	66	64	59	58	54	50	46
	CNT	16	15	14	15	9	14	22	26	27	29	26	25	20	24	25	27	27	28	30	28	27	22	15	19
	UQ																								
	LQ																								
h'F2	MED					U															U				
	CNT					505	550	550	598	610	642	635	655	625	640	610	598	600	520	470	355				
	UQ					2	19	26	26	27	26	21	19	16	15	20	26	23	25	7	1				
	LQ																								
h'F	MED	342	392	400	400	355	300	260	250	245	240	240	250	245	240	245	240	245	250	260	285	315	300	310	322
	CNT	18	16	19	17	17	23	23	24	26	27	23	20	18	21	22	24	17	25	26	21	24	21	19	20
	UQ																								
	LQ																								
(M3000)F2	MED	235	230	230	220	225	220	220	215	215	205	210	210	212	210	210	220	220	222	240	255	262	260	245	235
	CNT	13	13	11	12	6	9	19	23	20	26	23	21	14	20	19	25	23	28	30	21	18	15	13	14
	UQ																								
	LQ																								
foF1	MED					U																			
	CNT					310	390	440	480	500	530	540	560	570	560	560	550	520	500	470					
						2	20	25	26	27	28	24	21	22	20	25	27	24	25	8					
foE	MED	U		E	E	U																			
	CNT	122				175	250	300	340	375	400	410	430	420	430	420	410	375	350	305	260	188	125	135	100
		2		2	3	4	17	24	24	23	26	18	17	15	13	18	18	19	25	21	19	6	3	2	3
h'E	MED	U		E	E	U																			
	CNT	148				122	110	105	105	105	105	105	105	105	105	105	105	105	105	105	105	108	130	155	
		2		2	2	2	10	22	23	27	29	27	25	25	24	25	24	20	24	23	22	8	1	1	2
foEs	MED	29	32	31	33	34	32					42		45	44	45	40	48		34	32	31	28	31	32
	CNT	25	25	26	27	22	26	27	26	28	30	28	28	28	26	28	28	28	29	31	25	22	27	26	28

SWEEP 0.88 MC TO 14.14 MC IN 10 MINUTES. AUTOMATIC OPERATION.

DECEMBER, 1957

TABLE 66

TERRE ADELIE (66.7S, 140.0E)

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED		U	U	U	U	U			U				U	U		U	U	U			U	U	U	U
	CNT	51	50	47	54	50	54	58	60	59	63	61	66	65	62	61	60	64	64	65	62	62	57	57	54
	UQ	24	18	20	16	17	21	19	15	14	13	10	14	14	14	14	20	26	27	26	24	20	20	18	20
	LQ																								
h'F2	MED	U	U	U													U								
	CNT	495	475	500	500	500	555	608	642	600	590	580	550	585	600	550	622	565	565	515	500	U			
	UQ	1	1	4	8	10	20	18	14	13	12	12	14	16	17	16	22	26	28	28	23	475	460		
	LQ																					11	6		
h'F	MED	350	310	Z	Z	Z	Z	Z	Z	Z		U		U		Z	Z	Z	Z	Z	Z	Z	-		
	CNT	24	22	305	285	260	250	250	250	240	240	270	250	200	208	222	220	235	242	250	260	275	295	320	350
	UQ			26	25	27	24	24	22	9	6	3	6	3	10	16	19	22	24	27	25	22	20	19	26
	LQ																								
(M3000)F2	MED	U	U	U	U			U																	
	CNT	240	250	255	240	235	220	220	215	215	235	200	220	210	210	208	220	220	225	230	230	240	235	242	248
	UQ	15	5	12	5	5	13	12	13	8	7	7	9	7	10		44	19	23	14	17	17	10	12	10
	LQ																								
foF1	MED	U	U			U								U	U	U		U	U	U	U	U	U	U	U
	CNT	300	320	310	370	410	440	460	490	500	500	520	520	520	500	500	500	480	480	440	410	360	340	300	300
		1	2	5	14	22	21	26	23	18	19	11	18	19	22	22	24	27	29	28	25	12	5	2	1
foE	MED	U	U	U	U	U		U	U	U		U	U	U		U	U	U				U			
	CNT	160	140	225	240	270	308	335	355	370	375	385	385	388	385	375	360	348	320	300	270	230	170	150	140
		6	8	9	21	21	20	18	19	9	6	1	2	7	11	13	20	24	22	26	22	13	7	9	7
h'E	MED	E	E		Z	Z	Z	Z	Z	Z	Z	Z		Z	Z							-	E	U	E
	CNT	13	7	115	110	110	105	105	100	100	100	100	100	100	100	100	100	100	105	110	110	110		105	
			7	7	14	18	24	27	26	25	25	25	27	25	23	26	25	25	22	19	14	16	6	7	9
foEs	MED	32	30	31	27	27																			
	CNT	30	29	30	27	28	28	29	27	27	27	28	27	27	25	26	27	28	29	27	31	30	32	32	30
																			28	31	31	29	30	28	30

SWEEP 1.2 MC TO 17.0 MC IN 1 MINUTE.

DECEMBER, 1957

TABLE 67

KERGUELEN I. (49.4S, 70.3E)

TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	38	36	35	34	44	50	60	66	72	70	70	77	77	78	77	80	78	75	70	67	66	58	52	48
	CNT	16	16	13	12	14	15	22	28	27	25	25	21	18	20	23	25	28	27	26	24	23	22	18	16
	UQ																								
	LQ																								
h'F2	MED																			U					
	CNT						628	615	588	565	605	600	588	595	548	552	530	505	510	450					
	UQ						6	19	22	21	23	22	24	19	22	26	25	23	9	1					
	LQ																								
h'F	MED	392	370	390	400	390	312	270	255	245	245	240	228	238	235	235	245	245	250	265	295	275	300	300	310
	CNT	20	18	19	19	17	22	24	25	27	25	21	16	22	22	23	25	28	25	24	23	19	17	20	20
	UQ																								
	LQ																								
(M3000)F2	MED	235	230	225	222	240	250	220	210	205	220		210	210	212	210	220	225	240	245	265	260	255	245	240
	CNT	14	13	11	10	9	8	23	27	27	13	22	19	16	20	21	20	27	27	29	20	18	17	14	12
	UQ																								
	LQ																								
foF1	MED							370	440	480	540	550	570	580	580	580	570	550	520	490	420				
	CNT							7	20	24	24	24	22	22	19	21	25	24	21	9	1				
foE	MED	U		E		E																			
	CNT	120		1	E		230	288	330	360	390	410	410	415	410	405	380	352	330	280	212	E	138	138	130
		5			3	4	17	20	22	23	22	17	11	18	12	17	13	12	19	18	12	3	2	2	3
h'E	MED	E	E	E	E	E																U	U	U	U
	CNT		4	2	7	3	105	105	105	105	105	105	105	105	105	105	105	105	105	105	110	125	172	122	
						3	5	18	23	22	21	20	18	18	18	18	21	20	16	13	7	5	2	2	
foEs	MED	21	24	16	22	20	26	16				45	44	43	42		38	32	35	27	24	27	25	30	27
	CNT	25	26	27	26	26	24	29	27	27	27	26	24	24	24	24	26	28	26	25	24	25	25	26	28

SWEEP 0.88 MC TO 14.14 MC IN 10 MINUTES. AUTOMATIC OPERATION.

NOVEMBER, 1957

TABLE 68

TERRE ADELIE (66.7S, 140.0E)

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U	48	50	56	U	54	58	60	U	U	69	70	74	66	U	U	62	U	70	68	U	U	U	U
	CNT	46	40	46	46	54	58	60	63	62	69	72	70	74	66	69	92	62	70	70	68	63	58	55	53
	UQ	14	10	16	16	18	18	17	19	19	13	14	13	11	8	13	14	20	20	19	24	17	15	15	21
	LQ																								
h'F2	MED		U	U	U	U			U	U	U	U	U	U	U	U	U	U	U						
	CNT		465	550	502	558	512	532	550	600	500	508	555	500	550	522	582	545	486	455	485	482	400		
	UQ		2	1	2	6	12	14	17	17	13	14	12	13	11	14	18	19	16	15	11	6	1		
	LQ																								
h'F	MED	305	Z	320	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z			
	CNT	23	320	19	295	275	255	250	250	240	238	225	220	220	222	225	235	250	250	260	285	302	318	322	315
	UQ		19	24	23	27	26	22	21	16	10	6	7	7	12	13	18	22	23	25	21	26	24	24	25
	LQ																								
(M3000)F2	MED	U	255	265	258	U	220					U	U	222		210		225	U	240	U	U	U	245	U
	CNT	220	6	7	8	245	10	16	12	17	8	220	218	6	5	5	8	12	230	11	245	242	250	6	240
	UQ	3				9						12	8						18		17	12	8		7
	LQ																								
foF1	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U			
	CNT	290	320	310	340	390	430	460	490	500	500	500	500	510	520	510	490	480	450	420	400	340			
		1	2	1	4	9	18	23	25	33	20	15	15	14	13	17	20	25	19	18	12	5			
foE	MED	E								U	U	U	U	U	U	U	U	U	U	U	U	U	E	E	
	CNT	10	145	U	210	242	288	U	335	352	365	375	375	370	365	355	340	325	305	270	240	175	150	7	12
			11	10	11	18	22	17	21	14	8	10	8	7	11	15	13	18	21	22	17	10	10		
h'E	MED	E	E	E		Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	U	E	E	E
	CNT	12	11	5	120	110	105	105	100	100	100	100	100	100	100	100	102	105	110	105	110	115			
					5	13	21	24	25	25	27	23	24	22	21	19	12	16	13	16	11	3	9	11	10
foEs	MED	33	35	31	28	31	26										24	34	32	29	30	27	28	38	38
	CNT	29	28	29	28	29	29	28	29	29	26	26	25	25	25	25	22	23	24	25	24	26	29	27	27

SWEEP 1.2 MC TO 17.0 MC IN 1 MINUTE.

NOVEMBER, 1957

TABLE 69

KERGUELEN I. (49.4S, 70.3E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	50	46	47	46	41	48	64	70	76	82	91	102	104	108	108	105	100	92	87	85	78	68	57	57
	CNT	19	16	16	10	25	14	19	25	26	28	28	27	24	26	25	28	26	23	23	24	22	24	22	20
	UQ																								
	LO																								
h'F2	MED							U										U							
	CNT							675	578	600	540	560	595	515	500	492	490	450							
	UQ							4	6	9	13	14	18	15	15	12	11	1							
	LO																								
h'F	MED	305	330	338	350	355	345	285	250	245	245	240	240	240	235	235	238	245	250	255	260	250	250	285	298
	CNT	22	23	20	19	20	21	25	25	25	28	28	25	21	20	24	24	26	23	24	26	21	21	25	22
	UQ																								
	LO																								
(M3000)F2	MED	245	240	235	240	238	258	260	250	235	230	230	230	230	235	235	240	240	245	260	265	265	260	250	250
	CNT	15	12	11	7	10	10	17	23	23	26	28	22	21	22	19	25	23	19	17	19	18	15	11	13
	UQ																								
	LO																								
foF1	MED																	U	U						
	CNT							380	480	500	540	580	620	600	620	610	580	500	450						
								6	8	9	14	14	15	14	11	11	8	3	1						
foE	MED	E	E		E	E												E	E	E	U	U	U	U	E
	CNT	2	2		1	1	155	250	302	340	375	400	410	402	400	390	360	340	290	218	145	115	135	138	2
							5	16	24	23	25	24	22	20	19	16	21	24	18	18	4	1	1	4	
h'E	MED	E	E		E	E	E																		
	CNT	2	1		1	1	3	105	105	105	105	105	105	105	105	105	105	105	105	110	110	160		145	2
								9	21	23	25	24	23	21	21	19	22	22	17	7	3	1		4	
foEs	MED	15	15	20	31	21	21	28					42	44	43	38				30	20	16	25	16	15	16
	CNT	23	22	24	21	19	21	22	25	27	27	26	25	23	24	25	26	27	24	22	21	22	27	25	25

SWEEP 0.88 MC TO 14.14 MC IN 10 MINUTES. AUTOMATIC OPERATION. OCTOBER. 1957

TABLE 70

TERRE ADELIE (66.7S, 140.0E) TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U	U	U	U	U		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
	CNT	40	38	45	44	50	57	55	58	70	78	67	70	69	77	80	78	74	80	75	74	74	60	54	49
	UQ	13	9	8	11	11	11	13	3	5	8	8	6	7	6	9	12	15	17	19	17	13	17	15	7
	LO																								
h'F2	MED							U	U	U		U		U	U	U	U	U	U	U					
	CNT							350	370	440	440	415	450	482	455	460	450	455	440	395					
	UQ							3	5	12	13	9	13	14	10	15	14	11	6	2					
	LO																								
h'F	MED	325	340	302	2 320	2 310	2 280	2 270	2 250	2 250	U 245	2 245	2 240	2 225	2 230	2 225	2 242	2 250	2 260	2 278	290	290	292	300	300
	CNT	23	23	18	21	21	21	24	19	12	6	8	9	14	15	17	20	24	23	20	23	23	26	25	21
	UQ																								
	LQ																								
(M3000)F2	MED	U			U	U	U				U					U	U	U	U	U	U	U	U	U	U
	CNT	230			258	278	258	4	5	5	238	8	3	6	5	225	235	238	240	242	250	240	242	245	230
	UQ	2			2	4	4				4					2	7	8	7	6	6	4	4	3	3
	LQ															1									
foF1	MED						U	U	U	U	U	U	U	U	U	U	U	U	U	U					
	CNT						250	380	440	470	520	500	500	520	510	500	500	450	440	370					
							1	4	8	17	11	11	11	14	13	13	19	10	5	2					
foE	MED	E	E	E	U	U	U	2	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	E
	CNT	6	5	3	145	185	220	265	300	330	345	350	350	355	345	338	315	290	260	230	155	128	E	E	E
					14	11	15	19	20	16	8	8	9	11	16	18	19	15	17	12	14	14	6	5	1
h'E	MED	E	E	E	E	110	110	2 110	2 110	2 105	105	105	105	2 105	2 105	2 105	2 105	2 110	2 110	2 120	E	E	E	E	E
	CNT	6	5	9	12	7	9	21	24	24	22	21	20	19	20	20	23	13	13	7	9	13	7	5	1
foEs	MED	22	22	23	26	24	24	26		24	22	22	20	20	21	21	32	30	29	26	19	19	19	24	28
	CNT	25	26	24	24	23	25	25	22								22	24	22	24	23	26	24	26	26

SWEEP 1.2 MC TO 17.0 MC IN 1 MINUTE. OCTOBER. 1957

TABLE 71

MARION I. (46.8S, 37.9E) TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	0	0	0	0	0	U	U	U	U	U	U	U	U	U	U	U	U	U	0	0			0	0
	CNT	36	44	42	54	77	74	86	108	116	121	127	126	124	122	112	104	88	76	63	56	38	34	40	37
	UQ	8	7	5	5	4	12	11	8	10	10	8	9	8	7	11	9	10	9	11	10	9	9	10	8
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED					U	U	U	W	U	U	U	U	U	U	U	U	U	U	U					U
	CNT					250	250	265	240	230	265	250	270	270	280	280	235	220	310	300					215
	UQ					3	4	4	3	3	4	4	2	2	3	6	5	1	1	1					1
	LQ																								
(M3000)F2	MED						U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
	CNT						320	300	290	280	265	270	275	280	290	290	290	275	290	285	285	280	260	250	240
	UQ						4	5	4	4	6	4	5	3	2	4	5	5	4	4	2	3	3	1	1
	LQ																								
foF1	MED																								
	CNT																								
foE	MED						320										U								
	CNT						1										250								
																	1								
h'E	MED																								
	CNT																								
foEs	MED	E	E	U	U	U	U	U	U	U	U	U	U	U	E	U	U	U	U	U	U	U	U	U	E
	CNT	18	18	12	17	24	9	10	12	38	7	12	9	38	36	24	24	20	18	18	19	18	18	20	18
		16	12	12	12	9	9	10	12	7	9	12	9	9	9	13	15	14	16	20	17	17	16	16	14

SWEEP 1.6 MC TO 19.0 MC IN 18 SECONDS. SEPTEMBER. 1957

TABLE 72

KERGUELEN I. (49.4S, 70.3E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	31	30	30	30	30	31	44	66	80	92	100	119	119	120	0 120	118	114	108	100	85	70	58	42	38
	CNT	18	14	16	13	13	12	14	24	24	21	23	24	22	22	18	18	18	14	14	14	15	16	17	14
	UQ																								
	LQ																								
h'F2	MED									U		U	U	U	U				U						
	CNT									600	2	385	325	740	590				700						
	UQ									1		4	3	5	4				1						
	LQ																								
h'F	MED	272	300	325	315	310	300	295	250	245	240	232	230	232	235	230	238	240	240	235	232	222	225	235	250
	CNT	10	10	10	11	11	10	17	21	21	18	20	20	22	18	21	22	22	21	22	18	18	17	15	12
	UQ																								
	LQ																								
(M3000)F2	MED	260	260	250	250	242	260	280	310	300	290	282	270	270	270	270	272	272	275	290	300	310	305	300	275
	CNT	13	12	12	8	8	9	14	22	23	19	22	12	13	13	5	10	10	9	9	11	13	15	15	12
	UQ																								
	LO																								
foF1	MED									U	U	U	U	U	U				U						
	CNT									460	460	490	500	450	480				380						
										1	1	1	1	3	2				1						
foE	MED	U			U			U				U	U									U			E
	CNT	345			250			175	250	302	340	350	380	370	380	360	340	300	260	190		135			
		2			1			1	12	16	14	13	11	9	9	9	16	19	13	6		1			2
h'E	MED	U							U												U				U
	CNT	125							115	110	105	105	105	105	105	105	110	110	105	110		125			150
		2							4	13	14	16	12	11	12	13	18	17	7	2		1			3
foEs	MED						U																		
	CNT	27	29	16	18	25	28	15		16	17	16	10	15	15	17	19	21	26	16	26	16	38	34	36
		17	13	14	12	9	4	7	9										16	13	12	12	15	10	12

SWEEP 0.88 MC TO 14.14 MC IN 10 MINUTES. AUTOMATIC OPERATION. SEPTEMBER. 1957

TABLE 73

TERRE ADELIE (66.7S, 140.0E)

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 38	U 33	U 36	U 34	U 33	U 42	U 44	U 60	U 78	U 62	U 67	U 73	70	81	U 70	U 68	U 75	U 72	U 85	U 58	U 66	U 55	U 52	44
	CNT	13	11	10	7	10	9	12	7	4	1	3	5	8	7	8	7	10	13	10	10	15	10	11	12
	UD																								
	LQ																								
h'F2	MED								U 375	U 350	U 295	U 355	310	U 368	372	340	U 338	U 420							
	CNT								2	4	2	6	5	8	8	6	2	3							
	UD																								
	LQ																								
h'F	MED	270	265	282	290	300	290	270	Z 260	250	250	250	U 240	Z 240	Z 245	245	245	250	Z 260	260	270	252	250	255	250
	CNT	22	19	18	18	18	15	19	13	11	8	5	5	9	9	11	15	14	17	21	22	26	22	24	22
	UD																								
	LQ																								
(M3000)F2	MED	U 250	U 278	U 265	U 255	U 252	U 262		U 280				U 295	U 250		U 295	U 290	U 450	U 478	U 270	U 255	U 260	U 285	U 290	U 275
	CNT	6	2	1	3	2	2		1				1	6		2	1	6	4	4	4	7	5	2	3
	UD																								
	LQ																								
foF1	MED								U 400	U 400	U 420	U 450	U 460	U 520	U 500	U 440	U 440	U 300							
	CNT								2	3	2	7	6	6	9	6	3	2							
foE	MED	E		E	E							U 215	U 310	U 312	U 305	U 292	U 265	U 225	U 200	150	E	E	U 195	E	U 155
	CNT	4		3	3	145 6	U 168 6	U 168 8	U 230 7	260 8	300 6	U 308 4	U 315 8	U 312 8	U 305 11	U 292 10	U 265 10	225 8	200 8	11	5	3	2	1	1
h'E	MED	E	U 120	E	E	E	E	120	118	115	110	110	110	110	110	Z 110	115	115	E	E	E	E		E	E
	CNT	3	1	4	5	4	6	5	8	7	10	8	10	9	11	9	7	6	4	3	5	2		1	1
foEs	MED	E		E	E												30	26	24	18	E	E	E	E	17
	CNT	17	16 17	18	18	18 18	18 14	19 13	13	11	11	11	12	10	13	11	10	12	12	13	15	17	19	21	21

SWEEP 1.2 MC TO 17.0 MC IN 1 MINUTE.

SEPTEMBER, 1957

TABLE 74

IBADAN, NIGERIA (7.4N, 3.9E)

TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	J 63	J 64	J 65	62	56	43	76	106	120	129	130	123	111	108	103	106	109	111	110	92	J 70	J 66	J 64	J 65
	CNT	23	25	27	28	26	29	29	25	28	27	27	28	26	29	29	26	26	20	17	18	17	18	15	17
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	355	320	280	250	240	245	280	245	230	220	210	205	200	200	200	210	230	250	295	400	450	450	425	375
	CNT	27	25	26	26	25	25	24	22	23	27	24	27	24	26	26	22	23	24	25	21	25	28	27	25
	UQ																								
	LQ																								
(M3000)F2	MED	U 255	U 260	U 290	300	320	315	310	300	290	265	245	220	210	210	215	215	225	230	225	200	U 210	U 210	U 240	U 260
	CNT	3	4	6	14	16	23	22	17	24	27	25	26	24	25	26	23	21	16	14	15	6	3	4	5
	UQ																1								
	LQ																								
foF1	MED											U 540	U 550	U 550	U 540	U 520	570								
	CNT											3	10	15	10	9	1								
foE	MED							215	310	355	395	415	425	430	425	410	360	335	280	170					
	CNT							23	22	23	23	21	22	23	24	26	21	23	25	14					
h'E	MED							125	110	110	105	105	105	105	105	105	105	110	115	120					
	CNT							12	16	22	17	8	13	9	13	18	18	22	21	15					
foEs	MED	E	E	E	E	E	E		38	53	106	113	112	112	111	110	86	67	25	E 18	E	E	E	E	E
	CNT	27	26	26	27	25	25	23	21	23	27	23	25	25	25	25	21	27	25	22	16	22	27	26	26

SWEEP 0.67 MC TO 25.0 MC IN 5 MINUTES. AUTOMATIC OPERATION.

AUGUST, 1957

TABLE 75

MARION I. (46.8S, 37.9E)

TIME 0.0

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 25	U 26	U 26	U 24	U 33	U 68	86	99	U 112	U 122	U 124	120	U 119	U 114	U 109	U 84	U 68	U 48	U 24	U 21	U 21	U 22	U 23	U 23
	CNT	15	13	13	15	16	21	24	23	24	23	27	26	25	24	24	22	24	21	14	17	16	14	16	15
	UQ																								
	LQ																								
h'F2	MED							230	245	250	255	250	250	250	255										
	CNT							2	3	5	7	5	4	4	3										
	UQ																								
	LQ																								
h'F	MED					U 280	230	235	230	U 230	230	235	230	235	U 240	U 230	210	220	220						
	CNT					9	21	25	24	22	22	23	22	24	25	25	24	12	7						
	UQ																								
	LQ																								
(M3000)F2	MED	U 270	U 260	U 270	U 280	U 285	U 330	320	310	U 290	290	U 285	285	U 285	290	U 305	U 310	U 300	U 325	315	U 290	U 260	U 265	U 260	U 265
	CNT	8	7	6	9	9	21	24	23	24	23	27	26	25	24	24	22	24	18	7	10	10	5	6	7
	UD																								
	LQ																								
foF1	MED								360																
	CNT								1																
foE	MED						190	260	290	320	340	340	330	300	270	210	E								
	CNT						11	12	12	10	10	12	12	12	13	11	11								
h'E	MED																								
	CNT																								
foEs	MED	U	E	U	U	E	U				34						E	E	E	U	U	E	U	U	U
	CNT	24	22	21	21	20	23	25	24	21	23	24	24	25	24	23	23	22	22	21	22	20	21	21	21

SWEEP 1.6 MC TO 19.0 MC IN 18 SECONDS.

AUGUST, 1957

TABLE 76

KERGUELEN I. (49.3S, 70.3E)

TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	20	13	17	16	16	D 16	21	47	70	82	100	110	118	120	119	D 118	112	D 92	D 86	70	45	26	22	20
	CNT	13	13	18	13	15	12	12	12	17	19	22	25	24	17	12	11	7	5	12	20	23	26	23	16
	UQ																								
	LQ																								
h'F2	MED										U 242	U 220	J 248	250	250	248	U 260	U 290							U 300
	CNT										2	4	4	12	9	12	3	1							1
	UQ																								
	LQ																								
h'F	MED	295	300	335	325	310	312	300	258	240	240	225	230	230	225	230	235	225	215	210	212	210	215	250	275
	CNT	10	11	9	7	10	10	15	22	26	24	27	27	28	26	30	30	31	29	28	28	26	21	19	16
	UD																								
	LQ																								
(M3000)F2	MED	280	285	270	288	270	270	U 280	U 320	328	320	310	290	292	310	300	U 300	300	U 295	U 320	330	340	330	320	300
	CNT	7	9	9	8	11	5	3	3	14	15	18	17	12	9	7	3	5	2	1	10	18	20	16	9
	UD																								
	LQ																								
foF1	MED													U 470		U 470									
	CNT													1		1									
foE	MED	U 150	U 150	U 110		E	E		175	250	280	315	330	335	330	325	300	260	198			U 100	U 115	U 145	
	CNT	1	1	1		1	1		5	15	20	19	19	20	20	23	21	21	13			1	5	1	
h'E	MED	U 145	U 110	U 130		E	E		U 105	118	110	110	108	105	105	105	110	112	118			E	U 145	U 150	
	CNT	1	1	1		1	1		4	10	14	18	18	20	19	16	14	10	6			1	1	1	
foEs	MED	15	15	15	16	16	16	16	14								28	16	18	18	15	16	15	16	15
	CNT	22	23	23	22	20	16	9	14	19	20	23	22	27	26	27	24	24	22	18	13	16	19	12	17

SWEEP 0.88 MC TO 14.14 MC IN 10 MINUTES. AUTOMATIC OPERATION.

AUGUST, 1957

TABLE 77

TERRE ADELIE (66.7S, 140.0E)

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	U 36	U 35	U 33	U 32	U 32	U 27	U 30	W 43	U 48	62	U 58	U 66	U 71	U 70	U 62	U 50	U 62	60	U 62	U 55	U 55	U 54	U 46	U 44
	CNT	14	17	12	12	10	7	9	9	7	6	7	4	5	3	3	6	10	8	8	8	7	9	11	12
	UQ																								
	LQ																								
h'F2	MEQ										U 305	U 370	U 285	U 440	U 355	U 370									
	CNT										2	1	2	3	1	1									
	UQ																								
	LQ																								
h'F	MEQ	258	268	285	300	310	285	280	270	Z 260	Z 258	250	240	240	242	250	245	Z 255	250	250	250	255	250	250	250
	CNT	22	16	20	17	13	11	13	15	19	16	15	18	19	12	12	15	19	19	22	20	19	21	23	22
	UQ																								
	LQ																								
(M3000)F2	MEQ	U 300	U 295	U 285	U 255	U 262	U 258	U 270	U 265	U 290	U 300	U 290	U 335	U 275	U 285	U 310	U 298	U 280	U 270	U 265	U 300	U 295	U 300	U 258	U 282
	CNT	1	5	4	3	2	2	3	1	3	3	1	1	3	1	1	2	3	5	5	2	2	4	2	4
	UQ																								
	LQ																								
foF1	MEQ										U 380	U 400	U 370	U 420	U 390	U 330									
	CNT										2	3	1	4	2	1									
foE	MEQ	E		E	E	E	E	U	U	U 168	U 200	U 225	U 255	U 250	U 230	U 220	U 190	U 160	135	E	E				E
	CNT	1		4	4	3	3	3	7	14	11	7	9	13	9	13	14	11	6	5	1				1
h'E	MED	E		E	E	E	E	E	E	U 125	110	115	110	115	110	U 110	U 120	E	E	E	E				E
	CNT	1		4	2	5	5	7	8	3	5	5	8	12	5	4	4	5	5	4	1				1
foEs	MEQ	19	19	18	18	19	17	19	18	19	19	27	26		28	27	26	29	22	25	19	20	35	21	18
	CNT	22	23	21	20	19	21	20	20	19	17	15	15	17	12	16	15	17	17	18	18	18	21	23	22

SWEEP 1.2 MC TO 17.0 MC IN 1 MINUTE.

AUGUST. 1957

TABLE 78

KERGUELEN I. (49.4S, 70.3E)

TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	18	18	20	20	21	22	23	27	55	80	94	110	Q 118	Q 118	Q 120	Q 123	U 108	U 50	71	60	32	22	22	18
	CNT	13	14	11	15	12	15	13	13	10	21	23	17	13	11	6	5	3	1	6	9	22	22	16	10
	UQ																								
	LQ																								
h'F2	MEQ													U 235		U 230									
	CNT													3		2									
	UQ																								
	LQ																								
h'F	MEQ	270	275	300	300	305	300	298	275	238	225	230	228	228	225	228	218	210	205	218	210	205	235	250	248
	CNT	11	13	8	13	9	13	16	22	28	29	28	28	26	28	30	28	28	20	24	27	23	16	14	8
	UQ																								
	LQ																								
(M3000)F2	MEQ	U 292	280	260	275	265	270	275	U 275	320	335	320	315	315	U 308	U 310	U 290		U 325	U 310	U 335	340	312	302	U 345
	CNT	4	5	5	9	7	11	10	9	7	11	18	11	5	2	2	1		1	4	5	17	14	10	3
	UQ																1								
	LQ																								
foF1	MEQ																								
	CNT																								
foE	MED							E	E	182	240	290	310	320	310	300	270	218	U 122				U 140	U 142	U 100
	CNT							1	2	14	19	16	18	16	15	13	15	10	2				3	2	1
h'E	MEQ							E	E	U 98	105	105	105	105	105	105	105	U 105	U 140				U 148	U 150	U 145
	CNT							1	2	2	6	9	13	10	10	11	14	4	1				4	1	1
foEs	MED	16	15	19	16	16	16	15	16	16				32	33	31	31	25	20	15	15	16	15	15	16
	CNT	25	25	26	26	24	23	21	18	22	22	17	20	18	19	17	18	15	20	16	18	19	24	24	27

SWEEP 0.88 MC TO 14.14 MC IN 10 MINUTES. AUTOMATIC OPERATION.

JULY. 1957

TABLE 79

TERRE AQELIE (66.7S, 140.0E)

TIME 135.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	U 34	U 36	U 37	U 33	U 27	U 21	U 29	U 38	U 42	U 52	U 63	U 65	U 62	U 75	U 78	U 71	U 60	U 67	U 62	U 61	U 47	U 50	U 46	U 41
	CNT	11	12	10	12	7	5	13	8	8	10	6	8	6	4	5	7	6	10	8	10	9	12	12	7
	UQ																								
	LQ																								
h'F2	MEQ						U 450																		
	CNT						1																		
	UQ																								
	LQ																								
h'F	MEQ	260	260	270	270	272	280	290	U 280	Z 270	250	250	Z 250	245	250	250	250	250	250	250	250	250	240	245	245
	CNT	23	22	19	17	15	13	11	15	19	23	20	19	18	18	20	19	17	21	23	26	20	25	24	22
	UQ																								
	LQ																								
(M3000)F2	MEQ	U 275	U 250	U 265	U 260	U 280		U 255	U 310	U 280	U 280		U 288	U 278	U 285	U 300	U 272	U 250	U 290	U 285	U 290	U 288	U 282	U 290	
	CNT	4	1	1	1	1		3	1	2	1		2	4	2	1	4	3	6	1	4	4	2	1	
	UQ																								
	LQ																								
foF1	MEQ						E								U 310										
	CNT						1								1										
foE	MEQ				U 140	E		E	E	U 140	U 158	U 180	U 205	U 200	U 198	U 175	U 145	E	E	E	E	U 155	E		E
	CNT				4	2		5	5	9	16	14	11	12	10	12	9	2	1	2	2	1	2		2
h'E	MEQ			E	E	E	E	E	E	E	E	110	U 108	U 105	U 108	E	E	E	E	E	E		E		E
	CNT			3	1	4	3	8	8	13	6	5	4	3	2	2	5	3	1	2	1		1		2
foEs	MEQ	E	E		16	17	19	18	18	16	19	18	19	19	19	30	31	31	37	32	33	16	18	15	E
	CNT	26	27	24	25	21	23	23	24	23	25	22	16	20	23	24	24	21	25	24	25	22	26	28	25

SWEEP 1.2 MC TO 17.0 MC IN 1 MINUTE.

JULY. 1957

TABLE 80

HALLEY BAY (75.5S, 26.6W)

TIME 30.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	20	19	26	U 26	U 32	315	30	U 32	31	38	40	52	575	58	52	43	405	305	23	18	175	175	U 17	U 175
	CNT	25	25	24	23	23	24	24	23	25	23	25	26	28	27	26	29	28	26	27	23	26	24	23	25
	UQ																								
	LQ																								
h'F2	MEQ																								
	CNT																								
	UQ																								
	LQ																								
h'F	MEQ	380	365	370	360	360	340	310	275	250	250	245	230	225	220	225	225	230	235	260	300	350	350	360	385
	CNT	24	25	23	20	24	25	25	25	26	26	27	25	29	29	27	27	27	26	26	22	24	23	23	24
	UQ																								
	LQ																								
(M3000)F2	MED	230	230	245	215	U 250	235	255	255	250	275	260	270	280	325	315	305	310	310	285	285	250	250	245	235
	CNT	10	9	6	3	2	1	8	4	4	3	2	5	10	10	9	12	10	7	7	5	8	8	7	9
	UQ																								
	LQ																								
foF1	MEQ																								
	CNT																								
foE	MEQ																								
	CNT																								
h'E	MEQ																								
	CNT																								
foEs	MEQ	12	135	15	11	155	13	13	13	12	13	14	145	15	15	165	13	16	11	11	105	11	13	U 12	U 13
	CNT	22	25	26	23	24	24	22	23	23	25	22	21	24	23	24	23	23	16	19	19	20	26	23	24

SWEEP 0.65 MC TO 25.0 MC IN 5 MINUTES. AUTOMATIC OPERATION.

JULY. 1957

TABLE 81

LULEA, SWEDEN (65.6N, 22.1E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	72	71	70	70	74	70	73	77	80	75	73	73	72	70	70	72	70	70	73	72	75	80	70	70
	CNT	13	14	20	22	21	23	20	16	17	20	20	16	20	19	17	20	25	25	24	23	21	23	4	5
	UQ																								
	LQ																								
h'F2	MED			405	440	425	410	410	405	420	430	440	490	500	490	490	470	475	460	450	350	315	375				
	CNT			2	8	12	10	17	17	12	15	14	18	13	15	16	12	13	14	11	5	2	2				
	UQ																								
	LQ																								
h'F	MED	310	330	310	280	260	250	240	210	220	225	250	225	225	250	250	225	235	245	260	260	280	300	300	300
	CNT	14	14	18	19	19	20	17	8	9	10	12	6	6	7	6	10	18	15	21	22	20	15	9	7
	UQ																								
	LQ																								
(M3000)F2	MED	250	240	240	250	250	250	250	250	250	250	250	250	250	250	250	260	260	260	270	260	260	250	240	230
	CNT	7	9	15	19	16	21	19	15	15	18	20	17	21	19	17	19	24	23	23	19	11	4	2	2
	UQ																								
	LQ																								
foF1	MED				360	380	410	450	490	520	530	560	560	560	550	550	550	550	520	500	470	440				
	CNT				6	11	9	17	14	8	14	14	17	12	14	10	13	12	9	2	2				
foE	MED	E								E															
	CNT	180	180	200	250	290	320	330	340	360	370	370	380	370	370	390	370	360	350	330	300	260	200	240	
		1	2	8	10	15	15	11	3	4	3	3	3	3	3	2	7	8	2	6	4	7	5	2	
h'E	MED				U																				
	CNT		110	190	120	135	110	110	145		120	140	105	105	115	110	120	110	115	115	130	130	115		
			1	1	4	8	6	6	2		5	2	2	2	4	3	5	5	4	3	3	1	2		
foEs	MED																								
	CNT	37	27	26		28	33	37		32	33	37	37	37		37			37	35	34	30	29		
		5	7	15	17	20	25	19	6	7	10	7	6	5	8	4	6	13	9	15	12	14	10	2	

SWEEP 1.5 MC TO 25.0 MC IN 10 MINUTES, AUTOMATIC OPERATION.

JUNE, 1957

TABLE 82

LWIRO, CONGO (2.3S, 28.8E)

TIME 30.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U	D	D					D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
	CNT	100	100	99	93	78	68	82	114	134	129	126	123	124	100	100	125	124	127	130	100	99	96	96	96
	UQ	24	24	24	24	24	21	26	25	26	28	28	27	29	29	28	29	27	26	26	26	26	26	22	24
	LQ																								
h'F2	MED								255	250	275	295	360	385	405	420	415	410							
	CNT								17	20	12	14	16	18	18	16	19	5	1						
	UQ																								
	LQ																								
h'F	MED	220	220	220	220	225	230	270	240	230	220	220	210	205	205	215	220	240	250	275	280	280	230	227	230
	CNT	23	20	23	20	20	21	24	21	23	23	20	18	16	16	19	15	16	19	19	[illegible]	21	21	20	23
	UQ																								
	LQ																								
(M3000)F2	MED			U	U							U	U	U		U	U	U	U						
	CNT	4	3	299	292	301	318	300	316	317	296	288	268	266	4	238	239	259	265	4	2		1	1	2
	UQ			7	11	17	16	20	11	14	15	9	8	7		6	9	9	7						
	LQ																1								
foF1	MED													U											
	CNT													510	4	2	1								
												2	3	6											
foE	MED								267	340	375	400	415	422	412	409	375	345	275						
	CNT								22	23	27	22	17	23	20	20	19	19	13						
h'E	MED								119		111	109	109			104	111	111	115						
	CNT								9	4	15	16	8	1	3	5	6	8	9						
foEs	MED	20	20	22	24	21	22	20	30	36		42					44	40	36	36	30	27	20	20	19
	CNT	26	24	25	25	25	25	27	25	26	28	27	28	28	28	27	28	27	26	26	26	26	26	22	24

SWEEP 1.25 MC TO 25.0 MC IN 10 MINUTES, AUTOMATIC OPERATION.

JUNE, 1957

TABLE 83

LWIRO, CONGO (2.3S, 28.8E)

TIME 30.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	50	49	42	36	27	23	38	66	78	80	84	94	100	104	104	101	101	96	90	90	84	85	82	84
	CNT	21	24	22	20	21	19	27	28	28	28	28	27	28	26	30	29	30	27	29	29	29	29	29	26
	UQ																								
	LQ																								
h'F2	MED								255	265	275	292	295	295	305	312	305	280	258						
	CNT								26	27	27	28	25	27	27	30	29	30	26						
	UQ																								
	LQ																								
h'F	MED	235	230	232	235	240	250	252	240	222	218	208	202	200	200	200	210	230	240	230	225	215	210	210	235
	CNT	26	27	28	22	22	18	24	25	16	14	16	12	12	17	14	15	7	9	27	29	28	29	28	25
	UQ																								
	LQ																								
(M3000)F2	MED	318	324	334	321	334	325	330	348	344	339	324	317	316	301	294	292	311	317	322	339	352	367	345	306
	CNT	20	18	20	15	17	19	24	26	28	27	28	27	28	26	30	28	30	27	29	29	29	27	25	23
	UQ																								
	LQ																								
foF1	MED									415	450	455	480	465	460	455	440	410							
	CNT								2	14	19	18	10	16	17	18	17	10	4						
foE	MED							E		274	310	334	345	348	342	333	308	273	219						
	CNT							15	26	28	28	27	24	24	22	23	22	21	20						
h'E	MED							E		109	108	106	105	105	106	107	108	109	114						
	CNT							16	22	20	20	23	22	20	16	16	13	5	6						
foEs	MED	17	20	20	22	18	20	18	18	14	14	41	31	34	32	32	30	29	30	28	30	26	22	20	19
	CNT	27	29	30	26	26	25	28	28	28	28	28	27	28	27	30	30	30	28	30	30	29	28	29	26

SWEEP 1.25 MC TO 20.0 MC IN 10 MINUTES, AUTOMATIC OPERATION.

JUNE, 1957

TABLE 84

LWIRO, CONGO (2.3S, 28.8E)

TIME 30.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	52	49	46	35	30	22	40	64	75	77	80	93	96	103	112	110	102	94	90	86	56	48	46	42
	CNT	22	22	23	24	23	23	25	26	25	26	27	28	28	29	29	28	28	28	29	29	29	30	27	24
	UQ																								
	LQ																								
h'F2	MED								245	260	275	290	295	310	315	305	270	265	245						
	CNT								26	25	25	27	28	29	27	29	27	28	25						
	UQ																								
	LQ																								
h'F	MED	250	235	222	235	230	238	240	230	215	210	200	195	195	190	200	208	220	235	225	225	210	200	212	265
	CNT	27	27	26	27	23	22	26	17	15	13	16	18	18	16	13	9	9	12	24	28	29	26	24	27
	UQ																								
	LQ																								
(M3000)F2	MED	308	314	316	315	332	321	340	353	346	336	319	312	301	298	300	312	314	321	325	345	360	352	296	291
	CNT	19	21	25	22	20	22	24	26	25	26	27	27	28	29	29	28	28	28	29	29	28	29	27	22
	UQ																								
	LQ																								
foF1	MED									410	450	480	460	465	450	450	430	400							
	CNT									9	17	14	18	14	17	14	9	6							
foE	MED							E		275	310	333	344	347	342	330	310	275	218						
	CNT							14	24	26	29	26	28	26	27	27	21	26	14						
h'E	MED							E	115	106	106	108	105	104	105	106	110	110							
	CNT							14	22	21	19	22	18	19	16	15	13	13	4						
foEs	MED	17	21	18	19	19	19	18	20	18	24	E 18	22	24	23	24	28	22	29	30	24	21	18	16	13
	CNT	29	31	28	28	27	26	27	26	26	24	28	29	28	29	30	28	26	28	29	29	29	30	30	30

SWEEP 1.25 MC TO 20.0 MC IN 10 MINUTES, AUTOMATIC OPERATION.

MAY, 1955

TABLE 85

LWIRO, CONGO (2.3S, 28.8E)

TIME 30.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	72	67	45	41	37	31	39	62	71	80	84	91	102	118	120	110	108	114	119	122	118	98	88	68
	CNT	18	20	17	21	17	19	21	22	25	28	28	24	25	26	28	28	28	28	26	26	25	25	22	20
	UQ																								
	LQ																								
h'F2	MED								235	265	280	288	345	350	330	315	308	322	290						
	CNT								21	24	26	24	23	24	25	27	26	28	26						
	UQ																								
	LQ																								
h'F	MED	228	210	220	245	240	225	232	225	220	210	200	200	190	190	202	200	225	245	255	240	215	200	200	210
	CNT	22	23	20	19	17	18	20	16	21	20	19	16	14	11	14	12	7	17	24	26	25	25	22	23
	UQ																								
	LQ																								
(M3000)F2	MED	307	354	298	304	337	362	346	363	348	320	309	281	284	288	290	284	290	300	308	324	344	352	338	313
	CNT	17	18	16	19	17	18	20	21	25	26	26	23	24	26	28	28	27	28	26	26	24	24	17	17
	UQ																								
	LQ																								
foF1	MED									U 410	440	460	460	460	460	450	430								
	CNT									12	24	21	11	12	11	15	9	4							
foE	MED							E	208	271	308	332	345	348	344	332	310	272	224						
	CNT							6	18	25	26	27	21	24	23	26	24	24	16	1					
h'E	MED							E	114	111	109	105		108	108	109	110	111	114						
	CNT							8	11	10	7	6	2	11	12	15	10	11	9	1					
foEs	MED	E	E																				E	E	
	CNT	22	22	14	14	18	16	20	24	27	24	22	23	20	22	20	28	30	28	25	22	18	25	22	23
				22	22	20	20	22	21	25	26	26	22	24	24	26	28	28	27	25	26	25			

SWEEP 1.25 MC TO 20.0 MC IN 10 MINUTES. AUTOMATIC OPERATION.

APRIL, 1955

TABLE 86

LWIRO, CONGO (2.3S, 28.8E)

TIME 30.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 64	42	40	38	32	28	32	62	74	72	80	93	102	111	O 106	110	108	102	D 100	U 104	104	100		79
	CNT	18	17	19	19	20	17	21	21	21	23	24	21	19	17	21	26	26	23	25	24	23	23		21
	UQ																								
	LQ																								
h'F2	MED								240	252	290	330	322	350	350	345	305	290	280						
	CNT								16	20	21	21	18	18	17	20	25	26	17	1					
	UQ																								
	LQ																								
h'F	MED	195	210	235	252	240	220	238	225	215	210	200	198	192	190	200	200	210	230	245	240	235	215	210	200
	CNT	22	21	21	18	17	14	20	19	17	21	20	14	12	11	10	11	14	17	21	24	23	23	23	22
	UQ																								
	LQ																								
(M3000)F2	MED	344	319	303	300	330	350	322	359	348	314	284	282	277	277	280	301	297	291	292	306	319	337	341	348
	CNT	18	17	19	19	20	17	20	21	21	22	24	18	18	16	18	25	25	23	22	21	21	19	22	18
	UQ															I									
	LQ																								
foF1	MED										430	440	450	455	450	450	430	405							
	CNT									1	12	12	14	13	12	14	12	6							
foE	MED							E	201	269	306	330	345	351	347	337	322	284	235						
	CNT							15	15	17	20	20	15	16	15	19	21	24	17	4					
h'E	MED								116	111	111	111	110	109	110	111	111	111	113						
	CNT								15	13	15	13	8	14	11	14	19	21	12	1					
foEs	MED	E	E	E	E					14	16	16	22	17	15	23	28						E	E	E
	CNT	22	21	21	18	14	19	21	20	21	19	21	20	20	23	24	20	18	16	20	26	26	30	26	22	16	23	23	23	22
																							23	24	24					

SWEEP 1.25 MC TO 20.0 MC IN 10 MINUTES. AUTOMATIC OPERATION.

MARCH, 1955

TABLE 87

LULEA, SWEDEN (65.6N, 22.1E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	25		U 25		U 26		37		41		44		45		45		44		43		44		U 36	
	CNT	5		8		10		12		9		11		9		10		17		17		8		4	
	UQ																								
	LQ																								
h'F2	MED									355		360		300		300		320							
	CNT									6		8		7		7		3							
	UQ																								
	LQ																								
h'F	MED	245		200		240		200		200		200		200		200		210		210		240		240	
	CNT	2		3		7		17		14		13		7		11		19		16		15		5	
	UQ																								
	LQ																								
(M3000)F2	MED																								
	CNT																								
	UQ																								
	LQ																								
foF1	MED							360		370		380		390		370		370							
	CNT							1		6		11		11		11		7							
foE	MED					U 200		210		260		280		250		260		240		200					
	CNT					2		17		10		4		4		7		16		2					
h'E	MED					E		120		100		100		100		110		105		120					
	CNT							9		7		4		2		7		10		2					
foEs	MED	30		28		25		E 21		E 26		28		28		E 26		E 24		28		22		25	
	CNT	2		6		6		18		14		12		10		12		20		15		6		1	

SWEEP 1.5 MC TO 10.0 MC IN 9 MINUTES. AUTOMATIC OPERATION.

AUGUST, 1954

TABLE 88

LULEA, SWEDEN (65.6N, 22.1E)

TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	40		41		43		45		47		47		51		47		46		45		45		41	
	CNT	17		16		20		16		11		12		8		12		18		17		18		14	
	UQ																								
	LQ																								
h'F2	MED			300		340		350		350		390		350		360		350		310					
	CNT			1		10		14		11		8		6		10		14		3					
	UQ																								
	LQ																								
h'F	MED	250		250		210		210		200		200		200		200		210		220		240		280	
	CNT	14		11		16		16		16		16		14		18		15		13		16		16	
	UQ																								
	LQ																								
(M3000)F2	MED																								
	CNT																								
	UQ																								
	LQ																								
foF1	MED			300		330		370		400		410		430		420		400		370					
	CNT			2		11		15		11		9		9		11		16		5					
foE	MED			170		220		260		290		300		300		300		270		250		190		E 150	
	CNT			8		11		8		5		9		3		9		6		4		7		7	
h'E	MED			E		120		110		100		100		110		100		100		100		E		E	
	CNT			4		4		3		5		4		2		9		5		3		5		7	
foEs	MED	26		E 19		32		32		33		34		35		E 30		35		40		29		20	
	CNT	12		12		17		18		18		19		19		16		20		22		22		12	

SWEEP 1.5 MC TO 10.0 MC IN 9 MINUTES. AUTOMATIC OPERATION.

JUNE, 1953

US-COMM-NBS-BL

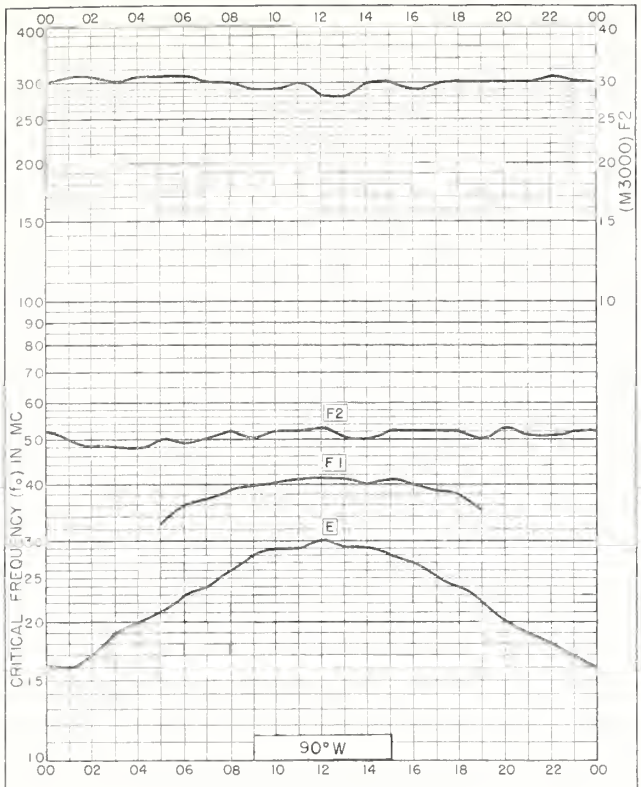

Fig. 1. RESOLUTE BAY, CANADA
74.7°N, 94.9°W AUGUST 1961

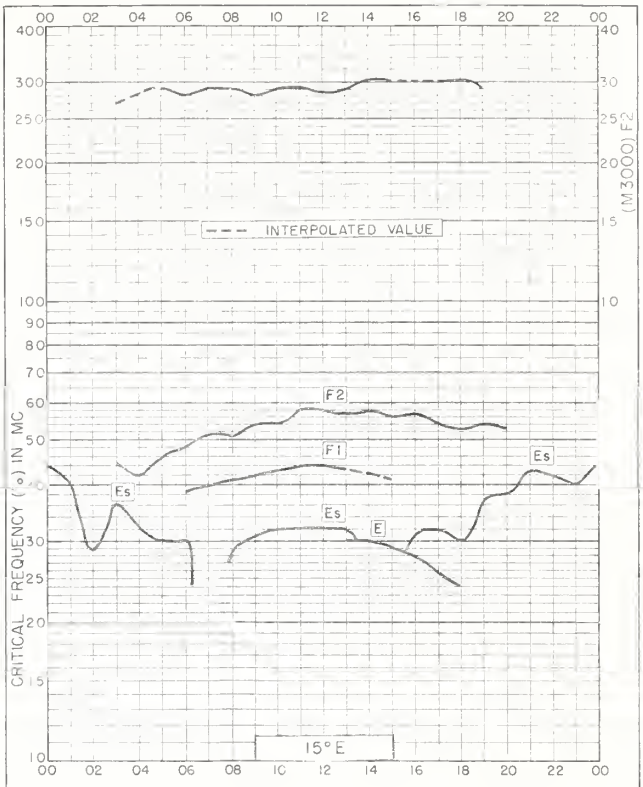

Fig. 2. TROMSO, NORWAY
69.7°N, 19.0°E AUGUST 1961

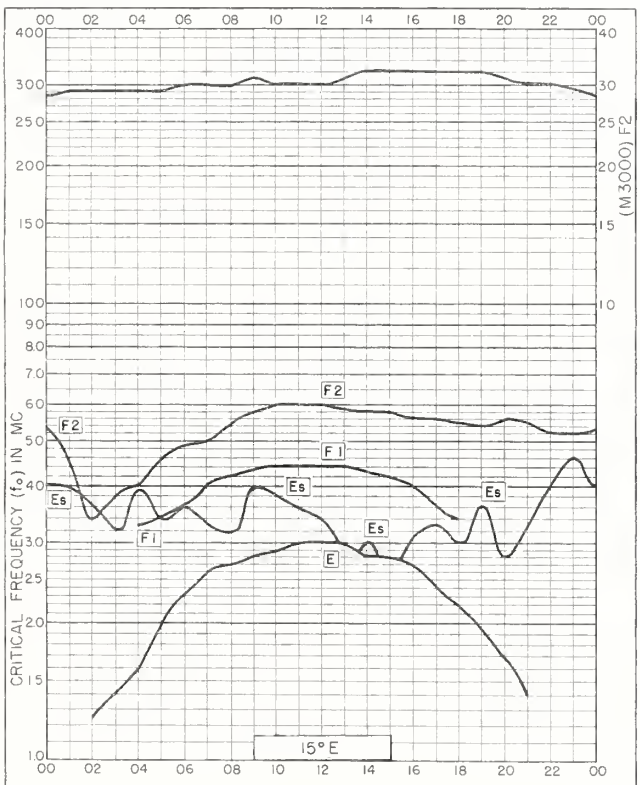

Fig. 3. KIRUNA, SWEDEN
67.8°N, 20.4°E AUGUST 1961

Fig. 4. LULEA, SWEDEN
65.6°N, 22.1°E AUGUST 1961

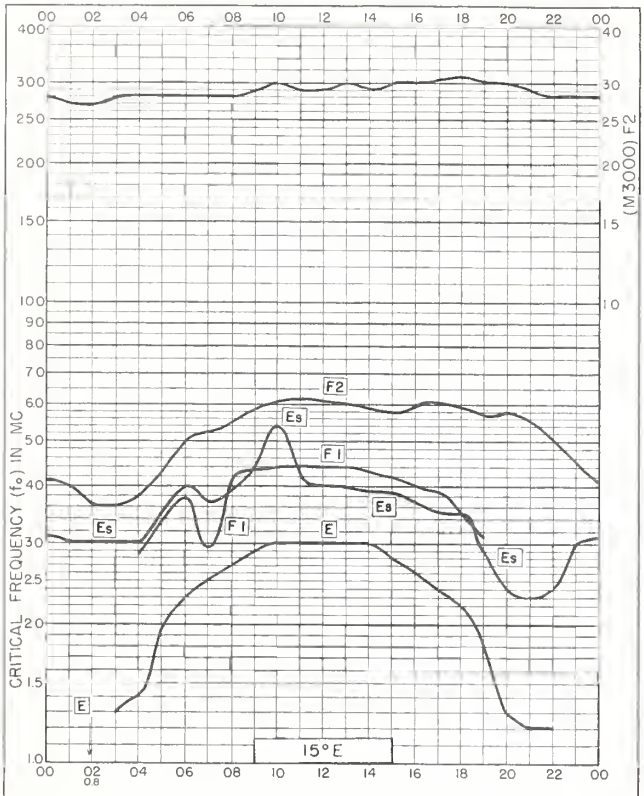

Fig. 5. LYCKSELE, SWEDEN
64.7°N, 18.8°E AUGUST 1961

Fig. 6. NURMIJARVI, FINLAND
60.5°N, 24.6°E AUGUST 1961

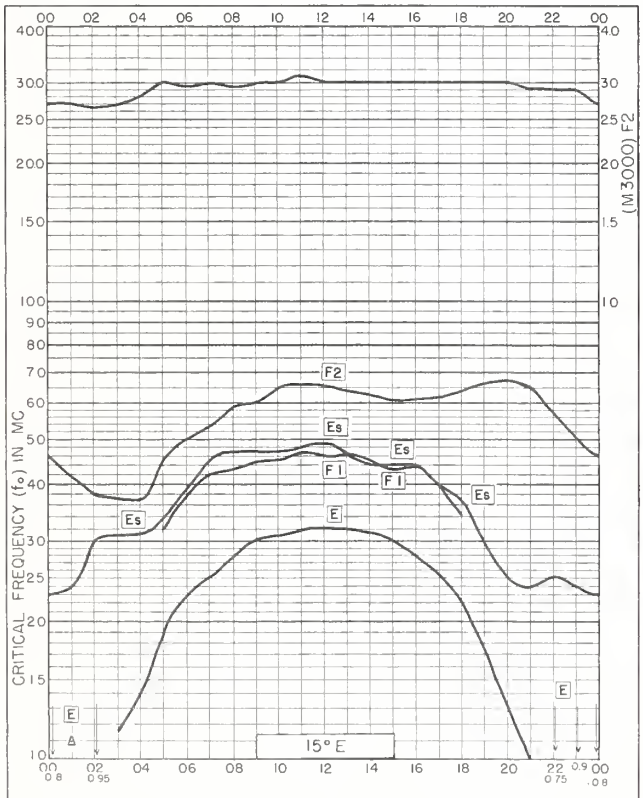

Fig. 7. UPPSALA, SWEDEN
59.8°N, 17.6°E AUGUST 1961

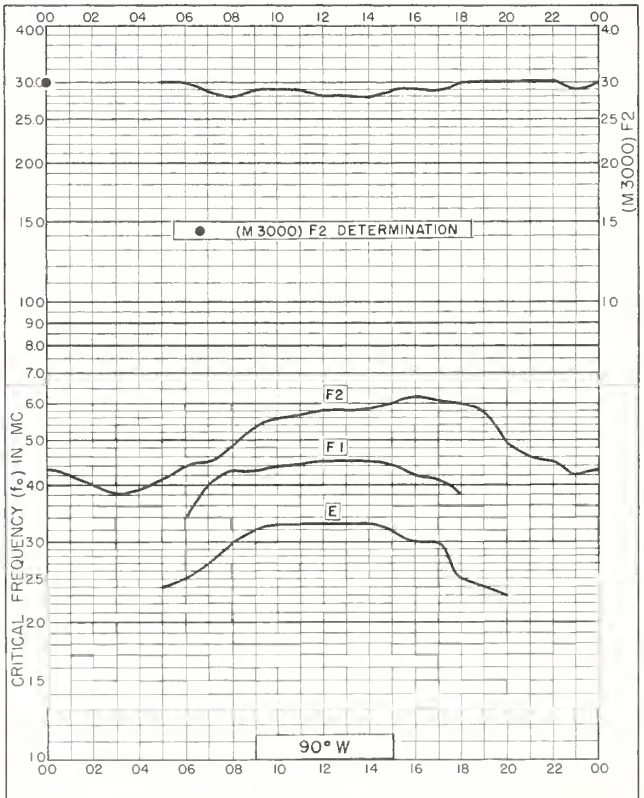

Fig. 8. CHURCHILL, CANADA
58.8°N, 94.2°W AUGUST 1961

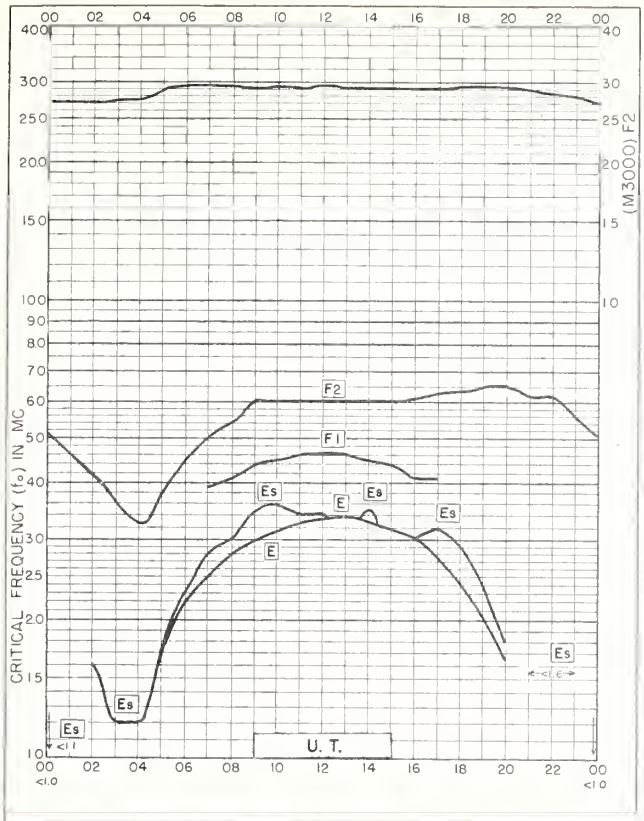

Fig. 9. INVERNESS, SCOTLAND
57.4°N, 4.2°W AUGUST 1961

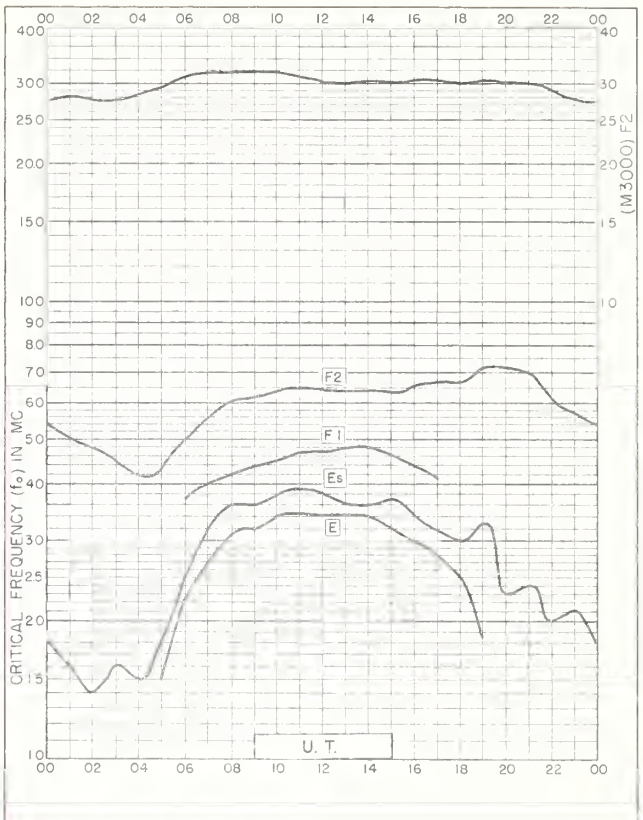

Fig. 10. SLOUGH, ENGLAND
51.5°N, 0.6°W AUGUST 1961

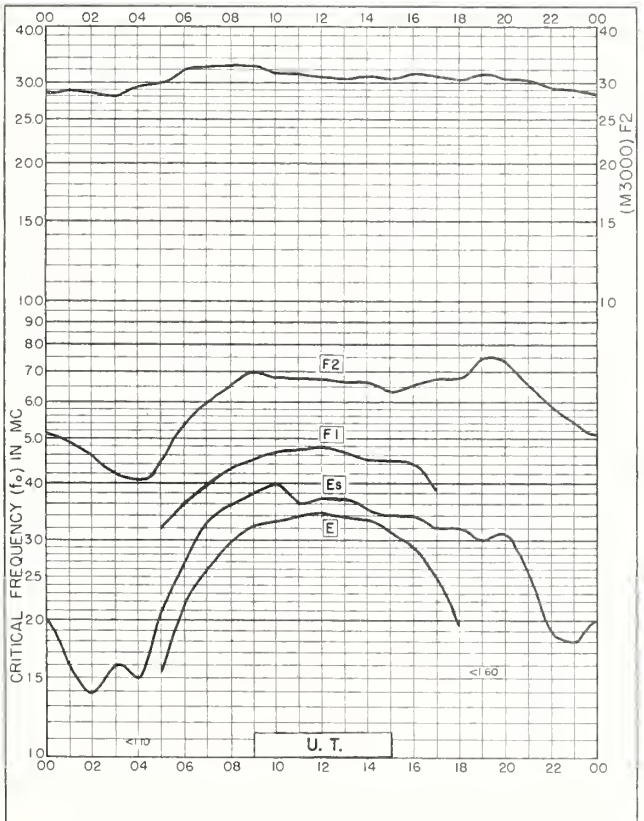

Fig. 11. DOURBES, BELGIUM
50.1°N, 4.6°E AUGUST 1961

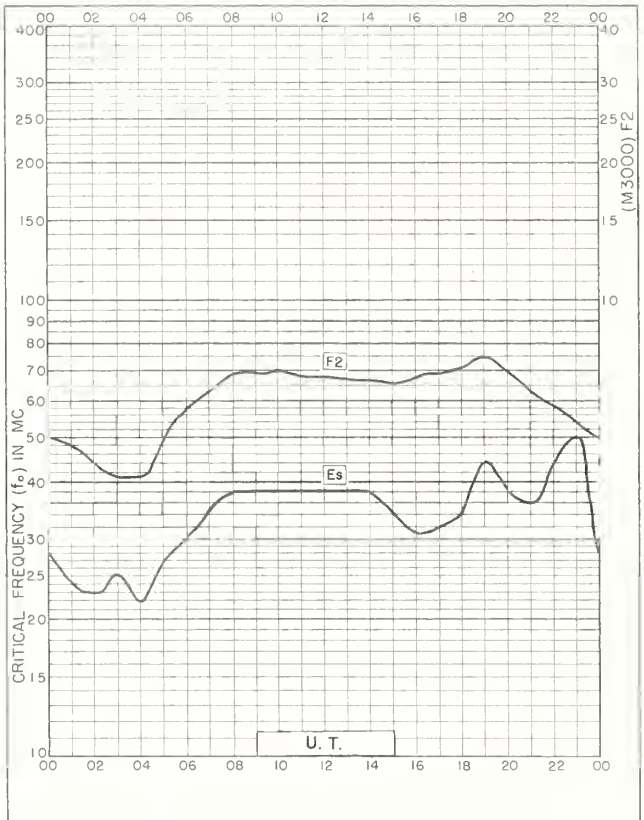

Fig. 12. PRUHONICE, CZECHOSLOVAKIA
50.0°N, 14.6°E AUGUST 1961

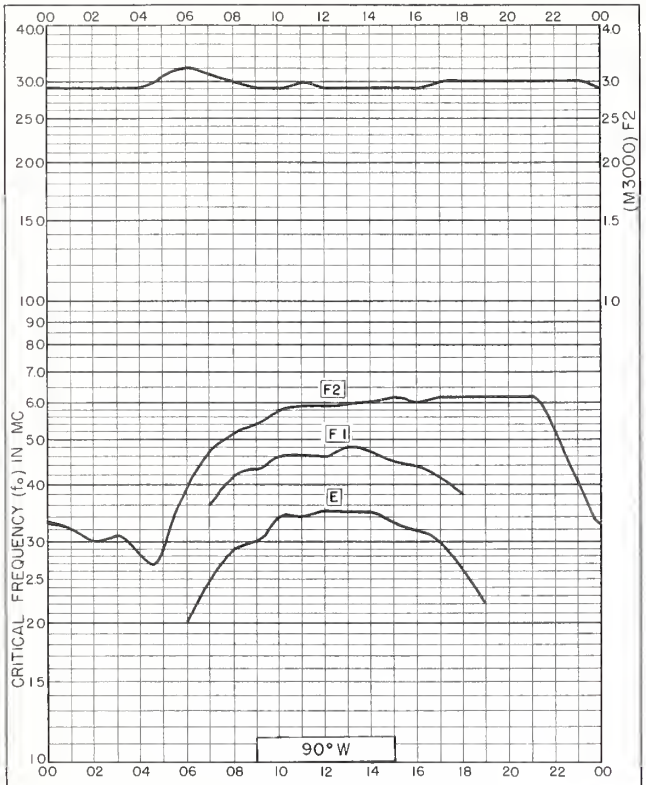

Fig. 13. WINNIPEG, CANADA
49.9°N, 97.4°W AUGUST 1961

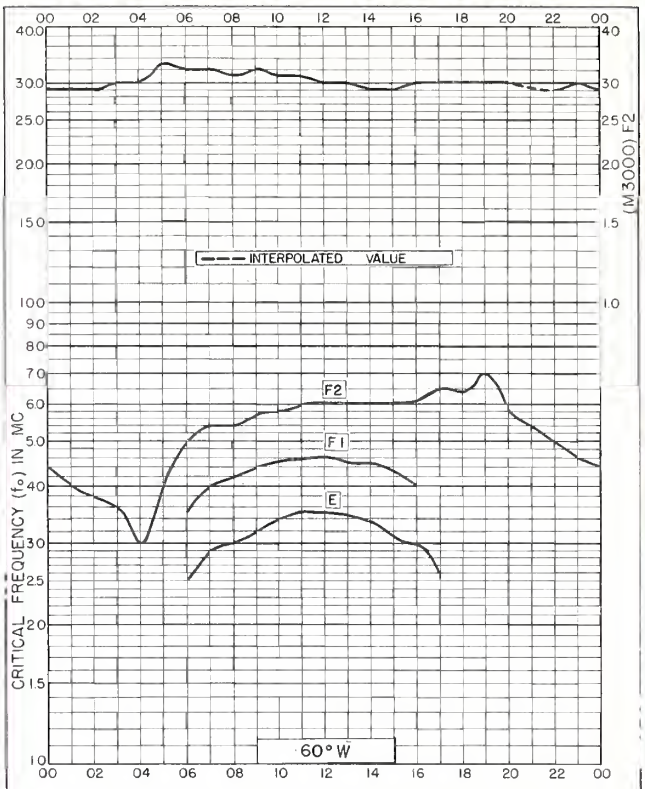

Fig. 14. ST. JOHN'S, NEWFOUNDLAND
47.6°N, 52.7°W AUGUST 1961

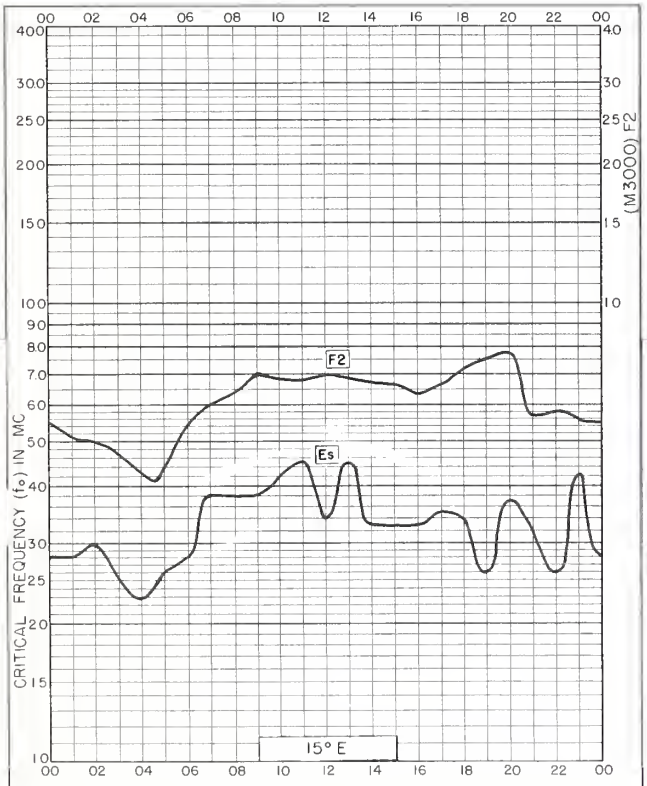

Fig. 15. GRAZ, AUSTRIA
47.1°N, 15.5°E AUGUST 1961

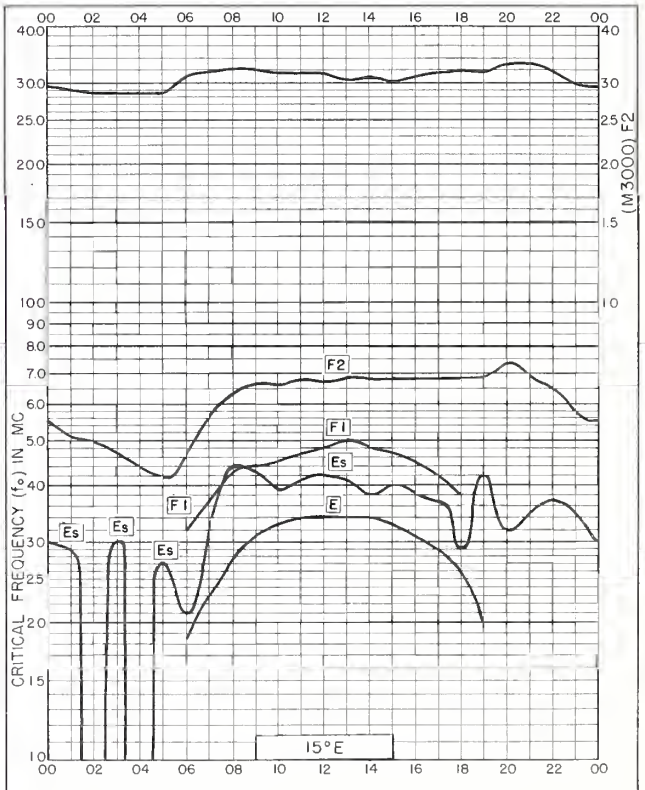

Fig. 16. SOTTENS, SWITZERLAND
46.6°N, 6.7°E AUGUST 1961

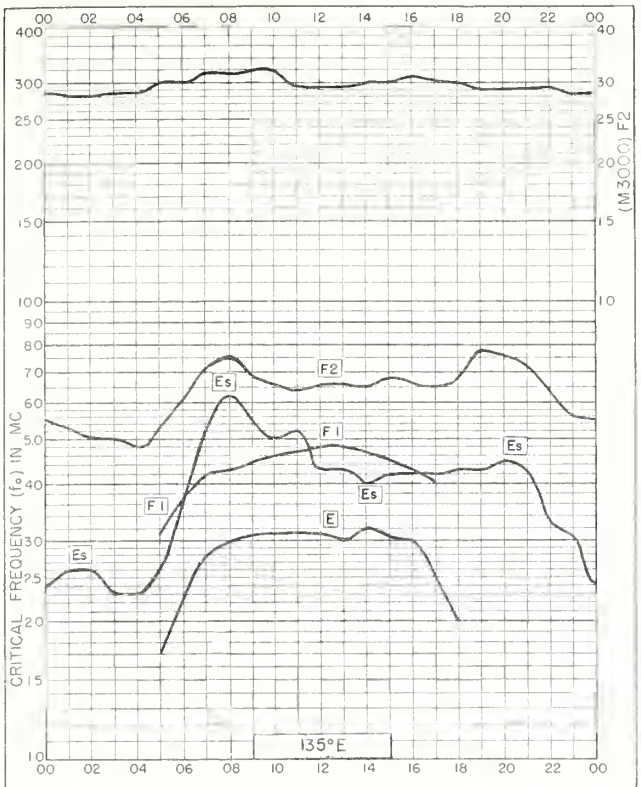

Fig. 17. WAKKANAI, JAPAN
45.4°N, 141.7°E AUGUST 1961

Fig. 18. OTTAWA, CANADA
45.4°N, 75.9°W AUGUST 1961

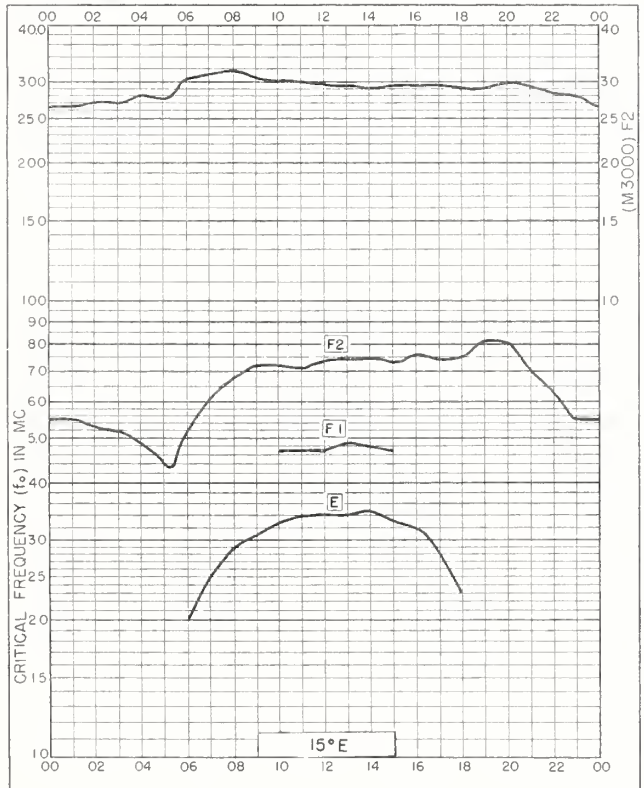

Fig. 19. ROME, ITALY
41.8°N, 12.5°E AUGUST 1961

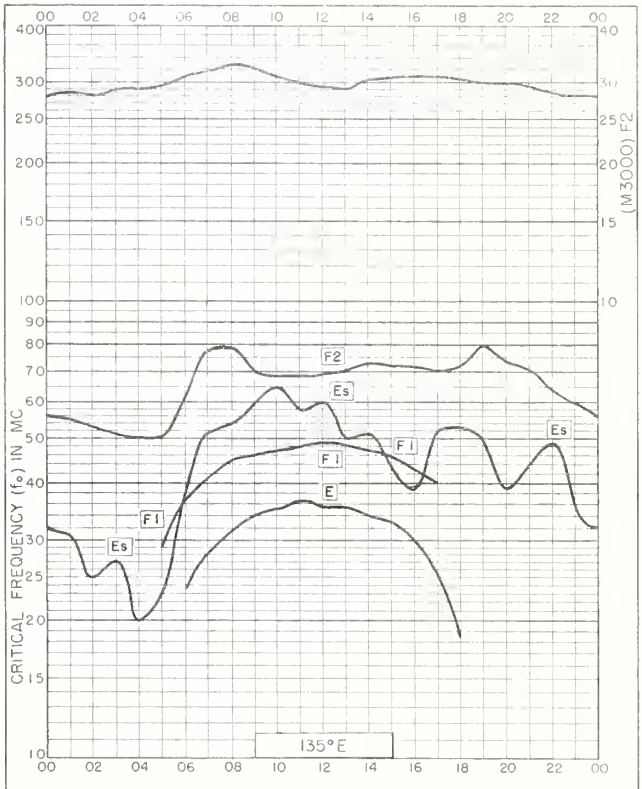

Fig. 20. AKITA, JAPAN
39.7°N, 140.1°E AUGUST 1961

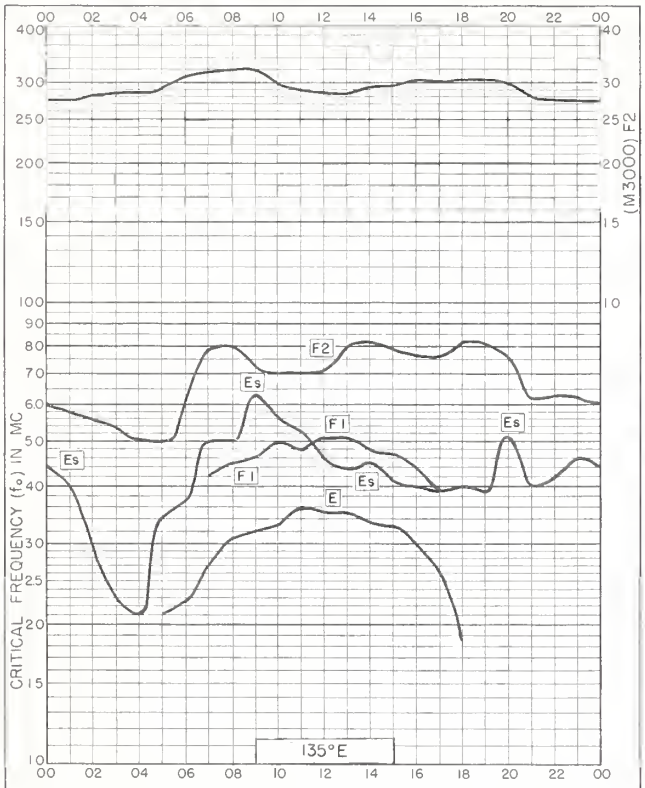

Fig. 21. TOKYO, JAPAN
35.7°N, 139.5°E AUGUST 1961

Fig. 22. YAMAGAWA, JAPAN
31.2°N, 130.6°E AUGUST 1961

Fig. 23. FORMOSA, CHINA
25.0°N, 121.5°E AUGUST 1961

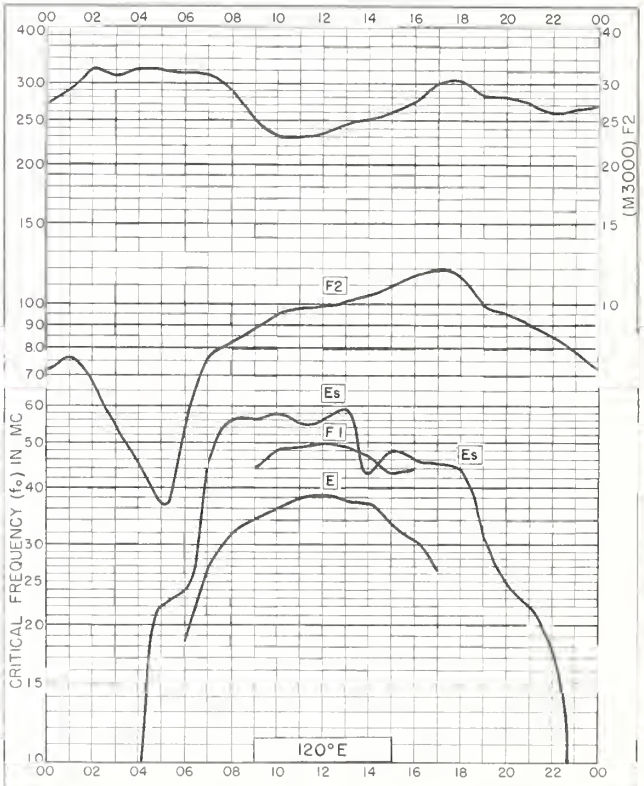

Fig. 24. BAGUIO, P. I.
16.4°N, 120.6°E AUGUST 1961

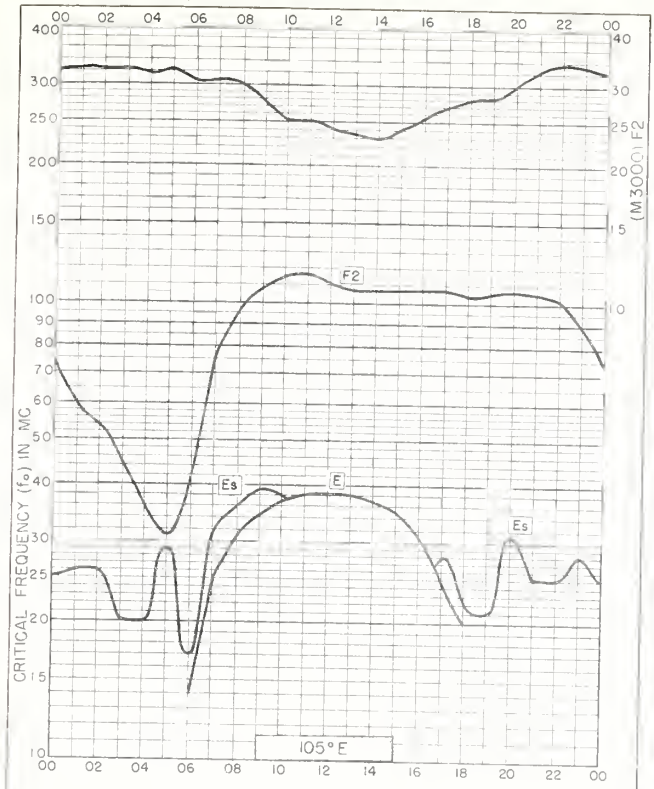

Fig. 25. SINGAPORE, BRITISH MALAYA
1.3°N, 103.8°E AUGUST 1961

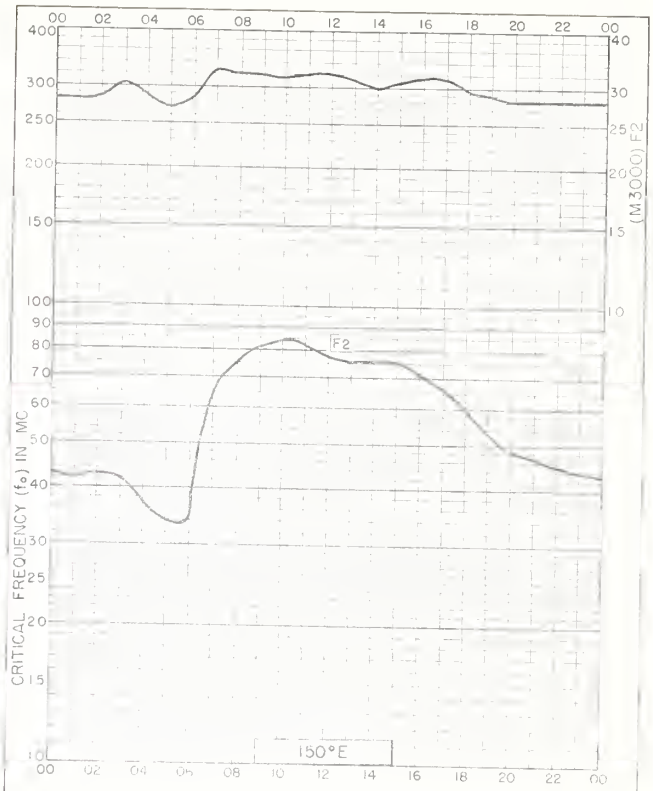

Fig. 26. BRISBANE, AUSTRALIA
27.5°S, 152.9°E AUGUST 1961

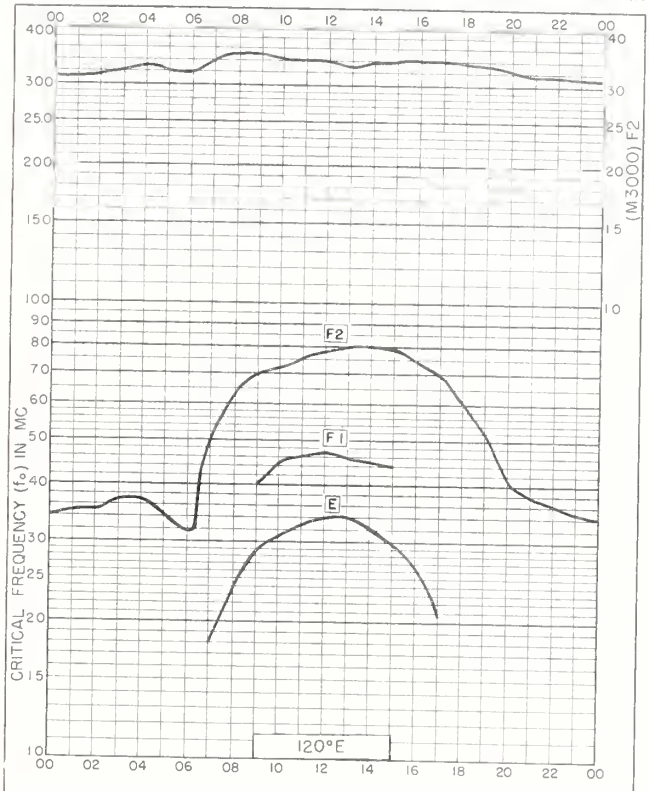

Fig. 27. MUNDARING, W. AUSTRALIA
32.0°S, 116.2°E AUGUST 1961

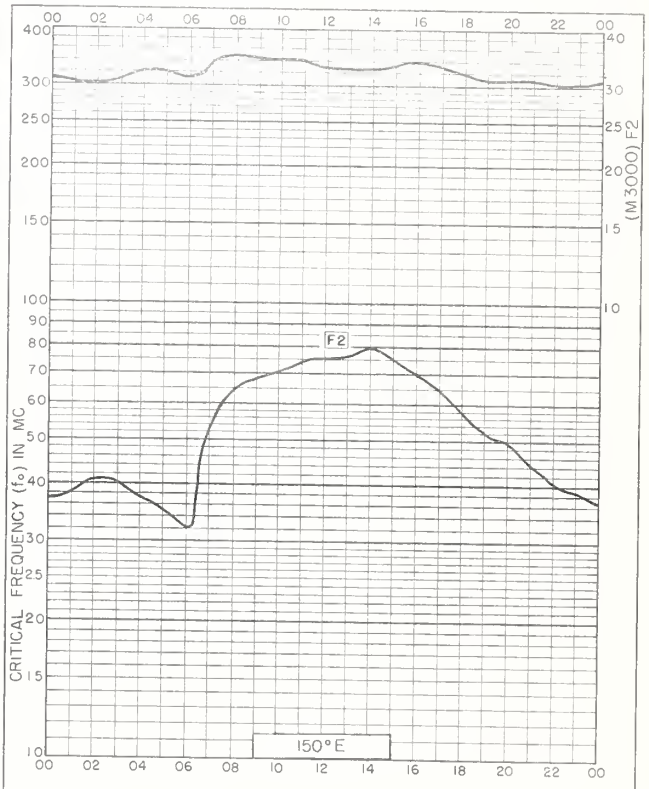

Fig. 28. CANBERRA, AUSTRALIA
35.3°S, 149.0°E AUGUST 1961

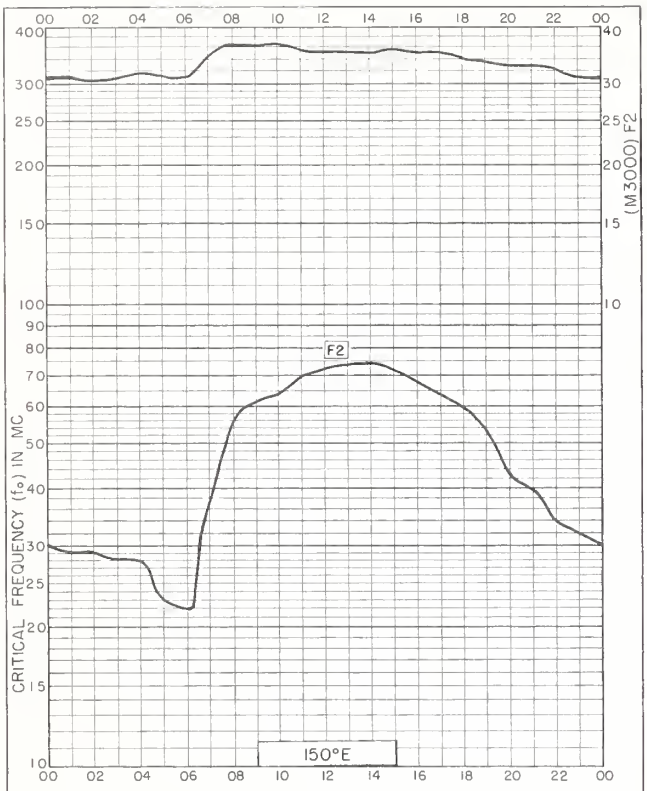

Fig. 29. HOBART, TASMANIA
42.9°S, 147.2°E AUGUST 1961

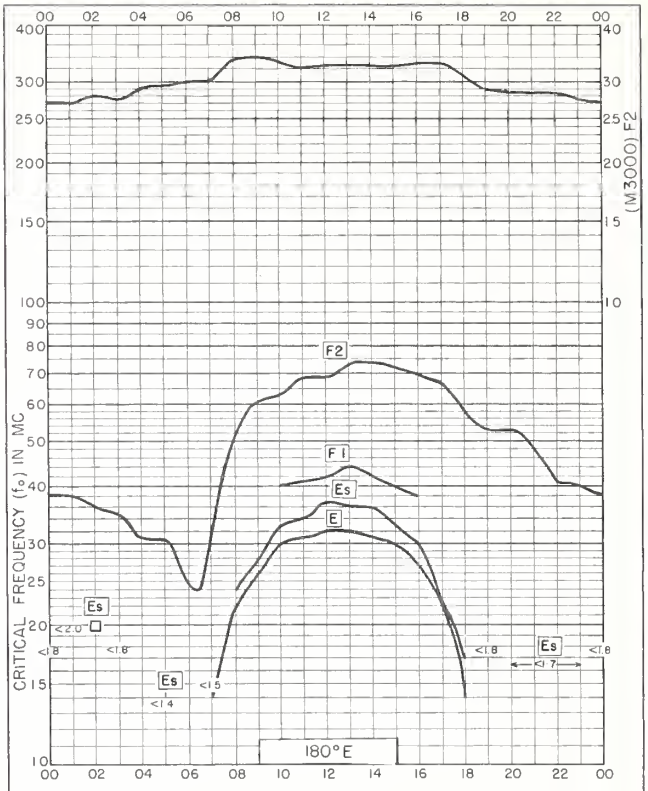

Fig. 30. CHRISTCHURCH, NEW ZEALAND
43.6°S, 172.8°E AUGUST 1961

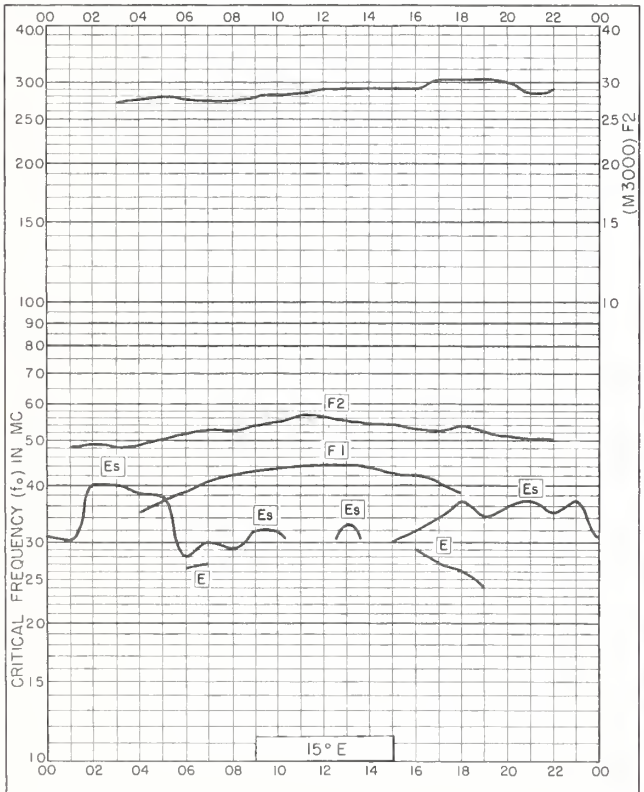

Fig. 31. TROMSO, NORWAY
69.7°N, 19.0°E JULY 1961

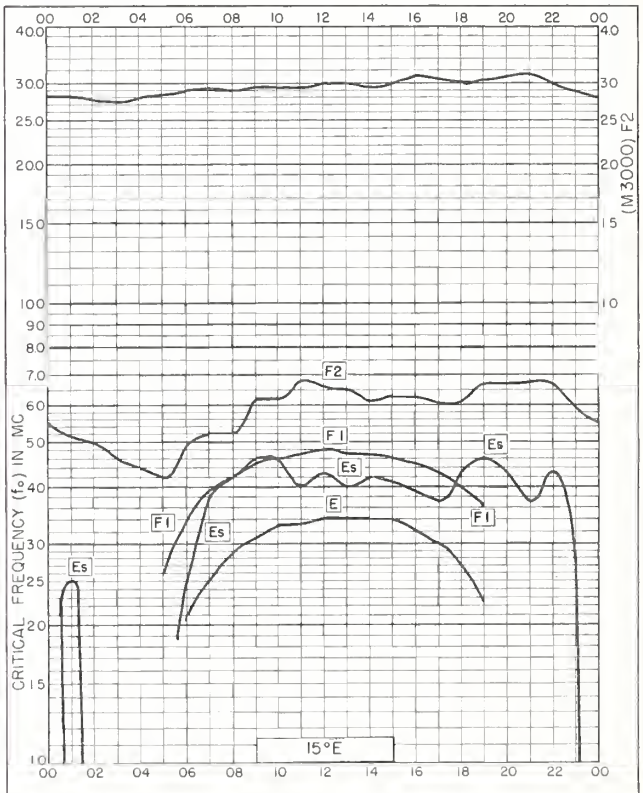

Fig. 32. SOTTENS, SWITZERLAND
46.6°N, 6.7°E JULY 1961

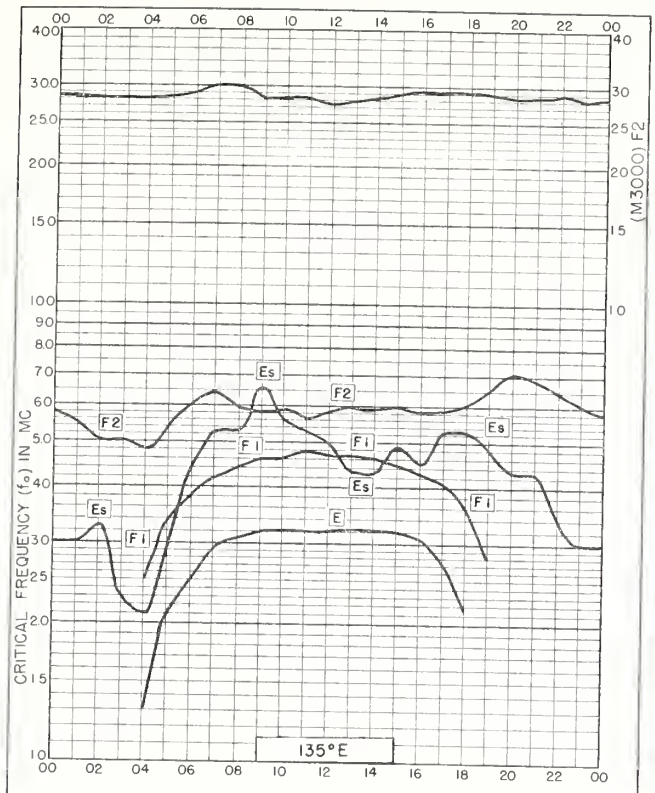

Fig. 33. WAKKANAI, JAPAN
45.4°N, 141.7°E
JULY 1961

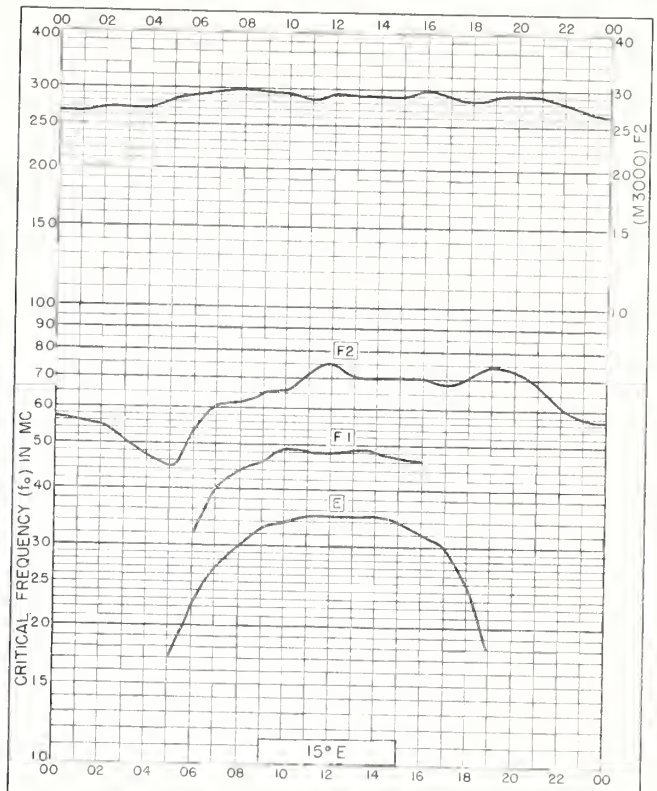

Fig. 34. ROME, ITALY
41.8°N, 12.5°E
JULY 1961

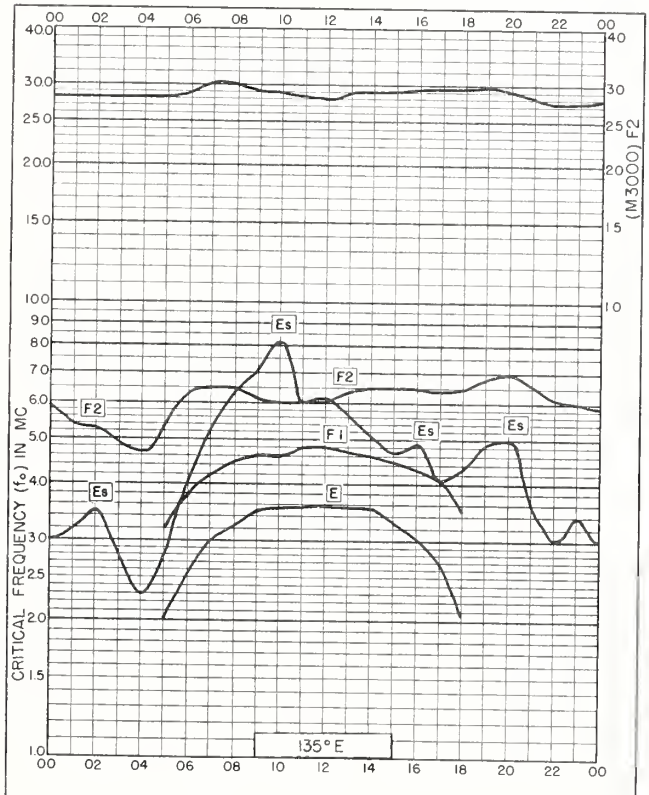

Fig. 35. AKITA, JAPAN
39.7°N, 140.1°E
JULY 1961

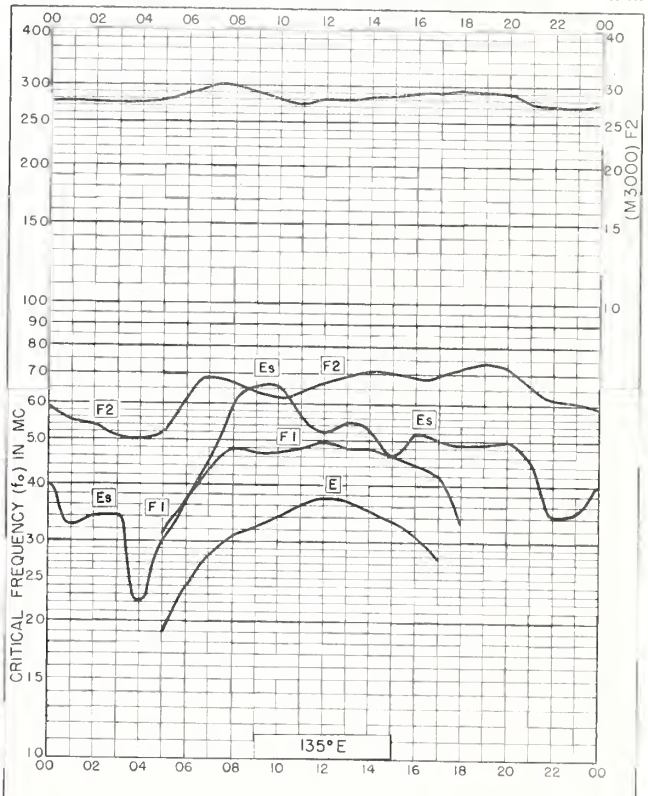

Fig 36. TOKYO, JAPAN
35.7°N, 139.5°E
JULY 1961

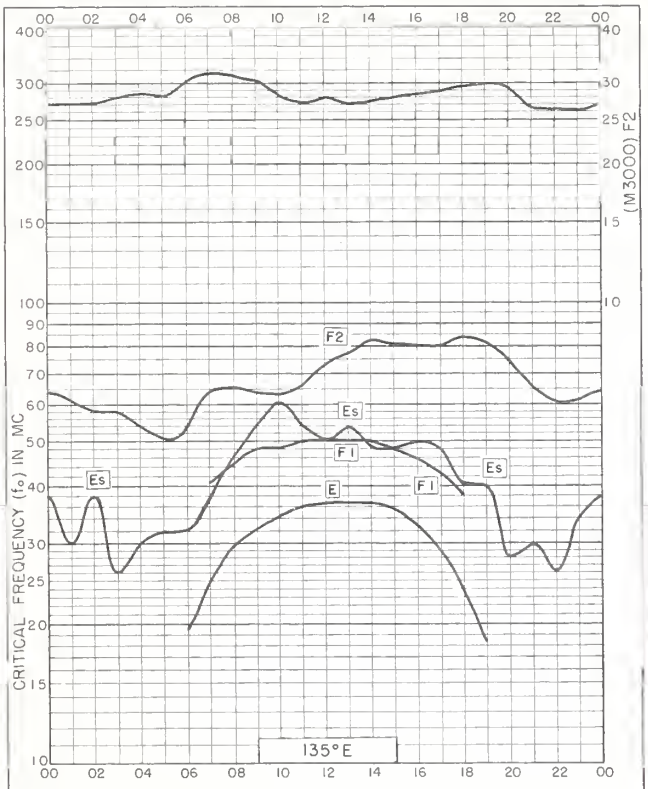

Fig. 37. YAMAGAWA, JAPAN
31.2°N, 130.6°E JULY 1961

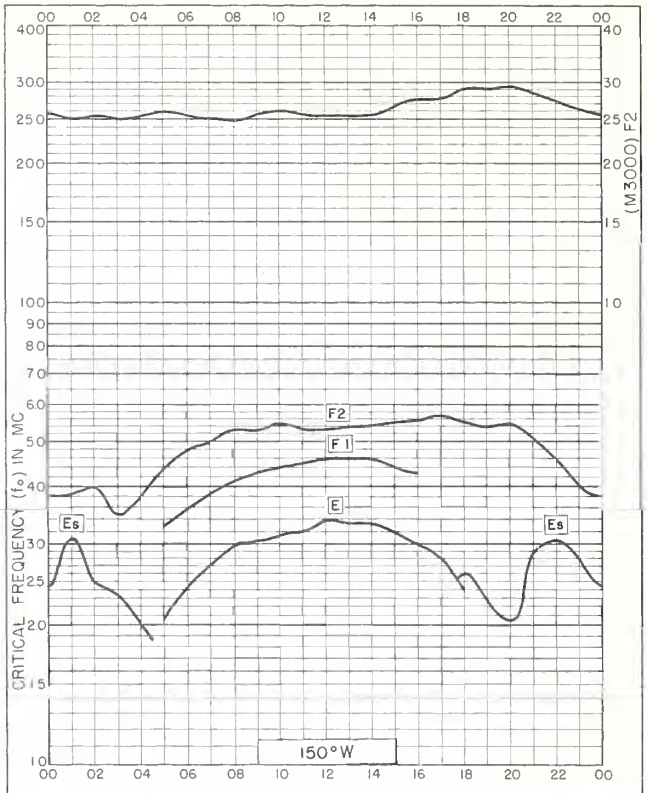

Fig. 38. ANCHORAGE, ALASKA
61.2°N, 149.9°W AUGUST 1960

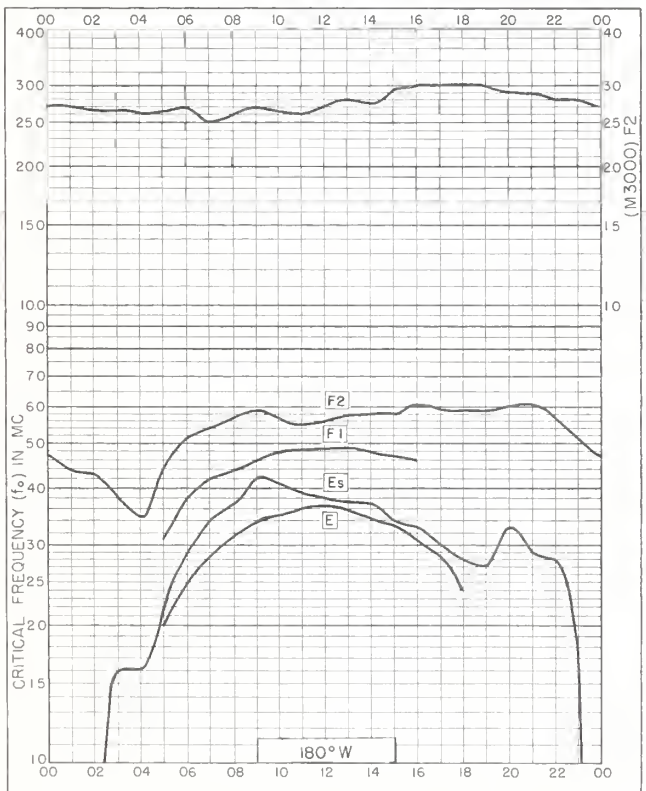

Fig. 39. ADAK, ALASKA
51.9°N, 176.6°W AUGUST 1960

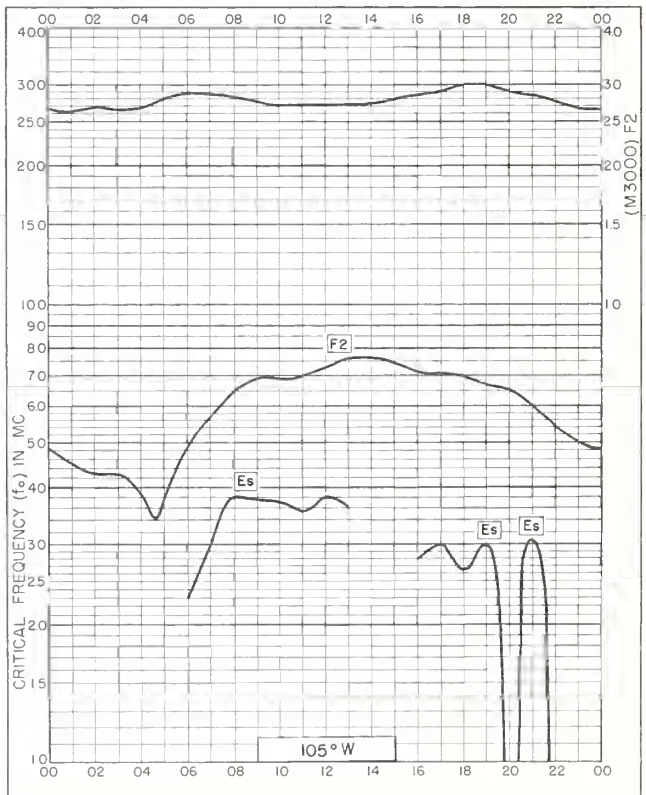

Fig. 40. BOULDER, COLORADO
40.0°N, 105.3°W AUGUST 1960

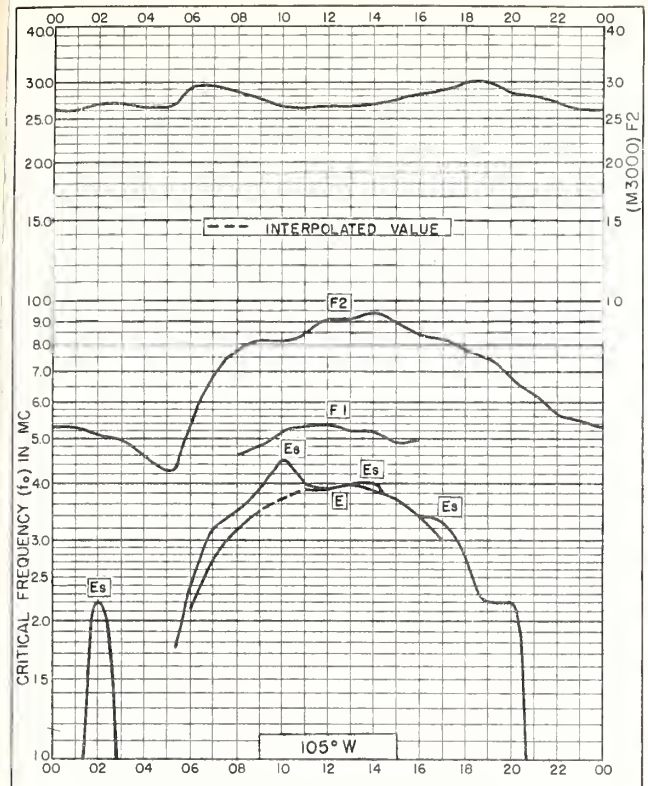

Fig. 41. WHITE SANDS, NEW MEXICO
32.3°N, 106.5°W AUGUST 1960

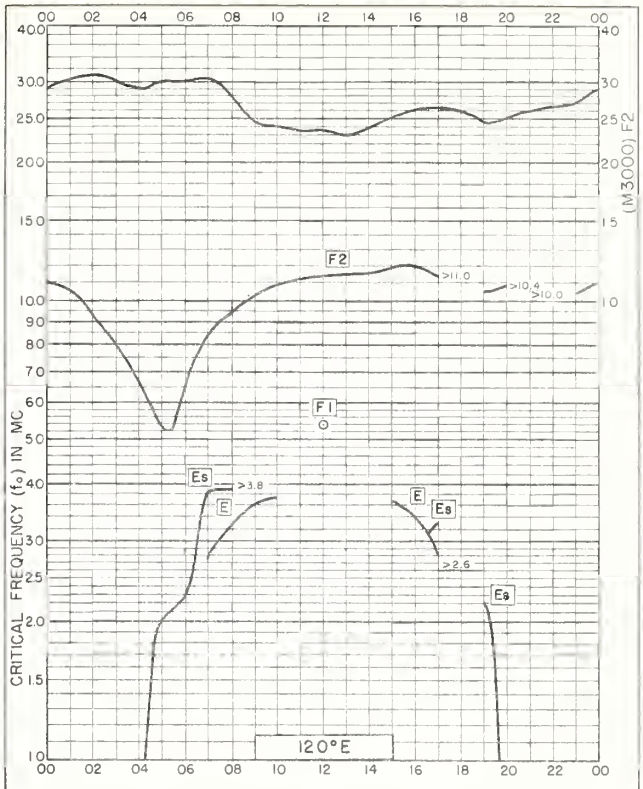

Fig. 42. BAGUIO, P. I.
16.4°N, 120.6°E AUGUST 1960

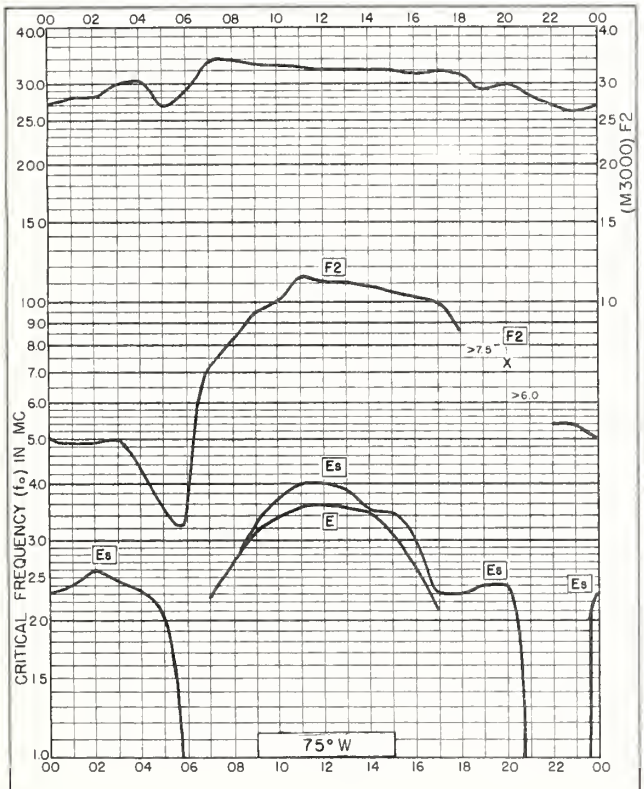

Fig. 43. CONCEPCION, CHILE
36.6°S, 73.0°W AUGUST 1960

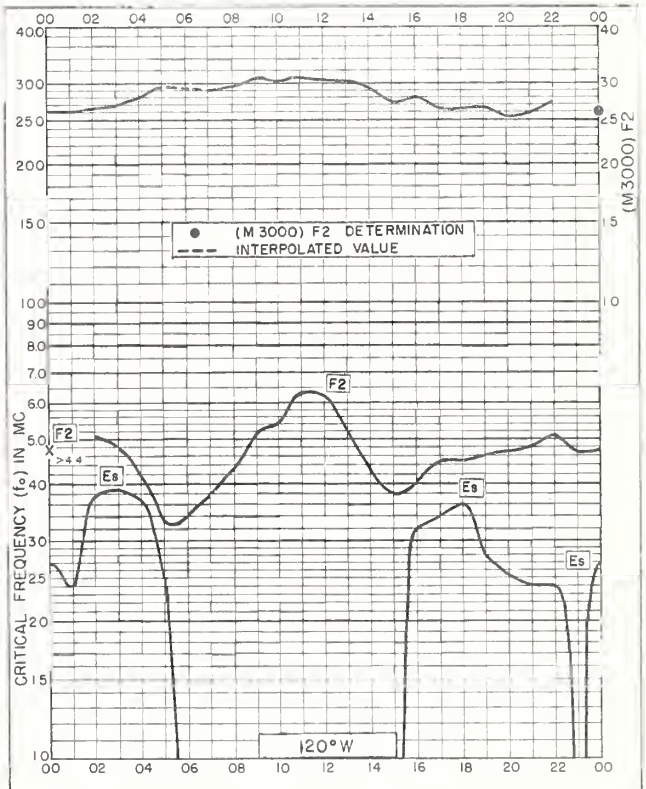

Fig. 44. BYRD STATION
80.0°S, 120.0°W AUGUST 1960

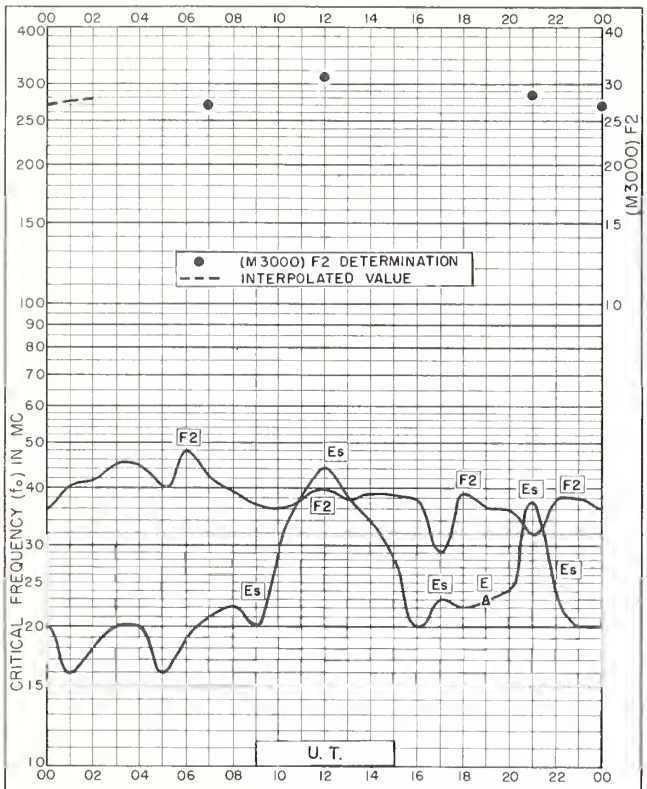

Fig. 45. POLE STATION
90.0° S JULY 1960

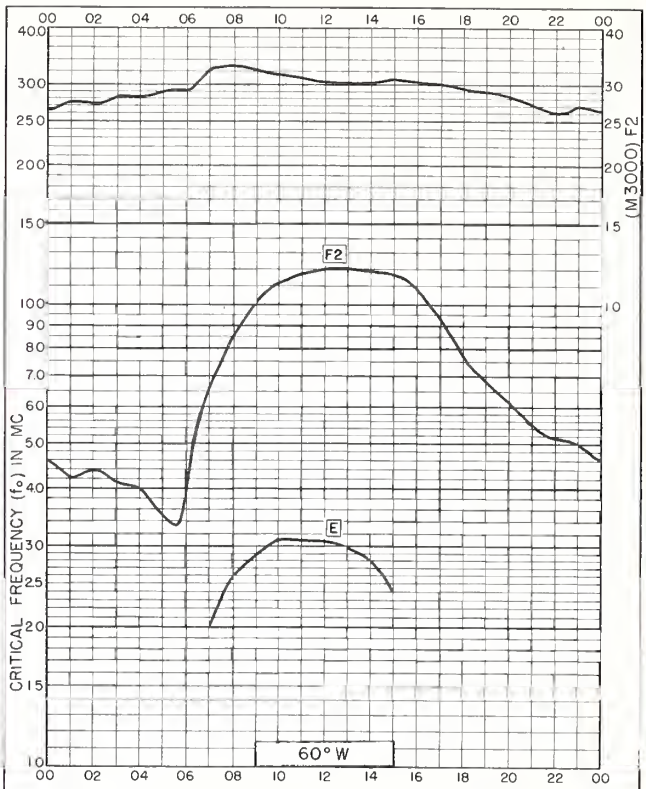

Fig. 46. ST. JOHN'S, NEWFOUNDLAND
47.6°N, 52.7°W NOVEMBER 1959

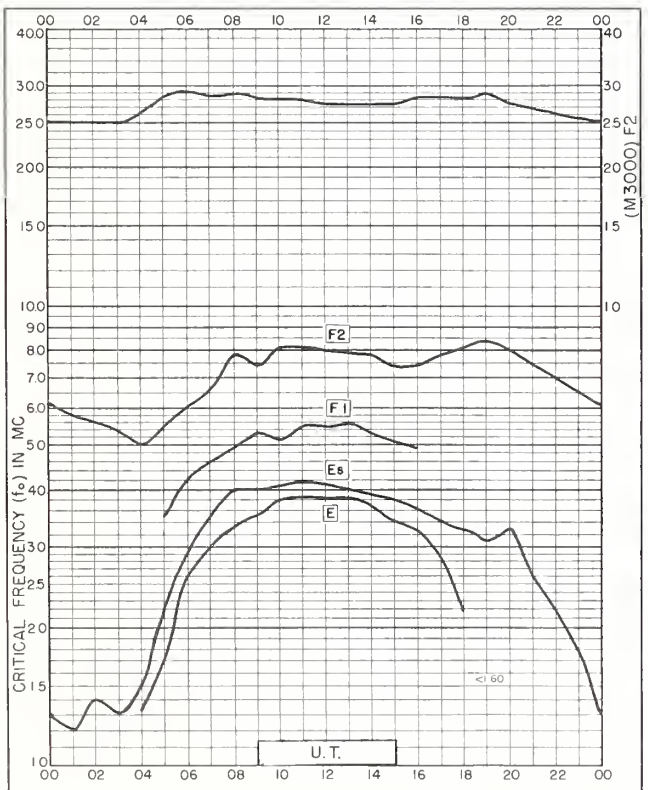

Fig. 47. DOURBES, BELGIUM
50.1°N, 4.6°E AUGUST 1959

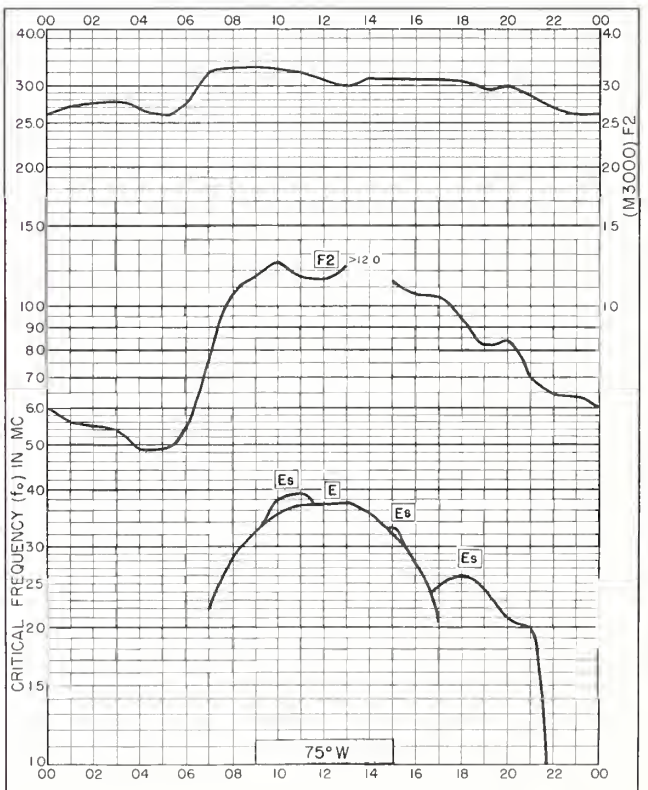

Fig. 48. CONCEPCION, CHILE
36.6°S, 73.0°W AUGUST 1959

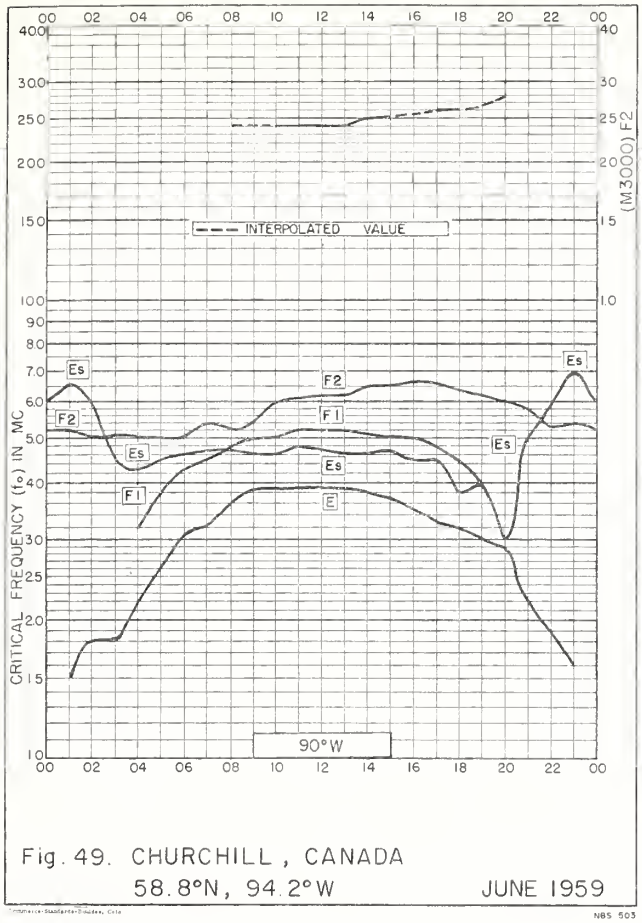

Fig. 49. CHURCHILL, CANADA
58.8°N, 94.2°W JUNE 1959

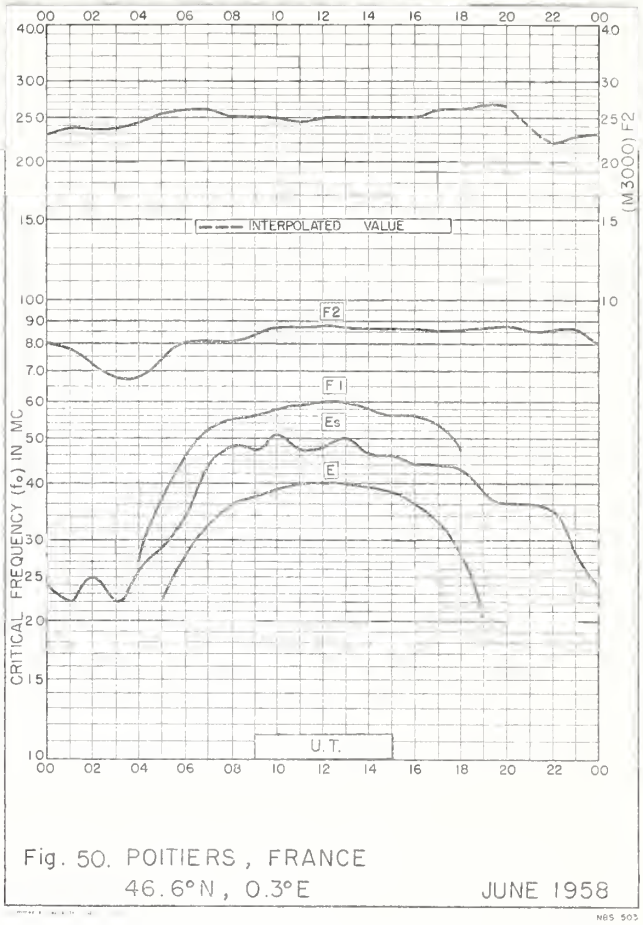

Fig. 50. POITIERS, FRANCE
46.6°N, 0.3°E JUNE 1958

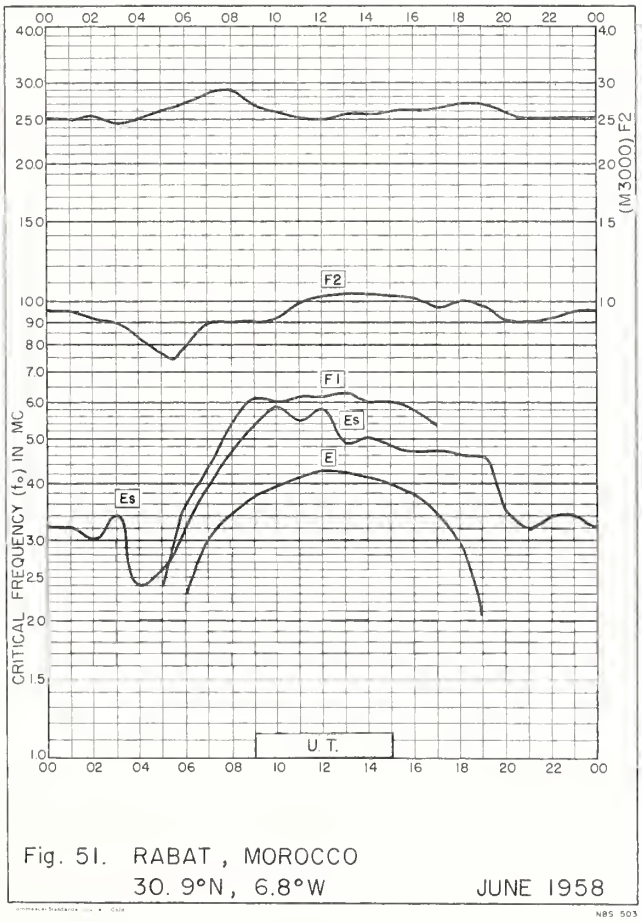

Fig. 51. RABAT, MOROCCO
30.9°N, 6.8°W JUNE 1958

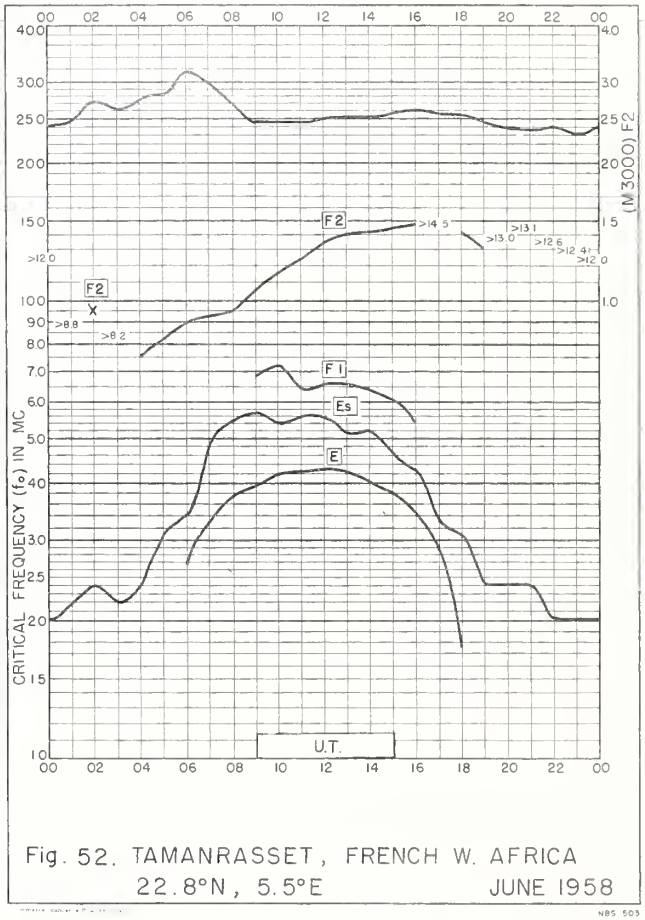

Fig. 52. TAMANRASSET, FRENCH W. AFRICA
22.8°N, 5.5°E JUNE 1958

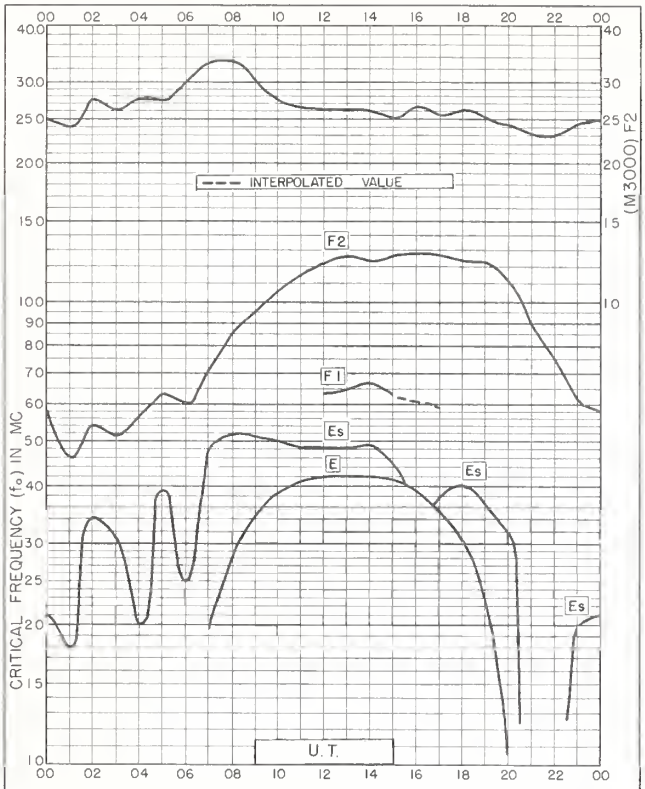

Fig. 53. DAKAR, FRENCH W. AFRICA
14.8°N, 17.4°W JUNE 1958

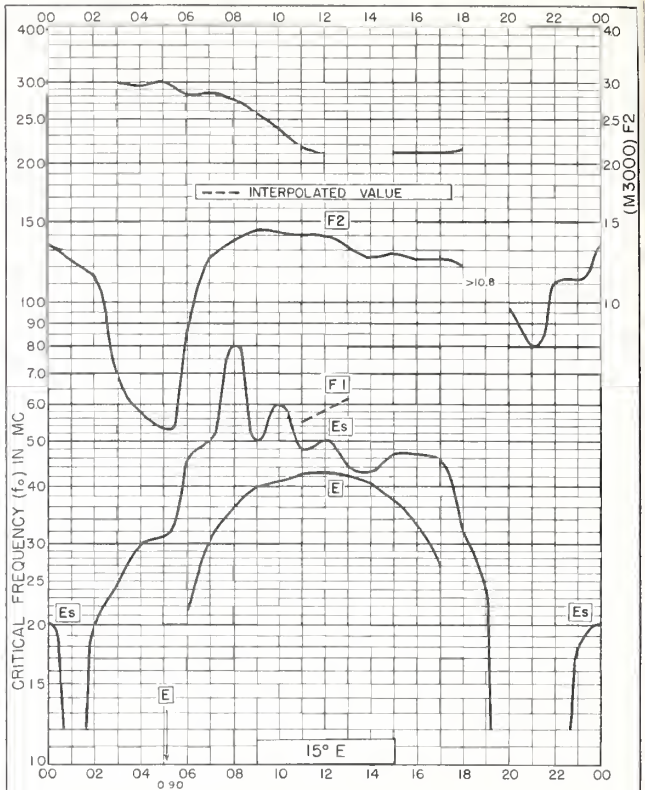

Fig. 54. BANGUI, FRENCH EQUATORIAL AFRICA
4.6°N, 18.6°E JUNE 1958

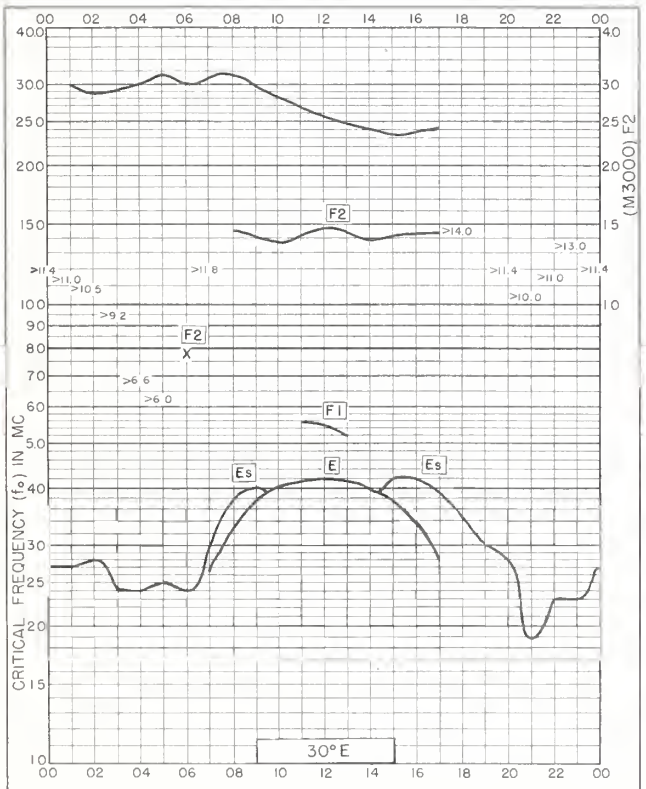

Fig. 55. LWIRO, CONGO
2.3°S, 28.8°E JUNE 1958

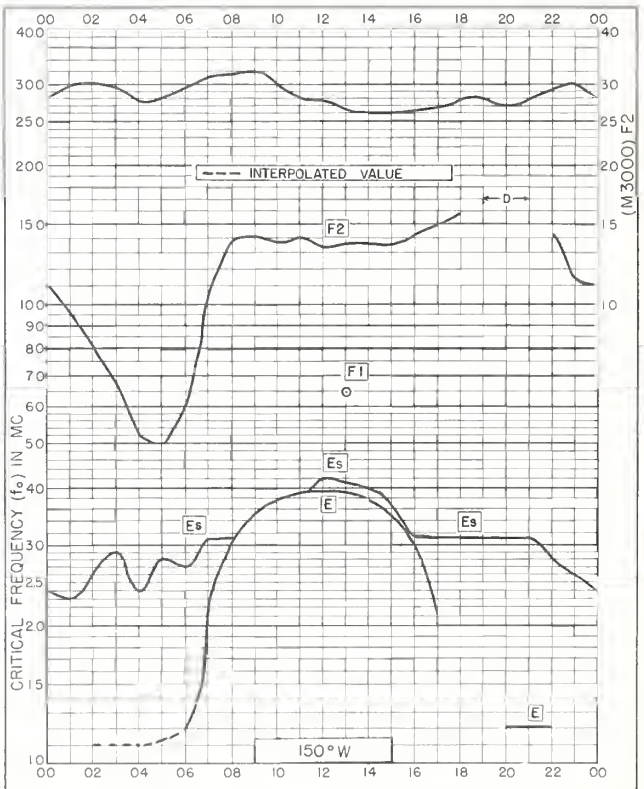

Fig. 56. TAHITI, SOCIETY IS.
17.7°S, 149.3°W JUNE 1958

Fig. 57. TANANARIVE, MADAGASCAR
18.8°S, 47.5°E JUNE 1958

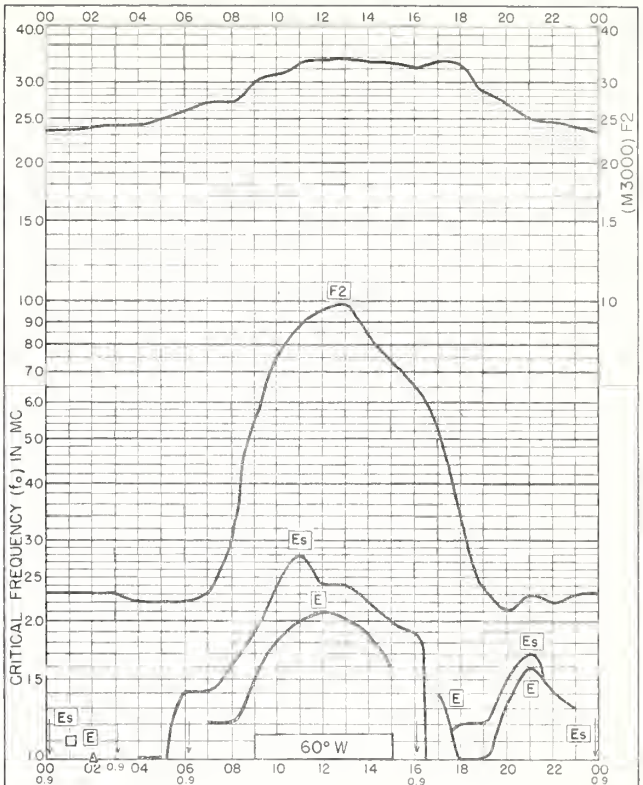

Fig. 58. PORT LOCKROY
64.8°S, 63.5°W JUNE 1958

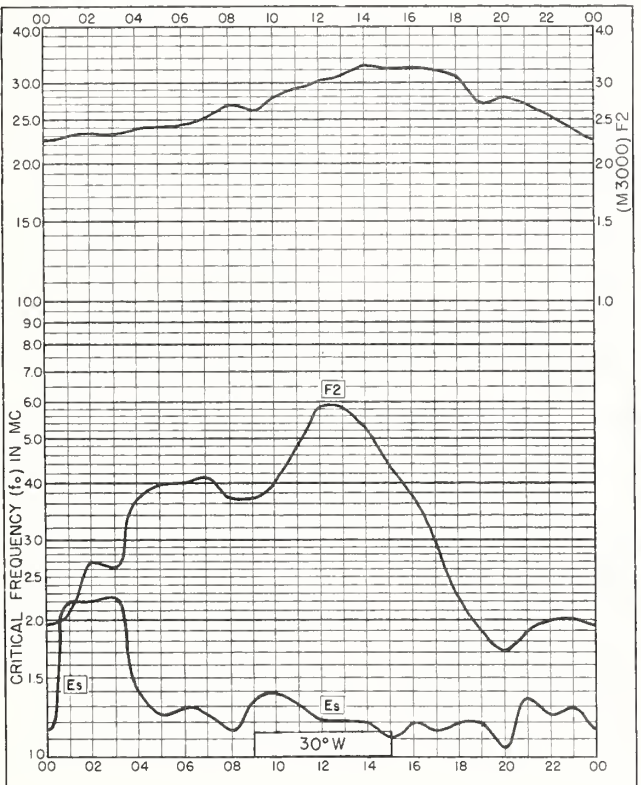

Fig. 59. HALLEY BAY
75.5°S, 26.6°W JUNE 1958

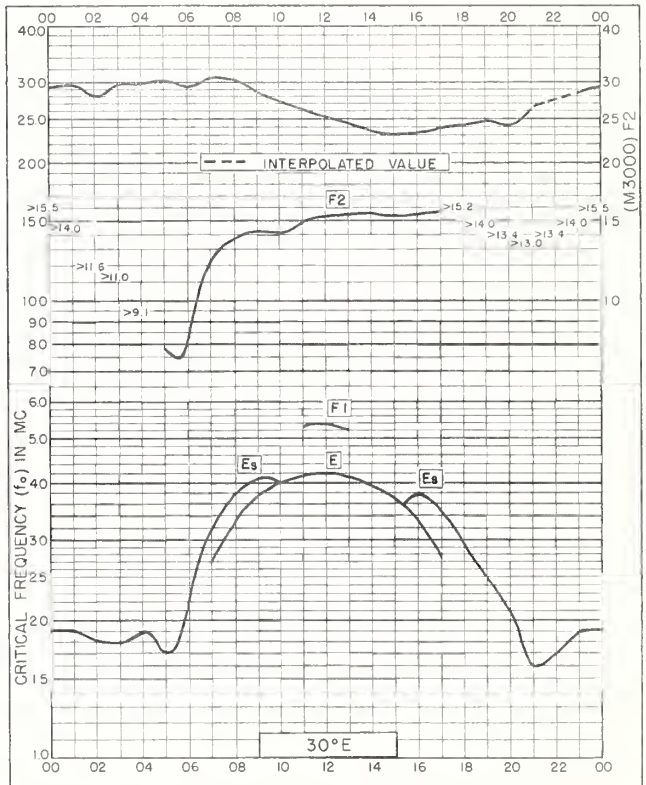

Fig. 60. LWIRO, CONGO
2.3°S, 28.8°E MAY 1958

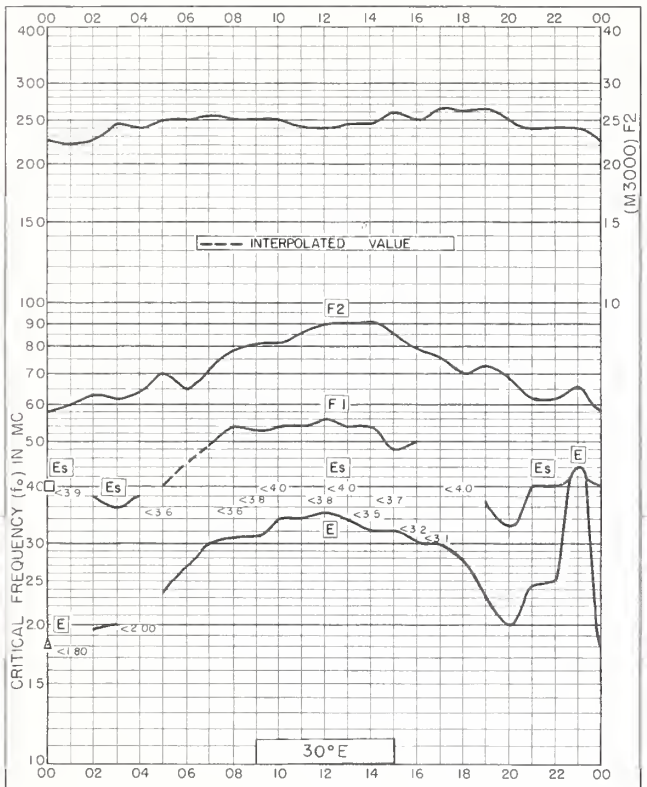

Fig. 61. MURMANSK, U.S.S.R.
69.0°N, 33.0°E APRIL 1958

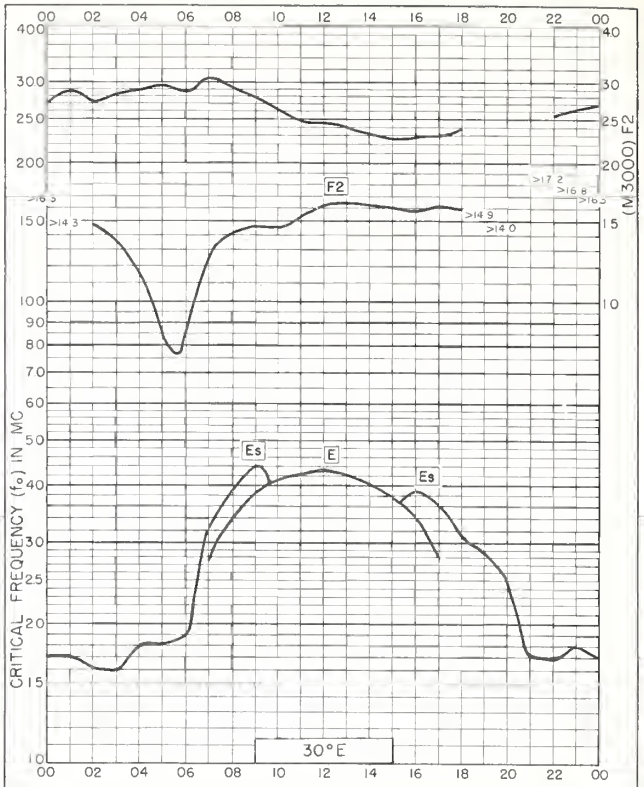

Fig. 62. LWIRO, CONGO
2.3°S, 28.8°E APRIL 1958

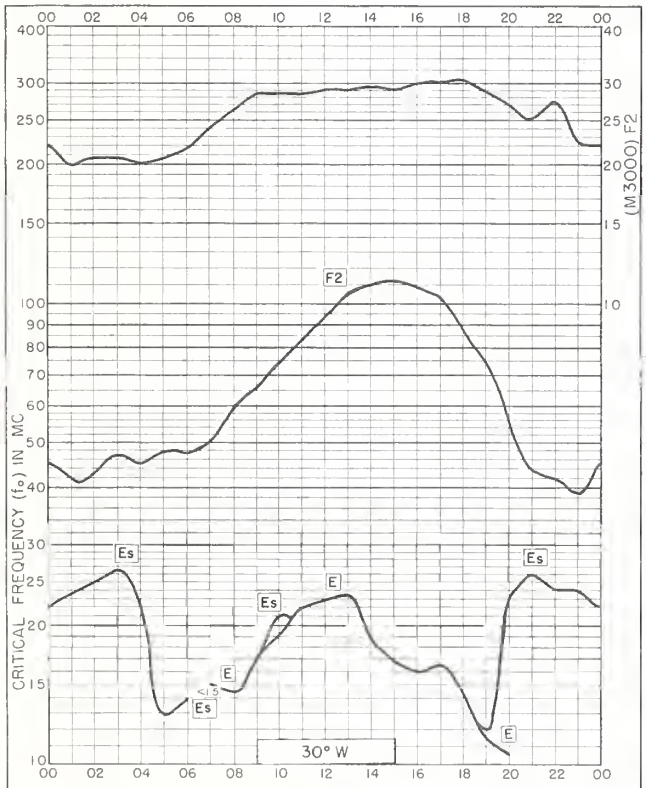

Fig. 63. HALLEY BAY
75.5°S, 26.6°W APRIL 1958

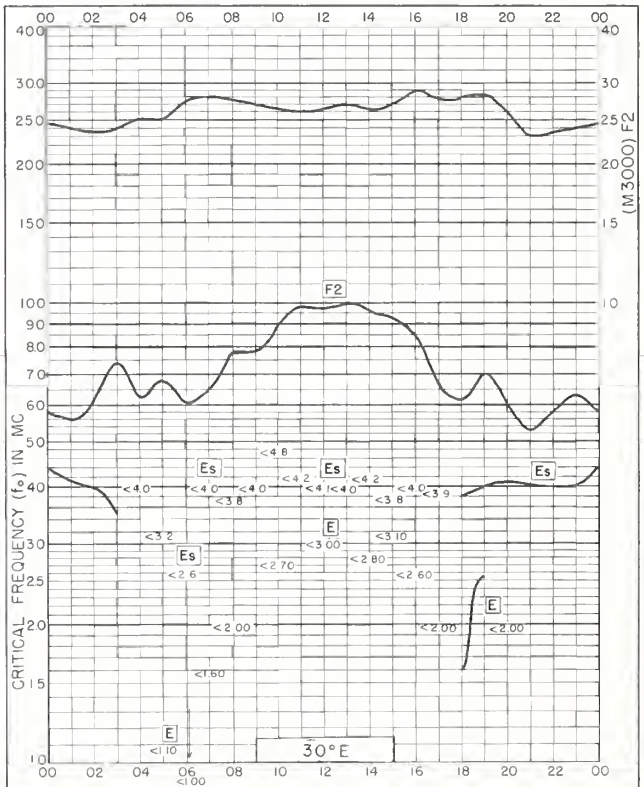

Fig. 64. MURMANSK, U.S.S.R.
69.0°N, 33.0°E MARCH 1958

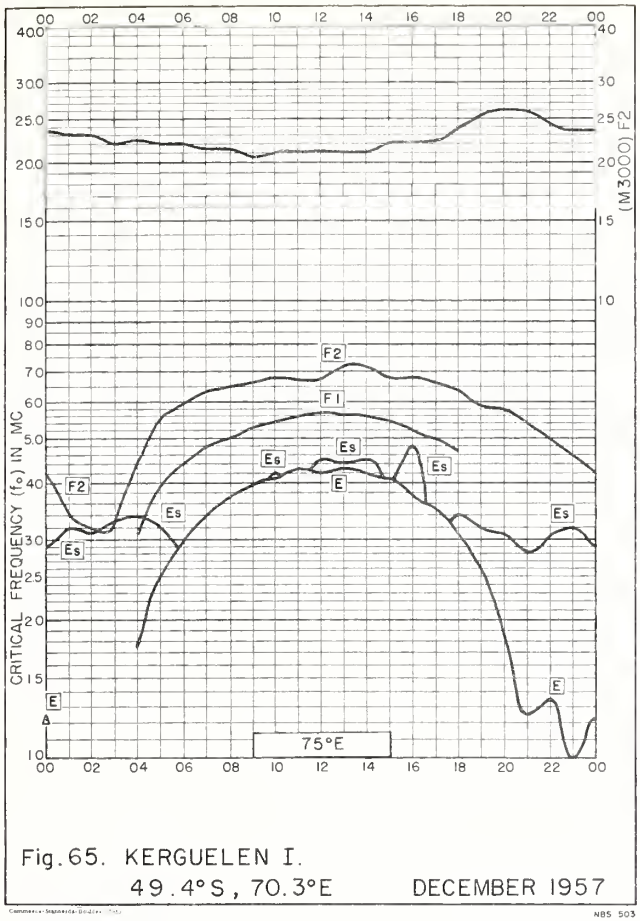

Fig. 65. KERGUELEN I.
49.4°S, 70.3°E DECEMBER 1957

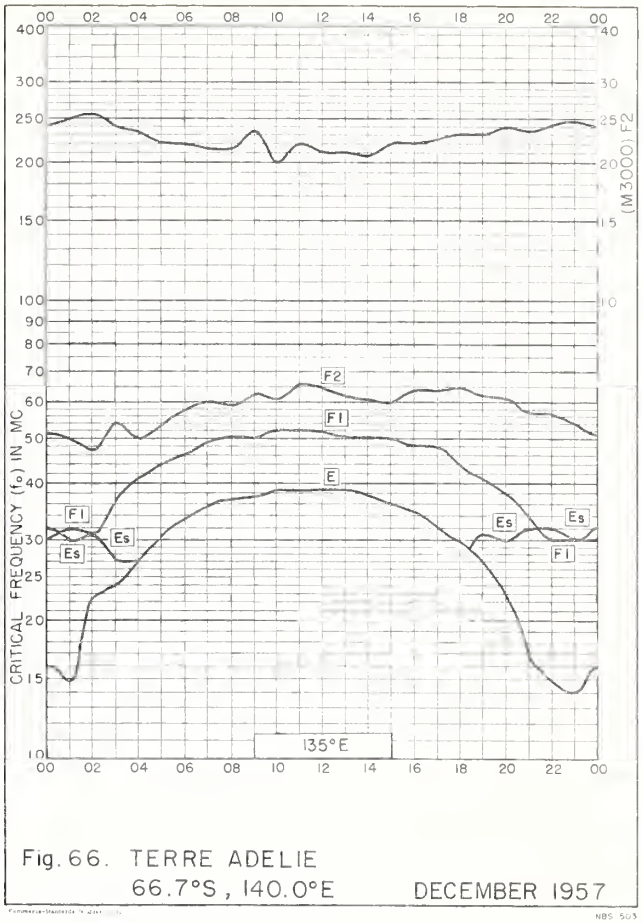

Fig. 66. TERRE ADELIE
66.7°S, 140.0°E DECEMBER 1957

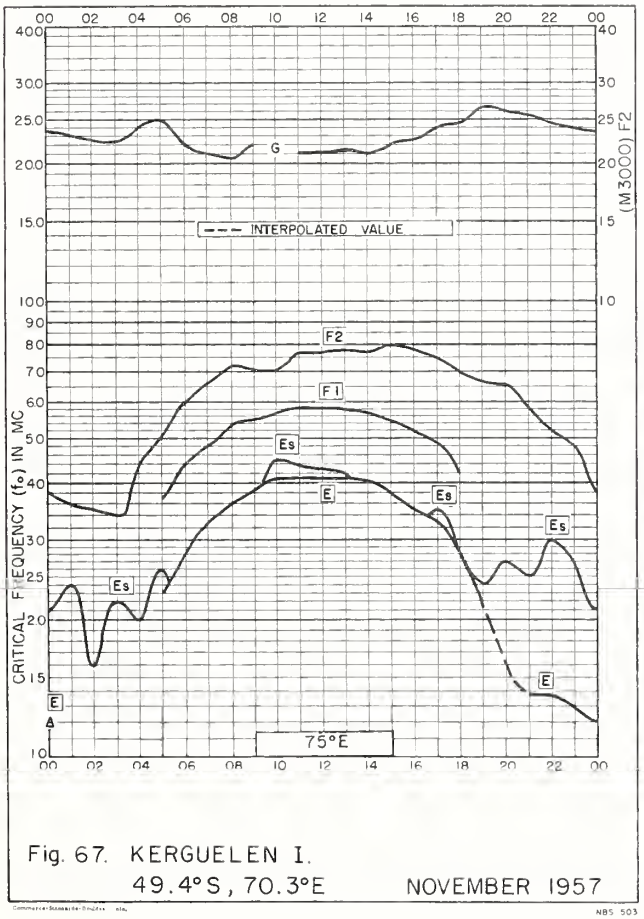

Fig. 67. KERGUELEN I.
49.4°S, 70.3°E NOVEMBER 1957

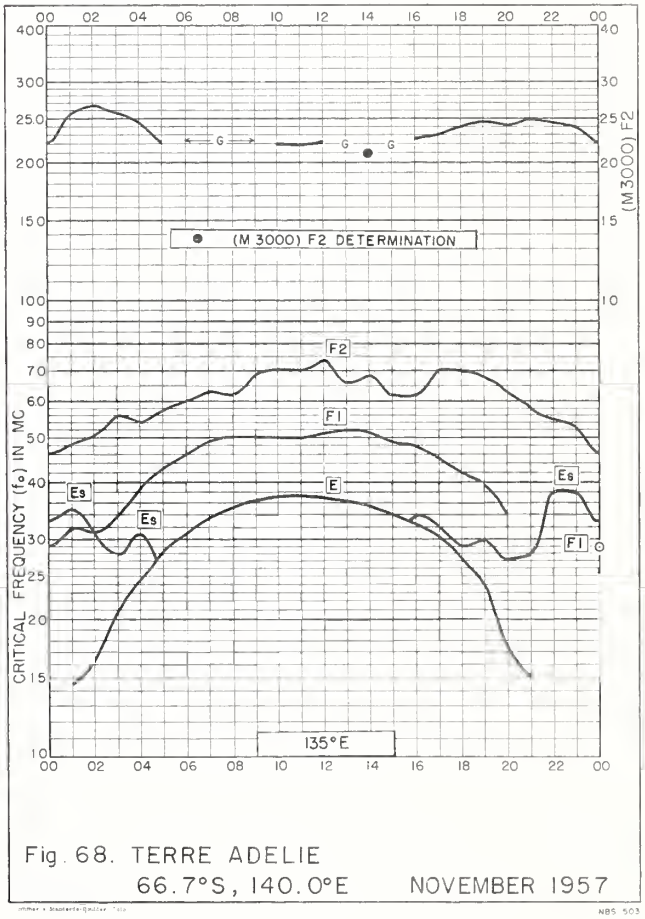

Fig. 68. TERRE ADELIE
66.7°S, 140.0°E NOVEMBER 1957

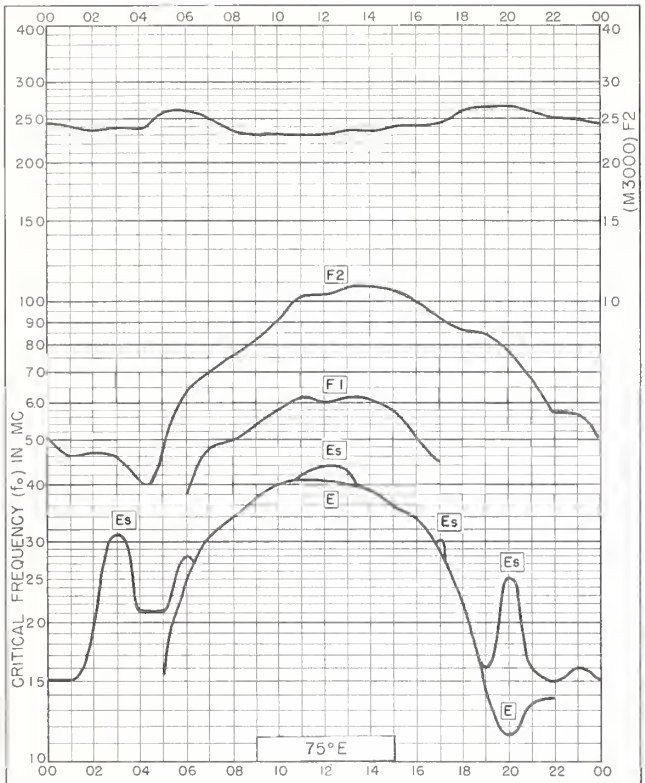

Fig. 69. KERGUELEN I.
49.4°S, 70.3°E OCTOBER 1957

NBS 503

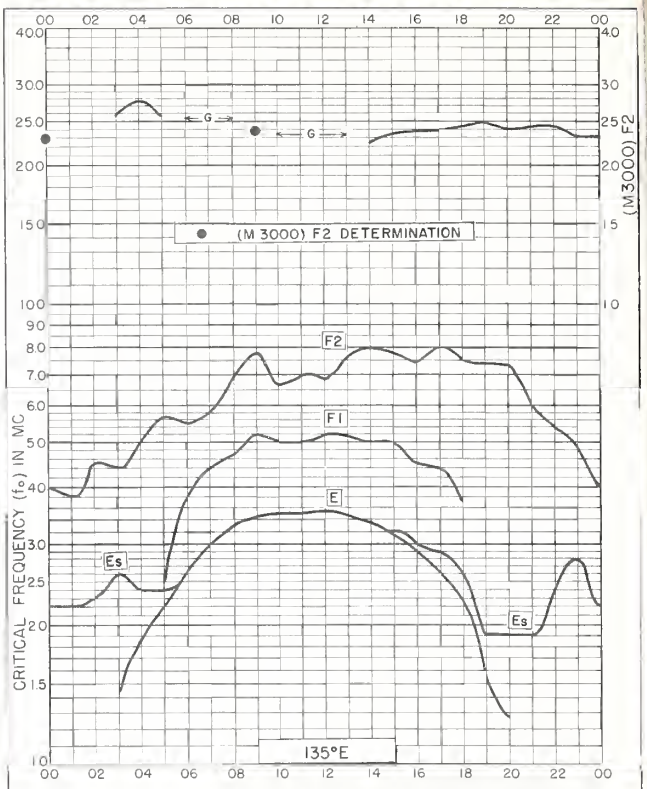

Fig. 70. TERRE ADELIE
66.7°S, 140.0°E OCTOBER 1957

NBS 503

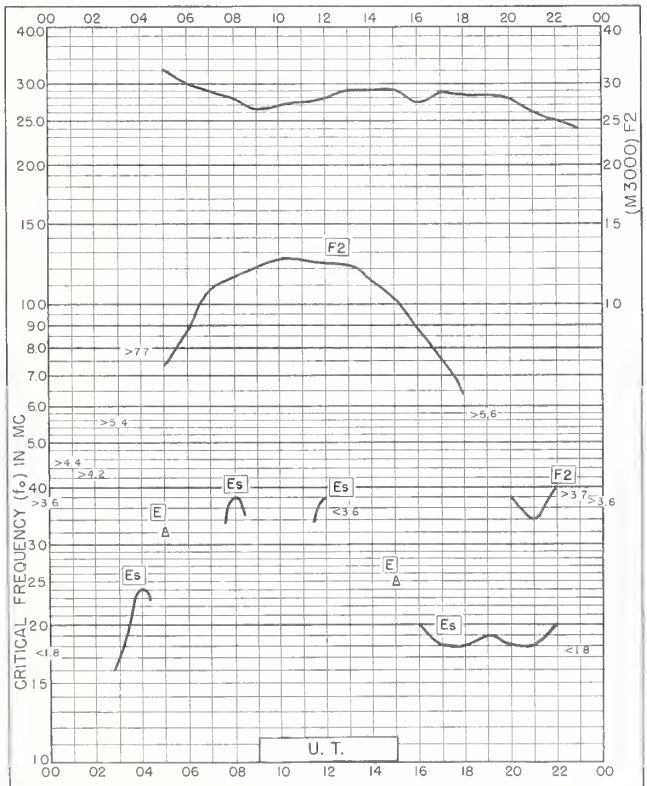

Fig. 71. MARION I.
46.8°S, 37.9°E SEPTEMBER 1957

NBS 503

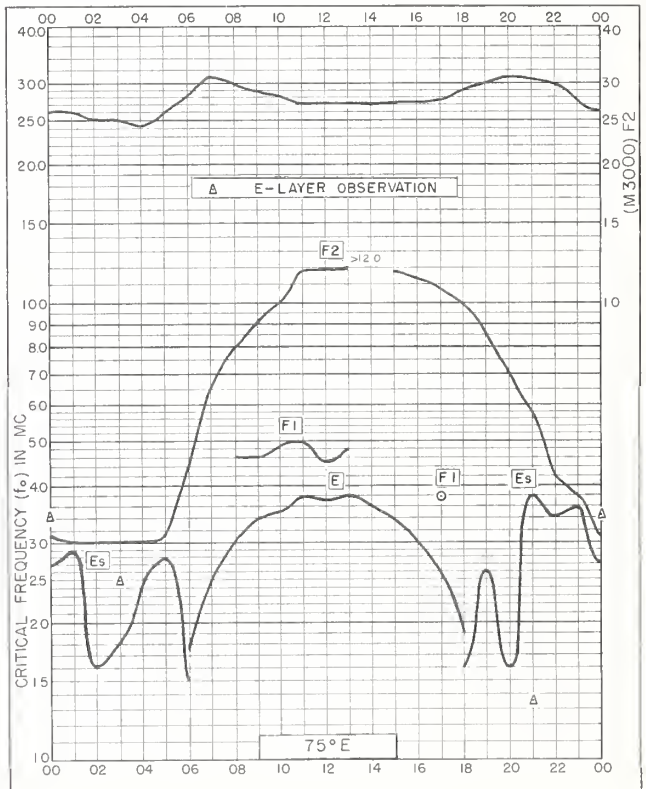

Fig. 72. KERGUELEN I.
49.4°S, 70.3°E SEPTEMBER 1957

NBS 503

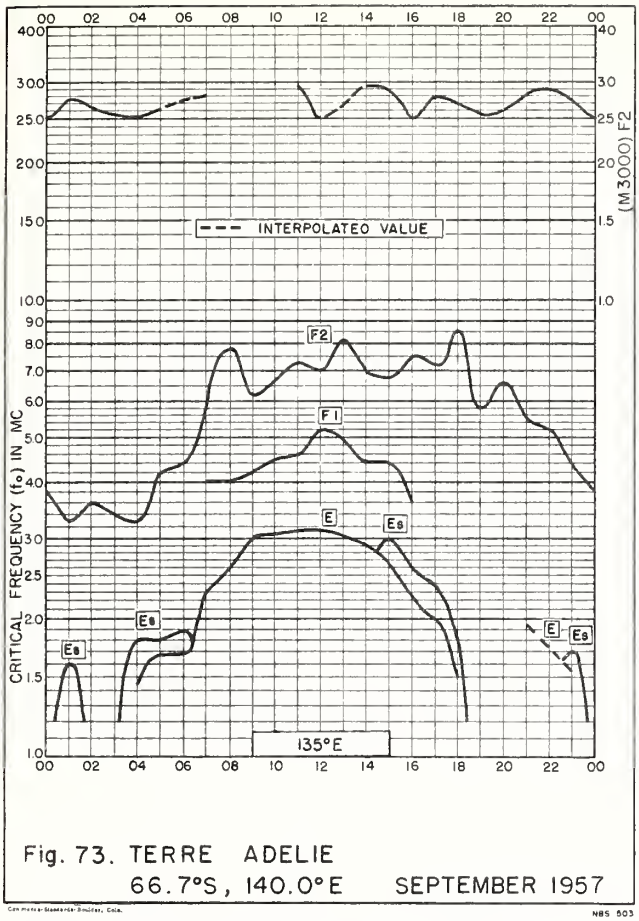

Fig. 73. TERRE ADELIE
66.7°S, 140.0°E SEPTEMBER 1957

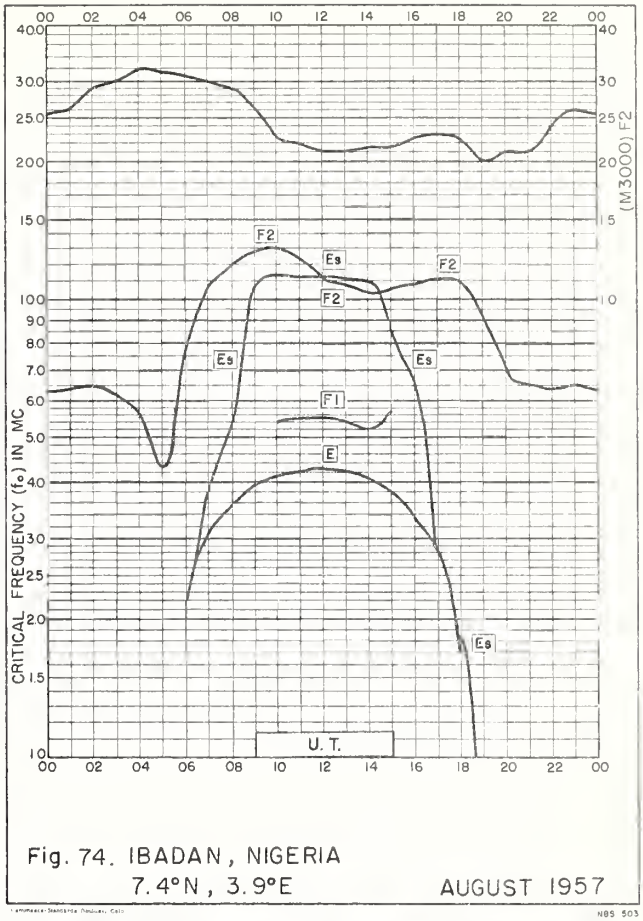

Fig. 74. IBADAN, NIGERIA
7.4°N, 3.9°E AUGUST 1957

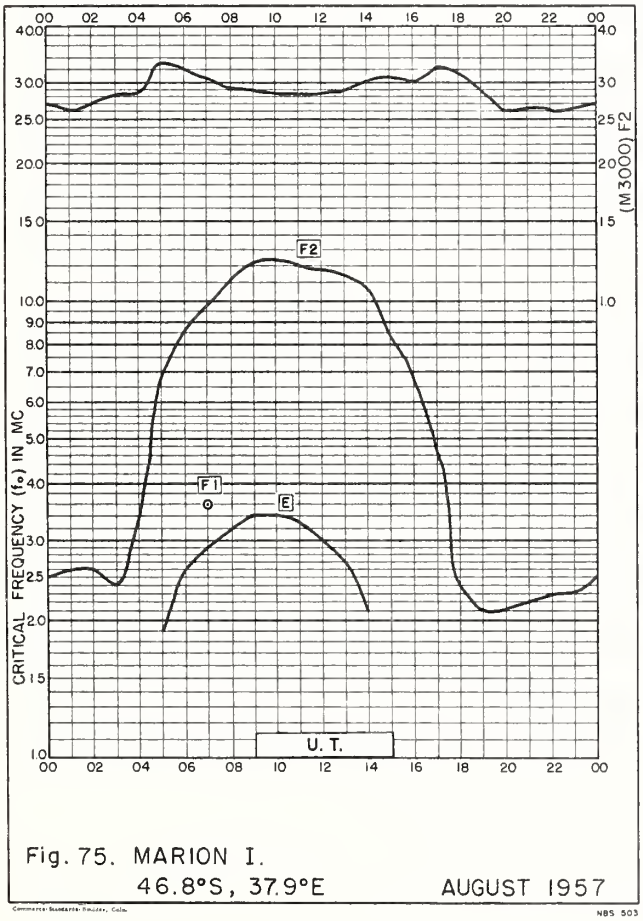

Fig. 75. MARION I.
46.8°S, 37.9°E AUGUST 1957

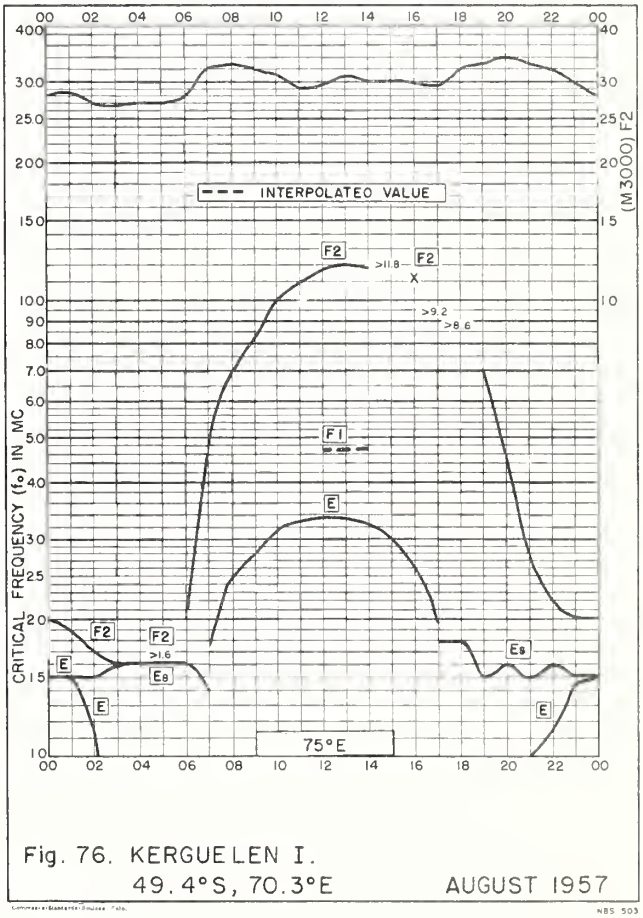

Fig. 76. KERGUELEN I.
49.4°S, 70.3°E AUGUST 1957

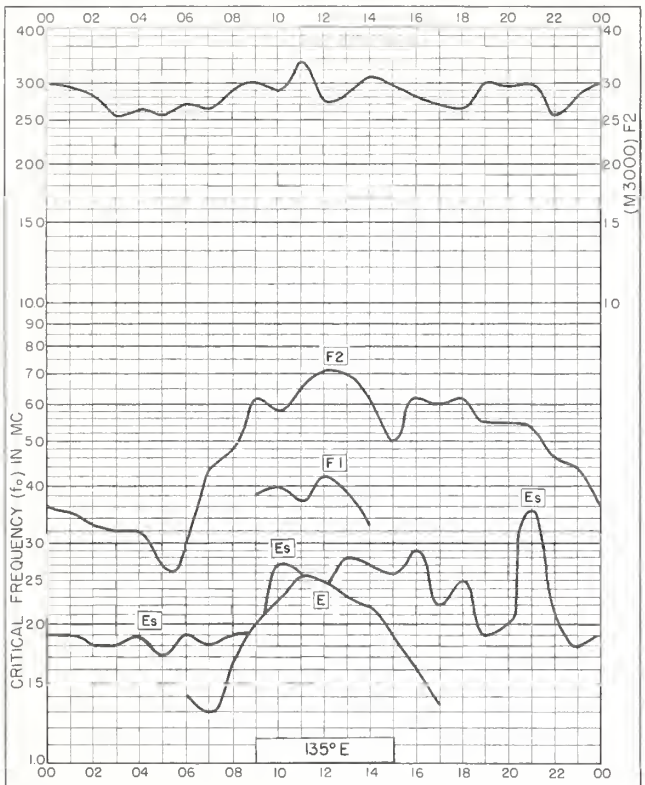

Fig. 77. TERRE ADELIE
66.7°S, 140.0°E AUGUST 1957

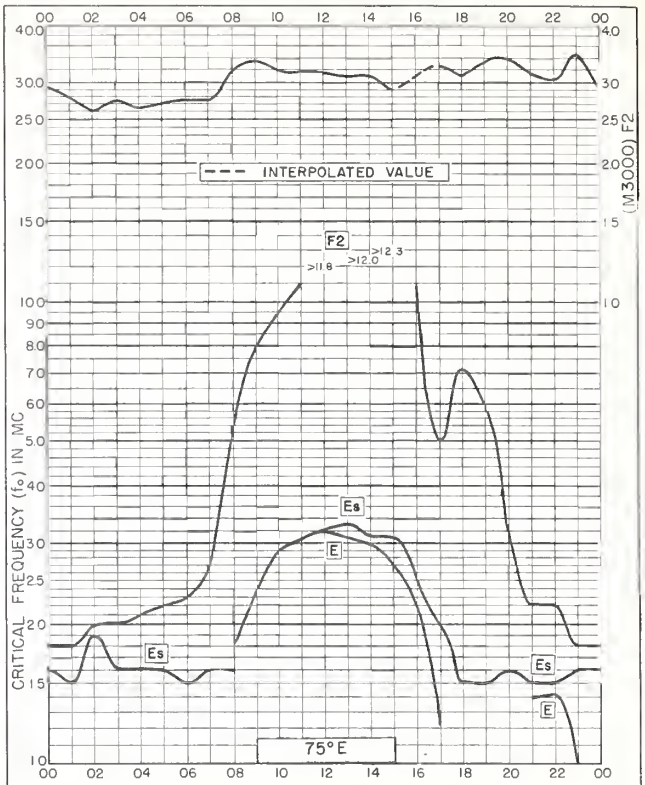

Fig. 78. KERGUELEN I.
49.4°S, 70.3°E JULY 1957

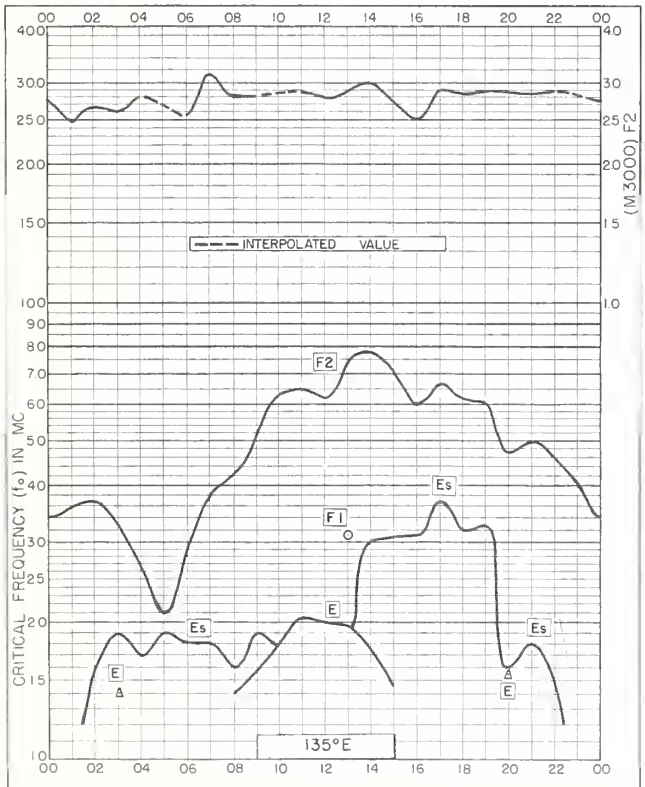

Fig. 79. TERRE ADELIE
66.7°S, 140.0°E JULY 1957

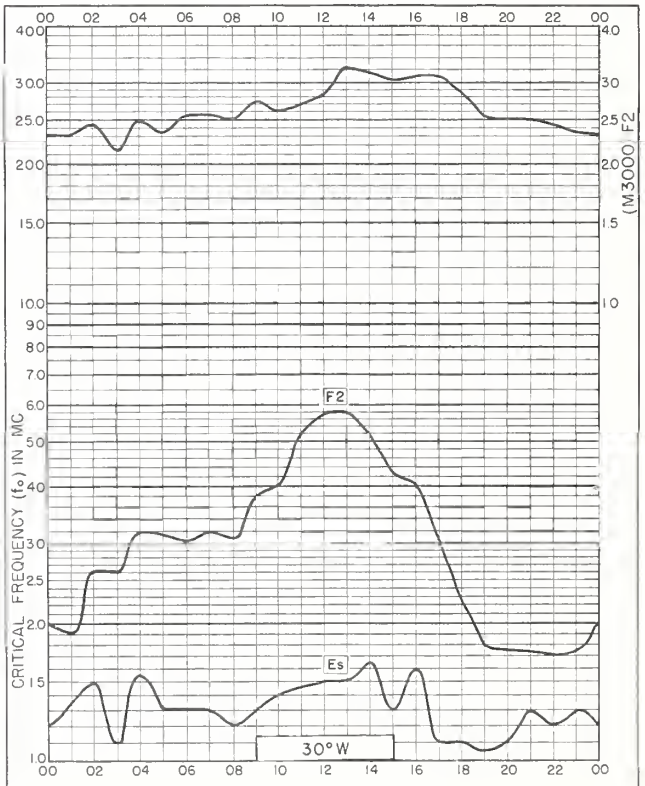

Fig. 80. HALLEY BAY
75.5°S, 26.6°W JULY 1957

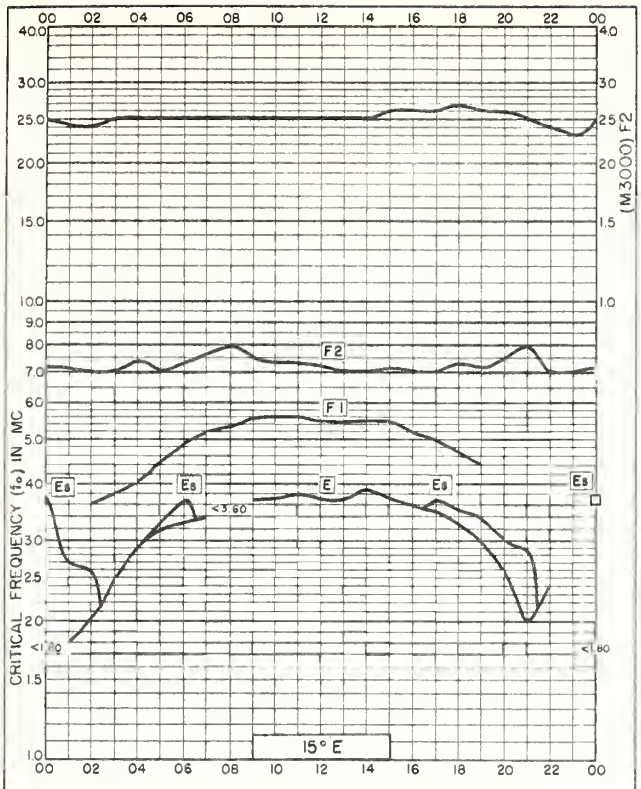

Fig. 81. LULEA, SWEDEN
65.6°N, 22.1°E JUNE 1957

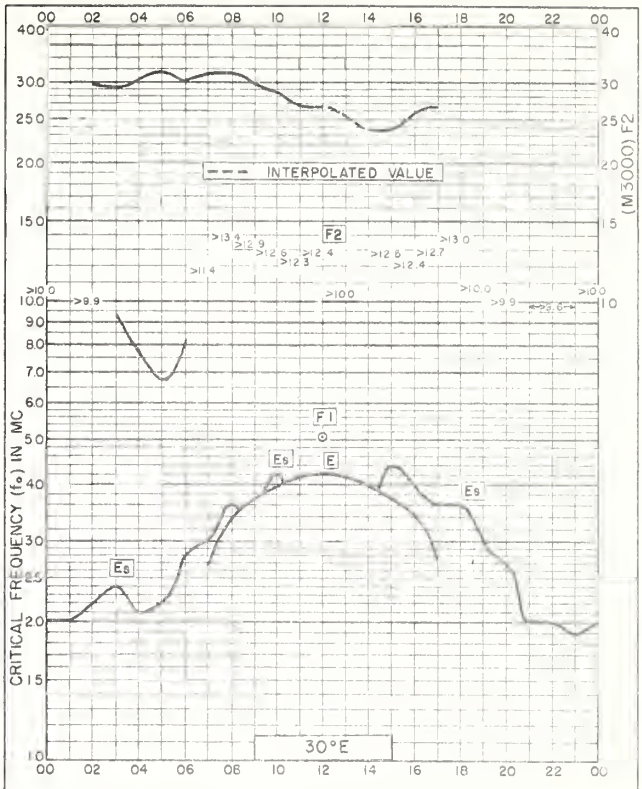

Fig. 82. LWIRO, CONGO
2.3°S, 28.8°E JUNE 1957

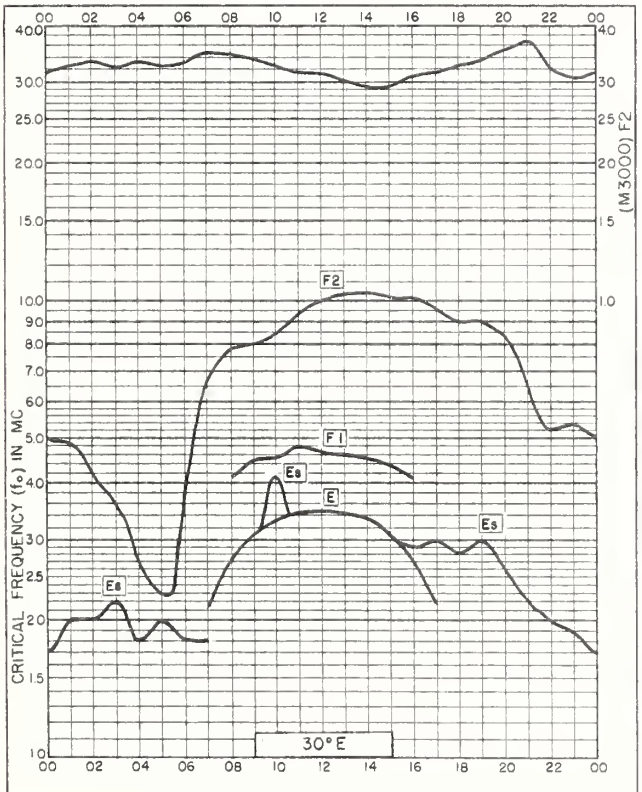

Fig. 83. LWIRO, CONGO
2.3°S, 28.8°E JUNE 1955

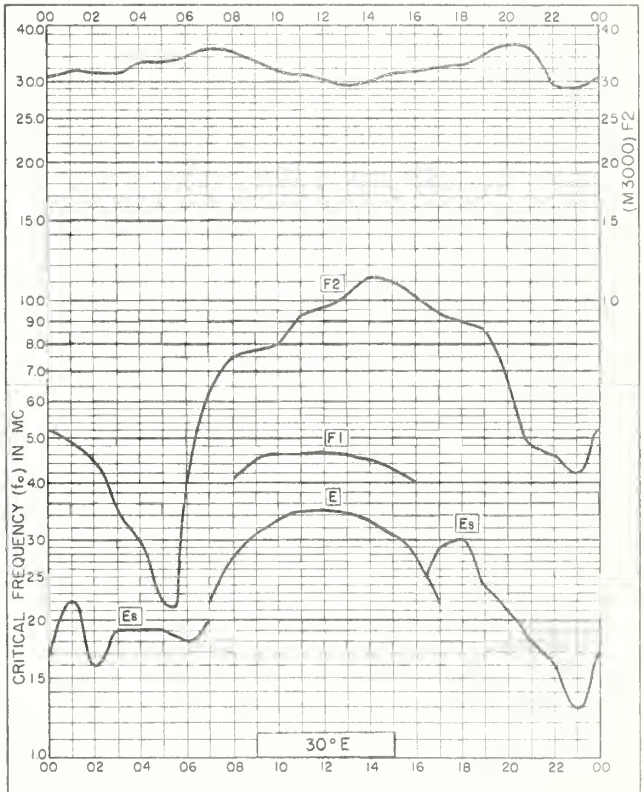

Fig. 84. LWIRO, CONGO
2.3°S, 28.8°E MAY 1955

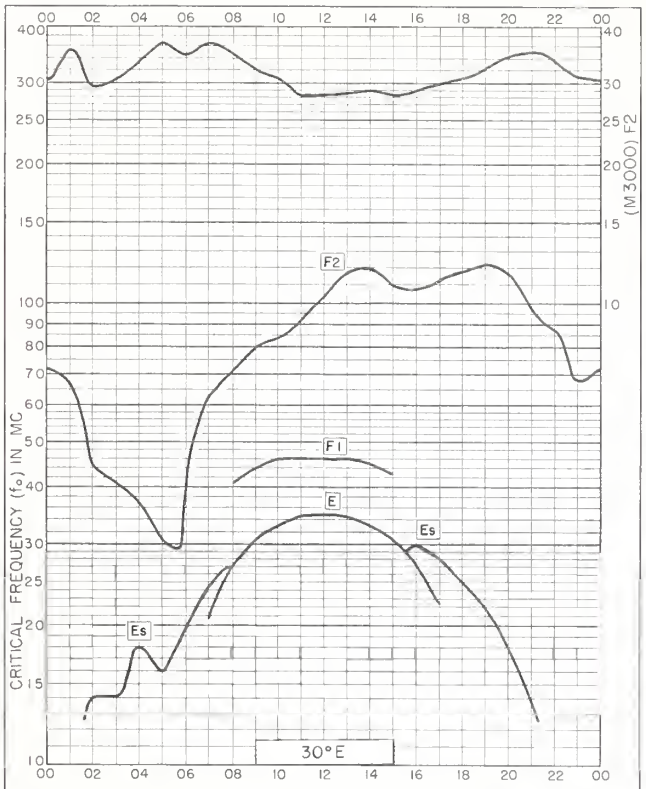

Fig. 85. LWIRO, CONGO
2.3°S, 28.8°E APRIL 1955

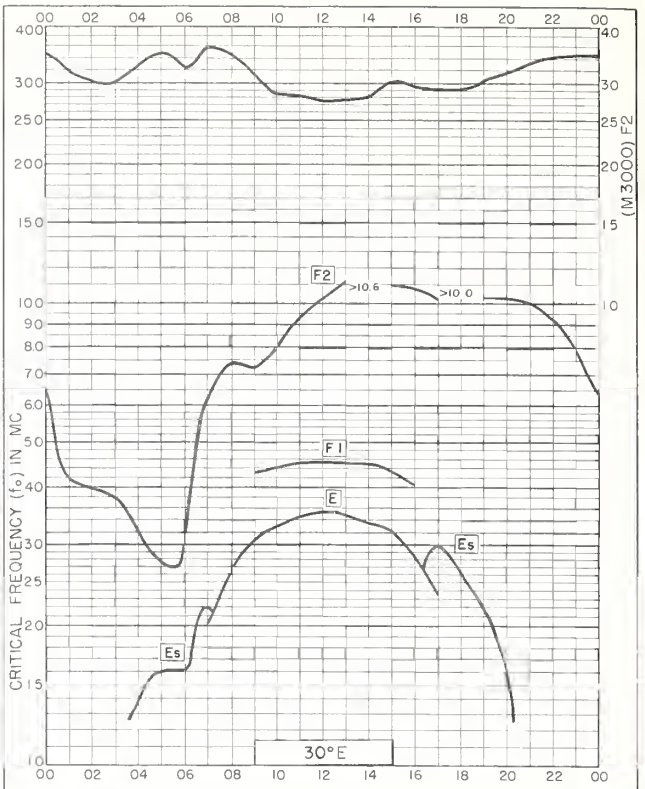

Fig. 86. LWIRO, CONGO
2.3°S, 28.8°E MARCH 1955

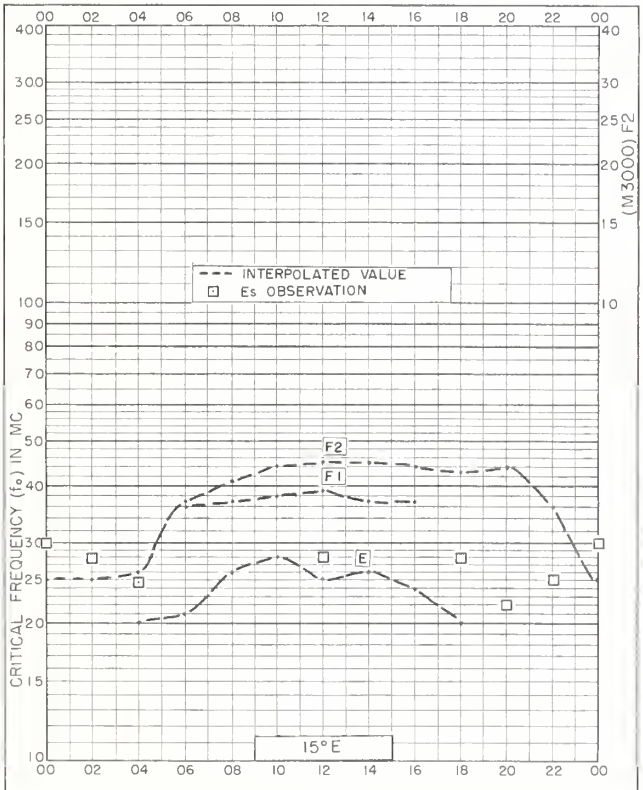

Fig. 87. LULEA, SWEDEN
65.6°N, 22.1°E AUGUST 1954

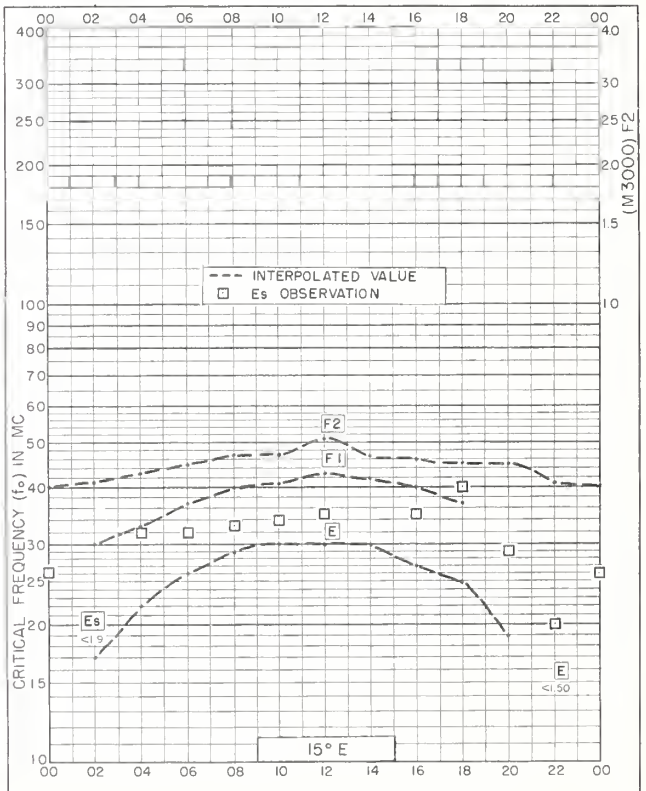

Fig. 88. LULEA, SWEDEN
65.6°N, 22.1°E JUNE 1953

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Index (CRPL-F211 (Part A), continued)

Index (CRPL-F211 (Part A), concluded)

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Catalog of Data:

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