IRPL-F3

RESTRICTED

IONOSPHERIC DATA

ISSUED

NOVEMBER, 1944

PREPARED BY INTERSERVICE RADIO PROPAGATION LABORATORY
National Bureau of Standards
Washington, D.C.

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IRPL-F3

INTERSERVICE RADIO PROPAGATION LABORATORY
NATIONAL BUREAU OF STANDARDS
WASHINGTON, D.C.

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IONOSPHERIC DATA

Note.- This IRPL-F series report, issued monthly, serves as one of two current supplements to IRPL Radio Propagation Handbook, Part 1, (War Dept. TM11-499, Navy Dept. DNC-13-1). The supplements of the IRPL-D series, "Basic Radio Propagation Predictions Three Months in Advance," issued earlier in the month, include basic prediction charts, auxiliary charts and nomograms, as well as examples illustrative of their use.

CONTENTS

Final Data

October, 1944

September, 1944

Final data are identical with provisional data presented in October issue of this report, Table 10, except that at 0900, h'F1 = 235 km.

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TERMINOLOGY

Note.- The following symbols are used, conforming to the recommendations of the International Radio Propagation Conference held in Washington, D.C., 17 April to 5 May 1944.

$f^{o}F2$ - ordinary-wave critical frequency for the F2 layer. The term night F layer will no longer be used. The term F2 layer is now used for the night F layer as well as the daytime F2 layer.

$f^{o}F1$ - ordinary-wave critical frequency of the F1 layer.

$f^{o}E$ - ordinary-wave critical frequency of the E layer.

h'F2 - minimum virtual height of the F2 layer.

h'F1 - minimum virtual height of the F1 layer.

h'E - minimum virtual height of the E layer.

fEs - highest frequency of Es reflections.

M - maximum usable frequency factor, to be followed by the distance in km. Example: M3500 represents 3500-km maximum usable frequency factor.

muf - maximum usable frequency.

[ ] - interpolated value.

( ) - doubtful value.

A - characteristic not measurable because of blanketing by sporadic E.

B - characteristic not measurable because of loss of trace due to absorption.

C - characteristic of measurable degree of equipment failure or interference.

D - characteristic higher than upper limit of recorder.

E - characteristic less than lower limit of recorder.

F - spread echoes.

H - $f^{o}F2 \leq f^{o}F1$.

I - stratification observed within region.

J - ordinary-wave critical frequency reduced from measured extraordinary-wave critical frequency.

K - ionosphere storm in progress.

MONTHLY AVERAGES AND MEDIAN VALUES OF IONOSPHERIC DATA.

The tables and graphs of ionospheric data presented here are assembled by the Interservice Radio Propagation Laboratory for analysis and correlation principally incidental to IRPL predictions of radio propagation conditions. These data are furnished by the following:

Carnegie Institution of Washington (Department of Terrestrial Magnetism)
- Baffin Is., Canada
- Fairbanks, Alaska (University of Alaska, College, Alaska)
- Reykjavik, Iceland
- Maui, Hawaii
- Trinidad, Brit. West Indies
- Huancayo, Peru
- Watheroo, W. Australia

British National Physical Laboratory, and Inter-[illegible]
- Radio Research Station, Slough, England
- Great Baddow, England
- Burghead, Scotland
- Delhi, India

Australian Council for Scientific and Industrial Research.
- Radio Research Board, Australia
- Brisbane, Q., Australia
- Mt. Stromlo, Canberra, ACT, Australia.

Canadian Department of National Defence, Naval Service
- Churchill, Canada
- Ottawa, Canada.

[illegible] Radio Research Committee
Kermadec Is.
Christchurch (Canterbury University College Observatory)
Campbell Is.

[illegible] Commissar for Postal and Electric[illegible]munications, Moscow, U.S.S.R.
Tomsk, U.S.S.R.
Sverdlovsk, U.S.S.R.

National Bureau of Standards, Washington, D.C.
Stanford University, (San Francisco), California.
Louisiana State University, Baton Rouge, Louisiana.
University of Puerto Rico, San Juan, P.R.

For their timely value, some of the tables presented are provisional data received by telephone or telegraph in which there may be small or infrequent errors. When final values are available such errors will be corrected in later issues of this report.

The final values presented, both in tabular and graphical form, although correct for the quantities stated, as reported to this laboratory, may sometimes lead to an erroneous conception of typical values for the quantity under consideration. Standard scaling practice, following recommendations of the International Radio Propagation Conference held in Washington, D.C., 17 April to 5 May, 1944, is not yet universal, deviation from standard practice being most common in the cases of records where spread echoes are present. Even when standard scaling practice is used, intrinsically misleading results may arise from the monthly average being determined from only a few observations during the month. Two frequent types of such error, both particularly typical of stations in far northern or far southern latitudes are:

(a) Erroneously high values of monthly average critical frequencies caused by the frequent absence of record for cases where the critical frequency is below the lower frequency limit of the recorder. A median, rather than a mean, value of the critical frequency is more significant in such cases, the median being that for all times at which observations were made, the cases of such inability to read the records being counted as less than the lower frequency limit of the apparatus.

(b) Erroneously high values of monthly average F2-layer critical frequencies caused by the frequent occurrence of cases where the F1-layer critical frequency exceeds that of the F2-layer. This is characteristic of summer months during sunspot-cycle minimum, particularly in northern latitudes. In this case, also, median values are more significant than mean values, the median being that for all cases where observations are made, those cases where missing values result because of higher $f^{o}F1$ being counted as less than the $f^{o}F1$. When, as is often the case, no great discrepancy is likely to exist between $f^{o}F1$ and $f^{o}F2$, a typical value of $f^{o}F2$ may be obtained by taking the monthly average of observed $f^{o}F2$ together with observed $f^{o}F1$ for the cases where no $f^{o}F2$ could be measured.

The discrepancy between predicted and observed values of monthly average critical frequencies, particularly for far northern stations, is frequently because of the above reasons, the predictions being intended to represent typical values for the location under consideration.

It may be noted by inspection of the figures presenting comparison of data received for the months of August, September, and October with IRPL predictions made four months in advance, that, generally, the predictions have been in error by being too low, especially in temperate latitudes.

These predictions are based on average trends of solar activity as measured by sunspot number. In the past few months this activity has been somewhat abnormally high. Occurrence of both sunspots and calcium flocculi during the past few months has been slightly more frequent at high than at low solar latitudes, indicating that perhaps the sunspot minimum has just been passed.

Because of great fluctuations in solar activity, however, an observation period of but a few months is so short as to render a final conclusion as to this premature as yet.

IONOSPHERIC DATA FOR EVERY DAY AND HOUR

These data, observed at Washington, D.C., follow the scaling practices recommended by the International Radio Propagation Conference held in Washington, D.C., 17 April to 5 May 1944. (Cf. IRPL-C61, pp.36-39).

Because of the high variability of observed fEs, mean values are of little practical significance and are not given here.

Mean values of other quantities are given for all days of the month as well as for quiet days only. The criteria for selecting periods of ionospheric storminess, whose data are deleted in obtaining the mean values for quiet days only, are presented in IRPL-R5, "Criteria for Ionospheric Storminess", available to authorized persons upon request to the Chief of IRPL, National Bureau of Standards, Washington 25, D.C.

In determining the median values included in Tables 43 through 55, the following procedure has been adopted:

For all characteristics: Where the value is missing because of A, B, or C (see Terminology, above), that hour is omitted from the median count.

In addition,

For critical frequencies:

For all layers, where a value is missing because of E (see Terminology, above), it is counted as less than the lower limit of the recorder.

Where values of $f^{o}E$ and $f^{o}F1$ are missing at the beginning or end of the diurnal curve, they are counted as less than the median frequency.

For virtual heights:

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

For muf factors:

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

IONOSPHERE DISTURBANCES

Table 56 presents ionospheric character figures and principal storms observed at Washington, D.C., during October 1944, as determined by the criteria presented in IRPL-R5, cited above, together with American magnetic K-figures which are usually covariant with them.

ERRATA

1. In the previous (October) issue of this report, page 3, line 39, should be "Delhi, India . . . Table 56."

2. In the previous (October) issue of this report, page 7, paragraph 4, first line, should be "These predictions are based on average trends of solar activity as ..."

3. In the report IRPL-R9, "The Prediction of Usable Frequencies over a Path of Short or Medium Length, Including the Effects of Es," the times designated in column (1) of Table 1 should be GCT.

Table 1

Baffin Island, Canada (70.5°N, 68.6°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	285	2.58						3.4
01	286	2.35						3.7
02	267	2.20						4.3
03	285	2.45					2.5	3.4
04	281	2.54					2.0	3.5
05	272	2.83					3.0	3.2
06	259	3.09					2.5	3.1
07	251	3.64						3.1
08	247	4.13						3.0
09	255	4.40						3.1
10	262	4.62	251	3.11				3.1
11	269	4.42	228	3.12				3.0
12	255	4.69	228	3.27				3.0
13	256	4.87	225	3.13				3.0
14	253	4.73						3.0
15	243	4.61						3.0
16	244	4.60						3.0
17	239	4.52						3.0
18	243	4.15						3.0
19	243	3.96						3.1
20	253	3.43						3.1
21	257	3.24						3.3
22	274	2.37						3.2
23	274	2.91						3.3

Time: 75°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 2

Delhi, India (28.6°N, 77.2°E) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		2.9						
01		3.0						
02		2.9						
03		2.6						
04		2.6						
05		2.7						
06		4.1						
07		6.1						
08		7.3						
09		7.7						
10		8.7						
11		9.4						
12		10.6						
13		11.1						
14		11.1						
15		10.0						
16		8.8						
17		7.6						
18		5.8						
19		4.1						
20		4.0						
21		3.3						
22		3.1						
23		3.1						

Time: 75°E.

Table 3

Maui, Hawaii (20.8°N, 156.5°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	272	3.52						3.1
01	247	3.76						3.4
02	244	3.32						3.4
03	236	3.26						3.4
04	245	3.07						3.5
05	253	2.66						3.7
06	291	2.72						3.
07	226	5.74			120	2.20		3
08	232	7.09	221	4.17	115	2.69		3.
09	257	7.92	205	4.60	114	2.98		3.1
10	287	9.11	208	4.77	113	3.16		3.
11	297	10.60	203	4.80	113	3.33		3.
12	290	11.53	204	4.83	113	3.40		3.
13	298	12.58	205	4.84	113	3.40		3.1
14	277	13.33	205	4.66	111	3.27		3.2
15	253	12.83	209	4.49	110	3.13		3.3
16	234	11.52	219	4.20	109	2.83		3.4
17	222	9.76	227	3.50	112	2.40		3.5
18	206	7.79						3.6
19	209	5.02						3.5
20	248	3.65						3.0
21	283	3.57						3.0
22	271	3.63						3.1
23	277	3.47						3.0

Time: 150°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 4

Trinidad, British West Indies (10.6°N, 61.3°W.) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	258	4.35						3.1
01	248	4.29						3.3
02	250	3.52						3.3
03	266	3.10						3.2
04	269	2.83						3.1
05	288	2.91						3.1
06	248	4.01						3.3
07	24	6.10	245	3.8		2.35		3.4
08	27	7.6	227	4.2	110	2.62		3.2
09	29	7.8	232	4.5	107	3.13		3.1
10	26	8.8	223	4.6	107	3.33		3.1
11	30	9.2	224	4.6	106	3.39		3.0
12	297	9.78	217	4.6	107	3.44		3.1
13	290	10.50	21	4.6	106	3.38		3.1
14	287	9.67	229	4.2	105	3.17		3.1
15	281	9.43	232	4.3	106	2.96		3.1
16	286	9.17	231	3.8	106	2.75		3.2
17	27	8.32	230	2.7		2.30		3.2
18	2	6.87						3.2
19	2	5.62						3.3
20	2	4.47						3.1
21	2	3.86						2.9
22	319	3.85						2.8
23	299	4.24						2.6

Time: 60°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 5

Brisbane, Q., Australia (27.5°S, 153.0°E) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		5.1						3.1
01		4.8						3.3
02		4.2						3.3
03		3.6						3.2
04		3.4						3.1
05		3.6						3.2
06		4.7						3.4
07		5.8						3.4
08		6.6						3.3
09		7.4						3.3
10		7.6						3.2
11		7.6						3.2
12		7.8						3.2
13		7.6						3.2
14		7.4						3.2
15		7.2						3.3
16		7.0						3.3
17		6.6						3.4
18		6.2						3.3
19		6.0						3.1
20		5.6						3.1
21		5.5						3.0
22		5.4						3.1
23		5.3						3.1

Time: 150°E.
Length of time sweep: 2.2 Mc to 12.5 Mc in two minutes, thirty seconds.

Table 6

Watheroo, Western Australia (30.3°S, 115.9°E) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.9						2.9
01		3.8						3.0
02		3.6						3.1
03		3.3						3.0
04		3.2						3.0
05		3.5						3.1
06		4.6						3.3
07		5.2						3.2
08		5.6						3.1
09		6.0						3.0
10		6.5						3.0
11		6.9						3.0
12		7.3						3.0
13		7.3						3.1
14		7.0						3.1
15		6.5						3.2
16		6.2						3.2
17		5.9						3.2
18		5.6						3.2
19		5.2						3.0
20		4.5						3.0
21		4.2						2.9
22		4.1						2.8
23		4.0						2.9

Time: 120°E.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 7

Mt. Stromlo, N.S.W., Australia (35.3°S, 149.0°E) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		4.5						3.0
01		4.3						3.2
02		3.8						3.2
03		3.4						3.1
04		3.3						3.0
05		3.5						3.1
06		4.5						3.3
07		5.2						3.1
08		5.8						3.2
09		6.5						3.2
10		6.7						3.2
11		6.9						3.3
12		6.8						3.3
13		6.8						3.2
14		6.8						3.2
15		6.7						3.3
16		6.2						3.3
17		5.8						3.3
18		5.8						3.3
19		5.7						3.2
20		5.3						3.1
21		5.3						3.0
22		5.0						3.0
23		4.8						3.0

Time: 150°E.
Length of time sweep: 1.6 Mc to 12.5 Mc in two minutes.

Table 8

Christchurch, N.Z. (43.5°S, 172.6°E) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	260	3.85						
01	258	3.67						
02	256	3.43						
03	223	3.27						
04	258	2.85						
05	241	2.95						
06	230	4.04						
07	245	4.62	216	3.52				
08	278	5.14	212	3.85				
09	293	5.53	205	4.11				
10	290	5.98	202	4.12				
11	286	6.01	197	4.18				
12	294	6.31	197	4.15				
13	279	6.39	207	4.17				
14	276	6.09	200	4.12				
15	267	5.77	205	3.94				
16	248	5.76	208	3.84				
17	228	5.51						
18	229	5.40						
19	229	5.47						
20	243	5.36						
21	247	4.79						
22	254	4.53						
23	259	3.94						

Time: 172.5°E.
Length of time sweep: 2.5 Mc to 12 Mc in two minutes.

Table 9

Delhi, India (28.6°N, 77.2°E) September, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.4						
01		3.1						
02		3.1						
03		2.9						
04		2.8						
05		2.6						
06		4.2						
07		6.2						
08		6.7						
09		6.9						
10		7.4						
11		8.7						
12		9.5						
13		10.2						
14		10.4						
15		10.3						
16		9.6						
17		8.2						
18		7.5						
19		6.1						
20		5.2						
21		4.0						
22		3.8						
23		3.6						

Time: 75°E

Table 10

Fairbanks, Alaska (64.9°N, 147.8°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	312	2.13					4.3	2.9
01	309	2.25					4.7	2.9
02	321	2.22					3.3	2.9
03	316	2.10					3.6	2.9
04	317	2.10					3.3	2.9
05	313	2.17					3.3	2.9
06	277	2.25			103	1.27	2.8	3.1
07	251	3.26			103	1.63	2.7	3.2
08	245	4.15	218	2.97	103	1.94	2.4	3.2
09	251	4.70	220	3.24	103	2.19		3.2
10	265	5.12	220	3.34	103	2.29		3.2
11	254	5.41	219	3.31	103	2.33	2.4	3.3
12	258	5.57	218	3.44	103	2.35		3.3
13	246	5.60	224	3.21	103	2.22	2.4	3.3
14	240	5.56	200	3.05	103	2.08	2.4	3.3
15	239	5.39			103	1.87	2.1	3.3
16	232	5.14			103	1.60		3.3
17	232	4.57					1.6	3.3
18	242	3.64					1.6	3.2
19	251	2.83					3.0	3.2
20	275	2.25					3.2	3.2
21	269	1.98					3.0	3.1
22	281	1.86					3.0	3.1
23	319	1.86					3.9	3.0

Time: 150°W.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 11

Reykjavik, Iceland (64.1°N, 21.7°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00							4.2	
01							4.2	
02							5.0	
03							3.6	
04								
05	272	2.90						3.2
06	305	2.60						3.2
07	244	3.15						3.3
08	218	4.01						3.3
09	210	4.82						3.3
10	214	5.28			116	2.20		3.3
11	215	5.66			115	2.52		3.3
12	214	5.72			116	2.52		3.4
13	223	5.82			108	2.63		3.3
14	224	5.17			113	2.53		3.2
15	214	5.52						3.3
16	215	5.22						3.2
17	204	5.04						3.2
18	208	4.90					3.0	3.0
19							4.1	
20							4.0	
21							4.9	
22							3.2	
23							4.8	

Time: 15°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 12

Churchill, Canada (58.8°N, 94.2°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	326	3.4					6.0	
01							5.0	
02	304	4.1					4.0	
03	297	3.4					4.3	
04	295	4.0					3.9	
05	350	3.5					4.4	
06	333	3.7					4.3	
07	294	3.8					3.8	3.2
08	274	4.6			118	3.0	3.6	3.2
09	282	5.0	231	3.3	111	2.3		3.2
10	293	5.3	229	3.6	114	2.7		3.1
11	289	5.5	220	3.7	112	2.7		3.2
12	303	5.7	227	3.7	114	2.6		3.1
13	308	5.9	226	3.7	114	2.7		3.1
14	294	6.0	233	3.6	118	2.7		3.1
15	284	6.2	240	3.4	120	2.8		3.2
16	283	6.1	246	3.2	124	2.6		3.0
17	276	5.6			122	2.9		3.1
18	305	4.6			114	2.3	3.5	3.0
19	306	4.2			123	2.3	3.4	3.0
20	330	3.8			116	2.3	4.0	2.9
21	295	4.0					6.0	
22	307	3.6					6.0	
23	336	3.7					7.0	

Time: 90°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 13

Burghead, Scotland (57.7°N, 3.5°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		2.74						
01		2.81						
02		2.61						
03		2.39						
04		2.27						
05		2.42						
06		2.46						
07		3.52						
08		4.60						
09		5.17						
10		5.53						
11		5.81						
12		5.91						
13		5.85						
14		5.88						
15		5.81						
16		5.64						
17		5.70						
18		5.57						
19		4.83						
20		3.91						
21		3.28						
22		3.08						
23		3.00						

Time: 0°

Table 14

Great Baddow, England (51.7°N., 0.5°E) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.0						2.6
01		3.0						2.8
02		2.9						2.8
03		2.8						2.8
04		2.4						2.6
05		2.1						3.0
06		2.8						3.2
07		4.2				1.7		3.5
08		5.4		3.4		2.2		3.5
09		5.8		3.6		2.4		3.5
10		6.2		3.8		2.7		3.5
11		6.3		3.9		2.7		3.4
12		6.4		3.9		2.7		3.4
13		6.4		3.8		2.7		3.5
14		6.2		3.6		2.5		3.4
15		6.1		3.4		2.3		3.4
16		6.1				2.0		3.5
17		6.0				1.7		3.4
18		5.8						3.2
19		5.0						3.2
20		3.8						3.1
21		3.1						2.9
22		3.0						2.8
23		3.0						2.8

Time: 0°
Length of time sweep: Manual operation.
Slough, England (51.5°N, 0.6°W.)
Noon f°F2 = 6.40 Mc.

Table 15

Ottawa, Canada (45.5°N, 75.8°W.) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	350	2.7					2.9	2.9
01	364	2.7					3.1	2.9
02	362	2.6					3.1	2.9
03	366	2.7					3.0	2.9
04	382	2.5					3.0	2.8
05							3.0	
06	284	3.3	260	2.9			3.0	3.2
07	242	4.8	226	3.2	122		3.0	3.4
08	250	5.4	210	3.6	126	2.6	4.2	3.4
09	275	5.8	205	3.9	119	2.7	4.4	3.3
10	282	6.2	201	4.1	118	2.9	4.4	3.2
11	287	6.5	207	4.2	116	3.0	4.4	3.2
12	286	6.7	212	4.2	117	3.0		3.3
13	282	6.7	217	4.1	117	2.9		3.2
14	272	6.8	222	3.9	120	2.8		3.2
15	260	6.5	226	3.7	123	2.6	3.8	3.2
16	244	6.3	230	3.1	128	2.5	3.3	3.3
17	234	6.0	245				2.7	3.3
18	245	5.2					3.1	3.1
19	251	4.6					2.4	3.1
20	268	3.8					2.6	3.1
21	288	3.4					3.0	3.0
22	306	3.1					2.9	2.9
23	327	2.8					3.0	2.9

Time: 75°W.
Length of time sweep: 1.93 Mc to 13.5 Mc. Manual operation.

Table 16

Washington, D.C. (39.0°N, 77.5°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	284	2.74					3.2	2.94
01	281	2.74					3.3	2.98
02	276	2.66					3.1	3.03
03	264	2.64					3.2	3.03
04	263	2.54					3.3	3.10
05	263	2.48					3.3	3.14
06	249	2.81					3.3	3.22
07	234	4.77			122	1.80	3.0	3.46
08	242	5.58	217	3.45	120	2.35	3.3	3.42
09	262	5.98	211	3.82	118	2.66	3.4	3.36
10	272	6.27	206	4.04	116	2.87	3.2	3.24
11	281	6.70	207	4.17	118	3.02	3.3	3.19
12	282	7.07	212	4.24	116	3.08	3.2	3.17
13	278	7.18	218	4.15	115	3.07	3.2	3.17
14	275	7.07	224	4.04	115	2.94	3.2	3.24
15	269	7.03	229	3.83	113	2.71	3.2	3.26
16	246	6.74	224	3.49	115	2.32	3.1	3.30
17	230	6.16			117	1.84	3.0	3.34
18	230	5.30					3.0	3.22
19	237	4.38					3.1	3.16
20	256	3.70					3.2	3.08
21	268	3.24					2.8	3.02
22	277	3.12					2.9	3.00
23	276	2.83					3.0	3.00

Time: 75°W.
Length of time sweep: 0.8 Mc to 14.0 Mc in two minutes.

Table 17

San Francisoo, California (37.4°N, 122.2°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	263	3.32					2.3	3.0
01	263	3.44					2.4	3.0
02	259	3.45					2.7	3.1
03	257	3.42						3.0
04	255	3.38						3.1
05	257	3.40						3.1
06	248	3.66					2.4	3.2
07	233	5.67	220	3.00	110	1.97	2.3	3.4
08	236	6.60	211	3.50	108	2.45	3.3	3.4
09	254	6.59	212	4.01	108	2.82	3.3	3.4
10	273	7.26	199	4.18	106	3.05	3.3	3.3
11	278	7.86	204	4.28	105	3.13	3.3	3.3
12	282	8.10	211	4.27	104	3.17		3.2
13	271	8.10	217	4.32	103	3.15		3.3
14	269	7.98	219	4.15	103	3.01	3.2	3.3
15	253	7.58	223	3.89	105	2.79	3.3	3.4
16	238	6.98	227	3.32	108	2.36	3.2	3.4
17	222	6.06	230	2.35	113	1.86	2.6	3.5
18	212	4.50					2.6	3.4
19	220	3.78					2.6	3.3
20	225	3.03					2.6	3.3
21	260	2.89					2.7	3.0
22	258	3.28					2.6	3.0
23	260	3.31					2.6	3.0

Time: 120°W.
Length of time sweep: 0.8 Mc to 12 Mc in six minutes. Record centered on the hour.

Table 18

Baton Rouge, Louisiana (30.5°N, 91.2°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	304	3.35						3.0
01	300	3.41						3.0
02	294	3.51						3.0
03	284	3.60						3.1
04	280	3.43						3.1
05	284	3.25						3.1
06	276	3.78						3.2
07	282	5.64	246	3.33	135	2.08		3.4
08	286	6.03	240	3.61	128	2.50		3.3
09	298	6.40	239	4.38	121	2.86		3.2
10	310	7.02	240	4.53	120	3.05		3.1
11	314	7.85	239	4.57	120	3.16		3.1
12	306	8.42	241	4.56	120	3.19		3.0
13	305	8.71	251	4.56	120	3.18		3.1
14	294	8.53	252	4.50	120	3.05		3.1
15	286	8.26	250	4.26	124	2.82		3.2
16	274	7.40	251	3.60	130	2.38		3.2
17	250	6.71			130	2.05		3.3
18	238	5.30						3.3
19	252	3.97						3.2
20	291	3.24						3.0
21	316	3.13						3.0
22	311	3.30						2.9
23	309	3.27						2.9

Time: 90°W.
Length of time sweep: 1.9 Mc to 9.8 Mc in three minutes, thirty seconds. Record centered on the hour.

Table 19

San Juan, Puerto Rico (18.4°N, 66.1°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.77						2.9
01		3.93						3.1
02		3.92						3.2
03		3.64						3.2
04		3.23						3.1
05		2.95						3.0
06		3.17						3.0
07	256	5.41		3.00				3.4
08	271	6.44	233	3.88		2.87		3.2
09	287	6.90	228	4.11		3.04		3.2
10	301	7.51	226	4.37		3.24		3.1
11	296	7.81	229	4.47		3.35		3.1
12	304	8.38	222	4.47		3.38		3.0
13	291	9.15	225	4.43		3.36		3.0
14	284	9.23	233	4.36		3.30		3.1
15	273	8.82	229	4.15		3.13		3.2
16	263	8.18	234	3.92		2.98		3.2
17	246	7.52	235	3.48				3.3
18	233	6.20						3.4
19	250	4.61						3.3
20		3.80						3.0
21		3.59						2.9
22		3.55						2.8
23		3.60						2.9

Time: 60°W.
Length of time sweep: 3 Mc to 12 Mc in eleven minutes. Record centered on the hour.

Table 20

Huancayo, Peru (12.0°S, 75.3°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	257	6.35						3.1
01	244	5.81						3.2
02	244	4.67						3.3
03	250	3.69						3.3
04	255	3.16						3.3
05	264	2.76						3.2
06	241	5.69				1.97	2.7	3.3
07	229	7.59				2.68	3.4	3.2
08	294	8.52	216	4.45		3.03	5.1	2.9
09	327	8.66	210	4.57		3.39	5.5	2.7
10	349	8.38	209	4.65			5.5	2.6
11	358	8.08	205	4.67			5.5	2.6
12	354	8.07	204	4.64			5.5	2.6
13	350	8.12	201	4.60			5.5	2.6
14	328	8.47	198	4.50		3.47	5.5	2.6
15	301	8.74	197	4.35		3.06	5.2	2.7
16	219	8.99	203	4.20		2.72	3.7	2.7
17	244	9.04				2.23	3.2	2.7
18	264	8.96				1.16		2.3
19	299	8.54						2.7
20	288	8.09						2.8
21	270	7.36						2.9
22	276	7.70						2.9
23	272	7.34						3.0

Time: 75°W.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 21

Kermadec Islands (29.2°S, 177.9°W) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
0010	275	5.38						
0100	256	5.10						
0200	248	4.66						
0310	265	3.78						
0400	281	3.66						
0500	279	3.51						
0600	251	4.96	238	3.01		1.75		
0700	272	6.42	243	3.45	107	2.40		
0800	270	7.41	230	4.19	112	2.81		
0900	269	7.41	220	4.41	110	3.07		
1000	285	7.36	221	4.51	109	3.20		
1100	297	7.80	212	4.61	110	3.32		
1200	291	7.87	209	4.57	110	3.32		
1300	288	7.77	221	4.58	109	3.34		
1400	288	8.66	227	4.45	109	3.23		
1500	283	7.47	227	4.28	111	3.10		
1600	271	7.21	237	3.95	112	2.79		
1700	252	6.87	246	3.31	116	2.29		
1300	243	6.60				1.60		
1850	247	6.41						
2000	273	6.05						
2100	287	5.88						
2200	289	5.77						
2300	283	5.74						

Time: Local.
Length of time sweep: 1.8 Mc to 12.8 Mc. Manual operation.

Table 22

Campbell Island (52.0°S, 169.0°E) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01								
02								
03								
04								
05	239	3.67						
06								
07	247	4.57	197	3.67	121	2.54		
08								
09	323	5.12	204	4.38	105	2.90		
10								
11	330	5.79	205	4.40	104	3.13		
12	319	6.31	201	4.27	100	3.07		
13	327	5.83	205	4.21	103	3.00		
14								
15	299	5.66	214	3.97	106	2.78		
16								
17	259	5.81	218	3.20	133	2.29		
18								
19	244	5.56						
20								
21	264	4.68						
22								
23								

Time: Local.
Length of time sweep: 1 Mc to 12 Mc. Manual operation.

Table 23

(Corrections and additions to previously issued provisional data)

Fairbanks, Alaska (64.9°N, 147.8°W) September, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00							4.8	
01							4.4	2.9
02							5.0	
03	328						4.5	
04							3.4	
05							3.0	3.1
06							3.0	
07							3.0	
08							2.8	
09							3.2	
10							3.0	3.0
11							3.0	
12							2.7	
13							3.0	
14							2.9	
15							2.4	
16							2.6	
17							2.4	3.3
18							1.6	
19							3.0	
20							2.8	
21							3.1	
22							3.5	
23							4.8	

Time: 150°W.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 24

(Corrections and additions to previously issued provisional data)

Reykjavik, Iceland (64.1°N, 21.7°W) September, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00							4.3	
01							3.4	
02							4.2	
03							3.6	
04							3.3	3.2
05								
06	238							
07								
08		4.16						
09	224							
10								
11						2.62		
12		5.10						3.2
13								
14		5.12						
15								
16								
17								
18								
19							2.9	3.3
20							3.9	
21							4.1	3.4
22							3.4	
23							3.3	

Time: 15°W
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 25

(Corrections and additions to previously issued provisional data)

Burghead, Scotland (57.7°N, 3.5°W.) September, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.1						
01		2.77						
02		2.58						
03		2.47						
04		2.43						
05		2.58						
06		2.96						
07		3.65						
08		4.01						
09		4.34						
10		4.84						
11		4.61						
12		4.38						
13		4.68						
14		4.39						
15		4.89						
16		4.89						
17		4.93						
18		5.01						
19		4.97						
20		4.82						
21		4.6						
22		4.08						
23		3.47						

Time: 0°

Table 26

(Additions to previously issued provisional data)

Great Baddow, England (51.7°N, 0.6°E) September, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00							1.5	
01								
02								
03								
04							1.4	
05								
06						1.7		
07						2.0	3.0	
08				3.7		2.4	3.5	
09				3.6		2.7	4.4	
10				4.1		2.9	4.2	
11				4.1		2.9		
12				4.1		3.0	3.8	
13				4.1		2.9	3.7	
14				4.0		2.9		
15				3.9		2.7		
16				3.7		2.4	3.0	
17						2.0	3.0	
18						1.7	2.4	
19								
20							1.8	
21							1.8	
22							1.8	
23							1.9	

Time: 0°.
Length of time sweep: Manual operation.
Slough, England (51.5°N, 0.6°W)
Noon f°F2 = 5.33 Mc.

Table 27

(Corrections and additions to previously issued provisional data)

Maui, Hawaii (20.8°N, 156.5°W) September, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		4.09						3.1
01								
02								
03								3.4
04								
05								3.3
06								3.1
07							3.0	
08			213				3.4	
09							3.5	
10							4.0	
11	249	8.66					4.2	2.8
12							4.5	
13							4.4	
14	301			4.64			4.2	3.1
15			209	4.46			4.1	
16	266						4.0	
17				3.84			3.8	
18							3.4	
19		5.93					3.4	
20	232						3.3	
21							3.2	
22							2.3	
23								

Time: 150°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 28

(Corrections and additions to previously issued provisional data)

Trinidad, British West Indies (10.6°N, 61.3°W) September, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01								
02								
03								
04	251							
05								
06								
07							2.6	
08							2.9	
09	314					3.16		3.2
10							3.8	
11							4.0	
12							4.2	
13							4.6	
14							4.8	
15							4.7	
16							4.6	
17							4.4	
18							3.6	
19							3.4	
20							3.2	
21								
22								
23								

Time: 60°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 29

(Corrections and additions to previously issued provisional data)

Huancayo, Peru (12.0°S, 75.3°W) September, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01								
02								
03								
04	252							3.2
05							2.4	3.3
06	246						3.3	3.2
07							4.7	
08							5.5	
09							5.5	
10							5.5	
11							5.5	
12							5.5	
13							4.7	
14							4.2	
15	330						3.6	
16							3.2	
17								
18								
19		7.04						2.7
20								
21								
22								
23	231							

Time 75°W.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 31

(Corrections and additions to previously issued provisional data).

Mt. Stromlo, N.S.W., Australia (35.3°S, 149.0°E) September, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	278	3.62						
01	278	3.58						
02	272	3.57						
03	261	3.45						
04	262	3.16						
05	279	2.94						
06	258	3.68						
07	270	4.70						
08	294	5.29	233	3.93	106	2.62		
09	315	5.67	220	4.16	103	2.93		
10	321	5.74	211	4.31	102	3.11		
11	332	6.08	210	4.41	101	3.27		3.1
12	322	6.38	210	4.43	102	3.38		
13	309	6.31	217	4.40	102	3.33		
14	304	6.16	212	4.30	102	3.18		
15	290	5.34	206	4.08	102	2.99		
16	273	5.54	222	3.62	104	2.63		
17	252	5.43						
18	240	5.04						
19	252	4.67						
20	271	4.32						
21	272	4.14						
22	275	3.90						
23	278	3.73						

Time: 150°E.
Length of time sweep: 1.6 Mc to 12.5 Mc in two minutes.

Table 30

(Corrections and additions to previously issued provisional dat

Brisbane, Q., Australia (27.6°S, 153.0°E) September, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								3.5
01	264	3.96						3.4
02	257	3.83						
03	239	3.73						
04	240	3.11						
05		2.93						
06		2.90						
07		3.83						3.5
08	263	5.28	233	3.57				3.4
09	276	6.03	228	4.03	116	2.80		
10	280	6.56	216	4.23	114	2.90		
11	275	6.68	208	4.36	111	3.08		
12	285	6.51	198	4.39	111	3.19		
13	281	6.64	197	4.38	110	3.20		3.4
14	286	6.42	200	4.37	112	3.15		3.3
15	278	6.26	203	4.23	114	3.01		3.6
16	275	5.87	211	4.05	117	2.76		
17	257	5.52	210	3.57				
18	240	5.19						3.4
19	241	5.00					2.5	3.3
20	249	4.71						3.2
21	273	4.38						3.1
22	283	4.35						
23	273	4.30						
	268	4.11						

Time: 150°E
Length of time sweep: 2.2 Mc to 12.5 Mc in two minutes, thirty seconds.

Table 32

(Corrections and additions to previously issued provisional data)

Christchurch, N.Z. (43.5°S, 172.8°E) September, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01								
02								
03								
04								
05								
06								
07								
08								
09								
10							3.2	
11							3.9	
12							3.1	
13							3.2	
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								

Time: 172.5°E.
Length of time sweep: 2.5 Mc to 12 Mc in two minutes.

Table 33

(Corrections and additions to previously issued provisional data).

Baffin Island, Canada (70.5°N, 68.6°W) August, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.42						
01								
02								
03								
04		3.39						
05			223					
06		3.78						
07	374							
08		4.24		3.53				
09			230					
10								
11	407	4.42						
12								
13					116			
14	391	4.41		3.71				
15		4.36				2.51		
16								
17		4.35				2.39		
18								
19	240							
20								
21		3.77						
22								
23								

Time: 75°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 34

(Corrections and additions to previously issued provisional data).

Reykjavik, Iceland (64.1°N, 21.7°W) August, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00							3.3	
01							3.3	
02							4.3	
03							3.5	
04							3.4	
05								
06	216							
07								
08								
09					100			
10			205		100			3.2
11					100			
12					100			
13					100			
14					100			
15					103			
16					117			
17			215		110			
18								
19								
20							3.0	
21							3.0	
22							3.0	
23							3.0	

Time: 15°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 35

S[illegible]ovsk USSR (56.8°N, 61.1°E) August, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	264	3.6						
01	290	3.3						
02	295	3.1						
	302	2.9						
	[illegible]	3.1						
05	[illegible]	3.6			124	1.8		
06	347	4.1	233	3.5	125	2.05		
07	306	4.4	230	3.8	110	2.4	3.7	
08	328	4.8	218	3.9	103	2.6	4.3	
09	340	5.1	219	4.1	101	2.8	4.4	
10	338	5.2	217	4.1	102	2.9	4.3	
11	334	5.4	212	4.2	102	2.9	4.0	
12	320	5.4	205	4.2	102	3.0	4.0	
13	325	5.4	207	4.2	101	2.9	3.9	
14	315	5.3	206	4.1	103	2.9		
15	302	5.[illegible]	211	4.1	100	2.7		
16	280	5.[illegible]	217	4.0	105	2.8		
17	260	4.[illegible]	220	3.8	108	2.45		
18	248	4.9	225	3.8	120	2.0		
19	248	4.8			128	1.8		
20	254	4.8					1.9	
21	258	4.8					3.4	
22	267	4.[illegible]					2.6	
23	274	4.0					3.2	

Time: Local.

Table 36

Tomsk, USSR (56.4°N, 85.0°E) August, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	250	4.7					3.4	
01	255	4.4						
02	260	4.1						
03	270	3.8						
04	270	3.9						
05	270	4.3	240		110	1.7		
06	300	4.8	220	3.9	110	2.0		
07	320	5.2	210	4.2	110	2.3		
08	340	5.4	210	4.5	100	2.6		
09	390	5.5	210	4.7	100	2.8		
10	360	5.8	210	4.8	110	3.0		
11	360	5.9	210	4.95	100	3.2		
12	340	6.2	220	5.0	100	3.3		
13	320	6.1	215	5.0	110	3.1		
14	340	6.0	210	4.9	100	3.1		
15	330	5.9	200	4.9	100	2.9		
16	330	5.9	210	4.65	100	2.7		
17	300	5.6	210	4.5	105	2.5		
18	280	5.7	210	4.1	110	2.3		
19	260	5.7	220	4.0	110	2.0		
20	240	5.8	230		110	1.7		
21	240	5.6					3.9	
22	250	5.4					3.3	
23	250	5.1					3.4	

Time: 90°E.

Table 37

(Corrections and additions to previously issued provisional data)

Delhi, India (28.6°N, 77.2°E) August, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.44						
01		3.48						
02		3.21						
03		2.93						
04		2.87						
05		2.96						
06		4.19						
07		5.39						
08		5.89						
09		6.04						
10		6.50						
11		7.56						
12		8.38						
13		9.47						
14		9.69						
15		9.84						
16		9.36						
17		8.72						
18		7.51						
19		6.58						
20		5.40						
21		4.43						
22		4.02						
23		3.68						

Time: 75°E.

Table 38

(Corrections and additions to previously issued provisional data)

Brisbane, Q., Australia (27.5°S, 153.0°E) August, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01								
02								
03		3.38						
04								
05								
06								
07								
08			244					
09			237					
10			229					
11		5.98	218					
12			210					
13								
14								
15			222				2.5	
16			217				3.5	
17								
18							3.1	
19							3.0	
20								
21								
22								
23								

Time: 150°E.
Length of time sweep: 2.2 Mc to 12.5 Mc in two minutes, thirty seconds.

Table 39

(Corrections and additions to previously issued provisional data)

Mt. Stromlo, N.S.W., Australia (35.3°S, 149.0°E) August, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01								
02								
03								
04								
05								
06								
07								
08								
09								
10								
11								
12					106			
13								
14								
15								
16								
17								
18								
19								
20								
21								
22		3.20						
23	278							

Table 40

(Corrections and additions to previously issued provisional data)

Baffin Island, Canada (70.5°N, 68.6°W) July, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01								
02								
03								
04								
05	293	3.94	205					
06	332			3.51				
07	374	4.28						
08		4.28						
09						2.76		
10		4.56						
11								
12								
13								
14			203					
15		4.38						
16								
17				3.55	118	2.48		
18								
19	274							
20	244	3.99		3.06				
21								
22	225							
23								

Time: 75°W.

Table 41

(Corrections and additions to previously issued provisional data)

Baffin Island, Canada (70.5°N, 63.6°W) June, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.71						
01								
02				2.82				
03								
04	309				148			
05						2.40		
06	405	3.92						
07	432	4.14			117			
08	405			3.76				
09								
10	348	4.81			112			
11	372		214	3.88				
12								
13								
14		4.40						
15								
16								
17			208	3.60				
18					134			
19		4.10		3.23	137			
20								
21								
22								
23								

Time: 75°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 42

(Corrections and additions to previously issued provisional data)

Baffin Island, Canada (70.5°N, 68.6°W) May, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	241							
01								
02								
03			225					
04		3.74	216					
05				3.28				
06	390							
07		4.25		3.47	123			
08				3.61				
09				3.85				
10				3.80				
11		4.60	206	3.86				
12	373							
13	406			3.78				
14			210					
15					120			
16		4.31	213	3.57				
17								
18								
19		3.99						
20		3.80						
21								
22								
23								

Time: 75°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

TABLE 43

IONOSPHERE DATA-I

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of h'_{F_2} in km for October (Month) 1944

Records measured by: S.M.O. H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1	260	260	240	280	270	260	240	240	240	280	280	280	300	300	280	280	260	240	220	220	240	250	260	260	6240	
2	280	280	280	260	(300)	[28]A	240	250	260	260	320	320	300	310	280	C	C	C	C	C	C	260	260	280	5020	
3	280	C	C	C	C	C	C	C	C	C	300	280	280	280	290	280	280	240	240	240	260	260	280	260	4050	
4	280	280	(300)	280	240	260	240	240	220	260	270	290	280	290	280	280	250	220	220	220	260	270	280	280	6270	
5	280	260	260	260	240	260	240	240	240	260	260	280	280	270	280	270	240	240	220	240	260	280	280	280	6220	
6	270	280	270	240	240	240	240	240	260	260	280	270	280	280	270	270	260	240	220	220	250	240	260	260	6140	
7	280	280	280	[27]A	270	280	250	240	280	280	280	310	[32]E	300	280	280	240	240	220	240	240	260	280	270	6470	
8	300	(310)	300	280	260	240	230	220H	220	260	260	300	300	280	280	280	260	230H	220	220	240	260	280	300	6330	
9	300	310	(300)	240	250	260	240	240	260	250	260	280	300	280	300	280	240	220	220	220	240	250	280	260	6280	
10	280	280	280	260	260	260	240	240	240	260	270	300	300	280	280	260	260	240	230	240	280	300	280	300	6420	
11	280	280	260	(250)	240	280	[25]A	240	270	280	300	340K	360K	340K	320K	330K	280K	300K	[29]A	290K	300K	290K	300K	320K	6990	
12	300K	300K	(340)K	A K	A K	A K	290	260	(230)	300	280	[29]A	290	290	280	280	260	240	240	(260)	270	240	240	(270)	5750	
13	280	280	280	280	280	280	(260)	220	250	270	280	280	300	280	270	280	250	240	240	260	260	(300)	280	260	6460	
14	310	(320)	300	[28]A	280	270	(250)	220	240	260	280	280	280	260	270	280	240K	250K	260K	280K	280K	300K	280K	250K	6520	
15	290K	280K	(280)K	(280)K	300K	280K	280K	260K	310K	360K	300K	280K	300K	290K	280K	300K	280K	240K	260K	220K	240K	300K	270K	280K	6760	
16	280K	280K	280K	280K	(300)K	280K	260	240	240	260	300	280	280	260	260	260	240	220	220	240	260	260	280	280	6340	
17	280	280	260	260	280	260	260	230	220	260	280	260	260	260	280	270	240	240	240	260	280	280	280	280	6300	
18	280	260	280	280	(280)	(300)	280	240	220	280	280	270	260	260	270	250	240	220	220	240	260	260	300	280	6310	
19	280	290	280	280	260	240	240	240	240	240	300	300	260	260	260	260	240	220	220	220	260	[27]A	300	280	6240	
20	280	260	280	260	250	260	240	220	240	250	260	280	280	280	280	260	240	220	220	240	260	270	280	280	6190	
21	280	260	280	240	240	260	260	220	240	(270)	260	260	270	280	280	260	240	220	240	240	230	240	280	260	6110	
22	260	270	(280)	(260)	270	260	220	220	230	240	240	280	260	280	270	260	240	220	220	220	240	280	280	270	6070	
23	280	280	260	260	260	260	240	220	220	240	250	280	300	280	280	260	240	220	220	210	260	260	300	290	6170	
24	290	260	240	220	240	260	(260)	220	230	260	260	260	260	280	280	250	240	240	240	240	240	260	260	280	6070	
25	[30]A	300	260	260	260	240	240	220	240	240	250	280	270	260	250	260	230	200	220	240	260	[27]A	300	280	6130	
26	[29]A	280	270	260	260	260	240	240	240	260	260	260	260	280	260	250	220	210	220	220	(250)	280	310	(310)	6190	
27	(290)	280	270	260	260	240	230	220	220	240	260	260	280	280	270	260	220	220	230	220	260	280	260	260	6070	
28	280	(320)	310	290	280	[28]A	(300)	240	240	240	260	280	260	260	260	260	240	220	220	240	260	250	260	270	6320	
29	280	280	240	240	240	240	240	220	220	260	260	260	240	260	260	260	240	220	220	240	250	260	260	260	5950	
30	300	260	260	280	260	250	240	240	230	240	250	270	260	260	260	250	240	220	220	240	260	280	280	280	6130	
31	300	270	260	260	250	280	240	240	260	240	260	260	260	260	260	260	230	220	220	240	220	260	260	280	6090	
Sum	8820	8430	8280	7650	7620	7620	7480	7020	7250	7860	8450	8720	8730	8630	8520	8080	7380	6910	6890	7120	7670	8320	8600	8570	190620	
Mean[1]	284	281	276	264	263	263	249	234	242	262	272	281	282	278	275	269	246	230	230	237	256	268	277	276		
Mean[2]	284	280	273	262	260	261	248	233	239	259	272	279	278	276	273	266	244	227	225	234	254	265	277	276		
Median	280	280	280	260	260	260	240	240	240	260	270	280	280	280	280	260	240	220	220	240	260	260	280	280		

[1]For all days of the month

[2]For quiet days

TABLE 44

IONOSPHERE DATA-2

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $f^{o}F_2$ in {Mc / Mo} for October (Month) 1944

Records measured by: S.M.O. H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1	2.6	2.5	2.3	2.3	2.4	2.4	3.2	5.1	5.8	5.6	6.2	6.4	6.3	6.8	7.1	(6.9)	6.6	(6.2)	6.4	4.9	4.1	3.6	3.2	2.7	111.6	
2	2.4	2.2	2.4	2.5	2.2	(2.3)	3.4	4.4	5.4	5.4	5.2	5.9	6.1	6.3	6.6	C	C	C	C	C	C	2.8[F]	2.7[F]	2.4[F]	70.6	
3	(2.3)[F]	C	C	C	C	C	C	C	C	C	6.0	6.7	7.0	6.9	6.4	6.0	5.9	6.1	5.1	4.7	4.6	3.4	3.3	3.2	77.6	
4	2.8	3.0	2.8	2.6	2.6	2.7	3.6	5.4	5.6	5.6	6.6	6.5	6.4	6.7	6.6	6.6	6.8	6.4	5.5	3.7	3.1	3.0	3.2	3.0	110.8	
5	3.0	3.0	2.9	2.8	2.7	2.4	3.3	5.1	5.5	6.2	6.4	7.1	(7.3)	7.0	7.2	7.1	6.8	6.5	5.3	4.2	3.3	3.1	3.2	3.0	114.4	
6	3.1	3.0	3.0	3.1	2.9	2.7	3.3	4.8	6.4	6.6	6.5	(7.0)	7.2	(7.5)	7.8	(7.8)	8.2	7.4	6.5	5.7	4.8	4.3	4.1	3.7	127.4	
7	3.6	3.7	3.2[F]	(2.8)	2.8	2.4	2.9	4.5	4.7	5.1	5.8	5.6	[6.0][C]	6.6	7.0	7.0	7.4	5.9	5.2	4.5	3.8	3.1	3.1	2.9	129.6	
8	2.7	2.5	2.6[F]	2.6	2.3[F]	2.3[F]	3.0	4.9[M]	5.7	5.6	5.5	5.1	6.2	6.4	6.9	6.9	7.1	6.6[M]	5.4	4.8	3.9	3.1	2.7	2.5	107.3	
9	2.4	2.6[F]	2.8	2.7[F]	2.6[F]	2.7[F]	3.2	5.6	5.8	5.6	6.2	6.0	6.6	7.1	6.6	7.1	7.2	6.8	6.0	4.3	3.1	2.5	(2.4	(2.3	1.0.2	
10	2.3[F]	2.4	2.4[F]	(2.6)[F]	2.6[F]	2.7[F]	3.0	5.0	5.9	5.4	5.5	6.0	6.2	6.9	6.2	6.6	6.4	6.8	5.7	4.6	4.1	4.2	4.0	3.1	2	
11	3.6	3.5	3.5	2.7[F]	2.3[F]	(2.2)[F]	(2.7)	4.9	5.8	6.6	6.5	6.8[K]	7.3[K]	6.2[K]	5.3[K]	4.7[K]	4.5[K]	4.4[K]	[4.0][A][K]	3.6[K]	2.6[K]	2.4[F]	2.6[F]	2.4[K]	1.1.8	
12	2.1[F][K]	(1.9)[F][K]	(1.8)[F][K]	A[K]	A[K]	A[K]	2.4[F]	3.9	4.4	5.3	5.4	(5.4)	5.7	6.0	6.2	6.2	6.0	6.4	5.5	5.0	4.0	3.4	3.0	(2.3[F]	7.2.3	
13	2.1[F]	2.0[F]	(1.7)[F]	(2.0)[F]	2.0[F]	2.4[F]	2.9[F]	4.7	5.3	5.4	6.0	6.4	6.7	(7.6)	6.8	6.7	6.8	6.4	4.9	4.6	4.1	3.4	3.3	3.0	127.6	
14	2.6	2.8[F]	2.8[F]	[2.8][A]	2.7[F]	2.2[F]	2.7[F]	4.6	5.8	6.7	(7.6)	8.4	(7.9)	8.0	6.7	6.8	6.4[K]	6.9[K]	6.5[K]	5.7[K]	5.7[K]	5.2[K]	5.2[K]	4.2[K]	124.1	
15	(2.2[F][K]	2.3[F][K]	(2.2)[F][K]	2.1[F][K]	2.2[F][K]	(1.8)[F][K]	2.1[F][K]	3.9[K]	4.5[K]	4.7[K]	5.2[K]	5.7[K]	5.8[K]	6.2[K]	5.7[K]	5.7[K]	5.4[K]	5.5[K]	4.6[K]	3.4[F][K]	2.4[F][K]	2.2[F][K]	2.2[F]	1.9[F]	97.7	
16	1.7[F][K]	1.6[F][K]	1.5[F][K]	1.5[F][K]	(1.5)[F][K]	1.6[F][K]	2.1[F]	4.5	5.3	5.8	6.3	7.8	8.0	7.8	6.8	6.7	6.4	5.6	4.5	3.5[F]	3.4	3.1	3.1	2.9	133.3	
17	2.8	2.8	2.6	2.4[F]	2.3[F]	2.2[F]	2.6	4.7	5.2	6.2	6.8	7.0	7.0	7.0	6.7	6.6	6.3	5.8	5.4	4.7	3.9	3.7	3.5	3.2	1.1.4	
18	3.5	2.9[F]	(2.6)[F]	2.5[F]	2.4[F]	2.2	2.3[F]	4.4	4.9	5.9	6.6	7.8	(7.7	7.3	7.4	7.1	6.4	5.8	5.6	4.1	3.3	3.0	3.1	2.9	1.1.6	
19	2.6[F]	2.5[F]	2.5[F]	2.5[F]	2.6[F]	2.3[F]	2.6[F]	4.9	5.2	5.3	5.7	6.3	6.6	6.9	6.7	6.5	6.1	5.3	4.6	(3.7)	2.9	2.7	2.6	2.5	122.6	
20	2.5[F]	2.3	2.3[F]	2.6	2.6[F]	2.6[F]	2.7[F]	4.8[F]	5.7[F]	6.6	6.1	6.3	7.0	7.4	7.0	7.4	7.2	5.4	4.9	4.2	3.9	3.3	3.2	3.0	111.6	
21	2.9	2.8	2.7[F]	2.2[F]	2.0[F]	2.2[F]	2.7[F]	5.4	5.7	6.7	6.8	6.2	7.3	(7.7)	7.4	7.3	7.0	(6.2)	5.1	4.6	3.4	3.3	3.1	3.0	1.1.8	
22	3.0	2.9	(2.9)	2.8[F]	2.5[F]	2.5[F]	2.8	4.7	(5.6)	6.0	5.8	6.8	7.8	(7.4)	7.8	(7.8)	7.0	6.4	5.2	3.5	3.2	2.5	2.3	2.6	1.1.2.1	
23	2.6	2.7	2.9	3.0	3.1	3.2	3.2	4.9[M]	5.5	6.3	6.7	7.0	(7.6)	8.5	(9.2)	9.3	7.8	7.0	6.8	4.5	4.4	3.6	3.7	3.5	127.6	
24	3.5	3.4	3.3	3.1	(2.5)	2.3	(2.6)	(5.2	6.4	6.2	7.3	7.2	7.8)	7.8	8.4	7.9	7.6	6.6	5.7	5.6	4.3	3.7	3.0	2.8	1.1.7.3	
25	[2.7][A]	3.0[F]	3.2	3.3	3.3	3.1	2.8	5.0	6.0	6.5	7.0	7.2	8.2	8.0	8.2	(8.4)[J]	(7.4)	5.7	5.2	4.0	3.4	[3.1][A]	3.0	3.0	1.1.9.2	
26	(2.9)	3.1	2.6[F]	3.0[F]	3.3	3.2	3.0	4.6	6.4	6.4	6.8	7.0	7.4	7.6	7.2	7.4	6.8	5.9	4.9	4.0	2.8	2.4[F]	2.4[F]	2.4[F]	1.1.3.5	
27	2.5[F]	2.7[F]	2.9[F]	3.0[F]	3.1[F]	3.1[F]	3.1	4.8	5.5	6.1	6.2	6.8	7.1	7.3	8.0	7.6	6.8	5.5	5.0	4.0	3.1[F]	3.0	3.0[F]	3.0[F]	1.1.3.2	
28	3.0[F]	(2.7)[F]	2.3[F]	2.2[F]	2.2[F]	[2.0][A]	1.8[F]	4.6	5.5	6.4	6.6	6.8	7.1	(7.4)	6.8	(7.2)	7.0	6.8	5.4	4.8	3.8	3.3	3.0[F]	2.8[F]	1.1.1.5	
29	2.7[F]	2.8[F]	2.9[F]	2.7[F]	2.5[F]	2.3[F]	2.2[F]	4.6	5.8	6.2	6.6	(7.0)	7.4	7.3	6.9	7.2	6.8	6.2	5.6	4.8	4.4	4.1	3.7	3.4	1.1.6.1	
30	3.0[F]	3.2[F]	3.1[F]	3.1[F]	2.9[F]	3.1[F]	3.2[F]	4.8	6.1	6.2	6.5	(7.4)	8.0	7.3	1.7.9)	7.2	6.8	6.0	4.6	3.9	3.4	3.0	3.0[F]	2.8[F]	1.1.6.5	
31	3.1[F]	3.4	3.1[F]	3.2[F]	2.7[F]	2.8[F]	2.8[F]	4.0	6.0	(6.9)	6.8	7.6	8.4	8.0	7.6	7.6	7.3	6.3	4.5	4.1	3.7	2.8	2.4	2.8[F]	1.1.9.4	
Sum	84.8	82.2	79.8	76.7	73.8	71.9	84.2	143.2	167.4	179.5	194.4	207.6	219.1	222.7	219.1	212.9	202.2	184.8	155.0	131.5	....	90.6	76.0	68.7	3377	337.7.8
Mean[1]	2.74	2.74	2.66	2.64	2.54	2.48	2.81	4.77	5.58	5.98	6.27	6.70	7.07	7.18	7.07	7.03	6.74	6.16	5.30	4.38	3.70	3.24	3.12	2.83		
Mean[2]	2.81	2.83	2.75	2.71	2.60	2.54	2.83	4.80	5.62	6.13	6.30	6.73	7.10	7.26	7.18	7.16	6.88	6.22	5.33	4.43	3.72	3.24	3.10	2.90		
Median	2.7	2.8	2.75	2.7	2.6	2.4	2.8	4.8	5.8	6.15	6.3	6.8	7.2	7.3	6.9	7.1	6.8	6.2	5.2	4.4	3.6	3.3	3.0	2.9		

[1] For all days of the month

[2] For quiet days

October, 1944

TABLE 45

IONOSPHERE DATA-3

RESTRICTED

(Location) Washington, D.C.

(Institution) National Bureau Of Standards

Half hourly values of $f^{\circ}F_2$ in $\{^{Mc}_{km}$ for October (Month) 1944

TIME: 75° W MERIDIAN

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	Sum	Mean
1	2.4	2.4	2.2	2.4	2.4	2.5	4.3	5.4	5.3	6.0	6.1	6.4	6.4	(7.0)	6.8	6.9	6.4	6.4	5.5	4.6	3.8	3.2	2.7	2.6	110.5	
2	2.3	2.3	2.4	(2.3)	2.3	2.5	4.0	4.5	5.4	[5.2]^{C}	5.5	6.0	6.0	[6.5]^{C}	6.4	C	C	C	C	C	C	2.8^{F}	2.6^{F}	2.5)^{F}	71.8	
3	C	C	C	C	C	C	C	C	C	C	6.2	6.9	(7.4)	6.6	6.2	5.8	5.9	5.4	5.3	5.0	3.7	3.4	3.2	2.9	74.0	
4	2.9	2.9	2.8	2.6	2.7	2.7	4.8	5.4	5.7	6.4	6.2	6.8	6.8	6.8	6.6	6.6	6.8	5	4.6	3.4	2.7	3.1	3.1	3.0	111.2	
5	3.0	2.9	3.0	2.8	2.6	2.5	4.3	5.2^{H}	5.9	6.2	6.5	6.8	(7.4)	7.1	7.4	6.9	6.8	5.6	4.7	3.5	3.1	3.1	3.1	3.1	113.5	
6	3.0	3.	3.1	3.1	2.9	2.7	4.4	5.6^{H}	6.1	6.0	7.1	6.9	7.4	7.6	7.7	(8.1)	7.5	7.2	7.0	5.0	4.6	4.1	3.7	3.8	127.9	
7	3.7	3.3	2.8	2.8	2.6	2.3	3.8	4.6	5.0	5.5	5.5	[5.8]^{C}	6.4	6.8	6.8	7.0	6.3	5.8	4.8	4.1	3.3	3.1	3.0	2.7	107.8	
8	2.6	2.4)^{F}	2.5^{F}	(2.3)^{C}	2.3^{F}	2.3^{F}	4.0	5.5	5.6	5.7	5.4	5.7	6.2	6.4	7.0	7.2	7.2	6.2	5.4	4.3	3.4	2.7	2.5	2.4	107.4	
9	2.6^{C}	2.8	2.7^{C}	2.6^{F}	2.6^{F}	2.6^{F}	4.4	5.7	5.4	5.7	6.0	6.0	7.1	6.8	7.0	7.0	6.9	6.4	4.7	3.5	2.7	2.5	2.4	2.3	108.6	
10	2.3^{F}	2.4	2.6	2.5^{F}	2.5^{F}	2.6^{F}	4.2	5.3	5.7	5.8	5.8	6.0	6.5	[6.5]^{C}	6.8	6.4	6.6	6.2	5.3	4.2	3.9	3.9	3.7	3.4	111.1	
11	3.6	3.6	2.9^{F}	2.5^{F}	2.2^{F}	(1.8)^{F}	[3.7]^{A}	5.4	6.5	6.2	6.8	6.9^{K}	6.8^{K}	6.1^{K}	4.9^{K}	4.7^{K}	(4.4)^{K}	4.3^{K}	3.2^{K}	2.8^{A}	(2.6^{A}	(2.8)^{K}	2.6^{K}	(2.1)^{F_2}	99.4	
12	2.^{F_2}	1.8^{F_2}	A^{K}	A^{K}	A^{K}	[1.9]^{A}	3.3	4.7	4.7	5.4	5.7	(5.7)	[5.9]^{A}	6.0	6.0	6.2	6.0	6.1	5.4	4.4	3.6	3.1	2.6^{F}	2.2^{F}	92.8	
13	2.0^{F}	1.7^{F}	(2.0)^{F}	(2.0)^{F}	2.1^{F}	2.3^{F}	3.9	5.2	5.3	5.4	6.2	6.4	7.1	7.4	[6.8]^{C}	[6.8]^{C}	6.2	5.5	4.5	4.3	4.0	3.3	3.3	2.7^{F}	106.4	
14	[2.8]^{A}	(2.8)^{F}	2.8	2.8^{F}	(2.5)^{F}	2.0^{F}	4.0	5.2	6.2	(7.7)	(7.8)	8.4	7.8	(7.0)	6.6	6.4	6.7^{K}	6.6^{K}	5.5^{K}	5.6^{K}	5.5^{K}	4.9^{K}	(4.3)^{K}	(2.0)^{F_2}	123.9	
15	2.2^{F}	(2.2)^{F_2}	(2.1)^{K}	2.2^{F_2}	2.2^{F_2}	(1.5)^{F_2}	3.3^{K}	4.2^{K}	4.6^{K}	5.2^{K}	5.6^{K}	5.8^{K}	6.0^{K}	5.8^{K}	5.7^{K}	5.7^{K}	5.7^{K}	4.8^{K}	4.8^{K}	3.3^{F_2}	2.2^{F_2}	2.1^{F_2}	2.2^{F_2}	1.7^{F_2}	91.1	
16	1.6^{F_2}	1.5^{F_2}	(1.4)^{F_2}	1.5^{F_2}	(1.5)^{F_2}	1.5^{F_2}	3.6	4.1	5.3	5.8	7.2	7.7	7.9	7.2	6.7	6.8	6.0	5.1	4.1	3.7	3.3	3.0	2.9	2.9	103.1	
17	2.8	2.8	2.5	2.3^{F}	2.3^{F}	2.1^{F}	4.0	5.4	(6.0)	6.0	(7.3)	7.2	7.2	6.7	6.6	6.4	6.0	5.7	5.4	4.1	3.8	3.6	3.4	3.4	113.0	
18	2.3	2.6^{F}	(2.5)^{F}	2.6^{F}	2.3^{F}	2.1^{F}	3.4	4.7	5.4	6.4	7.2	7.8	7.7	7.6	7.2	6.8	6.2	5.4	4.3	3.7	3.3	3.0	2.9	2.7^{F}	111.3	
19	2.5^{F}	2.4^{F}	2.6^{F}	2.5^{F}	2.4^{F}	2.3^{F}	3.7	5.2	5.3	5.5	5.9	(7.1)	6.4	6.7	6.7	6.4	5.6	5.2	4.1	3.2	2.8	2.6	(2.5)^{F}	2.5	102.1	
20	2.3^{F}	2.3^{F}	2.4	2.6	2.6^{F}	2.4^{F}	3.8	5.4	6.4	6.5	6.1	7.0	7.0	7.0	7.2	7.6	6.2	5.2	4.8	4.1	3.6	3.3	3.1	2.9	111.8	
21	2.8	2.8	2.5	2.1^{F}	2.1^{F}	2.3	4.1	5.5	5.5	6.6	(6.3)	7.3	7.5	7.4	(7.4)	7.1	6.5	5.3	4.9	3.9	3.3	3.2	3.1	3.0	112.5	
22	3.0	2.9	2.9^{F}	2.6	2.5^{F}	2.7	3.9	5.6	5.9	6.1	6.6^{H}	7.3	7.3	(7.8)	(7.9)	7.3	7.0	5.7	4.2	3.5	2.7	2.5^{F}	2.6	2.7	113.2	
23	2.7	2.8	2.8	3.0	3.1	3.1	4.1	5.5	5.9	6.5	6.8	7.2	8.4	8.6	9.8	9.4	7.6	7.2	5.7	4.6	4.1	3.7	3.7	3.6	129.9	
24	3.5	3.4	3.2	2.7	2.3	2.4	3.6	5.5	5.9	6.6	7.4	(7.6)	7.6	(8.0)	8.5	7.4	7.2	6.2	5.7	4.8	3.9	3.3	2.8	2.6	122.1	
25	2.8	3.1	3.2	3.3	3.2	2.7	3.6	5.5	5.8	6.8	7.2	7.6	8.0	8.2	(7.6)	(7.9)	6.7	5.4	4.7	3.4	3.3	(2.9)	2.7	2.9^{F}	118.5	
26	3.1	(3.0)^{F}	2.6^{F}	3.1^{F}	(3.3)	3.2	3.3	5.1	6.2	6.8	6.7	7.0	(7.6)	7.4	(7.6)	7.0	6.4	5.1	4.5	3.4	2.6^{F}	2.3	2.3^{F}	2.4^{F}	112.0	
27	2.7^{F}	2.8^{F}	2.8^{F}	2.9^{F}	3.0^{F}	3.2	3.9	5.3	6.0	6.2	(7.0)	7.0	(7.2)	7.7	(7.8)	7.4	5.9	4.8	4.7	3.4	3.0	2.9	3.1	2.9^{F}	113.6	
28	3.2	2.6^{F}	2.3^{F}	2.2^{F}	2.2^{F}	(2.3)	3.1^{F}	5.2	6.1	6.1	6.8	6.7	7.8	(7.4)	(7.7)	7.2	6.8	(6.2)	5.1	4.3	3.4	3.1	2.9^{F}	2.7^{F}	113.4	
29	2.7^{F}	2.8^{F}	2.9^{F}	2.6^{F}	2.5^{F}	2.3^{F}	3.4^{F}	5.3^{H}	5.8	5.8	6.3	7.2	7.0	7.0	7.1	6.8	6.3	5.9	5.2	4.8	4.2	3.8	3.5	3.2	114.4	
30	3.2^{F}	3.1^{F}	3.1^{F}	3.1^{F}	3.1^{F}	3.2^{F}	3.7	6.0	5.9	6.3	6.7	7.8	(8.0)^{J}	7.2	[7.4]^{C}	7.2	6.4	5.4	4.2	3.5	3.1	3.2	3.0	3.0	116.8	
31	3.3	3.2^{F}	3.0^{F}	3.0^{F}	2.8^{F}	2.9^{F}	3.5	5.3	5.7	7.2	(7.5)	8.5	8.2	7.7	7.7	7.7	6.6	5.4	4.5	4.4	3.2	2.7	2.9	2.7	120.8	
Sum	83.0	80.7	76.6	75.0	73.1	72.9	115.1	158.0	171.7	183.6	201.4	214.5	222.0	220.0	219.6	208.1	192.8	171.3	147.0	120.8	102.9	97.4	92.7	85.5	3385.9	
Mean[1]	2.77	2.69	2.64	2.39	2.52	2.43	3.84	5.27	5.72	6.12	6.50	6.92	7.16	7.10	7.08	6.94	6.43	5.71	4.90	4.03	3.43	3.14	3.00	2.76		
Mean[2]	2.86	2.78	2.71	2.64	2.57	2.52	3.86	5.30	5.76	6.15	6.53	6.96	7.21	7.18	7.21	7.06	6.52	5.76	4.94	4.04	3.43	3.[illegible]	2.[illegible]	2.85		
Median	2.8	2.8	2.7	2.6	2.5	2.4	3.85	5.3	5.8	6.1	6.5	7.0	7.2	7.0	7.0	7.0	6.4	5.6	4.8	4.1	3.3	3.1	2.9	2.7		

[1] For all days of the month

[2] For quiet days

$f^{\circ}F_2$

October, 1944

TABLE 46

IONOSPHERE DATA-4

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $h'F_1$ in ☐ km for October (Month) 1944

Records measured by: S.M.O. H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1								220	230	200^H	200	200	220	220	240	220	(220)								2170	
2								200^H	240	200^H	190	200	200	180^H	220	C	C								1630	
3								C	C	C	200^H	200	210	200^H	220	240	220								1490	
4										200	[210]^A	220	200	210	210	220	220								1690	
5										200	220	200	210	220	220	240									1510	
6									200^H	220	200	200^H	200	220	200^H	240	230								1910	
7									220	220^H	220^H	210	[220]^K	240	240	220	220								2010	
8										220	200	200	200	230	200^H	220	220								1690	
9									220	220	200	200	200	230	240	220	240								1970	
10									230	210	200	210	200	220	220	220	240								1950	
11									240	220	200	220^K	220^K	230^K	260^K	240^K	240^K	A^K							2070	
12									A	220	240	A	A	A	220	230	220								1130	
13									220	200	180	200^H	210	210^H	200^H	240	A	A							1660	
14										220	220	240	220	220	220^H	220	^{K}	^{K}							1560	
15									220^K	220^K	200^K	200^K	220^H_K	220^K	230^K	230^K	220^H_K	^{K}							1960	
16										220	200	200^H	240	220	220	220									1520	
17										(220)	220^H	230	(210)^H	220	220	220	A	A							1540	
18										[210]^A	220	200^H	(200)^H	200^H	(180)^H	240	A								1450	
19									220	200	200	200	240	220^H	240	220	A								1740	
20										220	200	200	210	200^H	230	240	-								1500	
21									220	210^H	220	200	190^H	220^H	240	240									1740	
22										220	200	200	190^H	220^H	220^H	230	220								1700	
23										200^H	220^H	220	200^A	240	240	220	A								1540	
24										200^H	200^H	190^H	200	230	240	240									1500	
25									200	200	200^H	(210	[240]^A	240	220	220	220								1950	
26									200	200	240	220	220	210	220	220	200								1930	
27									(200)	(220)	200^H	200	200^H	190^H	240	220									1610	
28									210	220	200	(220)	200	(230)	240	240	230								1990	
29										180^H	190^H	220	[230]	220	220	230									1490	
30									220	210	200	200	220	(220)	220	240									1730	
31									200	220	200	200^H	230	220	220	230	220								1940	
Sum								420	3690	6320	6390	6210	6350	6550	6950	6870	3580								53330	
Mean[1]								210	217	211	206	207	212	218	224	229	224									
Mean[2]								210	217	210	206	207	211	218	223	228	223									
Median									220	215	200	200	210	220	220	230	220									

[1] For all days of the month [2] For quiet days

TABLE 47

IONOSPHERE DATA-5

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $f^{\circ}F_1$ in Mc for October (Month) 1944

Records measured by: S.M.O. H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1									3.5	4.0H	4.1	4.2	4.2	4.2	4.2	4.0	3.7								36.1	
2								2.6H	3.7	4.0H	4.1	4.2	4.3	4.2H	4.0	C	C								31.1	
3								C	C	C	4.2H	4.2	4.3	4.2H	4.1	3.8	3.5								28.3	
4										4.0	(4.3)	4.4	4.4	4.3	4.2	3.9	3.6								33.1	
5										4.0	4.1	4.3	4.4	4.3	4.1	[4.0]									29.2	
6									3.6H	(4.1)	4.2	4.3H	4.4	4.2	4.2H	4.0	[3.7]								36.7	
7									3.7	4.0H	4.1H	4.2	[4.3]C	4.3	4.2	4.0	3.5								36.3	
8										3.9	3.8	(4.2)	4.3	4.1	4.3H	3.9	3.6								32.1	
9									3.5	3.8	4.2	4.2	4.3	4.2	4.2	4.0	3.5								35.9	
10									3.6	3.8	4.0	4.3	4.2	4.1	4.0	(3.8)	(3.5)								35.3	
11									3.6	3.9	4.0	4.1K	4.0K	3.9K	3.8K	3.7K	3.4K	A K							34.4	
12									A	3.8	3.9	A	A	A	4.0	3.9									15.6	
13										(3.8)	4.1	4.2H	4.2	4.2H	4.1H	3.8	A	A							28.4	
14										(3.9)	4.2	4.3	4.3	4.1	(4.0)H	(3.8)	K	K							28.6	
15									(3.4)K	3.8K	3.9K	3.8K	4.1HK	4.0K	3.9K	3.7K	(3.3)HK	K							33.9	
16										3.8	3.9	4.2H	4.2	4.0	4.0	(3.8)									27.9	
17										3.8	4.1H	4.1	4.0H	4.0	4.1	3.8	A	A							27.9	
18										(3.7)	4.1	(4.3)H	4.2H	4.2H	3.9H	3.7	A								28.1	
19										(3.8)	4.1	4.2	4.2	4.2H	4.0	3.8	A								28.3	
20										4.0	(4.2)	4.1	4.2	4.2H	4.1	3.9									28.7	
21									(3.4)	(4.1)H	4.0	4.1	(4.3)H	4.2H	4.1	[3.8]									32.0	
22										[3.6]	3.7	(4.0)	4.3H	(4.2)H	4.2H	3.7									27.7	
23										(3.8)H	4.1H	4.2	4.4H	4.2			A								20.7	
24										(4.1)H	4.0H	4.0H	(4.2)	4.3	4.1										24.7	
25									3.1	3.4	H		[4.3]A	[4.1]	3.8	(3.8)	(3.1)								25.6	
26									3.4	3.3	4.0	4.1	4.2	3.9	4.1	3.7									30.7	
27									[3.1]	[3.7]	(4.0)H	[4.1]	[4.1]	(4.1)H	4.0	3.7									30.8	
28									3.3	[3.8]	(4.0)	[4.1]	(4.1)	4.2	4.0	[3.7]									31.2	
29										(3.8)H	3.9H	(4.2)	[4.3]	(4.1)	4.0										24.3	
30										3.6	4.0	[4.2]	4.2	[4.2]	(3.8)										24.0	
31										[3.5]	[4.0]	(4.2)H	4.2	(4.1)	(3.8)										23.8	
Sum								2.6	44.9	114.6	121.3	121.0	127.1	124.5	121.3	95.7	38.4								911.4	
Mean[1]								2.60	3.45	3.82	4.04	4.17	4.24	4.15	4.04	3.83	3.49									
Mean[2]								2.60	3.46	3.82	4.05	4.19	4.25	4.16	4.06	3.84	3.52									
Median									3.5	3.8	4.05	4.2	4.2	4.2	4.05	3.8	3.5									

[1] For all days of the month

[2] For quiet days

TABLE 48

IONOSPHERE DATA-6

RESTRICTED

Washington, D.C. (Location) — Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of h'_E in [illegible] km for October (Month) 1944

Records measured by: S.M.O. H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1								120	120	120	110	120	100	100	120	120	120	120							1270	
2								120	120	120	110	120	120	120	120	C	C	C							950	
3								C	C	C	120	120	120	120	120	120	120	120							960	
4								120	120	120	120	120	120	120	100	110	110	120							1280	
5								140	120	120	120	120	120	120	120	120	120	120							1340	
6								120	120	110	110	120	110	110	120	110	120	140							1290	
7								140	120	110	120	120	120C	120	120	120	120	120							1330	
8								140	120	120	110	110	120	120	120	100	120	100							1280	
9								120	120	120	120	120	120	120	120	100	100	100							1260	
10								140	120	120	120	120	120	120	110	110	120	120							1320	
11									120	120	110	120K	120K	120K	120K	120K	120K	120K							1190	
12									120	120	120	120	110	120	120	120	120	130							1200	
13									110	110	120	120	120	120	120	120	110	110							1160	
14								120	120	110	120	120	120	110	120	120	120K	120K							1300	
15							130K	120K	120K	120K	120K	120K	120K	110K	120K	120K	140K	140K							1480	
16								120	120	120	120	120	120	120	120	110	120H								1190	
17								120	120	110	110	120	120	120	120	110	110	120							1280	
18								120	120	110	110	120	100	110	100	110	110	100							1210	
19								120	120	120	120	120	120	120	120	120	120	120							1320	
20								120	120	120	110	110	120	110	100	100	100	110							1220	
21								110	120	120	110	120	110	100	110	120	110	110							1240	
22								120	120	120	120	120	120	110	110	120	110	120							1290	
23								120	110	120	120	110	120	110	110	100	110	120							1250	
24								120	120	120	120	110	120	120	110	120	120								1180	
25								120	120	120	110	120	100	110	120	110	120	100							1250	
26									120	120	110	120	110	110	110	110	120H	120							1150	
27									120	110	120	120	120	120	110	110	110	110							1150	
28								120	120	120	120	110	110	110	120	120	120	120							1290	
29								120	130	120	120	120	120	120	120	120	110								1180	
30									120	120	120	110	110	110	100	100	100								990	
31								110	120	120	120	110	120	120	110	120	100								1150	
Sum							130	2940	3590	3530	3610	3650	3600	3570	3560	3390	3450	2930							37950	
Mean[1]							130	122	120	118	116	118	116	115	115	113	115	117								
Mean[2]								123	120	118	116	118	116	115	114	112	114	116								
Median								120	120	120	120	120	120	120	120	115	120	120								

[1] For all days of the month

[2] For quiet days

TABLE 49

IONOSPHERE DATA-7

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of f°_{E} in {Mc} for October (Month) 1944

Records measured by: S.M.O. H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1								2.1	2.5	B	B	[3.]^{B}	B	B	B	B	(2.4)	1.9							12.0	
2								1.9	(2.4)	(2.7)	[2.8]^{B}	(3.0)	B	B	(2.9)	C	C	C							15 7	
3								C	C	C	B	B	[3.]^{B}	(3.1)	(3.0)	(2 8)	2.4	1.9							16.3	
4								2.0	(2.4)	A	A	B	A	A	A	2.8	2.5	A							9.7	
5								2.0	[2.5]^{B}	[2.7]^{B}	A	A	A	B	(3.0)	[2.9]^{B}	(2.5)	1.9							17.5	
6								2.0	(2.4)	(2.7)	(3.0)	(3.1)	3.1	3.2	3 0	(2.8)	2.5	2.3							30 1	
7								1.9	2.5	2.8	A	A	C	(3.2)	(3.0)	(2 8)	2.4	A							18.6	
8								1.7	(2.4)	(2.8)	3 0	(3.1)	3.1	3.1	3.0	(2.8)	2.5	1.9							29.4	
9								1.9	(2.3)	(2.7)	(2.8)	3.0	3.2	3.1	3 0	(2.8)	[2.4]^{A}	A							27.2	
10								1.8	2.4	(2.8)	[3.0]^{A}	3.1	3.1	3.1	(2.9)	2.7	2.4	1.8							29.1	
11									A	(2.5)	(2.8)	[2.9]$^{A}_{K}$	2.9^{K}	2.9^{K}	A^{K}	A^{K}	A^{K}	A^{K}							14.0	
12									A	A	A	A	A	A	(3.0)	[2.7]^{A}	2.3	(1.9)							9.9	
13									(2.5)	(2.6)	2.9	3.1	3.1	3.1	2.9	2.8	A	A							230	
14								A	(2.5)	A	A	A	3.1	[3.0]^{A}	2.9	[2.7]^{A}	[2.4]$^{A}_{K}$	(1.7)$^{E}_{K}$							18.3	
15							(1.2)^{K}	[1.8]$^{A}_{K}$	(2.2)^{K}	2.5^{K}	2.7^{K}	2.9^{K}	2.9^{K}	[2.9]$^{A}_{K}$	(2.8)^{M}	(2.5)^{K}	2.1^{K}	1.7^{K}							28.2	
16								(1.9)	[2.4]^{A}	2.6	[2.8]^{B}	2.9	(3.1)	3.0	2.8	2 6	2.0^{H}								26.1	
17								1.8^{F}	[2.3]^{A}	[2.6]^{A}	2.8	3.0	3.0	3.0	2.9	A	A	A							21.4	
18								A	2.2	[2.6]^{A}	[2.8]^{A}	3.0	(3.1)	(3.1)	(2.8)	2.7	(2.3)	A							24.6	
19								1.7	2.3	2.7	2.9	3.0	(3.2)^{F}	3.1	3.0	2.7	(2.3)	(1.6)^{F}							28.5	
20								(1.8)	(2.4)	2.8	A	A	A	3.1	3.0	[2.7]^{A}	[2.3]^{A}	A							18.1	
21								A	A	A	2.9	3.0	3.1	3.0	[2.9]^{A}	2.6	2.3	(1.7)							21.5	
22								(1.7)	[2.3]^{A}	2.7	2.9	3.0	3.1	3.1	(3.0)	2.7	(2.3)	A							268	
23								1.6	2.3	2.7	2.9	(3.1)	[3.]^{A}	3.1	2.9	2.6	A	A							24.3	
24								(1.7)	[2.2]^{A}	2.6	[2.9]^{A}	3.0	3.1	3.2	(3.1)	(2.7)	2.3								26.8	
25								(1.6)	2.3	2.6	2.8	A	A	(3.1)	[2.9]^{A}	A	A	A							15.3	
26									2.3	2.6	2.9	A	A	(3.0)	2.9	[2.7]^{A}	2.1^{H}	A							18.5	
27									2 3	2.7	2.9	3.0	3.1	(3.0)	3.0	[2.7]^{A}	2.2	A							24.9	
28								(1.6)	A	A	(2.8)	[3.0]^{A}	(3.0)	(3.1)	3.0	2.7	2 4	A							21.6	
29								(1.6)	2.4	2.7	3.0	(3.1)	(3.1)	(3.1)	2.9	(2.7)	2.3								26.9	
30									(2.2)	(2.6)	2 9	3.1	3.1	3.1	2.9	2.6	A								22.5	
31								[1.7]^{C}	(2.2)	(2.6)	2.9	3 0	[3.]^{A}	(3.0)	2.8	2.6	2.1								26.0	
Sum							1.2	37.8	61.1	63.9	66.1	66 5	67.8	79.8	82.2	70 4	55.7	20.3							672.8	
Mean[1]							1.2	1.80	2 35	2.66	2 87	3.02	3.08	3.07	2.94	2.71	2 32	1.84								
Mean[2]								1.80	2.36	2.67	2.88	3.04	3.10	3.08	2.94	2.72	2.33	1.88								
Median								1.8	2.35	2.7	2.9	3.0	3 1	3 1	2.9	2.7	2.3	1.9								

[1] For all days of the month

[2] For quiet days

TABLE 50

IONOSPHERE DATA-8

RESTRICTED

Washington, D. C. (Location) — Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of E_s in {No / km} for October (Month) 1944

Records measured by: S.M.O. H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1	#6/120		1.9/120		2.6/120	2.6/100	1.8/120															2.4/100	2.5/120	2.4/120		
2	2.6/120	3.9/120	#3/120	3.5/120	#2/120	#4/110	2.7/120	2.5/120							C	C	C	C	C	C	C	2.4/110	2.2/120	2.6/120		
3	3.2/110	C	C	C	C	C	C	C	C	C								2.1/160		1.8/120	#8/120	2.8/120	2.6/120	2.0/120		
4	2.7/120	2.7/120	3.8/120	2.8/120	2.8/120	3.3/110	2.6/120	2.5/120	3.7/120	3.7/120	#0/120	3.5/120	#1/110	#8/100	#.6/100	3.2/110	2.8/110	2.2/120	2.5/100	6.8/110	2.5/120	2.3/120	2.8/110	2.6/100		
5	1.8/40	2.4/120	2.4/120	2.7/120	3.2/120	2.7/120	2.5/120		2.7/140	3.0/120	3.2/110	#1/120	#1/120						2.8/120	2.0/140	2.4/120			2.4/120		
6	3.0/120	2.4/110	2.6/120	2.9/110	2.5/110	2.3/110	2.5/120	2.5/120	3.9/120	3.0/120	3.1/120							3.0/40	2.1/120	3.1/110	2.4/110	2.4/100	2.9/110	3.2/120		
7	#0/120	3.3/120	6.0/120	#8/110	3.9/120	3.0/120	2.3/120	3.2/120	3.7/120	3.7/110	3.2/120	3.5/120	C	3.7/110		3.4/120		2.8/100	2.4/100	3.1/100	2.7/100	2.4/100	3.9/120	3.5/120		
8	#5/110	3.9/100	3.6/100	3.9/110	3.6/120	3.0/100	3.4/100	3.0/120	3.2/120	3.5/120	3.3/120	3.3/110	3.3/120		3.4/120	3.4/100	3.3/120	3.0/100		2.9/110		2.6/120	3.0/120	3.2/120		
9	#2/110	#4/120	3.1/120	3.0/120	1.0/120	3.3/100	3.4/100	3.1/120	3.7/120	3.7/120	3.0/120	3.2/120		5.4/120	3.4/100	3.5/100	3.1/100	3.1/100	3.2/100	3.0/120	2.1/100	2.0/100	3.1/130	2.4/120		
10	2.4/110	2.2/120	1.9/120	2.3/120	3.1/100	3.5/120		2.9/140	3.0/130	3.7/120	#1/120	3.4/120	3.3/120	3.8/120	3.4/110	2.7/140		2.7/100	3.3/120							
11	2.2/150	3.0/120	2.7/120	2.4/130	2.9/120	#3/120	6.8/120	5.1/120	3.4/120	3.5/110	3.9/110	3.9/120	3.1/120	3.5/110	3.9/110	3.5/120	3.5/120	#5/120	6.7/120	6.6/120	#7/120	#9/120	5.7/120	#5/120		
12	3.1/120	3.0/120	#1/120	#2/100	7.2/100	7.1/120	5.1/120	5.8/120	#3/120	#1/120	6.9/120	7.2/110	9.9/110	7.4/120	#0/120	#1/120	2.9/130	3.9/120	6.7/120	7.2/120	5.0/120	3.0/120	2.3/100	2.9/120		
13	3.4/120	3.6/120	3.4/120	3.0/120	3.7/120	3.7/100	3.5/100	3.5/100	3.3/110	3.0/110	3.3/120	3.3/120			3.5/110	3.6/110	#0/110	3.4/100	#0/120	#0/110	5.8/110	6.8/120	5.7/120	5.7/120		
14	7.0/110	#.6/120	5.9/110	6.8/110	#8/110	#3/110	3.7/120	3.0/120	#0/110	3.8/110	3.8/120	3.4/120	3.3/160	3.2/110		3.3/110	3.6/110	3.5/120	2.4/120	2.7/120				2.1/120		
15	3.0/120	2.9/120	3.1/140	3.1/120	3.0/120	3.3/120	3.0/120	3.0/120	2.9/120	3.1/120	3.1/120			3.3/110		3.0/120	2.2/120	3.8/120	#.3/120	3.7/160		2.6/110	2.0/120	2.4/110		
16	3.0/120	2.9/120	3.0/120	3.6/120	3.6/120	3.0/120	3.3/120	3.2/120	3.5/120	3.8/120								1.9/120		2.9/120	2.6/120			2.4/120		
17	3.3/120	2.4/120	3.1/120	2.9/120	3.3/120	3.5/120	3.3/120	3.0/120	3.3/120	3.0/110				3.3/110		3.0/110	#5/100	#2/120	3.4/120	#0/120	5.8/120	3.7/120	3.5/120	3.0/120		
18	3.0/120	3.9/120	3.6/120	3.5/120	#5/120	3.3/120	3.5/110	2.8/120	#0/100	#2/100	3.5/110		#0/100	3.4/100	3.7/120	3.9/120	#1/100	3.6/100	3.5/120	#1/120	5.9/110	#6/100	3.1/100	3.3/110		
19	3.1/120	3.4/120	3.1/120	2.8/120	#0/120	3.0/120	3.3/120	3.3/120	3.3/120						3.1/120	#.0/120	#8/120	#.6/120	3.2/120	3.0/110	3.0/110	#2/120	3.9/120	#5/120		
20	3.8/110	#.0/40	3.0/120	3.4/120	3.0/120	3.1/120	3.3/110	3.0/120	#0/120	3.7/120	#.6/110	5.2/110	3.6/110		3.4/110	3.6/100	3.5/100	3.7/110	3.1/120	3.8/100	#1/100	3.4/100	2.1/100	3.0/100		
21	3.5/110	3.7/110	3.5/110	#3/100	2.9/120	3.3/120	3.9/110	3.6/110	3.7/120	3.6/120	3.8/110	#.0/110			3.3/100	2.7/150	3.0/100	2.9/100		2.9/120	3.4/120	2.8/100	2.8/100	#0/120		
22	3.0/120	2.9/120	3.7/120	3.9/120	3.7/120	3.0/120	2.7/110		3.1/120	3.0/120					3.3/110	3.5/100	3.3/110	2.8/120	3.0/100	3.3/120	2.8/110	2.8/120	2.6/120	3.1/120		
23	3.3/110	#.5/110	3.0/120	3.2/120	3.1/110	3.3/110	3.7/110	3.8/120				3.5/120	#7/120	#.0/110	3.6/110	#.0/100	3.7/110	#.0/120	3.1/100	2.5/100	3.4/100	3.4/120	3.3/120	2.8/120		
24	3.1/120	3.6/120	3.0/120	3.2/120	3.3/120	3.0/120	3.6/120	#.0/110	3.4/120	#.0/120	3.0/120	3.2/140	3.3/110	3.3/120	3.5/110	3.9/120	#1/120	5.0/120	5.2/120	5.7/120	3.3/110	#.5/120	#.1/110	3.8/120		
25	5.0/120	3.1/120	3.4/120	3.0/120	3.7/120	3.0/100	3.4/120	3.4/120	3.1/120	(3.2)/40	3.5/110	5.7/110	6.8/100	#.0/110	#.0/120	2.8/110	2.4/120	2.9/100	#2/120	#3/120	5.1/110	5.1/110	3.9/110	3.3/120		
26	#3/120	3.7/110	2.9/120	3.1/110	5.7/120	#1/110	3.3/100	2.9/120	3.3/110	3.8/120	3.5/110	5.2/120	5.2/110	3.3/110	3.1/110	3.3/110		2.4/120	3.3/120	3.5/110	3.8/120	3.9/120	3.6/120	#2/120			
27	3.7/120	1.5/110	3.8/110	2.7/120	3.0/110	3.1/120	3.5/120	2.9/110		3.4/110	5.4/120		3.1/120	3.2/120	3.0/120	3.1/110	3.4/110	3.0/100	2.3/110	2.7/100		2.6/120	2.2/120	2.4/120		
28	3.2/120	3.5/120	3.4/110	3.9/110	3.6/110	3.4/110	3.5/120	3.0/120	3.7/120	3.5/110	3.2/110	#0/110	3.3/110	3.3/110		3.0/120	3.1/120	2.8/120	2.2/120	2.1/120	#1/120	3.1/120	3.3/120	3.1/110		
29	3.0/100	2.4/100	1.5/120	3.8/120	3.3/110	3.4/120	2.8/120	2.4/120				3.3/120	3.5/120	3.3/120	3.2/120		3.1/110		2.7/120	6.6/120	4.0/110	3.4/120	3.3/110	3.1/110		
30	3.1/110	3.3/120	1.8/120	3.5/120	3.2/110	3.0/110		2.7/120		3.0/120	3.1/120	3.1/110				3.0/100	3.9/100	4.0/100	3.7/100	3.1/110			2.2/120	2.7/120		
31	3.3/110	3.3/120	3.0/120	3.0/110	2.5/120	3.0/120	3.3/120	3.0/120	3.0/120		3.3/120		3.5/120	3.1/120	3.7/100			3.0/100	3.0/100	3.6/120	3.5/120	3.7/120	3.4/120	3.4/110		
Sum																										
Mean[1]																										
Mean[2]																										
Median	3.2	3.3	3.1	3.2	3.3	3.3	3.3	3.0	3.3	3.4	3.2	3.3	3.2	3.2	3.2	3.2	3.1	3.0	3.0	3.1	3.2	2.8	2.9	3.0		

[1] For all days of the month

[2] For quiet days

TABLE 51

IONOSPHERE DATA-9

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of F2-M1500 for October (Month) 1944

Records measured by: S.M.O. H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1	198	197	1.88	190	192	200	224	237	243	222	219	217	206	211	218	(216)	229	(222)	219	207	202	203	206	206	50.72	
2	199	195	192	200	(2.00)	A	220	240	241	243	210	207	214	205	216	C	C	C	C	C	C	(2.17)^F	(2.01)^F	(2.07)^F	3607	
3	(1.75)^F	C	C	C	C	C	C	C	C	C	2.14	215	2.08	215	211	2.19	2.16	228	2.10	213	219	210	1.97	2.00	31.50	
4	195	195	196	202	207	212	232	25+	2.49	237	225	213	2.17	2.05	212	2.17	230	230	238	215	208	202	190	1.98	51.79	
5	193	197	1.97	210	221	208	220	24+	233	234	225	217	(2.15)	220	220	219	222	238	217	214	210	1.96	1.89	195	51.51	
6	1.97	182	194	2.08	220	213	222	241	2.37	230	213	(224)	213	(218)	227	(213)	219	221	200	224	194	203	190	190	50.93	
7	1.97	204	200^F	A	195	203	218	223	223	221	220	208	C	1.97	213	213	222	225	221	216	1.98	195	192	197	4601	
8	190	195	207^F	200	209^F	221^F	230	242^M	243	237	220	217	208	206	211	207	227	231^M	230	213	216	195	192	194	51.53	
9	199	195^F	1.96	206^F	201^F	201^F	213	248	235	220	230	215	205	217	203	209	221	229	234	212	211	204	(2.00)	(2.17)	51.21	
10	204^F	196	201^F	(188)^F	201^F	209^F	220	241	254	235	228	218	210	220	218	221	219	225	222	200	188	178	198	178	50.72	
11	191	190	218	(198)^F	(212)^F	(211)^F	A	220	218	215	199	174^K	173^K	186^K	206^K	200^K	312^K	208^K	A^K	190^K	182^K	188^K	(2.04)^F_K	190^K	4485	
12	193^F_K	(198)^F_K	(188)^F_K	A^K	A^K	A^K	209^F	234	236	216	220	A	211	217	223	219	204	214	210	215	214	223	210	(218)^F	42.72	
13	(193)^F	(185)^F	(194)^F	(189)^F	(210)^F	219^F	221^F	240	246	(234)	220	218	209	(248)	228	223	234	225	208	199	202	212	192	206	5149	
14	188	180^F	198^F	A	200^F	(222)^F	200^F	240	221	214	(193)	216	(200)	220	213	213	208^K	223^K	197^K	182^K	185^K	(190)^K	188^K	(202)^F_K	4693	
15	(187)^F_K	(206)^F_K	(215)^F_K	(201)^F_K	(190)^F_K	(187)^F_K	(195)^F_K	220^A	210^K	202^K	207^K	213^K	211^K	212^K	210^K	213^K	222^K	230^K	195^K	(209)^F_K	(201)^F_K	(176)^F_K	200^F_K	(190)^F_K	4902	
16	(200)^F_K	(207)^F_K	(191)^F_K	188^K	F^K	(214)^F_K	(197)^F	240	239	223	(206)	217	212	220	220	220	232	243	225	221^F	205	200	197	194	4911	
17	190	200	202	195^F	195^F	201^F	212	230	209	228	200	(217)	216	224	225	224	232	230	213	210	197	194	197	200	5041	
18	201	220^F	(203)^F	207^F	(227)^F	(201)	220^F	240	240	210	205	(214)	(229)	222	221	224	230	240	223	219	207	201	192	201	5197	
19	199^F	194^F	200^F	201^F	201^F	211^F	210^F	249	237	242	212	215	219	221	225	224	237	240	215	(227)	203	A	200	205	4987	
20	196^F	201	204^F	201	202^F	209^F	220^F	240^F	220^F	239	225	215	210	213	211	221	235	223	219	212	203	217	199	194	5129	
21	197	206	212^F	216^F	220^F	202^F	212^F	253	243	(213)	229	227	219	(211)	216	215	230	(228)	211	217	214	201	200	201	5193	
22	195	193	(200)	(213)^F	(214)^F	220^F	239	247	(235)	(249)	228	209	223	(209)	217	(230)	230	241	(250)	212	225	198	197	194	5268	
23	188	197	206	197	203	202	213	247^M	238	239	236	214	(193)	203	(220)	229	223	223	(237)	230	190	190	187	184	5089	
24	198	207	215	210	(211)	214	(220)	(241)	251	229	(227)	(225)	(215)	200	220	224	230	217	202	227	217	220	216	199	5235	
25	A	190^F	204	207	211	215	224	231	244	222	225	209	217	215	223	J	(241)	238	230	216	213	A	194	198	4567	
26	A	205	(192)^F	(192)^F	213	213	210	235	210	227	233	227	224	221	227	228	228	239	221	227	220	211^F	202^F	(202)^F	5007	
27	(197)^F	(202)^F	(207)^F	205^F	(209)^F	225^F	240	255	251	242	225	219	211	206	217	225	229	250	217	230	200^F	192	210^F	211^F	5275	
28	200^F	(198)^F	(197)^F	217^F	201^F	A	210^F	(250)	249	247	229	221	224	(225)	227	(222)	220	235	215	214	202	210	211^F	200^F	5024	
29	195^F	192^F	(208)^F	211^F	(221)^F	(230)^F	(230)^F	259	243	240	229	(231)	(231)	(223)	222	231	233	227	227	211	209	206	210	(209)	5328	
30	(196)^F	(211)^F	(200)^F	205^F	(213)^F	210^F	(218)^F	235	243	230	231	(225)	220	218	(228)	238	232	243	224	209	202	189	198^F	195^F	5213	
31	190^F	209	205^F	212^F	(201)^F	201^F	(219)^F	232	230	(235)	211	212	219	216	220	225	235	223	210	210	227	210	200	210^F	5162	
Sum	5641	5947	6030	5469	5800	5674	6318	7205	7071	6875	6794	6469	6382	6644	6768	6382	6882	6895	6340	6401	6164	5831	6159	6185	152326	
Mean[1]	194	198	201	202	207	210	218	240	236	229	219	216	213	214	218	220	229	230	219	213	205	201	199	200		
Mean[2]	195	198	201	203	208	211	219	241	236	230	220	217	214	215	219	221	227	231	220	216	207	203	199	200		
Median	196	197	200	202	208	211	220	240	238	230	220	216	214	216	220	221	230	228	219	214	204	201	198	200		

[1] For all days of the month

[2] For quiet days

TABLE 52

IONOSPHERE DATA - 10

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of F2-M3000 for October (Month) 1944

Records measured by: S.M.O. H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1	2.95	2.95	2.84	2.90	2.90	3.05	3.39	3.45	3.53	3.32	3.25	3.19	3.14	3.19	3.29	(3.24)	3.34	(3.30)	3.20	3.08	3.08	3.06	3.10	3.10	75.84	
2	2.98	2.94	2.90	3.03	(3.03)	A	3.20	3.46	3.48	3.52	3.19	3.12	3.15	3.06	3.20	C	C	C	C	C	C	(3.20)F	(3.01)F	(3.08)F	53.55	
3	(2.55)F	C	C	C	C	C	C	C	C	C	3.20	3.19	3.10	3.20	3.19	3.21	3.20	3.31	3.17	3.15	3.21	3.12	3.00	3.00	46.80	
4	2.90	2.95	2.92	3.04	3.08	3.15	3.37	3.61	3.62	3.40	3.28	3.17	3.20	3.08	3.20	3.25	3.35	3.38	3.47	3.17	3.11	3.05	2.85	3.00	76.60	
5	2.90	2.98	2.91	3.13	3.31	3.17	3.29	3.45	3.40	3.40	3.30	3.20	(3.18)	3.23	3.30	3.24	3.30	3.47	3.29	3.17	3.18	2.84	2.84	2.95	76.43	
6	2.99	2.76	2.89	3.10	3.25	3.15	3.31	3.51	3.47	3.40	3.16	(3.29)	3.16	(3.20)	3.28	(3.22)	3.22	3.22	3.01	3.28	2.90	3.05	2.89	2.87	75.68	
7	3.00	3.05	3.01F	A	2.91	3.07	3.24	3.30	3.28	3.29	3.25	3.10	C	2.96	3.20	3.20	3.21	3.27	3.21	3.21	2.99	2.98	2.91	2.94	68.58	
8	2.87	2.93	3.01F	3.00	3.12F	3.27F	3.34	3.49H	3.56	3.42	3.25	3.20	3.10	3.09	3.16	3.09	3.30	3.40H	3.34	3.20	3.20	2.92	2.90	2.90	76.12	
9	3.00	3.00F	3.09	3.10F	3.00F	3.01F	3.20	3.52	3.42	3.24	3.46	3.17	3.10	3.27	3.09	3.13	3.20	3.34	3.39	3.14	3.18	3.10	(3.00)	(3.24)	76.39	
10	3.10F	2.98	3.03F	(2.82)F	3.09F	3.14F	3.20	3.44	3.68	3.44	3.35	3.20	3.13	3.24	3.21	3.25	3.20	3.31	3.26	3.00	2.85	2.68	3.00	2.70	75.30	
11	2.89	2.90	3.15	(3.00)F	(3.19)F	(3.17)F	A	3.20	3.22	3.20	3.00	2.65K	2.63K	2.84K	3.08K	3.04K	3.20K	3.11K	A K	2.90K	2.73K	2.83K	(3.06)K	2.96K	65.85	
12	2.93K	(2.90)FK	(2.88)K	A K	A K	A K	3.28F	3.40	3.30	3.25	3.25	A	3.15	3.23	3.28	3.25	3.04	3.19	3.11	3.16	3.20	3.30	3.10	(3.28)F	63.48	
13	(2.84)F	(2.89)F	(2.98)F	(2.75)F	(3.10)F	3.20F	3.22F	3.43	3.49	(3.46)	3.28	3.24	3.12	(3.20)	3.35	3.30	3.40	3.30	3.10	2.93	3.09	3.15	3.00	3.10	75.93	
14	2.87	2.80F	2.98F	A	3.05F	(3.30)F	3.00F	3.43	3.20	3.20	(2.90)	3.21	(3.00)	3.29	3.16	3.17	3.08K	3.25K	2.98K	2.78K	2.83K	(2.87)K	2.86K	(3.08)FK	70.29	
15	(2.90)FK	(3.07)FK	(3.25)FK	(2.98)K	(2.85)K	(2.84)FK	(2.97)FK	3.30K	3.11K	3.07K	3.10K	3.19K	3.16K	3.19K	3.14K	3.20K	3.32K	3.35K	2.90K	(3.10)FK	(3.00)FK	(2.70)FK	3.00FK	(2.86)FK	73.55	
16	(2.98)FK	(3.14)FK	(2.82)FK	2.81FK	F K	(3.14)FK	(2.91)F	3.44	3.47	3.24	(3.05)	3.27	3.18	3.25	3.25	3.29	3.38	3.50	3.30	3.21F	3.08	3.07	3.00	2.92	72.7^	
17	2.90	3.00	3.05	2.96F	2.91F	3.07F	3.15	3.36	3.11	3.34	3.02	(3.22)	3.21	3.30	3.29	3.30	3.35	3.33	3.18	3.12	3.00	2.91	3.00	3.00	75.05	
18	3.02	3.30F	(3.11)F	3.16F	(3.40)F	(3.01)	3.23F	3.47	3.49	3.10	3.05	(3.20)	(3.36)	3.24	3.30	3.30	3.39	3.46	3.25	3.18	3.14	3.03	2.85	3.04	77.18	
19	3.01F	2.90F	3.00F	3.03F	3.00F	3.25F	3.15F	3.53	3.40	3.48	3.20	3.20	3.26	3.27	3.29	3.30	3.44	3.45	3.20	(3.36)	3.10	A	3.10	3.06	73.96	
20	3.00F	3.06	3.10F	3.05	3.10F	3.10F	3.25F	3.48F	3.26F	3.47	3.27	3.18	3.14	3.22	3.15	3.27	3.39	3.28	3.24	3.19	3.03	3.22	3.00	2.97	76.42	
21	3.00	3.13	3.19F	3.18F	3.29F	3.07F	3.22F	3.65	3.47	(3.19)	3.39	3.30	3.26	(3.19)	3.21	3.20	3.35	(3.27)	3.14	3.25	3.18	3.10	3.10	3.05	77.38	
22	2.90	2.90	(3.02)	(3.12)F	(3.20)F	3.25F	3.49	3.50	(3.30)	(3.61)	3.27	3.12	3.30	(3.12)	3.21	(3.40)	3.31	3.48	(3.60)	3.16	3.32	2.95	2.98	2.94	77.70	
23	2.88	2.91	3.17	2.99	3.09	3.07	3.17	3.50H	3.42	3.43	3.40	3.17	(2.92)	3.03	(3.22)	3.37	3.30	3.26	(3.38)	3.36	2.86	2.95	2.77	2.80	75.82	
24	2.99	3.10	3.17	3.10	(3.12)	3.19	(3.15)	(3.47)	3.67	3.39	(3.37)	(3.28)	(3.20)	3.00	3.23	3.30	3.30	3.23	3.00	3.30	3.25	3.26	3.20	3.00	77.27	
25	A	2.90F	3.10	3.13	3.19	3.19	3.30	3.34	3.50	3.28	3.30	3.10	3.20	3.20	3.29	J	3.50	3.40	3.37	3.17	3.13	A	2.90	2.95	67.34	
26	A	3.05	(2.92)F	(2.90)F	3.20	3.22	3.11	3.40	3.18	3.37	3.40	3.32	3.30	3.11	3.32	3.37	3.35	3.43	3.30	3.23	3.20	3.14F	3.08F	(3.05)F	73.95	
27	(3.00)F	(3.01)F	(3.13)F	3.05F	(3.10)F	3.29F	3.42	3.64	3.64	3.53	3.25	3.21	3.25	3.04	3.26	3.31	3.37	3.55	3.15	3.34	2.94F	2.90	3.20F	3.12F	77.70	
28	2.98F	(3.00)F	(2.93)F	3.16F	3.04F	A	3.13F	(3.60)	2.59	3.54	3.30	3.25	3.25	(3.35)	3.34	(3.28)	3.24	3.38	3.20	3.19	3.12	3.13	3.21F	3.00F	77.21	
29	2.99F	2.93F	(3.11)F	3.15F	(3.15)F	(3.30)F	3.33F	3.68	3.54	(3.48)	3.34	(3.40)	(3.42)	(3.35)	3.30	3.32	3.26	3.26	3.30	3.17	3.11	3.11	3.12	(3.09)	78.07	
30	(2.99)F	(3.18)F	(3.03)F	3.11F	(3.15)F	3.10F	(3.14)F	3.43	3.48	3.36	3.36	(3.31)	3.28	3.20	(3.39)	3.48	3.33	3.50	3.30	3.11	3.06	2.85	3.00F	3.00F	77.17	
31	2.89F	3.10	3.15F	3.14F	(3.01)F	3.05F	(3.19)F	3.42	3.30	(3.42)	3.17	3.19	3.22	3.20	3.24	3.31	3.41	3.29	3.14	3.15	3.32	3.10	3.08	3.13F	76.65	
Sum	85.20	89.51	90.91	81.89	86.83	84.75	93.35	103.90	102.58	100.84	100.36	95.84	95.05	98.34	100.52	94.59	99.03	100.27	93.78	94.76	92.39	87.50	93.11	93.08	2258.15	
Mean[1]	2.94	2.98	3.03	3.03	3.10	3.14	3.22	3.46	3.42	3.36	3.24	3.19	3.17	3.17	3.24	3.26	3.30	3.34	3.22	3.16	3.08	3.02	3.00	3.00		
Mean[2]	2.94	2.98	3.04	3.04	3.11	3.15	3.23	3.47	3.43	3.37	3.24	3.21	3.19	3.18	3.25	3.27	3.31	3.35	3.24	3.18	3.10	3.04	3.01	3.01		
Median	2.98	2.98	3.03	3.05	3.10	3.15	3.22	3.46	3.47	3.40	3.25	3.20	3.18	3.20	3.24	3.27	3.32	3.32	3.21	3.17	3.10	3.05	3.00	3.00		

[1] For all days of the month

[2] For quiet days

TABLE 53

IONOSPHERE DATA-II

RESTRICTED

Washington, D.C. Ionosphere Station
(Location)

National Bureau Of Standards
(Institution)

Hourly values of F2-M3500 for October 1944
(Month)

Records measured by: S.M.O.
H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1	3.12	3.16	3.01	3.14	3.11	3.25	3.50	3.60	3.69	3.49	3.40	3.40	3.29	3.35	3.48	(3.42)	3.50	(3.45)	3.40	3.25	3.23	3.20	3.27	3.28	79.97	
2	3.1	3.13	3.10	3.20	(3.19)	A	3.41	3.59	3.69	3.63	3.35	3.30	3.30	3.21	3.39	C	C	C	C	C	C	(3.39)F	(3.19)F	(3.30)F	56.54	
3	2.72F	C	C	C	C	C	C	C	C	C	3.39	3.40	3.30	3.35	3.35	3.42	3.35	3.45	3.28	3.34	3.40	3.30	3.19	3.15	49.39	
4	3.1	3.11	3.13	3.22	3.22	3.35	3.63	3.73	3.75	3.60	3.43	3.35	3.40	3.25	3.32	3.41	3.50	3.50	3.64	3.30	3.25	3.21	3.02	3.20	80.63	
5	3.10	3.15	3.11	3.34	3.50	3.32	3.45	3.60	3.53	3.50	3.47	3.40	(3.38)	3.40	3.45	3.42	3.42	3.60	3.41	3.31	3.35	3.07	3.08	3.15	81.51	
6	3.9	2.95	3.1	3.31	3.40	3.31	3.50	3.62	3.60	3.52	3.35	(2.47)	3.31	(3.42)	3.50	(3.45)	3.39	3.40	3.16	3.45	3.10	3.23	3.08	3.09	79.91	
7	3.14	3.2	3.20F	A	3.13	3.30	3.36	3.45	3.46	3.46	3.41	3.26	C	3.10	3.36	3.37	3.36	3.45	3.40	3.38	3.17	3.11	3.10	3.1	72.27	
8	3.08	3.2	3.31F	3.20	3.30F	3.46F	3.48	3.62H	3.70	3.57	3.41	3.34	3.27	3.25	3.32	3.26	3.46	3.59H	3.45	3.41	3.34	3.09	3.12	3.10	80.25	
9	3.15	3.19F	3.30	3.29F	3.19F	3.22F	3.37	3.70	3.61	3.40	3.54	3.32	3.28	3.44	3.23	3.29	3.39	3.48	3.50	3.28	3.30	3.25	(3.20)	(3.46)	80.38	
10	3.32F	3.18	3.22F	(3.02)F	3.21F	3.31F	3.40	3.60	3.80	3.55	3.50	3.39	3.30	3.42	3.40	3.40	3.41	3.43	3.41	3.20	3.09	2.88	3.20	2.86	79.50	
11	3.10	3.10	3.38	(3.19)F	3.35)F	(3.35)F	A	3.40	3.40	3.49	3.17	2.81K	2.85K	3.00K	3.29K	3.20K	3.32K	3.32K	A K	3.10K	2.96K	3.02K	(3.26)F K	3.03K	73.19	
12	3.10F K	(3.12)F K	(3.06)F K	A K	A K	A K	3.37F	3.60	3.41	3.40	3.49	A	3.30	3.39	3.46	3.40	3.20	3.34	3.25	3.30	3.35	3.43	3.30	3.49F	66.76	
13	(3.03)F	2.96)F	(3.21)F	(3.01)F	3.29)F	3.42F	3.41F	3.56	3.65	(3.60)	3.41	3.41	3.30	(3.43)	3.50	3.44	3.60	3.45	3.26	3.12	3.23	3.30	3.13	3.30	80.02	
14	3.07	3.00F	3.10F	A	3.2 F	(3.43)F	3.21F	3.55	3.42	3.35	(3.09	3.40	(3.19)	3.44	3.36	3.35	3.22K	3.40K	3.15K	2.99K	3.03K	(3.11)K	3.05K	(3.30)F K	74.42	
15	(3.41)F	(3.22)F K	(3.45)F K	(3.17)F K	(3.08)F K	(3.11)F K	(3.22)F K	3.47K	3.30K	3.23K	3.28K	3.30K	3.33K	3.35K	3.31K	3.36K	3.49K	3.50 C	3.10K	(3.30)F K	(3.19)F K	(2.94)F K	3.20F K	3.35F K	78.05	
16	(3.17)F K	(3.34)F K	(2.99)F K	(3.10)F K	F K	(3.33)F K	3.15)F	3.62	3.62	3.40	(3.25)	3.40	3.39	3.41	3.41	3.44	3.50	3.68	3.47	3.42F	3.25	3.20	3.20	3.0	76.84	
17	3.11	3.20	3.25	3.15F	3.16F	3.20F	3.30	3.51	3.29	3.50	3.19	(3.40)	3.36	3.50	3.45	3.47	3.51	3.47	3.35	3.29	3.16	3.12	3.17	3.20	79.31	
18	3.20	3.48F	3.30F	3.34F	(3.61)F	(3.20)	3.48F	3.60	3.63	3.29	3.20	(3.41)	(3.52)	3.47	3.44	3.49	3.50	3.60	3.41	3.44	3.32	3.22	3.12	3.22	81.49	
19	3.20F	3.14F	3.20F	3.23F	3.21F	3.35F	3.34F	3.68	3.54	3.60	3.40	3.39	3.40	3.43	3.45	3.45	3.62	3.60	3.35	(3.50)	3.29	A	3.20	3.28	77.45	
20	3.20F	3.25	3.31F	3.21	3.28F	3.30F	3.44F	3.60F	3.40F	3.65	3.45	3.37	3.30	3.35	3.31	3.47	3.54	3.42	3.40	3.34	3.22	3.41	3.21	3.2	80.55	
21	3.20	3.31	3.38F	3.40F	3.46F	3.25F	3.41F	3.80	3.59	(3.38)	3.50	3.45	3.44	(3.35)	3.40	3.40	3.50	(3.41)	3.30	3.42	3.31	3.23	3.29	3.27	81.45	
22	3.11	3.10	(3.20)	(3.32)F	3.47F	3.41F	3.61	3.64	(3.48)	(3.70)	3.35	3.30	3.48	(3.31)	3.40	(3.55)	3.52	3.61	(3.74)	3.31	3.49	3.20	3.11	3.10	81.51	
23	3.07	3.17	3.35	3.13	3.25	3.23	3.31	3.70H	3.61	3.59	3.52	3.34	(3.10)	3.23	(3.45)	3.46	3.50	3.40	(3.55)	3.50	3.03	3.04	3.00	2.98	79.65	
24	3.14	3.28	3.35	3.37	(3.36)	3.38	(3.37)	3.62	3.80	3.50	(3.50)	(3.50)	(3.40)	3.20	3.41	3.48	3.50	3.43	3.18	3.46	3.44	3.40	3.35	3.20	81.62	
25	A	3.10F	3.29	3.21	3.33	3.34	3.45	3.47	3.57	3.48	3.48	3.29	3.40	3.40	3.46	J	3.67	3.59	3.49	3.38	3.33	A	3.13	3.15	71.01	
26	A	3.29	3.10F	(3.12)	3.29	3.31	3.38	3.55	3.35	3.50	3.60	3.49	3.48	3.49	3.50	3.49	3.50	3.56	3.45	3.45	3.41	3.32F	3.22F	(3.25)F	78.10	
27	(3.20)F	(3.22)F	3.30F	3.22F	(3.30F	3.48F	3.60	3.79	3.79	3.65	3.43	3.40	3.44	3.25	3.44	3.49	3.50	3.72	3.36	3.49	3.19F	3.12	3.40F	3.31F	82.09	
28	3.30F	(3.22)F	(3.12)F	3.44F	3.20F	A	3.40F	(3.76)	3.71	3.69	3.50	3.45	3.45	(3.56)	3.50	(3.47)	3.40	3.55	3.34	3.32	3.31	3.32	3.41F	3.22F	78.64	
29	3.18F	3.05F	(3.35)F	3.31F	(3.47)F	(3.50)F	(3.50)F	3.80	3.69	3.64	3.50	(3.58)	3.50	(3.43)	3.44	3.50	3.44	3.47	3.47	3.38	3.25	3.26	3.30	(3.30)	82.31	
30	(3.20)F	(3.30)F	(3.20)F	3.31F	(3.30)F	3.30F	(3.30)F	3.60	3.66	3.50	3.50	(3.50)	3.44	3.38	(3.55)	3.64	3.49	3.62	3.47	3.29	3.25	3.10	3.22F	3.19F	81.31	
31	3.10F	3.30	3.40F	3.40F	(3.20)F	3.28F	(3.42)F	3.55	3.47	(3.58)	3.30	3.40	3.40	3.39	3.45	3.50	3.52	3.48	3.30	3.30	3.54	3.30	3.29	3.31F	81.18	
Sum	90.92	95.35	96.78	87.35	92.07	89.69	98.77	108.38	107.21	105.44	105.36	101.22	100.30	103.95	105.78	99.61	103.82	104.97	98.04	100.02	97.78	92.73	99.01	99.37	2383.62	
Mean[1]	3.14	3.18	3.23	3.24	3.29	3.32	3.40	3.61	3.57	3.51	3.40	3.37	3.34	3.35	3.41	3.43	3.46	3.50	3.38	3.33	3.26	3.20	3.19	3.20		
Mean[2]	3.14	3.17	3.23	3.24	3.30	3.33	3.41	3.62	3.58	3.52	3.40	3.40	3.36	3.36	3.42	3.45	3.47	3.51	3.40	3.36	3.28	3.22	3.20	3.20		
Median	3.14	3.18	3.22	3.22	3.28	3.31	3.41	3.60	3.60	3.50	3.41	3.40	3.37	3.39	3.42	3.44	3.50	3.48	3.40	3.33	3.25	3.21	3.20	3.20		

[1] For all days of the month

[2] For quiet days

TABLE 54

IONOSPHERE DATA-12

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of FI-M3000 for October (Month) 1944

Records measured by: S.M.O. H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1									3.73	3.62H	3.63	3.69	3.63	3.64	3.51	3.50	(3.71)								32.66	
2								3.91H	3.6	(3.70)H	3.89	3.74	3.62	3.66H	3.69	C	C								29.81	
3								C	C	C	3.78H	3.81	3.55	3.62H	3.57	3.74	3.71								25.81	
4										3.82	A	3.63	3.51	3.77	(3.65)	3.63	3.70								25.71	
5										3.79	3.56	3.50	3.60	3.55	3.65										21.65	
6									3.60H	(3.70)	3.81	3.64H	3.62	3.72	3.61H	(3.70)									29.40	
7									3.66	3.42K	3.69H	3.60	C	3.57	3.47	3.65	3.75								28.81	
8										3.77	3.98	(3.80)	3.50	3.47	(3.81)H	3.64	(3.50)								29.52	
9									3.83	3.78	3.65	3.55	3.54	3.48	3.53	(3.60)	(3.90)								32.86	
10									3.70	3.45	3.74	3.70	3.48	3.50	3.60	(3.71)	(3.90)								33.11	
11									(3.75)	3.60	3.60	3.43K	3.52K	3.25K	3.32	3.40K	3.44K	↓K							31.41	
12									↓	3.48	3.70	A	A	A	3.60	(3.47)									14.26	
13										3.70	3.80	(3.50)H	3.59	3.40H	3.55H	3.60	A	A							25.14	
14										3.66	3.47	3.43	3.47	3.57	(3.58)H	(3.53)		↓ K							24.71	
15									3.74K	3.47K	3.60K	3.77K	3.49K	3.48K	3.50K	(3.54K	(3.60)K								32.07	
16										(3.76)	3.72)	3.41H	3.40	3.60	3.70	(3.72)									25.25	
17										3.64	3.74H	(3.64)	3.58H	3.63	3.55	(3.55)	A	A							25.24	
18										A	(3.61)	(3.50)H	3.70H	(3.69)H	(3.81)H	3.63	A								21.43	
19										(3.45)	3.50	3.53	3.63	3.50H	3.68	3.70	A								25.00	
20										3.51	(3.63)	3.67	3.59	3.61H	3.62	(3.61)									25.24	
21										3.78H	3.80	3.90	(3.70)H	(3.50)H	(3.50)										22.19	
22											3.90	(3.72)	(3.78)H	(3.61)H	(3.62)H	3.60									21.43	
23											3.64H	(3.60)	A H	3.66			H								14.37	
24											(3.70)H	(3.63)H	(3.60)	3.60	(3.45)										21.78	
25											H		A		3.71	(3.62)	(3.75)								18.98	
26											3.80	3.71	3.60	3.76	3.60										26.60	
27											(3.70)H		H	(3.50)H	(3.50)	3.50									14.50	
28											(3.73)		(3.60)	(3.60)	(3.60)										8.34	
29											3.73H	(3.90)		(3.54)	3.90										9.66	
30											3.77		(3.68)		3.70										15.11	
31												(3.73)H	(3.50)	(3.72)	(3.71)										14.66	
Sum													89.13	100.33	108.24	75.99	36.49								747.20	
Mean[1]													3.57	3.58	3.61	3.62	3.70									
Mean[2]													3.57	3.60	3.62	3.63	3.73									
Median													3.59	3.60	3.60	3.62	3.71									

[1] For all days of the month

[2] For quiet days

TABLE 55

IONOSPHERE DATA-13

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of E-MI500 for October (Month) 1944

Records measured by: S.M.O. H.P.G.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Sum	Mean
1								3.71	3.99	B	B	B	B	B	B	B	(3.90)	3.73							15.33	
2								3.90	(3.83)	(3.90)	B	(3.85)	B	B	(3.90)	C	C	C							19.38	
3								C	C	C	B	B	B	(3.72)	(3.75)	(3.82)	3.90	3.60							18.79	
4								3.85	A	A	A	B	A	A	A	(3.83)	(4.10)	A							11.78	
5								(3.79)	B	B	A	A	A	B	(3.81)	B	3.79	3.85							15.24	
6								3.67	(3.68)	(4.00)	(3.95)	(4.00)	3.84	3.91	3.79	(3.90)	3.64	3.68							42.06	
7								3.83	3.82	3.80	A	A	C	(4.03)	(3.89)	(3.95)	3.82	A							27.14	
8								(3.74)	A	(4.02)	A	A	(4.08)	(3.95)	3.81	(3.90)	3.70	(4.31)							31.51	
9								A	A	A	(4.05)	3.75	3.73	3.90	3.81	A	A	A							19.24	
10								(3.62)	A	A	A	(3.95)	(4.09)	(3.81)	A	3.98	3.80	(3.49)							26.74	
11									A	A	A	A[K]	(3.85)[K]	3.95[K]	A[K]	A[K]	A[K]	A[K]							7.80	
12									A	A	A	A	A	A	A	A	3.75	(3.51)							7.26	
13								A	(3.80)	(3.80)	(3.90)	(3.70)	4.00	3.78	(3.87)	A	A	A							26.85	
14								A	A	A	A	A	3.90	A	3.89	A	A[K]	F[K]							7.79	
15								(3.10)[K] A[K]	(3.90)[K]	3.70[K]	A[K]	3.80[K]	3.71[K]	A[K]	(3.80)[K]	(3.90)[K]	(3.90)[K]	(3.42)[K]							33.23	
16								A	A	(3.89)	B	(4.19)	(3.70)	(3.80)	3.82	3.75	4.00[H]								27.15	
17								F	A	A	(3.73)	3.55	3.81	3.90	3.99	A	A	A							18.98	
18								A	(3.91)	A	A	(3.85)	(3.82)	(3.94)	(4.00)	3.74	A									23.26	
19								(3.73)	A	3.90	3.84	3.87	(3.66)[I]	3.71	3.92	A	A	A F							26.63	
20								(3.67)	A	(3.73)	A	A	A	3.89	3.79	A	A	A							15.08	
21								A	A	A	(3.95)	3.90	3.67	3.80	A	3.83	3.64								22.79	
22								(3.60)	A	3.85	3.90	3.70	3.70	3.77	(3.76)	A	(3.89)	A							30.17	
23								(3.44)	3.60	3.70	3.70	(3.72)	A	(4.04)	(3.94)	A	A	A							26.14	
24										A	A	3.80	(3.68)	3.50	(3.80)	A	3.72								18.50	
25								A	A	(3.86)	(3.95)	A	A	A	A	A									7.81	
26									3.82	3.89	3.69	A	A	(3.90)	(3.94)	A	(3.70)[H]	A							22.94	
27									A	3.85	3.85	(3.90)	3.70	A	(3.71)	A	A	A							19.01	
28								(3.70)	A	A	A	A	A	(4.00)	(3.79)	3.50	3.50	A							18.49	
29								(3.90)	3.48	(4.00)	3.70	(3.82)	(3.82)	(3.90)	4.00	(3.90)	3.80								38.32	
30									(3.75)	A	(3.89)	(3.65)	3.79	(4.20)	(3.95)	3.94	A								27.17	
31								C	(3.75)	(3.72)	3.59	(3.95)	A	(3.95)	(3.90)	(3.98)	(3.95)								30.79	
Sum								52.15	45.33	61.61	53.69	68.95	68.55	85.35	92.63	53.92	68.50	29.59							683.37	
Mean[1]								3.72	3.78	3.85	3.84	3.83	3.81	3.88	3.86	3.85	3.80	3.70								
Mean[2]								3.72	3.77	3.86	3.84	3.83	3.81	3.88	3.86	3.85	3.80	3.74								
Median								3.72	3.81	3.86	3.87	3.84	3.80	3.90	3.84	3.90	3.80	3.64								

[1] For all days of the month

[2] For quiet days

Table 56

Ionospheric Storminess, October, 1944

Day	Ionospheric Character* 00-12 GCT	12-24 GCT	Principal Storms Beginning GCT	End GCT	Magnetic Character** 00-12 GCT	12-24 GCT
October						
1	2	1			3	3
2	2	2			1	2
3	2	1			3	3
4	2	1			1	1
5	1	2			1	1
6	1	2			2	2
7	2	3			1	1
8	2	2			0	1
9	2	1			1	0
10	2	2			1	2
11	2	4	1600	----/	3	4
12	5	3	----	1030	1	2
13	3	2			1	2
14	2	3	2100	----	2	3
15	4	4	----	----	4	3
16	4	1	----	1030	2	2
17	2	1			2	2
18	1	1			2	1
19	2	2			1	0
20	2	2			0	1
21	1	2			1	1
22	1	1			2	1
23	2	3			2	3
24	1	0			3	3
25	2	0			1	2
26	1	2			3	1
27	2	2			1	2
28	2	2			2	2
29	1	1			1	1
30	1	1			2	1
31	1	0			3	2

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

**Average for 12 hours of American magnetic K-figure, determined by a number of observatories, on an arbitrary scale of 0 to 9, 9 representing the greatest disturbance.

/Dashes indicate continuance of ionospheric storminess.

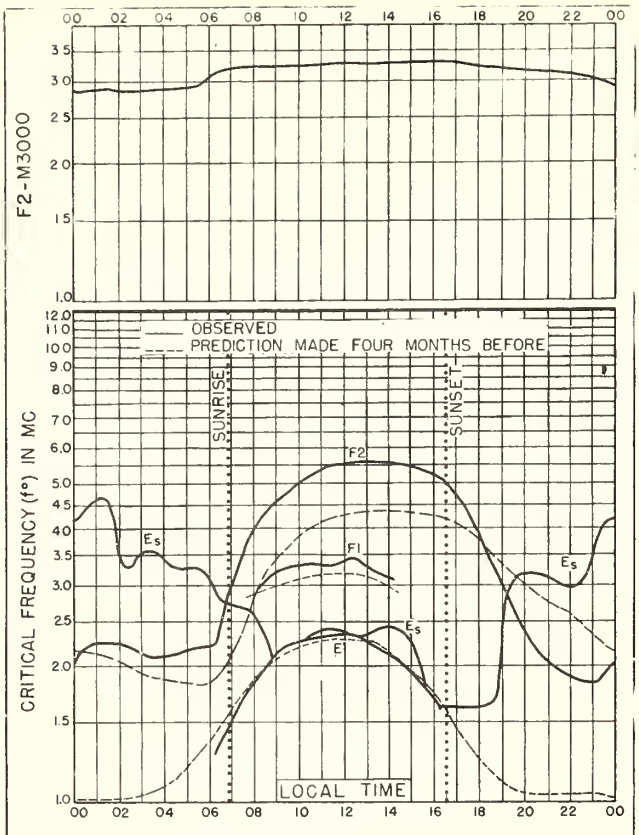

Fig. 1. FAIRBANKS, ALASKA
64.9°N, 147.8°W OCTOBER, 1944

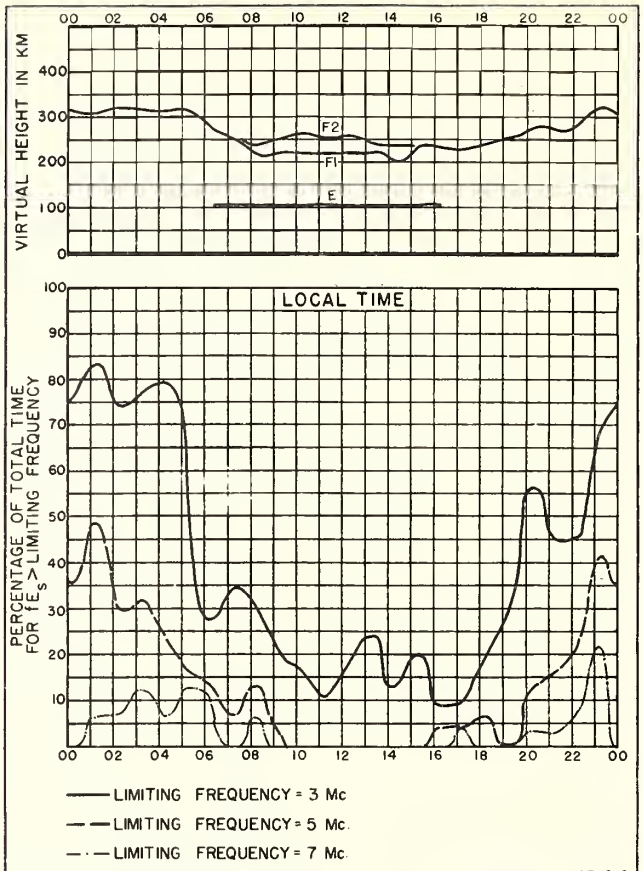

Fig. 2. FAIRBANKS, ALASKA OCTOBER, 1944

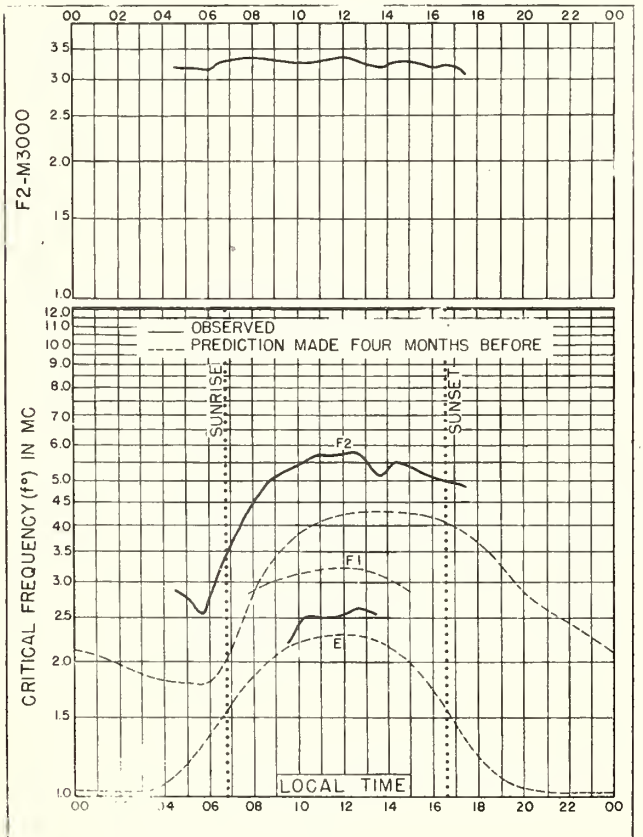

Fig 3. REYKJAVIK, ICELAND
64.1°N, 21.7° W OCTOBER, 1944

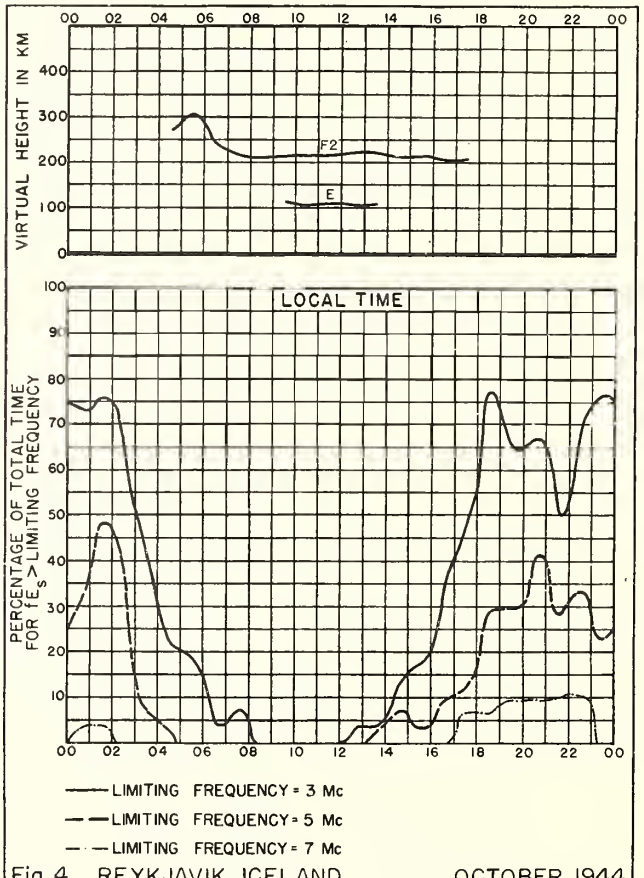

Fig 4 REYKJAVIK, ICELAND OCTOBER, 1944

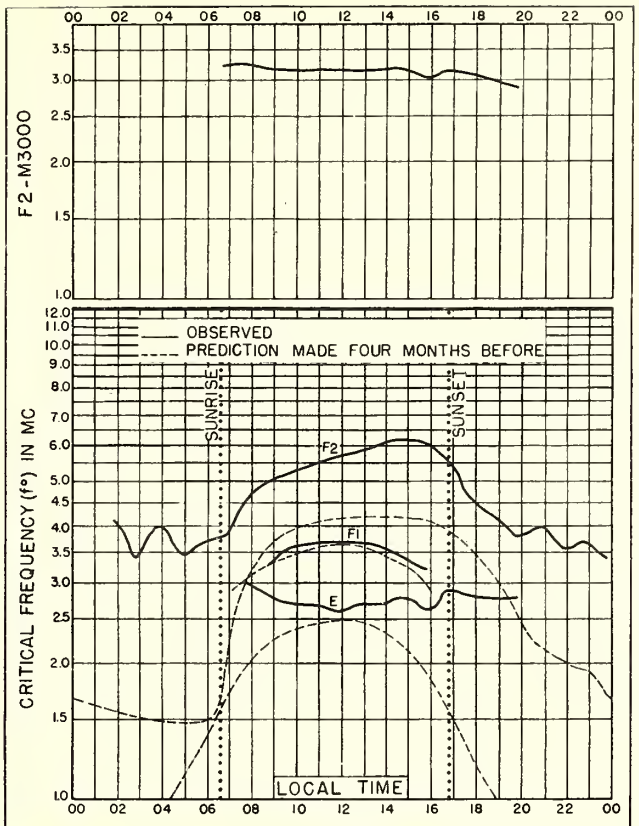

Fig. 5. CHURCHILL, CANADA
58.8°N, 94.2°W
OCTOBER, 1944

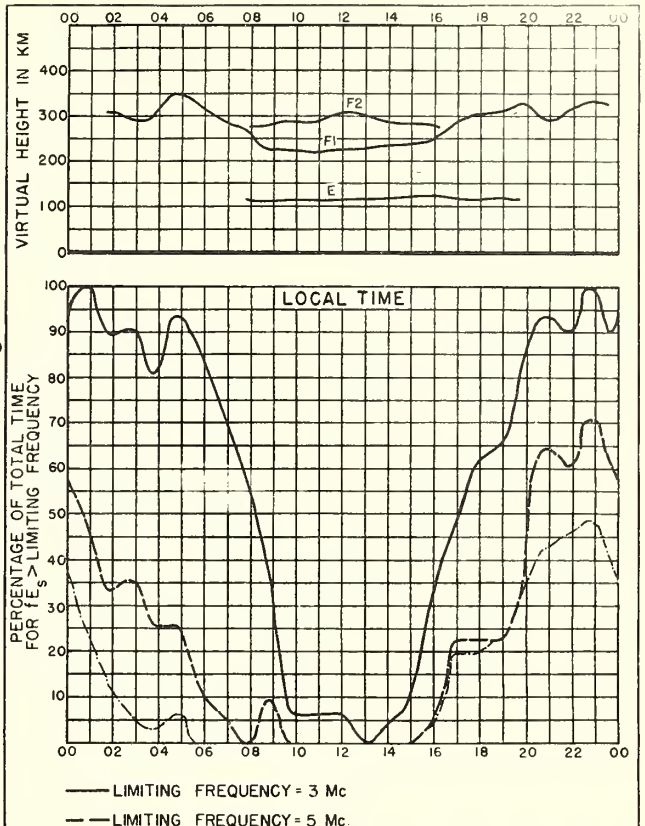

Fig. 6. CHURCHILL, CANADA
OCTOBER, 1944

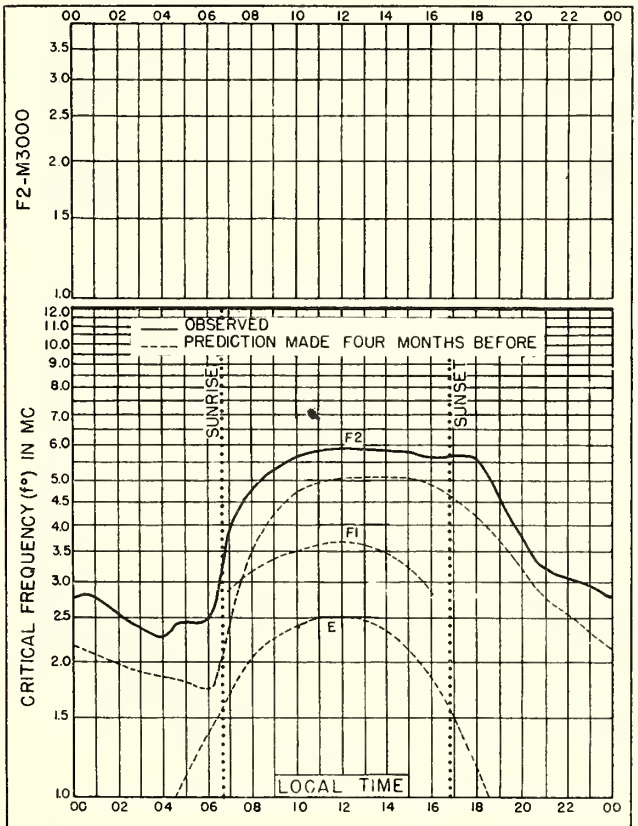

Fig. 7 BURGHEAD, SCOTLAND
57.7°N, 3.5°W
OCTOBER, 1944

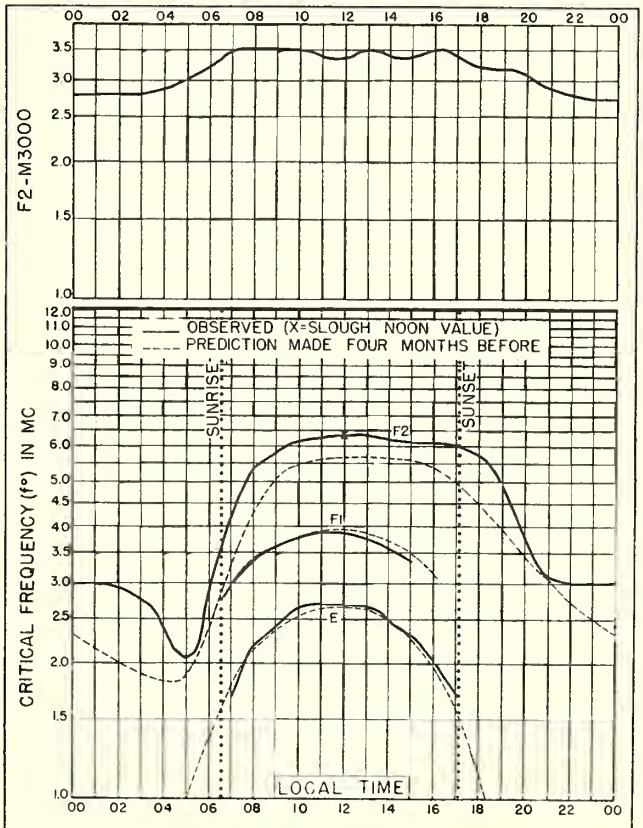

Fig. 8 GREAT BADDOW, ENGLAND
51.7°N, 0.5°E
OCTOBER, 1944

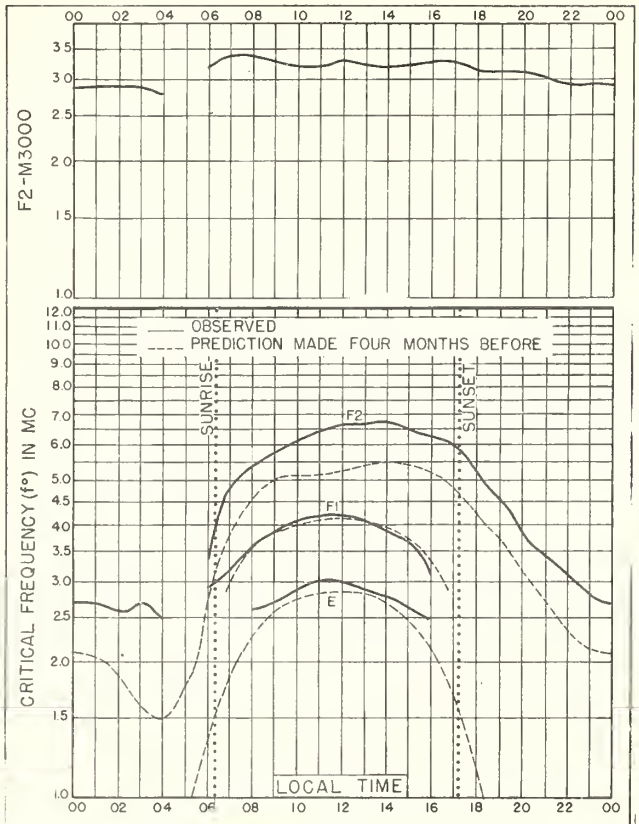

Fig 9 OTTAWA, CANADA
45.5°N, 75.8°W OCTOBER, 1944

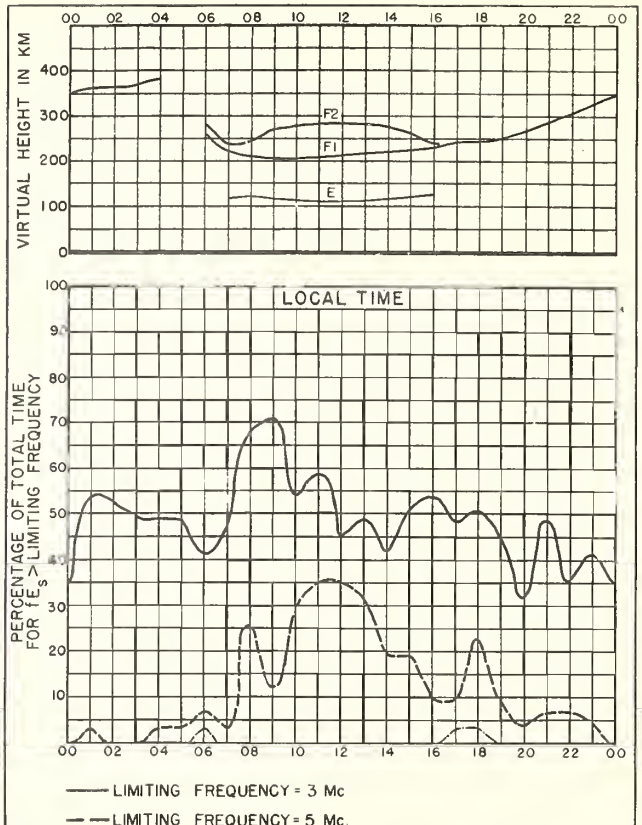

Fig 10. OTTAWA, CANADA OCTOBER, 1944

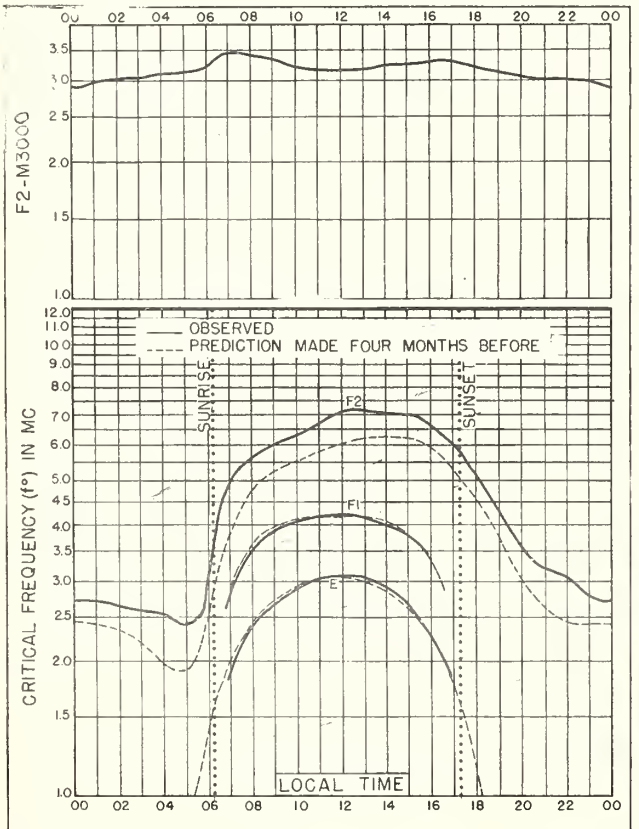

Fig 11. WASHINGTON, D.C.
39.0°N, 77.5°W OCTOBER, 1944

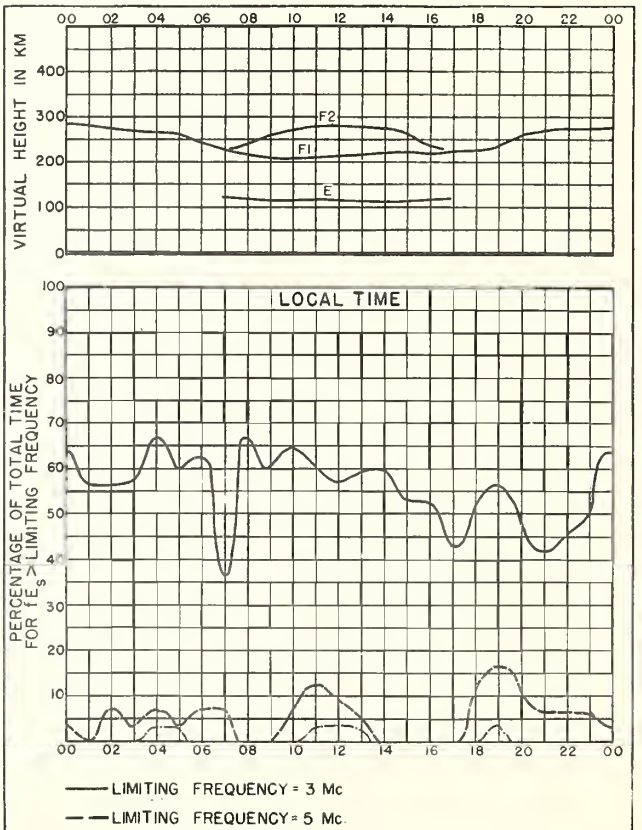

Fig 12 WASHINGTON, D.C. OCTOBER, 1944

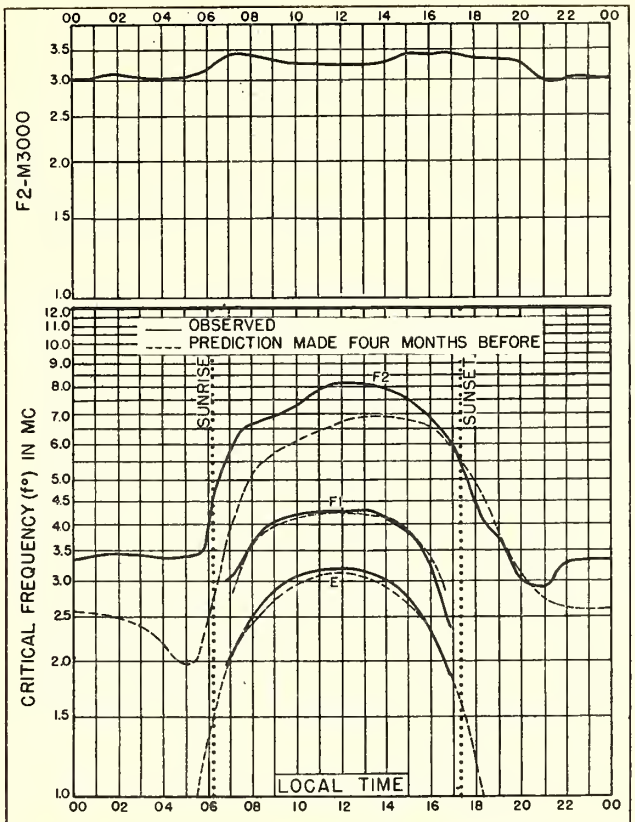

Fig. 13. SAN FRANCISCO, CALIFORNIA
37.4°N, 122.2°W OCTOBER, 1944

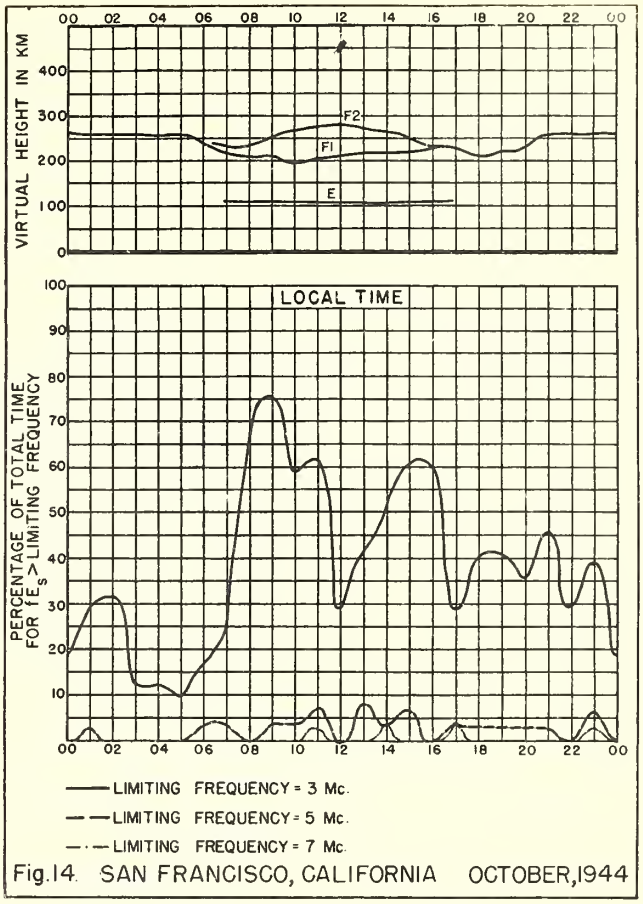

Fig. 14. SAN FRANCISCO, CALIFORNIA OCTOBER, 1944

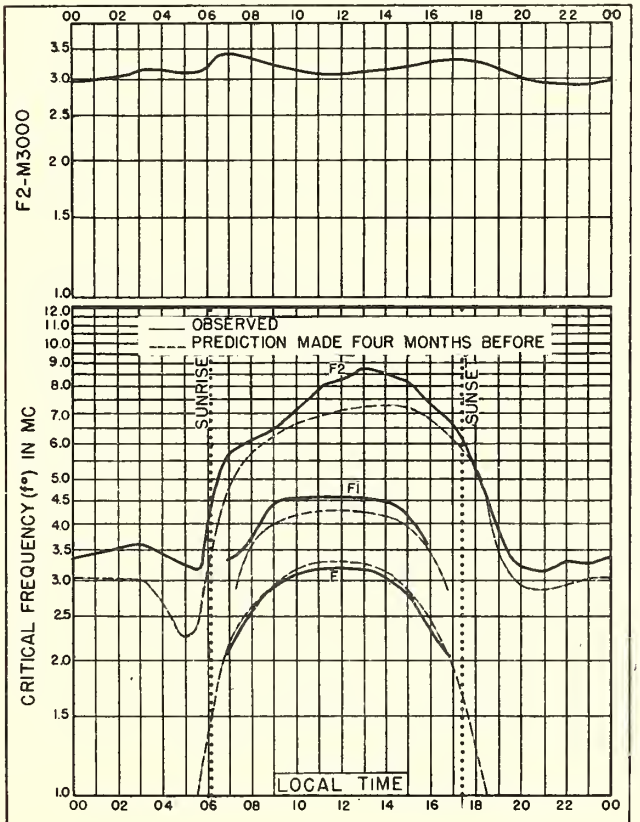

Fig. 15. BATON ROUGE, LOUISIANA
30.5°N, 91.2°W OCTOBER, 1944

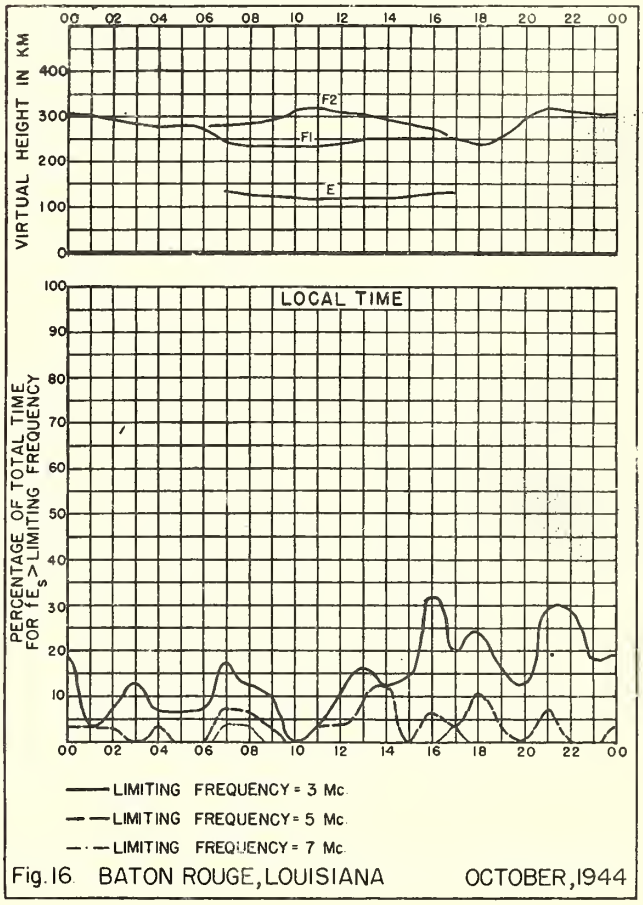

Fig. 16. BATON ROUGE, LOUISIANA OCTOBER, 1944

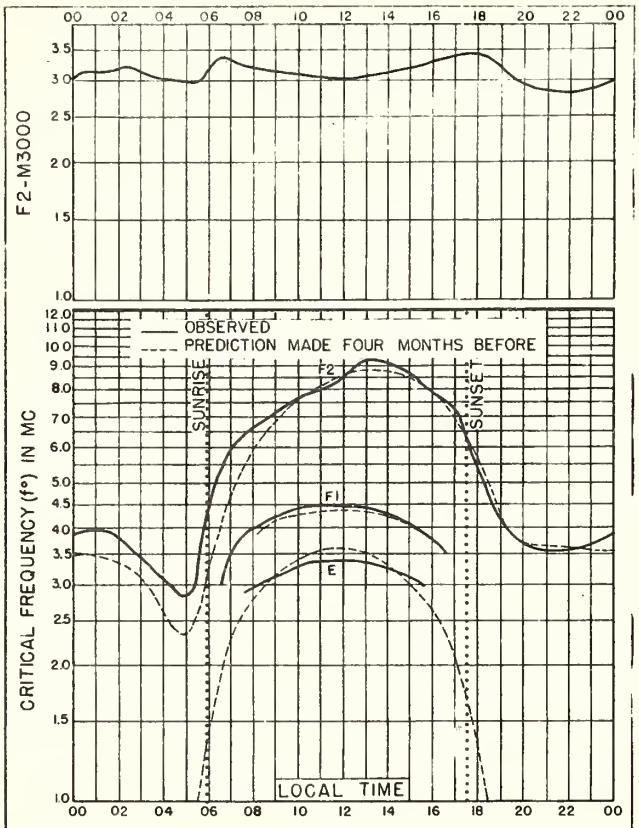

Fig.17 SAN JUAN, PUERTO RICO
18.4°N, 66.1°W OCTOBER, 1944

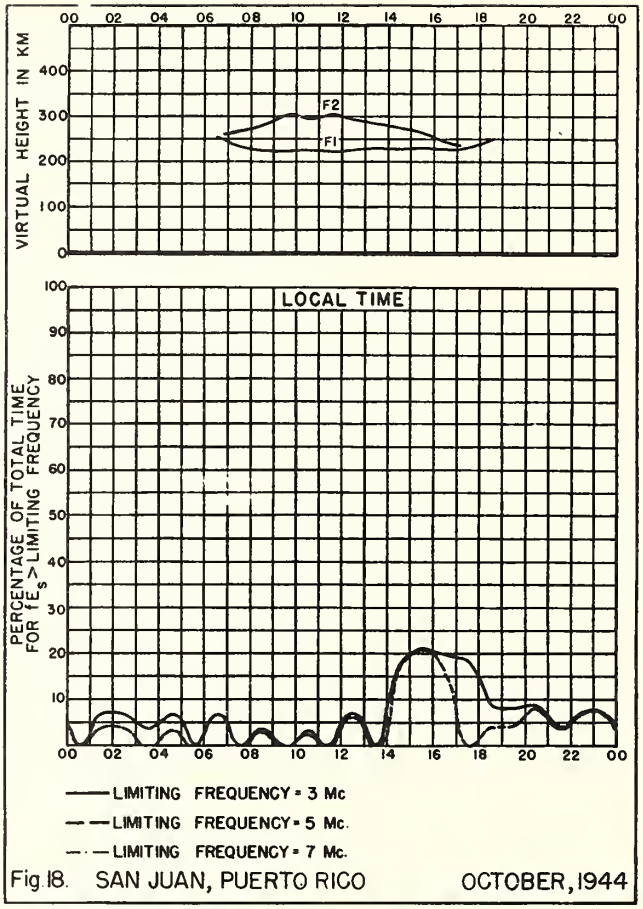

Fig.18. SAN JUAN, PUERTO RICO OCTOBER, 1944

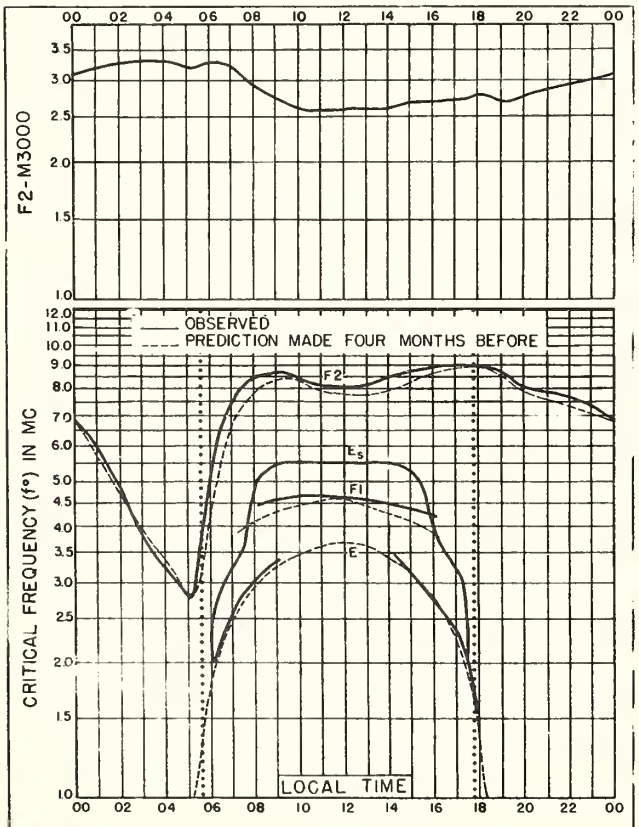

Fig.19 HUANCAYO, PERU
12.0°S, 75.3°W OCTOBER, 1944

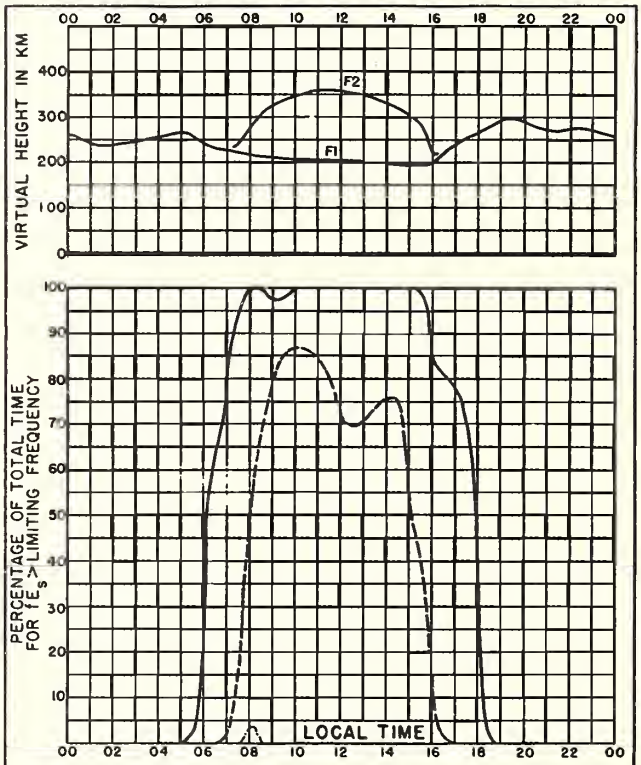

Fig 20 HUANCAYO, PERU OCTOBER, 1944

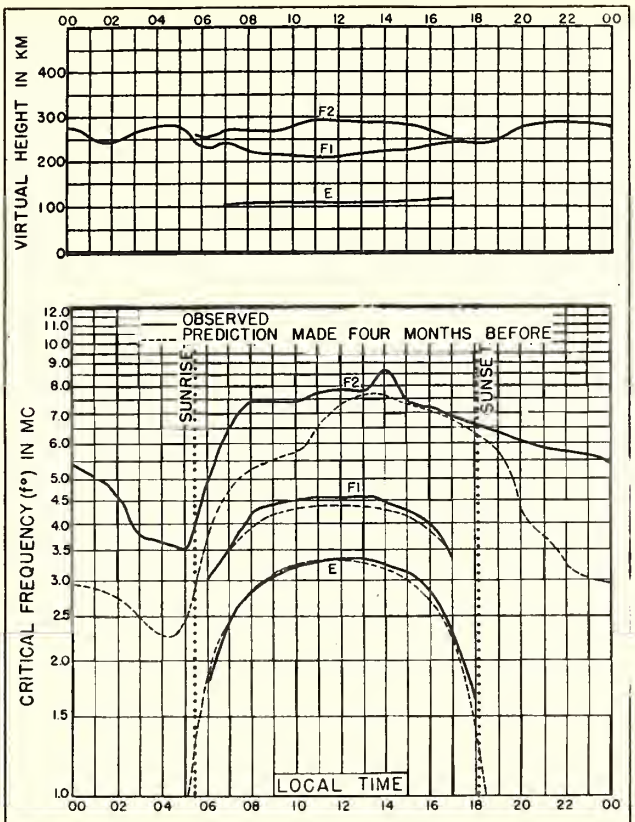

Fig 21. KERMADEC IS.
29.2°S, 177.9°W
OCTOBER, 1944

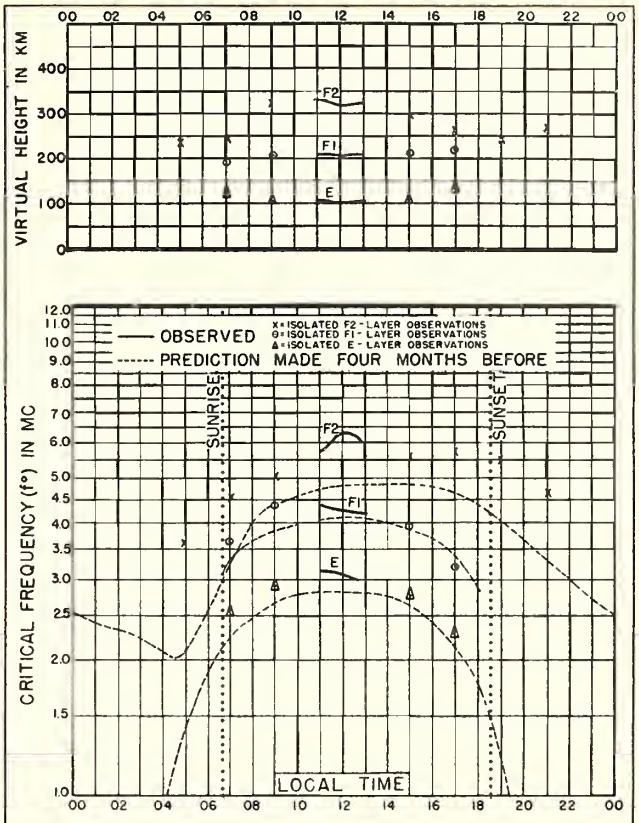

Fig 22. CAMPBELL IS.
52.0°S, 169.0°E
OCTOBER, 1944

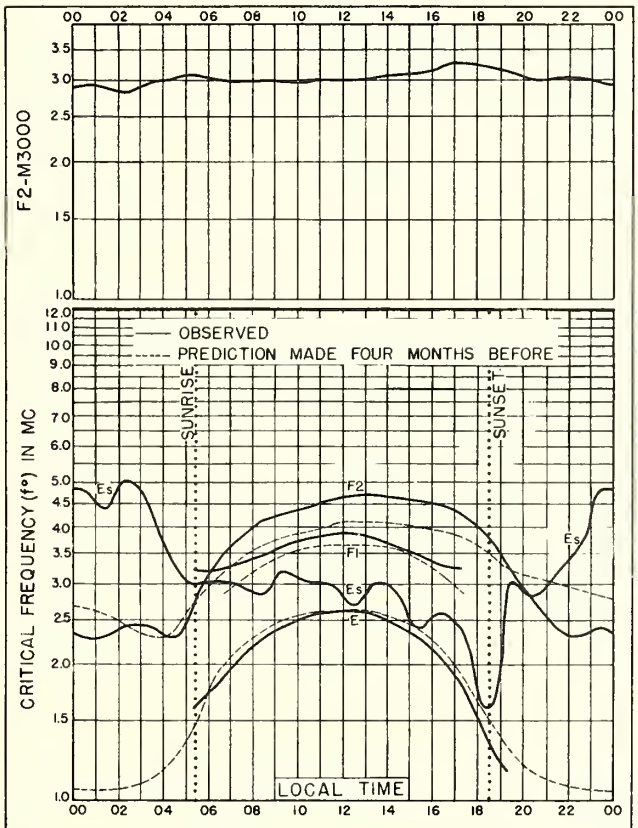

Fig 23. FAIRBANKS, ALASKA
64.9°N, 147.8°W
SEPTEMBER, 1944

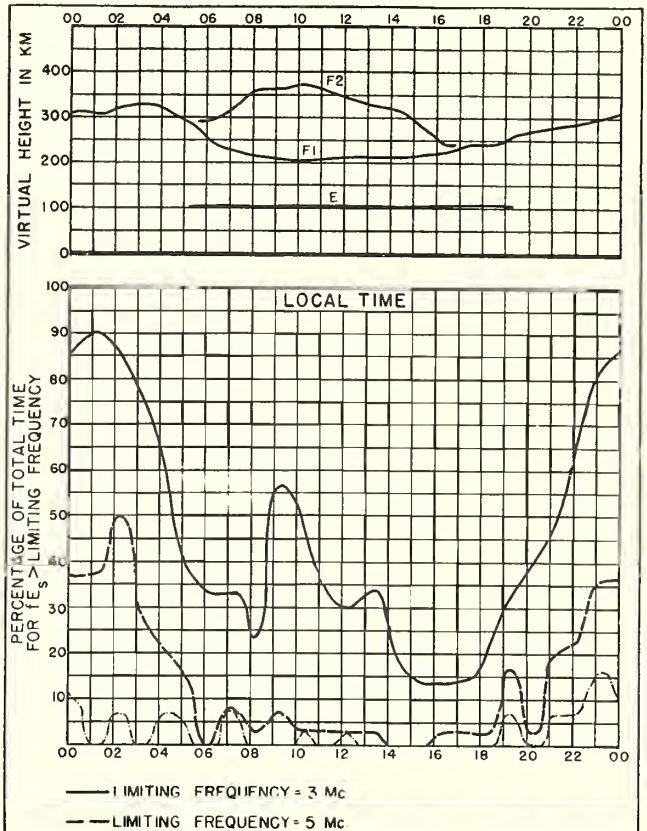

Fig 24 FAIRBANKS, ALASKA
SEPTEMBER, 1944

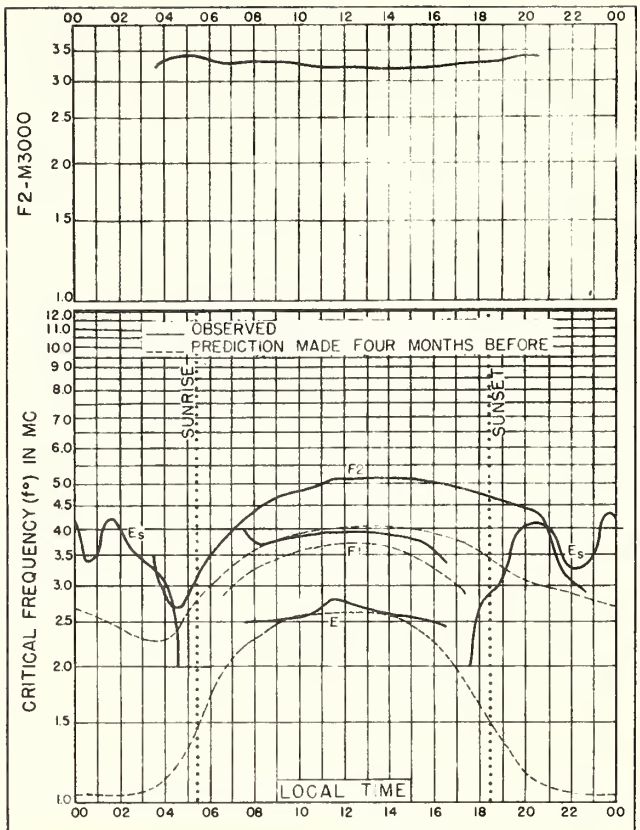

Fig.25. REYKJAVIK, ICELAND
64.1°N, 21.7°W SEPTEMBER, 1944

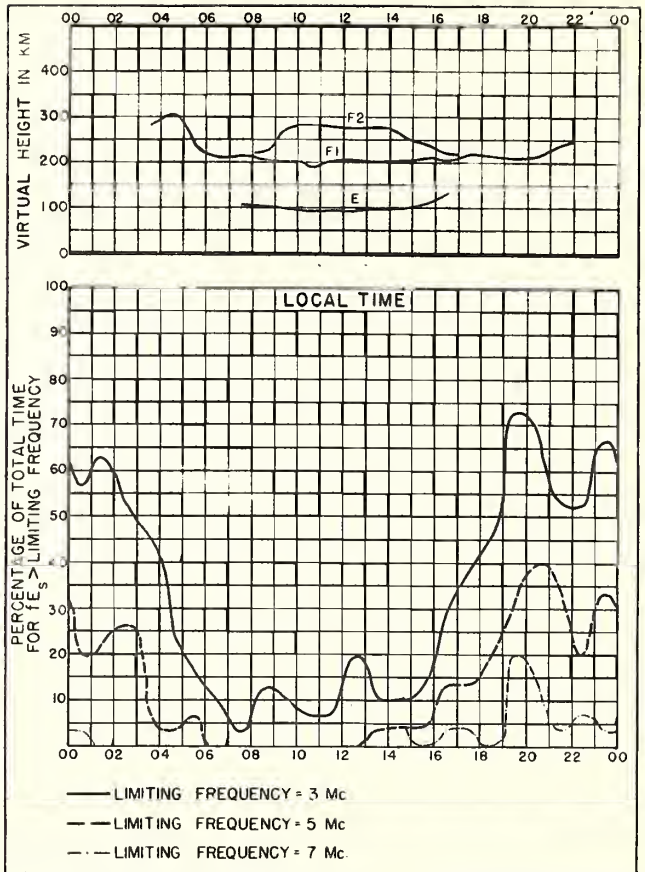

Fig 26. REYKJAVIK, ICELAND SEPTEMBER, 1944

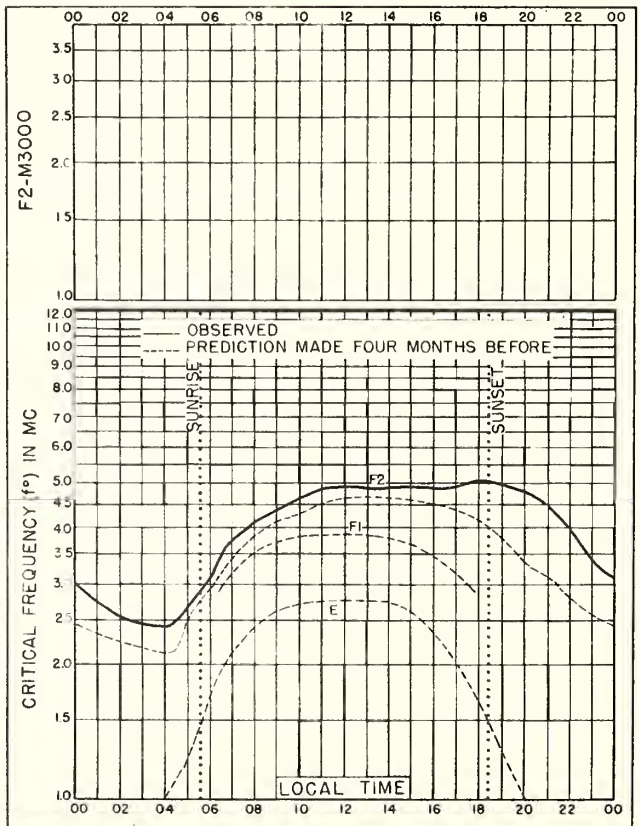

Fig 27. BURGHEAD, SCOTLAND
57.7°N, 3.5°W SEPTEMBER, 1944

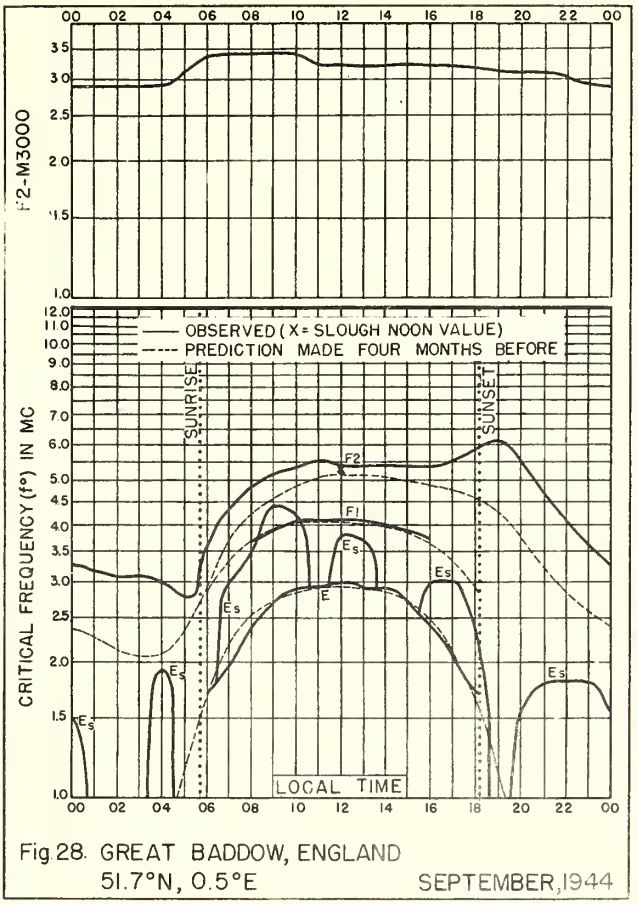

Fig. 28. GREAT BADDOW, ENGLAND
51.7°N, 0.5°E SEPTEMBER, 1944

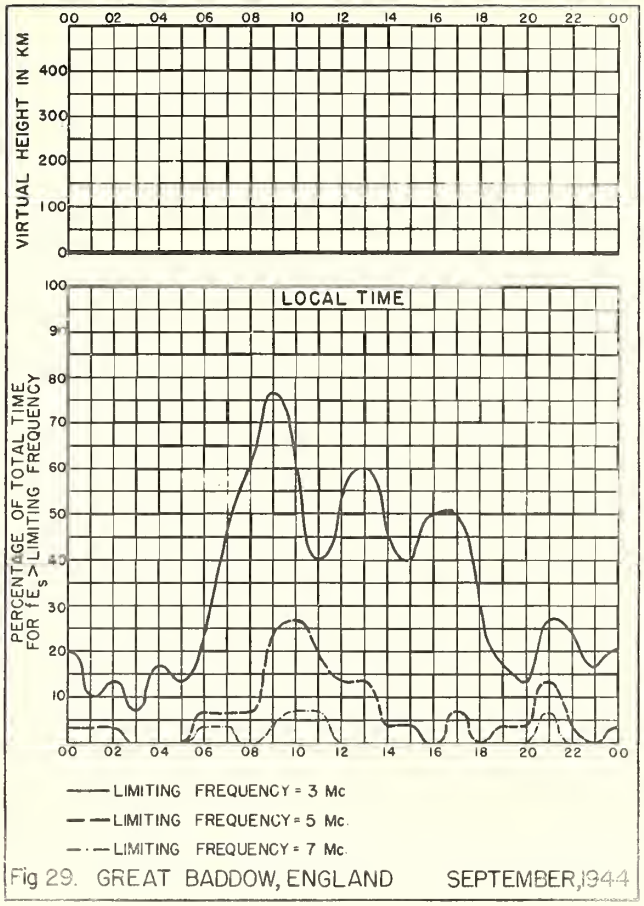

Fig. 29. GREAT BADDOW, ENGLAND SEPTEMBER, 1944

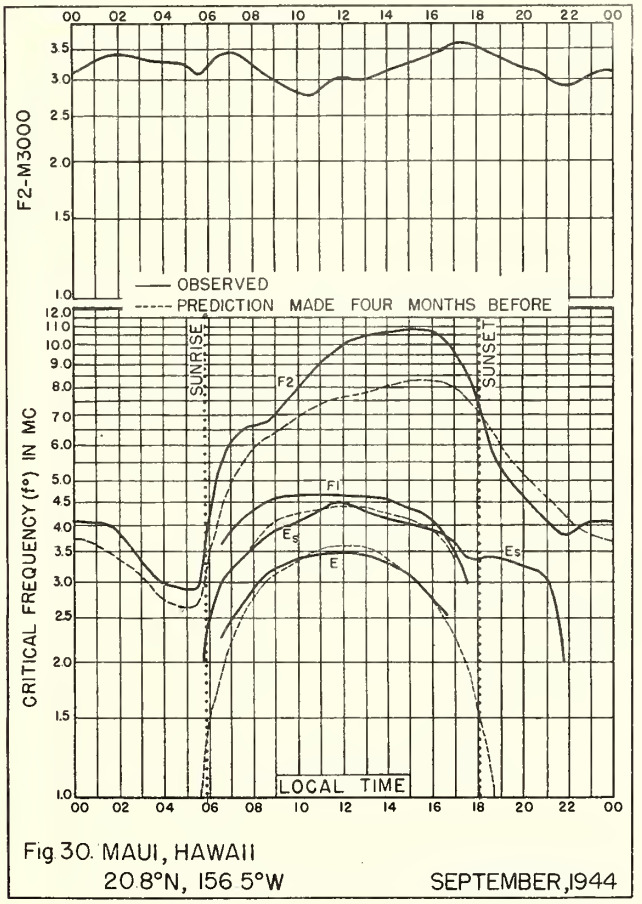

Fig. 30. MAUI, HAWAII
20.8°N, 156.5°W SEPTEMBER, 1944

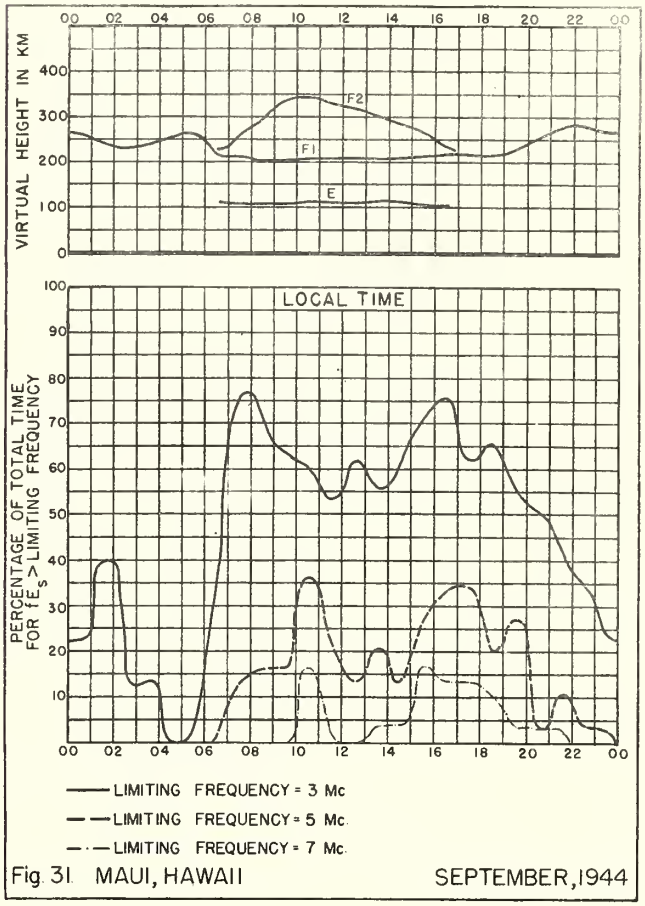

Fig. 31. MAUI, HAWAII SEPTEMBER, 1944

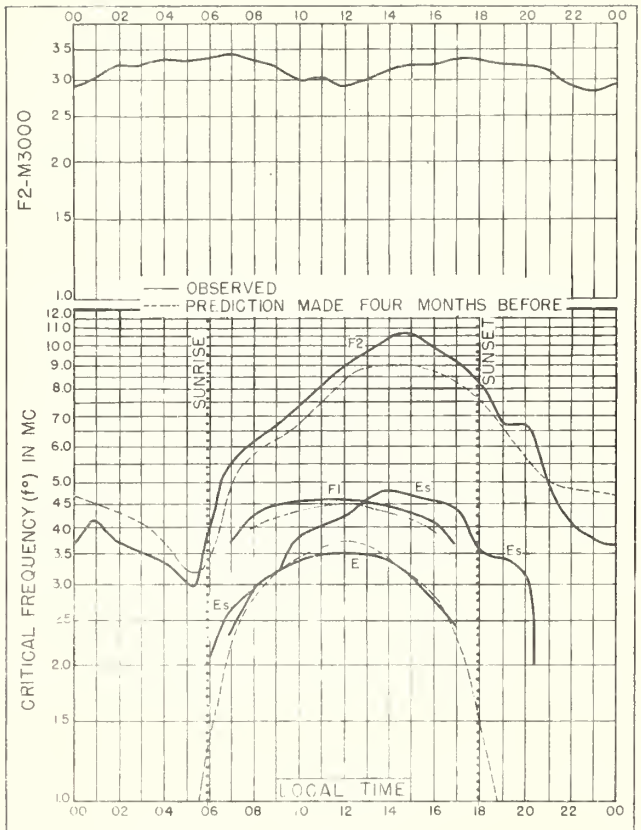

Fig 32. TRINIDAD, BRIT WEST INDIES
10.6°N, 61.3°W SEPTEMBER, 1944

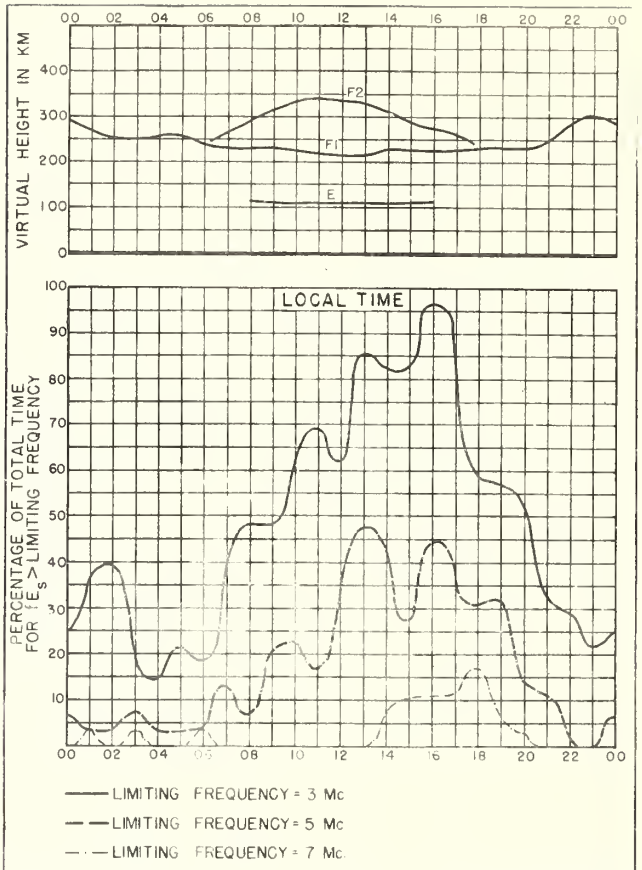

Fig 33. TRINIDAD, BRIT WEST INDIES SEPTEMBER, 1944

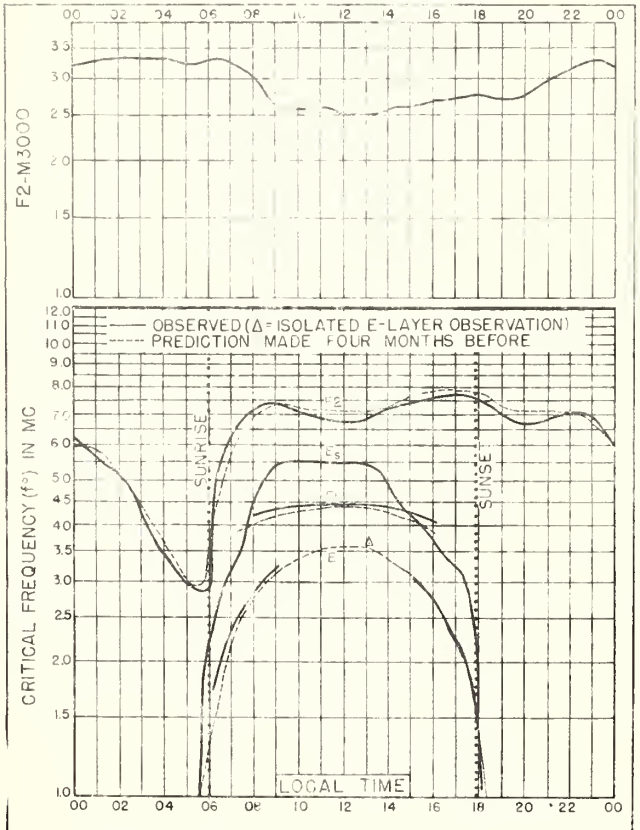

Fig 34. HUANCAYO, PERU
12.0°S, 75.3°W SEPTEMBER, 1944

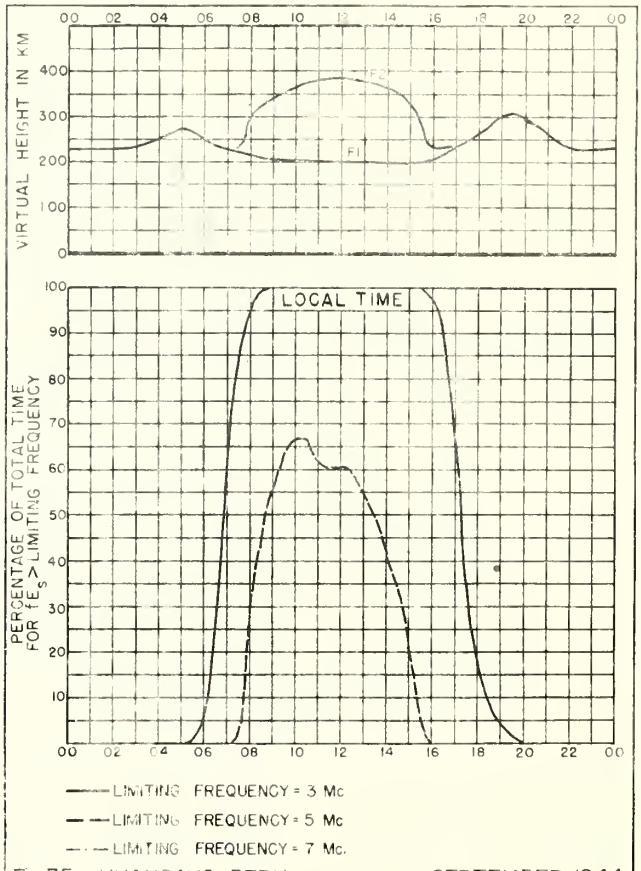

Fig 35. HUANCAYO, PERU SEPTEMBER, 1944

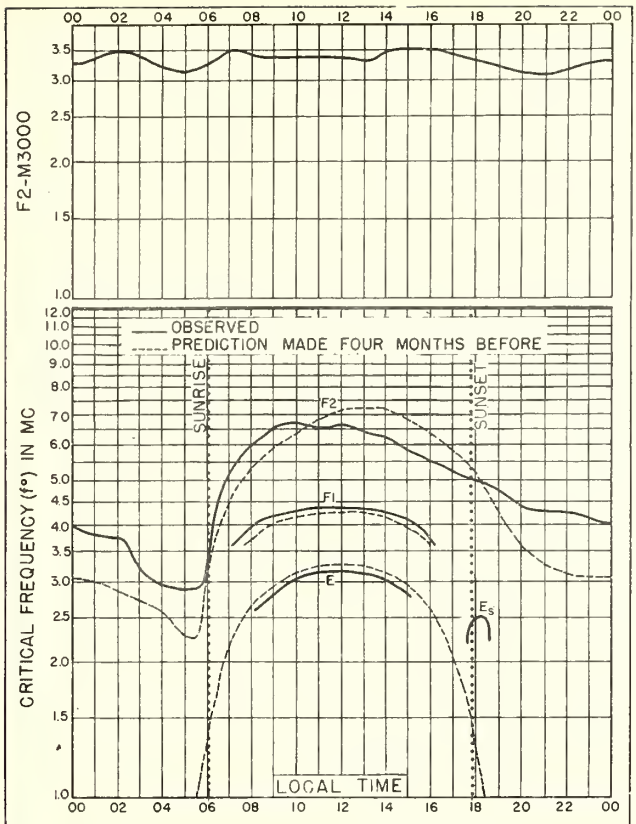

Fig. 36. BRISBANE, Q., AUSTRALIA
27.5°S, 153.0°E SEPTEMBER, 1944

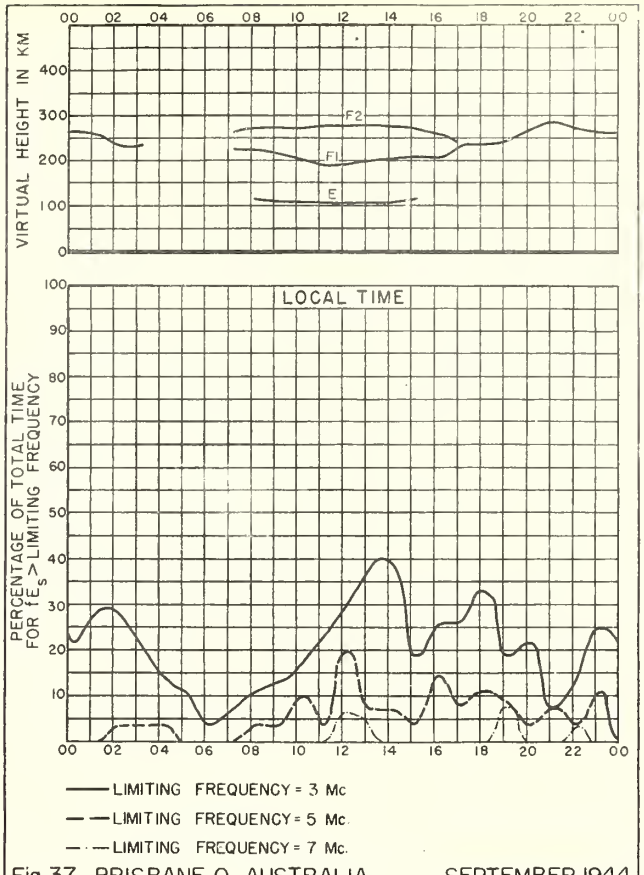

Fig. 37. BRISBANE, Q., AUSTRALIA SEPTEMBER, 1944

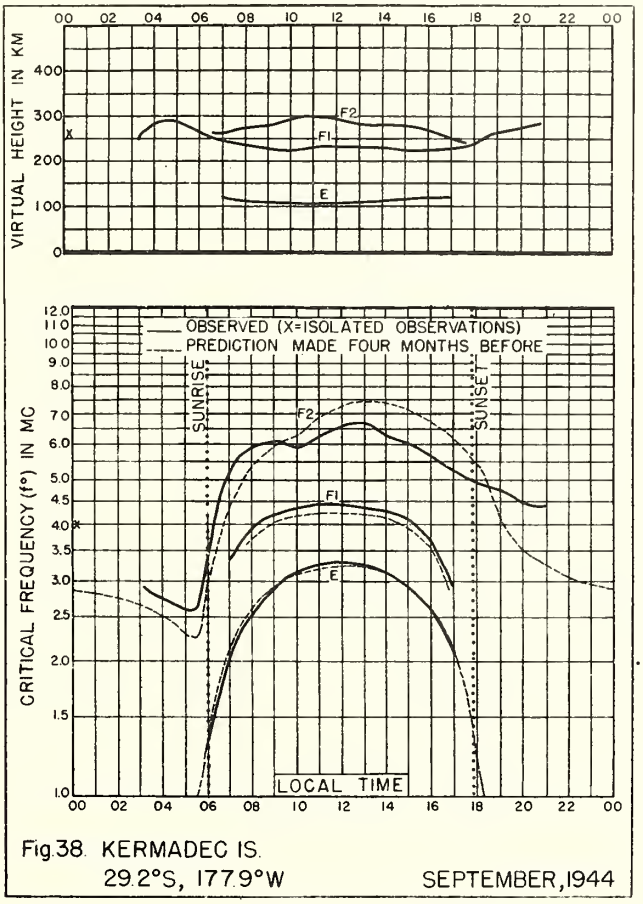

Fig. 38. KERMADEC IS.
29.2°S, 177.9°W SEPTEMBER, 1944

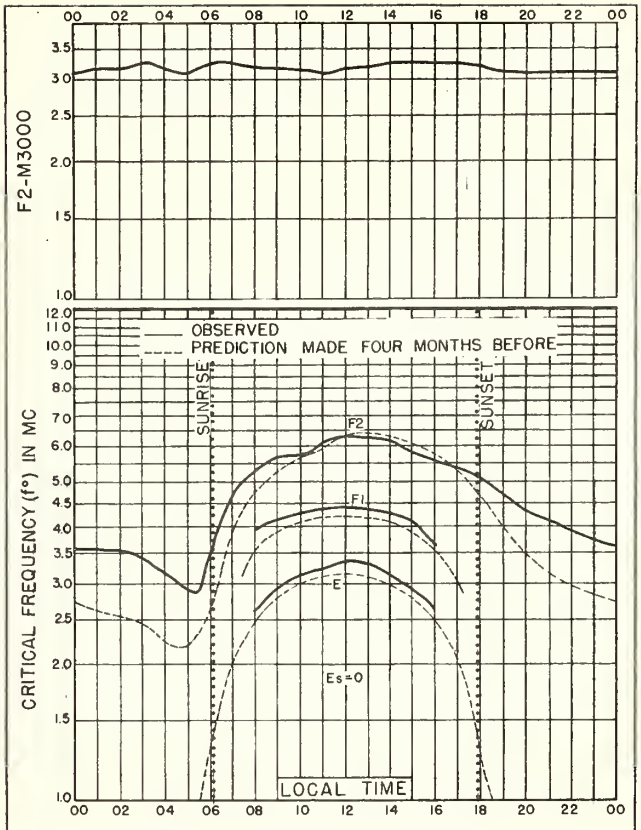

Fig.39. MT. STROMLO, N.S.W., AUSTRALIA
35.3°S, 149.0°E SEPTEMBER, 1944

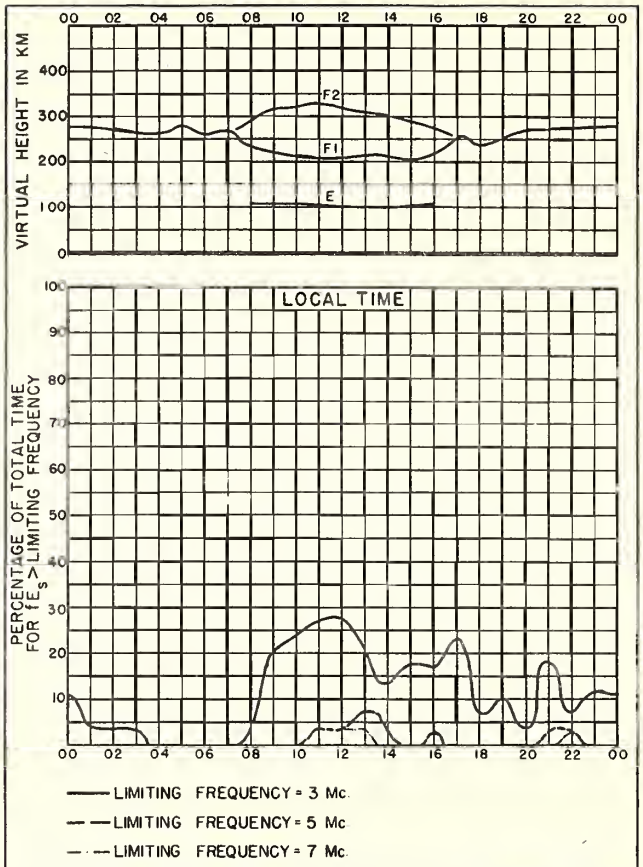

Fig.40. MT. STROMLO, N.S.W., AUSTRALIA SEPTEMBER, 1944

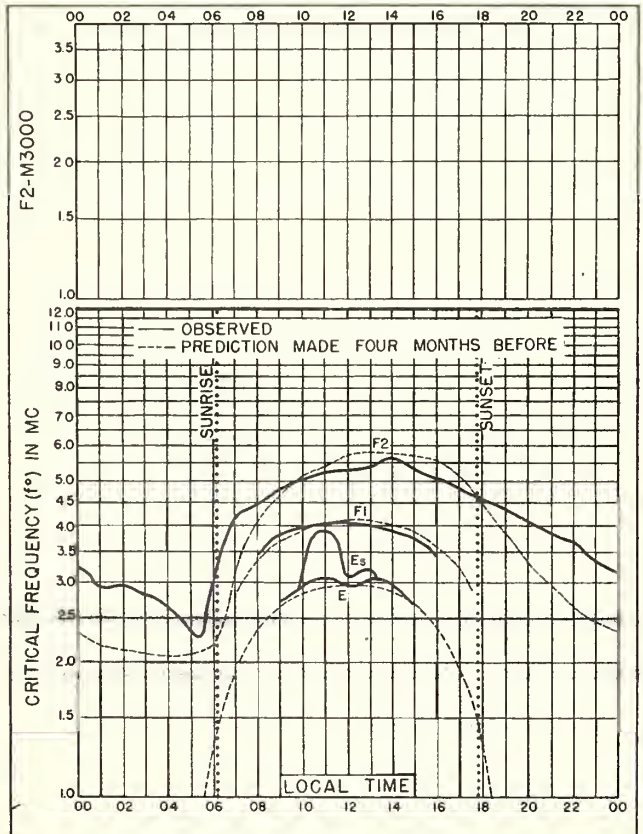

Fig.41. CHRISTCHURCH, NEW ZEALAND
43.5°S, 172.6°E SEPTEMBER, 1944

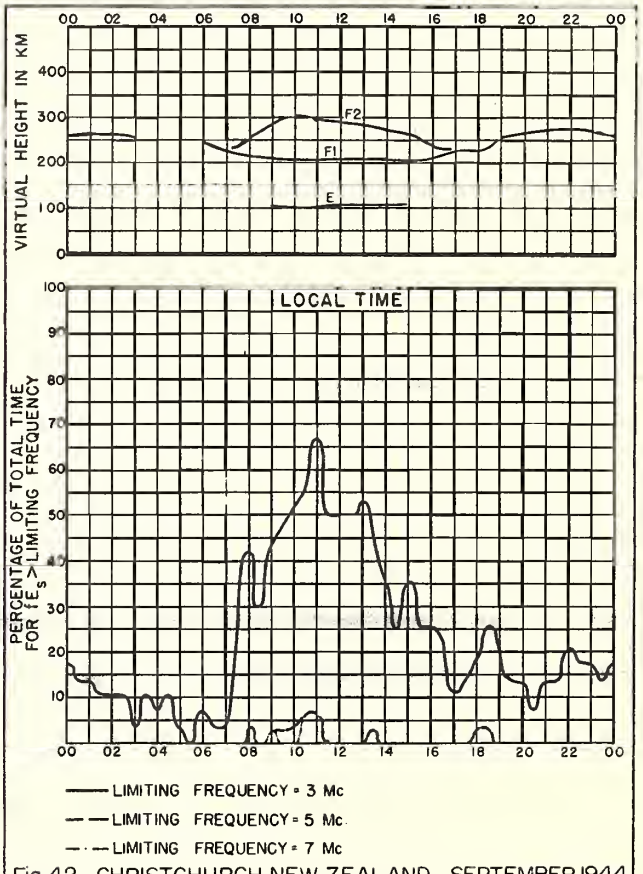

Fig.42. CHRISTCHURCH, NEW ZEALAND SEPTEMBER, 1944

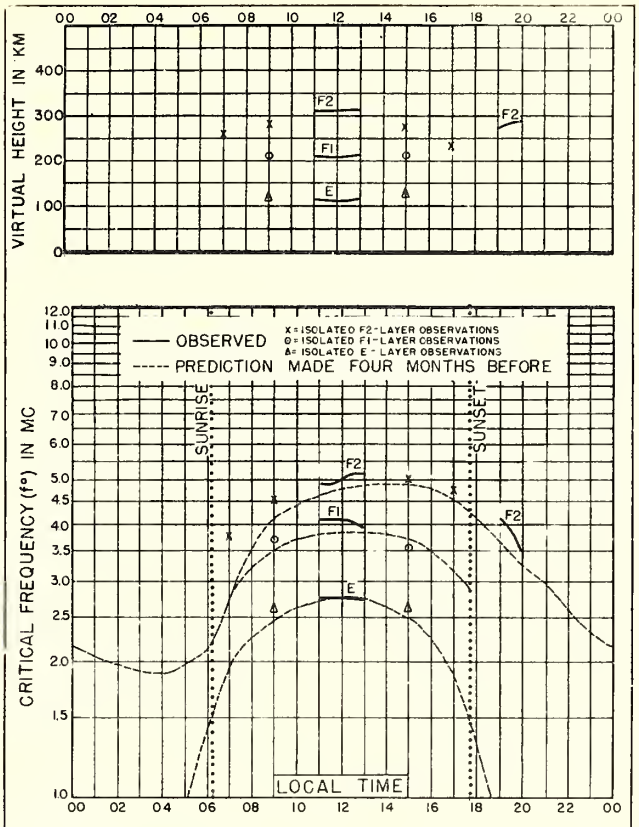

Fig. 43 CAMPBELL IS.
52.0°S, 169.0°E
SEPTEMBER, 1944

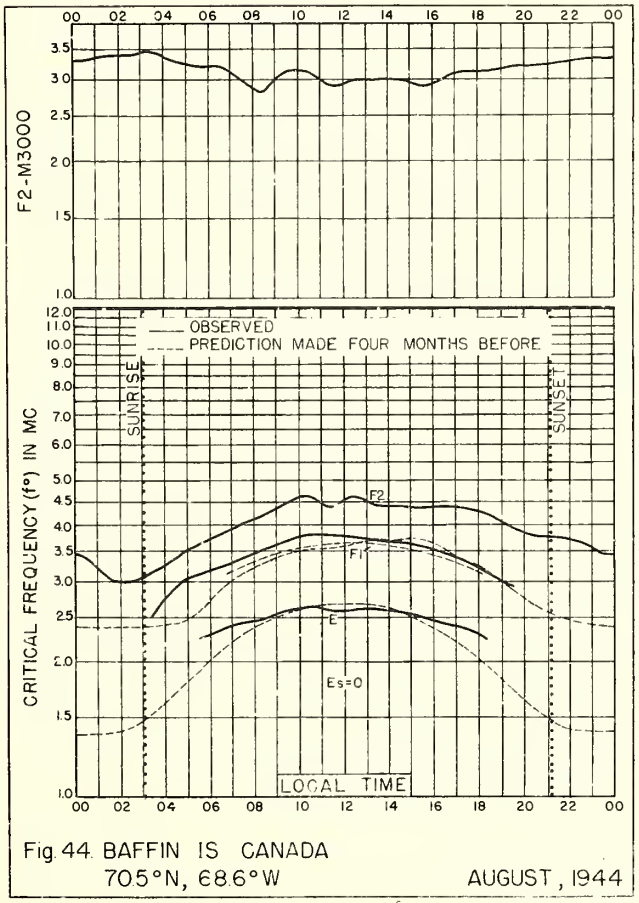

Fig. 44 BAFFIN IS CANADA
70.5°N, 68.6°W
AUGUST, 1944

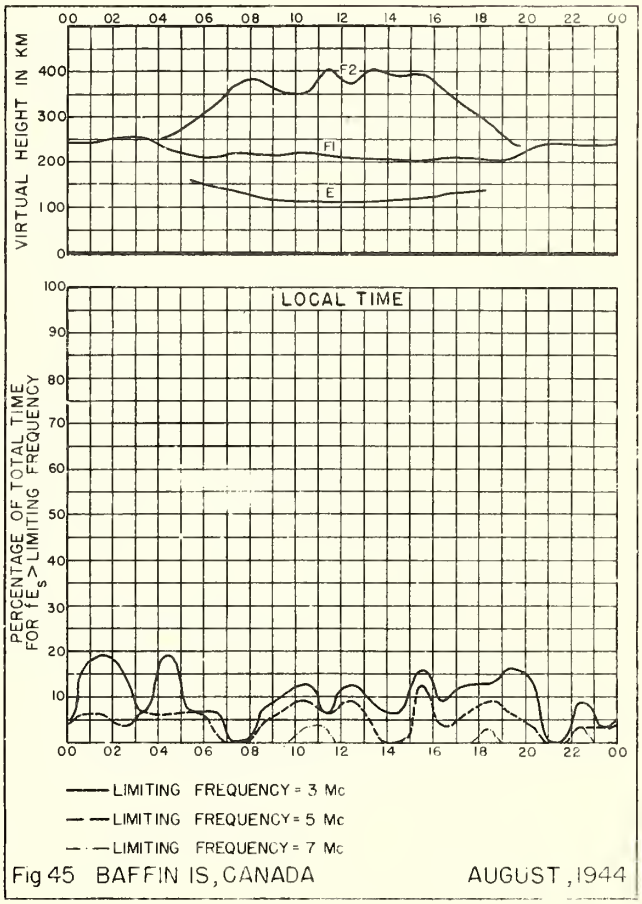

Fig. 45 BAFFIN IS, CANADA
AUGUST, 1944

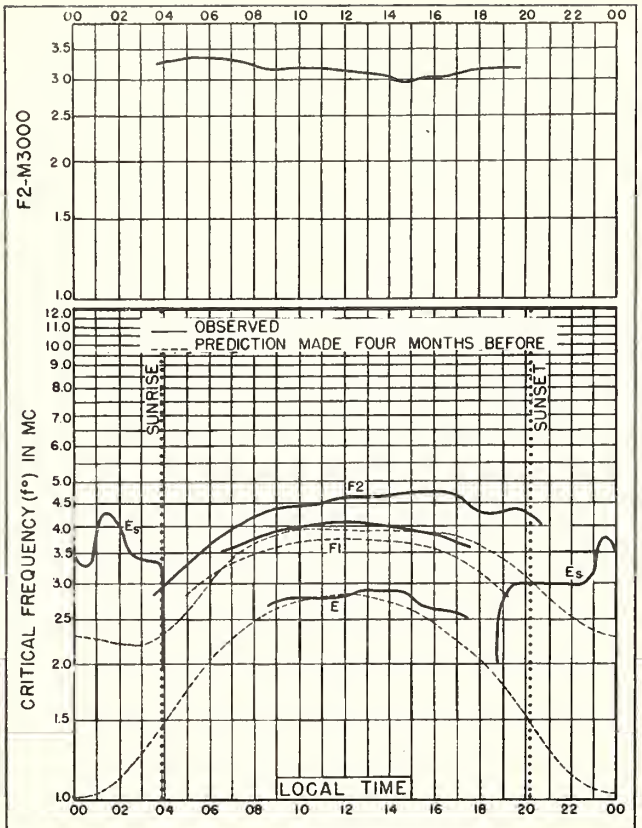

Fig.46. REYKJAVIK, ICELAND
64.1°N, 21.7°W AUGUST, 1944

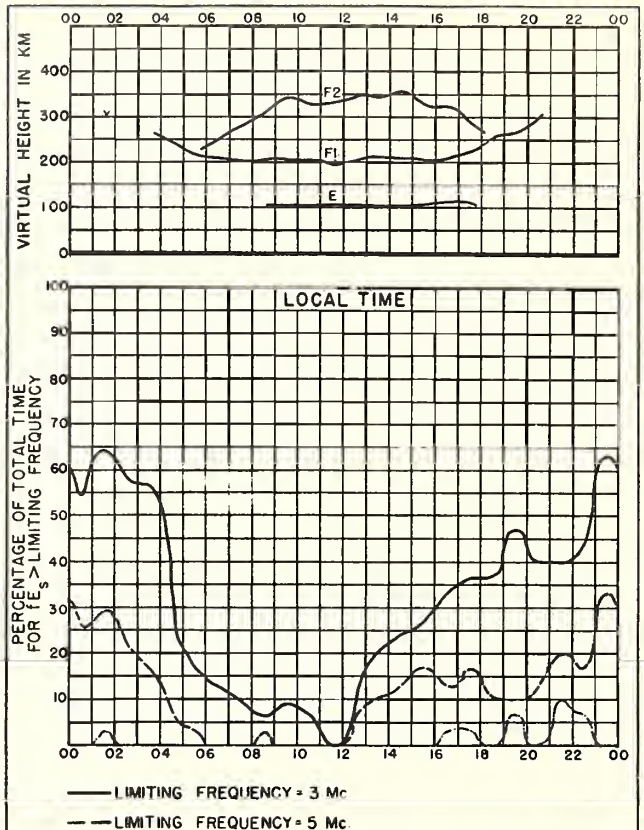

Fig.47. REYKJAVIK, ICELAND AUGUST, 1944

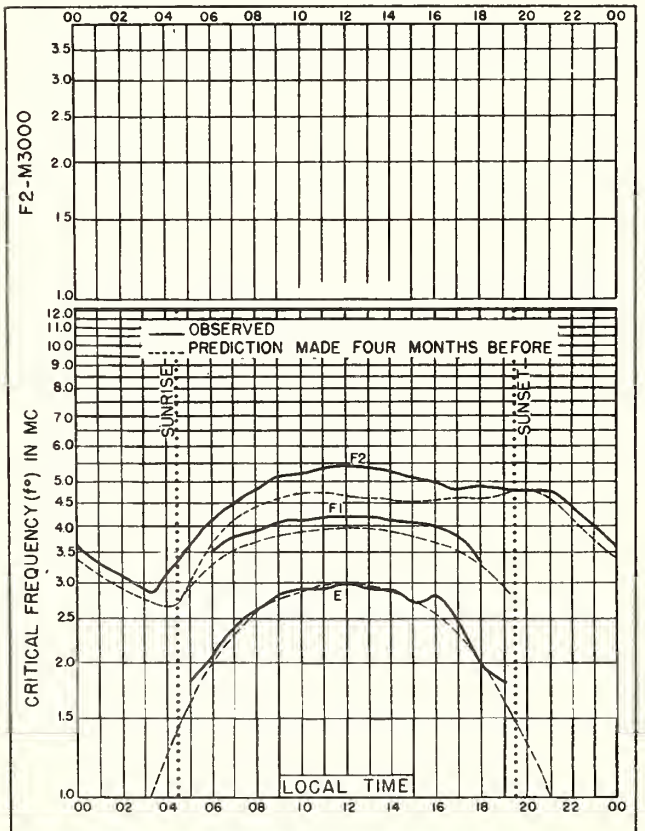

Fig.48. SVERDLOVSK, U.S.S.R.
56.8°N, 61.1°E AUGUST, 1944

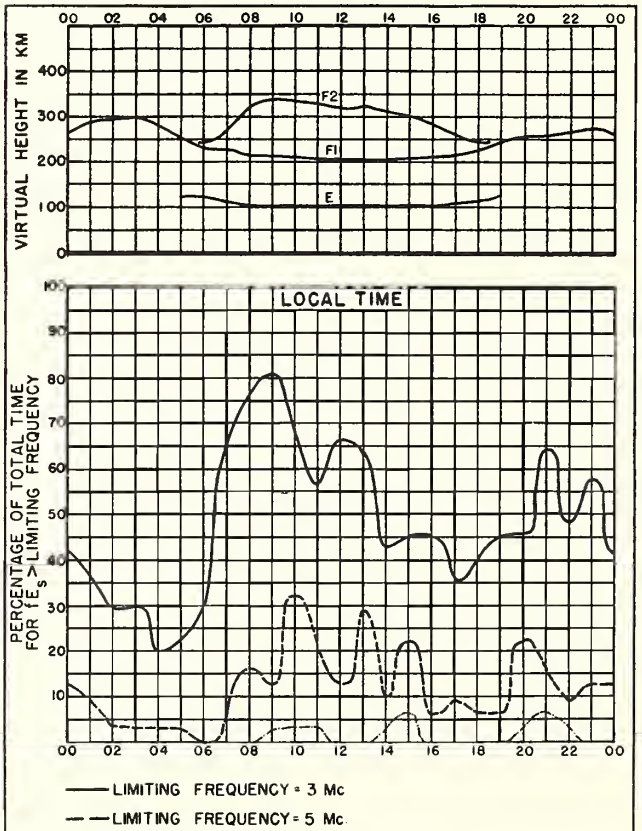

Fig.49. SVERDLOVSK, U.S.S.R AUGUST, 1944

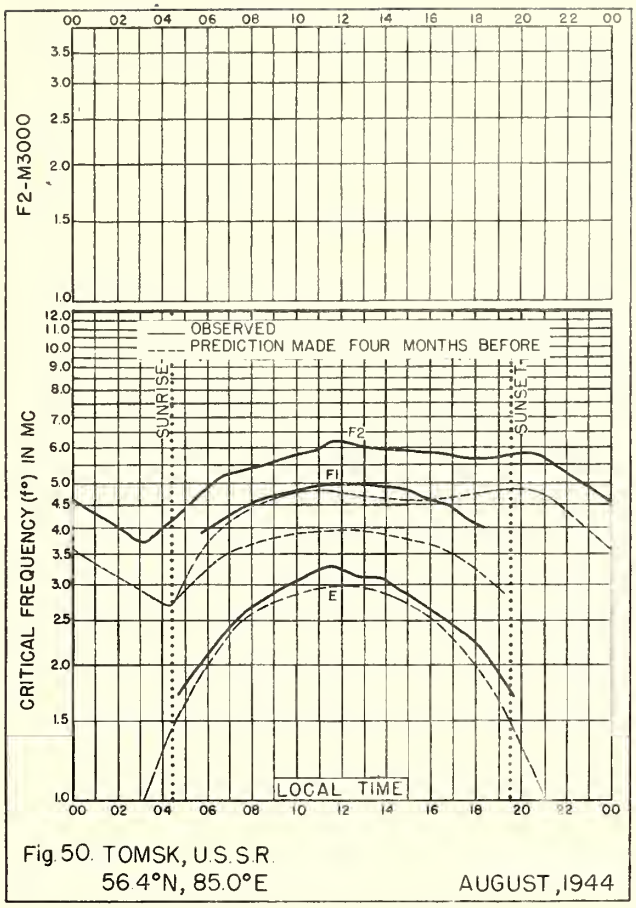

Fig. 50. TOMSK, U.S.S.R.
56.4°N, 85.0°E
AUGUST, 1944

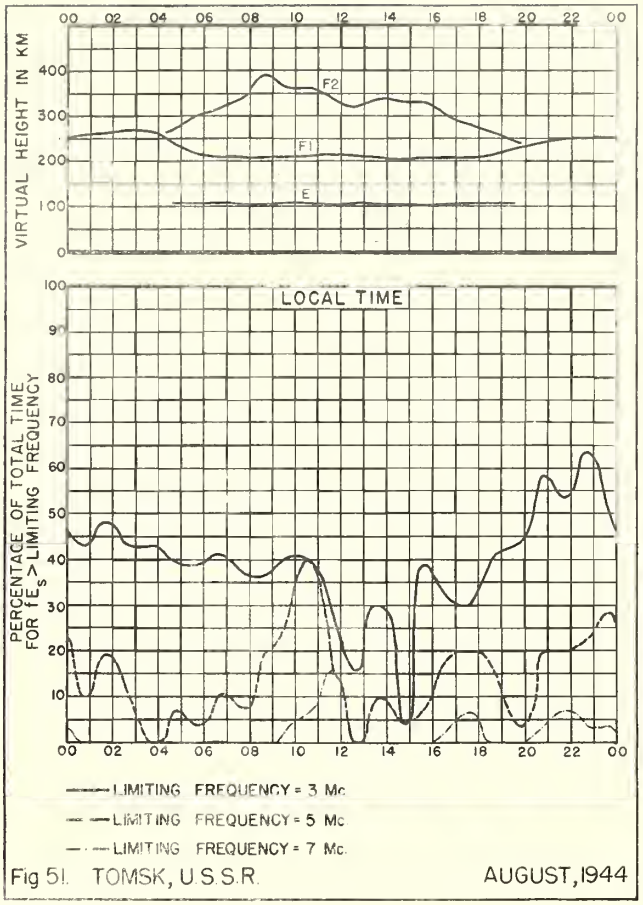

Fig 51. TOMSK, U.S.S.R.
AUGUST, 1944

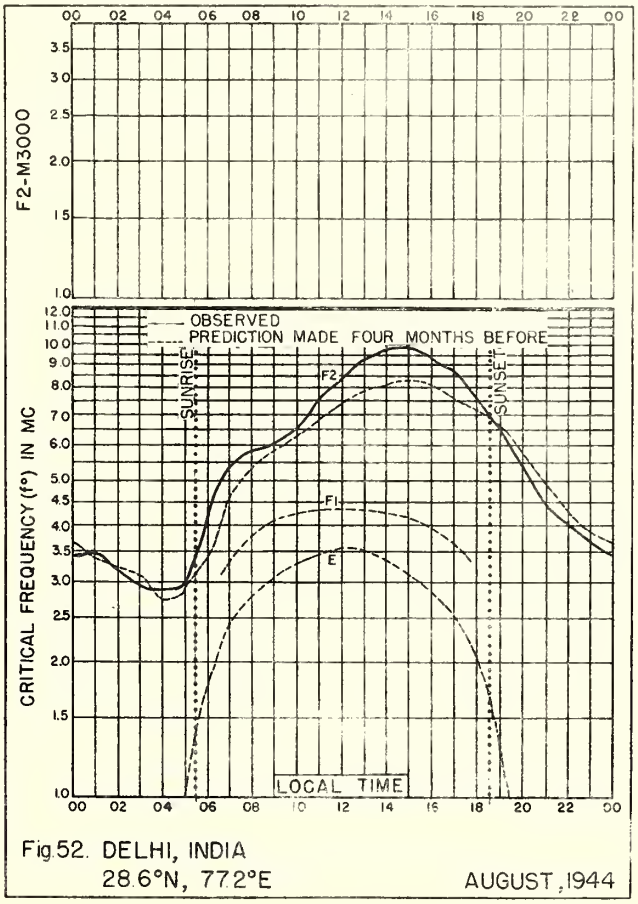

Fig. 52. DELHI, INDIA
28.6°N, 77.2°E
AUGUST, 1944

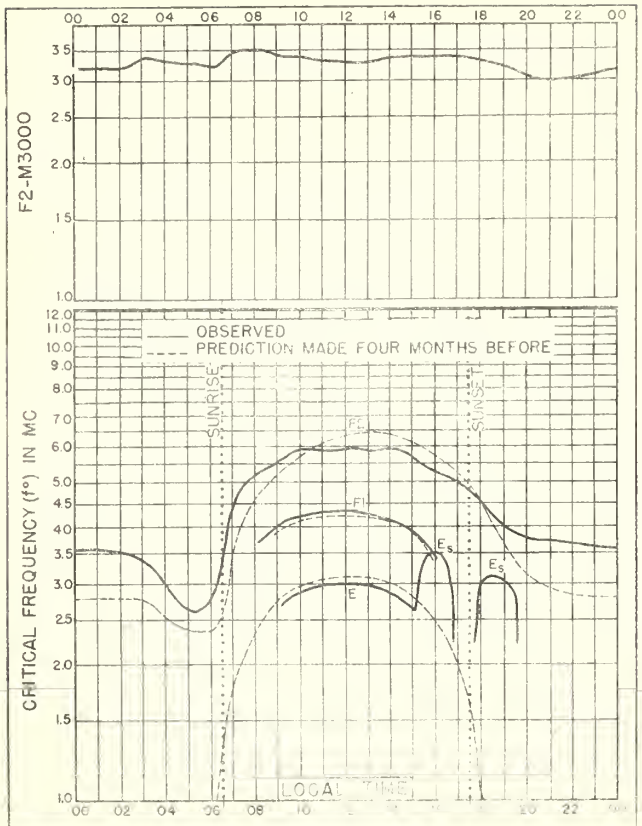

Fig 53 BRISBANE, Q, AUSTRALIA
27.5°S, 153.0°E AUGUST, 1944

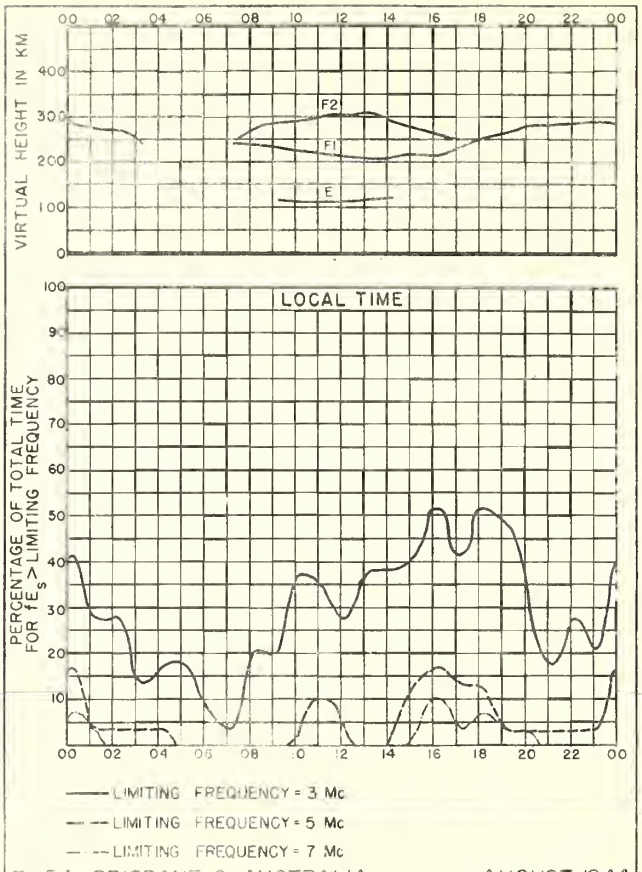

Fig 54 BRISBANE, Q, AUSTRALIA AUGUST, 1944

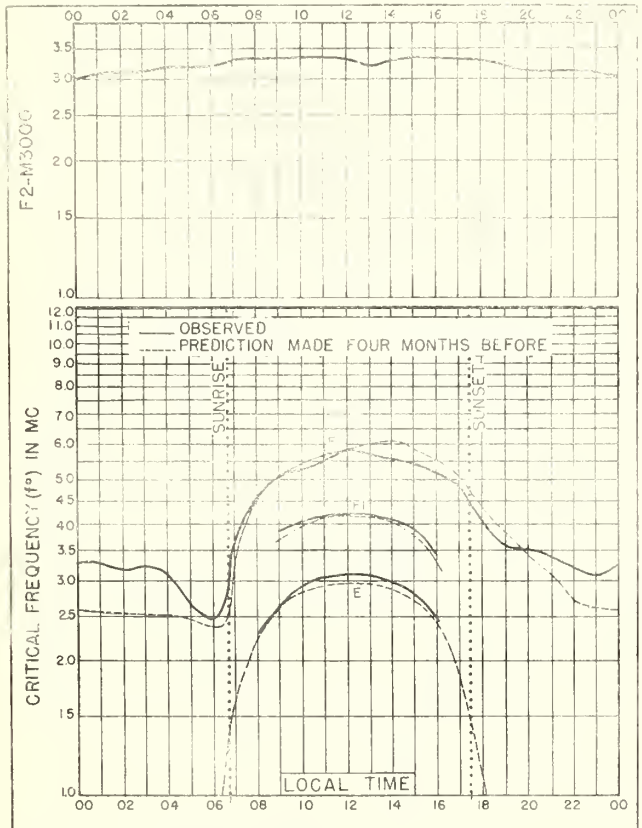

Fig 55 MT. STROMLO, N S W, AUSTRALIA
35.3°S, 149.0°E AUGUST, 1944

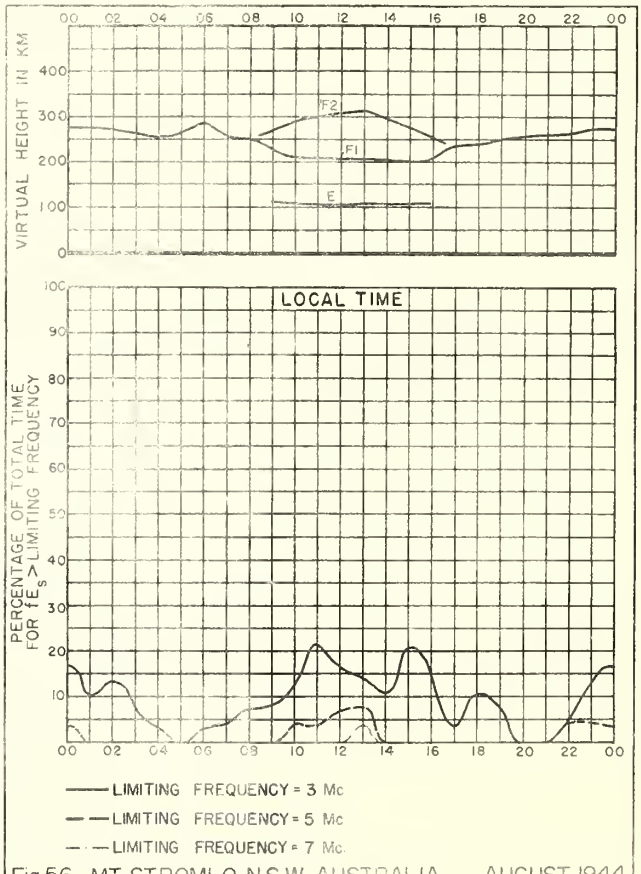

Fig 56 MT. STROMLO, N.S.W., AUSTRALIA AUGUST, 1944

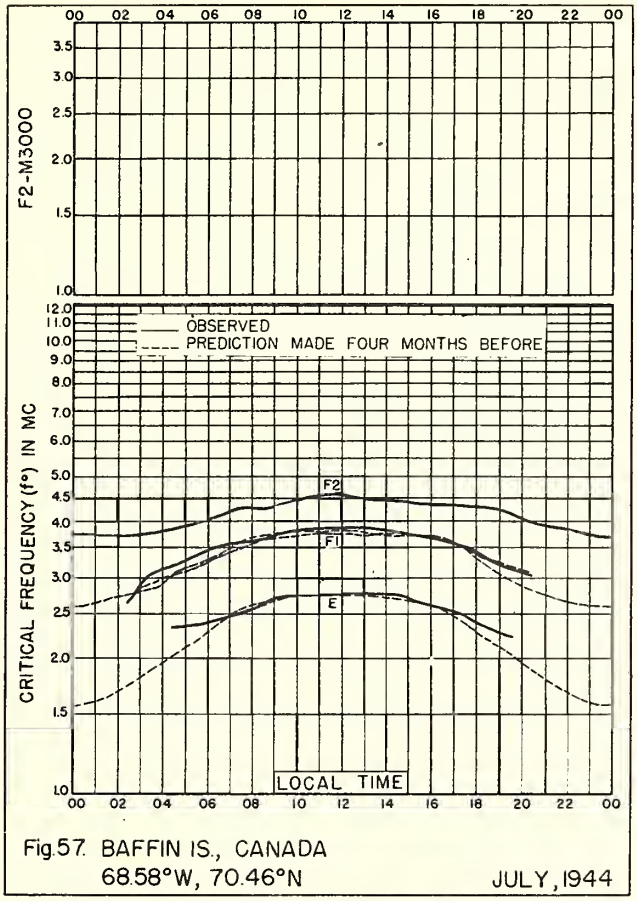

Fig.57. BAFFIN IS., CANADA
68.58°W, 70.46°N
JULY, 1944

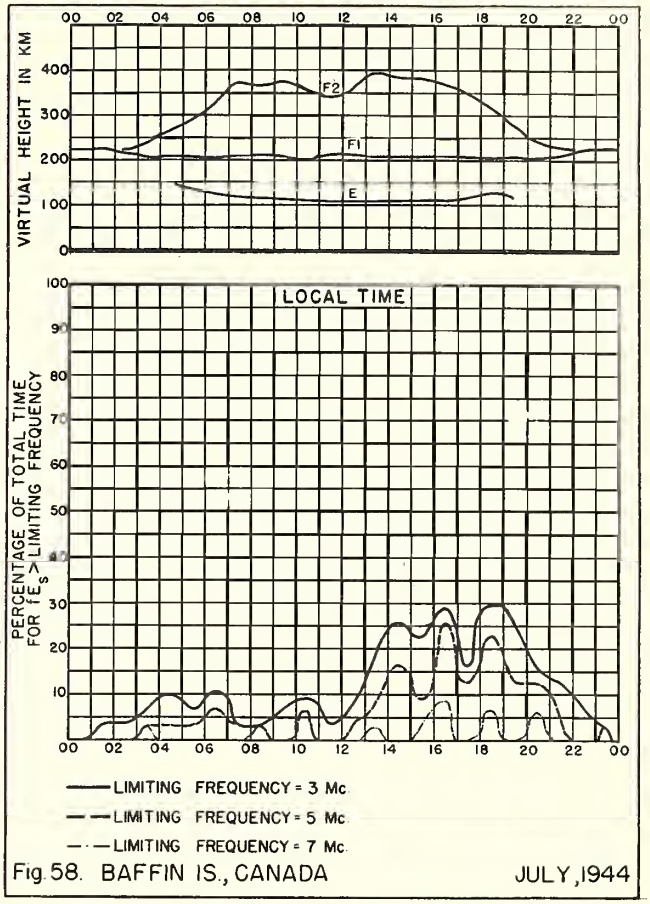

Fig.58. BAFFIN IS., CANADA
JULY, 1944

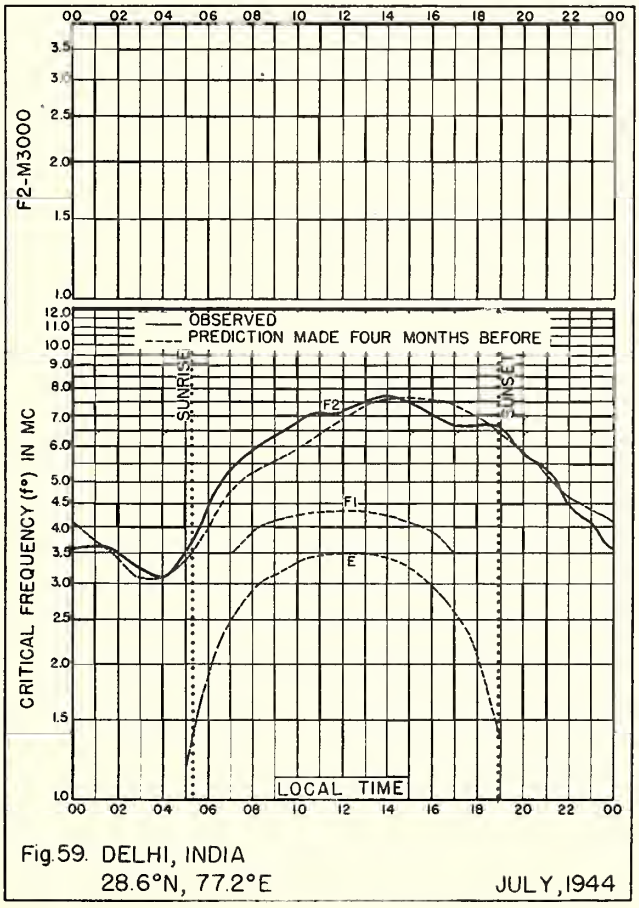

Fig.59. DELHI, INDIA
28.6°N, 77.2°E
JULY, 1944

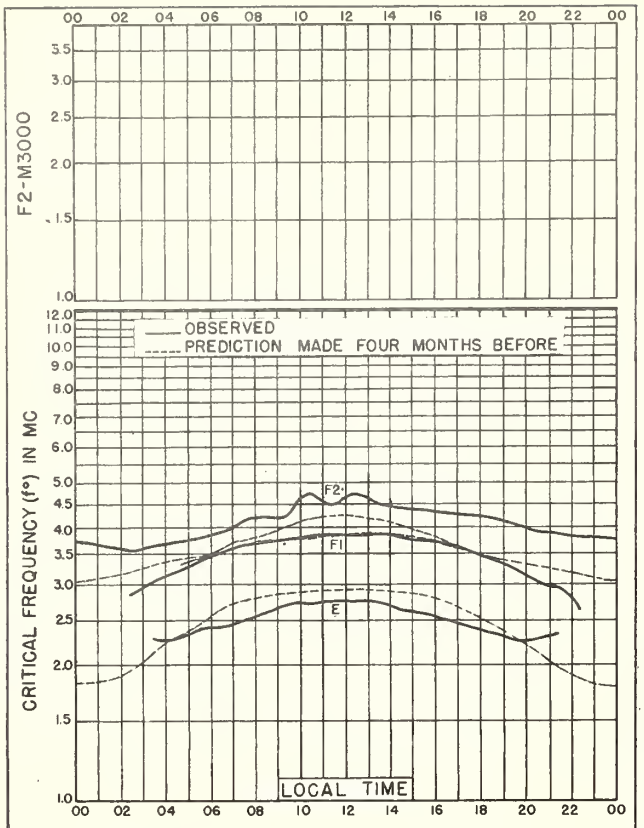

Fig. 60. BAFFIN IS., CANADA
68.58°W, 70.46°N

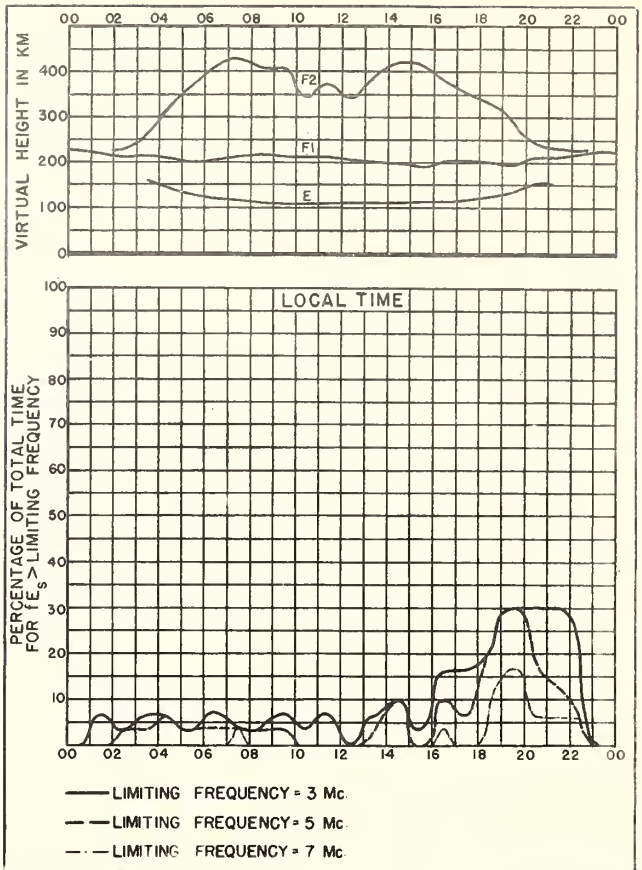

Fig. 61. BAFFIN IS., CANADA JUNE, 1944

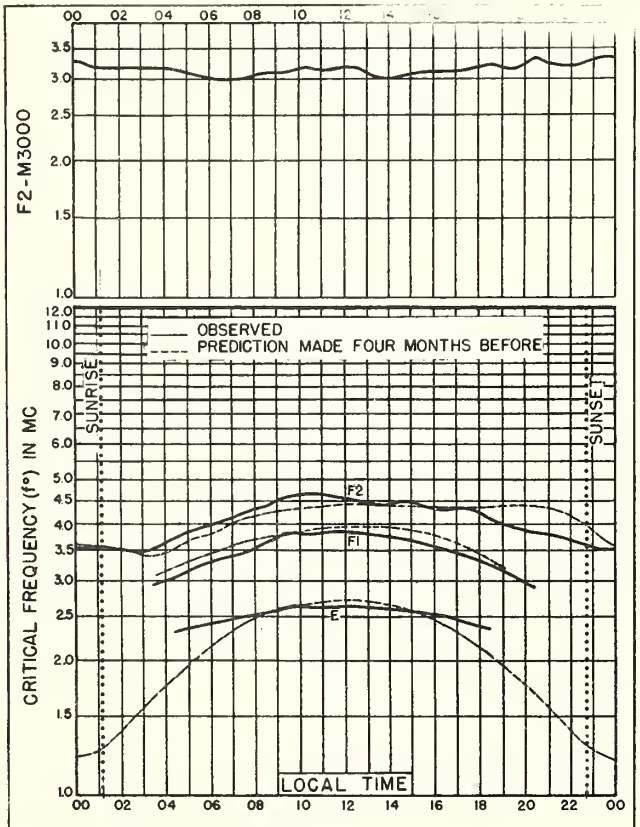

Fig. 62. BAFFIN IS., CANADA
70.5°N, 68.6° W
MAY, 1944

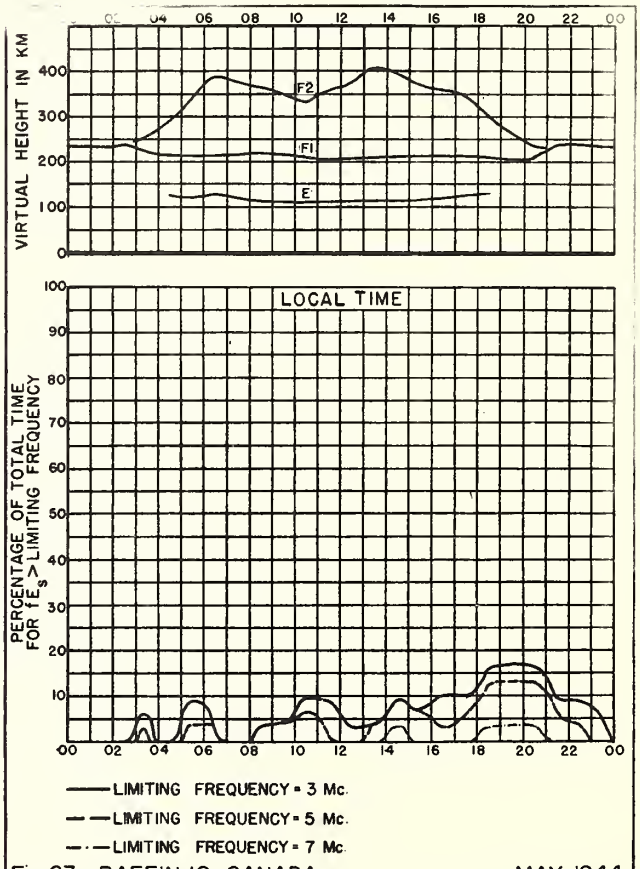

Fig. 63. BAFFIN IS., CANADA MAY, 1944

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