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CRPL-F232 PART A

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PART A
IONOSPHERIC DATA

ISSUED
DECEMBER 1963

SEE PAGE 55 FOR INDEX OF OBSERVED
IONOSPHERIC DATA BEGINNING JANUARY 1957

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

CRPL-F 232
PART A

NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

Issued
31 Dec. 1963

IONOSPHERIC DATA

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IONOSPHERIC DATA

The CRPL-F series bulletins are issued as part of the responsibility of the Central Radio Propagation Laboratory for the exchange and distribution of ionospheric and related geophysical data. Part A, "Ionospheric Data," and Part B, "Solar-Geophysical Data," of the CRPL-F series present a variety of data in convenient form for use in research in radio propagation and the ionosphere and in other geophysical problems.

The current form of the tables of ionospheric data provides the monthly medians and, in addition, the number of values entering into the median determination (count) for all ionospheric characteristics listed. Also, when available, the upper and lower quartile values indicated by UQ and LQ in the tables, are listed for foF2, h'F2, h'F, and M(3000)F2. Quartile values are not listed for the other characteristics because of space limitations. The tables are prepared by IBM machine methods.

Beginning with CRPL-F221, Part A, "Ionospheric Data," the hourly median values for the graphs of critical frequencies and M(3000)F2 were plotted by machine methods instead of manually, as in earlier issues. Graphs of critical frequencies and M(3000)F2 will continue to appear. Graphs of percentage of time of occurrence for fEs and virtual heights of the regular ionospheric layers are no longer included. Data on percentage of time of occurrence of fEs above 3, 5, and 7 Mc are available from the CRPL and the IGY World Data Center for Airglow and Ionosphere.

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

Medians of data for the U.S. stations are computed in accordance with the recommendations of the World-Wide Soundings Committee. Data will appear in the F series, Part A, only when the complete daily-hourly tabulations have been received by the CRPL or the IGY World Data Center A for Airglow and Ionosphere.

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

The following table contains the latest available information on smoothed observed Zurich sunspot numbers, beginning with the minimum of April 1954. Final numbers are listed through June 1962, the succeeding values being based on provisional data.

Smoothed Observed Zurich Sunspot Number

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1954				3	4	4	5	7	8	8	10	12
1955	14	16	19	23	29	35	40	46	55	64	73	81
1956	89	98	109	119	127	137	146	150	151	156	160	164
1957	170	172	174	181	186	188	191	194	197	200	201	200
1958	199	201	201	197	191	187	185	185	184	182	181	180
1959	179	177	174	169	165	161	156	151	146	141	137	132
1960	129	125	122	120	117	114	109	102	98	93	88	84
1961	80	75	69	64	60	56	53	52	52	51	50	49
1962	45	42	40	39	39	38	36	34	32	31	30	30
1963	29	30	30	29	29							

Units of Ionospheric Data Tables

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

NOTE: Occasionally, when the median falls between two of the observed values, the median is carried an extra decimal place beyond these units. Those cases are easily identifiable by the extra digit appearing to the right of the number, in a column usually left blank.

MED - Median

CNT - Count

UQ - Upper Quartile

LQ - Lower Quartile

WORLD-WIDE SOURCES OF IONOSPHERIC DATA

THE IONOSPHERIC DATA GIVEN IN TABLES 1 TO 100 AND FIGURES 1 TO 100 WERE ASSEMBLED BY THE CENTRAL RADIO PROPAGATION LABORATORY FOR ANALYSIS, CORRELATION AND DISTRIBUTION. THE FOLLOWING ARE THE SOURCES OF THE DATA IN THIS ISSUE:

UNIVERSIDAD MAYOR DE SAN ANDRES
LA PAZ, BOLIVIA

UNIVERSIDAD DE CONCEPCION
CONCEPCION, CHILE

DANISH NATIONAL COMMITTEE OF URSI
NARSSARSSUAQ, GREENLAND

ICELANDIC POST AND TELEGRAPH ADMINISTRATION
REYKJAVIK, ICELAND

UNITED STATES ARMY SIGNAL CORPS., UNITED STATES OF AMERICA
ADAK, ALASKA
FT. MONMOUTH, NEW JERSEY
GRAND BAHAMA I.
OKINAWA I.
THULE, GREENLAND
WHITE SANDS, NEW MEXICO

NATIONAL BUREAU OF STANDARDS, UNITED STATES OF AMERICA
(CENTRAL RADIO PROPAGATION LABORATORY)
ANCHORAGE, ALASKA
BARROW, ALASKA
BYRD STATION, ANTARCTICA
COLLEGE (FAIRBANKS), ALASKA (GEOPHY INST OF UNIV OF ALASKA)
HUANCAYO, PERU (INSTITUTO GEOFISICO DEL PERU)
MAUI, HAWAII
TALARA, PERU (INSTITUTO GEOFISICO DEL PERU)
WASHINGTON, D.C.

TABLE 73

TIME 60.0^a

TABLE 74

TIME 120.0^a

YEAR	MONTH	DAY	HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1961	LA PAZ, BOLIVIA	(116.55° S, 68.11° W)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1962	BYRD STATION, ANTARCTICA	(60.05° S, 120.0° W)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1962	DECEMBER • 1962	TIME 60.0 ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1962	DECEMBER • 1962	TIME 120.0 ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1962	DECEMBER • 1962	SWEEP 1.0 MC TO 25.0 MC IN 31.5 SECONDS.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

SWEEP 1.0 MC TO 25.0 MC IN 31.5 SECONDS.

YEAR	MONTH	DAY	HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1961	SARDOON, ALASKA	(71.73° N, 156.8° W)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1962	BYRD STATION, ANTARCTICA	(59.05° S, 176.6° W)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1962	DECEMBER • 1962	TIME 150.0 ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1962	DECEMBER • 1962	TIME 180.0 ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1962	DECEMBER • 1962	SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

SWEEP 1.0 MC TO 25.0 MC IN 31.5 SECONDS.

DECEMBER • 1962

NOVEMBER • 1962

SWEEP 1.0 MC TO 25.0 MC IN 31.5 SECONDS.

NOVEMBER • 1962

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ERR 1.0 MC TO 250 MC IN 16.2 SECONDS.

1

- EQUITY: 1962

11

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2

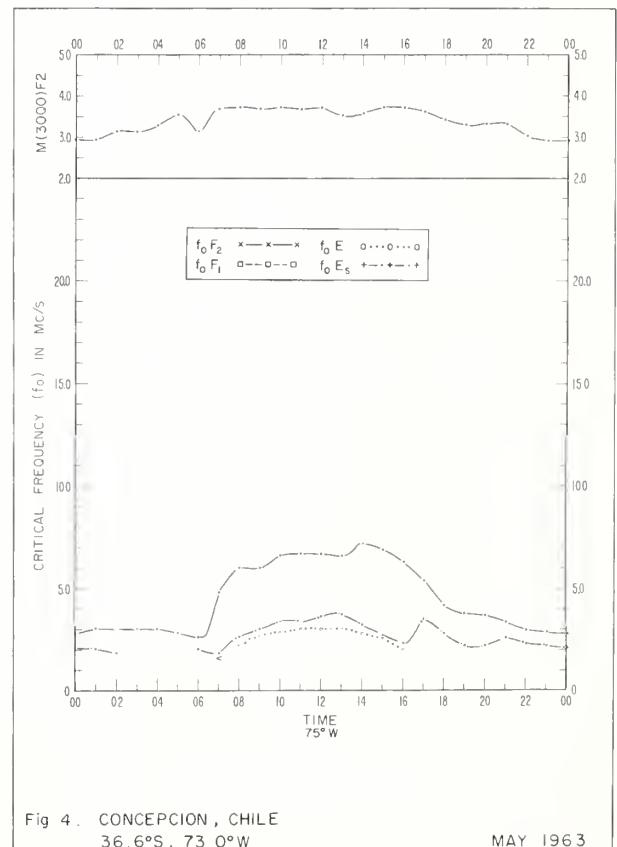
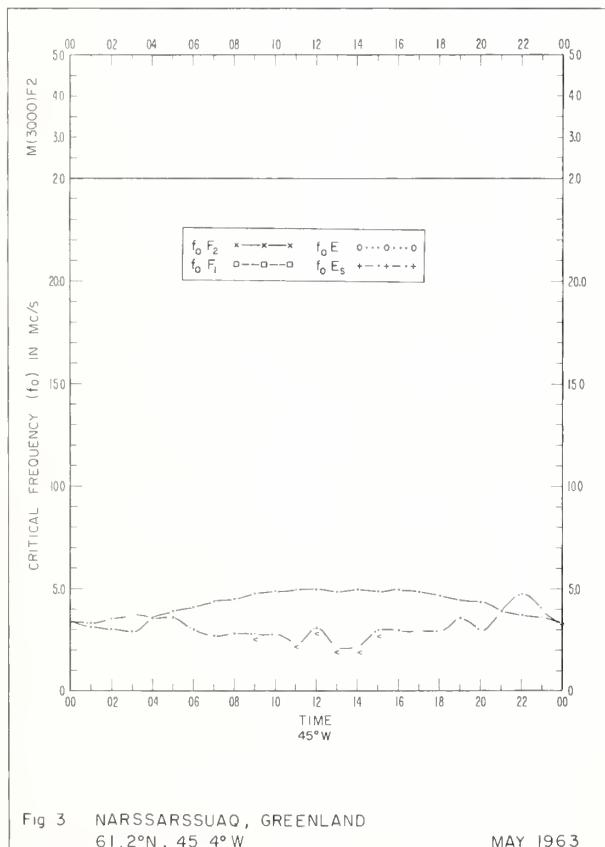
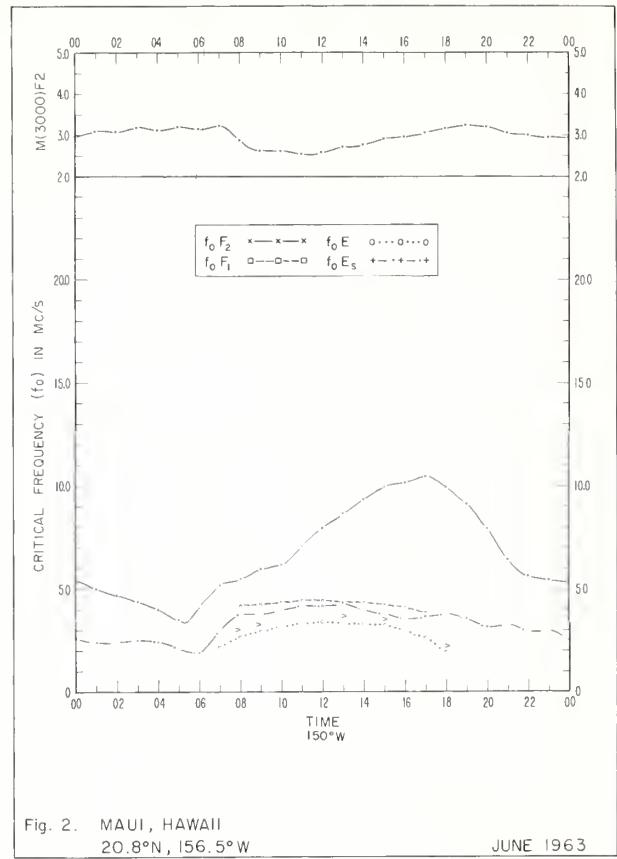
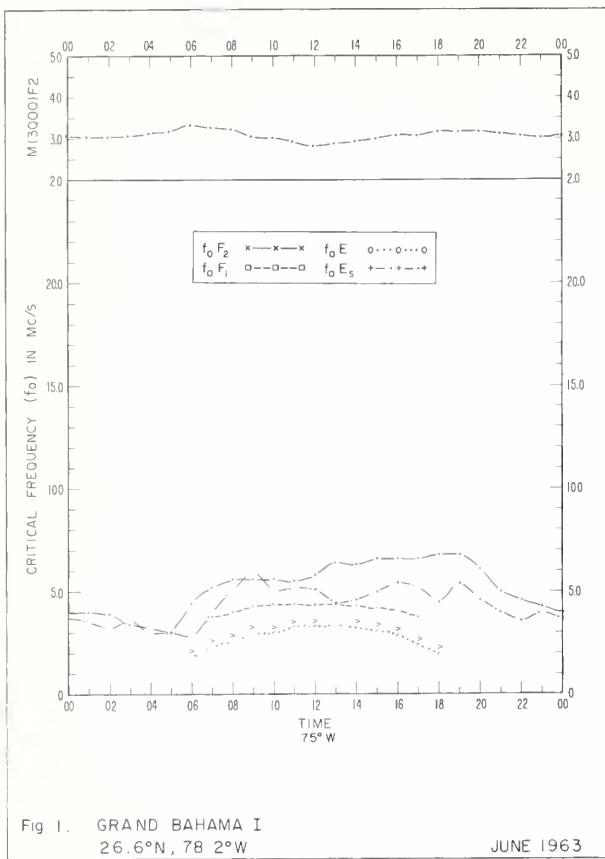
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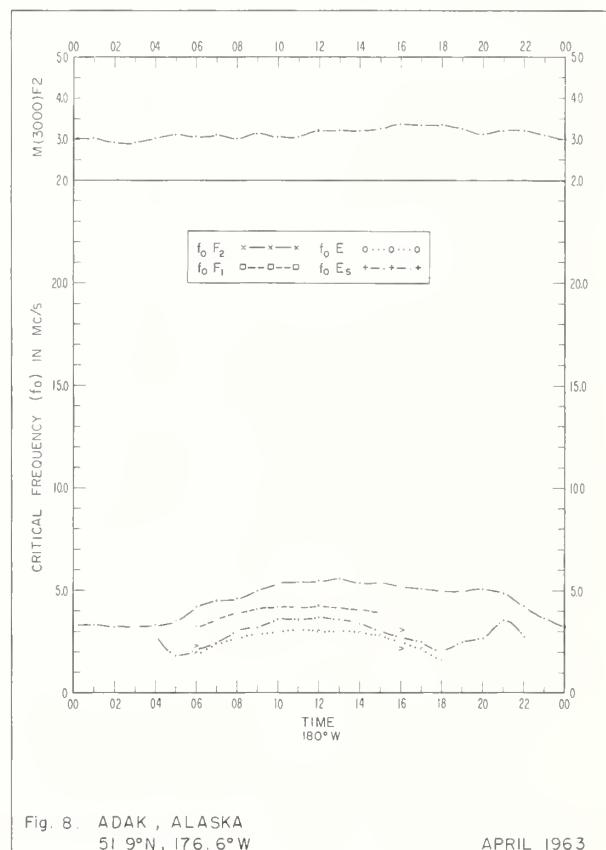
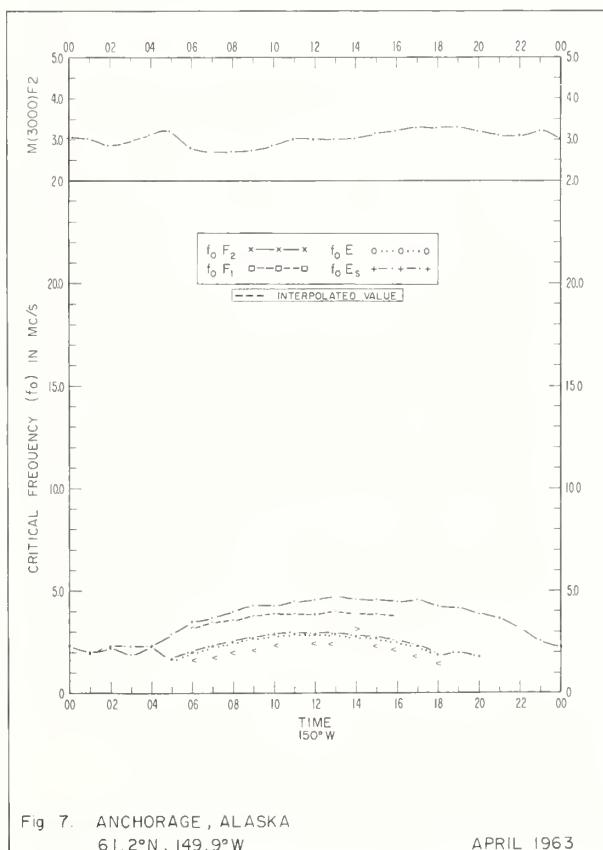
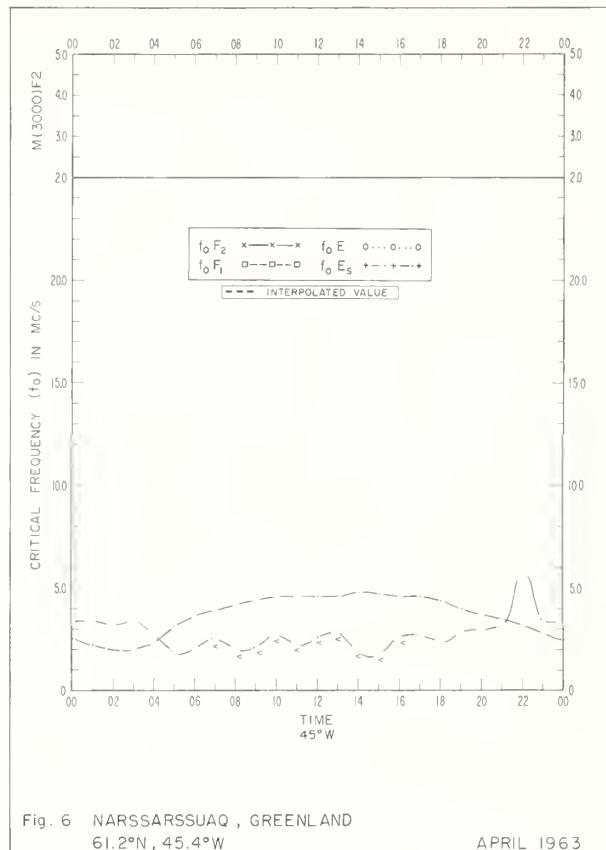
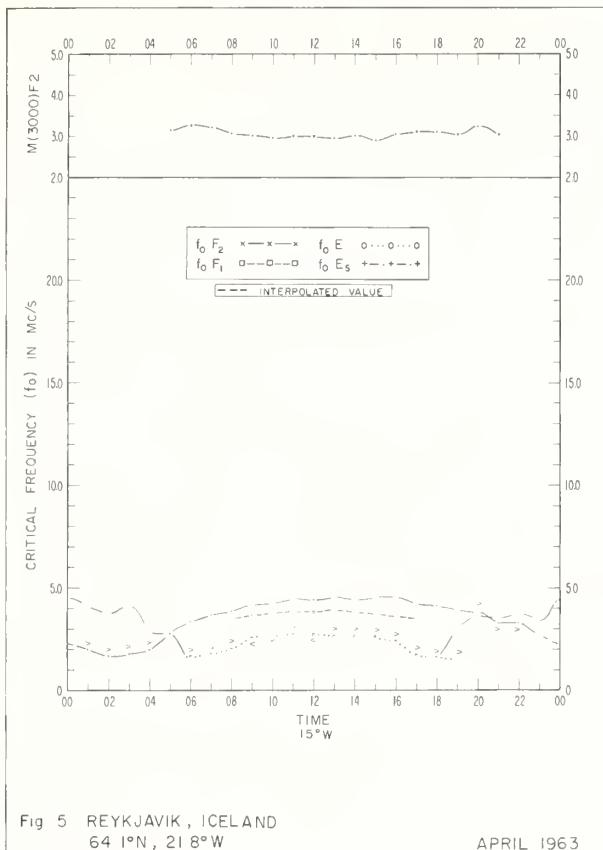
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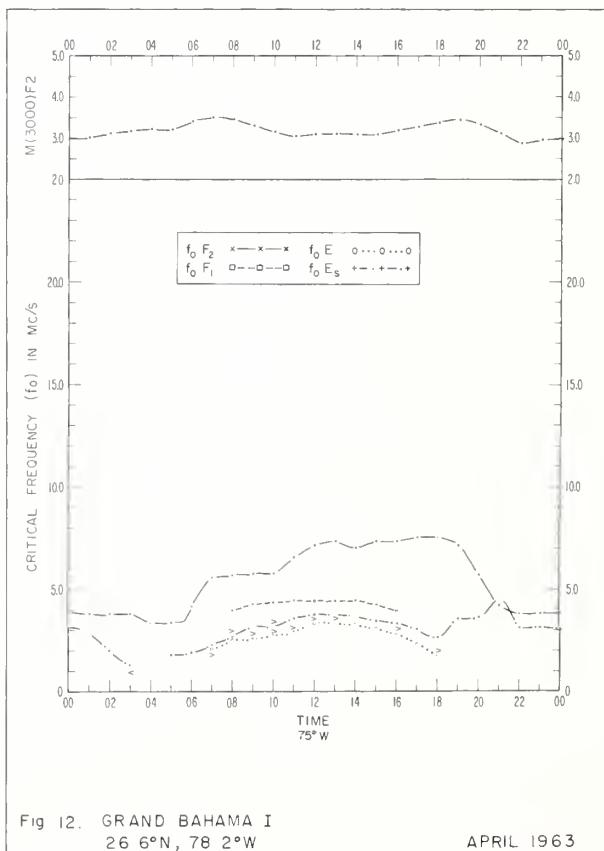
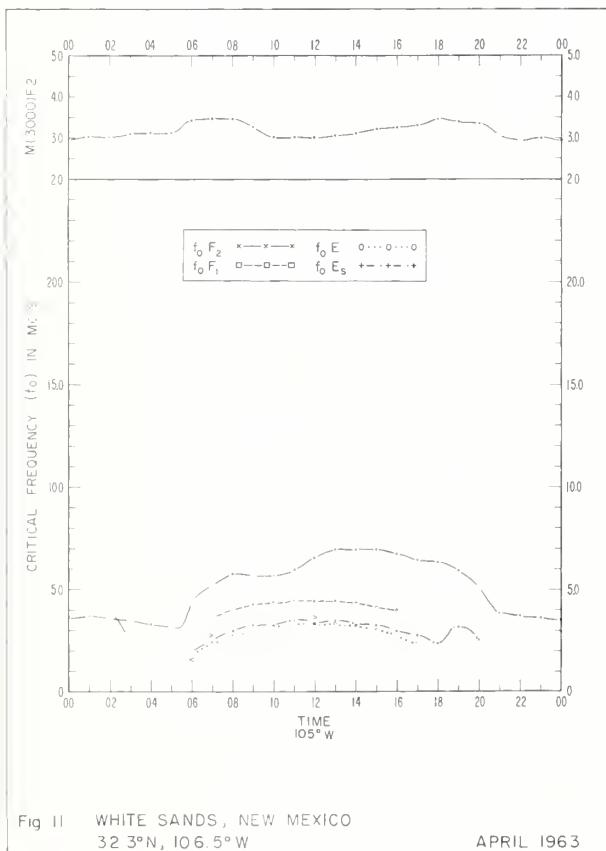
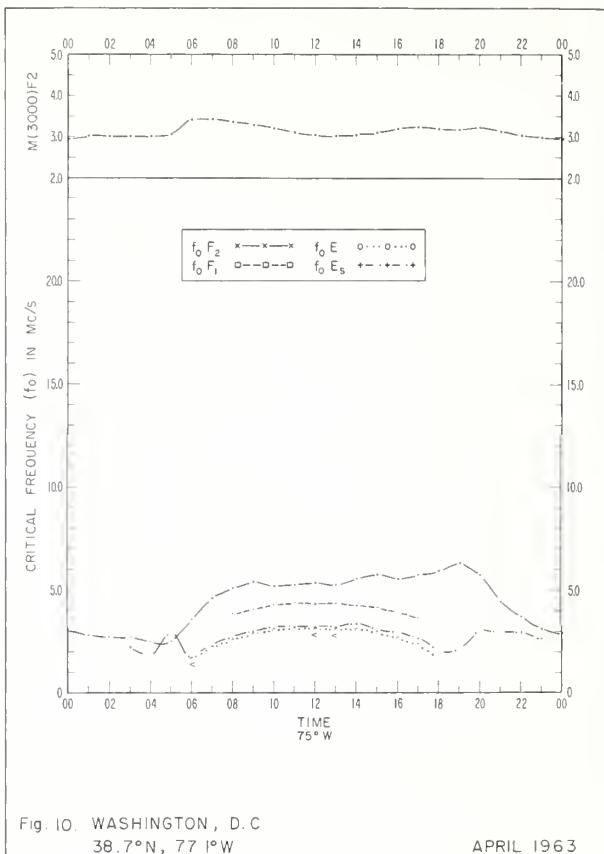
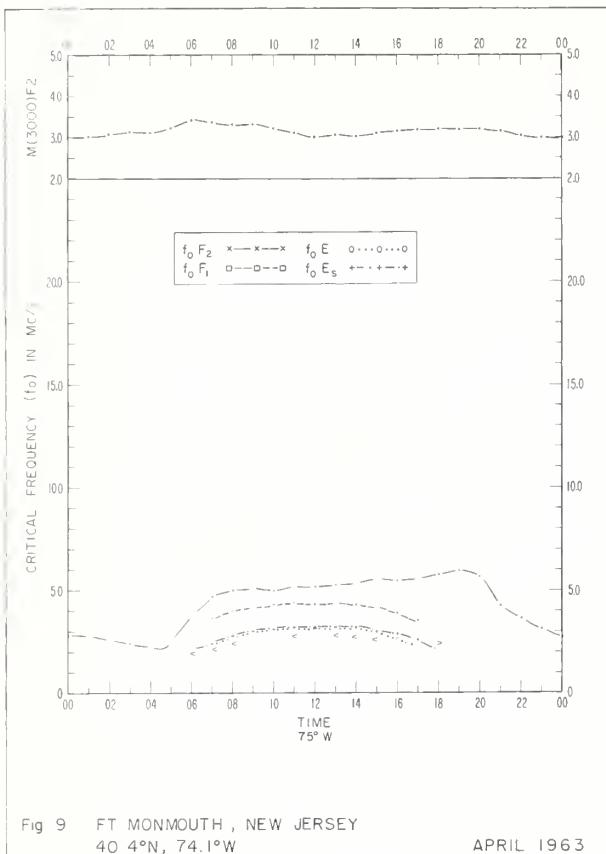
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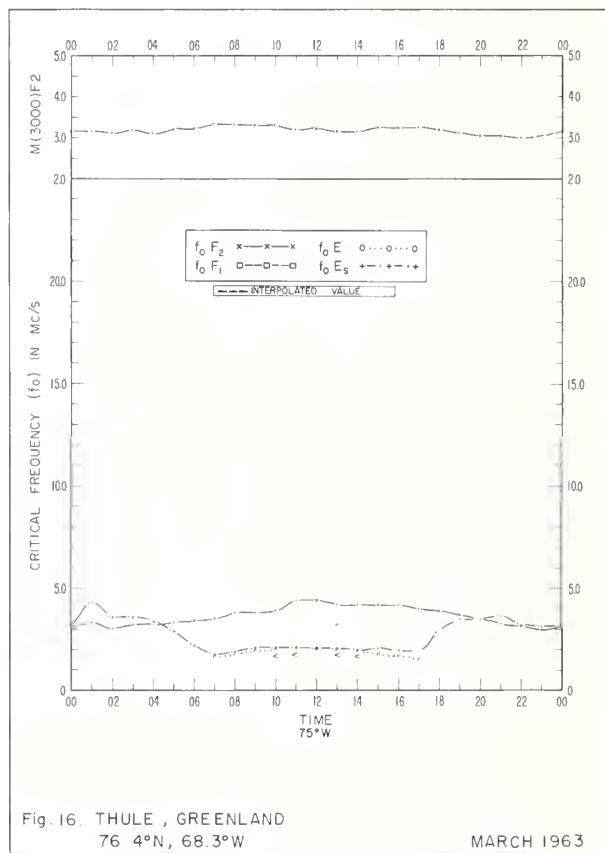
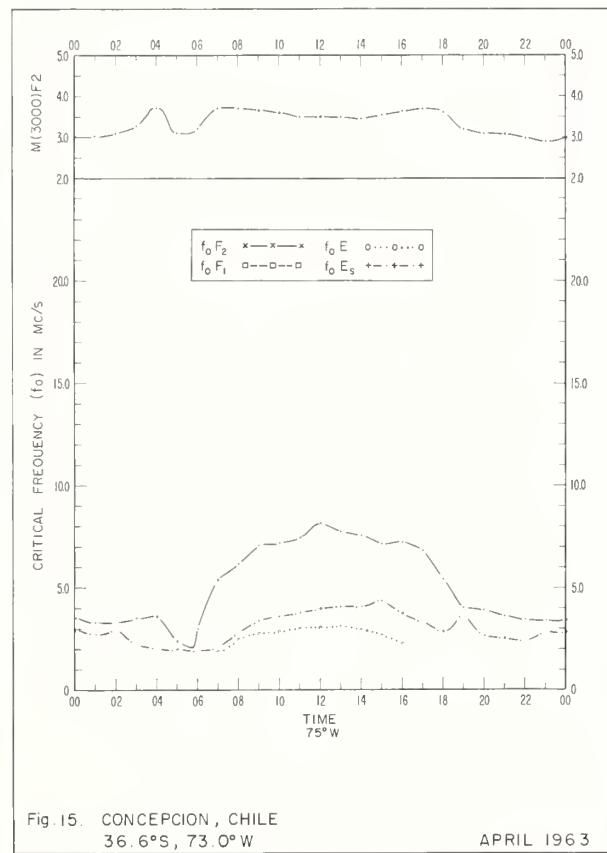
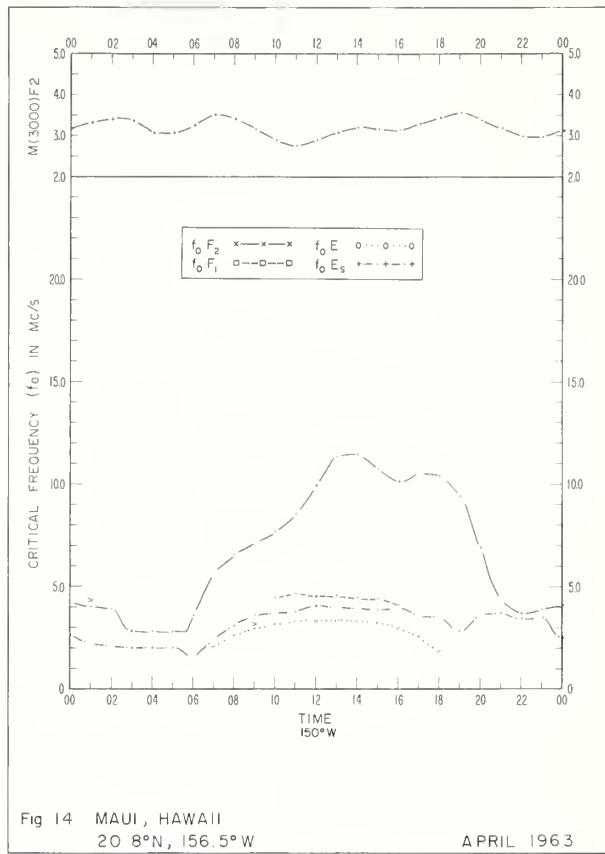
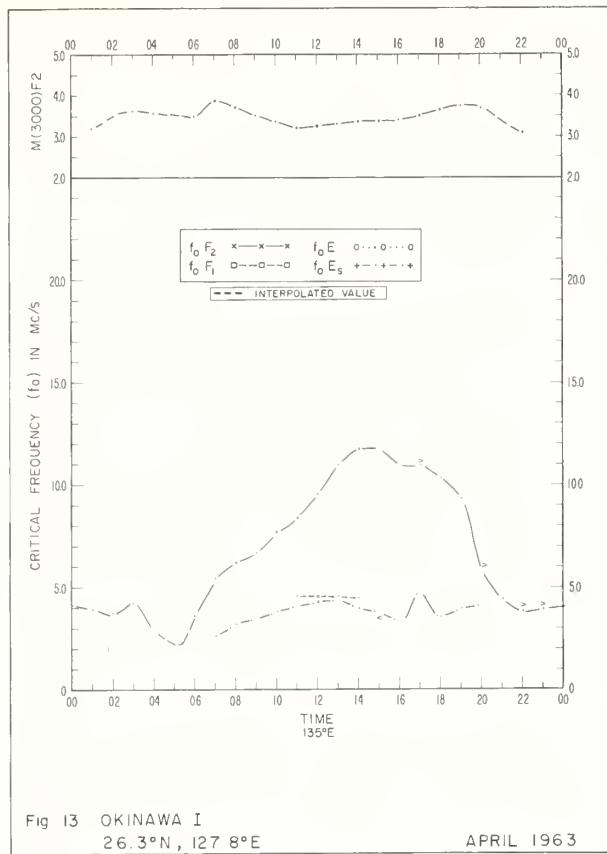
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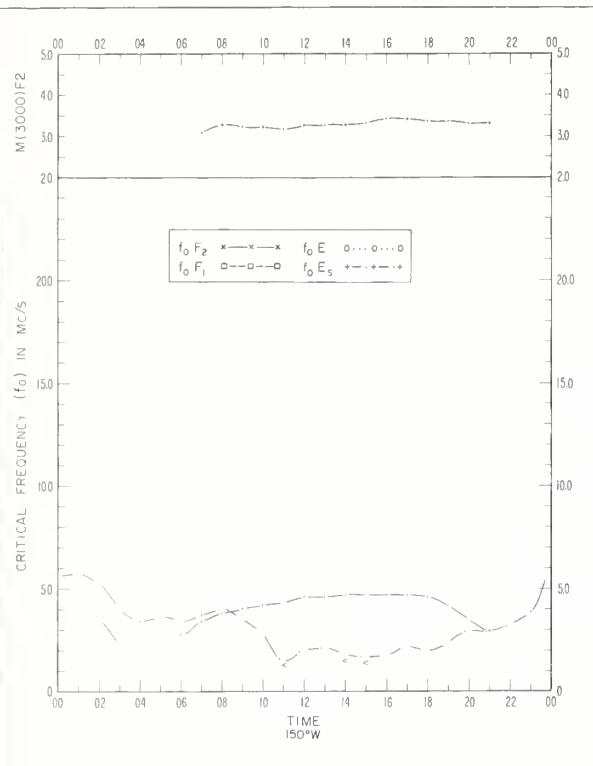
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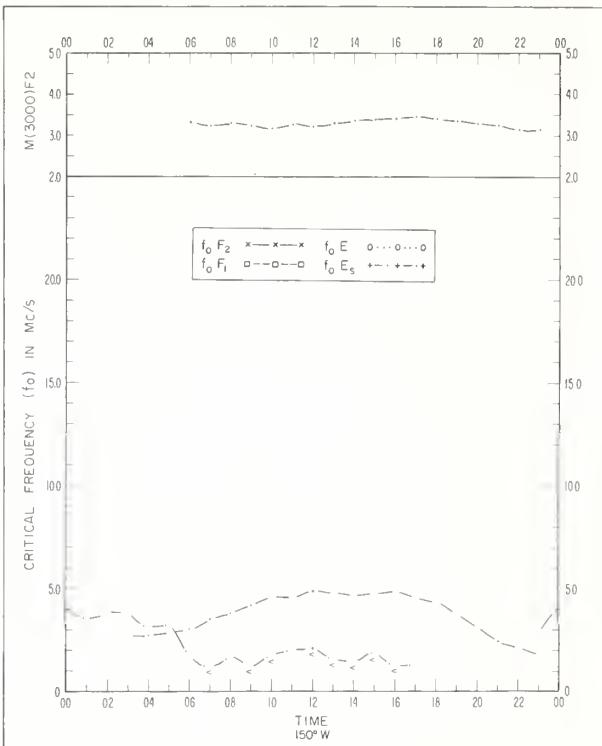




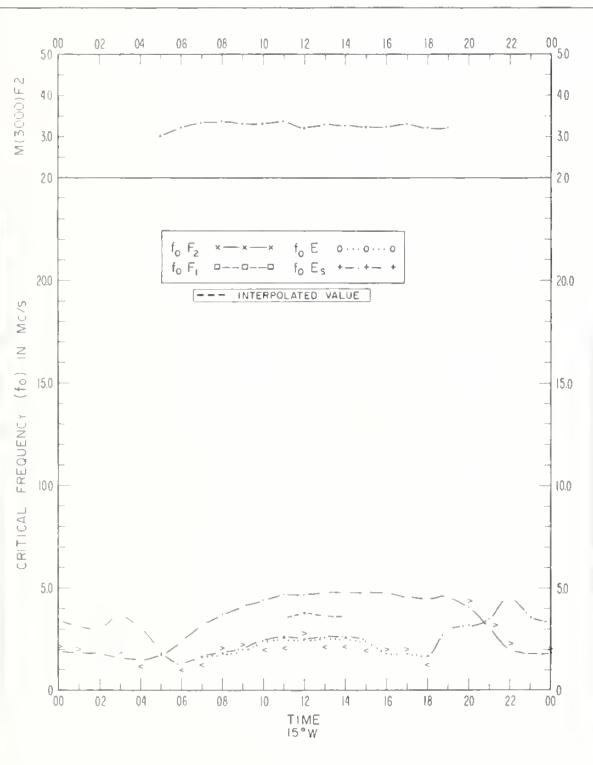


Fig 17 BARROW, ALASKA
71°3'N, 156°8'W

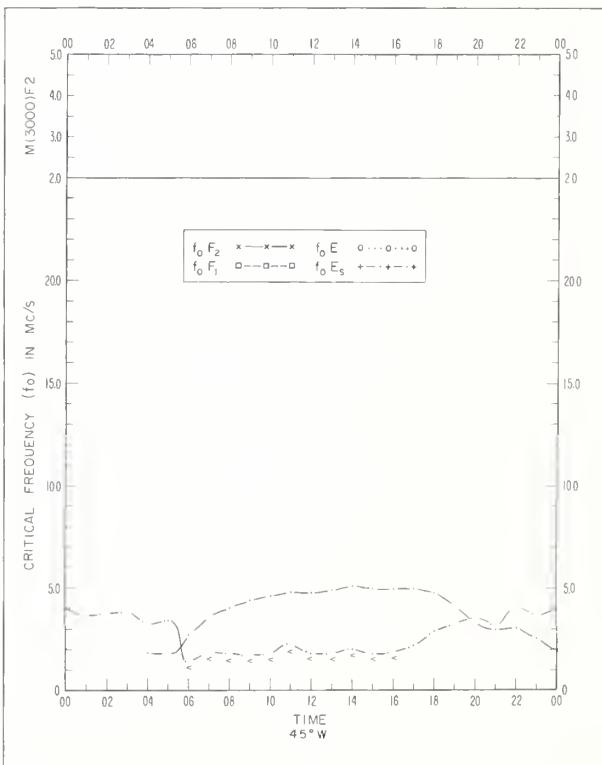
MARCH 1963

Fig 18. COLLEGE (FAIRBANKS), ALASKA
64°9'N, 147°8'W

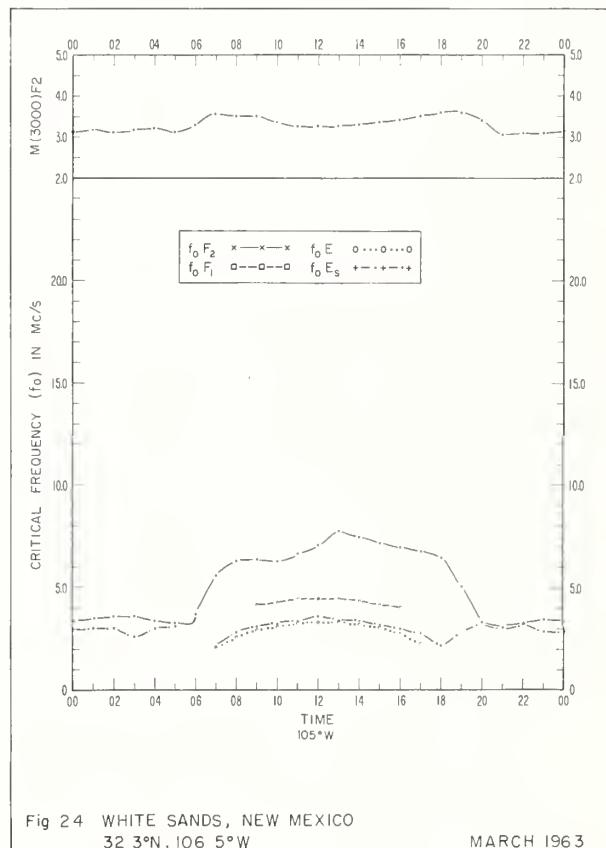
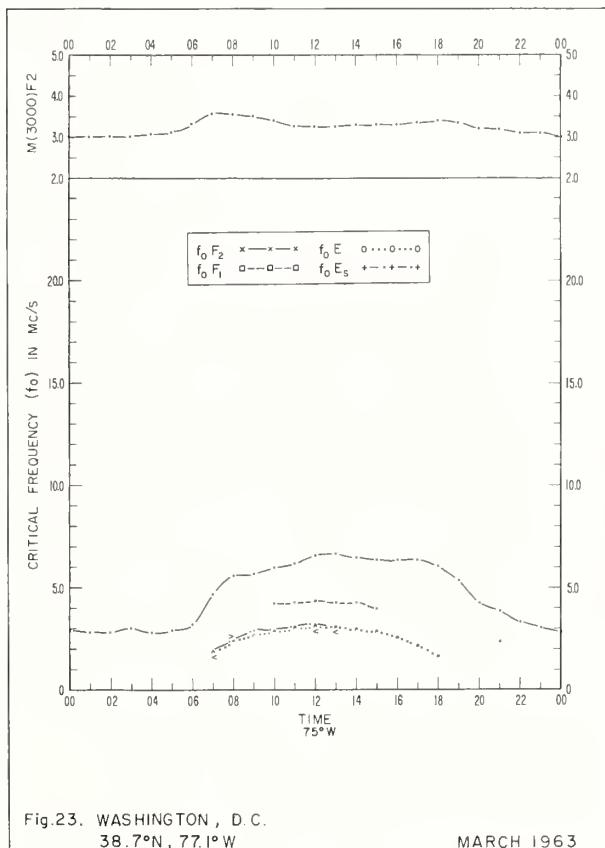
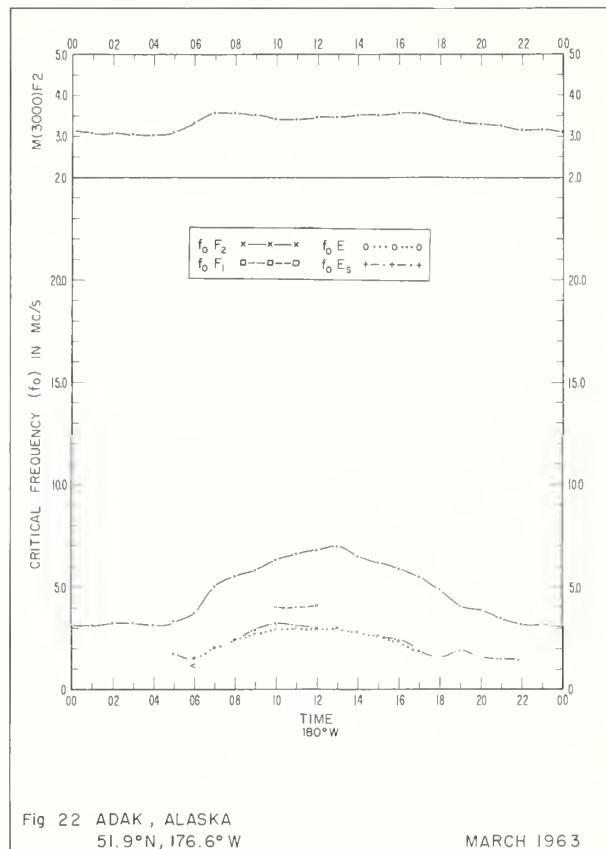
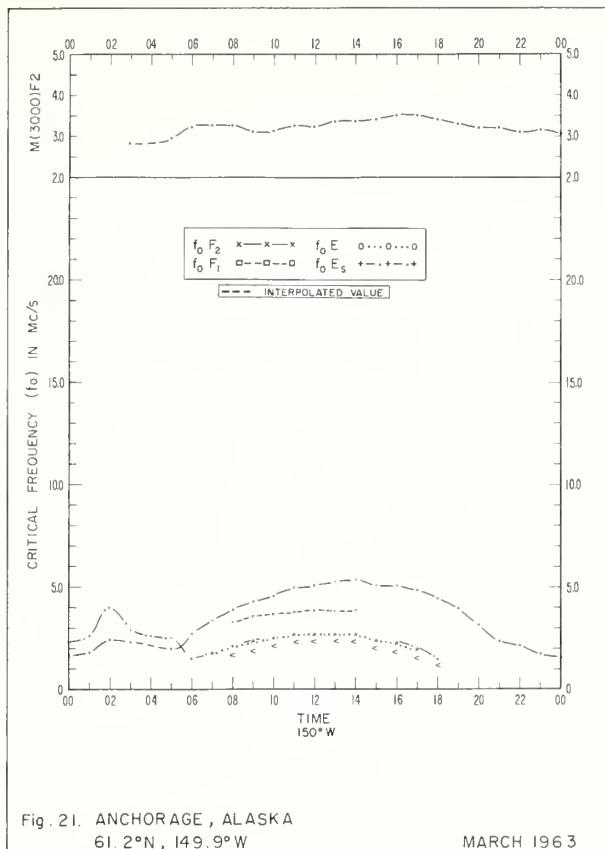
MARCH 1963

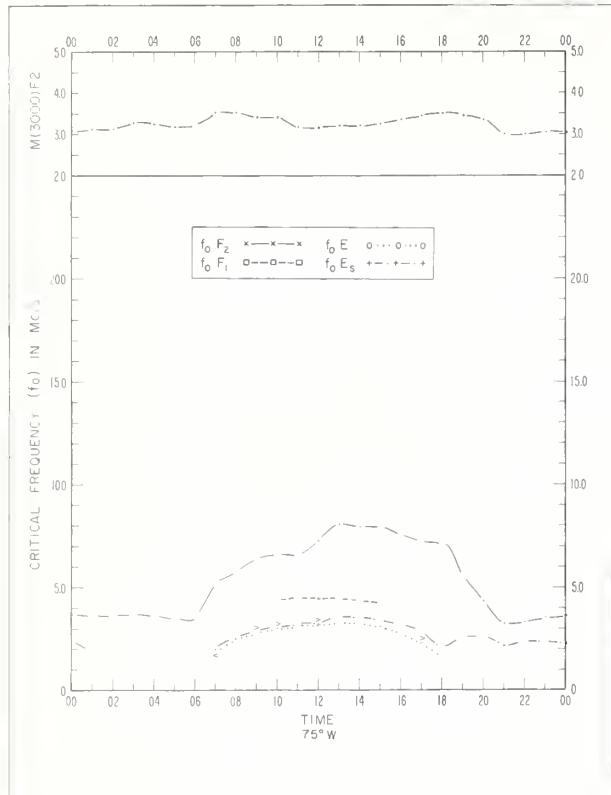
Fig 19 REYKJAVIK, ICELAND
64°1'N, 21°8'W

MARCH 1963

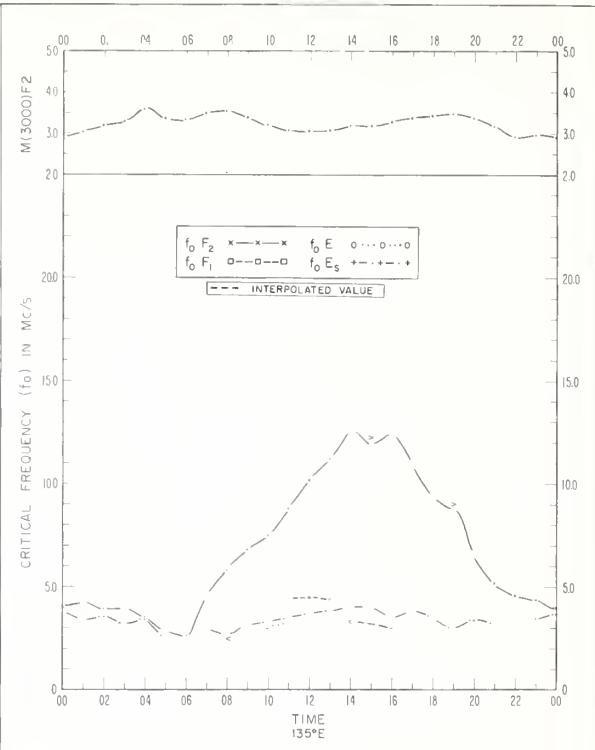
Fig 20. NARSSARSSUAQ, GREENLAND
61°2'N, 45°4'W

MARCH 1963

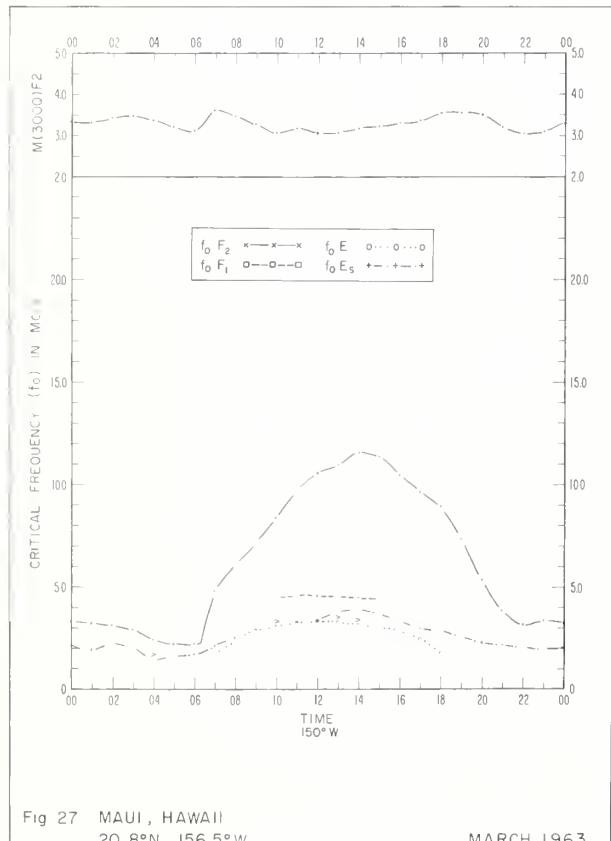


Fig 25 GRAND BAHAMA I
26 6°N, 78 2°W

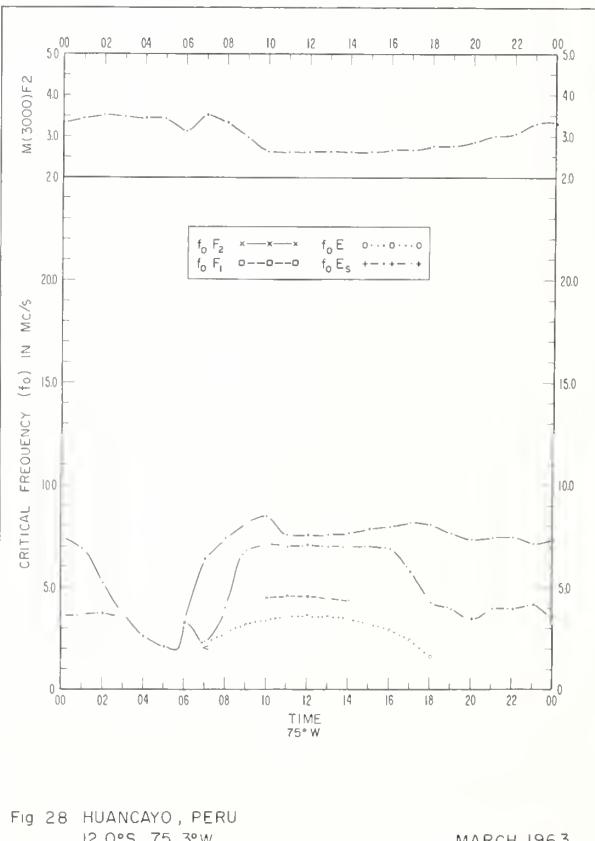
MARCH 1963

Fig 26 OKINAWA I.
26 3°N, 127 8°E

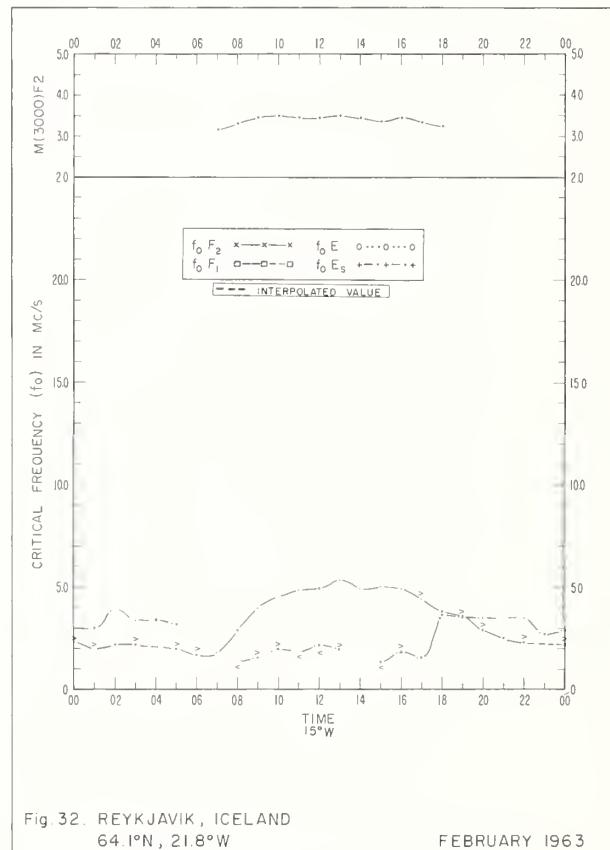
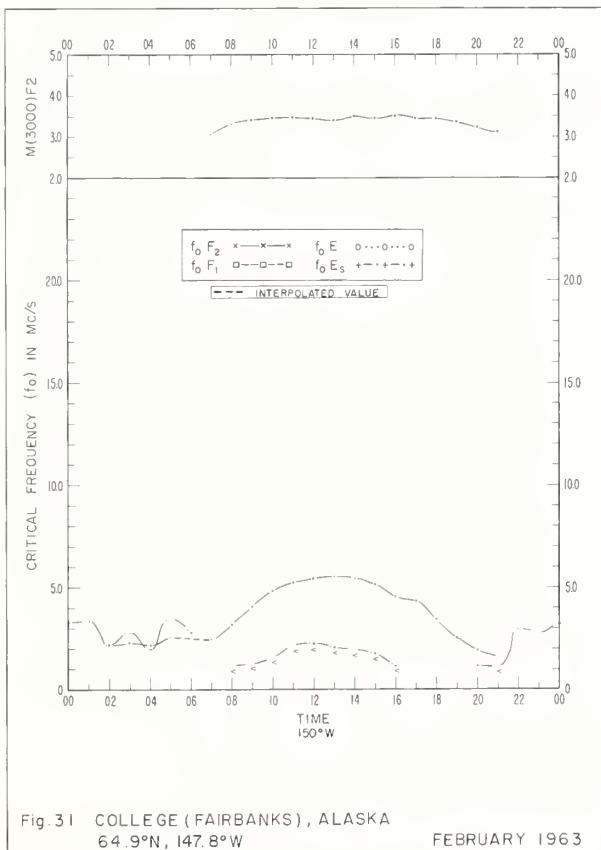
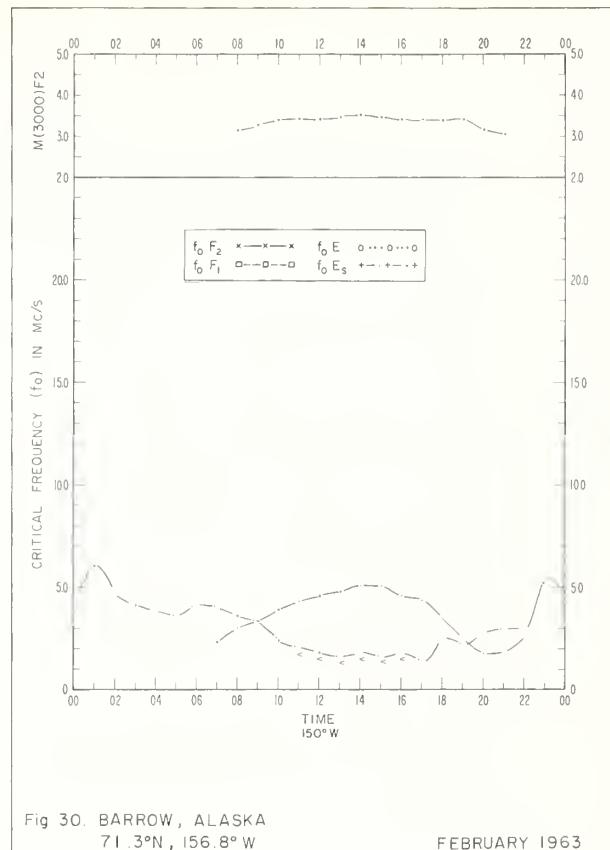
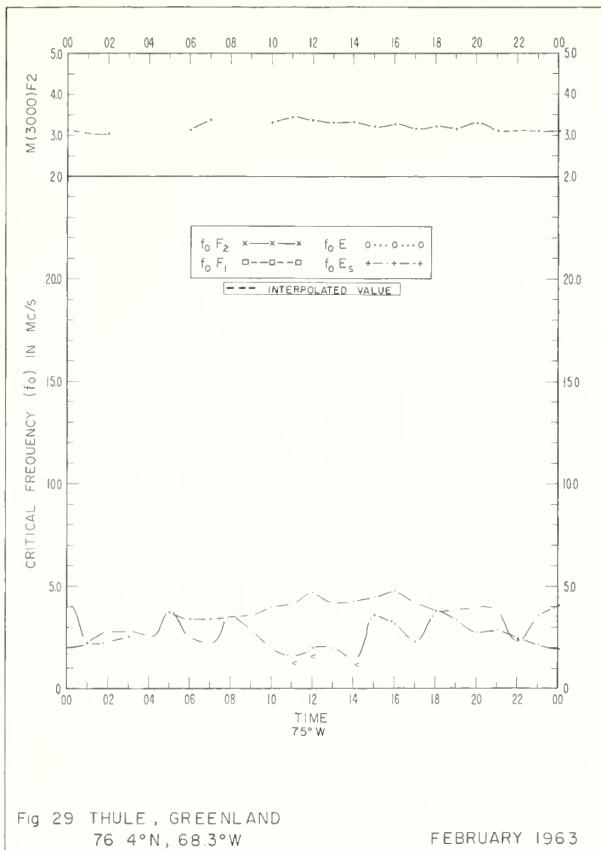
MARCH 1963

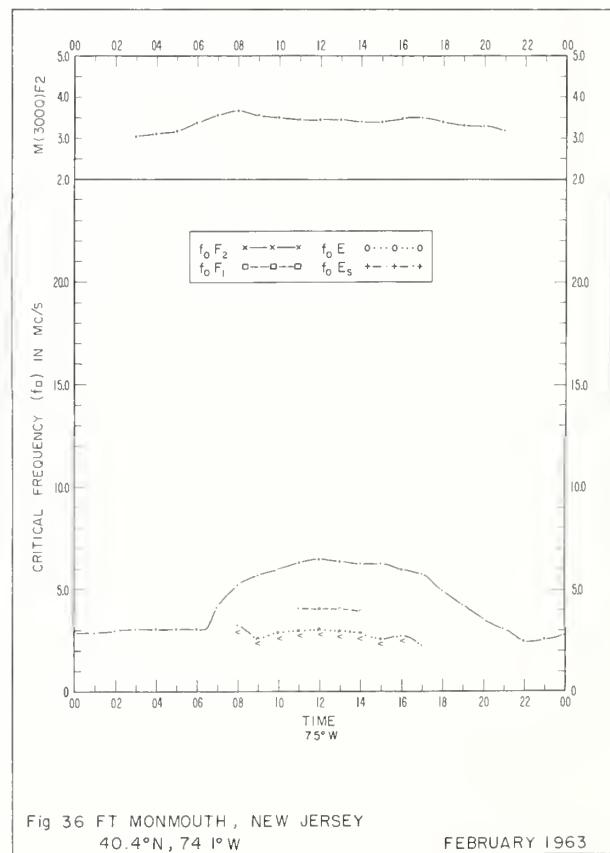
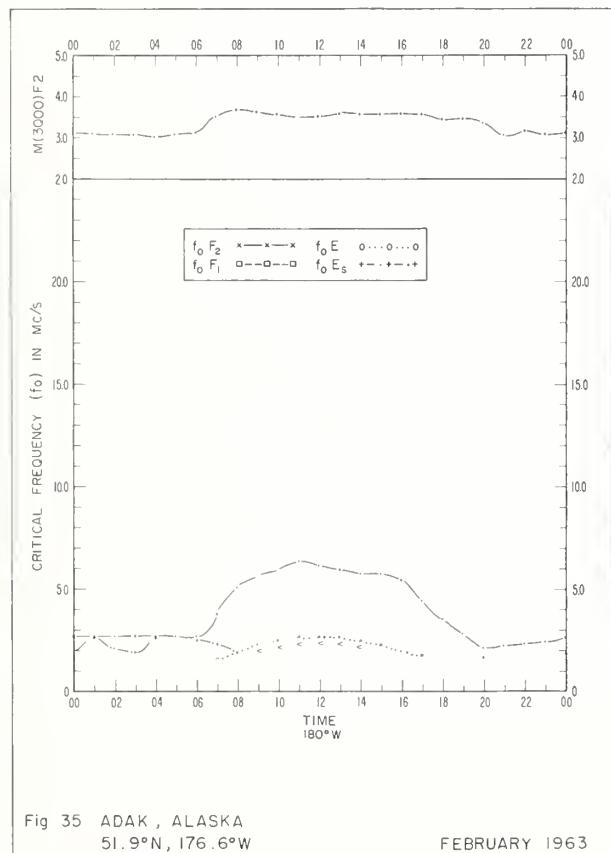
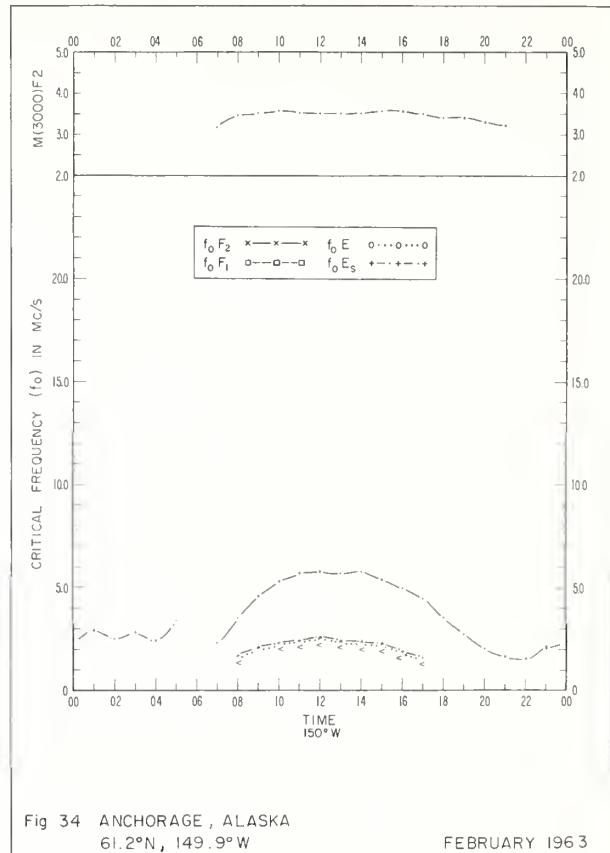
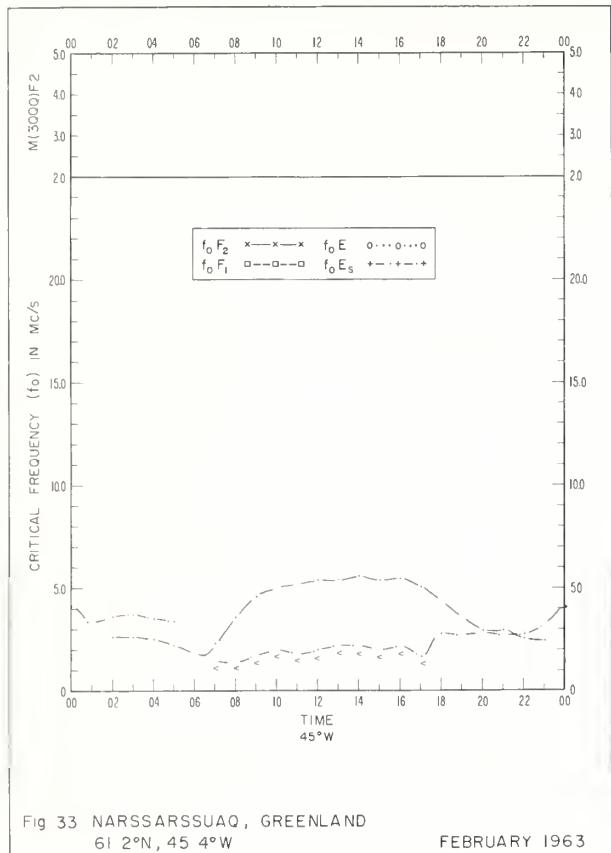
Fig 27 MAUI, HAWAII
20 8°N, 156 5°W

MARCH 1963

Fig 28 HUANCAYO, PERU
12.0°S, 75 3°W

MARCH 1963





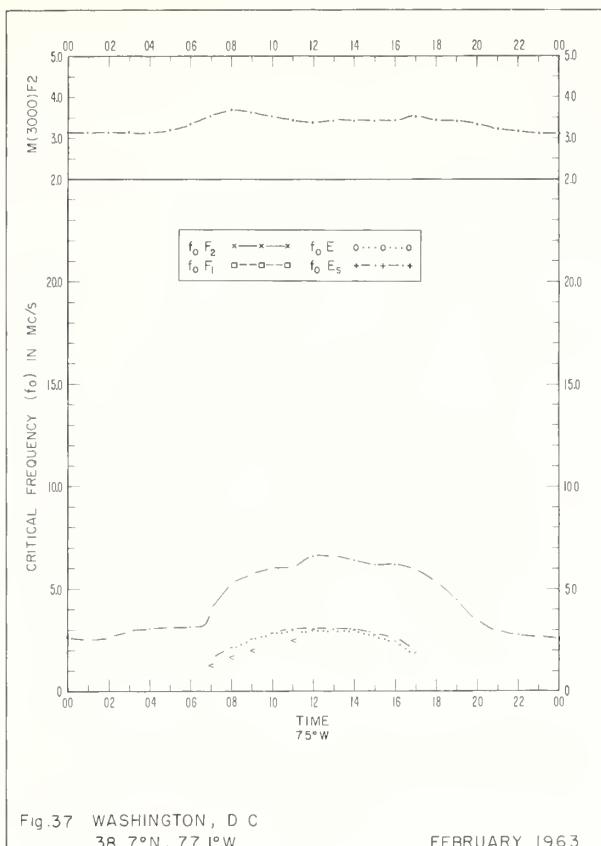


Fig 37 WASHINGTON, D C
38.7°N, 77.1°W FEBRUARY 1963

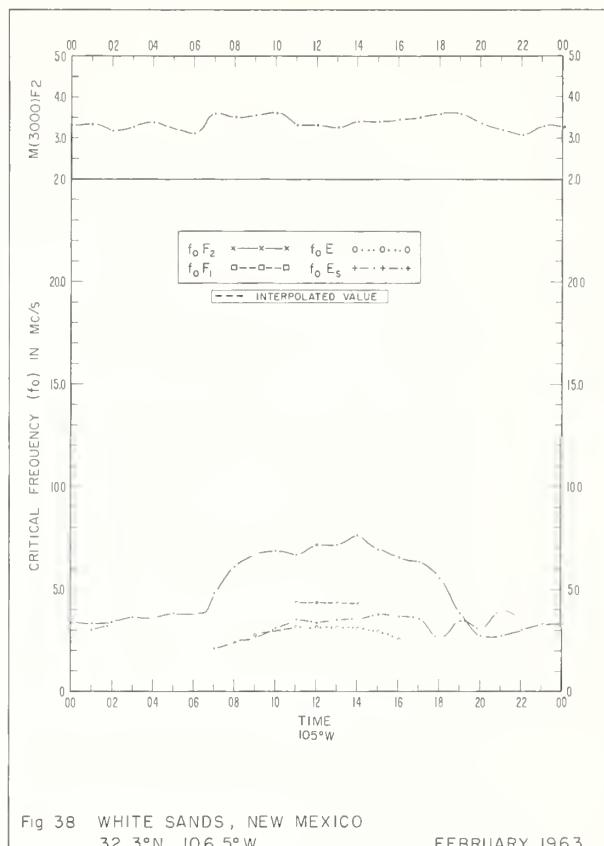


Fig 38 WHITE SANDS, NEW MEXICO
32.3°N, 106.5°W FEBRUARY 1963

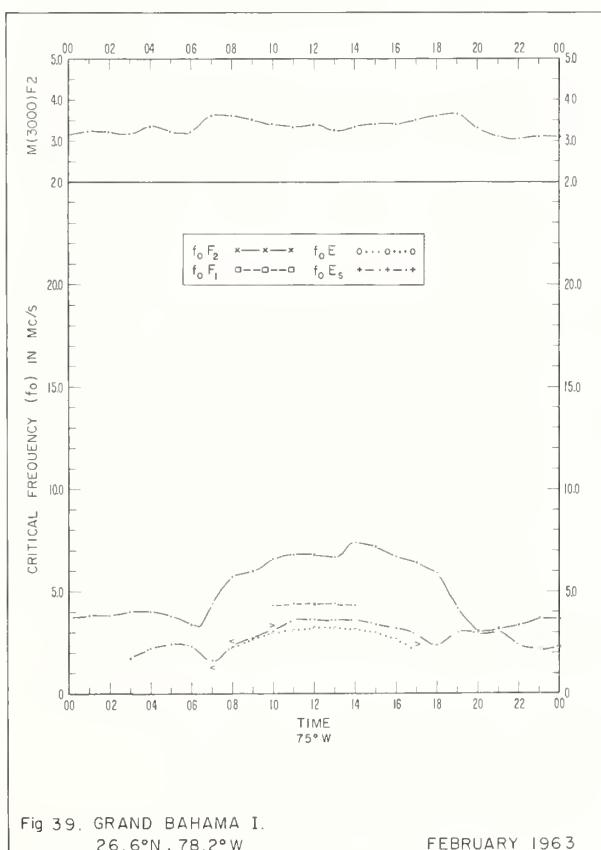


Fig 39. GRAND BAHAMA I.
26.6°N, 78.2°W FEBRUARY 1963

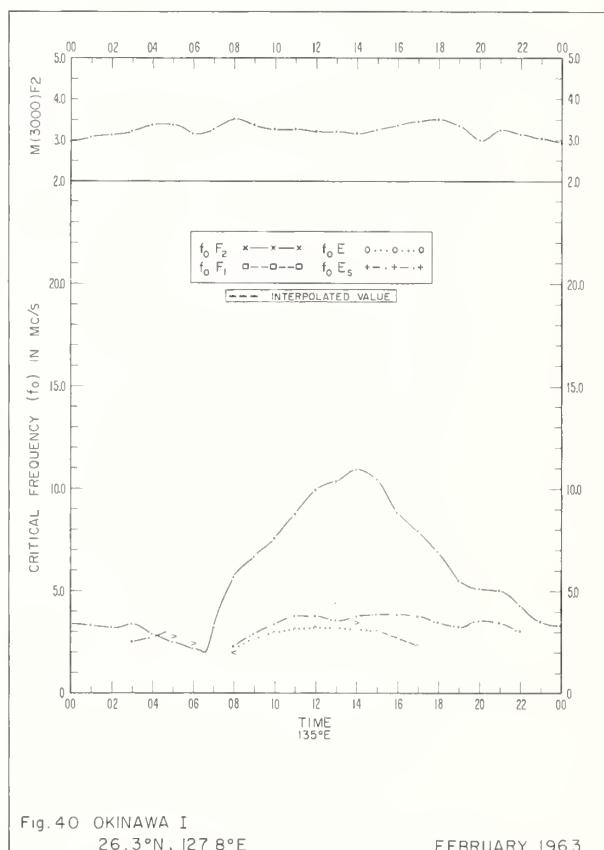
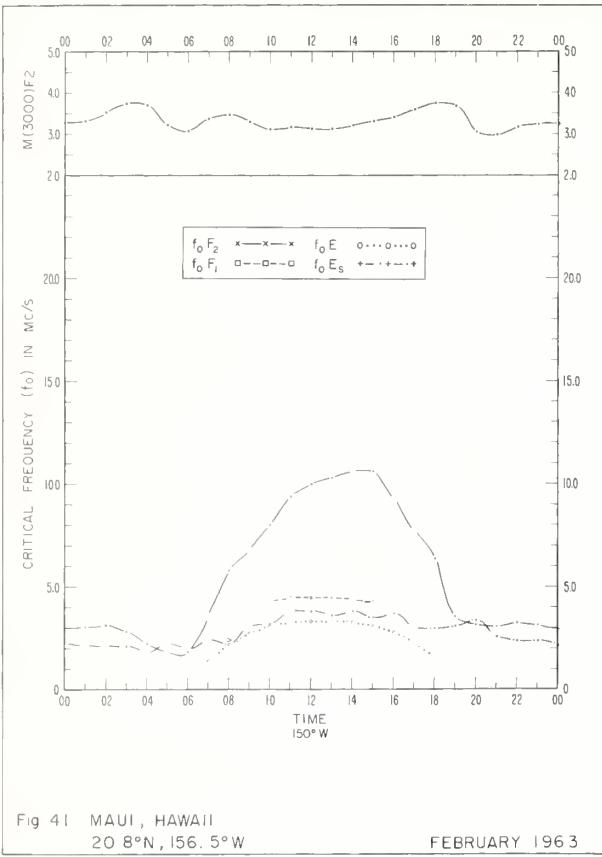
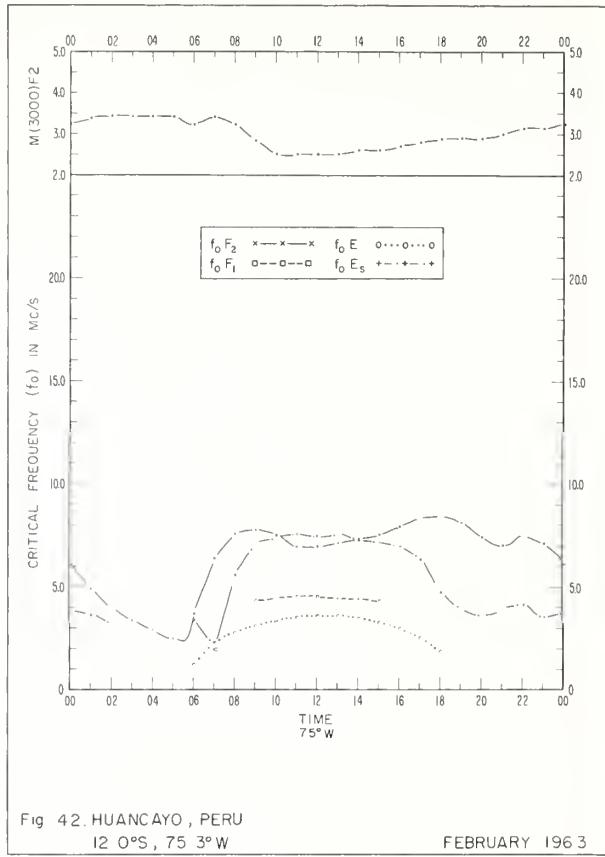


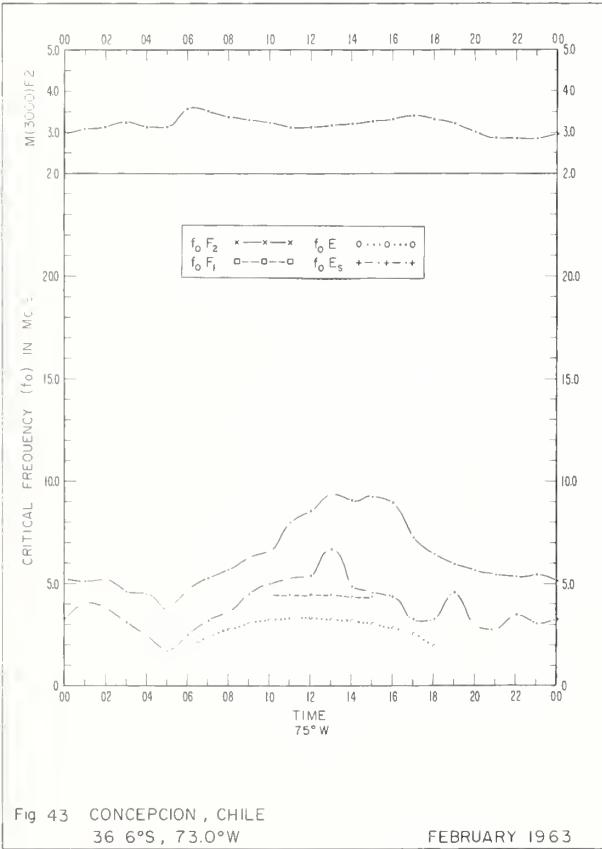
Fig 40 OKINAWA I.
26.3°N, 127.8°E FEBRUARY 1963

Fig 41 MAUI, HAWAII
20°8'N, 156.5°W

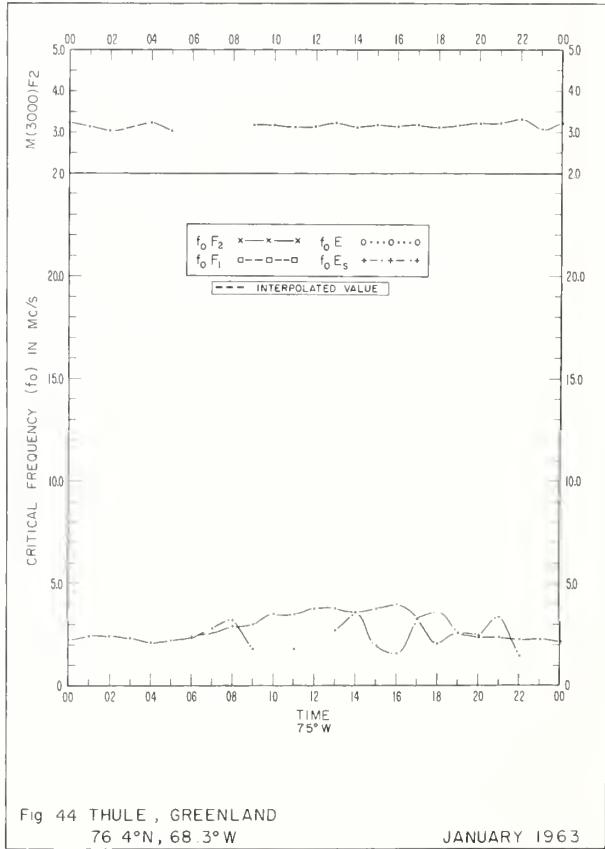
FEBRUARY 1963

Fig 42. HUANCAYO, PERU
12°0'S, 75°3'W

FEBRUARY 1963

Fig 43 CONCEPCION, CHILE
36°6'S, 73.0°W

FEBRUARY 1963

Fig 44 THULE, GREENLAND
76°4'N, 68°3'W

JANUARY 1963

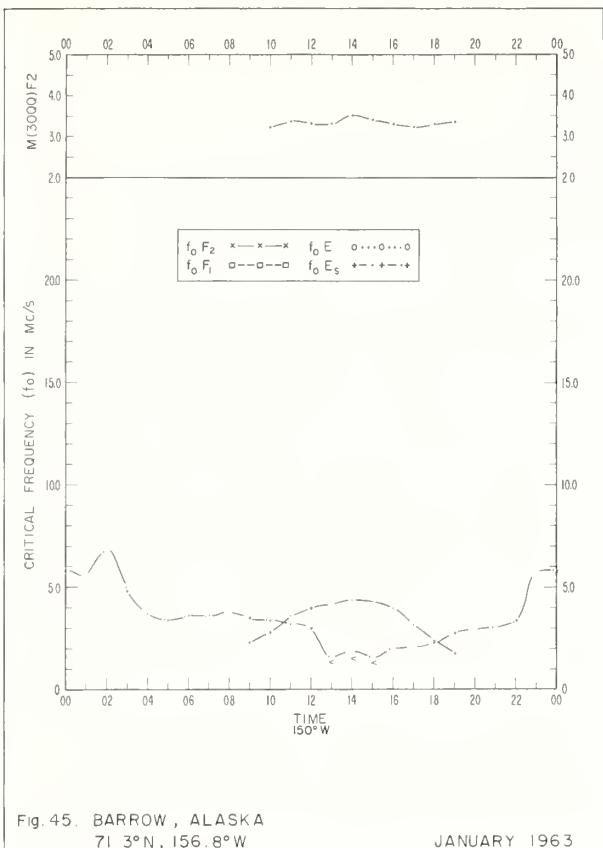


Fig. 45. BARROW, ALASKA
71°3'N, 156.8°W

JANUARY 1963

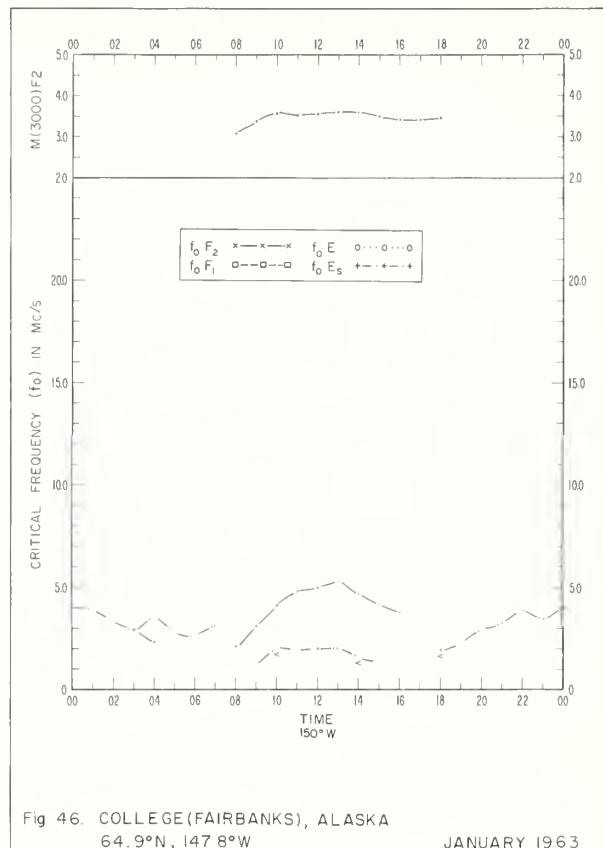


Fig. 46. COLLEGE(FAIRBANKS), ALASKA
64.9°N, 147.8°W

JANUARY 1963

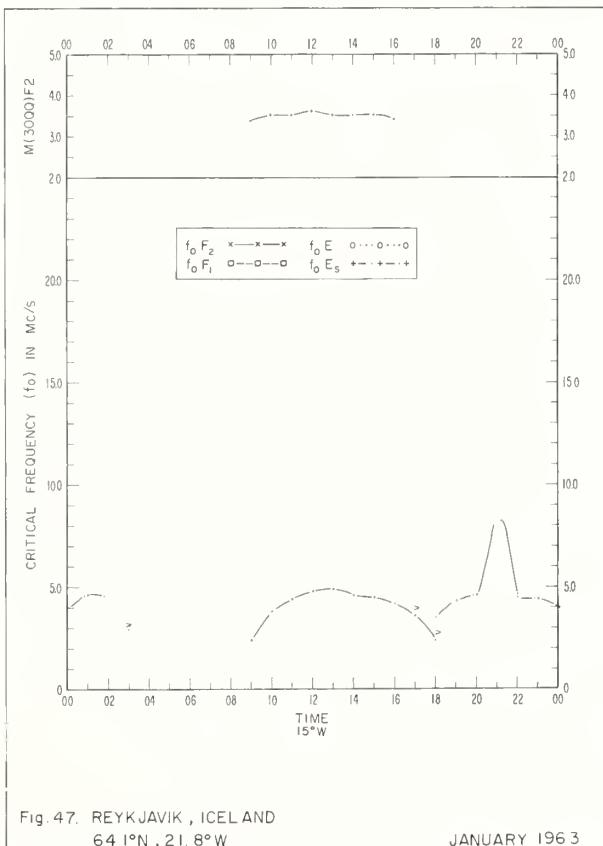


Fig. 47. REYKJAVIK , ICELAND
64.1°N , 21.8°W

JANUARY 1963

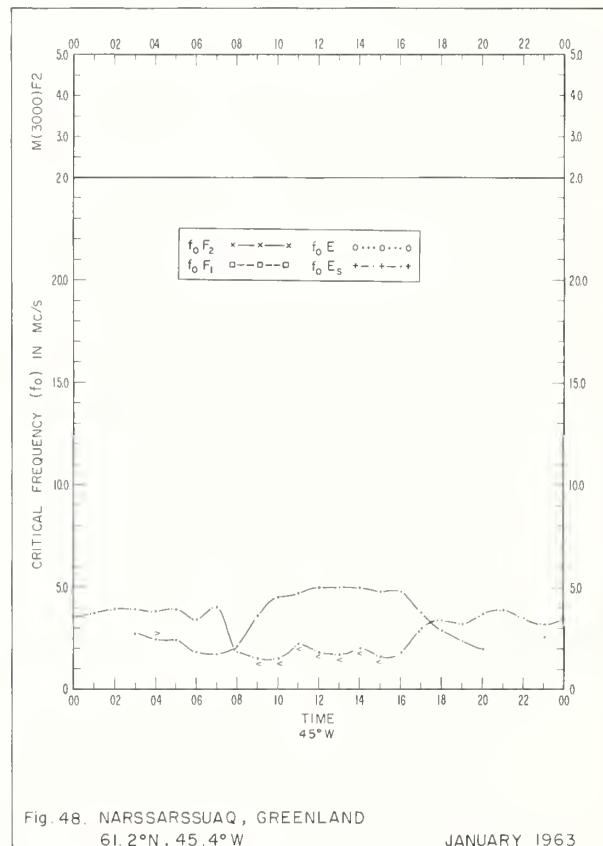


Fig. 48. NARSSARSSUAQ , GREENLAND
61.2°N , 45.4°W

JANUARY 1963

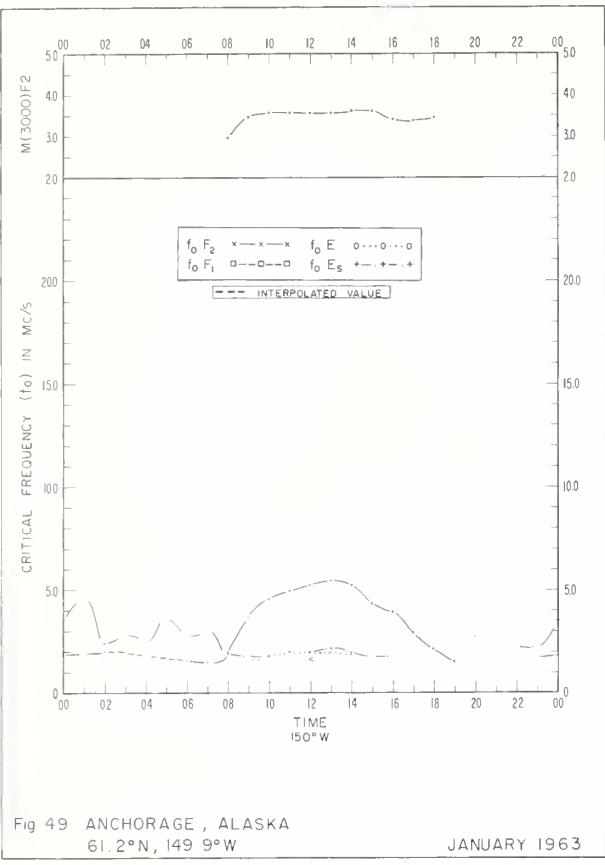


Fig 49 ANCHORAGE , ALASKA
61.2°N, 149.9°W JANUARY 1963

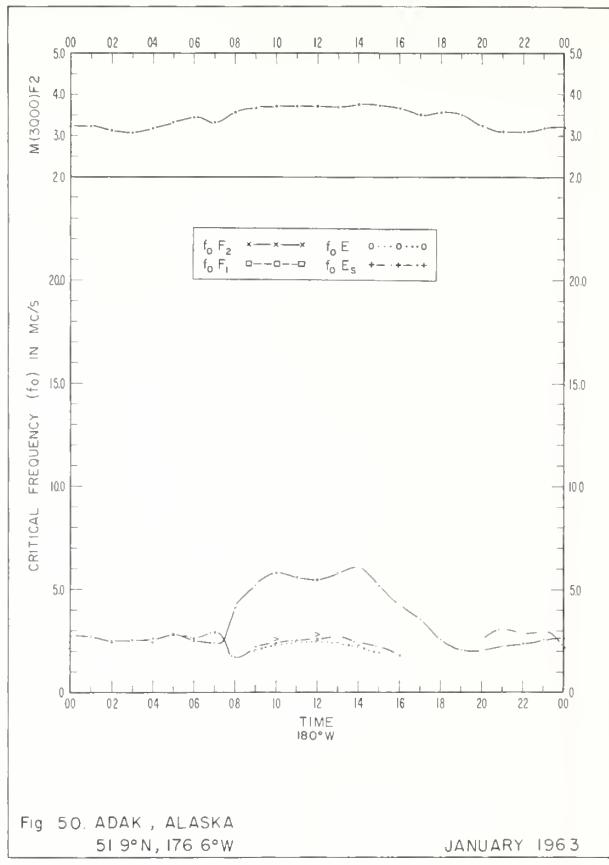


Fig 50. ADAK , ALASKA
51.9°N, 176.6°W JANUARY 1963

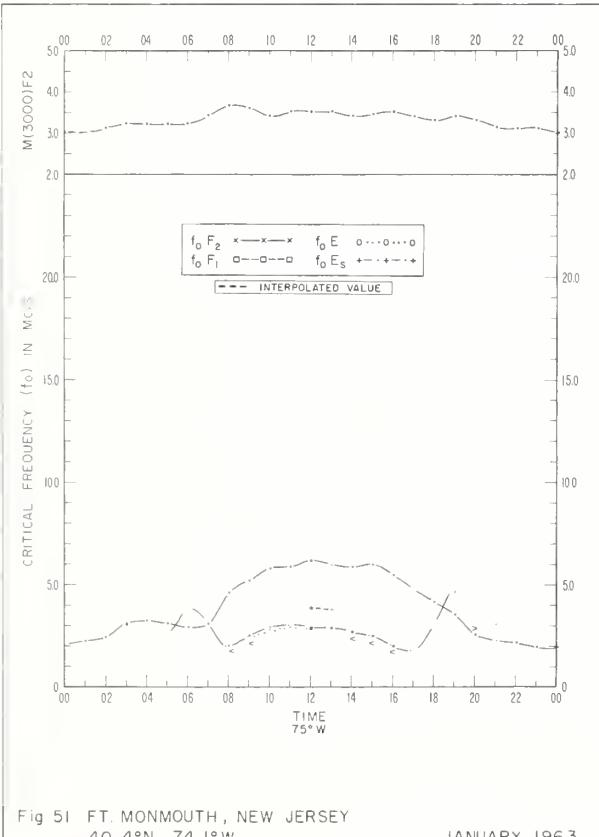


Fig 51 FT. MONMOUTH , NEW JERSEY
40.4°N, 74.1°W JANUARY 1963

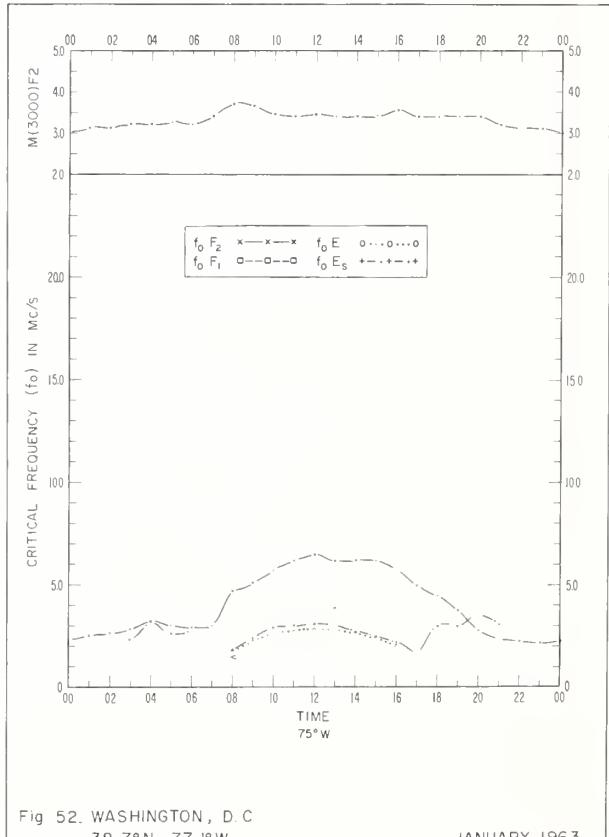


Fig 52. WASHINGTON , D.C.
38.7°N, 77.1°W JANUARY 1963

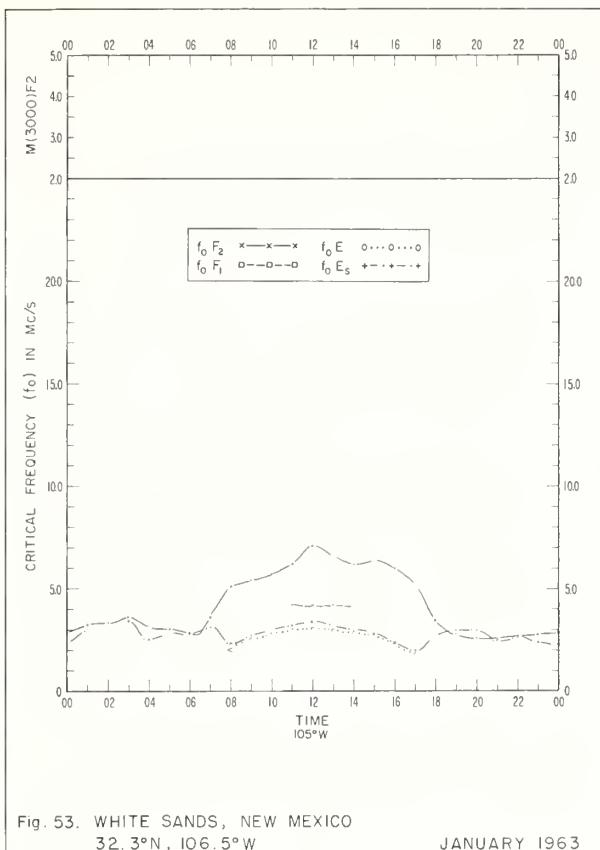


Fig. 53. WHITE SANDS, NEW MEXICO
32.3°N, 106.5°W JANUARY 1963

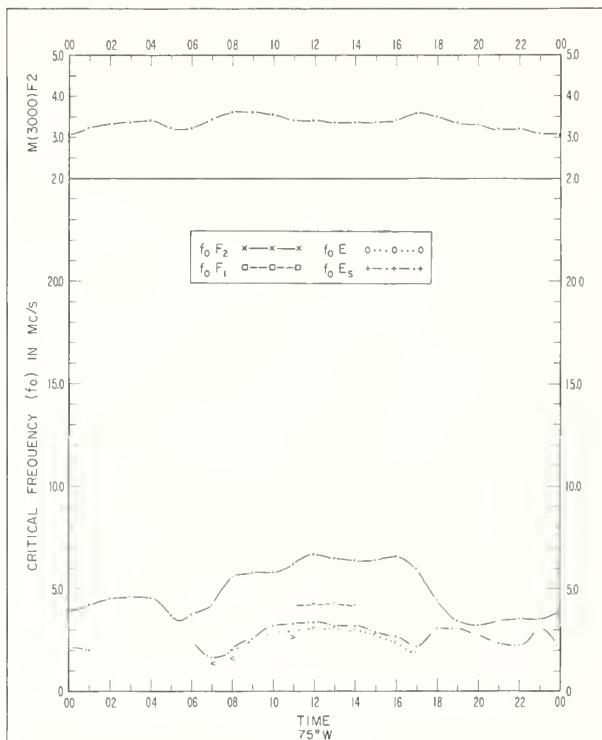


Fig. 54. GRAND BAHAMA I.
26.6°N, 78.2°W JANUARY 1963

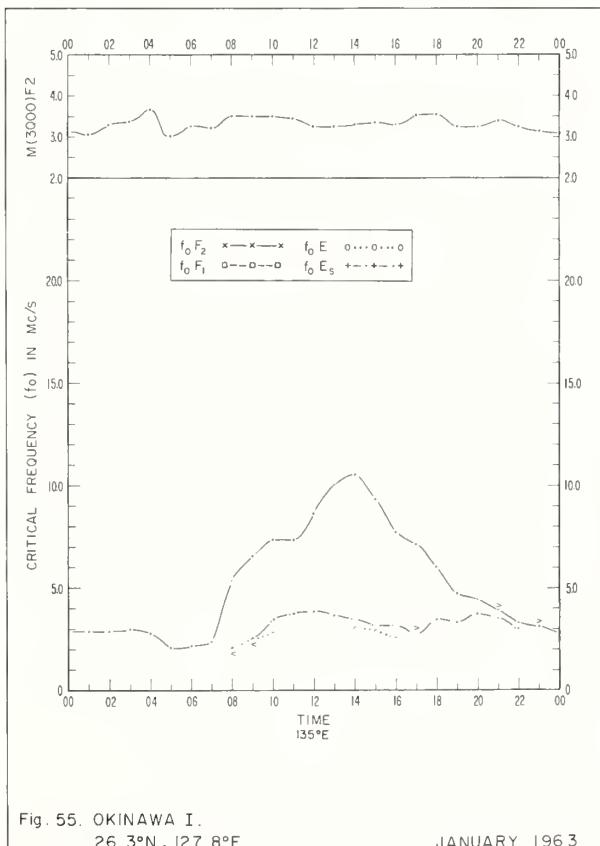


Fig. 55. OKINAWA I.
26.3°N, 127.8°E JANUARY 1963

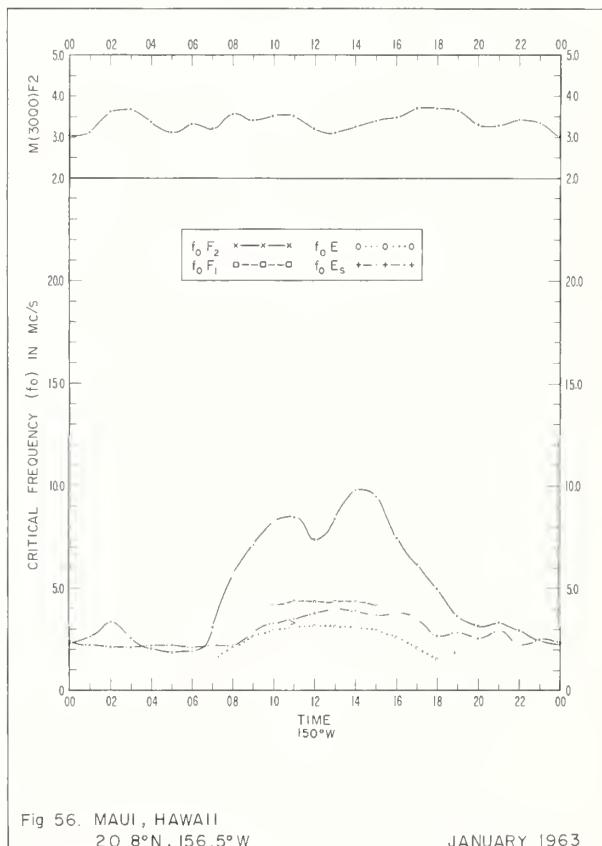
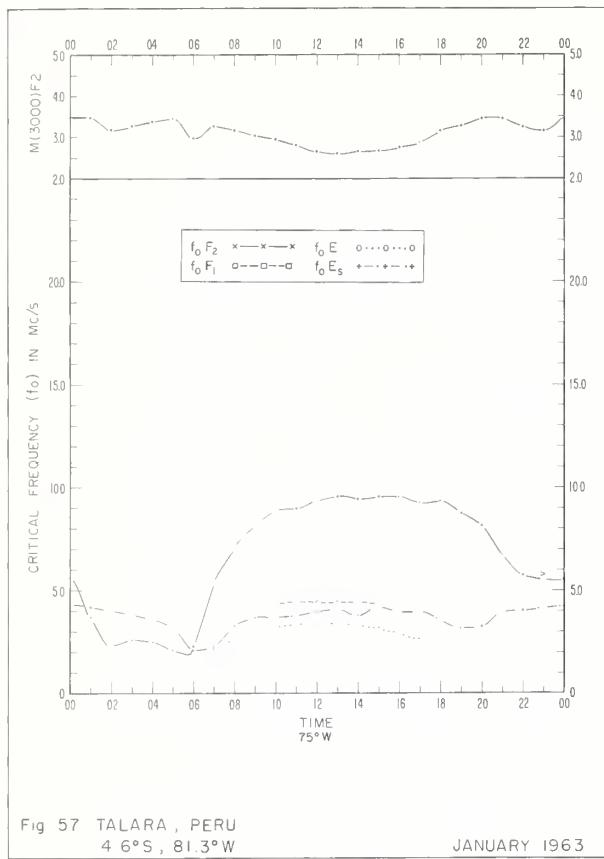
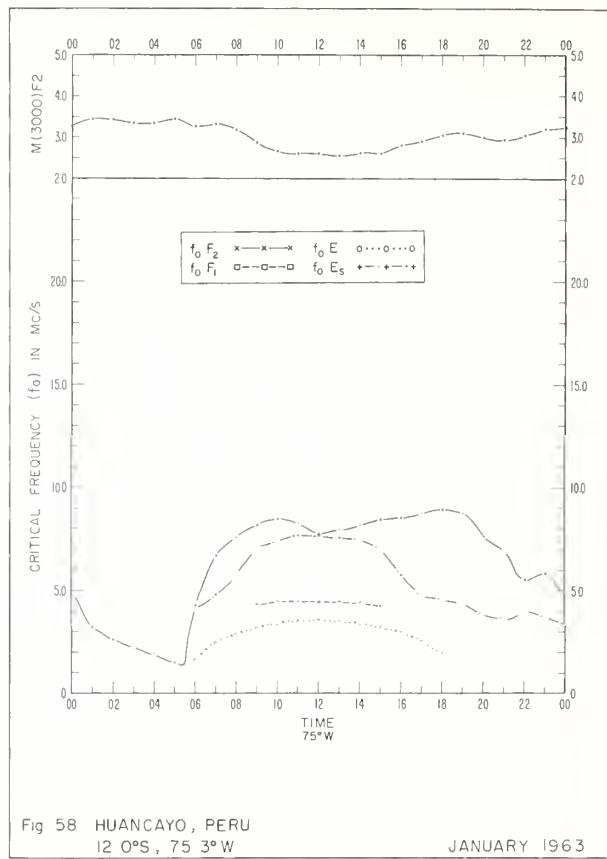


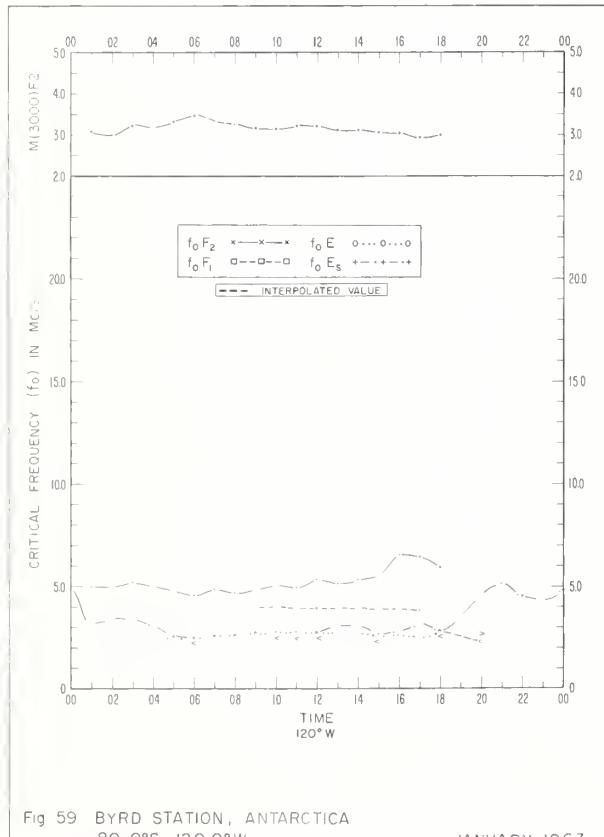
Fig. 56. MAUI, HAWAII
20.8°N, 156.5°W JANUARY 1963

Fig 57 TALARÁ, PERU
4.6°S, 81.3°W

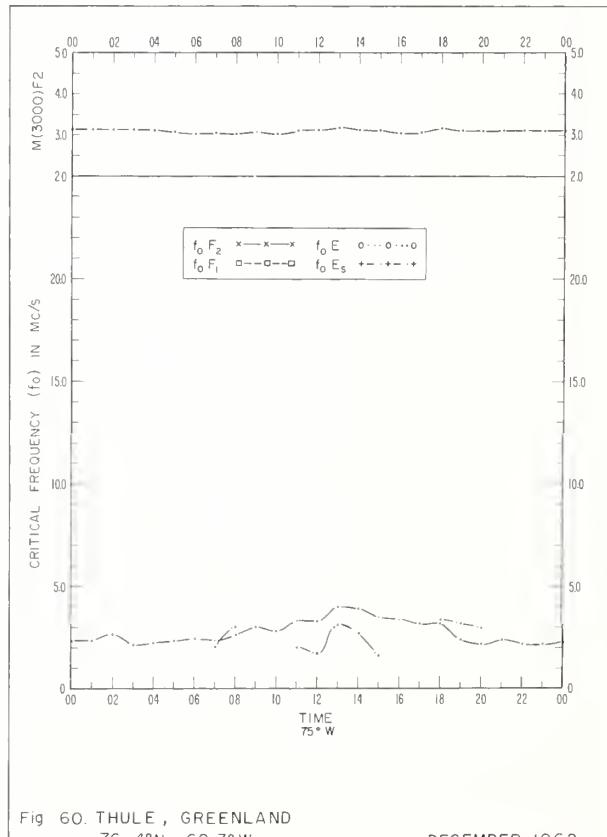
JANUARY 1963

Fig 58 HUANCAYO, PERU
12.0°S, 75.3°W

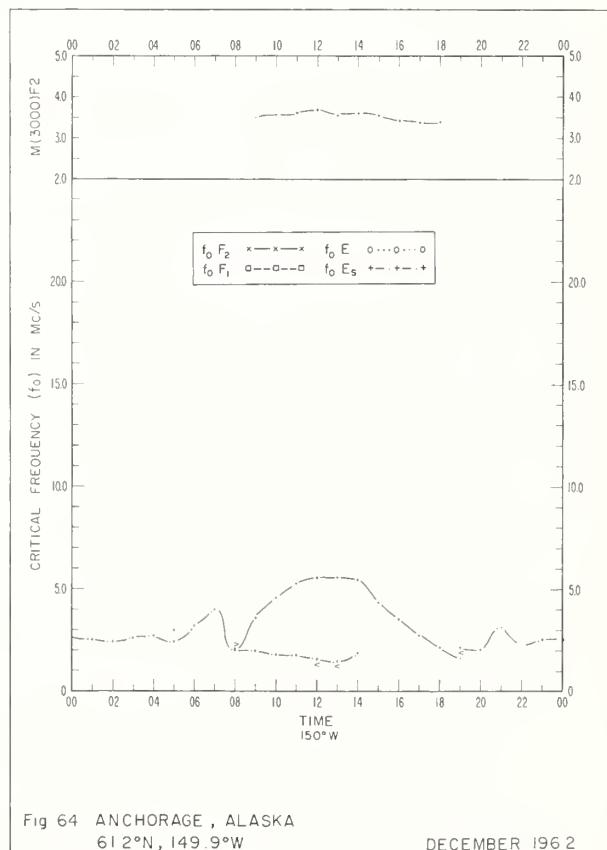
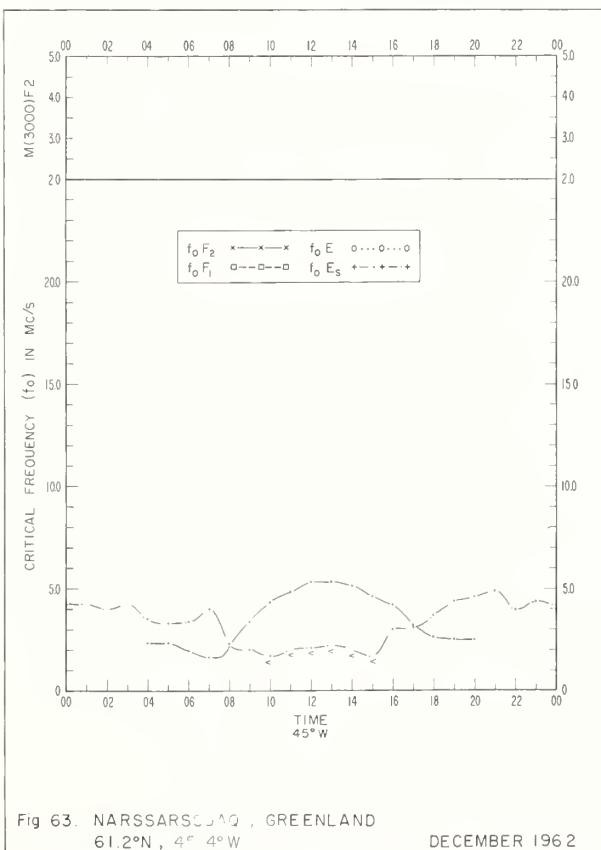
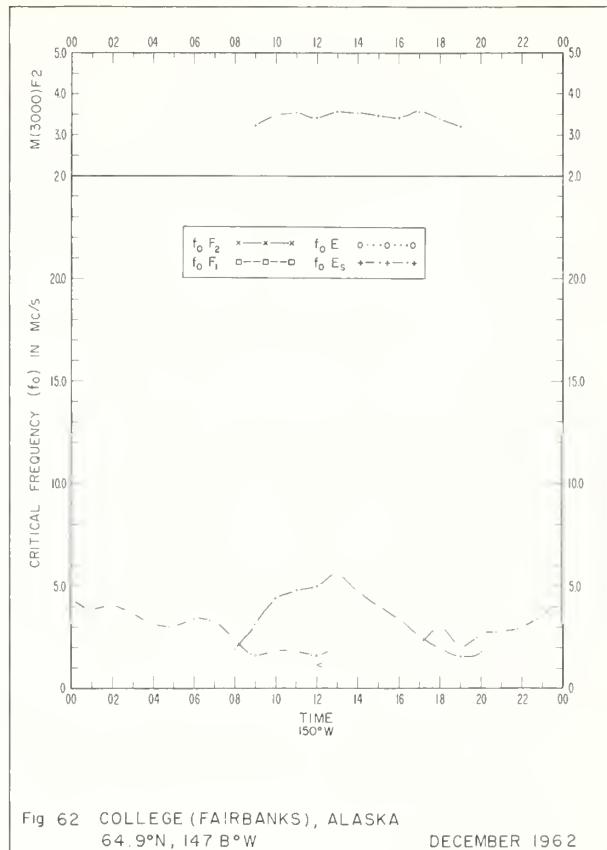
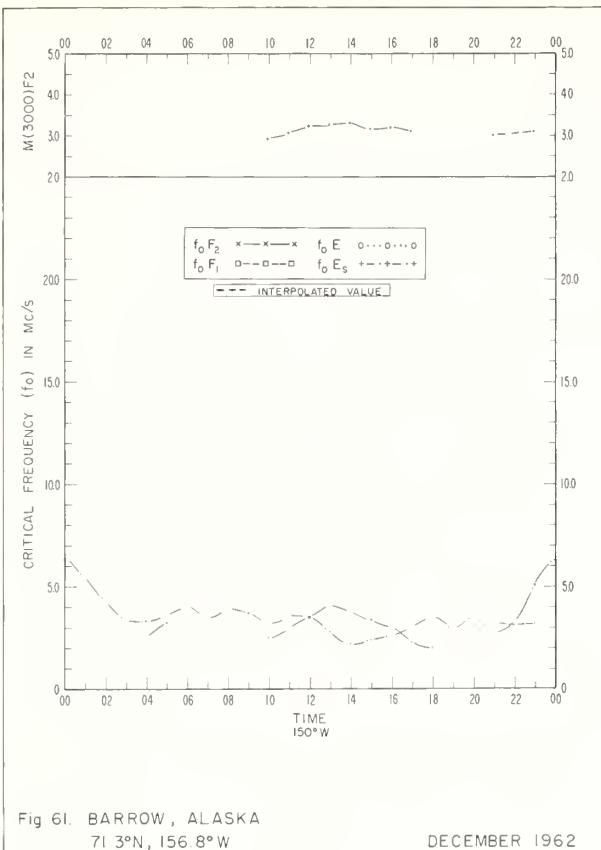
JANUARY 1963

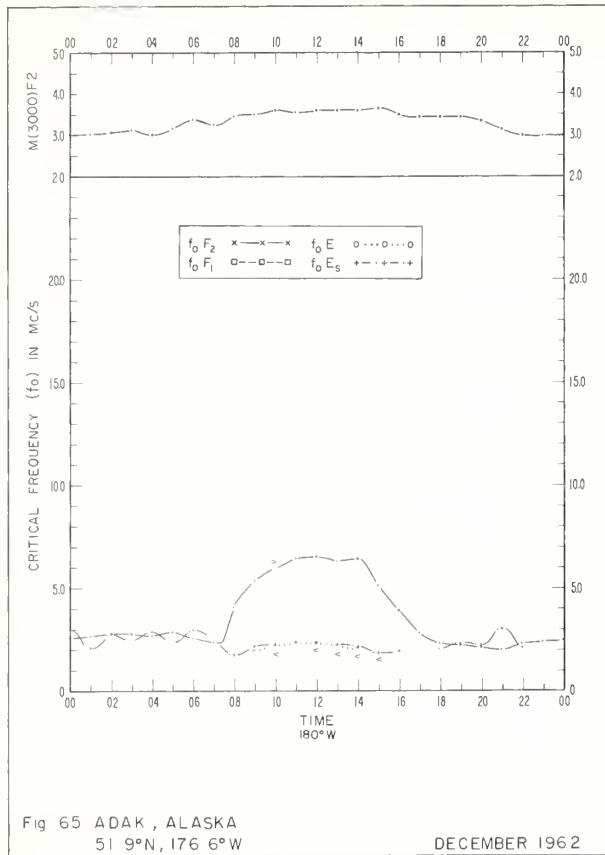
Fig 59 BYRD STATION, ANTARCTICA
80.0°S, 120.0°W

JANUARY 1963

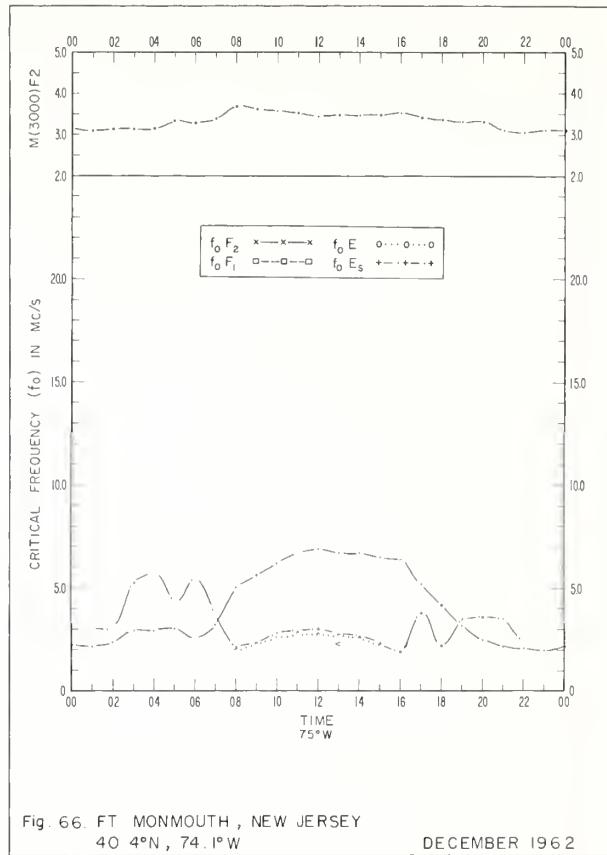
Fig 60 THULE, GREENLAND
76.4°N, 68.3°W

DECEMBER 1962

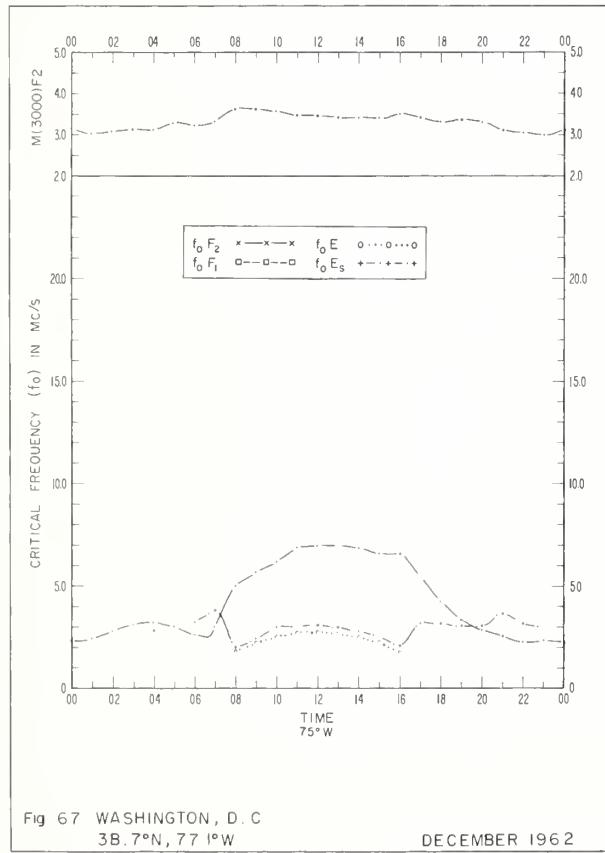


Fig 65 ADAK , ALASKA
51 9°N, 176 6°W

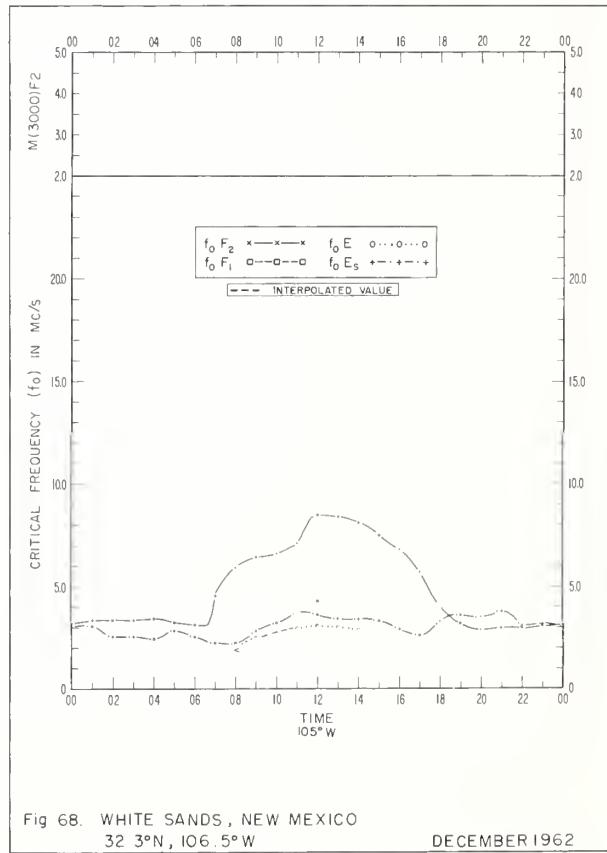
DECEMBER 1962

Fig 66 FT MONMOUTH , NEW JERSEY
40 4°N, 74.1°W

DECEMBER 1962

Fig 67 WASHINGTON , D. C
38.7°N, 77 1°W

DECEMBER 1962

Fig 68. WHITE SANDS , NEW MEXICO
32 3°N, 106.5°W

DECEMBER 1962

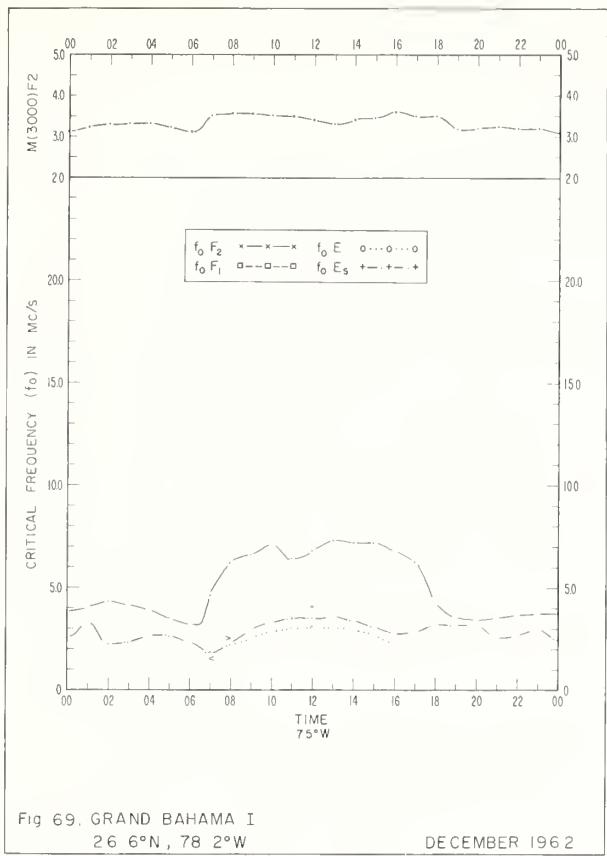


Fig 69. GRAND BAHAMA I
26 6°N, 78 2°W

DECEMBER 1962

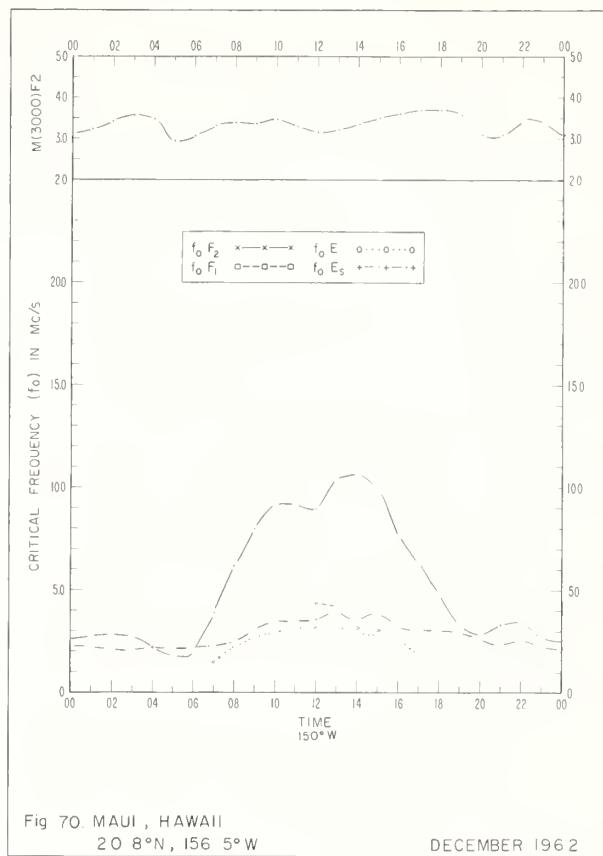


Fig 70. MAUI , HAWAII
20 8°N, 156 5°W

DECEMBER 1962

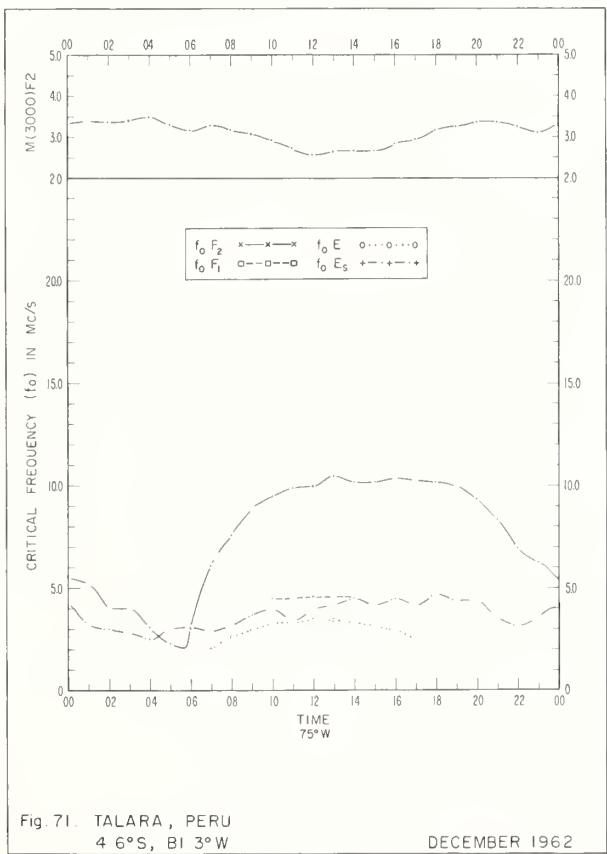


Fig 71. TALARA , PERU
4 6°S, 71 3°W

DECEMBER 1962

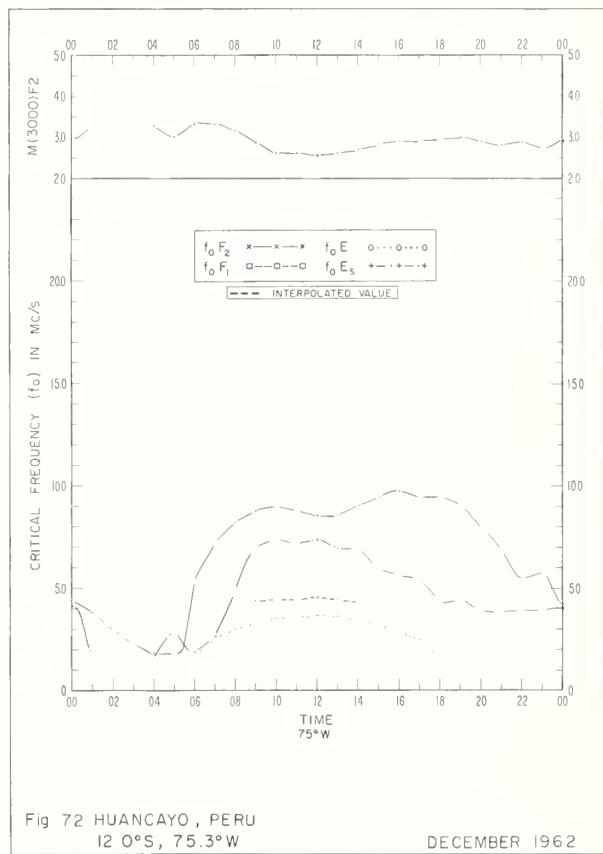
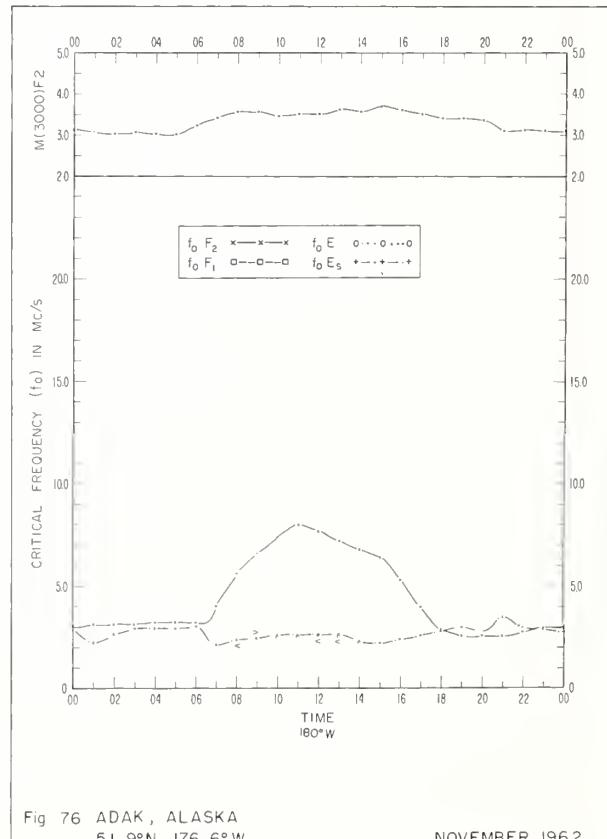
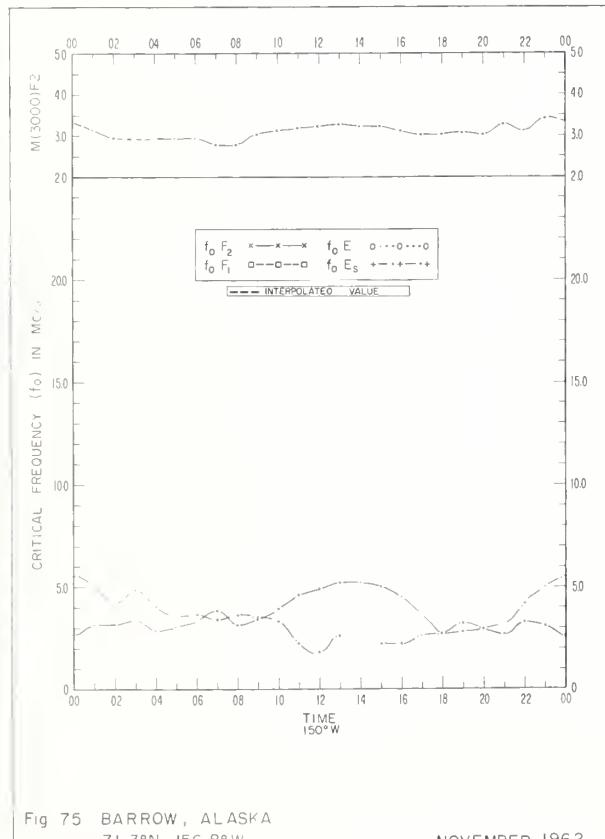
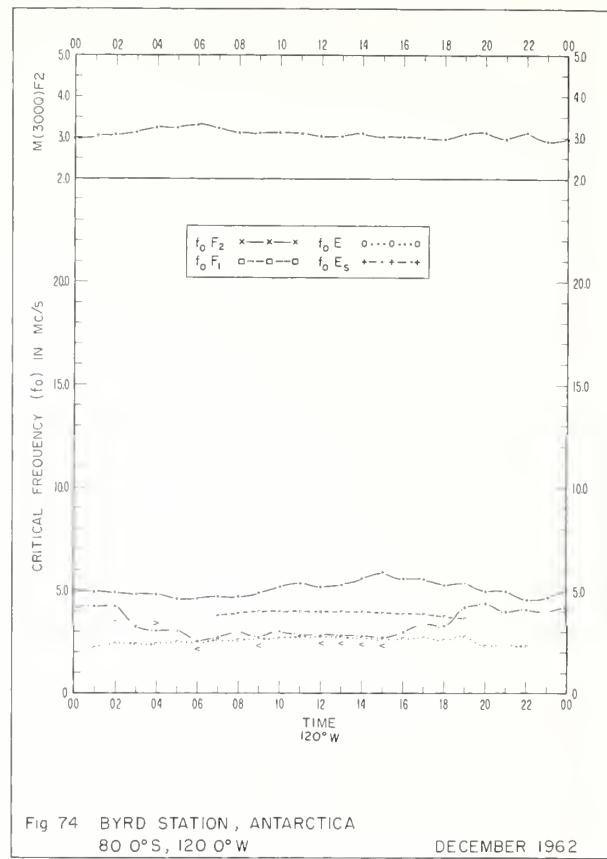
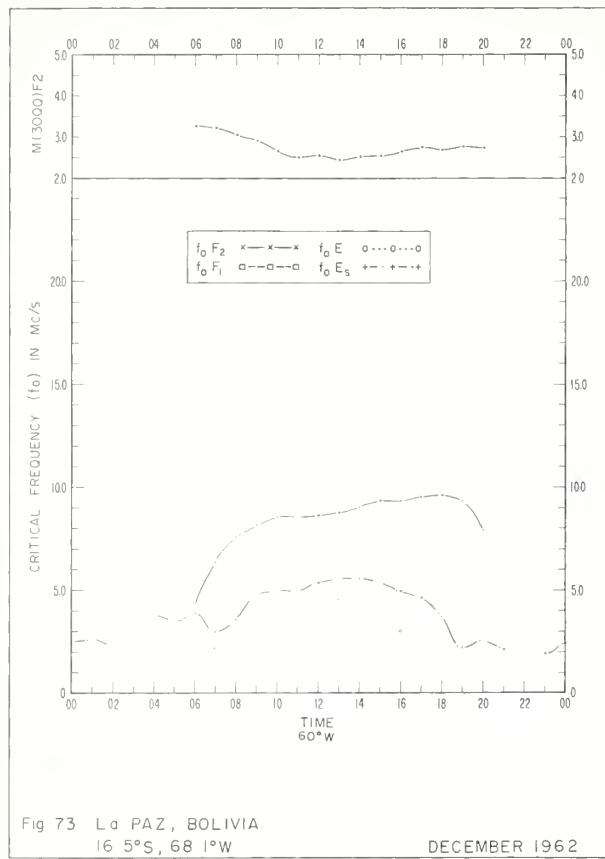
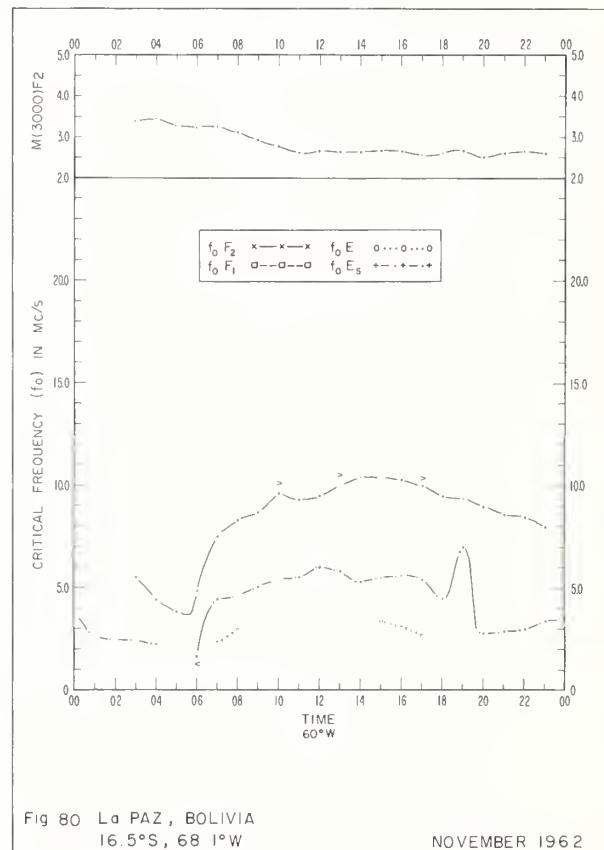
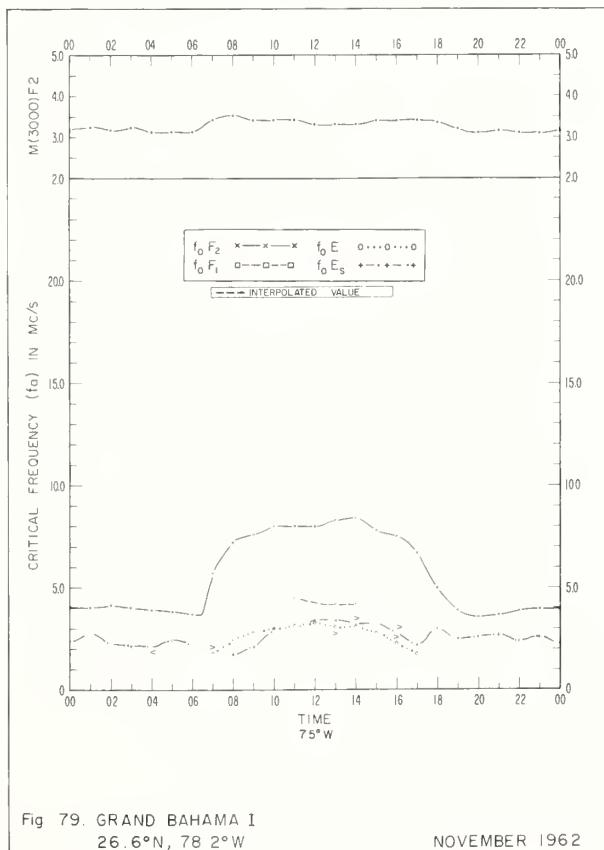
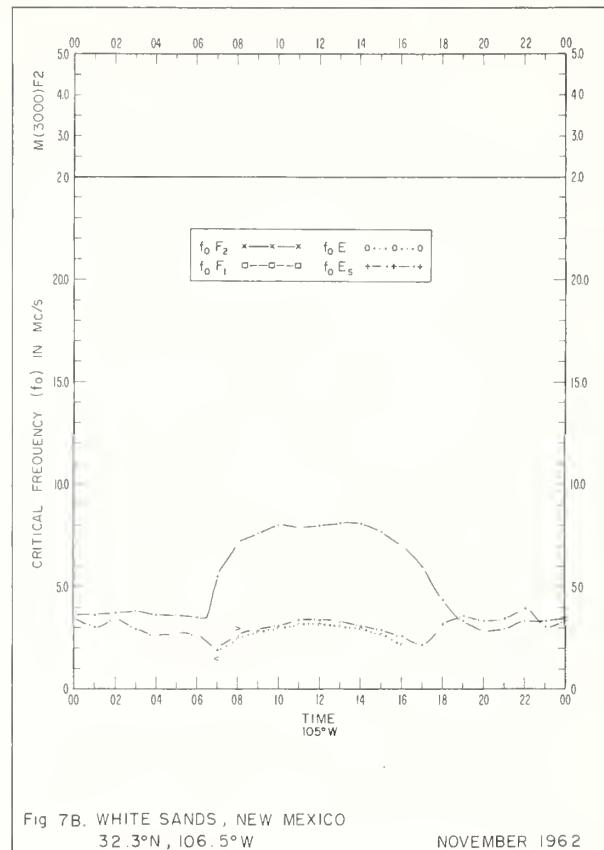
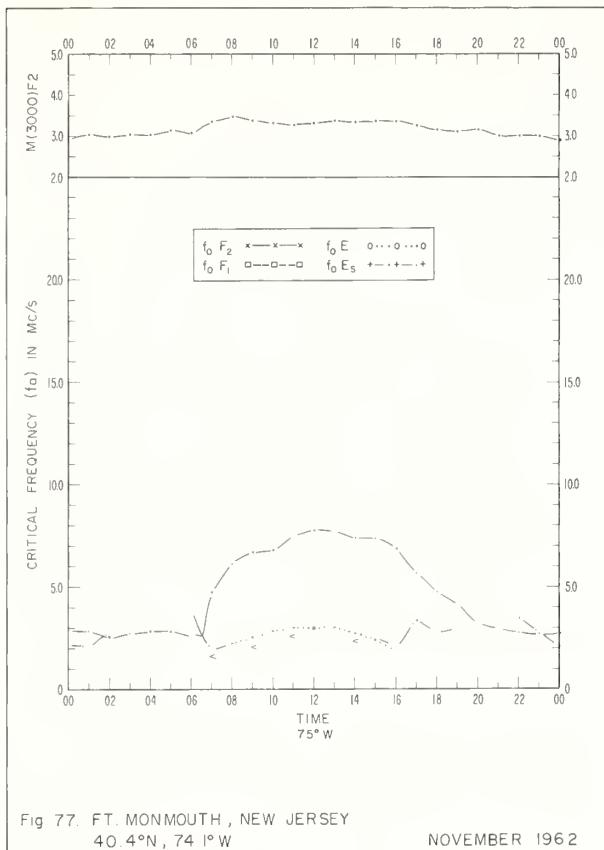
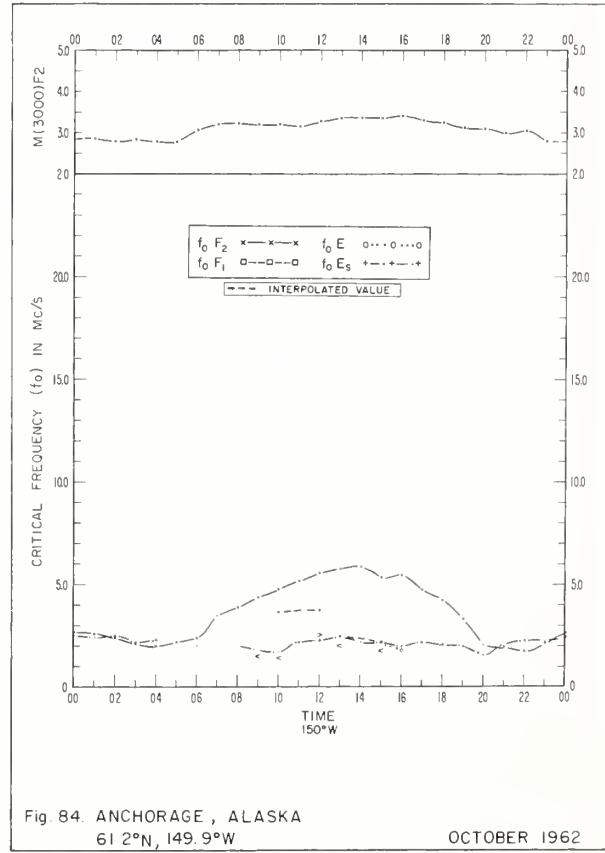
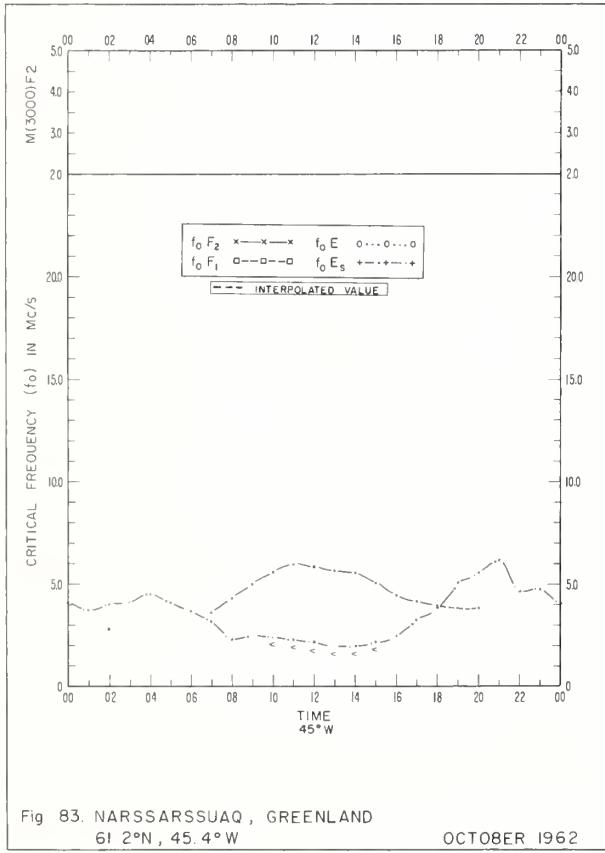
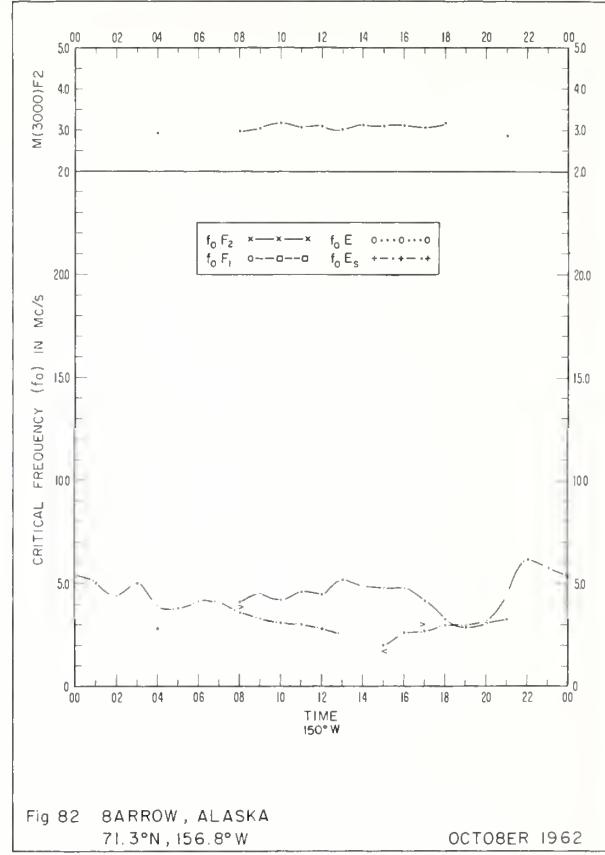
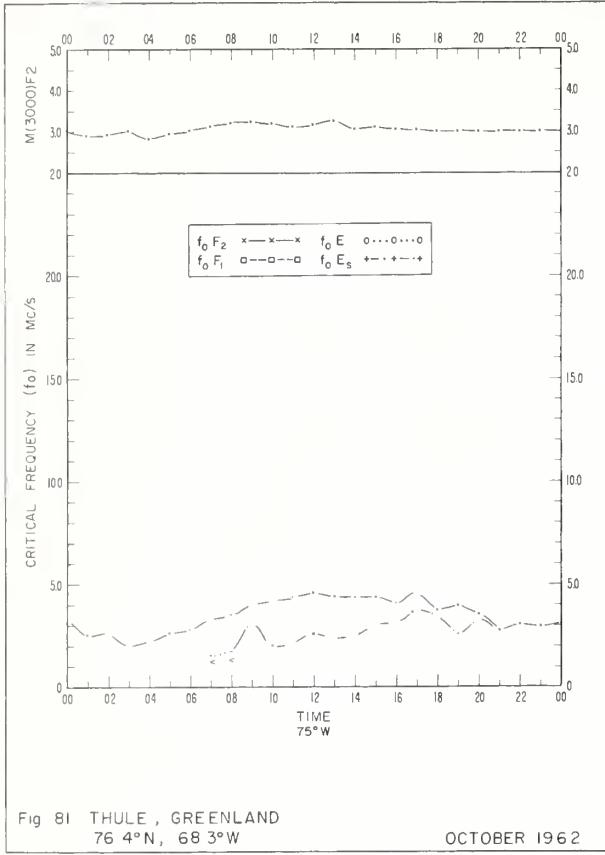


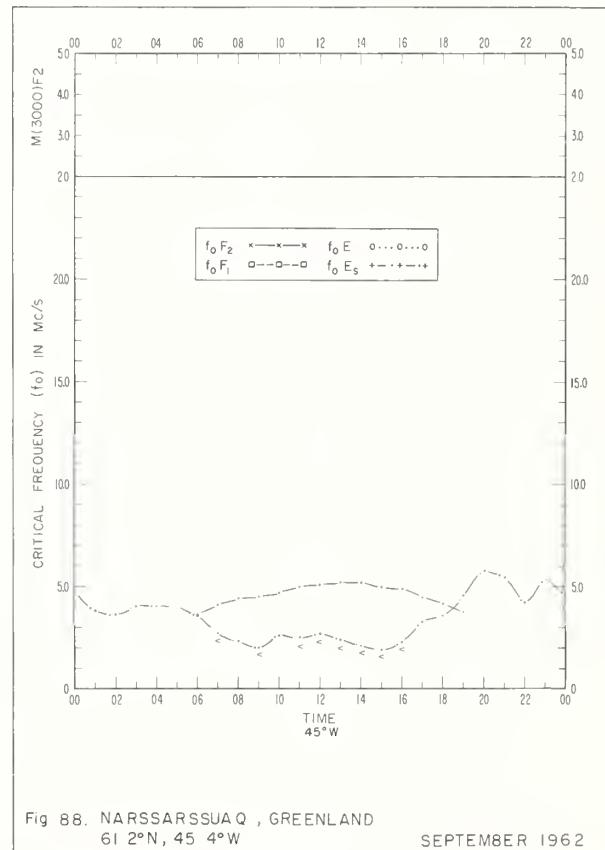
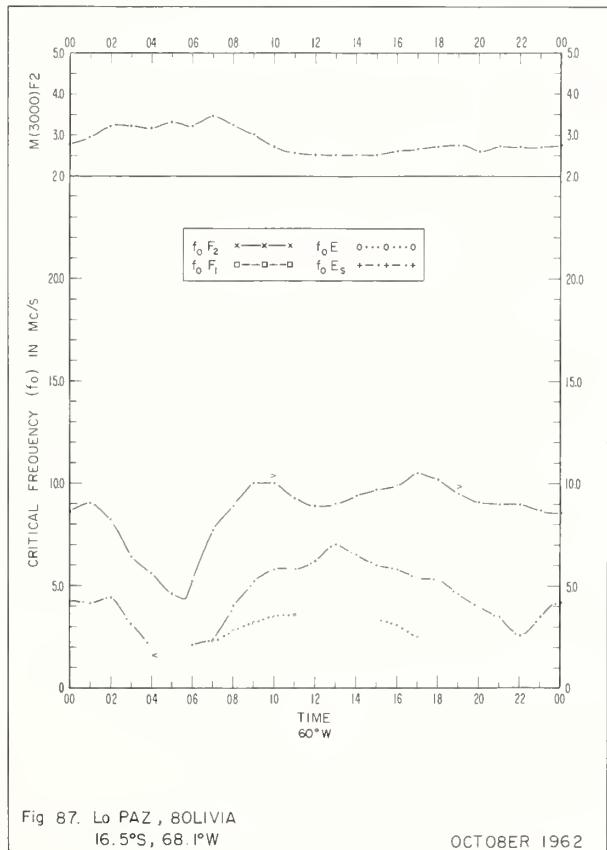
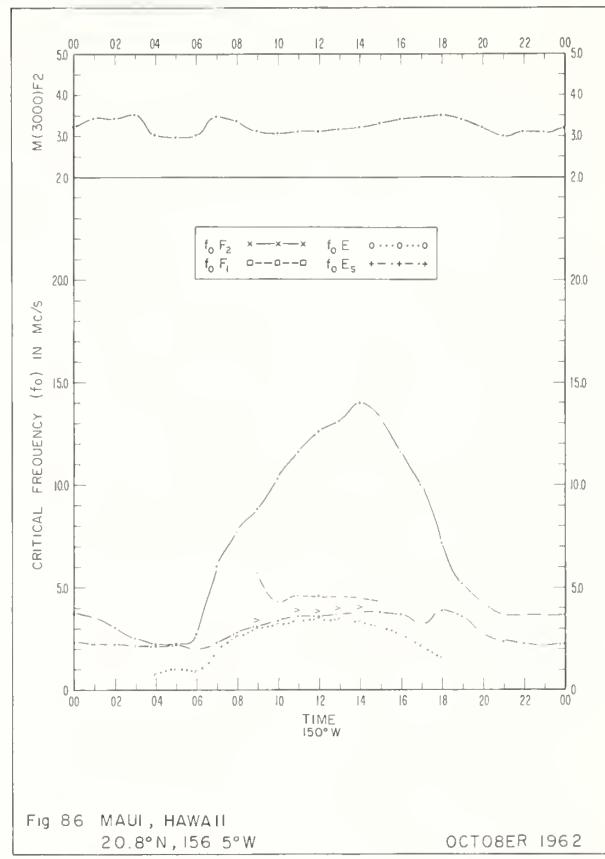
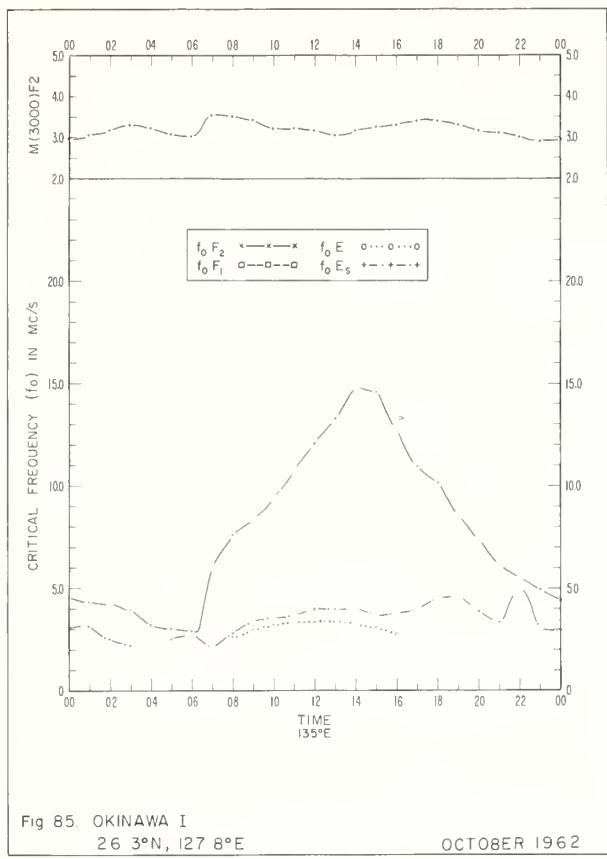
Fig 72 HUANCAYO , PERU
12 0°S, 75.3°W

DECEMBER 1962









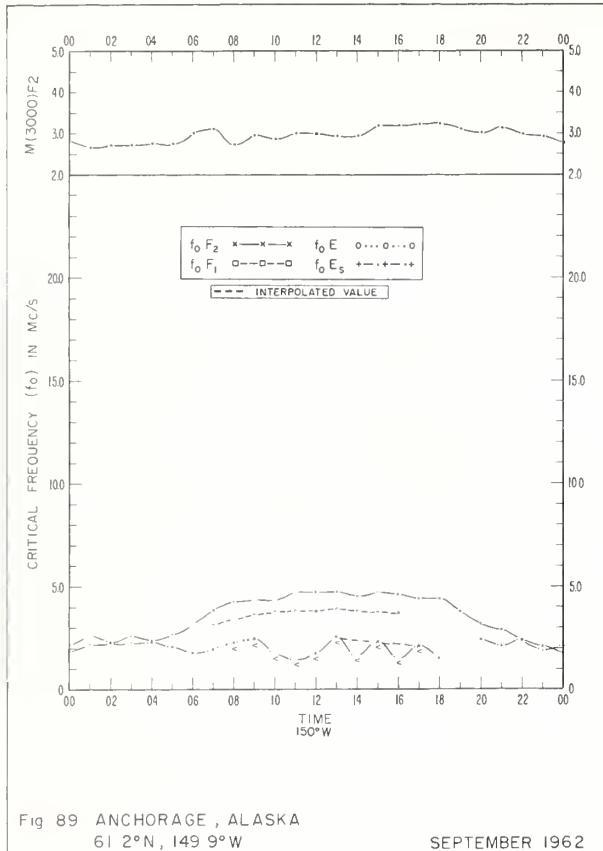


Fig 89 ANCHORAGE , ALASKA
61 2°N, 149 9°W SEPTEMBER 1962

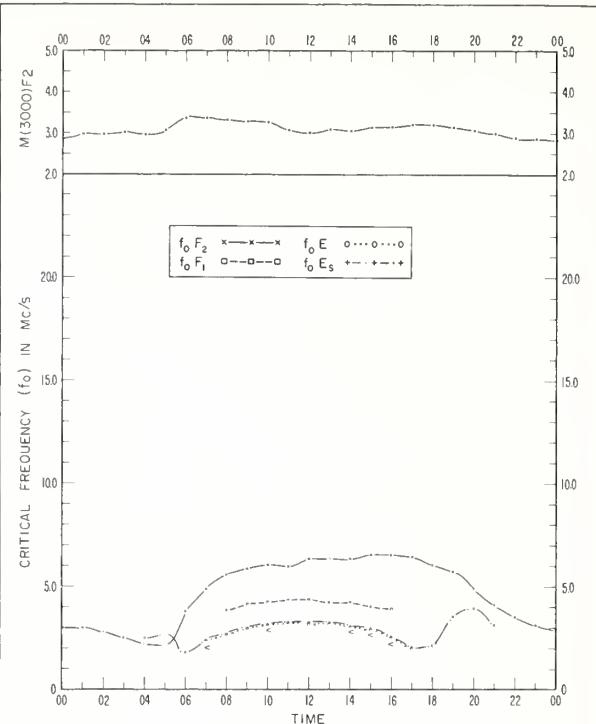


Fig 90. FT MONMOUTH , NEW JERSEY
40.4°N, 74 1°W SEPTEMBER 1962

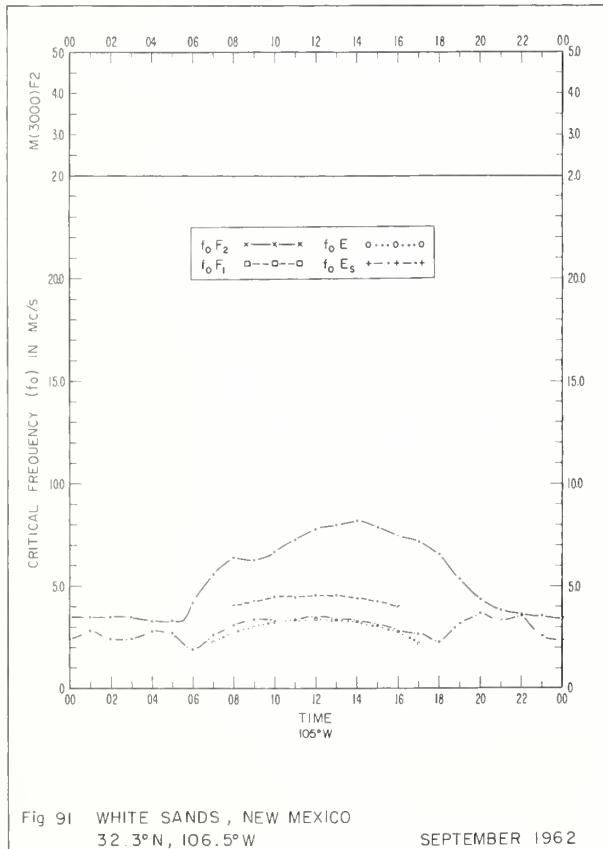


Fig 91 WHITE SANDS , NEW MEXICO
32.3°N, 106.5°W SEPTEMBER 1962

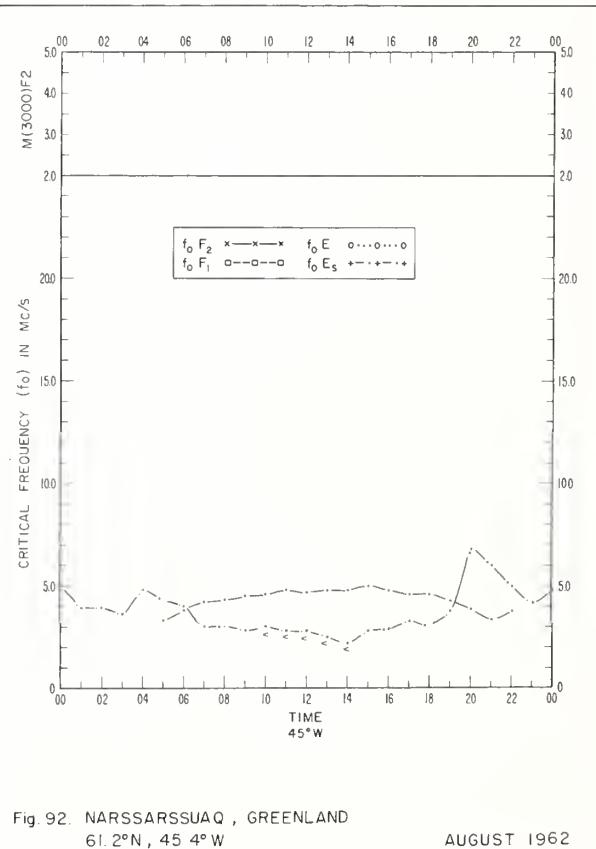
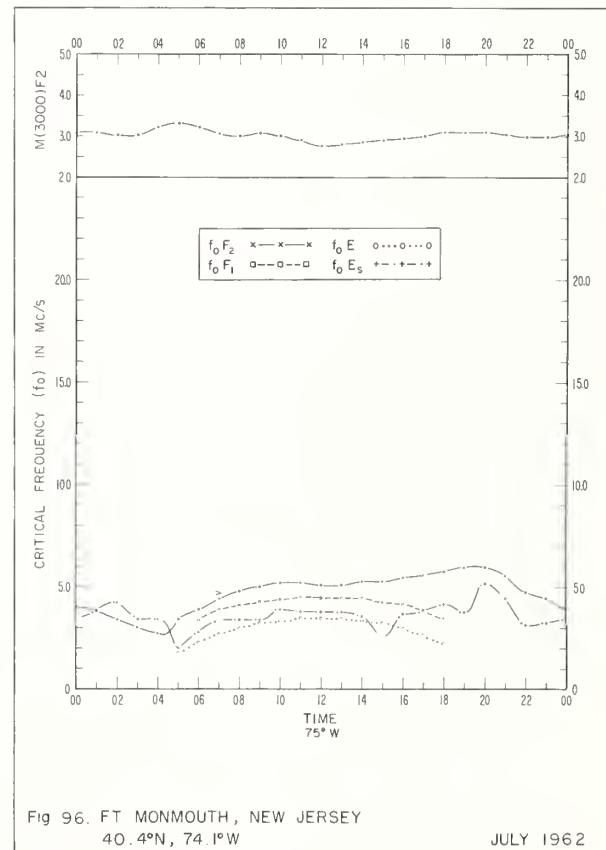
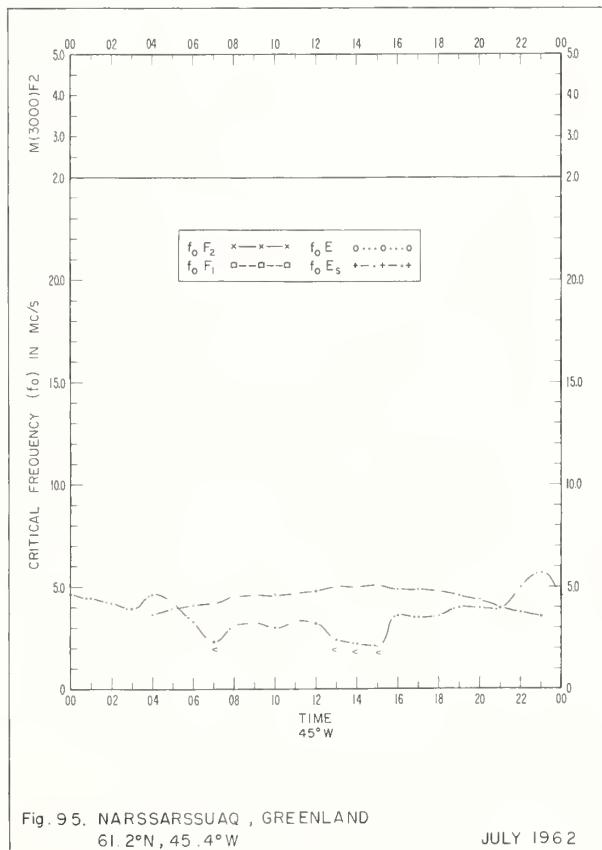
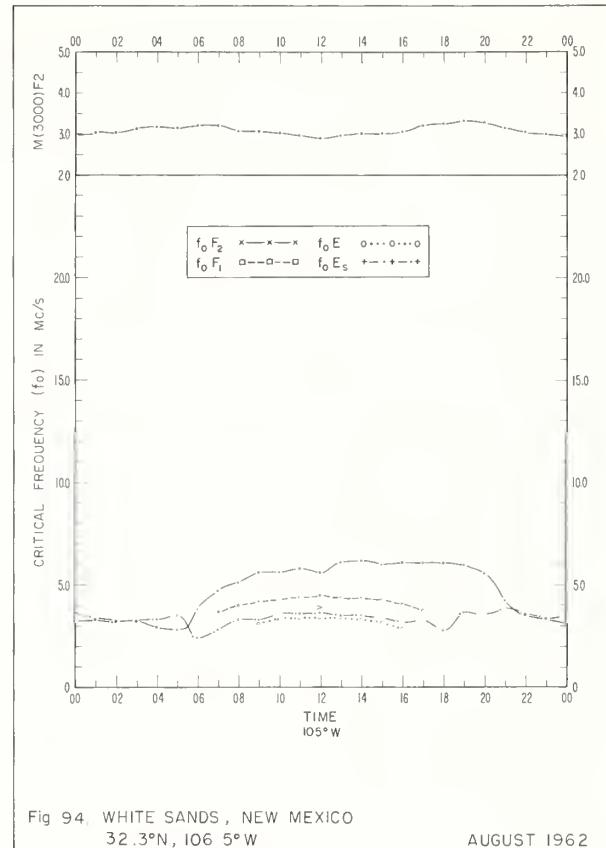
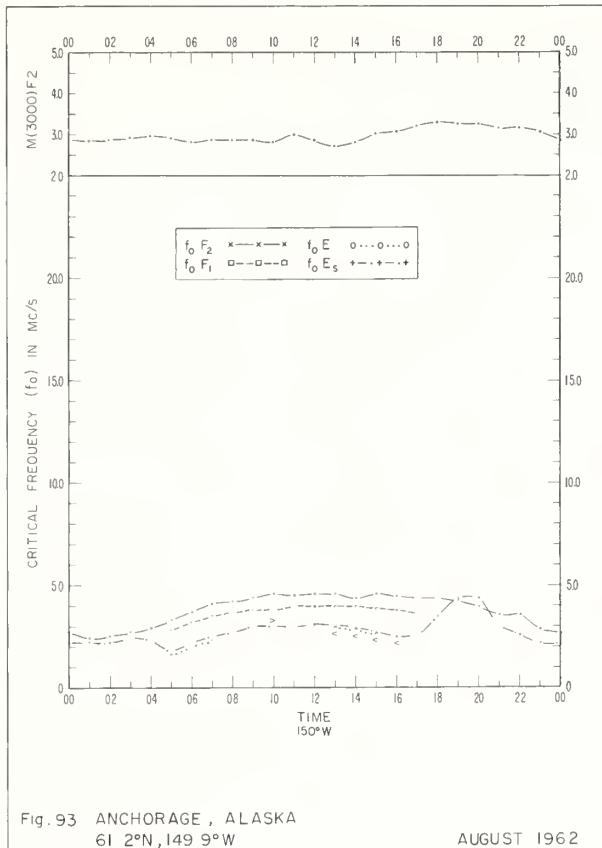
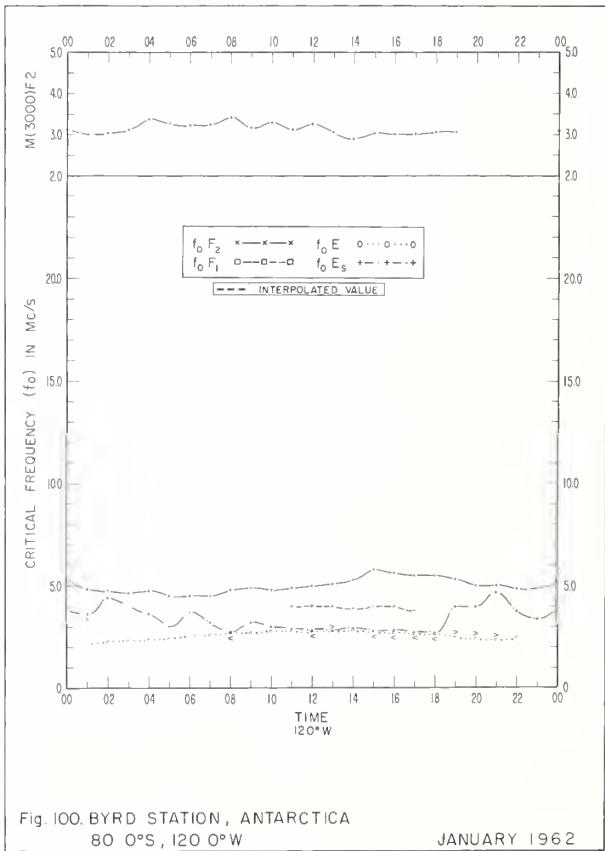
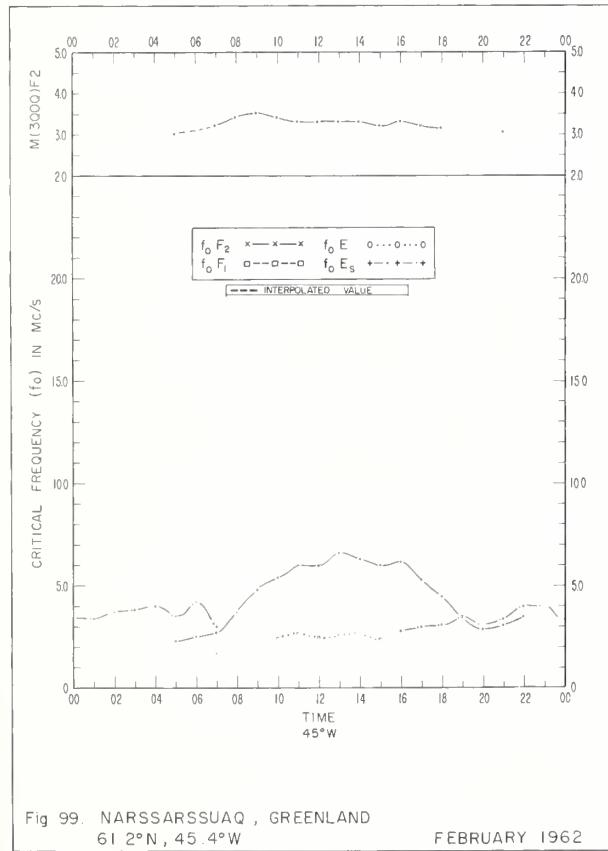
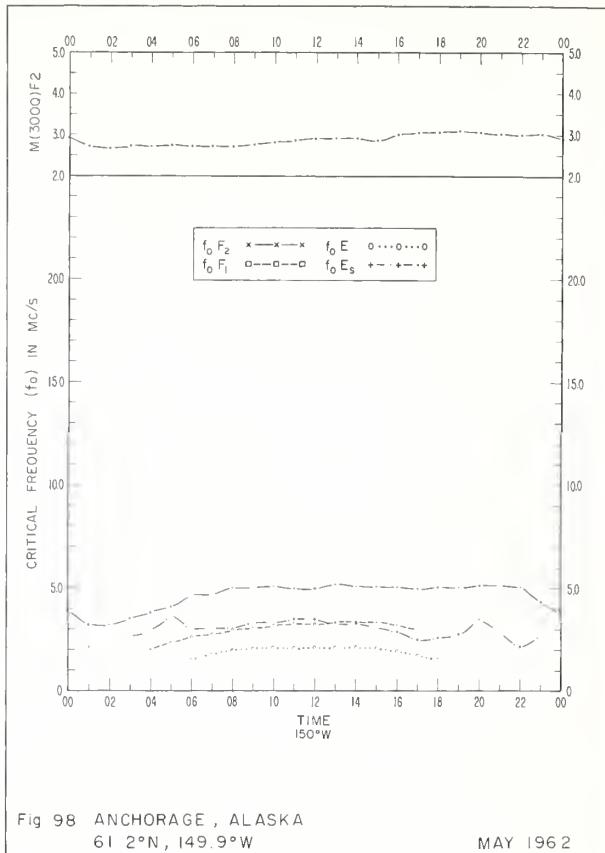
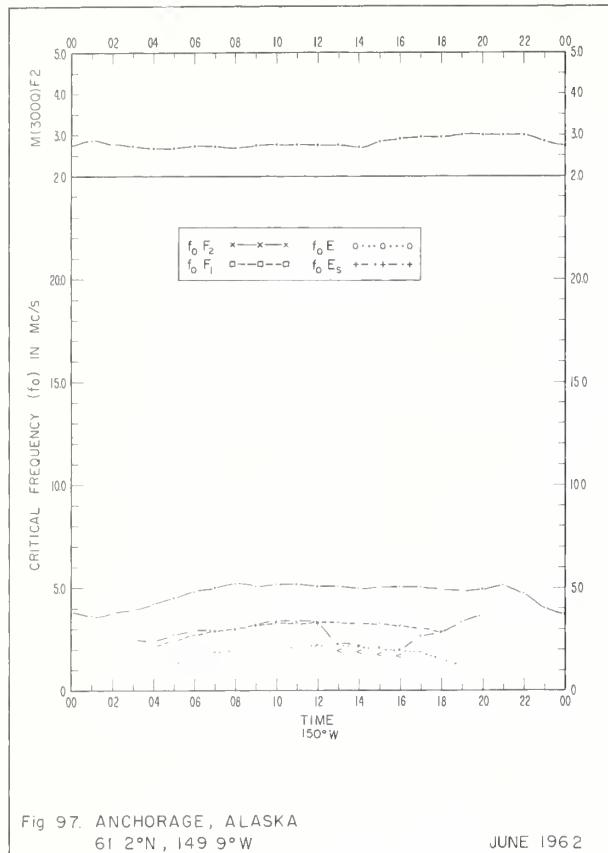


Fig 92. NARSSARSSUAQ , GREENLAND
61.2°N, 45 4°W AUGUST 1962





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	1963	MAR.	6	31
	1963	APR.	2	27
ANCHORAGE, ALASKA	1962	MAY	25	50
	1962	JUNE	25	50
	1962	AUG.	24	49
	1962	SEPT.	23	48
	1962	OCT.	21	46
	1962	DEC.	16	41
	1963	JAN.	13	38
	1963	FEB.	9	34
	1963	MAR.	6	31
	1963	APR.	2	27
BARROW, ALASKA	1962	OCT.	21	46
	1962	NOV.	19	44
	1962	DEC.	16	41
	1963	JAN.	12	37
	1963	FEB.	8	33
	1963	MAR.	5	30
BYRD STATION, ANTARCTICA	1962	JAN.	25	50
	1962	DEC.	19	44
	1963	JAN.	15	40
COLLEGE (FAIRBANKS), ALASKA	1962	DEC.	16	41
	1963	JAN.	12	37
	1963	FEB.	8	33
	1963	MAR.	5	30
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	1963	APR.	4	29
	1963	MAY	1	26
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	1962	DEC.	17	42
	1963	JAN.	13	38

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	1962	DEC.	13	43
	1963	JAN.	14	39
	1963	FEB.	10	35
	1963	MAR.	7	32
	1963	APR.	3	28
	1963	JUNE	1	26
HUANCAYO, PERU	1962	DEC.	18	43
	1963	JAN.	15	39
	1963	FEB.	11	36
	1963	MAR.	7	32
LA PAZ, BOLIVIA	1962	OCT.	22	47
	1962	NOV.	20	45
	1962	DEC.	19	44
MAUI, HAWAII	1962	OCT.	22	47
	1962	DEC.	18	43
	1963	JAN.	14	39
	1963	FEB.	11	36
	1963	MAR.	7	32
	1963	APR.	4	29
	1963	JUNE	1	26
NARSSARSSUAQ, GREENLAND	1962	FEB.	25	50
	1962	JULY	24	49
	1962	AUG.	23	48
	1962	SEPT.	22	47
	1962	OCT.	21	46
	1962	DEC.	16	41
	1963	JAN.	12	37
	1963	FEB.	9	34
	1963	MAR.	5	30
	1963	APR.	2	27
	1963	MAY	1	26
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	1963 FEB.	8	33
	1963 MAR.	5	30
	1963 APR.	2	27
TALARÁ, PERU	1962 DEC.	18	43
	1963 JAN.	15	40
THULE, GREENLAND	1962 OCT.	21	46
	1962 DEC.	15	40
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WASHINGTON, D.C.	1962 DEC.	17	42
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	1963 JAN.	14	39
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	J	F	M	A	M	J	Jy	A	S	O	N	D		J	F	M	A	M	J	Jy	A	S	O	N	D	
Adak, Alaska	153	154	155	155	156	158	159	159	162	163	164	165		166	166	168	168	169	170	171	173	172	174	175	176	
Ahmedabad, India	NR	NP	-----	170	176	177	213	214	214	214	214	214		224	191	NP	224	222	NP	222	223	215	NP	222	NP	
Akita, Japan	155	155	157	157	158	161	163	162	163	164	165	166		168	168	170	178	172	173	179	179	180	180	182	183	
Alert, Canada	-----	-----	-----	191	175	213	213	213	213	213	213	213		190	190	191	191	213	213	213	212	212	215	212	194	194
Alma-Ata, USSR	155	NP	157	161	168	164	170	-----	NP	-----	-----	-----		165	165	167	167	169	170	171	171	172	172	176	175	
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Ashkhabad, USSR	155	NP	160	167	168	NP	170	-----	NP	-----	-----	-----		166	167	178	177	171	178	179	174	179	181	181	183	
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Boulder, Colorado	-----	-----	-----	160	162	163	164	165	169	169	169	169		169	169	176	177	172	177	173	174	174	181	181	183	
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Byrd Station	-----	NP	-----	170	166	177	213	214	214	214	214	214		224	191	NP	224	222	NP	222	223	215	NP	222	NP	
Calcutta, India	219	180	174	173	NP	-----	161	162	163	167	165	166		168	172	NP	174	174	177	174	217	180	180	183	204	
Campbell I.	-----	-----	-----	213	213	213	173	NP	159	160	161	162	164	165	166	169	169	169	172	173	174	174	176	216	216	
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Chimbote, Peru	-----	-----	-----	164	165	166	167	169	169	169	169	169		164	165	166	167	169	170	170	170	170	170	170	170	
Chita, USSR	157	167	168	NP	-----	-----	161	162	163	167	170	167		168	168	176	177	171	177	179	179	181	183	184		
Christchurch, New Zealand	154	157	156	159	159	166	161	162	163	167	170	167		161	162	163	167	170	171	171	175	179	181	184		
Churchill, Canada	154	155	156	158	158	159	160	161	161	164	166	165		166	167	169	178	172	172	174	178	180	181	183		
Clyde, Baffin I.	-----	-----	-----	213	213	173	NP	159	160	161	162	165	168		216	194	194	215	215	215	216	216	216	216	216	
Concepcion, Chile	-----	-----	-----	161	162	175	167	167	169	213	213	213	213		173	174	174	174	174	174	174	174	174	174	174	
Dakar, French W. Africa	216	216	216	216	216	216	219	219	213	213	219	219		195	193	195	197	197	211	199	200	201	202	202		
De Bilt, Holland	154	155	156	156	156	159	159	160	160	163	163	166		166	169	168	178	171	172	174	175	180	182	183		
Deception I.	-----	NP	-----	170	170	213	213	213	213	213	213	213		213	213	195	213	213	213	198	200	201	202	202		
Delhi, India	-----	NP	-----	169	176	177	213	214	214	214	214	214		224	191	NP	224	222	NP	222	223	215	NP	222	NP	
Djibouti, French Somaliland	216	216	216	216	216	216	219	219	213	213	219	219		195	195	195	197	197	197	197	201	202	202	203		
Dourbes, Belgium	-----	-----	-----	162	214	214	198	166	214	214	214	214		198	216	230	195	230	230	199	216	230	216	216		
El Cerillo, Mexico	-----	-----	-----	154	157	157	158	158	161	161	162	165	168		169	169	170	177	174	178	178	179	180	182		
Elisabethville, Congo	-----	-----	-----	161	162	161	162	165	168	169	170	170	178		169	169	170	177	174	178	178	179	180	182		
Ellsworth, Antarctica	-----	-----	-----	171	172	171	165	171	171	171	171	171		178	178	178	178	178	178	178	178	178	178	178		
Eureka, Canada	-----	-----	-----	214	214	214	214	214	214	214	214	214		192	193	194	198	230	229	217	217	230	216	196		
Fairbanks, Alaska (College)	152	153	155	156	157	157	159	159	162	163	164	165		165	165	168	168	171	171	172	172	173	176	176		
Falkland Is. (Port Stanley)	157	160	160	164	164	164	164	163	163	164	164	166		169	169	171	172	172	173	174	174	174	174	174		
Fletchers Ice I.	-----	-----	-----	161	162	161	162	164	164	164	164	164		167	167	168	169	170	172	174	174	174	174	174		
Formosa, China (Taipei)	154	155	153	157	158	158	157	158	160	160	162	165		167	169	169	171	171	178	174	179	180	182	182		
Formosa, New Jersey	152	154	155	155	156	157	157	160	161	162	164	165		165	167	168	169	171	171	174	176	175	174	177		
Freiburg, Germany	219	219	219	190	190	190	190	178	179	180	214	214		192	194	198	195	198	198	198	199	230	181	184		
Frobisher, Canada	-----	-----	-----	214	214	214	214	214	214	214	214	214		214	216	216	216	216	216	216	216	216	216	216		
Genoa, (Monte Capellino), Italy	-----	NP	-----	175	175	175	175	175	175	175	175	175		175	175	175	175	175	175	175	175	175	175	175		
Godhavn, Greenland	158	158	158	158	163	161	161	161	162	162	164	172		171	171	171	171	171	171	172	173	177	184			
Grahamstown, Union of S. Africa	-----	-----	-----	159	161	162	163	165	165	165	165	165		178	178	178	178	178	178	178	178	178	178	178		
Grand Bahama I.	-----	-----	-----	151	152	156	156	155	159	161	161	161		165	165	168	168	176	176	173	175	175	176	176		
Graz, Austria	151	152	156	156	155	159	161	161	161	161	161	165		225	205	212	212	212	212	212	212	212	212	212		
Halley Bay	-----	-----	-----	211	211	211	211	211	211	211	211	211		204	206	212	211	212	211	212	212	212	212	212		
Hobart, Tasmania	158	168	171	171	159	159	159	159	160	163	163	166		162	162	163	163	166	168	173	173	175	175	175		

Station	1957												1958												
	J	F	M	A	M	J	Jy	A	S	O	N	D	J	F	M	A	M	J	Jy	A	S	O	N	D	
Ottawa, Canada	154	155	155	157	158	159	160	160	163	164	165	166	166	167	177	208	171	172	174	179	179	180	182	182	
Panama Canal Zone	153	154	154	155	156	158	160	161	161	162	164	165	166	167	167	168	168	169	170	171	172	173	174	177	
Paramaribo, Surinam	-----	-----	-----	-----	-----	-----	162	166	169	214	213	213	192	193	194	195	197	198	198	200	201	212	202	203	
Point Barrow, Alaska (Barrow)	152	152	154	155	156	158	159	161	162	163	164	165	165	167	167	167	169	170	171	172	172	175	176	177	
Poitiers, France	216	216	216	216	216	216	219	219	213	213	219	219	195	194	195	197	197	211	199	200	201	202	202	203	
Pole Station	-----	-----	-----	-----	-----	-----	172	173	173	173	171	164	180	180	182	182	183	183	183	184	184	190	191	191	
Port Lockroy	158	158	NR	196	195	195	219	177	189	190	189	190	189	189	189	189	195	197	211	199	200	NP	205	203	
Providenie Bay, USSR	-NP-	-NP-	160	161	168	NP	-NP-	-NP-																	
Pruhonice, Czechoslovakia	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	224	224	224	224	224	224	224	224	224	224	224	224	
Puerto Rico (San Juan), W. I.	152	152	154	156	156	156	159	160	162	162	164	165	167	167	168	169	169	170	170	171	172	173	174	177	
Rabat, Morocco	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	193	195	197	197	211	199	200	201	202	203	203	203	
Rarotonga I.	154	169	157	158	160	161	161	162	163	168	170	168	167	168	176	177	177	178	179	178	180	180	181	183	
Resolute Bay, Canada	154	155	155	158	158	159	161	161	163	163	165	165	166	167	168	170	172	172	174	179	179	180	181	182	
Reykjavik, Iceland	154	155	155	156	157	157	159	162	162	163	164	165	167	167	168	170	170	170	171	172	174	174	176	177	
Rome, Italy	155	NP	160	167	168	NP	170	-----	NP	-----	169	-----	166	173	171	174	172	172	174	179	180	181	181	183	
Rostov-on-Don, USSR	---	154	154	156	157	157	159	160	161	162	164	165	170	-----	NP	NR	-----	NP	-----	175	175	172	174	174	177
St. John's, Newfoundland	-----	-----	-----	-----	-----	-----	159	161	162	162	164	165	167	167	168	169	170	170	171	172	173	174	174	177	
Salehard, USSR	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	NP	219	NP	219	219	219	217	217	219	216	217	NP	
Salisbury, Southern Rhodesia	152	153	155	155	156	158	159	161	173	169	170	170	169	170	170	170	171	172	173	174	174	177	177	177	
San Francisco, California	152	152	154	156	156	156	159	160	162	162	164	165	167	167	168	169	169	170	170	171	172	173	174	177	
San Juan, Puerto Rico	-----	-----	-----	-----	-----	-----	159	160	162	162	164	165	167	167	168	169	169	170	170	171	172	173	174	177	
San Salvador I.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	188	188		
Sao Paulo, Brazil	214	214	214	214	214	219	161	162	163	166	170	166	171	171	176	177	173	192	194	216	216	216	216	216	
Schwarzenburg, Switzerland*	154	155	156	157	158	159	159	159	160	166	166	165	167	168	169	173	173	179	179	181	181	183	183	183	
Scott Base	-----	156	158	158	158	161	160	162	163	167	169	167	166	171	176	177	172	172	178	178	180	181	182	204	
Simferopol, USSR	157	NP	157	161	NR	164	-----	-----	NP	-----	NR	-----	-----	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NP	
Singapore, British Malaya	158	161	160	160	164	164	164	164	164	164	164	164	191	191	191	189	172	172	173	174	176	181	181	182	
Slough, England	156	157	158	160	160	160	161	162	167	164	166	169	168	168	171	169	170	172	173	174	203	179	180	183	
Sodankyla, Finland	-----	-----	-----	-----	-----	-----	162	163	168	168	168	168	167	168	171	172	172	178	173	179	180	180	182	182	
Sottens, Switzerland*	154	155	156	157	158	159	159	159	160	166	166	165	167	168	169	173	172	172	173	179	179	181	181	183	
Soya (Japanese Ship)	NP	206	-NP-	-NP-	-NP-	-NP-	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	NP	
Svalbard, Norway	-----	-----	-----	-----	-----	-----	166	166	208	208	214	214	192	192	192	208	190	191	190	196	213	208	202	215	
Sverdlovsk, USSR	155	NP	160	161	168	164	170	177	-----	NP	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	NP	
Tahiti, Society Is.	-----	-----	-----	-----	-----	-----	-----	-----	219	163	163	165	165	195	193	195	197	197	211	199	200	201	202	203	
Talara, Peru	158	155	158	158	158	159	163	163	163	165	165	165	166	168	168	170	170	170	171	175	176	177	178	176	
Tanmanasset, French W. Africa	216	216	216	216	216	216	219	219	213	NR	219	219	190	193	195	197	197	211	199	201	201	202	203	NR	
Tananaive, Madagascar	216	216	216	216	216	216	219	219	213	213	219	219	195	194	195	197	197	211	200	200	201	202	203	203	
Terre Adelie	216	NR	196	199	198	198	211	211	211	211	211	211	205	212	212	212	212	212	217	217	217	217	217	217	
Thule, Greenland	152	153	155	155	157	158	160	161	162	162	164	165	165	167	167	168	169	170	173	175	175	175	174	177	
Tiruchy, India	-----	-----	169	176	177	213	214	214	214	214	214	214	224	219	224	224	222	NP	222	223	215	NP	222	NP	
Tokyo, Japan	156	155	157	157	157	158	161	163	163	164	165	166	168	169	170	178	172	173	179	179	180	180	182	183	
Tomsk, USSR	155	NP	157	161	NR	164	170	-----	NP	-----	-----	-----	-----	-----	-----	-----	-----	NP	179	179	179	179	179	179	
Tortosa, Spain	-----	-----	-----	-----	-----	-----	174	164	-----	NP	166	166	174	174	174	174	174	174	174	174	174	174	174	174	
Townsville, Australia	158	158	158	158	158	160	160	162	164	164	166	168	169	181	181	181	181	181	181	175	190	215	180	181	
Trelew, Argentina	-----	-----	-----	-----	-----	-----	160	162	164	164	166	168	169	194	194	216	219	219	219	222	223	215	215	215	215
Trivandrum, India	-----	171	176	177	213	214	214	214	214	214	214	214	224	219	224	224	222	NP	222	223	215	NP	222	NP	
Tromso, Norway	154	155	156	157	158	159	159	160	161	163	163	165	166	166	168	168	177	179	178	173	179	176	180	182	
Tsumeb, South W. Africa	-----	-----	-----	-----	-----	-----	171	212	212	212	212	212	198	195	194	197	198	198	198	200	200	202	203	203	203
Tucuman, Argentina	-----	-----	-----	170	177	214	214	214	214	214	214	214	216	218	216	210	215	215	215	192	192	192	215	215	215
Uppsala, Sweden	154	152	153	156	155	159	158	158	160	161	164	165	168	165	167	169	170	168	178	179	179	180	182	183	
Ushuaia, Argentina	-----	-----	-----	-----	-----	-----	215	ND	NP	193	191	-----	ND	192	192	215	215	215	192	ND	192	215	215	215	
Victoria, Canada	174	163	163	164	169	167	167	168	168	168	170	170	172	172	173	173	179	179	180	182	183	183	183	183	
Wakkanai, Japan	155	155	157	157	157	161	163	162	163	164	165	166	168	168	170	170	172	173	173	179	179	180	182	183	
Washington, D. C.	150	151	152	153	154	155	158	158	160	161	162	163	163	166	166	166	167	169	169	170	171	172	173	174	
Watheroo, W. Australia	154	155	156	156	157	159	161	161	163	164	166	166	167	168	169	170	170	172	172	178	178	176	181	182	
White Sands, New Mexico	152	153	154	156	156	158	159	159	160	162	163	164	165	167	167	168	168	170	170	172	172	173	174	177	
Wilkes Station, Antarctica	-----	154	155	156	157	158	159	159	160	161	164	165	166	177	177	178	178	178	178	180	182	184	184	184	
Winnipeg, Canada	-----	154	155	156	157	158	159	159	160	162	163	165	165	166	166	167	167	177	177	178	179	179	181	182	
Yakutsk, USSR	NP	157	157	167	168	164	-----	-----	NP	-----	-----	-----	-----	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NP	

* Sottens as of July 1959; Schwarzenburg prior to that.

Code: NR = No data received.

NP = Data not published.

ND = No data in existence.

-- = (Without letter symbol) station not operating.

Data prior to 1957 and published in 1963 (CRPL-F221, Part A, through F232, Part A) are in the following issues:

Casablanca, Morocco, November 1956 - F223.

Deception I., Antarctica, November 1955 - in F229.

Godley Head (Christchurch), New Zealand, August 1955 - in F230.

Station	1959												1960												
	J	F	M	A	M	J	Jy	A	S	O	N	D	J	F	M	A	M	J	Jy	A	S	O	N	D	
Adak, Alaska	179	179	181	182	183	183	185	186	187	187	187	188	189	190	192	195	196	215	210	211	212	212	202	203	
Ahmedabad, India	205	206	210	213	218	220	218	217	220	220	220	220	222	227	219	223	224	225	206	193	194	195	196	198	225
Akita, Japan	185	186	186	187	188	188	207	210	215	209	205	204	179	179	181	181	183	185	186	186	184	187	187	188	203
Anchorage, Alaska	179	179	181	181	183	185	183	186	186	184	187	187	188	189	189	189	190	215	216	210	211	212	212	203	
Baguio, Luzon	179	179	181	182	183	186	184	186	186	187	187	188	184	185	184	185	185	185	185	185	185	185	185	185	
Baker Lake, Canada	222	222	222	223	223	223	230	230	230	230	230	230	222	227	219	223	224	225	206	193	194	195	196	198	225
Bangui, Central African Republic	184	184	185	185	184	185	189	190	192	189	188	189	184	184	185	185	185	185	185	185	185	185	185	185	203
Bogota, Colombia	205	206	210	213	218	220	218	217	220	220	220	220	189	189	189	189	189	189	189	189	189	189	189	189	203
Bombay, India	189	189	189	189	189	189	189	187	187	187	187	188	189	189	189	189	189	189	189	189	189	189	189	189	203
Boulder, Colorado	184	185	185	185	185	185	185	185	185	185	185	185	184	185	185	185	185	185	185	185	185	185	185	185	203
Brisbane, Australia	184	184	185	185	184	185	184	190	192	192	194	191	189	189	189	189	189	189	189	189	189	189	189	189	203
Budapest, Hungary	NP	193	189	185	185	189	190	193	193	193	194	198	192	192	192	192	192	192	192	192	192	192	192	192	203
Buenos Aires, Argentina	192	NR	194	195	197	198	198	199	200	201	202	204	193	193	194	195	196	197	198	199	200	201	202	203	203
Bunia, Congo	186	186	185	187	188	189	190	191	193	193	194	197	192	193	194	195	196	197	198	199	200	201	202	203	203
Byrd Station	205	206	207	210	213	218	220	218	217	220	220	220	222	227	219	223	224	225	225	227	227	227	227	227	225
Calcutta, India	190	191	193	193	194	197	198	198	199	200	192	208	209	217	220	220	220	220	220	220	220	220	220	220	220
Campbell I.	205	206	207	207	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218	218
Canberra, Australia	192	193	194	195	196	198	192	199	200	201	202	203	185	220	220	220	220	220	220	220	220	220	220	220	220
Cape Hallett	185	220	220	220	220	220	220	220	220	220	220	220	184	184	186	186	186	186	186	186	186	186	186	186	186
Capetown, Union of S. Africa	184	184	186	186	186	196	198	199	199	200	201	202	203	180	181	181	182	183	183	183	183	183	183	183	183
Chimbote, Peru	185	185	187	187	187	187	187	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	
Christchurch (Godley Head), N.Z.	185	206	207	219	219	219	219	219	219	219	219	219	185	185	187	187	187	187	187	187	187	187	187	187	187
Churchill, Canada	184	185	187	187	187	187	187	190	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191
Concepcion, Chile	188	190	194	207	208	209	209	210	211	212	188	189	189	190	191	191	191	191	191	191	191	191	191	191	191
Dakar, French W. Africa	193	193	194	197	197	198	198	200	200	202	225	225	185	185	187	187	187	187	187	187	187	187	187	187	187
De Bilt, Holland	185	185	187	210	210	207	207	216	216	216	216	216	185	185	187	187	187	187	187	187	187	187	187	187	187
Delhi, India	205	206	210	213	218	220	220	218	217	220	220	220	222	227	219	223	224	225	225	227	227	227	227	227	225
Djibouti, French Somaliland	192	193	194	195	196	198	198	199	199	200	201	202	185	185	186	186	186	186	186	186	186	186	186	186	186
Dourbes, Belgium	192	193	195	196	215	198	198	215	215	216	216	216	184	193	194	195	195	197	197	197	197	197	197	197	197
El Cerillo, Mexico	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
Elisabethville, Congo	186	186	185	187	188	189	189	191	191	193	209	204	186	186	187	187	187	187	187	187	187	187	187	187	187
Eureka, Canada	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
Fairbanks, Alaska (College)	179	180	182	181	183	184	184	185	185	187	188	188	185	185	186	187	187	187	187	187	187	187	187	187	187
Falkland Is.	185	185	186	186	186	188	188	191	191	193	193	193	185	186	186	187	187	187	187	187	187	187	187	187	187
Formosa, China (Taipei)	186	186	186	188	189	191	186	186	186	187	187	187	185	185	185	186	186	186	186	186	186	186	186	186	186
Ft. Monmouth, New Jersey	180	180	182	181	183	185	185	185	186	186	186	186	184	184	184	185	185	185	185	185	185	185	185	185	185
Freiburg, Germany	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
Frobisher, Canada	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
Garchy, France	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186
Genoa (Monte Capellino), Italy	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
Godhavn, Greenland	184	182	182	182	183	185	185	186	186	187	188	188	184	185	185	185	185	185	185	185	185	185	185	185	185
Grahamstown, Union of S. Africa	184	182	182	182	183	185	185	186	186	187	187	187	184	185	185	185	185	185	185	185	185	185	185	185	185
Grand Bahama I.	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
Graz, Austria	180	182	182	182	184	185	185	185	186	186	186	186	184	185	185	185	185	185	185	185	185	185	185	185	185
Hobart, Tasmania	184	184	185	185	185	185	185	185	185	185	185	185	184	185	185	185	185	185	185	185	185	185	185	185	185
Hollandia, Netherlands New Guinea	186	186	186	186	186	186	186	186	186	186	186	186	185	185	185	185	185	185	185	185	185	185	185	185	185
Huancayo, Peru	179	182	ND	182	184	185	185	186	186	187	187	188	186	186	186	186	186	186	186	186	186	186	186	186	186
Ibadan, Nigeria	185	185	185	187	187	189	189	190	190	192	193	193	185	185	185	185	185	185	185	185	185	185	185	185	185
Ilo, Peru	180	181	181	181	182	184	184	185	185	186	186	186	184	185	185	185	185	185	185	185	185	185	185	185	185
Inverness, Scotland	185	185	186	207	207	209	210	210	213	213	213	213	185	185	185	185	185	185	185	185	185	185	185	185	185
Johannesburg, Union of S. Africa	184	184	185	185	185	185	185	185	185	185	185	185	184	185	185	185	185	185	185	185	185	185	185	185	185
Juliaica (La Paz), Peru	186	186	187	187	187	187	187	187	187	187	187	187	186	186	186	186	186	186	186	186	186	186	186	186	186
Juliusruh/Rugen, Germany	192	193	194	195	196	198	198	199	199	220	216	216	185	185	186	186	186	186	186	186	186	186	186	186	186
Kiruna, Sweden	184	184	185	185	186	188	189	189	190	190	201	201	185	185	186	186	186	186	186	186	186	186	186	186	186
Kodaikanal, India	205	206	210	213	218	220	220	217	218	220															

* Also in F222.

** Mundaring station succeeded Watheroo, April 1959.

*** Schwarzenburg station moved to Sottens, July 1959.

Code: NR = No data received.

NP = Data not published.

ND = No data in existence

-- = (Without letter symbol) S

Station	1961												1962														
	J	F	M	A	M	J	Jy	A	S	O	N	D	J	F	M	A	M	J	Jy	A	S	O	N	D			
Godhavn, Greenland	217	214	216	217	217	217	217	222	228	229	222	224	225	231	231	231	231	231	231	231	231	231	231	231			
Grand Bahama I.	-NP----	218	218	219	221			-----NP----	218	218	221		222	221	228	231	224	231	231	231	231	231	231	232	232		
Graz, Austria	204	205	206	207	208	209		210	211	230	229	228	228	223	221	221	223										
Hobart, Tasmania	----NR---	226	208	209				210	211	230	229	228	228	220	221	221	231										
Huancayo, Peru	204	204	206	206	207	208		208	217	213	217	218	222	224	225	230	230	228	231	231	231	231	231	232			
Ibadan, Nigeria	225	221	226	226	226	227		226	228	230	227	228	228	221	221	221	221	221	221	221	221	221	221	230			
Inverness, Scotland	224	205	206	207	226	210		210	211	229	227	228	228	221	221	226	227	227	228	227	228	227	228	228			
Johannesburg, Union of S. Africa	204	205	206	207	208	209		226	228	229	229	227	228	221	222	226	227	227	228	230	230	231	231	232			
Juliusruh/Rugen, Germany	221	222	226	227	227			227	228	229	227	228	230	221	221	221	221	221	221	221	221	221	221	221			
Kiruna, Sweden	204	205	206	207	208	209		210	211	229	227	228	230	221	221	221	231	229									
Kodaikanal, India																											
La Paz, Bolivia (Juliaca)	NP	217	217	----NR---				223	-----NR-----															232	232	232	
Leopoldiville, Congo	225	221	227	228	228	228		228	230	229	229	228	228	221	221	221	221	221	221	221	221	221	221	221	221		
Lindau/Harz, Germany	224	221	226	226	227	227		227	228	229	229	230	228	221	221	221	221	221	221	221	221	221	221	221	221		
Lulea, Sweden	204	205	206	207	208	209		210	211	230	229	228	228	221	221	221	221	221	221	221	221	221	221	221	221		
Lycksele, Sweden	204	205	206	207	208	209		210	211	230	229	230	228	221	221	221	221	221	221	221	221	221	221	221	221		
Macau								226	226	227																	
Madras, India																											
Maui, Hawaii	217	217	217	217	220	220		220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220		
Mawson, Antarctica	226	229	229																								
Mundaring, W. Australia*	204	205	226	207	208	209		210	211	229	224	229	228	221	221	223	223	223	223	223	223	223	223	223	223		
Narsarsuaq, Greenland	218	218	218	219	218	219		219	219	223	229	223	223	221	224	232	225	223	231	231	232	232	232	232	232		
Natal, Brazil	229	229	229																								
Nurmijarvi, Finland	204	205	206	207	208	209		210	211	229	229	230	228	221	221	221	221	221	221	221	221	221	221	221	221		
Okinawa I.	228	226	227	228	228			223	227	223	227	226		230	229	231	223	224	231	231	232	231	231	231	231	231	
Ottawa, Canada	204	205	206	207	208	209		210	211	229	229	230	228	221	221	221	221	221	221	221	221	221	221	221	221	221	
Paramaribo, Surinam	230	231	230																								
Paris, France	225	222	226	226	227	227		227	228	228				223	229	231	223	224	231	231	231	232	231	231	231	231	
Point Barrow, Alaska (Barrow)	219	219	219	219	218	218		219	218	218	219	219	222	221	231	231	228	231	224	231	231	231	232	232	232	232	
Pole Station, Antarctica	219	229	222	222	222	222		231	231	228	231	224	231	221	221	221	221	221	221	221	221	221	221	221	221	221	
Port Lockroy	228	221																									
Port Moresby, Papua		222	224					224	229	229	227	224						230									
Pruhonice, Czechoslovakia	207	208	209					210	211	227	230	230	228	221	221	221	221	220									
Rarotonga, Cook Is.								227	227	230	229	229	230	228													
Resolute Bay, Canada	204	205	206	209	208	209		210	211	228	229	230	228	221	221	221	221	224	224	224	224	224	224	224	224	224	
Reykjavik, Iceland	220	220	220	220	220	220		220	222	220	220	222	222	221	226	227	227	227	227	227	227	227	227	227	227	227	
Rome, Italy	204	205	206	207	208	209		211	211	228	229	230	228	221	221	221	221	223	223	223	223	223	223	223	223	223	
St. John's, Newfoundland	204	205	206	207	208	209		210	211	228	229	230	227	221	221	221	221	223	223	223	223	223	223	223	223	223	
Sao Paulo, Brazil	229	221	226	226	227	227		227	227	227	227	227	227	221	221	221	221	221	221	221	221	221	221	221	221	221	
Singapore, British Malaya	221	205	206	207	227	210		210	211	228	229	230	227	221	221	221	221	230	221	221	221	221	221	221	221	221	
Slough, England	221	205	207	226	227	209		209	211	228	229	230	227	221	221	221	221	230	221	221	221	221	221	221	221	221	
Sodankyla, Finland	204	205	206	207	208	209		210	230	227	229	230	227	221	221	221	221	230	221	221	221	221	221	221	221	221	
Sottens, Switzerland**	204	205	206	207	208	209		211	211	227	229	230	227	221	221	221	221	230	221	221	221	221	221	221	221	221	
Tahiti, Society Is.	224	221	226	226	227	227		228	222	223				221	221	221	221	221	221	221	221	221	221	221	221	221	221
Talara, Peru	206	206	204	206	207	208		217	217	217	217	218	218	221	225	222	225	229	231	231	231	231	232	232	232	232	
Tananaive, Madagascar	224	221	226	226	227	227		228	222	223				221	221	221	221	221	221	221	221	221	221	221	221	221	221
Thule, Greenland	219	219	219	219	219	219		219	219	225	219	220	219	221	221	221	221	225	227	227	227	227	227	227	227	227	
Tiruchi, India	204	205	206	209	208	210		211	211	229	229	227	228	221	221	221	221	221	229	229	229	229	229	229	229	229	
Tokyo, Japan (Kokubunji)	204	205	206	209	208	210		228	230	222	222	222	-NR----	221	221	221	221	221	221	221	221	221	221	221	221	221	221
Townsville, Australia	227	221	226	226	226	226		227	227	227	229	229	229	221	221	221	221	229									
Trelew, Argentina	204	205	206	207	208	209		211	211	227	229	230	227	221	221	221	221	230									
Trivandrum, India																											
Tromso, Norway																											
Tucuman, Argentina																											
Uppsala, Sweden																											
Wakkaihai, Japan																											
Warsaw (Miedzesyn), Poland																											
Washington, D. C.																											
White Sands, New Mexico																											
Wilkes Station, Antarctica																											
Winnipeg, Canada	204	205	206	207	208	209		210	211	227	229	230	228	221	221	221	221	223	223	223	223	223	223	223	223	223	
Yamagawa, Japan	204	205	206	209	208	210		211	211	229	229	227	228	221	221	221	221	221	221	221	221	221	221	221	221	221	

* Succeeded Watheeroo, April, 1959.

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CRPL REPORTS

(A detailed list of CRPL publications is available from the Central Radio Propagation Laboratory on request.)

Catalog of Data.

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

CRPL-F (Part A), "Ionospheric Data."

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"Ionospheric Predictions."

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