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CRPL-F 233 PART A

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PART A

IONOSPHERIC DATA

ISSUED
JANUARY 1964

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

National Bureau of Standards

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CRPL-F 233
PART A

NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

Issued
31 Jan. 1964

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	27						
1964												

Units of Ionospheric Data Tables

foF2, foEs - - - Tenths of a megacycle
 foF1, foE - - - Hundredths of a megacycle
 h'F2, h'F, h'E - Kilometers
 M(3000)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:

REPUBLICA ARGENTINA, MINISTERIO DE MARINA.

BUENOS AIRES, ARGENTINA
TUCUMAN, ARGENTINA

COMMONWEALTH OF AUSTRALIA, DEPARTMENT OF THE INTERIOR.
COCOS IS.

COMMONWEALTH OF AUSTRALIA, IONOSPHERIC PREDICTION SERVICE OF THE COMMONWEALTH OBSERVATORY.

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HOBART, TASMANIA
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THULE, GREENLAND

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(CENTRAL RADIO PROPAGATION LABORATORY).

ANCHORAGE, ALASKA

BARROW, ALASKA

COLLEGE (FAIRBANKS), ALASKA (GEOFYS INST OF UNIV OF ALASKA)
WASHINGTON, D.C.

ERRATUM

F232, p. 3, table 9, Ft. Monmouth, New Jersey, April 1963 data--
Add to h'F2 at 10 o'clock the following values: median 328; count 28;
UQ 394; LQ 292.

TABLES OF IONOSPHERIC DATA

When a "less than" sign occurs on the graph of the k -layer frequency corresponding qualifying E is not found in the table, the corresponding descriptive E (which at times means "less than") was not present in the table.

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126-654 73.0 NW

30006 3M61

TABLE 13

TIME 170°E													
WIND AND WAVE, WESTERN AUSTRALIA 130°S., 116°27'E													
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12
10F2	MEO	53	52	50	34	34	30	28	32	50	46	60	64
	CNT	31	30	30	30	30	30	28	28	28	28	28	28
	UO	LO											
10F2	MED												
	CNT												
	UO												
	LO												
10F	MFO	205	240	210	255	210	220	225	220	205	210	220	240
	CNT	101	240	210	255	210	220	225	220	205	210	220	240
	UO	LO											
10F2	MED	125	125	130	345	140	145	340	370	360	345	345	345
	CNT	31	29	30	30	29	28	28	27	29	30	30	30
	UO	LO											
10F2	MED	125	125	130	345	140	145	340	370	360	345	345	345
	CNT	31	29	30	30	29	28	28	27	29	30	30	30
	UO	LO											
10F1	MED												
	CNT												
	UO												
10E	MED												
	CNT												
	UO												
10E	MED												
	CNT												
10E*	MED												
	CNT												

SWEEP 1.6 m/s TO 20 m/s IN 18 SECONDS.

JULY 1, 1962

TIME 170°E													
BUENOS AIRES- ARGENTINA 130°S., 55°E													
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12
10F2	MEO	205	240	210	255	210	220	225	220	205	210	220	240
	CNT	101	240	210	255	210	220	225	220	205	210	220	240
	UO	LO											
10F2	MED	125	125	130	345	140	145	340	370	360	345	345	345
	CNT	31	29	30	30	29	28	28	27	29	30	30	30
	UO	LO											
10F1	MED												
	CNT												
	UO												
10E	MED												
	CNT												
10E*	MED												

SWEEP 1.0 m/s TO 25 m/s IN 27 SECONDS.

JUNE 1, 1962

TIME 150°E													
LINEA SURFEN													
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12
10F2	MEO	205	240	210	255	210	220	225	220	205	210	220	240
	CNT	101	240	210	255	210	220	225	220	205	210	220	240
	UO	LO											
10F2	MED	125	125	130	345	140	145	340	370	360	345	345	345
	CNT	31	29	30	30	29	28	28	27	29	30	30	30
	UO	LO											
10F1	MED												
	CNT												
	UO												
10E	MED												
	CNT												
10E*	MED												

JUNE 1, 1962

TIME 150°E													
LINEA SURFEN													
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12
10F2	MEO	205	240	210	255	210	220	225	220	205	210	220	240
	CNT	101	240	210	255	210	220	225	220	205	210	220	240
	UO	LO											
10F2	MED	125	125	130	345	140	145	340	370	360	345	345	345
	CNT	31	29	30	30	29	28	28	27	29	30	30	30
	UO	LO											
10F1	MED												
	CNT												
	UO												
10E	MED												
	CNT												
10E*	MED												

JUNE 1, 1962

SWEEP 0.6 m/s TO 15.0 m/s IN 6 MINUTES, AUTOMATIC.

MAY 1, 1962

SWEEP 0.6 m/s TO 25.0 m/s IN 6 MINUTES, AUTOMATIC.

MAY 1, 1962

TABLE 17

0.43 MC TO 20.0 N IN 3 MINUTES.

TABLE 18

ALLISON LADYVA 6111 AND 1140 5N 24 461

May 1962

TABLE 19

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TABLE 2?

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TABLE 25

TABLE 26

WEEEP 1.0 M TO 25.0 MC IN 30 SECONDS.

261

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

96 I * AVN

• 96 I * AVN

CWEPEP 0465 MC TO 250 MR IN 5 MINUTES. ATTOMATIC.

APRIL 1962

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TIME 1300 E															
1400-1500N, 1(1-1.75)															
WINDS AND JAPAN		HOUR													
00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
16 F2	MED	62°	61°	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	71°
	CNT	51°	50°	51°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	60°
	LO	50°	51°	50°	51°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°
17 F2	MED	62°	61°	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	71°
	CNT	51°	50°	51°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	60°
	LO	50°	51°	50°	51°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°
18 F	MED	70°	69°	68°	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
	CNT	59°	58°	59°	58°	59°	60°	61°	62°	63°	64°	65°	66°	67°	68°
	LO	58°	59°	58°	59°	58°	59°	60°	61°	62°	63°	64°	65°	66°	67°
19 F0	MED	285°	286°	287°	288°	289°	290°	291°	292°	293°	294°	295°	296°	297°	298°
	CNT	284°	285°	286°	287°	288°	289°	290°	291°	292°	293°	294°	295°	296°	297°
	LO	283°	284°	285°	286°	287°	288°	289°	290°	291°	292°	293°	294°	295°	296°
M130001F2	MED	285°	286°	287°	288°	289°	290°	291°	292°	293°	294°	295°	296°	297°	298°
	CNT	284°	285°	286°	287°	288°	289°	290°	291°	292°	293°	294°	295°	296°	297°
	LO	283°	284°	285°	286°	287°	288°	289°	290°	291°	292°	293°	294°	295°	296°
16 F1	MED	45°	46°	47°	48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°
	CNT	44°	45°	46°	47°	48°	49°	50°	51°	52°	53°	54°	55°	56°	57°
	LO	43°	44°	45°	46°	47°	48°	49°	50°	51°	52°	53°	54°	55°	56°
16 E	MED	140°	141°	142°	143°	144°	145°	146°	147°	148°	149°	150°	151°	152°	153°
	CNT	140°	141°	142°	143°	144°	145°	146°	147°	148°	149°	150°	151°	152°	153°
	LO	140°	141°	142°	143°	144°	145°	146°	147°	148°	149°	150°	151°	152°	153°
17 E	MED	140°	141°	142°	143°	144°	145°	146°	147°	148°	149°	150°	151°	152°	153°
	CNT	140°	141°	142°	143°	144°	145°	146°	147°	148°	149°	150°	151°	152°	153°
	LO	140°	141°	142°	143°	144°	145°	146°	147°	148°	149°	150°	151°	152°	153°

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TABLE

REF ID: A1140000000000000000

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TABLE 38

TIME 135-00

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Part I + 1962

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TABLE

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APRIL • 1962

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TOWN. UNION OF S. AFRICA (34.1S., 18.7E.)

SWEEPER N MC TO 240 N MC IN 37 ◄FRONDS.

MAPPL. • 1962

P 10 MC TO 17.0 MC IN THE SEDONA'S.

1

THE JOURNAL OF CLIMATE

TABLE 53
JOHNS, NEWFOUNDLAND
167°N, 57°W

TIME K/N/W												TIME K/N/E												
167°N, 57°W												(6.7°N, 1.1°E)												
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
16F2	MED	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
	CNT	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
	LO	37	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
N F2	MED	26	24	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
	CNT	26	24	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
	LO	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
N F2	MED	275	276	278	279	280	277	276	275	274	273	272	271	270	269	268	267	266	265	264	263	262	261	260
	CNT	275	276	278	279	280	277	276	275	274	273	272	271	270	269	268	267	266	265	264	263	262	261	260
	LO	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
N F	MED	299	298	297	296	295	294	293	292	291	290	289	288	287	286	285	284	283	282	281	280	279	278	277
	CNT	299	298	297	296	295	294	293	292	291	290	289	288	287	286	285	284	283	282	281	280	279	278	277
	LO	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
N3000F2	MED	247	246	245	244	243	242	241	240	239	238	237	236	235	234	233	232	231	230	229	228	227	226	225
	CNT	247	246	245	244	243	242	241	240	239	238	237	236	235	234	233	232	231	230	229	228	227	226	225
	LO	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
16F1	MED	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	CNT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	LO	5	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16E	MED	270	269	268	267	266	265	264	263	262	261	260	259	258	257	256	255	254	253	252	251	250	249	248
	CNT	270	269	268	267	266	265	264	263	262	261	260	259	258	257	256	255	254	253	252	251	250	249	248
	LO	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35
N E	MED	207	206	205	204	203	202	201	200	199	198	197	196	195	194	193	192	191	190	189	188	187	186	185
	CNT	207	206	205	204	203	202	201	200	199	198	197	196	195	194	193	192	191	190	189	188	187	186	185
	LO	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
16E1	MED	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
	CNT	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
	LO	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31

MAPCH# 1962
MAPFP 1.4° N TO 1.4° N IN 6 MINUTES, AUTOMATICTABLE 54
CARTHAY, FRANCE

TIME K/N/W												TIME K/N/E												
167°N, 57°W												(6.7°N, 1.1°E)												
HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00	01	02	03	04	05	06	07
16F2	MED	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
	CNT	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
	LO	37	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
N F2	MED	275	276	278	279	280	277	276	275	274	273	272	271	270	269	268	267	266	265	264	263	262	261	260
	CNT	275	276	278	279	280	277	276	275	274	273	272	271	270	269	268	267	266	265	264	263	262	261	260
	LO	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
N F2	MED	299	298	297	296	295	294	293	292	291	290	289	288	287	286	285	284	283	282	281	280	279	278	277
	CNT	299	298	297	296	295	294	293	292	291	290	289	288	287	286	285	284	283	282	281	280	279	278	277
	LO	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
N F	MED	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	CNT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	LO	5	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16F1	MED	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
	CNT	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
	LO	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35
16E	MED	270	269	268	267	266	265	264	263	262	261	260	259	258	257	256	255	254	253	252	251	250	249	248
	CNT	270	269	268	267	266	265	264	263	262	261	260	259	258	257	256	255	254	253	252	251	250	249	248
	LO	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
16E1	MED	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
	CNT	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
	LO	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
N F	MED	207	206	205	204	203	202	201	200	199	198	197	196	195	194	193	192	191	190	189	188	187	186	185
	CNT	207	206	205	204	203	202	201	200	199	198	197	196	195	194	193	192	191	190	189	188	187	186	185
	LO	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29
16F1	MED	1	1	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	CNT	1	1	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	LO	5	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16E	MED	280	279	278	277	276																		

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61

U.S. AIR FORCE IN THE SEVENTIES

62

-5UN033 22 N 1 MC 0-52 01 0-1 0 MC 0333

TABLE 63

פָּרָמֵן דִּינְמֶלֶךְ, אַתְּנְגָּשָׂהוּ בְּבָבָל

64

פָּרָמֵן דִּינְמֶלֶךְ, אַתְּנְגָּשָׂהוּ בְּבָבָל

—TARLF 66

TABLE 66

1.0 MR TO 17.0 MC IN 20 SECONDS.

FEBRUARY, 1910 MC 1017.0 MC 116 SECONDS.

69

FP 1.0 MC TO 16.0 MC IN 4 MINUTES.

APRIL E 70

FEBRUARY, 1948

121

FEBRUARY • 1962

TABLE 72

FEBRUARY. 19.

-ERGMR 48 1962

TABLE 73

IBADAN, NIGERIA 17°45'N., 3°59'E.											
HOUR	00	01	02	03	04	05	06	07	08	09	10
16 F2	MED	U	66	57	48	42	30	36	67	82	61
	CNT	24	24	24	23	23	26	26	27	27	26
	UO										
	LO										
16 F2	NED										
	CNT										
	UO										
	LO										
16 F	NED	240	240	245	245	255	260	260	265	265	265
	CNT	24	24	24	24	24	24	24	24	24	24
	UO										
	LO										
16 F2	MED	320	320	315	315	325	295	265	265	265	265
	CNT	14	14	13	14	13	20	22	22	23	23
	UO										
	LO										
16 F1	MED	450	470	470	470	470	470	470	470	470	470
	CNT	16	16	16	16	16	24	24	24	24	24
	UO										
	LO										
16 E	MED	125	240	700	345	140	170	180	170	165	130
	CNT	16	18	21	25	24	24	24	20	20	20
	UO										
	LO										
16 E	NED										
	CNT										
	UO										
	LO										
16 E8	MED	F	F	F	F	52	50	50	50	50	50
	CNT	24	24	24	24	23	23	21	25	26	26
	UO										
	LO										

FEBRUARY 1962

SWEETWATER & WILSON SURVEY

FEBRUARY 1962

FEBRUARY 1962

SWEETWATER & WILSON SURVEY

FEBRUARY 1962

FEBRUARY 1962

SWEETWATER & WILSON SURVEY

FEBRUARY 1962

TABLE 75

PORT MELAKA, PAPUA 1°45'5"E., 107°51'F.											
HOUR	00	01	02	03	04	05	06	07	08	09	10
16 F2	MED	U	77	61	48	37	26	15	10	5	0
	CNT	24	21	22	22	22	25	25	25	25	25
	UO										
	LO										
16 F2	NED										
	CNT										
	UO										
	LO										
16 F	MED	225	210	210	225	200	195	180	180	180	180
	CNT	22	19	17	16	21	17	18	13	11	9
	UO										
	LO										
16 F2	MED	310	310	320	320	325	310	270	270	270	270
	CNT	10	10	12	12	22	24	25	21	21	17
	UO										
	LO										
16 F1	MED										
	CNT										
	UO										
	LO										
16 E	MED	220	210	210	210	210	210	210	210	210	210
	CNT	18	21	24	24	24	24	24	24	24	24
	UO										
	LO										
16 E	NED	148	140	140	140	140	140	140	140	140	140
	CNT	25	25	24	24	24	24	24	24	24	24
	UO										
	LO										
16 E8	MED										
	CNT										
	UO										
	LO										

FEBRUARY 1962

SWEETWATER & WILSON SURVEY

FEBRUARY 1962

TABLE 76

JOHANNESBURG, UNION OF S. AFRICA 1°45'5"E., 28°51'F.											
HOUR	00	01	02	03	04	05	06	07	08	09	10
16 F2	MED	U	25	25	25	25	25	25	25	25	25
	CNT	2	2	3	3	3	3	3	3	3	3
	UO										
	LO										
16 F2	NED										
	CNT										
	UO										
	LO										
16 F1	MED	260	260	265	265	265	265	265	265	265	265
	CNT	2	2	2	2	2	2	2	2	2	2
	UO										
	LO										
16 E	MED	265	265	265	265	265	265	265	265	265	265
	CNT	2	2	2	2	2	2	2	2	2	2
	UO										
	LO										
16 E	NED	265	265	265	265	265	265	265	265	265	265
	CNT	2	2	2	2	2	2	2	2	2	2
	UO										
	LO										
16 E8	MED										
	CNT										
	UO										
	LO										

FEBRUARY 1962

SWEETWATER & WILSON SURVEY

FEBRUARY 1962

TABLE 77

TIME 15°N., 105°E.											
HOUR	00	01	02	03	04	05	06	07	08	09	10
16 F2	MED	U	11	11	11	11	11	11	11	11	11
	CNT	17	17	17	17	17	17	17	17	17	17
	UO										
	LO										
16 F2	NED										
	CNT										
	UO										
	LO										
16 F1	MED	265	265	265	265	265	265	265	265	265	265
	CNT	2	2	2	2	2	2	2	2	2	2
	UO										
	LO										
16 E	MED	265	265	265	265	265	265	265	265	265	265
	CNT	2	2	2	2	2	2	2	2	2	2
	UO										
	LO										
16 E	NED	265	265	265	265	265	265	265	265	265	265
	CNT	2	2	2	2	2	2	2	2	2	2
	UO										
	LO										
16 E8	MED										
	CNT										
	UO										
	LO										

FEBRUARY 1962

SWEETWATER & WILSON SURVEY

FEBRUARY 1962

TABLE 78

TIME 14°55'N., 155°E.											
HOUR	00	01	02	03	04	05	06	07	08	09	10
16 F2											

TABLE 77

78

KEEP 1.0 MC TO 17.0 MC IN 7 SECONDS.

20

TIME 90+04

FEBRUARY, 1961

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

February, 1962

WEEP 1.0 MC TO 17.0 MC IN 7 SECONDS

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TABLE 8

TAGLE 82

• [WEMPE](#) [AEGEAN](#) [MC TO 25+](#) [MR INN](#) [A MINIFES.](#) [MINOMATIAR.](#)

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TABLE A6

P 1.6 MR TN 200.0 MRTN 15 FEBRUARY

JANUARY • 1962

JANUARY • 1962

• 16 SECONDS.

JANUARY • 1962

JANUARY • 1962

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TABLE 80

LÉOPOLDVILLE, CONGO TIME 10.00 E												
I 44.65° S 17.8° E												
HOUR	00	01	02	03	04	05	06	07	08	09	10	
10 F2	MED	36	32	30	21	34	52	59	64	111	110	105
	CNT	21	16	20	21	16	23	21	15	11	3	4
	UD											
	LO											
10 F2	MED											
	CNT											
	UD											
	LO											
10 F	MED											
	CNT											
	UD											
	LO											
10 F2	MED											
	CNT											
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10 F2	MED											
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	UD											
	LO											
10 F2	MED											
	CNT											
	UD											
	LO											
10 F2	MED											

SECTION I. A MC TO 20,000 MJS IN 7 SECONDS

JANUARY 1962

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TABLE Q

TABLE 9

HEATED 1.025 HR TO 20.0 MC IN 3 MINUTES.

SWEEP 1.0 MC TO 25.0 MC IN 30 SECONDS

•SUNDAY JULY 25TH 2010 •

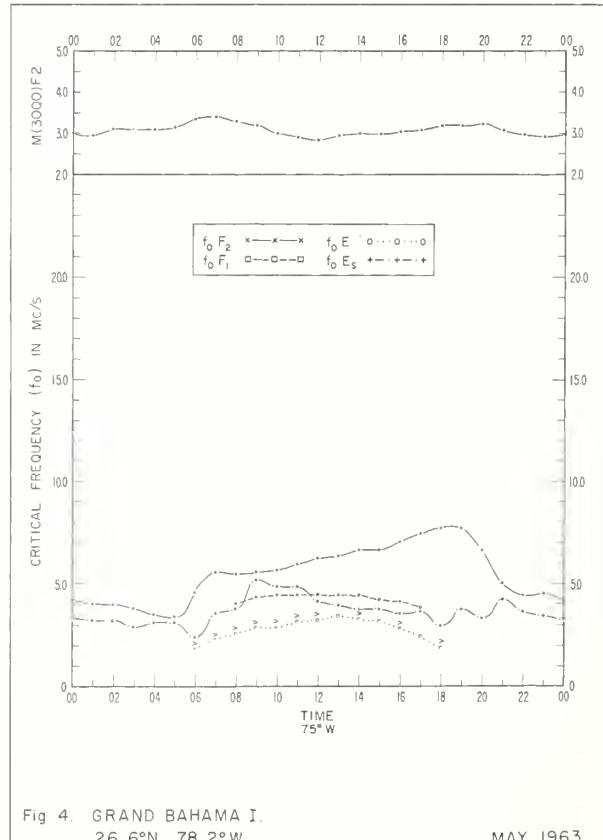
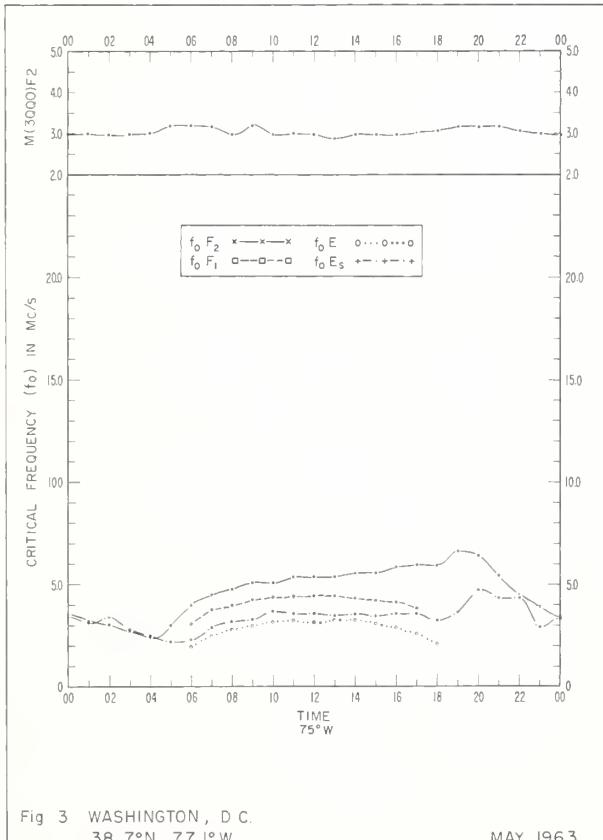
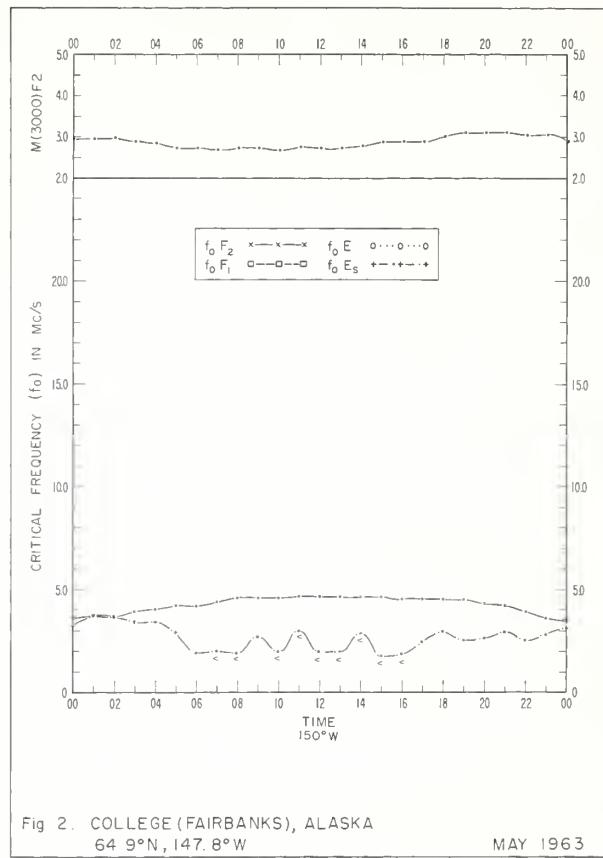
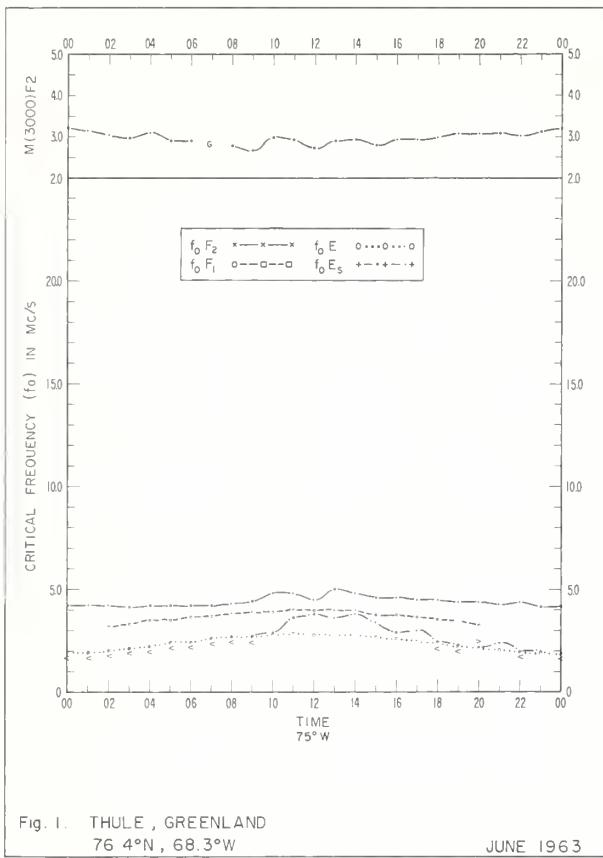
REF ID: A9744 1954

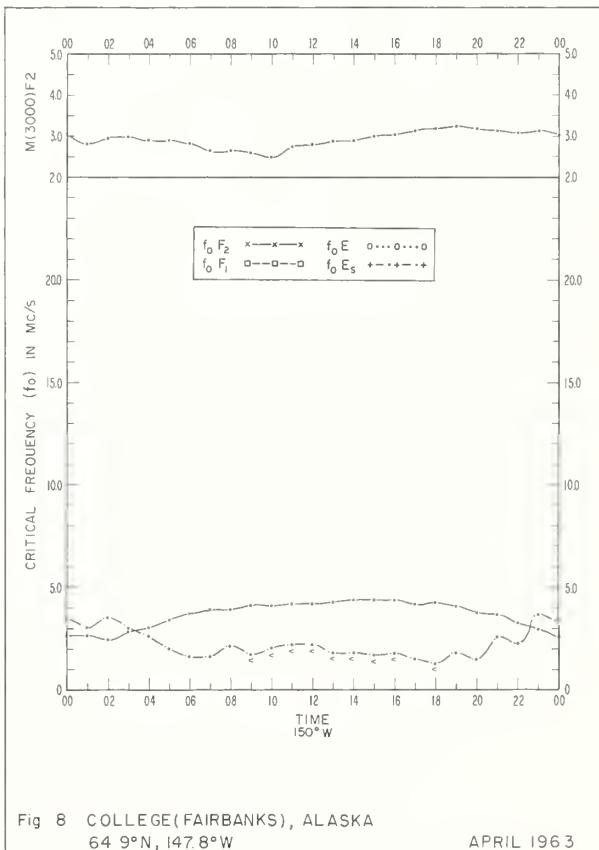
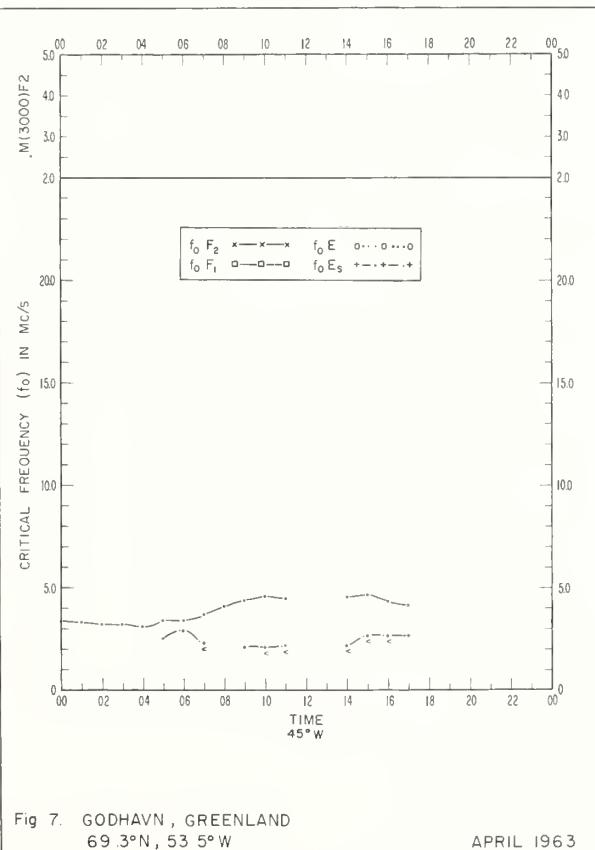
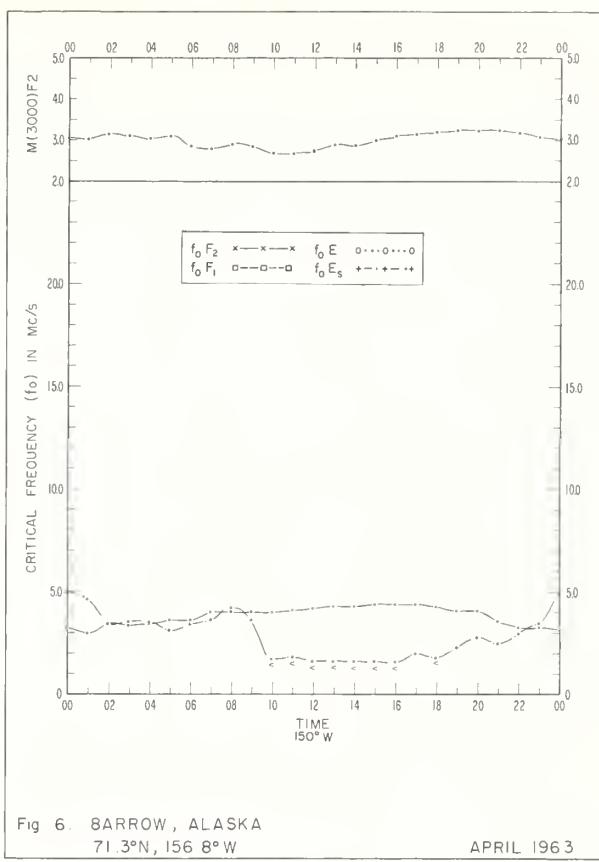
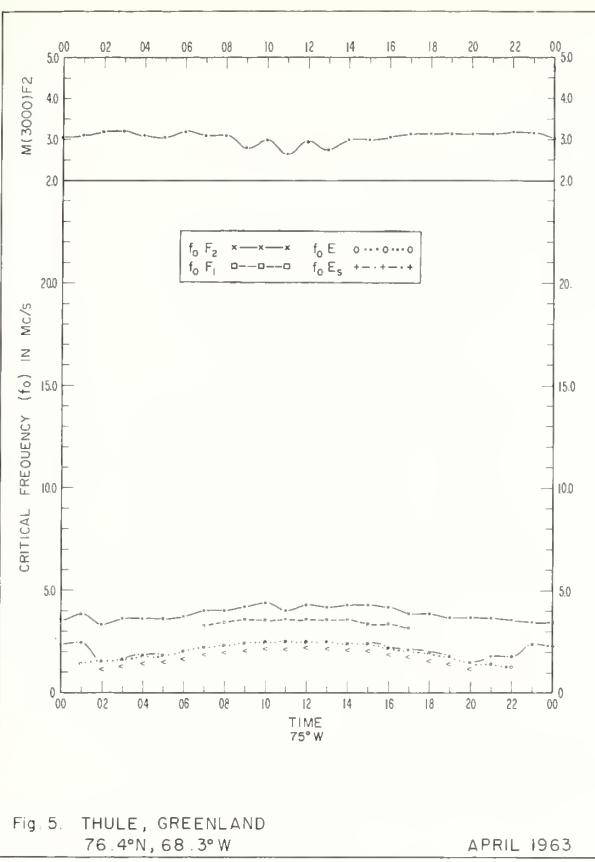
TABLE 98

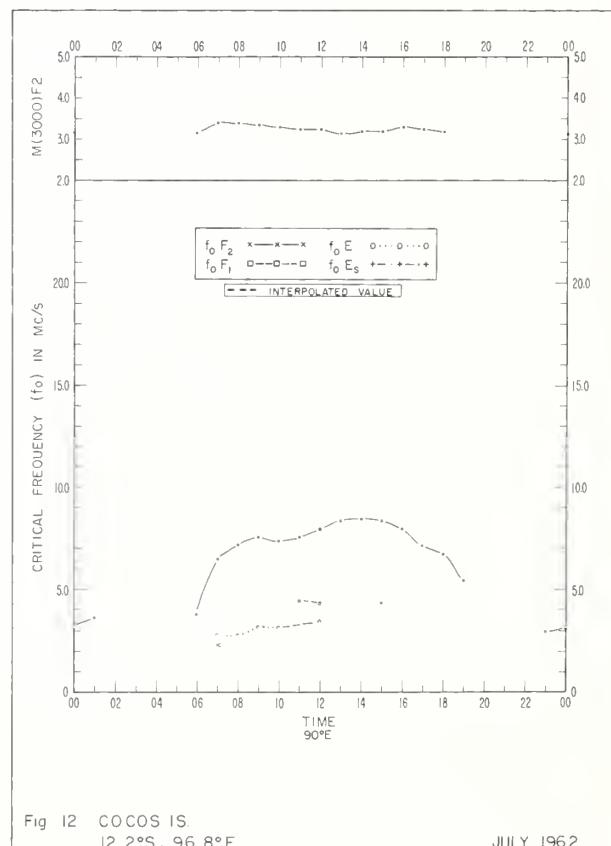
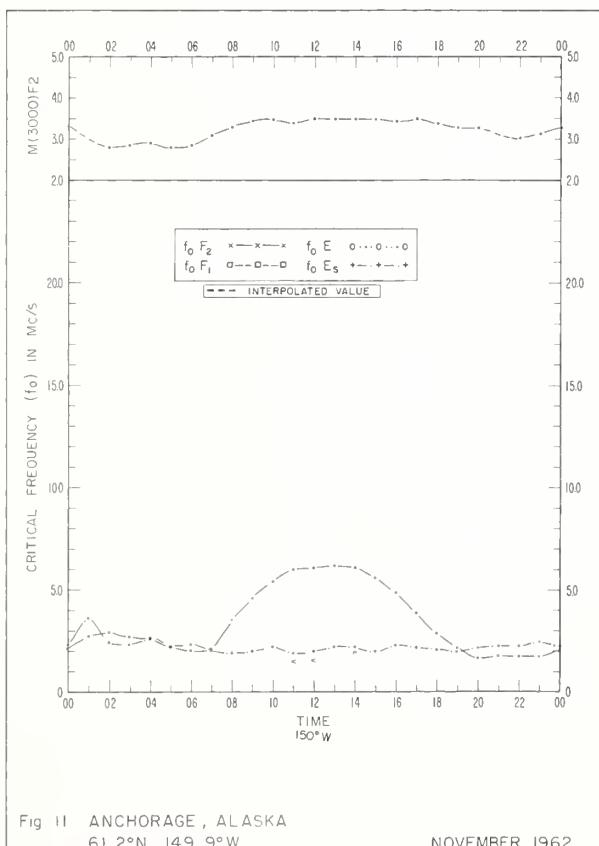
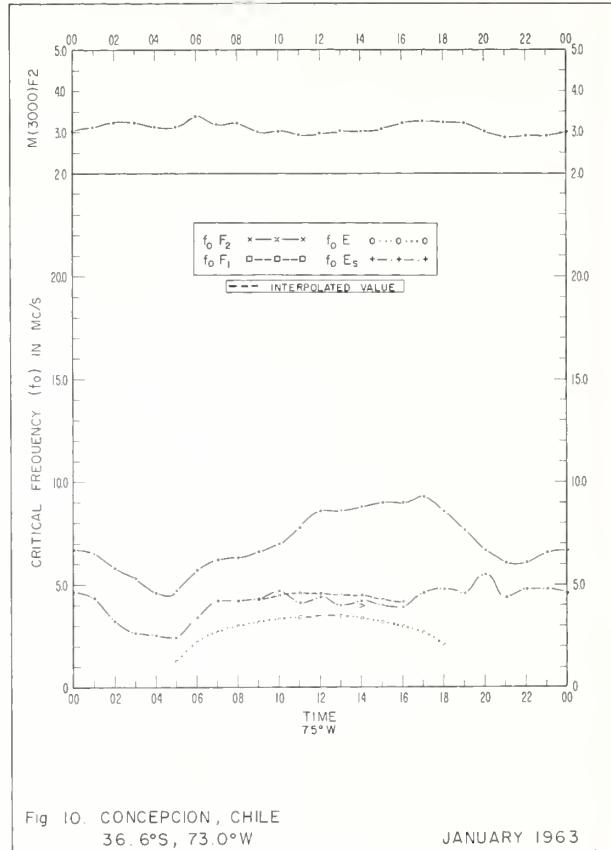
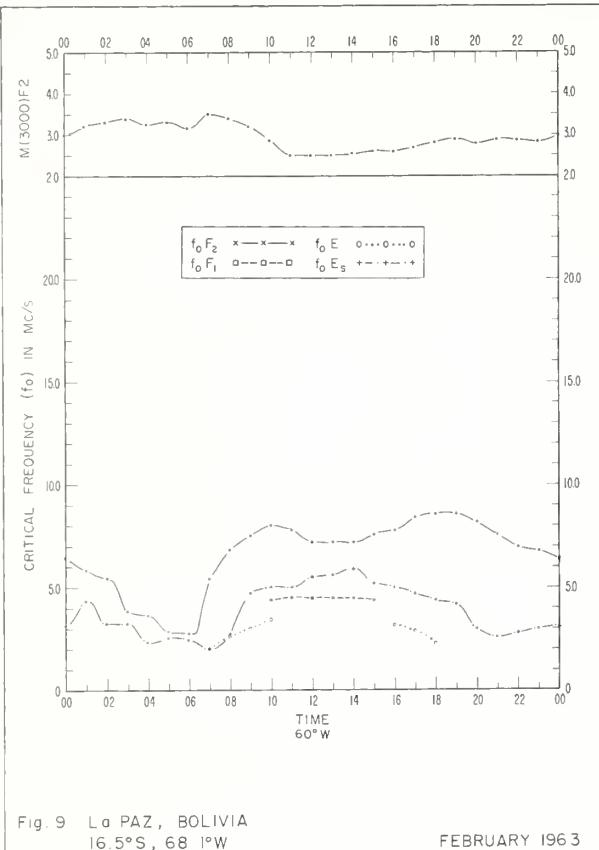
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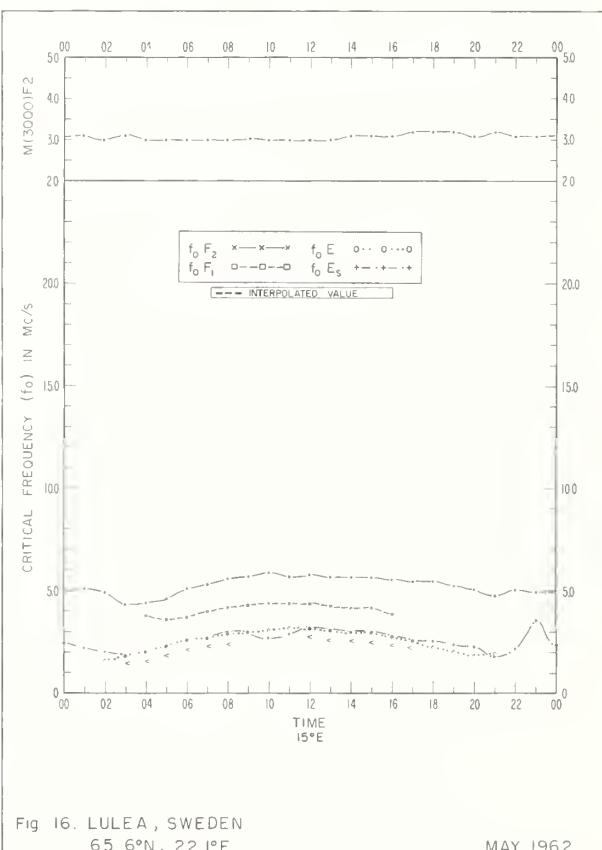
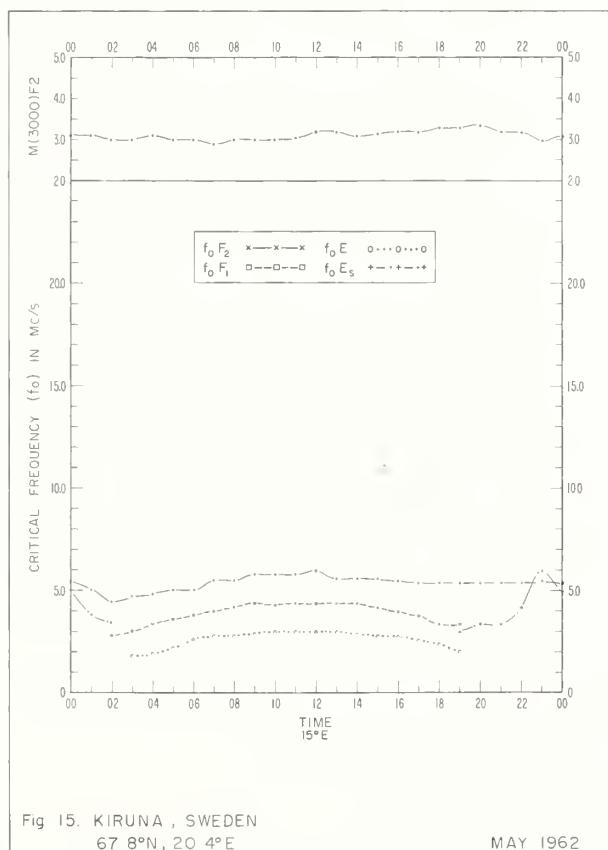
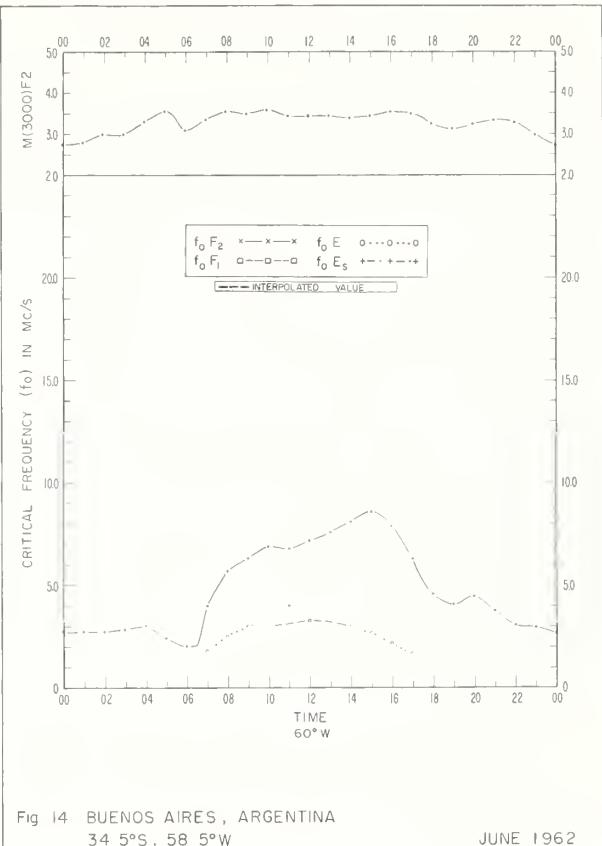
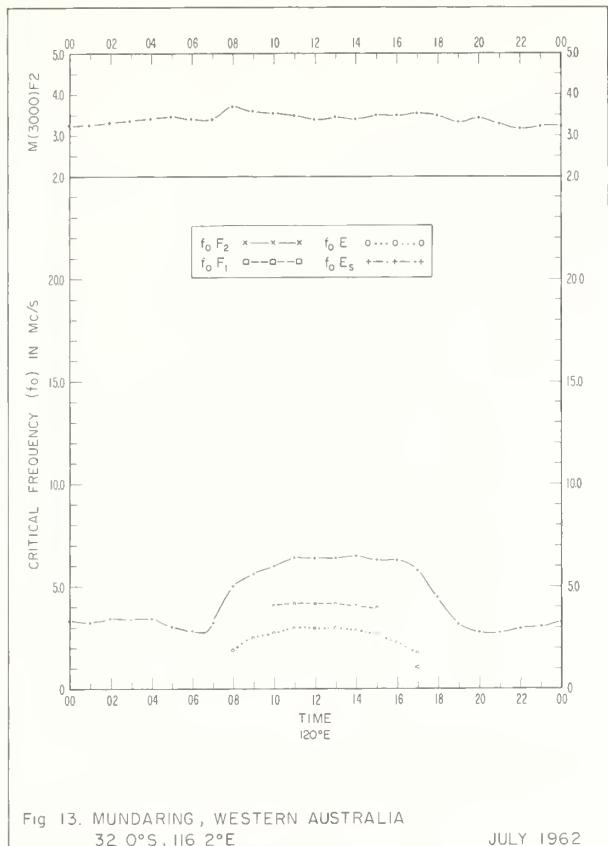
APRIL 1959

JANUARY • 1969









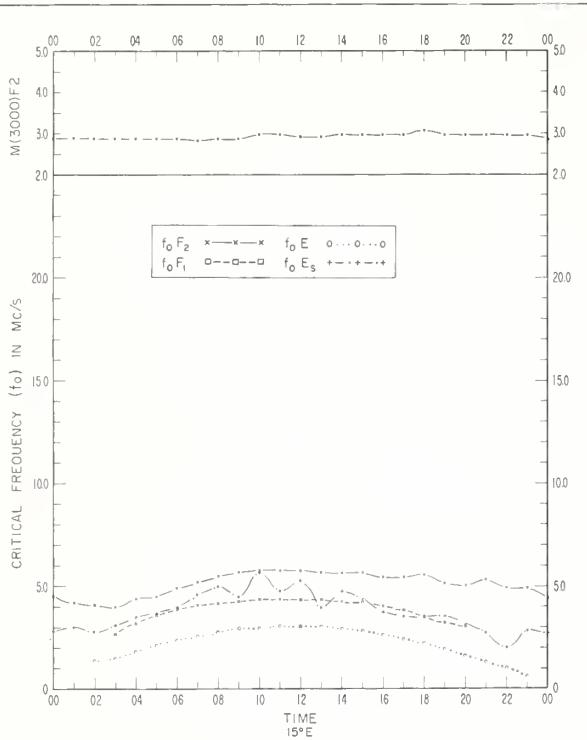


Fig 17 LYCKSELE , SWEDEN
64.7°N, 18.8°E
MAY 1962

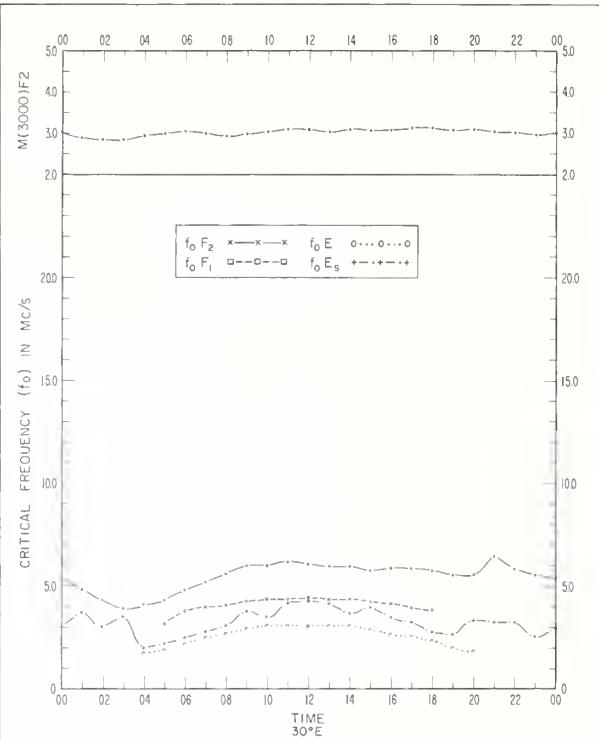


Fig 18 NURMIJARVI , FINLAND
60.5°N, 24.6°E
MAY 1962

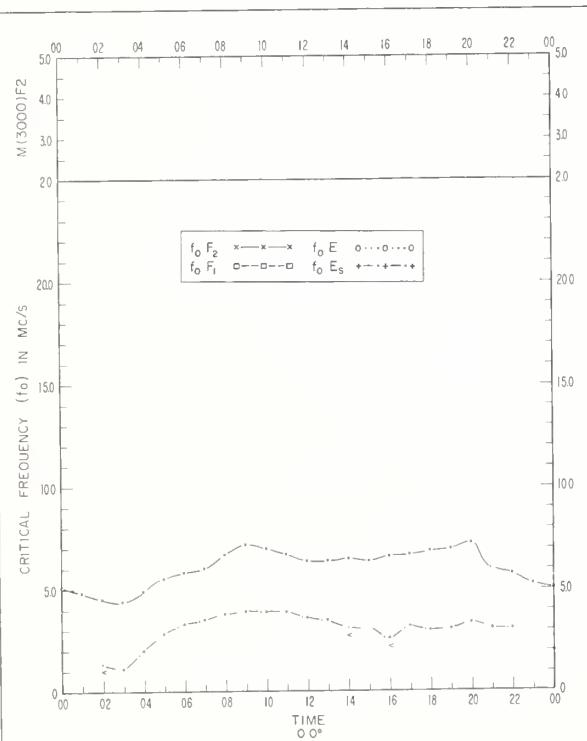


Fig 19 PRUHONICE , CZECHOSLOVAKIA
50.0°N, 14.6°E
MAY 1962

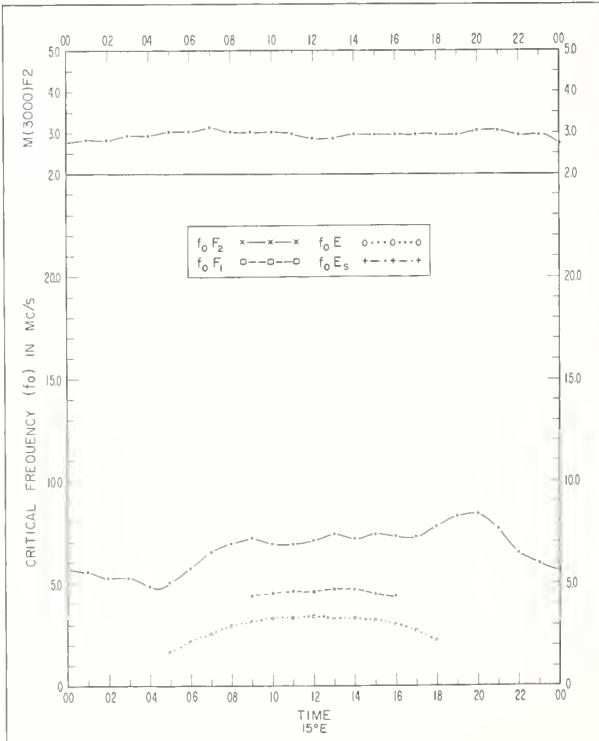


Fig 20. ROME , ITALY
41.8°N, 12.5°E
MAY 1962

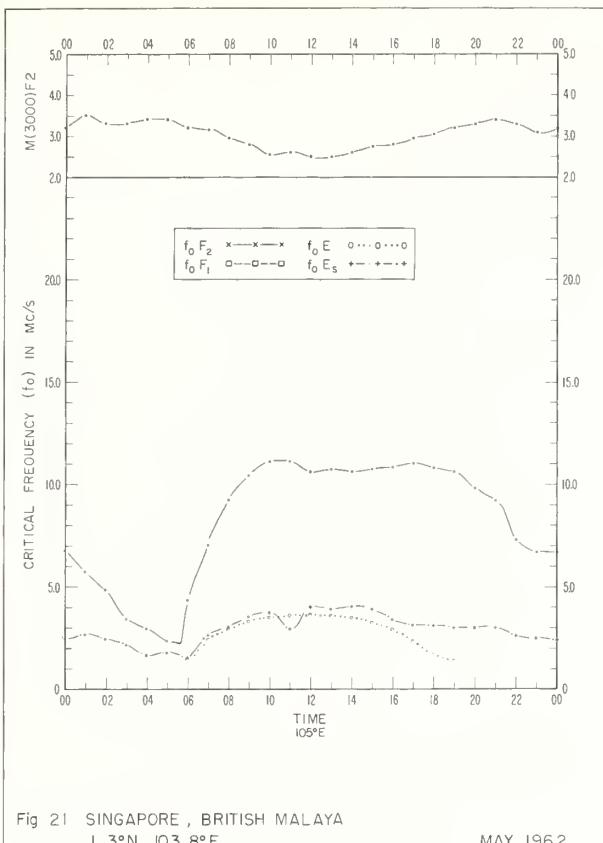


Fig 21 SINGAPORE , BRITISH MALAYA
1.3°N, 103.8°E MAY 1962

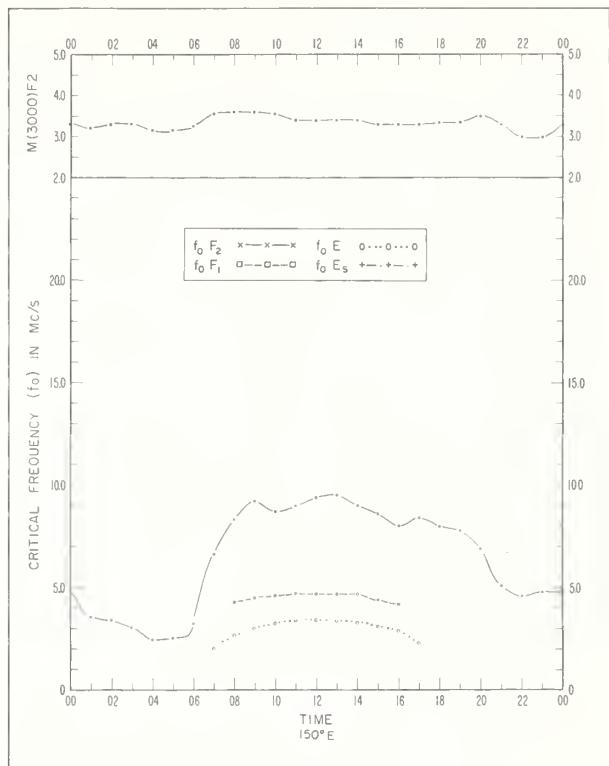


Fig 22 PORT MORESBY , PAPUA
9.4°S, 147.1°E MAY 1962

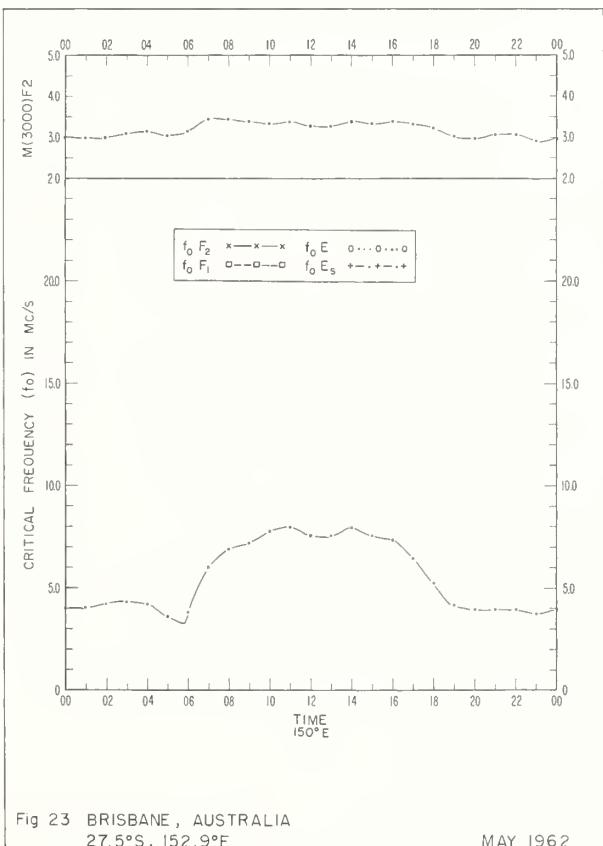


Fig 23 BRISBANE , AUSTRALIA
27.5°S, 152.9°E MAY 1962

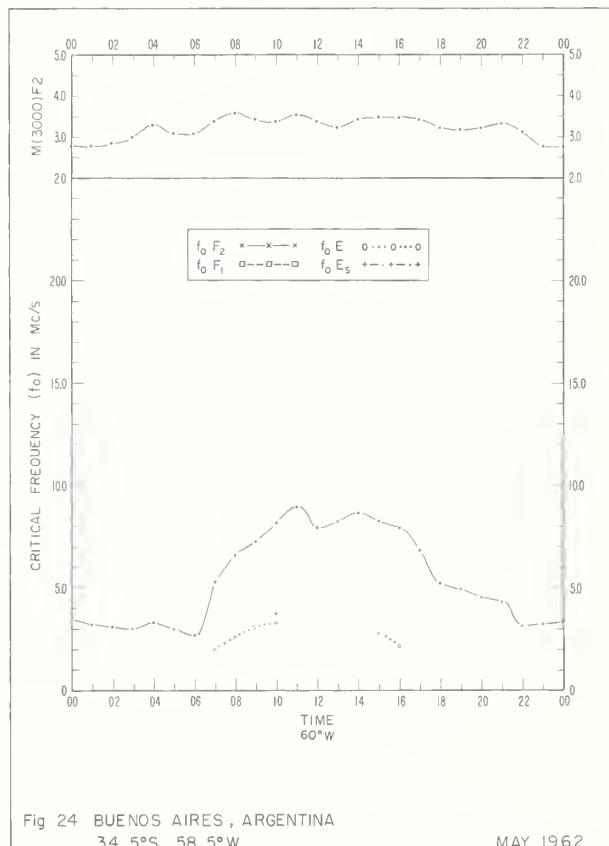
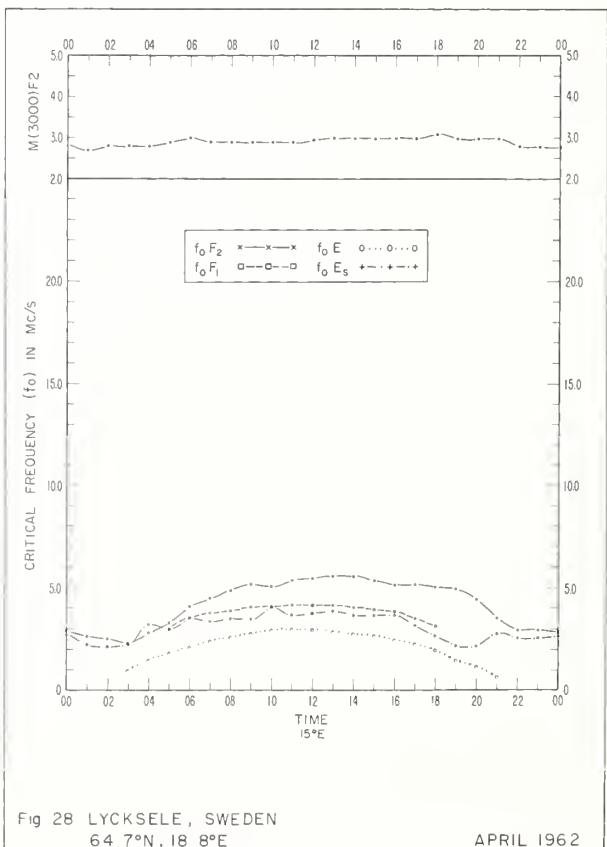
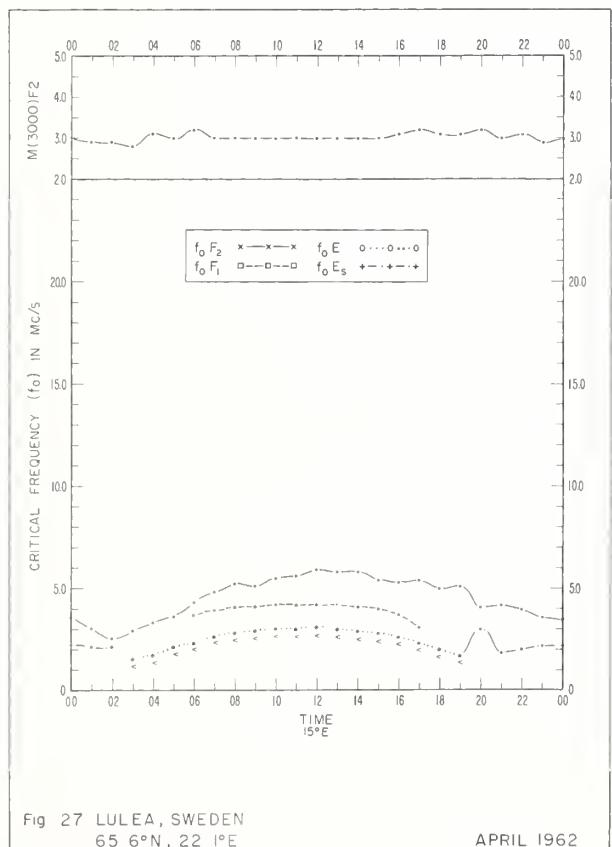
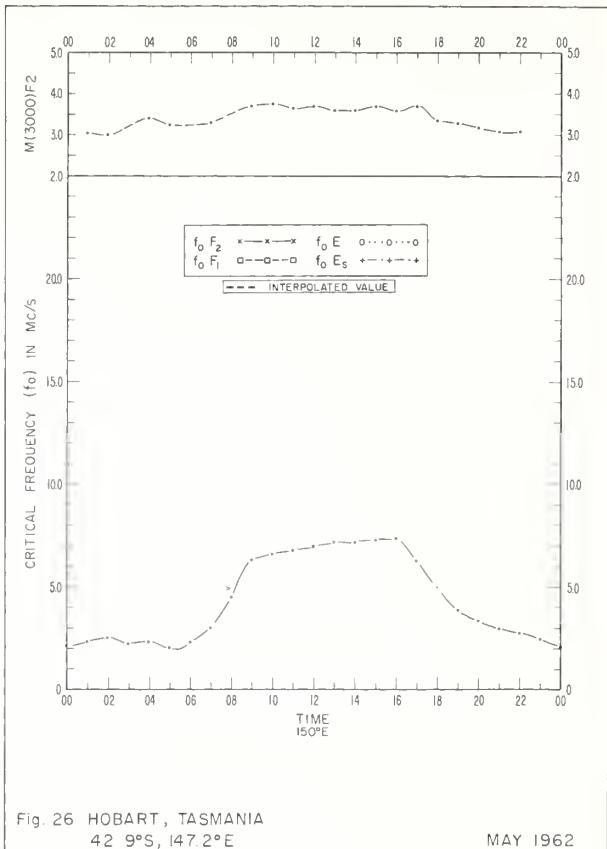
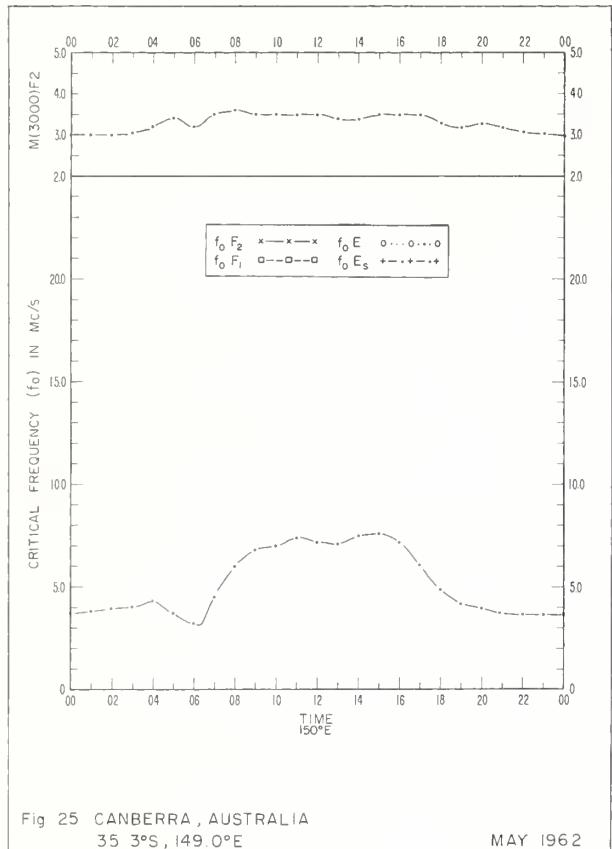
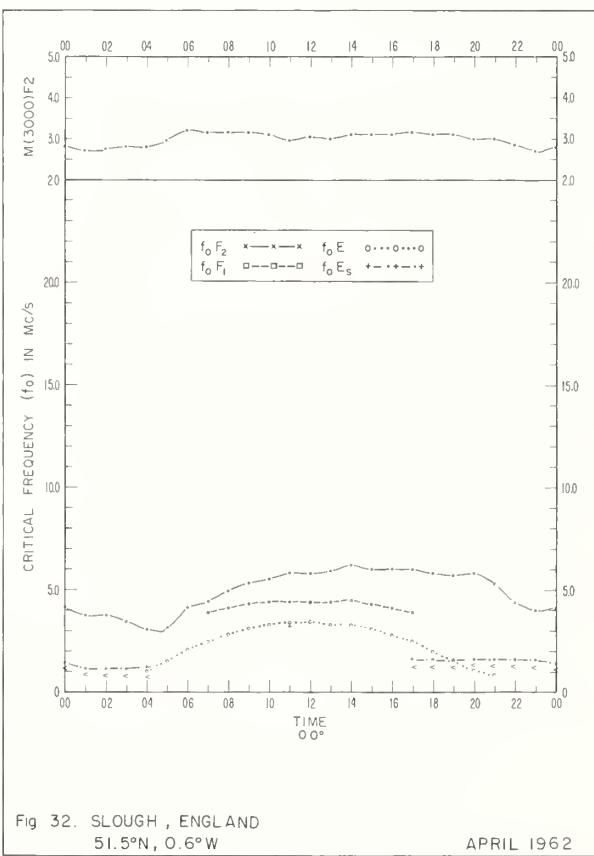
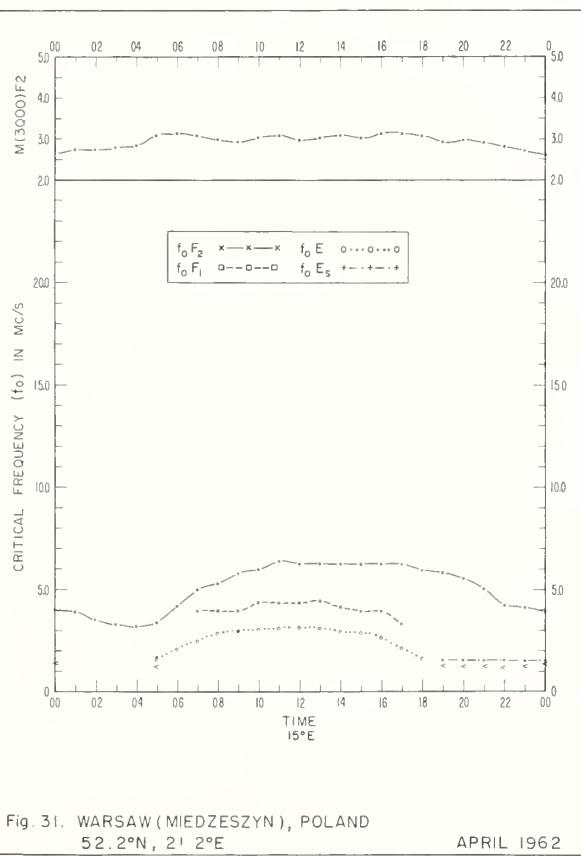
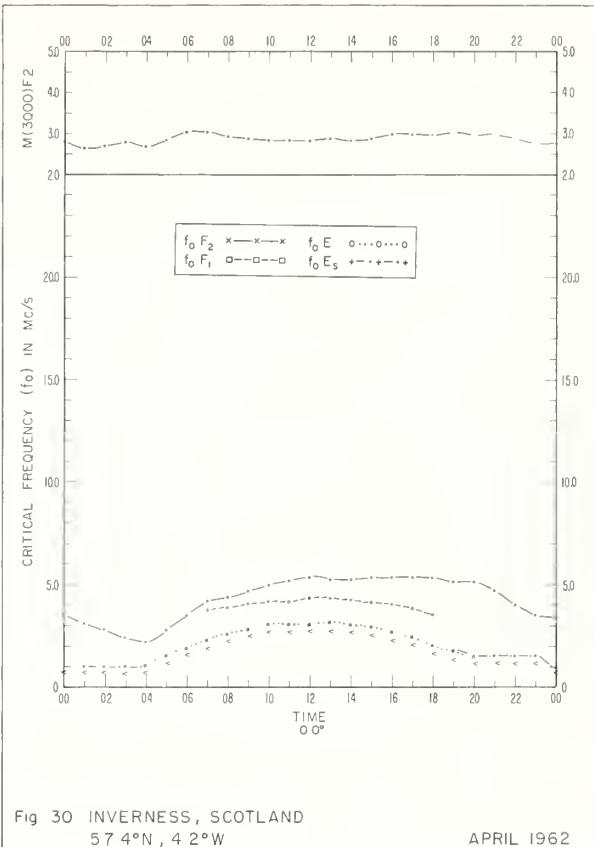
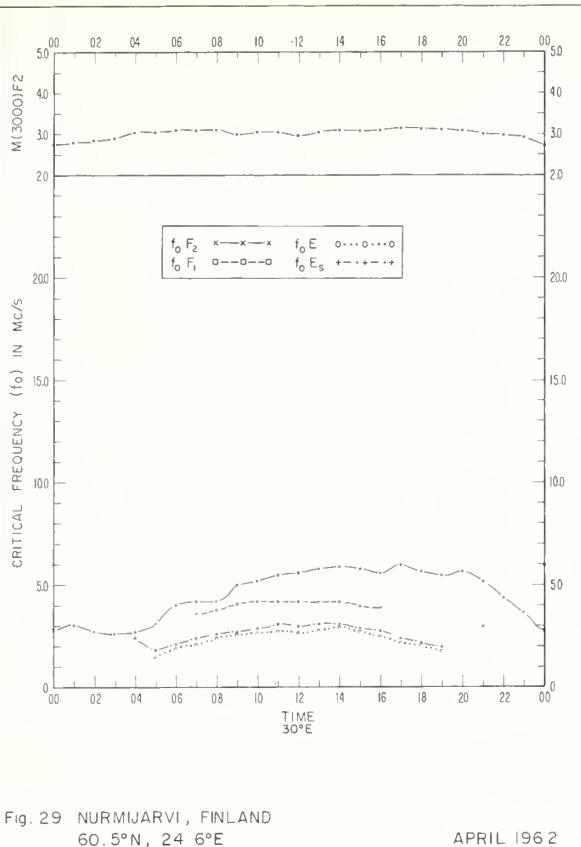


Fig 24 BUENOS AIRES , ARGENTINA
34.5°S, 58.5°W MAY 1962





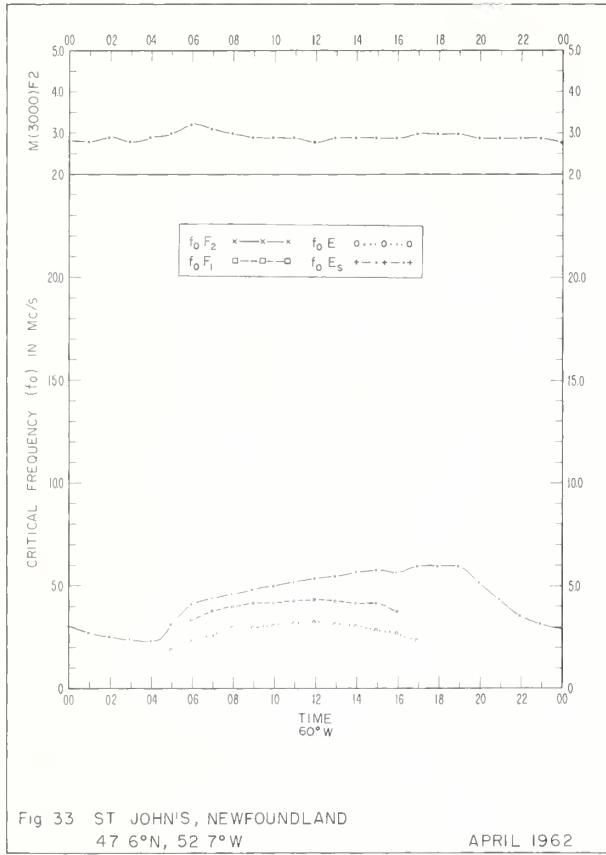


Fig. 33 ST JOHN'S, NEWFOUNDLAND
47°6'N, 52°7'W
APRIL 1962

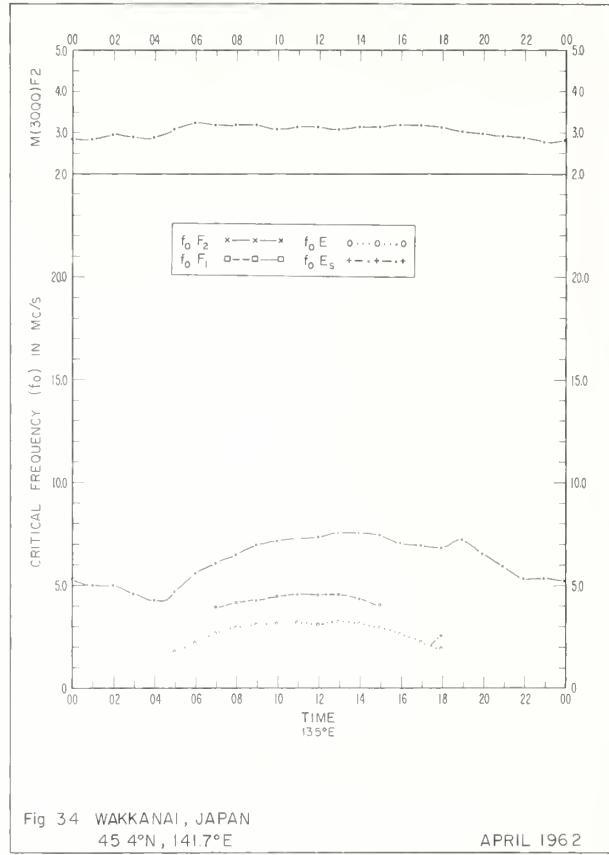


Fig. 34 WAKKANAI, JAPAN
45°4'N, 141°7'E
APRIL 1962

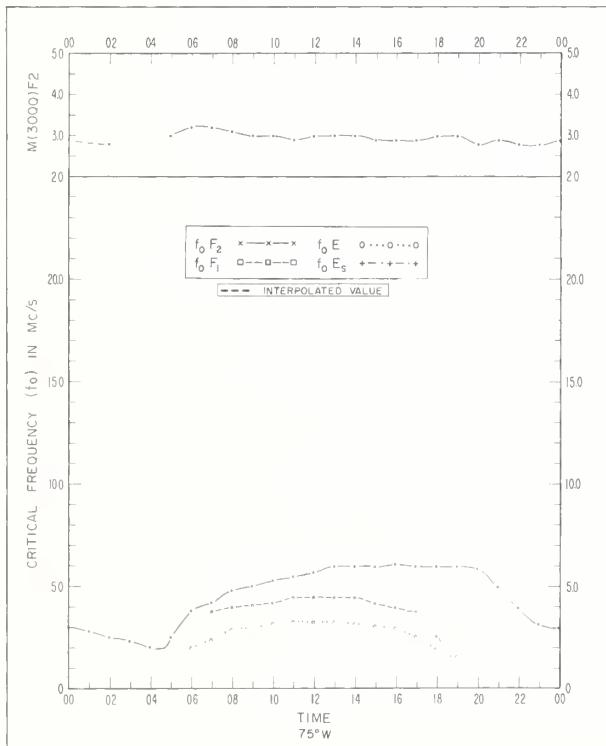


Fig. 35. OTTAWA, CANADA
45.4°N, 75.9°W
APRIL 1962

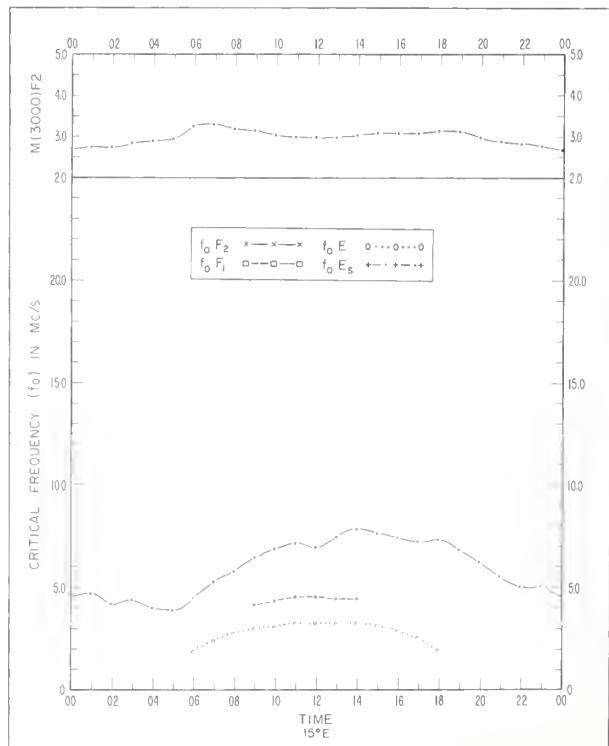


Fig. 36. ROME, ITALY
41°8'N, 12°5'E
APRIL 1962

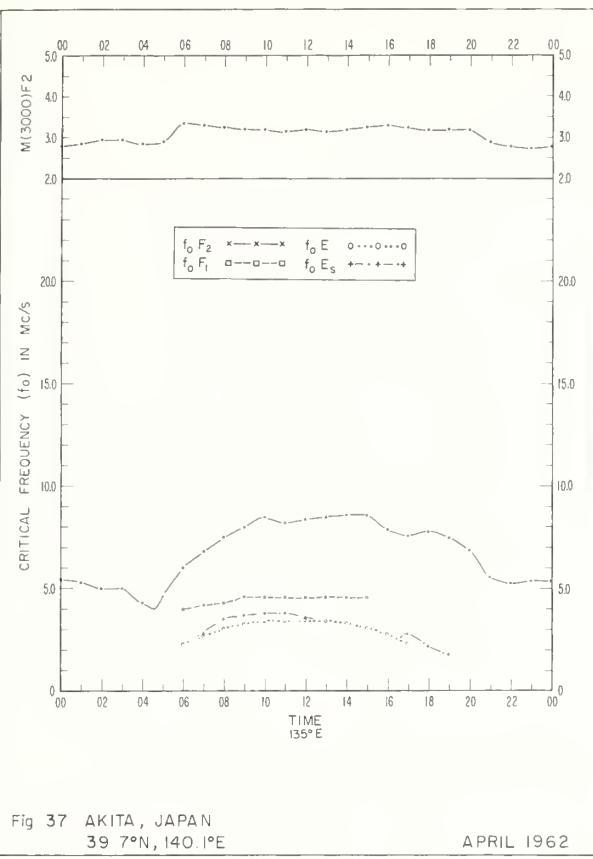


Fig. 37 AKITA, JAPAN
39°N, 140.1°E
APRIL 1962

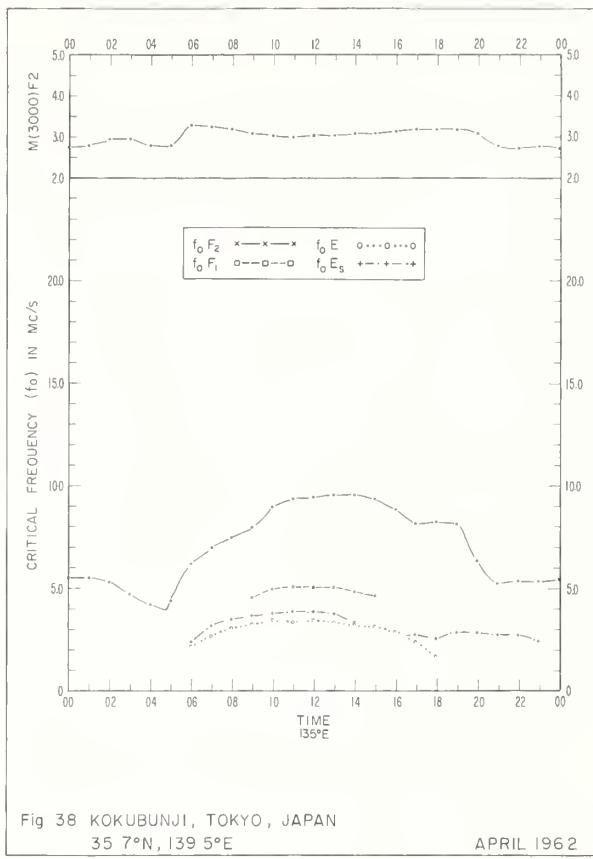


Fig. 38 KOKUBUNJI, TOKYO, JAPAN
35°N, 139.5°E
APRIL 1962

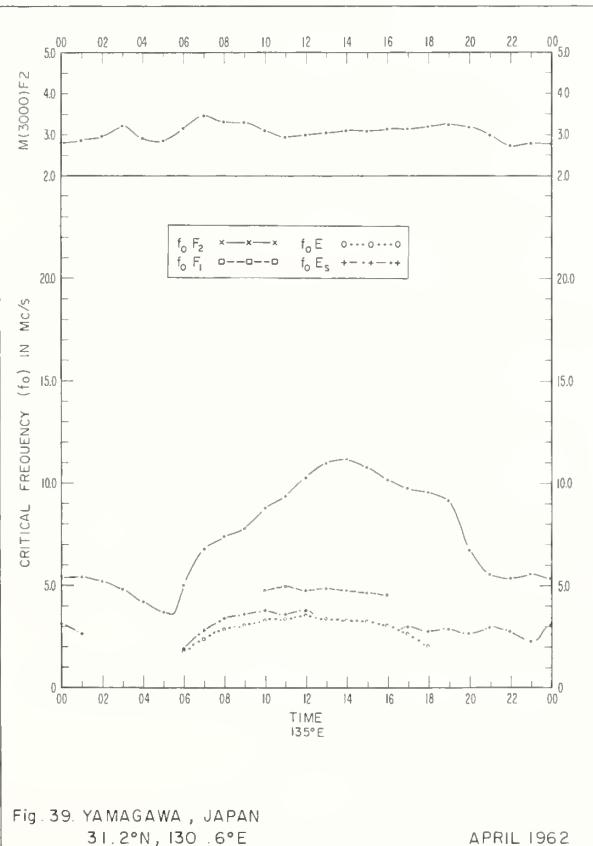


Fig. 39 YAMAGAWA, JAPAN
31.2°N, 130.6°E
APRIL 1962

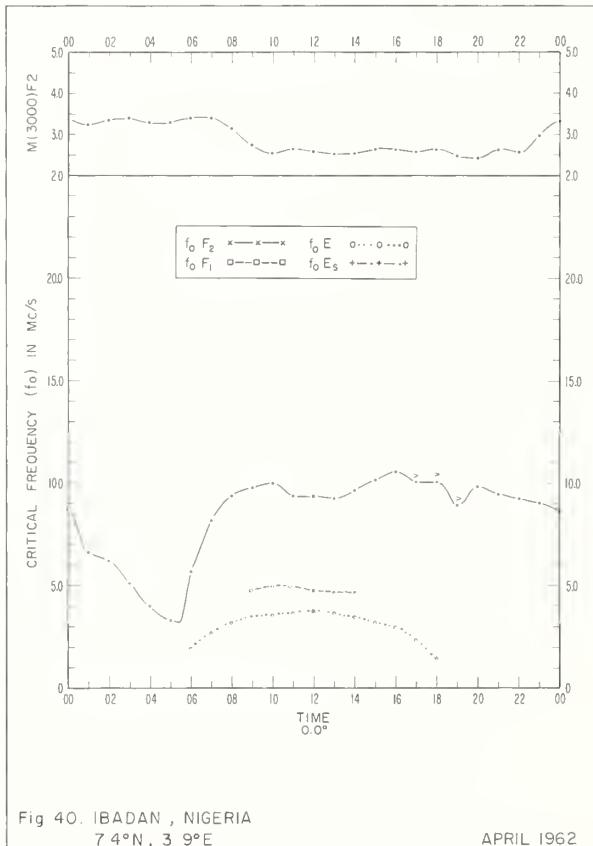


Fig. 40. IBADAN, NIGERIA
7.4°N, 3.9°E
APRIL 1962

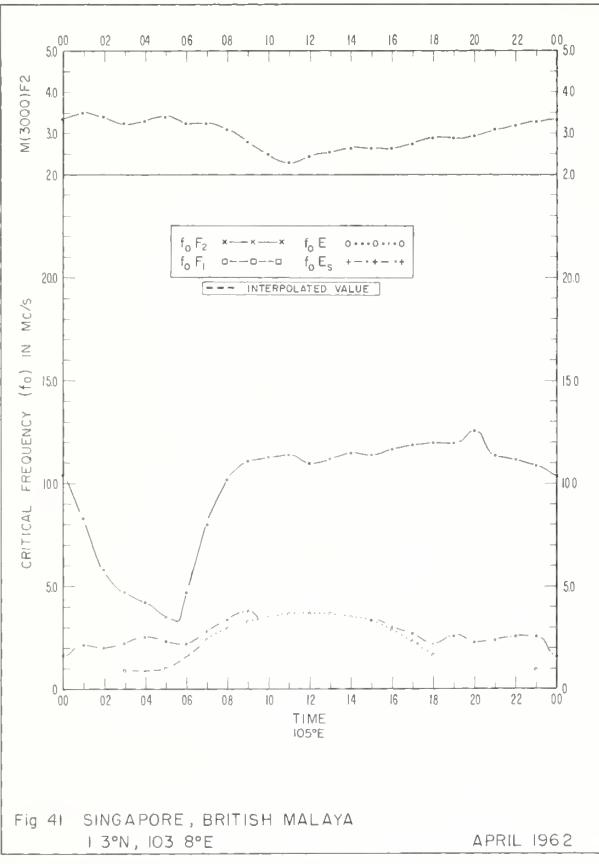


Fig 41 SINGAPORE, BRITISH MALAYA
13°N, 103.8°E
APRIL 1962

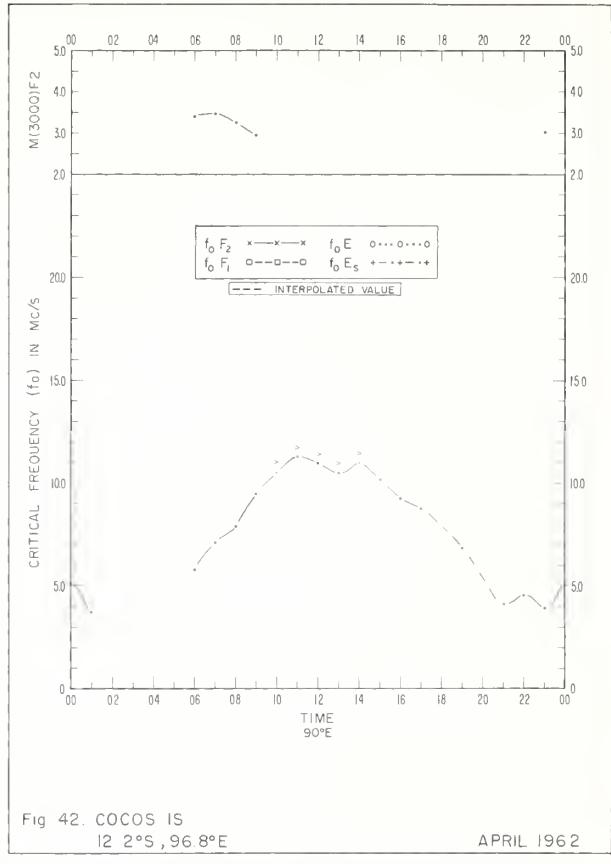


Fig 42. COCOS IS
12.2°S, 96.8°E
APRIL 1962

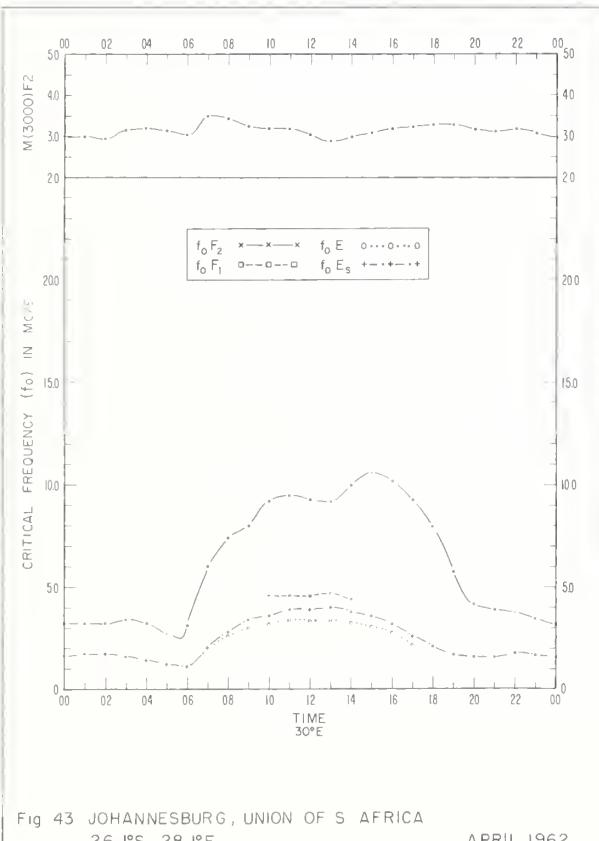


Fig 43 JOHANNESBURG, UNION OF S AFRICA
26.1°S, 28.1°E
APRIL 1962

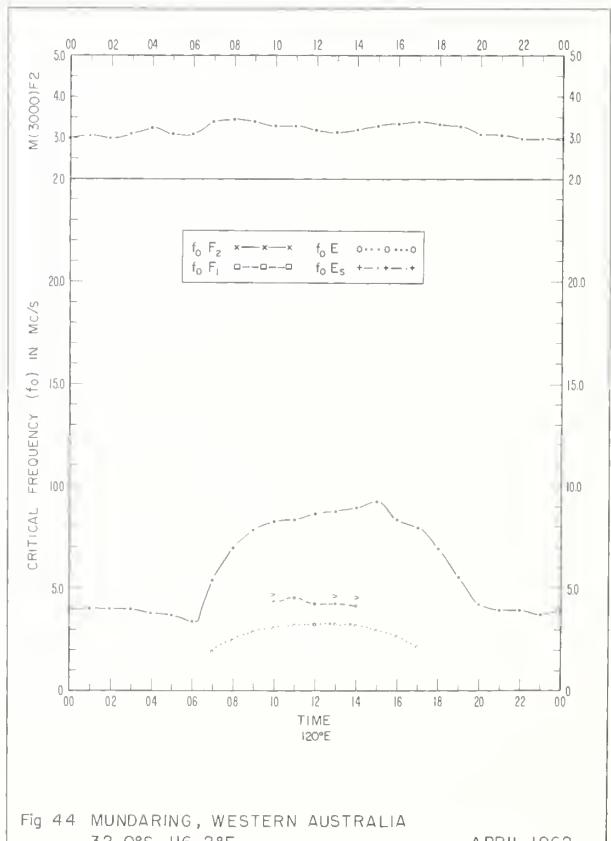
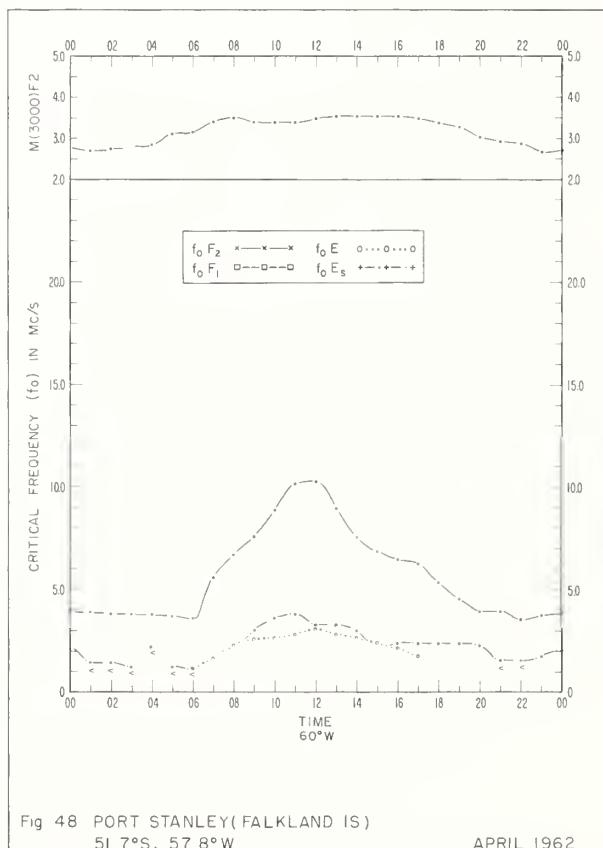
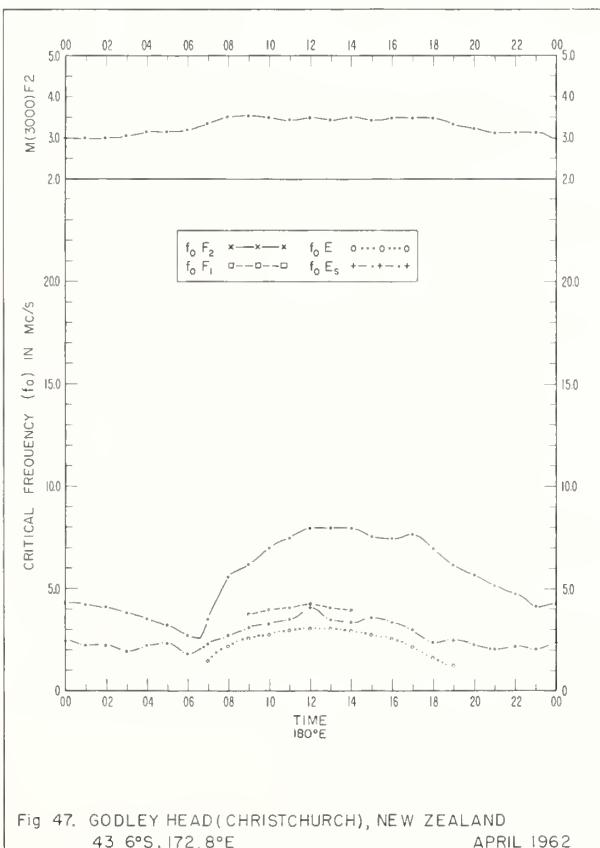
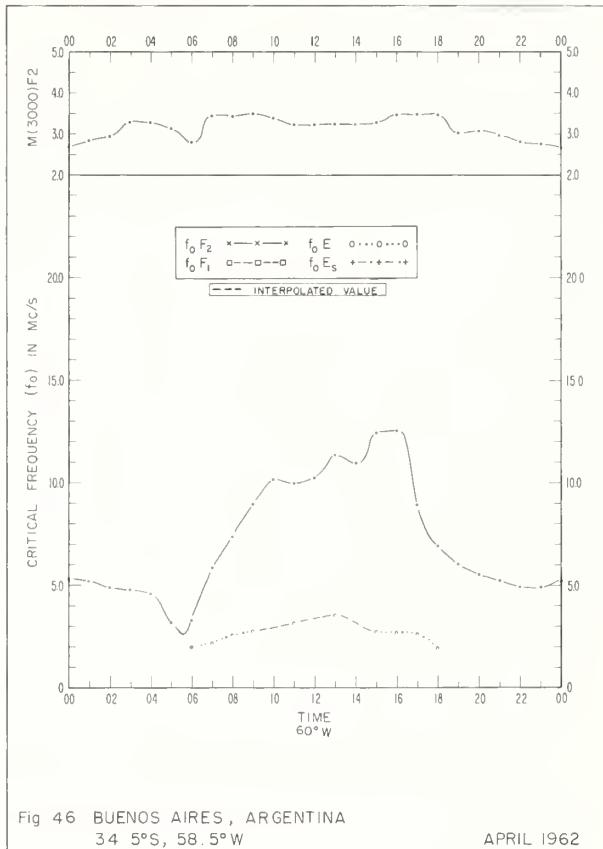
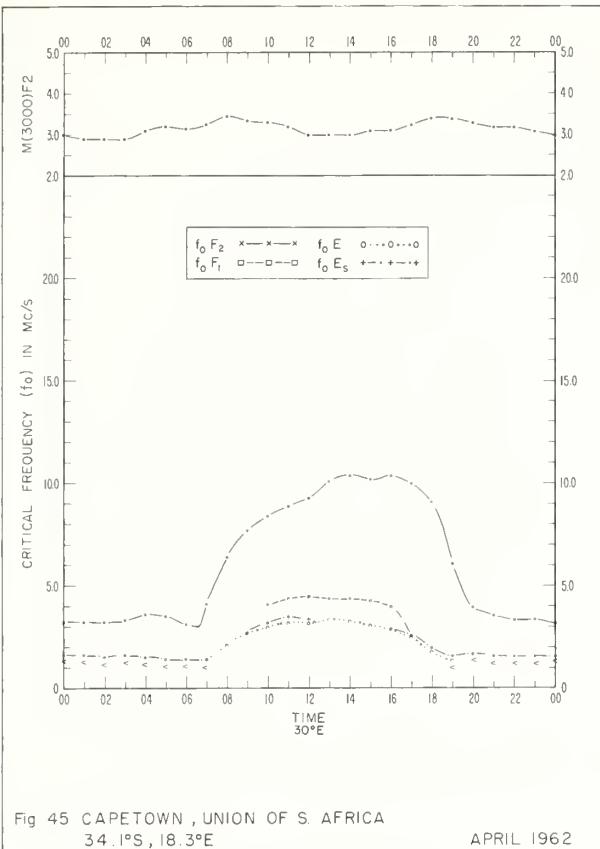
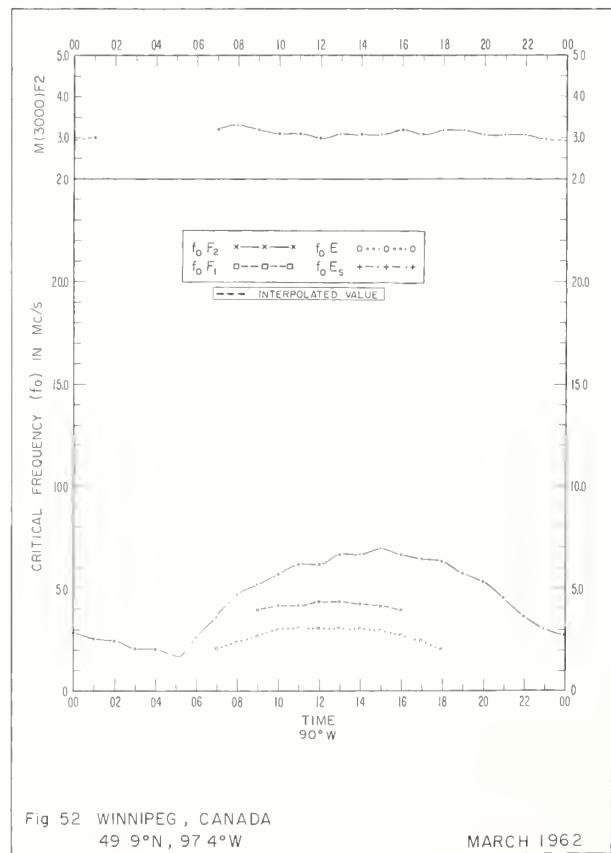
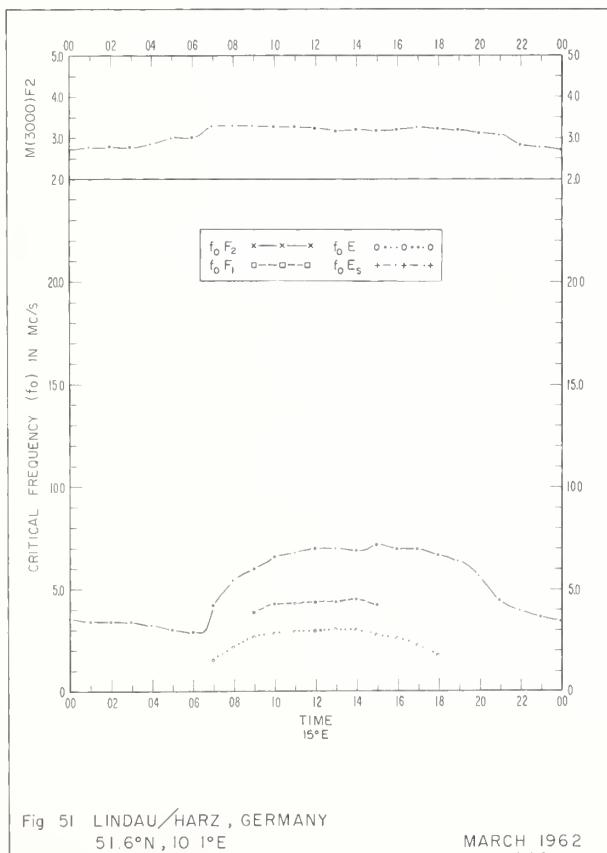
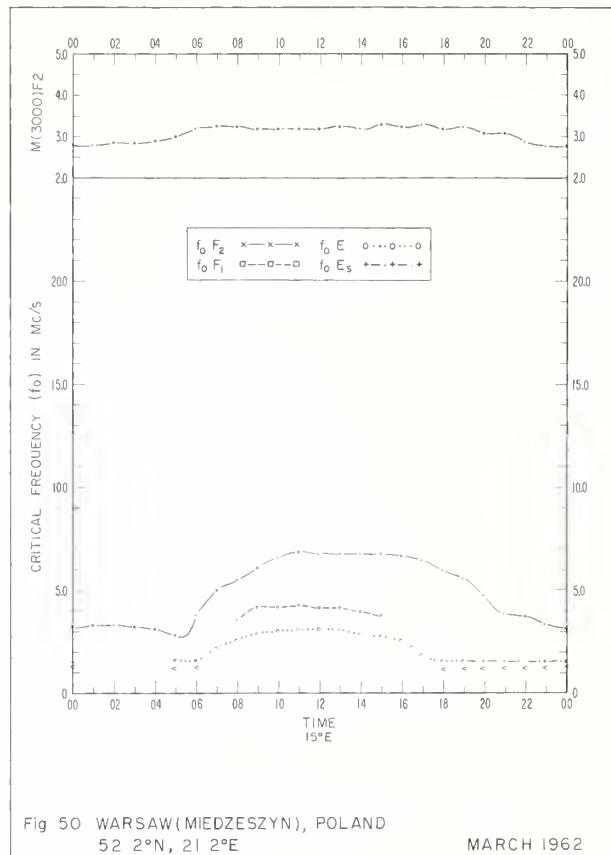
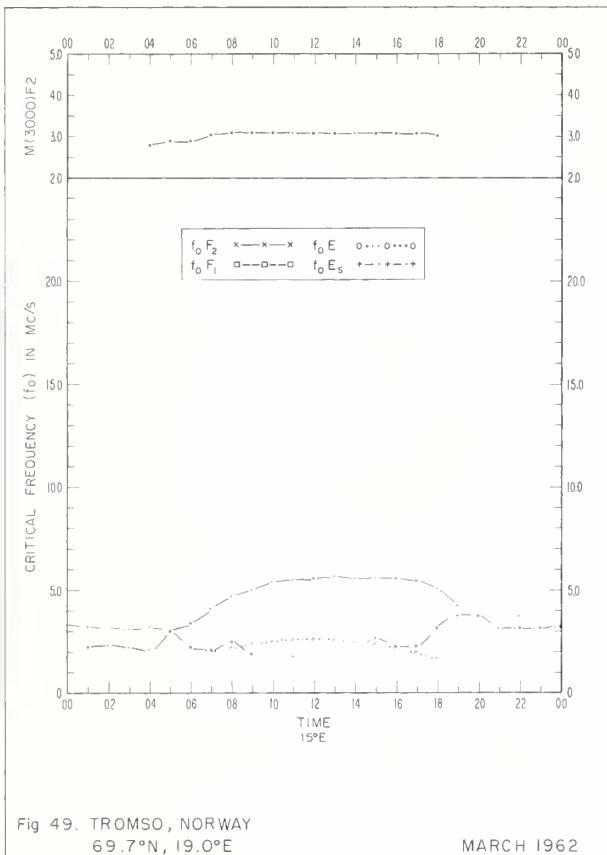


Fig 44 MUNDARING, WESTERN AUSTRALIA
32.0°S, 116.2°E
APRIL 1962





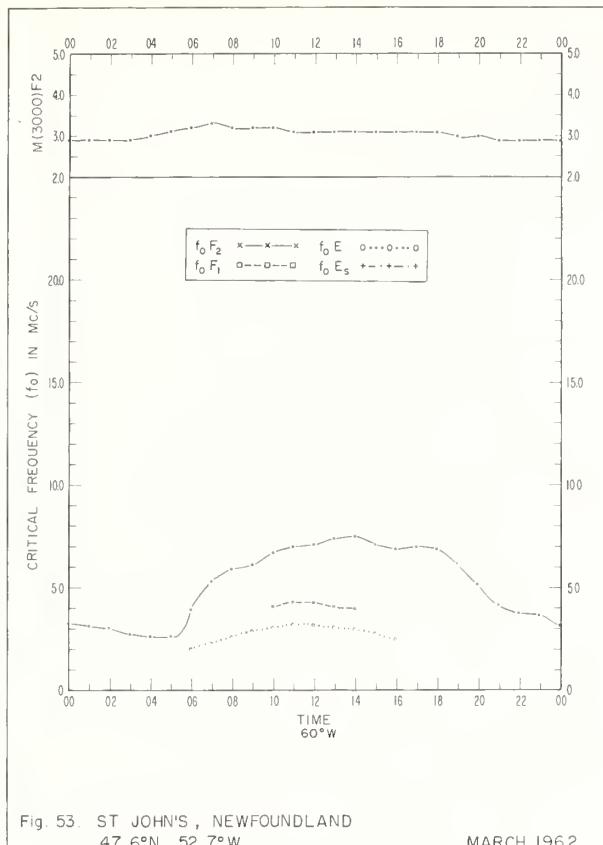


Fig. 53. ST JOHN'S, NEWFOUNDLAND
47°6'N, 52°7'W MARCH 1962

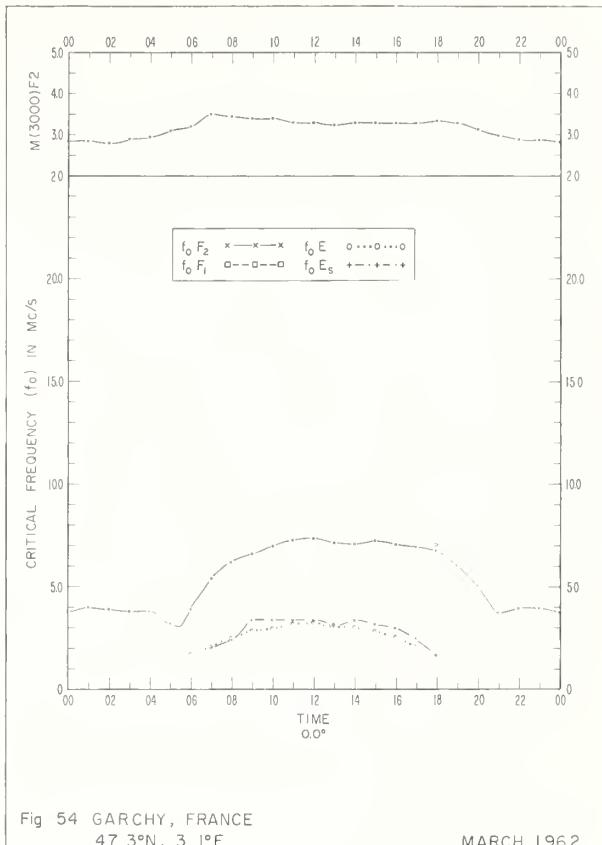


Fig. 54. GARCHY, FRANCE
47°3'N, 3°1'E MARCH 1962

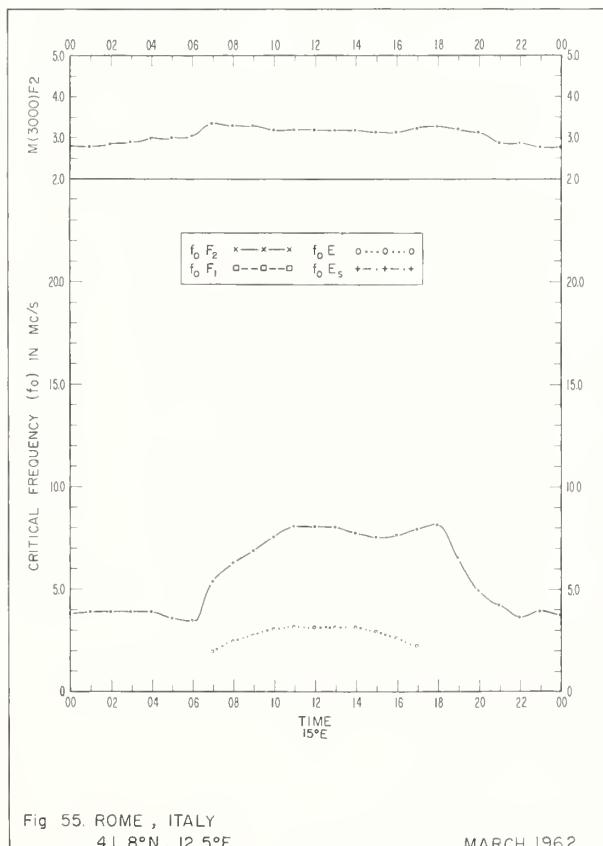


Fig. 55. ROME, ITALY
41°8'N, 12°5'E MARCH 1962

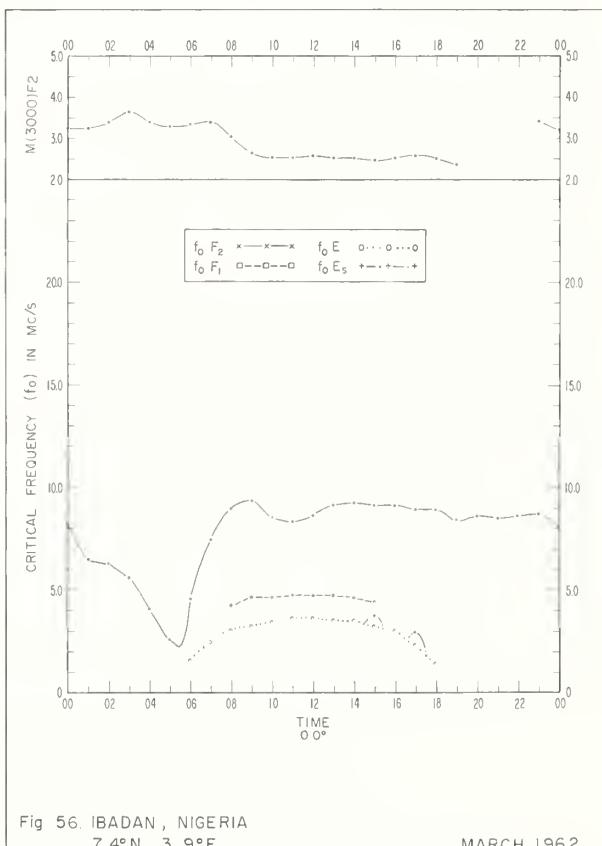


Fig. 56. IBADAN, NIGERIA
7°4'N, 3°9'E MARCH 1962

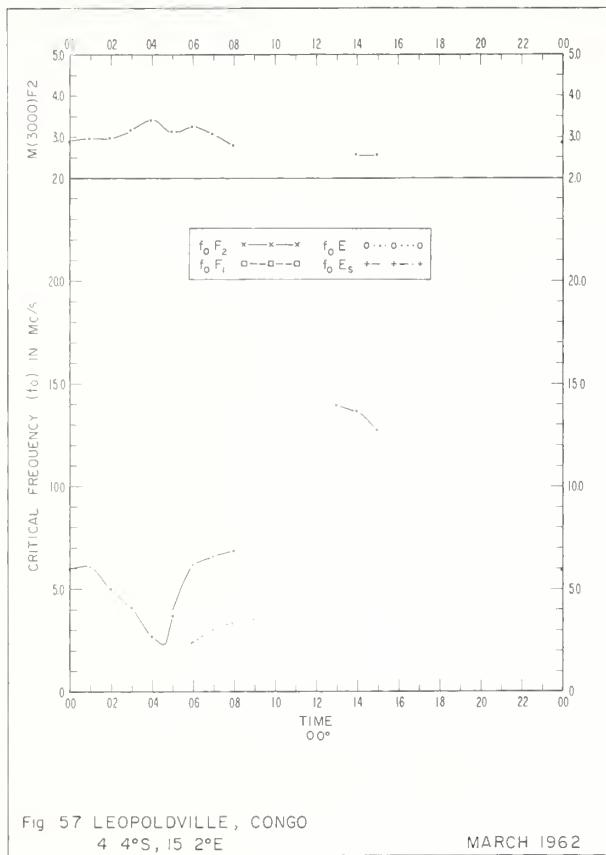


Fig. 57 LEOPOLDOVILLE , CONGO
4 4°S, 15 2°E MARCH 1962

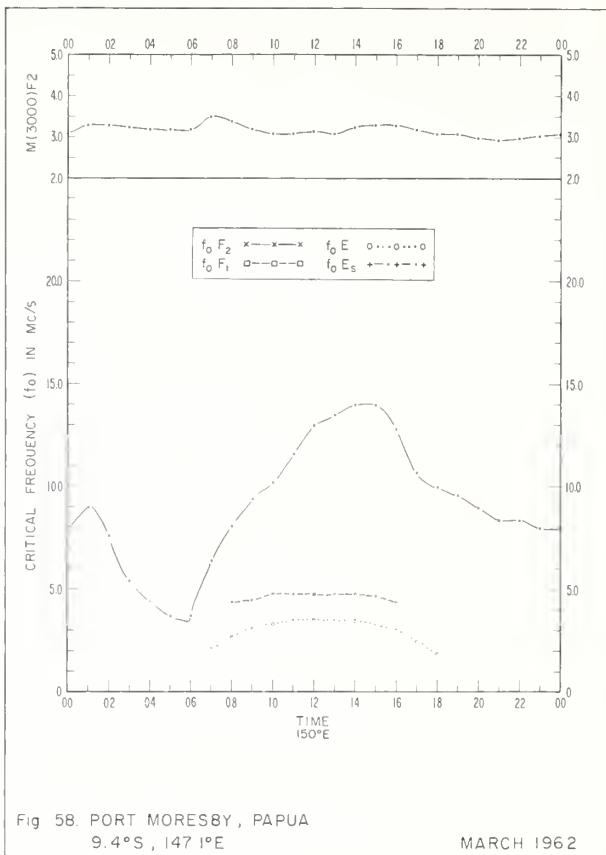


Fig. 58. PORT MORESBY , PAPUA
9.4°S, 147 1°E MARCH 1962

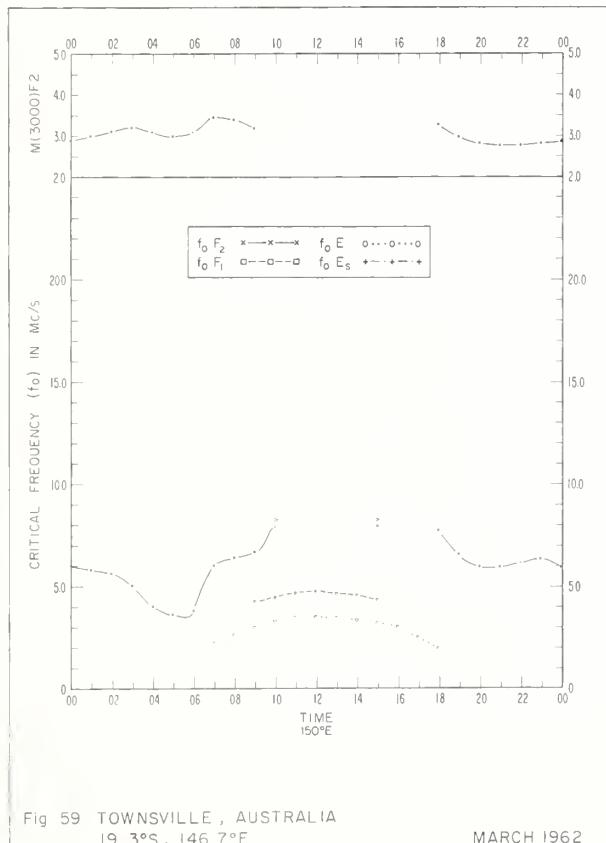


Fig. 59 TOWNSVILLE , AUSTRALIA
19 3°S, 146 7°E MARCH 1962

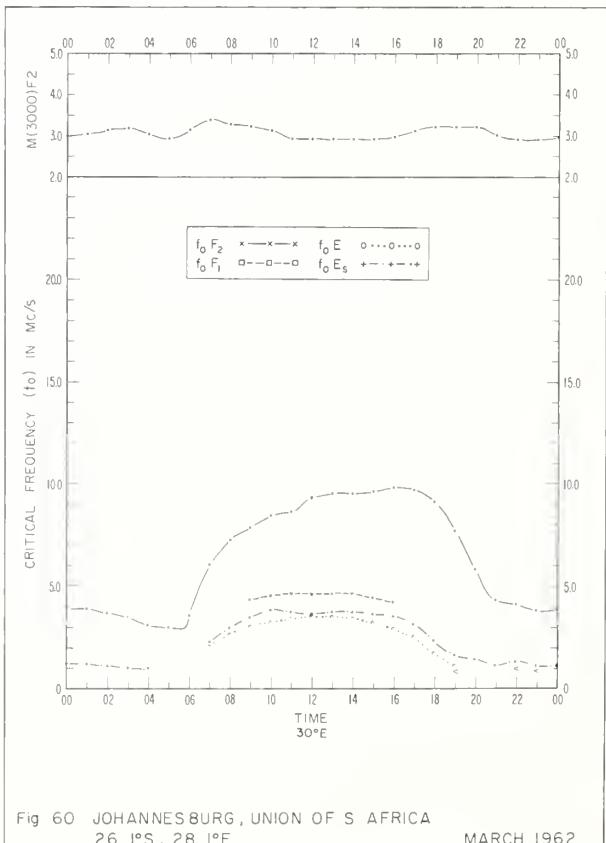
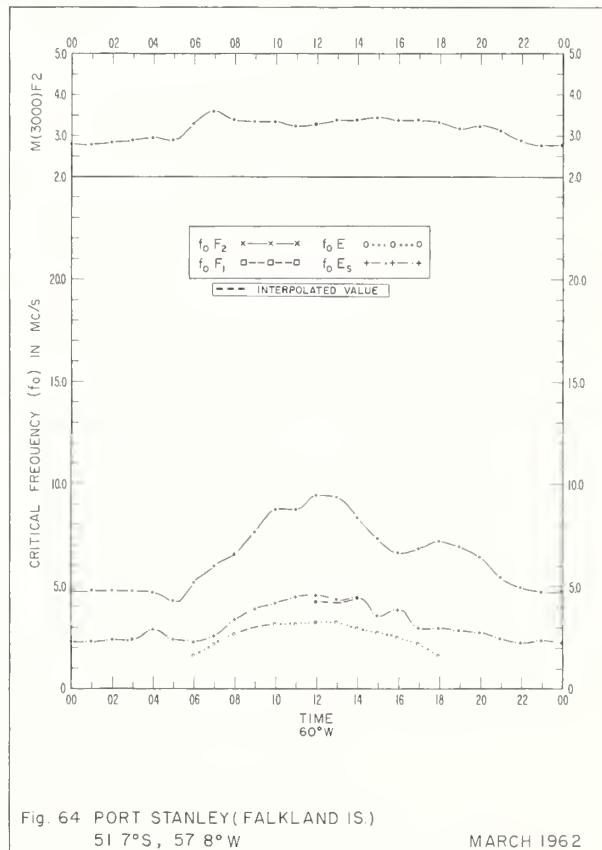
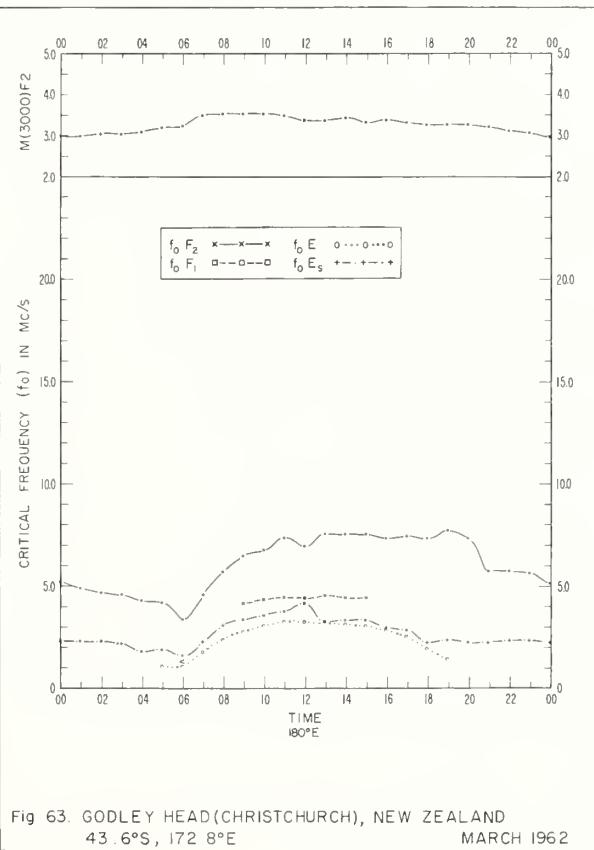
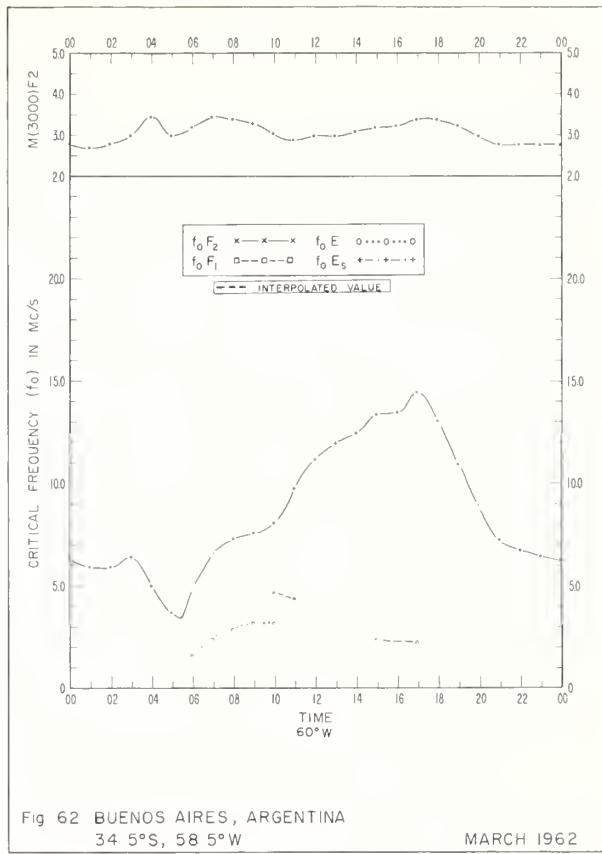
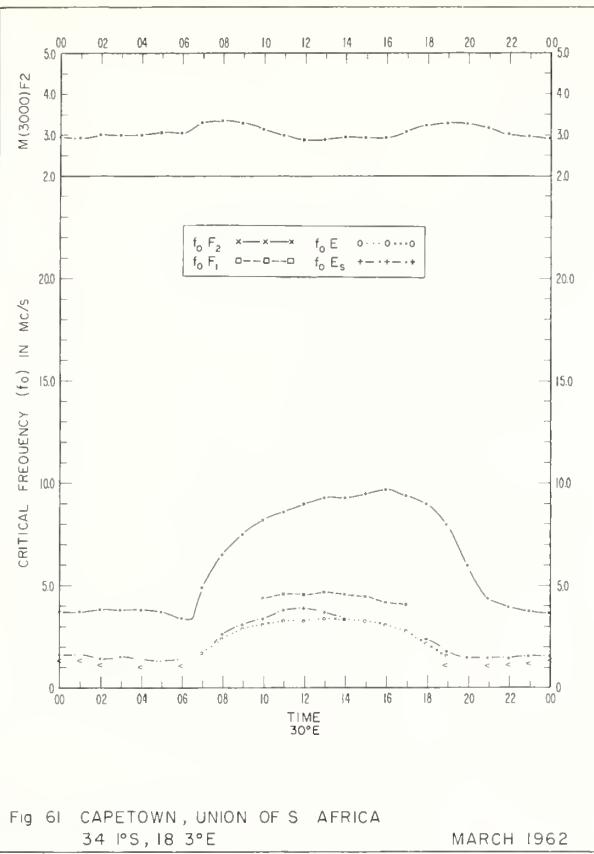
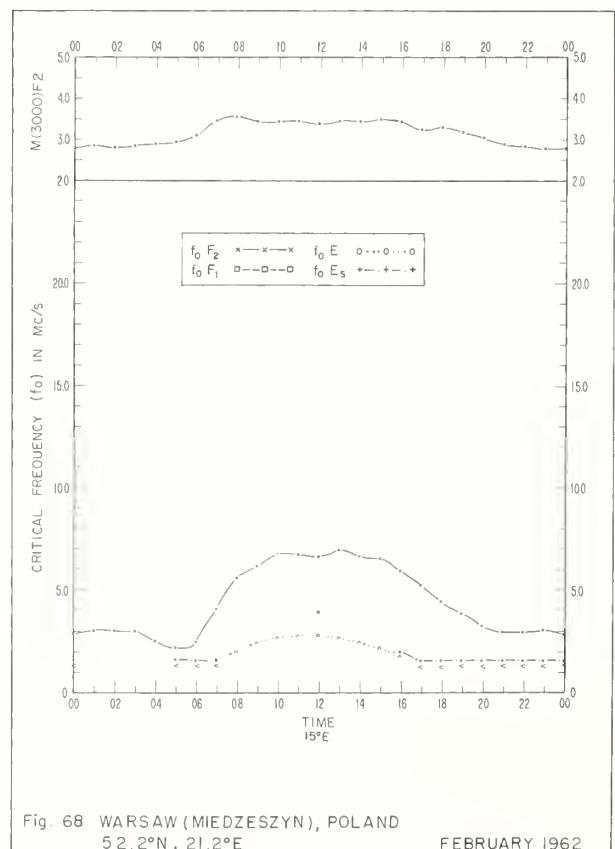
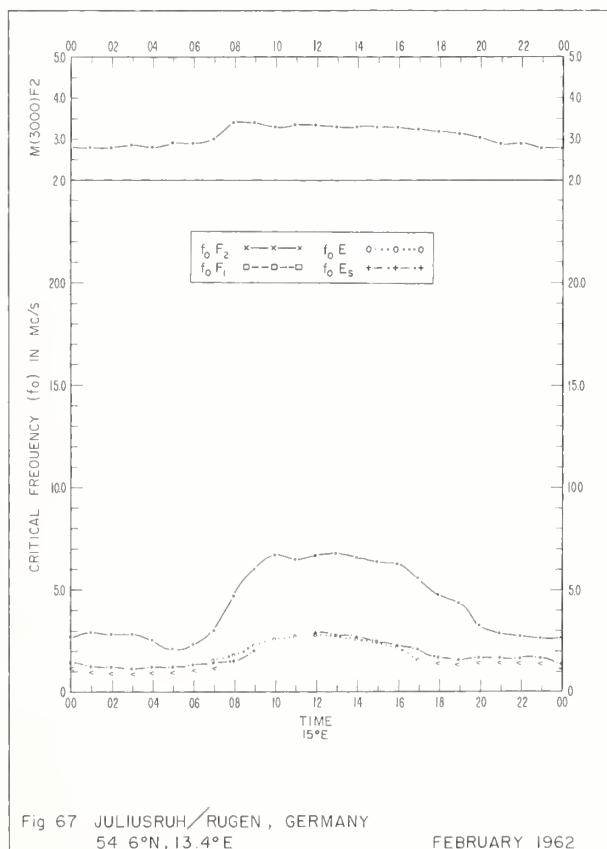
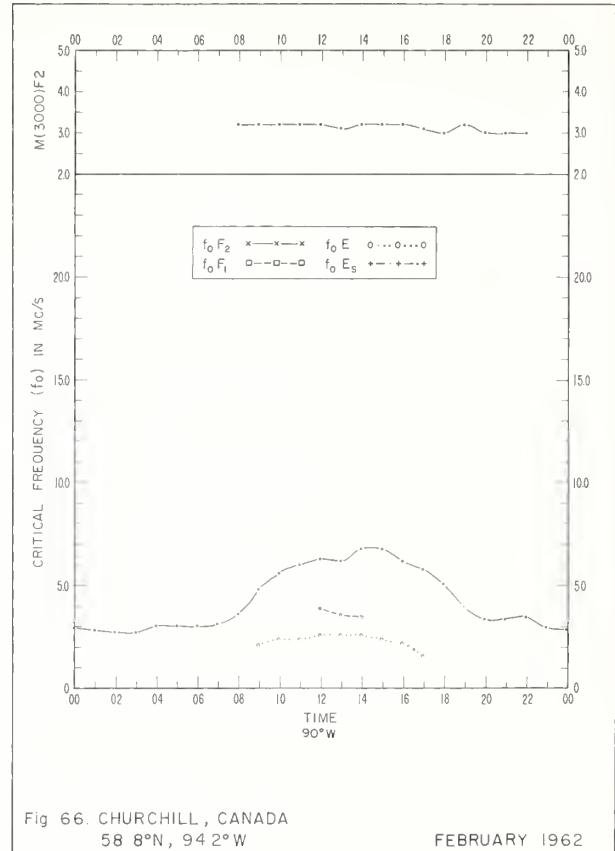
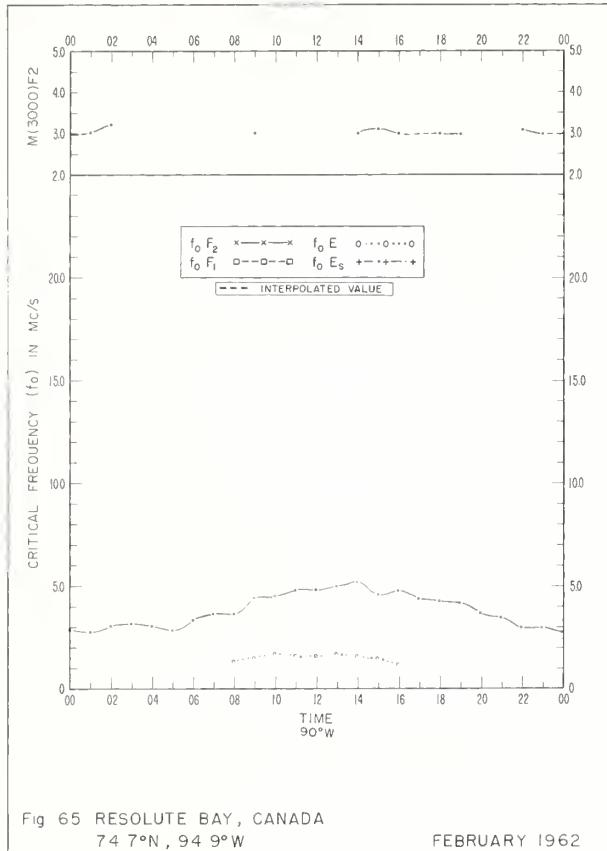


Fig. 60 JOHANNESBURG , UNION OF S AFRICA
26 1°S, 28 1°E MARCH 1962





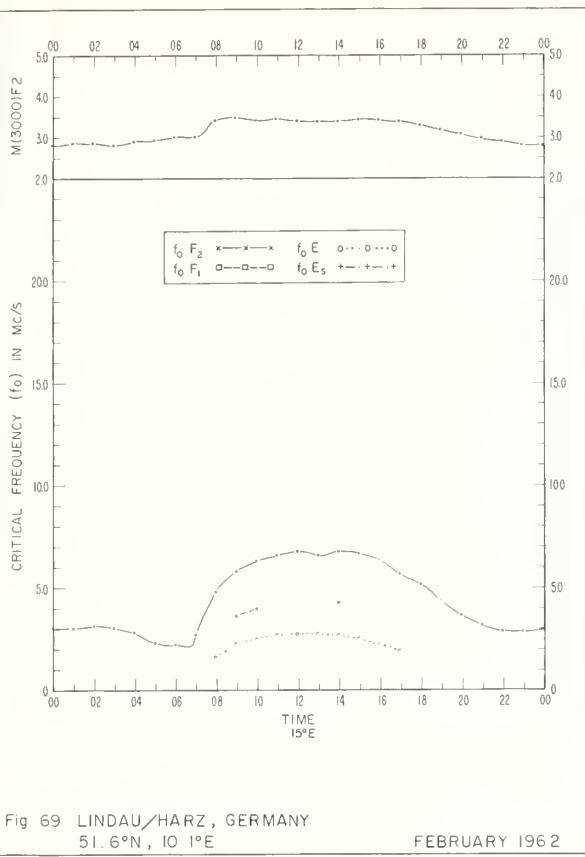


Fig 69 LINDAU/HARZ, GERMANY
51.6°N, 10.1°E FEBRUARY 1962

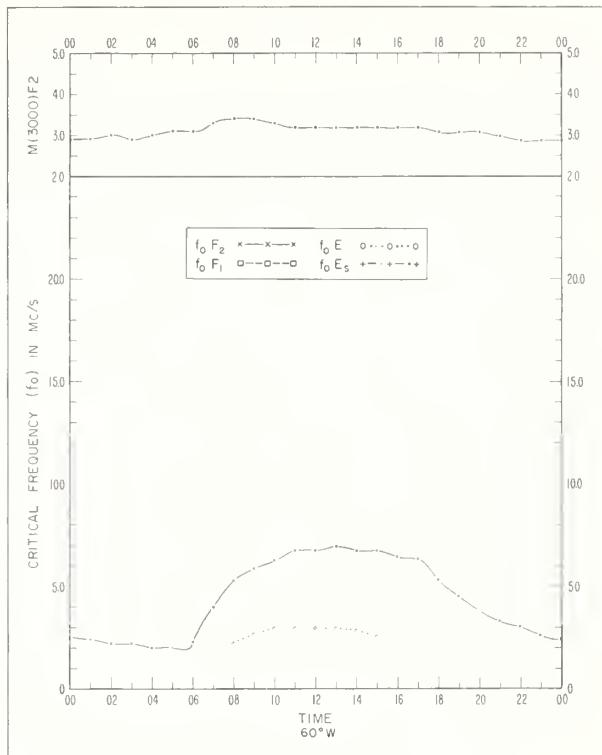


Fig 70 ST. JOHN'S, NEWFOUNDLAND
47.6°N, 52.7°W FEBRUARY 1962

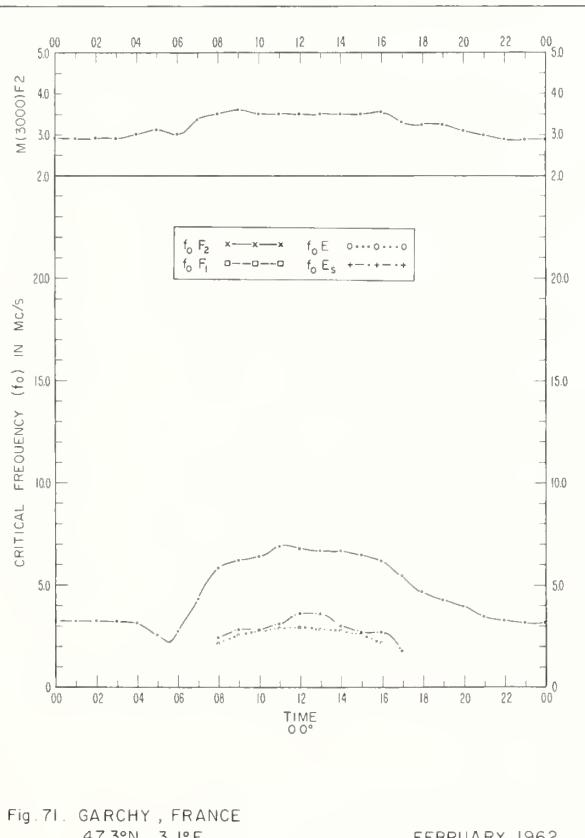


Fig. 71. GARCHY, FRANCE
47.3°N, 3.1°E FEBRUARY 1962

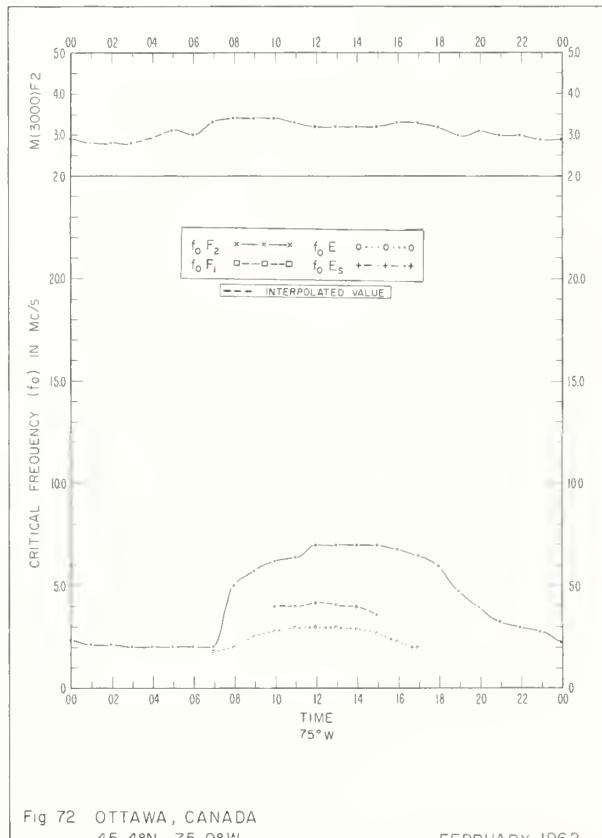
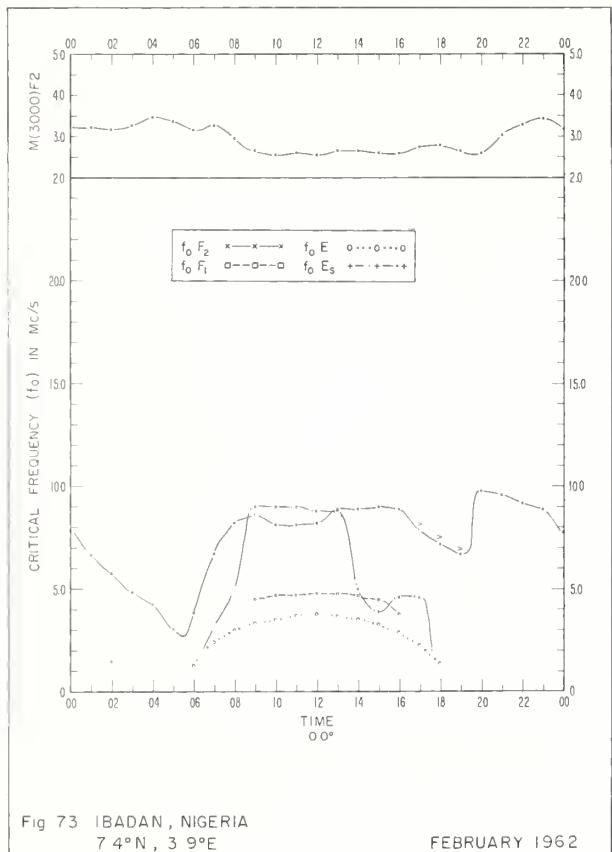
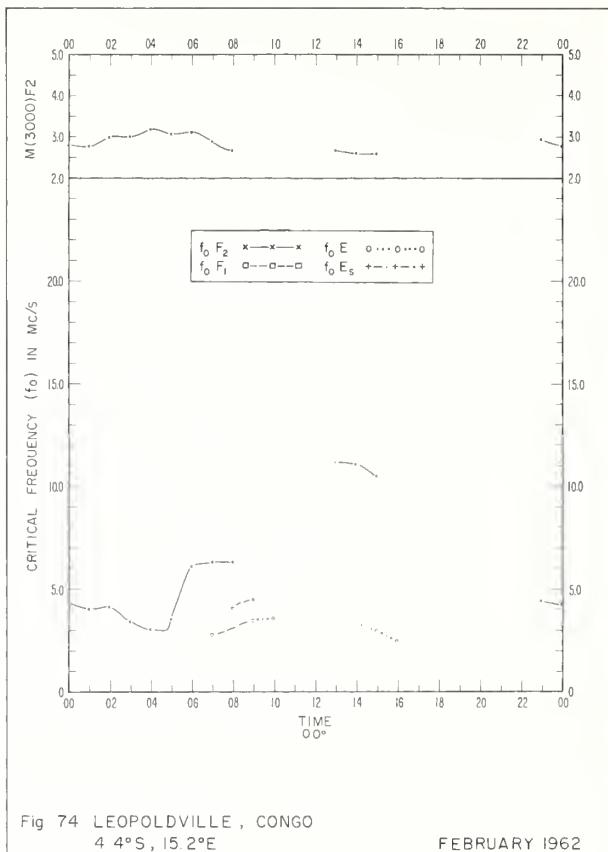


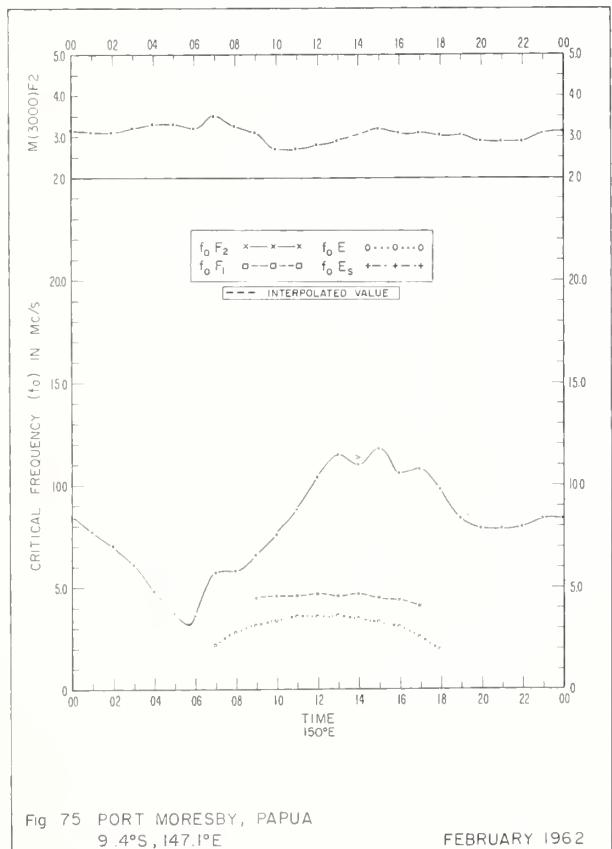
Fig. 72 OTTAWA, CANADA
45.4°N, 75.9°W FEBRUARY 1962

Fig 73 IBADAN, NIGERIA
7 4°N, 3 9°E

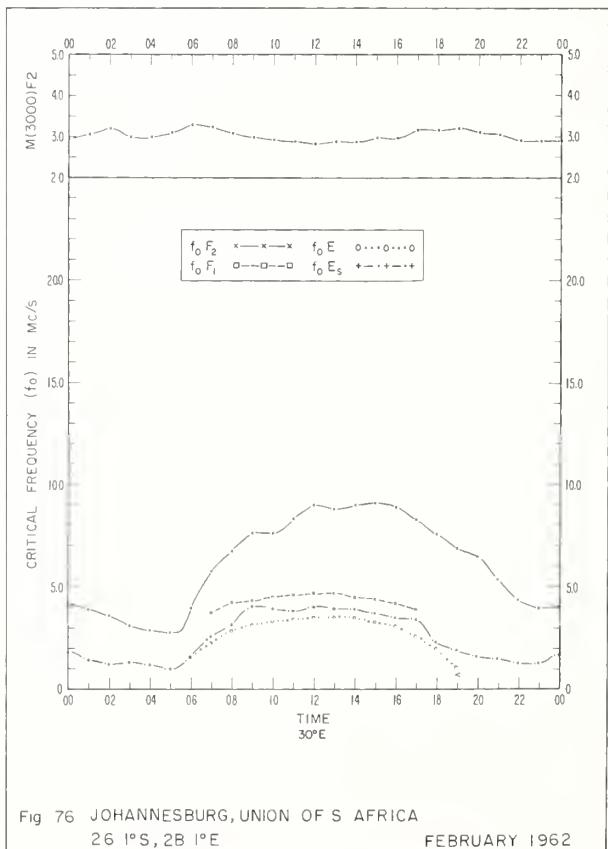
FEBRUARY 1962

Fig 74 LEOPOLDVILLE, CONGO
4 4°S, 15.2°E

FEBRUARY 1962

Fig 75 PORT MORESBY, PAPUA
9.4°S, 147.1°E

FEBRUARY 1962

Fig 76 JOHANNESBURG, UNION OF S AFRICA
26 1°S, 28 1°E

FEBRUARY 1962

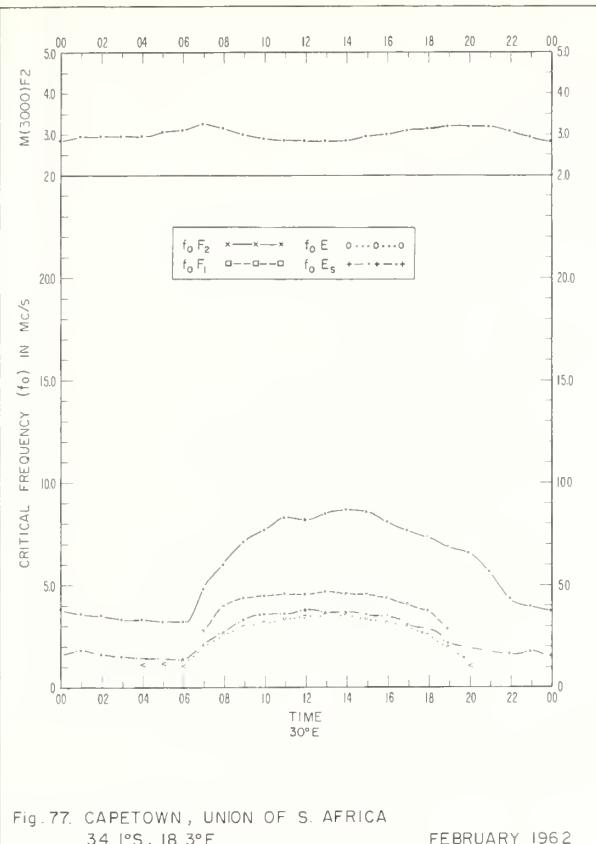


Fig. 77. CAPE TOWN, UNION OF S. AFRICA
34°S, 18°30'E FEBRUARY 1962

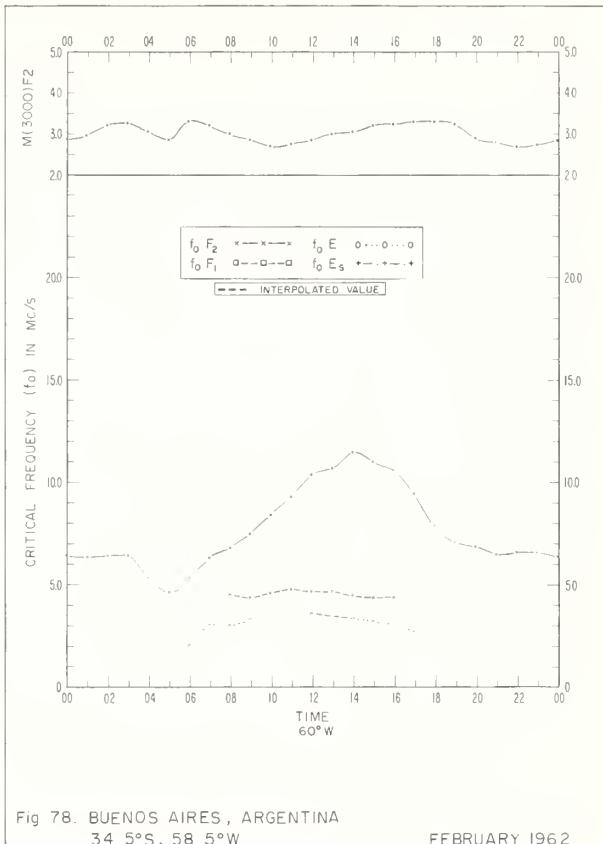


Fig. 78. BUENOS AIRES, ARGENTINA
34°5'S, 58°5'W FEBRUARY 1962

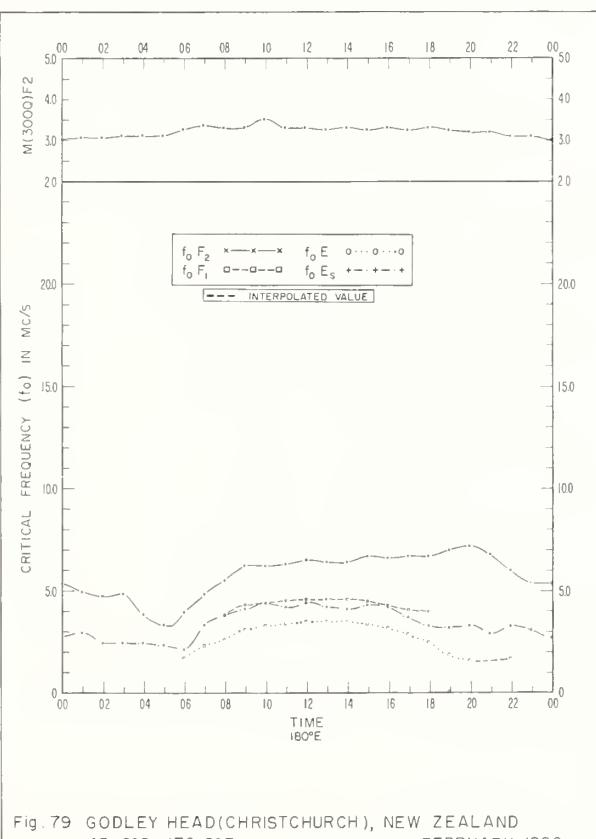


Fig. 79 GODLEY HEAD(CHRISTCHURCH), NEW ZEALAND
43.6°S, 172.8°E FEBRUARY 1962

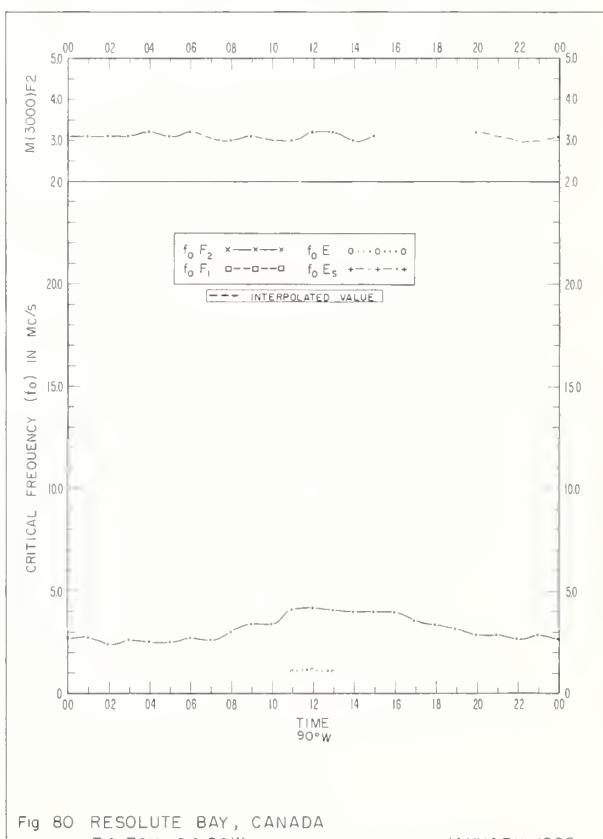
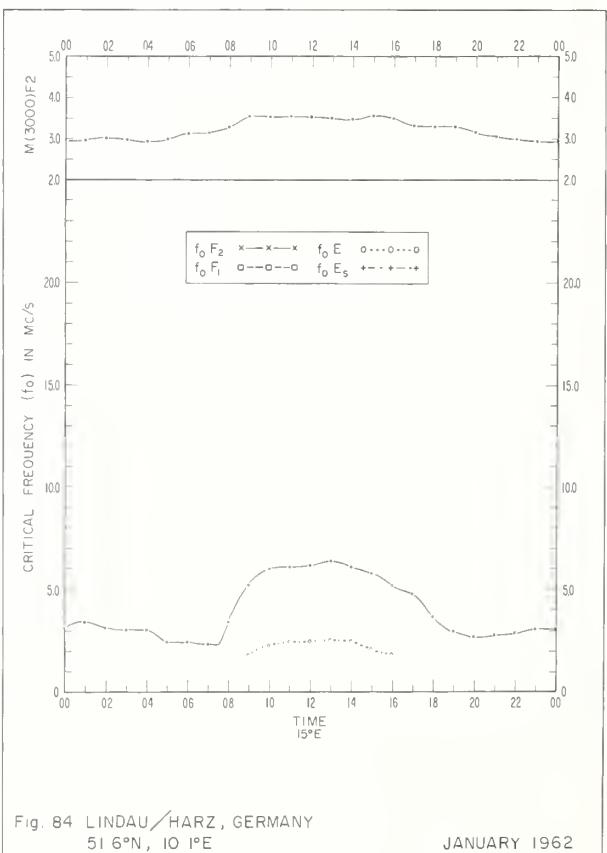
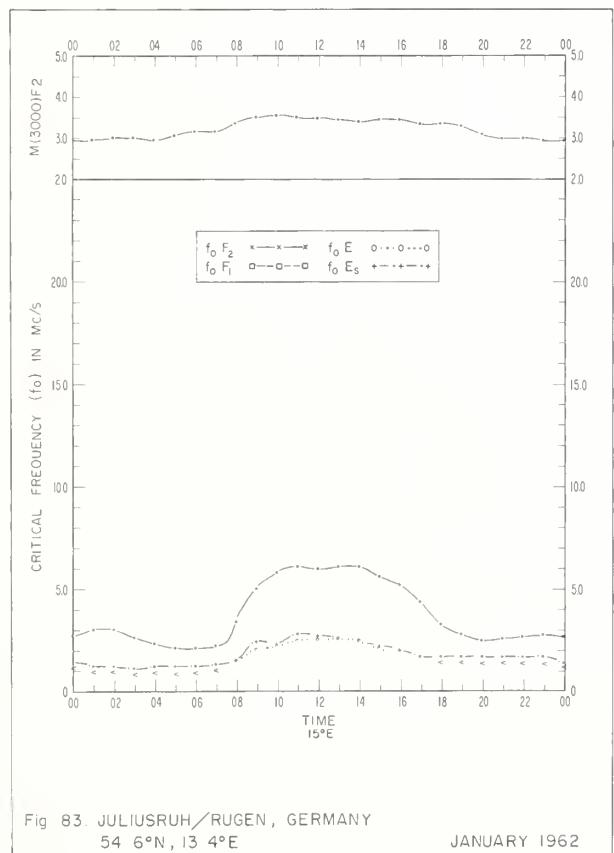
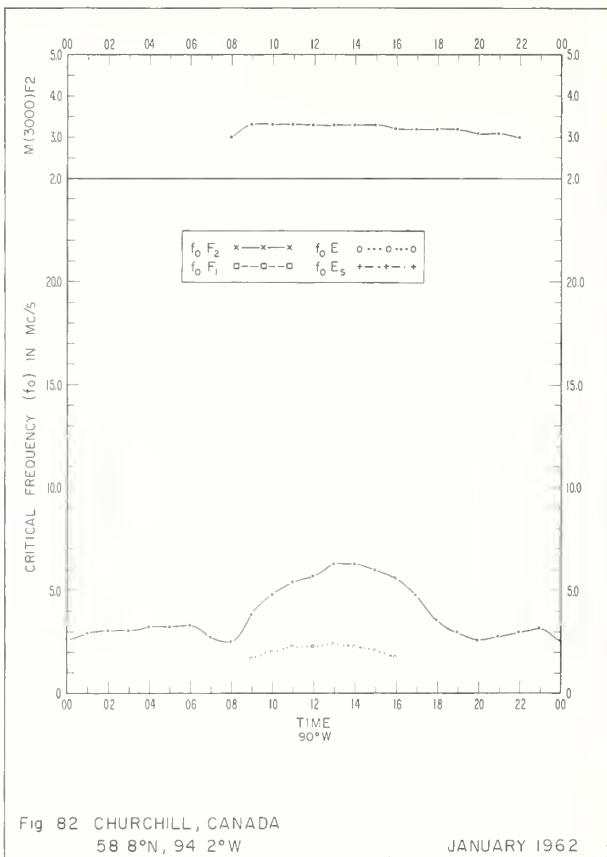
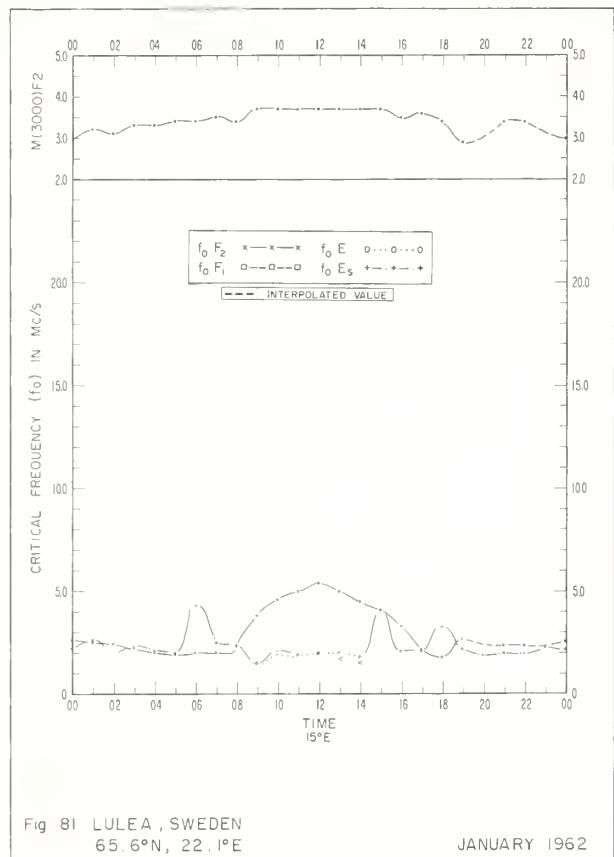
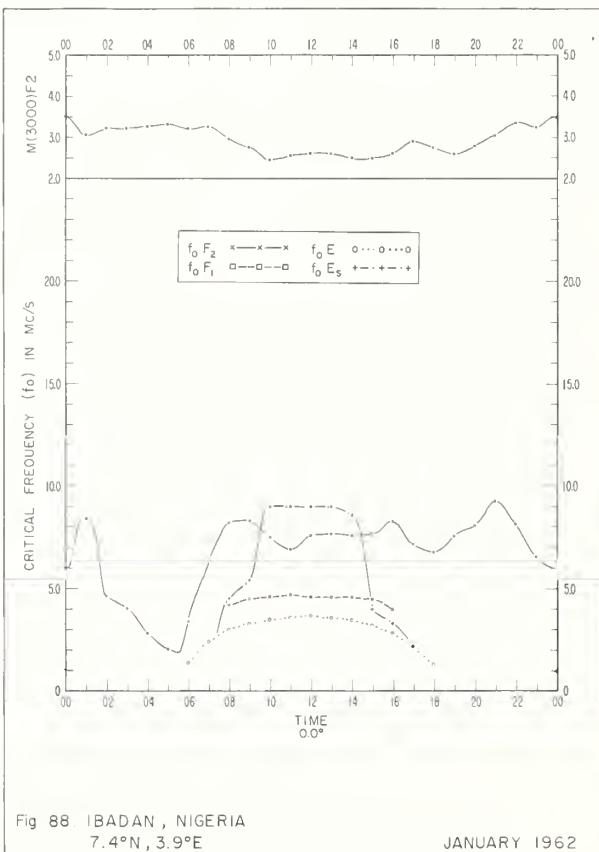
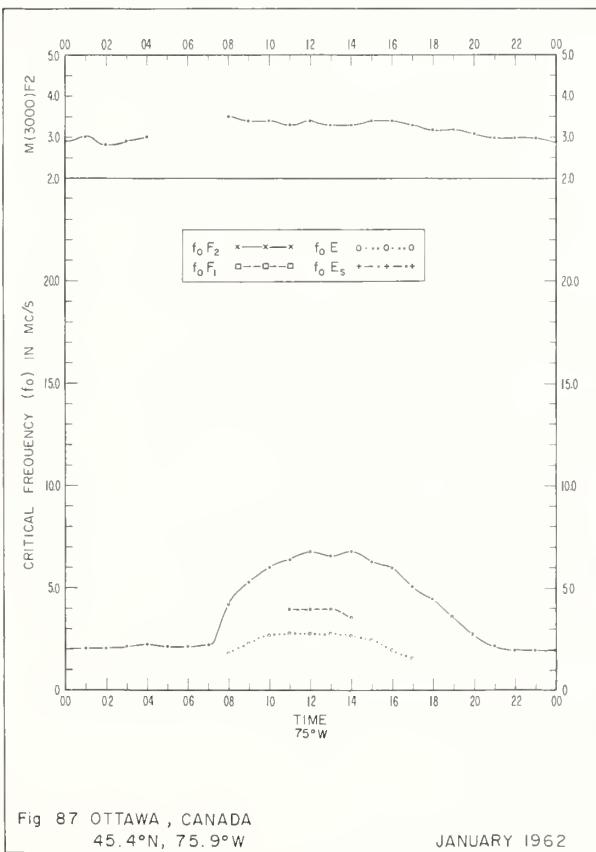
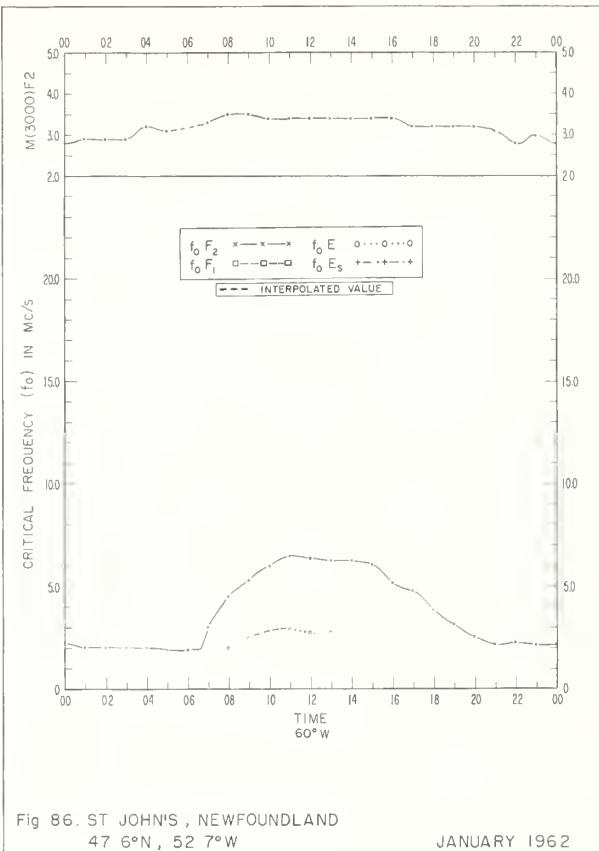
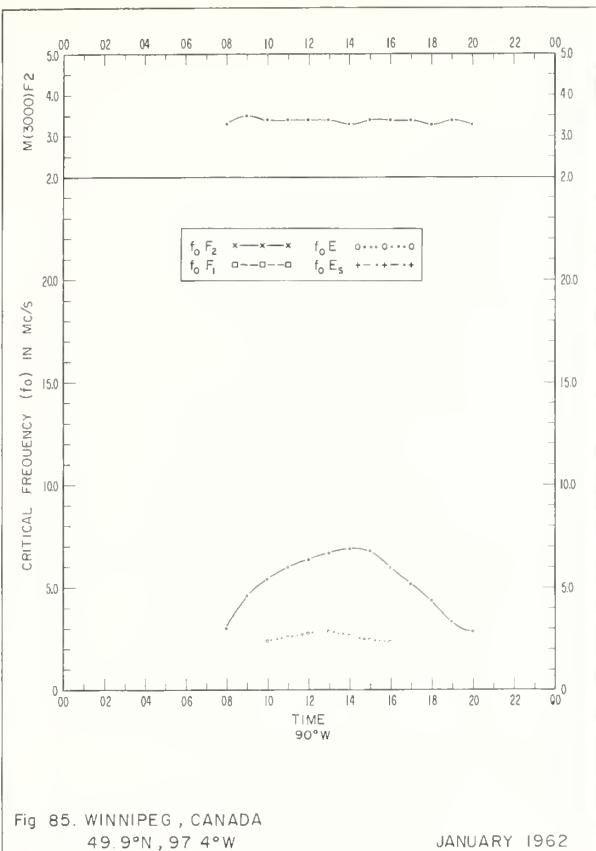
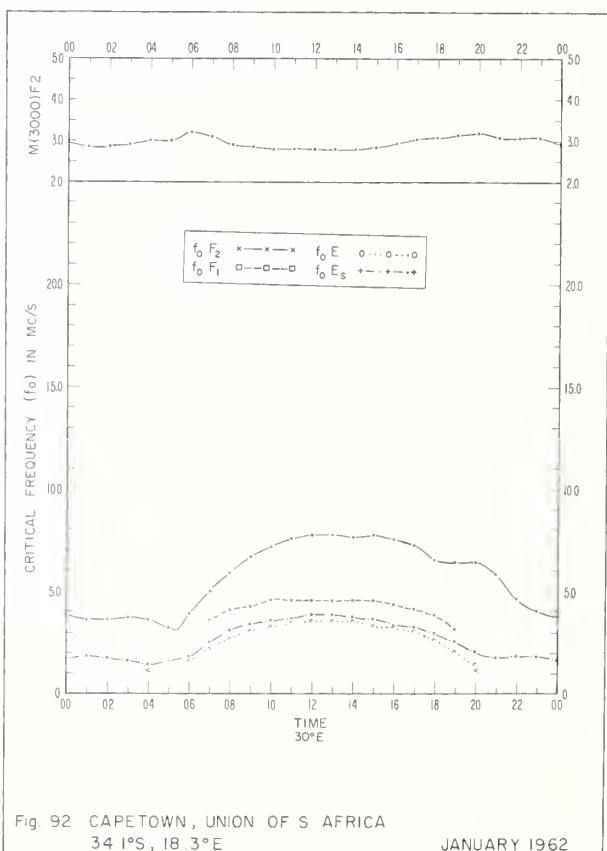
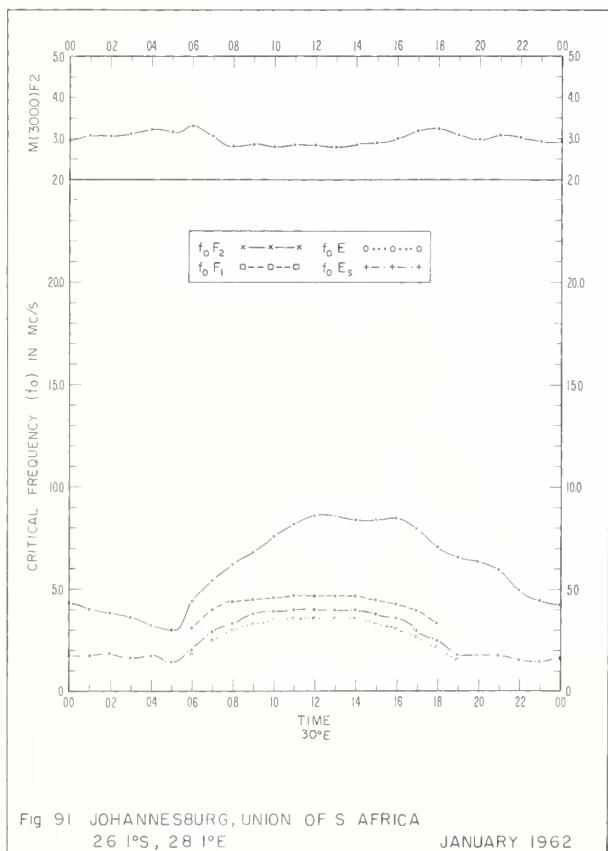
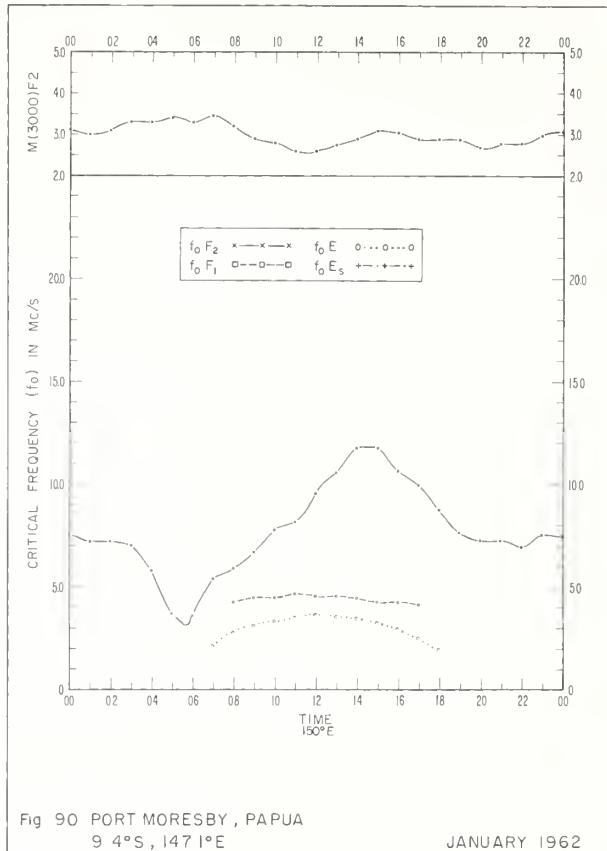
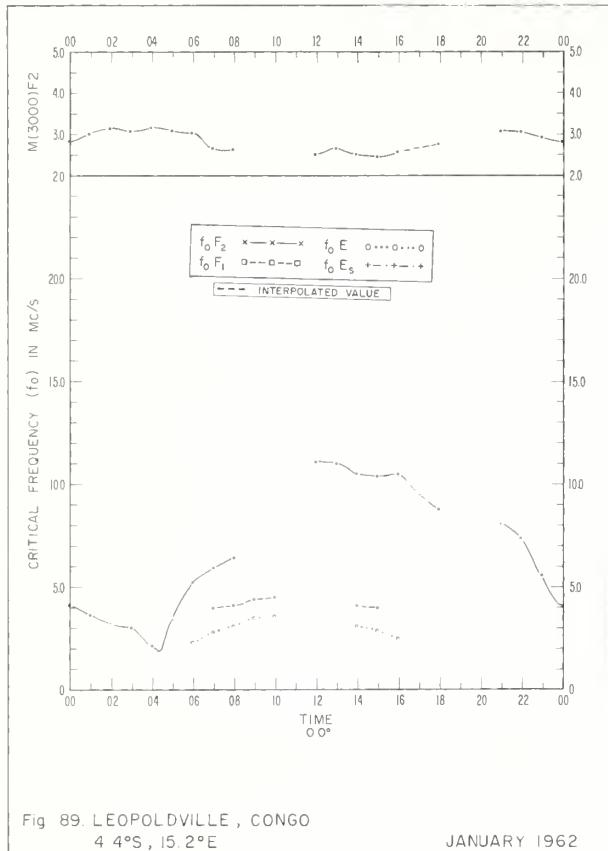
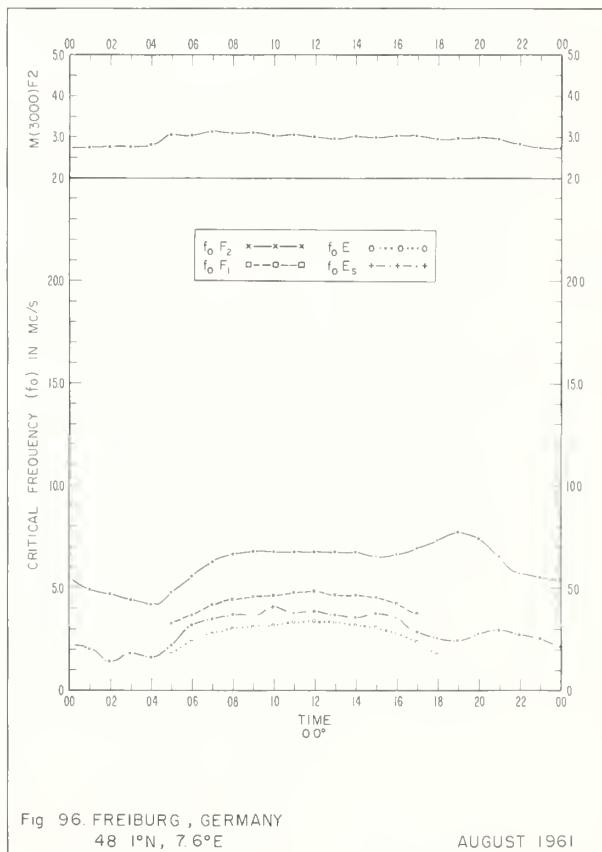
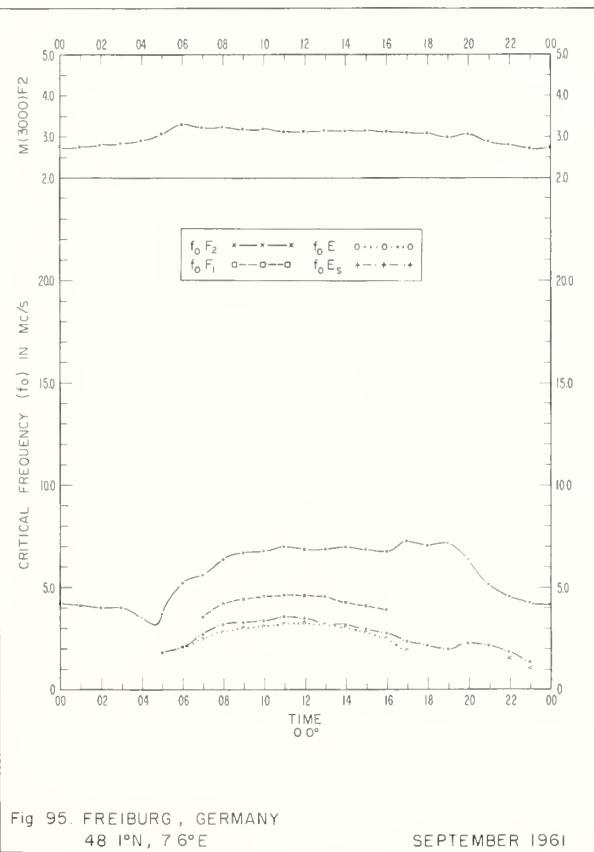
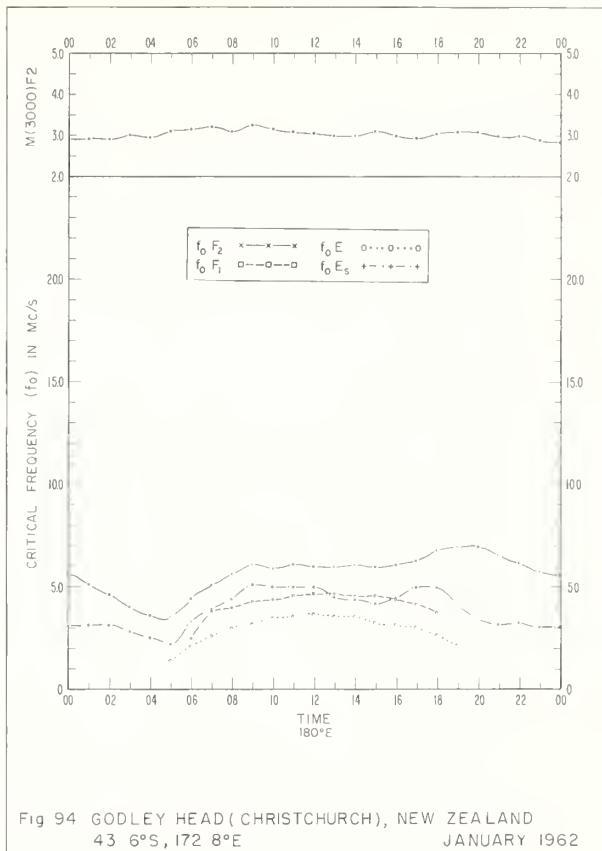
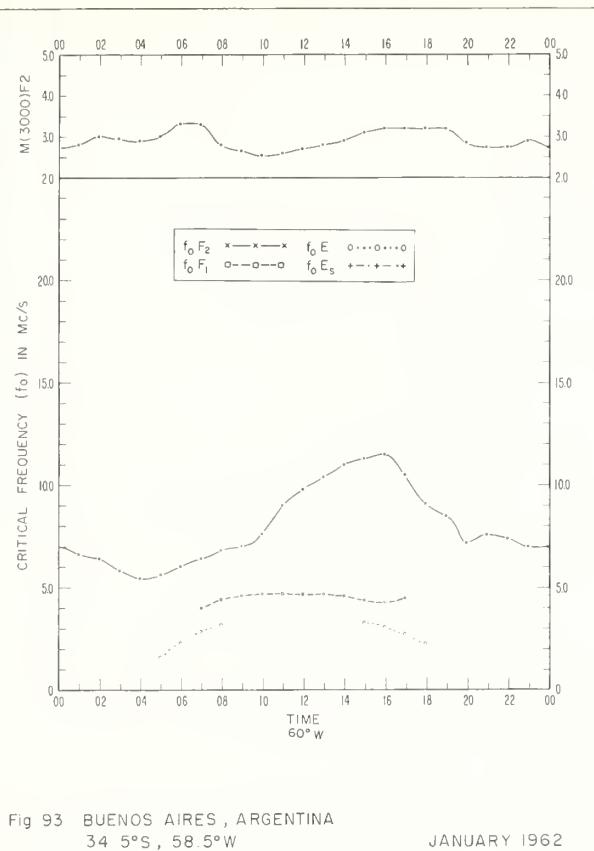


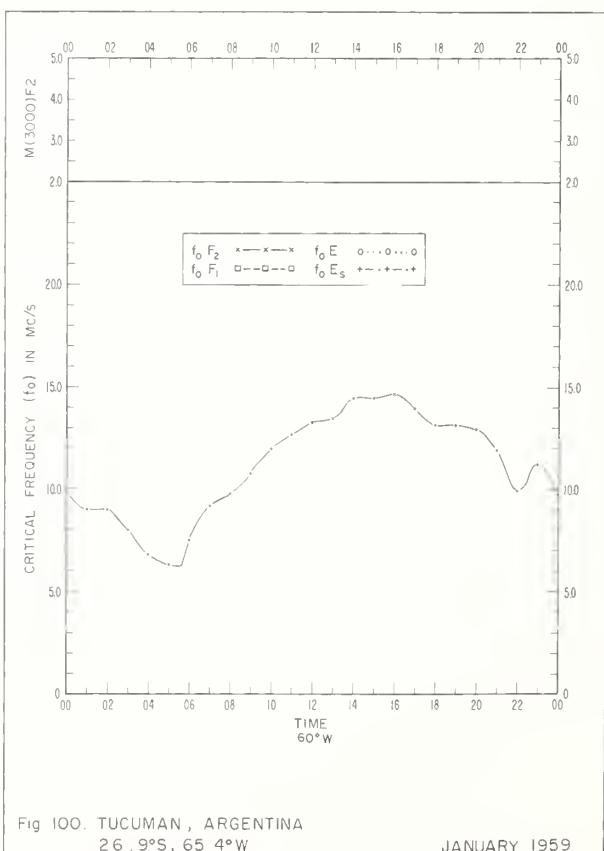
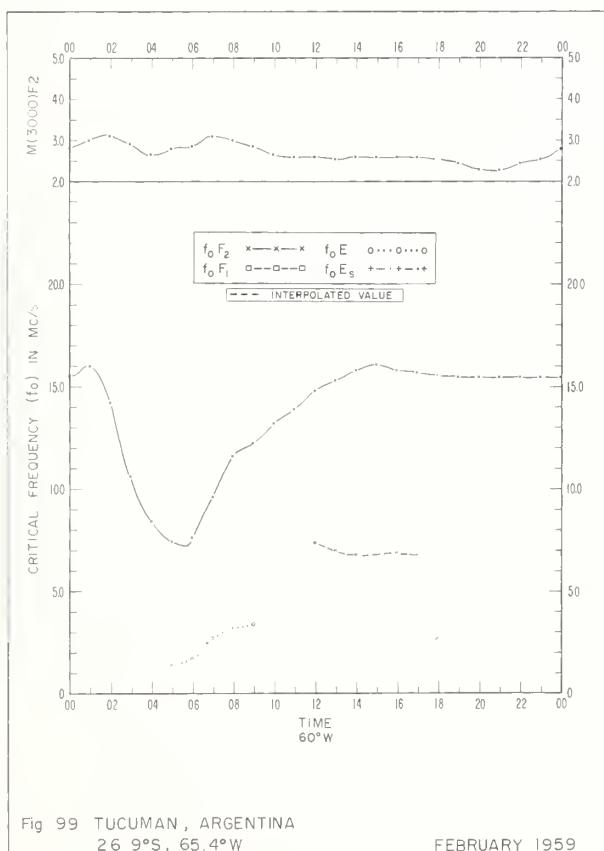
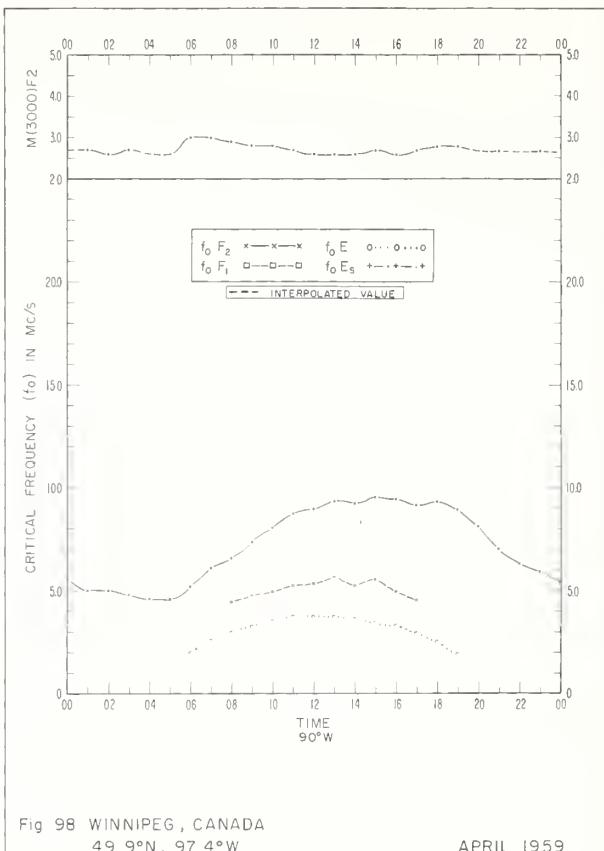
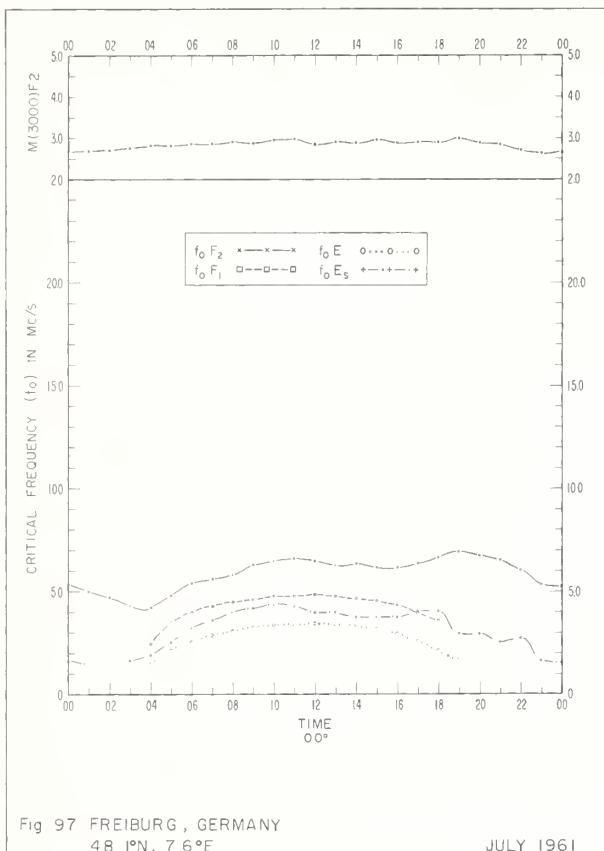
Fig. 80 RESOLUTE BAY, CANADA
74°7'N, 94°9'W JANUARY 1962











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