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CRPL-F 256 PART A

FOR OFFICIAL DISTRIBUTION

PART A
IONOSPHERIC DATA

ISSUED
DECEMBER 1965

NOTICE

See announcement on page ii

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
INSTITUTE FOR TELECOMMUNICATION SCIENCES AND AERONOMY
(FORMERLY CENTRAL RADIO PROPAGATION LABORATORY)
BOULDER, COLORADO

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
INSTITUTE FOR TELECOMMUNICATION SCIENCES AND AERONOMY
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BOULDER, COLORADO

IONOSPHERIC DATA

CONTENTS

	Page
Ionospheric Data	ii
Table of Smoothed Observed Zurich Sunspot Numbers .	iii
World-Wide Sources of Ionospheric Data	iv
Tables and Graphs of Ionospheric Data	1
Index of Tables and Graphs of Ionospheric Data in CRPL-F 256 (Part A)	51
Index by Issue Number of Observed Ionospheric Data Beginning with January 1961, Published in the CRPL-F (Part A)	53

NOTICE

Effective October 11, 1965, the Central Radio Propagation Laboratory was transferred from the National Bureau of Standards to the new Environmental Science Services Administration (ESSA). At the same time the name CRPL was changed to INSTITUTE FOR TELECOMMUNICATION SCIENCES AND AERONOMY (ITSA) to reflect the expanded scope of its responsibilities. The monthly bulletins "Ionospheric Data" (CRPL-F series, Part A) and "Solar-Geophysical Data" (CRPL-F series, Part B) will be continued under the new ITSA program. Communications concerning the "Ionospheric Data" series should be addressed to:

Prediction Services Section
Ionospheric Telecommunications Laboratory
Institute for Telecommunication Sciences and Aeronomy
Environmental Science Services Administration
Boulder, Colorado 80301

IONOSPHERIC DATA

The CRPL-F series bulletins are issued as part of the responsibility of the Institute for Telecommunication Sciences and Aeronomy (formerly Central Radio Propagation Laboratory) of ESSA for the distribution of ionospheric and related geophysical data. They represent a variety of data collected by ITSA (CRPL) in the course of its research and service activities. Through the CRPL-F series, as part of the general exchange of scientific information, these data are made available for use by others in research on radio propagation and the ionosphere, and in other geophysical applications.

In "Ionospheric Data" (CRPL-F series, Part A) tables of monthly median values of vertical incidence ionospheric data are presented accompanied by graphs of critical frequencies and $M(3000)F_2$. The tables include the number of values entering into the median determination (count). When available, the upper and lower quartile values (indicated by UQ and LQ) are listed for foF_2 , foF_1 , foE_s , $M(3000)F_2$, $h'F_2$ and $h'F$. Space limitations do not permit inclusion of quartile values for the other characteristics. The tables are prepared by machine methods and the graphs are plotted automatically.

The tables and graphs present the ionospheric data as received from 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 "Ionospheric Data" only when the complete daily hourly tabulations have been received. In general, priority of publication is given to the most current data. Publication of data

received too long after the month of observation may experience an indefinitely prolonged delay.

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 ITSA (CRPL).

Units and Abbreviations of Ionospheric Data Tables

foF2, foEs - - - Tenths of a megacycle	MED - Median
foF1, foE - - - Hundredths of a megacycle	CNT - Count
h'F2, h'F, h'E - Kilometers	UQ - Upper Quartile
M(3000)F2 - - - Hundredths	LQ - Lower Quartile

Key to Points of Ionospheric Data Graphs

foF2: x	foE : ◊	M(3000)F2 : ◇
foF1: Δ	foEs: +	
< Less-than value indicated.		> Greater-than value indicated.
- - - <u>Interpolated value indicated.</u>		

The following table contains the latest available information on twelve-month smoothed average of observed Zurich relative sunspot numbers, beginning with the minimum of April 1954. Final numbers are listed through June 1964, the succeeding values being based on provisional data.

Smoothed Observed Zurich Relative Sunspot Number

Month	Jan.	Feb.	Mar.	Apr.	May	June	July	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	37	35	33	31	30	30
1963	29	30	30	29	29	28	28	27	27	26	24	21
1964	20	18	15	13	11	10	10	10	10	10	10	11
1965	12	12	13	14	15							

WORLD-WIDE SOURCES OF IONOSPHERIC DATA

THE IONOSPHERIC DATA PRESENTED IN THE 100 TABLES AND GRAPHS OF THIS ISSUE WERE ASSEMBLED BY THE INSTITUTE FOR TELECOMMUNICATION SCIENCES AND AERONOMY FOR ANALYSIS, CORRELATION, AND DISTRIBUTION. THE FOLLOWING ARE THE SOURCES OF DATA.

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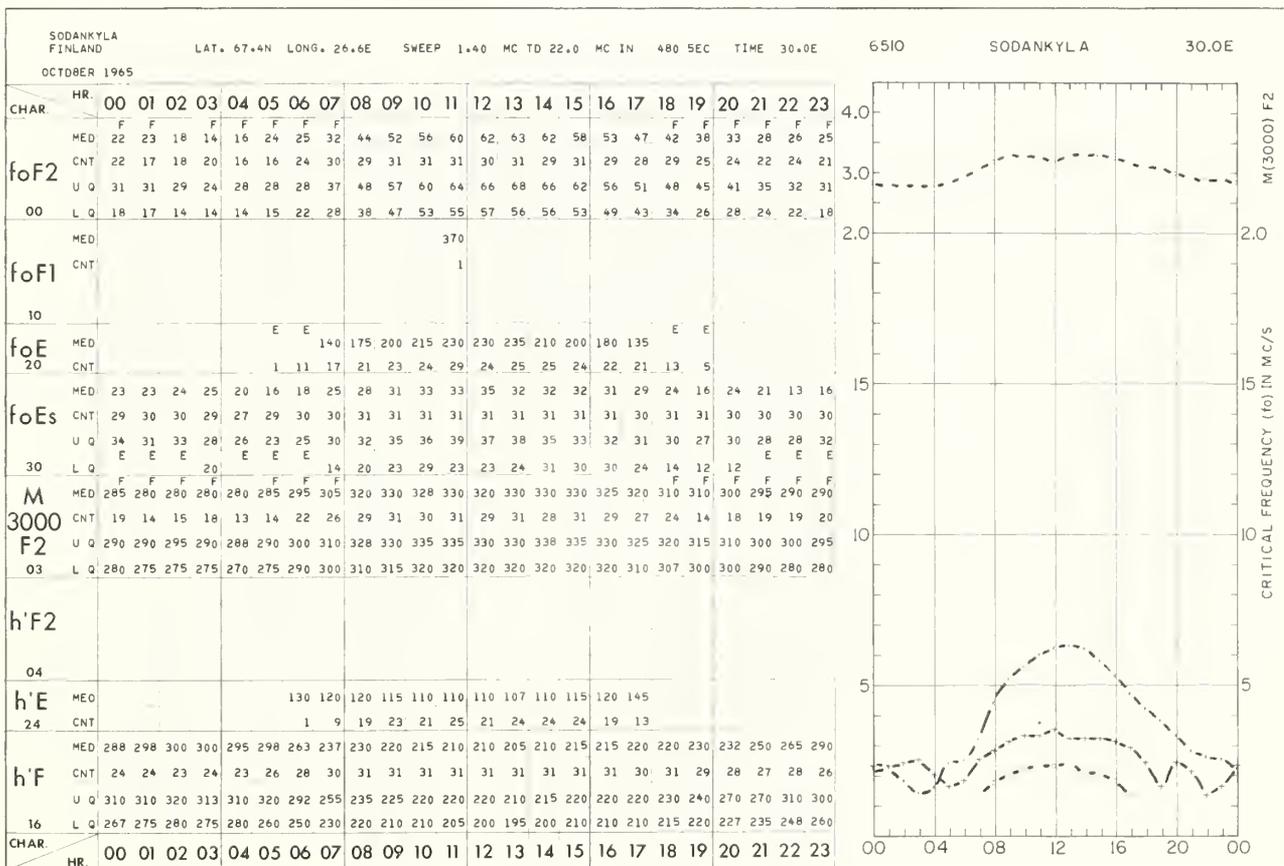
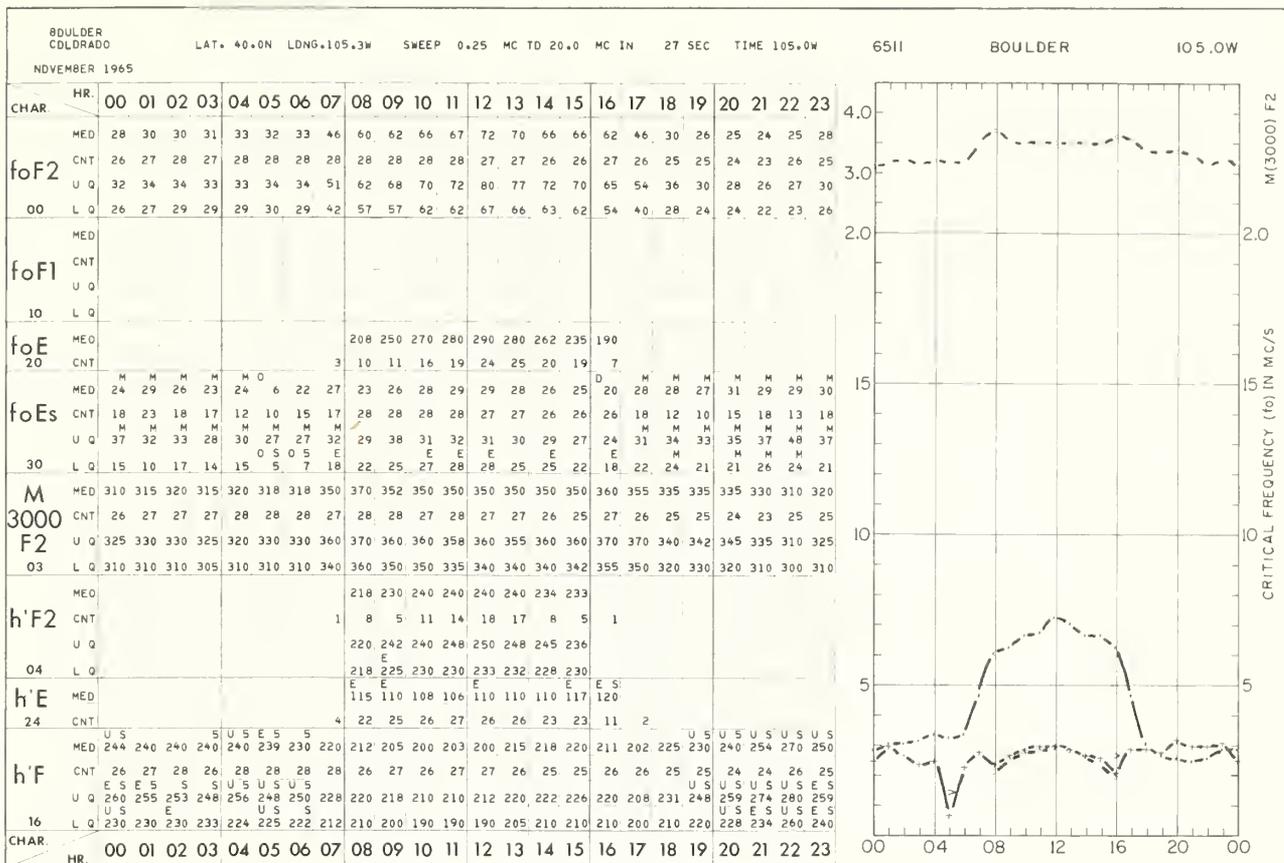
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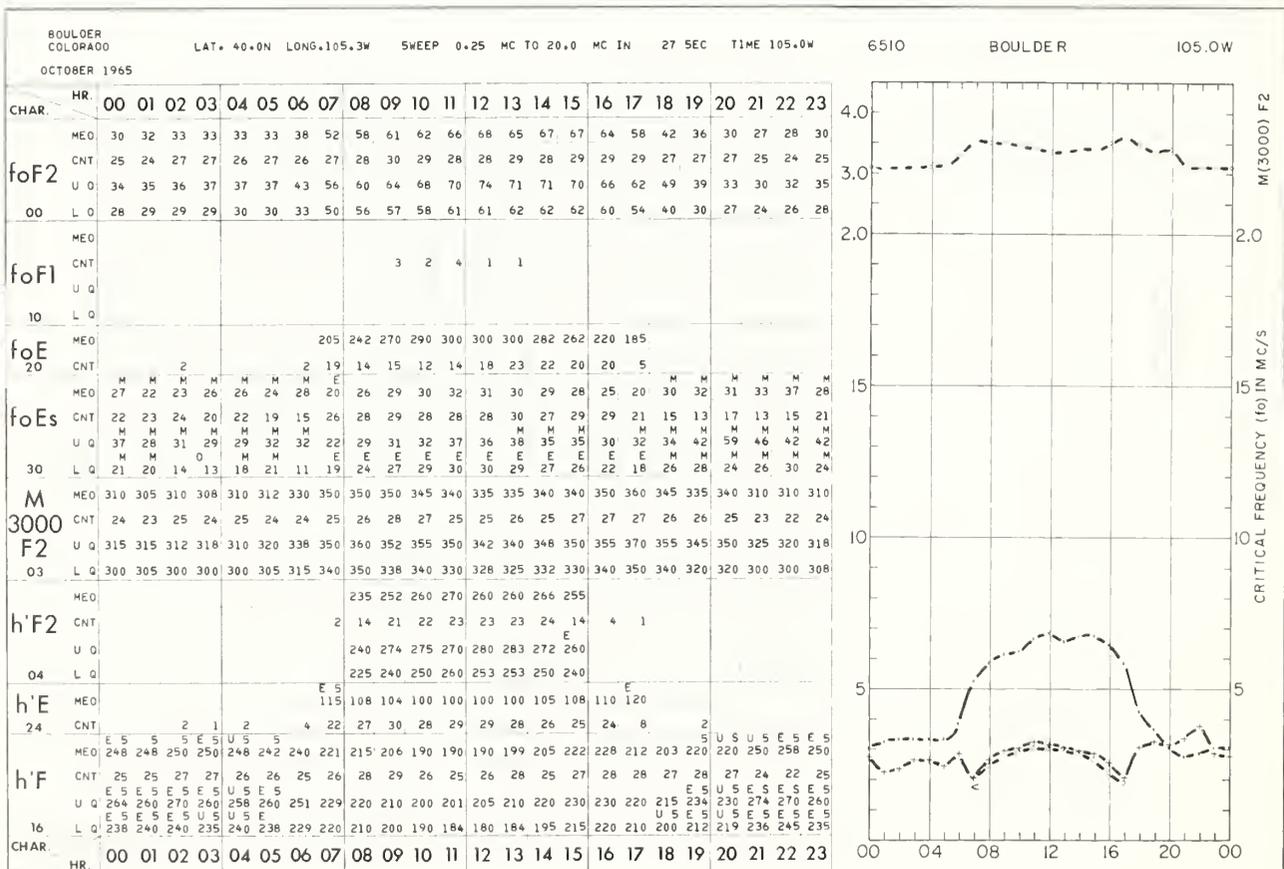
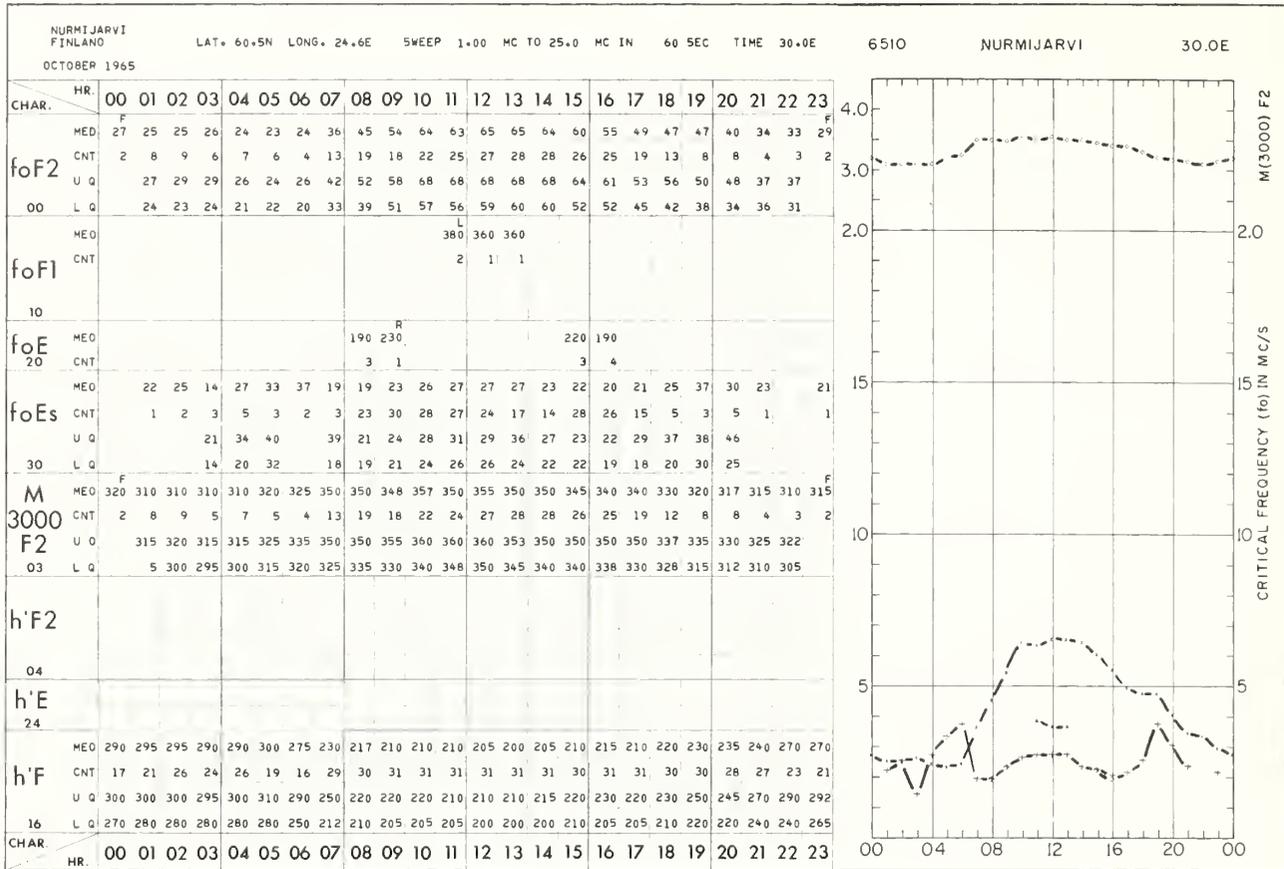
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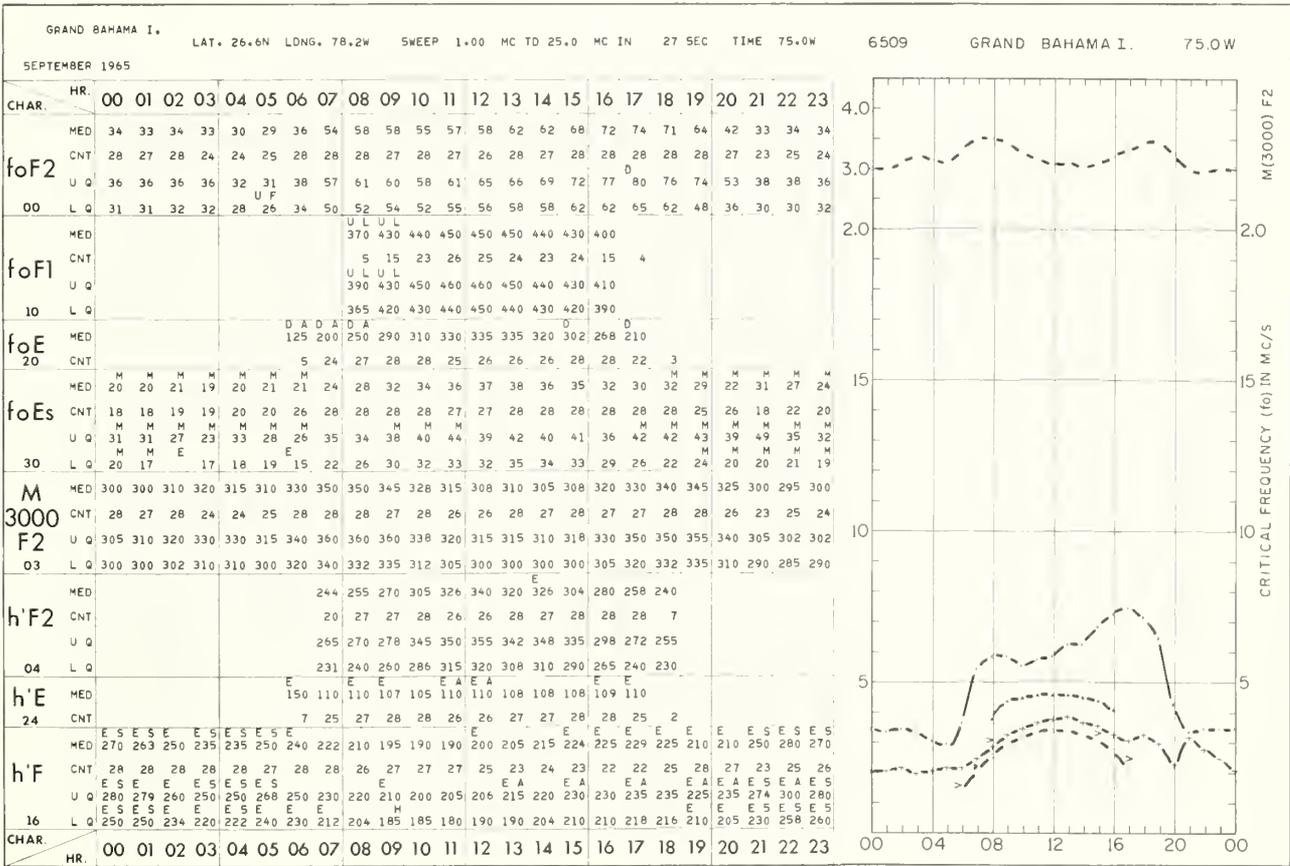
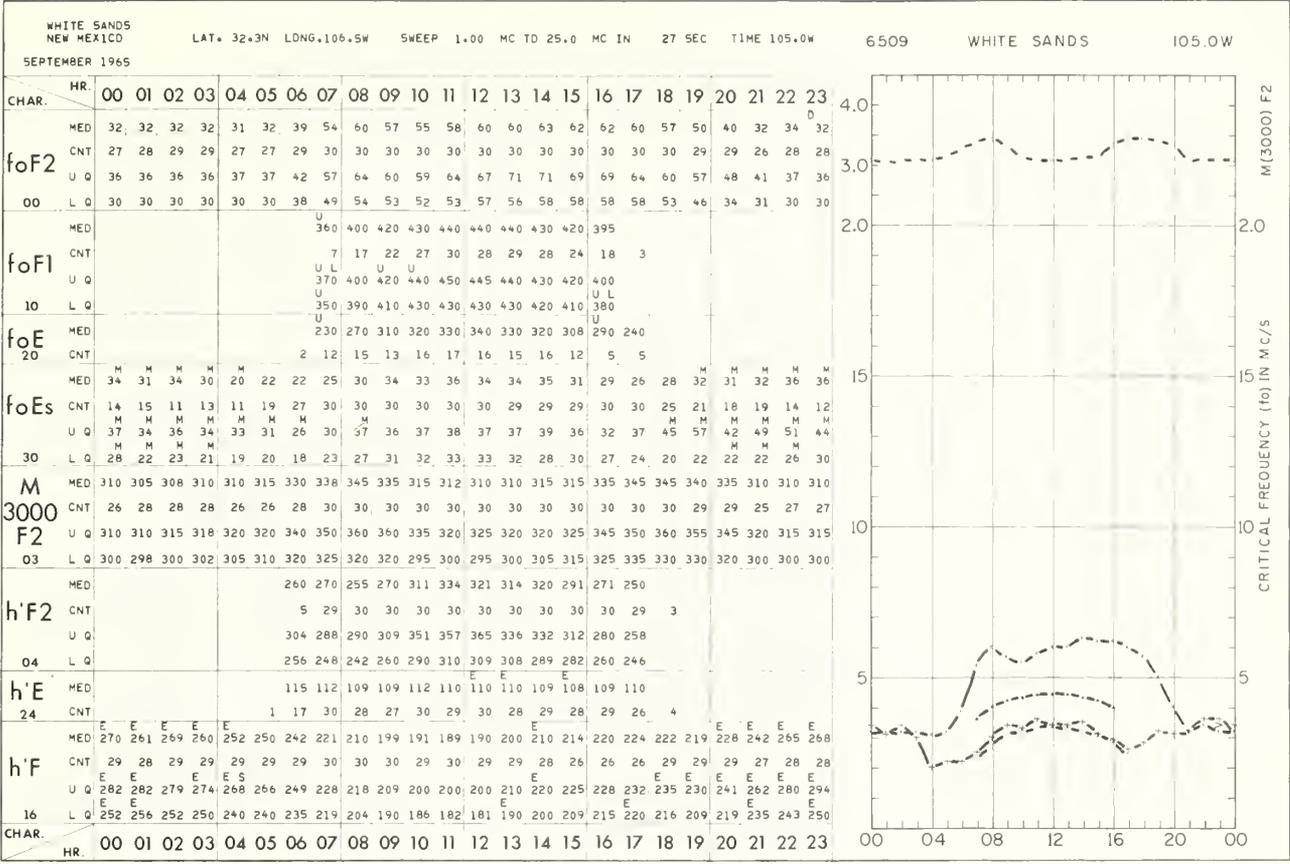
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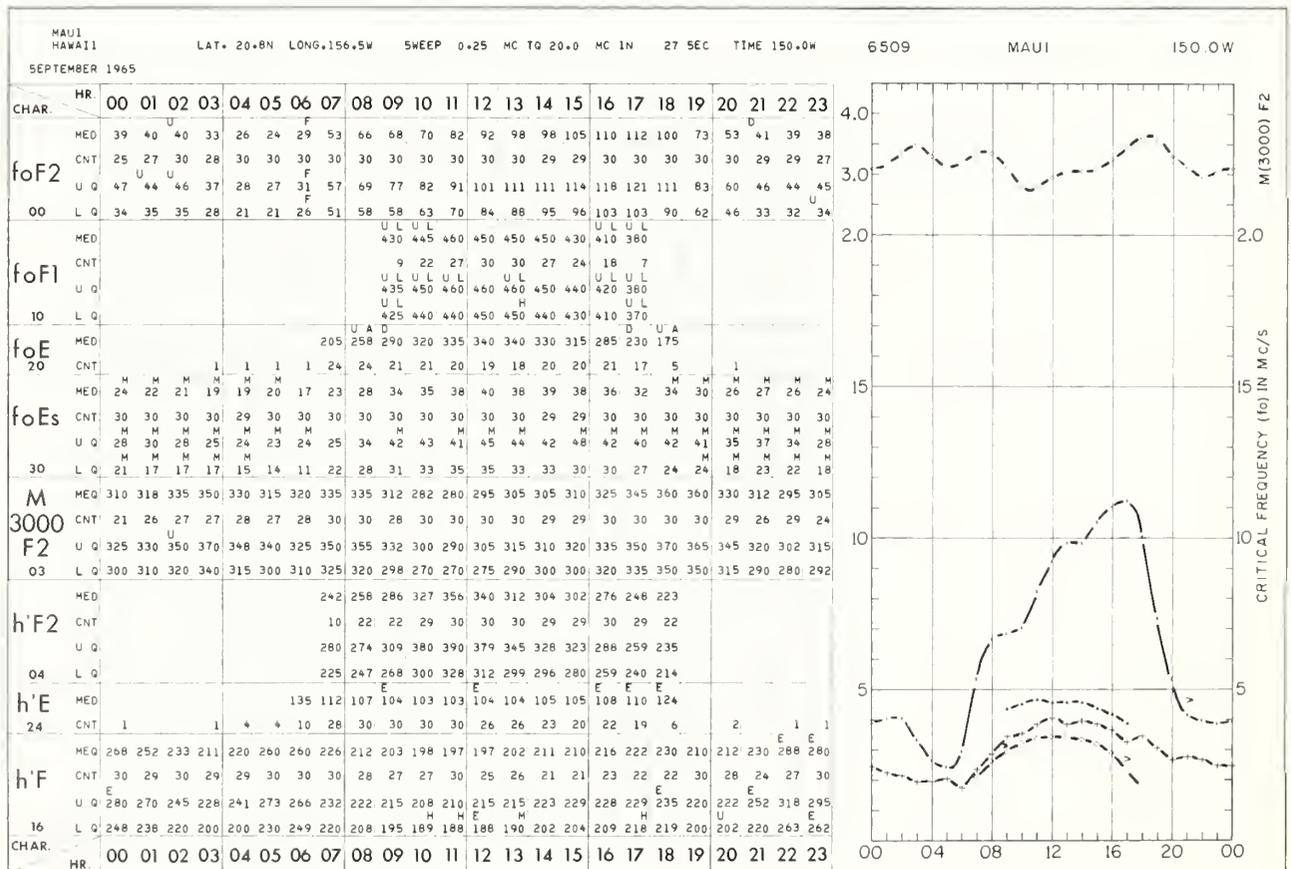
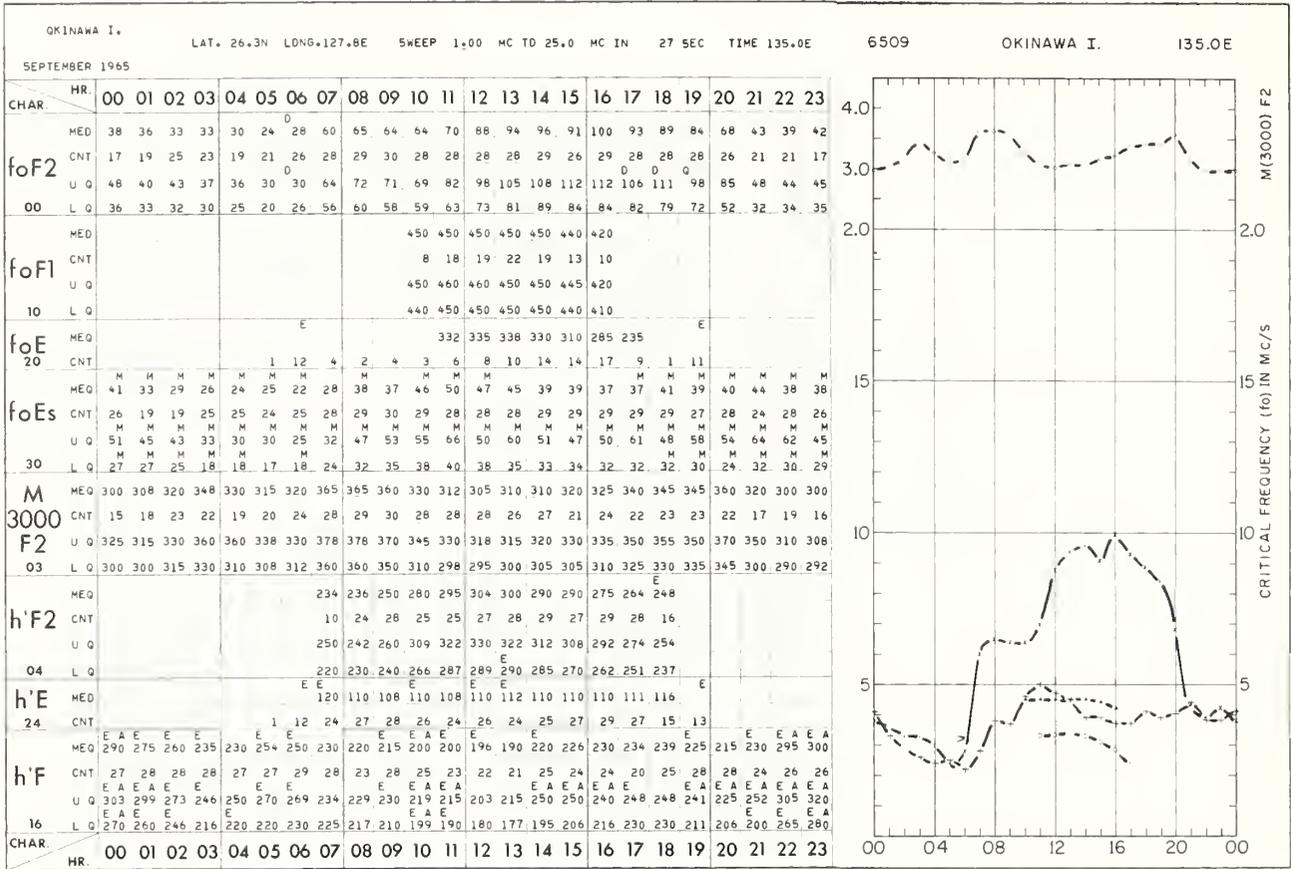
TABLES AND GRAPHS OF IONOSPHERIC DATA

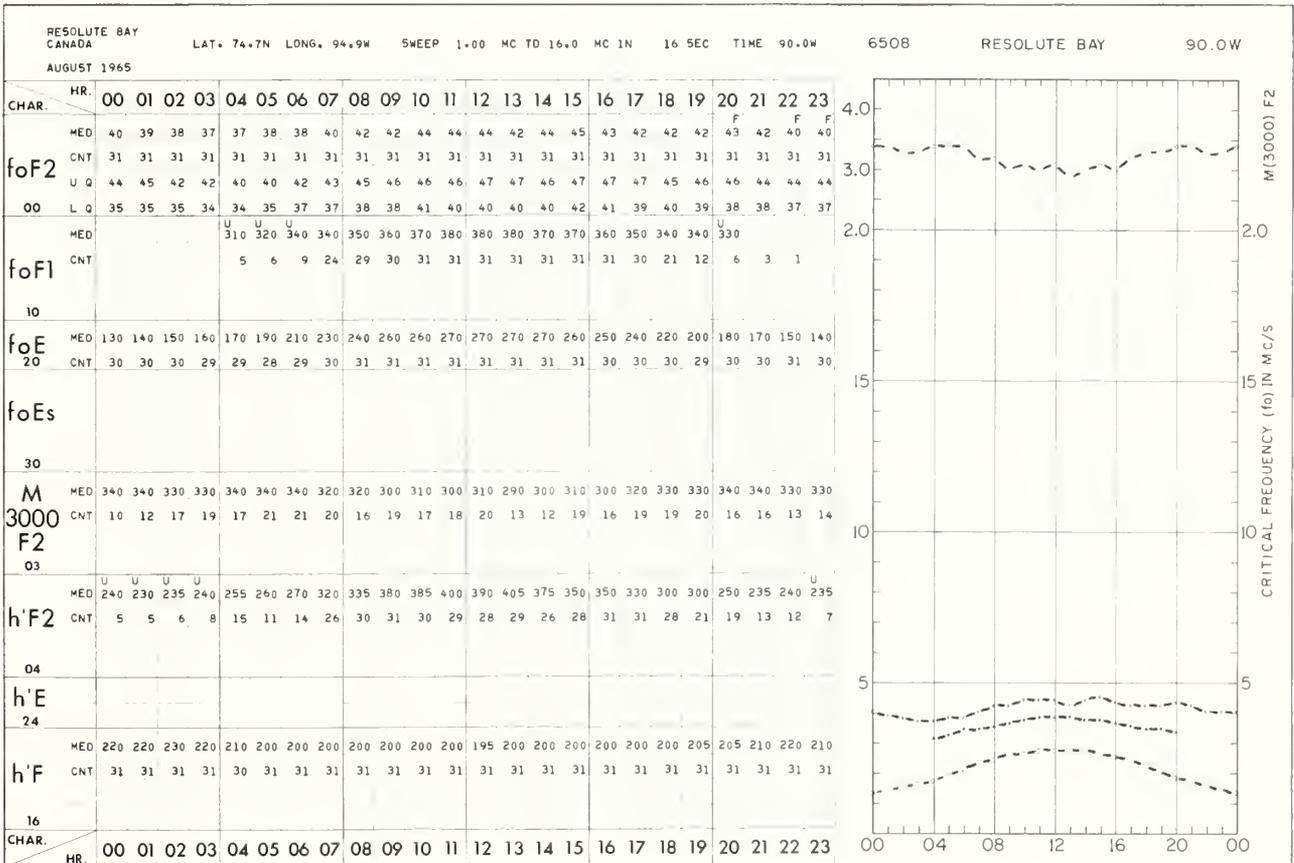
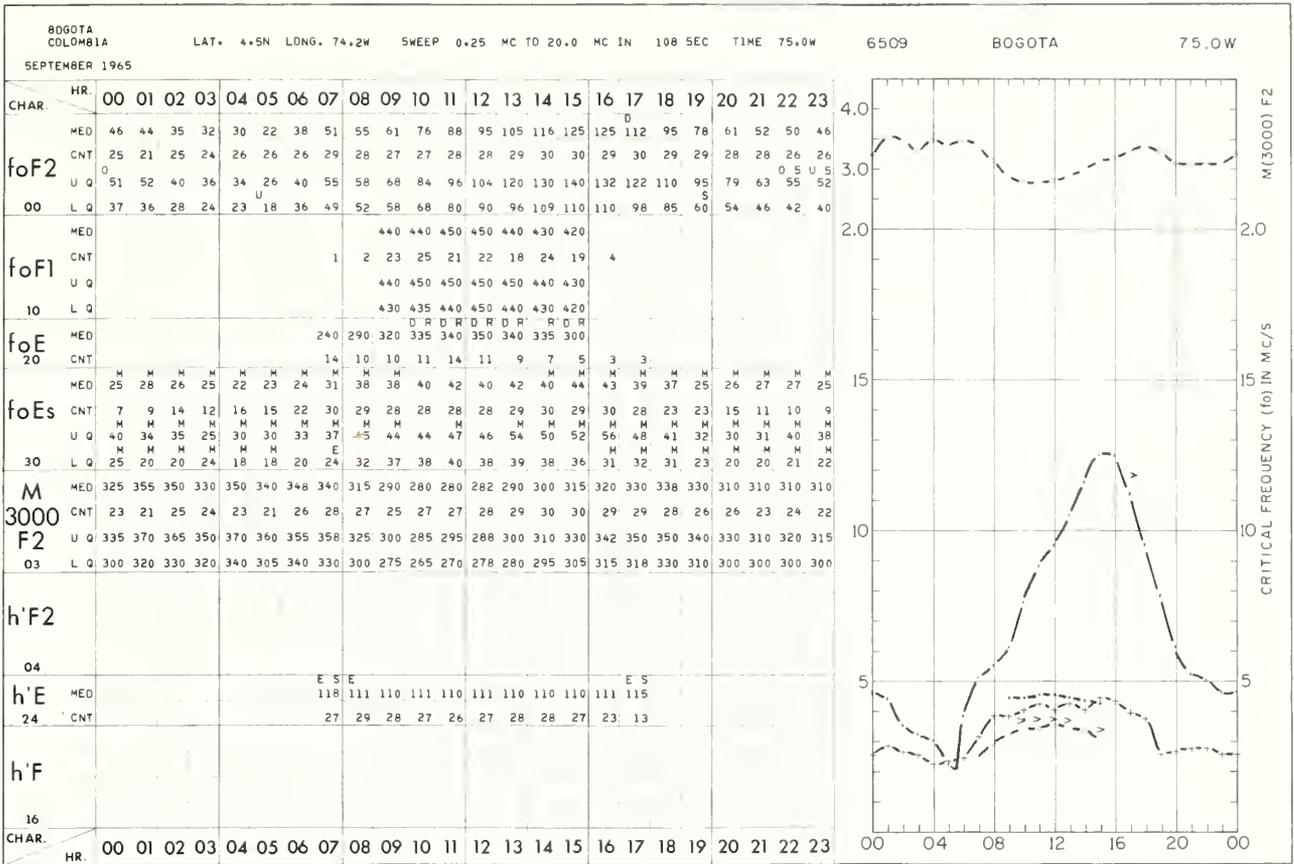
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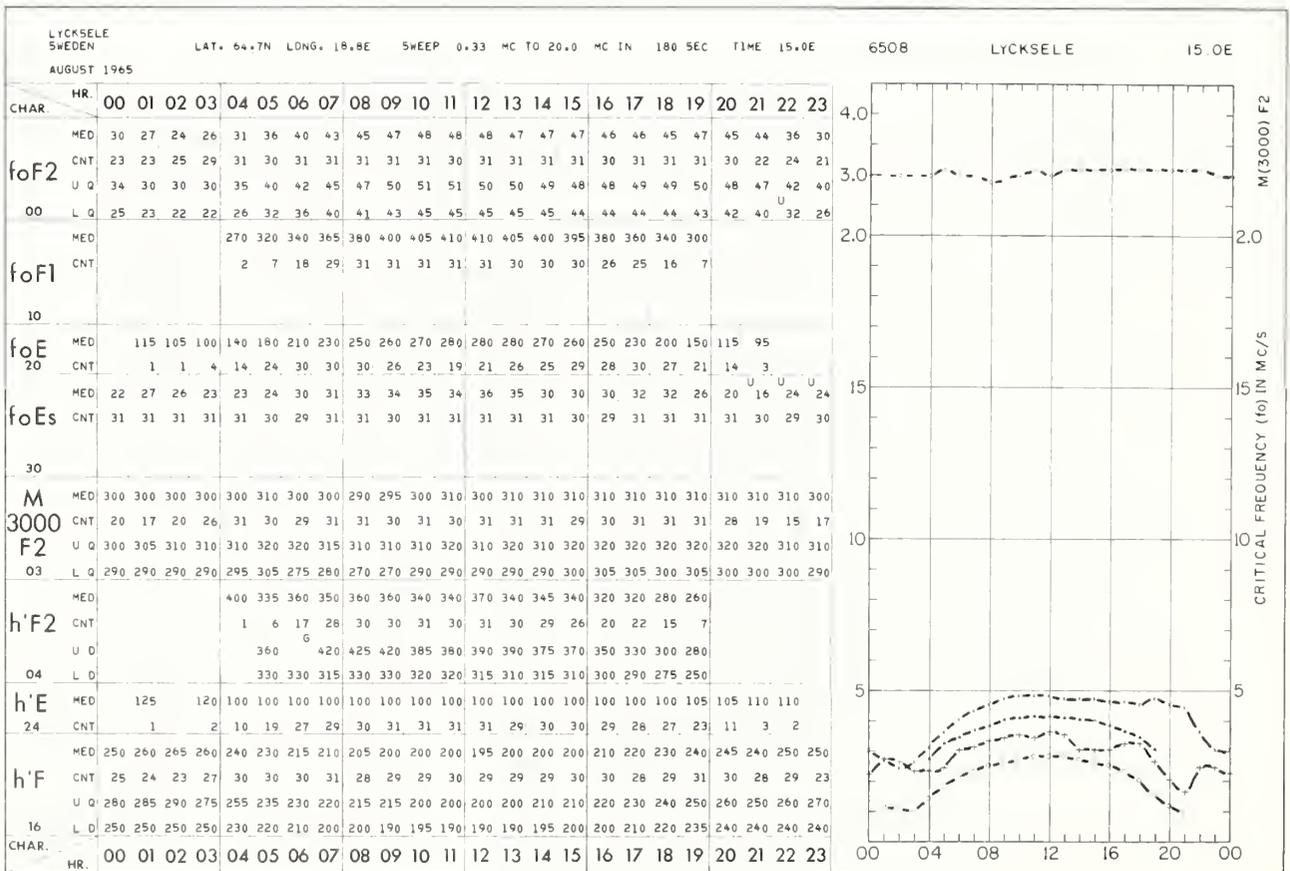
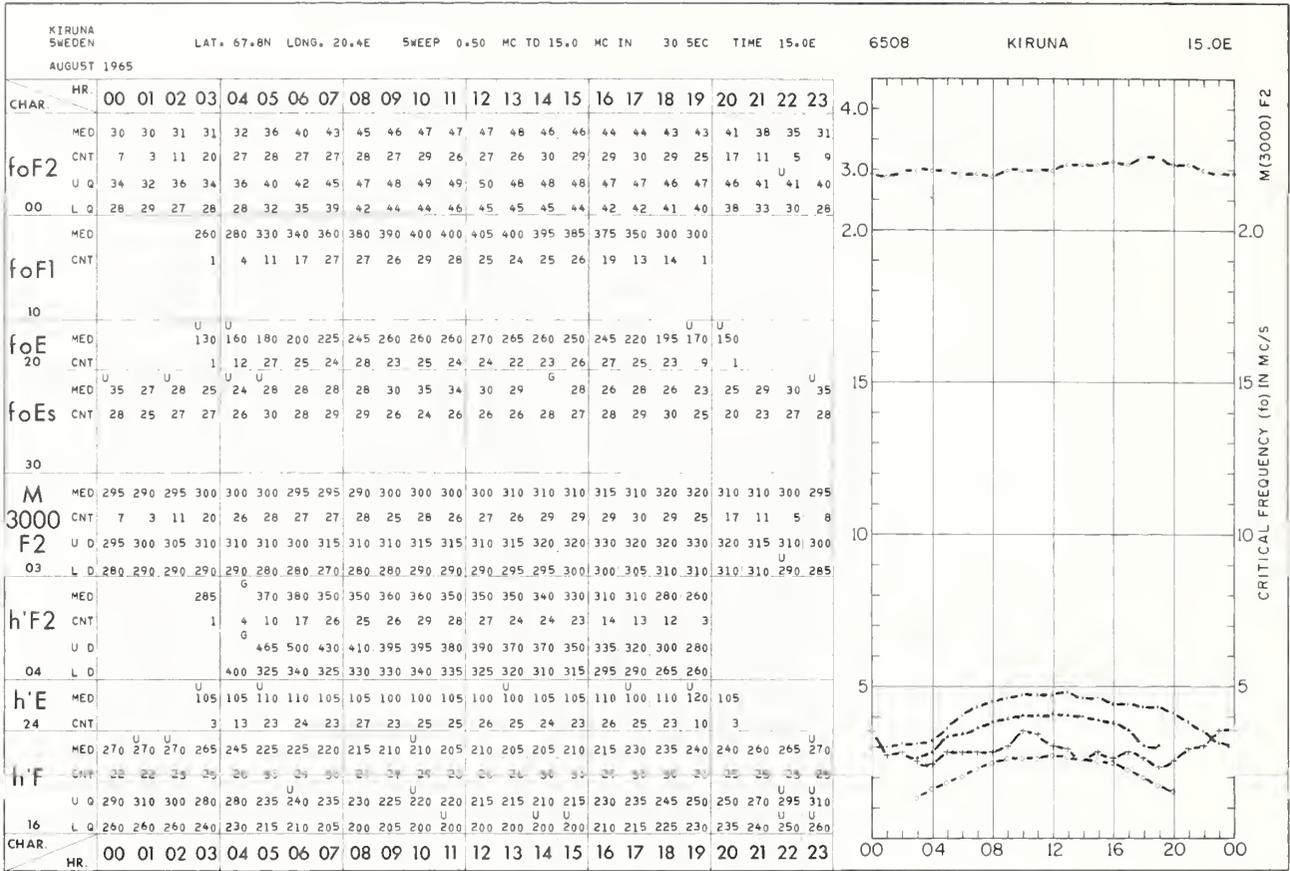


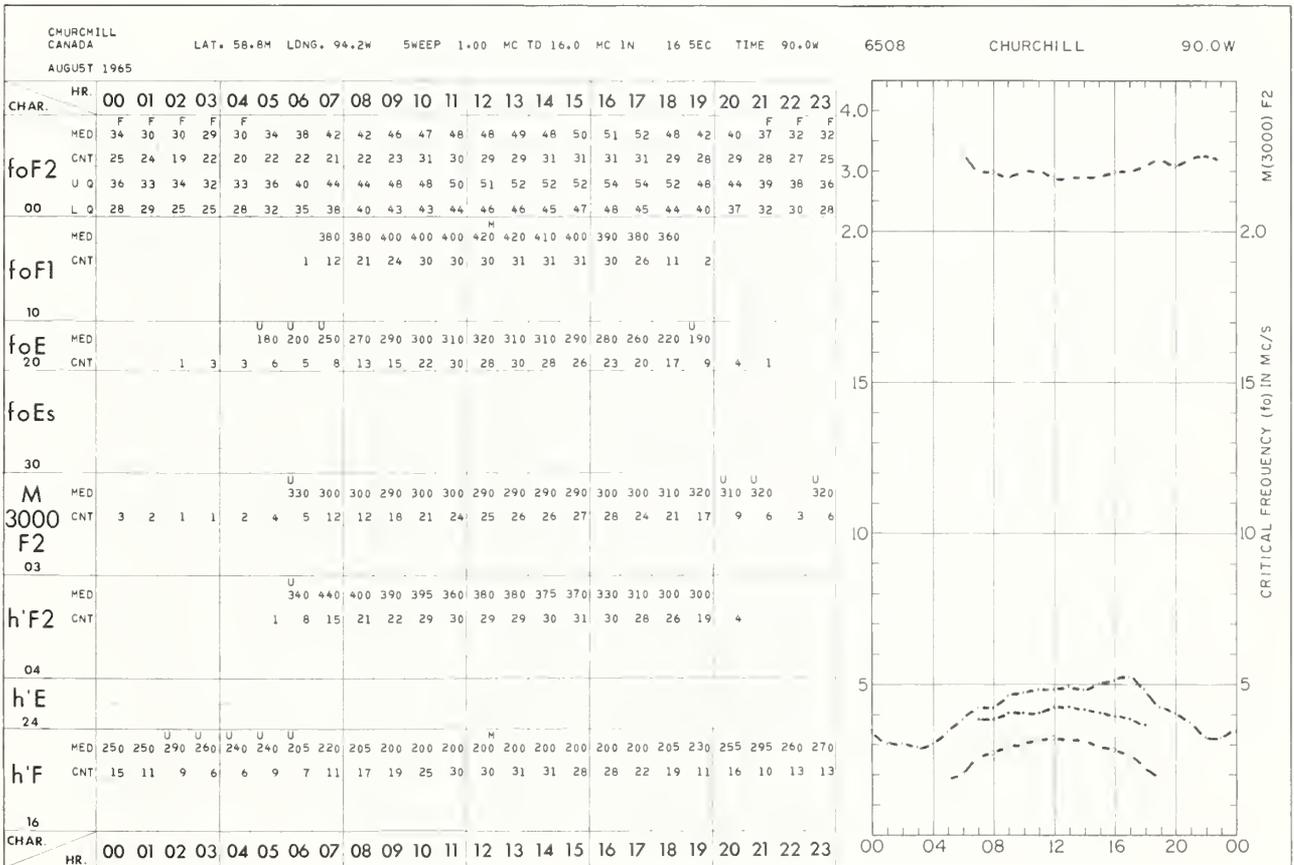
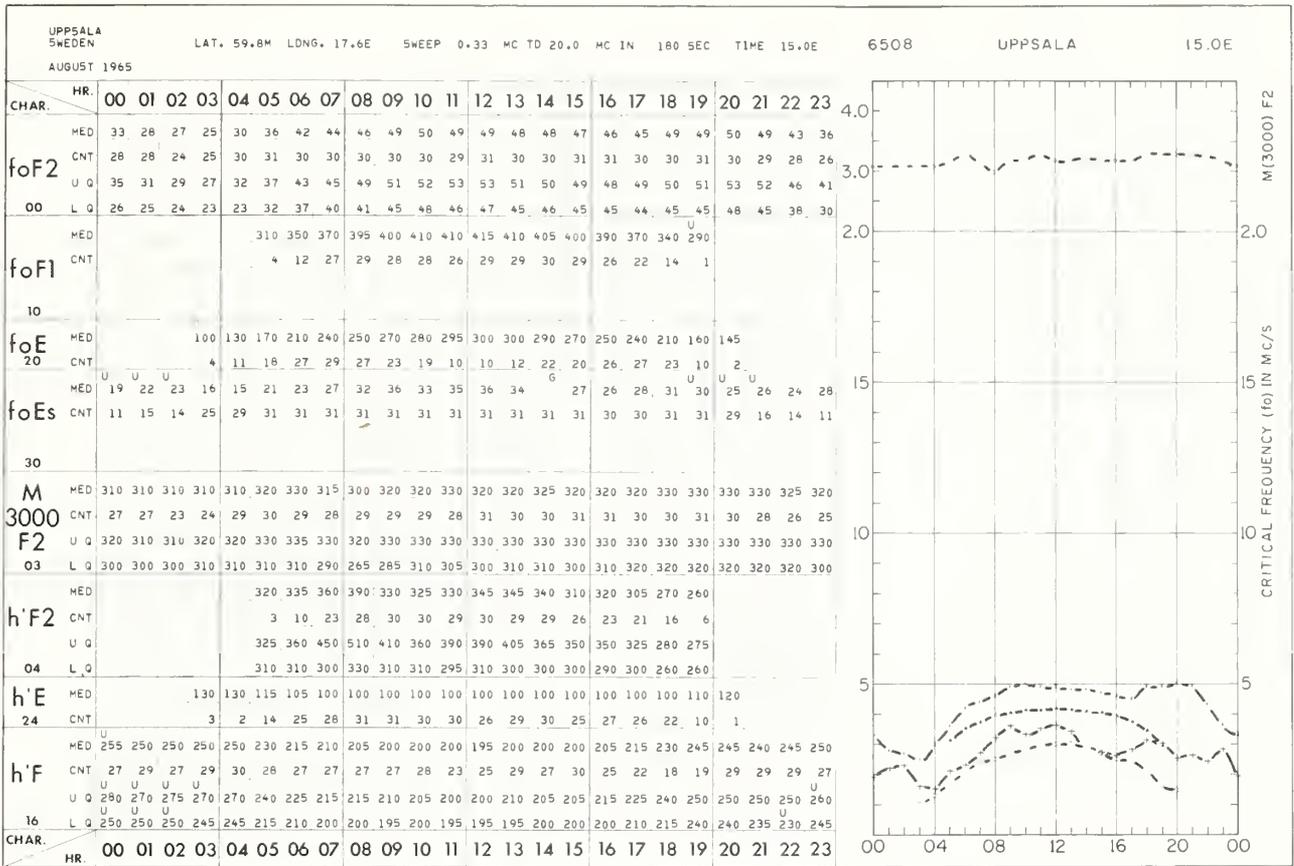


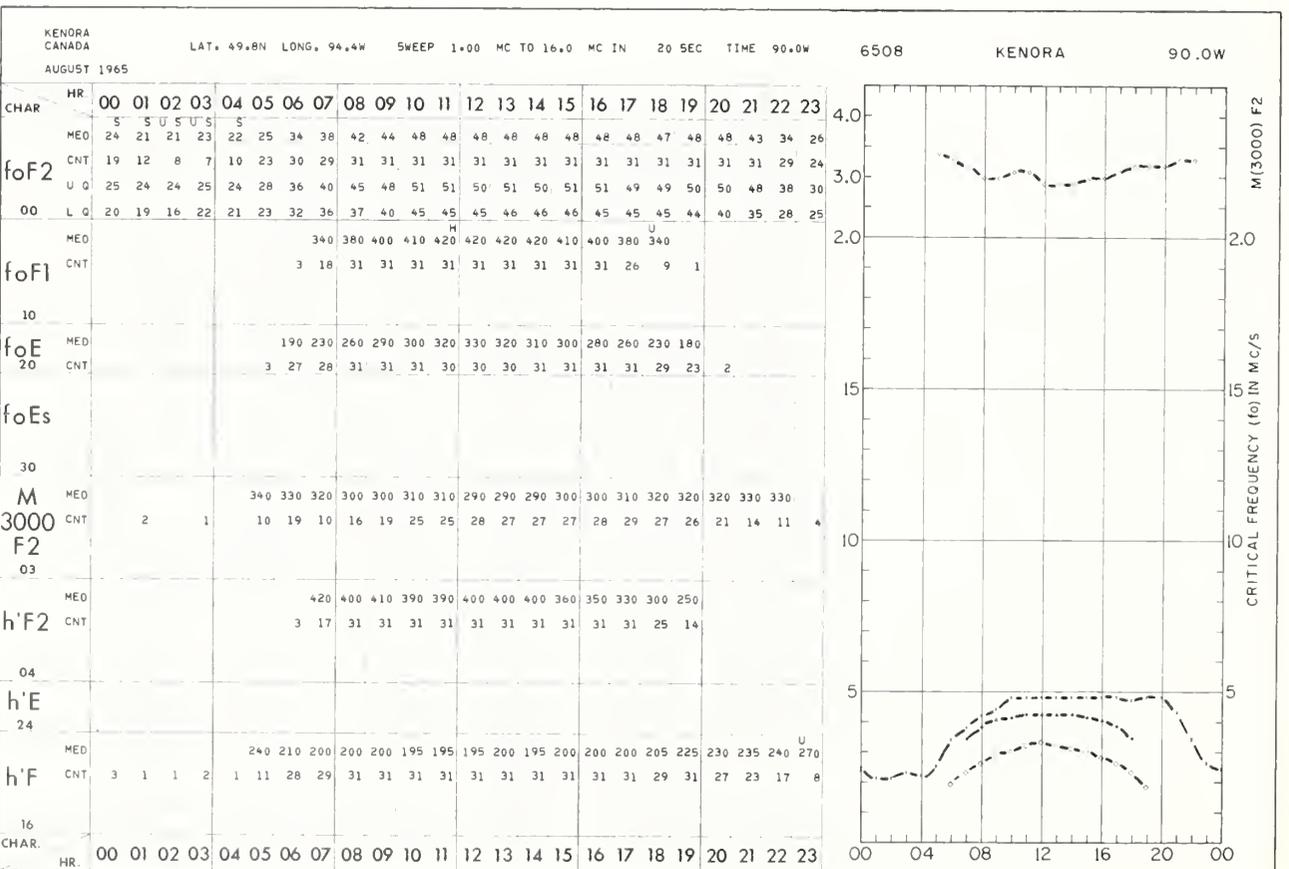
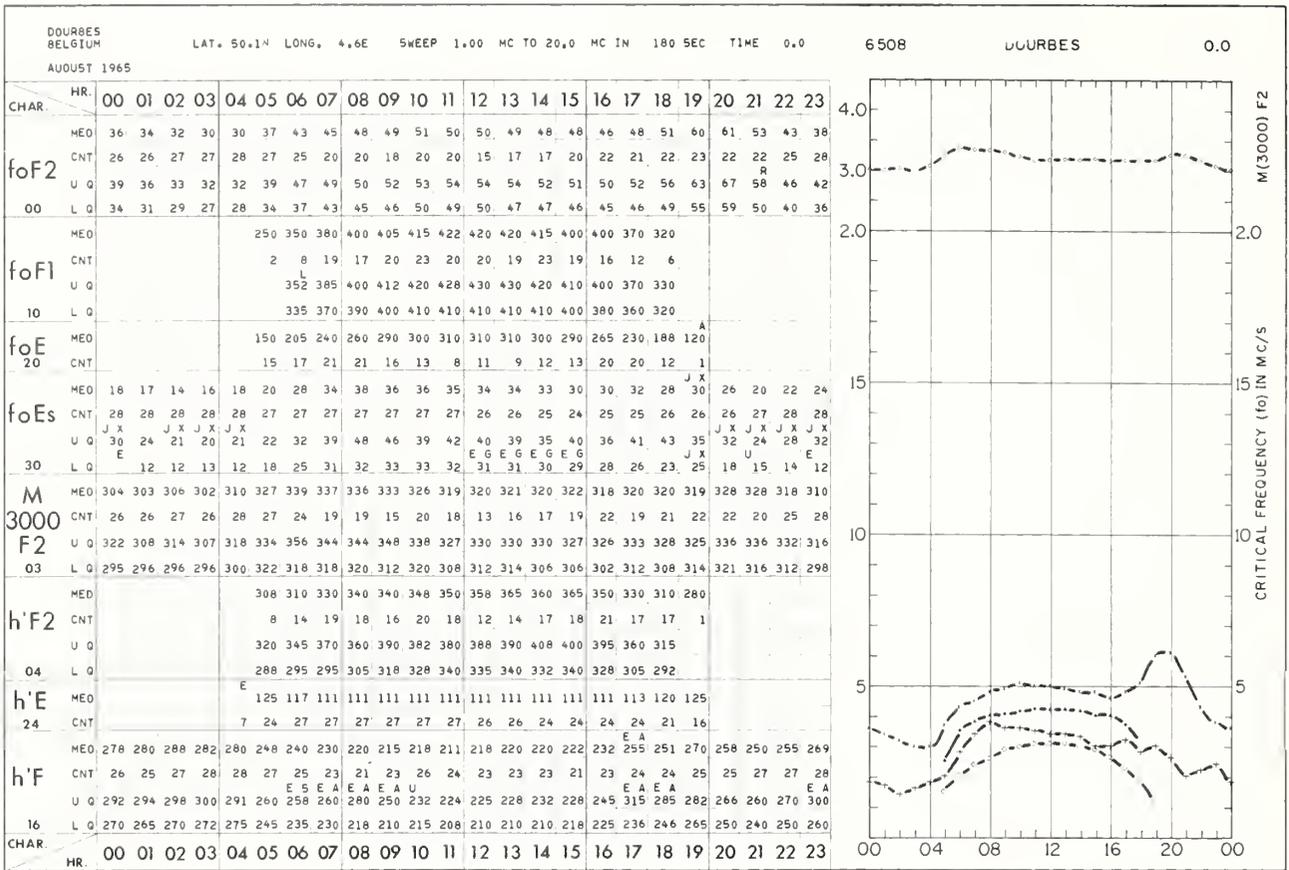


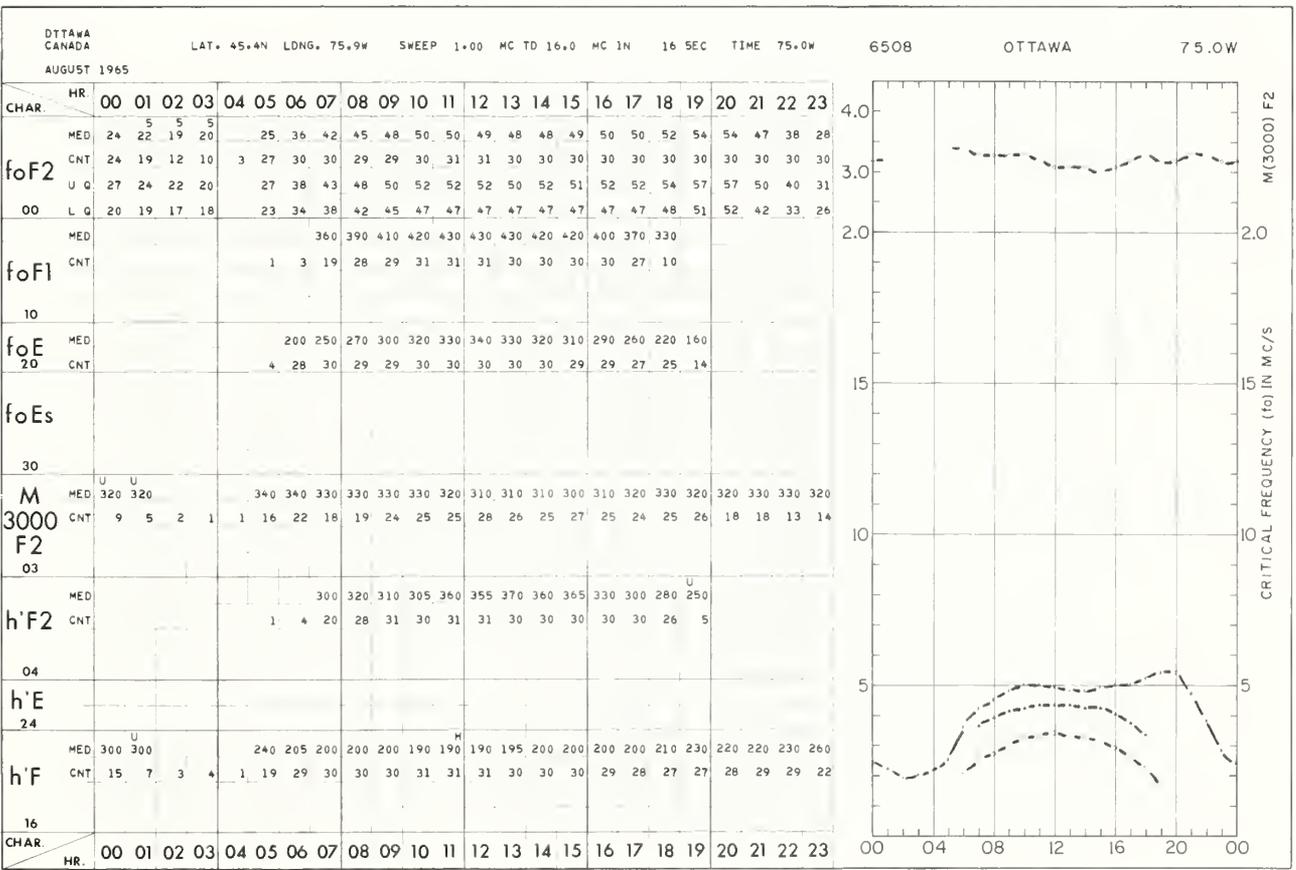
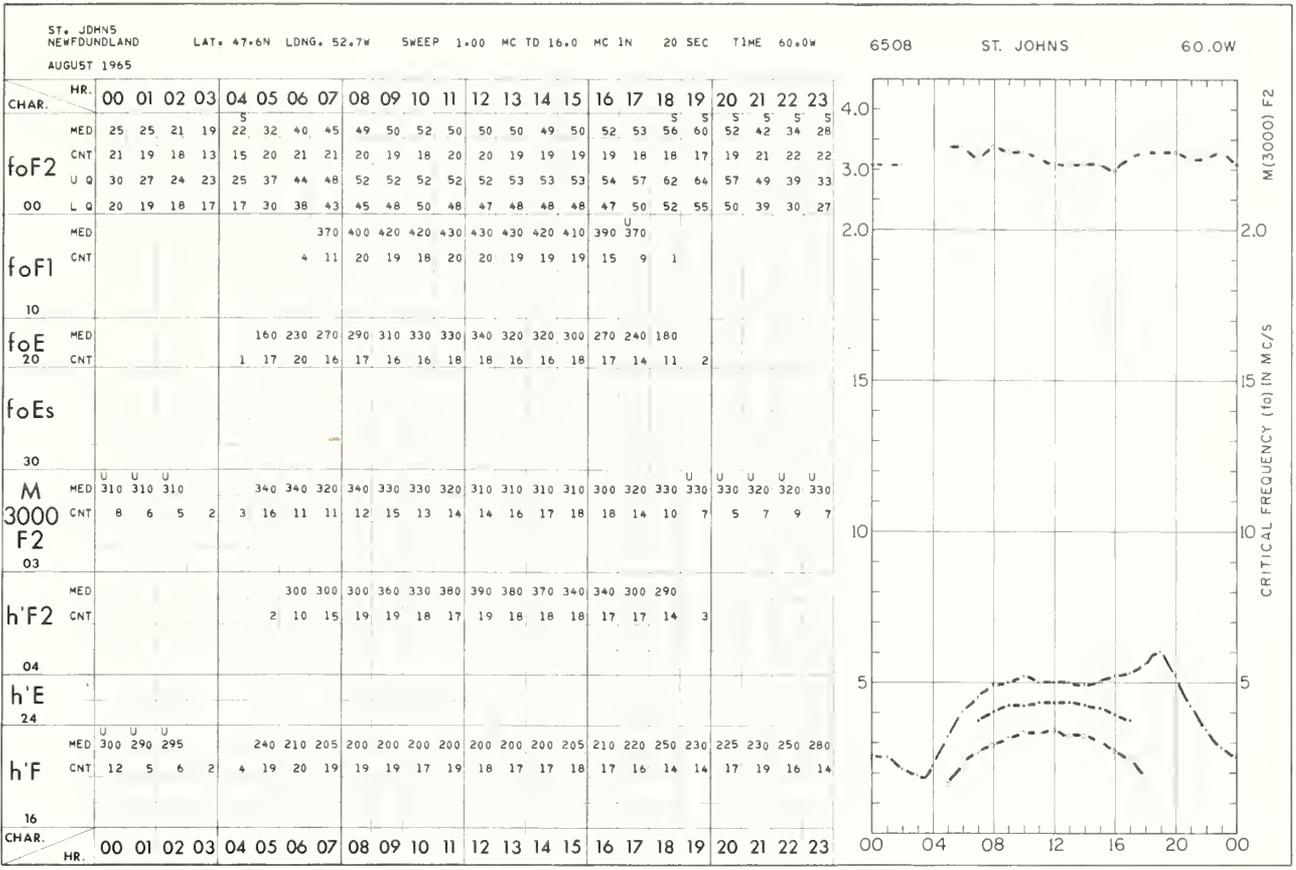


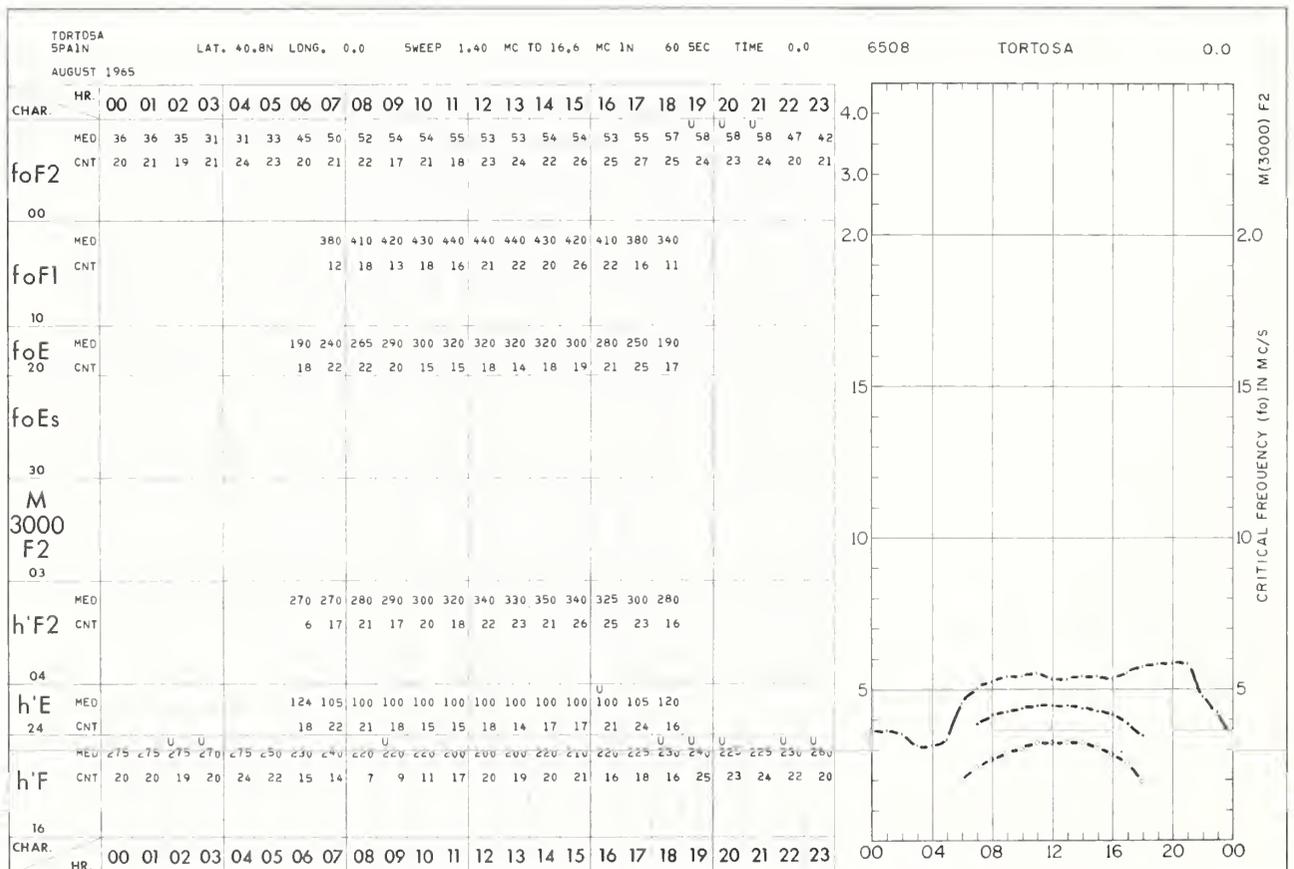
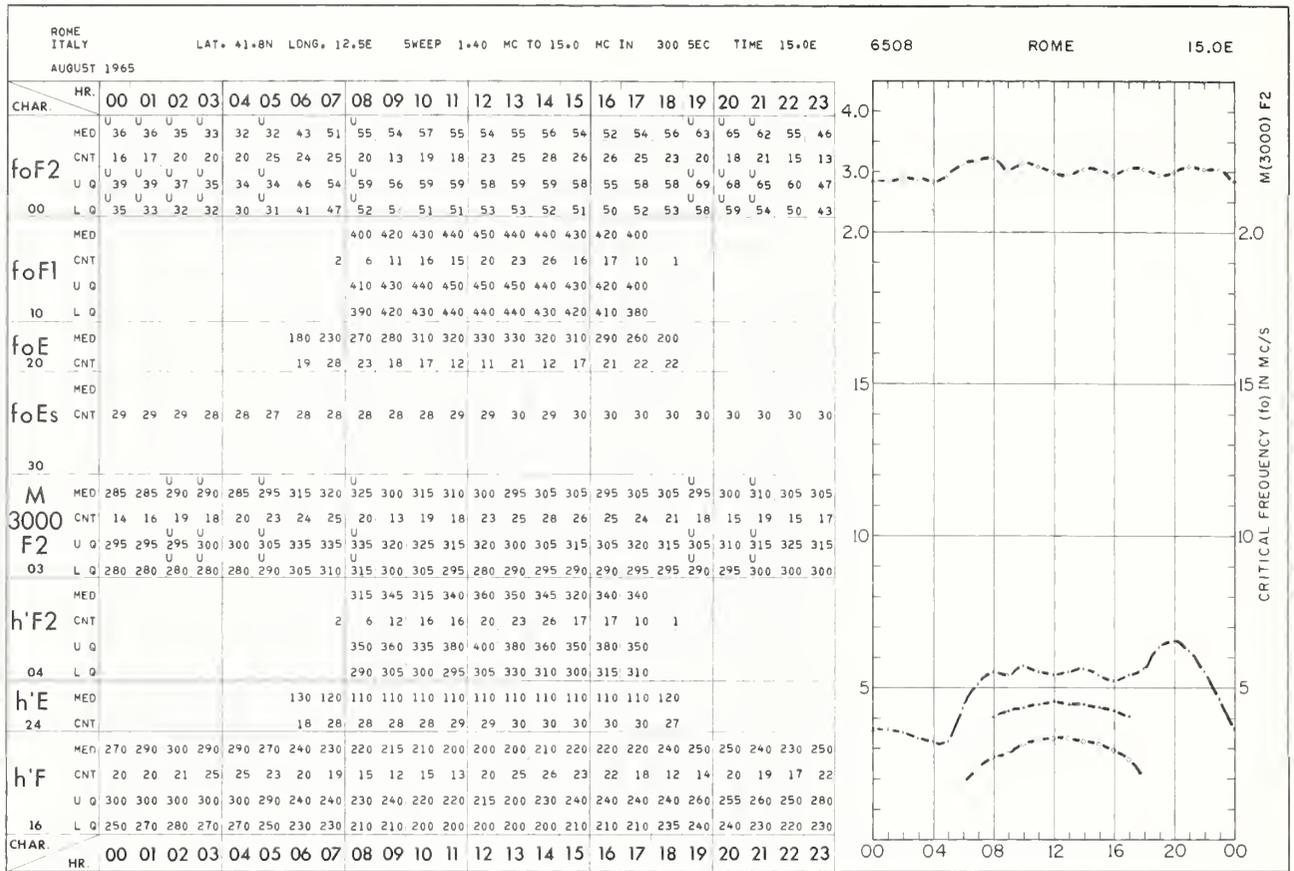


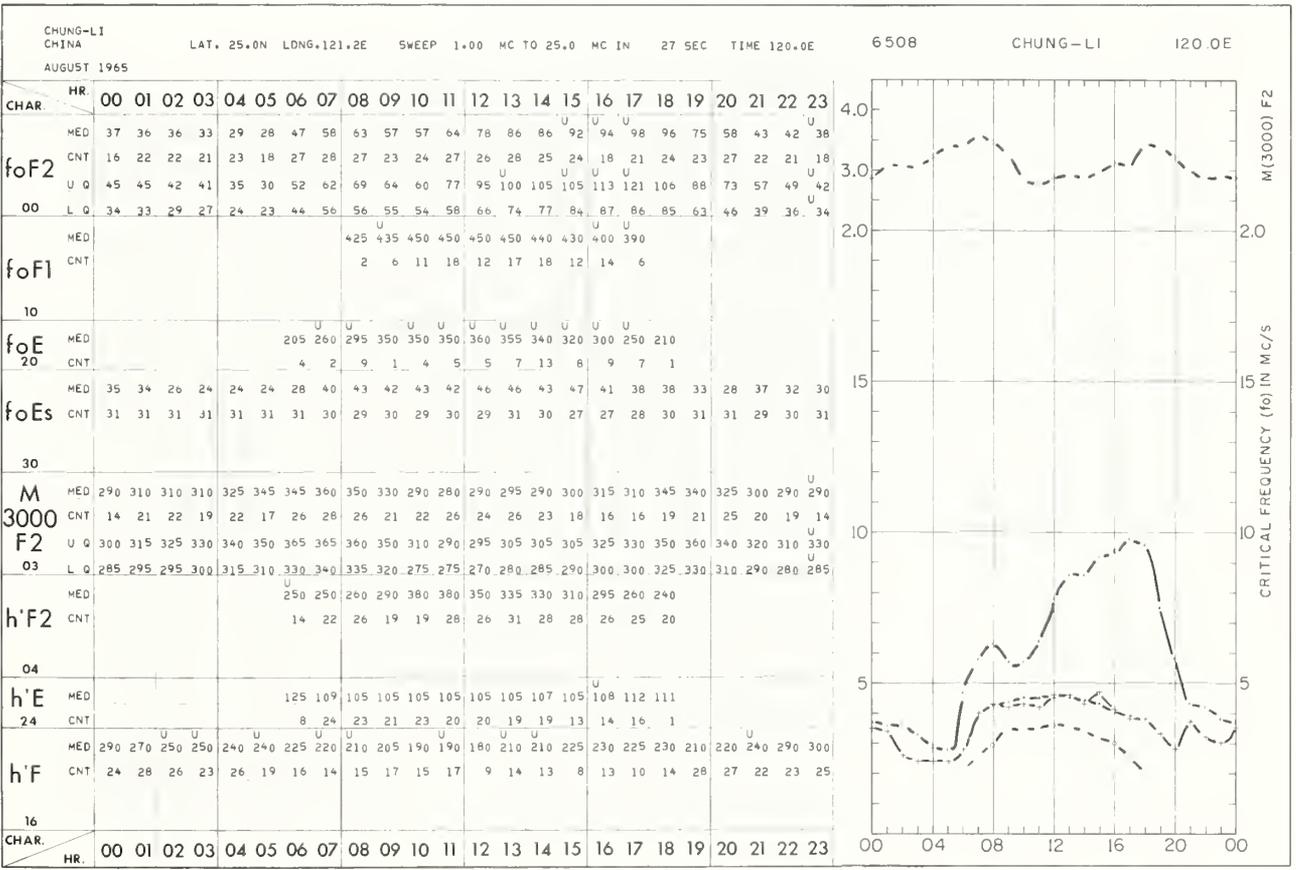
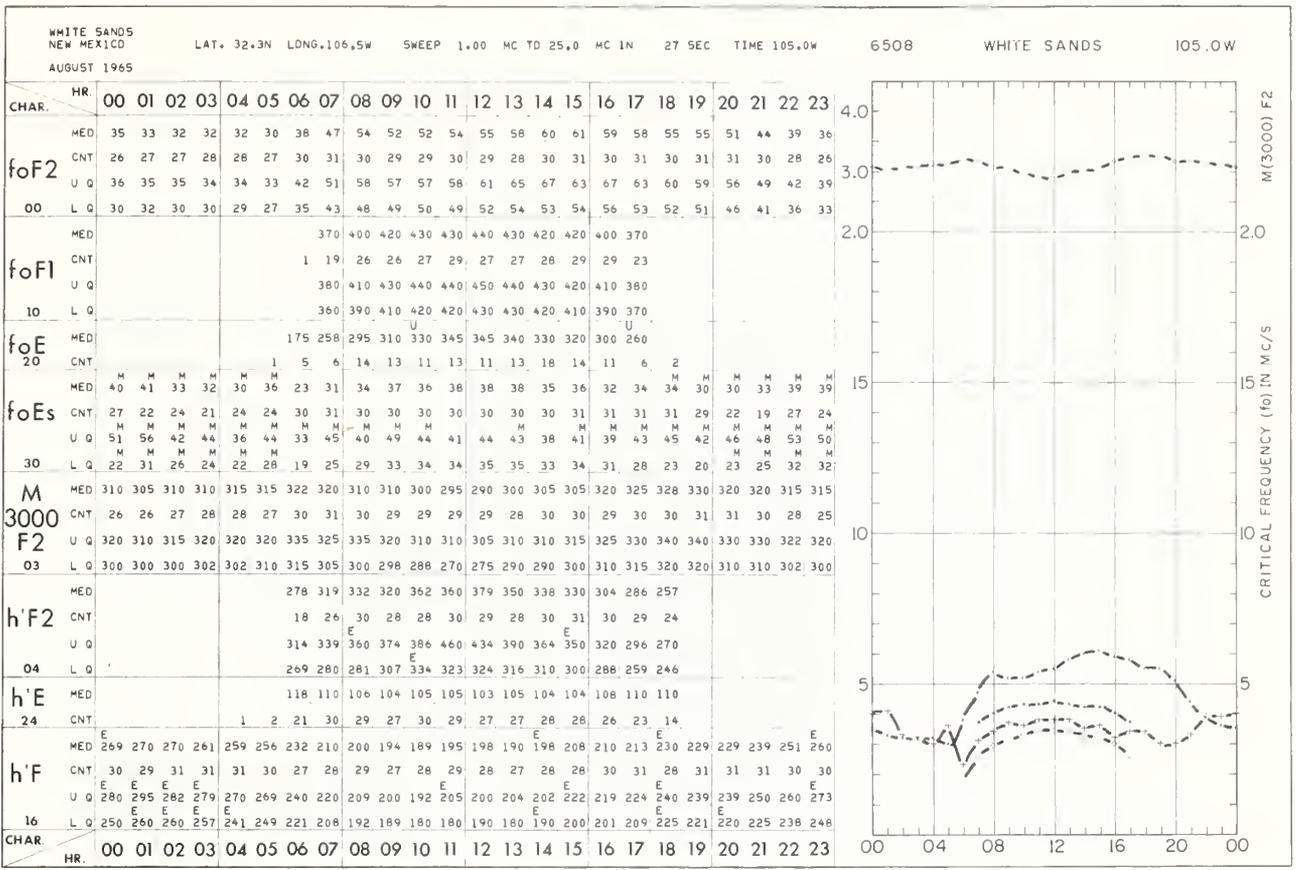


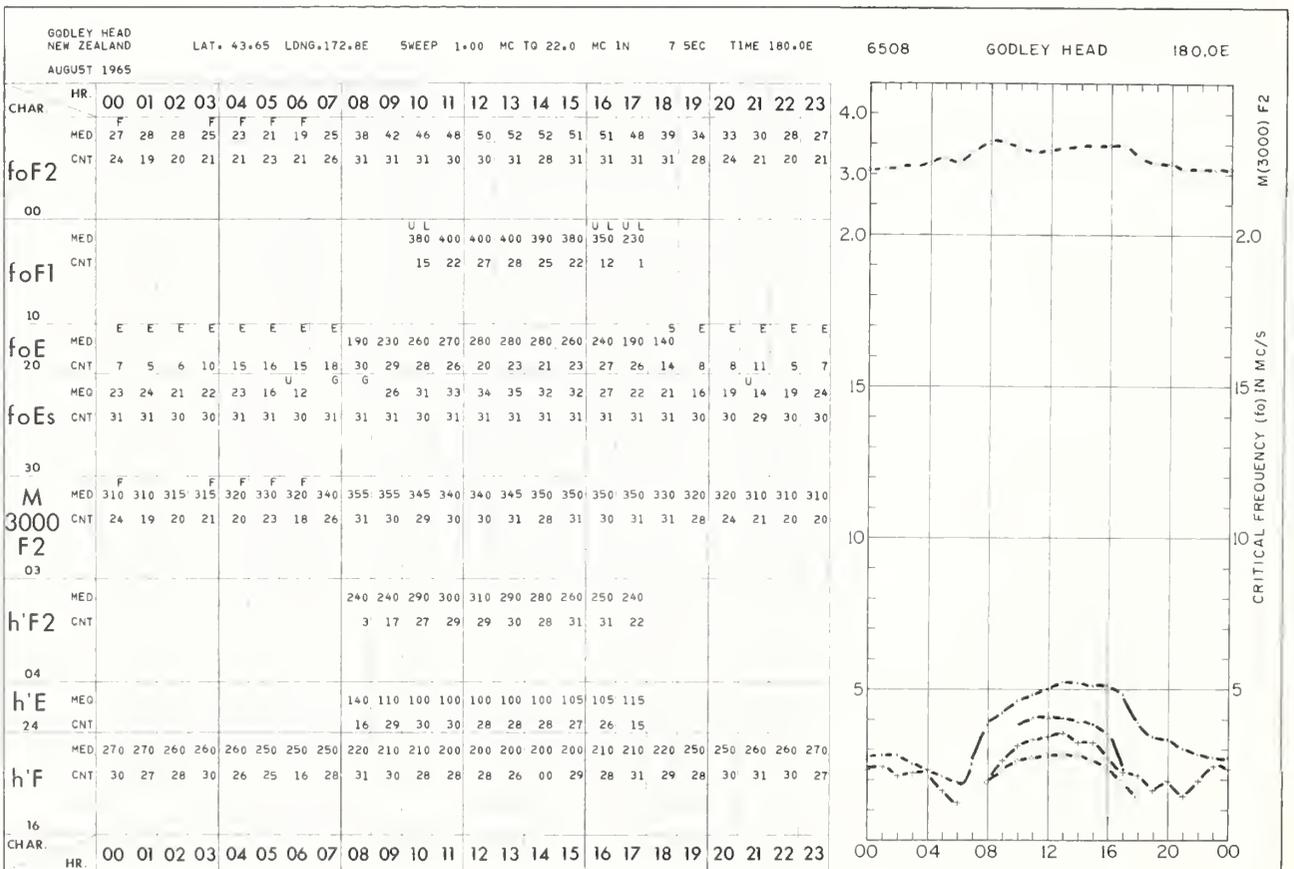
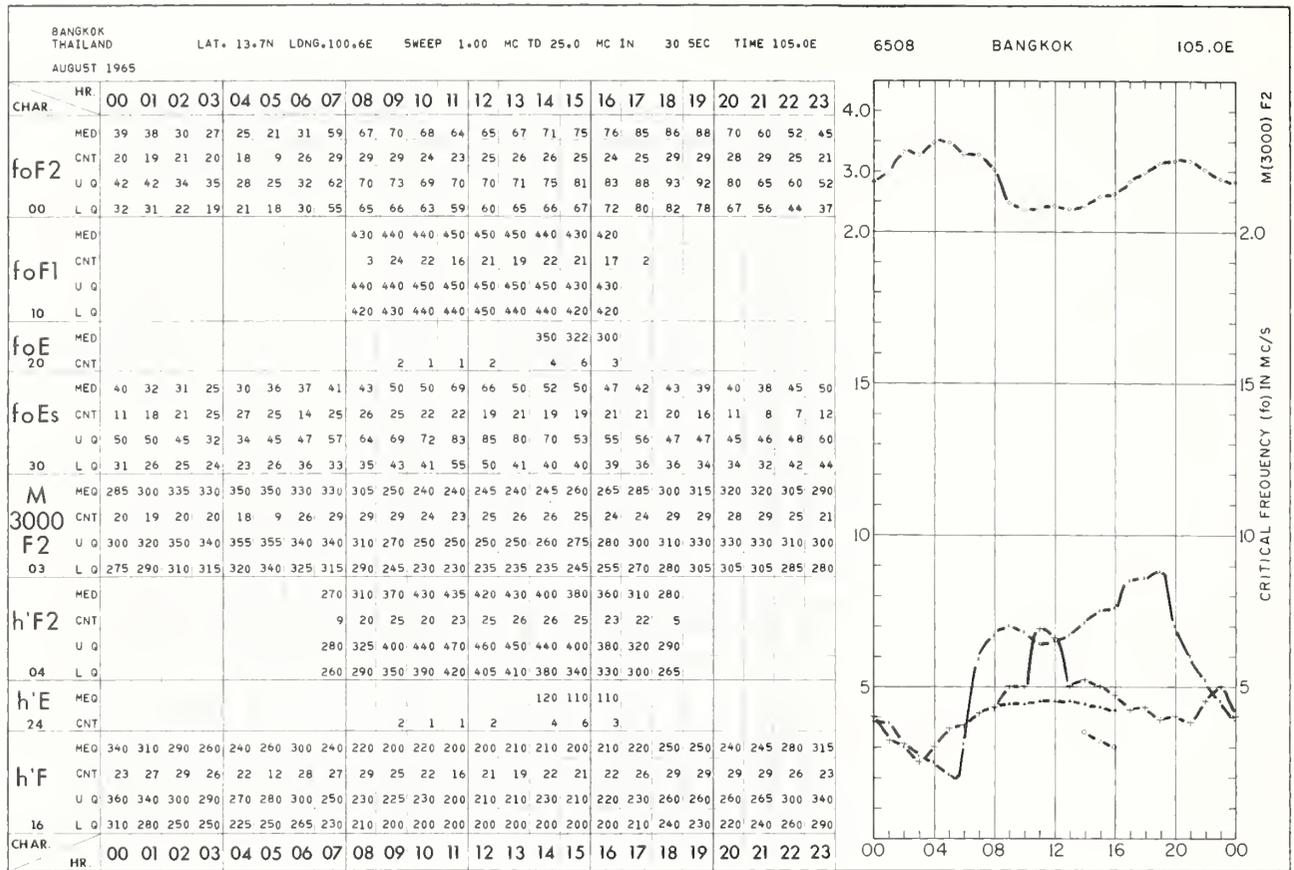


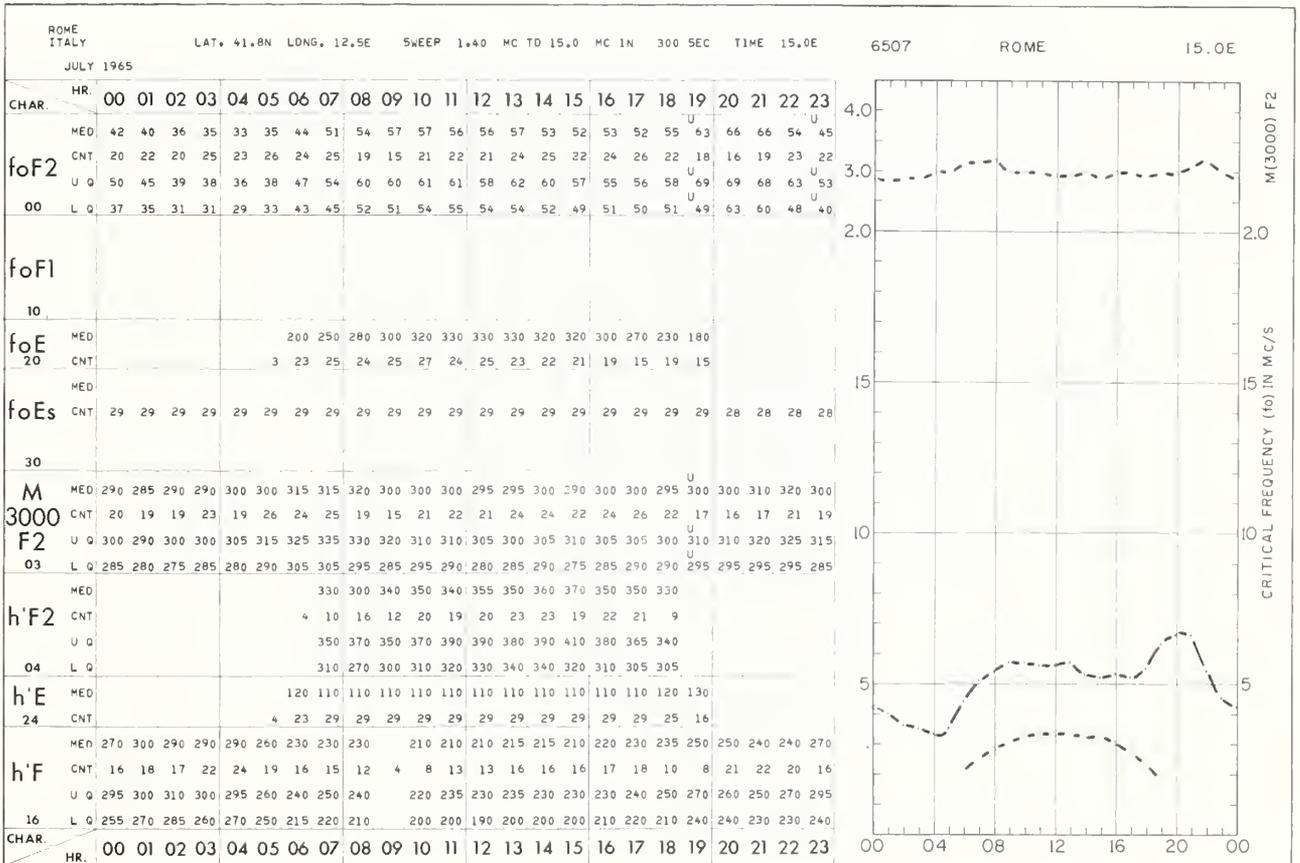
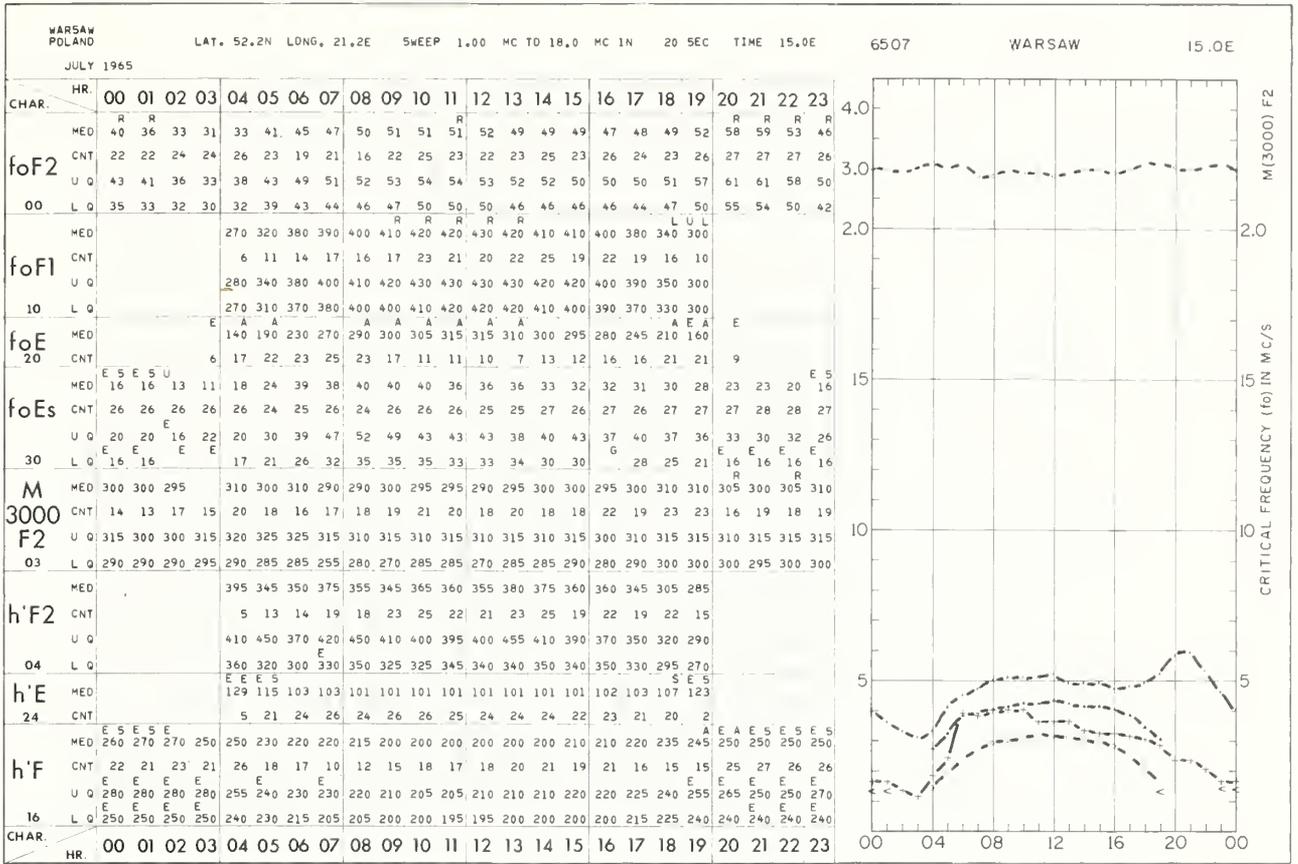


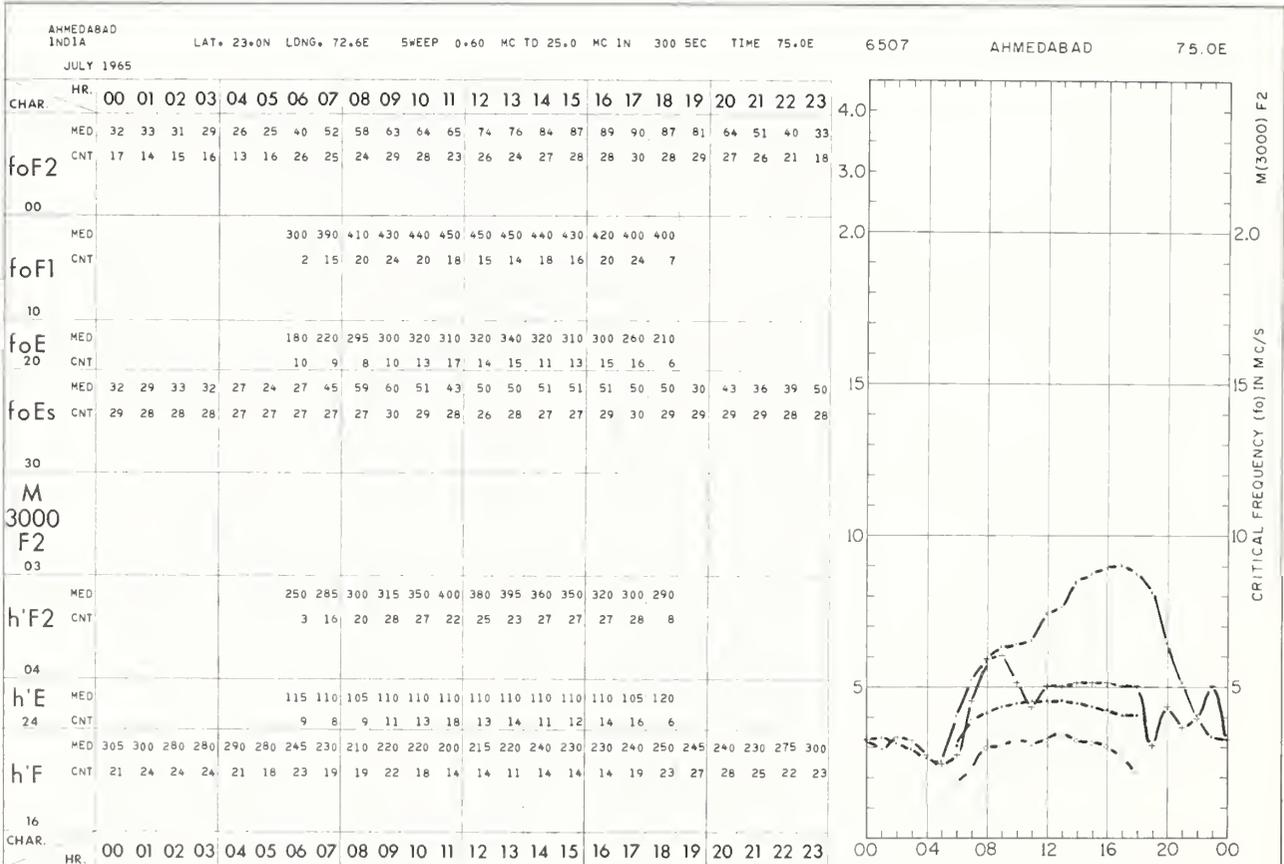
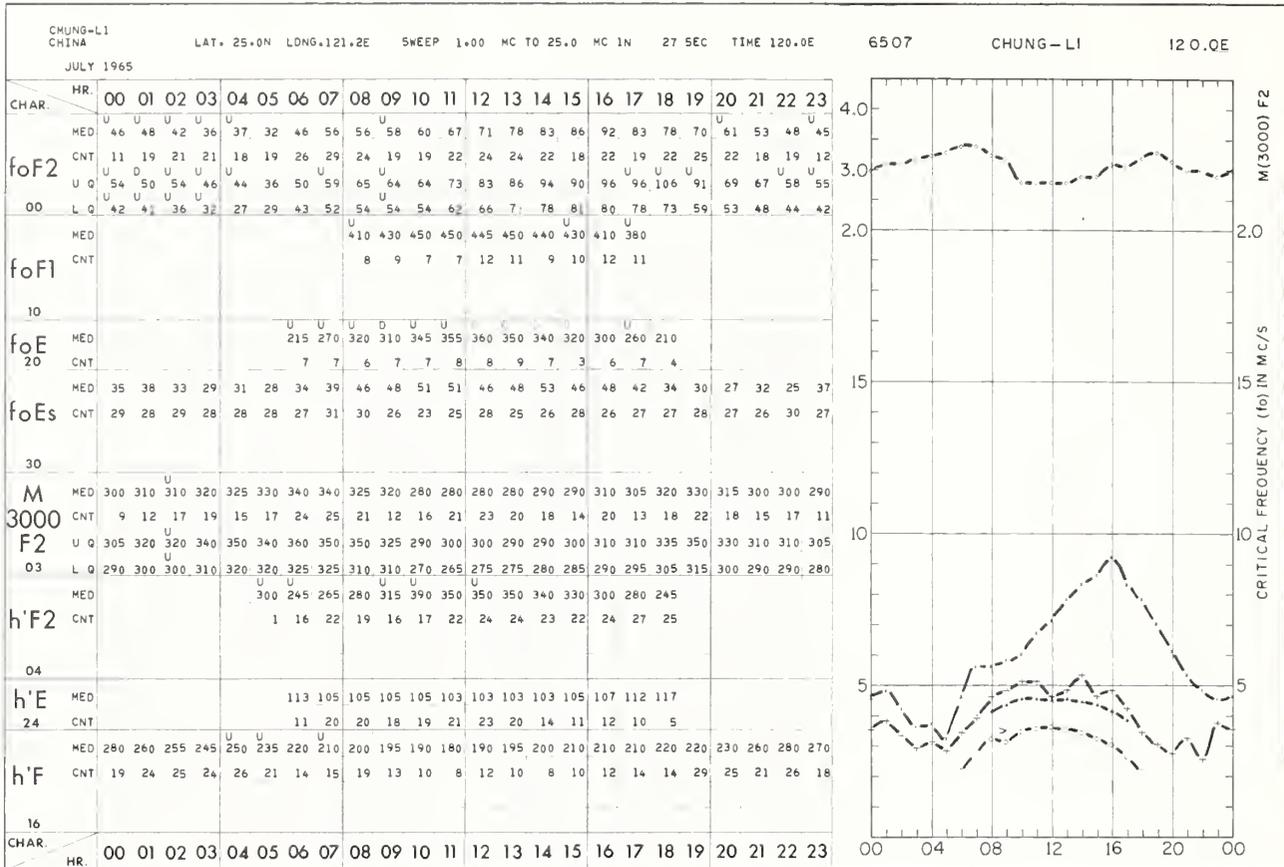


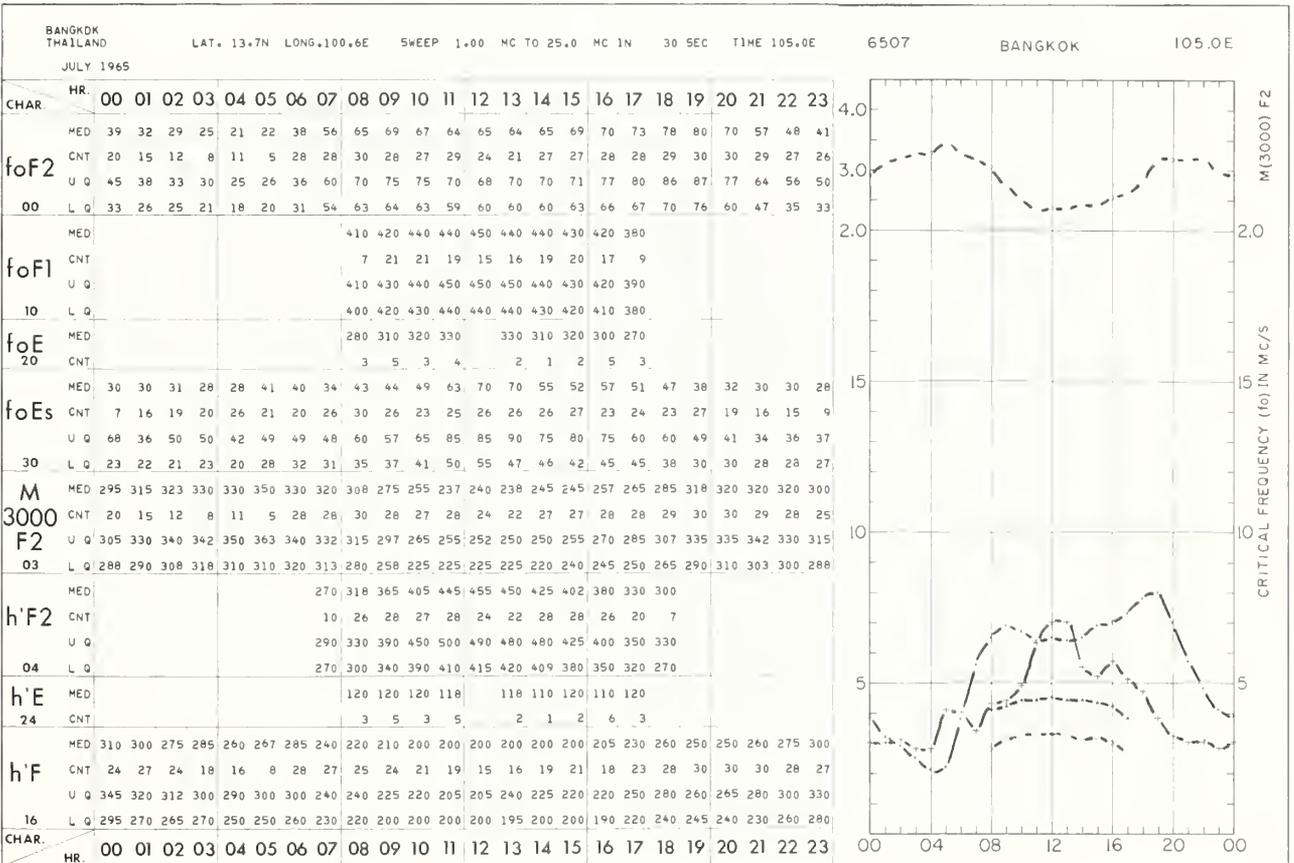
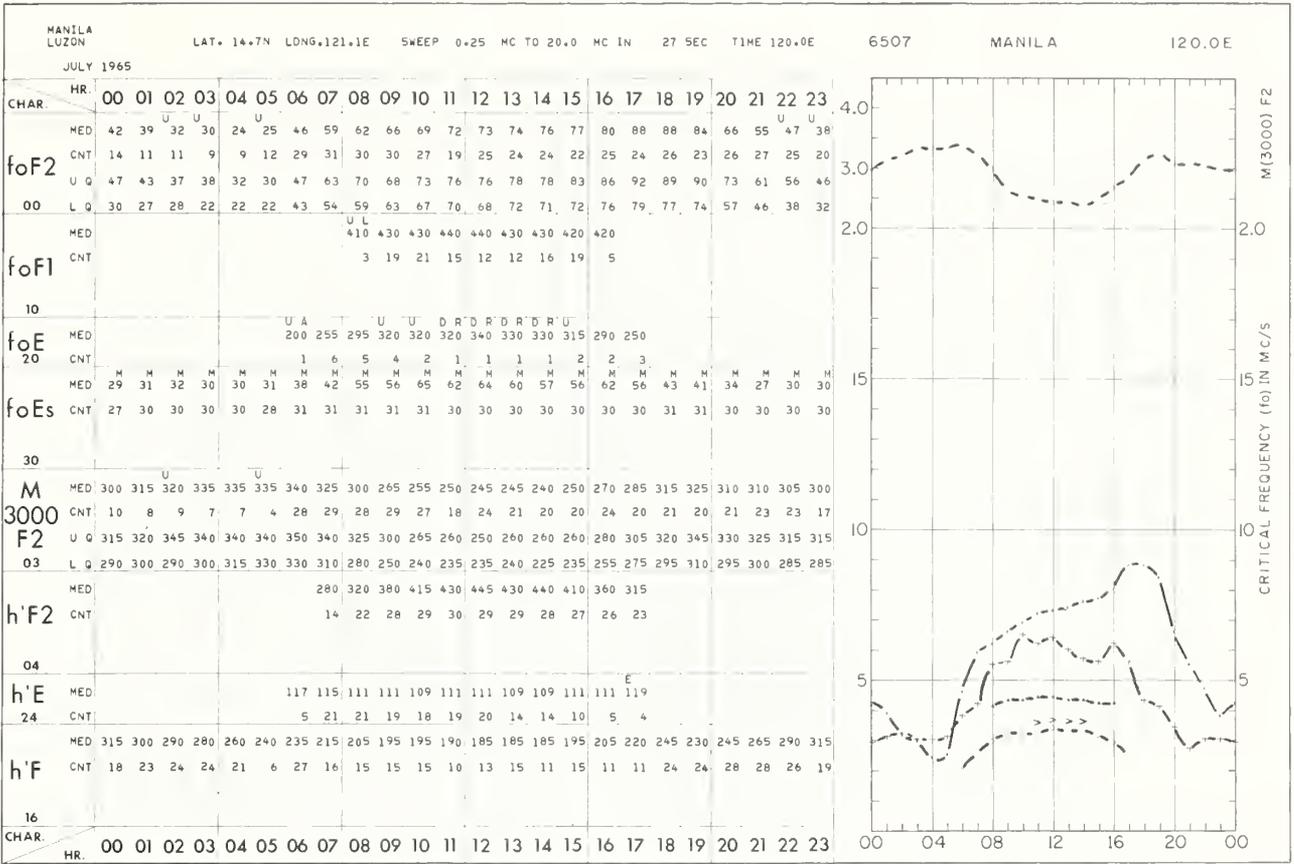


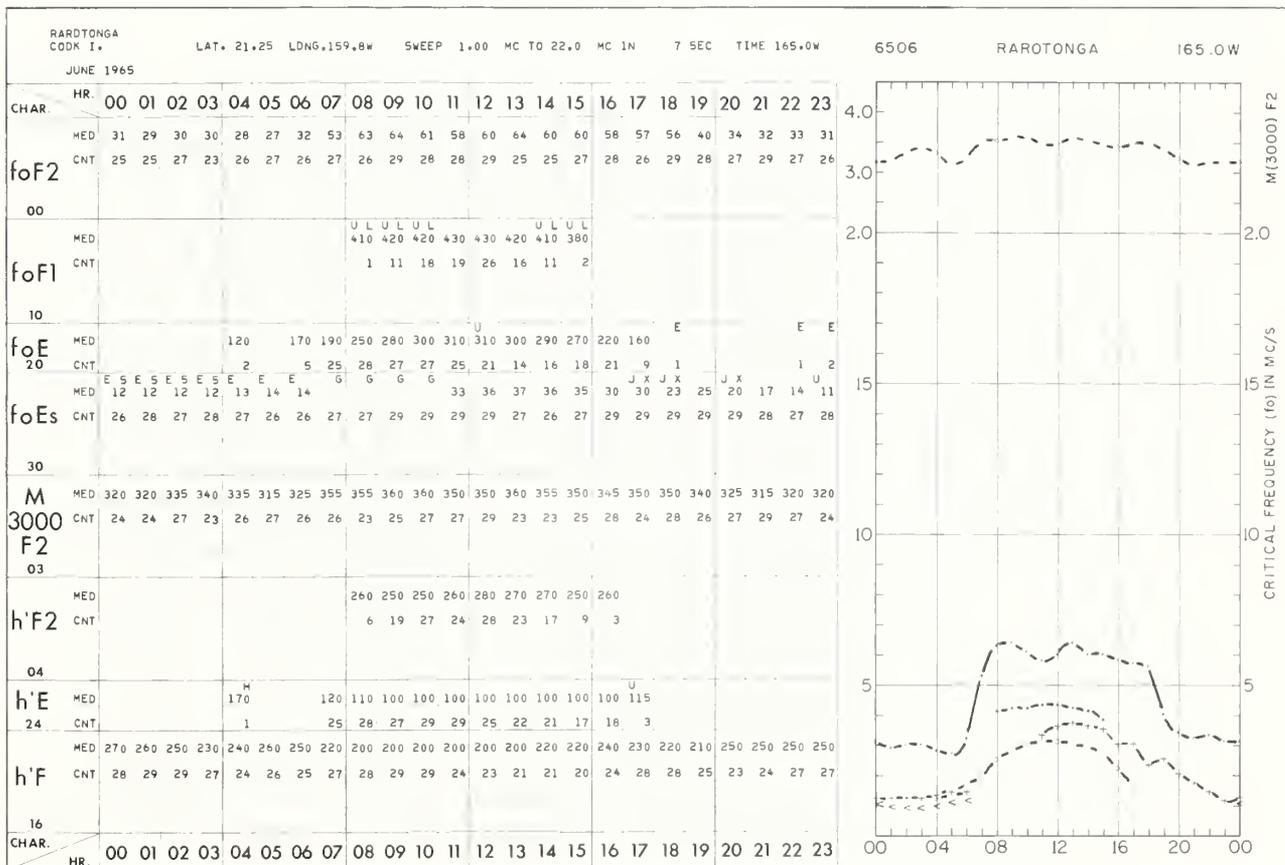
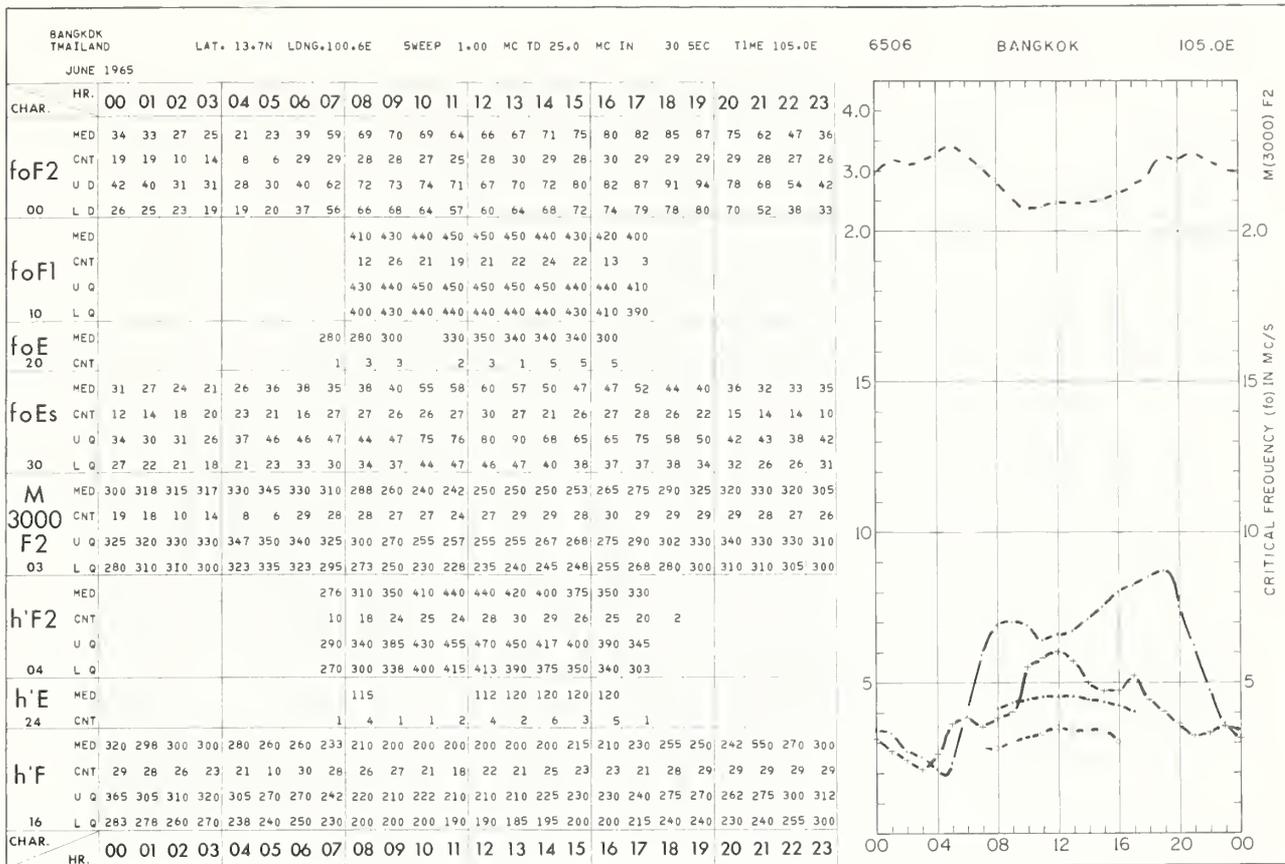


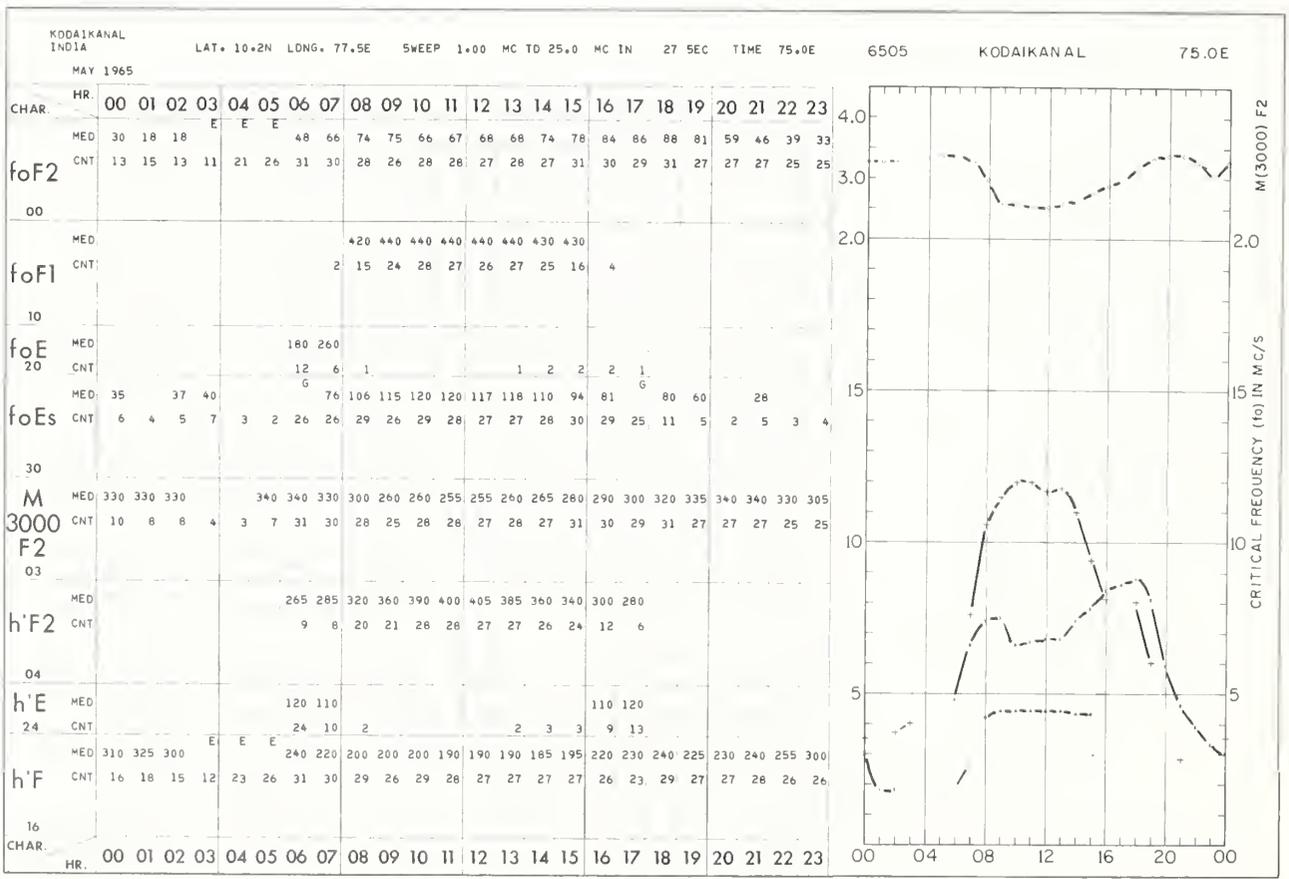
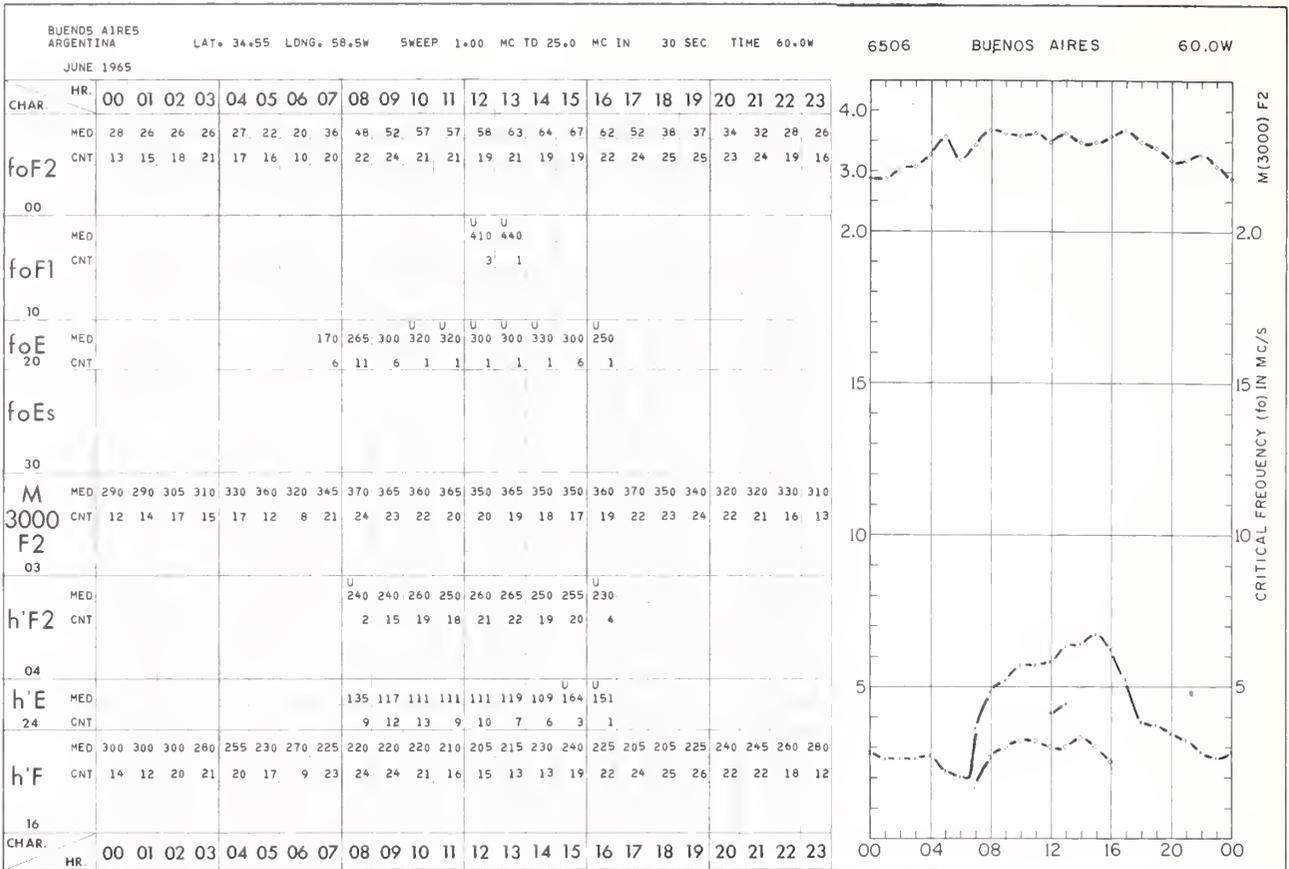


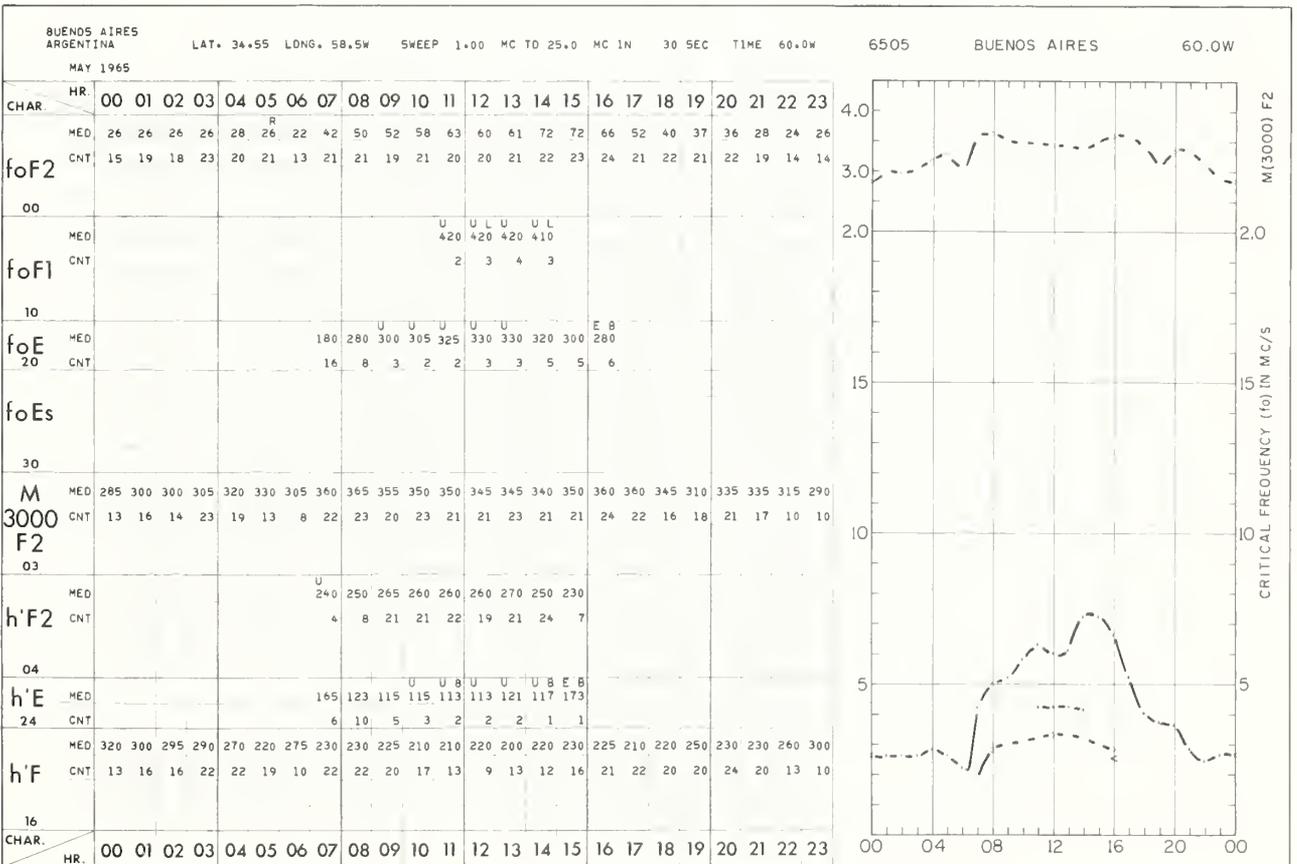
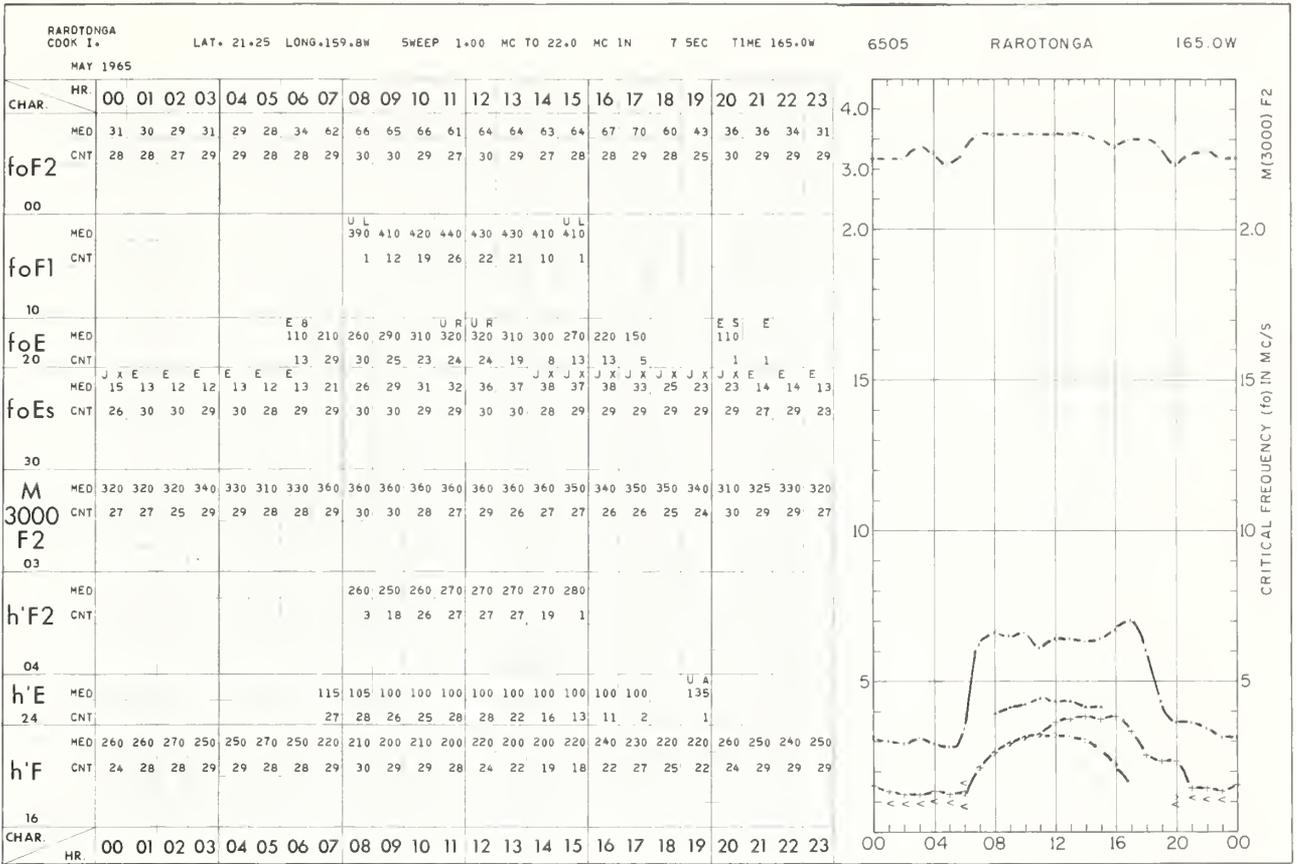


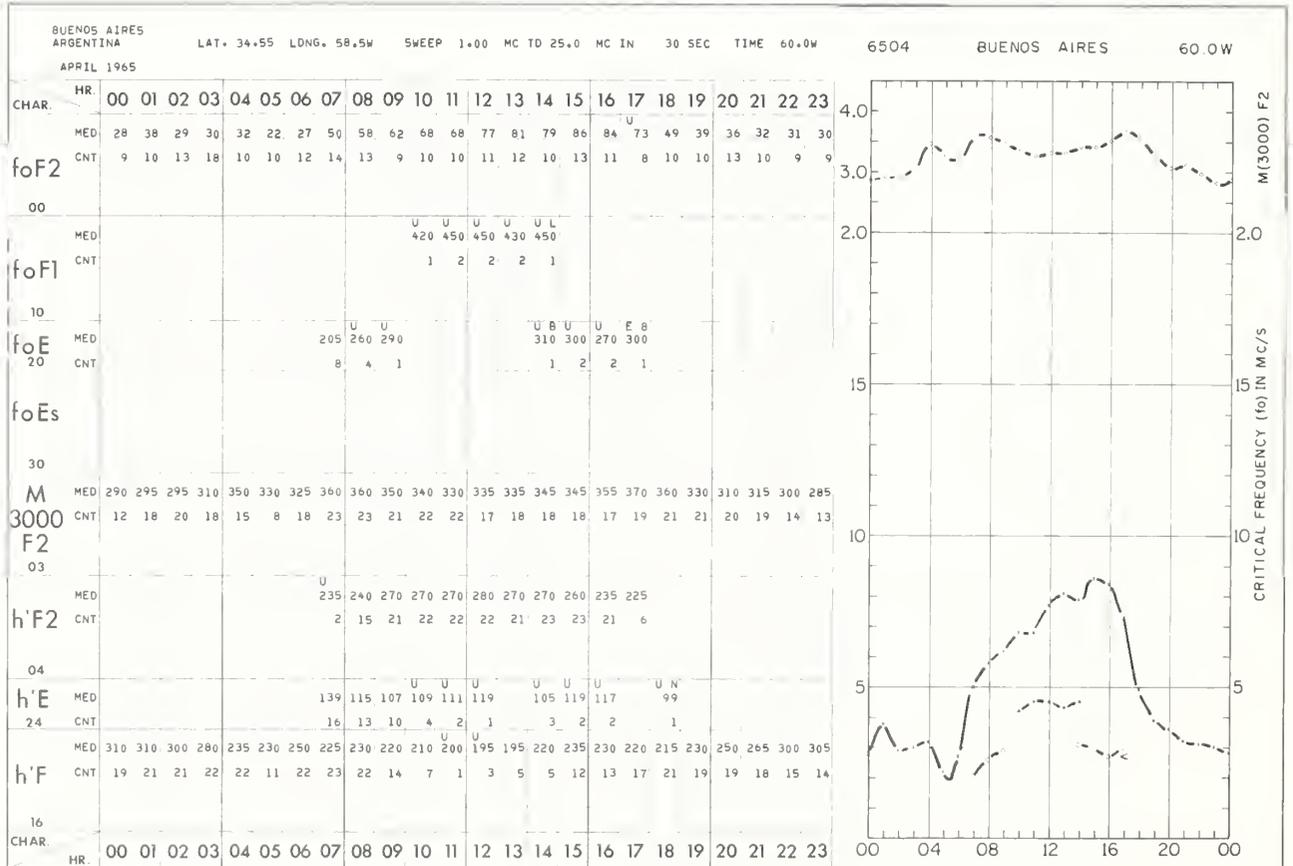
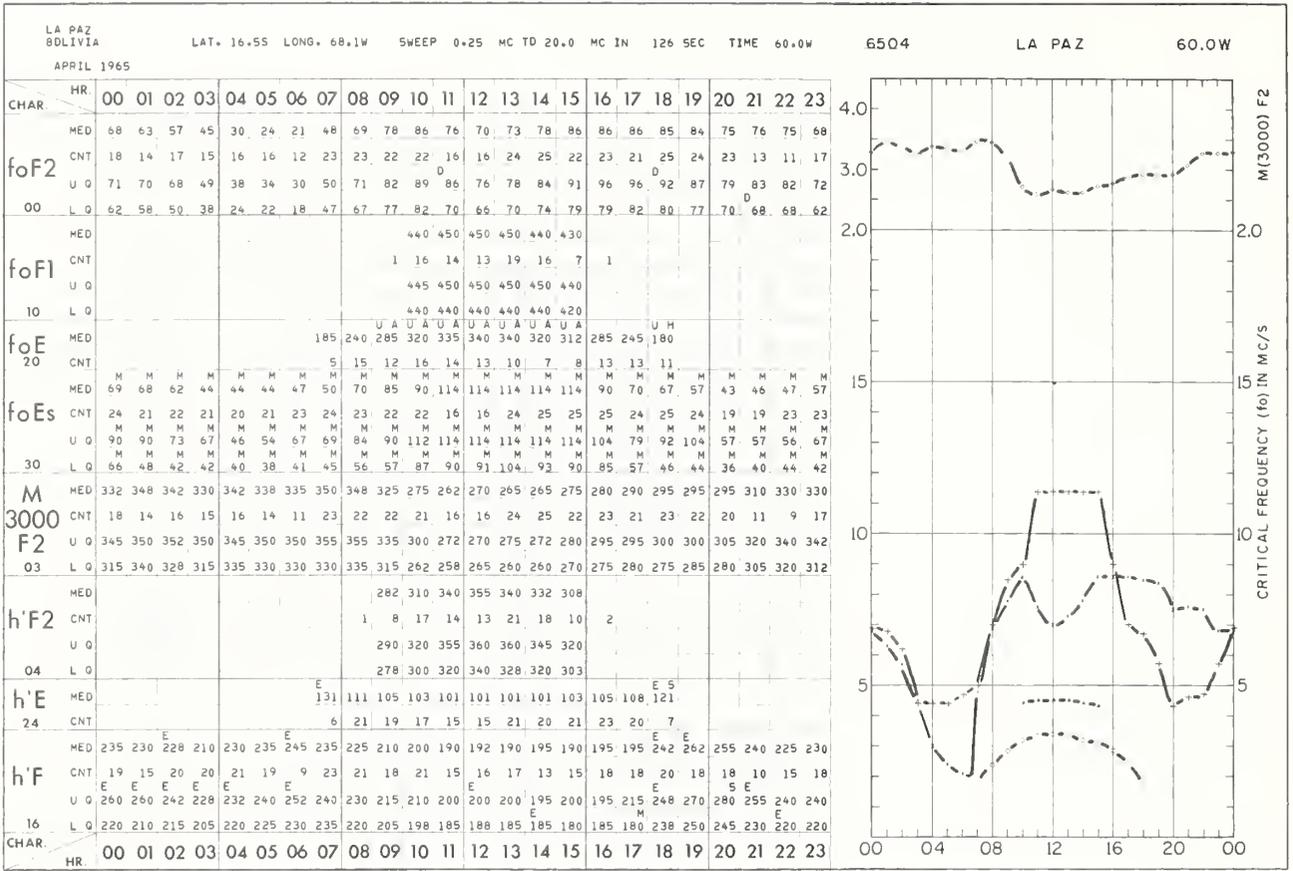


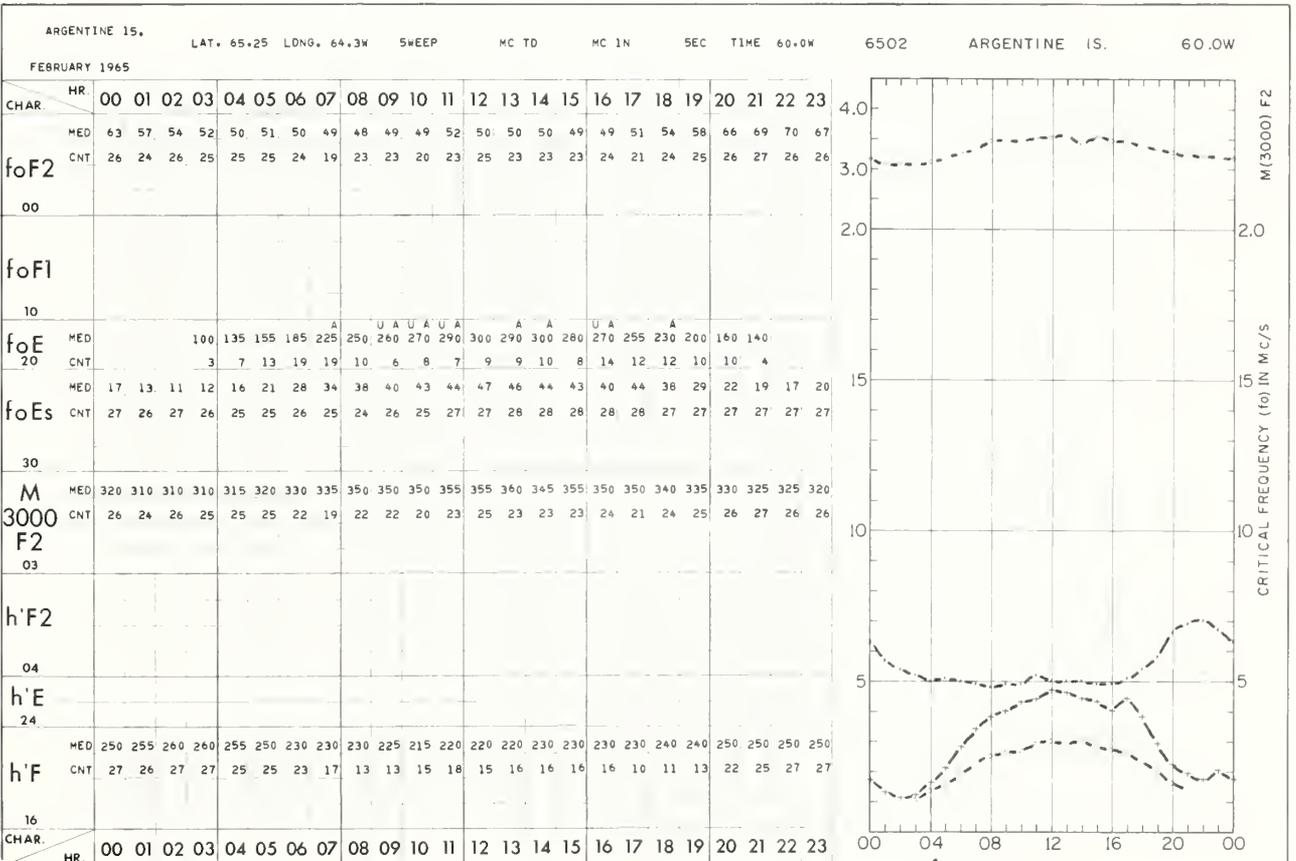
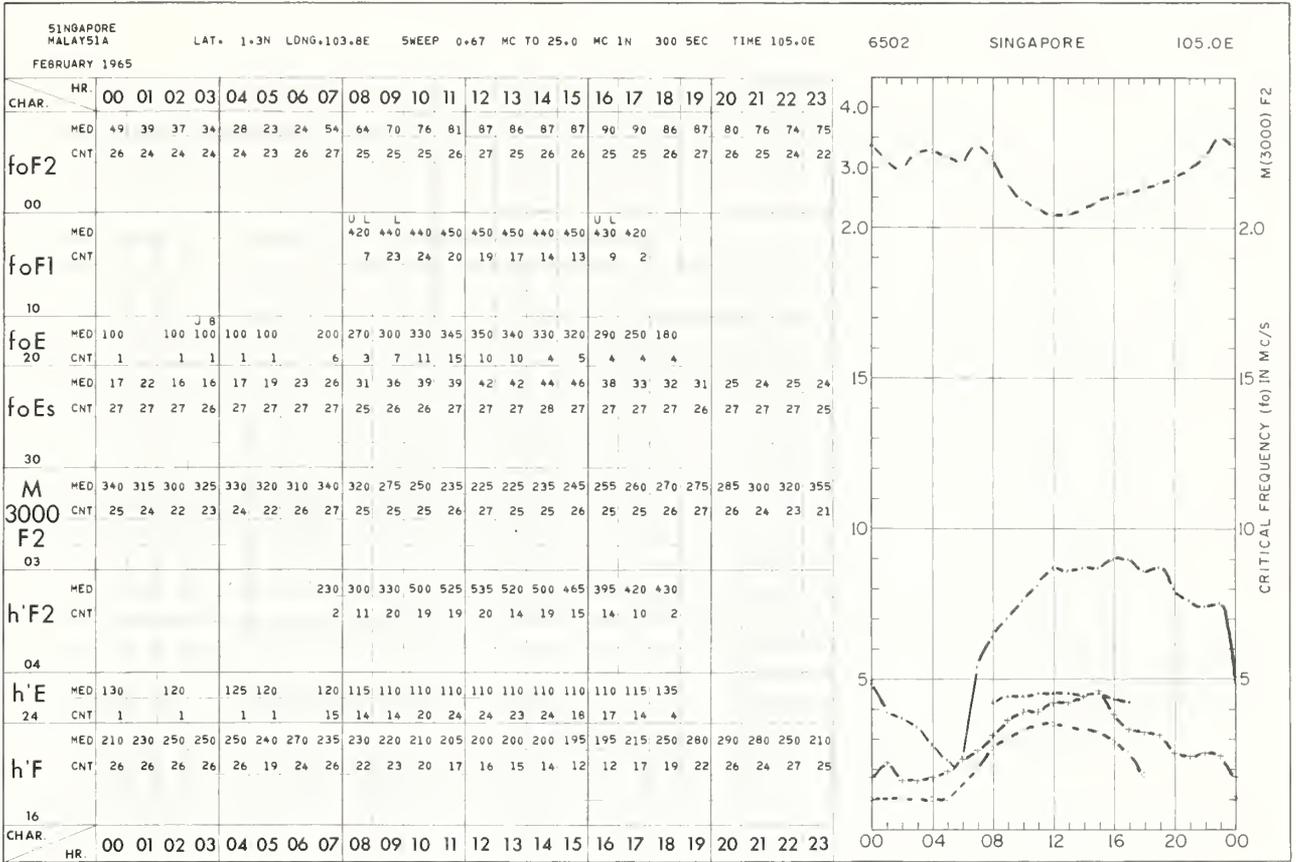


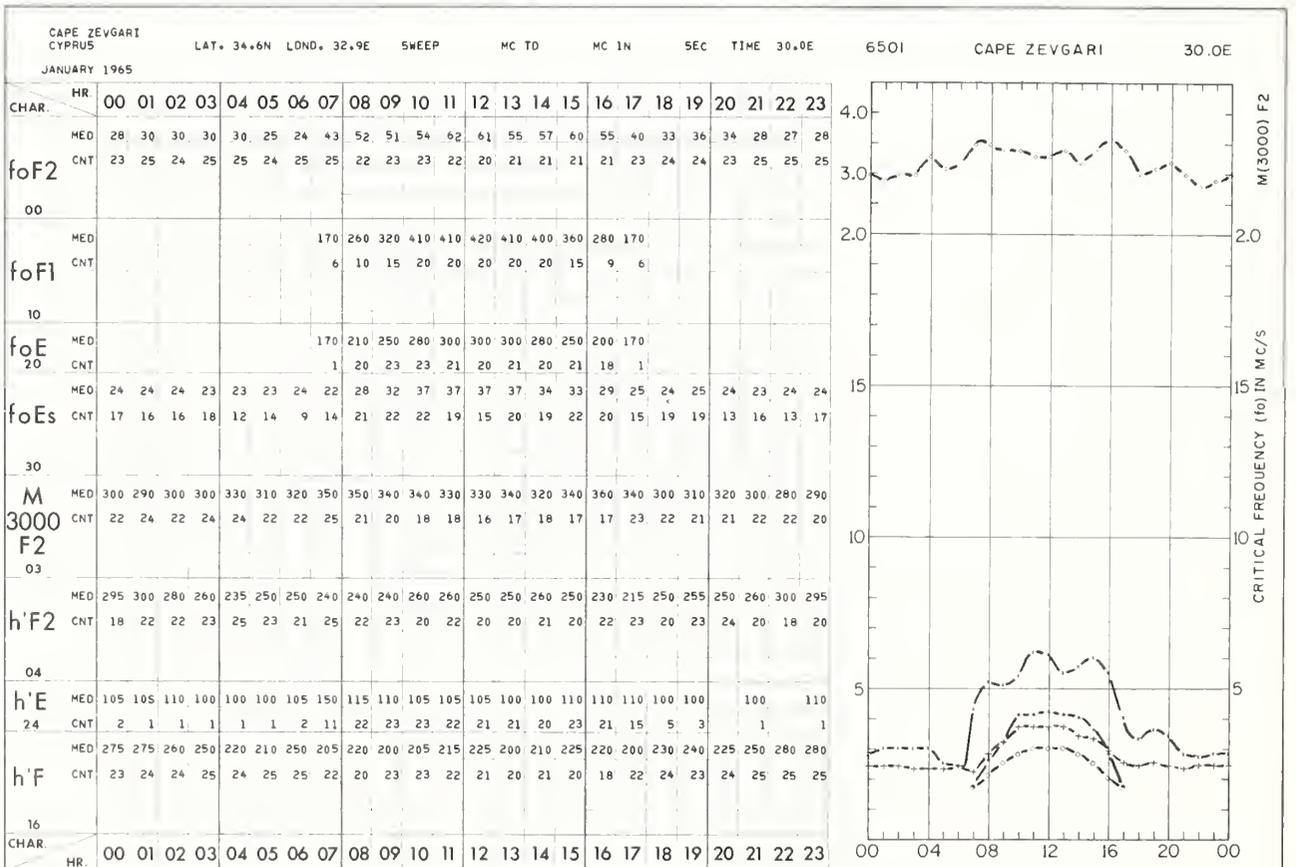
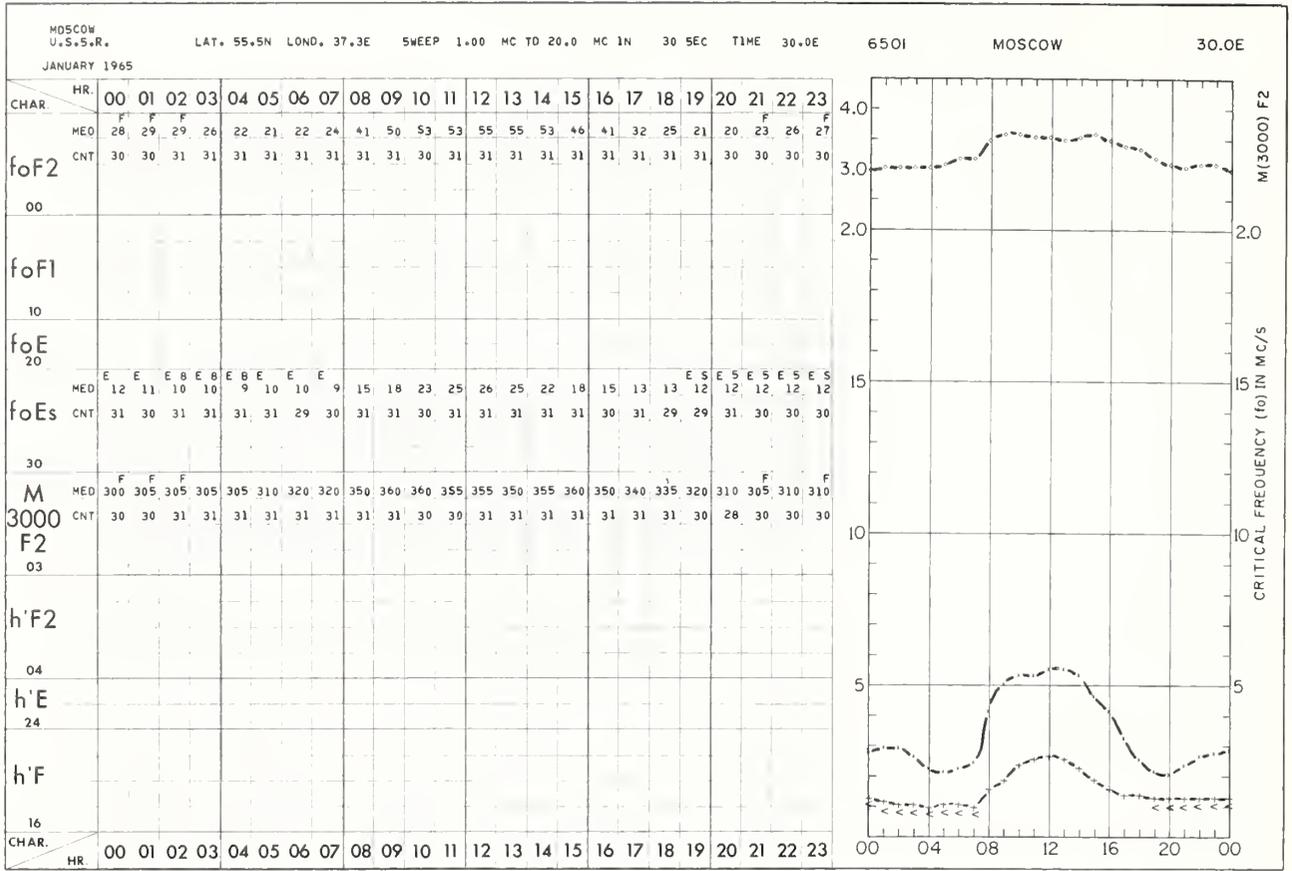


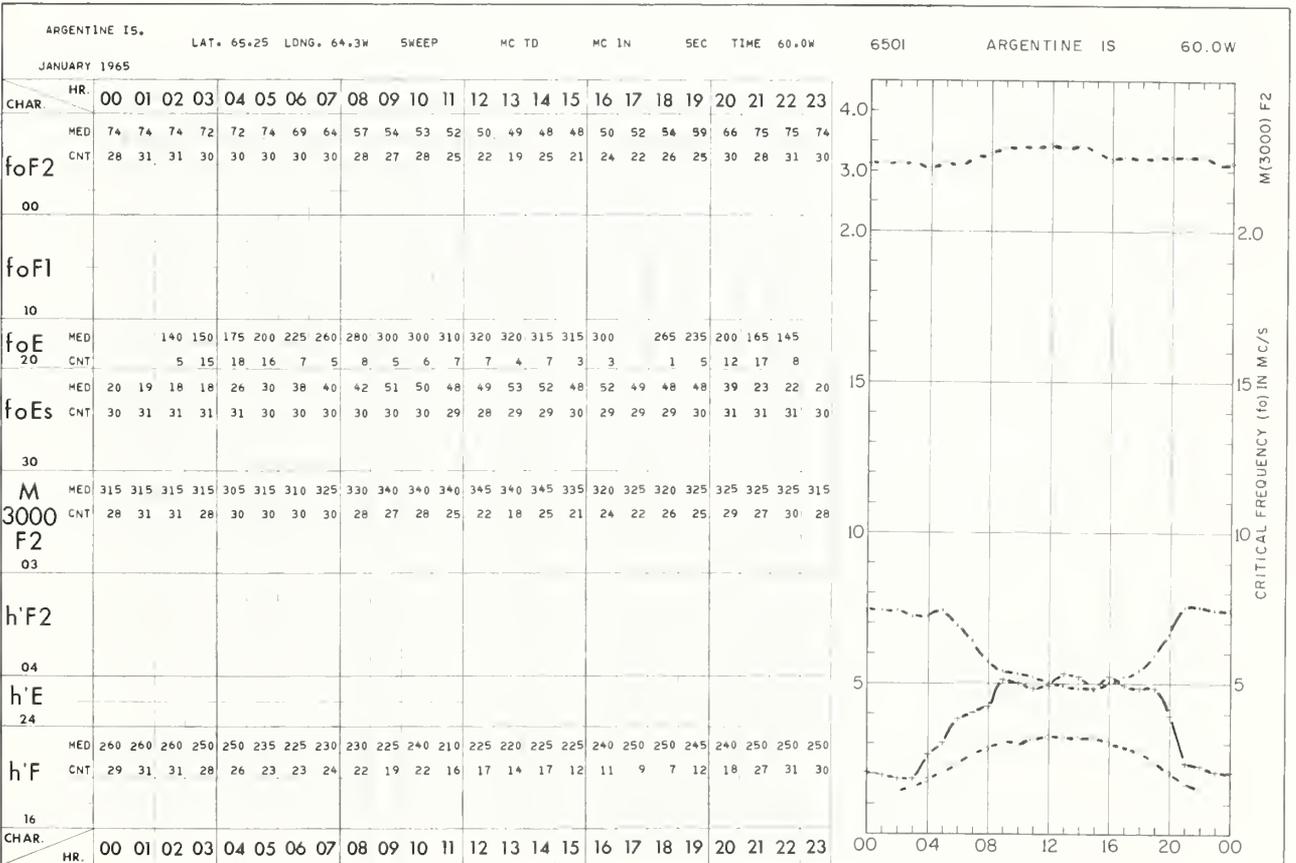
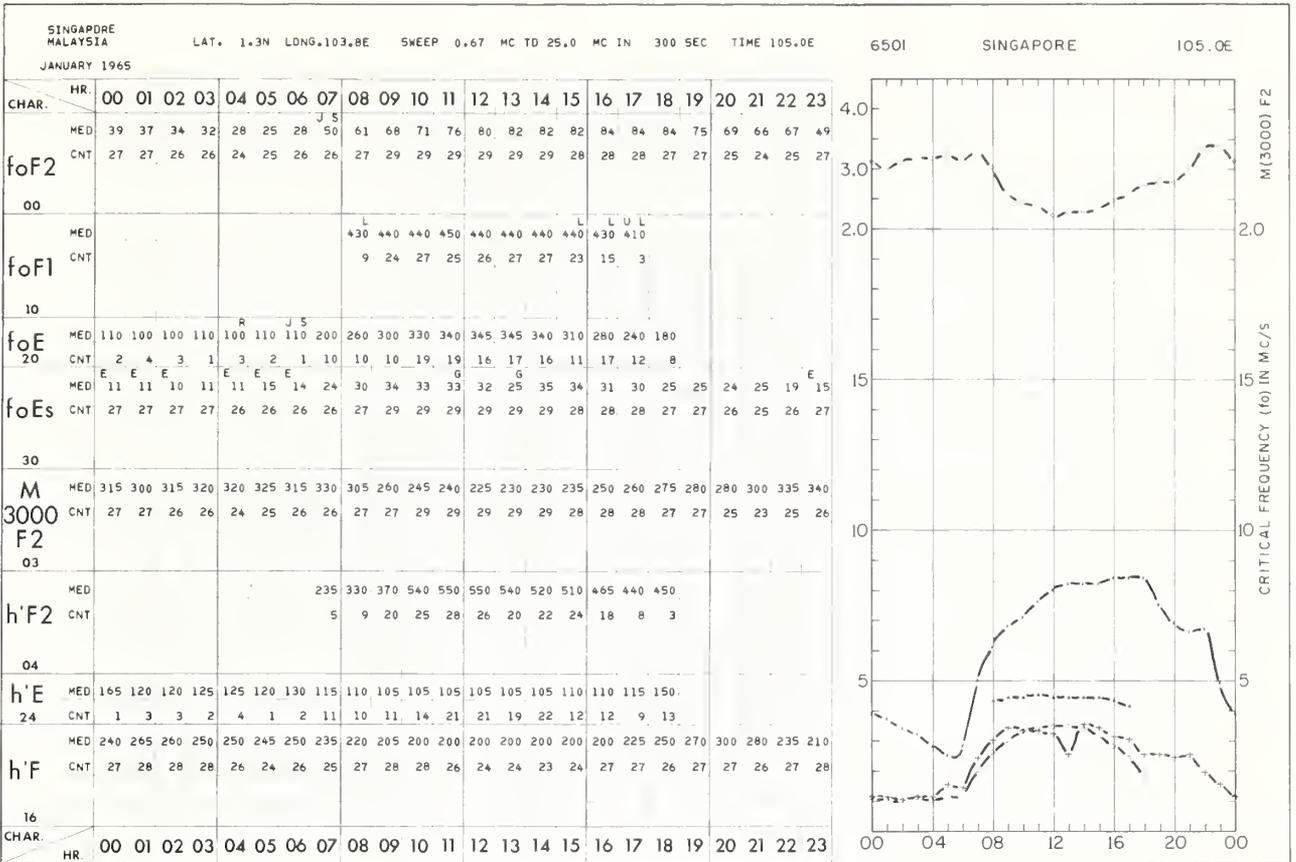


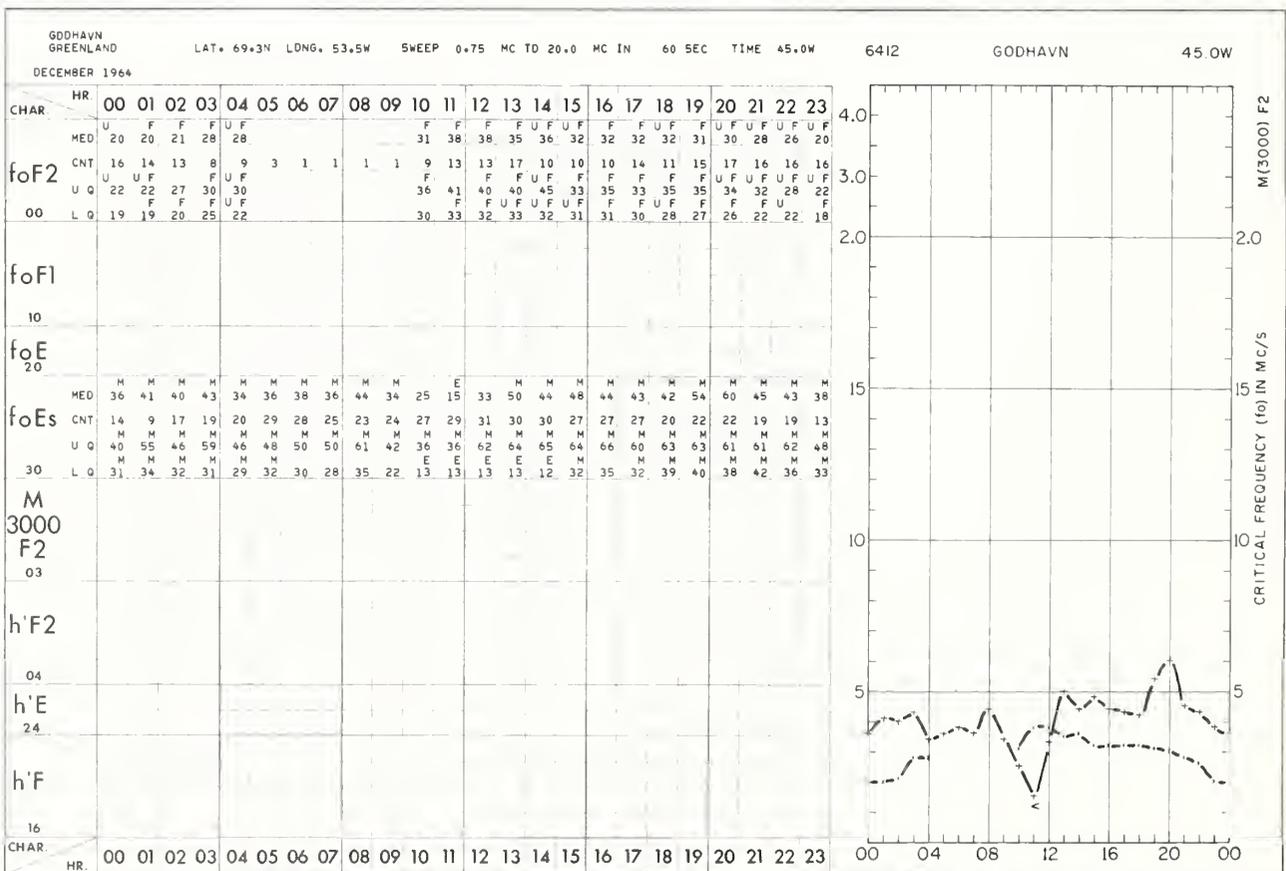
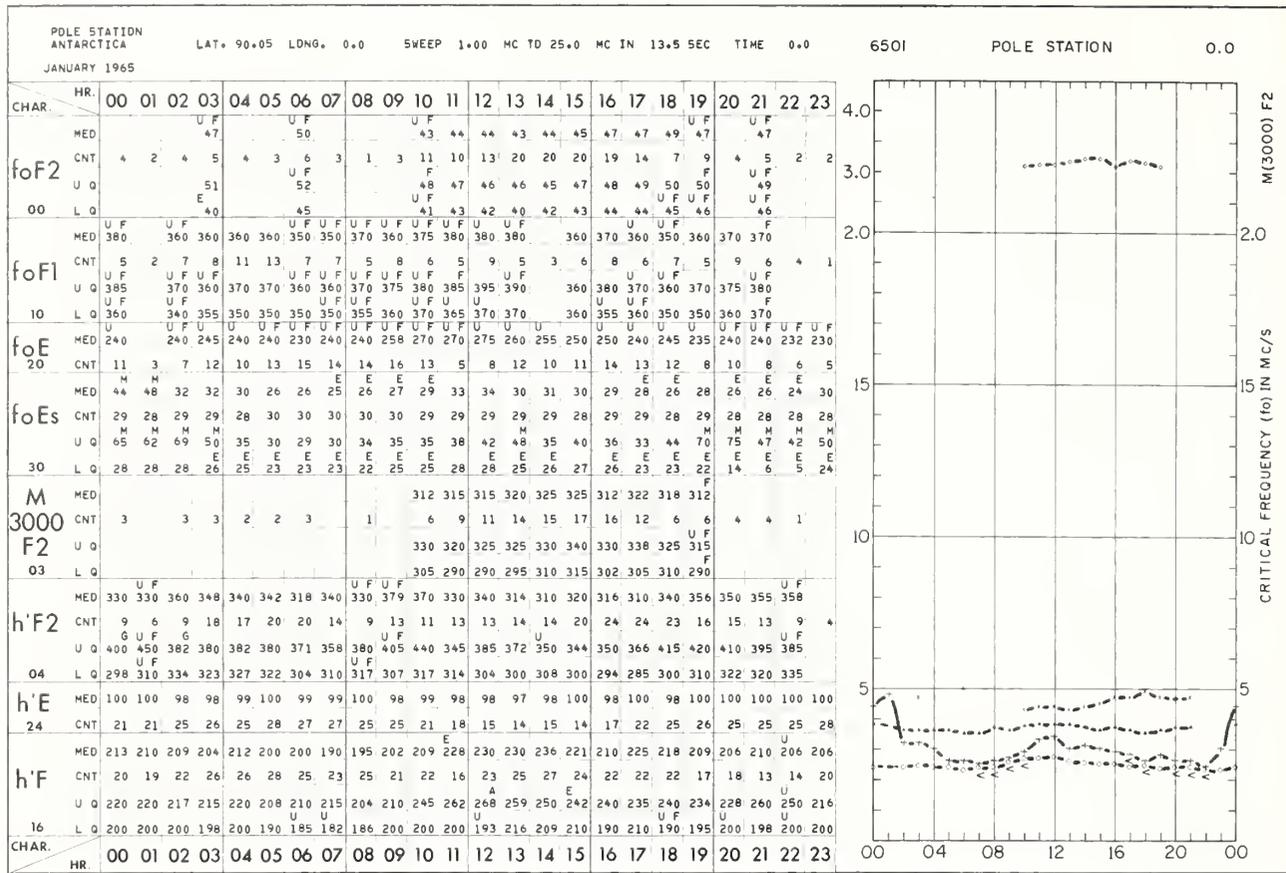


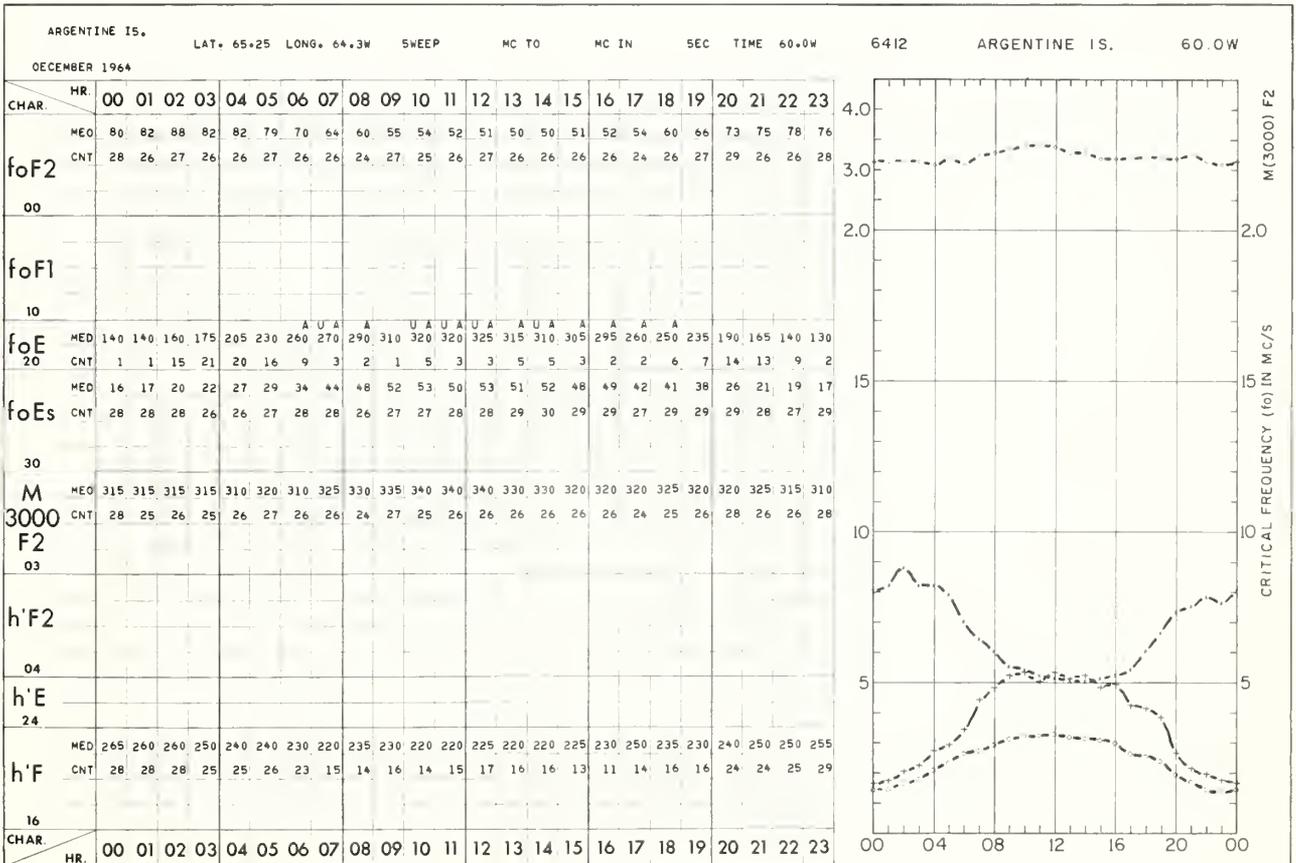
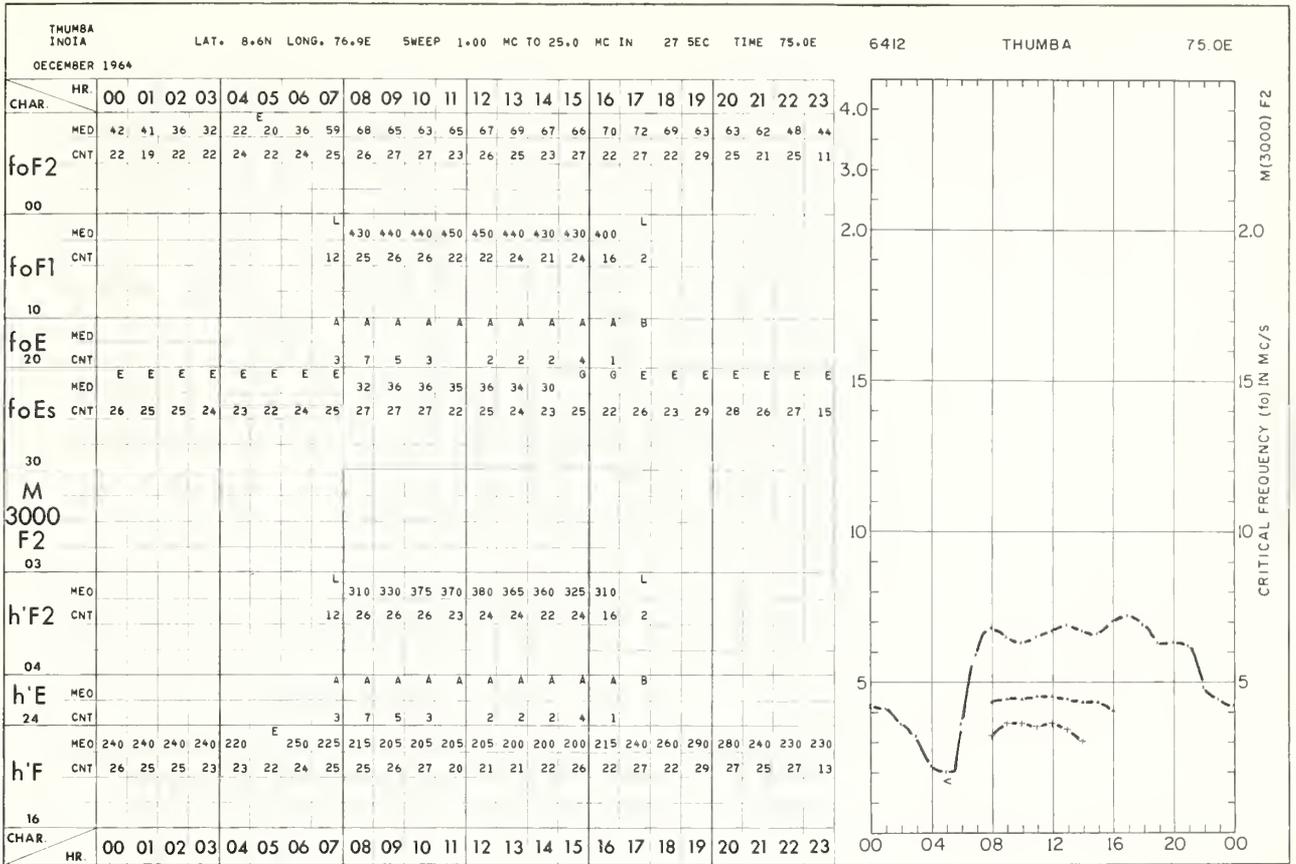


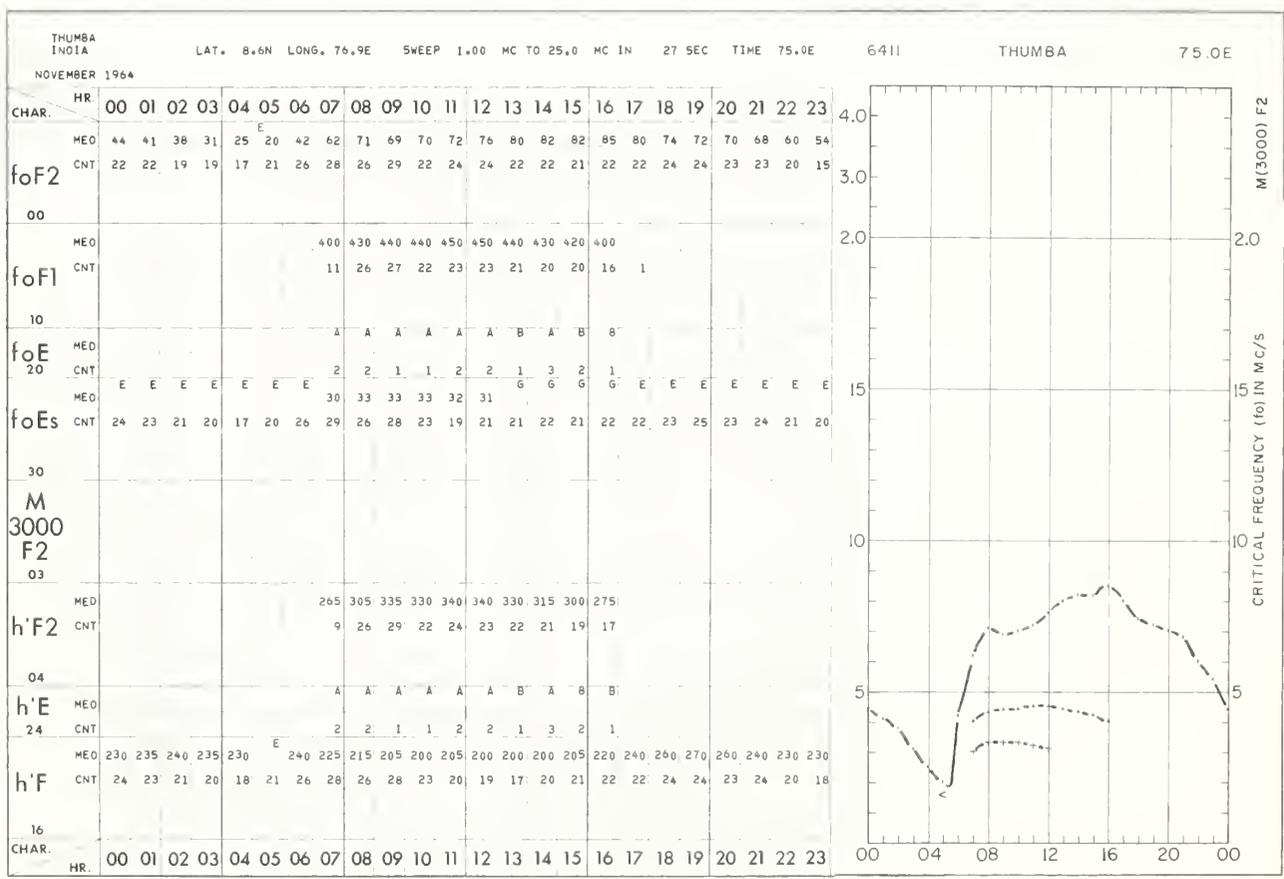
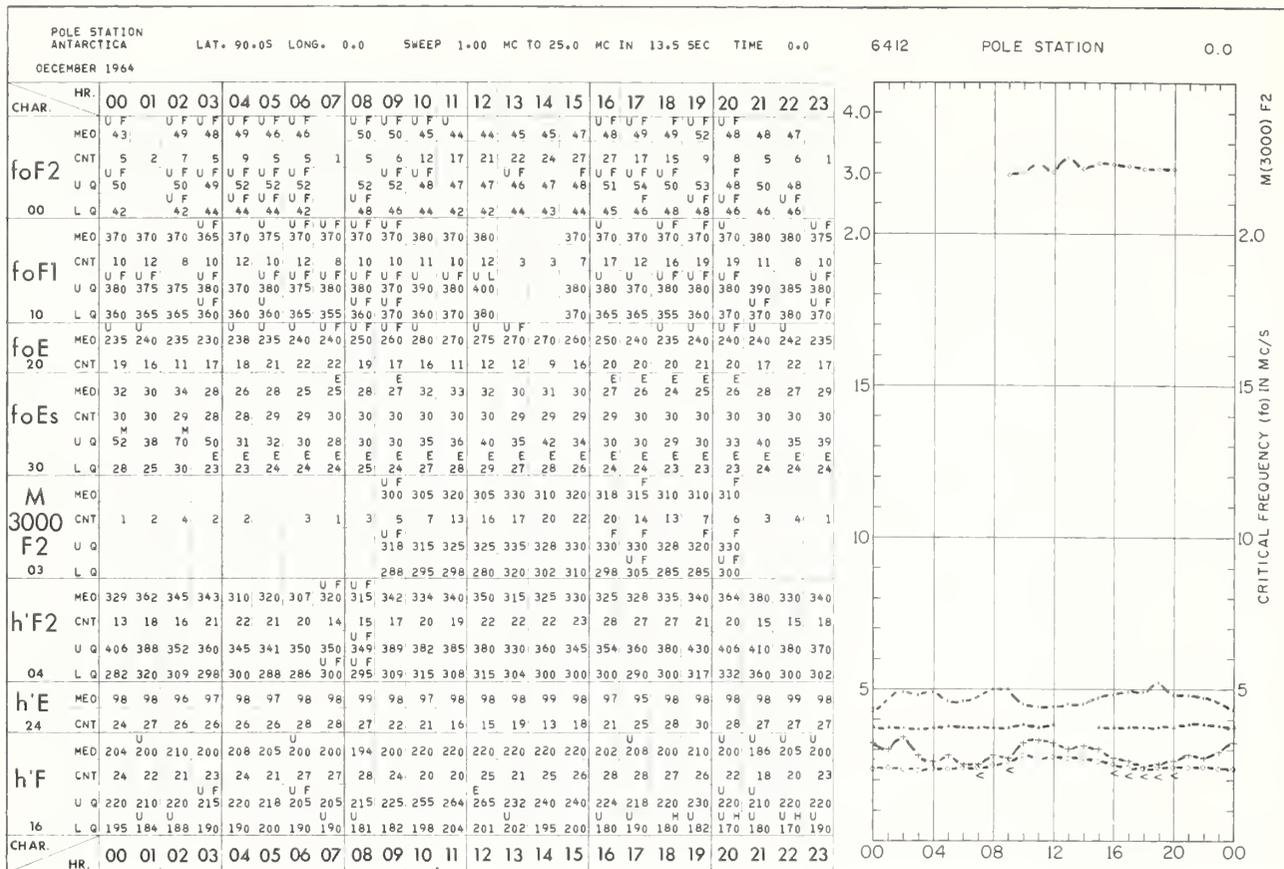


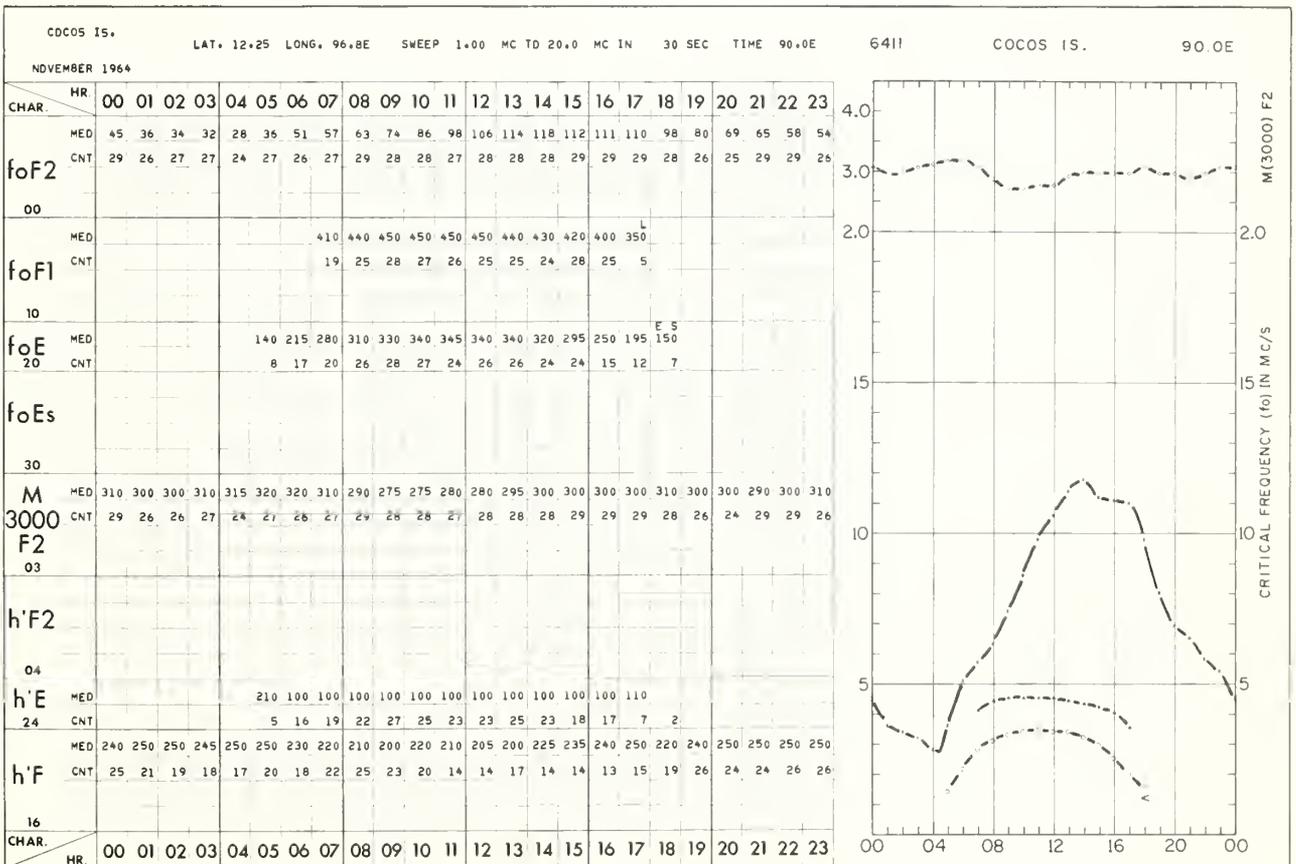
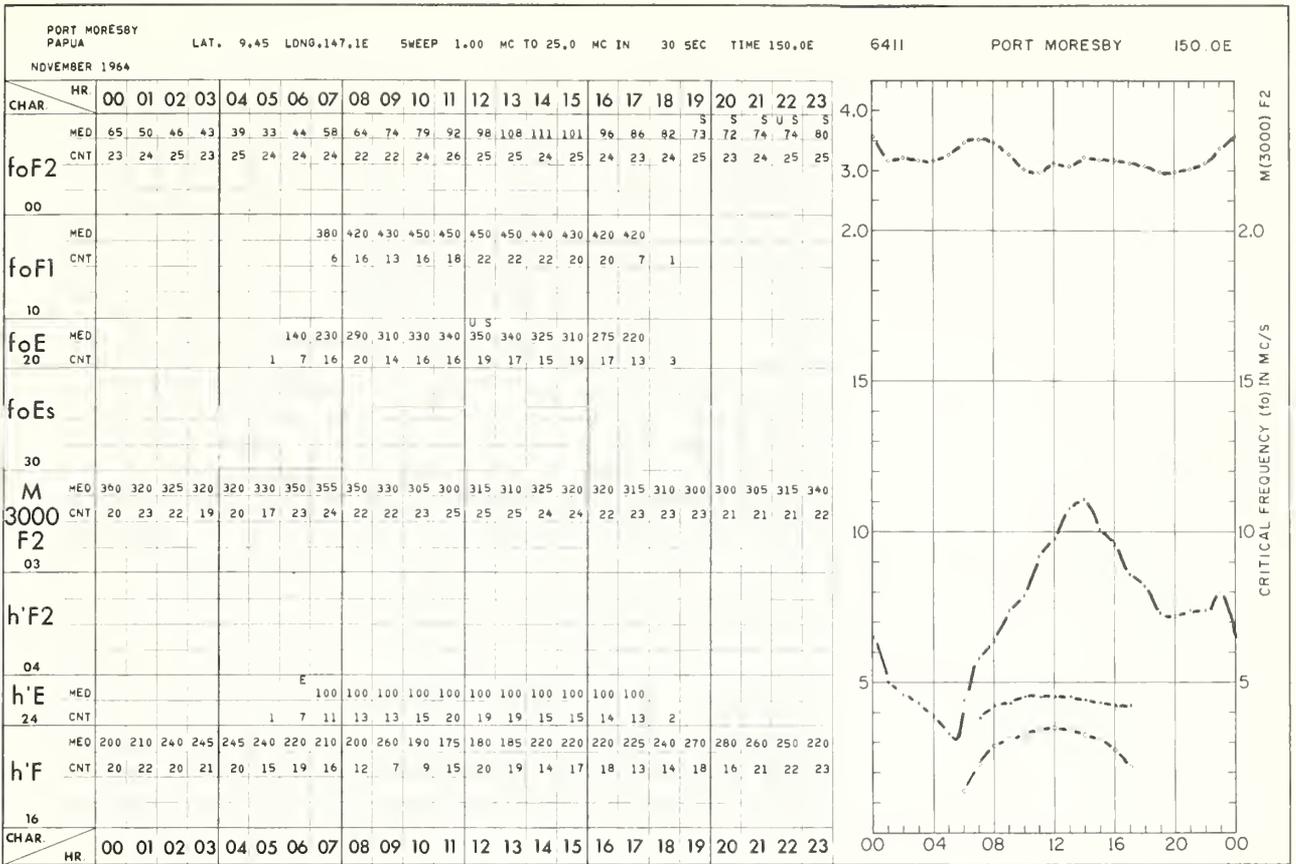


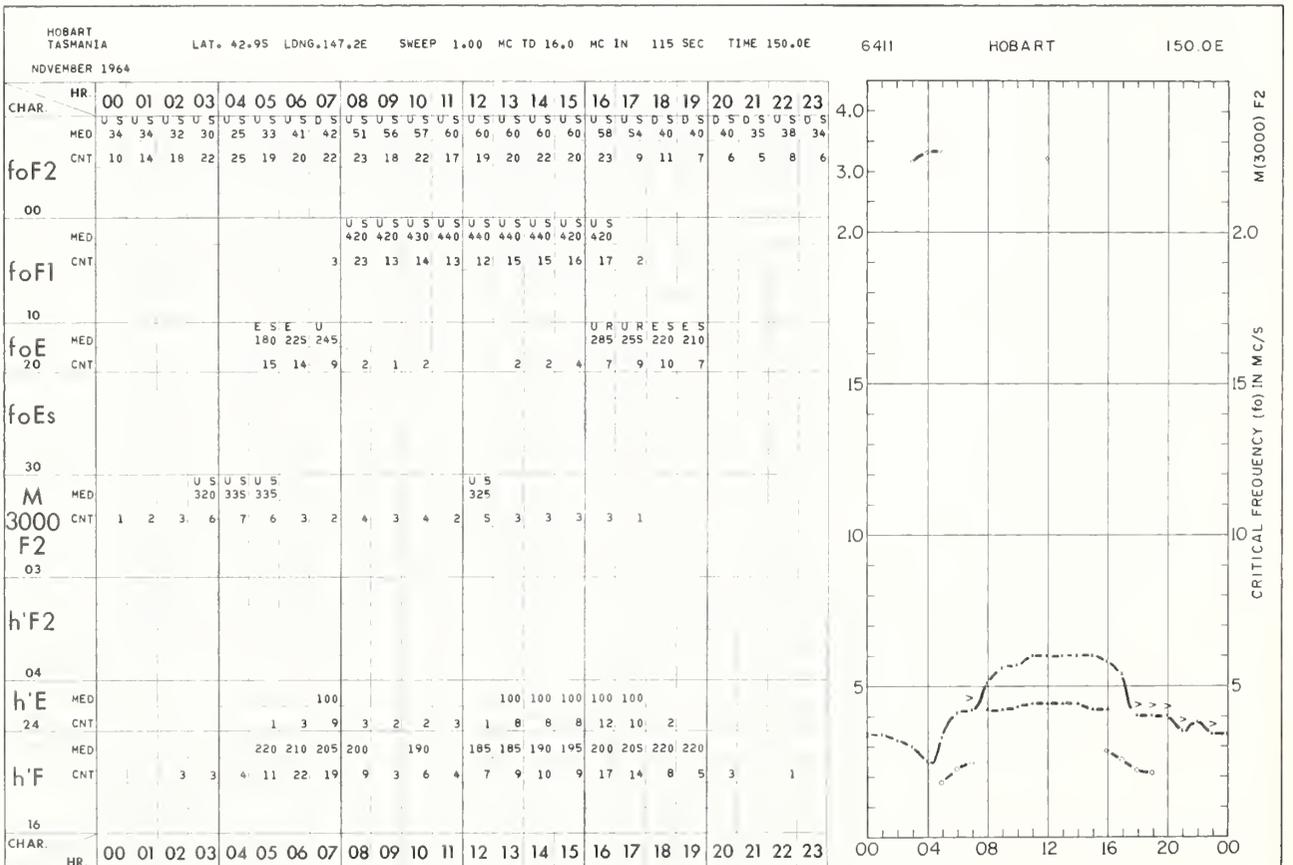
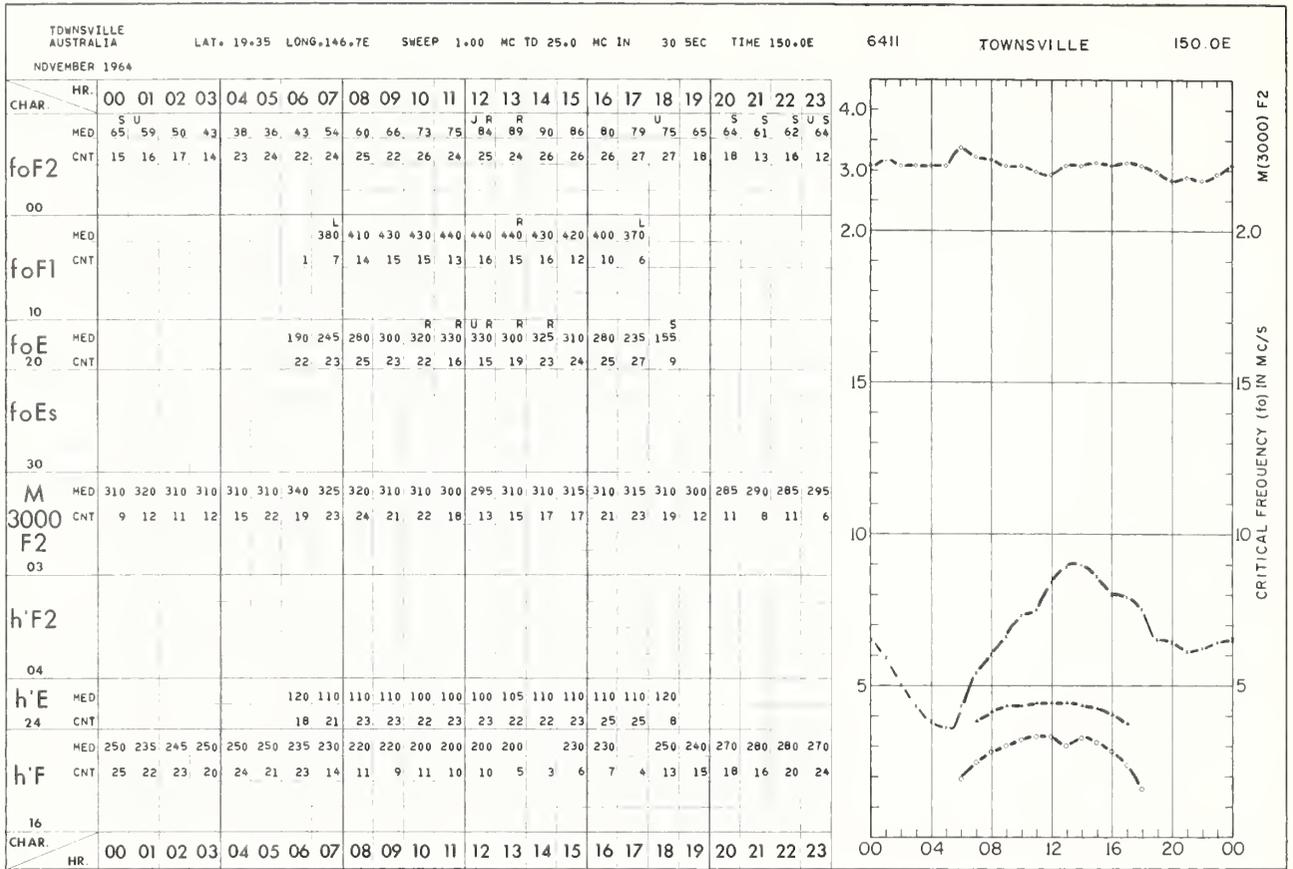


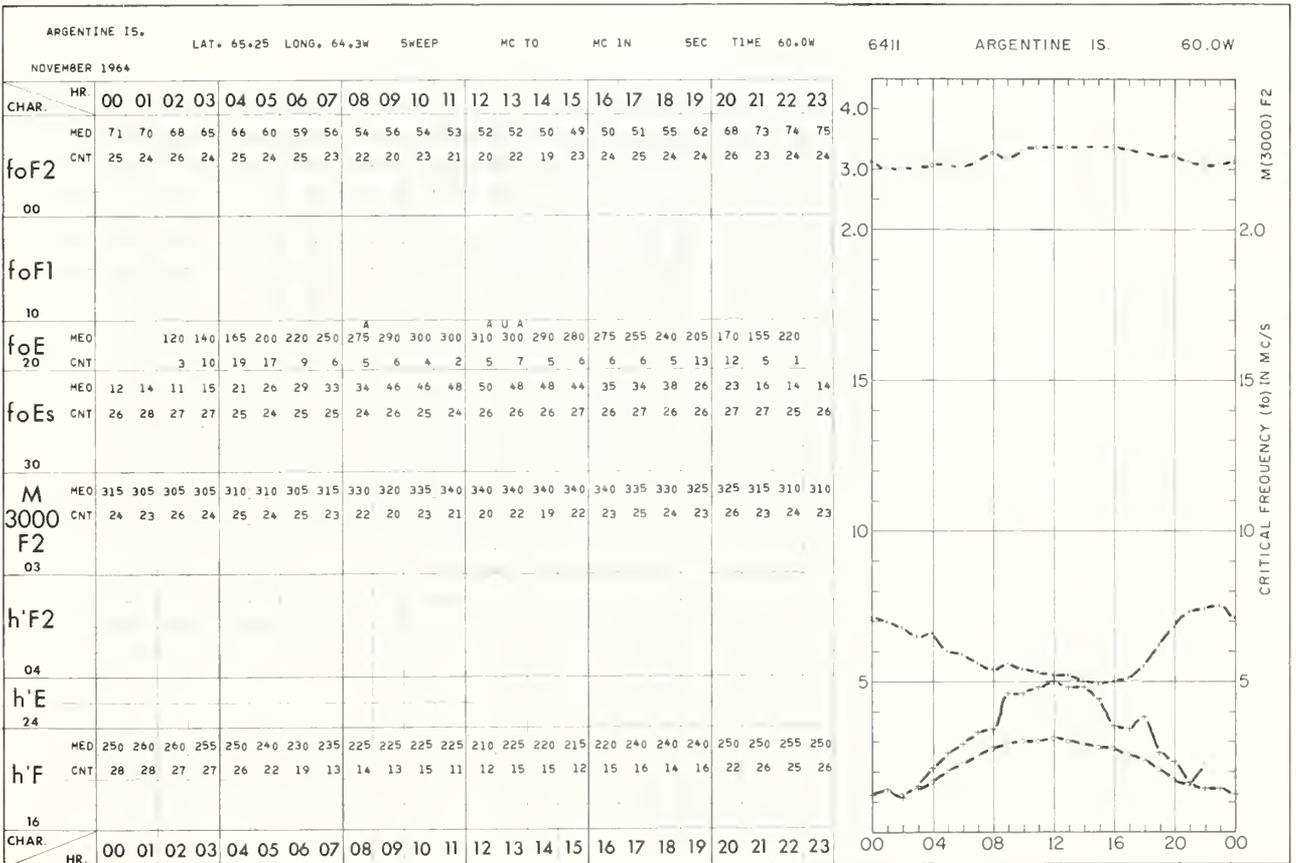
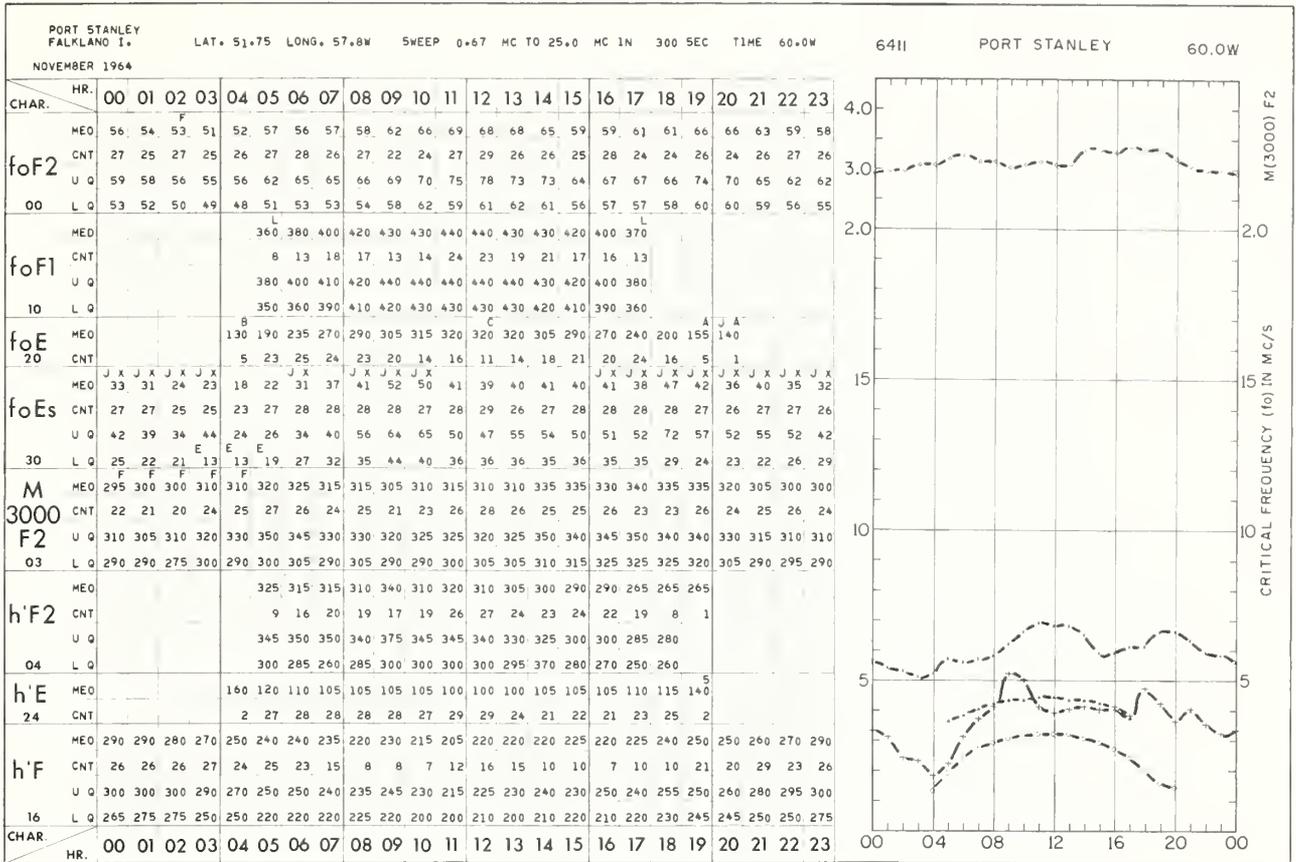


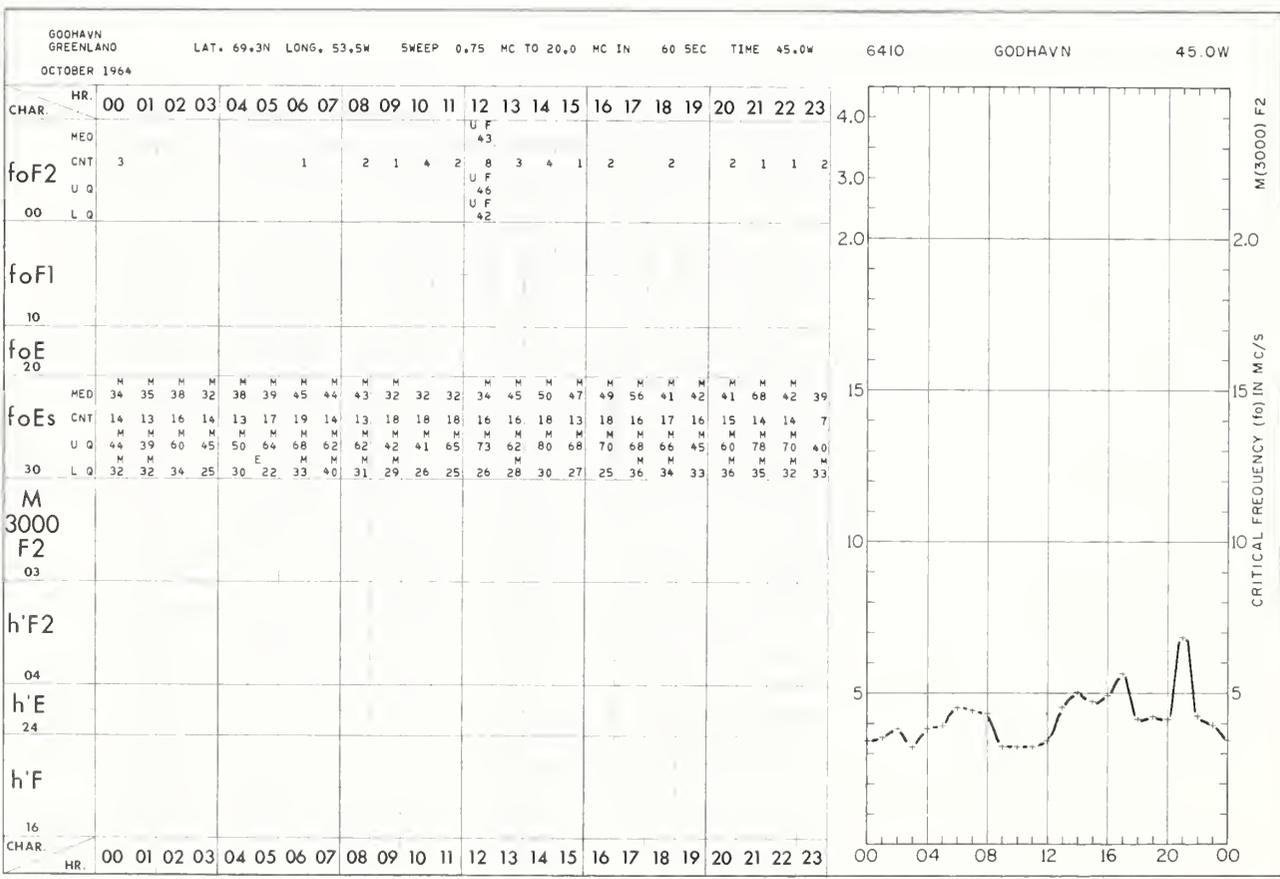
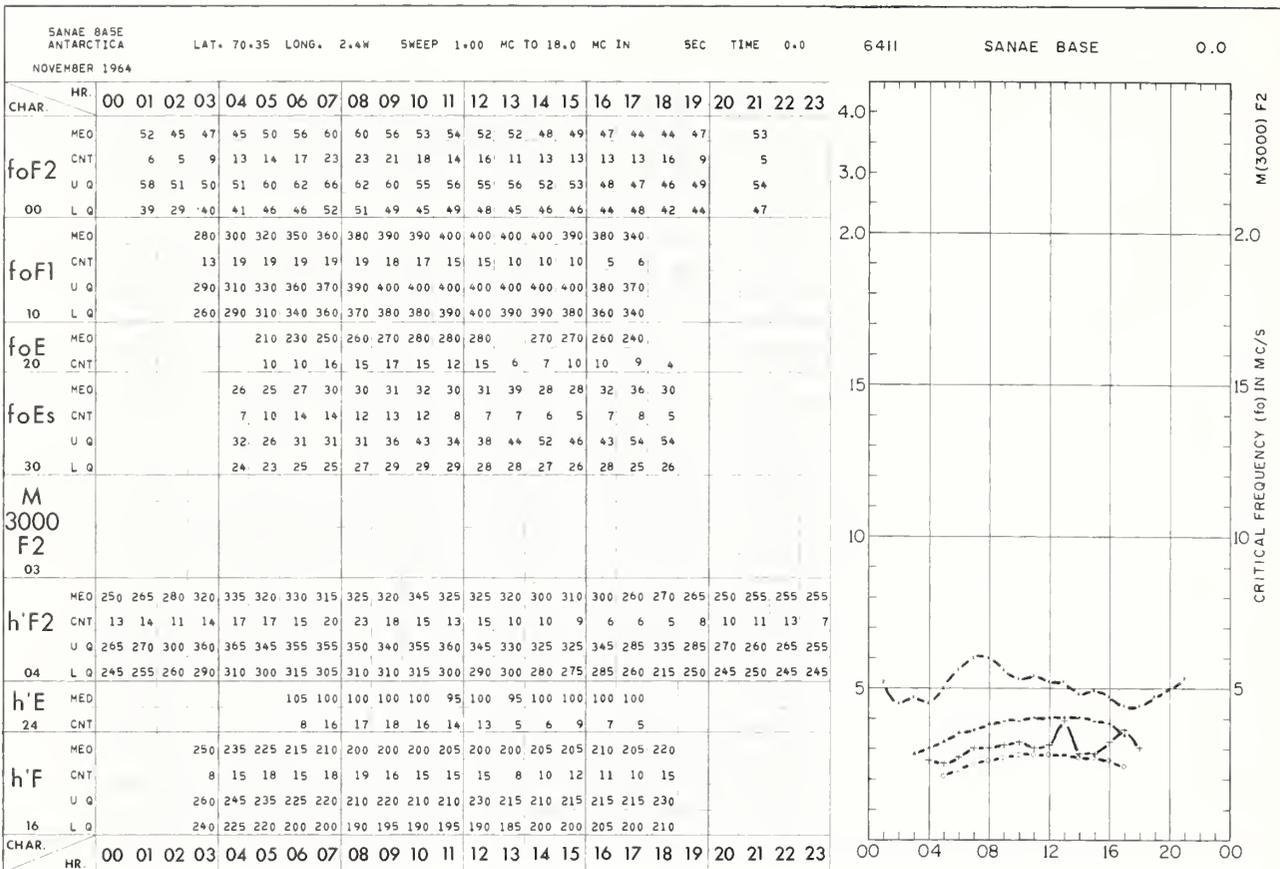


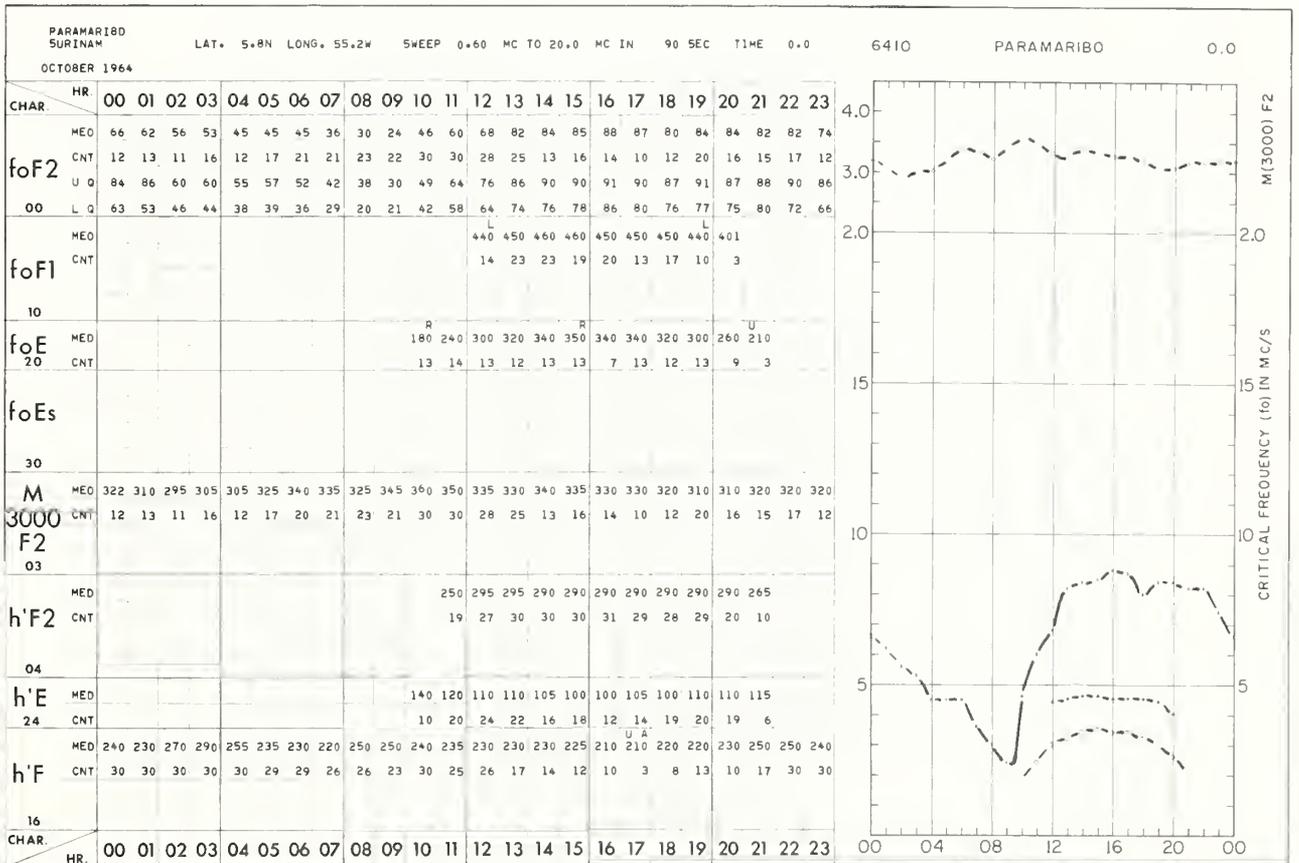
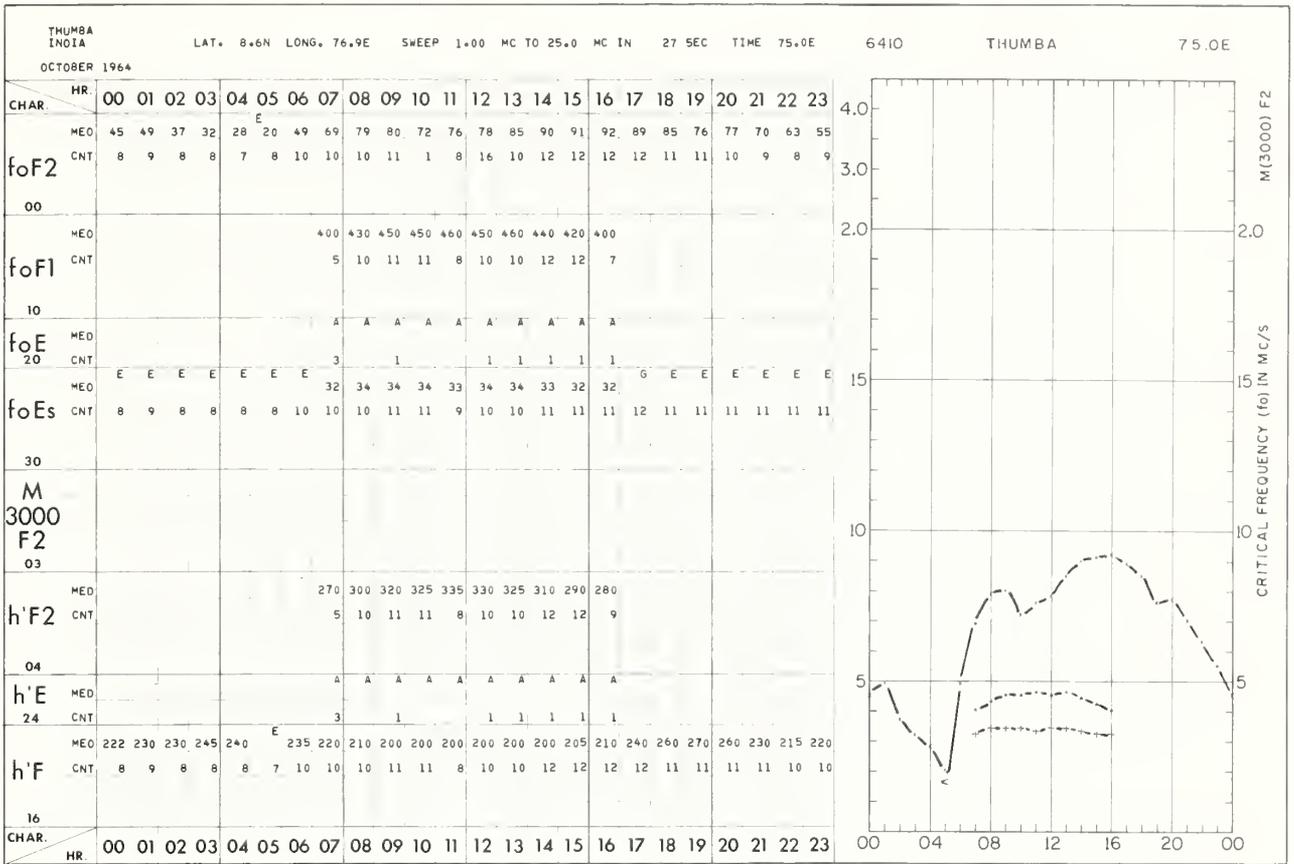


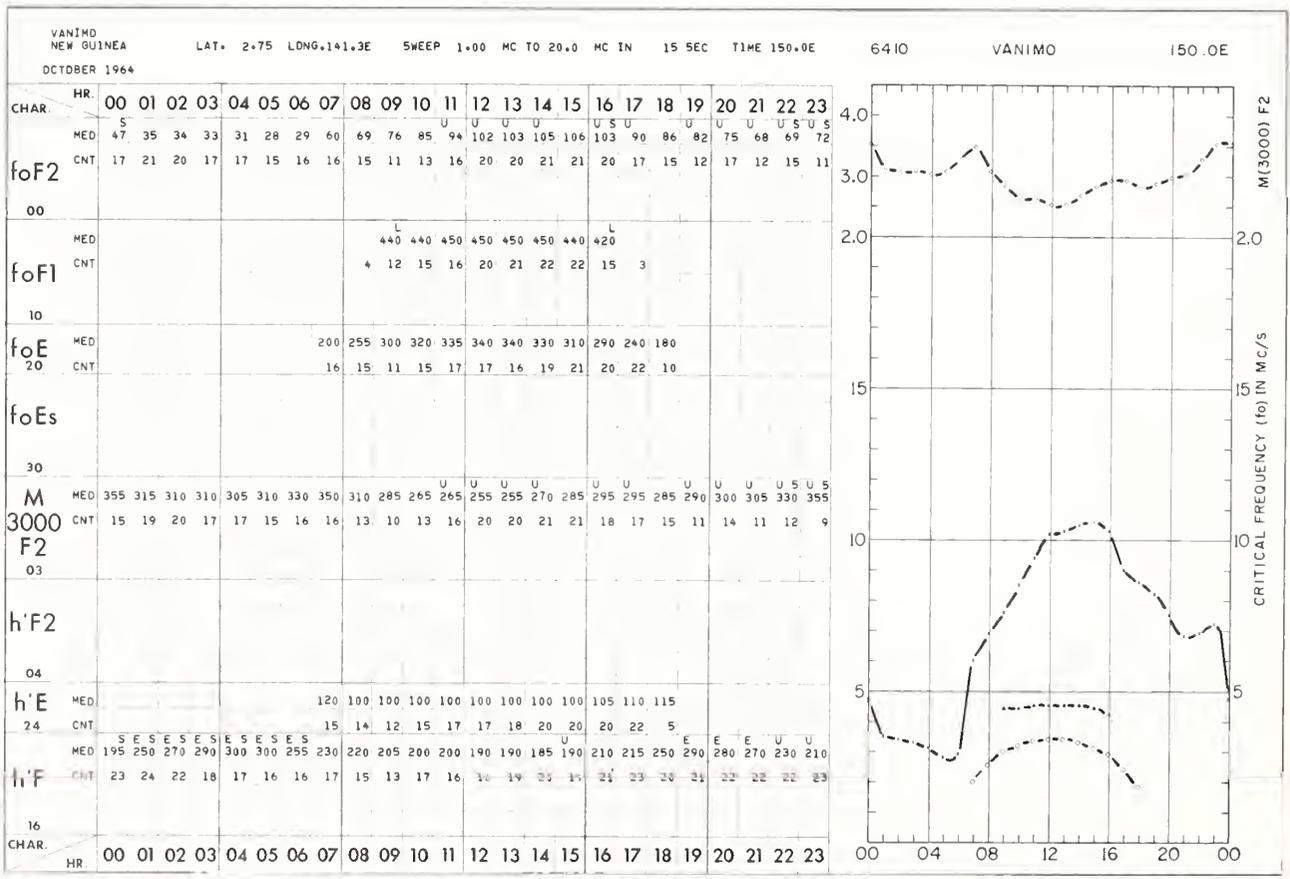
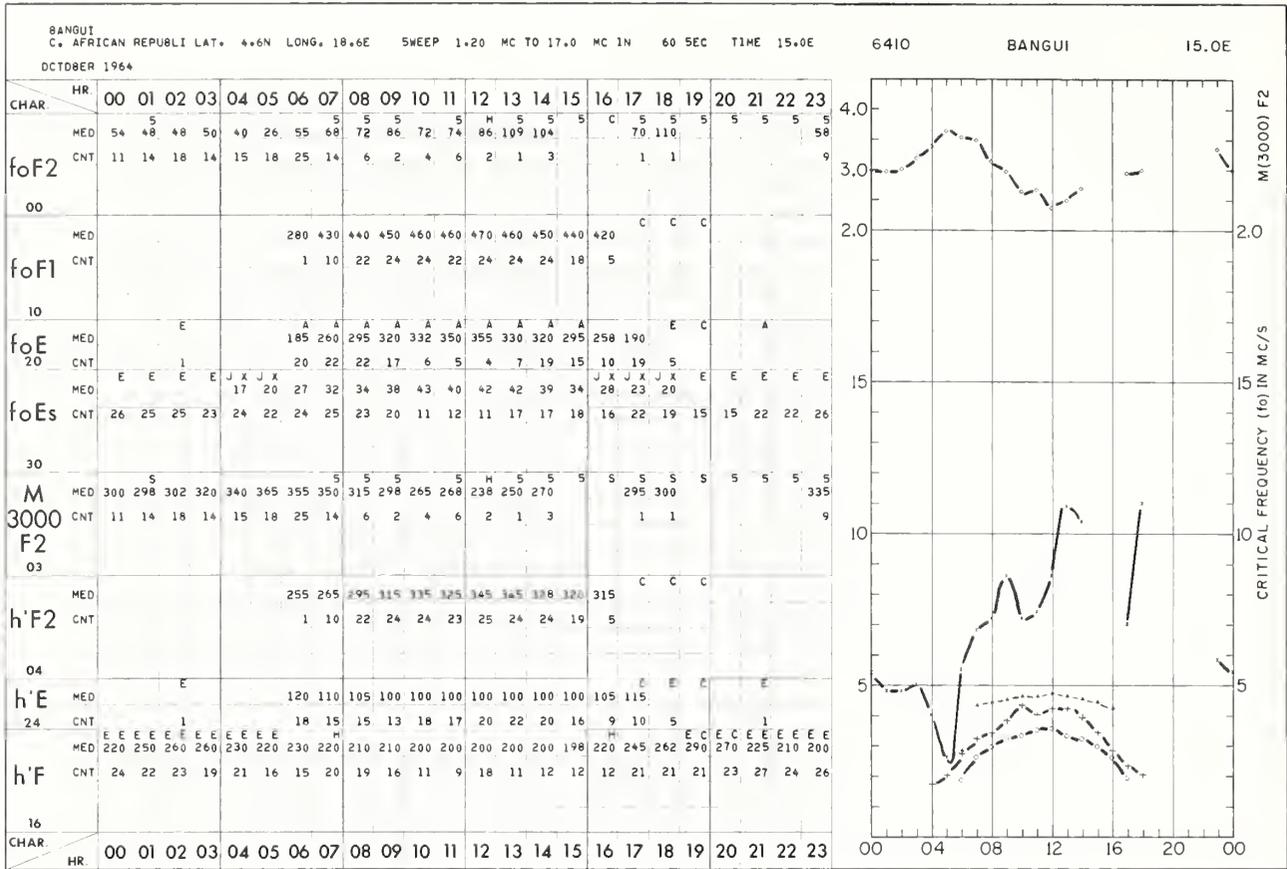


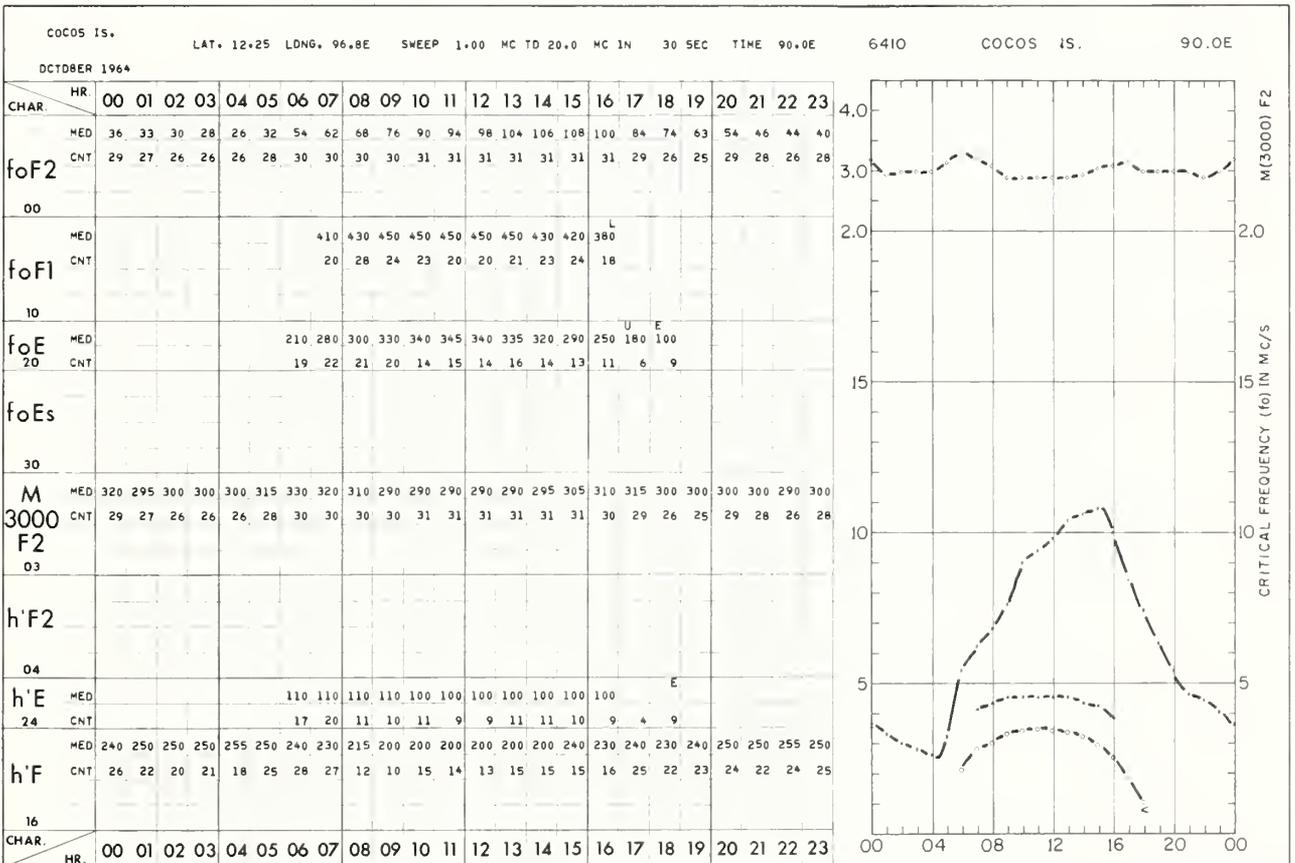
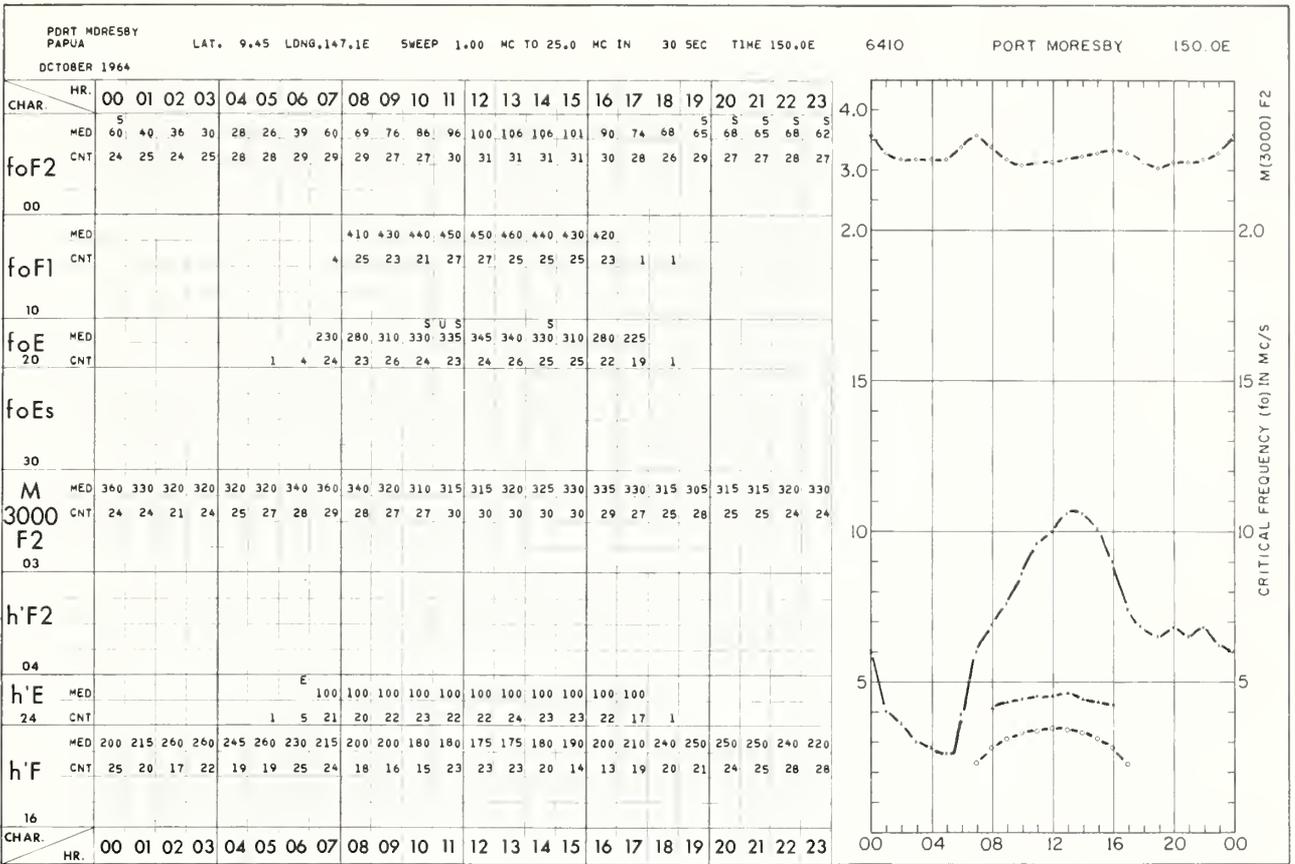


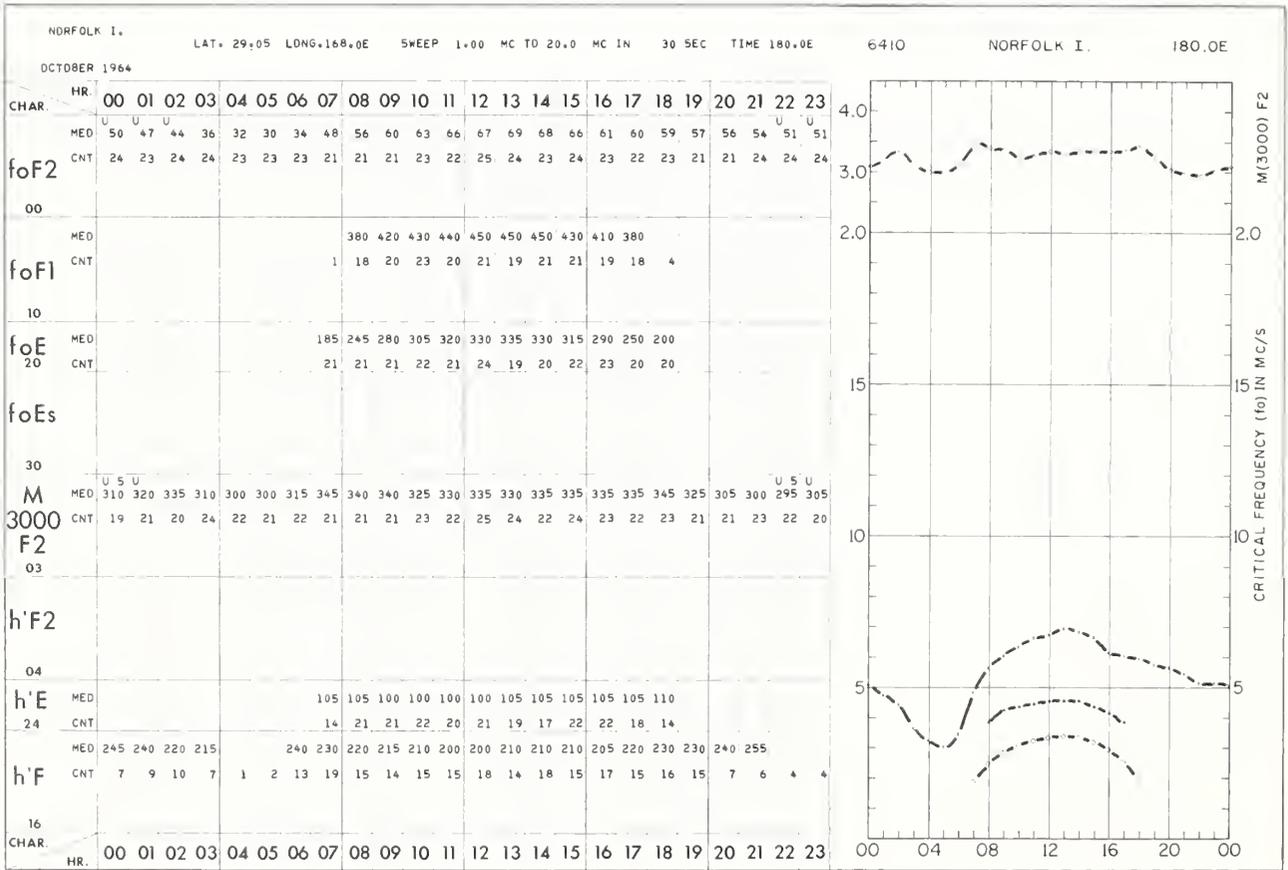
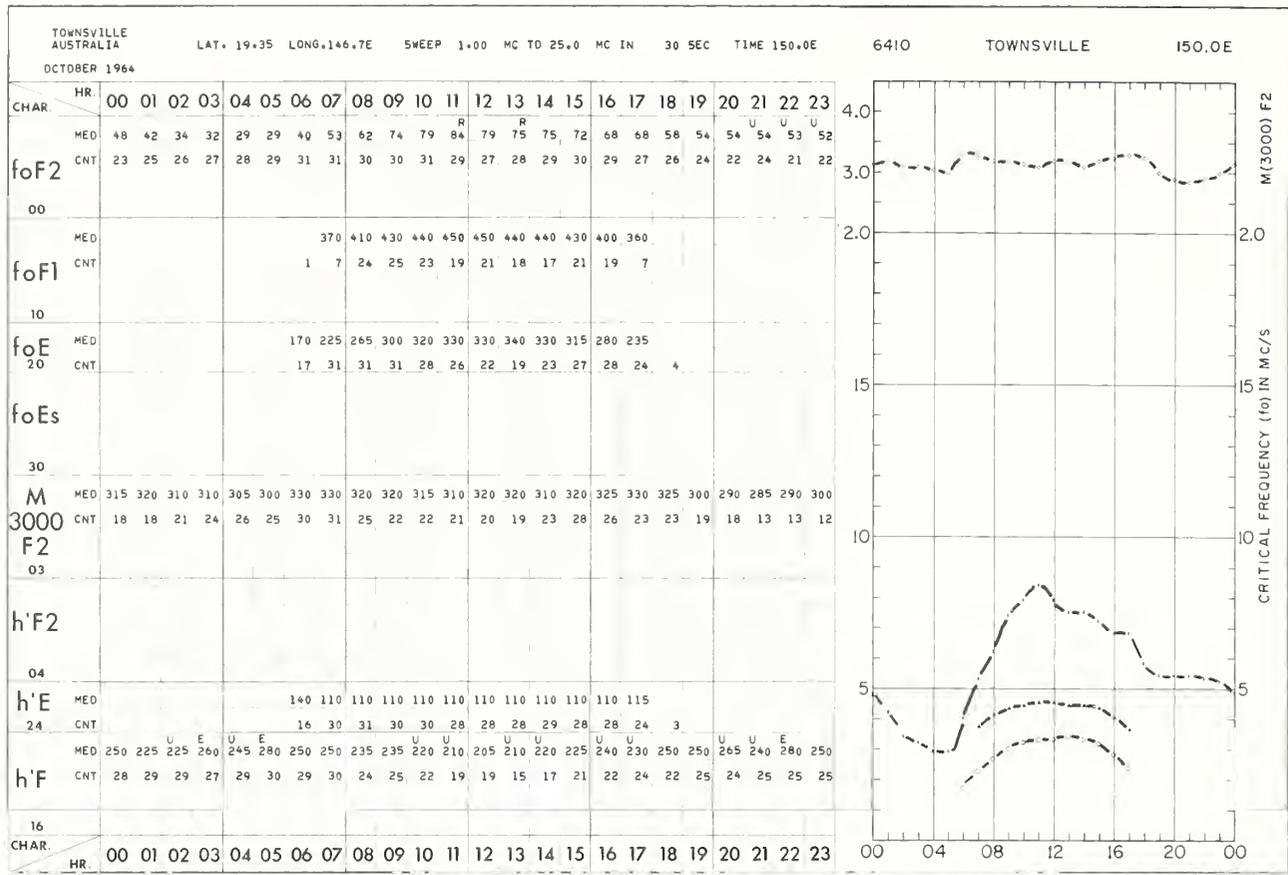


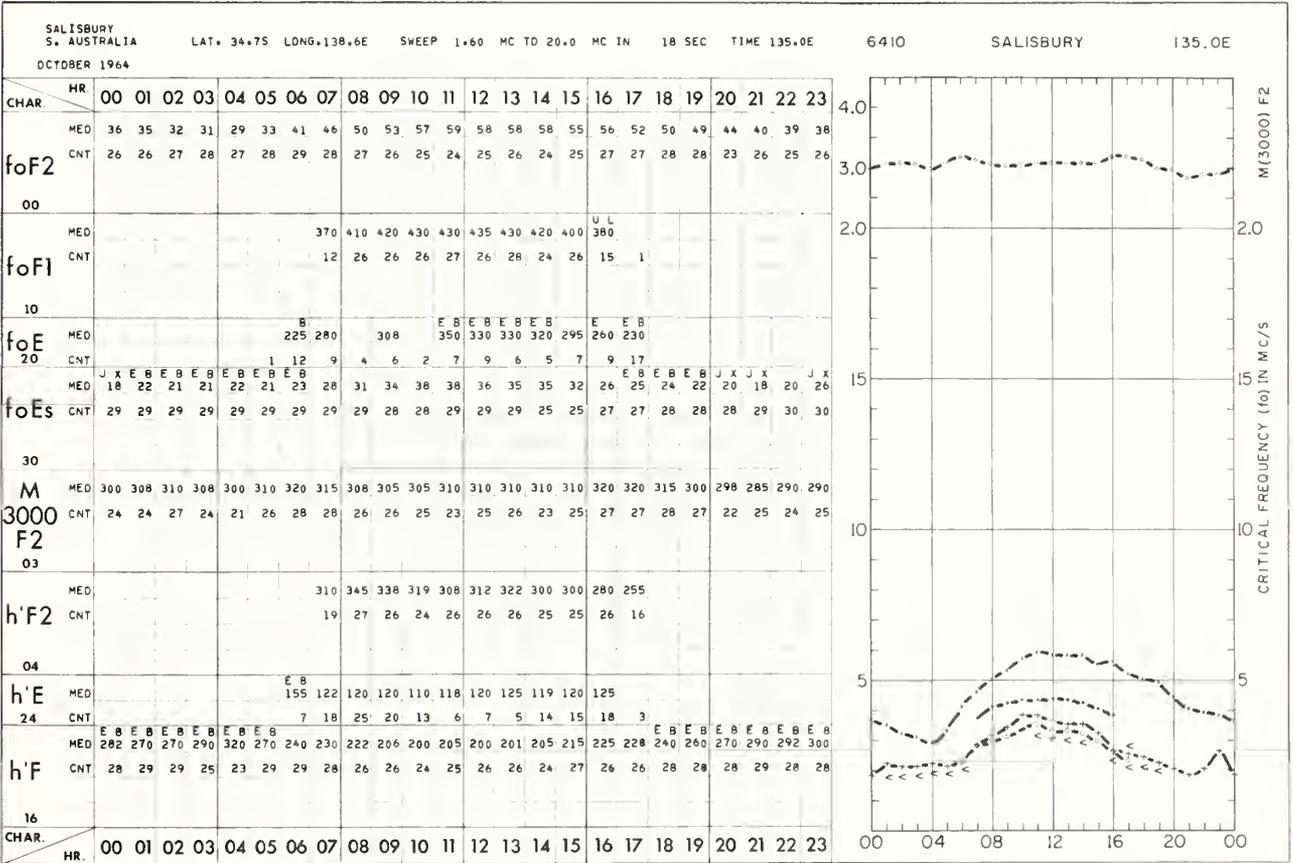
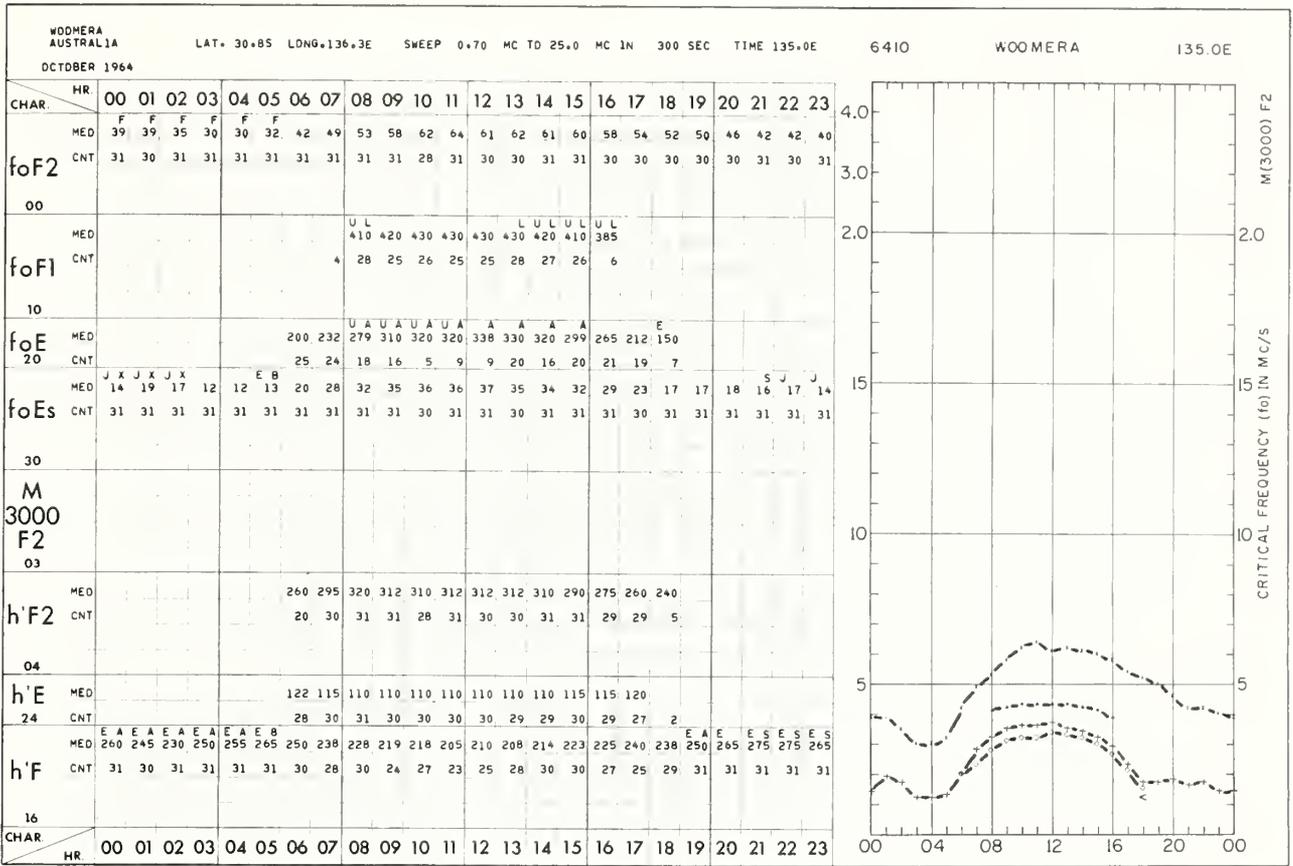


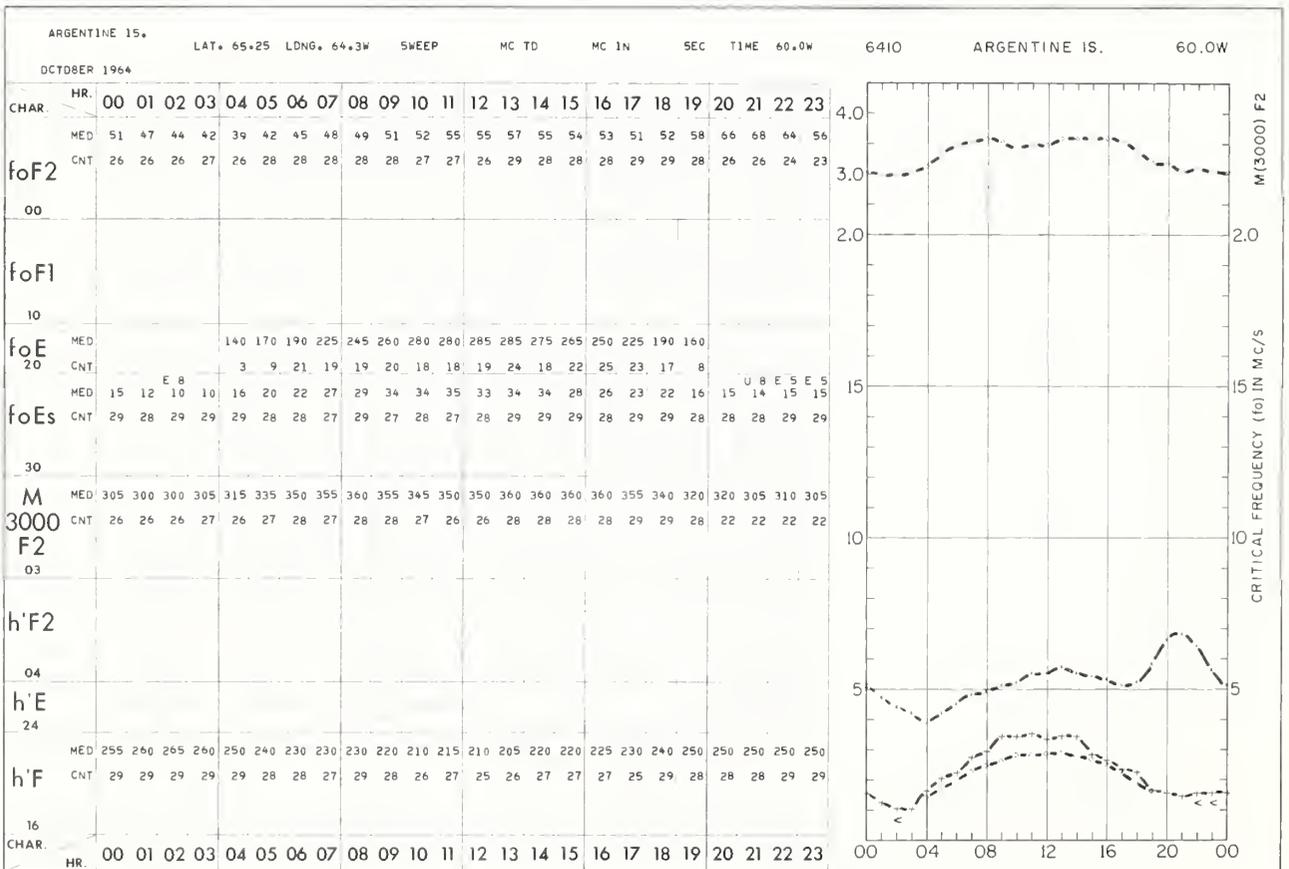
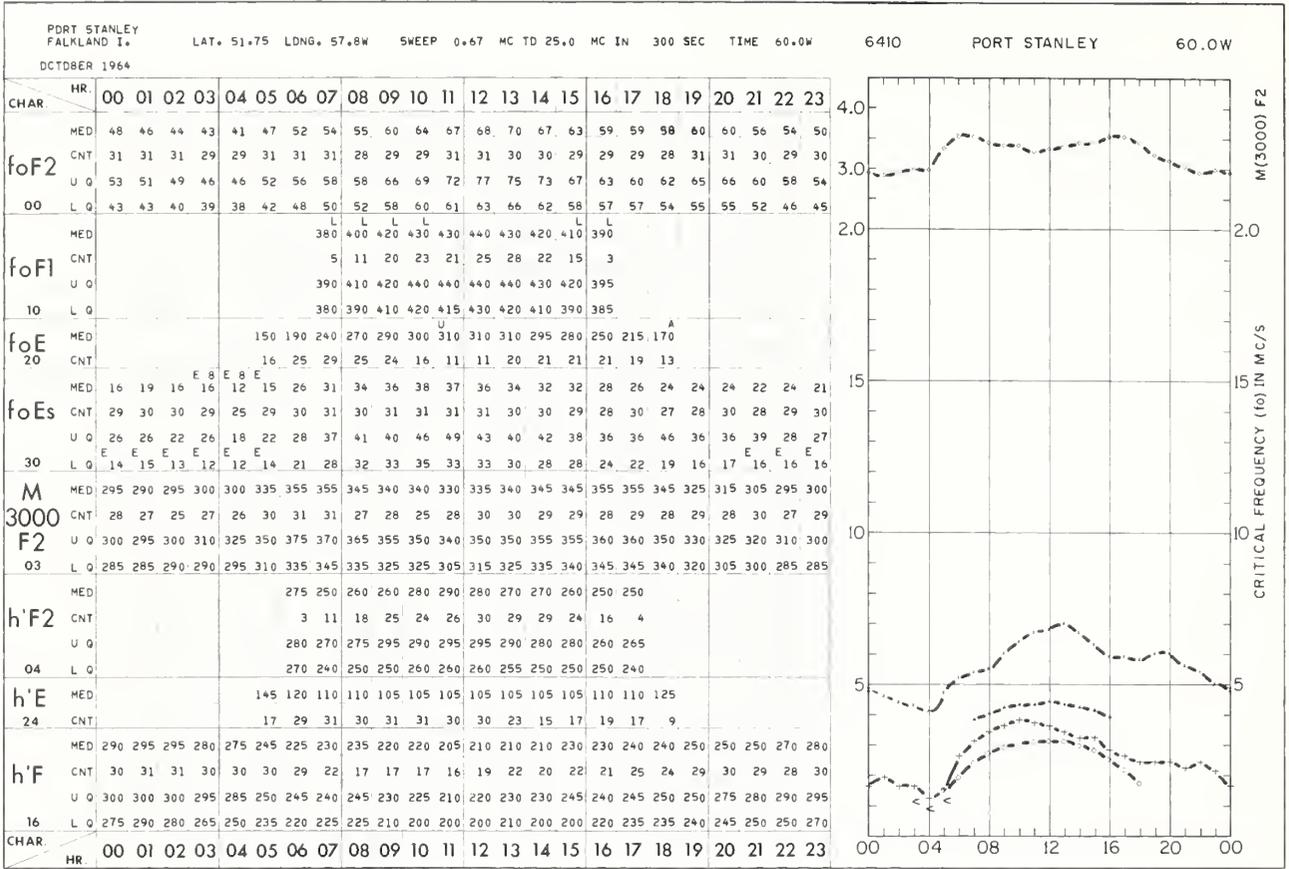


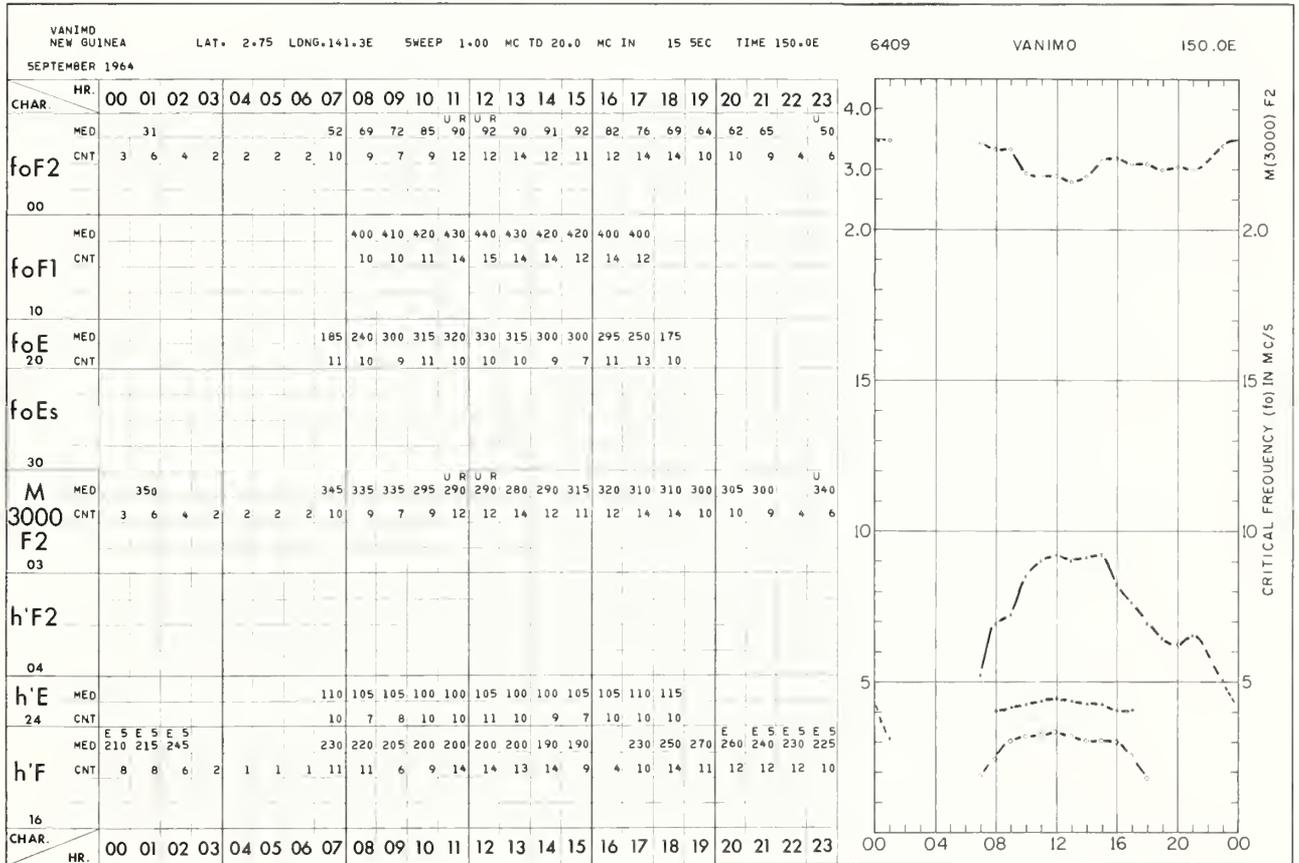
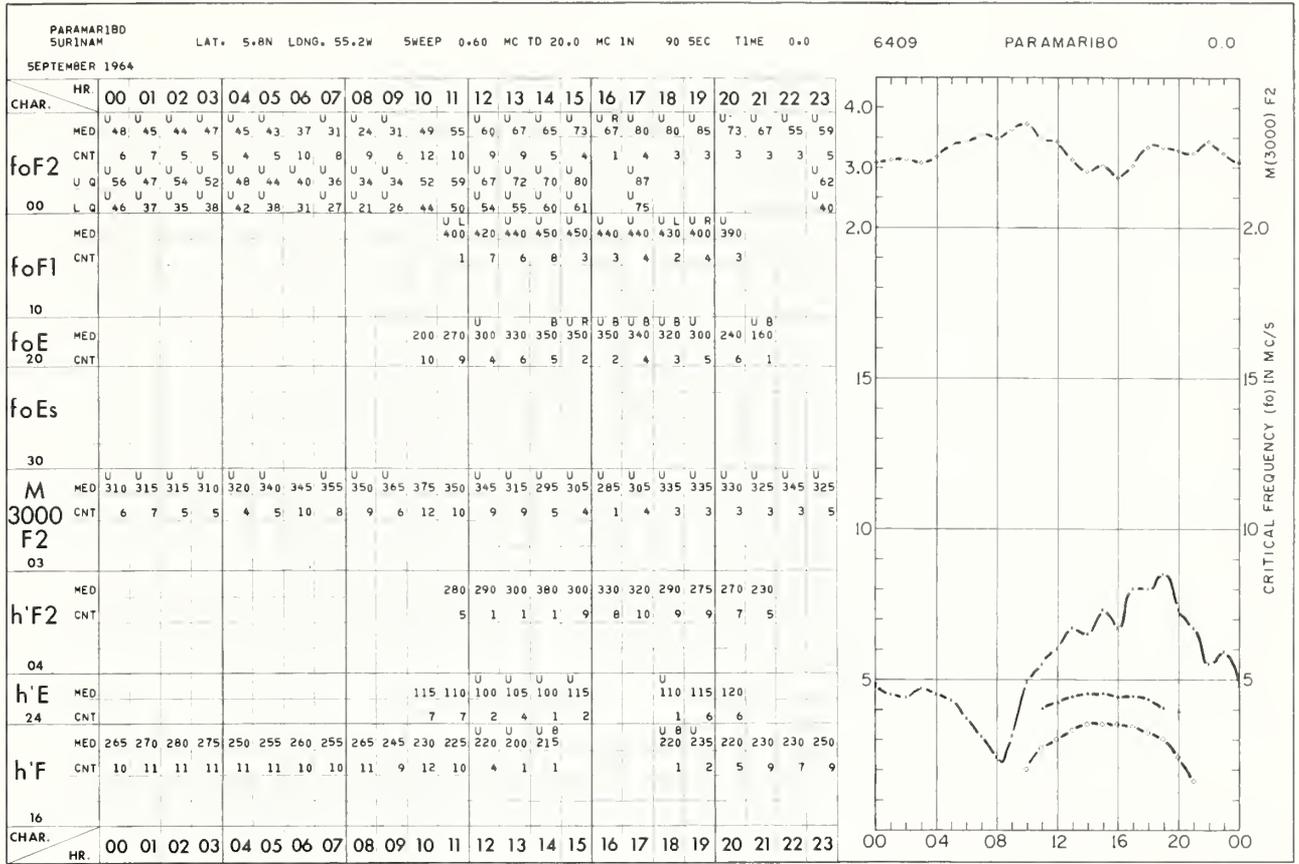


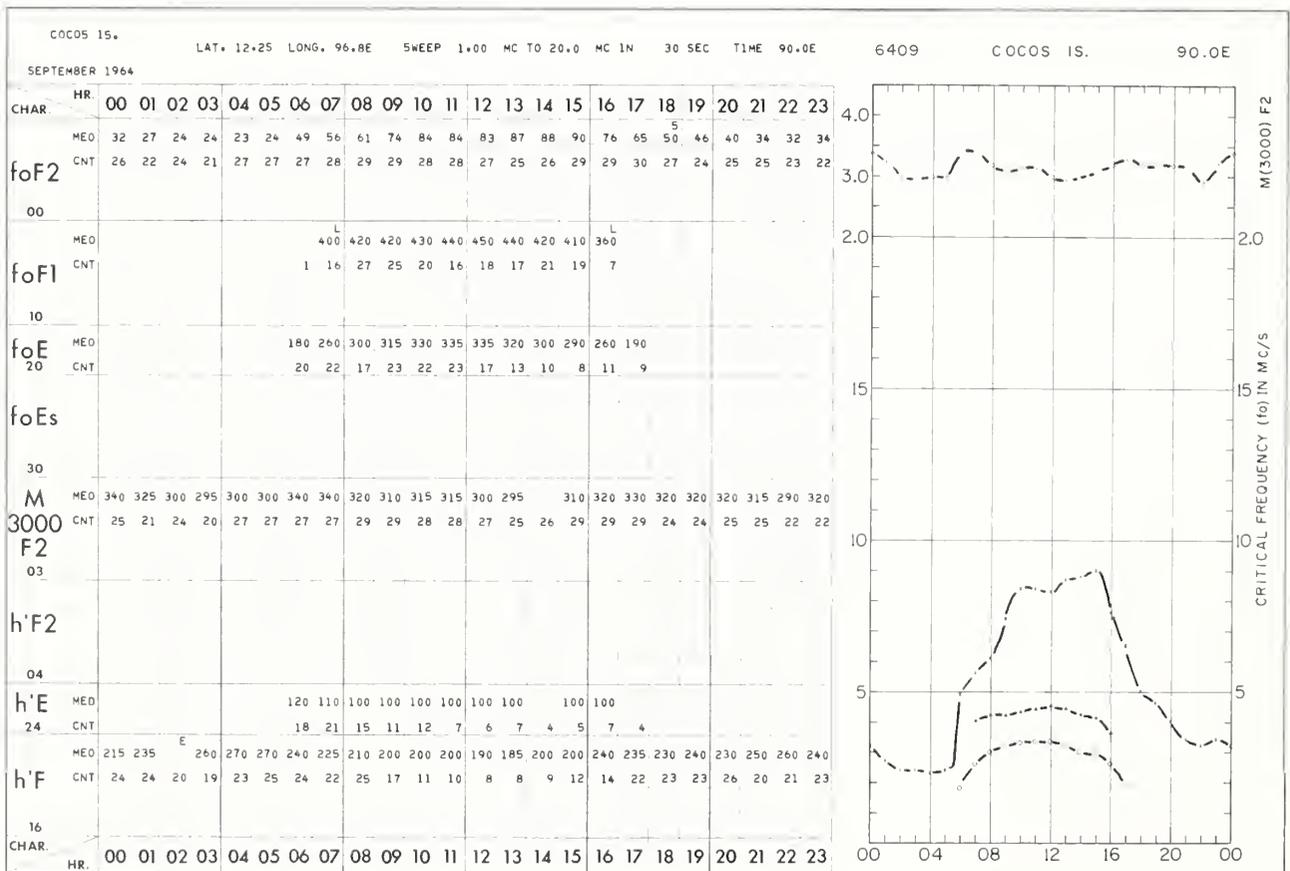
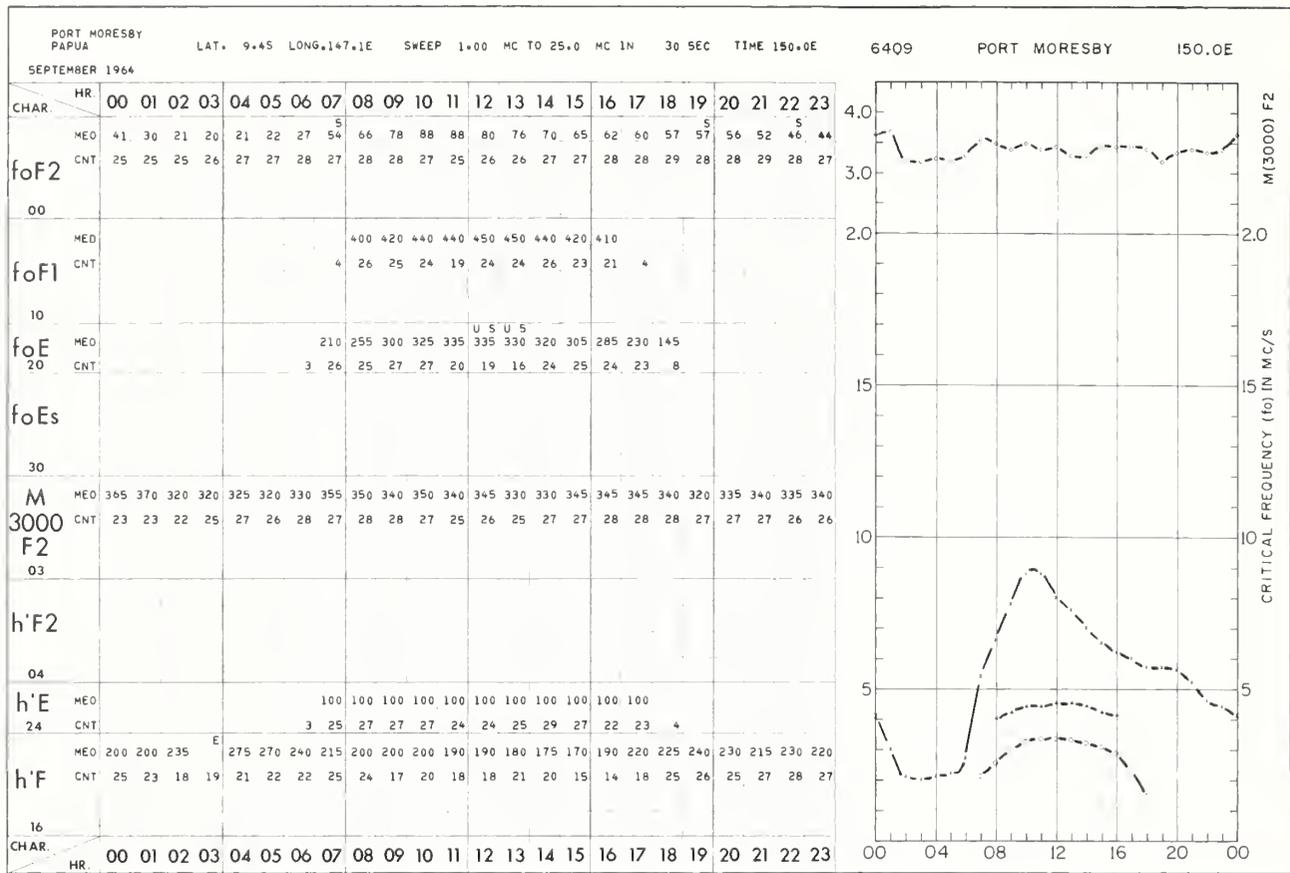


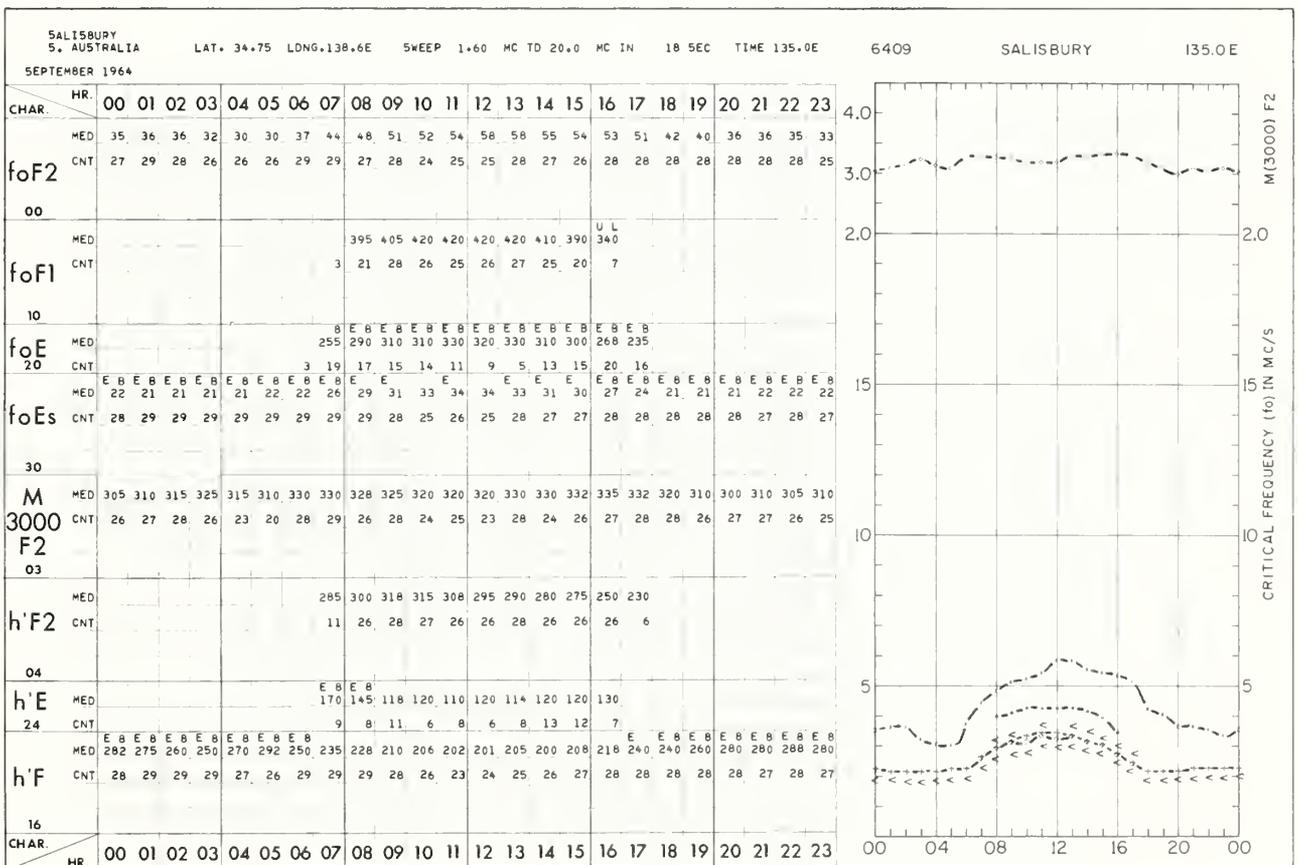
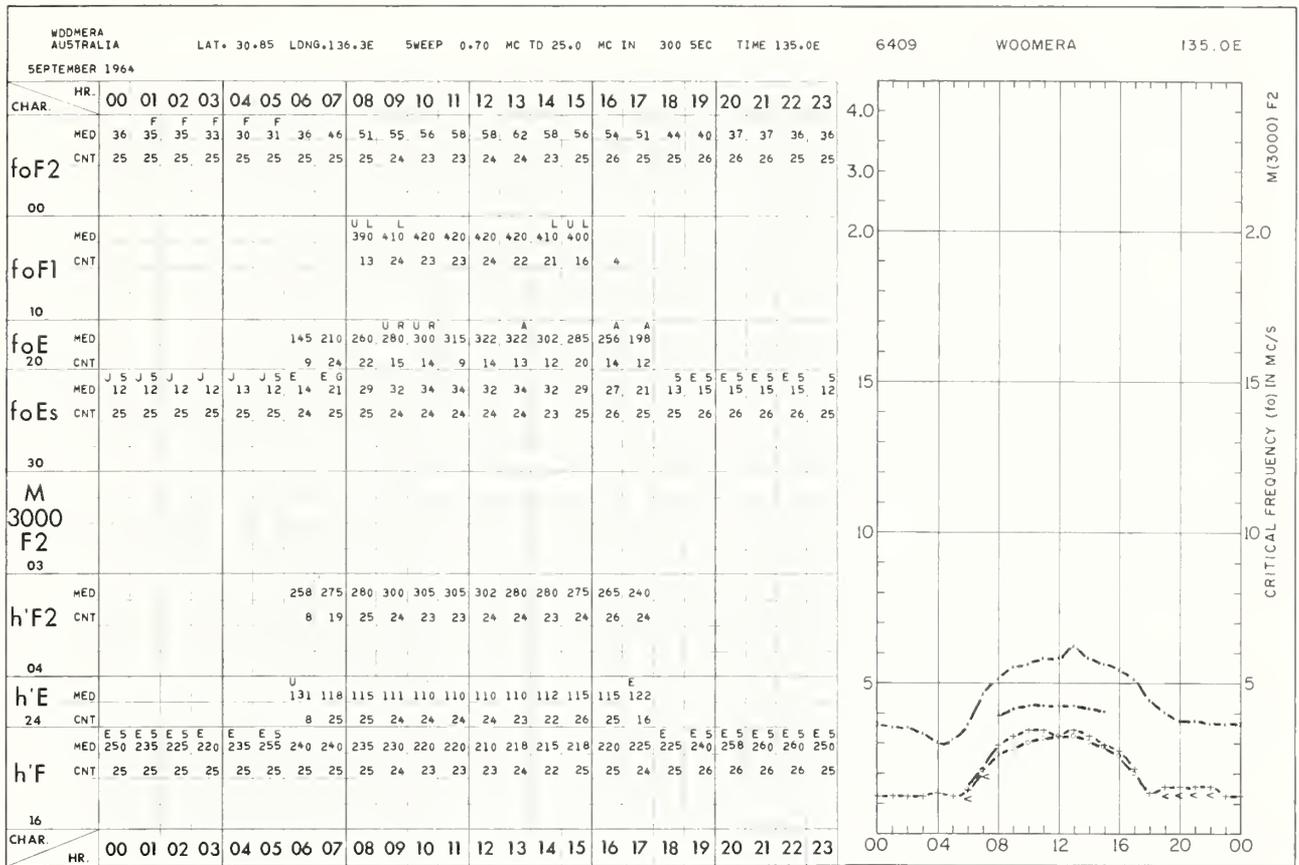


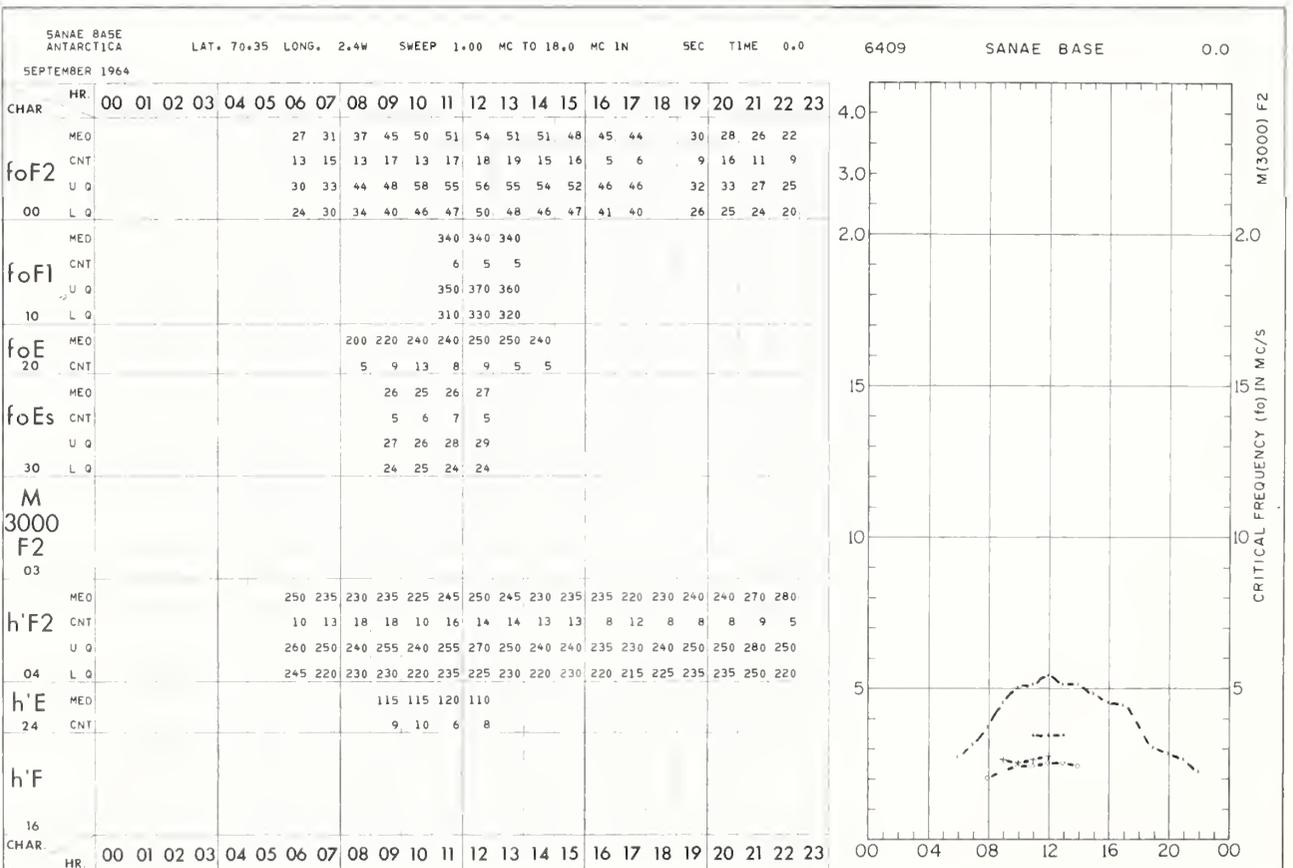
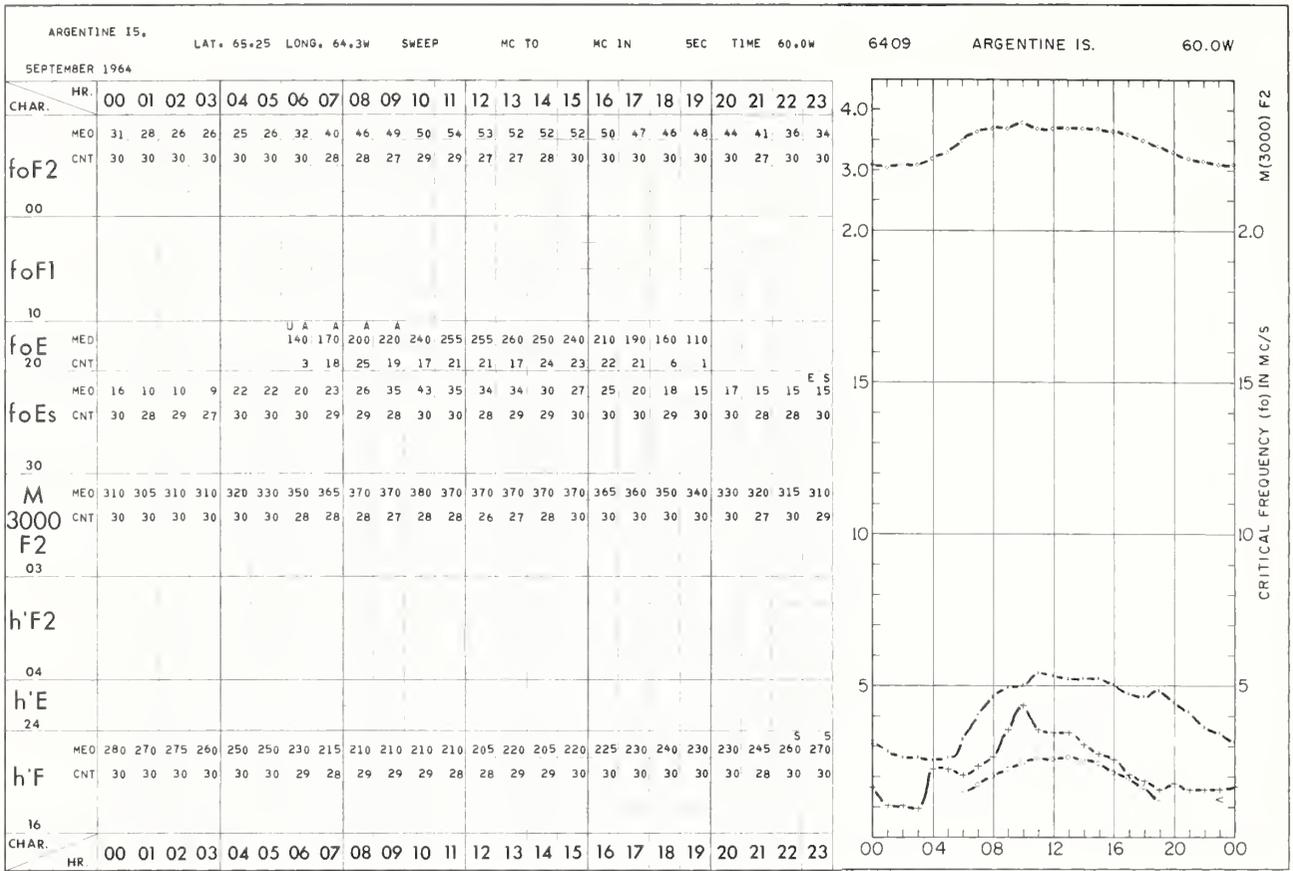


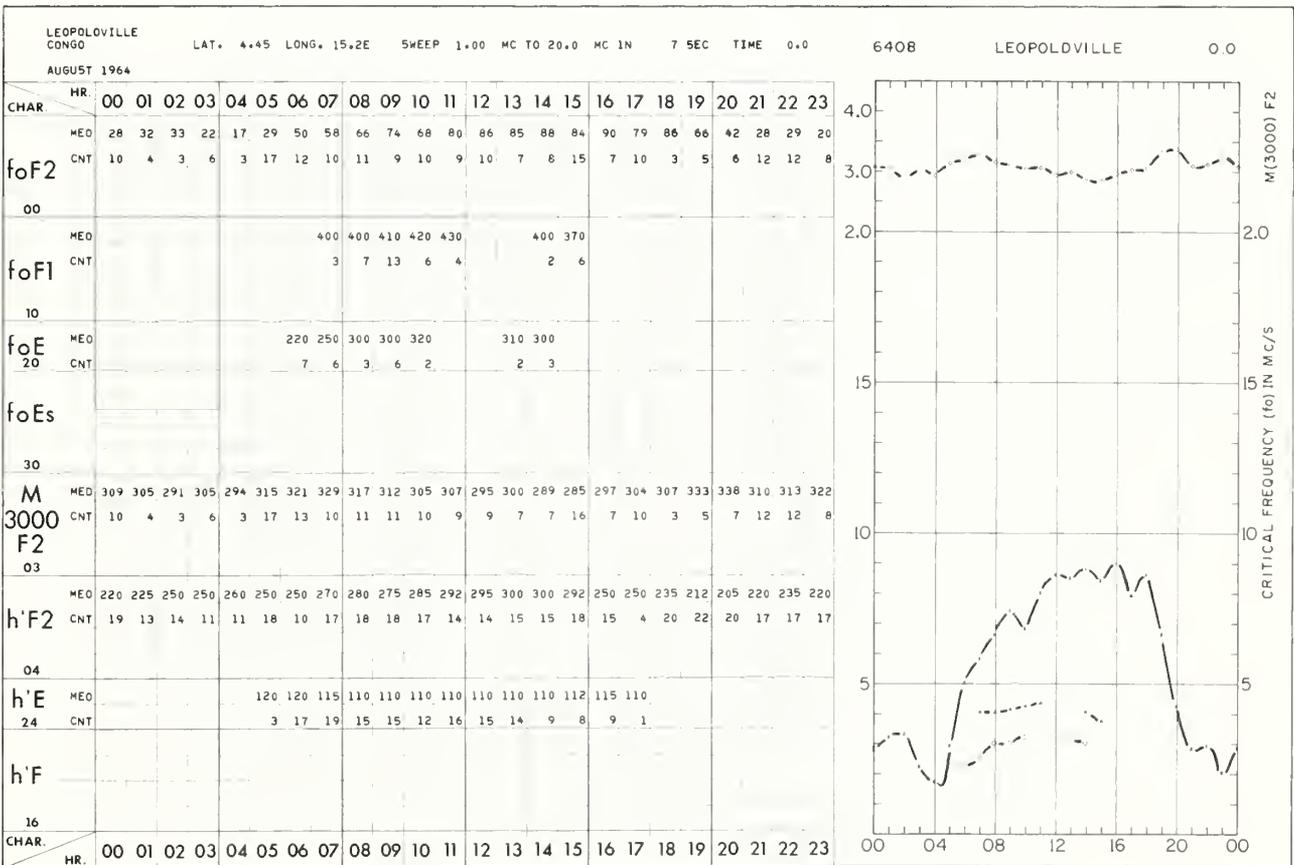
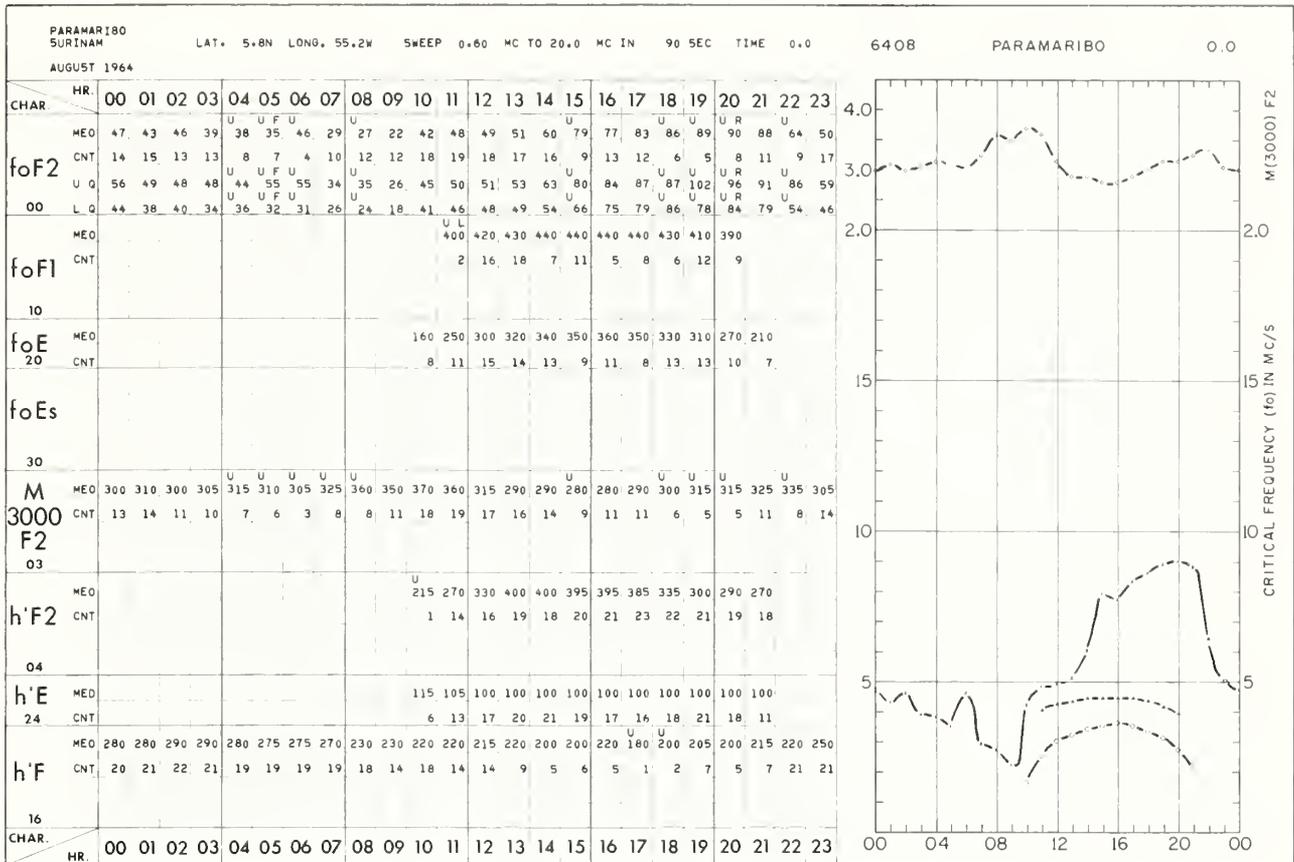


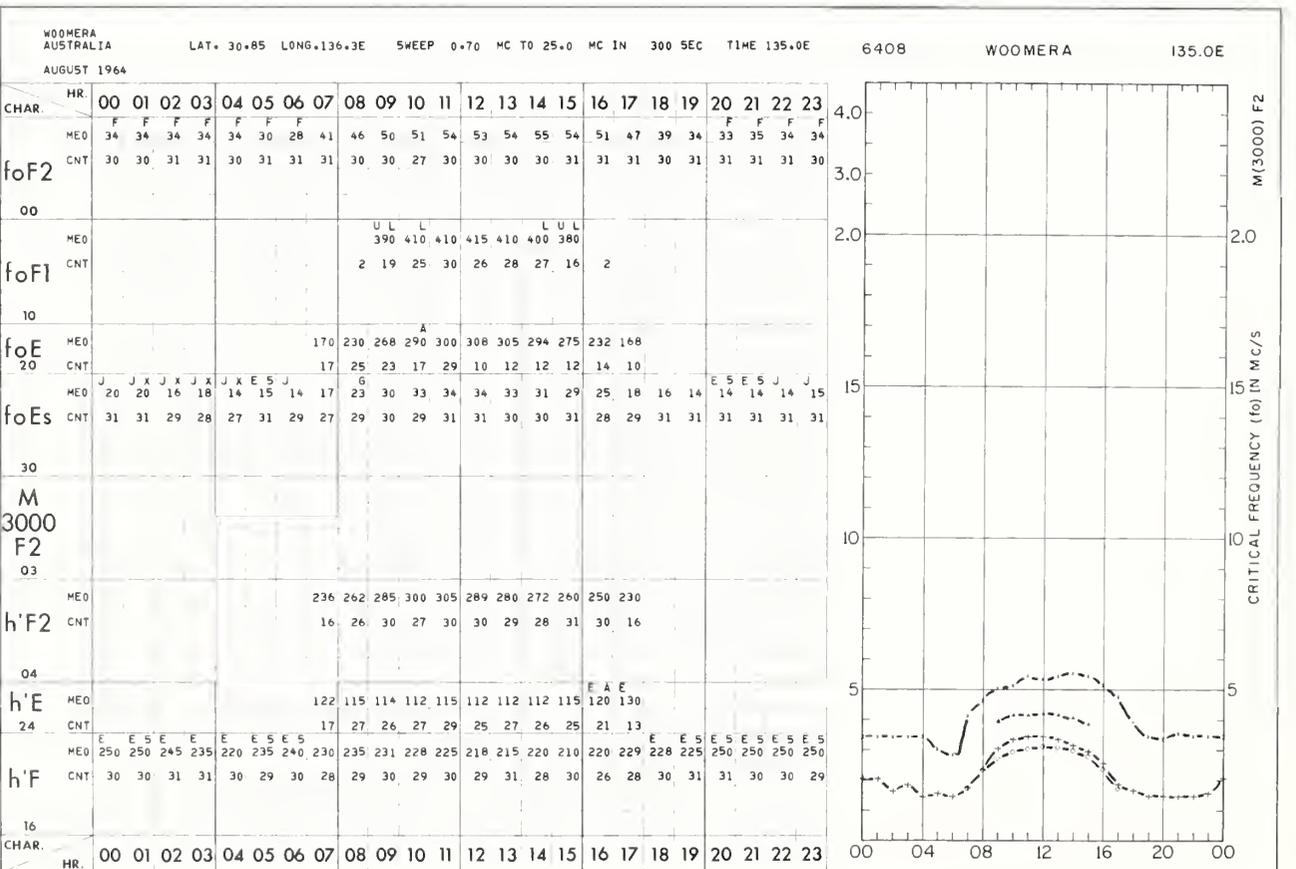
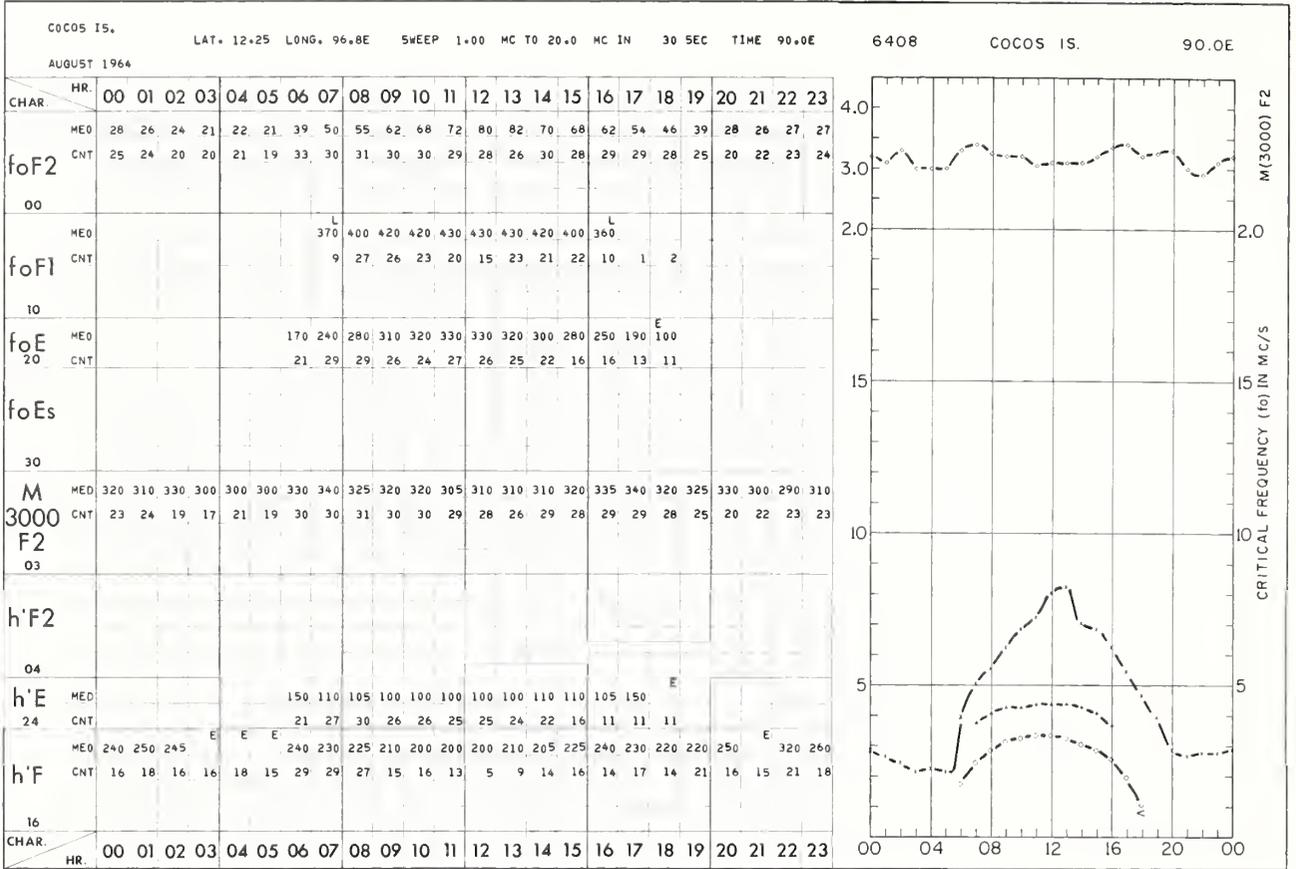


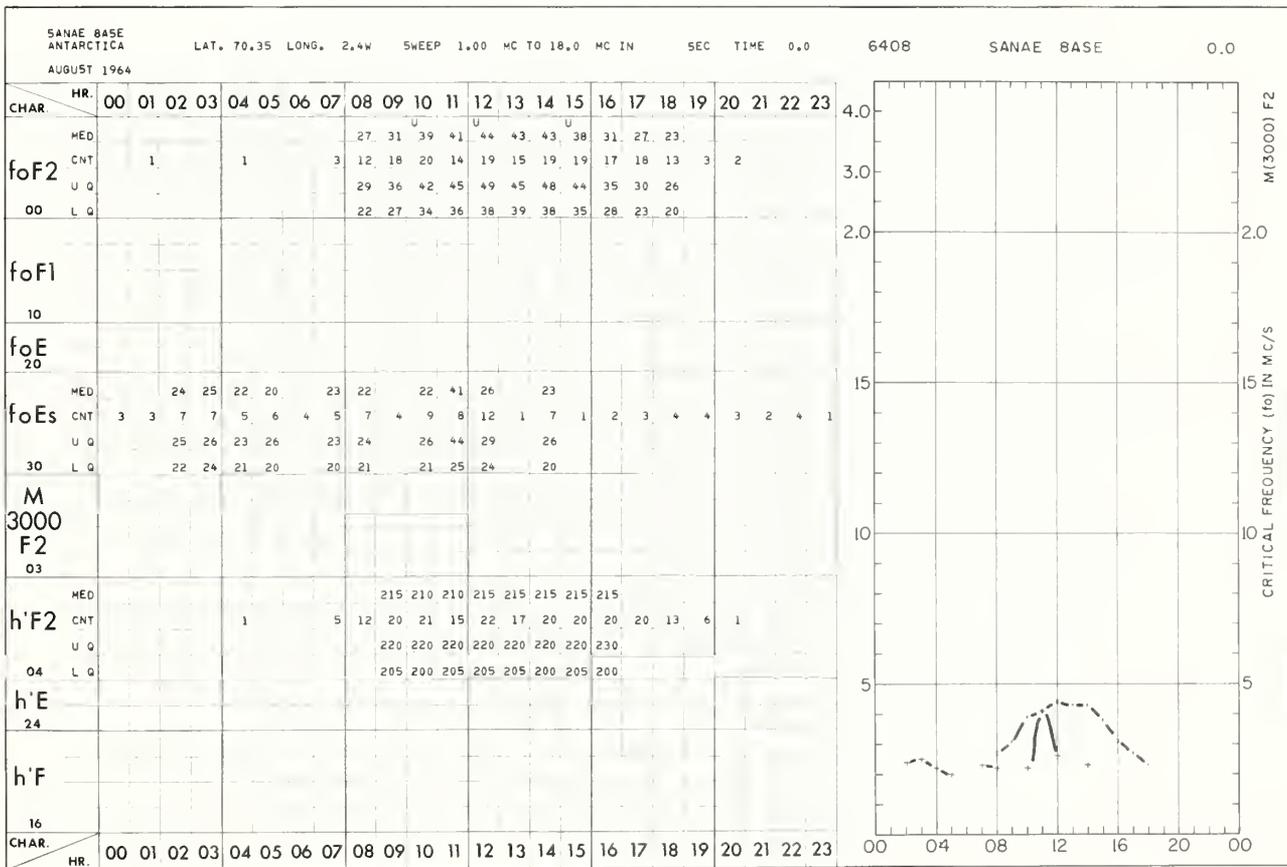
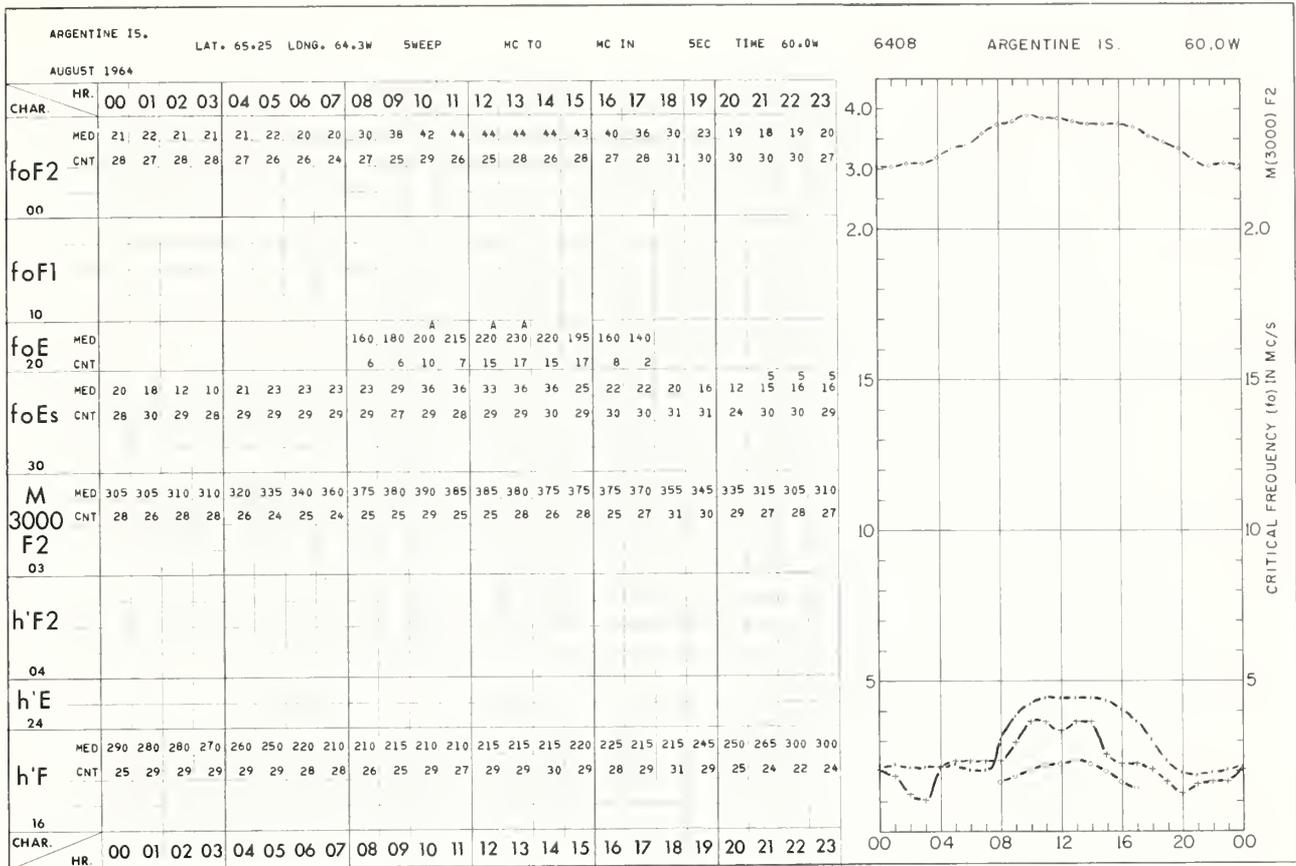


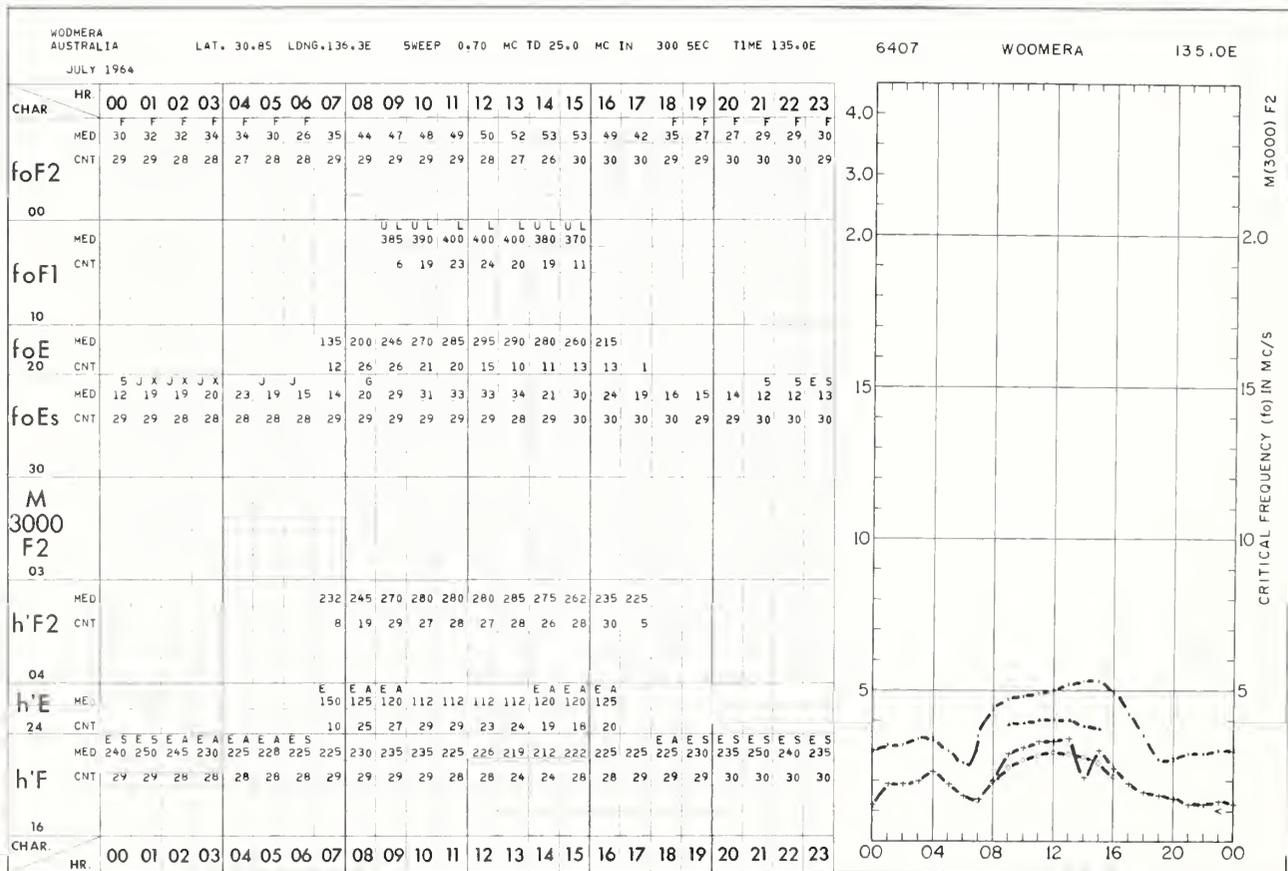
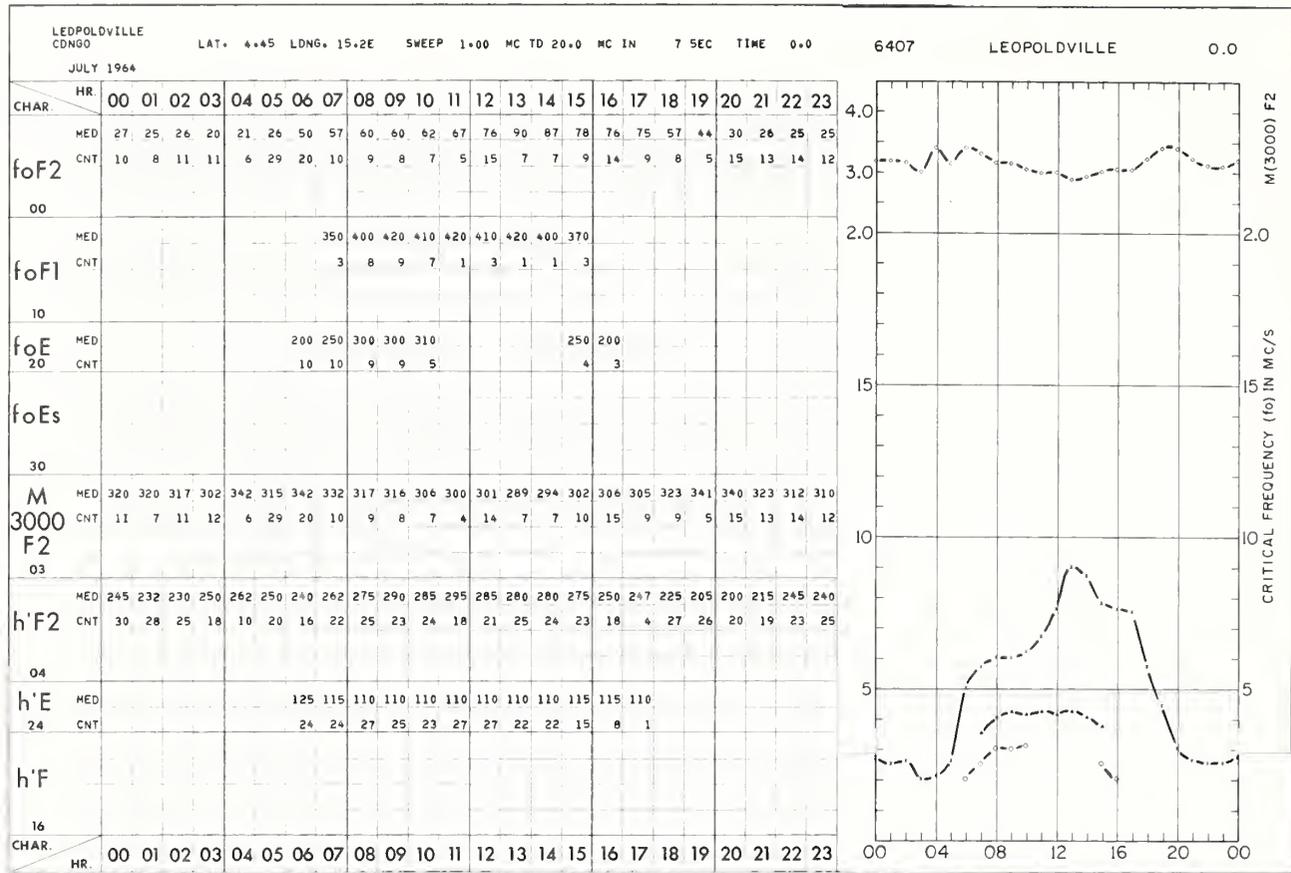


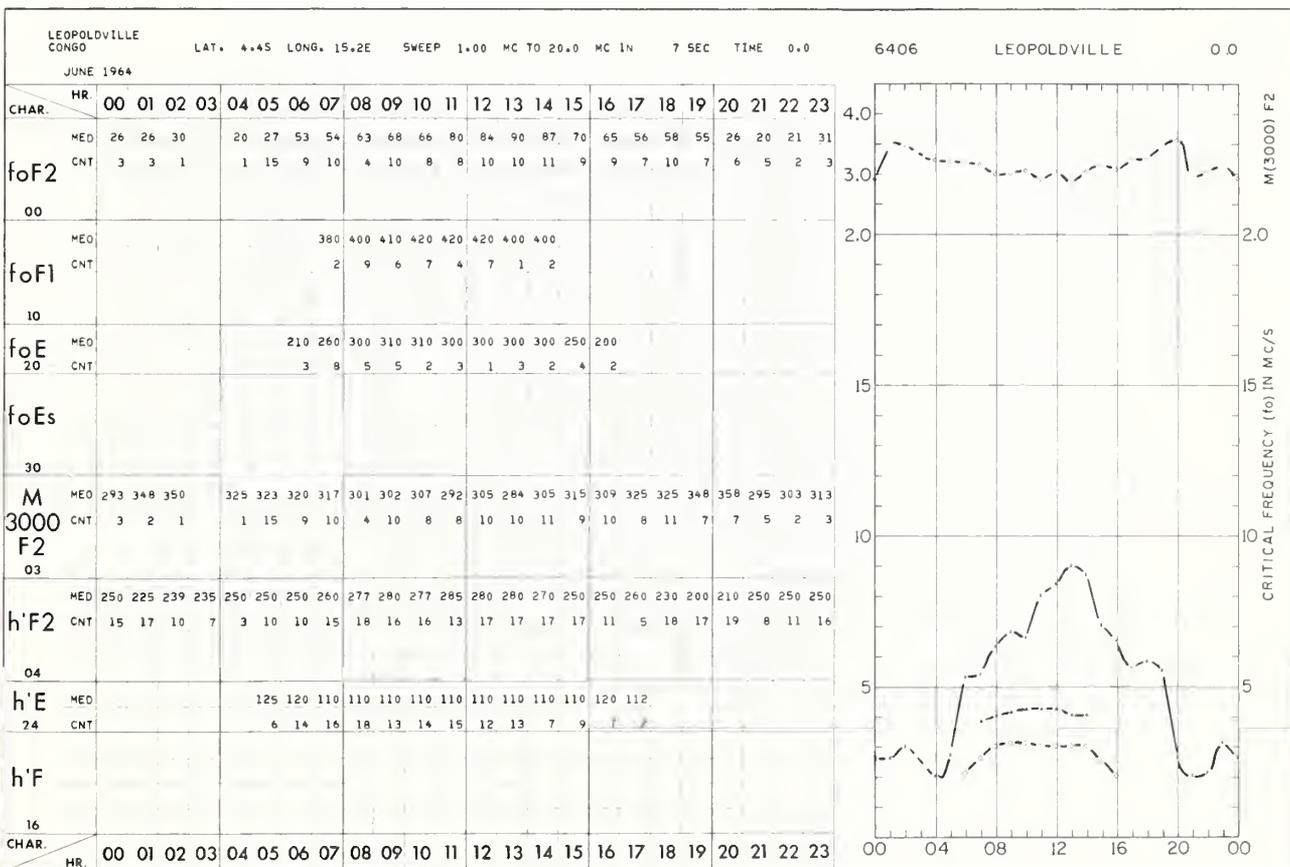
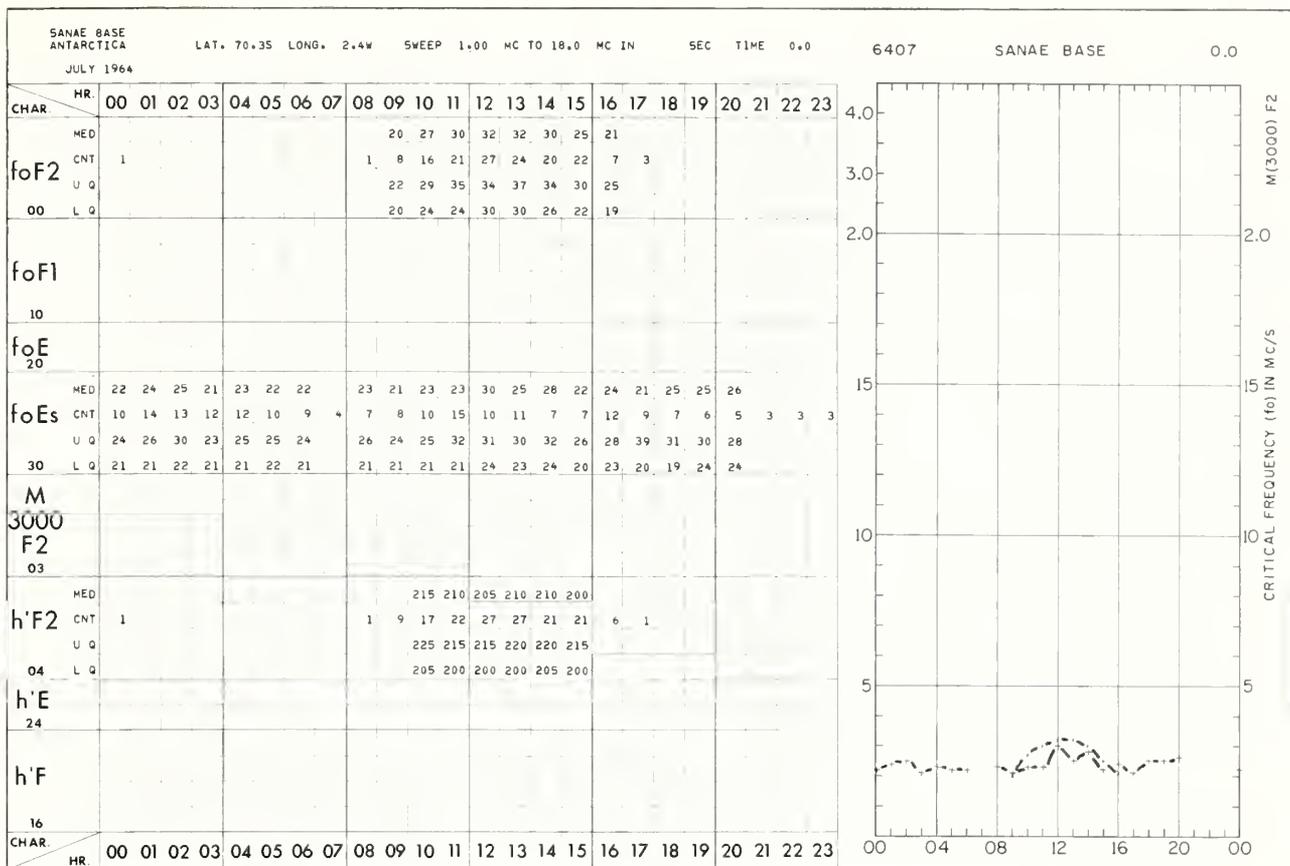


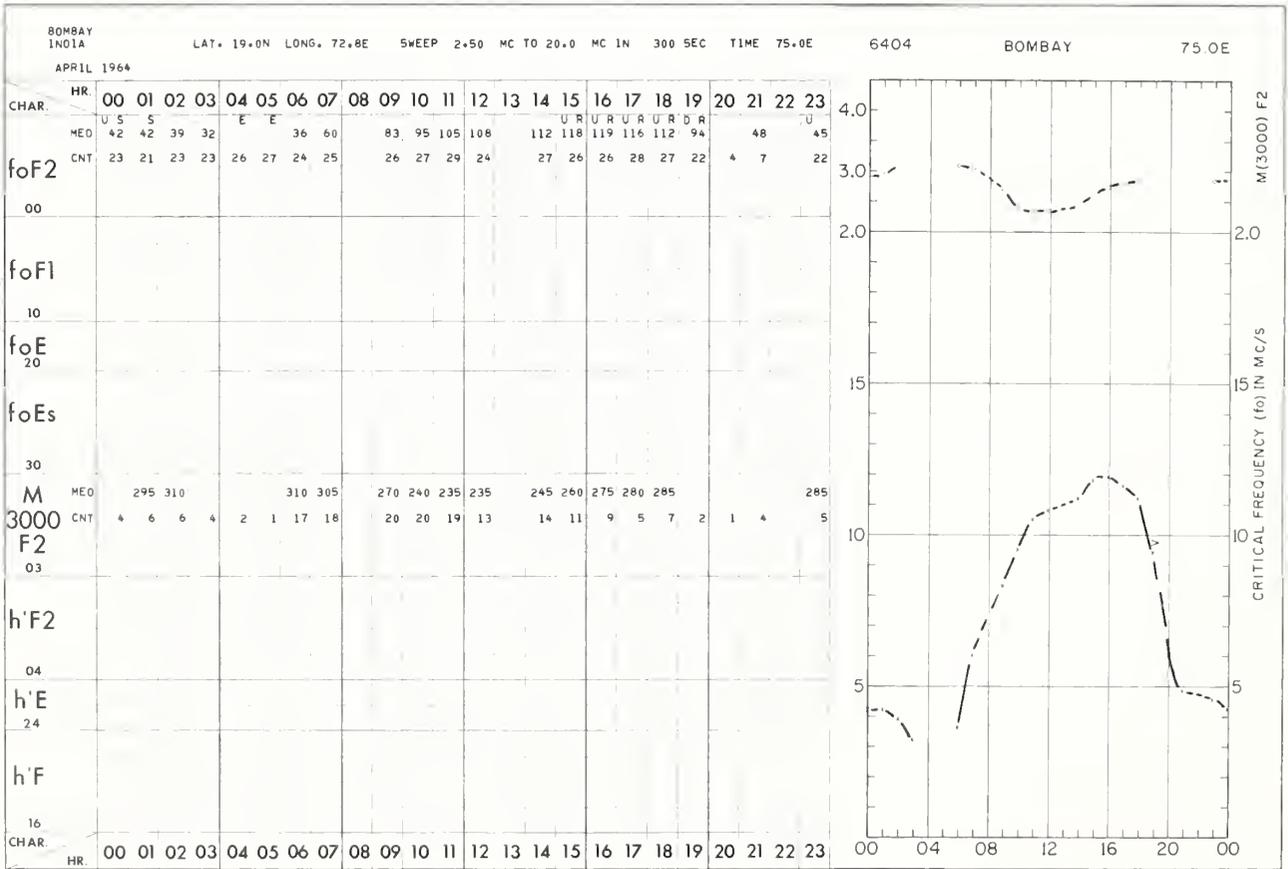
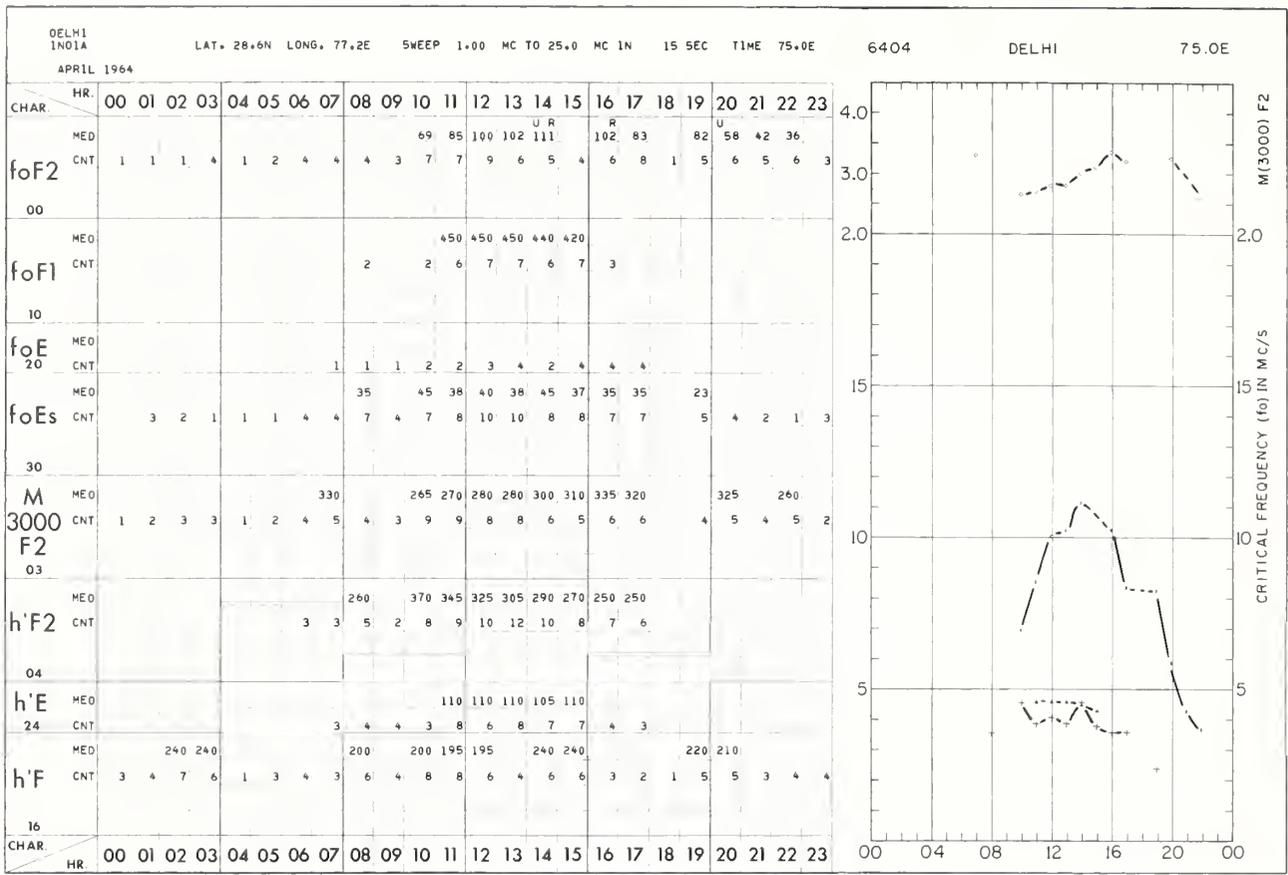


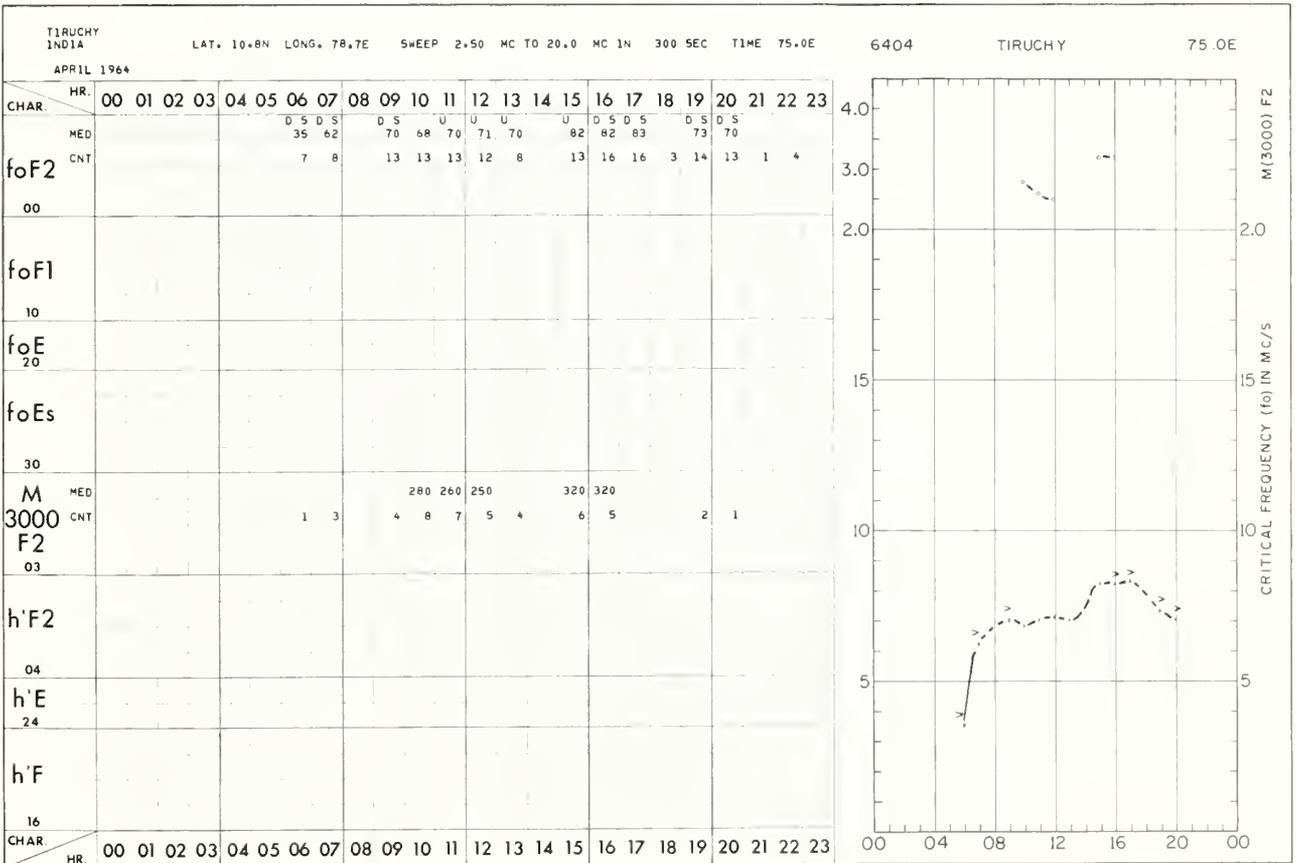
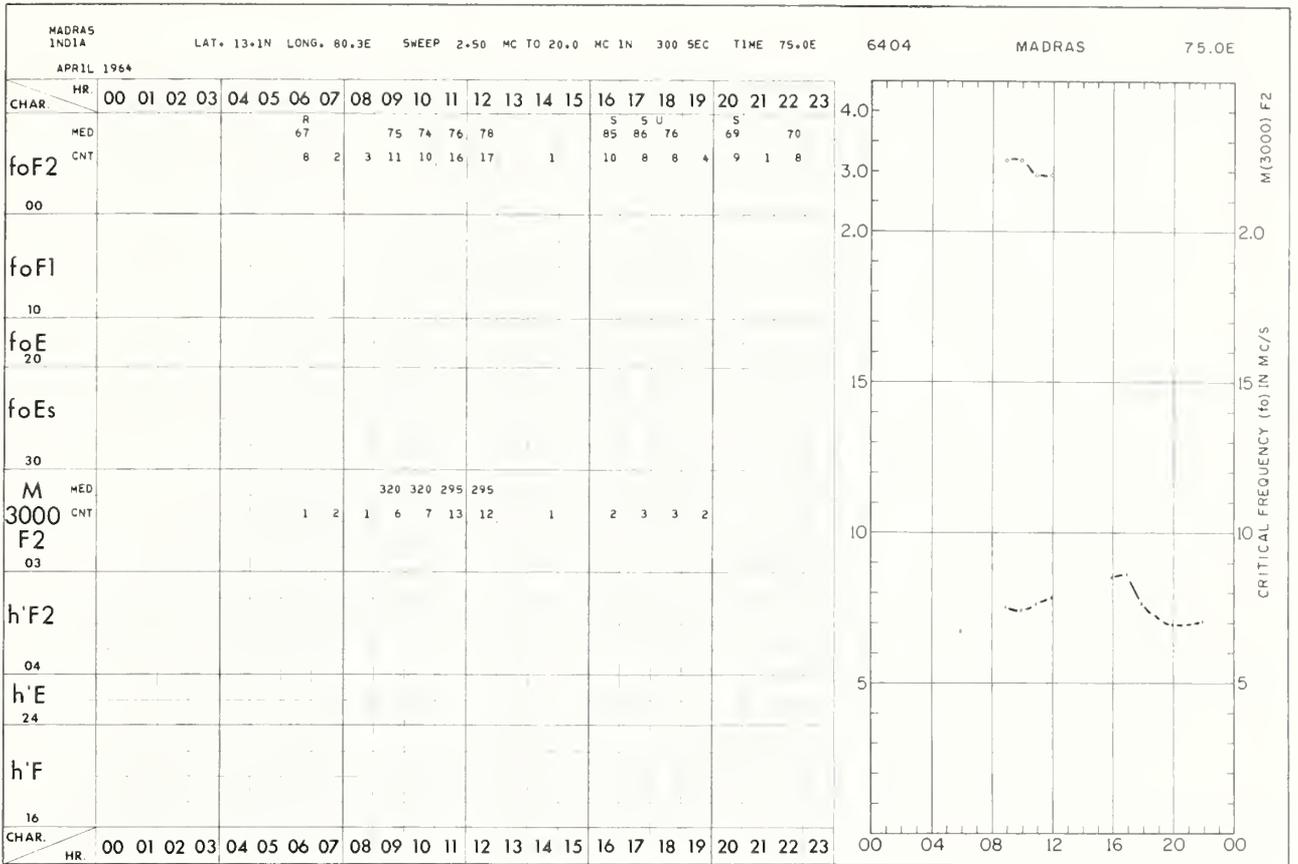


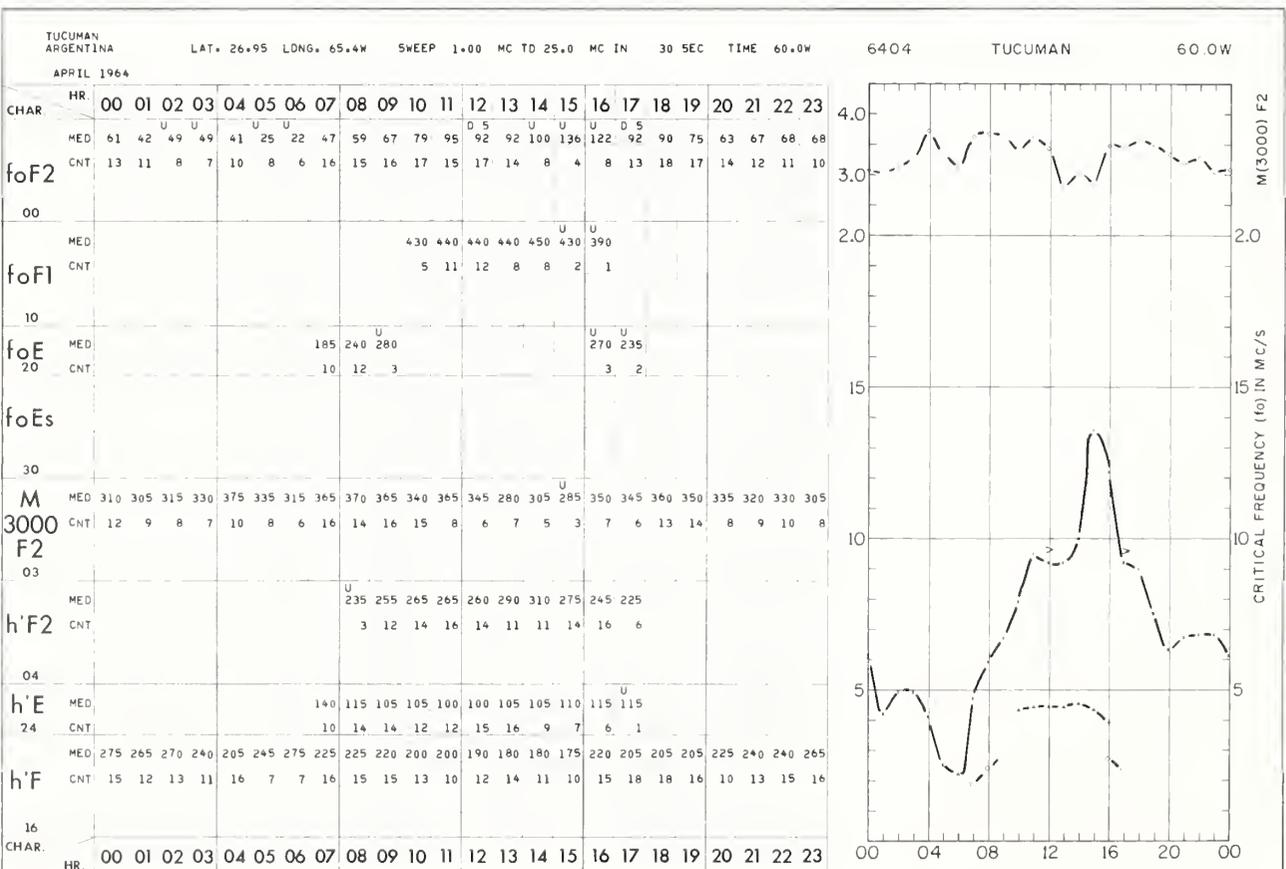
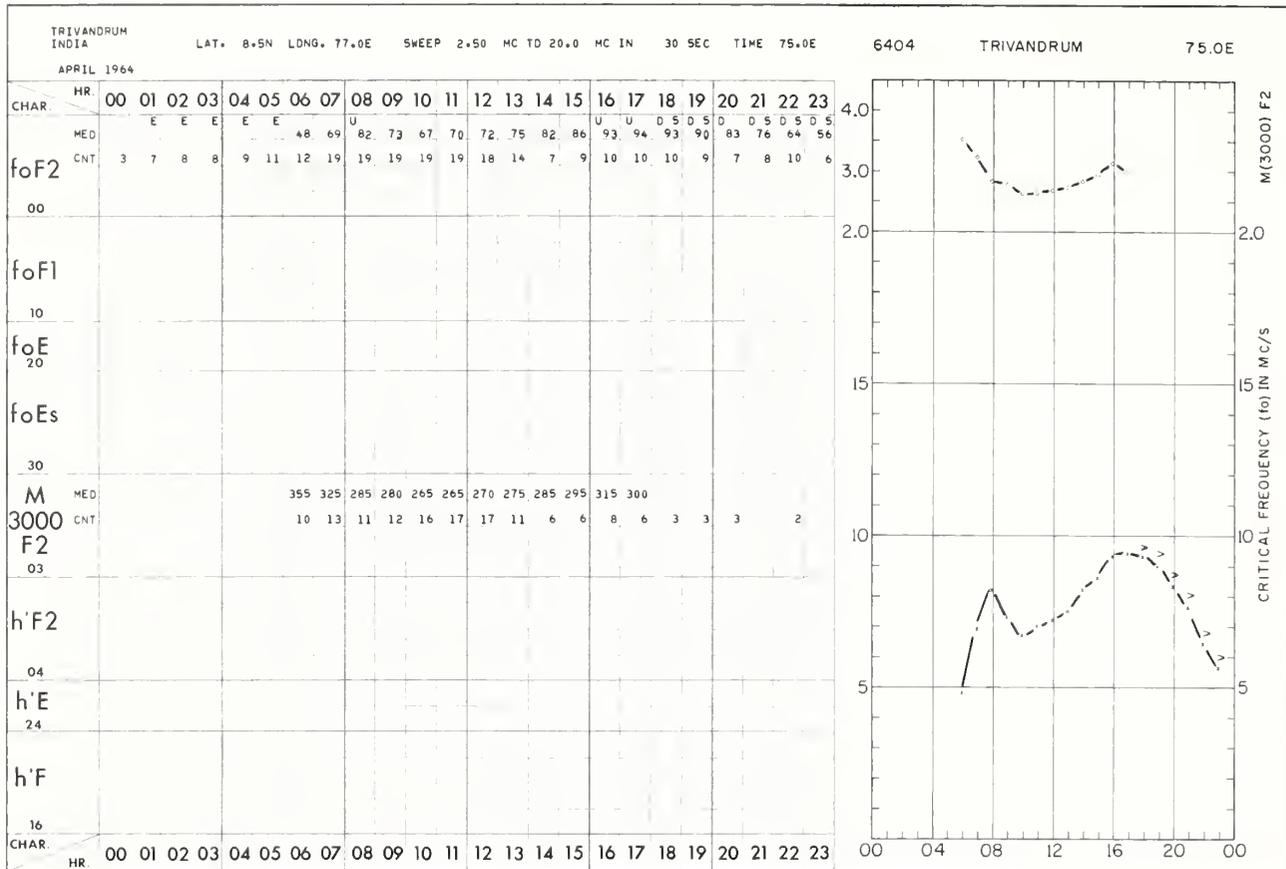


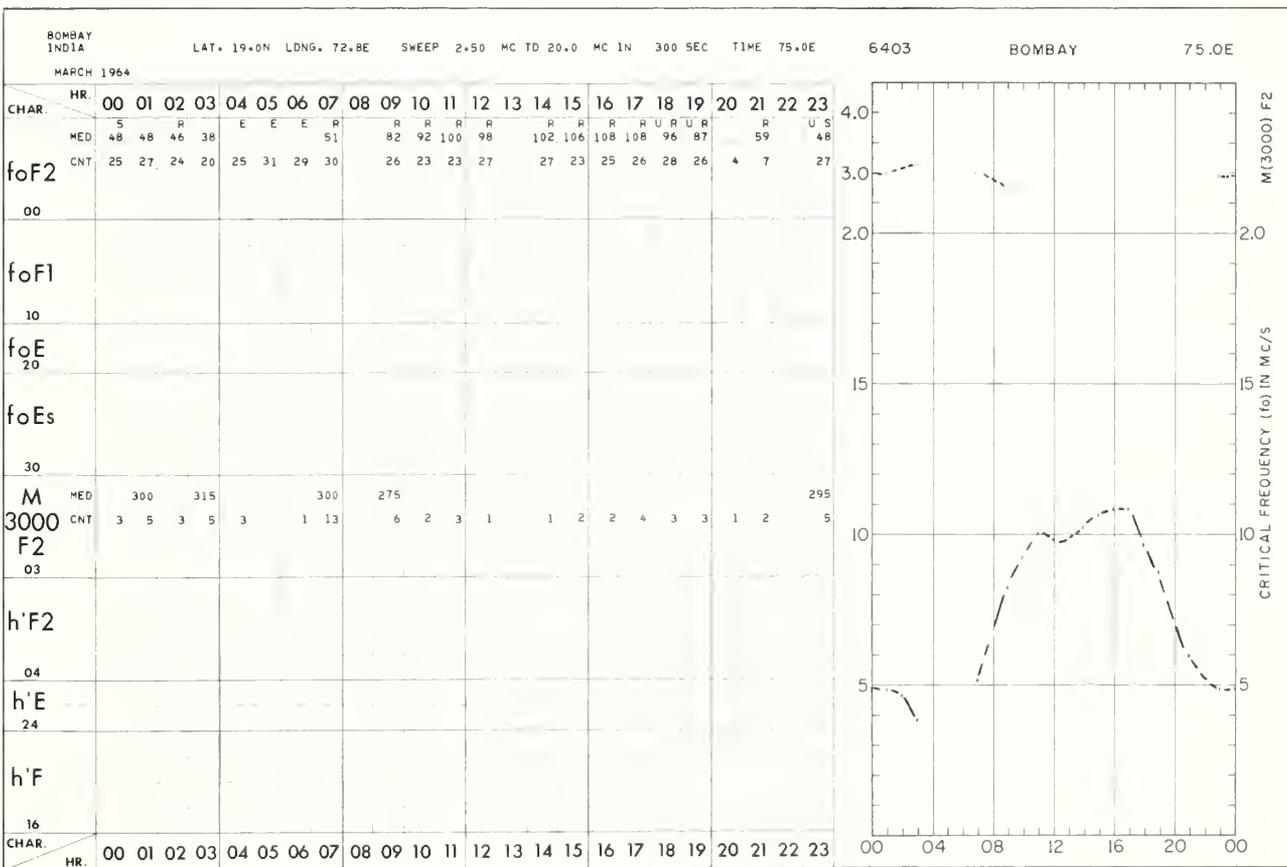
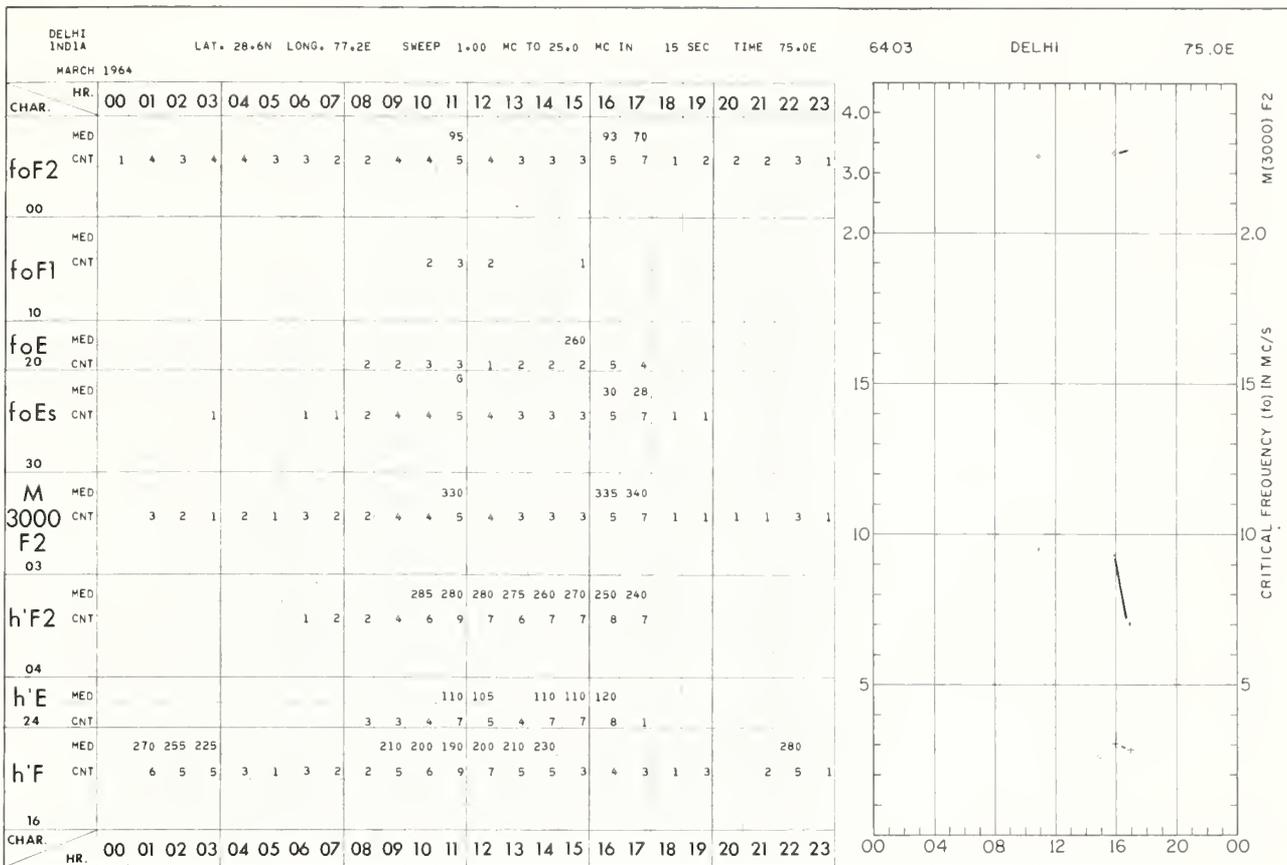


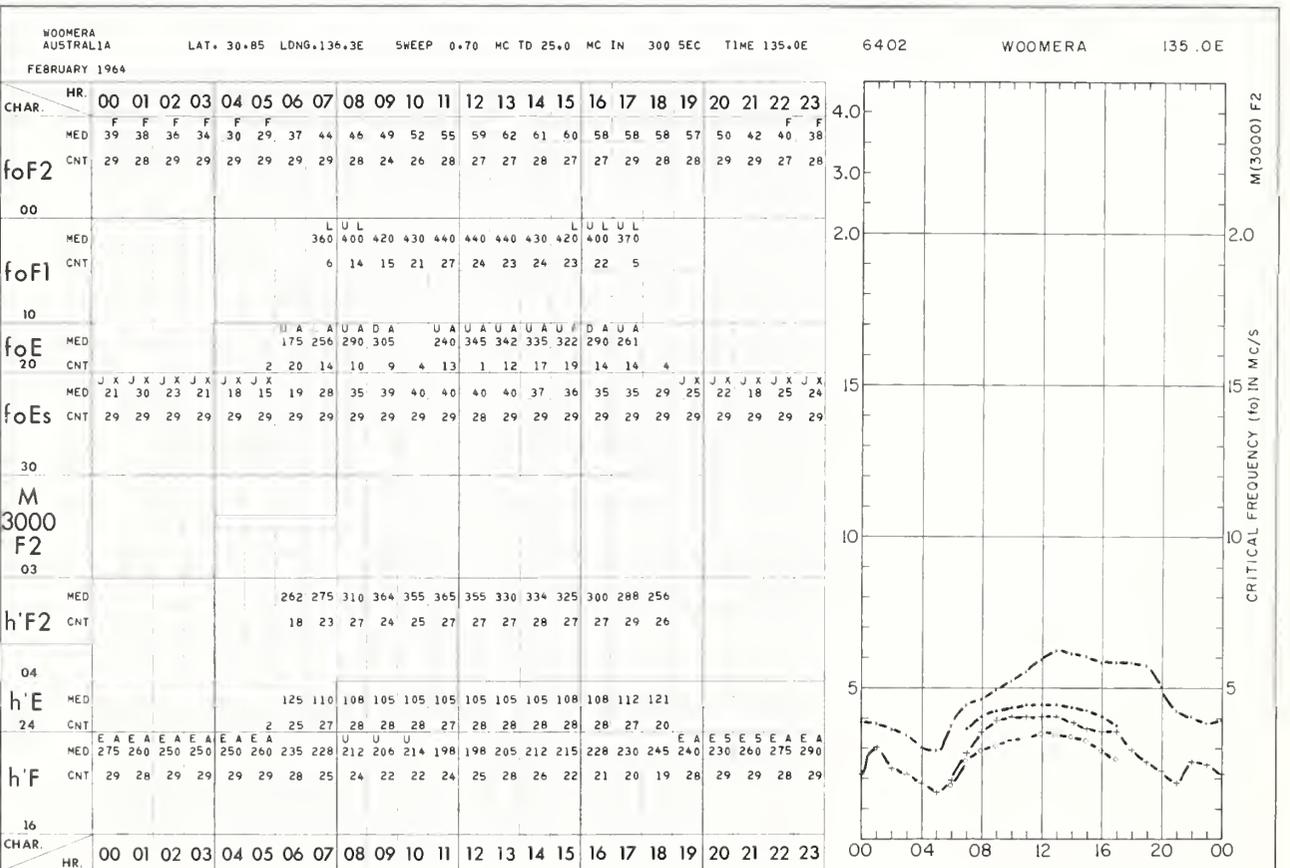
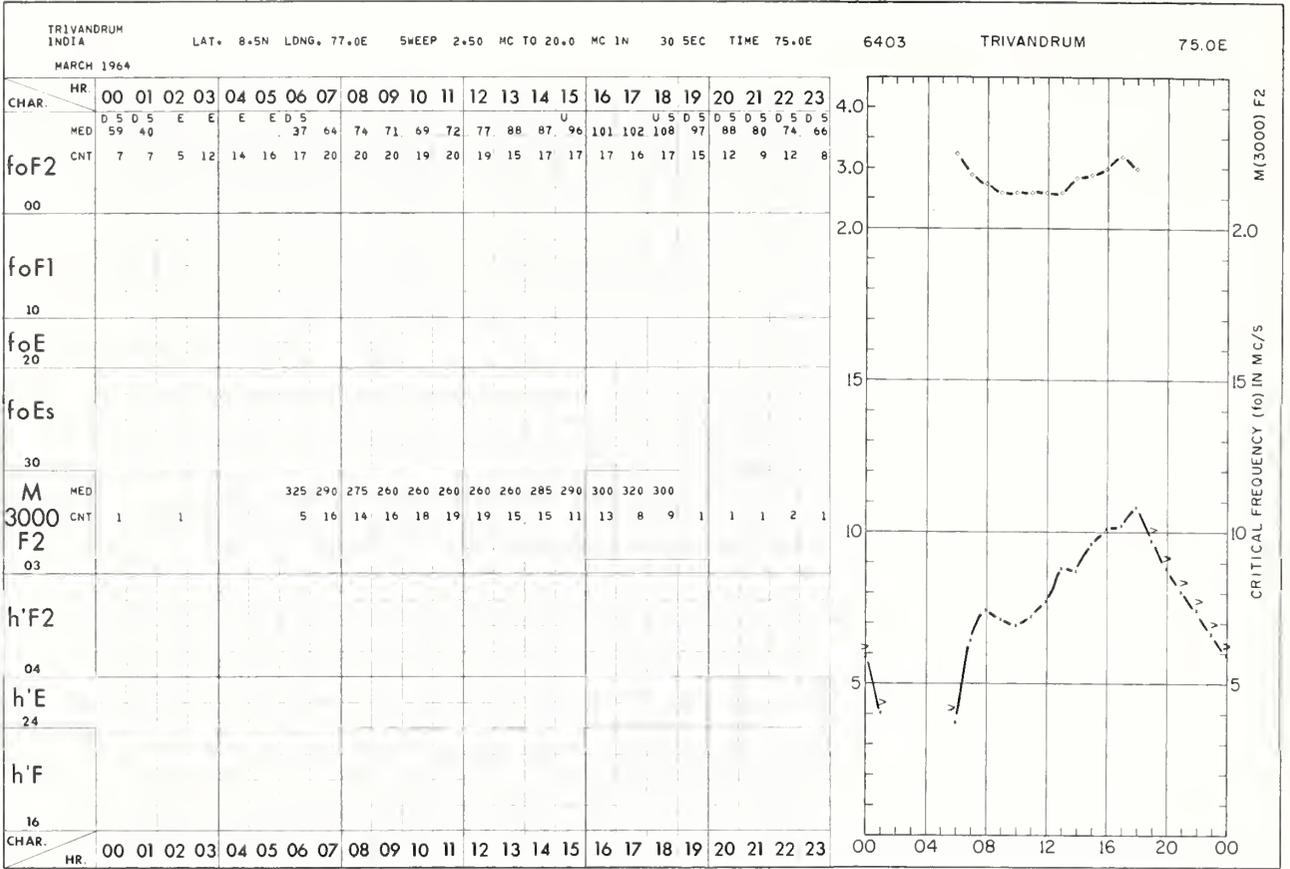












				PAGE
AHMEDABAD	INDIA	1965	JULY	14
ARGENTINE IS.		1964	AUG.	43
		1964	SEPT.	40
		1964	OCT.	36
		1964	NOV.	29
		1964	DEC.	25
		1965	JAN.	23
		1965	FEB.	21
BANGKOK	THAILAND	1965	JUNE	17
		1965	JULY	15
		1965	AUG.	12
BANGUI	C. AFRICAN REPUBLIC	1964	OCT.	32
BOGOTA	COLOMBIA	1965	SEPT.	5
BOMBAY	INDIA	1964	MAR.	49
		1964	APR.	46
BOULDER	COLORADO	1965	OCT.	2
		1965	NOV.	1
BUENOS AIRES	ARGENTINA	1965	APR.	20
		1965	MAY	19
		1965	JUNE	18
CAPE ZEYGARI	CYPRUS	1965	JAN.	22
CHUNG LI	CHINA	1965	JULY	14
		1965	AUG.	11
CHURCHILL	CANADA	1965	AUG.	7
COCOS IS.		1964	AUG.	42
		1964	SEPT.	38
		1964	OCT.	33
		1964	NOV.	27
DELHI	INDIA	1964	MAR.	49
		1964	APR.	46
DOURBES	BELGIUM	1965	AUG.	8
GODHAVN	GREENLAND	1964	OCT.	30
		1964	DEC.	24
GODLEY HEAD	NEW ZEALAND	1965	AUG.	12
GRAND BAHAMA I.		1965	SEPT.	3
HOBART	TASMANIA	1964	NOV.	28
KENORA	CANADA	1965	AUG.	8
KIRUNA	SWEDEN	1965	AUG.	6
KODAIKANAL	INDIA	1965	MAY	18
LA PAZ	BOLIVIA	1965	APR.	20
LEOPOLDVILLE	CONGO	1964	JUNE	45
		1964	JULY	44
		1964	AUG.	41
LYCKSELE	SWEDEN	1965	AUG.	6
MADRAS	INDIA	1964	APR.	47
MANILA	LUZON	1965	JULY	15
MAUI	HAWAII	1965	SEPT.	4
MOSCOW	U.S.S.R.	1965	JAN.	22
NORFOLK I.		1964	OCT.	34
NURMIJARVI	FINLAND	1965	OCT.	2

				PAGE
OKINAWA I.		1965	SEPT.	4
OTTAWA	CANADA	1965	AUG.	9
PARAMARIBO	SURINAM	1964	AUG.	41
		1964	SEPT.	37
		1964	OCT.	31
POLE STATION	ANTARCTICA	1964	DEC.	26
		1965	JAN.	24
PORT MORESBY	PAPUA	1964	SEPT.	38
		1964	OCT.	33
		1964	NOV.	27
PORT STANLEY	FALKLAND I.	1964	OCT.	36
		1964	NOV.	29
RAROTONGA	COOK I.	1965	MAY	19
		1965	JUNE	17
		1965	JULY	16
RESOLUTE BAY	CANADA	1965	AUG.	5
ROME	ITALY	1965	JULY	13
		1965	AUG.	10
SALISBURY	S. AUSTRALIA	1964	SEPT.	39
		1964	OCT.	35
SANAE BASE	ANTARCTICA	1964	JULY	45
		1964	AUG.	43
		1964	SEPT.	40
		1964	NOV.	30
SINGAPORE	MALAYSIA	1965	JAN.	23
		1965	FEB.	21
SODANKYLA	FINLAND	1965	OCT.	1
ST. JOHNS	NEWFOUNDLAND	1965	AUG.	9
THUMBA	INDIA	1964	OCT.	31
		1964	NOV.	26
		1964	DEC.	25
TIRUCHY	INDIA	1964	APR.	47
TORTOSA	SPAIN	1965	AUG.	10
TOWNSVILLE	AUSTRALIA	1964	OCT.	34
		1964	NOV.	28
TRIVANDRUM	INDIA	1964	MAR.	50
		1964	APR.	48
TROMSO	NORWAY	1965	JUNE	16
TUCUMAN	ARGENTINA	1964	APR.	48
UPPSALA	SWEDEN	1965	AUG.	7
VANIMO	NEW GUINEA	1964	SEPT.	37
		1964	OCT.	32
WARSAW	POLAND	1965	JULY	13
WHITE SANDS	NEW MEXICO	1965	AUG.	11
		1965	SEPT.	3
WOOMERA	AUSTRALIA	1964	FEB.	50
		1964	JULY	44
		1964	AUG.	42
		1964	SEPT.	39
		1964	OCT.	35

INDEX BY ISSUE NUMBER OF OBSERVED IONOSPHERIC DATA BEGINNING WITH JANUARY 1961 IN THE CRPL-F (PART A)

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
Adak, Alaska	214	214	214	216	216	215	210	212	NP	NP	218	218	222	223	221	226	229	228	231	230	231	231	232	232
Ahmedabad, India	222	221	226	222			222	230	230	228	228		221	223	223	231	236							
Akita, Japan	204	205	206	209	208	210	211	211	229	229	227	228	221	221	221	233	234	234	234	234	234	234	234	234
Anchorage, Alaska	214	214	216	216	215	216	210	212	213	217	221	218	230	222	223	224	232	232						
Athens, Greece	229	229	224	223	226	227	225	225	237		237	237	238	238										
Baguio, Luzon	224	205	206	226	208	209	210	211	227	223	227	228	224	223	223	223	223							
Barrow, Alaska (See Point Barrow)																								
Bogota, Colombia	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NR	-----	242					241	241	241	
Bombay, India																229	236	236						
Boulder, Colorado	214	214	216	217	216	215																		
Brisbane, Australia	223	222	226	226	208	209	210	211	229	229	227	228	220	221	221	223	233	234						
Buenos Aires, Argentina	223	223	223	226	226	226	226	226	226	229	229	229	233	233	233	233	233	233						
Byrd Station, Antarctica	214	214	214	231	231	231	231	231	231	231	231	231	232	ND	ND	239	239	241						
Canberra, Australia	224	NP	226	226	NR	NR	210	211	229	229	227	228	220	221	221	223	233	234						
Capetown, Union of S. Africa	204	205	206	207	208	209	226	228	229	229	227	228	233	233	233	233	234	234			ND	ND	236	237
Christchurch (Godley Head) N.Z.	205	206	206	226	208	209	210	211	229	229	227	228	233	233	233	233	234	234			234	234		
Churchill, Canada	204	205	206	207	208	209	210	211	228	229	228	228	233	233	221	223	234					235	234	236
Cocos Is.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	233	224					233	238	
College, Alaska (See Fairbanks)																								
Concepcion, Chile	214	214	217	217	221	223	224	222	222	237	236	237	242	243										
Dakar, French W. Africa	225	225	226	236	236	227	227	221	223															
De Bilt, Netherlands	204	206	206	207	208	209	210	228	228	229	228	228												
Delhi, India																229	236	236						
Djibouti, French Somaliland	223	221	226	226	226	227	226	222	224															
Dourbes, Belgium	223	206	207	226	208	209	210	211	228	229	228	228	221	221	221	223	234	234						
El Cerillo, Mexico	206	205	206	238	238	209	238	238	228	238	238	238	238	238	238	238	238	238						
Fairbanks (College), Alaska	214	214	214	216	216	216	216	220	212	213	219	219	223	222	228	229	231	231						
Falkland Is. (Port Stanley)	223	221	207	207	226	210	210	228	228	229	228	228	221	221	233	233								
Formosa (Taipei), China	204	205	206	207	208	209	210	211	228	229	228	228	221	221	221	223	234	234						
Freiburg, Germany	229	229	229	222	222	222	233	233	233															
Ft. Monmouth, New Jersey	218	218	218	219	219	219	ND	ND	NP	224	220	220	225	221	223	227	225	230						
Garchy, France	-----	-----	-----	-----	-----	-----	NR	228	228	229	228	228	228	233	233	233	237							
Genova (Monte Capellino), Italy	225	225	225	225	225	225	225	225	225	225	225	225	238	238	238	238	238	238						
Godhavn, Greenland	217	214	216	217	217	217	217	222	228	229	222	224	225	231	231	231	231	231						
Godley Head, N.Z. (See Christchurch)																								
Grand Bahama I.	NP	NP	218	218	219	221	-----	NP	-----	218	218	221	222	221	228	231	224	231			NP	231	231	232
Graz, Austria	204	205	206	207	208	209	210	211	230	229	228	228	223	221	221	223	234	234			234	234	234	235
Hobart, Tasmania	-----	NR	-----	226	208	209	210	211	230	229	228	228	220	221	221	231	233	234			234			
Huancayo, Peru	204	204	206	206	207	208	208	217	213	217	218	222	224	225	230	230	228	231			231	231	231	232
Ibadan, Nigeria	225	221	226	226	226	227	226	228	230	227	228	228	233	233	233	233					237	237	237	
Inverness, Scotland	224	205	206	207	226	210	210	211	229	227	228	228	221	221	221	233	234							237
Johannesburg, Union of S. Africa	204	205	206	207	208	209	226	228	229	229	227	228	233	233	233	233	234	234			234	235	236	237
Juliusruh/Rugen, Germany	201	226	226	227	227		227	228	229	227	228	230	233	233	235	235	236	236			236			
Kiruna, Sweden	204	205	206	207	208	209	210	211	229	227	228	230	221	221	221	231	233	234			234	234	235	235
Kodaikanal, India																								
Kokobunji, Japan (See Tokyo)																								
La Paz, Bolivia	NP	217	217	-----	NR	-----	223																	
Leopoldville, Congo	225	221	227	228	228	228	228	230	229	229	228	228	233	233	233		ND							
Lindau/Harz, Germany	224	221	226	226	227	227	227	228	229	229	230	228	233	233	233	234	234	234			234	237	237	237
Lulea, Sweden	204	205	206	207	208	209	210	211	230	229	228	228	233	233	233	233	234			234	234	235	235	235
Lycksele, Sweden	204	205	206	207	208	209	210	211	230	229	230	228	221	221	221	233	233	234			234	234	234	235
Macau	NR	NR	226	226	227																			
Madras, India																								
Maui, Hawaii	217	217	217	217	220	220	220	220	220	220	220	220	220	220	220	227	225	231			231	230	231	232
Mawson, Antarctica	226	229	229	235	236	237	237	238	237	238														
Moscow, USSR																								
Mundaring, W. Australia	204	205	226	207	208	209	210	211	229	224	229	228	221	221	223	233	223	223			233			
Narssarsuaq, Greenland	218	218	218	219	218	219	219	219	223	229	223	223	224	232	225	223	231	231			232	232	232	231
Natal, Brazil	229	229	229																					
Nurmijarvi, Finland	204	205	206	207	208	209	210	211	229	229	230	228	221	221	221	233	233	234			235	235	234	235
Okinawa I.	228	226	227	NP	228	228	223	227	223	227	226	NP	NP	230	229	231	223	224			231	231	231	232
Ottawa, Canada	204	205	206	207	208	209	210	211	229	229	230	228	233	233	233	233	234							
Paramaribo, Surinam	235	230		231	235	230	235	235	230															
Paris, France	225	222	226	226	227	227	227	228	223															
Point Barrow (Barrow), Alaska	219	219	219	219	218	218	219	218	218	219	219	222	229	229	223	230	223	231			231	231	231	232
Pole Station, Antarctica	219	229	222	222	222	221	231	231	228	231	224	231	242	242	242	242	242	242			243	243	243	243
Port Lockroy	228	221	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----			-----	-----	-----	-----
Port Moresby, Papua	-----	-----	-----	222	224		224		229	229	227	224	233	233	233	230	233	234			234	235		
Port Stanley (See Falkland Is.)																								
Pruhonice, Czechoslovakia				207	208	209	210	211	227	230	230	228	221	230	233	234					235	235	236	236
Rarotonga, Cook Island						227	227	230	229	229	230	228												

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
Tahiti, Society Is.	224	221	226	226	227	227	228	222	223															
Taipei, China (See Formosa)																								
Talara, Peru	206	206	204	206	207	208	217	217	217	217	218	218	225	222	222	225	229	231	231	231	231	231	231	232
Tananarive, Madagascar	224	221	226	226	227	227	228	222	223															
Thule, Greenland	219	219	219	219	219	219	219	219	225	219	220	219	227	226	224	231	231	225	231	231	231	232	231	232
Tiruchy, India														229	236	236								
Tokyo (Kokobunji) Japan	204	205	206	209	208	210	211	211	229	229	227	228	221	221	221	233	234	234	234	235	235	230	235	237
Townsville, Australia	236	205	206	226	208	209	228	230	222	222	NR	NR	NR	NR	233	231	224	234	237	238	239			
Trelew, Argentina	227	221	226	226	226	226	227	227	227	229	229	229												
Trivandrum, India														229	236	236								
Tromso, Norway	204	205	206	207	208	209	211	211	227	229	237	227	221	221	233	234	234	235	235	235	235	235	235	
Tucuman, Argentina	-----NR----	226	226	226																				
Uppsala, Sweden	204	205	206	207	208	209	210	211	227	229	230	228	221	221	221	223	234	234	235	235	235	235	235	235
Wakkanai, Japan	204	205	206	209	208	210	211	211	229	229	227	228	221	221	231	233	234	234	234	235	235	230	235	237
Warsaw, Poland	228	221	226	226	227	223	224	224	227	229	230	224	223	233	233	233								
Washington, D.C.	203	203	205	205	207	208	208	209	212	218	217	218	218	220	228	228	223	224	230	231	231	231	231	232
White Sands, New Mexico	223	223	227	220	223	222	221	229	222	223	229	226	230	229	231	230	230	228						
Wilkes Station, Antarctica		230	236	237	237	236	238	237	238															
Winnipeg, Canada	204	205	206	207	208	209	210	211	227	229	230	228	233	238	233	223	235				235	235	236	
Woomera, Australia	-----						-----	235					237											
Yamagawa, Japan	204	205	206	209	208	210	211	211	229	229	227	228	221	221	221	233	234	234	234	235	235	230	235	237

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

Station	1963												1964												
	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	232	232	232	232	234	238	237	238	239	240	240	240	240	241	241	242	243	244	245	245	246	246	247	247	
Ahmedabad, India	238	238	238	238					247	246	246							245	246	NR	249	249	250		
Akita, Japan	237	238	239	239	239		248	248	247	246	246	241	242	242	243	243	244	245	245	247	247	249	250		
Anchorage, Alaska	232	232	232	232	238	240	237	240	239	NP	240	240	240	241	241	242	243	244	245	245	245	246	247	248	
Argentine Is.													249	249	255	255	255	255	256	256	256	256	256	256	
Athens, Greece	-----NR-----						NR	248	248	247	246	246	241	242	242	243	243	244	244	245	245	246	248	249	
Bangkok, Thailand													241	241	241	246	246	246	252	252	252	252	252	252	
Baguio, Luzon	229	230	231	231	231	240	231	231	240	240	240	240													
Bangui, C. African Republic													253	253	253										
Barrow, Alaska	232	232	232	233	238	238	236	237	240	NP	ND	ND	241	241	241	243	243	244	245	245	246	246	246	247	
Bekescsaba, Hungary													250	250	250	251	251	251							
Bogota, Colombia	241	241	243				241	241	241	241	241	243	244	244	244	244	244	245	245	246	247	247	249		
Bombay, India													253	253	256	256									
Boulder, Colorado					240	240	240	242	241	241	240	240	240	240	241	241	241	242	242	243	243	244	245	246	
Brisbane, Australia	240												247	249	250	252	252	252	253	254	254	255			
Buenos Aires, Argentina													254	254	255	255	255	255	255	255	255	255	255	255	
Byrd Station, Antarctica	232	243	243	243	243	243	243	243	243	243	243	245				250	250	251	251	251					
Campbell I.	239	239	239										243	243	244	251	251	251	251	251	251	252	252	252	
Canberra, Australia	240												249	249	250	250	251	253	253	253	254	255			
Cape Hallett, Antarctica													243	243											
Capetown, Union of S. Africa	238	239	239	239									247	250	255				244	244	245	246	247	248	
Churchill, Canada	236	238	238	239	239			248	248	247	246	241	242	242	243	243	243	244	245	245	246	247	249		
Cocos Is.	240												248	NR	NR	255	255	255	255	256	256	256	256		
College (Fairbanks), Alaska	232	232	232	233	233	240	236	-----NP----	ND	249			249			246	252					247			
Concepcion, Chile	233	232	237	232	232	240	240	240	240	239	242	242	243	243	243	243	244	245	245	245	245	246	251	251	
Dakar, Senegal	239	239	239	240									245	245	246	246	250	250	252	252	252	252	253	253	
De Bilt, Netherlands	239	239	239							248	248	242	243	244	245	245	245	247	250	251	251	252			
Delhi, India													253	253	256	256									
Djibouti, French Somaliland	239	239	239	240									245	249	249	249	250	250	250	251	251	252	252	253	
Dourbes, Belgium	236	236	237	239	239		248	248	247	246	246	241	241	242	242	243	244	244	247	247	247	249	249		
El Cerillo, Mexico				238	239		248	248	247	246	246	245	245	245	245	245	246	246	246	246	246	250	250		
Ft. Belvoir, Va. (Washington, D.C.)	232	232	232	232	233	235	237	240	240	240	240	240	240	240	241	241	241	242	243	244	244	245	246	247	
Ft. Monmouth, New Jersey	232	232	234	232	235	238	234	239	240	242	240	240	241	241	241	242	244	244	245	245	246	247	247	248	
Garchy, France													251	251	252	252	252	253	253	253	253	253			
Genova, Italy	-----ND----	240											249	249	249	249	249	249	250	250	250	250	250	250	
Godhavn, Greenland	236	NR	237	233	240	240	240	240	238	240	242	242	242	243	243	244				250	250	253	256	250	
Godley Head (Christchurch), N.Z.	237	237	237	239	239		248	248	247	246	246	241	241	242	242	243	243	244	244	245	247	247	248		
Grand Bahama I.	232	232	232	232	233	232	235	240	240	240	240	239	241	241	241	242	242	244	245	245	246	246	247	247	
Graz, Austria	236	236	236	237	238																				
Haringhata, India																250	250	250	251						
Hobart, Tasmania	240												249	249	250	251	252	257	253	253	255	255	256		
Huancayo, Peru	232	232	232	235	235	235	236	240	240	240	241	241	241	241	241	242	243	244	245	245	246	247	247	251	
Hyderabad, India													243	243	244	244	249	249	249	249	249	249	250		
Ibadan, Nigeria	240												248	249	250	250	250	255	255	255					
Inverness, Scotland	237	238	239	239																					
Johannesburg, Union of S. Africa	238	239	239	239									247	250	255				248	248	251	251	252	253	
Juliusruh/Rugen, Germany																									

Station	1963												1964											
	J	F	M	A	M	J	Jy	A	S	O	N	D	J	F	M	A	M	J	Jy	A	S	O	N	D
Kokubunji, Japan	237	238	239	239	239			248	248	247	246	246	241	242	242	243	243	244	245	245	247	247	249	250
La Paz, Bolivia		233	240	240	240	240	240	240	----	ND	----	----	ND				245	NP	245	246	246	249	249	249
Leopoldville, Congo	240	----	----	NR	----	----	----	----	----	NR	----	----	243	248				256	256	256				256
Lindau/Harz, Germany	240	----	----	NR	----	----	----	----	----	NR	----	----	243	244	244	245	245	249	249	249	249			249
Lulea, Sweden		236	237		239								241	241	242	242	244	244	249	249	250			250
Lwiro, Congo	----	----	----	NR	----	----	----	----	----	NR	----	----	241	241	242	242	244							
Lycksele, Sweden	236	236	237	239	239			248	248	247	246	246	241	242	242	242	242	243	244	244	245	245	247	247
Madras, India													253	253	ND	256								
Manila, Luzon													241	241	242	242	243	243	243	243	244	244	249	249
Maui, Hawaii	232	232	232	232	234	232	235	238	240	240	240	240	240	241	241	242	243	244	245	245	246	246	247	247
Moscow, U.S.S.R.													247	247	247	250	250	251	251	251	252	252	253	253
Mundaring, W. Australia	240												249	250	250	251	251	252	253	253	255	255		
Narsarsuaq, Greenland	232	232	232	232	232	240	237	239	240	NP	242	241	240	241	243	244	244	244	245	245	246	247	247	248
Norfolk Is.													252	252	252	ND	253							
Nurmijarvi, Finland	235	236	236	237	238			248	248	247	247	247	241	241	242	242	242	243	244	244	245	246	247	247
Okinawa I.	232	232	232	232	234	234	235	240	240	240	240	240	240	241	241	242	243	243	243	243	245	245	246	247
Ottawa, Canada	236	238	238	239	239			248	248	247	246		241	242	242	243	243	243	244	244	245	246	247	248
Paramaribo, Surinam													243	249	249	249	250	255	254	256	256	256		
Paris, France	239	239	239	240									245	245	246	246	250	250	251	251	252	255	255	255
Pole Station, Antarctica	243	245	----	ND	----	246	246	246	247	249	ND		249			251	251	251	252	252			256	
Port Moresby, Papua	240																							
Port Stanley (Falkland Is.)	238	239	239	239				248	248	247	246	246	244	244	244	244	248	248	249	255	256	256		
Pruhonice, Czechoslovakia	240							248	248	247	246	246	242	242	243	244	248	251	251	251	251	252	252	252
Rarotonga, Cook I.	239	240	239	239									247	247	247	247	250	250	251	251	255	255	255	
Resolute Bay, Canada	236	238	238	239	239						248	248	241	242	242	243	243	243	244	244	245	246	247	248
Reykjavik, Iceland	232	232	232	232	234	238	236	240	242	239	240	240	240	241	241	241	243	243	243	245	245	246	247	248
Rome, Italy	236	236	238	238	239			248	248	247	246	246	241	241	242	242	242	244	244	244	245	246	247	248
Salisbury, S. Australia	240																							
Sanae Base, Antarctica													244	244	254	254	254		256	256	256		256	
Scott Base, Antarctica													248	248	248	248	248	248	249	249	249	249	252	253
Singapore, Malaysia	237	237	239	239				248	248	247	246	246	241	242	242	243	244	244	248	248	248	249	249	250
Slough, England	237	239	239	239				248	248	247	246	246	241	241	242	242	244	244	247	247	249	249	250	255
Sodankyla, Finland	235	236	237	237	239			248	248	247	247	247	241	241	242	242	242	243	244	244	245	246	247	247
Sottens, Switzerland	237	238	238	239	239						248	248	242	244	244	245	250	250	250	ND	251	251	252	254
St. Johns, Newfoundland	236	238	238	239	239						248	248	241	242	242	243	243	243	244	244	245	246	247	248
Tahiti, Society I.	239	239	239	240									245	245	245	246	246		254	254	254	254	254	
Taipei (Formosa), China	237	237	239	239	239					247	246	246	241	241	242	242	243	243	244	245	248	248	248	250
Talara, Peru	232	234	236	234	237	240	241	240	240	242	241	242	242	243	243	243	244	249	249	249	251	251	251	251
Tamanrasset, Algeria													250	250	251	251	251	252	252	252	252	253	253	
Tananarive, Malagasy Republic	239	239	239	240									245	245	245	249	249	250	250	251	251	252	252	253
Tehran, Iran				239	239											245	245	245				254	254	254
Thule, Greenland	232	232	232	233	242	233	236	242	240	239	240	240	241	241	241	243	244	244	245	245	245	247	247	249
Tiruchy, India													253	253	ND	256								
Tortosa, Spain													242	----	ND	----	252	252	252	252	ND	253	253	253
Townsville, Australia	240												250	250	251	251	252	252	253	254	255	256	256	
Trivandrum, India													253	253	256	256								
Tromso, Norway	235	236	236	237	238	239		248	248	247	246	246	241	242	242	242	242	244	244	245	245	247	247	249
Tucuman, Argentina		239	239										244	ND	ND	256	254	254	254					
Uppsala, Sweden	239	236	237	237	239			248	248	247	246	246	241	242	242	242	242	243	244	244	245	245	247	247
Vanimo, Australian New Guinea																			253	254	256	256		
Wakkanai, Japan	237	238	239	239	239			248	248	247	246	246	241	242	242	243	243	244	245	245	247	247	249	250
Warsaw, Poland	239	239									248	248	241	241	242	242	244	245	245	247	249	250	250	251
White Sands, New Mexico	232	232	232	232	235	236	234				241		241	241	241	243	244	244	244	245	245	246	247	247
Winnipeg, Canada	236	238	238	239	239	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Woomera, Australia	240												243	256	248	248	248	248	256	256	256	256		
Yamagawa, Japan	237	238	239	239	239			248	248	247	246	246	241	242	242	243	243	244	245	245	247	247	249	250

Code: NR = No data received.
 NP = Data not published.
 ND = No data in existence.
 -- = (Without letter symbol) station not operating.

Station	1965												1966											
	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	249	250	251	252	252	254	254	255	255															
Ahmedabad, India	250	251	251	253	255	255	256																	
Akita, Japan	250	252	252	253	254	256																		
Anchorage, Alaska	248	251	252	252	252	253	254	255	255															
Argentine Is.	256	256																						
Bangkok, Thailand	253	253	253	253	253	256	256	256																
Barrow, Alaska	249	251	252	252	252	254	254																	
Bogota, Colombia	249	249	252	252	252	253	NP	255	256															
Boulder, Colorado	247	248	249	250	251	252	253	254	255	256	256													
Buenos Aires, Argentina	255	255	255	256	256	256																		
Campbell I.	253																							
Cape Zevgari, Cyprus	256																							
Churchill, Canada	249	250	251	251	254	254	255	256																
College (Fairbanks), Alaska	249	253	254	253	254	254	254	255	255															
Concepcion, Chile	252	252	252	253	253	ND	254	255																
Dourbes, Belgium	250	250	251	252	253	254	255	256																
El Cerillo, Mexico	250	251	251	252	253	253	254	255																
Ft. Belvoir, Va. (Washington, D.C.)	249	249	251	251	252	253	254	254	255															
Ft. Monmouth, N.J.	250	250	251	252	252	253	254																	
Godhavn, Greenland	253	253	254	254																				
Godley Head (Christchurch), N.Z.	249	250	251	252	253	254	255	256																
Grand Bahama I.	249	249	251	252	253	254	255	255	256															
Huancayo, Peru	250	252	253	253	253	254	255	255																
Hyderabad, India	254	254	254	254	254	254																		
Juliusruh/Rugen, Germany	255	255																						
Kenora, Canada	249	250	251	251	254	254	255	256																
Kiruna, Sweden	249	250	251	252	253	254	255	256																
Kodaikanal, India	251	255	255	255	256																			
Kokubunji, Japan	250	252	252	253	254	255																		
La Paz, Bolivia	251	252	254	256																				
Lycksele, Sweden	249	250	251	252	253	254	255	256																
Manila, Luzon	250	250	253	253	254	254	256																	
Maui, Hawaii	248	249	251	251	252	252	254	255	256															
Narsarsuaq, Greenland	251	251	252	253	254	254	255																	
Nurmijarvi, Finland	249	249	250	251	252	253	254	255	256															
Okinawa I.	249	250	251	252	252	254	254	255	256															
Ottawa, Canada	249	250	251	251	254	254	255	256																
Pole Station	256																							
Pruhonice, Czechoslovakia	253	253	255	255																				
Rarotonga, Cook Is.	255	255	255	255	256	256	256																	
Resolute Bay, Canada	249	250	251	251	254	254	255	256																
Rome, Italy	249	250	251	252	254	254	256	256																
Singapore, Malaysia	256	256																						
Slough, England	255																							
Sodankyla, Finland	249	249	250	251	252	253	254	255	256															
Sottens, Switzerland	254	254	254	254	254	254	254	254	254															
St. Johns, Newfoundland	249	250	251	251	254	254	255	256																
Taipei (Chung-Li), China	251	251	253	253	253	254	254	254	254															
Talara, Peru	252	253	254	254	255																			
Tehran, Iran	254	254	254																					
Thule, Greenland	249	250		252	253	254	255	255																
Tortosa, Spain	253	254	254	254	254	255	255	256																
Tromso, Norway	250	250	251	253	255	256																		
Uppsala, Sweden	249	250	251	252	253	254	255	256																
Wakkanai, Japan	250	252	252	253	254	255																		
Warsaw, Poland	251	252	253	255	255	255	256																	
White Sands, New Mexico	249	251	252	252	253	253	254	256	256															
Yamagawa, Japan	250	253	253	253	254	255																		

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