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CRPL-F 244 PART A

FOR OFFICIAL USE

PART A
IONOSPHERIC DATA

ISSUED
DECEMBER 1964

SEE PAGE 53 FOR INDEX OF OBSERVED
IONOSPHERIC DATA BEGINNING JANUARY 1959

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

CRPL-F 244
PART A

NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

Issued
31 Dec.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 collected by 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 the 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)F2. 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 foF2, foF1, foEs, M(3000)F2, h'F2 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 by CRPL 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 World Data Center A for Airglow and Ionosphere. In general, priority of publication is given to the most current data. Data received too long after the month of observation may experience an indefinitely prolonged delay before finding space in the F series, Part A.

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.

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.

- - - Interpolated value indicated.

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 1963, the succeeding values being based on provisional data.

Smoothed Observed Zurich Relative 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	37	35	33	31	30	30
1963	29	30	30	29	29	28	28	27	27	26	23	21
1964	19	17	15	12	10							

WORLD - WIDE SOURCES OF IONOSPHERIC DATA

THE IONOSPHERIC DATA PRESENTED IN THE 100 TABLES AND GRAPHS OF THIS ISSUE WERE ASSEMBLED BY THE CENTRAL RADIO PROPAGATION LABORATORY FOR ANALYSIS, CORRELATION, AND DISTRIBUTION. THE FOLLOWING ARE THE SOURCES OF THE DATA.

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MAUI, HAWAII
TALARA, PERU (INSTITUTO GEOFISICO DEL PERU)

TABLES AND GRAPHS OF IONOSPHERIC DATA

October 1964 - January 1964

OTTAWA CANADA		LAT. 45.4N LONG. 75.9W		SWEEP 1.0 MC TO 20.0 MC IN		16 SEC		TIME 75.0W																		
AUGUST 1964																										
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
foF2	MED	S	J	S	U	S																				
		22	18	17			S	23	34	40	43	45	46	47	46	46	46	46	46	47	48	50	51	42	32	25
	CNT	21	14	8	2	2	27	31	30	31	30	30	30	31	31	31	31	31	31	31	31	31	31	31	30	28
	U Q	25	20	25			25	37	42	46	48	50	50	48	50	50	48	48	49	50	54	52	45	37	29	
foF1	00	L	Q	20	17	16		21	33	37	38	42	43	43	41	44	44	44	44	44	43	47	46	38	29	24
	MED						U	320	360	380	400	400	420	420	420	410	400	380	370	330						
								6	16	30	30	30	31	31	31	31	31	31	30	25	6					
	CNT																									
foE	10																									
	MED						U	170	200	240	280	300	320	330	330	330	320	310	280	260	200	160				
								7	27	25	28	25	26	28	29	30	29	29	28	28	22	8				
	CNT																									
foEs	20																									
M 3000 F2 03	30																									
	MED							340	340	330	330	320	320	300	300	300	300	300	320	320	320	330	330	330	330	
								3	20	17	19	16	21	17	16	23	24	26	26	28	29	26	23	18	19	13
	CNT	4	1																							
h'F2	03																									
	MED							300	335	350	375	360	385	450	400	400	385	360	320	290	270					
								11	22	31	30	29	30	30	31	30	30	31	30	28	7	1				
	CNT																									
h'E 24	04																									
h'F 16	24																									
	MED	U	280					260	210	200	200	200	200	200	200	200	200	205	205	220	235	230	235	250	260	
								13	30	30	30	29	27	28	29	28	30	29	29	28	23	25	29	30	27	27
	CNT	8	1	1	1																					
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	

6408 OTTAWA 75.0W

ROME ITALY		LAT. 41.8N LONG. 12.5E		SWEEP 1.4 MC TO 15.0 MC IN		300 SEC		TIME 15.0E																	
AUGUST 1964																									
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	35	34	31	32	31	30	40	47	50	53	55	53	51	52	52	51	51	53	59	68	67	59	49	40
	CNT	24	23	22	20	22	21	22	21	21	18	27	25	23	23	23	23	26	23	25	23	15	21	23	17
	U Q	38	38	36	34	33	31	43	50	57	56	59	57	55	55	53	52	53	57	62	70	75	68	52	46
	00 L Q	33	33	30	29	28	29	38	44	48	51	51	50	49	50	51	50	49	51	54	59	61	53	45	36
foF1	MED									360	390	410	420	430	430	430	420	400	380						
	CNT									5	16	17	26	24	22	23	22	22	17	11	2				
	U Q									370	390	410	430	430	440	430	420	400	380						
	10 L Q									360	390	410	420	430	430	420	420	410	400	380					
foE	MED									180	220	270	290	310	320	320	330	320	310	280	250	200			
	CNT									17	20	17	17	20	14	17	13	15	21	22	20	23			
foEs	MED																								
	CNT	28	28	28	28	27	27	25	25	26	27	31	29	29	29	29	29	29	29	29	29	29	29	28	28
30																									
M 3000 F2 03	MED	300	300	295	295	295	300	325	325	315	325	325	320	305	310	305	305	295	300	300	305	315	320	315	310
	CNT	22	22	20	19	19	20	22	19	17	18	27	25	23	23	23	23	26	20	21	23	11	19	21	17
	U Q	310	305	300	300	305	305	335	335	335	330	340	325	325	315	315	320	305	315	310	315	315	330	335	325
	L Q	290	290	290	285	290	295	315	310	310	320	305	310	285	295	300	295	285	295	290	295	310	305	300	300
h'F2	MED									300	295	300	300	310	350	350	340	350	350	330					
	CNT									5	14	17	26	24	21	22	23	22	17	11	3				
	U Q									435	340	330	320	345	410	370	360	370	385	340					
	L Q									295	260	290	270	290	325	310	330	330	330	300					
h'E 24	MED									130	110	110	110	110	110	110	110	110	110	120					
	CNT									19	25	26	27	31	29	29	29	29	29	28	25				
h'F 16	MED	260	275	290	300	290	280	240	220	220	210	210	200	200	200	220	230	240	240	245	250	240	235	240	255
	CNT	22	22	20	25	26	26	23	14	17	16	21	22	19	19	16	19	17	15	12	19	23	24	22	22
	U Q	290	300	300	305	300	290	240	240	240	230	220	210	210	230	235	240	250	240	265	260	250	240	260	270
	L Q	260	260	270	280	280	260	230	220	220	210	205	200	200	200	200	210	210	210	230	235	240	230	220	220
CHAR.	HR.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23

6408 ROME 15.0E

*Values of h'E are often incorrect owing to the fact that the trace has not always become horizontal.

				PAGE
ADAK	ALASKA	1964	JUNE	22
AHMEDABAD	INDIA	1964	JAN.	49
		1964	FEB.	47
		1964	MAR.	43
		1964	APR.	39
		1964	MAY	34
AKITA	JAPAN	1964	JUNE	25
ANCHORAGE	ALASKA	1964	JUNE	21
ATHENS	GREECE	1964	JUNE	25
		1964	JULY	17
BARROW	ALASKA	1964	JUNE	19
BOGOTA	COLOMBIA	1964	FEB.	47
		1964	MAR.	44
		1964	APR.	40
		1964	MAY	35
		1964	JUNE	29
BOULDER	COLORADO	1964	OCT.	1
CAMPBELL IS		1964	MAR.	45
CHURCHILL	CANADA	1964	JULY	14
		1964	AUG.	6
CONCEPCION	CHILE	1964	MAY	37
DE BILT	THE NETHERLANDS	1964	MAR.	41
DOORBES	BELGIUM	1964	JUNE	23
		1964	JULY	14
FT BELVOIR	VIRGINIA	1964	AUG.	9
		1964	SEPT.	2
FT MONMOUTH	NEW JERSEY	1964	MAY	33
		1964	JUNE	24
GODHAVN	GREENLAND	1964	APR.	37
GODLEY HEAD	NEW ZEALAND	1964	JULY	18
		1964	AUG.	10
GRAND BAHAMA I.		1964	JUNE	27
HUANCAYO	PERU	1964	JUNE	30
HYDERABAD	INDIA	1964	MAR.	43
		1964	APR.	40
JULIUSRUH/RUGEN	GERMANY	1964	APR.	38
KENORA	CANADA	1964	JULY	15
		1964	AUG.	7
KIRUNA	SWEDEN	1964	JULY	11
		1964	AUG.	4
KODAIKANAL	INDIA	1964	MAR.	44
		1964	MAY	34
		1964	JUNE	28
KOKUBUNJI	JAPAN	1964	JUNE	26
LINDAU/HARZ	GERMANY	1964	FEB.	46
		1964	MAR.	42
LULEA	SWEDEN	1964	MAY	31
		1964	JUNE	20
LWIRO	CONGO	1964	MAY	36

				PAGE
LYCKSELE	SWEDEN	1964	JULY	12
		1964	AUG.	5
MANILA	LUZON	1964	AUG.	9
		1964	SEPT.	3
MAUI	HAWAII	1964	JUNE	28
NARSSARSSUAQ	GREENLAND	1964	APR.	38
		1964	MAY	31
		1964	JUNE	21
NURMIJARVI	FINLAND	1964	JULY	13
		1964	AUG.	5
		1964	SEPT.	2
OTTAWA	CANADA	1964	JULY	16
		1964	AUG.	8
PORT STANLEY		1964	JAN.	50
		1964	FEB.	48
		1964	MAR.	45
		1964	APR.	41
PRUHONICE	CZECHOSLOVAKIA	1964	APR.	39
RESOLUTE BAY	CANADA	1964	JULY	10
		1964	AUG.	3
ROME	ITALY	1964	JUNE	24
		1964	JULY	16
		1964	AUG.	8
SANA E BASE	ANTARCTICA	1964	JAN.	50
		1964	FEB.	48
SINGAPORE	MALAYSIA	1964	MAY	35
		1964	JUNE	29
SLOUGH	ENGLAND	1964	MAY	32
		1964	JUNE	22
SODANKYLA	FINLAND	1964	JULY	12
		1964	AUG.	4
		1964	SEPT.	1
SOTTENS	SWITZERLAND	1964	FEB.	46
		1964	MAR.	42
ST JOHNS	NEWFOUNDLAND	1964	JULY	15
		1964	AUG.	7
TAIPEI (TAIWAN)	CHINA	1964	JULY	18
TALARA	PERU	1964	MAY	36
THULE	GREENLAND	1964	MAY	30
		1964	JUNE	19
TROMSO	NORWAY	1964	JUNE	20
		1964	JULY	11
TUCUMAN	ARGENTINA	1964	JAN.	49
UPPSALA	SWEDEN	1964	JULY	13
		1964	AUG.	6
WAKKANAI	JAPAN	1964	JUNE	23
WARSAW	POLAND	1964	MAY	32
WHITE SANDS	NEW MEXICO	1964	MAY	33
		1964	JUNE	26
		1964	JULY	17
YAMAGAWA	JAPAN	1964	JUNE	27

Station	1959												1960											
	J	F	M	A	M	J	Jy	A	S	O	N	D	J	F	M	A	M	J	Jy	A	S	O	N	D
Adak, Alaska	179	179	181	182	183	183	185	186	187	187	187	188	189	190	192	195	196	215	210	211	212	212	202	203
Ahmedabad, India	205	206	210	213	218	220	218	217	220	220	220	220	222	227	234	219	223	224	----	NP	-----	----	237	225
Akita, Japan	185	186	186	187	188	188	207	210	215	209	205	204	206	193	194	195	196	198	199	199	200	201	202	203
Alma-Ata, USSR	-----	-----	NP	-----	-----	-----	-----	-----	-----	NP	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Anchorage, Alaska	179	179	181	181	183	185	186	186	184	187	187	188	189	189	190	195	215	216	210	211	212	212	203	203
Baguio, Luzon	179	179	181	182	183	186	183	186	186	187	187	188	189	189	190	207	215	216	210	211	212	212	213	214
Baker Lake, Canada	184	185	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Bangui, Central African Republic	222	222	222	223	223	223	230	230	230	238	238	238	236	236	236	-----	NP	-----	-----	-----	NP	-----	-----	-----
Bogota, Colombia	184	184	185	184	184	NR	189	190	192	189	188	190	-----	-----	-----	NP	-----	-----	NR	217	-----	NP	-----	-----
Bombay, India	205	206	210	213	218	220	218	217	220	220	220	220	222	227	234	-----	NP	-----	-----	-----	NP	-----	-----	-----
Boulder, Colorado	189	189	189	189	189	189	189	187	NP	188	188	189	189	189	192	194	193	215	210	211	212	213	202	203
Brisbane, Australia	184	184	185	185	188	189	204	190	192	204	204	191	204	205	206	223	196	197	NR	199	200	201	225	225
Budapest, Hungary	NP	193	189	185	188	198	237	190	193	210	204	203	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Buenos Aires, Argentina	192	NR	194	195	197	198	198	199	200	201	202	203	238	238	238	NP	208	225	224	224	224	225	225	225
Bunia, Congo	186	186	185	187	188	189	NP	191	193	209	204	202	192	193	195	196	196	224	227	227	227	227	NR	NR
Byrd Station, Antarctica	190	191	193	193	194	197	198	199	200	192	208	209	212	212	206	207	216	216	210	211	213	213	213	214
Calcutta (Haringhata), India	205	206	207	-----	ND	---	ND	217	220	220	220	220	222	227	234	-----	NP	-----	-----	-----	NP	-----	-----	-----
Campbell I.	204	206	207	218	218	218	218	218	218	218	218	218	235	235	-----	NP	-----	NR	NR	-----	NP	-----	-----	-----
Canberra, Australia	192	193	194	195	196	198	192	199	200	201	202	203	-----	NP	-----	223	NP	223	223	225	223	225	225	224
Cape Hallet, Antarctica	185	220	220	220	220	220	220	220	220	220	220	220	226	226	227	227	227	227	230	230	230	230	230	230
Capetown, Union of S. Africa	184	184	186	188	196	198	199	199	200	201	202	203	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Chimbote, Peru	180	181	181	182	183	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Christchurch (Godley Head), N.Z.	185	206	207	219	219	219	219	219	219	218	218	218	235	235	-----	NP	-----	-----	-----	-----	NP	-----	-----	-----
Churchill, Canada	184	185	187	187	209	211	205	210	238	201	201	205	192	207	195	195	196	197	198	199	200	201	202	203
Concepcion, Chile	188	190	194	207	208	209	237	210	211	212	188	189	205	205	206	207	208	209	210	211	212	213	213	214
Dakar, Senegal	193	193	194	197	197	198	230	200	200	225	225	203	204	205	224	225	225	225	218	218	218	218	218	218
De Bilt, Netherlands	185	185	187	210	210	207	216	210	209	205	204	191	207	193	194	195	196	197	198	199	200	201	202	225
Delhi, India	205	206	210	213	218	220	218	217	220	220	220	220	222	227	234	-----	NP	-----	-----	-----	NP	-----	-----	-----
Dixon, I., USSR	-----	-----	NP	-----	-----	-----	-----	NP	-----	NR	NR	NR	204	205	224	225	226	226	218	218	218	218	218	218
Djibouti, French Somaliland	192	193	194	197	197	198	237	200	200	225	225	203	204	205	224	225	226	226	218	218	218	218	218	218
Dourbes, Belgium	192	193	195	196	215	198	215	211	214	201	202	204	204	205	206	224	208	224	237	222	225	225	225	225
El Cerillo, Mexico	184	193	194	195	197	235	191	200	191	191	201	219	199	199	194	196	196	197	198	199	200	201	202	203
Elisabethville, Congo	186	186	185	187	188	189	191	191	193	209	204	202	192	193	195	196	196	224	218	218	218	218	218	218
Ellsworth, Antarctica	NP	NR	NP	-----	NP	---	-----	-----	-----	NP	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Eureka, Canada	192	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Fairbanks (College), Alaska	179	180	182	181	183	184	185	185	187	187	188	188	189	190	190	194	215	216	210	199	201	213	203	203
Falkland Is. (Port Stanley)	185	185	186	186	188	188	191	213	191	193	193	189	207	207	194	195	196	197	198	199	223	225	225	225
Formosa (Taipei), China	186	186	186	188	188	191	193	190	220	216	216	230	207	207	194	195	197	197	198	199	224	225	225	228
Ft. Monmouth, New Jersey	180	180	182	181	183	185	185	186	186	187	187	187	189	189	193	195	217	217	218	218	218	219	219	219
Freiburg, Germany	192	192	198	212	212	212	-----	NP	-----	-----	NP	---	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Frobisher, Canada	192	-----	-----	-----	-----	-----	-----	-----	-----	201	202	212	NP	NP	237	237	238	NP	-----	NP	-----	-----	NP	---
Garchy, France	-----	-----	-----	-----	-----	-----	217	217	224	217	217	224	196	193	194	195	196	197	218	218	218	218	218	203
Genova (Monte Capellino), Italy	184	182	182	182	183	185	186	186	187	188	ND	ND	NP	205	206	207	215	216	210	212	212	213	213	214
Godhavn, Greenland	-----	-----	NP	-----	-----	-----	-----	-----	-----	NP	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Gorky, USSR	192	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Grahamstown, Union of S. Africa	180	182	182	182	184	185	185	186	187	188	189	189	191	191	193	207	215	216	210	212	212	213	213	NP
Grand Bahama I.	186	186	186	186	225	225	219	219	225	225	225	220	225	225	194	198	226	226	207	199	200	226	202	203
Graz, Austria	-----	-----	NP	-----	-----	-----	NR	NP	NP	-----	NP	---	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Heiss Island	184	184	185	-----	NP	---	-----	-----	-----	NP	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Hobart, Tasmania	-----	-----	-----	-----	NP	---	-----	-----	-----	NP	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Hollandia, New Guinea	214	214	-----	-----	-----	-----	186	186	186	187	187	188	190	190	191	193	194	195	196	199	200	201	202	203
Huancayo, Peru	179	182	ND	182	184	185	190	199	200	201	202	203	204	205	206	222	208	224	222	225	222	225	225	225
Ibadan, Nigeria	185	185	185	187	188	189	NP	181	183	182	184	---	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ilo, Peru	NP	181	183	182	184	---	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Inverness, Scotland	185	185	186	207	209	210	210	213	207	207	202	191	192	207	194	195	196	197	198	199	200	201	226	206
Irkutsk, USSR	-----	-----	NP	-----	-----	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	NP	-----	-----	-----
Johannesburg, Union of S. Africa	184	184	186	188	197	198	199	200	200	202	202	203	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Juliac, Peru	-----	-----	186	184	187	---	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Julius Ruh/Rugen, Germany	192	193	194	195	196	198	199	199	220	216	216	220	204	205	207	222	208	224	224	226	222	226	226	226
Kerguelen I.	-----	NP	-----	-----	NP	---	NR	-----	-----	NP	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Kiruna, Sweden	184	184	185	209	188	190	209	190	201	209	201	209	198	193	194	195	196	198	198	199	200	201	202	203
Kodaikanal, India	205	206	210	213	218	220	218	217	220	220	220	220	222	227	234	-----	NP	-----	-----	-----	NP	-----	-----	-----
La Paz, Bolivia	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	NP	190	193	206	NP	208	209	210	217	212	217	213	214
Leningrad, USSR	-----	NP	-----	-----	NP	---	-----	-----	-----	NP	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----
Leopoldville, Congo	186	186	186	187	188	189	191	191	193	209	204	202	192	193	195	196	196	224	227	227	227	227	2	

Station	1959												1960											
	J	F	M	A	M	J	Jy	A	S	O	N	D	J	F	M	A	M	J	Jy	A	S	O	N	D
Okinawa I.	179	180	181	182	183	185	186	186	186	187	187	187	189	191	----	NP	-----	-----	-----	NP	-----	-----	-----	-----
Oslo, Norway	185	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ottawa, Canada	185	185	185	217	217	230	216	216	200	201	216	230	192	193	195	195	196	197	198	199	200	201	202	203
Paramaribo, Surinam	212	214	224	224	224	224	NR	236	236	224	224	236	236	237	237	230	237	224	237	237	224	238	235	235
Paris, France	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	226	-----	-----	-----	-----	-----	-----	-----
Point Barrow (Barrow), Alaska	180	180	182	182	183	183	184	186	187	187	187	188	189	189	190	195	196	216	-----	-----	-----	-----	-----	-----
Poitiers, France	222	222	222	223	223	223	230	230	230	238	238	238	236	236	236	-----	NP	-----	-----	-----	-----	-----	-----	-----
Pole Station, Antarctica	193	193	193	193	195	195	196	196	196	196	191	191	191	212	214	216	216	215	211	212	213	229	225	214
Port Lockroy, Antarctica	192	206	207	207	214	214	199	200	200	201	202	203	204	205	221	222	237	224	222	226	222	226	225	238
Providenie Bay, USSR	-----	NR	-----	-----	-----	-----	191	-----	NR	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----
Pruhonice, Czechoslovakia	NP	238	238	196	197	214	217	217	219	217	NP	197	204	205	206	207	197	197	238	-----	NP	-----	238	238
Rabat, Morocco	222	222	222	-----	NR	-----	-----	NR	-----	-----	238	238	236	236	236	-----	NP	-----	-----	NP	-----	-----	-----	-----
Rarotonga, Cook Is.	219	206	207	218	218	218	218	218	218	218	218	218	235	235	-----	NP	-----	-----	-----	NP	-----	-----	-----	-----
Resolute Bay, Canada	184	185	222	188	217	222	217	217	201	201	217	191	192	193	195	195	196	197	198	199	200	201	202	203
Reykjavik, Iceland	181	181	182	182	183	185	186	186	187	187	188	189	189	214	216	216	215	209	210	212	212	213	216	214
Roi Baudouin	NP	-----	NR	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----
Rome, Italy	236	186	186	186	188	222	190	190	192	217	217	196	207	193	194	196	196	197	198	199	200	201	202	203
Rostov on Don, USSR	-----	NP	-----	-----	-----	-----	NR	-----	NP	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----
San Francisco, California	179	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
San Salvador I.	188	-----	NR	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----
Sao Paulo, Brazil	192	193	194	195	197	198	212	199	200	201	202	203	204	205	207	207	208	224	224	226	222	226	226	226
Scott Base, Antarctica	220	220	220	220	220	220	220	220	220	220	220	220	226	226	226	226	226	226	230	230	230	230	230	230
Simferopol, USSR	-----	NR	-----	-----	191	191	191	-----	NR	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----
Singapore, British Malaya	184	184	185	187	188	187	190	191	191	208	208	208	237	237	194	195	196	197	198	199	200	201	226	225
Slough, England	184	184	186	208	188	190	208	236	208	208	208	191	192	207	194	195	196	197	198	199	222	225	225	225
Sodankyla, Finland	185	186	185	187	188	191	192	190	201	217	194	192	237	193	194	195	196	197	198	199	200	201	202	203
Sottens, Switzerland	209	184	186	-----	ND	-----	190	219	230	219	219	220	192	193	194	195	196	198	198	199	200	201	202	203
St. John's Newfoundland	180	181	181	182	182	198	217	199	200	201	211	220	192	205	195	195	196	197	198	199	200	201	202	203
Svalbard, Norway	192	199	194	195	196	197	198	199	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Syowa Base, Antarctica	---	219	219	219	219	219	219	225	225	225	225	225	225	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Tahiti, Society Is.	193	193	194	197	197	198	237	200	200	225	225	NR	204	206	224	226	226	226	218	218	218	218	218	218
Talara, Peru	180	180	181	182	186	184	186	187	187	187	188	188	191	191	193	194	195	196	198	200	202	201	202	203
Tamanrasset, Algeria	222	222	222	223	223	223	230	230	230	238	NR	NR	236	236	236	-----	NP	-----	-----	NP	-----	-----	-----	-----
Tananarive, Madagascar	192	193	194	197	197	198	237	200	200	225	225	203	204	205	224	226	226	226	218	218	218	218	218	218
Thule, Greenland	179	180	181	182	183	184	186	186	187	188	187	188	190	191	194	193	215	215	210	NP	201	201	203	214
Tiruchy, India	205	206	210	213	218	220	218	217	220	220	220	220	222	227	234	-----	NR	-----	-----	NR	-----	-----	-----	-----
Tixie Bay, USSR	-----	NR	-----	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----
Tokyo (Kokobunji), Japan	185	185	185	187	188	188	207	210	215	209	205	204	206	193	194	195	196	198	199	199	200	201	202	203
Tomsk, USSR	-----	NR	-----	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----
Tortosa, Spain	-----	NP	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NP	-----	-----	-----	-----	-----	NP	-----	-----	-----	-----
Townsville, Australia	217	ND	ND	NP	190	190	190	190	192	217	208	203	204	205	221	222	223	NP	223	199	200	201	202	NP
Trelew, Argentina	217	193	194	196	196	198	198	200	200	237	NR	200	237	237	237	NR	228	228	228	-----	NR	-----	225	-----
Trivandrum, India	205	206	210	213	218	220	218	217	220	220	220	220	222	227	234	-----	NR	-----	-----	NR	-----	-----	-----	-----
Tromso, Norway	183	184	187	217	188	190	190	190	192	217	208	208	207	193	194	195	NR	NR	NR	NR	200	201	202	203
Tsumeb, South W. Africa	204	206	207	212	214	213	221	221	224	224	224	224	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Tucuman, Argentina	233	233	194	212	212	212	212	212	212	212	212	212	217	217	217	NR	NP	NP	-----	NP	-----	-----	-----	-----
Uppsala, Sweden	188	210	185	185	189	222	190	191	210	210	201	209	207	193	194	196	196	197	198	199	200	201	202	203
Ushuaia, Argentina	192	193	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Victoria, Canada	192	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Wakkanai, Japan	185	185	185	187	188	188	207	210	215	209	205	204	206	193	194	195	196	198	199	199	200	201	202	203
Warsaw, Poland	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	-----	-----	-----	NR	-----	-----	223	224	224	225	223	225	225	225
Washington, D.C.	177	177	181	182	183	183	183	186	186	186	187	187	189	189	191	191	194	194	196	197	197	201	202	202
Watheroo, W. Australia	185	184	234	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
White Sands, New Mexico	179	179	181	182	183	185	187	186	187	187	188	189	189	191	193	193	208	216	210	211	201	201	202	203
Wilkes Station, Antarctica	184	NR	212	214	214	212	212	199	200	219	212	236	237	205	221	223	223	224	223	224	223	224	227	226
Winnipeg, Canada	188	219	185	233	219	222	208	199	200	201	209	208	192	193	195	195	196	197	198	199	200	201	202	203
Yamagawa, Japan	185	185	186	187	188	188	207	210	215	209	205	204	206	193	194	195	196	198	199	199	200	201	202	203
Yellowknife, Canada	192	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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

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

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																								
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																								
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	235
Tucuman, Argentina	----	NR	----	226	226	226																		
Uppsala, Sweden	204	205	206	207	208	209	210	211	227	229	230	228	221	221	231	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	221	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			237	237	237	237	237	
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	232	
White Sands, New Mexico	223	223	227	220	223	222	221	229	222	223	229	226	230	229	231	230	230	228	231	232	232	232	232	
Wilkes Station, Antarctica							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	236	236	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

Code: NR = No data received.
 NP = Data not published.
 ND = No data in existence.
 -- = (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						
Ahmedabad, India	238	238	238	238									244	244	244	244	244							
Akita, Japan	237	238	239	239	239								241	242	242	243	243	244						
Anchorage, Alaska	232	232	232	232	238	240	237	240	239	NP	240	240	240	241	241	242	243	244						
Athens, Greece													241	242	242	243	243	244	244					
Baguio, Luzon	229	230	231	231	231	240	231	231	240	240	240	240												
Bangkok, Thailand													241	241	241									
Barrow, Alaska	232	232	232	233	238	238	236	237	240	NP	ND	ND	241	241	241	243	243	244						
Bogota, Colombia	241	241	243										243	244	244	244	244	244						
Boulder, Colorado					240	240	240	242	241	241	240	240	240	240	241	241	241	242	242	243	243	244		
Brisbane, Australia	240																							
Byrd Station, Antarctica	232	243	243	243	243	243	243	243	243	243	243		243	243	244									
Campbell I.	239	239	239																					
Canberra, Australia	240												243	243										
Cape Hallett, Antarctica													243	243										
Capetown, Union of S. Africa	238	239	239	239																				
Churchill, Canada	236	238	238	239	239								241	242	242	243	243	243	244	244				
Cocos Is.	240																							
College (Fairbanks), Alaska	232	232	232	233	233	240	236	-----	NP	-----	ND													
Concepcion, Chile	233	232	237	232	232	240	240	240	240	239	242	242	243	243	243	243	244							
Dakar, Senegal	239	239	239	240																				
De Bilt, Netherlands	239	239	239										242	243	244									
Djibouti, French Somaliland	239	239	239	240									241	241	242	242	243	244						
Dourbes, Belgium	236	236	237	239	239																			
El Cerillo, Mexico					238	239																		
Ft. Belvoir, Virginia (Wash., D.C.)	232	232	232	232	233	235	237	240	240	240	240	240	240	240	241	241	241	242	243	244	244			
Ft. Monmouth, New Jersey	232	232	234	232	235	238	234	239	240	242	240	240	241	241	241	243	244	244						
Genova, Italy	-----	ND	----	240																				
Godhavn, Greenland	236	NR	237	233	240	240	240	240	238	240	242	242	242	243	243	244								
Godley Head (Christchurch) N.Z.	237	237	237	239	239								241	241	242	242	243	243	244	244				
Grand Bahama I.	232	232	232	232	233	232	235	240	240	240	240	239	241	241	241	242	242	244						
Graz, Austria	236	236	236	237	238																			
Hobart, Tasmania	240																							
Huancayo, Peru	232	232	232	235	235	235	236	240	240	240	241	241	241	241	241	242	243	244	244					
Hyderabad, India													243	243	244	244								
Ibadan, Nigeria	240																							
Inverness, Scotland	237	238	239	239																				
Johannesburg, Union of S. Africa	238	239	239	239																				
Juliusruh/Rugen, Germany	240												242	243	243	244								
Kenora, Canada	-----												241	242	242	243	243	243	244	244				
Kiruna, Sweden	235	236	236	237	239	239	241	242	242	242	243	243	241	242	242	242	243	243	244	244				
Kodaikanal, India	230	238	239	231									241	242	244		244	244						
Kokubunji (Tokyo), Japan	237	238	239	239	239								241	242	242	243	243	244						
La Paz, Bolivia							240	240																
Leopoldville, Congo	240												243											
Lindau/Harz, Germany	240												243	244	244									
Lulea, Sweden													241	241	242	242	244	244	244					
Lwiro, Congo													241	241	242	242	244	244						
Lycksele, Sweden	236	236	237	239	239								241	242	242	242	242	243	244	244				

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
Manila, Luzon	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	241	241	242	242	243	243	243	244	244	244	244	244
Maui, Hawaii	232	232	232	232	234	232	235	238	240	240	240	240	240	241	241	242	242	243	244					
Mundaring, W. Australia	240																							
Narssarssuaq, Greenland	232	232	232	232	232	240	237	239	240	NP	242	241	240	241	243	244	244	244						
Nurmijarvi, Finland	235	236	236	237	238								241	241	242	242	242	243	244	244	244	244	244	244
Okinawa I.	232	232	232	232	234	234	235	240	240	240	240	240	240	241	241	242	242	243	243	243	243	243	243	243
Ottawa, Canada	236	238	238	239	239								241	242	242	243	243	243	243	244	244	244	244	244
Paramaribo, Surinam	239	239	239	240									243											
Paris, France	243	-----	ND	-----																				
Pole Station, Antarctica	240																							
Port Moresby, Papua	238	239	239	239									244	244	244	244								
Port Stanley (Falkland Is.)	240												242	242	243	244								
Pruhonice, Czechoslovakia	239	240	239	239																				
Rarotonga, Cook Is.	236	238	238	239	239								241	242	242	243	243	243	244	244	244	244	244	244
Resolute Bay, Canada	232	232	232	232	234	238	236	240	242	239	240	240	240	241	241	241	243	243	243	243	243	243	243	243
Reykjavik, Iceland	236	236	238	238	239								241	241	242	242	242	242	244	244	244	244	244	244
Rome, Italy	240												244	244										
Salisbury, S. Australia	237	237	239	239									241	242	242	243	244	244						
Sanae Base, Antarctica																								
Singapore, Malaysia	237	239	239	239									241	241	242	243	244	244						
Slough, England	235	236	237	237	239								241	241	242	242	242	243	243	243	243	243	243	243
Sodankyla, Finland	237	238	238	239	239								242	244	244									
Sottens, Switzerland	236	238	238	239	239								241	242	242	243	243	243	243	243	243	243	243	243
St. John's, Newfoundland	239	239	239	240									241	241	242	242	243	243	243	243	243	243	243	243
Tahiti, Society Is.	237	237	239	239	239								242	243	243	243	244							
Taipei (Formosa), China	232	234	236	234	237	240	241	240	240	242	241	242	242	243	243	243	244							
Talara, Peru	239	239	239	240																				
Tananarive, Malagasy Republic	-----	239	239										241	241	241	243	244	244						
Tehran, Iran	232	232	232	233	242	233	236	242	240	239	240	240	241	241	241	243	244	244						
Thule, Greenland													242											
Tortosa, Spain	240												241	242	242	242	242	244	244	244	244	244	244	244
Townsville, Australia	235	236	236	237	238	239							244											
Tromso, Norway	239	239											241	242	242	242	242	243	243	243	243	243	243	243
Tucuman, Argentina	239	236	237	237	239								241	242	242	242	242	243	243	243	243	243	243	243
Uppsala, Sweden	237	238	239	239	239								241	241	242	242	244							
Wakkanai, Japan	239	239											241	241	242	242	244							
Warsaw, Poland																								
Washington, D.C. (See Ft. Belvoir)	232	232	232	232	235	236	234				NP	241	241	241	241	243	244	244	244	244	244	244	244	244
White Sands, New Mexico	236	238	238	239	239								-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Winnipeg, Canada	240												243											
Woomera, Australia	237	238	239	239	239								241	242	242	243	243	244	244	244	244	244	244	244
Yamagawa, Japan																								

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

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