ION. ANT.—7

IONOSPHERIC DATA AT SYOWA BASE (ANTARCTICA)

February—July 1966

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Prepared by

THE RADIO RESEARCH LABORATORIES
MINISTRY OF POSTS AND TELECOMMUNICATIONS

NUKUI-KITAMACHI, KOGANEI-SHI, TOKYO, JAPAN.

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CONTENTS

MAIN CHARACTERISTICS OF THE IONOSONDE USED AT SYOWA BASE

Item	Specification
Frequency Range	1-20 Mc/s
Transmitting Power	10kW(peak value)
Duration of Sweep	30sec
Transmitted Pulse width	100 μsec(variable)
Recurrence Frequency of Transmitted Pulse	50 c/s(by power frequency)
Frequency Scale	Every 1 Mc/s
Height Range	1100 km
Height Scale	Every 100 km
Total Receiver Gain	140 dB
Noise Figure	About 9 (at 5 Mc/s)
Time Constant of Differential Circuit	50 μsec
Recording Method	35 mm film running and 16 mm movie picture
Power Supply	100 V AC, 3 kVA
Transmitting Antenna	20 m high vertical delta terminated by 600 Ω
Receiving Antenna	15 m high vertical delta terminated by 600 Ω

SYMBOLS AND TERMINOLOGY

All symbols and terminology in the table of ionospheric data are used in accordance with the First Report of the Special Committee on World-Wide Ionospheric Soundings (URSI/AGI), Brussels, September 2, 1956, and the Secnd Report of the Committee, May, 1957, supplementary to the First Report.

Terminology

f_0F2, f_0F1, f_0E — The ordinary-wave critical frequency for the $F2$, $F1$ and E layers respectively.

f_0Es — The ordinary wave top frequency corresponding to highest frequency at which a mainly continuous trace is observed.

f-min — That frequency below which no echoes are observed.

$M(3000)F2$ — The maximum usable frequency factor for a path of 3000 km for transmission by $F2$ layer.

$h'F2$ — The minimum virtual height of the ordinary wave trace for the highest stable stratification in the F region.

$h'F$ — The natural and most significant F region virtual height parameter is that for lowest F region stratification. This will be denoted by $h'F$. Thus $h'F$ is identical with the current $h'F2$ when F region stratification is absent, e. g., at night, and with the current $h'F1$ when $F1$ stratification is present.

$h'Es$ — The lowest virtual height of the trace used to give the f_0Es.

a. Descriptive Symbols

Used following the numerical value on monthly tabulation sheets.

A — Measurement influenced by, or impossible because of, the presence of a lower thin layer, for example *Es*.

B — Measurement influenced by, or impossible because of, absorption in the vicinity of *f*-min.

C — Measurement influenced by, or impossible because of, any non-ionospheric reason.

D — Measurement influenced by, or impossible because of, the upper limit of the normal frequency range. Used in a qualifying sense, see below.

E — Measurement influenced by, or impossible because of, the lower limit of the normal frequency range. Used in a qualifying sense, see below.

F — Measurement influenced by, or impossible because of, the presence of spread echoes.

G — Measurement influenced or impossible because the ionization density is too small compared with that of a lower thick layer.

H — Measurement influenced by, or impossible because of, the presence of a stratification.

L — Measurement influenced by or impossible because the trace has no sufficiently definite cusp between layers.

M — Measurement questionable because the ordinary and extraordinary components are not distinguishable.

N — Conditions are such that the measurement cannot readily be interpreted, for example, in the presence of oblique echoes.

O — Measurement refers to the ordinary component.

R — Measurement influenced by, or impossible because of, absorption in the vicinity of a critical frequency.

S — Measurement influenced by, or impossible because of, interference or atmospherics.

V — Forked trace which may influence the measurement.

W — Measurement influenced or impossible because the echo lies outside the height range recorded.

X — Measurement refers to the extraordinary component.

Y — Intermittent trace.

Z — Third magneto-ionic component present.

b. Qualifying Symbols

Used as a preceeding symbol on monthly tabulation sheets.

D — *greater than.....*

E — *less than.....*

I — Missing value has been replaced by an interpolated value.

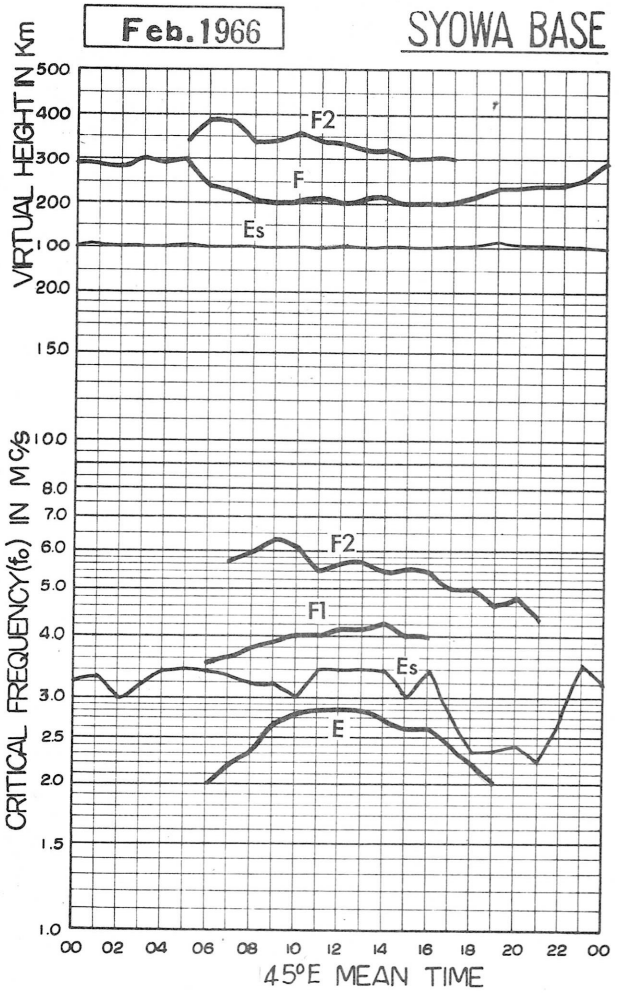
J — Ordinary component characteristic deduced from the extraordinary component.

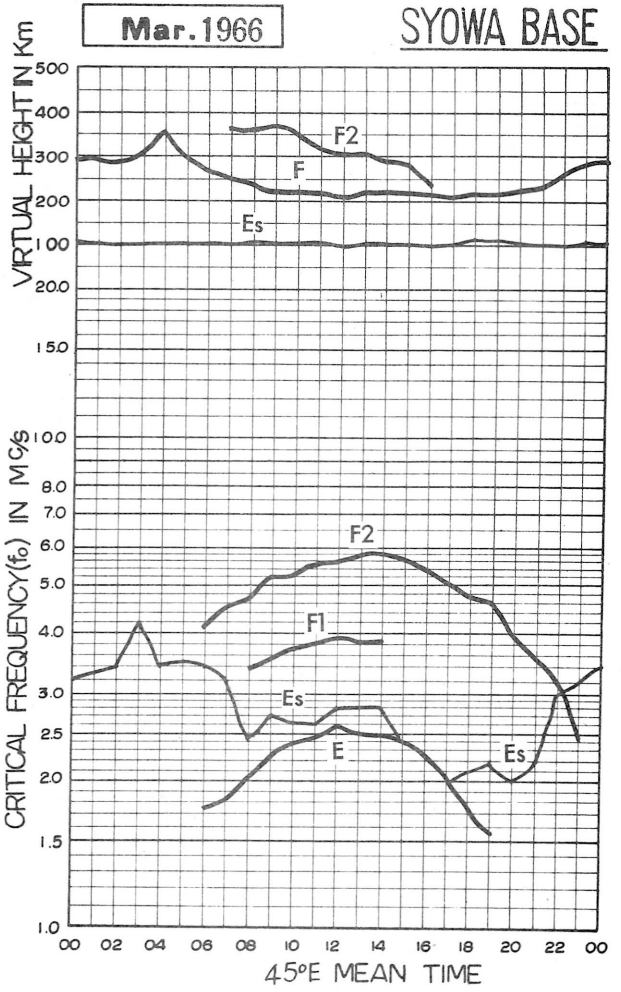
T — Value determined by a sequence of observations, the actual observation being inconsistent or doubtful.

U — Uncertain or doubtful numerical value.

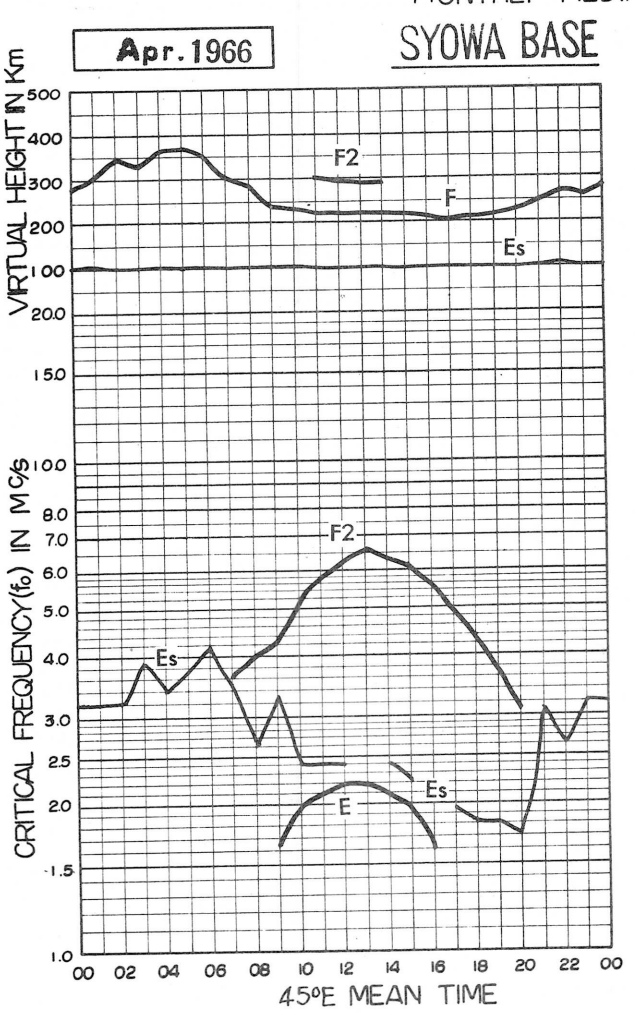
Z — Measurement deduced from the third magnetoionic component.

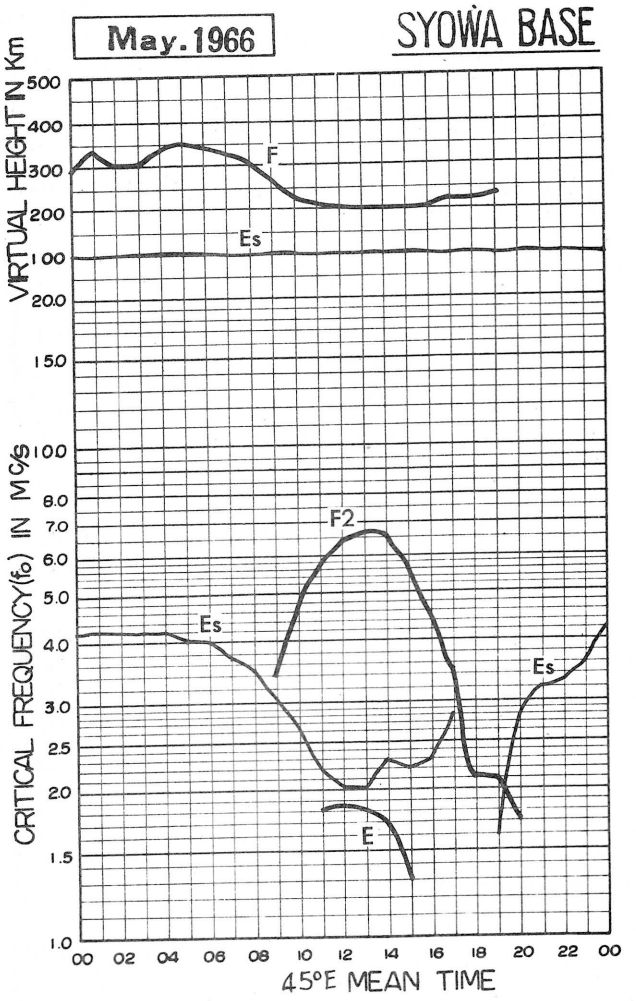
IONOSPHERIC DATA
MONTHLY MEDIAN CHARACTERISTICS



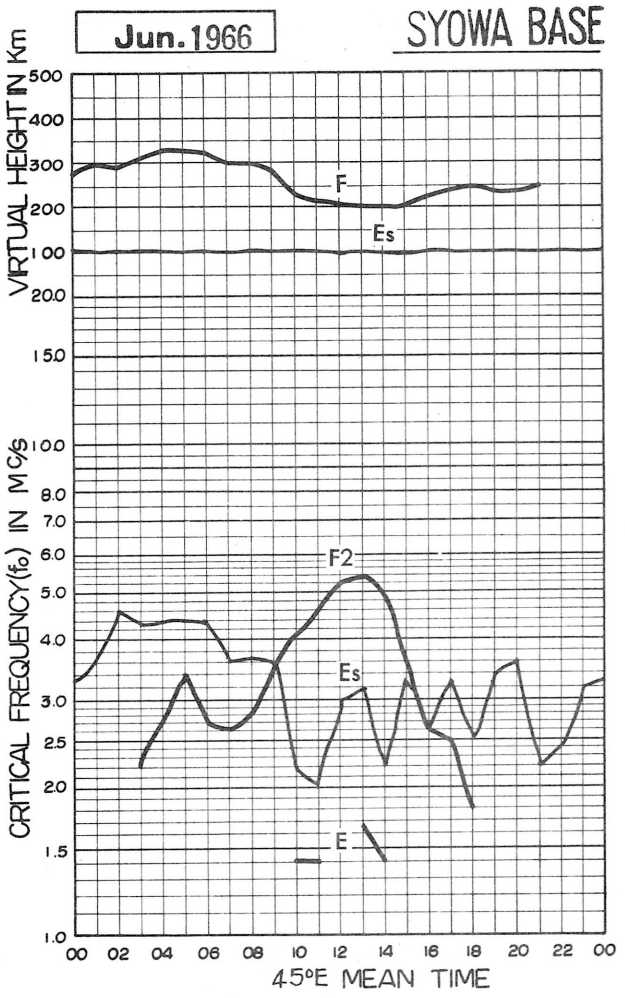


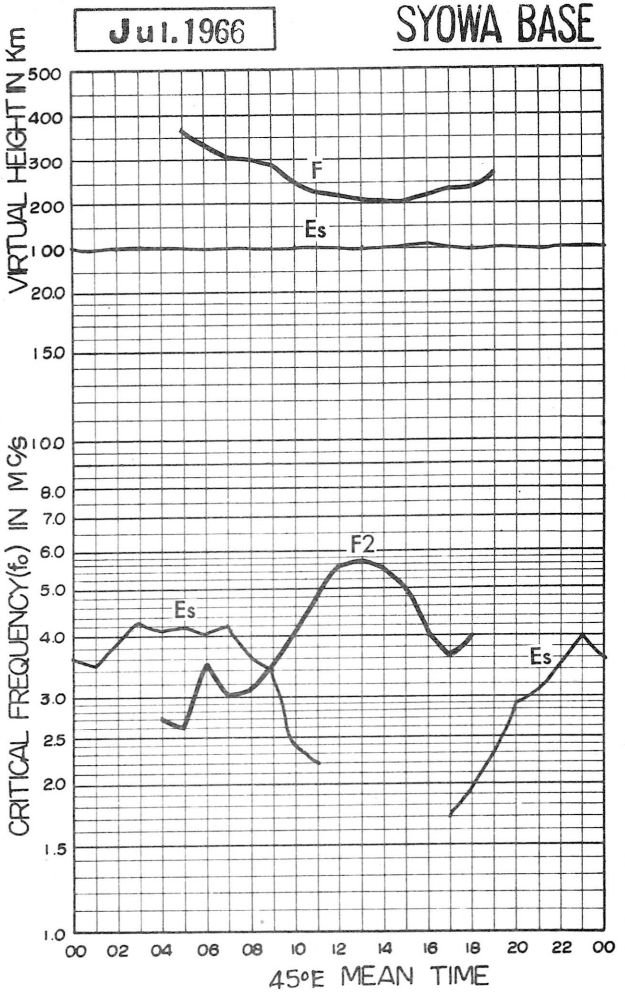
IONOSPHERIC DATA
MONTHLY MEDIAN CHARACTERISTICS





IONOSPHERIC DATA
MONTHLY MEDIAN CHARACTERISTICS





IONOSPHERIC DATA
LIST OF MEDIAN VALUES

OBSERVED AT: SYOWA BASE

FEBRUARY, 1966

45° E Mean Time (G.M.T. +3h)

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		J42S	J42S	40	J52	40	48	J57F	J59F	63F	62F	54F	56F	57	54	55	54	50	50	46	48	43	41	J38
	CNT		1	5	3	2	3	2	8	11	15	15	15	13	14	16	16	16	16	16	17	12	6	2	2
	Q R																								
foF1	MED				310L	280	315	350	360	380	390	400	400	410	410	420	400	400L	380	340					
	CNT				1	1	4	5	11	16	17	17	18	18	16	15	10	9	3	1					
foE	MED				150	170	180	200	220	235	265	275	280	280	280	270	260	260	240	222	200	170		130	
	CNT				3	3	3	6	7	6	9	11	10	9	5	4	9	10	10	10	8	1		1	
foEs	MED	J32X	J33X	J30X	J32X	J34X	J34X	J34X	J33X	J32X	J32X	J30X	J34	J34X	J34X	J34X	30	J34X	J28X	J23	23	J24X	J22X	J26X	J35X
	CNT	21	20	20	23	22	19	19	20	19	20	19	19	18	16	17	17	17	18	20	21	21	23	23	22
	Q R																								
f-min	MED	E	13	14	14	14	15	14	16	14	15	14	17	15	14	15	15	16	14	14	15	15	14	E	12
	CNT	21	23	24	24	24	24	23	23	23	23	23	23	22	21	21	21	22	21	20	23	24	24	24	23
M (3000) F2	MED			278	265		290	U265F	260F	245F	278	275F	288	285	300	300	310	322	318	325	325	325	320	340	
	CNT			2	3		3	1	4	3	8	10	12	12	11	13	13	14	14	15	16	10	6	1	
M (3000) F1	MED																								
	CNT																								
h'F2	MED				400	350	340	390	380	330	340	360	340	332	320	320	300	300	305	330	338	240			
	CNT				2	2	5	5	11	17	16	17	17	18	15	16	11	13	6	2	2	1			
h'F	MED	285	278	280	300	290	300	240	228	208	200	210	210	200	210	211	200	200	200	220	230	230	240	240	260
	CNT	13	12	12	9	11	13	11	14	16	16	17	18	17	16	16	16	15	18	19	18	19	17	19	17
h'Es	MED	100	110	100	100	100	112	100	100	100	100	100	100	100	100	100	100	100	100	100	120	110	110	105	100
	CNT	19	18	19	22	22	16	18	16	17	17	12	17	15	16	13	14	14	14	14	16	17	21	19	19
hpF2	MED																								
	CNT																								
ypF2	MED																								
	CNT																								

IONOSPHERIC DATA
LIST OF MEDIAN VALUES

OBSERVED AT: SYOWA BASE

MARCH, 1966

45° E Mean Time (G.M.T. +3h)

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	J32R		J23A		J41R	38	41	45	47	52	52	55	56	58	58	56	53	50	47	46	39	35	32	24
	CNT	2		1		2	3	6	12	18	21	25	25	28	25	28	26	25	21	21	14	9	8	4	7
	Q R																								
foF1	MED							280	310	335	350	370	380L	390	380	385L	390L	U370L	300F						
	CNT							1	3	10	15	19	21	17	19	12	3	1	1						
foE	MED					200	190	175	182	202	225	238	245	258	250	250	240	225	205	172	155	E			
	CNT					1	1	6	4	12	15	18	17	14	16	14	17	13	16	8	5	1			
foEs	MED	J32X	J33X	J34X	J42X	J34X	J35X	J34X	J32X	24	27	26	26	28	28	28	E24G	22	E23G	21	22	20	J22X	J30X	J31X
	CNT	30	30	31	31	30	30	28	28	26	27	28	28	28	28	30	27	28	27	28	28	30	30	29	31
	Q R																								
f-min	MED	E	13	12	15	14	15	17	16	15	16	15	16	16	17	16	18	16	16	14	14	13	11	E	E
	CNT	31	30	31	31	31	30	31	31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31
M (3000) F2	MED							288	275	285	280	282	290	295	305	315	320	340	338	335	335	320	312	300	315F
	CNT							4	7	13	13	18	21	22	23	27	23	21	18	16	7	6	4	1	5
M (3000) F1	MED																								
	CNT																								
h'F2	MED							360	370	365	370	345	318	302	300	285	280	230	225	220					
	CNT							3	10	14	20	24	26	26	26	26	19	9	3	1					
h'F	MED	280	295	280	310H	360	290	270	250	230	218	220	216	212	220	220	220	220	215	222	220	235	235	261	282
	CNT	10	7	5	3	7	8	11	16	20	22	26	26	26	27	29	26	26	27	26	26	27	24	22	16
h'Es	MED	110	105	102	100	100	100	102	100	110	105	105	105	100	105	100	100	100	100	122	110	105	100	100	110
	CNT	29	29	30	30	29	26	24	24	20	21	16	16	23	21	21	12	14	11	16	17	19	20	23	27
hpF2	MED																								
	CNT																								
ypF2	MED																								
	CNT																								

IONOSPHERIC DATA
LIST OF MEDIAN VALUES

OBSERVED AT: SYOWA BASE

APRIL, 1966

45° E Mean Time (G.M.T. +3h)

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	15	18	23	23	J29	J32R	J37R	J36	40	42	52	58	62	66	63	62	56	49	44	37F	31F	18F	18F	14
	CNT	1	2	1	1	2	1	3	8	8	12	18	21	22	25	21	21	19	15	13	13	4	2	3	2
	Q R																								
foF1	MED										290F	350L	340	330L	340L	330L									
	CNT										1	1	1	1	1	1									
foE	MED								190	165	170	200	210	220	220	208	200	162							
	CNT								1	2	3	14	11	15	9	8	7	4							
foEs	MED	J32X	J32X	J32X	J39X	J34X	J37X	J42X	J35X	J26X	J33X	24	24	U24	B24G	24	22	E20G	U19	U18	U18	17	J31X	J26X	J32X
	CNT	28	30	30	30	29	30	28	27	26	27	28	28	29	30	29	29	29	29	27	28	28	26	29	30
	Q R																								
f-min	MED	E	14	13	14	12	14	14	14	14	15	16	17	18	19	17	16	17	14	16	13	11	E11E	E	E
	CNT	29	30	30	30	30	30	30	30	30	30	30	29	30	30	29	29	29	29	30	29	29	30	30	30
M (3000) F2	MED	335	310	285	285			260R	280	292	300	302	310	310	325	335	340	340	335	335	320F	292F	342F	315F	335
	CNT	1	1	1	1			2	3	4	11	14	16	20	19	19	16	19	14	12	7	4	2	3	1
M (3000) F1	MED																								
	CNT																								
h'F2	MED								400	430L	420	325	300	288	280	282	342								
	CNT								1	1	2	2	7	6	4	4	2								
h'F	MED	J278	306	350	U326	365	372	350	305	280	240	230	220	225	220	220	220	210	205	212	215	232	252	270	258
	CNT	5	6	4	12	11	12	15	18	21	24	28	26	28	29	28	28	29	29	28	26	21	14	13	8
h'Es	MED	105	105	102	100	100	100	100	100	100	100	105	105	102	100	100	100	100	100	100	100	100	100	110	100
	CNT	25	29	30	29	29	29	26	24	20	24	23	16	18	13	17	19	14	15	14	16	15	18	25	27
hpF2	MED																								
	CNT																								
ypF2	MED																								
	CNT																								

IONOSPHERIC DATA
LIST OF MEDIAN VALUES

OBSERVED AT: SYOWA BASE

MAY, 1966

45° E Mean Time (G.M.T. +3h)

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	J50R	28F	28	J26	24F	27F	34	28	J32F	34F	J46F	57F	64	67F	66F	57F	J45F	35F	21	21F	17	18F	16F	15
	CNT	1	2	1	2	4	1	4	4	3	7	10	13	12	11	12	16	14	7	9	5	5	3	1	1
	Q R																								
foF1	MED																								
	CNT																								
foE	MED										140	150	180	185	180	170	130								
	CNT										2	2	6	3	4	7	3								
foEs	MED	J42X	J42X	J42X	J42X	J42X	J40X	J40X	J37X	J35X	J30X	J26X	U22	U20	U20	23	U22	U23	J28X	E20B	J16X	J28X	J32X	J33X	J36X
	CNT	28	31	29	30	28	30	29	27	25	26	26	26	25	27	26	27	29	28	26	23	22	22	21	26
	Q R																								
f-mig	MED	13	14	14	14	15	14	13	14	14	13	16	16	17	18	18	16	14	14	13	13	13	15	16	14
	CNT	29	31	30	30	31	31	30	30	30	30	31	30	29	30	30	29	30	29	30	30	31	30	30	31
M (3000) F2	MED		338F	330		250F	260F	255	280F	305F	292F	310F	320F	330	340	325F	340F	318F	315F	335	322F	295	320F		
	CNT		2	1		3	1	2	3	1	4	3	7	7	6	7	9	6	4	7	4	5	3		
M (3000) F1	MED																								
	CNT																								
h'F2	MED														280										
	CNT														1										
h'F	MED	280	335	300	298	330	355	340	322	300	271	230	210	205	202	200	200	202	224	220	232	260	268	278	200
	CNT	5	8	8	6	8	10	9	12	14	22	23	25	25	26	26	27	29	26	20	14	4	4	2	1
h'Es	MED	100	100	100	100	100	100	100	100	100	105	100	100	100	100	100	100	100	100	100	100	100	100	105	100
	CNT	28	31	29	29	27	29	29	27	24	22	19	15	14	14	16	14	18	17	11	13	18	20	20	26
hpF2	MED																								
	CNT																								
ypF2	MED																								
	CNT																								

IONOSPHERIC DATA
LIST OF MEDIAN VALUES

OBSERVED AT: SYOWA BASE

JUNE, 1966

45° E Mean Time (G.M.T. +3h)

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	25	J35A	29	J22F	J27	J34F	27F	26F	J28F	J35F	41	J46	J52	54	J49F	36F	26F	25F	18	16	16	12		14F
	CNT	6	1	2	5	5	7	8	10	9	13	15	18	16	13	11	10	10	13	9	4	3	1		1
	Q R																								
foF1	MED							.			E140E	140	140		165	140	E								
	CNT										2	6	3		3	3	1								
foE	MED																								
	CNT																								
foEs	MED	J35X	J36X	J46X	J43X	J44X	J44X	J44X	J36X	J37X	J36X	J23X	J20X	J30X	J32X	J22X	J33X	J26X	J33X	J25X	J34X	J36X	J22X	J24X	J32X
	CNT	29	30	30	27	29	29	30	29	28	25	27	28	27	27	27	29	25	28	24	25	22	23	26	27
	Q R																								
f-min	MED	E	E	E	E11E	12	E11E	E	E	E	12	12	12	11	12	13	13	13	13	13	14	14	13	E	E
	CNT	29	30	30	30	30	30	30	30	30	30	30	30	29	29	29	30	30	30	29	30	30	30	30	30
M (3000) F2	MED	312		275	282F	275F	250F	280F	270F	265F	278	295F	325	315	325	325	345F	335F	335	320	342	315	320		355F
	CNT	4		1	2	1	2	5	6	4	6	7	5	5	7	2	7	7	7	8	4	3	1		1
M (3000) F1	MED																								
	CNT																								
h'F2	MED																								
	CNT																								
h'F	MED	275	300	288	308	329	328	325	298	300	280	235	212	205	200	200	200	229	240	245	U235	U242	U248	395	250
	CNT	6	7	6	10	12	14	13	15	17	18	27	28	27	27	27	27	24	20	16	9	6	6	3	9
h'Es	MED	105	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	102	100
	CNT	29	30	30	27	28	29	30	28	27	22	25	22	22	20	18	18	17	23	18	22	21	21	26	26
hpF2	MED																								
	CNT																								
ypF2	MED																								
	CNT																								

IONOSPHERIC DATA
LIST OF MEDIAN VALUES

OBSERVED AT: SYOWA BASE

JULY, 1966

45° E Mean Time (G.M.T. +3h)

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			J41	J31F	J27	26	35F	30F	J31F	J35F	41F	48F	56F	57	55	J50F	J40F	36F	40	23			17	20
	CNT			2	2	5	6	5	6	10	8	10	14	16	14	13	11	14	7	6	4			1	1
	Q R																								
foF1	MED																								
	CNT																								
foE	MED													170A	160										
	CNT													1	1										
foEs	MED	J36X	J35X	J39X	J43X	J41X	J42X	J40X	J42X	J36X	J34X	J24X	22	E28B	E25B	E24B	U19	E21B	U17	U20	J23X	J29X	J31X	J35X	J40X
	CNT	30	28	29	31	26	30	28	26	25	25	22	25	25	24	26	24	25	23	21	19	17	12	21	25
	Q R																								
f-min	MED	11	13	13	13	14	15	16	13	16	15	17	16	21	23	22	18	18	15	18	18	17	B	14	11
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30
M (3000) F2	MED					250	225	272	262F	250F	290	305F	302F	295F	315	315	320	300	300F	310	310				310
	CNT					1	3	2	4	2	3	8	8	11	11	10	5	5	4	4	4				1
M (3000) F1	MED																								
	CNT																								
h'F2	MED													300											
	CNT													1											
h'F	MED	200	300	300A	320	U348	370	330	305	300	290	255	225	215	210	205	205	220	235	230	270			200	340
	CNT	1	2	1	2	4	7	7	6	9	14	19	24	25	23	25	23	22	20	13	9			3	1
h'Es	MED	100	100	100	100	100	100	100	100	100	100	105	100	100	100	100	105	110	100	105	100	100	100	102	105
	CNT	30	28	29	31	26	30	28	25	25	22	17	15	12	11	12	12	12	12	12	14	17	11	20	24
hpF2	MED																								
	CNT																								
ypF2	MED																								
	CNT																								

IONOSPHERIC DATA

FEB. 1966 | FOF2 (0.1 MHZ) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	C	U S 52	U S 48	S	F	F	J F 64	F	F 66	F 74	73	F 62	C	C	C	47	52	50	51	U S 48	S	F	S
2	S	S	J S 42	S	J S 52	S	S	F	J F 67	J F 63	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	F 43	A	A	S	A
5	S	B	B	A	A	B	A	B	B	R	R	B	B	B	B	B	B	C	C	R	B	S	S	A
6	A	A	A	A	A	A	R	A	A	R	B	45	43	F 44	45	47	B	43	R	A	42	F	S	S
7	R	S	30	R	A	40	U F 45	J F 48	F 46	J F 54	U F 53	F 50	F 45	45	45	44	43	47	47	41	42	42	39	J F 36
8	C	R	R	S	S	U R 53	S	F 60	J F 61	64	F 62	60	62	60	55	F 50	J F 53	R	F 52	F 50	48	F	S	C
9	S	S	S	32	S	R	A	F	J F 54	J F 53	F 53	53	54	F 55	51	51	49	48	47	47	S 49	48	S	S
10	S	S	S	S	S	A	S	63	J F 59	64	J F 63	F 60	F 54	J F 55	F 50	F 48	49	F 47	J F 49	46	S 47	S 41	R	A
11	A	A	A	B	R	B	A	A	F 48	J F 52	47	44	49	53	52	52	56	52	61	B	F	S	S	S
12	S	A	A	A	R	R	J R 52	F	F	F	F	J F 52	F	F	F 51	J R 55	52	46	47	46	49	U F 48	F	S
13	S	S	S	R	A	A	B	F	J R 65	J F 57	U F 50	F 54	F 56	50	53	A	51	48	50	44	J R 49	A	F	S
14	F	J S 42	J S 42	S	S	S	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	J R 49	S	S	S
16	C	C	C	C	C	C	C	C	C	C	J F 64	J F 61	F 60	58	57	58	55	F 50	52	46	R	S	R	R
17	S	S	R	R	R	R	R	J R 63	S	66	J R 71	J F 68	J F 69	R 68	65	F 59	F 54	51	52	J R 54	S	S	S	R
18	S	S	S	S	J R 52	R	R	S	R	F 65	J R 65	F	F	J F 69	F	65	57	52	F 46	J R 47	A	R	R	R
19	S	R	R	R	S	R	R	R	72	J F 72	J F 69	F	F	F	J F 77	J F 68	65	68	64	A	A	A	A	A
20	A	A	A	A	F	A	A	A	A	A	A	R	F	B	F 52	J F 59	F	F	F	U F 47	R	F 32	F	F
21	F	A	S	F 40	F	S 40	S	J S 54	J F 57	J F 59	F 58	F 53	F 52	F 56	J R 57	55	J F 55	50	U F 46	B	B	B	B	B
22	C	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C
23	A	A	B	A	A	R	R	A	B	B	B	B	B	B	B	B	B	B	F	F 45	B	F	F	A
24	A	B	B	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	J R 42	F 46	F	R	R	A
25	A	R	R	A	R	B	B	F 42	F	F 47	50	J F 47	C	C	C	C	C	C	C	44	40	F	F	F
26	A	R	R	F	S	S	S	J F 54	J F 52	54	55	56	59	58	55	55	55	J F 61	51	49	47	44	J R 43	J R 41
27	S	S	J A 26	R	A	R	R	R	J R 63	F 66	F	F	F	F 74	64	61	F 57	46	50	50	49	F	S	R
28	R	R	R	R	R	R	R	R	R	R	64	62	68	J R 70	J R 72	J A 62	F 54	J F 56	R	F	R	R	R	R
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT		1	5	3	2	3	2	8	11	15	15	15	13	14	16	16	16	16	16	17	12	6	2	2
MED		J S 42	J S 42	40	J 52	40	48	J F 57	J F 59	F 63	F 62	F 54	F 56	57	54	55	54	50	50	46	48	43	41	J 38
UQ			J S 42	44		46		63	J 64	F 66	J F 64	60	F 62	68	60	60	56	52	52	49	49	48		
LQ			J 30	36		40		J F 51	J F 53	J F 54	F 53	F 51	F 52	F 53	51	50	50	47	47	45	44	41		

FEB. 1966 | FOF2 (0.1 MHZ)

IONOSPHERIC DATA

FEB. 1966 | FOF1 (0.01 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1					L	320	350	370	380	400	400	400	420	C	C	C	A	L	L	L	L			
2						310	330	360	380	390	C	C	C	C	C	C	C	C	C	C				
3					C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C				
4					C	C	C	C	C	C	C	C	C	C	C	C	C	C	C					
5					A	B	A	B	B	370	400	B	B	B	B	B	B	C	C	B				
6					A	A	A	A	A	U F 390	B	390	400	400	400	390	B	L	B	A				
7					A	A	350	370	F 370	F 360	F 380	A	410	400	400	400	L	380	L					
8					280	320	350	L	L 400	400	H 420	410	420	420	U L 420	L	U L 410	U L 380		L				
9						300	A	350	F 280	400	440	410	410	420	420	L 420	U L 400	L	L	L				
10							350	370	380	380	390	400	400	410	400	L	400		L	L				
11					R	B	A	A	F 370	390	400	400	420	420	420	410	400	380	L	B				
12					R	A	A	F 380	F 400	U F 420	400	400	420	430	410	400	390		L	L				
13						A	B	A	390	400	420	400	410	420	420	A	L	L						
14						L	C	C	C	C	C	C	C	C	C	C	C	C	C	C				
15					C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C				
16					C	C	C	C	C	C	410	400	420	420	420	400	L	L	L					
17						L	L	370	380	410	420	440 L	420	410	U L 420	L	L	L	L					
18						L	A	L	390	400	400	420	420	420	U L 420	400	390 L	L	L					
19							L	360	380	390	400	420	430	410	420	U L 400	U L 400	L	L	L				
20						A	A	A	A	A	A	F 400	390	B	390	390	390	L		L				
21				310 L			L	350	370	380	390	400	400	390	C	400	400 L	L		B				
22					B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C				
23					A	R	A	A	B	B	B	B	B	B	B	B	B	B	340	L				
24					B	B	B	B	B	B	B	B	B	B	B	B	B	B						
25					A	B	B	310	360	360	380	400	C	C	C	C	C	C	C					
26							L	U L 320	360	L	390	400	400	400	400	L	L	L						
27				L	A		L	L	360	390	A	400	400	400	L	L	L							
28							L	L	L	L	L 390	410	400	410 L	410 L	L								
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT				1	1	4	5	11	16	17	17	18	18	16	15	10	9	3	1					
MED				310 L	280	315	350	360	380	390	400	400	410	410	420	400	400 L	380	340					
UQ						320	350	370	385	400	410	410	420	420	420	400	U L 400	380						
LQ						305	350	350	365	380	390	400	400	400	400	400	390 L	380						

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FEB. 1966 | FOF1 (0.01 MHZ)

IONOSPHERIC DATA

FEB. 1966 | FOE (0.01 MHZ) | 135° E Mean Time (G. M. T.+ 9h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1			A	A	190	R	B	B	B	270	275	280	280	C	C	C	A 260	A	240	A	170	A	130	
2			A	150	170	A	200	A 210	A	A	C	C	C	C	C	C	C	C	C	C	C	C	C	
3			C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
4			C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	A	B	B	B	
5				A	B	B	A	B	B	A	R	B	B	B	B	B	B	C	C	B	B	A	A	
6			A	A	A	A	B	A	A	A	B	B	R	275	280	280	B	B	B	B	A	B	A	
7				A	A	A	A 200	A	A	A	280	A	A	A	A	270	A 260	240	225	H 200	A	A	A	
8				A	A	170	220	240	A	280	A	A	A	A	A	A	270	250	A	190	B	A	A	
9				A	A	A	A	A	A	275	290	280	280	A	A	A	275	A	240	220	A	A	A	
10			A	A	A	A	A	A	245	260	270	280	270	280	A	250	A	250	A	A	A	A	A	
11			A	B	A	B	A	A	A	290	A	A	A	A	A	280	270	220	A	B	B	A	A	
12			A	A	B	B	A	A	A	A	310	280	280	A	A	A	275	240	225	210	A	A	A	
13			A	A	A	A	B	A	A	A	280	310	300	290	A	A	A	A	220	190	A	B	A	
14			B	A	A	A	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		
15				C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	A	A		
16				C	C	C	C	C	C	C	290	A	A	A 280	A 270	A	A	A	A	A	A	A		
17				A	A	R	200	A	A	265	260	A	A	A	A	A	A	250	220	A	A	A		
18				A	A	225	A	230	A	A	A	300	A	A	A	A	A	260	A	A	A			
19				210	A	A	200	220	240	A	270	A	A	A	A	260	A 250	A 230	230	A	A			
20				A	A	A	A	A	A	A	A	290	280	B	B	280	B	B	210	200	A			
21				A	A	A	A	A	A	250	260	A	A	A	R	260	240	A	200	B	B			
22				B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C			
23				B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A	200	B			
24				B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A			
25				B	B	B	B	A	250	260	R	A	C	C	C	C	C	C	C	A	B			
26				A	A	180	180	210	230	R	260	270	270	A	270	260	240	230	B	B	B			
27				A	A	A	A	230	220	A	A	300	270	260	270	260	250	220	190	170	B			
28				E	E	A	A	215	225	230	A	A 260	260	A	A	A	A	A	A	A	A			
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT				3	3	3	6	7	6	9	11	10	9	5	4	9	10	10	10	8	1		1	
MED				150	170	180	200	220	235	265	275	280	280	280	270	260	260	240	222	200	170		130	
UQ				180	180	202	200	230	245	275	285	300	280	280	275	280	270	250	230	205				
LQ				F E 150	F E 170	175	200	212	225	260	265	280	270	275	270	260	250	230	210	190				

FEB. 1966 | FOE (0.01 MHZ)

IONOSPHERIC DATA

FEB. 1966 | FOES (0.1 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	C	J X 51	J X 26	J X 23	G	E B 23	E B 25	E B 28	J X 41	G	34	35	C	C	C	J X 65	J X 51	J X 104	20	18	21	G	14
2	J X 32	J X 53	J X 35	J X 24	G 15	J X 42	J X 31	25	J X 31	J X 35	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	J X 33	J X 60	J X 122	J X 56	J X 38
5	J X 28	B	B	J X 44	J X 53	B	J X 52	B	B	33	G	B	B	B	B	B	B	C	C	E B 34	B	J X 35	J X 42	J X 84
6	J X 52	J X 42	J X 52	J X 42	J X 53	J X 54	J X 34	J X 57	J X 44	J X 38	B	E B 32	G	J X 31	J X 59	G	B	E B 28	E B 37	J X 61	J X 34	J X 51	15	J S 51
7	J X 20	J X 25	J X 30	J S 32	J X 42	J S 42	31	J X 28	J X 58	J X 32	J X 29	J X 113	J X 115	J X 52	J X 34	G 25	27	J X 27	G	23	J X 24	20	J X 30	J X 34
8	C	J X 21	14	17	J 32	J X 21	J X 52	G	J X 33	G	J X 75	J X 94	J X 50	J X 33	J X 96	31	G	J G 23	J X 27	G	E B 18	18	15	C
9	J X 26	J X 33	26	J X 30	J X 32	J X 23	48	J X 42	J X 29	G	G	J X 53	J X 78	J X 97	J X 52	J X 32	G	26	G	G	J X 21	J X 19	J X 22	D
10	J X 23	J X 33	J X 42	J X 47	J X 51	J X 50	36	J X 40	25	J G 24	G	30	J X 58	33	32	30	J X 83	J X 54	J X 34	J X 35	J X 22	J X 22	37	J X 40
11	J X 42	J X 65	J X 31	J X 65	J X 34	B	J X 57	58	D	G	J X 56	J X 33	J X 48	J X 33	30	J X 34	J X 33	J X 54	J X 36	B	J X 41	J X 20	J X 84	J X 52
12	J X 25	J X 65	J X 43	J X 43	J X 34	39	42	J X 51	J X 53	J X 58	J X 32	G 28	G	31	31	29	J G 26	J X 34	J X 39	G	20	J X 32	J X 25	E B 13
13	J X 30	J X 24	J X 25	J X 30	J X 41	J X 61	B	J X 53	J X 59	J X 56	G	34	J X 34	J X 34	J X 76	J X 124	J X 59	J X 33	J G 22	23	J X 25	J X 51	J X 25	J X 32
14	J X 79	J X 24	J X 23	J X 14	J X 20	J X 24	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	J X 46	13	E	J X 26
16	C	C	C	C	C	C	C	C	C	C	30	J X 34	J X 33	J X 33	J X 34	30	28	J X 30	J X 22	J X 32	J X 34	J X 42	J X 35	J X 34
17	J X 35	J X 34	J X 30	J X 32	J X 28	G	J X 29	24	J X 27	J X 34	33	J X 59	J X 45	J X 38	J X 58	J X 35	J X 34	J X 28	26	J X 38	24	J X 51	J X 51	J X 36
18	J X 25	J X 20	J X 29	J X 34	J X 51	J X 35	J X 45	G	J X 25	J X 52	J X 28	J G 30	J X 33	34	J X 31	J X 30	J X 28	J G 26	J X 20	20	J X 53	J X 27	J X 26	J X 25
19	J X 25	J X 22	J X 24	J X 21	J X 35	J X 30	J G 20	23	28	28	J X 104	J X 53	J X 88	J X 57	J X 52	J X 51	J X 52	J X 25	J G 20	J X 53	J X 110	J X 53	J X 45	J X 79
20	J X 54	J X 62	J X 96	J X 84	J X 104	J X 49	J X 54	J X 46	J X 61	J X 54	J X 50	G 27	G	B	E B 35	G	E B 34	E B 27	J X 30	J X 23	J X 21	J X 21	J X 20	J X 32
21	J X 34	J X 33	J X 25	J X 25	27	J X 34	J X 34	J X 32	J X 33	28	J X 35	J X 35	J X 36	J 71	G	29	27	24	22	B	B	B	B	B
22	C	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C
23	J X 49	J X 75	B	40	J X 50	38	45	53	B	B	B	B	B	B	B	B	B	B	J X 39	J X 26	B	26	J X 30	J X 46
24	J X 42	B	B	J X 45	B	B	B	B	B	B	B	B	B	B	B	B	B	B	E B 34	J X 32	24	J X 28	J X 36	J X 42
25	J X 42	J X 33	J X 33	J X 42	J X 35	B	B	J X 24	28	J X 54	G	J X 34	C	C	C	C	C	C	C	20	E B 18	17	J X 22	J X 36
26	J X 50	J X 32	J X 33	31	J X 17	G	J X 32	J X 43	J X 32	G	G	32	J X 34	J X 33	G	G	J X 52	G	E B 22	E B 18	E B 15	E	E	E
27	E B 14	E B 18	J X 30	J X 26	J X 107	J X 32	22	G	G	26	J X 49	G	32	J X 34	G	30	J X 52	G	G	20	E B 16	E B 16	E B 12	J X 21
28	E B 14	E B 15	E B 16	E	18	J X 21	J X 21	J X 34	J X 32	J X 29	J X 32	29	28	29	J X 38	J X 62	J X 60	J X 98	22	21	21	17	J X 32	E B 13
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	21	20	20	23	22	19	19	20	19	20	19	19	18	16	17	17	17	18	20	21	21	23	23	22
MED	J X 32	J X 33	J X 30	J X 32	J X 34	J X 34	J X 34	J X 33	J X 32	J X 32	J X 30	J 34	J X 34	J X 34	J X 34	30	J X 34	J X 28	J 23	23	J X 24	J X 22	J X 26	J X 35
UQ	J X 42	J X 48	J X 38	J X 42	J X 51	J X 42	J X 46	J X 48	J X 48	J X 46	J X 42	J X 44	J X 50	J X 45	J X 52	J X 34	J X 52	J X 34	J X 34	J X 32	J X 34	J X 38	J X 36	J X 46
LQ	J X 25	J X 23	J X 25	J X 26	J X 27	J X 22	J X 27	24	28	25	G	30	32	J X 33	31	29	27	24	20	20	20	18	18	J X 29

The Radio Research Laboratories, Japan

FEB. 1966 | FOES (0.1 MHZ)

IONOSPHERIC DATA

FEB. 1966 | F-MIN (0.1 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	C	E	11	14	15	23	25	28	14	13	13	17	C	C	C	14	12	15	14	11	12	E	E
2	E	11	E	E	E	E	14	E	11	14	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	15	35	33	17	E
5	12	B	B	24	32	B	18	B	B	25	19	B	B	B	B	B	B	C	C	34	B	13	14	14
6	17	16	15	14	15	E	33	19	15	14	B	32	21	13	14	15	B	28	37	32	18	14	E	E
7	E	E	14	17	16	18	14	16	18	18	24	27	14	14	16	16	15	14	22	15	11	13	E	E
8	C	16	E	11	13	E	12	16	12	14	14	13	15	14	14	13	14	14	14	16	18	15	E	C
9	15	E	E	E	13	18	17	16	15	15	11	13	14	15	14	15	14	12	14	14	E	E	E	11
10	E	13	14	14	14	12	14	11	E	E	13	E	E	14	14	15	15	13	E	E	12	13	14	13
11	E	13	13	47	25	B	18	26	14	11	11	E	13	11	16	13	16	11	14	B	21	13	15	14
12	E	11	14	15	33	35	14	26	18	14	14	16	15	15	15	13	11	14	13	16	16	15	14	13
13	E	15	16	E	15	18	B	16	E	15	13	14	13	14	14	15	15	16	13	E	11	17	15	16
14	15	14	16	13	E	11	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	13	E	E	E
16	C	C	C	C	C	C	C	C	C	C	14	18	14	14	13	16	15	15	13	14	11	14	E	E
17	E	E	E	13	12	11	E	E	13	12	12	12	14	13	13	11	12	E	15	15	14	E	E	14
18	E	E	14	14	14	15	14	E	12	16	14	19	23	17	15	17	16	12	14	12	14	16	E	E
19	E	E	E	11	E	12	E	E	E	E	E	E	16	14	17	15	15	13	11	15	14	13	E	14
20	15	E	11	14	E	14	17	13	13	18	16	18	24	B	35	27	34	27	18	15	14	18	E	E
21	E	E	E	E	E	15	12	E	14	15	13	13	15	23	16	14	14	14	12	B	B	B	B	B
22	C	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C
23	14	16	B	17	25	33	24	35	B	B	B	B	B	B	B	B	B	B	18	16	B	13	14	15
24	25	B	B	31	B	B	B	B	B	B	B	B	B	B	B	B	B	B	34	19	16	20	E	12
25	14	14	19	17	20	B	B	18	18	13	21	20	C	C	C	C	C	C	C	16	18	14	E	E
26	E	12	16	14	11	15	14	15	E	18	14	14	15	14	14	16	16	16	22	18	15	E	E	E
27	14	18	E	E	E	E	12	13	13	18	25	17	15	16	17	17	16	12	16	14	16	16	12	13
28	14	15	16	E	E	14	12	13	E	E	18	18	16	14	14	14	16	15	16	16	15	14	11	13
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	21	23	24	24	24	24	23	23	23	23	23	23	22	21	21	21	22	21	20	23	24	24	24	23
MED	E	13	14	14	14	15	14	16	14	15	14	17	15	14	15	15	16	14	14	15	15	14	E	12
UQ	14	16	16	17	22	34	24	26	18	18	22	24	23	23	17	17	34	16	18	17	18	16	14	14
LQ	E	E	E	E 11	E	12	13	12	12	14	13	13	14	14	14	14	14	12	13	14	12	13	E	E

FEB. 1966 | F-MIN (0.1 MHZ)

IONOSPHERIC DATA

FEB. 1966 | M(3000)F2 (0.01) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69 00.4 S. Long. 39 35.4 E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	C	U S 290	U S 280	S	F	F	J F 290	F	F 280	F 285	295	F 305	C	C	C	275	310	305	315	U S 325	S	F	S
2	S	S	S	S	S	S	S	F	F	F	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	F 290	A	A	S	A
5	S	B	B	A	A	B	A	B	B	R	R	B	B	B	B	B	B	C	C	R	B	S	S	A
6	A	A	A	A	A	A	R	A	A	R	B	265	255	F 250	290	290	B	285	R	A	325	F	S	S
7	R	S	265	R	A	290	U F 265	F	F 245	F	U F 265	F 290	F 255	280	290	275	265	320	340	340	320	335	340	F
8	C	R	R	S	S	U R 285	S	F 255	F	285	F 275	290	275	300	290	F 310	F	R	F 315	F 320	300	F	S	C
9	S	S	S	265	S	R	A	F	F	F	F 285	275	315	280	F 305	305	305	325	330	325	S 330	290	S	S
10	S	S	S	S	S	A	S	260	F	265	F	F 285	F 285	F	F 300	F 315	315	320	F J F 325	325	S 300	S 275	R	A
11	A	A	A	B	R	B	A	A	F 230	F	285	240	285	300	290	290	320	290	300	B	F	S	S	S
12	S	A	A	A	R	R	R	F	F	F	F	F	F	F	F 300	J R 310	325	305	320	325	345	U F 335	F	S
13	S	S	S	R	A	A	B	F	R	F	U F 260	F 285	F 295	300	320	A	325	315	330	330	R	A	F	S
14	F	S	S	S	S	S	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	R	S	S	S
16	C	C	C	C	C	C	C	C	C	C	F	F	F 285	295	280	310	310	F 320	315	335	R	S	R	R
17	S	S	R	R	R	R	R	R	S	290	R	F	F	R 310	310	F 320	F 335	315	325	R	S	S	S	R
18	S	S	S	S	R	R	R	S	R	F 275	R	F	F	F	F	315	335	355	F 350	J R 360	A	R	R	R
19	S	R	R	R	S	R	R	R	280	F	F	F	F	F	F	F	310	310	295	A	A	A	A	A
20	A	A	A	A	F	A	A	A	A	A	A	R	F	B	F 255	F	F	F	F	U F 320	R	F 320	F	F
21	F	A	S	F 265	F	S 315	S	S	F	F	F 275	F 290	F 275	F 285	R	320	F	350	U F 350	B	B	B	B	B
22	C	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C
23	A	A	B	A	A	R	R	A	B	B	B	B	B	B	B	B	B	B	F	F 300	B	F	F	A
24	A	B	B	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	R	F 325	F	R	R	A
25	A	R	R	A	R	B	B	F 260	F	F 275	260	J F 300	C	C	C	C	C	C	C	340	225	F	F	F
26	A	R	R	F	S	S	S	F	F	270	275	285	300	300	310	315	325	F	335	315	340	320	R	R
27	S	S	A	R	A	R	R	R	R	F 290	F	F	F	F 310	315	310	F 335	335	340	340	345	F	S	R
28	R	R	R	R	R	R	R	R	R	R	300	295	310	R	R	A	F 345	F	R	F	R	R	R	R
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT			2	3		3	1	4	3	8	10	12	12	11	13	13	14	14	15	16	10	6	1	
MED			278	265		290	U F 265	F 260	F 245	278	F 275	288	285	300	300	310	322	318	325	325	325	320	340	
UQ				272		302		275	262	288	F 285	292	302	300	310	315	335	325	338	338	340	F 335		
LQ				265		288		F 258	F 238	272	F 265	280	275	282	290	305	310	310	315	F 318	300	290		

FEB. 1966 | M(3000)F2 (0.01)

IONOSPHERIC DATA

FEB. 1966 | H'F2 (KM) | 45° E Mean Time (G. M. T. + 3 h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1					360	340	340	295	310	305	295	295	300	C	C	C	A	300	L	L	240			
2						320	300	295	280	370	C	C	C	C	C	C	C	C	C	C				
3					C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C				
4					C	C	C	C	C	C	C	C	C	C	C	C	C	C	C					
5					A	B	A	B	B	R	R	B	B	B	B	B	B	C	C	400				
6					A	A	R	A	A	R	B	465	520	R	400	370	B	L	R	A				
7					A	395	400	410	480	420	390	480	500	410	400	R	L	310	280					
8					340	310	S	300	310	330	360	320	300	300	320	L	300	280		L				
9						R	A	420	400	380	360	390	310	380	360	340	300	300	L	L				
10							400	380	330	330	370	325	345	315	360	L	330		L	275				
11					R	B	A	A	500	390	400	600	400	360	365	380	300	390	L	B				
12					R	R	390	470	430	410	410	370	405	400	320	310	290		L	L				
13						A	B	A	330	330	400	370	350	370	300	A	290	L						
14						L	C	C	C	C	C	C	C	C	C	C	C	C	C	C				
15					C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C				
16					C	C	C	C	C	C	300	340	350	320	345	300	300	L	L					
17						L	R	310	310	330	295	320	300	300	280	270	L	L	L					
18						340	A	L	310	315	340	350	305	320	295	270	270	L	L					
19							L	320	300	300	310	305	300	290	290	280	280	L	L	L				
20						A	A	A	A	A	A	R	490	B	390	375	370	380		L				
21				400			L	390	370	350	340	340	385	370	C	300	300	L		B				
22					B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C				
23					A	R	A	A	B	B	B	B	B	B	B	B	B	B	380	L				
24					B	B	B	B	B	B	B	B	B	B	B	B	B	B						
25					A	B	B	415	370	400	430	L	C	C	C	C	C	C	C					
26							L	L	365	L	390	340	320	330	300	295	295	L						
27				400	A		L	L	330	330	330	320	295	280	290	L	280							
28							L	L	300	320	295	295	300	290	290	L								
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT				2	2	5	5	11	17	16	17	17	18	15	16	11	13	6	2	2	1			
MED				400	350	340	390	380	330	340	360	340	332	320	320	300	300	305	330	338	240			
UQ						340	400	412	370	385	390	370	400	370	362	355	300	380						
LQ						320	340	305	310	330	310	320	300	300	292	288	290	300						

FEB. 1966 | H'F2 (KM)

The Radio Research Laboratories, Japan

IONOSPHERIC DATA

FEB. 1966 | H'F (KM) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S, Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	C	260	280	260	240	210	200	205	195	195	200	210	C	C	C	A	E A 250	205	200	230	245	230	230
2	270	295	280	280	225	230	240	195	H 175	200	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	240	A	A	270	A
5	330	B	B	A	A	B	A	B	B	A	225	B	B	B	B	B	B	C	C	R	B	A	A 240	A
6	A	A	A	A	A	A	B	A	A	A	B	220	250	210	H 200	220	B	240	B	A	250	250	250	300
7	330	A 330	A	A	A	A	265	230	240	230	230	A	220	H 200	210	210	200	H 205	215	210	260	250	240	250
8	C	300	280	280	260	230	230	210	200	190	220	240	200	200	205	200	200	195	240	230	230	230	230	C
9	A	A	A	A	A	360	A	290	205	200	200	215	A	210	210	200	200	200	220	215	230	240	240	240
10	280	250	A	A	220	200	355	235	200	195	190	200	200	215	200	200	200	200	200	230	240	330	A	250
11	A	220	280	B	A	B	A	A	280	195	200	200	200	195	220	200	215	200	230	B	290	240	260	270
12	330	A	A	A	A	A	A	A	A	A	230	205	200	200	220	200	215	200	205	210	250	250	230	240
13	260	260	280	A	230	A	B	A	220	H 295	225	210	205	H 210	205	A	210	200	200	210	250	240	250	290
14	305	280	270	280	290	270	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	230	210	210	300
16	C	C	C	C	C	C	C	C	C	C	205	200	190	240	220	200	200	200	230	220	230	240	230	260
17	280	270	280	330	300	190	240	200	H 200	210	200	210	200	200	E A 260	210	190	200	220	240	230	215	260	A
18	E A 300	E A 330	370	A	330	340	A	195	190	220	210	200	230	220	215	205	200	205	200	220	220	230	220	225
19	210	230	200	300	A	340	210	240	210	200	200	200	200	205	230	200	200	205	230	A	A	A	A	280
20	A	A	A	A	A	A	A	A	A	A	A	230	205	B	E B 280	235	B	230	265	270	270	280	300	290
21	A	A	360	350	320	A 305	330	290	215	210	230	210	205	260	R	200	200	220	200	B	B	B	B	B
22	C	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C
23	A	A	B	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	300	290	B	A	380	A
24	A	B	B	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	295	240	290	A	A	A
25	A	A	A	A	A	B	B	300	240	215	240	390	C	C	C	C	C	C	C	240	250	A	B	300
26	330	A	A	A	300	300	240	220	200	195	205	210	200	215	210	200	200	200	230	230	220	220	240	250
27	290	350	370	380	A	330	240	260	220	220	A	240	220	220	220	215	200	200	240	230	230	230	220	260
28	270	280	240	300	290	300	230	225	210	200	220	215	200	205	200	A 225	240	230	220	220	225	230	240	250
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	13	12	12	9	11	13	11	14	16	16	17	18	17	16	16	16	15	18	19	18	19	17	19	17
MED	285	278	280	300	290	300	240	228	208	200	210	210	200	210	211	200	200	200	220	230	230	240	240	260
UQ	330	306	320	330	300	330	252	260	220	218	225	220	210	218	220	212	205	212	235	240	250	250	255	290
LQ	270	255	265	280	245	230	230	200	200	195	200	200	200	200	205	200	200	200	205	215	230	230	230	250

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FEB. 1966 | H'F (KM)

IONOSPHERIC DATA

FEB. 1966 | H'ES (KM) | 45° E Mean Time (G. M. T. + 3 h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	C	100	100	100	G	B	B	B	110	G	100	100	C	C	C	100	100	120	100	100	140	G	120
2	130	110	115	100	100	100	100	110	100	100	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	170	120	120	120	105
5	120	B	B	100	100	B	100	B	B	100	G	B	B	B	B	B	B	C	C	B	B	115	105	150
6	100	140	100	100	100	100	120	100	100	100	B	B	G	110	100	G	B	B	B	110	110	110	110	100
7	160	170	115	110	105	110	110	110	100	105	110	100	100	100	100	100	100	100	G	100	100	105	100	100
8	C	180	115	120	110	125	100	G	100	100	100	100	100	100	100	140	G	105	100	G	B	120	140	C
9	115	110	105	100	105	115	100	100	105	G	G	100	150	140	100	100	G	100	G	G	120	100	100	110
10	105	110	110	100	100	100	170	140	100	100	G	140	100	120	100	100	100	100	100	100	120	120	120	115
11	100	100	100	160	100	B	100	100	100	G	100	100	100	100	100	100	100	100	100	B	120	110	100	110
12	100	100	100	100	130	130	100	120	100	100	100	130	G	100	100	100	100	100	100	G	130	110	110	B
13	100	100	100	105	105	105	B	100	100	100	G	100	100	100	100	100	100	100	100	150	105	110	115	100
14	105	110	100	100	100	120	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	110	110	E	125
16	C	C	C	C	C	C	C	C	C	C	100	100	100	100	100	100	100	105	100	100	100	150	100	100
17	100	100	130	100	130	G	100	100	100	100	100	140	100	100	100	100	100	100	100	100	130	100	100	100
18	160	160	110	100	125	120	100	G	100	100	100	105	105	105	100	100	100	100	100	100	100	110	105	105
19	100	100	100	150	100	100	100	130	100	100	100	100	100	100	100	100	100	100	105	130	100	110	100	100
20	100	100	100	100	100	100	100	100	100	100	100	130	G	B	B	G	B	B	140	130	140	130	120	100
21	100	160	100	110	130	100	110	100	100	100	100	100	100	100	G	170	150	100	160	B	B	B	B	B
22	C	B	B	B	B	B	B	F	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C
23	100	100	B	100	100	120	100	100	B	B	B	B	B	B	B	B	B	B	110	120	B	110	170	100
24	100	B	B	100	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	140	130	115	100	105
25	100	110	100	100	100	B	B	100	100	100	G	100	C	C	C	C	C	C	C	160	B	160	100	100
26	120	160	100	100	120	G	115	110	100	G	G	100	100	100	G	G	100	G	B	B	B	E	E	E
27	B	B	100	130	100	130	100	G	G	100	100	G	120	100	G	105	100	G	G	120	B	B	B	100
28	B	B	B	E	120	130	120	100	100	100	100	100	100	100	100	100	100	100	100	120	100	100	100	B
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	19	18	19	22	22	16	18	16	17	17	12	17	15	16	13	14	14	14	14	16	17	21	19	19
MED	100	110	100	100	100	112	100	100	100	100	100	100	100	100	100	100	100	100	100	120	110	110	105	100
UQ	118	160	110	110	120	122	110	110	100	100	100	105	100	102	100	100	100	100	110	135	120	120	118	110
LQ	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	110	100	100

FEB. 1966 | H'ES (KM)

The Radio Research Laboratories, Japan

IONOSPHERIC DATA

MAR. 1966 | FOF2 (0.1 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	A	R	R	R	R	R	R	F	B	64	F	71	75	71	67	64	56	54	47	F 48	F 46	R	R	R
2	R	R	F	R	R	R	R	R	U F 54	57	58	63	67	69	64	61	55	F 54	52	R	R	A	R	R
3	J K 38	S	A	A	A	A	R	R	R	J R 71	J R 68	J F 62	J F 63	69	F 73	F 67	67	F 51	J R 55	R	R	K	A	A
4	R	A	R	R	B	A	J S 41	F 45	46	48	52	53	54	55	55	F 55	53	52	48	45	S	S	R	R
5	A	A	A	S	S	R	A	A	K	F	J F 49	F 48	49	51	51	F 51	47	49	46	J R 46	U R 38	R 38	J S 35	S
6	S	S	S	A	K	A	37	42	45	47	50	50	54	F 54	56	J R 56	48	50	F 51	F	S	R	S	S
7	R	C	A	A	S	A	35	J R 45	46	U F 52	58	55	58	56	F 53	J R 54	J R 54	J R 46	J F 46	F	R	R	R	J R 32
8	S	S	A	S	R	38	41	J R 48	56	J R 55	J R 56	J R 55	J R 62	J F 65	63	58	F 52	J R 51	F	R	J R 43	F	S	S
9	R	R	R	A	R	U F 33	F	R	J R 58	F	J R 64	J F 65	67	68	F 72	69	57	F 51	46	J R 48	R	R	R	J R 27
10	A	F	A	A	K	A	A	47	F	J R 52	F 53	55	56	56	57	56	51	48	52	F	R	R	R	S
11	K	A	A	A	A	A	F	J F 53	J R 60	R 57	57	56	56	58	58	F 55	51	R	F	J R 40	R	S	J S 37	S
12	S	A	A	A	A	K	J F 41	J R 47	53	54	52	54	57	62	F 73	72	F	R	F	F	R	S	R	S
13	R	F	J A 23	A	J R 35	S	S	S	44	F	J F 54	J F 58	F 62	F 70	F 72	67	57	60	52	J R 51	F	K	A	A
14	A	R	R	A	A	A	A	A	A	R	R	B	B	R	F	B	B	R	B	A	A	A	A	A
15	K	A	A	A	K	A	R	A	B	F	F 45	F 48	F 50	F 54	F 52	52	46	F 47	F 50	R	F	S	A	A
16	A	A	A	A	A	A	R	B	A	J F 48	F 50	48	49	49	51	46	46	43	43	39	F	R	R	F
17	A	A	A	A	A	A	A	38	J F 49	J F 52	57	55	58	57	58	F 53	52	R	R	F	R	R	R	A
18	A	A	A	A	A	A	A	F	J F 49	J F 52	F 56	61	62	64	63	57	56	52	R 52	43	38	36	F	A 30
19	J K 25	A	A	A	A	A	A	J F 47	R	J R 67	J R 63	F	F 74	F 83	86	F 83	J R 75	R	R	R	R	R	R	A
20	K	A	A	A	A	A	B	F	J F 48	48	51	52	55	B	59	61	60	S 60	J R 57	F	R	R	F	R
21	K	A	A	A	A	A	B	R	R	B	F 49	F 56	55	60	61	54	51	49	46	50	36	J F 35	F	U F 24
22	A	A	A	A	A	J K 38	F	F 41	45	47	50	58	64	64	68	64	56	50	52	48	41	J R 38	F	A
23	A	A	A	A	A	A	A	A	A	J F 52	F	50	B	B	F	F	F	F	A	R	A	A	B	A
24	A	A	A	A	A	K	R	B	B	B	44	48	51	48	48	41	41	36	F 34	30	F 24	20	20	R 19
25	B	A	R	A	R	R	R	F	F 46	51	56	58	60	F 63	J F 65	B	C	C	C	C	J F 39	J F 35	F 30	F
26	A	A	A	R	J R 47	F	R 44	F	F 48	B	F 44	F	J F 52	R	61	B	J R 61	B	B	J R 42	R	A	A	A
27	A	A	A	A	A	A	B	A	B	B	B	B	J R 44	F	51	49	B	B	F	B	B	B	F	A
28	A	A	A	A	A	A	A	F 35	40	39	B	R	J R 37	B	B	B	R	B	J F 38	B	A	A	A	A
29	B	A	A	A	A	A	A	B	B	R	B	B	B	R 41	41	44	47	43	45	F	R	R 28	F	F 16
30	A	A	A	A	A	A	A	A	K 41	43	J F 50	51	52	52	51	54	48	46	41	J F 35	F	A	B	A
31	A	A	A	A	A	C	A	30	F 33	F 36	39	F 46	J F 54	J F 55	F 56	J F 54	J F 53	J F 53	J F 43	J F 46	J F 45	J A 35	F	F 24
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	2		1		2	3	6	12	18	21	25	25	28	25	28	26	25	21	21	14	9	8	4	7
MED	J R 32		J A 23		J R 41	38	41	45	47	52	52	55	56	58	58	56	53	50	47	46	39	35	32	24
UQ						38	41	J 47	J F 53	J 55	57	58	62	65	66	64	56	52	52	J 48	J F 43	37	J S 36	28
LQ						36	37	40	45	48	50	50	52	54	52	53	48	47	45	40	38	32	25	F 22

The Radio Research Laboratories, Japan

MAR. 1966 | FOF2 (0.1 MHZ)

IONOSPHERIC DATA

MAR. 1966 | FOF1 (0.01 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1								L	B	B	L	L	L	L 410	U L 400	L								
2							L	L	L	L	L 410	400	410	U L 410	U L 400	L								
3							A	L	L	U L 380	L 400	U L 380	400	410	L	L 390	U L 370	L						
4							280	300	340	350	380	390	390	400	400	L								
5							A	A	A	F 340	380	390	390	380	L 380	U L 380	L		L					
6								320	360	360	380	370	390	L 390	L 410	L	L							
7								L	320	350	360	370	380	380	L 380	L	L	L						
8							A	A	330	350	360	L 390	L 390	L 390	U L 380	L	L							
9								L	L		L	L	L	L	U L 390	L	L	L	L					
10								A	340	350	370	380	380	370	L 380	L	L							
11								L	L	U L 350	380	L 370	380	U L 370	U L 380	L	L	L						
12								310	L 300	L	L	L	L 340	380	L	L								
13								L	360	L	380	390	U L 400	U L 390	L	L								
14									A	R	R	B	B	R	R	B	B	F 300	B					
15									B	350	360	370	380	380	L									
16								B	A	350	360	L 370	L 370	L 380	L 380	L	L							
17								A		360	390	U L 380	L	L	L	L								
18									L	L	L	L	L	L	L									
19								A	L 360	L 360	L	U L 400	U L 400	U L 410	L	L 390								
20									L 320	L 370	360	380	L 390	B	L	L								
21								A	A	B	L 370	U L 380	L	U L 390	L	L								
22									L	L	L	U L 390	L 390	L	L	L								
23								A	A	L	L	B	B	B	400	B	A							
24								B	B	B	340	340	360	360		L								
25									L	L	L 380	L 380	L	L	L	B	C	C						
26										B	L 360	L 360	L	380	L	B		B						
27								A	B	B	B	B	B	360	L	L	B							
28									L	320	B	B	B	B	B	B	B	B						
29									B	A	B	B	B	L	L	L								
30											L	L	L	L	L	L								
31									280	310	330	L 350	L	L			L							
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT							1	3	10	15	19	21	17	19	12	3	1	1						
MED							280	310	335	350	370	L 380	390	380	L 385	L 390	U L 370	F 300						
UQ								315	360	360	380	390	390	L 395	L 400	L 390								
LQ								305	320	350	360	L 370	380	380	L 380	L 385								

MAR. 1966 | FOF1 (0.01 MHZ)

The Radio Research Laboratories, Japan

IONOSPHERIC DATA

MAR. 1966 | FOE (0.01 MHZ) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1						B	B	B	B	B	B	260	A	A	270	270	B	B	B	A	A			
2						B	170	A	215	240	245	270	A	270	A	265	250	230	215	180	B			
3						A	A	A	220	240	245	A	A	R	B	B	B	230	200	B	A			
4						A	220	A	210	215	270	260	260	260	245	A	240	230	R	155	B			
5						B	B	A	B	A	A	R	260	250	A	A	A	220	A	B	B			
6						A	180	185	215	240	A	A	A	K	A	A	A	220	170	A	A			
7						B	A	A	A	A	A	250	260	250	250	240	240	A	A	175	B			
8						B	A	A	205	H 220	225	A	A	A	A	255	A	220	A	R	E			
9							A	180	210	240	A	250	A	250	A	240	225	200	150	145				
10							A	A	B	220	240	245	250	260	250	230	B	180	B	B				
11							B	A	200	215	225	225	240	240	A	235	220	190	190	A				
12							A	A	195	A	225	230	255	235	250	A	B	B	B	B				
13							E	A	200	A	235	A	250	250	A	250	230	250	175	135				
14							A	A	B	A	A	B	B	A	A	B	B	A	B	A				
15							B	B	B	A	255	260	260	245	A	B	A	A	160	A				
16							B	B	A	A	225	245	255	250	240	B	B	B	A	B				
17							B	A	A	230	250	250	265	265	270	235	230	190	A					
18							B	A	A	225	230	235	A	A	A	240	225	195	140					
19							B	A	200	215	235	A	A	270	A	A	A	210	A					
20							B	A	A	225	245	245	265	B	280	260	220	B	B					
21							B	A	A	B	B	275	265	A	260	240	225	200	A					
22							E	160	200	245	240	A 240	230	260	245	240	215	185	B					
23							A	A	A	A	A	B	B	B	B	B	A	B	B					
24							A	B	B	B	B	B	R	A	R	230	A	A	A					
25					200	190	225	225	A	A	220	A	245	A	240	B	C	C	C					
26							A	A	B	B	B	B	A	A	A	B	220	B	B					
27							B	A	B	B	B	B	B	A	230	210	B	B						
28								A	195	220	B	B	B	B	B	B	B	B						
29								B	B	A	B	B	B	B	265	230	B	B						
30									B	B	240	225	A	230	220	210	R	170						
31								A	A	195	220	230	A	230	B	B	190	B						
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT					1	1	6	4	12	15	18	17	14	16	14	17	13	16	8	5	1			
MED					200	190	175	182	202	225	238	245	258	250	250	240	225	205	172	155	E			
UQ							220	205	212	240	245	260	260	260	265	250	230	225	195	175				
LQ							E	170	200	218	225	235	250	242	240	230	220	190	155	145				

MAR. 1966 | FOE (0.01 MHZ)

IONOSPHERIC DATA

MAR. 1966 | FOES (0.1 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	J X 50	J X 25	E B 16	J X 21	E B 14	E B 13	E B 23	E B 22	B	E B 44	E B 33	29	30	J X 58	J X 28	G	E B 32	E B 27	E B 23	26	27	J X 22	E B 14	J X 26
2	J X 21	E B 13	21	E B 14	18	E B 15	G	22	23	26	27	G	27	G	J X 30	G	G	G	J X 22	G	E B 14	J X 53	J X 21	E B 12
3	J X 23	J X 26	J X 34	J X 32	J X 50	J X 48	J X 34	25	J X 23	26	J X 60	J X 30	J X 33	G	E B 31	E B 27	E B 24	G	21	J X 33	19	E B 13	J X 34	J X 36
4	J X 35	D	J X 41	33	B	J X 37	G	24	G	24	G	G	28	28	J X 28	28	G	G	G	G	E B 13	E B 14	J X 21	J X 32
5	J X 84	J X 46	J X 43	J X 35	J X 24	32	J X 42	J X 52	J X 32	32	J X 29	G	30	J X 66	J X 41	J X 32	25	G	21	E B 18	J X 40	J X 21	J X 34	E B 14
6	J X 26	J X 25	J X 25	J X 51	J X 35	J X 41	G	G	G	G	J X 47	27	J X 31	G	30	28	24	G	G	15	16	E B 12	J X 41	E B 12
7	J X 33	C	J X 35	J X 58	J X 35	J X 35	J X 35	J X 33	J X 21	J X 30	29	G	J X 58	G	G	G	G	J X 23	22	G	E B 13	E B 12	14	E
8	J X 29	J X 20	J X 30	J X 50	J X 25	J X 34	J X 41	J X 32	G	J X 32	J X 40	J X 50	28	30	27	J X 30	J X 50	J X 56	J X 35	24	11	J X 14	J X 24	J X 25
9	E B 27	J X 20	J X 32	J X 58	J X 31	E B 14	J X 24	G	24	J X 57	28	J G 25	26	27	J X 31	28	J X 32	J X 53	G	J X 53	J X 22	12	J X 20	J X 22
10	J X 37	J X 25	J X 77	J X 35	J X 17	J X 35	J X 35	J X 33	27	G	J X 31	28	28	28	G	G	E B 23	J X 32	E B 21	E B 19	E B 18	J X 20	J X 35	J X 35
11	J X 31	J X 50	J X 52	J X 57	J X 52	J X 52	J X 34	J X 45	J X 28	J X 31	G	J X 50	27	28	27	G 23	G	G	J X 33	J X 20	J X 30	J X 25	E	J X 24
12	J X 32	J X 50	J X 60	J X 50	J X 32	J X 20	16	18	22	J X 50	J X 28	25	G 25	G	J X 32	24	E B 30	E B 31	E B 26	E B 17	18	E B 15	J X 26	J X 20
13	J X 25	J X 25	J X 25	J X 42	J X 20	J X 22	J X 21	J X 57	23	J X 34	28	J X 31	27	J X 57	J X 30	G	G	J X 42	G	J X 23	J X 30	J X 38	J X 41	J X 102
14	J X 86	J X 32	21	J X 76	J X 94	J X 60	J X 50	J X 43	J X 59	J X 21	27	B	B	J X 27	28	B	B	J X 27	B	J X 35	J X 32	J X 38	J X 55	J X 35
15	J X 31	J X 45	J X 72	J X 41	J X 32	J X 53	J X 52	J X 41	B	J X 43	J X 27	28	28	28	31	E B 35	J X 52	25	19	J X 20	J X 52	J X 26	J X 52	J X 40
16	J X 52	X J 34	36	J X 41	J X 41	J X 53	J X 40	B	J X 40	J X 27	G	G	G 25	G 25	G 23	E B 25	E B 23	E B 23	J X 87	E B 22	E B 15	E	J X 30	J X 25
17	J X 64	J X 65	J X 51	42	46	43	J X 50	J X 45	J X 57	G 23	J X 60	G 25	G	G	J X 103	J X 27	J X 50	G	J X 33	J X 33	E B 19	E B 11	E	J X 42
18	J X 40	J X 60	J X 63	J X 43	J X 50	J X 53	J X 32	J X 42	22	28	G	G	J X 30	J X 33	J X 49	G 24	J X 32	J X 35	J X 32	J X 22	J X 42	J X 25	J X 34	J X 33
19	J X 20	J X 30	J X 25	J X 37	J X 36	J X 30	J X 52	J X 47	J X 22	25	26	27	26	G 27	J X 27	25	24	22	J X 39	19	21	J X 34	J X 30	J X 36
20	J X 32	J X 65	J X 53	J X 53	J X 34	J X 32	B	25	22	23	G	G	G	B	G	G	G 22	E B 19	E B 18	24	E B 16	E B 11	J X 34	18
21	20	J X 25	J X 31	43	J X 53	J X 52	B	J X 42	J X 35	B	E B 34	28	J X 31	31	J X 42	G	G	G	21	J X 42	J X 32	J X 33	J X 32	J X 25
22	J X 25	J X 30	J X 35	J X 49	J X 33	21	11	J X 32	G	G	G	27	28	29	J X 57	J X 52	G	G	E B 15	E B 13	E B 12	E	E B 11	J X 25
23	J X 50	J X 54	J X 42	J X 40	J X 65	J X 53	J X 52	J X 45	J X 53	40	27	E B 43	B	B	E B 25	E B 43	J X 45	E B 33	J X 64	J X 35	J X 60	J X 32	B	J X 95
24	J X 55	36	J X 32	J X 65	J X 30	J X 30	J X 23	B	B	B	E B 30	E B 31	G	25	G	G	23	23	22	28	25	J X 32	J X 89	12
25	B	21	J X 17	21	G 20	G	J X 23	G	J X 24	J X 40	24	26	G 24	J X 52	25	B	C	C	C	C	E B 13	E	E	J X 33
26	J X 33	J X 34	J X 37	J X 26	J X 33	31	31	16	E B 18	B	E B 26	E B 25	28	24	J X 32	B	J X 59	B	B	J X 21	20	J X 41	J X 40	J X 51
27	J X 25	J X 43	J X 34	J X 51	J X 33	J X 34	B	J X 60	B	B	B	B	E B 36	30	25	23	B	B	E B 20	B	B	B	E B 15	19
28	J X 21	J X 32	32	J X 47	J X 52	J X 56	J X 44	J X 24	J X 32	G	B	E B 32	E B 35	B	B	B	E B 53	B	41	B	22	J X 83	J X 66	J X 78
29	J X 50	J X 33	J X 26	J X 32	J X 50	J X 53	30	B	B	J X 33	B	B	B	E B 28	G	G	E B 24	E B 33	E B 34	E B 22	E B 16	16	J X 23	J X 33
30	J X 30	J X 71	J X 29	J X 33	J X 45	41	J X 65	J X 58	E B 33	E B 32	G	27	29	25	G	28	25	J X 32	E B 16	E B 12	E B 14	J X 32	B	J X 31
31	J X 33	J X 33	J X 34	J X 40	J X 51	C	J X 34	J X 21	J X 83	G 19	G	G	27	26	E B 35	E B 24	21	E B 18	16	E B 13	J X 21	J X 53	25	J X 33
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	30	30	31	31	30	30	28	28	26	27	28	28	28	28	30	27	28	27	28	28	30	30	29	31
MED	J X 32	J X 33	J X 34	J X 42	J X 34	J X 35	J X 34	J X 32	24	27	26	26	28	28	28	E G 24	22	E G 23	21	22	20	J X 22	J X 30	J X 31
UQ	J X 50	J X 50	J X 42	J X 50	J X 50	J X 52	J X 43	J X 45	J X 33	J X 33	29	29	30	30	J X 32	28	U 30	J X 29	J X 32	J X 27	J X 30	J X 33	J X 35	J X 36
LQ	J X 25	J X 25	J X 28	J X 34	J X 30	J X 30	23	22	22	23	G	G	26	G 24	25	G	E G 21	G	E G 17	E G 16	E B 15	E E 12	20	J X 21

MAR. 1966 | FOES (0.1 MHZ)

IONOSPHERIC DATA

MAR. 1966 | F-MIN (0.1 MHZ) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	E	17	16	11	14	13	23	22	B	44	33	23	20	16	16	21	32	27	23	18	16	15	14	E
2	E	13	E	14	15	15	15	15	17	17	14	15	15	16	15	13	13	13	13	14	14	E	E	12
3	E	15	E	E	13	14	12	E	14	14	E	E	13	22	31	27	24	18	18	17	14	13	E	11
4	20	19	18	14	B	14	16	16	15	E	E	14	13	14	12	16	16	16	14	12	13	14	14	E
5	17	18	16	15	15	23	21	18	23	20	18	23	16	15	23	18	18	16	18	18	19	15	14	14
6	E	E	12	15	15	14	13	15	11	11	11	E	13	13	14	11	15	14	13	13	13	12	11	12
7	14	C	14	15	16	15	13	13	11	12	12	12	13	13	E S 13	11	E	E	E	13	13	12	E	E
8	E	E	E	E	12	15	14	11	E	E	12	11	16	19	16	16	16	13	11	11	E	11	E	E
9	27	15	15	16	14	14	11	13	14	16	14	12	13	12	14	14	13	16	11	11	11	E	E	E
10	E	E	E	14	14	15	17	15	24	17	13	12	15	16	14	15	23	12	21	19	18	14	13	E
11	E	16	16	15	18	23	20	15	14	12	13	13	13	14	14	12	13	13	E	E	E	E	E	E
12	11	14	16	18	13	14	14	11	13	13	13	16	13	12	16	13	30	36	26	17	16	15	13	E
13	15	14	E	E	E	E	E	E	13	13	18	19	21	17	15	15	16	12	11	E	14	11	E	11
14	15	13	12	15	E	16	24	22	31	14	18	B	B	17	15	B	B	18	B	13	13	E	E	E
15	E	23	11	15	14	17	21	20	B	19	18	18	18	18	24	35	22	17	14	14	E	E	E	E
16	19	13	16	12	18	15	31	B	21	18	16	16	16	16	17	25	23	23	18	22	15	E	E	E
17	12	E	12	14	11	17	18	17	15	16	15	16	16	17	16	14	16	14	13	E	19	11	E	E
18	11	E	E	18	16	16	20	16	15	16	15	15	14	15	14	14	16	14	E	E	E	E	E	E
19	E	E	E	E	E	E	22	14	14	13	14	15	15	15	16	18	13	18	14	15	14	E	18	12
20	E	21	16	20	15	16	B	22	15	15	15	14	15	B	20	17	16	19	18	17	16	11	14	11
21	E	E	19	16	17	15	B	22	22	B	34	24	18	18	15	18	16	14	12	E	E	E	E	E
22	E	E	17	18	14	13	E	14	15	17	13	16	17	16	14	18	14	14	15	13	12	E	11	E
23	15	E	13	13	15	16	17	16	21	24	15	43	B	B	25	43	22	33	22	14	E	12	B	12
24	13	15	13	13	14	14	16	B	B	B	30	31	23	22	19	13	16	16	14	13	E	E	E	E
25	B	12	E	11	13	14	13	16	15	15	17	17	17	17	16	B	C	C	C	C	13	E	E	E
26	E	E	12	E	E	11	E	13	18	B	26	25	16	16	13	B	13	B	B	14	E	E	E	11
27	E	E	17	15	E	16	B	21	B	B	B	B	36	24	17	15	B	B	20	B	B	B	15	12
28	14	E	12	19	20	18	18	15	E	15	B	32	35	B	B	B	53	B	18	B	13	15	13	13
29	52	13	11	18	31	17	17	B	B	26	B	B	B	28	24	19	24	33	34	22	16	13	E	E
30	E	E	E	E	15	18	27	19	33	32	18	18	18	18	16	18	23	15	16	12	14	13	B	E
31	E	13	13	15	29	C	14	14	15	14	16	19	20	21	35	24	17	18	13	13	11	E	11	E
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	31	30	31	31	31	30	31	31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31
MED	E	13	12	15	14	15	17	16	15	16	15	16	16	17	16	18	16	16	14	14	13	11	E	E
UQ	15	15	16	16	16	16	22	20	24	22	18	24	20	20	20	24	23	23	20	17	16	13	14	11
LQ	E	E	E	12	13	14	14	14	14	14	13	14	14	15	14	14	15	14	13	12	E E 11	E	E	E

MAR. 1966 | F-MIN (0.1 MHZ)

IONOSPHERIC DATA

MAR. 1966 | M(3000)F2 (0.01) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	A	R	R	R	R	R	R	F	B	280	F	290	305	300	315	315	340	355	355	F 335	F 315	R	R	R
2	R	R	F	R	R	R	R	R	U F 305	300	285	290	300	305	315	335	345	F 350	335	R	R	A	R	R
3	R	S	A	A	A	A	R	R	R	R	R	F	F	260	F 300	F 315	335	F 355	R	R	R	R	A	A
4	R	A	R	R	B	A	S	F 275	295	280	290	285	295	290	310	F 310	340	355	335	335	S	S	R	R
5	A	A	A	S	S	R	A	A	R	F	F	F 280	265	315	315	F 315	310	335	315	R	R	R 310	S	S
6	S	S	S	A	R	A	295	290	270	265	270	290	285	F 285	290	R	320	325	F 325	F	S	R	S	S
7	R	C	A	A	S	A	255	R	275	U F 270	245	280	305	290	F 300	R	R	R	F	F	R	R	R	R
8	S	S	A	S	R	A	290	R	290	R	R	R	R	F	335	345	F 365	R	F	R	R	F	S	S
9	R	R	R	A	R	F	F	R	R	F	R	F	315	325	F 320	350	350	F 335	350	R	R	R	R	R
10	A	F	A	A	R	A	A	275	F	R	F 285	300	305	305	315	320	355	320	340	F	R	R	R	S
11	R	A	A	A	A	A	F	F	R	R 285	280	305	305	320	320	F 325	F 355	R	F	R	R	S	S	S
12	S	S	A	A	A	R	F	R	285	280	290	285	300	290	F 295	305	F	R	F	F	R	S	R	S
13	R	F	A	A	R	S	S	S	280	F	F	F	F 290	F 300	F 295	335	340	350	340	R	F	R	A	A
14	A	R	R	A	A	A	A	A	A	R	R	B	B	R	F	B	B	R	B	A	A	A	A	A
15	R	A	A	A	R	A	R	A	B	F	F 280	F 275	F 280	F 315	F 290	325	320	F 320	F F 355	R	F	S	A	A
16	A	A	A	A	A	A	R	B	A	F	F 285	290	290	300	320	325	330	330	330	335	F	R	R	F
17	A	A	A	A	A	A	A	270	F	F	280	295	295	315	325	F 325	350	R	R	F	R	R	R	A
18	A	A	A	A	A	A	A	F	F	F	F 285	295	315	315	315	320	355	345	R 325	345	325	325	F	A 265
19	R	A	A	A	A	A	A	F	R	R	R	F	F 255	F 275	F 290	F 265	R	R	R	R	R	R	R	A
20	R	A	A	A	A	A	B	F	F	260	275	290	285	B	320	320	350	S 315	R	F	R	R	F	R
21	R	A	A	A	A	A	B	R	R	B	F 285	F 290	285	300	330	335	335	345	350	360	305	F	F	U F 330
22	A	A	A	A	A	R	F	F 285	300	295	300	295	305	315	325	345	330	340	335	335	315	R	F	A
23	A	A	A	A	A	A	A	A	A	F	F	250	B	B	F	F	F	F	A	R	A	A	B	A
24	A	A	A	A	A	R	R	B	B	B	265	260	280	315	270	315	365	335	F 340	335	F 355	315	300	R 315
25	B	A	R	A	R	R	R	F	F 290	285	290	295	290	F 300	F	B	C	C	C	C	J F 345	F	F	F
26	A	A	A	R	R	F	R 285	F	F 285	B	F 280	F	F	R	310	B	R	B	B	R	R	A	A	A
27	A	A	A	A	A	A	B	A	B	B	B	B	R	F	275	315	B	B	F	B	B	B	F	A
28	A	A	A	A	A	A	A	F 255	270	255	B	R	R	B	B	B	R	B	F	B	A	A	A	A
29	B	A	A	A	A	A	A	B	B	R	B	B	B	R 310	305	295	340	340	335	F	R	R 285	F	F 315
30	A	A	A	A	A	A	A	A	R 295	290	F	305	310	310	315	335	335	325	335	F	F	A	B	A
31	A	A	A	A	A	C	A	265	F 250	F 250	245	F 270	F	F	F 320	F	F	F	F	F	F	A	F	F 285
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT							4	7	13	13	18	21	22	23	27	23	21	18	16	7	6	4	1	5
MED							288	275	285	280	282	290	295	305	315	320	340	338	335	335	320	312	300	F 315
UQ							292	280	295	285	285	295	305	315	320	335	350	350	345	340	F 345	320		F 315
LQ							270	268	275	265	275	280	285	295	298	315	335	325	332	335	315	R 298		F 285

MAR. 1966 | M(3000)F2 (0.01)

IONOSPHERIC DATA

MAR. 1966 | H'F2 (KM) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1								360	B	320	290	300	285	300	275	280								
2							L	L	L	L	340	320	300	290	300	L								
3							320	L	300	300	295	300	365	370	280	300	250	225						
4							390	360	360	380	330	375	320	340	300	290								
5							A	A	R	400	390	390	400	310	320	300	L		L					
6								390	395	390	370	370	360	340	365	L	225							
7								325	380	365	370	370	300	300	300	295	225	225						
8							360	370	330	325	325	310	290	300	275	240	230							
9								L	L		290	240	285	280	270	250	230	210	220					
10								420	410	370	335	330	300	300	290	275	L							
11								310	290	320	350	315	300	290	280	L	L	L						
12								370	330	270	L	350	315	340	280	280								
13								L	370	330	320	300	305	290	280	225								
14									A	R	R	B	B	R	580	B	B	R	B					
15									B	380	395	385	390	300	325									
16								B	A	390	370	370	350	355	290	L	270							
17								430		370	330	315	300	290	280	260								
18									370	L	300	300	280	295	275									
19								385	370	305	325	315	330	305	295	320								
20									340	400	380	350	360	B	290	L								
21								A	A	B	380	310	L	300	275	270								
22									L	L	L	310	300	280	270	240								
23								A	A	370	380	B	B	B	440	370	425							
24								B	B	B	415	405	345	310		300								
25									300	300	330	310	300	295	270	B	C	C						
26										B	400	370	320	305	L	B								
27								A	B	B	B	B	370	305	400	300	B							
28									L	440	B	R	B	B	B	B	360	B						
29									B	R	B	B	B	340	L	300								
30											L	300	300	L	280	280								
31									480	520	495	370	300	300			230							
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT							3	10	14	20	24	26	26	26	26	19	9	3	1					
MED							360	370	365	370	345	318	302	300	285	280	230	225	220					
UQ							375	390	380	390	380	370	350	310	300	300	270	225						
LQ							340	360	330	320	325	310	300	295	275	265	230	218						

The Radio Research Laboratories, Japan

MAR. 1966 | H'F2 (KM)

IONOSPHERIC DATA

MAR. 1966 | H'F (KM) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S, Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	270	290	300	310H	330H	270	240	215	B	B	220	200	200	200	195	200	240	220	215	220	220	230	230	230
2	280	280H	280	300	300H	290	220	205	200	200	200H	190H	200	230	215	200	190H	200	195	210	230	230	260	240
3	290	370	A	A	A	A	A	230	200	190	210	215	200	200H	220	225	205	200	220	225	240	270	250	A
4	A	A	R	A	B	A	315	280	220	230	205H	240	220	220	220	210	220	215	225	230	240	280	370	A
5	A	A	210	415H	370	A	A	A	A	A	220	200H	230H	220	200	220	220	240	220	230	230	230	270	290
6	300	330	230	A	A	A	240	225	190	200	195	200	200	200	200	200	200	200	215	210	230	225	220	325
7	A	C	A	A	A	A	A	240	230	260	190	200	200	200	195	225	200	200	205	220	230	220	240	280
8	280H	330H	A	A	A	A	A	A	190	195	175	200	195	205	200	200	225	200	220	220	200	215	275	300
9	B	B	B	B	A	280B	220	210	225	200	210	190	215	220	200	205	205	200	195	210	200	215	260	290
10	A	220	A	A	235	A	A	A	265	260	225	225H	210	220	205	220	220	195	250	260	240	240	265	295
11	EA 470	A	A	A	A	A	A	A	185H	200H	220	215	205	220	225	210	200	200	220	200	225	240	250	EB 390
12	EA 360	A	A	A	A	300	270	200	190H	200H	210	200H	210H	220	200	200	250	210	220	230	275	230	240	260
13	280	295	305	A	360	290	220H	200	200	200	190	215	215	210	210	205	210	225	225	215	275	A	A	A
14	240	A	R	A	A	A	A	A	A	R	R	B	B	R	R	B	B	A 300	B	A	A	A	A	A
15	A	A	A	A	A	A	305	A	B	265	230	250	230	240	290	300	EA 270	250	245	260	300	370	A	A
16	A	A	A	A	A	A	B	B	A	215	215	200	200	225	225	215	230	250	240	240	260	220	280	280H
17	A	A	A	A	A	A	A	A	305	240	215	205	230	220	205	200	215	205	230	225	250	240	260	A
18	A	A	A	A	A	A	A	300	260	220	230	225	230	230A	215	200H	210	215H	205	210	210	230	250A	270
19	280	A	A	A	A	A	B	A	270	230	230	230	215	200	225	230	230	270	230	230	EA 320	A	A	A
20	A	A	A	A	A	A	B	290	240	220	220H	230	205	B	230	240	230	240	230	220	260	260	310	R
21	R	A	A	A	A	A	B	A	A	B	EB 300	265	240	230	240	230	240	220	220	215	275	250	250	280
22	A	A	A	A	A	360	280	260	230	225	225	240	205	220	225	220	210	215H	225H	210	230	240	315	A
23	A	A	A	A	A	A	A	A	A	A	235	B	B	B	230	B	A	B 280	A	A	A	A	B	A
24	A	A	A	A	A	195	A	B	B	B	B	EB 275	270	265	250	230	250	250	260	250	260	EA 300	EA 300	EB 295
25	B	A	A	A	R 410	R	390	350	250	210	220	230	210	200	205	B	C	C	C	C	230	270	280	A 330
26	A	A	A	A	370	305H	300	280	265	B	260	220	225	200	210	B	230	B	B	260	EA 300	A	A	A
27	A	A	A	A	A	A	B	A	B	B	B	B	B	230	330	230	B	B	270	B	B	B	280	A
28	A	A	A	A	A	A	A	380	265	250	B	B	B	B	B	B	B	B	A	B	A	A	A	A
29	B	A	A	A	B	A	A	B	B	A	B	B	B	260	280	270	270	260	280	250	270	275	A	A
30	A	A	A	A	A	A	A	A	B	300	220	230	240	250	230	230	250	230	225	210	280	EB 300	B	A
31	A	A	A	A	A	C	A	315	290	200H	220	260H	265	240	280	230	205	215	220	220	215	225	265	280
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	10	7	5	3	7	8	11	16	20	22	26	26	26	27	29	26	26	27	26	26	27	24	22	16
MED	280	295	280	310H	360	290	270	250	230	218	220	216	212	220	220	220	220	215	222	220	235	235	261	282
UQ	290	330	300	362H	370	302	302	295	265	240	225	230	230	230	230	230	235	245	230	230	266	262	280	295
LQ	280	285	230	305	315	275	230	212	200	200	210	200	200	202	205	200	205	200	220	210	230	228	250	275

MAR. 1966 | H'F (KM)

IONOSPHERIC DATA

MAR. 1966 | H'ES (KM) | 45° E Mean Time (G. M. T. + 3 h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	100	100	B	160	B	B	B	B	B	B	B	100	100	100	100	G	B	B	B	100	100	100	B	100
2	100	B	145	B	120	B	G	120	110	105	100	G	100	G	100	G	G	G	100	G	B	100	100	B
3	170	125	100	100	100	100	100	100	120	120	100	100	100	G	B	B	B	G	160	100	100	B	125	120
4	125	100	100	100	B	100	G	100	G	100	G	G	130	130	130	100	G	G	G	G	B	B	150	105
5	100	100	100	105	100	100	100	100	105	100	105	G	130	100	100	100	100	G	160	B	100	100	100	B
6	160	150	110	100	100	100	G	G	G	G	100	100	100	G	100	180	100	G	G	130	130	B	100	B
7	115	C	100	100	100	100	100	100	100	100	100	G	100	G	G	G	G	100	170	G	B	B	100	E
8	110	140	125	100	115	100	115	105	G	100	100	100	100	100	100	100	100	100	100	150	100	120	160	165
9	B	180	110	100	100	B	100	G	170	100	165	100	100	110	100	100	100	100	G	100	100	125	100	100
10	105	120	110	100	110	105	105	100	105	G	100	150	150	140	G	G	B	125	B	B	B	125	150	160
11	110	105	100	100	100	100	100	100	120	100	G	130	130	120	100	115	G	G	100	100	100	100	E	190
12	110	115	100	100	100	100	120	120	105	100	100	105	100	G	100	100	B	B	B	B	160	B	120	130
13	130	170	100	100	100	130	140	100	100	100	120	120	110	100	100	G	G	100	G	100	105	100	100	100
14	115	130	100	110	100	105	105	110	130	105	105	B	B	100	100	B	B	160	B	110	105	100	120	110
15	105	140	120	105	100	100	165	100	B	110	110	130	105	105	105	B	100	140	165	130	110	110	110	110
16	110	105	120	110	100	100	170	B	100	100	G	G	160	105	100	B	B	B	115	B	B	E	120	100
17	140	100	105	105	100	100	105	105	110	110	110	160	G	G	110	100	105	G	100	100	B	B	E	120
18	120	100	100	100	110	130	105	100	115	120	G	G	100	100	100	G	100	100	100	100	100	100	100	100
19	100	100	100	100	105	100	105	105	190	180	130	100	105	105	100	120	110	140	140	150	150	110	105	100
20	100	100	100	100	100	100	B	150	115	115	G	G	G	B	G	G	120	B	B	160	B	B	100	125
21	120	105	105	105	100	100	B	100	105	B	B	120	100	105	100	G	G	G	100	100	100	100	100	100
22	110	105	100	100	105	170	100	100	G	G	G	100	100	105	100	100	G	G	B	B	B	E	B	120
23	110	100	105	100	100	100	100	105	100	110	105	B	B	B	B	B	105	B	170	125	160	105	B	120
24	100	100	100	110	105	100	130	B	B	B	B	B	G	105	G	G	100	150	150	120	115	100	100	100
25	B	100	100	100	100	G	130	G	120	120	120	105	120	100	100	B	C	C	C	C	B	E	E	115
26	110	110	110	100	105	105	100	140	B	B	B	B	105	105	100	B	100	B	B	125	120	100	100	100
27	100	100	125	120	100	100	B	100	B	B	B	B	B	105	100	100	B	B	B	B	B	B	B	115
28	105	100	105	100	100	100	100	100	110	G	B	B	B	B	B	B	B	B	105	B	105	100	100	100
29	140	100	120	125	100	100	100	B	B	110	B	B	B	B	G	G	B	B	B	B	B	120	100	105
30	150	160	105	100	105	105	100	110	B	B	G	105	100	100	G	120	130	100	B	B	B	100	B	110
31	100	105	100	110	120	C	100	175	160	100	G	G	120	115	B	B	130	B	130	B	115	100	100	100
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	29	29	30	30	29	26	24	24	20	21	16	16	23	21	21	12	14	11	16	17	19	20	23	27
MED	110	105	102	100	100	100	102	100	110	105	105	105	100	105	100	100	100	100	122	110	105	100	100	110
UQ	120	125	110	105	105	105	118	110	120	110	115	125	120	105	100	118	110	140	160	130	118	110	120	120
LQ	100	100	100	100	100	100	100	100	105	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

The Radio Research Laboratories, Japan

MAR. 1966 | H'ES (KM)

IONOSPHERIC DATA

APR. 1966 | FOF2 (0.1 MHZ) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4' S. Long. 39°35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	F	A	A	A	A	A	A	U F 31	J F 41	F	F	F 56	J R 63	J R 70	J R 63	J R 62	F 58	J F 52	B	A	A	A	A	A
2	A	A	A	A	A	A	A	A	A	B	B	F 36	F 38	38	38	39	38	42	42	J R 25	R	F	A	A
3	A	A	A	A	B	A	A	B	F	40	48	52	56	61	56	53	43	43	R	R	R	R	F	A
4	A	A	A	B	A	A	A	A	B	38	F 45	48	R 53	54	52	49	46	45	44	F 39	F 34	R	A	A
5	A	A	B	A	A	A	R 32	32	38	41	44	50	54	53	56	53	48	46	R	R	F	F	F	A
6	A	A	R	A	A	A	A	A	36	42	45	50	56	58	51	J F 62	R	R	B	B	A	F	F	A
7	A	J A 24	F	A	A	A	B	A	B	U F 40	B	B	F 48	48	C	C	C	C	46	37	U F 27	B	A	A
8	A	A	A	A	A	A	A	A	B	B	F 46	F 48	52	58	58	58	52	51	45	42	R	F 18	F 19	A
9	A	A	A	A	A	A	J R 37	J R 39	F	J F 46	F 51	F 57	62	63	68	69	F 56	J A 52	J A 47	J R 42	F	F	R	A
10	A	A	F	R	J F 24	A	J R 38	J F 38	R	J R 56	J R 57	J R 66	F 72	J F 78	F 74	F 74	69	54	F	J F 45	F	A	A	A
11	A	A	23	23	R	R	R	J R 42	J R 50	R	66	71	86	83	74	J R 77	58	54	J F 43	J R 42	F	R	F	R
12	B	A	A	F	R	R	B	B	F	52	62	71	81	72	83	76	75	J F 54	U F 45	U F 36	F 34	F	F	F
13	A	A	A	R	A	R	A	A	A	R	R	F	F 81	F 81	91	102	R	R	92	A	A	A	A	A
14	A	A	A	A	A	A	A	A	A	A	F	42	B	J R 42	J R 45	F 58	U F 53	F	R	F	F	A	A	A
15	A	A	A	A	A	A	A	31	31	39	48	F	F	55	55	59	48	42	38	27	F	F	16	15
16	15	13	A	A	F	F	F	F	31	F	R	F	F	J F 69	F	F 71	56	F 51	F 37	F 28	F	F	A	A
17	R	A	A	A	A	R	R	F	F	F	F	J F 63	67	F	F	67	58	R	F	F	F	F	U F 18	A
18	A	A	A	F	A	A	F	J F 35	F	F	J R 57	J A 58	F	J F 67	F	F	R	F	F	F	F	R	R	A
19	A	A	R	F	F	R	R	R	F	R	F	F 68	68	74	79	83	71	F	F	F	F	R	R	R
20	R	R	R	R	R	R	R	F	R	R	F 64	J F 73	74	F	F	R	R	R	72	F	A	A	A	A
21	A	A	A	A	A	A	A	A	A	43	45	49	56	F 53	50	51	55	49	F 36	J F 34	J F 28	A	R	R
22	C	A	A	A	A	A	F	J F 38	J R 42	B	F 52	F	J F 57	66	61	64	60	F	F	J F 62	A	A	A	A
23	A	A	A	A	A	A	A	B	B	F	F	F	F	J F 60	F	J F 60	R	F	F	R	B	B	A	14
24	A	A	A	A	A	A	A	R	J F 42	F	J R 60	J R 70	67	73	73	R	F	F	F	F	F	F	A	A
25	A	A	A	A	A	A	R	F	F	51	58	65	67	74	R	R	R	R	R	R	F	K	A	A
26	A	R	A	R	R	F	F	F	F	F	J R 57	75	86	86	F 78	R	F 67	F 46	F	F	F	F 17	A	A
27	A	R	R	R	J A 34	J R 32	F	F	F	R	R	R	F	F	R	F	R	R	F	F	A	B	B	A
28	F	F	F	R	R	R	R	R	F	F	F	F 79	F	89	83	85	75	49	F 36	F 30	F	A	A	A
29	A	A	A	F	A	F	A	A	F	F	F	C	F	F	F	C	F	R	C	C	C	B	A	R
30	A	A	A	A	A	A	A	A	A	F 43	43	R	F 53	F	F 63	F	R	R	F	R	A	A	A	A
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	1	2	1	1	2	1	3	8	8	12	18	21	22	25	21	21	19	15	13	13	4	2	3	2
MED	15	18	23	23	J 29	J R 32	J R 37	J 36	40	42	52	58	62	66	63	62	56	49	44	F 37	F 31	F 18	F 18	14
UQ							J R 38	J 38	J 42	48	58	70	72	74	74	74	64	52	46	J 42	F 34		F 18	
LQ							R 34	32	34	40	45	50	54	55	55	58	50	46	F 38	F 30	F 28		17	

APR. 1966 | FOF2 (0.1 MHZ)

The Radio Research Laboratories, Japan

IONOSPHERIC DATA

APR. 1966 | FOF1 (0.01 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1										L			L											
2										B	B	340	330	340	330	L								
3											L	L	L	L	L									
4										A	350	B		B										
5												B	L											
6									L	L		L	L	L										
7										F 290	B	B	L		C	C	C							
8												L	L	L	L									
9								L	L				L											
10																								
11																								
12																								
13																								
14										A			B			L	L							
15															L									
16																								
17									L			L	L											
18																								
19																								
20													B											
21											L	L												
22									L	B														
23												L												
24										L		L												
25																								
26																								
27																								
28																								
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT										1	1	1	1	1	1									
MED										F 290	350	340	330	340	330									
UQ																								
LQ																								

The Radio Research Laboratories, Japan

APR. 1966 | FOF1 (0.01 MHZ)

IONOSPHERIC DATA

APR. 1966 | FOE (0.01 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1								A	A	B	B	B	215	A	A	A	B	B						
2								B	B	B	B	B	A	B	B	B	B	B						
3								B	A	A	220	220	225	240	A	235	R	B						
4								A	B	A	225	B	B	B	B	B	B	B						
5								190	A	A	215	B	B	B	B	B	B	B						
6								A	A	A	A	A	B	B	B	A	A	B						
7								A	B	B	B	B	B	B	C	C	C	C						
8								B	B	B	A	225	235	B	B	B	B	B						
9								A	170	A	200	205	230	A	B	200	B	A						
10									A	170	200	220	235	225	A	200	175	A						
11									A	A	200	A	230	A	220	210	A	A						
12									B	A	225	230	235	B	B	B	A	A						
13									B	A	A	A	A	A	220	B	180	A						
14									B	A	A	A	B	B	B	B	B	B						
15									A	170	B	B	A	B	A	A	A	A						
16									B	B	210	200	220	R	A	A	A	B						
17									A	A	180	210	B	B	B	B	B	A						
18										A	A	A	210	210	220	A	B							
19										A	180	B	B	B	215	B	B							
20										175	190	210	B	B	B	A	B							
21									A	A	A	A	A	210	A	200	B							
22									160	B	A	A	195	190	190	190	150							
23										B	B	B	B	B	200	R	A							
24										A	A	A	215	225	A	A	B							
25										A	180	200	210	225	175	A	A							
26										B	195	210	220	220	190	A	A							
27										A	A	190	200	205	A	160	140							
28										B	170	B	190	A	B	B	B							
29										A	B	C	B	B	A	A	A							
30										A	A	B	B	A	A	A	A							
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT								1	2	3	14	11	15	9	8	7	4							
MED								190	165	170	200	210	220	220	208	200	162							
UQ										172	215	220	230	225	220	205	178							
LQ										170	180	202	210	210	190	195	145							

APR. 1966 | FOE (0.01 MHZ)

The Radio Research Laboratories, Japan

IONOSPHERIC DATA

APR. 1966 | FOES (0.1 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	J X 21	J X 23	J X 32	J X 32	J X 21	J X 33	J X 33	J X 32	23	J X 52	E B 24	E B 29	27	24	J X 54	25	E B 23	26	B	J X 43	J X 85	J X 52	J X 52	J X 87
2	J X 96	J X 48	J X 54	J X 57	J X 34	J X 53	J X 50	J X 48	J X 51	B	B	E B 25	28	E B 26	E B 28	E B 24	E B 22	E B 31	E B 22	E B 18	E B 18	E B 16	J X 32	J X 32
3	J X 42	J X 32	J X 33	J X 40	B	40	J X 41	B	J X 22	J X 59	J X 32	23	G	G 24	23	J X 50	G	E B 17	E B 13	E B 17	26	J X 32	26	26
4	33	J X 104	J X 50	J X 65	J X 50	J X 32	J X 52	J X 54	B	40	25	E B 43	E B 35	E B 43	E B 33	E B 27	E B 22	25	E B 16	E B 14	E B 11	J X 20	26	J X 25
5	J X 65	44	38	J X 54	J X 60	J X 52	J X 26	J X 34	J X 32	J X 32	G	E B 35	E B 26	E B 26	E B 24	E B 25	E B 25	E B 25	E B 20	J X 30	J X 32	J X 24	J X 42	J X 32
6	J X 30	J X 30	J X 22	J X 42	39	J X 45	J X 57	41	26	J X 22	J X 27	27	27	25	25	24	26	E B 15	B	B	J X 22	J X 32	J X 23	J X 31
7	J X 31	24	J X 23	J X 52	J X 32	26	B	J X 55	B	J X 40	B	B	E B 31	E B 33	C	C	C	C	E B 16	E B 11	E B 11	B	J X 23	32
8	30	J X 32	27	J X 31	J X 62	J X 66	J X 53	J X 53	B	B	J X 33	24	J X 49	E B 24	E B 29	E B 23	E B 19	E B 19	E B 18	E B 18	E B 19	E B 14	E B 11	J X 33
9	J X 98	J X 61	J X 52	J X 42	J X 47	J X 43	J X 21	J X 20	26	J X 21	21	23	J X 52	J X 44	E B 26	J X 32	22	J X 52	J X 56	J X 32	23	E B 19	21	J X 32
10	J X 33	J X 52	J X 22	J X 33	J X 20	J X 37	J X 33	J X 54	J X 34	J X 33	J X 34	25	26	J X 49	J X 25	25	23	24	J X 32	16	J X 17	J X 54	J X 26	J X 30
11	J X 22	J X 19	J X 20	J X 25	J X 21	J X 53	24	J X 32	J X 23	J X 43	J X 35	J X 35	J X 40	26	J X 32	J X 43	J X 36	J X 42	J X 35	J X 35	E B 11	E	J X 35	J X 42
12	B	J X 74	J X 57	J X 40	J X 36	E B 13	B	B	E B 21	J X 84	23	24	26	E B 30	E B 26	E B 23	20	19	J X 28	26	J X 34	J X 52	J X 42	J X 13
13	J X 32	J X 34	22	31	J X 35	J X 22	J X 61	J X 45	J X 61	J X 55	J X 32	J X 52	J X 32	J X 22	G	E B 22	G	J X 31	J X 23	31	J X 52	J X 62	J X 65	J X 37
14	J X 52	J X 54	J X 42	J X 42	J X 45	J X 44	J X 46	J X 44	J X 46	J X 52	J X 40	J X 42	B	E B 35	E B 36	E B 28	E B 23	E B 34	B	J X 22	26	J X 35	J X 49	J X 38
15	J X 53	J X 32	J X 63	J X 60	J X 50	J X 37	26	J X 31	J X 22	J X 40	E B 30	E B 34	24	E B 22	23	18	16	16	16	16	14	E B 12	E B 12	E
16	E B 12	J X 16	J X 12	J X 12	17	J X 12	E B 16	E B 15	E B 18	E B 18	22	22	J X 68	G	J X 23	J X 20	J X 20	E B 14	17	23	E B 12	J X 34	J X 19	J X 34
17	E	J X 27	J X 72	J X 41	J X 25	J X 21	J X 42	J X 20	14	17	G 16	G	E B 21	E B 23	E B 21	E B 23	E B 18	J X 22	E B 18	J X 34	E B 13	E B 13	J X 52	J X 30
18	J X 31	J X 32	J X 27	J X 32	J X 26	J X 39	J X 52	J X 35	J X 28	22	23	J X 64	G 21	J X 45	25	21	E B 18	E B 11	E B 13	E B 12	E B 12	19	16	J X 41
19	J X 54	J X 27	24	18	J X 32	26	J X 47	E	E	23	22	E B 29	E B 31	E B 23	G	E B 19	E B 18	E B 12	J X 34	E	E	E	E	E
20	E	26	26	E B 19	17	21	J X 44	J X 43	J X 43	18	20	G 21	E B 58	E B 34	E B 24	24	E B 19	E B 19	J X 52	E B 19	J X 37	J X 37	J X 25	J X 21
21	J X 38	J X 34	J X 42	J X 42	J X 47	J X 42	J X 44	J X 42	J X 42	J X 33	20	J X 34	22	G 21	J X 32	J X 109	E B 16	J X 30	J X 21	E	J X 35	J X 33	E B 11	E
22	C	J X 42	J X 53	J X 36	J X 57	J X 47	J X 36	23	22	B	J X 50	23	J X 20	23	J X 32	J X 30	G 15	E B 14	E B 18	J X 36	J X 53	J X 30	J X 32	J X 26
23	J X 40	J X 42	J X 24	J X 39	J X 51	J X 35	J X 40	B	B	E B 34	J X 32	E B 21	E B 22	E B 21	J X 37	17	J X 18	J X 17	J X 28	E B 22	B	B	J X 20	J X 17
24	J X 33	J X 30	J X 31	J X 39	J X 43	J X 47	44	J X 42	J X 37	J X 31	J X 22	J X 33	G	G	J X 53	J X 20	E B 29	J X 52	E B 14	E B 13	E B 16	E	J X 30	22
25	J X 23	J X 60	J X 26	J X 29	J X 25	J X 52	17	J X 22	E	J X 32	J X 36	G	J X 37	G	J X 37	22	11	J X 23	E	J X 42	E	J X 24	25	J X 36
26	J X 25	J X 20	J X 22	J X 53	J X 20	J X 25	25	E	E	E B 13	G	G	G	G	G 19	J X 32	J X 20	22	J X 45	14	E	J X 41	J X 18	J X 42
27	J X 25	J X 21	J X 33	J X 22	J X 34	J X 20	E B 13	J X 24	J X 34	19	J X 54	22	22	22	20	J X 52	J X 32	E	J X 36	E	J X 37	B	B	J X 42
28	J X 20	E B 14	J X 17	J X 25	J X 24	J X 23	J X 20	J X 34	E B 18	J X 40	G	E B 24	J X 32	23	E B 32	E B 23	E B 22	E B 17	E B 16	J X 32	E	J X 32	J X 26	J X 62
29	J X 45	J X 36	J X 55	23	J X 33	J X 36	J X 42	J X 48	J X 63	J X 36	J X 32	C	J X 87	E B 23	J X 43	24	J X 34	J X 32	E B 24	C	C	B	J X 52	J X 35
30	J X 39	J X 41	J X 41	J X 40	J X 51	J X 52	J X 52	J X 61	J X 52	J X 51	J X 22	E B 36	E B 33	J X 32	J X 32	J X 57	J X 34	E B 23	J X 34	J X 36	J X 33	J X 40	J X 32	J X 37
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	28	30	30	30	29	30	28	27	26	27	28	28	29	30	29	29	29	29	27	28	28	26	29	30
MED	J X 32	J X 32	J X 32	J X 39	J X 34	J X 37	J X 42	J X 35	J X 26	J X 33	24	24	U 24	E G 24	24	22	E G 20	U 19	U 18	U 18	17	J X 31	J X 26	J X 32
UQ	J X 44	J X 44	J X 50	J X 42	J X 47	J X 47	J X 48	J X 46	J X 42	J X 42	J X 32	U 30	J X 34	U 28	J X 32	J X 30	22	J X 28	J X 33	J X 32	J X 34	J X 37	J X 35	J X 37
LQ	J X 24	J X 26	J X 23	J X 29	J X 25	J X 25	J X 26	J X 24	21	22	21	22	22	E G 22	U 21	U 20	E G 18	E B 17	E B 16	E B 14	E B 12	E E 16	J X 20	J X 25

The Radio Research Laboratories, Japan

APR. 1966 | FOES (0.1 MHZ)

IONOSPHERIC DATA

APR. 1966 | F-MIN (0.1 MHZ) | 45 E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69 00.4 S. Long. 39 35.4 E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	E	E	E	E	11	14	14	18	15	23	24	29	20	18	17	16	23	15	B	13	14	E	E	11
2	18	18	13	15	14	22	32	23	22	B	B	25	22	26	28	24	22	31	22	18	18	16	E	E
3	E	13	11	19	B	16	28	B	16	15	17	17	18	18	17	16	20	17	13	17	22	19	12	11
4	11	26	18	53	34	19	14	16	B	17	17	43	35	43	33	27	22	19	16	14	11	11	E	E
5	18	16	34	24	22	15	15	11	14	12	18	35	26	26	24	25	25	25	20	11	11	E	E	E
6	E	14	12	15	15	14	14	11	14	17	22	17	23	23	23	21	15	15	B	B	14	15	E	E
7	E	E	E	23	23	17	B	22	B	23	B	B	31	33	C	C	C	C	16	11	11	B	12	E
8	14	15	14	23	13	16	33	36	B	B	21	19	19	24	29	23	19	19	18	18	19	14	11	E
9	E	13	14	13	18	16	13	13	E	12	11	14	15	16	26	19	19	13	16	14	13	19	16	14
10	E	18	13	E	E	14	11	E	E	E	E	15	17	14	15	14	15	20	14	13	11	E	E	14
11	E	E	E	E	E	13	E	11	E	E	E	14	15	14	13	13	11	E	E	E	11	E	E	E
12	B	20	19	14	E	13	B	B	21	14	18	16	18	30	26	23	14	14	14	12	E	E	E	E
13	19	16	E	13	E	E	E	43	33	18	13	13	13	11	20	22	17	14	20	E	13	16	14	13
14	18	20	23	18	17	19	19	31	23	18	17	17	B	35	36	28	23	34	31	18	14	13	11	E
15	E	E	15	16	19	12	13	18	12	14	30	34	21	22	19	15	16	14	13	13	E	12	12	E
16	12	E	12	E	E	12	16	15	18	18	16	15	17	18	17	17	15	14	E	E	12	E	E	E
17	E	11	13	13	E	E	E	E	11	E	13	22	21	23	21	23	18	11	18	12	13	13	E	E
18	E	E	E	E	E	E	11	E	E	13	E	E	16	15	15	E	18	11	13	12	12	E	E	30
19	19	20	16	E	E	14	16	E	E	15	13	29	31	23	16	19	18	12	E	E	E	E	E	E
20	E	E	15	19	E	E	E	E	11	12	12	14	58	34	24	15	19	19	28	19	11	E	E	E
21	E	14	14	15	13	18	19	16	12	14	14	13	18	14	14	15	16	12	E	E	E	E	11	E
22	C	E	19	E	19	14	13	E	E	B	22	19	16	11	11	15	13	14	18	13	E	14	E	E
23	E	14	13	20	15	18	18	B	B	34	21	21	22	21	16	16	14	11	13	22	B	B	14	E
24	E	14	E	13	13	14	16	E	16	16	18	14	E	13	14	13	29	14	14	13	16	E	E	E
25	19	E	11	18	12	E	11	E	E	E	E	13	13	13	E	11	E	E	E	E	E	E	E	E
26	E	E	15	E	E	E	E	E	E	13	14	16	15	16	14	13	14	12	13	E	E	E	E	15
27	E	E	E	E	E	14	13	11	E	E	11	13	13	13	12	12	E	E	E	E	15	B	B	16
28	E	14	15	15	E	E	14	14	18	16	14	24	17	18	32	23	22	17	16	11	E	E	E	16
29	E	E	E	E	E	E	22	20	18	11	22	C	22	23	E	14	E	15	24	C	C	B	16	11
30	E	16	30	23	32	31	36	18	17	16	13	36	33	20	14	11	16	23	24	14	E	E	11	11
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	29	30	30	30	30	30	30	30	30	30	30	29	30	30	29	29	29	29	30	29	29	30	30	30
MED	E	14	13	14	12	14	14	14	14	15	16	17	18	19	17	16	17	14	16	13	11	E 11	E	E
UQ	14	16	15	19	18	16	19	22	21	18	21	25	23	24	24	23	20	19	20	14	14	16	12	11
LQ	E	E	E	E	E	E	11	E	E	12	13	14	16	14	14	14	14	12	13	E	E	E	E	E

APR. 1966 | F-MIN (0.1 MHZ)

IONOSPHERIC DATA

APR. 1966 | M(3000)F2 (0.01) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	F	A	A	A	A	A	A	UF 355	F	F	F	F 305	R	R	R	R	F 320	F	B	A	A	A	A	A
2	A	A	A	A	A	A	A	A	A	B	B	F	F 290	290	295	335	330	335	335	R	R	F	A	A
3	A	A	A	A	B	A	A	B	F	315	315	310	305	335	340	340	395	335	R	R	R	R	F	A
4	A	A	A	B	A	A	A	A	B	270	F 285	315	R 300	325	340	345	330	335	335	F 310	F 280	R	A	A
5	A	A	B	A	A	A	R 225	280	295	315	295	310	315	300	340	340	355	325	R	R	F	F	F	A
6	A	A	R	A	A	A	A	A	255	275	295	300	305	330	355	F	R	R	B	B	A	F	F	A
7	A	A	F	A	A	A	B	A	B	UF 250	B	B	F 315	300	C	C	C	C	335	350	UF 280	B	A	A
8	A	A	A	A	A	A	A	A	B	B	F 305	F 315	310	310	330	320	345	325	335	310	R	F 305	F 265	A
9	A	A	A	A	A	A	JR 295	R	F	JF 295	F 295	F 300	310	325	315	340	F 340	JA 260	JA 261	R	F	F	R	A
10	A	A	F	R	F	A	R	F	R	R	R	R	F 305	F	F 320	F 325	350	335	F	F	F	A	A	A
11	A	A	285	285	R	R	R	R	R	R	310	295	300	330	340	R	360	350	F	R	F	R	F	R
12	B	A	A	F	R	R	B	B	F	345	340	350	325	360	335	340	387	JF 350	UF 335	UF 305	F 310	F	F	F
13	A	A	A	R	A	R	A	A	A	R	R	F	F 290	F 300	285	315	R	R	285	A	A	A	A	A
14	A	A	A	A	A	A	A	A	A	A	F	275	B	R	R	F	UF 320	F	R	F	F	A	A	A
15	A	A	A	A	A	A	A	270	290	310	290	F	F	295	335	355	355	345	340	335	F	F	315	335
16	335	310	A	A	F	F	F	F	300	F	R	F	F	F	F	F 330	340	F 315	F 325	F 320	F	F	A	A
17	R	A	A	A	A	R	R	F	F	F	F	JF 295	290	F	F	345	330	R	F	F	F	F	UF 325	A
18	A	A	A	F	A	A	F	F	F	F	R	A	F	F	F	F	R	F	F	F	F	R	R	A
19	A	A	R	F	F	R	R	R	F	R	F	F 310	325	325	330	335	340	F	F	F	F	R	R	R
20	R	R	R	R	R	R	R	F	R	R	F 295	F	310	F	F	R	R	R	325	F	A	A	A	A
21	A	A	A	A	A	A	A	A	A	300	320	325	320	F 330	340	355	310	325	F 335	F	JF 305	A	R	R
22	C	A	A	A	A	A	F	F	R	B	F 300	F	F	320	310	315	315	F	F	F	A	A	A	A
23	A	A	A	A	A	A	A	B	B	F	F	F	F	F	F	F	R	F	F	R	B	B	A	A
24	A	A	A	A	A	A	A	R	F	F	R	R	320	330	340	R	F	F	F	F	F	F	A	A
25	A	A	A	A	A	A	R	F	F	315	310	310	330	310	R	R	R	R	R	R	F	R	A	A
26	A	R	A	R	R	F	F	F	F	F	R	335	350	330	F 335	R	F 345	F 325	F	F	F	F 380	A	A
27	A	R	R	R	A	R	F	F	F	R	R	R	F	F	R	F	R	R	F	F	A	B	B	A
28	F	F	F	R	R	R	R	R	F	F	F	F 305	F	335	315	340	345	335	F 345	F 365	F	A	A	A
29	A	A	A	F	A	F	A	A	F	F	F	C	F	F	F	C	F	R	C	C	C	B	A	R
30	A	A	A	A	A	A	A	A	A	F 300	315	R	F 290	F	F 285	F	R	R	F	R	A	A	A	A
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	1	1	1	1			2	3	4	11	14	16	20	19	19	16	19	14	12	7	4	2	3	1
MED	335	310	285	285			R 260	280	292	300	302	310	310	325	335	340	340	335	335	F 320	F 292	F 342	F 315	335
UQ								318	298	315	315	315	320	330	340	342	352	335	335	342	F 308		320	
LQ								275	272	285	F 295	300	300	305	315	328	330	325	325	F 310	F 280		290	

APR. 1966 | M(3000)F2 (0.01)

IONOSPHERIC DATA

APR. 1966 | H'F2 (KM) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1										L			285											
2									A	B	B	580	L	L	390	295								
3											280	300	280	270	270									
4										A	370	B		290 B	295									
5												305	290											
6									430 L	380		300	300	270										
7										460	B	B	L		C	C	C							
8												L	L	300	L									
9								400	L				L											
10																								
11																								
12																								
13																								
14										A			B			390	L							
15															260									
16																								
17									L			270	300											
18																								
19																								
20													270											
21											L	L												
22									L	B														
23												300												
24										L		250												
25																								
26																								
27																								
28																								
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT								1	1	2	2	7	6	4	4	2								
MED								400	430 L	420	325	300	288	280	282	342								
UQ												302	300	295	342									
LQ												285	280	270	265									

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APR. 1966 | H'F2 (KM)

IONOSPHERIC DATA

APR. 1966 | H'F (KM) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S, Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	E 300	A	A	E A 340	A	A	A	275	210	240	230	230	200	220	210	200	250	280	B	A	A	A	A	A
2	A	A	A	A	A	A	A	A	A	B	B	270	240	265	270	240	250	280	250	280	300	E B 300	A	A
3	A	A	A	A	B	A	A	B	300	270	260	240	225	225	240	240	230	210	230	230	R	R	B	B
4	A	A	A	B	B	A	A	A	B	A	250	B	300	B	B	250	215	250	220	210	225	280	300	A
5	A	A	B	A	A	A	290	340	280	220	250	B	230	220	250	230	220	230	230	225	250	220	270	A
6	A	A	A	A	A	A	A	A	315	290	290	270	270	240	220	240	240	225	B	B	E B 300	A	E E 305	A
7	A	350	F	A	A	A	B	A	B	280	B	B	300	295	C	C	C	C	220	200	260	B	A	A
8	A	A	A	A	A	A	A	B	B	B	300	250	240	250	260	250	230	230	230	230	250	E B 290	E B 300	A
9	A	A	A	A	A	A	370	340	290	210	205	230	210	205	240	225	215	210	240	220	A 280	B	R	A
10	A	A	A 380	350	365	A	320	300	H 200	240	230	215	220	230	220	220	215	205	215	230	230	A	A	230
11	A	A	A	A	320	300	290	280	260	250	230	220	225	220	210	220	200	200	200	210	210	200	225	260
12	B	A	A	470	470	420	B	B	250	230	210	220	215	210	210	205	200	195	210	220	235	225	225	270
13	A	A	A	300	A	330	330	B	290	230	200	230	230	210	240	215	225	270	300	A	A	A	A	A
14	A	A	A	A	A	A	A	A	A	A	A 300	A 290	B	360	B 330	280	250	280	B 300	275	E A 300	A	A	A
15	A	A	A	A	A	A	A	330	300	270	290	B 290	260	220	240	230	210	205	200	240	250	260	E B 290	E E 280
16	B	E E 370	A	A	395	380	400	B 300	290	260	230	220	205	205	200	200	200	195	205	200	270	265	260	240
17	300	A	A	A	390	370	330	H 290	270	240	220	220	225	220	230	210	205	200	200	210	250	B 260	E E 270	A
18	A	A	A	E A 370	A	A	350	330	240	200	220	205	210	215	210	205	205	190	195	200	200	R	R	R
19	A	A	A	300	300	360	350	270	190	210	210	205	210	205	205	195	200	195	200	200	215	260	280	280
20	260	300	370	395	400	410	450	320	230	220	210	205	B	260	220	230	200	205	220	280	A	A	A	A
21	210	A	A	A	A	A	A	A	A	270	220	205	240	220	230	220	210	200	200	210	220	260	285	300
22	C	A	A	A	A	A	370	H 330	300	B	280	280	275	240	240	230	225	270	280	300	A	A	A	A
23	A	A	A	290	A	A	A	B	B	B	290	210	260	230	210	230	210	220	210	255	B	B	A	A
24	A	A	A	A	A	A	A	380	H 290	280	260	210	220	210	210	200	205	200	210	200	220	F 260	A	A
25	A	A	A	A	A	400	350	300	290	240	210	210	215	210	200	200	195	200	200	200	200	230	280	A
26	A	290	300	370	340	375	340	210	250	200	230	220	210	200	200	200	200	200	200	195	220	210	260	B
27	A	295	330	350	320	310	H 300	H 290	220	205	200	200	200	200	190	200	200	190	200	200	A	B	B	A
28	F	330	F	315	430	420	450	390	300	240	225	200	200	205	200	200	200	205	210	200	230	A	A	A
29	A	A	A	290	300	250	A	E A 370	B	280	280	C	230	230	200	C	205	200	240	C	C	B	A	210
30	295	A	B	B	B	B	B	A	A	290	275	E B 330	295	280	250	230	230	280	310	400	A	A	A	A
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	5	6	4	12	11	12	15	18	21	24	28	26	28	29	28	28	29	29	28	26	21	14	13	8
MED	U 278	306	350	U 326	365	372	350	305	280	240	230	220	225	220	220	220	210	205	212	215	232	252	270	258
UQ	300	340	375	370	398	405	370	335	290	270	278	245	250	240	240	230	225	230	235	240	255	262	285	280
LQ	260	295	315	298	320	320	325	290	240	220	215	210	210	210	208	200	200	200	200	200	220	225	260	235

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APR. 1966 | H'F (KM)

IONOSPHERIC DATA

APR. 1966 | H'ES (KM) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S, Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	100	100	100	100	100	100	100	100	100	100	B	B	105	105	110	100	B	130	B	100	105	100	100	100
2	100	100	100	100	110	100	120	100	105	B	B	B	110	B	B	B	B	B	B	B	B	B	130	100
3	105	105	105	100	B	100	100	B	100	100	105	120	G	110	105	105	G	B	B	B	100	160	100	100
4	110	105	100	100	110	110	100	100	B	100	110	B	B	B	B	B	B	150	B	B	B	100	100	150
5	120	100	110	100	100	100	120	100	100	100	G	B	B	B	B	B	B	B	B	100	100	100	100	100
6	105	110	140	100	100	100	100	100	120	110	110	105	110	120	125	160	180	B	B	B	130	150	150	105
7	110	130	100	100	130	100	B	100	B	105	B	B	B	B	C	C	C	C	B	B	B	B	170	100
8	120	115	130	115	100	100	110	100	B	B	100	120	100	B	B	B	B	B	B	B	B	B	B	100
9	100	100	100	100	110	110	100	130	150	150	130	110	105	100	B	105	100	100	100	100	100	B	100	100
10	100	130	180	100	100	100	120	100	100	100	100	100	100	100	100	100	100	100	100	100	100	110	120	140
11	105	100	105	130	140	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	B	E	100	160
12	B	150	100	130	160	B	B	B	B	100	100	100	140	B	B	B	100	100	100	100	100	100	130	110
13	100	150	170	110	100	125	110	180	180	180	130	100	100	100	G	B	G	110	105	100	110	100	100	100
14	100	100	110	100	110	100	100	100	100	100	100	105	B	B	B	B	B	B	B	150	130	100	110	105
15	100	105	180	100	100	100	100	100	110	150	B	B	100	B	100	100	100	100	100	100	100	B	B	E
16	B	100	100	100	110	130	B	B	B	B	150	105	100	G	100	100	100	B	100	100	B	100	100	100
17	E	100	100	100	100	110	120	100	120	100	100	G	B	B	B	B	B	100	B	100	B	B	100	110
18	120	100	115	110	110	105	100	100	105	105	100	100	105	160	120	120	B	B	B	B	B	110	110	120
19	100	100	100	125	170	130	100	E	E	150	150	B	B	B	G	B	B	B	100	E	E	E	E	E
20	E	100	100	B	130	120	100	100	100	150	120	105	B	B	B	100	B	B	100	B	105	105	100	110
21	100	105	100	100	100	100	100	100	100	100	110	100	110	100	110	100	B	100	100	E	100	100	B	E
22	C	100	100	100	100	100	100	110	100	B	105	100	105	100	100	160	135	B	B	120	100	105	110	100
23	105	105	110	110	100	105	100	B	B	B	105	B	B	B	100	110	140	140	140	B	B	B	120	110
24	150	105	100	100	100	100	100	100	100	100	105	105	G	G	100	100	B	100	B	B	B	E	150	100
25	100	100	105	100	105	100	150	120	E	100	100	G	100	G	100	140	100	100	E	100	E	100	140	100
26	175	140	120	100	100	100	100	E	E	B	G	G	G	G	120	100	100	100	100	100	E	100	100	100
27	180	160	140	140	100	100	B	100	100	150	100	150	100	105	115	100	100	E	105	E	110	B	B	100
28	100	B	100	100	100	100	100	100	B	100	G	B	105	100	B	B	B	B	B	100	E	160	130	100
29	130	110	100	105	100	100	100	130	105	100	120	C	100	B	100	100	100	100	B	C	C	B	115	100
30	100	100	140	100	120	110	105	100	100	100	100	B	B	100	100	100	100	B	150	100	100	100	100	100
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	25	29	30	29	29	29	26	24	20	24	23	16	18	13	17	19	14	15	14	16	15	18	25	27
MED	105	105	102	100	100	100	100	100	100	100	105	105	102	100	100	100	100	100	100	100	100	100	110	100
UQ	120	110	120	110	110	110	110	100	108	130	115	108	105	105	110	108	100	105	105	100	108	110	130	110
LQ	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

APR. 1966 | H'ES (KM)

IONOSPHERIC DATA

MAY. 1966 | FOF2 (0.1 MHZ) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	A	A	A	A	A	A	C	C	C	C	J F 27	C	C	C	C	C	C	C	F	F 31	B	B	R	A
2	A	A	A	A	A	B	A	A	A	R	B	B	B	B	B	F 59	B	B	R	B	A	R	A	A
3	A	A	A	A	A	A	A	B	A	J F 38	F 48	F 58	F	F 74	R	F	J F 57	F	R	F	F 18	A	A	A
4	A	F	B	A	B	A	A	A	B	A	B	B	B	F	B	B	R	R	R	B	R	A	A	R
5	A	A	B	A	A	A	A	R	F 28	F 34	J F 39	F 57	72	75	F 73	J F 73	J F 52	R	F	J F 21	B	B	R	R
6	A	B	A	A	B	A	B	A	B	B	B	B	B	J F 67	B	B	F	F	F	F	15	B	B	B
7	J R 50	A	A	A	A	A	F	F 23	F	F 37	45	54	66	77	F 79	56	F 43	F 39	F	F 28	F	F 18	F 16	A
8	A	A	A	A	A	F 27	F	F	F	J F 41	J F 47	R	R	R	F	J R 62	J F 53	F	F	F	A	A	A	A
9	A	A	A	A	A	A	A	A	A	B	B	R	R	F	R	F 74	F	R	B	B	B	B	R	B
10	A	F	F	F	F	F	B	B	B	F	R	F	F	F	F 68	J R 65	F	F	R	A	A	A	A	15
11	A	R	R	F	R	F	A	A	F	F	F	R	R	F	F 69	J F 62	F	R	F 30	F	F 23	18	F	A
12	A	A	A	A	B	F	J F 51	J R 53	A	F	F	F 57	F 64	63	J F 70	65	J F 49	R	F	F	A	A	B	A
13	R	A	A	B	A	B	F 27	F	A	B	F	58	F 58	R	F	R	R	R	B	B	A	A	A	A
14	B	B	A	A	B	B	A	A	A	F 27	F	R	R	R	F	J F 52	F	F	B	B	B	A	B	B
15	A	F 29	F	F	F	F	A	A	B	F	J F 52	J F 69	J F 68	F 62	58	F 58	F	F	B	B	A	A	A	B
16	A	A	F	A	A	A	F	A	A	F	F	J F 65	R	J R 67	J F 60	F 47	F	F	J F 35	F	R	R	B	A
17	A	F 26	A	A	A	A	A	A	F	F	F	F 54	63	F	F	F	J F 49	F	F	A	B	A	A	A
18	A	A	A	A	A	A	A	A	A	A	F	J F 56	F	J F 57	F	F 43	F 33	F 34	F	F	17	F 15	B	B
19	A	R	28	A	F	R	F	R	J F 45	F	F	F	F	R	R	F	J F 50	J F 41	J F 35	F	A	B	A	A
20	A	A	A	A	A	A	A	F	J F 32	F	J F 42	J F 51	J R 65	J F 67	J R 67	F	J F 47	J F 37	F	F	A	B	A	A
21	A	A	A	A	F 22	F	R	R	R	F	J F 50	J F 60	J R 65	R	R	R	R	F	J R 21	B	B	B	B	B
22	A	R	F	J F 26	F 26	F	F	F	B	B	F	F	J F 61	R	F	R	F	F	F	F 18	B	B	B	A
23	A	A	A	J R 26	J R 27	R	J A 35	F	F	F	J F 47	R	A	R	J R 60	F	F	F	16	A	A	A	A	A
24	A	A	A	A	A	A	A	U F 18	F	F 33	F	J R 64	F 64	J F 58	J F 64	F 36	F 31	F 33	F	F 17	R	B	B	B
25	A	R	F	A	R	R	A	A	B	F	F	R	J R 61	R	F 62	R	J F 34	J F 35	F 28	F	B	A	A	A
26	R	R	A	A	F	R	R	F	R	F	F	F	F	B	F	C	R	R	C	C	A	A	A	A
27	C	A	A	A	A	A	A	A	F	J F 31	F 36	44	C	41	38	30	F 26	C	A	A	B	C	C	A
28	C	A	C	C	A	F	A	F	F	F	B	F	F	R	F	J F 36	F 26	F 21	20	B	15	A	B	B
29	A	A	A	A	F 21	F	F	F	F	F	F	F	F	F	F	J F 37	F 31	F	21	B	B	B	B	A
30	R	A	A	A	A	A	32	32	F	F	R	R	J R 65	R	F	R	F	F	20	B	B	A	A	A
31	A	A	A	A	A	A	A	B	B	A	R	B	B	B	B	F	F	R	A	A	A	A	A	A
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	1	2	1	2	4	1	4	4	3	7	10	13	12	11	12	16	14	7	9	5	5	3	1	1
MED	J R 50	F 28	28	J 26	F 24	F 27	34	28	J F 32	F 34	J F 46	F 57	64	F 67	F 66	F 57	J F 45	F 35	21	F 21	17	F 18	F 16	15
UQ					26		J 43	42	J F 38	F 38	J F 48	J F 60	J 66	70	F 70	F 64	J F 50	J F 38	J F 30	F 28	F 18	18		
LQ					F 22		30	F 20	F 30	F 32	J F 39	F 54	F 62	F 60	60	F 40	F 31	F 34	20	F 18	15	16		

MAY. 1966 | FOF2 (0.1 MHZ)

IONOSPHERIC DATA

MAY 1966 | FOF1 (0.01 MHZ)

45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1												C	C	C	C									
2											B	B	B	B	B									
3																								
4											B	B	B	B	B									
5																								
6											B	B	B		B									
7																								
8																								
9											B	B												
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
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22																								
23																								
24																								
25																								
26																								
27																								
28											B													
29																								
30																								
31												B	B	B										
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT																								
MED																								
UQ																								
LQ																								

MAY 1966 | FOF1 (0.01 MHZ)

IONOSPHERIC DATA

MAY 1966 | FOE (0.01 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1										C	B	C	C	C	C	C								
2										B	B	B	B	B	B	B								
3										B	B	B	B	B	B	B								
4										A	B	B	B	B	B	B								
5										A	B	B	A	A	A	A								
6										B	B	B	B	B	B	B								
7										A	A	A	A	B	B	A								
8										A	B	B	A	B	175	A								
9										B	B	B	B	B	B	B								
10										B	B	B	B	B	B	B								
11										A	A	180	190	190	175	130								
12										A	A	A	A	180	170	140								
13										B	A	180	A	B	B	B								
14										B	B	B	B	B	B	B								
15										B	A	A	B	B	A	B								
16										B	A	A	185	175	160	E								
17										A	A	140	A	B	B	B								
18										B	A	A	A	B	B	B								
19										B	B	A	A	180	170	B								
20										A	A	185	B	A	A	A								
21										130	140	A	A	A	A	B								
22										B	B	B	B	A	B	B								
23										A	A	A	175	A	140	B								
24										A	B	B	B	B	A	A								
25											A	A	A	A	140									
26											A	170	A	B	B									
27										150	160	180	C	A	A									
28											B	B	B	A	B									
29											A	A	A	B	B									
30											A	A	A	B	B									
31											B	B	B	B	B									
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT										2	2	6	3	4	7	3								
MED										140	150	180	185	180	170	130								
UQ												180	188	185	172	135								
LQ												170	180	178	150	E E 130								

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MAY 1966 | FOE (0.01 MHZ)

IONOSPHERIC DATA

MAY 1966 | FOES (0.1 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	J X 64	D	J X 42	J X 36	J X 38	J X 49	C	C	C	C	E B 27	C	C	C	C	C	C	C	J X 34	E B 14	B	B	J X 19	J X 34
2	J X 60	J X 41	J X 45	J X 57	J X 53	J X 37	J X 42	J X 52	J X 52	J X 38	B	B	B	B	B	E B 33	B	B	E B 29	B	J X 35	J X 32	J X 36	J X 35
3	J X 35	J X 51	J X 52	J X 45	J X 35	J X 31	J X 34	B	J X 35	J X 28	E B 21	E B 32	E B 37	E B 38	E B 24	E B 33	E B 32	J X 19	E B 13	E B 11	E	J X 24	J X 30	J X 34
4	J X 87	J X 42	B	J X 63	B	J X 52	J X 84	J X 62	B	J X 53	B	B	B	E B 43	B	B	E B 46	E B 33	E B 21	B	J X 19	J X 35	J X 37	J X 24
5	J X 42	J X 53	J X 43	J X 42	J X 52	J X 53	J X 44	J X 22	17	18	E B 32	E B 32	21	18	J X 20	21	E B 18	E B 33	E B 19	J X 12	J X 20	B	18	J X 18
6	37	36	J X 45	J X 32	B	J X 51	J X 60	J X 67	J X 79	B	B	B	B	E B 37	B	B	E B 31	E B 21	E B 17	E B 13	25	B	B	J X 52
7	J X 33	J X 64	J X 36	J X 47	J X 37	J X 42	J X 18	J X 48	E B 13	17	J X 17	J X 18	J X 18	E B 19	J X 42	19	24	J X 20	E B 13	E B 11	E	E	J X 32	J X 20
8	J X 60	J X 36	J X 39	J X 43	J X 37	J X 38	J X 43	J X 19	20	22	J X 46	E B 19	J X 45	J X 46	J X 45	J X 42	J X 36	E B 15	25	E	J X 42	J X 33	J X 37	J X 42
9	J X 64	J X 48	J X 38	J X 42	J X 42	J X 58	J X 65	J X 62	J X 60	B	B	E B 49	E B 36	E B 41	E B 22	J X 32	J X 30	E B 20	B	B	B	B	J X 27	B
10	J X 33	J X 32	J X 42	21	J X 43	J X 35	B	B	B	E B 20	J X 57	E B 25	E B 28	E B 22	E B 23	E B 16	J X 16	27	23	J X 42	J X 22	J X 34	J X 35	J X 32
11	J X 57	J X 52	J X 20	E B 16	E B 16	E B 19	J X 35	J X 35	J X 32	17	20	G	G	22	J X 32	J X 35	14	J X 37	E B 14	E B 14	J X 30	J X 38	E B 19	J X 37
12	J X 61	J X 45	J X 45	J X 53	J X 60	J X 51	49	J X 34	J X 52	J X 37	J X 33	J X 35	J X 37	J X 44	J X 33	J X 37	16	J X 19	J X 30	J X 34	22	J X 36	B	J X 36
13	J X 25	J X 48	J X 52	J X 37	J X 53	J X 32	32	J X 37	J X 46	B	J X 30	J X 42	J X 35	E B 43	E B 35	E B 51	E B 43	E B 35	B	26	25	23	J X 32	J X 37
14	B	J X 42	J X 34	J X 30	B	B	J X 32	J X 52	J X 51	E B 22	E B 19	26	E B 20	E B 23	E B 19	E B 16	E B 20	E B 15	B	J X 57	B	J X 20	B	B
15	27	J X 30	J X 23	J X 37	J X 42	J X 53	J X 41	J X 40	J X 32	E B 14	J X 22	21	E B 17	E B 18	22	E B 18	J X 52	J X 32	B	B	J X 32	J X 33	J X 47	B
16	J X 52	J X 50	J X 32	J X 39	J X 36	J X 38	J X 51	J X 32	J X 35	J X 51	J X 67	20	G	J X 21	J X 47	J X 33	J X 42	J X 34	J X 34	E	J X 38	J X 31	B	J X 32
17	J X 33	J X 36	J X 32	J X 50	J X 62	J X 55	J X 54	J X 42	J X 40	18	16	J X 33	18	E B 30	29	27	J X 55	J X 46	26	J X 51	B	J X 34	J X 37	J X 40
18	J X 53	J X 51	J X 42	J X 84	J X 43	J X 58	J X 52	J X 63	J X 50	J X 42	J X 47	J X 37	J X 51	J X 42	J X 23	J X 54	J X 32	J X 35	E B 13	E B 13	22	E	B	B
19	J X 22	J X 21	J X 99	J X 37	J X 52	J X 38	J X 29	J X 35	J X 34	J X 52	J X 45	J X 35	J X 50	J X 33	J X 36	E B 16	J X 36	J X 45	E	E B 12	J X 35	B	J X 21	J X 42
20	J X 62	J X 36	J X 62	J X 45	J X 37	J X 43	J X 37	J X 25	J X 21	18	J X 53	G	E B 22	J X 23	J X 32	J X 16	J X 20	E	J X 32	J X 32	J X 34	B	J X 32	J X 51
21	J X 84	J X 42	J X 38	J X 34	J X 25	25	J X 27	J X 32	J X 19	J X 22	J X 22	J X 13	J X 43	J X 43	21	E B 14	E B 13	E B 14	E B 16	B	J X 53	J X 51	B	J X 31
22	J X 36	J X 21	J X 32	J X 20	J X 46	J X 30	J X 35	J X 33	B	B	E B 28	E B 32	E B 21	19	E B 18	E B 16	16	J X 34	J X 32	J X 19	B	B	B	J X 76
23	J X 57	J X 23	J X 24	J X 42	J X 42	J X 20	J X 38	J X 47	J X 42	J X 32	18	J X 22	J X 83	J X 58	J X 33	E B 17	E B 15	J X 34	E B 14	J X 53	J X 42	J X 32	J X 33	J X 34
24	J X 42	J X 25	J X 60	J X 42	J X 64	J X 96	J X 118	J X 62	J X 37	17	E B 13	E B 15	E B 17	E B 18	22	J X 51	E B 14	43	E B 14	J X 53	E B 13	J X 30	J X 36	J X 54
25	20	J X 20	J X 19	J X 46	J X 19	J X 20	J X 40	J X 60	B	E	J X 22	J X 36	23	18	J X 34	J X 32	J X 53	J X 33	J X 42	E	B	23	J X 32	22
26	15	16	J X 37	J X 37	J X 23	J X 25	J X 20	J X 25	J X 22	J X 32	J X 41	J X 20	J X 42	B	E B 22	C	J X 34	J X 27	C	C	D	J X 63	J X 54	J X 44
27	C	J X 41	J X 97	J X 52	J X 47	J X 35	J X 39	J X 32	J X 20	J X 42	G	G 18	C	J X 23	22	J X 29	J X 43	C	20	J X 53	B	C	C	16
28	C	J X 45	C	C	J X 38	J X 46	J X 42	J X 36	J X 40	J X 31	B	E B 21	E B 18	J X 23	E B 24	E B 31	E B 17	E B 13	E B 14	B	E B 13	J X 38	B	B
29	J X 36	J X 41	J X 42	J X 28	J X 15	J X 30	J X 33	J X 31	J X 33	J X 33	J X 32	J X 52	18	E B 15	E B 13	J X 17	16	J X 33	E B 13	J X 16	B	B	B	J X 36
30	J X 36	J X 57	J X 34	J X 38	J X 44	J X 46	J X 21	J X 63	J X 21	J X 37	J X 38	J X 40	J X 26	E B 23	E B 29	E B 19	J X 31	E B 16	E B 13	B	B	J X 12	J X 37	J X 40
31	J X 44	J X 42	J X 47	J X 47	J X 55	J X 43	J X 60	B	B	J X 52	J X 33	B	B	B	B	E B 31	E B 23	J X 34	J X 45	J X 97	J X 53	J X 52	J X 65	J X 52
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	28	31	29	30	28	30	29	27	25	26	26	26	25	27	26	27	29	28	26	23	22	22	21	26
MED	J X 42	J X 42	J X 42	J X 42	J X 42	J X 40	J X 40	J X 37	J X 35	J X 30	J X 26	U 22	U 20	U 20	23	U 22	U 23	J X 28	E B 20	J X 16	J X 28	J X 32	J X 33	J X 36
UQ	J X 60	J X 49	J X 45	J X 47	J X 52	J X 51	J X 51	J X 56	J X 46	J X 38	J X 41	J X 35	J X 37	J X 32	J X 33	J X 32	J X 35	J X 34	J X 30	J X 46	J X 38	J X 36	J X 37	J X 42
LQ	J X 33	J X 34	J X 34	J X 36	J X 36	J X 31	J X 33	J X 32	J X 21	18	U 18	U 16	E G 18	19	E B 22	E B 17	15	E B 19	E B 14	E B 12	20	J X 23	J X 30	J X 32

MAY 1966 | FOES (0.1 MHZ)

The Radio Research Laboratories, Japan

IONOSPHERIC DATA

MAY 1966 | F-MIN (0.1 MHZ) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	25	15	16	16	23	21	C	C	C	C	27	C	C	C	C	C	C	C	E	14	B	B	16	14
2	18	E	15	23	22	33	18	17	17	31	B	B	B	B	B	33	B	B	29	B	11	E	12	23
3	18	27	24	21	19	15	15	B	20	17	21	32	37	38	24	33	32	15	13	11	E	E	E	E
4	19	19	B	22	B	20	19	19	B	19	B	B	B	43	B	B	46	33	21	B	20	22	E	24
5	16	18	34	19	18	23	17	14	13	15	32	32	17	15	16	14	18	33	19	16	19	B	11	E
6	14	32	22	18	B	19	34	21	53	B	B	B	B	37	B	B	31	21	17	13	E	B	B	36
7	E	15	14	14	19	16	11	14	13	E	14	16	16	19	17	15	19	14	13	11	E	E	E	14
8	14	24	14	13	14	13	14	13	11	13	16	19	18	18	15	13	12	15	13	E	E	14	E	13
9	E	16	14	15	18	16	18	15	16	B	B	49	36	41	22	16	16	20	B	B	B	B	20	B
10	19	14	14	14	14	17	B	B	B	20	26	25	28	22	23	16	13	14	13	12	E	17	16	E
11	20	20	16	16	16	19	13	15	11	13	14	15	15	14	13	E	11	E	14	14	E	14	19	E
12	16	E	E	16	20	13	14	E	17	13	13	E	13	13	14	E	E	E	E	E	13	19	B	E
13	E	E	12	28	17	21	14	E	18	B	18	13	15	43	35	51	43	35	B	23	15	21	14	19
14	B	23	18	19	B	B	19	15	18	22	19	22	20	23	19	16	20	15	B	21	B	E	B	B
15	16	E	13	E	14	11	13	18	22	14	14	16	17	18	19	18	16	15	B	B	E	14	16	B
16	E	15	15	E	E	E	12	12	13	13	16	16	15	13	13	E	E	E	E	E	13	13	B	E
17	11	E	11	16	18	13	13	16	14	13	13	13	14	30	18	16	12	E	12	E	B	E	E	13
18	14	18	13	18	16	16	16	15	19	16	13	13	16	25	18	16	11	E	13	13	13	E	B	B
19	13	E	E	E	15	13	E	13	E	15	18	13	13	12	13	16	12	12	E	12	16	B	E	14
20	13	13	22	20	12	E	E	E	E	13	11	16	22	18	15	12	12	E	E	11	13	B	E	13
21	E	12	13	13	12	E	12	E	E	E	E	13	13	14	13	14	13	14	16	B	38	20	B	29
22	E	14	E	E	E	E	12	E	B	B	28	32	21	15	18	16	15	13	11	12	B	B	B	18
23	12	E	E	E	13	E	E	E	E	E	13	13	13	13	E	17	15	13	14	13	12	E	16	16
24	E	E	E	E	E	14	E	E	E	E	13	15	17	18	15	15	14	11	14	13	13	18	17	19
25	E	E	E	E	13	E	19	21	B	E	11	13	12	E	E	11	E	E	E	E	B	16	E	13
26	E	12	E	E	E	E	13	E	E	E	E	E	E	B	22	C	12	21	C	C	E	E	16	13
27	C	16	16	11	14	13	13	11	E	E	E	E	C	12	12	14	13	C	11	11	B	C	C	E
28	C	12	C	C	11	13	13	12	13	13	B	21	18	15	24	31	17	13	14	B	13	14	B	B
29	E	E	13	13	13	14	E	E	E	E	E	11	15	15	13	12	13	E	13	13	B	B	B	E
30	E	E	12	14	14	11	E	E	E	E	E	12	E	23	29	19	17	16	13	B	B	E	14	12
31	14	14	18	21	15	19	23	B	B	32	20	B	B	B	B	31	23	14	16	E	E	E	16	15
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	29	31	30	30	31	31	30	30	30	30	31	30	29	30	30	29	30	29	30	30	31	30	30	31
MED	13	14	14	14	15	14	13	14	14	13	16	16	17	18	18	16	14	14	13	13	13	15	16	14
UQ	16	17	16	19	18	19	18	17	20	20	26	32	22	37	24	19	19	16	17	23	B	B	B	24
LQ	E	E	11	E	13	11	12	E	E	E	13	13	14	14	13	14	12	E	11	11	E	E	E	E E 12

MAY 1966 | F-MIN (0.1 MHZ)

IONOSPHERIC DATA

MAY 1966 | M(3000)F2 (0.01) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	A	A	A	A	A	A	C	C	C	C	F	C	C	C	C	C	C	C	F	F 350	B	B	R	A
2	A	A	A	A	A	B	A	A	A	R	B	B	B	B	B	F 305	B	B	R	B	A	R	A	A
3	A	A	A	A	A	A	A	B	A	F	F 315	F 320	F	F 340	R	F	F	F	R	F	F 295	A	A	A
4	A	F	B	A	B	A	A	A	B	A	B	B	B	F	B	B	R	R	R	B	R	A	A	R
5	A	A	B	A	A	A	A	R	F 305	F 305	F	F 320	335	345	F 350	F	F	R	F	F	B	B	R	R
6	A	B	A	A	B	A	B	A	B	B	B	B	B	F	B	B	F	F	F	F 265		B	B	B
7	R	A	A	A	A	A	F	F 285	F	F 275	310	335	320	340	F 315	340	F 350	F 340	F	F 285	F	F 290	F	A
8	A	A	A	A	A	F 260	F	F	F	F	F	R	R	R	F	R	F	F	F	F	A	A	A	A
9	A	A	A	A	A	A	A	A	A	B	B	R	R	F	R	F 340	F	R	B	B	B	B	R	B
10	A	F	F	F	F	F	B	B	B	F	R	F	F	F	F 325	R	F	F	R	A	A	A	A	A
11	A	R	R	F	R	F	A	A	F	F	F	R	R	F	F 350	F	F	R	F 335	F	F 325	320	F	A
12	A	A	A	A	B	F	F	R	A	F	F	F 305	F 330	315	R	355	F	R	F	F	A	A	B	A
13	R	A	A	B	A	B	F 260	F	A	B	F	330	F 310	R	F	R	R	R	B	B	A	A	A	A
14	B	B	A	A	B	B	A	A	A	F 295	F	R	R	R	F	F	F	F	B	B	B	A	B	B
15	A	F 310	F	F	F	F	A	A	B	F	F	F	F	F 340	345	F 345	F	F	B	B	A	A	A	B
16	A	A	F	A	A	A	F	A	A	F	F	F	R	R	F	F 340	F	F	F	F	R	R	B	A
17	A	F 365	A	A	A	A	A	A	F	F	F	F 310	315	F	F	F	F	F	F	A	B	A	A	A
18	A	A	A	A	A	A	A	A	A	A	F	F	F	F	F	F 325	F 305	F 280	F	F	295	F 335	B	B
19	A	R	330	A	F	R	F	R	F	F	F	F	F	R	R	F	F	F	F	F	A	B	A	A
20	A	A	A	A	A	A	A	F	F	F	F	F	R	F	R	F	F	F	F	F	A	B	A	A
21	A	A	A	A	F 320	F	R	R	R	F	F	F	R	R	R	R	R	F	J R 335	B	B	B	B	B
22	A	R	F	F	F 250	F	F	F	B	B	F	F	F	R	F	R	F	F	F	F 305	B	B	B	A
23	A	A	A	R	R	R	A	F	F	F	F	R	A	R	R	F	F	F	290	A	A	A	A	A
24	A	A	A	A	A	A	A	U F 280	F	F 290	F	R	F 330	F	F	F 355	F 325	F 320	F	F 340	R	B	B	B
25	A	R	F	A	R	R	A	A	B	F	F	R	J R 360	R	F 325	R	F	F	F 305	F	B	A	A	A
26	R	R	A	A	F	R	R	F	R	F	F	F	F	B	F	C	R	R	C	C	A	A	A	A
27	C	A	A	A	A	A	A	A	F	F	F 290	285	C	340	320	335	F 310	C	A	A	B	C	C	A
28	C	A	C	C	A	F	A	F	F	F	B	F	F	R	F	F	F 325	F 310	335	B	335	A	B	B
29	A	A	A	A	F 250	F	F	F	F	F	F	F	F	F	F	F	F 290	F	345	B	B	B	B	A
30	R	A	A	A	A	A	250	265	F	F	R	R	R	R	F	R	F	F	350	B	B	A	A	A
31	A	A	A	A	A	A	A	B	B	A	R	B	B	B	B	F	F	R	A	A	A	A	A	A
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT		2	1		3	1	2	3	1	4	3	7	7	6	7	9	6	4	7	4	5	3		
MED		F 338	330		F 250	F 260	F 255	F 280	F 305	F 292	F 310	F 320	330	340	F 325	F 340	F 318	F 315	335	F 322	295	F 320		
UQ					F 285			F 282		F 300	312	325	332	340	F 348	F 345	F 325	F 330	340	345	F 325	328		
LQ					F 250			272		F 282	300	F 308	318	340	F 322	F 335	F 305	F 295	320	F 295	295	305		

The Radio Research Laboratories, Japan

MAY 1966 | M(3000)F2 (0.01)

IONOSPHERIC DATA

MAY 1966 | H'F2 (KM) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S, Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1												C	C	C	C									
2											B	B	B	B	B									
3																								
4											B	B	B	280	B									
5																								
6											B	B	B		B									
7																								
8																								
9											B	B												
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28											B													
29																								
30																								
31												B	B	B										

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT														1										
MED														280										
UQ																								
LQ																								

The Radio Research Laboratories, Japan

MAY 1966 | H'F2 (KM)

IONOSPHERIC DATA

MAY 1966 | H'F (KM) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4' S. Long. 39°35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	B	A	A	A	B	B	C	C	C	C	B	C	C	C	C	C	C	C	240	250	B	B	A	A
2	A	A	A	B	B	B	A	A	A	B	B	B	B	B	B	240	B	B	240	B	A	270	A	B
3	A	B	B	B	A	A	A	B	A	260	240	240	230	220	200	220	200	220	230	210	E E 290	A	A	A
4	A	260	B	A	B	A	A	A	B	A	B	B	B	B	B	B	B 260	230	250	B	B	B	A	B
5	A	A	B	A	A	B	A	A	305	275	295	260	210	200	200	200	200	R	270	250	B	B	A	A
6	A	B	B	B	B	B	B	B	B	B	B	B	B	250	B	B	220	225	210	225	E E 270	B	B	B
7	265	A	A	A	A	A	A	E B 300	300	270	210	210	210	205	195	200	205	205	210	210	250	270	270	A
8	A	A	A	A	A	A 280	A 370	365	290	260	230	240	205	205	200	200	200	200	225	260	A	A	A	A
9	A	A	A	290	340	A	A	A	A	B	B	B	220	225	200	200	200	200	B	B	B	B	B	B
10	A	320	A 300	305	B 310	B 380	B	B	B	250	205	210	200	200	205	200	210	230	290	290	A	A	A	A
11	A	490	400	400	430	400	A	A	B 300	260	205	200	200	200	200	200	200	200	220	265	270	E B 290	E B 300	A
12	A	A	A	A	B	A	380	305	A	290	230	205	205	230	205	200	200	200	200	200	A	B	B	A
13	290	A	A	B	A	B	A	340	A	B	230	220	240	270	210	245	E B 295	E B 300	B	B	A	B	A	B
14	B	B	A	A	B	B	A	A	A	E B 305	250	205	200	200	200	200	210	250	B	B	B	A	B	B
15	A	305	300	320	330	A	A	A	B	270	230	205	200	200	200	200	200	B	B	B	A	A	A	B
16	280	B	B	A	A	A	400	A	A	250	A	205	200	200	200	200	200	200	210	230	B	B	B	A
17	A	A	A	A	A	A	A	A	A	260	250	225	225	215	205	205	200	200	210	210	B	A	A	A
18	A	A	A	A	A	A	A	A	A	A	270	265	240	250	225	215	205	240	B	B	B	260	B	B
19	A	330	290	A	330	A 340	300	300	300	320	290	215	215	200	210	200	200	200	215	235	A	B	A	A
20	A	A	A	B	A	A	A	390	310	290	220	225	240	230	210	200	200	240	200	250	B	B	A	A
21	A	A	A	A	A	390	320	370	375	275	250	200	200	220	200	200	200	230	B	B	B	B	B	B
22	A	385	340	260	A	290	A	A	B	B	B 240	225	205	200	200	200	200	225	200	B	B	B	B	B
23	A	A	A	290	B 290	300	295	270	290	290	230	200	200	200	200	200	225	250	B	A	A	A	A	A
24	A	A	A	A	A	A	A	E E 300	285	250	240	200	200	200	200	200	270	200	220	B	B	B	B	B
25	A	400	355	A	370	360	A	A	B	270	220	200	200	200	200	200	200	205	200	205	B	A	A	A
26	380	340	300	A	330	350	300	A	320	300	240	225	260	B	B 350	C	280	290	C	C	A	A	A	200
27	C	A	A	A	A	A	A	A	E A 400	360	280	260	C	220	240	230	230	C	A	A	B	C	C	A
28	C	A	C	C	A	370	A	350	A 330	300	B	250	210	205	230	240	260	250	B	B	B	A	B	B
29	A	A	A	A	A	A	390	325	300	280	230	205	205	200	200	210	225	250	B 260	B	B	B	B	A
30	280	A	A	A	A	A	340	320	290	250	230	200	215	200	250	200	210	205	235	B	B	A	A	A
31	A	A	A 260	B	A	B	B	B	B	B	A	B	B	B	B	290	290	300	A	A	A	A	A	A
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	5	8	8	6	8	10	9	12	14	22	23	25	25	26	26	27	29	26	20	14	4	4	2	1
MED	280	335	300	298	330	355	340	322	300	271	230	210	205	202	200	200	202	224	220	232	260	268	278	200
UQ	290	392	348	320	355	380	380	358	315	290	250	225	220	220	210	212	225	245	240	250	275	275		
LQ	280	312	295	290	320	300	300	300	290	260	230	205	200	200	200	200	200	200	210	210	255	265		

MAY 1966 | H'F (KM)

IONOSPHERIC DATA

MAY 1966 | H'ES (KM) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	120	110	105	110	125	100	C	C	C	C	B	C	C	C	C	C	C	C	100	B	B	B	170	105
2	130	105	105	100	100	100	100	100	100	115	B	B	B	B	B	B	B	B	B	B	105	100	105	120
3	100	100	100	100	105	105	100	B	100	105	B	B	B	B	B	B	B	120	B	B	E	105	105	105
4	100	120	B	100	B	100	100	100	B	100	B	B	B	B	B	B	B	B	B	B	140	110	100	130
5	105	105	100	100	100	100	100	105	105	130	B	B	105	100	100	100	B	B	B	150	140	B	130	110
6	105	120	100	105	B	100	100	100	180	B	B	B	B	B	B	B	B	B	B	B	100	B	B	105
7	105	100	100	100	100	100	105	115	B	105	100	100	100	B	100	100	100	100	B	B	E	E	100	150
8	110	105	100	110	110	110	100	100	100	100	120	B	100	120	100	100	100	B	150	E	100	125	105	109
9	100	105	120	100	180	100	100	100	100	B	B	B	B	B	B	100	100	B	B	B	B	B	105	B
10	100	100	150	130	150	100	B	B	B	B	105	B	B	B	B	B	120	105	100	100	100	100	110	100
11	100	100	100	B	B	B	100	100	100	140	125	G	G	165	100	100	100	100	B	B	100	105	B	105
12	105	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	B	100
13	105	100	120	100	100	100	100	100	100	B	100	100	100	B	B	B	B	B	B	100	100	100	100	100
14	B	100	100	100	B	B	100	100	100	B	B	105	B	B	B	B	B	B	B	100	B	100	B	B
15	100	100	100	120	140	100	100	120	160	B	115	100	B	B	105	B	100	100	B	B	100	100	100	B
16	100	100	100	140	120	130	140	100	130	110	100	150	G	100	100	100	100	100	100	E	105	100	B	100
17	105	100	100	115	105	100	100	100	100	115	105	130	160	B	105	140	100	100	120	100	B	100	105	100
18	110	100	100	105	100	100	105	100	100	100	100	100	100	100	100	100	100	100	B	B	100	E	B	B
19	170	100	150	100	100	100	100	100	105	110	105	105	100	100	130	B	100	100	E	B	100	B	150	100
20	100	100	105	110	100	100	100	105	100	105	100	G	B	100	100	130	100	E	100	100	100	B	110	100
21	100	100	100	100	120	100	115	100	120	150	110	110	100	140	150	B	B	B	B	B	100	100	B	110
22	100	150	100	100	135	130	100	100	B	B	B	B	B	100	B	B	100	100	100	100	B	B	B	100
23	100	100	110	130	100	100	100	100	100	100	130	100	100	100	100	B	B	100	B	100	110	100	100	100
24	100	135	100	100	100	120	100	100	100	100	B	B	B	B	100	100	B	100	B	100	B	170	100	100
25	150	100	100	100	100	160	180	105	B	E	105	110	100	135	100	100	100	100	100	E	B	100	160	140
26	150	145	100	100	125	120	160	115	120	100	100	100	100	B	B	C	100	140	C	C	100	100	100	100
27	C	100	100	100	100	100	100	100	105	135	G	G	C	100	100	100	100	C	100	100	B	C	C	140
28	C	100	C	C	100	100	100	100	100	110	B	B	B	100	B	B	B	B	B	B	B	100	B	B
29	100	100	100	100	120	150	100	150	105	100	100	100	130	B	B	100	100	100	B	100	B	B	B	100
30	100	100	100	100	100	100	120	105	150	100	100	120	100	B	B	B	140	B	B	B	B	130	100	100
31	100	100	105	100	100	100	100	B	B	100	100	B	B	B	B	B	B	100	110	100	100	100	100	100
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	28	31	29	29	27	29	29	27	24	22	19	15	14	14	16	14	18	17	11	13	18	20	20	26
MED	100	100	100	100	100	100	100	100	100	105	100	100	100	100	100	100	100	100	100	100	100	100	105	100
UQ	108	105	105	110	120	105	100	105	112	115	108	110	100	120	102	100	100	100	105	100	105	105	110	110
LQ	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

MAY 1966 | H'ES (KM)

IONOSPHERIC DATA

JUN. 1966 | FOF2 (0.1 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	A	A	A	A	A	A	A	A	B	B	B	F 35	41	36	F 39	F 26	F 20	16	A	A	A	A	A
2	A	A	22	F 19	F	F	F	19	F	J F 37	U F 43	J F 57	R	R	J F 61	J F 56	B	F	R	F	A	A	A	A
3	A	A	A	A	A	A	F	J F 36	A	A	J F 42	R	R	R	J R 60	F	J F 35	J F 37	20	15	B	R	A	A
4	A	A	A	A	A	A	B	A	A	F	F 43	J F 49	51	53	F	F	29	F	C	A	R 15	F	F	A
5	A	A	A	A	A	A	A	A	F	B	F	F	F	F	R	F	F	J F 24	17	A	B	A	A	A
6	F 24	R	A	J F 22	F	A	A	A	A	U F 31	F	F	51	59	J F 49	J F 45	F	J F 23	F	F	19	F	B	F 14
7	A	R	R	A	J A 34	J A 37	A	A	J F 37	33	F	J F 46	F 51	F 60	R	F	J F 42	F	B	B	B	A	R	R
8	41	A	A	A	A	A	A	F	J F 37	J F 35	J F 37	F	F	B	B	B	B	B	B	B	B	B	B	B
9	A	A	A	A	R	B	B	A	B	B	F	F	F	J F 52	J F 49	F	F	F	A	16	A	12	A	A
10	A	A	A	A	A	F	U F 22	U F 22	F 21	F	F	F	J R 58	R	R	J F 38	F 26	F 15	U F 24	F	A	F	A	R
11	A	A	A	A	J R 27	F	F	A	F	F	F	J F 46	R	R	R	F	F 21	F	F 18	F	F	A	A	A
12	F 25	A	A	A	A	J A 34	J A 35	A	A	A	F	J F 52	R	R	R	F	B	27	B	B	B	A	A	A
13	A	A	A	B	A	A	F	A	A	A	B	B	F	F	F	F	F	J F 27	A	A	B	B	B	B
14	A	R	A	A	A	A	A	A	F	R	A	J R 49	R	F	R	F	B	B	B	A	A	A	A	A
15	A	A	A	A	A	A	F 27	S	J F 34	F	J A 37	J R 46	J R 51	R	F	R	F	A	18	A	A	B	B	A
16	A	A	A	A	A	A	A	A	A	F	F	J R 41	J A 55	J A 54	R	F	A	A	A	A	R	B	A	A
17	A	R	A	A	A	A	F 16	F 22	26	F	34	43	J R 53	J R 61	J R 46	R	F	F	F	A	R	B	A	A
18	A	A	A	A	F	R	R	A	A	J R 39	J R 45	J R 45	J F 49	J R 65	R	F 26	U F 24	F 24	R	A	A	A	R	F
19	A	R	A	F 20	F	A	A	A	A	R	R	R	J F 51	R	R	F 31	F 25	A 26	R	A	B	A	R	R
20	A	J A 35	J A 36	J A 35	J A 41	J A 49	R	R	R	B	U R 31	F	B	F	F	A	A	20	J R 17	B	16	B	A	R
21	J R 33	A	A	A	A	A	A	F 31	F	U F 33	F 41	44	J R 50	J R 62	J F 47	F 26	B	A	F 16	15	A	B	B	B
22	A	A	A	F	F 20	F 21	F 24	F 24	J F 24	U F 27	F	F	J R 52	R	R	F	F 17	R	B	B	B	A	B	B
23	A	A	A	B	A	A	A	J R 38	R	30	J R 35	J R 43	R	51	J F 50	F	F	B	R	A	A	A	A	A
24	A	A	A	A	A	F	R	J F 48	U F 26	37	41	59	57	54	38	34	R	25	23	F 20	A	A	A	A
25	B	B	B	B	B	A	B	B	B	B	B	J R 57	B	B	B	B	R	B	A	B	A	A	A	A
26	A	A	A	A	R	F	J F 28	F 27	U F 28	J F 43	F 50	66	J F 53	J R 53	F	A	J F 37	J F 25	R	B	A	A	A	B
27	A	A	A	F	F	F 26	F 27	J F 23	F	J F 42	J R 50	J F 41	C	C	C	F	R	F	A	A	B	A	A	A
28	R	F	F	J F 27	J F 27	J F 36	R	R	A	B	F	F	J F 57	R	J F 46	U R 35	F	F	A	A	A	A	A	R
29	20	A	A	A	A	J F 33	J F 35	A	J F 31	J F 35	J R 45	J F 45	J R 55	R	R	A	A	J R 29	A	A	A	A	R	F
30	J F 25	A	A	A	A	A	A	A	A	J F 26	F 36	U R 56	R	U R 55	J F 60	F 43	F	F	A	A	B	B	A	A
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	6	1	2	5	5	7	8	10	9	13	15	18	16	13	11	10	10	13	9	4	3	1		1
MED	25	J A 35	29	J F 22	J 27	J F 34	F 27	F 26	J F 28	J F 35	41	J 46	J 52	54	J F 49	F 36	F 26	F 25	18	16	16	12		F 14
UQ	33			J F 27	J A 34	J A 36	J F 32	J F 36	J F 34	J F 37	F 44	J 56	J 55	J R 60	J F 55	J F 43	J F 35	J 27	20	18	18			
LQ	F 24			F 20	J F 27	F 30	F 23	F 22	F 26	F 31	36	J 44	51	53	J 46	F 31	F 24	F 23	17	15	16			

JUN. 1966 | FOF2 (0.1 MHZ)

IONOSPHERIC DATA

JUN. 1966 | FOF1 (0.01 MHZ) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1												B												
2																								
3																								
4																								
5																								
6																								
7																								
8														B										
9																								
10																								
11																								
12																								
13												B												
14																								
15																								
16																								
17																								
18																								
19																								
20													B											
21																								
22																								
23																								
24																								
25													B	B										
26																								
27													C	C										
28																								
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT																								
MED																								
UQ																								
LQ																								

The Radio Research Laboratories, Japan

JUN. 1966 | FOF1 (0.01 MHZ)

IONOSPHERIC DATA

JUN. 1966 | FOE (0.01 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1											B	B	A	170	B									
2											A	140	A	A	B									
3											B	A	A	A	A									
4											140	A	A	160	140									
5											B	A	A	165	A									
6											A	140	A	A	A									
7											A	A	A	A	B									
8											A	A	A	B	B									
9											150	B	B	B	B									
10											A	A	A	A	A									
11											A	A	A	A	145									
12											A	A	A	A	A									
13											B	B	B	B	B									
14											A	A	B	B	B									
15											B	A	R	R	A									
16											A	A	A	A	A									
17											A	A	A	A	A	E								
18										140	A	A	A	A	A	A								
19											E	A	A	A	A									
20											B	B	B	B	B									
21											A 140	A	A	A	B									
22											E	A	A	A	E									
23										E	A	A	A	B	B									
24											B	140	B	B	B									
25											B	B	B	B	B									
26											A	A	B	A	B									
27											140	B	C	C	C									
28											B	B	B	A	A									
29											A	A	A	A	A									
30											A	B	B	B	A									
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT										2	6	3		3	3	1								
MED										E E 140	140	140		165	140	E								
UQ											140	140		168	142									
LQ											E	140		162	E E 140									

JUN. 1966 | FOE (0.01 MHZ)

IONOSPHERIC DATA

JUN. 1966 | FOES (0.1 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S, Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	JX 48	JX 45	JX 56	JX 40	JX 54	JX 45	JX 45	JX 52	B	B	B	JX 37	JX 43	JX 63	EB 19	EB 12	EB 13	14	18	JX 18	JX 24	20	JX 34
2	JX 53	JX 37	JX 38	JX 53	JX 18	JX 37	JX 34	JX 32	JX 40	JX 37	16	JX 47	JX 45	JX 32	EB 16	EB 22	B	JX 32	JX 20	JX 25	JX 36	JX 42	JX 42	JX 37
3	JX 39	JX 40	JX 59	JX 48	JX 49	JX 37	JX 52	JX 26	JX 54	JX 36	JX 30	JX 21	JX 35	JX 33	15	12	27	13	EB 13	EB 12	B	EB 14	JX 36	JX 34
4	JX 31	JX 37	JX 52	JX 48	JX 32	JX 58	JX 44	JX 42	JX 35	16	JX 20	16	JX 32	JX 62	15	E	JX 20	JX 32	C	JX 35	JX 33	JX 15	JX 17	JX 40
5	JX 42	JX 21	JX 37	JX 41	JX 55	JX 54	JX 55	JX 36	JX 22	38	JX 28	JX 21	JX 34	JX 23	JX 34	JX 33	JX 32	16	EB 13	17	20	JX 22	JX 23	JX 31
6	JX 36	JX 34	JX 36	JX 32	JX 20	JX 55	JX 45	JX 42	JX 48	JX 41	JX 19	JX 46	JX 30	JX 34	JX 32	E	JX 29	E	E	E	JX 40	E	B	E
7	JX 22	JX 22	JX 28	JX 41	JX 52	JX 44	JX 53	JX 42	JX 22	JX 36	JX 15	JX 22	16	16	EB 20	EB 23	EB 25	JX 36	B	B	B	JX 37	JX 34	JX 32
8	JX 42	JX 34	JX 50	JX 111	JX 54	JX 46	JX 39	JX 54	JX 37	JX 35	JX 32	JX 20	JX 33	B	B	JX 96	B	B	B	JX 45	JX 42	JX 31	JX 38	JX 54
9	JX 21	JX 38	JX 38	JX 31	JX 34	B	JX 34	JX 20	B	B	17	EB 16	EB 18	JX 52	JX 22	JX 19	JX 34	35	JX 31	JX 55	JX 65	JX 35	JX 24	JX 20
10	JX 53	JX 36	JX 39	JX 53	JX 44	JX 21	JX 54	27	JX 40	JX 40	JX 22	JX 19	JX 54	JX 42	JX 25	JX 36	JX 22	JX 54	JX 35	JX 64	JX 35	JX 56	JX 25	13
11	JX 20	JX 21	JX 34	JX 20	E	JX 33	JX 53	JX 51	JX 53	JX 37	39	JX 54	JX 37	JX 35	17	E	JX 32	JX 34	JX 32	JX 18	JX 41	JX 20	JX 38	JX 33
12	JX 33	JX 70	JX 63	JX 25	JX 32	JX 62	JX 42	JX 40	JX 60	JX 55	51	JX 57	JX 30	JX 32	JX 37	JX 33	B	EB 23	B	B	B	JX 17	JX 35	JX 22
13	JX 36	JX 33	JX 52	B	JX 52	JX 32	JX 50	JX 52	JX 47	JX 42	B	B	EB 29	EB 22	EB 16	EB 14	JX 41	JX 39	JX 54	JX 34	B	B	24	JX 62
14	JX 20	13	JX 27	JX 43	JX 51	JX 35	JX 52	JX 49	JX 33	21	JX 52	JX 32	EB 32	EB 32	EB 23	JX 52	B	26	B	JX 38	JX 38	21	26	JX 35
15	JX 32	JX 60	JX 55	JX 53	JX 54	JX 53	JX 60	21	JX 37	JX 33	JX 60	JX 19	16	G	JX 52	JX 33	20	JX 34	26	JX 27	JX 38	B	B	JA 42
16	JX 52	JX 52	JX 51	JX 57	JX 53	JX 60	JX 59	JX 46	JX 31	EB 12	JX 20	JX 18	JX 198	JX 32	JX 33	JX 33	JX 65	JX 53	JX 32	JX 45	14	B	JX 19	JX 26
17	JX 26	JX 21	JX 42	JX 46	JX 27	JX 21	13	JX 21	23	16	27	14	14	JX 62	JX 42	E	16	JX 34	JX 24	JX 22	11	B	JX 17	JX 21
18	JX 20	JX 58	JX 32	JX 24	JX 26	JX 42	JX 23	JX 33	JX 44	JX 32	JX 33	JX 23	JX 18	JX 32	JX 27	JX 50	JX 32	JX 12	JX 41	JX 21	JX 38	JX 21	12	JX 36
19	JX 21	JX 20	JX 26	JX 42	JX 58	JX 50	JX 54	JX 77	JX 59	JX 36	JX 20	JX 23	JX 30	JX 52	JX 20	JX 45	JX 53	JX 74	JX 18	JX 19	B	JX 32	16	JX 26
20	JX 40	JX 36	JX 62	JX 45	JX 50	JX 53	JX 32	JX 25	JX 32	B	EB 23	EB 16	B	EB 32	EB 19	JX 87	JX 38	JX 43	EB 16	B	E	B	JX 26	JX 26
21	JX 30	JX 52	JX 101	JX 50	JX 38	JX 34	JX 46	JX 36	JX 22	JX 32	JX 50	JX 42	16	JX 35	EB 13	JX 50	B	18	JX 43	JX 46	JX 38	B	B	B
22	JX 28	JX 17	JX 54	JX 42	JX 64	JX 25	JX 34	JX 42	26	JX 53	17	JX 20	14	14	E	JX 41	EB 13	16	B	B	B	16	B	B
23	JX 51	JX 24	JX 24	B	JX 42	JX 44	JX 42	JX 31	JX 20	17	JX 22	14	JX 41	EB 31	EB 24	EB 17	EB 16	JX 50	EB 15	JX 40	JX 40	JX 102	JX 70	JX 86
24	JX 89	JX 53	JX 63	JX 52	JX 40	JX 51	16	JX 29	JX 50	JX 40	JX 45	JX 22	EB 14	EB 14	JX 55	EB 16	EB 21	JX 38	18	EB 11	JX 24	JX 42	JX 74	JX 55
25	JX 96	JX 42	JX 52	B	B	JX 57	JX 42	B	B	B	B	EB 46	B	B	B	B	EB 33	B	JX 45	B	JX 37	JX 46	JX 54	D
26	JX 54	JX 52	JX 52	JX 37	JX 36	JX 30	JX 23	17	JX 44	JX 42	JX 52	JX 20	JX 32	JX 32	EB 15	JX 35	JX 52	EB 12	EB 13	JX 53	JX 32	JX 37	JX 36	B
27	JX 37	JX 25	JX 33	JX 30	JX 33	JX 18	JX 63	E	17	E	17	EB 16	C	C	C	EB 18	EB 18	12	JX 14	JX 40	B	JX 20	JX 18	17
28	19	JX 17	JX 34	JX 24	JX 54	JX 42	JX 25	JX 22	22	B	EB 18	EB 18	22	JX 43	JX 37	JX 25	EB 15	EB 14	JX 51	23	JX 33	JX 22	JX 19	JX 20
29	JX 26	JX 38	JX 47	JX 48	JX 44	JX 36	18	JX 52	E	EB 12	14	JX 44	JX 42	JX 36	JX 21	JX 98	JX 55	JX 36	JX 43	JX 47	JX 22	JX 22	JX 24	JX 20
30	JX 33	JX 50	JX 52	JX 51	JX 53	JX 45	JX 52	JX 45	JX 39	JX 35	JX 26	EB 27	EB 25	EB 42	23	JX 40	24	JX 49	D	JX 57	B	B	JX 22	JX 25
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	29	30	30	27	29	29	30	29	28	25	27	28	27	27	27	29	25	28	24	25	22	23	26	27
MED	JX 33	JX 36	JX 46	JX 43	JX 44	JX 44	JX 44	JX 36	JX 37	JX 36	JX 23	JX 20	JX 30	JX 32	JX 22	JX 33	JX 26	JX 33	JX 25	JX 34	JX 36	JX 22	JX 24	JX 32
UQ	JX 42	JX 50	JX 52	JX 52	JX 53	JX 53	JX 53	JX 45	JX 48	JX 40	JX 36	JX 32	JX 36	JX 42	JX 34	JX 41	JX 34	JX 38	JX 42	JX 45	JX 38	JX 37	JX 36	JX 38
LQ	JX 26	JX 22	JX 34	JX 30	JX 32	JX 34	JX 34	JX 26	JX 22	21	18	18	17	32	EB 16	EE 17	EB 20	14	EE 14	JX 19	JX 22	JX 20	JX 19	JX 22

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JUN. 1966 | FOES (0.1 MHZ)

IONOSPHERIC DATA

JUN. 1966 | F-MIN (0.1 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	15	17	18	16	19	16	19	17	B	B	B	16	11	17	19	12	13	13	14	12	11	14	14
2	15	E	E	E	E	E	E	E	E	E	E	E	17	14	16	22	B	16	E	E	11	E	E	E
3	E	E	14	11	13	E	E	E	36	22	16	14	11	E	13	11	E	E	13	12	B	14	E	E
4	E	E	11	14	13	E	34	18	13	12	12	12	13	E	11	E	11	E	C	14	E	E	E	E
5	E	E	14	18	12	18	18	14	21	34	16	14	13	12	E	E	11	E	13	14	16	12	E	E
6	E	E	E	E	E	15	19	17	14	13	13	E	E	12	E	E	E	E	E	E	E	E	B	E
7	E	E	E	E	E	E	33	33	20	14	13	11	11	11	20	23	25	15	B	B	B	15	E	E
8	E	E	E	E	13	13	E	E	E	E	E	E	E	B	B	34	B	B	B	17	16	16	17	19
9	E	E	E	11	12	B	17	15	B	B	13	16	18	19	20	14	15	E	E	E	E	E	E	E
10	E	E	E	E	E	E	11	E	E	E	E	E	E	E	E	E	E	E	E	E	14	E	E	E
11	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	11	E	E	E	E	E
12	E	E	E	E	E	E	E	E	15	16	14	13	11	E	E	E	B	23	B	B	B	E	E	E
13	E	14	13	B	15	13	E	17	E	13	B	B	29	22	16	14	E	E	E	16	B	B	19	33
14	E	E	E	E	15	19	14	13	E	E	12	E	32	32	23	16	B	22	B	14	14	E	E	E
15	E	11	14	15	14	15	E	E	E	E	14	E	E	E	E	E	E	14	13	14	15	B	B	E
16	11	12	15	18	14	21	17	E	E	12	E	E	E	E	E	E	13	13	13	E	E	B	E	E
17	E	E	E	18	E	11	E	E	E	13	12	12	12	E	E	E	E	E	E	E	E	B	E	E
18	E	E	E	E	E	E	E	14	12	11	E	E	11	E	E	E	11	11	12	13	13	E	E	E
19	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	18	15	B	16	E	E
20	18	E	E	E	E	E	E	E	E	B	23	16	B	32	19	16	16	15	16	B	E	B	E	E
21	E	E	E	E	11	11	14	E	E	E	E	E	11	12	13	13	B	13	E	13	16	B	B	B
22	E	12	E	E	E	E	E	E	E	E	E	E	E	12	E	E	13	13	B	B	B	E	B	B
23	15	E	E	B	13	E	E	E	E	E	E	E	E	31	24	17	16	23	15	13	E	E	14	E
24	13	12	12	16	15	13	13	E	E	E	15	11	14	14	14	16	21	16	13	11	E	14	11	E
25	24	32	34	B	B	19	38	B	B	B	B	46	B	B	B	B	33	B	E	B	E	15	13	19
26	19	15	19	14	E	E	E	E	12	E	E	14	15	13	15	14	11	12	13	30	E	E	E	B
27	17	16	17	E	11	E	E	E	E	E	E	16	C	C	C	18	18	E	17	20	B	18	15	12
28	17	E	E	E	E	E	E	E	15	B	18	18	15	14	13	14	15	14	15	14	E	19	E	E
29	E	12	11	18	14	11	E	E	E	12	E	13	11	E	E	E	13	E	E	13	14	E	E	E
30	E	E	14	16	13	16	16	13	13	E	13	27	25	42	14	13	E	13	15	13	B	B	E	E
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	29	30	30	30	30	30	30	30	30	30	30	30	29	29	29	30	30	30	29	30	30	30	30	30
MED	E	E	E	E E 11	12	E E 11	E	E	E	12	12	12	11	12	13	13	13	13	13	14	14	13	E	E
UQ	13	12	14	18	14	15	16	14	15	16	15	16	16	19	17	16	21	15	16	17	B	19	14	12
LQ	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	11	E	E	E	E

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IONOSPHERIC DATA

JUN. 1966 | M(3000)F2 (0.01) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	A	A	A	A	A	A	A	A	B	B	B	F 315	305	320	F 320	F 310	F 350	345	A	A	A	A	A
2	A	A	275	F 265	F	F	F	265	F	F	F	F	R	R	F	F	B	F	R	F	A	A	A	A
3	A	A	A	A	A	A	F	F	A	A	F	R	R	R	R	F	F	F	290	365	B	R	A	A
4	A	A	A	A	A	A	B	A	A	F	F 300	F	335	350	F	F	275	F	C	A	R 335	F	F	A
5	A	A	A	A	A	A	A	A	F	B	F	F	F	F	R	F	F	F	300	A	B	A	A	A
6	F 335	R	A	F	F	A	A	A	A	U F 280	F	F	315	340	F	F	F	F	F	F	290	F	B	F 355
7	A	R	R	A	A	A	A	A	F	275	F	F	F 295	F 315	R	F	F	F	B	B	B	A	R	R
8	305	A	A	A	A	A	A	F	F	F	F	F	F	B	B	B	B	B	B	B	B	B	B	B
9	A	A	A	A	R	B	B	A	B	B	F	F	F	F	F	F	F	F	A	345	A	320	A	A
10	A	A	A	A	A	F	U F 270	U F 270	F 285	F	F	F	R	R	R	F	F 345	F 335	U F 310	F	A	F	A	R
11	A	A	A	A	R	F	F	A	F	F	F	F	R	R	R	F	F 335	F	F 335	F	F	A	A	A
12	F 320	A	A	A	A	A	A	A	A	A	F	F	R	R	R	F	B	315	B	B	B	A	A	A
13	A	A	A	B	A	A	F	A	A	A	B	B	F	F	F	F	F	F	A	A	B	B	B	B
14	A	R	A	A	A	A	A	A	F	R	A	R	R	F	R	F	B	B	B	A	A	A	A	A
15	A	A	A	A	A	A	F 280	S	F	F	A	R	R	R	F	R	F	A	335	A	A	B	B	A
16	A	A	A	A	A	A	A	A	A	F	F	R	A	A	R	F	A	A	A	A	R	B	A	A
17	A	R	A	A	A	A	F 310	F 275	250	F	300	300	R	R	R	R	F	F	F	A	R	B	A	A
18	A	A	A	A	F	R	R	A	A	A	R	R	F	R	R	F 345	U F 335	F 335	R	A	A	A	R	F
19	A	R	A	F 300	F	A	A	A	A	R	R	R	F	R	R	F 355	F 360	A 325	R	A	B	A	R	R
20	A	A	A	A	A	A	R	R	R	B	U R 285	F	B	F	F	A	A	350	R	B	315	B	A	R
21	R	A	A	A	A	A	A	F 265	F	U F 275	F 295	295	R	R	F	F 345	B	A	F 315	335	A	B	B	B
22	A	A	A	F	F 275	F 250	F 265	F 270	F	U F 285	F	F	R	R	R	F	F 310	R	B	B	B	A	B	B
23	A	A	A	B	A	A	A	R	R	315	F	R	R	325	F	F	F	B	R	A	A	A	A	A
24	A	A	A	A	A	F	R	F	U F 250	270	295	340	315	335	330	325	R	320	325	F 340	A	A	A	A
25	B	B	B	B	B	A	B	B	B	B	B	R	B	B	B	B	R	B	A	B	A	A	A	A
26	A	A	A	A	R	F	F	F 280	U F 280	F	F 340	325	F	R	F	A	F	F	R	B	A	A	A	B
27	A	A	A	F	F	F 250	F 320	F	F	F	R	F	C	C	C	F	R	F	A	A	B	A	A	A
28	R	F	F	F	F	F	R	R	A	B	F	F	F	R	F	U R 355	F	F	A	A	A	A	A	R
29	300	A	A	A	A	F	F	A	F	F	R	F	R	R	R	A	A	R	A	A	A	A	R	F
30	F	A	A	A	A	A	A	A	A	F	F 265	U R 340	R	U R 310	F	F 350	F	F	A	A	B	B	A	A
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	4		1	2	1	2	5	6	4	6	7	5	5	7	2	7	7	7	8	4	3	1		1
MED	312		275	F 282	F 275	F 250	F 280	F 270	F 265	F 278	F 295	F 325	315	325	325	F 345	F 335	F 335	320	342	315	320		F 355
UQ	F 328						F 310	F 275	F 282	U F 285	F 300	340	315	338		F 352	F 340	F 342	335	355	325			
LQ	302						F 270	F 265	250	275	290	300	315	312		F 335	F 310	322	305	338	302			

JUN. 1966 | M(3000)F2 (0.01)

IONOSPHERIC DATA

JUN. 1966 | H'F2 (KM) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1												B												
2																								
3																								
4																								
5																								
6																								
7																								
8														B										
9																								
10																								
11																								
12																								
13												B												
14																								
15																								
16																								
17																								
18																								
19																								
20													B											
21																								
22																								
23																								
24																								
25													B	B										
26																								
27													C	C										
28																								
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT																								
MED																								
UQ																								
LQ																								

The Radio Research Laboratories, Japan

JUN. 1966 | H'F2 (KM)

IONOSPHERIC DATA

JUN. 1966 | H'F (KM) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	A	A	A	A	A	A	A	A	B	B	B	280	220	230	210	205	230	260	B	A	A	A	A
2	A	A	A	A	320	325	A	A	290	290	205	200	205	205	205	205	B	230	230	290	A	A	A	A
3	A	A	A	A	A	A	340	300	A	A	280	215	205	200	200	190	230	215	230	230	B	290	A	A
4	A	A	A	A	A	A	B	A	A	300	230	215	205	200	205	195	250	200	C	A	E E 260	E E 280	250	205
5	A	A	A	A	A	A	A	A	300	B	280	215	200	205	200	190	210	220	B	A	B	A	A	215
6	250	205	260	300	340	A	A	A	A	350	270	210	205	205	200	200	200	210	215	290	225	270	B	250
7	B 300	A 320	300	340	330	300	B	B	320	A	250	215	230	210	220	250	250	210	B	B	B	A	410	395
8	225	A	A	A	A	A	A	350	300	295	220	225	215	B	B	B	B	B	B	B	B	B	B	B
9	A	A	A	A	350	B	B	B	B	B	250	205	200	200	210	190	230	A	A	A	A	E E 300	A	A
10	A	A	A	330	A	A 320	330	330	A 300	A	200	200	200	200	200	190	230	A 280	A 205	A 205	A	205	A	250
11	A	A	A	A	290	290	340	A	300	A 295	250	215	200	200	200	200	280	A	230	E E 280	250	A	A	A
12	330	A	A	A	A	360	340	A	A	A	295	240	200	200	200	205	B	B	B	B	B	A	A	A
13	A	A	A	B	B	A	A	B	A	A	B	B	240	205	205	195	200	250	250	A	B	B	B	B
14	A	A	A	A	A	A	A	A	310	275	260	240	225	290	220	220	B	B	B	A	A	A	A	A
15	A	A	A	A	A	A	A	290	240	240	260	200	205	200	200	200	200	A	E B 260	A	A	B	B	210
16	A	A	A	A	A	A	A	A	A	285	270	215	200	200	200	200	230	A	A	A	A	B	A	A
17	A	260	A	A	A	A	325	A 390	330	320	230	210	210	200	200	190	220	240	200	E E 260	275	B	A	A
18	A	A	A	350	E A 370	320	340	A	A	300	200	200	200	200	200	225	230	250	250	A	A	A	R	A
19	A	300	295	300	E A 320	330	A	290	A	270	200	200	200	200	200	200	225	290	290	A	B	A	A	370
20	A	A 350	300	300	340	330	300	280	290	B	E B 305	205	B	220	205	A 230	A	E B 275	290	B	E E 290	B	A	A
21	250	300	A	A	A	A	A	E A 370	A 330	270	200	210	215	200	200	220	B	A	E E 290	E B 300	A	B	B	B
22	A	A	230	300	A 340	330	300	285	250	270	220	200	190	200	190	200	230	220	B	B	B	240	B	B
23	A	A	A	B	A	A	A	A 350	290	250	230	225	200	210	220	215	270	B	255	210	A	A	A	A
24	A	A	A	A	A	370	320	295	320	260	230	200	200	200	200	220	B 230	A 290	250	210	A	A	A	A
25	B	B	B	B	B	A	B	B	B	B	B	270	B	B	B	B	260	B	A	B	A	A	A	A
26	A	A	A	A 430	E A 400	300	290	270	295	220	200	190	200	200	225	A	205	280	260	B	A	A	A	B
27	A	A	A	E A 400	E A 390	310	280	215	220	220	200	240	C	C	C	200	220	A 270	A	A	B	A	A	A
28	A	300	280	290	315	330	310	330	A	B	260	210	200	200	200	205	E B 300	B 280	A	A	A	A	A	300
29	A	A	A	A	A	360	380	H 310	H 290	H 290	240	230	210	205	195	200	200	205	A	A	A 230	A	395	320
30	A 300	A	A	A	A	A	A	A	A	A	290	270	215	285	205	200	190	280	A	A	B	B	A	A
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	6	7	6	10	12	14	13	15	17	18	27	28	27	27	27	27	24	20	16	9	6	6	3	9
MED	275	300	288	308	329	328	325	298	300	280	235	212	205	200	200	200	229	240	245	U 235	U 242	U 248	395	250
UQ	300	310	300	345	350	330	340	335	310	295	262	225	212	205	205	212	235	280	259	E E 290	E E 275	E E 290	402	320
LQ	250	280	260	300	320	310	300	288	290	260	212	200	200	200	200	198	205	218	230	210	230	240	322	215

JUN. 1966 | H'F (KM)

IONOSPHERIC DATA

JUN. 1966 | H'ES (KM) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	100	100	100	100	100	100	105	100	B	B	B	180	110	100	B	B	B	120	105	170	100	120	105
2	105	100	100	100	105	120	105	100	150	105	100	100	100	100	B	B	B	125	110	110	105	100	100	100
3	105	100	100	100	105	100	100	160	100	105	105	100	100	100	180	100	100	150	B	B	B	B	100	100
4	100	100	100	100	100	100	110	100	100	140	140	110	100	100	160	E	100	100	C	100	100	100	130	100
5	100	125	105	105	100	100	100	100	100	125	100	100	100	100	100	100	100	125	B	115	100	100	100	100
6	120	100	110	100	105	100	100	100	100	100	100	100	100	100	100	E	100	E	E	E	100	E	B	E
7	100	115	100	100	105	120	100	100	100	100	105	100	140	140	B	B	B	100	B	B	B	130	110	105
8	100	105	100	100	100	100	100	100	100	100	100	100	100	B	B	100	B	B	B	130	100	100	100	100
9	130	110	110	100	100	B	100	100	B	B	130	B	B	100	100	100	100	100	100	100	100	100	150	100
10	100	100	105	180	100	100	100	120	100	100	100	100	100	100	100	100	100	100	100	100	100	100	150	140
11	100	100	100	120	E	100	100	100	100	100	100	100	100	100	100	E	100	100	100	100	100	100	105	125
12	120	100	100	100	100	100	100	100	100	100	100	100	130	100	100	100	B	B	B	B	B	130	100	115
13	100	100	100	B	100	100	100	100	100	100	B	B	B	B	B	B	120	100	100	100	B	B	100	100
14	110	105	100	100	100	100	100	100	100	100	100	110	B	B	B	100	B	100	B	110	120	110	150	100
15	105	100	100	100	100	100	100	130	100	100	100	100	130	G	100	100	125	100	105	100	100	B	B	100
16	100	100	110	100	100	100	100	100	100	B	160	130	100	100	100	120	100	100	110	110	160	B	130	110
17	140	130	100	100	100	105	110	100	105	105	130	130	115	100	100	E	130	100	100	100	110	B	160	100
18	120	100	110	110	105	110	120	125	100	100	100	100	120	100	100	100	100	100	100	100	100	105	160	130
19	120	180	150	100	105	115	100	100	100	100	140	100	100	100	100	100	100	100	100	100	B	100	170	130
20	120	110	100	100	100	100	100	100	100	B	B	B	B	B	B	105	105	106	B	B	E	B	110	115
21	130	110	110	105	100	105	100	100	100	100	110	160	100	100	B	125	B	120	100	100	150	B	B	B
22	140	110	100	110	105	100	100	100	100	110	100	100	100	110	E	120	B	105	B	B	B	120	B	B
23	100	100	100	B	100	100	100	100	100	120	100	110	150	B	B	B	B	100	B	100	100	100	100	100
24	100	100	100	100	100	100	105	100	150	150	100	105	B	B	100	B	B	100	130	B	100	100	100	100
25	100	125	130	B	B	100	100	B	B	B	B	B	B	B	B	B	B	B	100	B	100	100	100	100
26	105	100	100	100	100	100	100	100	100	100	120	110	100	100	B	100	100	B	B	100	100	100	100	B
27	100	100	100	100	100	100	100	E	100	E	130	B	C	C	C	B	B	100	100	120	B	100	100	100
28	100	150	150	100	100	100	100	100	120	B	B	B	120	100	140	105	B	B	105	110	120	120	150	130
29	120	100	100	100	100	100	130	100	E	B	150	130	120	100	120	100	100	105	100	100	100	100	100	100
30	100	100	100	100	100	100	100	100	100	100	100	B	B	B	160	100	130	120	105	110	B	B	100	105
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	29	30	30	27	28	29	30	28	27	22	25	22	22	20	18	18	17	23	18	22	21	21	26	26
MED	105	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	102	100
UQ	120	110	110	100	102	100	100	100	100	105	130	110	120	100	120	105	105	106	105	110	110	105	150	115
LQ	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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IONOSPHERIC DATA

JUL. 1966 | FOF2 (0.1 MHZ) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	A	A	A	B	B	B	A	F 28	B	R	B	B	J F 57	F	F	B	R	F 23	B	B	B	B	A	A
2	A	A	B	A	A	A	J F 35	J F 37	J F 32	J F 27	F 39	F 46	F	R	R	R	F	A	A	A	A	B	A	A
3	A	A	A	A	A	27	A	B	A	A	J F 42	F 49	F	U F 54	R	F 47	A	A	A	A	A	A	A	A
4	A	A	J A 56	A	J F 24	J A 26	35	R	A	A	F	F	R	R	U F 71	R	F	F	F	R	A	A	A	A
5	A	A	B	A	A	A	A	B	A	A	A	J R 29	B	R	F	R	F 26	F	R	A	B	B	B	A
6	A	A	A	J F 21	F	A	A	A	J F 38	J F 28	B	R	R	46	R	R	25	B	B	B	B	B	B	B
7	B	R	A	A	J A 32	A	A	A	J F 30	F	R 34	F	U R 48	U R 47	48	F	F	R	B	15	A	A	B	B
8	A	A	A	A	A	A	R	A	F	A	A	B	B	B	B	B	B	B	B	B	A	A	A	A
9	B	B	B	A	B	A	B	A	B	B	B	B	B	B	B	B	B	J R 20	A	A	A	A	A	A
10	A	A	A	B	B	B	B	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A
11	A	A	A	A	A	B	A	A	B	B	B	B	B	R	F 46	F 36	J R 28	B	B	B	B	A	B	A
12	A	A	A	B	B	B	B	B	B	A	B	A	B	B	B	B	J R 40	B	B	B	B	B	B	A
13	B	A	A	A	A	A	A	A	A	J F 33	J F 40	R	R	R	A	R	B	B	B	B	A	B	B	B
14	B	A	A	A	A	B	A	B	B	B	F	J F 50	F 45	R	44	R	B	B	B	B	B	B	B	B
15	A	B	B	A	B	R	R	B	B	R	F 35	48	R	58	R	43	R	A	A	A	B	B	B	A
16	A	R	A	A	R	J R 35	J F 35	A	F	U A 35	A	R	R	B	B	B	B	R	A	A	B	B	A	A
17	A	A	A	A	A	A	B	B	J F 23	A	R	F	41	B	46	R	F	F	R	B	A	A	A	A
18	A	A	A	A	A	A	F 15	F	J R 23	B	F	J F 45	R	R	R	J F 39	F	22	21	R	A	B	R	B
19	A	A	A	A	A	22	A	A	B	A	F	F	R	U R 56	R	F	R	F 56	R	R	B	B	A	A
20	B	A	A	A	A	A	F 31	R	J F 40	J R 35	A	F	J R 60	J R 58	J F 53	44	J F 40	R	F	A	A	A	F	20
21	A	A	A	A	A	A	B	A	A	F	F	F	J F 58	F 56	J F 56	J F 50	J F 46	J F 48	U R 43	B	A	A	A	A
22	B	B	B	B	B	A	A	F	F 24	B	B	F 40	F 46	F 58	F 55	J F 55	F	B	R	B	B	B	A	A
23	B	B	A	A	A	A	F	A	A	B	F	J F 57	F 54	R 51	F	R	F	U F 36	R	A	A	B	B	A
24	A	A	A	A	A	A	B	B	A	F	F 39	F 43	54	55	66	59	F 38	F	F	A	A	B	B	A
25	F	A	A	A	18	U F 18	F	F 21	F 17	F	F	F	J R 61	R	R	R	J F 36	F	R	F 25	A	A	A	A
26	A	A	A	A	A	A	A	F 28	A	J F 36	F 46	J F 55	F 65	J F 62	F	J F 56	J F 44	F	J F 37	F	A	B	R	A
27	A	A	A	A	A	A	A	A	J F 40	A	B	F 46	F 53	J F 62	F 58	J F 59	J F 52	J F 45	F 50	B	A	A	A	A
28	A	A	A	A	A	A	A	A	A	A	B	B	J F 55	B	J R 54	B	J F 50	F	B	B	B	B	17	A
29	A	A	A	A	A	A	A	U F 33	A	F 35	U R 53	53	U R 62	R 66	66	J F 59	46	B	30	A	A	A	A	C
30	A	A	A	J F 41	J R 47	R	R	F	B	B	U F 56	J F 61	J F 62	F	F	F	36	F	R	25	B	B	B	A
31	A	R	J F 26	A	27	F 25	A	31	U F 34	J F 37	J F 50	F 56	66	71	78	R	J F 58	F	J F 42	21	B	B	A	A
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT			2	2	5	6	5	6	10	8	10	14	16	14	13	11	14	7	6	4			1	1
MED			J 41	J F 31	J 27	26	F 35	F 30	J F 31	J F 35	F 41	F 48	F 56	57	55	J F 50	J F 40	F 36	40	23			17	20
UQ					J 32	J 27	J F 35	F 33	J F 38	J 36	F 50	J F 55	J 62	62	F 66	J F 58	J F 46	F 46	F 43	25				
LQ					24	F 22	F 31	F 28	J F 23	J F 30	F 39	F 45	F 50	54	48	F 44	F 36	22	30	18				

JUL. 1966 | FOF2 (0.1 MHZ)

IONOSPHERIC DATA

JUL. 1966 | FOF1 (0.01 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1												B												
2																								
3																								
4																								
5													B											
6																								
7																								
8												B	B	B										
9												B	B	B										
10												B	B	B										
11												B	B											
12													B	B										
13																								
14																								
15																								
16														B										
17														B										
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28												B	L	B										
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT																								
MED																								
UQ																								
LQ																								

JUL. 1966 | FOF1 (0.01 MHZ)

IONOSPHERIC DATA

JUL. 1966 | FOE (0.01 MHZ) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S, Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1											B	B	B	B	B									
2											A	A	B	B	A									
3											B	B	A	A	A									
4											B	A	A	B	A									
5											B	B	B	B	B									
6											B	B	B	B	B									
7											A	B	B	B	B									
8											B	B	B	B	B									
9											B	B	B	B	B									
10											B	B	B	B	B									
11											B	B	B	B	B									
12											B	B	B	B	B									
13											A	A	A	A	A									
14											B	B	B	B	B									
15											B	A	A	A	A									
16											A	A	B	B	B									
17											B	A	B	B	B									
18											A	B	B	B	B									
19											B	B	B	B	B									
20											A	B	A	160	A									
21											B	B	B	B	B									
22											B	B	B	B	B									
23											B	B	B	B	B									
24											B	B	B	A	B									
25											A	A	A	A	A									
26											A	A	A	A	B									
27											B	A	A	B	B									
28											B	B	A	B	B									
29											A	A	A 170	A	A									
30											B	A	B	B	B									
31											A	A	B	B	B									
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT													1	1										
MED													A 170	160										
UQ																								
LQ																								

JUL. 1966 | FOE (0.01 MHZ)

IONOSPHERIC DATA

JUL. 1966 | FOES (0.1 MHZ) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	J X 36	J X 85	J X 64	J X 44	J X 53	J X 47	J X 40	J X 35	B	J X 22	B	B	E B 21	E B 22	22	B	E B 22	E B 15	B	B	B	B	J X 30	J X 32
2	J X 36	J X 44	J X 65	J X 41	J X 38	J X 36	J X 34	J X 37	J X 22	J X 17	J X 33	J X 32	J X 30	J X 52	24	J X 24	32	J X 27	22	J X 77	J X 29	B	J X 35	J X 24
3	J X 22	J X 35	J X 52	J X 52	J X 37	J X 25	J X 47	B	J X 45	J X 35	J X 24	E B 16	16	27	J X 34	J X 37	J X 102	J X 35	J X 46	J X 32	J X 57	J X 87	J X 52	J X 26
4	J X 32	J X 26	J X 36	J X 43	J X 34	J X 22	J X 26	J X 26	E B 46	J X 53	J X 39	J X 24	J X 52	17	25	26	J X 43	J X 43	23	J X 23	J X 42	J X 44	J X 42	J X 50
5	J X 41	J X 62	B	J X 56	J X 47	J X 57	J X 53	J X 37	J X 27	J X 36	J X 31	E B 24	B	J X 30	22	18	21	J X 35	12	J X 39	B	B	B	J X 57
6	J X 42	J X 41	J X 44	J X 43	J X 50	J X 64	J X 40	J X 22	J X 22	E B 11	B	E B 23	E B 24	E B 22	E B 33	E B 17	E B 20	B	B	B	B	B	B	B
7	43	J X 22	J X 33	J X 49	J X 44	J X 33	J X 46	J X 37	16	J X 34	21	E B 16	E B 18	E B 23	E B 19	E B 16	18	E B 15	B	E B 13	J X 54	J X 24	B	B
8	21	J X 52	J X 41	J X 44	J X 52	J X 25	J X 42	J X 52	J X 35	J X 57	39	B	B	B	B	B	B	B	B	B	22	J X 42	J X 44	J X 42
9	J X 87	B	J X 53	J X 42	B	J X 48	J X 50	J X 57	B	J X 58	B	B	B	B	B	B	B	E B 21	J X 44	J X 40	J X 32	23	J X 37	35
10	J X 36	J X 31	J X 39	J X 52	B	J X 38	J X 50	J X 49	J X 68	B	B	B	B	B	B	B	B	B	B	B	B	B	J X 32	J X 41
11	J X 50	J X 58	J X 46	J X 40	J X 42	J X 44	J X 32	J X 49	J X 42	B	B	B	B	E B 25	E B 24	E B 18	E B 20	B	B	B	B	17	B	18
12	21	J X 36	J X 59	J X 51	B	J X 60	B	B	B	J X 42	B	J X 48	B	B	B	B	E B 35	B	B	B	B	B	J X 40	J X 40
13	J X 32	33	J X 32	J X 25	J X 36	J X 53	J X 51	J X 48	J X 47	J X 20	J X 22	J X 46	J X 35	J X 35	J X 52	E B 19	B	B	B	B	J X 44	B	B	B
14	J X 48	21	J X 27	J X 20	23	B	J X 31	B	B	B	E B 23	E B 19	E B 32	E B 31	E B 34	E B 23	B	B	B	B	B	B	B	B
15	J X 37	B	B	J X 14	B	J X 17	18	B	B	E B 15	E B 14	J X 17	J X 31	J X 20	J X 44	J X 26	E B 15	J X 47	25	J X 21	B	B	B	J X 26
16	J X 44	J X 26	J X 38	J X 25	J X 20	J X 20	J X 22	J X 42	J X 51	J X 43	J X 27	J X 50	E B 30	B	B	B	B	18	17	16	B	B	J X 23	J X 30
17	J X 37	J X 74	J X 58	J X 52	J X 51	J X 55	B	B	J X 28	J X 39	E B 21	J X 44	E B 28	B	E B 35	E B 26	E B 15	E B 15	E B 16	B	J X 21	J X 31	J X 38	J X 35
18	J X 54	J X 37	J X 24	21	J X 22	J X 23	16	E B 12	J X 24	B	J X 42	E B 21	E B 20	E B 17	E B 15	E B 14	E B 15	E B 14	E B 14	E B 14	17	B	J X 22	B
19	J X 29	J X 43	J X 62	J X 25	J X 25	J X 32	J X 39	J X 22	B	J X 33	E B 16	E B 15	E B 43	E B 32	E B 33	E B 22	E B 18	J X 23	E B 13	E B 14	B	B	15	J X 15
20	B	J X 22	J X 30	J X 36	J X 48	J X 33	J X 24	J X 22	J X 15	J X 22	J X 47	J X 28	J X 25	J X 22	J X 21	J X 20	14	13	J X 31	J X 54	J X 42	J X 26	J X 25	J X 40
21	J X 25	J X 38	J X 53	J X 50	J X 65	J X 45	B	J X 54	J X 48	J X 63	J X 39	E B 28	E B 28	E B 25	E B 22	17	E B 13	E B 14	E B 31	B	J X 36	E B 13	J X 47	J X 75
22	23	B	J X 52	J X 50	B	J X 52	J X 47	J X 21	17	B	B	E B 22	E B 24	E B 21	J X 21	J X 20	21	B	E B 22	B	B	B	J X 32	J X 45
23	J X 17	J X 25	J X 35	J X 30	J X 40	J X 42	J X 42	J X 19	J X 22	J X 24	25	23	J X 36	E B 43	E B 42	E B 30	E B 30	E B 21	E B 24	J X 23	J X 20	B	B	J X 54
24	J X 17	J X 16	J X 24	J X 35	J X 48	J X 46	J X 34	J X 43	J X 39	E B 14	E B 17	E B 16	E B 20	21	19	18	J X 46	E B 13	E B 12	J X 36	J X 25	B	B	J X 47
25	J X 30	J X 32	J X 22	J X 45	J X 32	J X 42	J X 24	J X 42	J X 53	J X 33	J X 42	D	J X 44	J X 36	J X 22	J X 18	J X 21	J X 19	18	J X 52	J X 28	J X 34	J X 40	J X 42
26	J X 62	J X 34	J X 29	J X 25	J X 42	J X 24	J X 40	J X 37	J X 36	J X 23	18	J X 23	18	J X 21	E B 16	E B 15	J X 32	J X 22	J X 26	21	22	B	E B 16	J X 42
27	J X 42	J X 42	J X 34	J X 44	J X 50	J X 60	J X 45	J X 43	J X 42	J X 35	B	J X 21	J X 39	E B 38	E B 22	E B 23	J X 21	J X 25	E B 29	J X 28	J X 21	J X 31	J X 37	J X 38
28	J X 48	J X 35	J X 34	J X 38	J X 30	J X 50	J X 25	J X 54	J X 54	J X 50	B	B	J X 21	B	E B 46	B	E B 17	E B 16	B	B	B	B	21	J X 64
29	J X 42	J X 79	J X 42	J X 65	J X 62	J X 45	J X 60	J X 41	J X 57	J X 40	18	J X 61	J X 43	20	J X 22	J X 42	J X 75	D	J X 110	J X 75	J X 52	J X 52	J X 61	C
30	J X 25	J X 27	J X 33	J X 26	31	J X 22	J X 26	J X 65	28	B	J X 30	J X 39	E B 32	E B 25	E B 24	E B 42	E B 25	E B 24	E B 23	E B 21	B	B	B	J X 37
31	J X 26	J X 21	J X 51	J X 46	J X 40	J X 34	J X 47	J X 46	J X 36	J X 23	J X 19	21	E B 23	E B 32	E B 53	J X 30	E B 18	E B 18	J X 23	E B 14	B	B	J X 17	E B 14
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	30	28	29	31	26	30	28	26	25	25	22	25	25	24	26	24	25	23	21	19	17	12	21	25
MED	J X 36	J X 35	J X 39	J X 43	J X 41	J X 42	J X 40	J X 42	J X 36	J X 34	J X 24	22	E B 28	E B 25	E B 24	U 19	E B 21	U 17	U 20	J X 23	J X 29	J X 31	J X 35	J X 40
UQ	J X 43	J X 44	J X 52	J X 50	J X 50	J X 50	J X 47	J X 49	J X 47	J X 42	J X 39	J X 39	J X 33	E B 32	E B 34	25	U 26	J X 26	J X 27	J X 40	J X 42	J X 43	J X 40	J X 45
LQ	J X 25	J X 26	J X 33	J X 28	J X 32	J X 25	J X 26	J X 26	J X 24	J X 22	18	E B 21	E B 21	U 19	20	18	E B 18	E B 15	E B 17	17	J X 22	24	J X 23	J X 30

The Radio Research Laboratories, Japan

IONOSPHERIC DATA

JUL. 1966 | F-MIN (0.1 MHZ) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	12	15	14	20	29	21	15	E	B	17	B	B	21	22	17	B	22	15	B	B	B	B	14	E
2	E	12	34	14	14	14	13	12	E	E	E	14	17	21	15	15	16	13	14	11	13	B	E	E
3	E	E	14	13	E	E	13	B	16	14	13	16	E	E	E	E	14	14	14	14	17	16	15	11
4	E	E	E	E	E	E	12	12	16	13	14	14	14	17	13	17	11	14	15	E	16	13	E	18
5	11	14	B	17	17	17	16	23	16	16	18	24	B	23	16	14	13	11	E	E	B	B	B	14
6	11	E	11	13	13	15	16	12	12	11	B	22	24	22	33	17	20	B	B	B	B	B	B	B
7	36	13	E	E	13	17	13	11	E	12	14	16	18	23	19	16	14	15	B	13	15	14	B	B
8	14	11	11	15	16	18	16	14	12	11	34	B	B	B	B	B	B	B	B	B	17	18	17	18
9	23	B	31	14	B	15	36	21	B	33	B	B	B	B	B	B	B	21	18	11	13	14	13	13
10	13	14	16	22	B	22	44	24	19	B	B	B	B	B	B	B	B	B	B	B	B	B	11	E
11	E	17	18	18	19	33	18	17	27	B	B	B	B	25	24	18	20	B	B	B	B	12	B	12
12	13	E	18	30	B	33	B	B	B	18	B	28	B	B	B	B	35	B	B	B	B	B	31	18
13	22	15	11	16	14	14	18	13	E	E	E	E	12	14	20	19	B	B	B	B	16	B	B	B
14	42	E	E	12	14	B	18	B	B	B	23	19	32	31	34	23	B	B	B	B	B	B	B	B
15	E	B	B	12	B	11	14	B	B	15	14	13	14	14	15	16	15	14	16	13	B	B	B	E
16	E	13	E	E	E	E	E	21	15	13	16	18	30	B	B	B	B	16	15	14	B	B	E	E
17	E	11	12	12	14	17	B	B	14	16	21	14	28	B	35	26	15	15	16	B	16	E	11	11
18	14	13	15	13	14	11	11	12	14	B	15	21	20	17	15	14	15	14	14	14	15	B	14	B
19	E	11	E	E	E	E	E	16	B	20	16	15	43	32	33	22	18	14	13	14	B	B	12	E
20	B	13	E	E	11	E	E	E	E	E	14	17	16	14	13	E	11	E	E	E	E	11	E	E
21	E	E	16	13	18	16	B	15	17	15	17	28	28	25	22	13	13	14	31	B	E	13	E	18
22	17	B	16	23	B	19	19	13	13	B	B	22	24	21	17	17	18	B	22	B	B	B	E	E
23	13	14	17	12	13	13	E	12	19	21	15	16	18	43	42	30	30	21	24	18	E	B	B	E
24	16	15	E	13	14	14	20	38	16	14	17	16	20	16	17	13	14	13	12	13	15	B	B	E
25	E	E	14	E	E	E	11	E	14	E	14	13	16	15	16	14	18	15	15	13	11	11	11	E
26	E	E	E	E	14	16	16	13	E	E	13	14	14	14	16	15	E	13	13	16	15	B	16	E
27	E	E	19	18	12	12	12	E	12	14	B	15	15	38	22	23	18	E	29	27	15	E	E	E
28	E	E	11	13	12	15	16	15	16	21	B	B	15	B	46	B	17	16	B	B	B	B	E	E
29	E	13	13	E	13	15	18	13	11	E	14	13	14	17	15	18	23	27	18	20	15	14	13	C
30	E	E	E	E	E	E	E	11	25	B	17	15	32	25	24	42	25	24	23	21	B	B	B	15
31	13	13	E	14	13	12	15	13	12	13	13	13	23	32	53	18	18	18	14	14	B	B	13	14
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30
MED	11	13	13	13	14	15	16	13	16	15	17	16	21	23	22	18	18	15	18	18	17	B	14	11
UQ	14	14	16	16	18	17	18	22	22	21	B	26	32	40	38	36	28	D 27	B	B	B	B	B	18
LQ	E	E	E	E	12	11	12	12	12	12	14	14	16	17	16	15	14	14	14	13	15	14	E 11	E

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JUL. 1966 | F-MIN (0.1 MHZ)

IONOSPHERIC DATA

JUL. 1966 | M(3000)F2 (0.01) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	A	A	A	B	B	B	A	F 285	B	R	B	B	F	F	F	B	R	F 305	B	B	B	B	A	A
2	A	A	B	A	A	A	F	F	F	F	F 270	F 305	F	R	R	R	F	A	A	A	A	B	A	A
3	A	A	A	A	A	265	A	B	A	A	F	F 315	F	U F 315	R	F 340	A	A	A	A	A	A	A	A
4	A	A	A	A	F	A	255	R	A	A	F	F	R	R	U F 295	R	F	F	F	R	A	A	A	A
5	A	A	B	A	A	A	A	B	A	A	A	R	B	R	F	R	F 290	F	R	A	B	B	B	A
6	A	A	A	F	F	A	A	A	F	F	B	R	R	325	R	R	300	B	B	B	B	B	B	B
7	B	R	A	A	A	A	A	A	F	F	R 325	F	U R 345	U R 325	345	F	F	R	B	345	A	A	B	B
8	A	A	A	A	A	A	R	A	F	A	A	B	B	B	B	B	B	B	B	B	A	A	A	A
9	B	B	B	A	B	A	B	A	B	B	B	B	B	B	B	B	B	R	A	A	A	A	A	A
10	A	A	A	B	B	B	B	A	A	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A
11	A	A	A	A	A	B	A	A	B	B	B	B	B	R	F 285	F 285	R	B	B	B	B	A	B	A
12	A	A	A	B	B	B	B	B	B	A	B	A	B	B	B	B	R	B	B	B	B	B	B	A
13	B	A	A	A	A	A	A	A	A	F	J F 325	R	R	R	A	R	B	B	B	B	A	B	B	B
14	B	A	A	A	A	B	A	B	B	B	F	F	F 310	R	335	R	B	B	B	B	B	B	B	B
15	A	B	B	A	B	R	R	B	B	R	F 315	315	R	330	R	300	R	A	A	A	B	B	B	A
16	A	R	A	A	R	R	F	A	F	U A 290	A	R	R	B	B	B	B	R	A	A	B	B	A	A
17	A	A	A	A	A	A	B	B	F	A	R	F	295	B	320	R	F	F	R	B	A	A	A	A
18	A	A	A	A	A	A	F	F	R	B	F	F	R	R	R	F	F	295	310	R	A	B	R	B
19	A	A	A	A	A	225	A	A	B	A	F	F	R	U R 320	R	F	R	F 315	R	R	B	B	A	A
20	B	A	A	A	A	A	F 290	R	F	J R 320	A	F	R	R	F	320	F	R	F	A	A	A	F	310
21	A	A	A	A	A	A	B	A	A	F	F	F	F	F 315	F	F	F	F	U R 265	B	A	A	A	A
22	B	B	B	B	B	A	A	F	F 230	B	B	F 315	F 335	F 310	F 310	F	F	B	R	B	B	B	A	A
23	B	B	A	A	A	A	F	A	A	B	F	F	F 295	R 275	F	R	F	U F 280	R	A	A	B	B	A
24	A	A	A	A	A	A	B	B	A	F	F 285	F 300	315	290	320	320	F 290	F	F	A	A	B	B	A
25	F	A	A	A	A	F	F	A	F	F	F	F	R	R	R	R	F	F	R	F 330	A	A	A	A
26	A	A	A	A	A	A	A	F 250	A	F	F 295	F	F 285	F	F	F	F	F	F	F	A	B	R	A
27	A	A	A	A	A	A	A	A	F	A	B	F 285	F 270	F	F 295	F	F	F	F 310	B	A	A	A	A
28	A	A	A	A	A	A	A	A	A	A	B	B	F	B	R	B	F	F	B	B	B	B	A	A
29	A	A	A	A	A	A	A	U F 275	A	F 270	U R 340	300	U R 305	R 320	320	F	305	B	350	A	A	A	A	C
30	A	A	A	F	R	R	R	F	B	B	U F 285	F	J F 290	F	F	F	315	F	R	290	B	B	B	A
31	A	R	F	A	250	F 220	A	250	U F 270	F	F	F 295	295	295	295	R	F	F	F	285	B	B	A	A
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT					1	3	2	4	2	3	8	8	11	11	10	5	5	4	4	4				1
MED					250	225	272	F 262	F 250	290	F 305	F 302	F 295	315	315	320	300	F 300	310	310				310
UQ						245		F 280		305	325	F 315	312	322	320	320	305	F 310	330	338				
LQ						222		250		280	F 285	F 298	F 292	302	F 295	300	F 290	288	288	288				

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JUL. 1966 | M(3000)F2 (0.01)

IONOSPHERIC DATA

JUL. 1966 | H'F2 (KM) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69° 00.4' S. Long. 39° 35.4' E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1												B												
2																								
3																								
4																								
5													B											
6																								
7																								
8												B	B	B										
9												B	B	B										
10												B	B											
11												B	B											
12													B	B										
13																								
14																								
15																								
16														B										
17														B										
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28												B	300	B										
29																								
30																								
31																								
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT													1											
MED													300											
UQ																								
LQ																								

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JUL. 1966 | H'F2 (KM)

IONOSPHERIC DATA

JUL. 1966 | H'F (KM) | 45° E Mean Time (G. M. T. + 3h)

Station SYOWA BASE Lat. 69°00.4'S. Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Day \ Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	A	A	A	B	B	B	A	325	B	A	B	B	205	215	200	B	270	B 290	B	B	B	B	A	A
2	A	A	B	A	A	A	320	290	280	A 300	255	220	210	210	200	205	B	A	A	A	A	B	A	A
3	A	A	A	A	A	A 350	A	B	A	A	230	190	195	195	190	200	210	230	A	A	A	A	A	A
4	A	A	A 300	A	A	A 370	370	A	A	A 300	280	230	215	205	205	205	225	285	250	305	A	A	A	A
5	A	A	B	A	A	A	A	B	A	A	A	290	B	225	315	310	A 310	270	220	220	B	B	B	A
6	200	A	A	A	A	A	A	A	290	290	B	240	240	230	230	230	B	B	B	B	B	B	B	B
7	B	A	A	A	300	A	A	A	290	250	255	200	200	230	200	230	220	210	B	E B 270	A	A	B	B
8	A	A	A	A	A	A	300	A	320	300	B	B	B	B	B	B	B	B	B	B	A	A	A	A
9	B	B	B	A	B	A	B	A	B	B	B	B	B	B	B	B	B	B	A	A	A	A	A	A
10	A	A	A	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A
11	A	A	A	A	A	B	A	A	B	B	B	B	B	225	230	220	290	B	B	B	B	A	B	A
12	A	A	A	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	B	B	B	A
13	B	A	A	A	A	A	A	A	A	300	220	250	220	190	230	230	B	B	B	B	A	B	B	B
14	B	A	A	A	A	B	A	B	B	B	290	220	250	250	260	215	B	B	B	B	B	B	B	B
15	A	B	B	A	B	380	380	B	B	E B 330	240	230	200	200	200	200	200	220	A	A	B	B	B	A
16	A	300	A	A	400	370	330	B	350	290	300	210	205	B	B	B	B	220	A	A	B	B	A	A
17	A	A	A	A	A	A	B	B	A	A	290	260	265	B	270	210	230	270	B 210	B	A	A	A	A
18	A	A	A	A	A	A	B	B 300	380	B	300	240	200	200	200	195	200	290	240	265	B	B	200	B
19	A	A	A	A	A	A	A	A	B	A	260	215	B 260	200	200	200	200	240	240	B 280	B	B	A	A
20	B	A	A	A	A	A	H 360	300	290	290	330	210	200	200	200	210	200	220	A	A	A	A	200	A
21	A	A	A	A	A	A	B	A	A	A	A	290	235	230	230	200	220	205	B	B	A	A	A	A
22	B	B	B	B	B	A	A	A	A	B	B	230	220	225	210	215	200	B	225	B	B	B	A	A
23	B	B	A	A	A	A	A	A	A	B	230	205	205	B	B	B	250	240	230	A	A	B	B	A
24	A	A	A	250	A	A	B	B	A	270	240	205	220	205	200	200	200	200	205	A	A	B	B	340
25	A	A	A	A	E B 390	E 400	A	A	B	280	230	205	200	200	200	190	250	A 220	250	230	A	A	A	A
26	A	A	A	A	A	A	A	A	A	240	220	220	215	205	200	200	210	290	215	270	A	B	200	A
27	A	A	A	A	A	A	A	A	340	A	B	250	270	230	225	215	205	250	250	B	A	A	A	A
28	A	A	A	A	A	A	A	A	A	B	B	B	250	B	260	B	220	220	B	B	B	B	A	A
29	A	A	A	A	A	A	A	A	A	300	210	220	200	205	205	200	250	B	A	A	A	A	A	C
30	A	A	A	390	350	330	305	310	B	B	240	240	240	215	220	230	230	300	240	290	B	B	B	A
31	A	300	A	A	A	A 390	A	365	300	270	260	240	210	240	250	205	205	210	205	B 290	B	B	A	A
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	1	2	1	2	4	7	7	6	9	14	19	24	25	23	25	23	22	20	13	9			3	1
MED	200	300	A 300	320	U 348	370	330	305	300	290	255	225	215	210	205	205	220	235	230	270			200	340
UQ					395	380	365	325	340	300	285	240	240	228	230	218	250	278	240	290			200	
LQ					325	360	312	300	290	270	230	210	200	200	200	200	200	220	215	U 248			200	

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JUL. 1966 | H'F (KM)

IONOSPHERIC DATA

JUL. 1966 | H'ES (KM) | 45° E Mean Time (G. M. T.+ 3h)

Station SYOWA BASE Lat. 69°00.4'S, Long. 39°35.4'E Sweep 1 MHz to 20 MHz in 30 sec in automatic operation

Hour / Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	100	105	100	100	105	105	100	100	B	100	B	B	B	B	100	B	B	B	B	B	B	B	110	105
2	100	100	100	100	100	100	100	130	100	110	105	160	120	170	130	110	100	100	100	100	100	B	160	100
3	130	110	100	100	100	105	100	B	100	100	100	B	100	100	100	100	100	100	100	100	100	100	150	125
4	120	110	110	100	100	100	130	120	100	100	100	105	110	100	100	100	130	100	125	100	100	105	100	105
5	100	100	B	100	100	100	100	100	100	100	100	B	B	105	100	100	100	100	130	100	B	B	B	100
6	100	100	100	100	100	100	100	120	100	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
7	100	155	110	120	100	100	100	100	100	100	130	B	B	B	B	B	110	B	B	B	100	100	B	B
8	140	125	105	100	100	100	100	100	105	100	115	B	B	B	B	B	B	B	B	B	160	105	115	105
9	100	B	105	100	B	100	125	100	B	100	B	B	B	B	B	B	B	B	125	100	100	100	100	100
10	100	100	100	100	B	100	105	100	100	B	B	B	B	B	B	B	B	B	B	B	B	B	100	100
11	100	100	100	100	100	100	100	100	105	B	B	B	B	B	B	B	B	B	B	B	B	165	B	105
12	120	100	120	100	B	100	B	B	B	100	B	100	B	B	B	B	B	B	B	B	B	B	120	100
13	110	105	100	100	100	100	100	100	100	100	100	100	100	100	105	B	B	B	B	B	100	B	B	B
14	100	100	100	100	105	B	130	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
15	100	B	B	110	B	120	110	B	B	B	B	115	110	100	100	100	B	100	100	100	B	B	B	110
16	100	100	100	100	100	100	100	105	100	100	100	100	B	B	B	B	B	115	105	105	B	B	160	100
17	100	100	100	100	100	100	B	B	100	100	B	100	B	B	B	B	B	B	B	B	100	130	100	100
18	100	100	105	105	105	100	105	B	100	B	100	B	B	B	B	B	B	B	B	B	100	B	100	B
19	100	100	100	100	100	100	100	100	B	100	B	B	B	B	B	B	B	105	B	B	B	B	165	130
20	B	100	100	100	100	100	100	100	100	150	100	100	100	100	100	100	120	100	105	100	105	105	100	105
21	130	100	100	100	100	100	B	100	100	100	150	B	B	B	B	140	B	B	B	B	120	B	100	105
22	160	B	100	100	B	100	100	110	120	B	B	B	B	B	115	105	125	B	B	B	B	B	100	100
23	130	100	105	100	100	100	105	105	100	100	105	130	105	B	B	B	B	B	B	120	100	B	B	120
24	120	160	105	100	100	100	100	115	100	B	B	B	B	100	150	130	110	B	B	100	100	B	B	130
25	120	110	150	100	150	105	100	100	100	100	170	100	100	100	130	125	160	160	120	100	100	100	100	140
26	105	120	120	105	100	100	100	100	100	110	120	130	110	100	B	B	100	100	130	100	100	B	B	100
27	100	100	110	100	100	100	100	100	100	100	B	100	100	B	B	B	100	100	B	150	130	100	105	110
28	100	100	105	100	100	100	100	100	100	100	B	B	100	B	B	B	B	B	B	B	B	B	140	100
29	100	100	100	100	100	100	100	100	100	100	105	100	100	170	100	115	120	115	100	105	100	100	100	C
30	100	100	105	100	130	135	130	100	100	B	140	100	B	B	B	B	B	B	B	B	B	B	B	110
31	100	140	110	100	150	100	100	100	100	105	180	170	B	B	B	105	B	B	100	B	B	B	160	B
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	30	28	29	31	26	30	28	25	25	22	17	15	12	11	12	12	12	12	12	14	17	11	20	24
MED	100	100	100	100	100	100	100	100	100	100	105	100	100	100	100	105	110	100	105	100	100	100	102	105
UQ	120	110	105	100	100	100	105	105	100	100	130	122	110	102	122	120	122	110	125	105	100	105	145	110
LQ	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

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JUL. 1966 | H'ES (KM)