F — 90

551. 510. 535. 05(52) (047.3)

IONOSPHERIC DATA IN JAPAN

FOR JUNE 1956

Vol. 8 No. 6

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Prepared by

THE RADIO RESEARCH LABORATORIES

KOKUBUNJI, TOKYO, JAPAN

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CONTENTS

SYMBOLS AND TERMINOLOGY

The following symbols and terminology have been used in accordance with the recommendation of the International Scientific Radio Union (U.R.S.I.), Zürich, 1950 and at the Sixth Meeting of the International Radio Consultative Committee (C.C.I.R.), Geneva, 1951.

f_0E, f_0F1, f_0F2	ordinary-wave critical frequency for the E, $F1$ and $F2$ layers respectively
fE_s	highest frequency on which echoes of the sporadic type are observed from the lower part of the E layer
$h'E$, $h'F1$, $h'F2$	minimum virtual height on the ordinary-wave branch for the E, $F1$ and $F2$ layers respectively
$hpF2$	virtual height of the $F2$ layer measured on the ordinary-wave branch at a frequency equal to 0.834 f_0F2
$ypF2$	semi-thickness of the $F2$ layer deduced from a parabolic fit to the "nose" of the electron density distribution with height and based on the observed $h'f$ trace. (The difference between $hpF2$ and the virtual height at 0.969 f_0F2)
$(M3000)F2$	maximum usable frequency factor for a path of 3000 km for transmission by $F2$ layer
$f_{\min}E$, $f_{\min}F$	frequency below which no echoes are observed for the E and F regions respectively
( )	doubtful value
[ ]	interpolated value
A	characteristic not measurable because of blanking by E_s
B	characteristic not measurable because of absorption either partial or complete, and probably non-deviative in type
C	characteristic not observed because of equipment or power failure
D	before a number (or>): greater than alone: characteristic at a frequency higher than the normal upper frequency limit of the equipment
E	before a number (or<): less than alone: characteristic at a frequency lower than the normal lower frequency limit of the equipment
F	spread echoes present
G	a) $F2$-layer critical frequency equal to or less than $F1$-layer critical frequency b) no E_s (or $E2_s$) echoes observed though regular E (or $E2$) layer echoes are present (i.e., a symbol for daytime usage)
H	stratification observed within the layer

j	ordinary wave characteristic deduced from measured extraordinary-wave characteristic
K	ionospheric disturbance in progress (this is always applied to a series of hourly values, never to an isolated value)
L	a) $E1$-layer characteristic emitted or doubtful because no definite or abrupt change in slope of the $h'f$ curve is observed either for the first reflection or any of the multiples b) $h'F2$ omitted because the $F2$-layer trace is continuous with the $F1$-layer trace and without a point of zero slope
M	characteristic not observed because of some failure or emission on the part of the operater, rather than owing to any mechanical or electrical fault in the equipment or its power supply
N	nature of the record is such that the characteristic cannot readily be interpreted
P	trace extrapolated to critical frequency (it is unnecessary to use this letter for small extrapolations of one or two percent, but use should be made of symbol of ( ) if the extrapolation leads to a critical frequency which exceeds the last observed point on the trace by more than five percent)
Q	distinct layer not present
S	characteristic observed by interference or by atmospherics
T	loss or destruction of successful observations
U	hp or yp not measurable, for instance, because ordinary-wave trace has horizontal tangent at or above the frequency 0.834 f_0F_2
V	trace forked near critical frequency
W	characteristic at a virtual height greater than the normal upper height limit of the equipment
Y	E_s trace intermittent in frequency range very short pieces of trace at the high frequency and should be ignored since they may be presumed to be due to short-lived echoes
Z	third magnet-ionic component of the $h'f$ trace is observed

SITES OF THE RADIO WAVE OBSERVATORIES

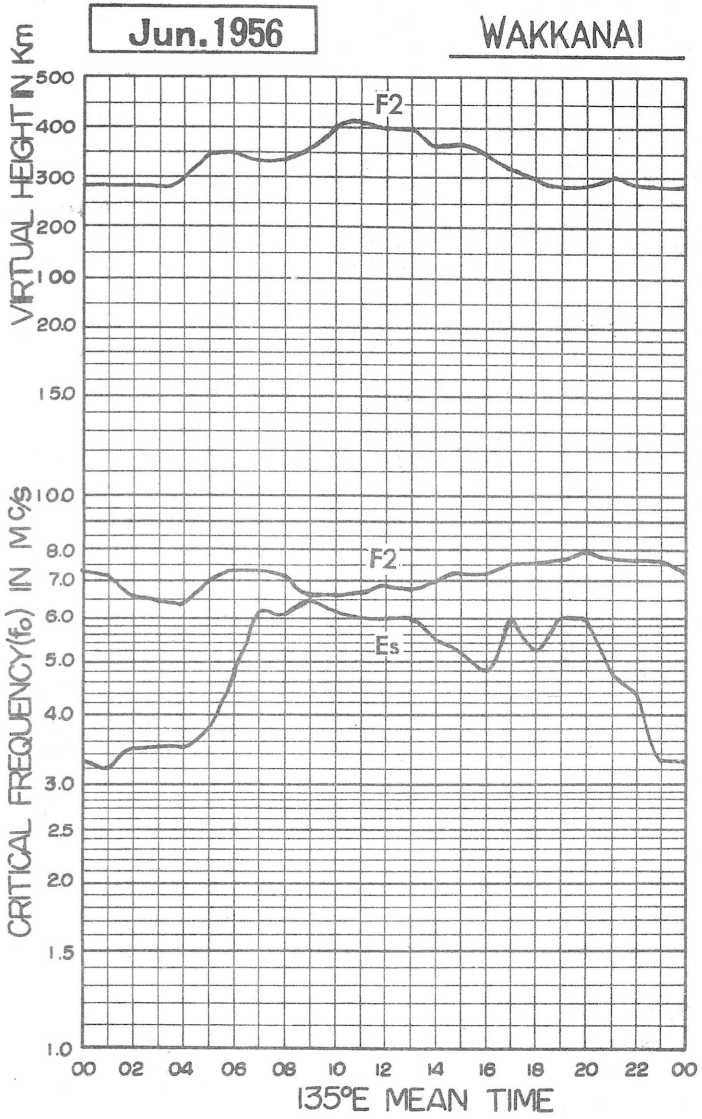
Ionospheric observation is carried out at the following four observatories in Japan.

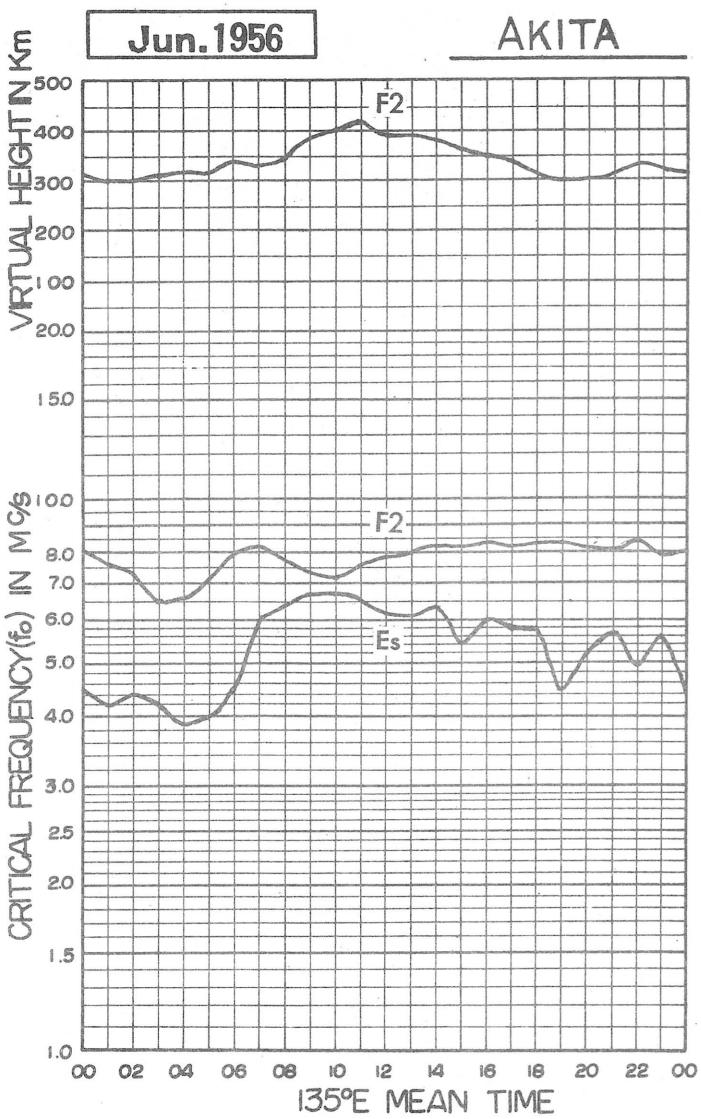
	Latitude	Longitude	Site
Wakkanai	45°23.6′N.	141°41.1′E.	Wakkanai-shi, Hokkaido
Akita	39°43.5′N.	140°03.2′E.	Tegata Nishishin-machi, Akita-shi, Akita-ken
Kokubunji	35°42.4′N.	139°29.3′E.	Koganei-machi, Kitatama-gun, Tokyo-to
Yamagawa	31°12.5′N.	130°37.7′E.	Yamagawa-machi, Ibusuki-gun, Kagoshima-ken

Solar radio emission is observed at Hiraiso Radio Wave Observatory.

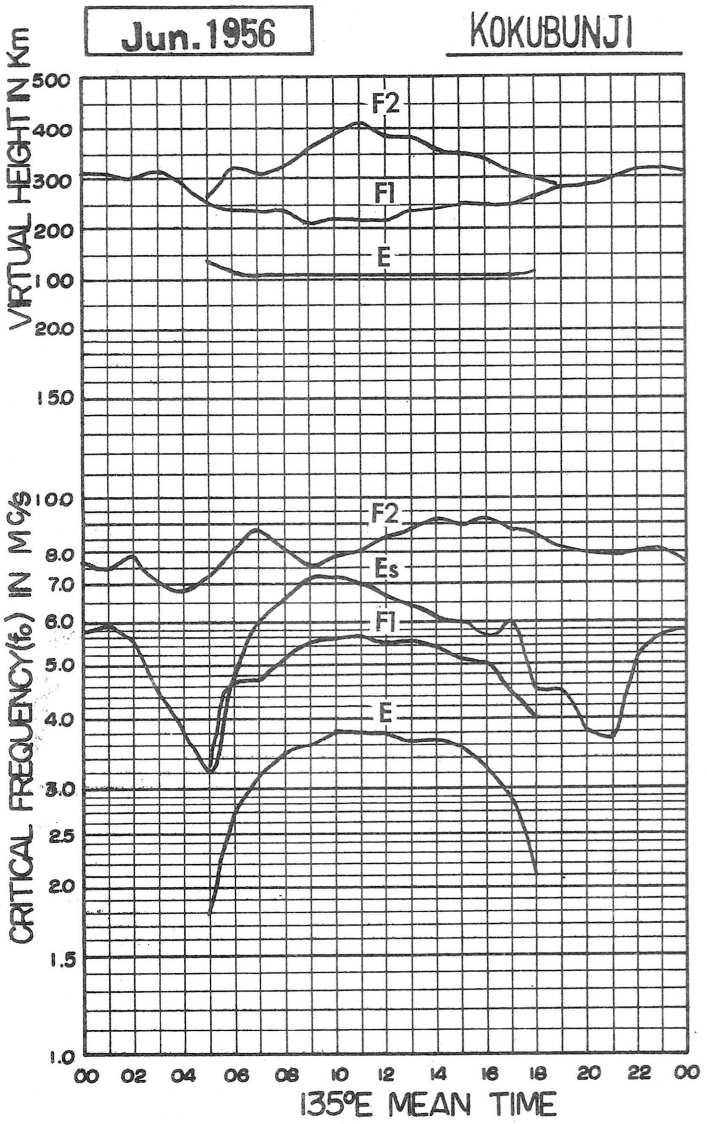
	Latitude	Longitude	Site
Hiraiso	36°22.0′N.	140°37.5′E.	Hiraiso-machi, Nakaminato-shi, Ibaragi-ken

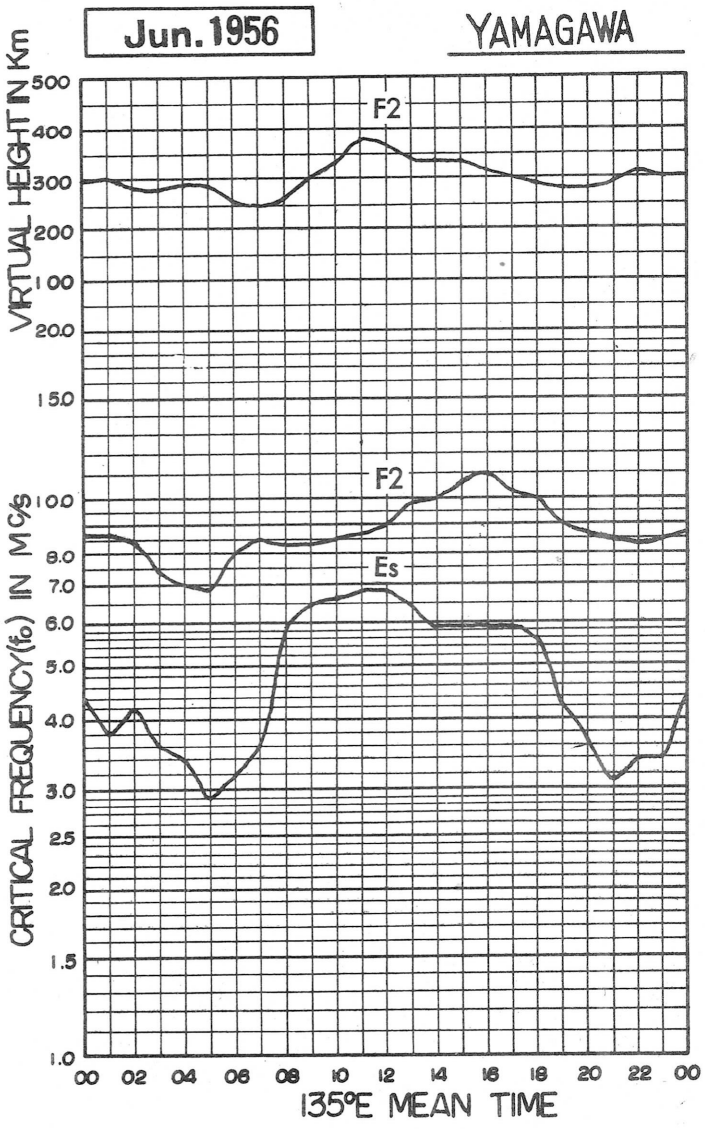
IONOSPHERIC DATA
MONTHLY MEDIAN CHARACTERISTICS





IONOSPHERIC DATA
MONTHLY MEDIAN CHARACTERISTICS





The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | foF2 | 135° E Mean Time | Wakkanai | Lat. 45° 23.6' N | Long. 141° 41.1' E

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	7.3J	7.0	7.0	C	C	7.8	8.6	8.0	9.0	8.2	8.0	8.2	7.8	8.1	7.5P	8.0	7.5	8.0	7.8	7.2	7.3J	7.8	[7.6J]S	7.5
2	7.2	6.7	6.6	6.3	6.0	7.3	7.3	6.2	5.8	A	A	6.5	6.1	6.1	5.9	[6.0J]A	6.2	6.0	7.4	A	A	(7.0)JF	7.4P	7.0
3	6.7	7.0J	6.1	6.5F	5.8	6.2	6.6	6.5	B	A	A	A	A	A	A	5.8	5.8	5.9	6.5	6.3	6.5	6.5	F	F
4	7.0J	6.5F	6.3PJ	5.9	(5.9)F	6.3F	7.7	7.8	A	A	A	A	6.2	6.0	6.1	6.6	6.6	6.5	6.5	A	A	7.3PJ	7.3PJ	7.0P
5	F	F	6.3	(6.3)JF	(6.3)F	5.8	8.5H	9.5	B	B	6.6	6.7P	7.6P	7.3	A	A	7.1	7.3	[7.4J]A	7.5	[7.6J]A	(7.8)SP	A	A
6	Fs	Fs	7.5Z	6.5	6.0F	6.5	7.1J	6.7J	A	A	6.3P	6.4P	[6.4J]A	6.3	6.5	6.7	7.2	7.5	7.5	7.3P	6.8P	7.3	[7.4J]SF	7.5PJ
7	7.0J	6.7	(6.0)F	6.5F	6.3	7.0	6.3J	6.5	6.5	[6.2J]A	5.8P	5.8P	A	A	5.6	5.8	6.2	A	A	6.7	7.5	7.5	7.5J	7.1J
8	6.8P	6.8	6.3P	6.3	5.8	6.0	6.6	6.2	6.2	5.8	[5.8J]A	5.8	6.3	6.7	7.3	7.8	7.3	7.5	7.3	[7.6J]A	7.8	8.2P	7.5PJ	(7.6)PJ
9	7.0	6.5	6.5	6.3	[6.6J]F	7.0	8.0	9.0J	7.2	6.5	5.9	[5.9J]B	5.9	[5.7J]B	5.5	5.9	6.1	6.8	6.8J	7.3	[7.2J]A	7.2P	7.2	7.2
10	6.5	6.5	6.2	6.0	6.8	7.0	6.2	A	A	6.0	A	A	A	A	5.9	6.1	6.1	5.8	5.9	6.5	7.5	8.0	8.2	7.5J
11	7.0	6.5	6.5	6.3	6.0H	7.0	7.3J	7.7	6.6	6.6	6.3	6.7P	7.0	7.0	7.5	7.8	7.8	7.6	7.8J	[8.0J]A	8.2	8.2	8.0	7.5
12	7.0	7.5J	F	F	8.0	8.0	7.5	6.5	6.8	6.4	5.8H	6.3	[6.4J]A	6.4	6.6	6.6	6.2	6.5	6.8	7.7	8.0	8.2	8.3P	7.8
13	7.6	7.3	6.8	6.5	6.4	6.5	6.8	7.5	7.7	6.8	7.2	7.8	8.3J	8.8J	7.8P	7.7H	7.9	7.8	7.7	8.0	8.2	Fs	Fs	Fs
14	F	8.0	7.3J	6.8	7.0	6.7	7.5	7.3J	7.8	6.6	6.9	6.7	7.4	[7.3J]B	7.2	7.7	7.6	7.6	7.7	7.7	8.0	7.3J	7.5PJ	8.0
15	7.7	8.0	7.6	7.3	6.6	7.1	7.6	7.3J	7.6	7.0	6.8J	6.7	7.1	6.5	7.3J	7.5	7.7	7.4	7.8	8.1	8.0	[8.0J]S	7.9	8.3J
16	8.5	8.1	7.9	7.8	7.5	7.2	8.1	8.1	9.3J	8.8J	7.5	8.0	9.8J	8.8J	8.8J	8.0H	8.5H	8.8	9.5	9.3J	8.8P	9.0	9.0	9.0
17	9.0P	9.2	9.0P	7.7	8.0	6.9	7.2H	7.8	8.0	8.0	7.9	7.0	7.1	7.7	7.1	7.8	7.8	8.1	8.1	8.0	7.9	8.0PJ	8.0	8.1
18	Fs	Fs	7.6	7.0	7.1	7.9	8.0	7.9V	8.8J	7.1P	7.5P	(7.5)P	(7.5)P	(7.8)JF	8.0	7.8	7.8	[7.9J]B	8.0	8.0	8.0	8.1	8.1	8.0
19	7.8P	7.6	7.0	7.0	6.4	7.0	7.9	7.0	6.7	6.3	A	A	A	A	A	7.2	7.0	7.2	7.3J	7.0	7.8	A	A	8.2
20	7.8J	7.4	(7.3)JF	7.1	7.6	8.1	9.4	9.1	(7.5)PJH	7.8	7.0	7.0J	7.3J	7.5	6.8P	7.3	7.8	7.7	7.8	(8.8)J	8.5	8.3J	8.3P	8.1
21	8.0	8.1	8.0	8.0P	8.2	8.5	10.0PJ	9.5	10.0	A	A	8.1	7.5J	7.8	7.9	7.6	A	A	8.0	8.1	8.2	A	A	A
22	Fs	F	F	F	7.5	7.9	7.9	A	A	8.0P	7.7	6.0	[6.8J]A	7.5	A	A	8.0	A	A	A	A	A	A	A
23	Fs	Fs	Fs	7.8	7.8	8.0	7.5	7.6	7.8	A	A	A	A	A	7.8	7.7	7.8	7.7	8.1	8.0	8.3J	7.5J	9.1	8.0
24	8.5	8.0	7.7	7.0	7.0	6.3	7.0	C	C	C	C	C	C	C	C	C	C	C	7.4	[7.7J]A	8.0	7.5PJ	(7.3)PJS	8.0
25	7.5J	7.3	6.6	6.1	6.2	6.7	7.0	6.3	5.7	6.3	6.0P	6.4	6.8	6.5P	6.5P	6.5	7.5	7.8	7.5	A	A	6.5	6.4	6.6PJ
26	6.6	(6.0)F	5.8F	5.3F	5.5F	6.0	[6.9J]A	7.8	A	A	A	A	6.5P	6.8	7.1	7.2	6.9	7.7	8.1	8.0	8.0	(7.1)PS	8.2	[8.0J]A
27	7.8PJ	7.5	[6.6J]F	5.7	5.3	6.0	6.0	5.6	A	A	5.8P	A	A	B	B	6.1	5.7	6.0	6.0	5.5	6.0	6.6	6.8	6.7PJ
28	6.8J	5.8	5.2	[5.0J]F	4.7	5.3	5.3	[5.5J]A	5.7	A	A	A	B	5.5	[5.6J]B	5.6	A	A	A	6.5	A	F	7.5	6.7
29	F	F	F	F	5.3F	5.8	6.0	[5.9J]A	5.8	5.8	A	A	6.3	6.5	6.7	6.6P	6.6	7.0	6.7P	7.0	7.0	7.7	7.5J	7.8PJ
30	7.8P	5.9	6.3PJ	5.6	5.5	6.1	7.2	6.9	6.5	5.5	5.8P	[6.0J]A	6.3	6.2	7.0	6.6	A	A	6.8	7.0	7.8	7.8PJ	8.0	7.3J
31																								
Mean Value	7.4	7.2	6.9	6.6	6.5	6.7	7.4	7.3	7.3	6.8	6.7	6.8	7.0	7.0	6.9	7.0	7.1	7.3	7.4	7.5	7.7	7.6	7.8	7.6
Median Value	7.3	7.2	6.6	6.5	6.4	7.0	7.3	7.3	7.2	6.6	6.6	6.7	6.9	6.8	7.0	7.2	7.2	7.5	7.5	7.6	7.9	7.7	7.6	7.6
Count	23	24	26	26	29	30	30	27	21	19	19	20	22	23	24	27	26	24	27	26	25	25	24	25

foF2

Sweep 1.0 Mc to 22.0 Mc in 1 min ☐ Manual ☒ Automatic

W 1

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | h'F2 | 135° E Mean Time | Wakkanai | Lat. 45° 23.6' N | Long. 141° 41.1' E

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	280	280	270	C	C	340	L	A	340	340	A	A	400	360	360	330	360	300	270L	250	290	290	290	280
2	280	260	310	330	280	330	310	400	340	A	A	410	450	420	440	[410]A	280L	250	310L	A	A	260A	260	290
3	330	300	290	330A	300	270	280	270	B	A	A	A	A	A	A	440	410	290	320	270	270	320	320F	310
4	310	300A	300A	340A	350L	420	350	330	A	A	A	A	430	460	460	370	270	330	290L	A	A	280	260	270
5	260	300A	300AF	290	260	270	270H	310	300	[360]A	430	420	350	350	A	A	350	A	A	280A	[290]A	300A	A	A
6	AF	280F	250	310	330L	410	360	360	A	A	490	410	[440]A	460	400	370	330	310	280	270	260	350A	[330]AF	300
7	290	270	260F	270	310	350	[290]A	430	410	[330]A	450	380	A	A	350	460	370	A	A	320	310	280	260	260
8	290	270	280	260	350	410	360	410	400	440	[340]A	630	450	430	360	330	330L	300	290	[290]A	290	360	300	260
9	260	270	280	300	290L	270L	350	310	370	360	380	[420]B	450	[300]B	350	470	420	360	[310]A	270	[280]A	300	290	260
10	260	260	260	270	300	270	330	A	A	450	A	A	A	A	490	390	360	[360]L	340	[360]A	340	270	290	260
11	350	270	260	280	330L	370	350	310	310	310	470	450	400	400	370	350	330	330	310	[280]A	260	270	280	270
12	310	310	290F	280	290	260	270	390	370	370	290H	460	[460]A	450	410	390	[380]A	370	360A	290A	300A	310	270	280
13	270	270	260	290	290	340	350	330	330	390	360	360	360	340	340	310HL	330	300	290	270	270	310	[290]A	270
14	270F	260F	260	260	300	260L	310	350	320	350	410	440	400	[410]B	420	340	290	310	300L	280	280	280	270	270
15	310	300	290	270F	260	260	340	310L	370	350	410	430	400	370	360	370	350	340	280L	270	280	260	260	300
16	270	280	270	270	260	310L	350	350	310	310	310	300	330	350	330	280H	300H	310A	270	300A	280	260	260	290
17	280	280	240	250	260	260	350H	310	360	330	350	370	410	350	360	370	330L	330	280L	260	310A	340A	300	300
18	310	290	290	300A	290	280	280	300	300	[330]A	360	360	350	390	350	330	340	[310]A	280	280L	260	270	280	300
19	300	280	310	270	300L	360	360	310	340	420	A	A	A	A	A	370	370	330	310L	270	270	A	A	260
20	260	270	280	300	340L	330	300	300	360H	350	370	360	370	400	360	370	360	310	290	270	[280]A	290	270	270
21	300	280	280	270	260	280	270	270	330	A	A	A	A	370	360	350	A	A	300	280	A	A	A	A
22	A	[280]A	[270]A	[260]FA	330L	270	330	A	A	280	280	280	[340]A	410	A	A	A	A	A	A	A	A	A	A
23	[340]FA	[340]FA	330F	310	300	270	440	300	400	A	A	A	A	A	360	360	340	330	300	280	300	320	270	290
24	290	260	280	280	310	370	350	C	C	C	C	C	C	C	C	C	C	C	280	[280]A	280	310	[300]A	300
25	300	330	330	340	360	350	350	430	400	450	430	380	410	370	410	430	330	310	290	A	A	350	310	310
26	310	280	290	270	350	360	A	A	A	A	A	A	340	350	340L	320	300	330	300	260	290	300	290	[280]A
27	280F	260	240	290	280	370	400	420	A	A	460	A	A	B	A	350	420	360	310	[300]A	290	300	340	300
28	270	330	290	310F	330L	410	450	A	A	A	A	A	B	430	[380]A	450	A	A	A	360A	[340]A	340AF	260	270
29	300	310A	300A	300F	330	340	360	A	A	420	A	A	400	400	360	350	330	310	300	310	280	310	270	270
30	330	360	270F	280	330L	400	330	350	340	300	360L	[380]A	400	450	370	350	A	A	300	280	270	300	290	280
31																								
Mean Value	290	280	280	290	310	330	340	350	340	370	400	410	400	400	400	380	350	330	300	290	290	300	280	280
Median Value	280	280	280	280	300	350	350	330	340	360	400	410	400	400	360	370	350	320	300	280	280	300	280	280
Count	28	30	30	29	29	30	28	23	20	20	18	18	21	23	24	27	25	23	26	26	25	27	26	27

h'F2 | Sweep 10 Mc to 22.0 Mc in 1 min | ☐ Manual ☒ Automatic | W 2

7

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Wakkanai

Lat. 45° 23.6' N
Long. 141° 41.1' E

Jun. 1956

fEs

135° E Mean Time

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	3.0	3.0	C	C	3.5^{F}	G	6.6	6.2	5.5	7.3	6.5	G	G	G	5.0	4.1	6.0	5.2	3.9	4.1	4.1	4.5	3.5
2	2.8	E	E	3.5	3.5	G	6.1	6.5	5.0^{Y}	11.7	7.3	5.5	5.5^{Y}	G	6.0	9.5	4.7	6.5^{Y}	4.1	7.7	10.0	6.0	3.0	3.1
3	4.1	5.2	5.0	6.5	3.5	4.0	4.4	4.8	5.2	8.0	7.8	8.5	8.7	9.3	7.6	6.0	G	4.0	3.5	3.1^{Y}	3.3	8.0	6.5	4.8
4	5.0	10.0	8.6	6.5	3.5	G	5.5	6.5	6.6	7.4	9.8	7.8	6.0	6.5	6.1	5.3	G	G	4.0	6.6	12.0	4.0	3.2	4.4
5	3.0	7.0^{F}	5.3^{F}	3.5	2.6	G	G	6.9	8.0	6.9	6.2	6.0	5.5	G	12.0	12.0	G	9.0	11.0	11.0	7.0	10.0	7.5	7.5
6	6.5^{F}	6.0^{F}	4.2	4.5	3.5	4.2	5.6	6.4	10.5	12.5	6.4	6.7	7.2	8.6	6.5	6.0	6.0	6.6	5.7	4.1	4.0	6.0	7.5	3.0^{Y}
7	2.5	2.3	3.3	3.5	2.3	4.1	8.0	6.0	6.2	10.7^{Y}	5.9	6.2	6.5	6.7	5.0	5.3^{Y}	5.8	9.5	8.5	5.9	7.8	3.2	2.7	E
8	3.5	3.2	2.5	E	G	G	4.9	5.1	6.1	5.5	6.4	G	5.2	6.2	6.3	6.7	G	G	3.8	7.2	6.0	E	6.0	4.5
9	2.5	2.3	E	4.5	3.5	3.8	5.3	6.0	5.9	7.2	5.2	G	G	G	G	5.0^{Y}	4.8	G	6.8	5.2	8.5	3.5	E	E
10	E	2.5	3.0	3.3	4.2	4.2	G	6.5	11.8	7.6	8.5	8.0	7.6	7.0	6.0	5.9	G	G	5.2	6.4	5.9	5.0	5.0	E
11	E	E	3.5^{Y}	3.0	G	G	G	5.0	6.5	6.3	G	6.0	6.3	6.0	G	G	G	4.1	6.0	8.0	7.0	2.3	E	E
12	3.5	3.5	3.0	2.5^{F}	3.5	5.2	5.7	6.2	6.0	6.0	G	6.0	8.0	6.4	4.9	5.8	5.7	5.5	5.2	6.0	4.9	5.0	4.2	3.8
13	3.0	3.5	3.5	3.3	4.0	3.5	G	G	5.2	5.1^{Y}	5.5	5.2	4.9^{Y}	5.0^{Y}	G	G	G	3.5	G	G	4.2	4.5	7.3	E
14	E	E	2.2^{Y}	E	G	G	4.3	5.3	6.0	6.2	G	G	G	B	G	G	G	G	G	3.6	3.5	E	E	2.9
15	3.5	E	E	6.2^{F}	3.5	4.0	4.3	5.1	5.2	5.2^{Y}	6.6	5.8	G	G	G	G	G	G	G	4.2	4.2	3.5	E	E
16	E	2.3^{Y}	E	E	G	G	G	G	5.5	6.4	G	5.8	6.0^{Y}	8.0	6.0	G	5.0	6.2	5.8	6.0	5.0	7.0	E	E
17	E	3.2	4.2	2.2^{Y}	G	G	G	7.1	G	6.5	5.7	5.7	6.5	5.1	5.7	G	5.1	G	G	5.0	7.3	7.1	7.0	3.1
18	4.5	5.0	5.1	4.5	3.5	3.7	5.3	5.5	6.6	7.0	G	6.0	G	G	G	G	6.2	6.5	5.2	4.5	2.1	3.5	3.0	4.5
19	4.1	3.3	2.2	E	3.5	3.5	4.0	6.0	6.0	6.5	8.5	7.0	6.5	14.0	10.7	5.2	4.9	G	3.5	2.5	8.0	12.5	10.7	11.0
20	2.5	4.0	3.5	4.5	3.5	4.5	G	6.5	5.3	6.5	G	G	6.1	5.2	7.3	G	6.0	7.0	5.5	4.5	7.8	7.0	E	E
21	3.5	2.5	3.0	2.2	G	G	G	6.8	6.0	12.5	10.5	7.0	6.0	6.0	5.8^{Y}	6.1	7.8	12.5	5.5	6.5	8.5	11.0	10.5	11.5
22	9.0	7.7	9.5	9.5	5.0	7.8	12.5	8.7	9.7	6.5	10.0	10.7	11.0	7.8	8.0	12.5	12.5	13.0	12.7	12.5	12.5	13.3	12.3	10.0
23	10.7	6.5	3.8	3.0	G	4.0	7.1	7.0	7.1	11.5	13.5	13.0	12.6	8.0	G	5.0	G	4.2	6.5	4.5	5.3	5.1	6.0	4.2
24	5.8	2.5	3.5^{F}	3.5	G	4.5	6.0	C	C	C	C	C	C	C	C	C	C	C	10.7	12.5	4.0	4.5	6.5	6.0
25	4.2	4.2	3.5	2.5	3.4	4.3	4.8	5.0	5.0	G	6.4	G	G	G	G	5.3	G	5.0	4.8	9.5	7.5	5.0	3.0	7.0
26	5.8	5.0^{F}	4.5	4.1^{F}	3.5	G	7.0	7.5	8.7	8.7	8.0	12.5	4.9^{Y}	5.7	G	G	5.0	6.5	5.2	4.6	5.0	4.0	3.5	11.0
27	2.0	3.0	2.3	3.5	2.2	4.0	5.0	5.5	6.5	6.0	5.8	5.6	6.8	G	5.5	5.0^{Y}	7.8	7.3	6.2	8.0	7.0	2.8	5.0	5.0
28	3.1	2.8	2.3	3.3	3.5^{F}	4.3	4.6	7.5	7.0	6.7	6.1	6.0	G	7.0	5.0	5.0	10.5	13.0	13.0	12.7	10.3	6.5	6.0	2.5^{S}
29	4.5	7.0	6.0	4.3	3.5	G	4.9	8.7	6.5	6.0	6.0	8.0	6.2	6.2	6.0	9.1	4.8	6.2	7.0	8.5	E	3.8	E	E
30	E	3.3	4.1	2.6	6.7	6.3	5.7	6.0	G	5.3	G	8.5	G	G	G	7.8	12.5	12.0	4.8	4.8	4.2	4.5	4.2	2.3
31																								
Mean Value	4.5	4.3	3.9	4.0	3.6	4.4	5.8	6.3	6.7	7.4	7.1	7.3	6.9	7.1	6.4	6.7	6.7	7.3	6.4	6.5	6.4	5.8	5.9	5.5
Median Value	3.3	3.2	3.5	3.5	3.5	3.8	4.8	6.2	6.1	6.5	6.2	6.0	6.0	6.0	5.5	5.2	4.8	6.0	5.2	6.0	6.0	4.8	4.4	3.3
Count	30	30	30	29	29	30	30	29	29	29	29	29	29	28	29	29	29	29	30	30	30	30	30	30

fEs

Sweep 1.0 Mc to 22.0 Mc in 1 min ☐ Manual ☒ Automatic

W 3

8

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Akita

Lat. 39° 43.5' N
Long. 140° 08.2' E

Jun. 1956

foF2

135° E Mean Time

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	7.6	7.5	7.2	7.0	6.5	7.2	8.0	8.4	9.0	9.4	9.8	9.6	(9.5)^{P}	10.7	10.4	10.6	9.7	9.9	9.1	A	A	(8.2)^{P}	[8.1]^{A}	(8.0)^{P}
2	7.6	7.1	6.5	6.2^{V}	6.8	8.1	8.1	7.5	6.8	[6.8]^{A}	6.9	7.5	[7.1]^{A}	6.7	A	A	A	6.9^{J}	8.0	A	A	A^{F}	F	7.2^{F}
3	6.7^{F}	7.4^{F}	6.5^{V}	[5.8]^{A}	5.2^{V}	6.2	6.6	7.0	B	B	5.7^{J}	A	A	A	5.8	6.1	6.2	6.2	[6.4]^{S}	6.5	6.5	6.5	6.3	6.6^{F}
4	6.5^{F}	6.6	[6.6]^{S}	6.5^{F}	5.5^{F}	6.8	8.4^{J}	9.0	7.3	6.0	[6.5]^{A}	7.0	7.3	7.7	7.8^{P}	(7.9)^{P}	7.3	6.7	[7.0]^{A}	7.2	7.9	7.8	7.6^{P}	6.5
5	6.6	6.6	(7.0)^{PV}	5.5^{F}	5.6^{F}	6.4	8.7^{H}	10.0	9.9	8.1	7.6	A	A	9.1	8.2	7.9	7.7^{H}	8.2	8.1	8.8	8.2	7.6	8.0	(8.4)^{P}
6	8.1^{F}	8.4^{P}	7.4^{F}	6.5^{F}	6.2^{F}	6.9	8.1	8.9	9.4	A	A	7.4	[7.6]^{A}	7.8^{P}	(8.0]^{A}	8.2	8.5	8.4^{P}	8.0	>5.4^{C}	A	7.1^{P}	8.2^{J}	8.0^{F}
7	8.2^{JF}	C	>5.4^{C}	>5.4^{C}	7.7^{F}	7.7^{ZF}	[8.0]^{S}	8.3	>5.4^{C}	>5.4^{C}	>5.4^{C}	5.9	6.1	6.3	6.5	6.6	6.9	7.0	6.6	6.8	[7.4]^{A}	8.1^{F}	8.5^{P}	7.5^{F}
8	6.9	6.5	(5.9)^{P}	6.4	(5.8)^{P}	>5.4^{C}	7.1	7.0	C	A	6.7^{P}	6.8	7.4	7.8	8.5	8.7	A	A	8.4^{P}	8.4^{P}	8.5	>5.4^{C}	A	C
9	7.3	6.9	(5.9)^{P}	6.4^{F}	6.0^{JF}	7.3^{HF}	9.1^{F}	10.4^{F}	8.4	6.6	6.6^{H}	6.8^{P}	6.6	6.1	5.9	6.5	6.6	7.0	6.8	7.0	7.0	7.5^{P}	7.4^{F}	(7.0)^{P}
10	6.8	6.6	6.3	5.8	6.5^{F}	6.9^{F}	7.2	7.0	6.2	6.4	A	A	A	A	6.1	6.5	[6.3]^{A}	6.1	6.2	(6.8]^{A}	7.3	7.4^{JF}	7.5	7.3^{JF}
11	7.1	6.6	6.4	6.3	5.8	6.8	8.0	8.2	7.8	6.8	6.7^{H}	7.7	8.1	8.0	B	8.9	[8.6]^{A}	8.2	8.6	8.3^{P}	(8.4]^{J}	[8.4]^{A}	8.5	7.7
12	7.3	7.6	7.5	7.5	8.1	8.9	8.1	7.9	[7.4]^{A}	6.9	6.1	6.5	6.6	6.9	7.5	7.1	A	A	(7.5]^{P}	7.9	(8.0]^{P}	(7.8]^{PF}	8.4^{J}	FB
13	8.8^{J}	8.1	7.7	7.2	6.6	6.6	7.2	7.6	7.6	7.1	7.5	8.1	9.0	9.0	8.8	8.7	9.0	9.0	9.0	8.5	8.6	8.6	8.4^{J}	[8.9]^{FB}
14	9.4^{PJF}	8.2^{F}	8.0^{F}	7.0^{V}	6.9^{F}	7.2	8.1	8.0	8.0	[7.8]^{A}	7.6	8.2	8.6	8.2	8.2	9.2	8.7	8.7	9.1	8.7	8.5	8.6	9.0	8.4^{J}
15	8.0	8.0	8.0	7.8	7.4	7.5^{F}	8.3^{P}	8.2	7.7	8.1	7.6	7.4	7.7	8.7	8.6^{P}	(8.4]^{P}	8.3^{P}	8.5^{P}	8.5	8.6	8.6	8.6	(8.6]^{P}	8.5
16	9.0	8.5^{P}	8.1	7.9	7.5	8.1	9.1	10.5	10.3	10.3	9.1^{H}	9.5	11.6	11.0	10.3	8.9	8.8	9.5	9.5	9.7	8.8	9.0	9.1^{F}	9.4
17	9.7	9.7	9.0	8.6	7.7	7.0	7.5	8.1	8.5	8.5	8.6	8.0	8.4	8.6	8.5	8.2	8.7	9.4	9.2	8.4	7.4	7.3	7.8^{F}	8.2
18	8.0^{F}	7.5^{JF}	8.0	7.2^{F}	7.2^{F}	7.5	8.1	9.0	9.0	7.5	7.7	[8.0]^{A}	8.4	9.2	9.5	9.6	9.0	9.0	8.9^{P}	8.7	8.0	8.4^{J}	[8.4]^{S}	8.4
19	8.4^{P}	8.4^{JF}	7.6	7.4	7.2	7.2	7.5	8.0	6.8	6.7	6.8	7.1	7.6	7.6	8.1	8.3	8.1	8.1	8.0	8.3^{P}	(8.1)^{P}	(8.0]^{P}	7.9^{F}	[7.8]^{A}
20	7.7^{F}	8.1^{F}	8.0^{F}	7.4^{F}	7.4^{F}	8.4	9.9	9.5	[8.9]^{A}	8.3	8.4	8.5	8.4	8.0	8.2	8.2	8.3^{P}	9.0	9.4	8.7	7.4	7.8^{P}	(8.4]^{PF}	8.2^{P}
21	8.1	8.0^{F}	7.7^{F}	8.0^{F}	7.7^{F}	8.7	9.7	9.9	9.5^{V}	9.5	A	A	A	8.7^{PJ}	9.5	9.7	8.6^{J}	8.1	9.4	9.4	8.7^{P}	8.2	(7.7]^{P}	7.8^{ZF}
22	7.9^{F}	7.7^{F}	7.6^{F}	7.7^{ZF}	7.5	7.6	8.3^{P}	9.0	8.7^{J}	8.1	(7.5]^{PH}	7.8	[8.0]^{A}	8.1	8.4^{J}	8.8	9.1	8.6	8.7	8.5	8.4^{P}	8.6^{F}	8.6^{PF}	9.0^{F}
23	8.2^{F}	[7.8]^{FB}	7.5^{F}	8.0^{F}	8.2^{ZF}	8.4	8.0	8.2	(8.4]^{P}	8.6^{P}	[8.6]^{A}	8.7	9.0	9.5	9.6	B	A	9.0	8.7	8.7	(8.5]^{P}	[8.5]^{B}	8.5	9.0^{F}
24	8.9^{F}	9.5^{F}	8.7^{F}	8.1^{F}	7.5	7.0	7.5	7.2	7.6	[7.8]^{A}	8.0	[8.1]^{A}	8.2	8.8^{P}	9.2	9.4	8.7	8.9^{J}	[8.4]^{A}	7.9	8.2	8.5	[8.4]^{AF}	8.4^{J}
25	8.3^{F}	7.8^{F}	7.1	6.5	6.1^{F}	7.0	7.5	7.1	6.5^{H}	[6.6]^{A}	6.6	7.8	7.3	7.6	7.5	7.5	8.6	8.7	8.2	6.8	6.0	6.5	6.6	6.8
26	6.8	6.0	5.6	5.5^{F}	5.2^{F}	6.0^{VF}	7.4	7.1	6.8	6.7	[6.8]^{A}	7.0	7.8^{P}	A	A	7.9	7.9	8.2	8.8	8.9^{J}	8.5^{PF}	8.4	8.7^{JF}	8.0^{PJF}
27	[8.4]^{AF}	8.9^{JF}	7.5^{JF}	6.4^{F}	6.6	7.1^{V}	6.6^{H}	6.3	5.9	A	A	A	A	5.7^{P}	[5.6]^{A}	5.6	6.2	6.5	6.5	5.8	5.8	6.5	6.6^{F}	6.6^{F}
28	[6.3]^{A}	6.0	5.3^{P}	5.2^{JF}	4.8^{F}	5.3^{V}	5.6	6.5	A	A	A	B	A	A	A	6.5	6.0	5.7	6.4	6.5	7.0^{P}	6.7^{F}	6.7^{F}	6.7^{F}
29	6.9^{F}	7.1	6.8^{F}	5.9^{F}	6.0^{F}	6.1^{F}	6.5	6.4	6.3	[6.2]^{A}	6.0	[6.6]^{A}	7.2	7.6	7.7^{P}	7.5	7.6	7.8	7.1	[7.4]^{A}	7.6	8.0	9.0^{PJ}	7.7^{F}
30	8.7	6.0	5.8	5.6	5.5	6.1	8.0	8.6	6.9	6.5	5.9	6.9	7.3	7.5	7.9	7.2	6.7	[7.1]^{A}	(7.5]^{P}	7.7^{P}	8.2^{J}	[8.5]^{AF}	8.8	7.8^{F}
31																								
Mean Value	7.8	7.6	7.1	6.8	6.6	7.2	7.9	8.2	7.9	7.6	7.3	7.6	8.0	8.1	8.1	8.0	7.9	8.0	8.1	8.0	7.8	7.9	8.1	7.9
Median Value	8.0	7.6	7.4	6.5	6.6	7.1	8.0	8.2	7.8	7.3	7.2	7.6	7.8	8.0	8.2	8.2	8.3	8.2	8.3	8.3	8.1	8.0	8.4	7.9
Count	30	29	29	29	30	29	30	30	26	24	24	24	24	26	26	28	26	28	30	27	27	28	28	28

foF2

Sweep 0.85 Mc to 22.0 Mc in 2 min ☐ Manual ☒ Automatic

A 1

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The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | h'F2 | 135° E Mean Time | Akita | Lat. 39° 43.5' N | Long. 140° 08.2' E

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	340F	310	320	310	290	250	L	L	350	370	360	[360]A	360	360	330	340	350	290	300L	A	A	A	A	300
2	300	290	350	300	340	300L	320	[330]A	340	[400]A	470	A	A	400	A	A	A	350	300A	A	A	A	350AF	340A
3	340A	300	A	A	330	A	A	380	B	B	A	A-	A	A	A	480	400	370	340	300	290	290	350A	300
4	300	310	350A	410A	360	380	360	340	290	530	[490]A	450	430	390	360	350	310	300	[300]A	300	300	320A	290	310A
5	350A	290	280	300A	370	280	260H	320	330	[440]A	540	A	A	380	380	350	310H	340	300	280	290	300	340	300
6	340	300	270	[310]A	350	270	400	350	A	A	A	420	[400]A	380	[370]A	360	330	310A	[380]A	440A	[390]A	340A	310	320A
7	360	[330]A	300F	320A	300A	340A	[360]C	390A	380	C	C	580	510	480	450	430	370	340	320	A	A	360	290	270
8	310A	300	300	310	350	430	370	A	C	A	590	430A	400	390	370	330	A	A	300	290	290	300	A	A
9	260	290	300F	350F	370AF	340HAF	380F	340F	330	520	470H	450	420	480	540	430	400	390	340	300	310	300	330F	290A
10	290	290	270	300	330A	260	340A	370A	420A	410F	A	A	A	A	500A	400	[400]A	400	370	[340]A	320	350	300	300F
11	280	300	310	310	390	360L	330	290	310	400	LH	420	370	390	400	350	[330]A	310	310	300	320	[310]A	300	290
12	320	340	310	300	300	250	L	A	A	A	510	480	480	490	410	A	A	A	350	300	340A	310	330	350F
13	300	300	300	280	290	290	340L	330	350	400	400	400	380	360	390L	370	350	350A	[320]A	300	330A	310	300	[290]A
14	280	260	300	300	320	310	340	320	A	A	400A	390	390	400	400	350	310L	350	300	290	300	320	300	290
15	330	330	290	290	300	350L	350	300	350	360	330	400	430	390	350	400	350	330	300L	300	300	300	300	330
16	300	290	300	290	300	L	L	300	300	310	400LH	390	350	320	340	350	350	310	290	260	270	310	330	300
17	290	280	240	270	250	250	330	330	350A	410	350	420A	420A	370	370	400	370	330	290	260	270	340F	380F	370F
18	290F	350AF	300F	310F	300	270	320	330	320	290	430	[430]A	430	370	360	330	350	320A	310A	290	A	310	[310]C	310
19	330F	310F	310	320	310	330	330L	330	330L	480	470	470	400	390	380	360	360	340	340A	300	280	280	320	[320]A
20	310F	320F	310F	310F	320	270	270	310	[340]A	370	[380]A	390	380	410	380	380	[360]A	340	300	270	280	340	360	350AF
21	320A	310AF	330F	310A	310F	290	280	270	370A	310	A	A	A	A	370	340	340	350	310	280	250	260	280	[320]A
22	350AF	350	320	310	320	280	[290]A	300	[340]A	(380)A	330H	A	A	430	430	390	340	340	300	290	250	A	A	350F
23	350F	350F	380	350AF	300	250	280L	300	300	340	[360]A	390A	370	370	350	350	A	A	300A	300A	300A	300A	330	340
24	330A	300	280	300F	290	350L	400	360	330	[360]A	390	[380]A	380	400	[380]A	370A	340	A	A	300	[320]A	350A	[340]AF	320AF
25	320	300	330	340	350	380	300	380	370AH	A	A	390	390	400	400	380	350	350	290	260	270	[300]A	340	[320]A
26	300	300A	350A	330A	360A	370L	330	290	350A	380	[380]A	380	360	A	A	A	A	350	310	280	310	320	340F	330AF
27	[300]A	280	260F	320AF	400	380	350H	470	A	A	A	A	A	500	A	A	A	A	310	A	A	360AF	350F	340F
28	A	A	350F	310AF	310F	400	A	A	A	A	A	B	A	A	A	370	360	360L	330	310	310	340F	350F	350F
29	320F	300	280F	290F	300F	350	380	A	390	[440]A	490	[440]A	390	380	350	340	360	320	300	[310]A	320	[320]A	310	300F
30	270F	240F	250	300	320	360	370	300	310	330	510	410	370	380	360	320	A	A	310	290	[300]A	320F	330	300F
31																								
Mean Value	310	300	300	310	320	320	340	330	340	390	430	420	400	400	390	370	350	340	310	300	300	320	320	320
Median Value	310	300	300	310	320	320	340	330	340	380	400	420	390	390	380	360	350	340	310	300	300	310	330	320
Count	29	29	29	29	30	28	25	25	23	21	21	22	22	25	25	26	23	24	29	26	25	27	27	29

h'F2

Sweep 0.85 Mc to 22.0 Mc in 2 min ☐ Manual ☒ Automatic

A 2

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | fEs | Akita | Lat. 39° 43.5' N | Long. 140° 08.2' E

135° E Mean Time

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	4.5F	3.7F	4.8F	4.1F	4.2F	3.2	4.2	5.5	5.3	4.6	6.3	7.8	11.2	7.0	7.0	10.5	10.0	5.1	3.1	7.0	13.0Y	8.0	7.7	3.8
2	4.2	3.1	4.9	2.3	3.0	4.0	4.4	7.5	6.1	9.8	4.6	7.9	9.5	6.9	11.4Y	10.4	10.6	7.7	10.0Y	10.4	11.0	10.0	4.2	7.5
3	6.6	6.4Y	7.2F	6.9F	3.9F	6.0	6.0	4.8	B	7.0Y	7.0	6.0	8.0	11.0	7.5	G	4.3	3.9	>55C	4.4	3.4	3.1Y	6.4Y	4.8
4	4.2F	4.9	>5.3C	6.1Y	4.7	4.1Y	3.4	6.5	5.5	5.9	11.5	6.9	4.8	4.6	4.4	6.0	4.4	4.6	8.8	4.2	3.1	6.3Y	5.6	8.9
5	6.4Y	6.7	4.1	5.3	4.7	3.1	4.5	5.2	5.5	9.2	10.0	10.7	9.5	9.0	10.4	5.8	4.4	10.9	5.0	3.7	4.0	6.5	4.5	5.8
6	5.5	7.3F	9.0	7.8F	6.0YF	4.5	4.1	5.9	10.5	10.0	9.3	10.6	11.5	6.5	8.9	6.5	4.5	7.5	9.0Y	>5.4C	6.5Y	3.8	4.5	6.7F
7	4.5F	>5.4CF	5.2F	4.4F	7.8	5.0	9.1Y	9.0	4.5	>5.4C	>5.4C	4.2	4.2	4.3	G	G	4.8	4.4	4.0	5.5	11.4	5.8	3.8	3.5
8	4.6F	2.4F	2.2	2.2Y	3.1	4.9	4.2	6.6	>5.4C	8.0	6.0Y	6.1	4.2	4.5	5.4	4.7	11.5	11.5	4.6	3.5	3.5	3.5	8.0	10.0
9	3.2	2.7	3.0F	3.8F	5.8	4.5	5.6	7.0	6.2	6.7	4.6	4.9	4.4	4.5	G	G	G	5.1	4.6	3.2	6.5	3.1F	6.5F	4.1F
10	3.7F	2.5F	3.5F	3.5F	5.5F	4.5	6.2	6.8	6.5	13.2	11.1	10.0	11.5	6.5	6.6	5.2	9.2	6.2	6.7	7.5	7.0F	4.5	6.7	3.5F
11	3.0F	4.4F	3.5F	3.1F	2.2F	G	4.4	5.2	4.7	4.5	G	4.1	G	5.2Y	6.8	6.4	10.0	4.4	4.5	5.8	7.7	7.9	8.4Y	2.1
12	2.0Y	2.0Y	2.2	3.2	4.1	3.1	5.5	8.5	10.9	11.5	6.8	6.5	6.3	4.6	7.1	8.0	9.9	10.0	5.8	4.6	5.9	4.5	4.4	4.4
13	2.0	4.1Y	3.9	2.7Y	2.4YF	4.1	4.0	6.5	6.0	6.5	5.1	4.5	G	5.6	4.7	4.4Y	9.5Y	7.4	9.0Y	7.0	7.1	6.5	9.0	8.9Y
14	2.0Y	5.0	4.2	3.5	3.0	3.4	G	5.0	8.5	7.7	6.7	5.9	G	B	G	G	G	4.1	3.1	3.0	3.1	3.0	3.0	3.0
15	2.4Y	2.5	3.0	2.2	1.5	3.2	4.5	4.8	5.2	5.2	6.8	10.0	9.5	G	G	G	4.2	4.2	3.5	3.1	1.9	2.9	4.5	4.0
16	3.5	4.6	3.6Y	4.5Y	4.2	4.0	3.9	G	G	6.4	6.7	6.5	6.4	6.1	4.8	4.4	4.9	5.7	6.2	3.5	3.5	8.0	4.5	1.9
17	E	3.5Y	3.2	4.2	2.2F	3.1F	4.3	G	7.5	6.0	7.2	9.0	7.0	4.3	4.5	G	G	3.9	4.6	3.9F	3.8F	5.6F	4.6	5.6F
18	7.6F	4.1F	4.5F	7.0F	3.5F	3.5F	5.5	7.0	5.2	6.2	6.6	8.6	5.8	7.6	5.0	5.4	6.1	7.6	5.9	4.2F	11.5F	6.6	C	3.4
19	3.5	4.2	5.1F	4.3F	3.5	4.5	6.5	4.5	4.7	5.4	4.6	G	5.6	6.1	6.4	6.2	5.2	5.6	7.5	3.2	3.2	2.0	4.9F	9.1
20	9.0	6.7F	5.5F	4.5F	4.4F	4.5F	4.0	6.0	10.1	6.5	7.8	G	4.6	G	G	5.7	9.7	6.6	6.5Y	4.8	3.5	3.7	6.5	5.6
21	4.5	6.7F	4.7F	6.6F	4.6F	6.0	5.9	5.5	8.0	7.1	10.0	11.5	11.5	9.8Y	10.0Y	8.7	7.0	4.4	3.5	3.5	2.3Y	2.2Y	3.1	7.0
22	4.8	4.3	4.5	3.8	3.1	4.6	6.0	6.5	8.0	7.9	6.1	6.5	11.0	4.6	6.4	G	4.6	5.8	6.2Y	3.5	5.6Y	7.7	6.5	6.7
23	7.4Y	4.5F	5.6	4.5F	3.1F	3.1Y	4.4	6.5	4.6	4.6	10.2	7.5	6.0	G	5.2	6.1	9.0Y	9.5	6.0	5.9	3.7	4.4	4.5	6.5
24	7.0	4.5	3.1	3.0	3.7	4.3	4.5	4.4	8.6	7.0	6.3	7.1	6.2	10.5	8.5	8.0	9.0	8.9Y	11.5Y	6.3Y	9.3Y	10.0	8.0	4.4
25	4.4	2.7	E	1.8Y	2.5	3.5	6.0	4.5	6.8	9.6	7.7	4.5	G	G	5.2	4.5	4.3	3.5	G	2.7	3.0	6.5	5.7	6.5
26	4.5	4.1	5.2	4.2	5.6	3.1	4.5	5.2	6.1	6.0Y	10.5	6.5	9.0Y	11.5	11.5	8.9	6.8	6.1	3.4	6.6	8.9	4.8	3.2	6.6
27	6.7	3.7	4.6F	6.5F	7.1F	G	4.7	4.8	6.5	10.0	10.1	9.0	7.5	5.0	9.0	5.4	8.0	6.2	5.5	6.4	6.7	4.4	6.5	7.0
28	7.7	7.1	4.5F	4.4F	3.9F	5.0	8.5	6.8	8.0	5.6	6.2	4.5	6.7	11.6	11.1	G	6.0Y	3.6	4.1	4.2	4.8	6.7	4.5F	5.8F
29	6.6YF	4.5F	3.7F	6.4YF	5.0F	6.7	5.0	6.5	6.5	11.0	6.2Y	11.2	5.4Y	7.5	9.5	4.8	G	5.2	5.8	9.0	4.7	7.2	3.7	4.5F
30	3.0F	2.0F	3.0YF	3.0	1.9Y	3.8	5.1	7.5	7.0	6.2	G	G	G	6.1	4.7	7.1	7.1	9.3	7.0	4.7	11.5	9.0Y	5.3	4.4
31																								
Mean Value	4.8	4.3	4.3	4.3	4.0	4.2	5.1	6.1	6.5	6.3	7.5	7.4	7.5	6.8	7.3	6.5	7.1	6.3	5.9	5.0	6.0	5.6	5.5	5.5
Median Value	4.5	4.2	4.4	4.2	3.9	4.0	4.5	6.0	6.4	6.7	6.7	6.5	6.2	6.1	6.4	5.4	6.0	5.8	5.8	4.5	5.2	5.7	4.9	5.6
Count	30	30	30	30	30	30	30	30	28	29	29	30	30	29	30	30	30	30	29	30	30	30	29	30

fEs

Sweep 0.85 Mc to 22.0 Mc in 2 min ☐ Manual ☒ Automatic

A 3

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | foF2 | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

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	7.4	7.2F	7.1F	7.0F	6.7F	7.0	7.5	8.2	8.6	9.6	10.0	10.1	10.7	11.9	11.3	11.3	10.6	10.3	[9.8]A	9.3	9.1	8.7	8.8	8.2
2	7.2F	7.4F	6.6F	6.4F	7.2	8.1	8.6	8.6	[8.0]A	7.4	[7.4]A	7.5J	7.6	7.6	A	A	7.5	8.1	8.5	8.6	6.6	6.6F	7.0F	7.1
3	[7.6]AF	8.1JF	>7.5F	5.9JF	5.5F	5.7FH	6.9	7.2	6.3	[6.0]A	5.7	A	A	A	6.1	6.6	6.8	6.6	6.5	6.4	6.6	6.6	6.8	6.5V
4	[6.4]A	6.4	5.6F	5.5F	A	6.7	8.2	9.3	8.2	7.1	7.0	7.9	8.7	8.9	9.1	9.0	8.5	7.2	7.1	8.0	7.7	8.2	(8.0)J	6.8
5	6.4	6.6JF	6.8VF	5.2F	5.3F	5.8F	7.9	9.5	9.3	8.6	8.7	8.8	9.2	10.0	9.9	8.6	A	A	8.9	7.9	7.8	7.9	8.0P	8.5
6	8.5	8.2	8.0F	6.0F	6.0JF	5.8F	8.5	10.3	10.1	7.6	A	7.6	8.4	[8.8]A	9.1	8.7	9.0	8.8	8.1	7.1	7.7	7.9	8.2	7.9
7	7.2P	(7.2)P	7.7F	7.5Z	6.9JF	7.2H	8.7	9.6	8.9	A	7.0	7.5	7.3	7.6	7.9P	7.8	7.7P	7.9	7.2	7.0	8.0J	7.7	8.4	7.9
8	7.0	6.9	6.5	6.4	6.4	6.4HF	7.5	7.6	A	A	6.5	7.7	8.2	8.6	9.4	9.6	9.1	[9.3]A	9.5	9.0	8.7	8.8	(7.8)B	8.7
9	7.9	7.3	6.5	6.2F	6.1F	7.0H	9.4	10.5	A	A	A	A	A	6.7	6.5	6.9	7.0	7.0	7.2	[7.4]A	7.5	7.2	8.0	6.9F
10	7.0	7.4S	7.0F	6.0F	6.2F	7.1F	7.5	7.1	6.3V	6.3	W	W	6.3	[6.3]A	6.5	[6.6]A	6.6	6.1	6.4	7.0	7.2	7.0	7.0P	(7.1)F
11	6.9F	6.7	6.3F	6.4F	5.8	7.0	8.5	8.8	7.8	6.1	7.0	8.5	8.6	9.5	9.0	9.8	10.0	10.1	9.0	8.1	8.5	7.9	8.1	7.7
12	7.5	7.2	8.0	7.6	7.5	8.5	8.9	9.2	A	A	A	7.0	A	A	A	A	7.5	7.6J	7.6J	7.5	7.8	7.5	7.6	8.1F
13	8.7F	8.7F	7.8F	7.5	6.9	7.0	7.3	7.9	7.8	A	A	8.1J	9.0	8.9	(9.6)JA	[10.0]A	10.4	10.3	9.5	9.1	8.8	8.5	A	A
14	C	9.0V	7.7	7.6Z	7.2F	8.0	8.6	8.4	7.9H	8.5	8.5	9.1	9.4J	9.2	9.2	9.9	9.9	9.9	9.9	9.2	9.0	8.6	9.0	9.0
15	8.4	8.0	8.0	8.0	8.2	7.7	8.5	9.6	8.8	8.4	8.2	8.1	8.7	9.6	9.7	9.1	9.2	9.6	9.0	8.6	8.5	8.9	8.9	8.5
16	9.2	8.5	8.0	7.5	7.7	8.5	9.7	11.4	11.0	9.7	9.1	10.5	11.9	12.0	11.6	9.5	9.7	10.2	10.3	10.2	8.5	8.9	8.8	[9.4]C
17	9.8F	9.8F	10.0F	9.0	7.5	7.4	7.9	8.9	8.6	[8.6]A	8.5	8.6	9.1	9.4	9.5	9.0	9.7	10.2	10.2	8.1	7.1	7.3	7.4J	(7.3)JF
18	8.0JF	7.4F	8.3JF	7.4F	6.8JF	7.2	8.6	9.0	8.5	[8.3]A	8.1	8.1	9.0	10.1	10.6	10.8	10.3	10.1	9.7	9.5	8.5	8.6	9.0	9.0Z
19	8.6F	8.7F	8.3JF	8.1ZF	7.4	7.0	8.0	8.4	7.2	6.4J	7.1	7.5	8.4	8.2	8.5	9.0	9.1	7.6	8.6	8.6	8.1	7.9	7.8	8.1
20	7.6	7.5F	7.5JF	(7.5)F	7.5	8.4	9.4	9.0H	9.0	8.9	9.0	8.2H	8.6	8.9	8.9	9.0	9.4	10.2	10.2	8.4	7.1	7.6P	8.0	8.2
21	7.9J	8.0	8.0J	7.4JF	7.2F	8.1	9.6H	10.2	9.2	8.8	8.6	8.5	9.0	9.1	[9.8]A	10.5	9.1	8.8	9.5	9.4	9.1	8.1	7.9	7.5
22	7.6	7.5	7.9	7.7	7.5	7.7	8.4	8.9	8.2	7.5	[7.8]A	8.0	8.5	8.6	8.7	9.5	9.5	9.0	8.6	8.6	8.5	7.6	8.8	8.2
23	8.5	8.2	7.9F	7.7JF	8.0	8.1	8.3	8.7	8.7	8.8	8.7	8.5	9.8	10.5	(10.6)A	A	10.5	10.5	9.0	9.1	9.0	8.9	(8.4)B	8.6
24	9.0F	9.1F	9.9	8.6	8.4F	7.4	7.9	8.3	(7.9)JA	A	A	A	A	A	9.9J	10.0	9.2	9.5	[8.1]A	8.1	8.5	8.7	9.2	9.3
25	9.6	8.5	7.9	7.0	[7.4]C	7.7	7.9	C	A	7.0	7.8	7.8	8.1	8.5	9.2	9.0	9.7	9.6	8.4	6.9	6.3	6.6	6.8	6.9
26	6.7	6.2	5.7	5.9	(5.3)JA	5.9	7.6	7.4	[6.8]A	6.3	7.5	7.0	8.5	8.8	8.4	8.3	8.3	8.8	9.3	9.1	8.5	8.5	9.0	8.9F
27	8.0	9.0	7.9	5.8F	7.0F	7.2	7.3	7.0	6.6	A	A	A	A	6.1	A	A	A	7.3	[6.8]A	6.0	5.8	6.4	6.5	6.9
28	6.0	(5.9)F	5.6JF	5.8JF	6.0F	5.4J	6.0	A	A	A	A	A	A	6.3	6.6	7.3	6.7	6.5	7.1	6.6	7.1	7.2	7.6	7.5
29	7.5F	7.7	8.6	5.8F	5.7JF	5.8	6.8	(6.9)A	A	6.1	6.5	[7.2]A	7.9	8.5	9.0	8.7	8.9	8.7	[8.3]A	7.9	8.0	8.5	8.8	8.3
30	9.2	6.9	5.9V	6.2	6.1F	6.0	8.0	9.9	7.0H	6.7	6.2	[7.2]A	8.3	8.8	8.9	A	A	8.5	8.3	8.5	8.5	7.9	8.5	(8.3)F
31																								
Mean Value	7.8	7.7	7.5	6.9	6.8	7.1	8.1	8.8	8.2	7.7	7.8	8.1	8.7	8.8	9.0	9.0	8.9	8.8	8.6	8.2	7.9	7.9	8.1	8.0
Median Value	7.6	7.5	7.8	7.0	6.9	7.2	8.1	8.8	8.2	7.6	7.8	8.0	8.6	8.8	9.1	9.0	9.1	8.8	8.6	8.2	8.0	7.9	8.0	8.1
Count	29	30	29	30	29	30	30	28	24	22	22	24	24	27	27	25	27	29	30	30	30	30	29	29

foF2

Sweep 1.0 Mc to 17.2 Mc in 2 min ☐ Manual ☒ Automatic

K 1

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | foF2 | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

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	390	400F	340F	360F	340F	330	350	350	370	400	400	350	400	400	370	370	350	360	(360)A	370	360	360	A	360
2	370F	360F	390F	460F	390	360	330	280	(360)A	440	(440)A	(430)J	410	380	A	A	380	350	(340)A	320	370	420F	440F	420
3	AF	(380)JF	F	(380)JF	450F	450FH	380	350	A	A	A	A	A	A	A	420	380	370	350	360	400	400	390	440V
4	(400)A	350	400F	430F	A	380	370	350	350	A	A	A	380	370	360	350	330	340	360	360	360	400	(340)J	400
5	400	(380)JF	330VF	400F	380F	350F	340	330	340	360	360	400	380	370	350	360	A	A	340	350	390	400	410P	400
6	350	310	320F	360F	(410)JF	440F	450	330	300	320	A	460	A	A	360	A	350	330	320	380	420	430	380	390
7	390P	(370)P	400F	410Z	(290)JF	440H	430	380	360	A	U	430	430	400	380P	350	350P	320	350	370	(370)J	390	390	380
8	390	420	390	400	420	390HF	370	330	A	A	U	410	390	A	A	350	360	A	A	370	380	400	(390)B	350
9	360	360	380	430F	430F	450H	410	A	A	A	A	A	A	U	U	410	370	380	340	(360)A	380	390	400	410F
10	390	420S	340F	380F	400F	320F	350	A	A	A	W	W	510	A	U	A	360	370	400	370	380	410	380P	(440)AF
11	390F	370	390F	430F	430	400	360	310	280	270	A	400	370	360	400	390	370	350	360	360	410	390	390	410
12	440	380	430	370	360	310	380	350	A	A	A	460	A	A	A	A	390	(380)J	(370)A	360	370	380	420	430F
13	400F	350F	360F	360	360	360	340	320	360	A	A	(420)J	400	390	A	A	380	360	330	350	380	380	A	A
14	C	340V	360	400Z	390F	370	340	360	360	360	430	390	A	A	400	390	390	400	350	370	420	410	410	400
15	430	430	410	400	370	390	400	350	(360)A	360	380	380	400	390	390	380	360	360	360	360	400	440	410	440
16	380	360	380	390	410	400	400	330	350	360	450	420	390	360	350	370	400	360	360	350	360	420	410	(390)C
17	370F	350F	330F	330	360	340	390	380	370	(380)A	400	410	400	420	390	410	400	360	310	320	370	420	(410)J	(400)JF
18	(380)JF	370F	(380)JF	370F	(360)JF	350	360	320	330	(360)A	380	430	430	410	380	(370)A	360	370	360	350	370	380	390	420Z
19	430F	400F	(390)JF	410ZF	370	320	370	320	330	U	380	410	380	370	380	360	350	340	370	360	370	370	390	390
20	380	380F	(370)JF	(380)F	350	320	320	350H	360	370	370	380H	400	400	380	380	(360)A	350	320	320	390	430P	430	400
21	(380)J	400	(340)J	(370)JF	370F	320	340H	310	330	360	(400)A	440	(420)A	410	(380)A	350	360	400	370	330	340	350	410	390
22	440	410	380	380	370	330	310	320	310	370	A	A	420	400	410	390	350	350	360	360	380	380	440	410
23	400	390	390F	(390)JF	360	290	320	350	310	380	350	380	410	410	A	A	A	350	340	380	380	400	(390)B	460
24	380F	410F	350	350	400F	420	390	370	A	A	A	A	A	A	A	360	370	340	A	A	410	410	410	430
25	410	410	450	450	(420)C	380	330	C	A	A	370	380	350	360	350	400	360	320	310	400	400	440	430	400
26	A	360	410	440	A	390	310	270	(300)A	330	340	U	360	340	360	360	350	370	340	310	380	430	430	400F
27	420	360	340	390F	410F	420	440	380	340	A	A	A	A	U	A	A	A	350	(340)A	330	430	420	440	400
28	340	(390)F	(420)JF	(430)JF	390F	(400)J	410	A	A	A	A	A	A	U	410	370	370	360	340	370	380	410	420	410
29	440F	390	310	350F	(430)JF	410	360	A	A	A	A	A	390	370	370	360	340	A	A	370	420	420	420	390
30	320	280	410V	410	400F	370	370	280	340H	U	U	A	370	350	340	A	A	350	350	360	360	400	410	(400)F
31																								
Mean Value	390	380	380	390	390	370	370	330	340	360	390	410	400	380	380	380	370	360	350	360	380	400	410	400
Median Value	390	380	380	390	390	380	360	330	340	360	380	410	400	380	380	370	360	360	350	360	380	400	410	400
Count	27	30	29	30	28	30	30	25	21	15	15	20	22	20	20	22	26	27	27	29	30	30	28	29

foF2

Sweep 1.0 Mc to 17.2 Mc in 2 min ☐ Manual ☒ Automatic

K 2

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | h'F2 | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

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	320	310A	320A	270	270F	270A	L	270	340	360	380	320	380	350	330	330	310	290	A	A	310A	270	A	290A
2	290	270	310	360A	310	280	260	270	A	440	[440]A	430	410	380	A	A	380	340A	[280]A	260	220	(340)AF	(390)AF	A
3	AF	320AF	270F	330AF	380A	340H	370	340	A	A	A	A	A	A	460	420	380	360	320	280	290	300	310	(370)A
4	[320]A	270	310A	360A	A	260	320	320	320	410A	500	450A	380	370	350	330	310	300	290	280	270	360A	290A	[320]A
5	340A	350AF	280	240	290	250	290L	290	320	320	360	380	360	370	330	330	A	A	320A	240	250	300	310	330A
6	300A	270A	260	300A	340	260	400	290	280	320A	A	460	A	A	340	[340]A	330	300	290	290A	360A	350A	300	300A
7	320A	310A	320	310F	240	240H	350	340	340	A	520	430	430	400	380	350	340	300	300	310A	350A	300	300A	290
8	290	310	330A	330A	340	300H	350	320	A	A	490	410	380	A	A	350A	330A	A	A	330A	310A	350A	370A	300A
9	270	310A	310A	350	380	260H	360A	A	A	A	A	A	A	390	440	410	370	380	320	[320]A	310A	280	360A	300
10	300	[280]A	260	260	290	250	300	400A	400A	440	W	W	510	[480]A	450	[420]A	380	350A	330	310A	350A	300	320A	[300]A
11	270	270	290	360AF	340	310L	320	330	270	270	500A	390	370	380	380	360	320	320	280	290	280	300	300	280
12	350	340	330	310A	270	240	320	330	A	A	A	460	A	A	A	A	380	360	[360]A	350A	290A	280	340	340
13	300	260	270	280	270	270	310A	310	360	A	A	420	390	360	A	A	340	310	270	280	280	300A	A	A
14	C	260	280A	330A	320	280	300	310	LH	360	410	360	A	A	380	360	330	330	290	270	290	310	310	280
15	310	320	290	290	280	260	340	320	360A	320	360	370	360	380	360	340	340	310	290	270	280	340	310	340A
16	300	270	290	290	340A	280A	320L	280	270	280	A	380	350	320	320	320	360	310	290A	270A	260A	320A	320	[300]C
17	290	270	260F	230	260A	240	330L	320	360	[370]A	380	360	350	380	350	380	360	310	270	250	260	300	310	360AF
18	330A	330A	310A	290	280	250	290A	290	310	[340]A	360	430	410	380	360	[360]A	350A	310	300	280	300A	340A	300	300
19	330F	310A	310A	320A	310	270	360	290	330	400	360	410	380	360	380	350	330	290	330	280	260	270	290	310
20	300A	300	330A	350A	290	260	270	250H	280A	320L	340	300H	380	380	380	360	[340]A	310	280	260	290A	340A	340A	330A
21	360A	350A	300A	310A	280A	270	270H	260	290	340	[380]A	430	[420]A	410	[360]A	320	320	340	290	260	250	250	290	300
22	330	330	290	280	290	260	270	280	270	350	[380]A	420A	420	400	400	380	320	300	300	300A	280	260	330	310
23	330A	300	310A	310	290	230	260	320	300	360	310	360	380	360	A	A	A	290	310A	280	300A	270	280	360
24	310	360A	260	270	260	330A	360	340A	A	A	A	A	A	A	A	330	320	300	A	A	330A	330A	330	360A
25	320	310	330	330	[340]C	340	300	C	A	390	360	380	350	360	340	380	340	290	240A	250A	300A	340	340	350A
26	310A	310A	350A	380A	A	270	290	260	[300]A	330L	340	470	360	300	340	340	320	350	300	260	260	310	350	330A
27	350A	300A	260A	310A	330	360	420	360	340	A	A	A	A	480	A	A	A	330	[300]A	270	A	A	380A	[350]A
28	320A	310A	360	360AF	270	370	400	A	A	A	A	A	A	440	410	360	380	360	310	270	280	310A	320	330A
29	A	310A	250	240	320	380	340	A	A	A	A	A	380	360	350	340	320	A	A	A	290	310	330A	310A
30	270	220	290	300	310	260	330A	270	280H	420L	410	[380]A	360	350	330	A	A	320	330A	280A	270A	300	330A	360A
31																								
Mean Value	310	300	300	310	300	280	320	310	320	360	400	400	390	380	370	360	340	320	300	280	290	310	320	320
Median Value	310	310	300	310	290	270	320	310	320	360	380	410	380	380	360	350	340	310	300	280	290	300	320	320
Count	27	30	30	30	28	30	29	26	20	20	20	24	22	24	23	24	26	27	26	27	29	29	28	28

h'F2 | Sweep 1.0 Mc to 17.2 Mc in 2 min | ☐ Manual ☒ Automatic

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | foF1 | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

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	A	5.4	5.5	5.6	5.7	5.5	5.5	5.9L	5.1	5.0	L	A					
2						2.9	4.7L	4.6	[5.1]A	5.6	[5.6]A	5.6	5.1	A	A	A	A	A	A					
3						A	A	A	B	A	A	A	A	A	A	5.0	4.7	4.3	3.7					
4							4.6L	4.8	5.0	A	A	A	A	A	5.2	5.0	4.9	4.0	3.4L					
5							L	4.6	5.2	5.1	A	A	5.5	5.7	5.2	5.1	A	A	A					
6							5.0	4.7	A	A	A	A	A	A	5.2	A	A	A	A					
7							4.4	A	A	A	5.5	5.3	5.4	5.5	5.0	4.9	4.8	4.3	A					
8							A	A	A	A	A	A	A	A	A	A	A	A						
9							A	A	A	A	A	A	A	4.9	4.8	[4.8]A	4.8	4.4	A					
10							A	A	A	A	4.8	A	A	A	A	A	4.7	A	3.9L					
11						L	4.5L	4.5	A	A	A	5.1	5.5	5.5	4.9	A	A	A	L					
12						A	L	A	A	A	A	5.0	A	A	A	A	A	A	A					
13							A	A	A	A	A	A	5.4	A	A	A	A	4.5	L					
14							4.8L	5.2L	L	5.6	5.9	5.5	A	A	5.4	5.5	5.0	4.8	A					
15						Q	5.0L	A	A	A	6.2	[6.0]A	5.7	5.8	5.9H	5.6	L	L	L					
16							5.4L	4.9	A	A	A	A	5.6	5.5	5.5	5.7L	5.0	L						
17							5.1L	5.0	5.8	[5.9]A	6.0	A	5.5	5.6	5.5	5.6	5.0	4.6H	4.0					
18							A	5.0	A	A	L	6.2H	A	A	5.5	A	A	A	A					
19							4.7	4.7	5.5	5.5	5.0	5.6	5.5	5.5	A	A	A	A	5.0L					
20						L	4.2L	L	A	L	5.6	5.4	A	5.7	5.5	5.5	A	A	4.0					
21							A	4.5L	5.2H	6.0	A	A	A	A	A	A	5.4	5.6	L					
22							A	L	4.8	A	A	A	5.8	5.4	5.4	5.4	4.8	4.5	L					
23						L	L	5.5	5.4	5.5	5.2	5.5	5.5	5.5	A	A	A	4.5	A					
24							A	A	A	A	A	A	A	A	A	A	L	A	A					
25						3.3	A	C	A	5.5	5.8	5.6	5.5	5.6	5.5	5.5	5.0	4.5	A					
26							4.2	4.5	[5.0]A	5.4L	5.1	5.8	5.0	[5.2]A	5.3	4.9L	4.8	4.7L	4.2L					
27						3.2	A	A	4.5	A	A	A	A	5.0	A	A	A	4.3	A					
28						3.5	A	A	A	A	A	A	A	A	A	5.0	(5.3)L	4.4	A					
29						3.4	4.1	A	A	A	A	A	5.1	A	5.0	4.8	A	A	A					
30						Q	A	A	5.1	5.7H	5.5	A	A	5.0	5.4	A	A	A	A					
31																								
Mean Value						3.3	4.7	4.8	5.2	5.6	5.5	5.6	5.4	5.4	5.3	5.2	4.9	4.5	4.0					
Median Value						3.3	4.7	4.7	5.2	5.5	5.6	5.6	5.5	5.5	5.4	5.1	5.0	4.5	4.0					
Count						5	13	13	12	11	13	13	15	16	18	16	14	14	7					

foF1

Sweep 1.0 Mc to 17.2 Mc in 2 min ☐ Manual ☒ Automatic

K 4

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | h'F1 | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

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							240	A	A	A	A	A	A	A	250	230	270	270	A					
2						260	240	A	A	A	A	A	210	A	A	A	A	A	A					
3						A	A	A	B	A	A	A	A	A	A	270	230	250	270					
4							250	240	250	A	A	A	A	A	A	250	230	220	240					
5							240	270	240	210	A	A	A	A	260	250	A	A	A					
6							260	260	A	A	A	A	A	A	240	A	A	A	A					
7							250	A	A	A	210	210	210	240	230	250	240	A	A					
8							A	A	A	A	A	A	A	A	A	A	A	A						
9							A	A	A	A	A	A	A	230	250	[260]^{A}	280	A	A					
10							A	A	A	A	210	A	A	A	A	A	A	A	260					
11						270	260	A	A	A	A	A	A	A	A	A	A	A	260					
12						A	260	A	A	A	A	200	A	A	A	A	A	A	A					
13							A	A	A	A	A	A	A	A	A	A	A	240	250					
14							250	230	230	A	A	A	A	A	B	220	220	240	A					
15						Q	240	A	A	A	270	A	A	A	220^{H}	250	[250]^{A}	250	260					
16							240	240	A	A	A	A	A	A	A	A	260	250						
17							250	230	A	A	270	A	A	270	A	230	230	250^{H}	250					
18							A	260	A	A	A	270^{AH}	A	A	A	A	A	A	A					
19							230	260	250	200	200	230	[230]^{B}	230	A	A	A	A	250					
20						260	230	240	A	240	240	A	A	B	B	A	A	A	250					
21							A	230	230^{H}	290	A	A	A	A	A	A	250	270	260					
22							A	240	230	A	A	A	B	B	B	250	270	290^{A}	270					
23						240	240	250	230	A	210	B	B	A	A	A	A	A	A					
24							A	A	A	A	A	A	A	A	A	A	240	A	A					
25						280	A	C	A	A	230	220	A	B	A	230	250	A	A					
26							250	260	[240]^{A}	210	A	A	230	[240]^{A}	240	270	260	[260]^{A}	260					
27						300	A	A	270^{A}	A	A	A	A	250	A	A	A	260	A					
28						290	A	A	A	A	A	A	A	A	A	270	260	250	A					
29						250	A	A	A	A	A	A	A	A	220	240	A	A	A					
30						Q	A	A	220	210^{H}	A	A	A	260	A	A	A	A	A					
31																								
Mean Value						270	250	250	240	230	230	230	220	250	240	250	250	250	260					
Median Value						260	240	240	240	210	220	220	220	240	240	250	250	250	260					
Count						8	16	13	10	6	8	5	4	7	8	14	15	13	12					

h'F1

Sweep 1.0 Mc to 12.2 Mc in 2 min ☐ Manual ☒ Automatic

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | foE | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

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	3.5	3.6	3.9	3.9	(3.5)^{A}	3.5	3.8	3.8	3.6	3.3	(2.6)^{A}	A					
2						1.8	2.7	3.1	3.5	3.7	3.8	3.7	3.7	3.6	3.5	3.4	3.2	2.9	2.1					
3						2.0	2.6	3.3	B	A	A	3.9	3.9	3.7	A	A	A	A	A					
4							2.7	3.2^{s}	3.5	3.8	3.9	3.9	3.8	3.6	3.7	3.4	(2.9)^{A}	[2.5]^{A}	2.1					
5							A	3.2	3.2	3.6	3.6	[3.6]^{A}	3.6	3.7	3.7	3.6	3.3	2.7	2.0					
6							2.6	[3.0]^{A}	3.4	3.7	3.8	3.7	3.7	(3.8)^{A}	3.9	(3.7)^{B}	A	A	A					
7							2.5	3.0	3.3	3.3	3.6	3.8	3.4	A	A	3.6	3.3	2.8	2.1					
8							2.7	3.2	3.5	3.5	3.7	3.7	3.9	3.7	3.5	3.3	2.9	2.8						
9							2.7	3.2	3.4	3.5	(3.5)^{A}	3.5	3.5	3.4	A	3.7	3.3	2.8	1.8					
10							2.6	3.2	3.5	3.6	3.5	3.8	3.7	3.7	3.8	[3.6]^{A}	3.3	A	(2.3)^{A}					
11						2.0	2.7	3.2	3.4	3.6	3.7	[3.8]^{A}	3.9	3.9	3.8	3.6	3.3	3.0	2.2					
12						2.0	2.7	3.1	3.3	3.5	3.6	(3.6)^{A}	3.4	3.3	3.3	2.7	A	A	A					
13							A	A	A	3.6	3.7	A	A	3.7	3.5	[3.2]^{A}	3.0	3.0	2.3					
14							2.6	3.2	3.5	3.7	3.8	3.9	4.0	B	B	3.4	3.0	A	A					
15						1.8	2.6	3.2	3.6	(3.9)^{A}	(3.9)^{A}	A	A	A	A	A	A	A	A					
16							A	3.3	3.7	3.8	3.9	3.8	3.9	3.9	3.8	3.6	3.0	A						
17							2.7	3.3	3.7	3.8	3.9	3.9	(3.7)^{A}	(3.5)^{A}	(3.5)^{A}	3.6	A	A	A					
18							2.8	3.4	3.6	3.7	3.9	4.0	3.9	3.9	A	A	A	A	A					
19							A	A	A	A	A	(3.9)^{B}	(4.0)^{A}	3.8	3.9	3.6	3.3	3.0	A					
20						A	A	3.1	3.5	(3.8)^{A}	3.7	A	A	3.7	3.7	3.6	3.5	3.0	B					
21							A	3.0	3.7	3.7	3.6	3.9	3.9	[3.8]^{A}	3.6	3.6	3.6	A	A					
22							2.6	3.0	3.0	3.6	3.6	3.8	[3.8]^{B}	3.7	3.8	3.8	3.3	3.0	2.0					
23						1.8	[2.4]^{A}	3.0	3.5	3.6	3.8	3.7	A	3.4	A	A	A	A	A					
24							2.7	3.2	3.6	3.7	3.8	4.0	A	3.9	3.7	3.5	3.5	3.1	2.1					
25						1.8	2.8	[3.2]^{C}	3.5	3.6	3.8	3.8	3.9	3.8	(3.4)^{A}	A	A	A	A					
26							2.7	3.3	[3.5]^{A}	3.7	3.8	3.8	(4.0)^{B}	3.9	3.8	3.6	3.3	2.9	2.0					
27						A	2.7	3.0	3.3	3.5	3.7	3.7	3.6	3.4	A	A	A	A	A					
28						2.0	2.7	A	3.5	3.7	A	A	3.8	3.8	3.7	3.4	3.3	3.0	2.3					
29						1.7	2.5	3.0	3.4	3.6	3.8	3.8	4.0	3.8	3.8	3.5	3.4	2.9	2.2					
30						A	2.4	3.3	3.4	3.6	3.5	A	A	3.9	3.2	3.6	3.4	2.8	(1.9)^{A}					
31																								
Mean Value						1.9	2.6	3.2	3.5	3.6	3.7	3.8	3.8	3.7	3.7	3.5	3.3	2.9	2.1					
Median Value						1.8	2.7	3.2	3.5	3.6	3.8	3.8	3.8	3.7	3.7	3.6	3.3	2.9	2.1					
Count						9	23	27	27	28	27	25	24	27	22	24	21	17	14					

foE

Sweep 1.0 Mc to 17.2 Mc in 2 min ☐ Manual ☒ Automatic

K 6

17

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | h'E | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

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	110	110	110	110	110	110	110	110	110	110	110	A					
2						140	110	110	120^{B}	110	110	110	110	110	110	110	110	110	110					
3						130	120	110	B	A	A	110	110	110	A	A	A	A	A					
4							120	120	110	110	110	110	110	110	110	110	110	A	A					
5							A	110	110	110	110	(110)^{A}	110	110	110	110	110	120	120					
6							110	(110)^{A}	110	110	110	110	110	110	110	120^{B}	A	A	A					
7							120	110	110	110	110	110	110	A	A	110	110	110	120					
8							120	110	110	110	110	110	110	110	110	110	110	110						
9							120	110	120	110	110	110	110	110	A	110	110	120	120					
10							110	110	110	110	110	110	110	110	110	(110)^{A}	110	A	120					
11						130	120	110	110	110	110	(110)^{A}	110	110	110	110	110	110	120					
12						140	120	110	110	110	110	110	110	110	110	110	A	A	A					
13							A	A	A	110	110	A	A	110	110	(110)^{A}	110	120	120					
14							110	110	110	110	110	110	110	B	120	110	120	A	A					
15						140	120	110	110	110	110	A	A	A	A	A	A	A	A					
16							A	110	110	110	110	110	110	110	110	110	110	A						
17							110	110	110	110	110	110	110	110	110	110	A	A	A					
18							110	110	110	110	110	110	110	110	A	A	A	A	A					
19							A	A	A	A	A	110	110	110	110	110	110	110	A					
20						A	A	110	110	110	110	A	A	110	110	110	110	120	B					
21							A	110	110	110	110	110	110	(110)^{A}	110	110	110	A	A					
22							110	110	110	110	110	110	(110)^{B}	110	110	120^{A}	110	110	110					
23						120	(120)^{A}	110	110	110	110	110	A	110	A	A	A	A	A					
24							120	110	110	110	110	110	A	110	120	110	120	110	110					
25						130	110	(110)^{C}	110	110	110	120	120^{B}	110	110	A	A	A	A					
26							A	110	(110)^{A}	110	110	110	110	130	120	110	110	110	120					
27						A	120	110	110	110	110	110	110	110	A	A	A	A	A					
28						130	120	A	110	110	A	A	110	110	110	110	110	110	110					
29						130	110	110	110	110	110	110	110	110	110	110	110	110	110					
30						A	110	110	110	110	110	A	A	110	110	110	110	110	110					
31																								
Mean Value						130	120	110	110	110	110	110	110	110	110	110	110	110	120					
Median Value						130	120	110	110	110	110	110	110	110	110	110	110	110	120					
Count						9	22	27	27	28	27	25	24	27	23	24	21	16	13					

h'E

Sweep 1.0 Mc to 17.2 Mc in 2 min ☐ Manual ☒ Automatic

K 7

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Kokubunji Tokyo Lat. 35° 42.4' N Long. 139° 29.3' E

Jun. 1956 | fEs | 135° E Mean Time

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	4.5	6.7	9.0	6.0	4.8	5.5	3.6	5.2	6.6	6.5	5.7	5.4	5.0	5.8	6.2	3.8	4.4	6.1	14.0	9.5	9.5	6.0	8.2	6.0
2	4.1	6.0	4.5	4.5	3.4	3.0	4.5	5.5	8.6	8.0	11.5	7.8	6.0	7.1	14.1	8.3	5.8	6.5	6.1	6.1	6.6Y	6.0	6.5	6.8
3	7.0	12.5	9.0	6.3	6.5	4.2	5.5	6.4	7.0	10.6	7.2	10.2	7.5	7.5	10.5	7.5	3.9	6.0	3.8	3.6	3.8	3.3	3.1	5.7
4	8.5	10.0Y	6.5	6.2	8.0	6.0	4.2	4.5	4.7	6.6	6.6	7.1	11.3	13.0	5.0	6.0	5.8	4.2	3.2	2.9	5.8	7.0	5.7	7.0
5	4.5	6.5	4.5	2.9	3.2	2.9	3.4	5.7	7.0	5.8	9.1	9.0	6.5	5.6	6.0	5.6	9.4	9.0	6.8	3.1	2.4	4.4	3.8Y	5.7
6	5.8	5.0	10.1	6.7	3.5	3.7	4.5	5.7	6.5	8.0	9.0	8.5	11.3	12.0	5.4	8.1	5.5	6.0	3.8	7.4	7.0	4.5	4.5	3.6
7	3.9	5.8	5.8F	3.3	4.0	1.9	6.0	6.0	6.2	13.1	6.0	4.0	3.8	3.9	3.7	3.6	3.7	4.5	4.4	5.4	6.6	8.5	7.0	5.9
8	2.8	3.5Y	4.5	4.5	3.3	3.0	4.9	5.7	13.3	8.7	6.2	6.8	6.6	9.2	10.4	9.9	7.3	11.3	9.4	7.0	5.9	6.0	6.0	8.1
9	9.0	6.9	6.9F	3.9	4.5	2.9	6.7	10.0	8.6	11.5	12.9	10.5	10.1	4.4	4.2	5.9	4.5	4.9	5.9	6.7	5.9	3.7	8.5	E
10	3.0	8.7	6.1	4.2	2.9	2.7	4.6	7.0	6.4	8.3	4.7	6.6	6.7	10.2	6.0	12.2	4.4	5.7	2.4	5.4	8.9	3.7	5.8	9.2
11	2.4	5.4	2.4	6.8	5.9	3.5	3.8	5.2	6.3	6.0	7.1	6.6	5.2	6.0	6.5	7.5	6.0	7.0	4.4	4.1	2.3	3.3	4.5	2.8
12	6.8	5.5	4.5	5.9	2.4	3.8	5.6	7.1	9.1	14.0	10.5Y	6.9	14.5	14.5	12.0	10.2	5.9	6.8	8.5	7.0	3.4	3.3	6.0	5.5
13	6.0	E	7.0	4.0	4.1	3.6	6.0	6.0	7.4	13.5	10.1	7.0	8.0	6.3	10.1	13.4	6.2	5.9	3.0	3.5	3.2	5.6	8.5	10.4
14	C	5.7Y	5.0	6.6	3.7	3.9	G	3.6	4.8	5.7	5.7	5.8	9.7	9.6	G	4.4	3.7	3.7	4.5	3.8	E	3.0	3.5	2.6
15	2.9	2.0	2.0	2.4Y	2.1Y	2.9Y	3.9	7.3	7.9	6.1	5.4	6.8	5.9	7.1	3.8	4.4Y	5.1	5.6	4.0	4.5	3.0	3.5	3.7	4.5
16	5.8	6.6	6.0	4.0	10.5	9.0	4.2	4.2	5.7	6.0	8.4	7.5	5.9	6.2	6.2	5.8	6.8	3.8	4.5	4.6	8.4	5.7	6.7	C
17	2.5	2.1	3.6	3.4	4.5	2.5	4.5	6.1	6.2	9.8	6.5	6.6	6.3	4.7	5.1	G	3.8	4.7	3.0	3.5	3.0	3.6	6.0	5.1
18	5.8	7.0	6.5	5.8	3.9	3.3	5.8	6.0	7.0	10.2	5.8	5.9	7.9	6.5	10.2	13.5	9.0	6.1	5.6	4.5	4.5	6.6	10.5	E
19	3.5	3.7	4.6	4.5	5.7	7.0	6.0	6.4	6.0	5.5	3.8	G	4.5	G	9.5	7.4	6.0	5.5	3.8	3.5Y	E	E	2.0	2.9
20	3.5	3.6	6.5	8.0	4.5	3.0	2.9	4.2	5.7	5.0	5.7	6.0	6.6	G	G	6.1	11.3	6.6	3.7Y	E	3.2	3.2	3.5	4.5
21	6.7	8.5	6.6	4.5Y	3.5	3.7	4.6	3.5	4.0	5.8	8.8	7.5	10.5	13.0	13.7	6.0	5.6	6.0	3.7	E	E	E	2.9	2.9
22	E	5.5Y	2.4F	2.3Y	2.4	2.9	6.0	4.4	6.5	8.1	7.5	7.5	B	4.2	G	3.7	3.5	4.5	4.0	4.4	2.7	E	6.0	5.9
23	6.0	3.8	4.5	4.1	3.0YF	2.1	2.9	4.3	3.8	5.8	4.1	4.4	3.6	6.1	12.0	12.2	10.0	5.3	7.0	4.9	6.0	3.0	2.3	4.5
24	5.9	8.0	5.7	5.8	7.0	4.8	5.2	6.6	9.0	15.0	10.6	14.2	14.6	13.0	11.0	5.6	10.0	10.5	13.1	8.9	8.5	4.9	6.0	6.0
25	4.2	3.4	2.5	1.8Y	C	2.9	5.7	C	7.5	7.0	6.5	G	8.6	4.4	8.1	(9.0)Y	3.7	4.4	4.9	3.0	3.9	3.3	3.0	4.6
26	5.8	7.3	5.6	6.5	8.5	4.1	3.0	3.8	7.2	G	5.5	6.2	4.4	6.6	5.6	3.7	5.6	8.2	4.5	3.6	2.0	5.9	3.7	6.1
27	7.2	6.6	6.6	7.9	5.8	2.8	6.2	6.4	6.1	7.5	10.0Y	14.2	10.9	6.8	12.2	7.3	9.1	8.5	12.5	7.0	4.3	6.7	4.4	8.5
28	6.0	6.9	6.8	5.9F	2.4	4.0	5.9	13.9	14.1	10.1	13.5	14.5	14.5	6.4	4.5	4.3	4.5	5.8	5.4	3.0	2.4Y	3.5	6.0	6.0
29	6.1	8.6	3.8	2.3	1.2	3.0	5.7	8.3	8.0	6.3	8.0	10.6	5.1	10.5	6.0	6.0	5.3	8.4	8.9	5.6	(2.4)Y	2.1	4.2	6.5
30	4.5	E	E	3.8Y	2.4Y	2.9	4.9	10.4	5.9	3.8	7.5	10.1	9.6	6.4	5.4	11.0	7.0	7.0	7.0	6.0	6.0	4.5	4.7	6.0
31																								
Mean Value	5.2	7.1	5.5	4.8	4.4	3.7	4.9	6.2	7.1	8.2	7.7	8.0	8.0	7.7	7.9	7.3	6.1	6.3	5.9	5.1	4.9	4.6	5.2	5.7
Median Value	5.8	5.9	5.6	4.5	3.9	3.2	4.8	6.0	6.6	7.2	7.2	7.0	6.7	6.4	6.1	6.0	5.7	6.0	4.5	4.5	3.8	3.7	5.2	5.7
Count	29	30	30	30	29	30	30	29	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30	29

fEs

Sweep 1.0 Mc to 17.2 Mc in 2 min ☐ Manual ☒ Automatic

K 8

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | (M3000)F2 | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

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	2.7	2.7^{F}	2.9^{F}	2.8^{F}	2.9^{F}	2.8	2.9	2.7	2.7	2.7	2.6	2.7	2.7	2.6	2.8	2.8	2.9	2.9	[2.8]^{A}	2.7	2.9	2.8	2.6	2.9
2	2.8^{F}	2.8^{F}	2.7^{F}	2.5^{F}	2.7	2.7	3.0	3.2	[2.8]^{A}	2.5	[2.6]^{A}	(2.6)^{J}	2.7	2.8	A	A	2.8	2.9	3.1	3.0	2.7	2.5^{F}	2.5^{F}	2.7
3	AF	(2.7)$^{J}_{F}$	F	(2.7)$^{J}_{F}$	2.4^{F}	2.4$^{F}_{H}$	2.7	2.9	2.8	[2.5]^{A}	2.2	A	A	A	2.6	2.7	2.8	2.8	2.9	2.7	2.6	2.7	2.7	2.6^{V}
4	[2.8]^{A}	2.9	2.6^{F}	2.5^{F}	A	2.6	2.8	2.9	2.9	2.7	2.4	2.5	2.7	2.7	2.8	2.9	3.0	2.9	2.8	2.8	2.8	2.6	(3.0)^{J}	2.7
5	2.7	(2.8)$^{J}_{F}$	2.9$^{J}_{F}$	2.6^{F}	2.6^{F}	2.9^{F}	2.9	2.9	2.9	2.8	2.7	2.6	2.7	2.8	2.9	2.7	A	A	2.9	2.8	2.7	2.6	2.6^{P}	2.7
6	2.9	3.1	3.1^{F}	2.8^{F}	(2.6)$^{J}_{F}$	2.4^{F}	2.5	2.9	3.1	2.8	A	2.6	2.7	[2.8]^{A}	2.8	2.9	2.9	2.9	3.0	2.7	2.7	2.6	2.7	2.7
7	2.7^{P}	(2.8)^{P}	2.7^{F}	2.6^{Z}	(3.1)$^{J}_{F}$	2.6^{H}	2.5	2.7	2.8	A	2.3	2.6	2.6	2.8	2.8^{P}	2.9	2.9^{P}	3.0	2.9	2.7	(2.7)^{J}	2.7	2.7	2.8
8	2.7	2.6	2.7	2.6	2.6	2.7$^{H}_{E}$	2.7	3.0	A	A	2.6	2.7	2.7	2.6	2.7^{A}	2.9	2.8	[2.8]^{A}	2.8	2.7	2.6	2.6	(2.7)^{B}	2.8
9	2.9	2.8	2.7	2.5^{F}	2.4^{F}	2.5^{H}	2.6	2.9	A	A	A	A	A	2.8	2.6	2.7	2.8	2.8	2.9	[2.8]^{A}	2.8	2.7	2.7	2.7^{F}
10	2.7	2.6^{S}	2.9^{F}	2.7^{F}	2.7^{F}	2.9^{F}	2.8	2.7	2.6^{V}	2.6	W	W	2.4	[2.5]^{A}	2.6	[2.8]^{A}	2.9	2.7	2.6	2.8	2.7	2.6	2.7^{P}	(2.6)^{F}
11	2.7^{F}	2.9	2.6^{F}	2.6^{F}	2.5	2.5	2.8	3.0	3.3	3.4	2.4	2.6	2.8	2.9	2.6	2.7	2.8	2.8	2.7	2.8	2.6	2.7	2.7	2.7
12	2.5	2.6	2.5	2.7	2.8	3.1	2.7	2.9	A	A	A	2.6	A	A	A	A	2.8	(2.7)^{J}	[2.8]^{A}	2.9	2.8	2.8	2.6	2.6^{F}
13	2.6^{F}	2.8^{F}	2.8^{F}	2.9	2.7	2.8	2.8	3.1	2.8	A	A	(2.6)^{J}	2.6	2.6	A	A	2.7	2.8	3.0	2.8	2.7	2.7	A	A
14	C	2.9^{V}	2.8	2.7$^{Z}_{A}$	2.7^{F}	2.7	2.9	2.8	2.7^{H}	2.8	2.5	2.7	A	2.7^{A}	2.6	2.7	2.7	2.7	2.8	2.7	2.5	2.6	2.6	2.6
15	2.5	2.6	2.7	2.7	2.7	2.6	2.6	2.9	2.8	2.7	2.7	2.7	2.7	2.6	2.7	2.7	2.8	2.9	2.8	2.7	2.6	2.5	2.5	2.5
16	2.8	2.8	2.7	2.6	2.7	2.5	2.6	2.9	2.8	2.7	2.4	2.6	2.7	2.8	2.9	2.7	2.6	2.8	2.8	2.9	2.7	2.5	2.6	[2.7]^{C}
17	2.8^{F}	3.0^{F}	2.9^{F}	3.0	2.8	2.8	2.6	2.6	2.7	[2.7]^{A}	2.7	2.5	2.6	2.5	2.7	2.6	2.6	2.9	3.0	2.9	2.8	2.6	(2.7)^{J}	(2.6)$^{J}_{F}$
18	(2.7)$^{J}_{F}$	2.9^{F}	(2.8)$^{J}_{F}$	2.8^{F}	(2.8)$^{J}_{F}$	2.7	2.7	3.0	2.9	[2.8]^{A}	2.8	2.6	2.5	2.6	2.7	2.8	2.8	2.7	2.8	2.8	2.7	2.6	2.7	2.6^{Z}
19	2.6^{F}	2.7^{F}	(2.7)$^{J}_{F}$	2.6$^{Z}_{F}$	2.8	3.0	2.8	3.0	3.0	(2.8)^{J}	2.7	2.7	2.7	2.7	2.7	2.8	2.9	2.9	2.7	2.7	2.7	2.7	2.6	2.7
20	2.7	2.8^{F}	(2.8)$^{J}_{F}$	(2.8)^{F}	2.9	3.0	3.0	2.7^{H}	2.7	2.8	2.7	2.7^{H}	2.6	2.6	2.7	2.8	2.8	2.9	3.0	2.9	2.6	2.6^{P}	2.6	2.6
21	(2.7)^{J}	2.7	(2.7)^{J}	(2.8)$^{J}_{F}$	2.8^{F}	3.0	2.9^{H}	3.0	2.9	2.8	2.6	2.5	2.7	2.6	[2.7]^{A}	2.8	2.8	2.6	2.7	2.9	2.9	2.8	2.6	2.8
22	2.8	2.8	2.8	2.7	2.8	2.9	3.0	3.0	3.0	2.8	[2.8]^{A}	2.7	2.5	2.6	2.6	2.7	2.9	3.0	2.7	2.7	2.7	2.7	2.5	2.6
23	2.7	2.7	2.7^{F}	(2.7)$^{J}_{F}$	2.8	3.0	3.0	2.8	3.1	2.8	2.8	2.6	2.5	2.6	A	A	2.8	2.8	2.9	2.7	2.7	2.5	(2.7)^{B}	2.4
24	2.7^{F}	2.6^{F}	2.8	2.8	2.6^{F}	2.5	2.7	2.7	A	A	A	A	A	A	A	2.8	2.8	2.8	[2.7]^{A}	2.6	2.6	2.5	2.6	2.5
25	2.6	2.6	2.5	2.5	[2.6]^{C}	2.7	3.0	C	A	2.7	2.8	2.7	3.0	2.9	2.9	2.6	2.9	3.1	3.0	2.8	2.6	2.5	2.6	2.7
26	3.1	2.9	2.5	2.5	A	2.6	3.1	3.3	[3.1]^{A}	2.9	3.1	2.6	2.9	2.8	2.9	2.8	2.8	2.7	2.9	3.0	2.7	2.5	2.5	2.6^{F}
27	2.6	2.8	3.0	2.5^{F}	2.6^{F}	2.5	2.5	2.8	3.0	A	A	A	A	2.5	A	A	A	2.8	[2.9]^{A}	3.0	2.5	2.5	2.6	2.7
28	3.0	(2.7)^{F}	(2.6)$^{J}_{F}$	(2.5)$^{J}_{F}$	2.8^{F}	(2.6)^{J}	2.5	A	A	A	A	A	A	2.7	2.8	2.8	2.8	2.9	2.9	2.8	2.7	2.7	2.6	2.6
29	2.6^{F}	2.7	3.1	2.9^{F}	(2.5)$^{J}_{F}$	2.6	2.8	A	A	2.6	2.5	[2.6]^{A}	2.7	2.9	2.8	2.8	2.9	3.0	[2.8]^{A}	2.7	2.6	2.5	2.6	2.7
30	3.0	3.1	2.5^{V}	2.6	2.5^{F}	2.6	2.7	3.2	2.8^{H}	2.7	2.9	[2.8]^{A}	2.7	2.9	3.0	A	A	2.9	2.8	2.8	2.8	2.6	2.5	(2.7)^{F}
31																								
Mean Value	2.7	2.8	2.7	2.7	2.7	2.7	2.8	2.9	2.9	2.8	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.7	2.6	2.6	2.7
Median Value	2.7	2.8	2.7	2.7	2.7	2.7	2.8	2.9	2.8	2.8	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.7	2.6	2.6	2.7
Count	28	30	29	30	28	30	30	27	23	22	23	25	23	27	24	24	27	29	30	30	30	30	29	29

(M3000)F2 Sweep 1.0 Mc to 17.2 Mc in 2 min ☐ Manual ☒ Automatic

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | fminF | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

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	2.7A	2.7A	A	1.6	3.2A	4.3A	2.8	4.5A	5.0A	5.0A	4.9A	4.9A	5.7A	4.9A	4.1	3.7	4.0	3.7	A	7.5A	A	2.3	7.5A	3.1A
2	2.0	1.5	1.6	2.5A	1.5	2.1	3.2	4.2	(4.6)A	5.0A	(5.0)A	4.9A	4.1	5.3A	A	A	5.0A	5.5A	7.5A	1.9	1.8	2.5A	4.4A	5.0A
3	A	4.5A	2.5AE	AE	2.7A	3.1A	5.0A	5.5A	6.0A	A	5.4A	A	A	A	5.0A	4.3	3.5	3.1	2.5	2.1	2.6	1.9	2.0	4.1A
4	(3.0)A	2.0	2.0A	2.7A	A	2.2	3.4	3.8	4.0	6.1A	6.0A	6.6A	5.4A	5.4A	5.0A	4.2	3.4	3.4	2.6	2.5	1.7	5.0A	3.3A	5.0A
5	2.8A	3.4A	2.3	2.0	1.8	2.0	3.1	4.0	4.2	4.1	5.4A	5.3A	5.0A	5.0A	4.5	4.4	A	A	6.2A	2.3	1.6	2.1	1.5	4.1A
6	3.2A	3.2A	2.0	3.6A	1.8	2.1	3.5	4.1	5.1A	6.1A	(5.8)A	5.5A	7.5A	(5.8)A	4.2	8.0A	5.0A	4.9A	3.7A	4.2A	4.1A	3.4A	2.1	2.3A
7	2.6A	3.2A	2.0	1.7	1.5	2.1	3.2	5.0A	5.5A	A	4.1	4.2	4.2	4.3	4.1	4.0	3.6	4.0A	3.6A	3.9A	6.2A	2.0	3.0A	2.4
8	1.7	1.5	2.6A	2.7A	2.1	2.1	4.1A	5.0A	A	A	5.5A	6.1A	6.0A	7.5A	8.9A	8.0A	6.7A	A	8.7A	A	4.9A	5.2A	5.5A	4.0A
9	1.6	4.0A	(2.8)A	1.7	1.8	2.1	A	9.3A	A	A	A	A	A	4.4	4.3	4.9A	4.0	4.4A	4.9A	A	3.3A	1.5	5.4A	2.1
10	2.1	4.9A	1.9	1.5	1.4	2.0	4.1A	6.0A	4.9A	5.5A	4.1	A	5.2A	(5.0)A	4.9A	(4.5)A	4.1	4.4A	2.4	3.2A	5.2A	1.9	2.5A	4.9A
11	1.4	1.6	1.6	4.1A	1.9	2.1	3.2	4.2A	4.9A	4.9A	6.0A	4.3	4.9A	4.9A	4.1	4.9A	4.5A	4.9A	2.6	3.2	2.1	2.6	2.5	2.1
12	2.7	2.6	2.6	(2.0)A	1.5	2.7	2.9	6.4A	A	A	A	4.3	A	A	A	A	4.9A	5.4A	7.5A	6.1A	2.8A	2.1	2.0	2.0
13	1.7	1.0	1.5	1.6	2.0	2.5	5.0A	4.9A	6.4A	A	A	6.2A	4.9A	5.4A	10.0A	A	4.9A	3.8	2.7	3.1	2.3	3.8A	A	A
14	C	1.3	2.8A	3.1A	2.1	2.2	3.0	3.2	4.1	4.9A	4.9A	4.9A	9.5A	8.2A	4.9	4.0	3.1	3.2	3.3	2.8	1.7	1.9	1.2	1.5
15	1.4	1.3	1.4	1.4	1.2	2.1	3.2	6.3A	7.4A	5.0A	4.9	6.0A	5.0	4.9A	4.1	4.0	4.6	3.5	2.8	1.8	1.8	2.6	1.9	2.9A
16	2.4	2.1	1.9	1.7	2.7A	3.5A	3.3	3.5	5.0A	5.3A	7.0A	6.2A	5.0A	5.4A	5.0A	5.0	4.2	3.4	4.8A	3.3A	3.3A	4.0A	2.5	(2.0)C
17	1.4	1.5	1.8	2.5	3.4A	2.1	3.3	4.5	5.0A	(5.0)A	4.9	5.4A	5.0A	4.9	5.0A	4.1	3.4	3.3	2.6	2.4	1.6	1.5	1.6	4.0A
18	3.4A	4.9A	A	2.3	2.6	2.4	4.9A	4.0	5.5A	(5.2)A	4.9A	4.9A	6.7A	5.9A	4.9A	9.9A	8.1A	4.9A	5.1A	2.7	4.1A	5.0A	3.2	1.5
19	1.7	A	A	A	2.8	2.7	2.8	4.0	4.1	4.0	4.2	4.2	5.0	4.4	6.4A	5.2A	5.3A	4.2	3.1	1.8	1.6	1.7	1.7	1.8
20	2.5A	1.7	3.0A	3.2A	2.0	2.1	2.6	3.5	5.0A	4.4	4.9	5.0A	5.9A	5.0	5.0	5.0A	8.4A	5.4A	2.5	1.8	2.5A	2.5A	2.2A	A
21	5.0A	4.5A	A	A	2.0A	2.9	4.1	3.4	4.1A	5.0	8.0A	6.8A	8.0A	7.5A	(6.4)A	5.2A	4.2	4.1	3.0	1.5	1.5	1.5	1.8	1.7
22	1.6	1.5	E	1.1	1.1	2.1	5.0A	4.0	4.1	5.9A	(6.4)A	6.9A	5.0	5.2	4.9	4.1	4.0	4.0A	3.7	4.1A	1.8	1.6	1.7	2.0
23	4.0A	1.7	2.3A	1.3	1.3	2.1	3.3	3.4	4.0	4.9A	4.1	4.9	4.9	4.9A	10.1A	A	9.2A	4.1A	(3.6)A	3.2	4.1A	1.6	1.6	2.1
24	3.3A	4.9A	1.3	1.7	1.9	A	4.3A	6.4A	8.0A	A	A	A	A	A	A	4.9A	3.4	5.9A	A	7.5A	4.2A	3.2A	3.4A	4.9A
25	2.9	1.7	1.0	1.0	(1.6)C	2.1	4.9A	C	A	5.3A	4.4	4.4	5.0A	5.0	5.0A	4.1	4.0	4.0A	4.0A	2.7A	A	2.0	2.0	4.2A
26	A	A	3.2A	3.6A	5.4A	2.0	3.1	4.1	(4.1)A	4.1	4.9A	4.9A	4.6	5.5A	4.3	4.0	4.2	4.3A	2.7	2.2	1.5	2.1	3.0	3.7
27	4.1A	4.0A	3.0A	3.2A	2.8	2.1	4.9A	4.9A	4.1	A	4.1	A	A	4.4	A	A	A	3.6	(3.6)A	3.5A	4.2A	4.9A	3.4A	4.5A
28	A	2.5A	1.8	3.4A	1.2	2.6	4.0A	A	A	A	A	A	A	4.9A	4.9A	4.1	4.1	3.3	4.1A	2.5	1.8	2.6A	2.0	(3.4)A
29	4.9A	A	1.0	1.0	E	2.1	4.1A	6.2A	A	4.9A	5.9A	(5.4)A	4.9A	4.9A	4.0	4.1	4.9A	7.5A	(6.2)A	4.9A	1.5	2.0	3.4A	(3.0)A
30	2.6	1.3	1.4	E	E	2.1	4.9A	5.4A	3.4	4.0	5.0A	(5.2)A	5.5A	4.5	4.9A	A	A	5.8A	6.2A	4.4A	3.6A	2.0	(2.5)A	3.5A
31																								
Mean Value	2.6	2.6	2.1	2.2	2.1	2.4	3.4	4.8	4.9	5.0	5.2	5.3	5.5	5.3	5.3	4.9	4.8	4.4	4.2	3.3	2.8	2.6	2.8	3.1
Median Value	2.6	2.1	2.0	2.0	1.9	2.1	3.4	4.4	4.9	5.0	4.9	5.1	5.0	5.0	4.9	4.4	4.2	4.1	3.6	3.0	2.4	2.1	2.5	3.0
Count.	26	27	26	27	29	29	29	28	24	21	25	24	24	27	26	24	27	28	28	28	28	30	29	28

fminF

Sweep 1.0 Mc to 17.2 Mc in 2 min ☐ Manual ☒ Automatic

K 10

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The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956

fminE

135° E Mean Time

Kokubunji Tokyo

Lat. 35° 42.4' N
Long. 139° 29.3' E

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	1.5	1.5	E	E	1.0	1.6	1.7	2.0	2.6	2.0	2.3	2.2	1.9	2.0	2.0	1.7	2.0	1.6	1.5	1.6	1.6	1.5	1.5	1.5
2	1.5	1.5	E	E	1.0	1.5	1.6	2.0	2.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.7	1.6	1.5	1.5	1.6	1.6	1.6
3	1.6	1.5	1.0	E	E	1.4	1.6	2.0	5.0	3.3	3.5	3.3	1.6	2.0	2.0	2.0	1.7	1.5	1.6	1.5	1.5	1.6	1.6	1.6
4	1.5	1.5	E	E	E	1.5	1.8	2.8	1.5	2.2	2.0	2.2	2.1	2.1	2.0	1.9	2.0	1.6	1.7	1.5	1.5	1.5	1.5	1.5
5	1.6	1.6	1.1	E	E	1.5	1.7	1.8	1.8	1.6	2.6	2.0	2.0	2.1	2.1	2.0	1.8	2.2	1.7	1.5	1.5	1.6	1.5	1.7
6	1.6	1.4	E	E	E	1.5	1.6	1.6	1.7	2.0	2.1	2.0	2.0	1.9	2.0	3.5	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6
7	1.5	1.5	E	E	1.0	1.4	1.7	1.7	1.9	2.9	2.5	2.0	2.4	2.3	2.0	2.1	2.0	1.7	1.7	1.6	1.6	1.6	1.5	1.5
8	1.5	1.7	E	E	E	1.7	1.6	2.0	2.0	2.1	2.5	2.2	2.5	2.5	2.2	2.1	1.7	2.0	1.8	1.6	1.5	1.5	1.5	1.5
9	1.5	1.2	E	E	E	1.3	1.7	1.7	2.1	2.1	2.1	2.2	2.5	1.5	1.6	2.1	1.8	1.7	1.6	1.4	1.5	1.5	1.5	E
10	1.4	1.5	1.0	E	1.0	1.4	1.6	1.8	1.8	1.8	1.7	2.1	2.3	2.5	2.0	2.1	1.5	1.8	1.6	1.5	1.6	1.5	1.5	1.4
11	1.5	1.4	E	1.0	E	1.5	1.7	1.6	2.1	1.6	1.8	1.7	1.9	2.7	2.1	1.8	1.9	1.8	1.7	1.5	1.5	1.1	1.5	1.4
12	1.5	1.4	E	E	E	1.7	1.7	1.6	2.2	2.0	2.3	2.3	2.0	2.9	2.0	2.0	2.0	2.0	1.7	1.7	1.6	1.6	1.5	1.5
13	1.5	E	E	E	E	1.5	1.7	1.8	1.8	2.1	2.2	2.2	2.1	2.4	2.1	2.1	1.6	1.8	1.7	1.3	1.5	1.7	1.4	1.3
14	[1.3]C	1.3	E	E	1.0	1.3	1.6	1.6	1.8	1.6	2.1	1.6	2.1	4.9	2.4	1.8	2.1	1.8	1.5	1.6	E	1.5	1.5	1.5
15	1.4	1.6	E	E	E	1.6	1.6	1.6	2.5	2.0	2.4	2.6	2.0	2.4	2.0	2.0	1.6	1.7	1.7	1.5	1.6	1.6	1.5	1.5
16	1.5	1.5	E	E	E	1.5	1.6	1.8	2.0	2.1	2.1	2.0	2.0	2.5	2.0	2.0	1.7	1.7	1.5	1.5	1.5	1.5	1.5	[1.5]C
17	1.5	1.5	E	E	E	1.5	1.9	1.6	2.1	2.1	2.0	2.3	2.4	2.5	2.0	2.0	2.0	1.7	1.7	1.5	1.5	1.5	1.5	1.5
18	1.5	1.5	E	E	E	1.5	1.7	1.7	1.6	2.1	2.4	2.4	2.3	1.9	2.1	2.3	1.7	1.6	1.6	1.4	1.7	1.7	1.5	E
19	1.4	1.4	E	E	E	1.4	1.5	1.5	1.7	2.0	2.0	2.6	2.6	2.0	2.6	2.0	1.8	2.0	2.0	1.7	E	E	1.7	1.5
20	1.6	1.5	E	E	E	1.5	1.7	2.0	2.2	2.0	2.5	2.3	2.8	3.0	2.5	2.3	2.0	2.0	2.1	E	1.6	1.5	1.5	1.5
21	1.6	1.5	1.0	E	E	1.6	1.9	2.0	2.6	2.0	2.8	2.8	2.4	3.1	2.1	2.1	2.0	2.1	1.8	E	E	E	1.5	2.0
22	E	1.6	E	E	E	1.5	1.7	2.0	2.0	2.0	2.3	2.5	[2.4]B	2.2	2.0	2.0	2.0	1.6	1.7	1.5	1.5	E	1.5	1.5
23	1.5	1.5	E	E	1.5	1.5	1.7	1.7	1.9	2.1	2.3	2.3	3.3	2.1	2.0	2.1	2.1	1.7	1.1	1.4	1.5	1.5	1.5	1.6
24	1.3	1.4	E	E	E	1.5	1.6	1.6	2.1	2.1	1.7	2.5	1.9	2.3	2.7	2.1	2.1	1.7	1.6	1.4	1.4	1.3	1.5	1.5
25	1.5	1.4	E	E	C	1.4	1.7	[2.0]C	2.4	2.1	2.1	3.3	3.4	2.7	2.3	2.0	1.7	1.9	1.5	1.5	1.6	1.7	1.6	1.6
26	1.5	1.5	E	E	E	1.5	1.6	2.0	2.0	2.1	2.1	2.1	2.1	3.4	2.4	1.7	2.1	1.6	1.5	1.6	1.5	1.4	1.5	1.6
27	1.2	1.3	E	E	E	1.7	2.1	2.1	1.7	1.8	1.5	1.6	1.7	1.6	1.6	1.7	1.5	1.8	1.6	1.5	1.6	1.5	1.7	1.6
28	1.4	1.4	E	E	E	1.6	2.0	2.1	1.5	2.1	2.0	3.2	2.2	1.6	2.1	1.6	1.7	1.5	1.4	1.4	1.3	1.3	1.5	1.5
29	1.4	1.4	E	E	E	1.4	1.6	1.7	2.2	1.6	1.5	1.6	1.5	1.5	1.8	2.1	1.5	1.4	1.6	1.4	1.7	1.5	1.4	1.5
30	1.4	E	E	E	E	1.5	1.5	1.5	1.4	1.9	2.1	2.1	2.0	2.0	2.1	2.0	2.1	1.8	1.6	1.6	1.6	1.6	1.5	1.4
31																								
Mean Value	1.5	1.5	1.0	1.0	1.0	1.5	1.7	1.8	2.1	2.0	2.2	2.3	2.2	2.4	2.1	2.0	1.9	1.8	1.6	1.5	1.5	1.5	1.5	1.5
Median Value	1.5	1.5	E	E	E	1.5	1.7	1.8	2.0	2.0	2.1	2.2	2.1	2.2	2.0	2.0	1.8	1.7	1.6	1.5	1.5	1.5	1.5	1.5
Count	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30

fminE

Sweep 1.0 Mc to 17.2 Mc in 2 min ☐ Manual ☒ Automatic

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | ypF2 | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

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	60	80F	60F	90F	90F	130	60	100	100	80	100	90	70	80	80	80	60	50	[60]A	80	70	70	A	60
2	70F	80F	60F	50F	70	90	110	80	[80]A	90	[70]A	(50)J	40	50	A	A	70	60	[60]A	60	130	80F	70F	50
3	AF	(90)JF	F	(90)JF	70F	90FH	90	70	A	A	A	A	A	A	A	60	80	80	90	90	90	80	70	70V
4	[80]A	80	60F	60F	A	120	80	80	90	A	A	A	70	90	80	70	80	70	80	60	50	60	(70)J	80
5	70	(60)JF	80VF	80F	100F	60F	70	80	70	100	90	90	80	90	90	90	A	A	70	90	90	80	80P	60
6	60	50	60F	90F	(70)JF	110F	110	80	30	90	A	50	A	A	90	[80]A	70P	80	90	100	60	70	70	70
7	60P	(70)P	90F	90Z	(60)JF	60H	70	90	100	A	U	90	60	60	50P	60	40P	70	80	100	(100)J	70	80	70
8	70	90	110	80	90	70HF	90	70	A	A	U	60	60	A	A	80	90	A	A	110	90	100	(70)B	70
9	60	70	90	80F	80F	90H	110	A	A	A	A	A	A	U	U	90	60	80	90	[80]A	60	70	90	70F
10	70	80S	90F	110F	50F	90F	110	A	A	A	W	W	50	A	U	A	80	80	70	90	80	100	70P	(70)AF
11	80F	70	70F	70F	120	130	100	100	100	30	A	100	70	50	100	100	100	80	110	90	120	80	60	80
12	100	120	120	80	90	100	90	60	A	A	A	50	A	A	A	A	70	(70)J	[60]A	50	50	70	60	70F
13	60F	60F	90F	50	90	100	80	70	80	A	A	(50)J	100	120	A	A	80	90	50	80	100	90	A	A
14	C	90V	70	70Z	70F	100	90	140	120H	100	110	80	A	A	100	100	110	100	100	90	130	70	60	80
15	120	80	90	80	90	100	150	70	[80]A	90	60	80	70	100	70	80	90	70	100	90	100	70	100	60
16	50	90	70	70	50	110	60	70	100	120	120	90	90	70	50	90	80	80	80	70	110	80	90	[80]C
17	80F	50F	80F	90	80	90	100	100	80	[80]A	90	110	90	90	120	60	80	70	70	80	80	80	(60)J	(90)JF
18	(70)JF	40F	(70)JF	70F	(80)JF	110	110	80	90	[80]A	70	60	90	100	90	[90]A	90	100	100	100	100	100	90	60Z
19	50F	60F	(80)JF	70ZF	90	80	80	110	70	U	80	50	80	80	80	60	70	60	80	80	70	80	60	60
20	50	60F	(50)JF	(70)F	50	80	90	90H	100	110	90	60H	60	110	90	100	[80]A	50	70	90	40	50P	80	70
21	(80)J	60	(60)J	(50)JF	80F	80H	80	90	90	100	[80]A	70	[80]A	80	[80]A	90	70	100	90	80	70	70	70	60
22	70	50	80	70	80	60	90	60	100	80	A	A	80	70	50	70	70	60	80	90	80	90	90	80
23	60	60	70F	(60)JF	50	110	90	70	70	110	150	120	100	90	A	A	A	110	80	90	90	100	(60)B	90
24	70F	80F	70	80	110F	130	90	100	A	A	A	A	A	A	A	90	90	120	A	A	100	80	70	80
25	90	90	120	100	[100]C	100	120	C	A	A	50	70	60	60	80	100	70	60	90	60	100	70	90	100
26	A	80	140	110	A	100	50	40	[60]A	90	30	U	80	120	70	90	100	100	90	70	100	80	100	70F
27	80	100	70	80F	80F	90	120	100	80	A	A	A	A	U	A	A	A	100	[100]A	110	80	90	70	80
28	60	(60)F	(60)JF	(70)JF	60F	(90)J	90	A	A	A	A	A	A	U	50	80	70	70	90	90	80	60	70	80
29	70F	50	70	100F	(60)JF	90	100	A	A	A	A	A	80	80	70	90	80	A	A	100	90	100	80	80
30	60	90	140V	90	90F	120	110	80	130H	U	U	A	90	70	80	A	A	70	80	90	80	70	60	(60)F
31																								
Mean Value	70	70	80	80	80	100	90	80	90	90	90	70	80	80	80	80	80	80	80	80	90	80	70	70
Median Value	70	80	70	80	80	100	90	80	90	90	80	70	80	80	80	90	80	80	80	90	90	80	70	70
Count	27	30	29	30	28	30	30	25	21	15	15	20	22	20	20	23	26	27	27	29	30	30	28	29

ypF2 | Sweep 1.0 Mc to 17.2 Mc in 2 min | ☐ Manual ☒ Automatic | K 12

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | foF2 | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

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	[7.4]^{S}	7.5	7.3	6.6	6.1	5.9	M	M	M	8.6	9.2^{H}	9.9	10.6	10.7	11.1	[11.0]^{S}	10.9	S	S	(9.8)^{P}	[9.2]^{S}	8.7^{Z}	8.7^{J}	8.9
2	9.0	11.0^{S}	[9.6]^{S}	8.1	8.3	7.5	9.0	8.3^{H}	9.0	9.5	8.5	7.6^{J}	A	A	A	A	9.6	9.5	[9.0]^{S}	8.6	[8.3]^{A}	8.0	8.5	[8.6]^{S}
3	8.7	8.5^{V}	8.1	7.3	(7.1)^{P}	6.6^{H}	8.8	8.5	B	A	A	B	6.6	(7.0)^{P}	6.5	7.3	7.6	7.6	6.9^{H}	7.5	7.1	[7.2]^{S}	(7.2)^{P}	7.2
4	6.9	C	C	C	C	C	8.1	8.4	8.0$^{J}_{H}$	8.0	8.5	9.4	10.5	10.7	10.5	10.5	10.5	[10.2]^{S}	9.9	[9.4]^{S}	8.9	8.5	S	9.3
5	8.6	[8.6]^{S}	8.5	6.6^{J}	6.0	6.3	6.4	9.4	9.0	8.8	9.2	9.3	10.3	10.7^{H}	10.3^{H}	10.3	10.0	10.0	10.0	9.0^{H}	8.2	[8.6]^{S}	9.0	S
6	S	S	8.2^{S}	6.6	6.3	6.3	8.0	10.4	8.5	6.7^{H}	6.4^{H}	8.0	9.7	10.0	9.4	10.0	10.1^{J}	A	A	7.9^{H}	8.0	8.2	[8.7]^{S}	9.2
7	8.7	9.1	10.0^{J}	7.5^{H}	7.9	7.2	8.4	11.0	9.8	9.0^{H}	9.1^{H}	9.7	10.0	11.5	11.8	12.0	11.0	9.6	9.3	9.0	9.6	8.7	7.9$^{S}_{H}$	8.0
8	8.5	7.8	7.2	6.8	6.2	6.5^{H}	7.8	7.8	6.2	A	7.6	8.3	9.0	9.5	9.8^{H}	10.8	10.8	11.0^{S}	[10.0]^{S}	9.0	9.0	8.5	8.3	8.5
9	8.3	7.9	[7.6]^{S}	7.2	6.5	6.5	9.5	10.0	8.7^{H}	9.0^{H}	[10.2]^{A}	11.3	C	C	C	C	C	8.7	A	A	9.5	8.1	[8.2]^{S}	8.3
10	[8.2]^{S}	8.0^{J}	7.3	6.4	5.5	6.0	6.9	9.0	9.3	7.1	6.5	6.5	7.0	[7.2]^{A}	7.5	7.5	7.2	7.5	7.5	A	A	7.0	7.2	FS
11	A	8.0	6.7	F	F	F	7.7	S	A	6.2	7.3	9.0	9.0	9.8	9.7	10.2	11.7	11.2	[10.1]^{S}	9.0	9.5$^{P}_{S}$	8.5	8.3	[8.9]^{S}
12	9.5	8.6^{S}	9.0	9.0	7.5	7.2	[8.6]^{S}	10.0	8.6	8.3	8.1^{H}	A	A	A	A	9.9	8.6	9.5	10.5	8.3	8.8	8.5	[8.5]^{S}	8.5
13	FS	FS	FS	7.5	7.0	6.7	7.3	7.9^{H}	7.8	8.7	8.9	8.6	8.9	9.5	[10.4]^{S}	11.3	[11.8]^{A}	12.3	[11.6]^{S}	10.8	S	S	S	S
14	S	S	S	S	9.0	8.7^{S}	8.4	8.5	8.4	9.0	8.8	9.0	S	S	S	11.0^{H}	12.0	11.5	11.0	[10.8]^{S}	10.7	[10.4]^{S}	10.0	S
15	S	9.2	9.5	9.5	8.5	8.0	9.2^{H}	[9.5]^{S}	9.8	8.9^{H}	8.6^{H}	9.3	S	S	12.0^{Z}	A	SH	11.0	[10.6]^{S}	10.3	9.0	[10.0]^{S}	11.0	S
16	9.5	[9.2]^{S}	8.8	8.2	8.3^{J}	8.4	[9.6]^{S}	10.9^{J}	9.7	8.7	9.6	10.0	11.5	[11.2]^{A}	11.0	11.2	11.5	11.7^{H}	(12.4)$^{J}_{P}$	S	A	S	S	10.1^{J}
17	S	S	S	7.3^{H}	6.3^{H}	6.9	7.9^{H}	9.4	9.3	8.5	8.7	9.5	9.7	10.4	10.0	10.0	10.5	11.5	10.4	9.5	7.3	7.9	8.5	8.5
18	8.7	C	C	C	C	C	C	C	C	C	C	C	C	C	C	12.5	[12.4]^{S}	12.2	[11.6]^{S}	11.1	S	S	S	S
19	S	S	S	9.3	[8.6]^{S}	8.0	8.6	9.3	7.9^{H}	7.8	7.7	8.5	9.0	9.2	9.8	10.0	9.6	9.9	10.5	S	S	9.0	SH	S
20	S	8.7	9.2	7.6	(6.9)^{P}	7.2	8.0	8.5	8.4^{H}	8.8	9.1	8.6^{H}	8.6^{H}	9.8	9.6	9.7	10.7	10.1	10.0^{S}	[8.9]^{A}	7.8	8.2	[8.4]^{S}	8.6
21	S	FS	S	A	6.8	[7.4]^{A}	8.1	9.8	(8.7)^{S}	8.9^{H}	8.6^{H}	8.8^{H}	10.0	S	S	10.8	[10.2]^{S}	9.5^{H}	9.8^{J}	S	S	S	S	9.3
22	9.3	8.6	[8.7]^{S}	8.8	8.4	8.0	8.0^{J}	8.5^{H}	8.3^{H}	6.5	7.5^{H}	8.3^{H}	8.9^{H}	9.5^{H}	9.8^{H}	10.9^{H}	[10.2]$^{S}_{H}$	9.5	9.1	9.0	8.7	[8.5]^{S}	8.3	[8.5]^{S}
23	8.7	S	S	8.6	8.8	8.5	7.3	8.3	8.5^{H}	8.4	8.5	9.0	9.6	11.0	11.4	11.8	11.5	10.6^{S}	[10.8]^{S}	11.0	[10.0]^{S}	8.9	[8.8]$^{S}_{H}$	8.8
24	S	S	S	8.5	7.1	6.8	7.9	8.2	7.0	6.8	7.8^{H}	8.0	9.2^{H}	[10.6]$^{S}_{H}$	11.9^{H}	12.0	11.5	11.7	11.0	[10.5]$^{S}_{H}$	10.0	9.1	SH	SH
25	S	S	10.3^{S}	8.7	8.7	8.4	8.0	7.4	7.1	8.4	[8.4]^{A}	8.5	S	A	SH	SH	10.5^{H}	10.9	10.2	8.1^{J}	8.1^{J}	6.8	[6.8]^{S}	6.9
26	S	C	A	6.1	[5.8]^{C}	5.5^{H}	6.5	7.8	7.4	6.8	7.9	8.6	9.0	10.3	11.0	10.0^{J}	10.7	S	S	S	S	9.5^{J}	S	S
27	S	S	8.5	6.3	6.2	5.8	6.6	7.6	6.7	5.7	A	A	A	S	6.9	6.8	7.8	8.5	8.3^{J}	7.0	6.2	6.3	6.4^{P}	6.3
28	6.2	A	A	A	F	6.4^{F}	6.5	6.2	6.0	5.6	6.0	B	B	8.0	8.7	8.4	8.5	8.8	9.3	7.6	7.5	6.9^{J}	6.4^{J}	S
29	S	9.0	8.5	5.5	5.5$^{J}_{E}$	[6.0]^{F}	6.4^{P}	7.8^{P}	[7.1]^{A}	6.4^{H}	6.8	8.7	9.0	9.7	10.5	11.5	10.9	10.2	9.7	[9.0]^{S}	8.2	8.8	[8.5]^{S}	8.2
30	8.1^{J}	6.5	6.2	6.8	6.3	5.8	[6.9]^{B}	8.0	7.0	7.0	7.3	8.0	9.0	9.4	9.2	8.7	8.6	9.5^{P}	(9.9)$^{J}_{P}$	[9.3]^{S}	8.7	[8.6]^{S}	8.4	8.5
31																								
Mean Value	8.4	8.5	8.4	7.5	7.1	7.0	7.9	8.8	8.2	7.9	8.2	8.8	9.3	9.8	9.9	10.2	10.2	10.2	10.0	9.2	8.6	8.4	8.3	8.5
Median Value	8.6	8.6	8.5	7.4	7.0	6.8	8.0	8.5	8.4	8.4	8.5	8.7	9.0	9.8	10.0	10.4	10.5	10.1	10.0	9.0	8.7	8.5	8.4	8.5
Count	16	16	19	24	26	27	28	27	26	27	27	25	21	21	23	26	28	27	26	24	23	26	22	20

foF2

Sweep 1.0 Mc to 22.0 Mc in 1 min ☐ Manual ☒ Automatic

Y 1

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | h'F2 | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

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	290	310^{A}	300	260	240	260	M	M	M	320^{A}	300$^{A}_{H}$	400	(390)^{A}	340^{A}	340	340	310	300	300	260	250	290	350	340^{A}
2	340^{A}	340^{A}	300^{A}	290	290	290	240	240^{H}	300	A	A	A	A	A	A	A	320	290	280	250^{A}	[300]^{A}	350^{A}	340	300^{A}
3	290	290	270	250	320	340^{H}	280	270	B	A	A	B	A	440	[420]^{A}	400	360	340	260^{H}	290	290^{A}	290	290	300
4	300	C	C	C	C	C	250	250	250^{H}	(340)^{A}	430	390	370	340	340	(330)^{A}	(350)^{A}	310	300	300	270	280	330^{A}	350
5	300	280	250	240	270	290	240	260	280	290	370	(430)^{A}	370	300^{H}	310^{H}	340	330	310	280	240^{H}	280^{A}	320	320	320^{A}
6	260	250	230	250	(390)^{A}	(390)^{A}	290	250	240	250^{H}	LH	450	370	330	340	340	320^{A}	A	A	250$^{A}_{H}$	320^{A}	340	320	280
7	300	300	250	270^{H}	300^{A}	300	310	290	270	280^{H}	270^{H}	350	(380)^{A}	340	320	310	290	290	280	260	270	240	290^{H}	350^{A}
8	280	300^{A}	290	310^{A}	290	290^{H}	290	280	580	A	A	390	370	360	300^{H}	340	320	300	290	290^{A}	270	290	300	300^{A}
9	280	290	290	290	330^{A}	300	300	280	250^{H}	310$^{A}_{H}$	[310]^{A}	310	C	C	C	C	C	310	A	A	300	260	350^{A}	300
10	290	290	270	250	290	270	250	300	270^{A}	(380)^{A}	490	520	A	A	400	380	[360]^{A}	340	340	A	A	300	300	300
11	(380)^{A}	270^{A}	280^{A}	340	340	300	250	270^{A}	A	A	440	390	390	370^{A}	370	360	320	300	290^{A}	(300)^{A}	310^{A}	260	300^{A}	330
12	300	330	290	250	250	290	280	240	240	A	AH	A	A	A	A	360	340	340	310	290	250	270	300	300
13	320^{A}	320^{A}	270	300^{A}	290	290	250	250^{H}	260	340	330	310	400	420	390^{A}	370	[350]^{A}	330^{A}	300	280	A	A	350^{A}	300^{A}
14	350^{A}	270	280	300^{A}	250	280	240	240	250	330	300	360^{A}	A	B	370^{A}	300^{H}	340^{A}	300	290	280^{A}	290	310^{A}	320	280^{A}
15	300^{A}	330	300	300	240	280	300^{H}	290	260	[260]$^{A}_{H}$	250^{H}	380^{A}	350	350	350	[320]^{A}	300^{H}	290	(300)^{A}	280^{A}	290^{A}	300	290	310
16	300	260	300^{A}	300^{A}	350	340^{A}	270^{A}	250	260	A	(400)^{A}	(390)^{A}	370^{A}	[340]^{A}	(310)^{A}	370^{A}	360^{A}	260^{H}	300	270^{A}	[310]^{A}	350^{A}	340	300
17	300	270	220	200^{H}	240^{H}	290	240^{H}	240	250	300	A	A	350	370^{A}	340	360	350	300	270	250	240	310	300	300
18	320	C	C	C	C	C	C	C	C	C	C	C	C	C	C	320^{A}	A	A	300^{A}	270^{A}	260	280	290	300^{A}
19	330^{A}	300^{A}	280	260^{A}	290^{A}	300	250	250	240^{H}	300	390	L	360	340	360	340	340	340^{A}	310	300	290	260	280^{H}	340^{A}
20	340^{A}	290	270	300^{A}	300^{A}	300^{A}	250	250	250^{H}	320	330	270^{H}	290^{H}	370	380	360	340	300	270	[280]^{A}	280	340^{A}	330	360^{A}
21	300^{A}	330^{A}	290	[280]^{A}	260	[260]^{A}	250	250	260	290^{H}	[270]$^{L}_{H}$	250^{H}	400	370	350	340	300	280^{H}	300	250	240	240	340	300
22	300	330	290	260	260	250	240	240^{H}	250^{H}	250	280$^{L}_{H}$	260^{H}	330^{H}	270^{H}	340^{H}	320^{H}	280^{H}	290	300	290	270	290	340	340
23	320	320	300	290	250	240	240	240	250^{H}	270	[320]^{A}	380	400	350	340	330	320^{A}	300	300	270	260	270	300^{H}	320
24	300	280	240	240	250	300	300	270	(290)^{A}	[290]^{A}	290^{H}	[340]^{A}	400^{H}	340^{H}	300^{H}	310	310	300	270	250^{H}	270	290	300^{H}	320^{H}
25	340	300	300	300	300	260	280	290	320^{A}	350	A	A	350^{A}	[330]^{A}	310^{H}	310^{H}	300^{H}	270	280	240	290^{A}	330^{A}	340	300
26	270	C	A	370^{A}	[340]^{C}	300^{H}	240	250	250	280	360	320	340	330	300	300	250	320	290^{A}	260	240	280	300	340
27	340^{A}	270	230	240	330	340	350	330	380	A	A	A	A	390	440	450	380	310	280	290^{A}	280	310	(360)^{B}	350
28	300^{A}	A	A	A	310^{A}	300^{A}	300	340	410	470	440	460	390	350	350	320	330	310	260	310	300^{A}	270	(390)^{B}	350^{A}
29	(350)^{A}	300	250	290^{A}	(390)^{A}	310^{A}	330^{A}	270	280^{A}	340^{H}	340	390	360	350	340	310^{A}	290	290	270	290	290	270	290	350
30	280	240	350^{A}	280	240	290	270	250	240	330^{L}	(360)^{A}	390	350	320	340	(350)^{A}	340	340	290	260	260^{A}	290	300	290
31																								
Mean Value	310	290	280	280	290	290	270	270	280	310	350	370	370	350	350	340	330	310	290	270	280	290	320	320
Median Value	300	300	280	280	290	290	260	250	260	300	330	380	370	340	340	340	320	300	290	280	280	290	310	300
Count	30	26	26	27	28	28	28	28	26	22	21	22	22	24	26	28	28	28	28	28	28	29	30	30

h'F2 | Sweep 1.0 Mc to 22.0 Mc in 1 min | ☐ Manual ☒ Automatic | Y 2

The Radio Research Laboratories
Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Jun. 1956 | fEs | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

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	2.3	5.9	5.9	3.6	2.9	2.3	M	M	M	6.5	5.9	6.5	8.5	6.8	4.9	G	G	G	G	2.3	5.9Y	2.3	5.9	6.5
2	7.0	8.9	6.5	2.9	3.0	3.0	G	4.6	5.9	10.7	11.1	8.9	10.0	15.5	15.5	12.3	5.9	8.9	6.3	6.3	8.9	5.9	4.0	3.3
3	3.5	2.4	3.3	3.6	3.4	3.3	G	4.8	8.0	13.8	12.2	7.0	7.3	5.6	6.3	5.9	3.6	G	G	2.3	3.6	2.0	2.2	3.3
4	3.7	C	C	C	C	C	3.6	3.6	G	6.1	G	4.6	5.8	5.9	6.5	7.8	7.8	5.3	3.5	3.3	3.8	3.1	4.8	7.0
5	3.5	3.6	3.6	2.9	2.4	2.4	3.5	G	4.6	5.5	5.7	9.1	6.6	G	G	5.3	5.0	5.0	4.7	3.7	3.6	3.3	5.0	5.9
6	3.2	3.5	3.5	3.2	5.0	5.2	G	G	G	5.2	3.8	5.1Y	G	G	5.9	5.5Y	6.9	11.5	13.0	3.6	5.0	3.2	5.9	3.0
7	3.0	3.6	2.3Y	5.0	5.8	3.2	G	5.0	6.5	7.0	8.5	6.8	13.0	6.8	4.5	G	G	G	3.7	3.0	3.0	2.4	3.6	5.9
8	5.9	4.8	3.0	3.1	2.4	2.4	G	G	6.0	6.5	7.4	7.1	4.7	5.2	3.8	G	G	7.0	5.9	4.5	2.9	2.3	2.6	2.4
9	2.3	3.2	3.2	3.5	3.5	2.8	3.5	6.4	5.0	6.5	11.5	3.8	C	C	C	C	C	4.3	10.7	11.5	13.5	7.0	9.5	3.4
10	6.2	3.0	5.9	3.0	2.6	2.3	G	G	6.4	6.6	6.6	B	9.5	13.0	G	5.9Y	8.1	6.8	8.9	9.0	13.8F	5.9	3.3	3.0
11	8.9	5.9	4.8	3.7	3.5	2.4	3.7	7.7	10.5	9.5	6.3	6.6	6.8	7.3	6.2	5.5	5.9	5.8	6.3	8.0	5.9	3.3	3.3	2.4
12	2.3F	2.9	2.9	2.3	3.6	2.4	3.0	G	5.9	8.0	6.3	9.7	13.1	13.5	10.7	8.9	8.0	5.4	3.8	3.6	2.4	2.2	2.3	3.1
13	5.9Y	8.9	8.9	5.9	3.6	3.5	5.7	5.1	5.9	4.9	5.9	5.9	8.0	7.5	8.5	8.4	14.6	9.5	7.2	5.9	9.2	3.8	5.8	5.9
14	6.8	5.9	6.3	3.7	3.6	2.4	G	G	4.5	5.8	7.0	7.2	8.9	9.5	8.9	5.0	8.5	6.5	5.9	4.5	5.9	3.6	3.4	3.1
15	2.4	5.9	3.0	3.2	3.5	2.3F	3.7	G	6.2	7.2	5.9	7.2	5.9	5.6	4.7	15.4	5.9	5.9	7.0	4.8	3.5	3.1	2.3	2.3
16	2.3	2.2	5.5	5.9	5.9	4.9	4.9	5.0	5.6	7.8	7.2	8.5	8.9	13.0	6.8	9.2	8.9	5.3	7.0	7.0	9.2	5.8	3.2	3.4
17	3.5	3.8	3.5	2.4	2.4F	2.3	G	G	5.9	5.9	11.2	9.7	5.9	7.8	5.9	4.7	5.0	5.9	5.1	3.6	2.3	2.4	2.2	2.4
18	5.9	C	C	C	C	C	C	C	C	C	C	C	C	C	C	13.0	11.7	11.5	8.7	8.9	3.3	3.1	5.9	7.0
19	7.0	5.9	5.9	6.7	5.9Y	5.9Y	5.9Y	3.6	3.7	5.9	5.0	5.6	5.9	5.0	5.5	6.7	6.8	6.5	5.9	6.5	3.8	2.7	3.3	5.9
20	5.1	2.3	2.4	5.9	5.9	5.1	5.5	7.8	5.7	5.3	6.1	5.3	G	G	5.6	5.9	5.2	8.9	4.8	8.9	3.1	3.7	3.7	6.8
21	8.1	5.9	6.5	8.2	3.2	8.9	5.5	5.9	5.1	8.4	7.1	5.9	6.8	B	7.0	5.1	5.5	5.9	3.4	G	3.1	3.0	3.0	2.3
22	3.2	2.4	2.4	2.3	2.4	2.4F	G	3.3	G	5.9	5.0	B	B	5.5	B	5.3	G	5.9	G	3.6	4.7	2.4	3.1	3.5
23	3.0	3.2	3.4	3.1	2.4	2.3F	G	3.2	4.8	5.9	7.3	5.9	5.9	8.0	6.6	7.0	8.5	5.9	5.1	3.8	3.6	3.5	3.2	2.3
24	2.3	2.3	E	E	2.3	E	G	G	5.9	6.5	5.8	8.1	5.9	B	G	G	5.7Y	3.6	3.6	3.2	2.3	2.2	3.7	3.0
25	5.9	3.8	3.4	2.3F	2.3	3.0	3.2	5.5	5.7	6.5	8.9	12.5	8.4	10.5	5.1	G	5.9Y	6.1	5.9	3.7	3.8	3.0	2.4	2.2
26	5.9	C	6.5	5.9	C	3.7	G	G	G	5.9	8.9	5.9	7.2	5.9Y	6.2	6.3	5.9	5.9	6.5	3.1	2.4	8.0	8.9Y	5.9
27	5.9Y	5.9	5.9	5.9F	2.4	E	3.4	5.9	5.9	8.6	8.5	12.5	9.4	5.2	6.2	6.6	5.2	5.0	5.5	5.9	E	2.0	3.8	3.2
28	5.9	9.5	6.6F	6.6F	5.9	5.9	3.5	5.6	5.9	5.7	5.9Y	5.7	5.9Y	G	G	G	5.9	G	G	5.9	5.0	5.9	5.9	5.9
29	8.9	5.9	5.9	5.9	5.9	5.9	4.8Y	5.2	9.5	5.9	6.5	8.5Y	5.9	5.9Y	4.9	8.0	4.8	G	G	5.0	E	2.8	2.3	5.9
30	3.6	3.6	5.9	3.3	2.7	3.2	3.1	3.5	5.9Y	5.9	7.0	G	B	12.4Y	12.0	6.6	11.3	4.9	5.7	3.5	5.9	3.5	3.2	5.9Y
31																								
Mean Value	4.8	4.6	4.7	4.2	3.6	3.6	4.2	5.1	6.0	6.9	7.3	7.3	7.7	8.2	6.9	7.4	7.1	6.5	6.2	5.1	5.2	3.6	4.1	4.2
Median Value	4.4	3.8	4.2	3.6	3.4	2.9	3.2	3.6	5.9	6.5	6.6	6.8	6.8	6.4	5.9	5.9	5.9	5.9	5.6	4.2	3.7	3.1	3.4	3.4
Count	30	27	28	28	27	28	28	28	28	29	29	27	26	26	27	29	29	30	30	30	30	30	30	30

fEs

Sweep 1.0 Mc to 22.0 Mc in 1 min ☐ Manual ☒ Automatic

Y 3

SOLAR RADIO EMISSION

JUNE, 1956

Observing Station: HIRAISO

Frequency: 200 Mc/s

Flux in 10^{-22} w.m.$^{-2}$(c/s)$^{-1}$, 2 polarizations

Time in U.T.

Daily Data

Date	Steady Flux		
	00-03	03-06	Daily Averages
1	9	9	9
2	10	10	10
3	-	-	(10)
4	6	-	(6)
5	-	-	-
6	9	8	9
7	12	11	11
8	12	-	(12)
9	9	9	9
10	10	9	9
11	9	7	8
12	8	7	8
13	7	(6)	7
14	8	9	9
15	8	5	7
16	12	22	17
17	8	6	7
18	9	8	9
19	10	9	9
20	9	12	10
21	10	14	12
22	9	7	8
23	13	10	12
24	11	12	11
25	13	12	13
26	12	9	10
27	9	9	9
28	9	9	9
29	7	5	6
30	7	(6)	6

Outstanding Occurrences

Date	Starting Time	Duration	Type	Peak Flux	Time
19	0558-20s	10s	SD	420	-
	2040-30s	30s	SD	490	-
	2149-20s	1m	CD	370	-
	2306-30s	1m20s	SD	>2500	-
20	0030-40s	1m	CD	570	-
	0251-50s	50s	SD	520	-
	0519-20s	1m10s	CD	340	-
	0818-00s	1m10s	CD	390	-
	0923-20s	40s	SD	490	-
23	0134-40s	3m30s	CD	780	0135-00s
				620	0136-30s
	0519-30s	1m30s	CD	660	0520-00s

IONOSPHERIC DATA IN JAPAN FOR JUNE 1956
電 波 観 測 報 告　才8巻 才6号

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