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IONOSPHERIC DATA IN JAPAN

FOR FEBRUARY 1950

Vol. II No. 2

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PREPARED BY RADIO REGULATORY AGENCY

(DENPACHO)

TOKYO, JAPAN

RADIO REGULATORY AGENCY

(DENPACHO)

TOKYO, JAPAN

IONOSPHERIC DATA IN JAPAN FOR FEBRUARY 1950

CONTENTS

FOREWORD

Since November 1949 the observation of ionosphere and most part of the research related to the propagation of radio wave excepting those parts directly connected with the Telecommunication Service were transferred to the jurisdiction of the Radio Regulatory Agency from that of the Electrical Communication Laboratory.

Considering the role played by the reports related to the results of the ionospheric observations hitherto prepared by the Laboratory to the world scientiphic circles, we would like to continue the issue of this pamphlet.

Taking this happy occassion when Japan has resumed the membership in the International Telecommunication Conference, we wish to make every efforts in contributing to the improvement and development of radiocommunications.

We shall be very much obliged to receive the similar publications from the organizations concerned with radio propagation in the world.

February 1950

Tsuyoshi Amishima
Radio Regulatory Commissioner

SITE OF THE IONOSPHERIC STATIONS

Ionospheric observation is carried out at four stations in Japan.

The stations are situated as follows:

	longitude	latitude	site
Wakkanai	141° 41.1′ E	45° 23.6′ N	Wakkanai-machi, Soya-gun, Hokkaido
Akita	140° 08.2′ E	39° 43.5′N	Tegata-cho,Akita-shi, Akita-ken
Kokubunji	139° 29.3′ E	35° 42.4′ N	Koganei-machi, Kitatama-gun, Tokyo-to
Yamagawa	130° 37.7′ E	31° 12.5′ N	Yamagawa-machi, Ibusuki-gun, Kagoshima-ken

REMARKS ON SYMBOLS

Except both f_{min} E and f_{min} F, other symbols are used in accordance with recommendation of C.C.I.R. f_{min} E and f_{min} F in the table are defined as follows:

Z_d. Half breadth of the layer, calculated by the method of Booker.

f_{min} E Minimum frequency, on which echo reflected from E-layer begins to appear by use of the observation equipment on routine work.

f_{min} F Minimum frequency, on which echo reflected from F-layer begins to appear by use of the observation equipment on routine work.

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | f_0F2 | 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	3.3	3.4	3.4	3.4	3.6	2.8	2.5^{F}	(5.8)^{J}	B^{S}	S	(9.5)^{J_2S}	10.9	9.8^{S}	[9.4]^{S}	9.0^{S}	8.5^{S}	S	6.5^{S}	6.2	4.9	4.7	3.6	3.6	3.3
2	3.5	3.5^{Z}	3.7^{Z}	3.8	2.9	3.3	3.4	7.0^{F_2S}	(8.9)^{F_2S}	9.1	10.9	S	(10.1)^{J_2F_2S}	(9.0)^{F}	10.1	8.4	7.6	6.4	4.4	4.8	4.5^{F}	4.3^{F}	4.2	4.1
3	3.6	3.5	3.3	3.2	3.0^{A}	2.8	2.6	6.0^{F}	8.2^{S}	(10.9)^{F_1H}	11.2	12.4^{F_1H}	10.9	10.5	10.5^{Z}	(9.0)^{F_1H}	7.1	7.0	5.8	5.3	3.8	3.5	3.1	'3.5
4	3.2	3.1	3.0	3.1	3.1	2.7	2.8	6.1^{J_2S}	S	S	S	C	11.3	10.1	10.1	(9.1)^{J_2F_2S}	7.7^{J_2S}	7.5^{S}	6.2	4.9	3.7	3.6	3.4	3.8^{V}
5	3.6^{F}	3.8	3.6	3.7	3.5^{F}	3.6	3.6	6.0	C	C	C	C	C	C	C	8.8	[8.5]^{S}	(8.2)^{F}	7.1^{S}	3.8^{F}	2.8^{F}	3.9^{F}	3.5	3.7
6	3.8	3.7	3.6	3.7	3.5	3.4	3.1^{F}	6.0	8.3^{J}	9.4	10.2	(10.7)^{F}	(10.8)^{F_2S}	10.3^{S}	(9.5)^{J_2F_2S}	(9.3)^{J_2F_2S}	(7.8)^{F_2S}	6.3	5.6	5.0	3.6	3.0	3.0	2.8
7	3.3	3.3	3.4	3.5	3.7	2.9	2.6	5.6	7.7	9.8^{J}	9.1	9.8	10.4	(9.8)^{F_1H}	10.0	9.1^{J}	7.6^{F}	6.6	5.9^{S}	5.1^{H}	3.5	(3.7)^{F}	3.6	3.8^{F_2}
8	3.6	4.0	4 2	4.3	4.0	3.4	3.3	5.8	8.2	B	B^{S}	(11.0)^{F}	10.8	9.1^{F_2}	10.8	10.5	8.5^{S}	7.5	6.5	4.7	[3.9]^{S}	3.1	3.3	3.3
9	3.5	3.5	4.0^{F_2Z}	4.0	3.6	2.9	3.4	5.7	(8.1)^{F}	10.8	12.2^{F}	10.8^{F}	9.6	10.5	9.8^{F}	9.7	7.6	7.8	5.9	5.7	5.6	4.5	4.3	4.2
10	4.3	4.2	3.9	4.1^{B}	4.2	3.8	(4.9)^{F}	(6.2)^{F}	(8.1)^{J_2F_2S}	(9.6)^{J_2F}	(11.7)^{F}	10.7^{F}	9.9^{J}	B	B	B	(8.0)^{F}	7.0	(6.4)^{F_2H}	5.3	3.4	3.3	3.6	3.3
11	3.5^{F}	3.6	3.6^{F}	3.6	3.6	2.6	2.4	5.7	6.6	7.1^{J_2}	[9.0]^{C}	9.8	9.2^{J_2}	(9.7)^{J_2F}	9.0	7.6	7.5	5.8^{F}	5.6	5.1	4.2	3.5	3.8	3.8
12	4.6^{F}	3.9	3.9	3.9	3.9	3.5	3.6	B	7.8^{B}	S	S	S	S	S	8.2	7.7^{S}	[7.4]^{S}	7.2	5.5	5.0	4.1	4.2	4.3	3.7
13	4.0	4.1^{V}	4.1	4.4	4.9	4.7	3.1	6.1	(8.0)^{F}	8.2	10.2^{F}	C	C	S	8.8^{F}	8.0	8.1^{F}	7.6	5.6	4.7	5.2	3.9	4.0^{F}	4.2
14	4.1	4.0	3.9	4.2	4.1	4.4	4.7	7.5	[9.0]^{S}	(10.4)^{F_2S}	(9.7)^{F_2S}	(9.2)^{F_2S}	9.8	(9.6)^{F_2S}	9.4	9.4	8.9^{F_2S}	8.6^{S}	S	5.1^{F_2S}	4.2	4.3	4.6	4.7^{F}
15	4.4^{J_2F}	5.7^{Z}	4.8^{V}	4.7^{F}	5.2^{V}	4.4^{V}	5.2^{V}	8.3^{Z}	9.8^{J}	9.6^{J}	11.1	10.9	11.9	10.3	10.7	10.1	9.3	7.6^{S}	6.5	5.9	4.2	3.9	3.9^{Z}	4.0
16	4.2	4.3	4.2	4.0	3.9	3.6	4.6	7.8^{J_2}	9.5^{J_2}	(11.3)^{F}	10.7	10.7	12.0	11.0^{Z}	10.1^{J}	(9.7)^{F}	(9.3)^{F}	8.2	5.8	5.2	5.2	4.7	4.2	4.1
17	3.7	4.1	4.7	4.8^{F}	4.6^{F}	3.9^{F}	3.8	6.9	8.7	9.0^{F}	(9.6)^{J_2F_2S}	12.0	11.3^{V}	9.6^{S}	7.9^{S}	(8.5)^{F_2S}	(8.2)^{J_2F_2S}	7.1	5.7	5.5	5.1	4.3	4.1	4.0
18	3.9	4.0	4.0	4.3	4.5^{F}	3.2	3.6	7.0	10.5^{B}	10.0	10.7	10.2	10.5^{F}	10.2	10.2	(10.0)^{F}	(9.4)^{J}	8.3^{F_2B}	7.1	5.8	4.8	4.4	4.3	4.3
19	4.5	4.5	4.4	4.4	4.0^{F_2S}	4.3	4.4	7.4	C	C	C	C	C	C	C	C	9.7^{J}	(8.8)^{F_2S}	(7.1)^{F}	6.5	6.0	5.6	5.2	5.8^{F_2S}
20	5.1	4.9	4.9$^{F}_{H}$	5.1	4.7	4.4	5.0	7.5	9.8	(10.7)^{F}	11.0	11.3	10.9	10.5^{Z}	10.2	10.2	S	S	7.4^{F}	6.5	5.8	5.8^{H}	5.4	5.0
21	4.5	4.0	4.1	4.4	3.4^{K}	3.1^{K}	3.3^{K}	4.6^{K}	6.5^{K_2F}	6.7^{K}	9.6^{K}	8.1^{K}	9.3^{K_2H}	10.5^{F_2Z}	(10.8)^{F}	8.6^{K}	9.6	(8.9)^{F_2S}	7.5^{F_2H}	(6.7)^{F_1H}	6.8^{F_2H}	6.7^{F_1H}	6.0^{F}	6.0^{K_2H}
22	(5.9)^{K_2H}	5.9^{K}	6.0$^{K}_{F}$	6.0	6.1	5.8	5.2	8.2	12.6	12.3	12.8^{F}	12.1	11.6	11.4	11.4	10.9	10.4	8.0^{F}	S	7.0^{F}	6.5^{S_2H}	5.3	5.1	4.5
23	4.4^{H}	5.1$^{K}_{H}$	5.0^{K}	5.3^{K_2F}	4.4^{K}	4.0^{K_2F}	4.9^{K_2F}	7.1	7.9^{J}	10.3^{F}	11.5	11.9	13.0	13.1	12.3^{H}	11.2^{H}	10.2	8.3	7.9^{F}	6.2^{S}	5.1	3.8^{K}	3.8^{K}	3.4^{K}
24	3.1^{K}	3.1^{K_2}	3.1^{K}	3.1$^{K}_{F}$	2.7^{K}	3.0^{K}	3.6^{K}	5^{K}	8.8^{K}	8.0$^{K}_{H}$	10.6$^{F}_{H}$	11.8^{H}	12.0^{F}	11.7	11.4^{F}	11.0	(9.5)^{F_2S}	(8.8)^{F_2S}	7.3	7.0	5.5	5.0	4.8^{V}	4.4^{V}
25	4.7$^{F}_{H}$	5.1	5.0^{F}	4.6^{F}	3.8^{F}	3.3^{F}	4.1	6.5	8.9	10.8	(11.6)^{F}	11.4	11.9	10.3	10.2	10.7	10.4^{F}	8.5	6.8	6.0	5.0	4.6	4.6	4.7^{F}
26	4.8^{F}	4.9$^{F_2}_{H}$	5.2^{F}	(5.6)^{J_2F}	4.7	(4.9)^{J_2F}	(5.6)^{J_2F_2H}	6.7^{J}	(10.0)^{F}	11.1	12.7	11.8	11.9	10.8	10.3	9.6^{F}	9.2	8.4^{F}	7.0	7.0^{Z}	5.7	5.2	5.3^{F}	5.2^{V_2H}
27	5.0^{F}	5.4	5.3^{F}	5.0^{F}	5.1	5.0	5.8	7.6	S	9.9^{S}	10.4	11.2^{S_2H}	(11.6)^{J_2F}	10.1^{F}	9.0^{F_2S}	8.8	10.0	8.0	7.0	5.8	5.4	5.7	5.4	5.5
28	5.6	5.3	5.2^{F}	5.0^{F}	5.0^{F}	5.0^{F}	5.7^{F}	7.8	10.3	11.8	10.6	12.1	11.6^{H}	(12.4)^{F}	(11.2)^{F}	10.4^{F}	10.4	(9.0)^{F}	7.2^{F}	6.2	6.4	5.2	5.4	5.3
29																								
30																								
31																								
Median Value	4.0	4.0	4.0	4.2	4.0	3.6	3.6	6.6	8.7	10.0	10.7	11.0	10.9	10.3	10.1	9.4	8.7	7.8	6.4	5.4	4.9	4.3	4.2	4.1
Count	28	28	28	28	28	28	28	26	23	22	23	22	24	23	25	26	26	27	26	28	28	28	28	28

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 1

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | h_pF2 | 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	(450)^{A}	450	440	400	320	310	360^{P}	(340)^{J}	B^{S}	S	(300)$^{J}_{S}$	360	310^{S}	S	(340)^{S}	340^{S}	S	310^{S}	350	300	390	360	370	430
2	440	420^{Z}	400^{Z}	350	400	400	340	300$^{P}_{S}$	(290)$^{P}_{S}$	300	330	S	(310)$^{J}_{S}$	B	310	320	320	320	350	360	360^{P}	360^{P}	(410)^{B}	440
3	420	420	430	410	440^{A}	370	410	370^{P}	350^{S}	(380)$^{P}_{S}$	300	320$^{P}_{H}$	300	320	(330)$^{J}_{H}$	(300)$^{P}_{H}$	310	320	300	320	(390)^{S}	390	380	350
4	360	360	380	390	370	(280)^{B}	440	(310)$^{J}_{S}$	S	S	S	C	340	310	330	(310)$^{J}_{S}$	(310)$^{J}_{S}$	320^{S}	310	330	320	380	400	470^{V}
5	430^{F}	430	420	400	440^{F}	370	410	290	C	C	C	C	C	C	C	300	[330]^{S}	(360)^{F}	310^{S}	380	330^{F}	400^{F}	430	440
6	450	400	420	380	320	350	350^{F}	300	(270)^{V}	280	300	(310)^{P}	(320)$^{P}_{S}$	310^{S}	(300)$^{J}_{S}$	(310)$^{J}_{S}$	(290)$^{P}_{S}$	(300)^{B}	360	350	340	(380)^{B}	430	440
7	480	420	420	360	(330)^{B}	370	(330)^{B}	340	300	(300)^{J}	(320)^{B}	(320)^{B}	310	(380)$^{J}_{S}$	310	(320)^{J}	310^{P}	(340)^{B}	(310)^{S}	380^{H}	350	(360)^{P}	(400)^{B}	410$^{P}_{S}$
8	400	420	430	370	(340)^{B}	420	(350)^{B}	300	300	B	B^{S}	(310)^{P}	340	330$^{P}_{S}$	(390)^{S}	(330)^{S}	320^{S}	310	330	290	S	410	(430)^{B}	430
9	450	440	420^{P}	370	350	310	380	310	(290)^{F}	330	310^{P}	340^{P}	300	290	290^{P}	270	260	320	(320)^{B}	350	310	320	350	390
10	400	340	360	(350)^{B}	400	330	(330)^{F}	(330)^{P}	(300)$^{J}_{S}$	(310)^{J}	(330)^{P}	320^{P}	(290)^{J}	B	B	B	(280)^{P}	(280)^{B}	(370)$^{P}_{H}$	270	280	350	390	490
11	440^{P}	430	430^{F}	(320)^{B}	300	250	340	240	230	270$^{S}_{H}$	[290]^{C}	310	300	(280)^{J}	310	320	320	300^{P}	350	350	270	420	410	430
12	440^{F}	380	360	(350)^{B}	340	(310)^{B}	300	B	(300)^{B}	S	S	S	S	S	250	(250)^{B}	[280]$^{S}_{F}$	300	340	320	300	330	350	320
13	380	430^{V}	420	380	360	330	380	330	(290)^{P}	280	(300)$^{P}_{B}$	C	C	S	290^{P}	300	290^{P}	350	380	360	340	390	430^{P}	400
14	400	390	420	400	390	370	340	290	[300]^{S}	(310)$^{P}_{S}$	(290)$^{P}_{S}$	(290)$^{P}_{S}$	310	(310)$^{P}_{S}$	400	320	290$^{P}_{S}$	290^{S}	S	290$^{P}_{S}$	310	340	340^{S}	420^{F}
15	(380)^{Z}	(430)^{Z}	440^{V}	390^{F}	350^{V}	(310)^{B}	330^{V}	310^{Z}	(250)^{J}	250^{P}	290	310	300	300	320	300	300	290^{S}	290	320	360	400	400^{Z}	450
16	440	390	370	360	340	380	420	(310)$^{J}_{S}$	(310)$^{J}_{S}$	(300)^{P}	320	290	330	(320)$^{B}_{Z}$	(310)^{J}	(310)^{P}	(330)^{P}	310	320	370	340	390	390	480
17	370	390	410	400^{F}	350^{F}	330^{F}	310^{F}	300	310	(290)^{P}	(310)$^{J}_{S}$	340	300^{V}	(320)^{S}	290^{S}	(340)$^{P}_{S}$	(320)$^{J}_{S}$	340	350	340	350	A	350	420
18	420	430	430	350	310^{F}	410	390	410	300^{B}	250	270	300	310^{P}	320	300	(300)$^{P}_{S}$	(270)^{P}	(320)$^{P}_{B}$	340	300	320	350	380	370
19	390	420	380	400	380$^{P}_{S}$	460	360	310	C	C	C	C	C	C	C	C	(300)^{J}	(310)$^{P}_{S}$	(370)^{P}	340	370	380	350	350$^{P}_{S}$
20	410	360	420$^{F}_{H}$	380	370	400	350	280	280	(330)^{P}	320	340	320	320^{Z}	340	340	S	S	390	390	340	420^{H}	410	360
21	350	490	480	420	550^{K}	690^{K}	450^{K}	360^{K}	390$^{K}_{P}$	G^{K}	500^{K}	B^{K}	450$^{F}_{H}$	410$^{F}_{Z}$	(430)^{F}	330^{K}	350	(340)$^{P}_{S}$	380$^{P}_{H}$	(410)$^{P}_{H}$	(440)$^{P}_{H}$	370$^{P}_{H}$	380^{P}	470$^{P}_{H}$
22	(480)$^{P}_{H}$	(430)$^{P}_{F}$	430$^{P}_{Z}$	370	(290)^{F}	320^{F}	380	320	310	310	330^{P}	320	310	340	310	320	290	310^{P}	S	340^{P}	340$^{P}_{H}$	(320)^{B}	400	390
23	460^{H}	500$^{K}_{H}$	420^{K}	540$^{K}_{F}$	(460)$^{K}_{F}$	540$^{K}_{F}$	500$^{K}_{F}$	(320)^{B}	(300)^{J}	350^{P}	320	330	340	340	360^{H}	310^{H}	320	320	320^{P}	340^{S}	300	420^{K}	530^{K}	610^{K}
24	650^{K}	570$^{P}_{Z}$	550^{K}	470$^{K}_{F}$	540^{K}	470^{K}	400^{K}	S^{K}	380^{K}	370$^{K}_{H}$	(390)$^{P}_{S}$	400^{H}	380^{P}	370	350^{P}	350	(320)$^{P}_{S}$	(330)$^{P}_{S}$	360	400	400	470	470^{V}	470^{V}
25	510^{F}	440	410^{F}	390^{F}	430^{F}	440^{F}	400	320	350	300	(290)^{P}	310	320	320	330	330	320^{P}	290	360	360	400	410	460	450^{F}
26	460^{F}	480$^{P}_{H}$	450$^{P}_{F}$	(470)$^{J}_{F}$	450	(490)$^{J}_{F}$	(440)$^{J}_{H}$	(310)^{J}	(330)$^{P}_{B}$	370	380	320	350	330	330	350^{P}	340	360^{P}	(370)^{P}	380$^{P}_{Z}$	400	430	450^{F}	(450)$^{J}_{F}$
27	490^{F}	490	440^{F}	420^{F}	420	430	340	320	S	320^{S}	340	390$^{S}_{H}$	(300)$^{P}_{F}$	300^{P}	300$^{P}_{S}$	300	320	(320)^{B}	340	340	360	420	380	380
28	400	(380)^{B}	(380)$^{P}_{B}$	390^{F}	370^{F}	380^{F}	380^{F}	300	310	320	310	370	330^{H}	(350)^{P}	(330)^{P}	(310)^{S}	300	(330)^{P}	300^{P}	340	340	390	390	390
29																								
30																								
31																								
Median Value	440	420	420	390	370	370	370	310	300	310	310	320	310	320	320	320	310	320	340	340	340	390	400	430
Count	28	28	28	28	28	28	28	26	23	22	23	21	24	21	25	26	26	27	26	28	27	27	28	28

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 2

5

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | 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	340	320	310	300	270	270	300	280	260	260	230	280	280	260	290	270	270	A	280	270	340	300	320	B
2	410	370	320	290	300	310	280	270	260	260	270	280	280	290	290	290	280	250	280	290	290	310	360	360
3	350	340	340	300	A	250	360	300^{A}	300^{A}	300$^{A}_{H}$	(270)^{A}	A^{H}	250	280	260^{H}	250^{H}	250^{A}	270	240	230	210	330^{A}	380^{A}	300
4	300	290	310	320	320	240	390	280	240	220	240	270	270	240	290	260	270	300	270	250	270	300	A	330
5	250^{F}	300	310	290	320	300	320	250	C	C	C	C	C	C	C	260	230	290	210^{A}	A	250	A	320	320
6	A	310	300	300	300	280	290	250	250	210	250	260	270	280	260	270	250	240	280^{A}	250	270	310	370^{A}	400^{A}
7	380	350	350	310	280	250	290	240	230	270	300	300	280	290^{H}	280	290	300	250	230	220^{H}	290	300	320	320
8	310	340	320	280	260	290	280	260	260	250	200	260	220	250	300	240	260	220	230	220	230	A	380	350
9	360	340	320	300	270	230	270	280	210	270	230	270	240	230	240	220	230	240	250^{A}	260	270^{F}	290^{A}	300	300
10	300	280	290	280	290	240	200	200^{A}	280	250	270	270	240	300	280	270	220	210	220^{H}	200	220	270	290	270
11	310	300	290	280	210	210	300	210	200	220^{H}	250	230	300	280	300	300	290	220	250	250	230	300	310	310
12	300	300	270	280	270	250	230	230	210	210	200	290	290	290	210	220	230	290	230	240	220	240	240	250
13	300	300	300	310	250	240	240	250	220	220	250	240	[260]^{C}	290	250	250	250	270	290	290	290	300	310	310
14	300	300	310	310	310	280	290	250	250	210	240	270	280	250	270	270	230	230	200	240	220	260	290	310
15	300	300	270	250	220	200	200	240	210	220	220	290	200	230	300	240	260	230	220	220	220	260	290	330^{F}
16	350	300	280	290	290	300	290	230	230	230	300	270	270	270	250	280	240	280	230	260	300	300	320	350
17	300	300	300	290	280	240	230	270	220	280	290	300	270	260	260	300	290	240^{A}	250^{A}	240	260	A	290	300
18	320	340	310	300	A^{F}	260	260^{A}	280	280	220	220	280	280	280	270	270	220	300	290	220	260	280	310	300
19	310	310	300	300	290	340	260	240	250	C	C	C	C	C	C	C	290	210	230	250	230	280	280	200
20	300	280	310^{H}	270	250	260	270	250	260	280	230	290	290	250	260	260	280	250	270	280	280	300^{H}	300	290
21	290	360	380	300	450^{K}	600^{K}	330$^{K}_{B}$	310^{K}	370^{K}	390^{K}	500^{K}	420^{K}	370$^{K}_{H}$	410^{K}	360^{K}	290^{K}	290	290	290^{H}	300^{H}	300^{H}	280^{H}	270	300$^{K}_{H}$
22	300$^{K}_{H}$	320^{K}	300^{K}	290	230	250	250	240	300	290	270	230	260	260	250	260	260	210	210^{A}	290	A	220	300^{A}	300
23	320^{H}	400$^{K}_{H}$	300^{K}	320^{K}	320^{K}	400$^{K}_{F}$	350^{K}	250	260	280	290	300	230	240	290^{H}	290^{H}	280	270	230^{F}	270^{F}	230	300^{K}	390^{K}	470^{K}
24	500^{K}	440^{K}	400^{K}	400$^{K}_{F}$	410^{K}	390^{K}	400^{K}	280^{K}	280^{K}	280$^{K}_{H}$	270^{H}	300^{H}	300	290	260	A	270	300	260	240	280	280	320	360
25	370	340	300	290	300^{A}	310	330	280	300	260	250	270	300	210	250	250	280	240	220	280	300	300	320	330
26	330	310^{H}	300	300	300	300	300^{H}	300	290	300	300	270	300	280	280	310	280	250	240	280	300	300	300	290^{H}
27	360	330	330	300	300	310	280	300	230	290	300	290^{H}	300	270	240	290	290	290	250	260	270	300	290	290
28	290	300	300	280	290	270	280	270	270	210	220	230	250^{H}	210	210	240	250	260	240	250	260	270	280	290
29																								
30																								
31																								
Median Value	310	310	300	300	290	270	280	260	260	260	250	270	280	270	260	270	260	250	240	250	270	300	310	310
Count	27	28	28	28	26	28	28	28	27	26	26	25	26	26	26	26	28	27	28	27	27	25	27	27

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 3

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | f_0F1 | 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							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	A						
2							Q	Q	Q	Q	Q	Q	Q	Q	Q	L	L	Q						
3							Q	A	A	A	A	Q	Q	Q	Q	Q	Q	Q						
4							Q	Q	Q	Q	Q	Q	Q	Q	L	Q	Q	Q						
5							Q	Q	C	C	C	C	C	C	C	Q	Q	L						
6							Q	Q	L	Q	Q	Q	Q	Q	Q	Q	Q	Q						
7							Q	Q	Q	Q	L	L	Q	Q	Q	Q	L	Q						
8							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
9							Q	Q	Q	L	4.5	4.9^P	4.4	4.2	Q	Q	Q	Q						
10							Q	Q	L	Q	Q	Q	Q	L	L	Q	Q	A						
11							Q	Q	Q	Q	Q	Q	Q	L	L	Q	L	Q						
12							Q	Q	Q	Q	Q	L	L	L	Q	Q	Q	L						
13							Q	Q	Q	Q	Q	Q	C	Q	Q	Q	L	L						
14							Q	Q	Q	Q	Q	L	L	Q	Q	Q	Q	Q						
15							Q	3.6	Q	Q	Q	L	Q	Q	L	Q	Q	Q						
16							Q	Q	Q	Q	L	L	L	L	Q	Q	Q	Q						
17							Q	L	Q	L	L	Q	Q	Q	Q	Q	Q	Q						
18							A	L	Q	Q	Q	L	L	L	L	Q	Q	L						
19							Q	Q	L	C	C	C	C	C	C	C	L	Q						
20							Q	Q	L	L	Q	Q	L	Q	Q	Q	Q	Q						
21							B^K	Q^K	L^K	5.1^P_K	L^K	6.3^K	6.5^K_P	L^K	6.7^F_P	Q^K	Q	Q						
22							Q	Q	L	L	L	Q	Q	Q	Q	Q	L	Q						
23							Q	Q	4.4	L	L	L	Q	Q	L	L	L	Q						
24							L	Q	Q	Q	Q	L	L	Q	Q	Q	Q	L						
25							Q	Q	Q	L	L	L	L	Q	Q	Q	Q	Q						
26							Q	Q	Q	Q	L	Q	L	Q	Q	L	Q	Q						
27							Q	L	Q	L	Q	L	L	L	Q	L	L	L						
28							Q	Q	L	Q	Q	Q	Q	Q	Q	Q	Q	Q						
29																								
30																								
31																								
Median Value								—	—	—	—	—	—	—	—									
Count								1	1	1	1	2	2	1	1									

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 4

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | h'F1 | 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							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	A						
2							Q	Q	Q	Q	Q	Q	Q	Q	Q	280	250	Q						
3							Q	A	A	A	A	Q	Q	Q	Q	Q	Q	Q						
4							Q	Q	Q	Q	Q	Q	Q	Q	250	Q	Q	Q						
5							Q	Q	C	C	C	C	C	C	C	Q	Q	250						
6							Q	Q	240	Q	Q	Q	Q	Q	Q	Q	Q	Q						
7							Q	Q	Q	Q	280	270	Q	Q	Q	Q	250	Q						
8							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
9							Q	Q	Q	220	200	210	220	220	Q	Q	Q	Q						
10							Q	Q	240	Q	Q	Q	Q	260	230	Q	Q	A						
11							Q	Q	Q	Q	Q	Q	Q	220	220	Q	270	Q						
12							Q	Q	Q	Q	Q	220	230	220	Q	Q	Q	210						
13							Q	Q	Q	Q	Q	Q	C	Q	Q	Q	240	240						
14							Q	Q	Q	Q	Q	230	230	Q	Q	Q	Q	Q						
15							Q	180	Q	Q	Q	230	Q	Q	240	Q	Q	Q						
16							Q	Q	Q	Q	240	210	250	200	Q	Q	Q	Q						
17							Q	240	Q	220	220	Q	Q	Q	Q	Q	Q	Q						
18							A	250	Q	Q	Q	210	240	240	240[B]	Q	Q	240						
19							Q	Q	230	C	C	C	C	C	C	C	270	Q						
20							Q	Q	220	230	Q	Q	270	Q	Q	Q	Q	Q						
21							B[K]	Q[K]	320[K]	270[K]	290[K]	250[K]	290[K]	290[K]	300[K]	Q[K]	Q	Q						
22							Q	Q	250	240	220	Q	Q	Q	Q	Q	230	Q						
23							Q	Q	240	240	240	230	Q	Q	240	250	250	Q						
24							330	Q	Q	Q	Q	260	230	Q	Q	Q	Q	280						
25							Q	Q	Q	210	210	240	240	Q	Q	Q	Q	Q						
26							Q	Q	Q	Q	280	Q	270	Q	Q	270	Q	Q						
27							Q	260	Q	200	Q	230	260	250	Q	250	250	240						
28							Q	Q	250	Q	Q	Q	Q	Q	Q	Q	Q	Q						
29																								
30																								
31																								
Median Value							—	—	240	220	240	230	240	230	240	—	250	240						
Count							1	4	8	8	9	12	11	8	7	4	8	6						

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 5

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | foE | 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							E	1.7	(2.7)A	2.9	3.1	3.3	3.2B	3.1	3.1	(2.8)BF	2.1	A						
2							E	2.1H	2.9	3.4	3.2A	A	A	3.2B	3.1	(2.7)B	(2.0)A	1.4						
3							E	A	A	A	A	A	3.3	B	3.0	2.5	(2.4)A	A						
4							E	(1.9)B	(2.4)B	2.6	3.1	3.2	3.2	3.0	3.0	(2.4)B	B	A						
5							E	1.7	C	C	C	C	C	C	C	(2.7)B	(2.6)B	(1.4)B						
6							E	1.9	2.1	2.7	3.0	3.2	3.1	3.3	3.0	2.5	2.2	A						
7							(1.3)J	(2.0)A	(2.5)A	2.8	3.0	3.1	3.1	3.1	3.0	2.8	2.3	1.4						
8							1.2	1.5	2.2H	3.0A	3.0	3.3	3.3	3.0	B	A	(2.2)B	1.7						
9							(1.2)B	1.8	2.5	2.8	3.0F	3.0	3.3	3.0	3.0	(2.6)P	2.0F	(1.5)F						
10							(1.2)B	A	1.7A	(2.2)A	(2.9)A	B	B	B	B	B	2.1	1.4						
11							E	(1.9)BH	2.4	2.6	3.0H	3.2	3.3	3.4	2.9	B	2.0	(1.5)B						
12							E	1.7F	2.3	(2.9)B	(3.1)B	3.4B	[3.3]B	(3.2)A	(3.0)A	(2.9)BF	2.3B	1.7						
13							E	A	2.4F	3.0	3.3	(3.3)A	[3.4]C	(3.4)B	3.1	2.8	2.4	(1.4)B						
14							E	2.0F	2.5	2.9	3.1	3.3	3.5	3.4	3.2	3.0	2.4	(1.5)B						
15							E	2.0F	2.4	3.0A	3.2A	3.3	3.4	3.2	3.1F	2.9F	2.7F	2.1F						
16							E	2.1H	2.5B	3.0H	3.4H	3.4	3.4	3.4	3.1	3.0	2.4	(2.2)B						
17							E	2.0	2.8	3.0	3.2	[3.4]B	3.5	[3.4]S	3.2P	3.0	2.5	(2.4)A						
18							A	2.1	2.5	3.0F	A	3.4	3.4	3.3	[3.1]B	2.9	(2.5)F	1.4						
19							E	2.1H	2.6	C	C	C	C	C	C	C	2.5	2.0						
20							E	2.3BH	2.7F	3.2	3.5	3.6	3.6	3.5	3.4	2.7	2.4	1.4						
21							E	2.1	(2.8)A	2.8H	3.0	3.5P	3.6	3.4	(3.3)P	A	2.5F	(1.9)B						
22							E	2.2	2.7	B	A	3.3P	3.5P	3.5	3.4	3.0	2.7P	1.7						
23							1.4H	2.4H	3.0F	3.0	3.2A	3.4A	3.5A	3.5	3.2	3.0	2.2JF	2.1						
24							(1.4)B	1.8	2.6	2.6J	(2.9)A	3.2	3.3	A	B	A	2.5	B						
25							1.3	2.1	2.6	3.0	3.2	3.2	3.3	3.1	3.1	3.0	A	2.0						
26							1.2	2.1H	2.7	3.1F	3.2F	3.5	3.4	3.3	3.1	3.0	2.5	2.1B						
27							1.4P	2.0	2.6	3.0	3.1	B	3.4	3.3P	3.0	2.9H	2.1	(2.0)A						
28							E	2.0	2.5	3.2	3.3	3.5	3.5	3.3	3.4	2.9	2.5P	1.9						
29																								
30																								
31																								
Median Value							E	2.0	2.5	3.0	3.1	3.3	3.4	3.3	3.1	2.9	2.4	1.7						
Count							27	25	26	24	23	22	24	23	23	22	26	23						

Sweep 1.0 Mc to 14.0 Mc in 1.5 min Manual

W 6

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | h'E | 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							E	100	A	100	100	110	100	B	100	110	110	A						
2							E	110^{H}	110	120	120	A	A	100	100	110	A	110^{B}						
3							E	A	A	A	A	A	130^{A}	B	A	110	A	A						
4							E	B	110	110	110	100	100	110^{B}	110	110	B	A						
5							E	(130)^{B}	C	C	C	C	C	C	C	B	120	100						
6							E	B	120	100	100	100	100	100	100	100	100	A						
7							100	A	A	110	110	120	110	110	120	130	120	100						
8							E	100	100^{H}	100	100	100	110	100	110	A	100	120						
9							B	120	100	100	100	100	110^{B}	100	B	100	100	110						
10							B	A	100	B	A	B	110	110	120	120	120^{F}	100						
11							E	120$^{B}_{H}$	110	110	110^{H}	110	100	100	110	110	100	110						
12							E	110	110	110	110	120	120	A	A	110	110	B						
13							E	A	100	100	100	A	C	130^{A}	100	100	100	100						
14							E	130	120	100	110	110	110	110	110	100	100	B						
15							E	100	100	110^{A}	110^{A}	110	100	110	110	110	120	B						
16							E	110^{H}	110	100^{H}	130$^{H}_{B}$	100	100	100	120	100	120^{B}	B						
17							E	110	110	140	120	[120]^{B}	130	[120]^{S}	100	110	100	110^{A}						
18							A	100	100	120	A	100	120	110	[100]^{B}	100	120	100						
19							E	B	110	C	C	C	C	C	C	C	110	120^{B}						
20							E	100^{H}	100	100	100	100	110	100	110	110	110	100						
21							E	130	A	100^{H}	100	100	120	120	100^{A}	A	110	B						
22							E	110^{A}	A	B	A	110	110	120	100	100	100	100						
23							E	100^{H}	100	110	110^{A}	110	110^{A}	100	110	110	110	A						
24							E	110	100	A	A	(120)^{A}	120	A	110	A	130	110						
25							E	100	100	100	100	100	100	100	100	100	A	110						
26							E	110^{H}	100	100	100	100	100	100	100	100	100	100						
27							E	B	100	100	100^{H}	100	110	110	(110)^{B}	100^{H}	100	A						
28							E	B	110	100	100	100	100	100	100	100	100	100						
29																								
30																								
31																								
Median Value								110	100	100	100	100	110	100	110	110	110	100						
Count								19	22	22	21	22	24	22	23	23	24	17						

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 7

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | fEs | 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	(2.8)^{B}	G	(2.0)^{B}	G	G	G	G	G	3.8	G	G	G	G	G	G	G	B	3.7^{Y}	G	G	B	B	B	2.9
2	B	G	G	G	G	G	G	G	G	G	4.5	3.8	3.7	G	G	G	2.3	G	G	G	G	G	G	G
3	2.0	2.4	B	G	4.8	4.8^{B}	G	2.4^{Y}	5.2	(3.9)^{B}	6.0	3.6^{Y}	(4.5)^{B}	4.1^{B}	5.7^{Y}	5.0	4.4	2.0	2.0	3.1	2.1	3.0	3.0	G
4	2.9	G	G	G	2.1	2.3	G	G	G	G	3.9	4.6	4.8^{Y}	4.6^{B}	4.2	4.2^{Y}	3.4	3.8	3.2	G	G	G	3.2	G
5	G	G	2.4	G	G	2.8	G	3.6	C	C	C	C	C	C	C	G	G	2.3^{Y}	4.3^{Y}	2.4	3.5	3.7	2.9	2.4
6	2.2	2.4	1.7	G	G	G	G	G	3.7^{B}	3.4	3.8	G	4.4^{Y}	G	3.5	3.0	4.4	3.2	2.2	G	G	2.4	3.2	3.0
7	1.4	G	B	2.1	G	2.1^{Y}	4.2	3.2	3.0	G	G	G	G	G	G	G	G	G	G	G	3.0	2.3	G	G
8	3.3	2.1	2.0	1.9	G	G	G	G	G	5.0	3.9^{Y}	G	G	G	G	4.8	3.0^{Y}	G	G	G	4.3	3.0	G	G
9	G	G	1.7	G	G	1.4	G	2.4	G	G	4.2	3.4^{Y}	G	4.6	3.6	G	3.6	G	5.0	2.2	3.4^{F}	3.7	2.4	G
10	2.7	G	2.3	2.4^{Y}	2.5	2.6	G	2.3	2.9	5.0	4.5	B	G	G	G	G	G	4.3^{Y}	2.2	B	G	G	G	G
11	G	G	2.0	3.0^{Y}	1.2	G	G	G	3.2	4.1^{Y}	C	G	G	G	G	G	(3.0)^{B}	G	G	2.2	3.2	G	G	B
12	2.1	2.6	2.2	2.8	3.0	2.2	G	(2.8)^{B}	3.4	3.8^{Y}	G	G	G	3.3	3.6	G	G	G	G	G	G	G	G	2.0
13	1.4	G	G	G	G	G	G	(2.0)^{B}	G	4.4^{Y}	G	3.5	C	4.0^{Y}	G	G	G	G	G	G	G	1.4	2.3	G
14	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
15	G	G	G	G	G	G	G	G	4.0^{Y}	3.2	3.6	G	G	G	G	G	G	G	G	G	G	G	G	G
16	G	G	1.4	1.7	B	2.3	G	G	3.5	3.8	3.6	6.2^{Y}	G	G	G	G	G	G	G	3.8	5.0	(3.4)^{B}	3.3	4.2
17	B	G	G	G	G	G	G	G	G	G	4.7^{Y}	B	G	5	G	3.7	3.4^{Y}	4.0	3.5	2.6	2.5	4.7	2.2	G
18	G	G	G	3.2^{F}	2.8^{F}	2.6$^{Y}_{F}$	3.0	(2.9)^{B}	G	3.9^{F}	5.3	G	G	G	B	G	G	G	2.2	G	1.6	G	2.4	3.0
19	1.8	G	2.4	2.4	G	G	G	G	3.8	C	C	C	C	C	C	C	(3.4)^{B}	G	G	G	G	G	1.5	1.5
20	G	G	G	G	G	G	1.1	5.0^{Y}	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
21	G	G	G	G	G	G	G	3.1^{Y}	3.6	G	4.9^{F}	(4.2)^{Y}	4.6^{Y}	G	3.8	3.4	4.0	G	G	G	G	G	G	B
22	G	G	G	G	G	G	G	G	3.7	B	3.8	G	G	G	G	G	G	G	2.0	2.7	4.4	G	3.0	G
23	1.3	G	1.2	1.2	1.2	G	G	G	3.6^{Y}	3.7	4.5	G	4.5^{Y}	G	G	G	G	5.4	4.4^{F}	3.6	2.4	G	G	G
24	G	2.3^{Y}	1.3	2.4^{Y}	1.6	1.4	G	3.2^{Y}	3.6^{Y}	4.7^{Y}	4.5	5.0	G	3.5	B	3.4	(3.2)^{B}	G	G	G	G	G	G	1.8
25	3.6	1.9	2.2	2.4	2.4	2.0	G	G	G	G	G	G	G	G	G	G	3.2	G	G	G	2.4	2.0	G	G
26	2.3	G	2.3	1.3	2.3	2.2	G	G	G	3.5	3.4	G	G	G	G	G	G	G	2.4^{Y}	3.4	G	G	G	G
27	G	G	G	G	G	G	G	G	4.4^{Y}	4.3^{Y}	G	G	G	G	4.0^{Y}	G	3.8	3.0	(2.0)^{B}	G	G	G	2.2^{Y}	G
28	2.5	2.2	2.6	2.5	3.0	2.2	G	2 3	G	G	G	G	G	4.8^{Y}	4.4^{Y}	G	3.4^{Y}	3.0^{Y}	1.2	G	G	G	G	2.6
29																								
30																								
31																								
Median Value	1.4	G	1.4	G	G	G	G	G	3.0	3.4	3.7	G	G	G	G	G	2.3	G	G	G	G	G	G	G
Count	26	28	26	28	27	28	28	28	27	25	26	24	25	25	24	27	27	28	28	27	27	27	27	26

Sweep 1.0 Mc to 16.0 Mc in 15 min Manual

W 8

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | (M3000)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	2.4	2.4	2.5	2.6	2.9	3.2	2.8^{P}	(2.9)^{J}	B^{S}	S	(3.2)$^{J_F^P S}$	2.7	3.0^{S}	S	(2.9)^{S}	(2.8)^{S}	S	3.0^{S}	2.7	3.2	2.6	2.7	2.7	2.5
2	2.5	2.5^{Z}	2.8^{Z}	(2.8)^{B}	2.6	2.7	2.8	3.1$^{F_S^P}$	(3.2)$^{F_S^P}$	(3.2)^{F}	2.9	S	(3.0)$^{J_S^P}$	B	(3.0)^{B}	2.9	2.9	3.1	2.7	2.7	2.7^{P}	2.7^{P}	(2.5)^{B}	2.5
3	2.5	2.5	2.4	2.6	2.5^{A}	2.7	2.6	2.7^{P}	(2.8)^{B}	(2.7)^{P_H}	3.0	3.0^{P_H}	3.1	3.0	(3.1)$^{J_H^P}$	(3.1)^{H}	3.1	3.0	3.1	2.9	2.6	2.6	2.8	2.8
4	2.8	2.7	2.6	2.7	2.7	3.2	2.4	(3.1)^{J_S}	S	S	S	C	2.8	3.0	2.9	(3.0)$^{J_S^P}$	(3.1)^{J_S}	3.1^{S}	3.1	2.9	3.0	2.7	2.6	2.4^{V}
5	2.5^{F}	2.6	2.6	2.6	2.4^{P}	2.7	2.6	3.2	C	C	C	C	C	C	C	(3.0)^{S}	[2.8]^{S}	(2.7)^{P}	3.0^{S}	2.7^{P}	2.8^{P}	2.7^{F}	2.5	2.4
6	2.4	2.7	2.6	2.7	3.0	2.8	2.8^{F}	3.1	(3.2)^{J}	3.1	3.2	(3.0)^{P}	(2.9)$^{F_S^P}$	3.0^{S}	(3.2)$^{J_S^P}$	(3.0)$^{J_S^P}$	(3.1)$^{F_S^P}$	(3.0)^{B}	2.7	2.9	2.9	(2.5)^{B}	2.5	2.5
7	2.3	2.6	2.5	2.7	2.9	2.7	(2.7)^{B}	2.8	3.1	(3.1)$^{J_F^P}$	2.9	2.9	3.0	(2.7)$^{J_F^P}$	(3.1)^{B}	(3.1)^{J}	3.2^{P}	2.8	(3.0)^{S}	2.6^{H}	2.8	(2.7)$^{P_S^B}$	(2.6)^{B}	(2.6)^{P_S}
8	2.7	2.5	2.5	2.7	3.0	2.5	3.0	3.2	3.1	B	B^{S}	(3.0)$^{P_B^F}$	2.9	2.9^{P_S}	(2.6)^{S}	2.9	(3.0)^{B_S}	3.0	3.0	3.1	S	2.5	2.5	2.5
9	2.5	2.5	2.5^{P_Z}	2.7	2.8	3.0	2.6	3.0	(3.1)^{P}	3.0	(2.9)^{P_B}	2.8^{P}	(3.1)^{B}	(3.1)^{B}	(3.0)^{B}	(3.3)^{B}	3.4	3.0	3.0	2.7	3.0	3.0	2.7	2.6
10	2.6	2.8	2.7	2.8^{B}	2.5	2.8	(2.8)^{P}	(2.9)^{P}	(3.1)$^{J_S^P}$	(3.1)$^{J_F^P}$	(2.8)^{P}	3.0^{P}	(3.3)^{J}	B	B	B	(3.2)^{P}	(3.0)^{B}	(2.7)^{P_H}	3.3	3.2	2.7	2.7	2.3
11	2.4^{P_S}	2.5	2.5	3.0	3.1	3.4	2.9	3.5	3.6	3.4^{S_H}	[3.2]^{C}	3.0	(3.1)^{J_S}	(3.2)^{J_F}	2.9	2.9	2.9	3.1^{P}	2.8	2.8	3.2	2.6	2.6	2.5
12	2.4^{F}	2.7	2.8	2.8	3.0	3.1	3.1	B	(3.2)^{B}	S	S	S	S	S	3.4	3.5^{S}	[3.2]^{S_F}	3.0	2.8	3.0	3.1	2.9	2.8	3.0
13	2.7	2.5^{V}	2.6	2.6	2.8	2.9	2.8	2.9	(3.2)^{P}	3.2	3.0^{P}	C	C	S	3.1^{P}	3.1	3.1^{P}	2.7	2.7	2.7	2.9	2.6	2.5^{P}	2.6
14	2.6	2.7	2.5	2.6	2.7	2.6	2.9	3.0	[3.0]^{S}	(3.1)^{P_S}	(3.1)^{P_S}	(3.0)^{P_S}	3.0	(3.0)^{P_S}	2.9	2.9	3.1^{P_S}	3.2^{S}	S	3.1^{P_S}	3.1	2.7^{S}	2.9	(2.5)^{F}
15	(2.7)^{J_F}	2.4^{Z}	2.5^{V}	2.6^{P_F}	2.9^{V}	(2.9)^{V_B}	2.8^{V}	3.0^{Z}	(3.3)^{J}	3.4^{P}	3.2	3.0	3.0	3.1	3.1	3.0	3.1	3.1^{S}	3.1	3.0	2.8	2.6	2.5^{Z}	2.4
16	2.4	2.7	2.8	2.7	2.9	2.7	2.5	(3.1)^{J_S}	(3.1)^{J_S}	(3.0)^{P_B}	(2.9)^{B}	(3.1)^{B}	3.0	3.0^{Z}	(3.1)^{J}	(3.0)^{P_B}	(2.9)^{P_B}	3.1	3.0	2.7	2.9	2.7	2.6	2.4
17	2.7	2.7	2.5	2.5^{F}	2.8^{F}	3.0^{F}	3.1	3.0	3.0	3.3^{P}	(3.0)$^{J_S^P}$	(3.0)^{B}	3.1^{V}	2.9^{S}	3.3^{S}	(2.9)$^{J_S^P}$	(3.0)$^{J_S^P}$	2.9	2.7	2.8	2.8	2.7	2.8	2.5
18	2.5	2.5	2.5	2.7	3.0^{F}	2.5	2.5	2.6	3.2^{B}	3.4	3.2	3.1	3.1^{P}	3.0	3.0	(3.1)^{P_S}	(3.2)$^{J_F^P}$	3.3^{P_B}	2.8	3.0	3.0	2.8	2.7	2.7
19	2.7	2.6	2.6	2.5	2.6	2.3	2.8	3.0	C	C	C	C	C	C	C	C	(3.0)^{J}	(3.0)^{P_S}	(2.7)^{P}	2.9	2.6	2.6	2.8	2.8^{P_S}
20	2.5	2.7	2.5^{F_H}	2.7	2.7	2.5	2.8	3.3	(3.2)^{B}	(2.8)^{P}	3.0	2.8	2.9	2.8^{Z}	(2.8)^{B}	2.9	S	S	2.6	2.6	2.8	2.5^{H}	2.5	2.7
21	2.8	2.4	2.3	2.5	2.2^{K}	1.9^{K}	2.4^{K}	2.7^{K}	2.7^{K_P}	2.7^{K}	(2.5)^{B}	2.6^{K}	2.4^{K_H}	2.6^{K_Z}	(2.5)^{K_F}	3.0^{K}	2.8	(2.9)^{P_S}	2.8^{P_H}	(2.5)^{P_H}	2.4^{P_H}	2.6^{P_H}	2.6^{P}	2.3^{K_H}
22	(2.3)^{K_H}	2.5^{K}	2.5^{K_Z}	2.7	(3.1)^{F}	3.0	3.6	2.9	3.1	3.0	2.9^{P}	3.1	2.9	2.9	3.0	3.0	3.2	3.1^{P}	S	2.8^{P}	2.9^{S_H}	3.0	2.7	2.7
23	2.4^{H}	2.3^{H}	2.5^{K}	2.2^{K_F}	2.5^{K_F}	2.2^{K_F}	2.2^{K_F}	2.9	(3.2)^{J}	2.9^{P}	3.6	3.0	2.9	2.9	2.8^{H}	3.0^{H}	3.0	2.9	3.0^{P}	2.9^{S}	3.1	2.5^{K}	2.2^{K}	2.0^{K}
24	1.9^{K}	2.0^{K_Z}	2.1^{K}	2.4^{K_F}	2.2^{K}	2.3^{K}	2.7^{K}	S^{K}	2.8^{K}	2.6^{K_H}	2.8^{F_H}	2.7^{H}	2.7^{P}	2.7	2.8^{P}	2.8	(3.0)^{P_S}	(2.9)^{P_S}	2.7	2.5	2.6	2.3	2.3^{V}	2.3^{V}
25	2.3^{P_F}	2.5	2.6^{F}	2.6^{F}	2.4^{F}	2.6^{F}	2.6	3.1	2.8	3.0	(3.2)^{P}	3.0	3.1	3.0	2.9	2.8	(2.9)^{B}	(3.2)^{B}	2.7	2.8	2.6	2.6	2.5	2.4^{F}
26	2.4^{F}	2.2^{P_H}	2.4^{P_F}	(2.3)^{J_F}	2.4	(2.2)^{J_F}	(2.5)^{J_H}	(3.0)^{J}	(2.9)^{J}	2.7	2.6	2.9	2.8	2.8	2.9	2.8^{P}	2.8	2.7^{P}	2.6	2.7^{Z}	2.6	2.5	2.5^{F}	(2.4)^{J_H}
27	2.3^{F}	2.3	2.5^{F}	2.6^{F}	2.4	2.5	2.8	3.0	S	2.9^{S}	2.8	2.8^{S_H}	(3.1)^{J}	3.1^{P}	3.1^{P_S}	(3.0)^{B}	(3.0)^{B}	3.0	2.8	2.8	2.7	2.6	2.8	2.7
28	2.6	2.8	2.6^{P}	2.6^{F}	2.7^{F}	2.6^{F}	2.7^{F}	3.1	3.3	3.1	3.0	2.7	3.1^{H}	(2.8)^{P_B}	(2.9)^{P_B}	(2.9)^{P_S}	3.2	(2.8)^{P}	3.0^{P}	2.8	2.8	2.6	2.7	2.6
29																								
30																								
31																								
Median Value	2.5	2.5	2.5	2.6	2.7	2.7	2.8	3.0	(3.1)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	(3.0)	3.0	2.8	2.8	2.8	2.6	2.6	2.5
Count	28	28	28	28	28	28	28	26	23	22	23	22	24	21	25	26	26	27	26	28	27	28	28	28

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 9

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | $f_{min}F$ | 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	E	E	E	E	E	E	E	1.7	2.7	3.1	3.2	3.4	3.4	3.1	3.2	2.8	2.7	A	1.3	1.4	2.2	2.1	2.1	2.4
2	2.2	E	E	E	1.2	1.1	1.1	2.1	3.0	3.6	3.6	3.8	3.5	3.5	3.2	2.7	2.1	1.5	1.3	1.2	1.7	1.6	1.5	1.5
3	1.4	E	1.3	E	A	E	1.2	A	A	A	A	A	3.6	3.8[S]	3.1	2.6	2.4	2.3	2.0	A	1.2	A	A	E
4	E	E	1.2	E	1.6	1.7[A]	1.4	1.9	2.6	2.7	3.2	4.2[A]	3.5	3.6	3.4	2.7	2.6	A	1.6	1.2	1.2	1.2	A	E
5	1.5[F]	1.2	1.2	1.1	E	1.3	1.1	1.7	C	C	C	C	C	C	C	2.8	2.6	1.5	A	A	1.5	A	1.1	1.3
6	A	1.2	E	E	E	E	E	1.9	2.7	2.8	3.5	3.2	3.3	3.4	3.3	3.3	2.7	1.8	1.6[A]	E	E	E	A	1.6[A]
7	E	E	E	E	E	E	1.8	2.2	2.6	3.0	3.0	3.2	3.8	3.2	3.0	2.9	2.4	1.7	1.4	1.2	1.4	E	1.2	1.4
8	E	1.3	E	E	E	E	1.2	1.7	2.8	3.1	3.1	4.0	3.3	3.1	3.4	2.7	2.3	1.9	1.4	1.4	1.3	A	1.2	1.4
9	1.3	1.3	1.5	1.2	1.2	1.3	1.3	1.9	2.5	2.9	3.1[B]	3.3	3.4	3.0	3.4	3.2	2.6	1.6	A	1.3	1.5[F]	A	1.2	1.2
10	1.1	E	E	E	1.1	1.2	1.2	A	1.7	2.2	2.9	3.5	3.5	3.6	3.0	3.0	2.4	1.4	1.2	1.2	E	E	E	E
11	E	E	E	E	E	E	E	2.0	2.6	2.8	3.1	3.5	3.3	3.4	3.2	2.5	2.8	1.5	1.2	1.3	A	E	1.3	1.2
12	1.3	E	E	E	E	E	E	1.9	2.5	2.9	3.1	3.4	3.6	3.2	3.0	2.9	2.5	1.8	1.2	1.2	1.2	1.2	1.2	1.2
13	E	E	E	E	E	E	E	2.1[A]	2.4	3.0	3.4	3.3	[3.4][C]	3.5	3.1	3.2	2.5	2.0	E	1.1	1.1	1.3	1.5	1.2
14	E	E	E	E	E	E	1.2	2.0[F]	2.9[F]	3.0	3.3	3.4	3.7	3.6	3.4	3.2	2.4	1.9	1.1	1.4	E	E	E	1.3
15	1.2	E	E	E	E	E	E	2.1	A	3.0	3.2	3.4	3.4	3.4	3.3	3.0[F]	2.8	2.1	1.4	1.2	E	E	E	E
16	E	E	E	E	E	E	E	2.2	2.7	3.0	3.6	3.6	4.1	3.5	3.2	3.0	2.5	2.3	1.2	1.3	A	2.1	1.5	1.3
17	2.0	1.2	1.1	E	1.2	E	1.2	2.2	2.8	3.0	3.3	4.5	3.7	3.8[S]	3.2	3.0	2.6	A	2.0[A]	1.3	1.3	A	1.3	1.2
18	1.1	E	E	E	A	E	1.3	2.3	2.9	3.2	A	3.6	3.6	3.6	4.0	3.0	2.7	1.9	1.4	E	1.3	1.2	1.2	1.1
19	E	E	E	E	E	E	E	2.1	2.9	C	C	C	C	C	C	C	2.7	2.1	1.3	1.2	1.2	1.1	1.2	1.5
20	1.2	E	E	E	E	E	E	2.3	2.9	3.3	3.7	3.9	3.6	3.5	3.4	3.2	2.6	2.0	1.2	1.1	E	E	E	E
21	E	E	E	1.3	1.5	1.4	1.4	2.4	2.8	3.1	3.4	3.6	3.6	3.5	3.4	3.2	2.5	1.9	1.3	1.3	1.3	1.2	1.2	1.3
22	E	E	E	E	E	E	E	2.2	2.7	3.6	3.5	3.5	3.7	4.1	3.5	3.1	2.8	1.9	1.3[A]	2.9	A	E	1.4[A]	E
23	E	E	E	E	E	E	1.4	2.4	3.0	3.0	3.2	3.4	3.5	3.5	3.2	3.0	2.9	2.1	AF	AF	1.2	1.1	E	1.3
24	E	1.2	E	E	E	E	1.5	2.2	2.8	3.4	2.9	3.2	3.4	3.5	3.7	A	2.5	2.9	1.4	1.2	1.3	1.2	1.2	1.2
25	E	1.2	1.2	1.2	A	E	1.3	2.2	2.7	3.1	3.3	3.5	3.5	3.5	3.2	3.1	A	2.0	E	1.2	1.8	1.4	1.1	E
26	E	E	E	E	E	E	1.2	2.3	2.7	3.2	3.3	3.5	3.5	3.3	3.2	3.0	2.7	2.1	1.4	A	1.2	E	E	E
27	E	E	E	E	E	E	1.4	2.4	2.8	3.1	3.4	3.5	3.5	3.5	3.6	3.0	2.8	2.1	1.1	1.4	1.1	1.2	1.4	E
28	E	E	E	E	E	1.1	1.2	2.4	2.8	3.2	3.6	3.5	4.0	3.4	3.5	3.0	3.0	1.9	1.2	E	1.2	1.2	E	E
29																								
30																								
31																								
Median Value	E	E	E	E	E	E	1.2	2.2	2.7	3.0	3.3	3.5	3.5	3.5	3.2	3.0	2.6	1.9	1.3	1.2	1.2	1.2	1.2	1.2
Count	27	28	28	28	25	28	28	26	25	25	24	25	26	26	26	26	27	25	25	24	25	23	25	28

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 10

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | fminE | 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	E	G	E	G	G	G	E	1.2	1.4	1.6	1.9	1.8	1.9	2.6	2.0	1.6	1.4	1.3	G	G	B	B	B	2.8
2	B	G	G	G	G	G	E	1.1	1.6	2.7	2.6	2.8	2.0	1.6	1.6	1.7	1.5	1.2	G	G	G	G	G	G
3	1.7	E	B	G	1.1	E	E	E	E	1.4^{F}	1.4	1.6	2.5	3.4^{F}	2.1	2.0	2.0	1.2	1.2	E	E	E	E	G
4	E	G	G	G	E	E	E	B	1.3	1.4	1.9	2.0	2.0	2.6	2.4	2.1	2.7	E	1.2	G	G	G	E	G
5	G	G	1.1	G	G	2.4	E	1.4	C	C	C	C	C	C	C	2.7	1.9	E	2.0	1.2	1.2	1.1	1.1	1.2
6	1.3	E	1.4	G	G	G	E	1.4	1.3	1.3	1.6	1.4	1.3	1.4	1.3	1.2	1.3	1.3	E	1.2	G	G	E	E
7	E	G	B	E	G	E	E	E	E	1.3	1.7	2.0	1.9	2.0	1.7	2.2	1.7	1.1	G	G	1.4	E	G	G
8	E	E	E	E	G	G	E	E	E	E	2.0	1.8	E	2.0	2.3	1.4	E	1.2	G	G	1.6	1.8	G	G
9	G	G	1.5	G	G	1.2	B	1.2	1.2	E	1.2	E	2.8	1.9	2.8	1.6	E	1.4	1.2	1.3	1.2	1.3	1.8	G
10	1.7	G	E	E	E	1.1	B	1.3	1.2	2.0	2.0	B	1.9	2.0	2.0	1.4	1.2	E	1.2	B	G	G	G	G
11	G	G	1.8	E	E	G	E	E	E	1.3	2.0	2.1	2.4	2.1	2.0	2.0	1.2	E	G	1.3	E	G	G	B
12	1.8	E	E	E	E	E	E	1.2	E	1.9	1.6	2.4	2.7	2.3	2.4	1.5	1.4	1.2	G	G	G	G	G	1.4
13	E	G	G	G	G	G	E	1.1	1.3	E	2.4	1.7	[1.6]^{F}	1.6	E	1.4	E	1.2	G	G	G	1.2	1.7	G
14	G	G	G	G	G	G	E	1.1	1.7	1.8	1.9	2.1	1.8	1.8	2.6	1.8	1.8	B	G	G	G	G	G	G
15	G	G	G	G	G	G	E	E	E	1.3	1.8	1.9	2.2	2.2	2.2	2.0	2.0	1.9	G	G	G	G	G	G
16	G	G	E	E	B	E	E	E	E	E	2.4	2.4	2.4	2.4^{S}	2.2	2.0	2.0	B	G	2.7	1.2	(2.1)^{B}	1.7	2.1
17	B	G	G	G	G	G	E	1.3	1.8	2.3	2.1	[2.3]^{B}	2.5	[2.4]	2.2	2.1	1.2	1.3	1.3	1.2	1.3	1.2	1.3	G
18	G	G	G	3.0	E	E	E	E	1.3	1.7	2.3	2.3	2.2	2.2	[2.1]^{B}	2.0	2.0	E	E	G	E	G	E	E
19	E	G	E	E	G	G	E	1.4	1.4	C	C	C	C	C	C	C	1.4	1.4	G	G	G	G	E	1.1
20	G	G	G	G	G	G	E	E	E	E	1.1	2.2	2.2	2.2	2.0	2.0	E	E	G	G	G	G	G	G
21	G	G	G	G	G	G	E	1.4	1.3	E	E	2.0	2.2	2.2	1.2	2.2	1.3	B	G	G	G	G	G	B
22	G	G	G	G	G	G	E	E	1.3	B	2.2	2.2	2.2	2.2	2.0	2.0	E	E	1.3	E	1.2	G	E	G
23	E	G	E	E	E	G	E	E	E	2.0	2.2	2.2	2.1	2.1	2.1	2.0	1.4	E	1.1^{F}	1.3^{F}	E	G	G	G
24	G	E	E	E	E	E	E	1.3	E	1.5	2.1	2.1	2.2	2.2	2.1	2.0	1.9	E	G	G	G	G	G	1.2
25	3.1	1.2	1.2	E	E	E	E	1.1	1.2	E	E	E	2.0	1.7	E	E	E	E	E	G	1.5	E	G	G
26	E	G	1.1	E	1.8	E	1.1	1.2	1.5	1.6	1.8	1.9	2.0	2.2	1.8	1.6	1.6	E	E	E	G	G	G	G
27	G	G	G	G	G	G	E	(1.7)^{B}	1.6	2.0	2.1	2.7	(2.9)^{B}	2.4	2.1	2.0	E	E	(1.6)^{B}	G	G	G	E	G
28	1.2	E	E	E	1.1^{F}	1.1	E	1.5	1.5	1.5	1.2	1.8	1.2	E	1.5	1.4	E	E	E	G	G	G	G	E
29																								
30																								
31																								
Median Value	E	G	E	G	G	G	E	1.1	1.3	1.4	1.9	2.0	2.2	2.2	2.0	2.0	1.4	E	G	G	G	G	G	G
Count	26	28	26	2[illegible]	27	28	26	27	27	25	26	25	26	26	26	27	28	25	28	27	27	27	27	26

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 11

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | f_0F2 | 135° E Mean Time | Akita | Lat. 39° 43.5'N | Long. 140° 08.2E

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	3.6	3.6	3.5	3.6	3.5	2.7	2.6	B	(9.0)P	10.4	10.7	10.6	10.0	9.2	9.4H S	9.3P S	8.5 S	7.3 S	5.8 S	5.0	4.1	3.7	B	3.6
2	3.4	3.6	3.9	4.5	3.4	3.2	3.4	6.5	9.4	8.2	10.7Z	11.4J	11.1P	9.0	9.0	9.8	8.2	6.8	6.0	5.0	4.8	3.9	4.0	4.4
3	4.1	3.9P	3.5	3.3	2.9H	3.4H J	2.8	(6.9)P	8.2	9.9	(11.5)P J	(12.1)P	(12.0)	11.9H	9.5	(10.1)P	7.9	6.6	6.6	5.7	3.9	3.7	3.7	4.0
4	3.6	3.6	3.2	3.2	3.3	3.0	2.9	6.3	8.8	10.5	(12.7)P	10.9	10.9	10.8H	[10.4]C	9.9J	[8.6]C	7.3	[6.4]A	5.6	3.2P	[3.2]A	3.1	2.9
5	3.9	3.5F	3.7P	4.0	3.7F	3.9	3.7S	6.7S	8.7	C	C	C	C	C	C	10.2H P	9.1	7.9	7.7	6.0	2.9	2.8	3.0	3.6
6	3.7F	3.7	3.7	3.9P	3.8	3.2	3.4	5.7J	7.8	9.0H	(11.3)P	10.5	11.6P	10.6	9.4	8.1H	9.2	7.0	5.9	6.3	4.5	2.9	3.1	3.1
7	3.3	3.5	3.6	3.8P	3.3	2.9	2.8	(6.0)P	7.3	8.4	10.3	10.7	10.4	10.5	10.1	9.4	9.1	7.1	5.5	5.3	4.5	3.5	3.8	3.8
8	3.8	3.9	4.1	(4.5)P	4.0	3.6	3.5	6.7	8.1	10.3	10.9B	10.9F B	(11.4)B J	9.7B	9.6P	11.2	9.6	7.4	6.2	5.9	3.4	2.8	3.1	3.2
9	3.3	3.5	2.8	4.2	3.5	2.5K	2.7K	5.5	8.0	9.8	10.7	10.7	11.7	10.9	10.3	9.2	9.7	7.6	7.7	6.5S	6.0	A	4.0F	3.9
10	3.8S	3.9S	3.6	3.8	3.9	3.9	3.8	5.8	9.3	(9.8)P	10.9	B	(11.2)P	10.9	10.1	9.9	9.8	8.2	5.0	4.8	3.7	3.0	3.1	3.5
11	3.4	3.5	3.6	3.9	4.0	2.6H	2.5	6.2	7.6	8.1	B	B	B	9.0	9.7	8.1	7.7P	7.2	4.9	5.0	4.9	3.8	3.7	3.7
12	3.6	3.8	3.6	4.0	3.9	3.5F	3.3	6.5	7.8	8.8	8.4P	10.1	10.7	10.8	9.3	8.2	7.8S	7.4S	5.7	5.1	4.5	4.2	3.8	3.6
13	3.7	3.5	3.8	4.2	4.9	3.1	3.0	5.8	9.4	9.1P	9.2	[9.7]C	10.2	9.8P	9.7	9.2	8.1	7.2	5.6	5.7	5.0	4.5	3.9	3.9P
14	4.0	4.0	3.6	3.9	3.9	4.0	4.3	8.0	8.1	9.3	9.7P	9.6P	9.9	(9.8)	B	9.9H	9.1	8.2P	6.3	5.0	4.7	3.9	4.0	4.0
15	4.0	4.2	4.0	4.3	4.3	3.7	3.9	6.2	9.1	9.8	10.0	11.1	10.5	12.2	10.7	9.8	10.0	8.7	6.6	6.0	5.0	4.6	3.7	3.6
16	3.9	4.1	4.3S	3.9S	3.7S	3.4	3.9	7.4S	9.3S	9.9	9.4	11.0	11.9P	12.0P	10.9	9.6H P	9.8	8.3	6.7	5.3	4.3P	4.1	3.3	3.7
17	4.1	3.9	4.2	4.4	4.2	3.4	3.6	7.0	8.6	10.8	8.7P	[10.0]C	11.3F	11.3	10.7	(9.7)P	9.1	9.0	6.3	5.7	5.4	4.4	3.6	A
18	3.8	3.8	3.9P	4.0	4.0	2.9	3.5	(7.6)B	(9.7)P B	[9.7]C	9.7	9.4	10.9	10.8	10.7	10.2	10.4	8.6	6.9	6.4P	5.0	4.5	4.3	4.4
19	4.4	4.4	4.2	4.2	3.8P	3.6	4.6S	(7.4)S	9.9	(9.5)B	(9.6)B	(11.7)P	11.7	10.9	10.6	10.9	10.0	8.8	7.4	6.1P	6.1	5.6	5.7	5.3
20	4.8	4.8	4.6	4.7	4.8	4.2	4.4	7.8	9.5	10.6	10.3	10.7	11.3P	10.7	10.4H	11.0	10.7P	9.8	8.8	6.9P	6.8	5.8	5.4	4.6
21	4.5	4.4	4.4	4.5	3.7K	2.9K	3.6K	6.4K	8.1K	7.1K	BH	10.9H	11.4H	11.7P	12.3	12.0	11.3	11.2	8.7	7.4	6.9	7.2	6.9	5.6
22	5.9	4.8	5.3	5.3	5.7	4.8	4.8	8.1	12.8P	12.3J	13.4P	B	B	11.5P	12.2	11.9	11.2	10.5	8.1	7.2	7.1P	6.0P	4.9P	5.0P
23	4.7	4.7	4.5P	4.5	4.3	3.7	4.2	7.7	9.0	10.2	13.0H P	14.1	14.3	14.1P	(13.0)P	12.1B	11.2	9.8	7.0	7.0	5.7	4.3	BK	4.1JK
24	BK	4.1K	3.8K	2.9K	3.7K	3.5	4.0	7.8	9.1	8.0	11.3	13.7P	12.1	12.8	12.7H	11.6	11.0P	9.4P	8.6	7.6P	5.4	5.1	5.2	5.3
25	5.6	5.3	5.7	5.1	3.8	3.5	4.0	7.6	10.2	10.7P	B	12.4P	12.2	12.3	11.6H	11.4	10.7H	(10.2)P	7.0S	6.3S	4.7	4.8	3.6	5.1
26	5.1P	5.2	5.1	4.6	4.2	4.4	4.8	8.0	11.1	11.7	12.3	12.7	11.8	11.0	10.2	10.3	10.1	8.8	6.9	6.5	5.4	5.2	F	F
27	5.2	5.3F	F	FS	FS	FS	5.0SF	7.7P	9.6S P	10.7	9.8	11.0	12.2	12.2	10.7	10.7	9.5	9.3	7.4P	5.5	4.9	4.1	4.7F	5.3
28	5.7	5.7	5.2	5.0FJ	F	F	F	8.0	9.2	10.4	10.9	11.5P	12.2	12.0	10.7	9.7	10.0	9.4	8.5	6.6	5.9	5.3	5.5	5.6
29																								
30																								
31																								
Median Value	3.9	3.9	3.9	4.2	3.8	3.4	3.6	6.9	9.0	9.8	10.7	10.9	11.4	10.9	10.4	9.9	9.6	8.2	6.6	6.0	4.9	4.2	3.8	4.0
Count	27	28	27	27	26	26	27	27	28	27	24	24	25	27	26	28	28	28	28	28	28	27	25	26

Sweep 1.0 Mc to 19.0 Mc in 15 min Manual

A 1

Radio Regulatory Agency (Denpacho)
Kasumigaseki-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | hpF2 | 135° E Mean Time | Akita | Lat. 39° 43.5N | Long. 140° 08.2E

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	400	380	330	290	370	370	B	(270)P	200	270	290	260	260	300H S	270P S	280 S	290 S	290 S	300	300	350	B	350
2	410	390	360	340	340	440	340	320	280	250	290 Z	(320) J	260 P	270	330	290	280	280	300	300	360	310	430	370
3.	420	410 P	280	390	390 H	(350) J	330	(300) P	240	250	(310)P J	310	(290) P	320 H	320 P	(300) P	230 C	320	300 A	230	320 P	340 A	370	330
4	400	330	430	420	360	370	360	300 S	250	270	(280) P	290	280	290	[290] C	(290) J	[280] C	270	[270] A	270	340	[340]	340	340
5	340 F	460 P	410	350	420 F	320	400 S	280	260	C	C	C	C	C	C	310H P	270	300	280	260	340	340	310	340
6	380 F	330	400	320	290	370	320	270	250	250	(290) P	290	280 P	280	280	280 H	280	220	330	270	250	340	390	280
7	390	390	390	320 P	330	340	240	(260) J P	260	300 H	290 B	290 B	300 J	300 B	290 P	250	280	260	310	290	290	400	350	380
8	350	360	360	(350) P	300	360	330 K	270	280	300	250	280 F	(260) B	260 P	300	270	240	270	360	280 S	300	320	370	380
9	380	380	340	300	260	340 K	390 K	250	270	280	280	290	270 P	290	270	270	260	300	290	270	260	A	350 F	360
10	320 S	300 S	330	340	390	320	260	260	270	(290) P	280	B	(300) P	270	280	280	280 P	240	260	300	300	350	340	380
11	380	390	360	290	310	300 H	380	270	250	280	B	B	B	280	280	280	260 P	250	300	310	300	270	360	370
12	400	340	370	350	320	250 H	320	270	240	260	270 P	280	260	280	280	270	260 S	290 S	260	290	B	280	330	350
13	390	370	400	330	260	370	300	270	280	250 F	230	[270] C	300	280 P	270	280	300	270	290	290	290	280	330	360 P
14	380	330	350	350	350	330	280	260	240	270	280 P	280 P	290	(280) P	B	310 H	280	290 P	280	310	300	350	360	350
15	380	340	360	350	350	380	330	290	270	290	290	300	300 P	320 P	300 H	310 P	300	280	300	340	320	350	350	430
16	300	350	310 S	310 S	330 S	370	360	260 S	240 S	290	310	310 C	320 P	320 P	290	310H P	310	250	260	290	290 P	290	300	350
17	320	310	330	330	270	330	340	270	280	260	250 P	[270] C	290 P	290	270	(300) P	280	270	290	380	330 P	290	330	A
18	400	400	400 P	320	280	350	350	(280) B	(270)B P	[290] C	310	280 P	330	310	300	290	300	270	290	290 P	340	350	370	370
19	340	340	330	350	310	400	300 S	(290) S	280	(270) B	(300) B	(320)	300 P	310	310 H	310	270 P	280	310	350 P	350	350	360	370
20	350	370	380	370	400	350	340	280	250	270	280	300	280 P	360	330	330	340	300	350	340	340	320	320	410
21	370	440	410	350	500 K	560 K	420 K	340 K	360 K	290 K	BH	300	360 H	330 P	330	320	330	300	300	330	320 P	360	330 P	410
22	390	390	390	380	340	300	310	310	310 P	(300) J	320 P	B	B	350 P	310	310	290	300	310	350	350	330	390 P	390
23	390	400 P	410	350	400	390	380	260	260	260	290H P	300	310	310 P	(320) P	380 B	300	280	290	290	290	340	BK	(450)K J
24	BK	480 K	420 K	500 K	460 K	450	340	310	280	240	280	310 P	290	310	300	300	300	290	310	330 P	310	370	420	440
25	410	370	310	290	400	310	270	290	290	290 P	B	300	300	280	350	290	280 H	(270) P	290 S	310 S	340	350	340	370
26	410 P	360	320	360	380	370	360 F	270 P	280 P	290	300	300	290	290	310	270	290	260	290	310	340	350	F	F
27	360	400	F	FS	FS	FS	320S	240	280S	270	300	270 P	330	300	300	280	280	270	300 P	290	350	320	380 F	400
28	350	380	370	(390) F	F	F	F	250	270	270	320	290 P	300	310	290	300	280	280	240	300	300	340	350	390
29																								
30																								
31																								
Median Value	380	380	370	350	340	360	340	270	270	270	290	290	290	290	300	290	280	280	290	300	320	340	350	370
Count	27	28	27	27	26	26	27	27	28	27	24	24	25	27	26	28	28	28	28	28	27	27	25	26

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 2

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | 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	300	300	310	270	240	300	310	(320)B	250	230	230	250	250	250	220H	230	240	210	220	230	230A	270	290	270
2	300	300	280	240	[260]	230	250	240	(220)B	230	250B	250	260	260	310H	240	230	220	250	220A	250	250	300	300
3	290	270	300	290	240H	290H	320A	260	230	210	230	240	240	230	260	240	230	230	240	230A	230	290	310	290
4	290	280	320	B	300	B	310	260	220	260	240	250	250	260AH	[260]C	260	[240]C	230A	A	220A	300A	[300]A	310	290
5	310A	350B	310	280	270	300A	280	270S	220	C	C	C	C	C	C	220H	220	200	260	210	310	290	290	300
6	320	300A	300	270	240	210	270	220	220	210H	280	240	220	220	210	210H	220	200	200	220	220	260	310	310
7	320	320A	A	A	200	290	220	220	210	240	270	280	260	270	240A	220	230	220	210	220	220	240	290	310
8	300	300	290	280	240	260	260	220	230	250	210	220	220	230	240A	240	220	210C	220	220	220	270	360	350
9	350	320	300	250	220	300K	BK	210	210	250	230	250	230	220	230	240	220	280	A	AF	200	A	290	270
10	270A	240	250	260	270	250	230	200	230	210	220	220	230	260	230	230	220	220	210A	230	220	250	290	290A
11	300	300C	300	240	220	270H	260	200	220	230	230	230	220	260	260	220	220	200	210F	240	240	230	280	310
12	290	270	310	290	270	230	230	240	210	240	220	260	220	270	230	230	220	240	200	230	230	220	270	280
13	290	300	320	260	220	200	210	220	240	200A	200	200	220	250	250	230H	220	220	220	230	240	220	250	280
14	300	270	260	270	260	260	240	230	220	220	240	220	220	220	260	250H	230	220	210	210	250	230	280	290
15	290F	280	300	270	260	230	270	250	220	240	250	260	250	300	290	280H	B	220	210	220	220	240	280	340
16	340	290	260	240	230	280	260	220	220	240	290	260C	260	290	250	220	240	220	220	250	250	250	270	320
17	300	280	280	270	240	230	280	220	220	220C	220	[230]	240	250	240	230	230	240	210	230	220	230	270	A
18	320	310	300A	270	220	240	270	230	230	[230]C	230	210	250	270	270	260	240	220	210	230	230	250	300	300
19	280	270	250	270A	230	330	250	210	230	210	260	300	260	280	270	270	220	220	210	240	260	260	280	290
20	260	290	270	280	250	270	280	230	250	240F	240	270	260	260	260H	260	240	220	220	220	240	240	240	260
21	260	290	320	280	400K	520K	320K	300K	340K	240K	290H	260H	230H	270	300	250	230	240	220	240	260	260	270	300
22	300	320	280	230	220	220	240	220	230	250	290H	240	260	270	270	260	240	240	230	250	230	230	A	300K
23	300A	310A	360	280	300A	330A	320	230	220	250	250H	210	280	260	280	230	230	210	210	220	230	250	320K	400K
24	400K	380K	320K	400KA	350K	380	280	240	240	210	260A	250A	260	260	260	230	230	A	210	250	210	280	300	310
25	300	290	260	240	220	300	280	200	270	250	240	220	270	230	230H	250	250	220	210A	250	260	300	310	300
26	300	300	270	250	270	280	270	240	230	260	220	230	240	220	220	260	240	220	210	240	220	250	260	270
27	270	290	250	260	240	260	240	200	210	220	230	270	280	260	230	210	220	210	220	250	270	290	300	300
28	290	290	260	270	280	290	260	230	220	240	230	240	280	230	220	220	250	210	210	220	260	240	270	280
29																								
30																								
31																								
Median Value	300	300	300	270	240	270	270	230	220	240	240	240	250	260	250	240	230	220	210	230	230	250	290	300
Count	28	28	29	26	28	27	27	28	28	27	27	27	27	27	27	28	27	27	26	27	28	27	27	27

Sweep 1.0 Mc to 7.0 Mc in 15 min Manual

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A 3

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb 1950 | f_0F1 | 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							Q	L	L	Q	Q	L	Q	Q	Q	Q	Q	Q						
2							Q	Q	Q	B	B	Q	Q	Q	L	Q	Q	Q						
3							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
4							Q	Q	Q	L	Q	Q	Q	A	C	Q	C	A						
5							Q	Q	L	C	C	C	C	C	C	Q	Q	Q						
6							Q	Q	Q	Q	L	Q	Q	Q	Q	Q	Q	Q						
7							Q	Q	Q	L	L	5.3	L	L	L	Q	Q	Q						
8							Q	Q	Q	L	Q	Q	Q	Q	Q	Q	Q	Q						
9							Q	Q	Q	Q	Q	L	Q	Q	Q	Q	Q	Q						
10							Q	Q	Q	Q	Q	Q	L	L	Q	Q	Q	Q						
11							Q	Q	Q	Q	Q	Q	Q	L	Q	Q	Q	Q						
12							Q	Q	Q	Q	Q	L	Q	L	Q	Q	Q	Q						
13							Q	Q	Q	Q	Q	Q	Q	Q	L	Q	Q	Q						
14							Q	Q	Q	Q	L	Q	Q	Q	B	L	Q	Q						
15							Q	Q	Q	Q	Q	Q	Q	L	L	L	B	Q						
16							Q	Q	Q	Q	L	Q	L	L	Q	Q	Q	Q						
17							Q	Q	Q	Q	Q	C	Q	Q	Q	Q	Q	Q						
18							Q	Q	Q	C	Q	Q	Q	L	Q	Q	Q	Q						
19							Q	Q	Q	Q	L	L	Q	L	L	L	L	Q						
20							Q	Q	Q	Q	Q	Q	Q	Q	L	L	Q	Q						
21							Q	L	L	Q	L	L	Q	L	L	Q	Q	Q						
22							Q	Q	Q	B	L	Q	L	L	L	L	Q	Q						
23							Q	Q	Q	Q	Q	Q	L	L	L	L	Q	Q						
24							Q	Q	Q	Q	Q	Q	L	L	Q	Q	Q	Q						
25							Q	Q	L	L	Q	Q	L	Q	Q	L	L	Q						
26							Q	Q	Q	L	Q	Q	Q	Q	Q	L	Q	Q						
27							Q	Q	Q	Q	Q	L	L	L	Q	Q	Q	Q						
28							Q	Q	Q	Q	Q	Q	5.2	Q	Q	Q	L	Q						
29																								
30																								
31																								
Median Value												—	—											
Count												1	1											

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 4

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | h'F1 | 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							Q	B	220	Q	Q	220	Q	Q	Q	Q	Q	Q						
2							Q	Q	Q	B	B	Q	Q	Q	220	Q	Q	Q						
3							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
4							Q	Q	Q	230	Q	Q	Q	A	C	Q	C	A						
5							Q	Q	210	C	C	C	C	C	C	Q	Q	Q						
6							Q	Q	Q	Q	230	Q	Q	Q	Q	Q	Q	Q						
7							Q	Q	Q	210	210	210	210	220	220	Q	Q	Q						
8							Q	Q	Q	220	210	Q	Q	Q	Q	Q	Q	Q						
9							Q	Q	Q	Q	Q	220	Q	Q	Q	Q	Q	Q						
10							Q	Q	Q	Q	Q	Q	220	250	Q	Q	Q	Q						
11							Q	Q	Q	Q	Q	Q	Q	230	Q	Q	Q	Q						
12							Q	Q	Q	Q	Q	210	Q	200	Q	Q	Q	Q						
13							Q	Q	Q	Q	Q	Q	Q	Q	230	Q	Q	Q						
14							Q	Q	Q	Q	220 A	Q	Q	Q	B	250	Q	Q						
15							Q	Q	Q	Q	Q	Q	Q	260	260	240	B	Q						
16							Q	Q	Q	Q	230	Q	230	230	Q	Q	Q	Q						
17							Q	Q	Q	Q	Q	C	Q	Q	Q	Q	Q	Q						
18							Q	Q	Q	C	Q	Q	Q	250	Q	Q	Q	Q						
19							Q	Q	Q	Q	230	250	Q	240	250	210	220	Q						
20							Q	Q	Q	Q	Q	Q	Q	Q	230	220	Q	Q						
21							Q	230	220	Q	240	260	Q	230	240	Q	Q	Q						
22							Q	Q	Q	B	250	Q	240	250	240	250	Q	Q						
23							Q	Q	Q	Q	Q	Q	250	220	220	220	Q	Q						
24							Q	Q	Q	Q	Q	Q	230	220	Q	Q	Q	Q						
25							Q	Q	200	240 A	Q	Q	240	Q	Q	220	230	Q						
26							Q	Q	Q	220	Q	Q	Q	Q	Q	230	Q	Q						
27							Q	Q	Q	Q	Q	230	220	220	Q	Q	Q	Q						
28							Q	Q	Q	Q	Q	Q	230	Q	Q	Q	220	Q						
29																								
30																								
31																								
Median Value								—	—	220	230	220	230	230	230	220	—							
Count								1	4	5	8	7	9	13	9	8	3							

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

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A 5

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | f_0E | 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							E	B	2.3	3.1 H	3.2	3.3 J	3.2 J	3.2 J	3.2	2.8	2.3	1.8						
2							E	1.8 J	B	B	A	B	B	B	3.3	3.0	2.4 J	2.0						
3							B	(1.8) F	2.7 H	2.8 H	B	A	A	B	3.2	3.0	2.3	1.9						
4							E	1.7	2.5 H	3.0	3.2	3.3	B	A	C	2.9	C	A						
5							E	S	2.4 J A	C	C	C	C	C	C	2.9	2.3	1.3						
6							E	1.8	2.5	3.0 F	B	3.3	3.3	3.3	3.2	2.8	2.3 A	1.8						
7							E	1.9 A	2.6	2.9	3.2	3.5	3.3	3.3	3.2	3.0	2.5 J	1.8						
8							E	1.9 F	2.4	2.8 F	(3.1) B	(3.3) B	3.3	3.2 B	A	3.0	2.5	E						
9							1.3 J	2.0	2.6 H	2.8	3.0	3.0	3.4	3.3 F	3.3	3.3	2.7 J	A						
10							E	1.8 A	2.6	3.0 H	3.3	3.4 B	3.4	B	A	2.8	2.3	1.7						
11							E	(1.9) B	2.6	2.9	3.5	3.5	(3.3) J	(3.4) B	3.3	2.9	2.2	1.8						
12							E	2.1	2.5	3.0	3.3	3.4	3.3 B	3.2	3.2	2.9 F A	A	A						
13							E	1.8	2.6 H	A	3.4	3.4 B	3.4	3.3	3.2	3.0	(2.8) B	2.1						
14							E	2.0 F	2.6	3.0	A	(3.6) B	3.2	B	B	3.0	(2.7) B	2.1						
15							B	2.0	2.7	3.0	3.1	3.3	3.4	3.4 B	3.3 B	3.1 B	B	2.0						
16							B	2.0 F	2.7	A	3.4	3.4	3.5	3.4	3.2	3.0 A	2.6	1.8 H						
17							E	2.0	2.5	3.2 L	3.3	C	B	B	B	3.2	A	2.0 H						
18							E	2.2	2.7 H	[3.0]	3.4	B	B	B	B	B	2.9	2.1						
19							B	2.0	2.8	3.3	B	B	B	B	B	3.0	2.9	(1.9) B						
20							B	2.3 H	2.8	(3.3) F	B	B	B	B	B	3.1	2.9	2.3						
21							B	2.3	3.0	(3.2) A	3.5	3.6	3.6 A	3.3	(3.2) B J	3.2	2.6	1.8						
22							B	2.1	2.5	B	B	B	B	(3.4) B	B	3.2	2.8	2.0						
23							B	(1.9) B	2.9	3.3 H	3.4 B	3.6	3.3 B	3.3	3.4 F	3.2	2.8	1.8						
24							(1.4) J	2.1 J	2.8	2.8 J	A	B	B	A	B	A	2.6 B	A						
25							B	2.5	2.6	3.0 H	A	A	3.4 B	3.5 B	3.3	3.1 B	2.6	B						
26							B	2.1	2.5 H	3.0 H	3.5	B	B	(3.6) J	3.2	3.0	2.6	B						
27							E	2.0 H	2.7	3.2	3.4	3.5	3.4	3.4	B	3.2	2.8	B						
28							E	(2.1) B	B	B	B	B	(3.8) J	B	B	B	B	B						
29																								
30																								
31																								
Median Value							E	2.0	2.6	3.0	3.3	3.4	3.4	3.3	3.2	3.0	2.6	1.8						
Count							8	26	26	22	17	16	17	16	15	25	23	20						

Sweep 1.0 Mc to 20 Mc in 15 min Manual

A 6

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | h'E | 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							E	B	110	110 H	110	110	100	110	110	110	110	(110) B						
2							E	B	B H	110	A	110	110	110	110	110	130	B						
3							B	120	120 H	120 H	110	A	A	110	120	120	120	B						
4							E	B	130 H	110	110	110	110	A	C	130	C	A						
5							E	S	A	C	C	C	C	C	C	100	100	110						
6							E	110	110	110	110	110	110	110	110	120	A	110						
7							E	A	A	110	110	110	110	110	110	100	110	120						
8							E	B	A	110	110	100	100	100	A	100	A	E						
9							B	140	100 H	110 H	B	110	110	110	110	110	120	A						
10							E	A	A	120 H	120	120	110	110	110	110	110	110						
11							E	120	120	110	110	110	120	100	110	110	110 B	B						
12							E	B	110	110	100	110	110	110	110	110 A	A	A						
13							E	B	110 H	A	100	100	100	110	110	110	120	120						
14							E	B	120	120	A	110	120	120	B	110	110	B						
15							B	B	130	110	110	110	110	110	120	120	B	(120) B						
16							B	B	110	110	120	110	110 B	110	110	100	110	110 H						
17							E	150 B	120 H	110 C	110	[110]	(110)	110 B	110	A	A	110 H						
18							E	A	120	[120]	110	110	110	120	B	120	110	B						
19							B	110	110	110	110	110	B	120	120	110	120	B						
20							B	B H	120	110	B	B	B	B	120	120	120	B						
21							B	(130) B	120	130	120	120	120 A	110 B	120	120	110	110						
22							B	120	130	B	B	B	B	(120)	130	110	120	B						
23							B	B	130 B	110 H	110	110	110	110	120	110	110	110						
24							B	B	120	110	A	110	110	A	120	A	110	A						
25							B	B	110	110 H	A	A	120	120	120	110	120	130						
26							B	B	120 H	110 H	110	110	110	B	110	110	130	100						
27							E	110 H	110	120	120	120	110	110	130	100	130	B						
28							E	B	120	B	B	B	B	B	B	B	B	B						
29																								
30																								
31																								
Median Value								120	120	110	110	110	110	110	110	110	110	110						
Count								9	23	24	19	22	22	22	22	25	21	14						

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 7

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb 1950 | fEs | 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	G	G	G	G	G	G	G	B	3.3	G	3.8	G	G	G	G	G	G	G	G	G	G	G	G	G
2	G	G	G	G	G	G	G	G	B	B	3.8	B	B	B	G	3.6	G	G	G	1.8	1.9	G	G	G
3	G	G	G	G	G	3.9	2.2	3.2	G	G	B	4.6	3.8	B	5.3 Y	4.0	3.4	G	(3.9) B	3.5	2.4	G	G	2.4
4	1.6	G	G	G	G	G	G	G	G	G	G	G	b	7.0	C	G	C	4.8	9.0	3.0	3.4	4.8	3.0	2.2
5	(2.8) B	(2.6) B	2.4	G	1.5 F	2.7	G	S	3.0	C	C	C	C	C	C	G	G	G	G	G	G	G	G	G
6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	3.6	G	G	G	G	G	G	G
7	G	2.3	4.1	3.8	B	1.9	2.1	3.0	3.4	G	G	G	G	G	G	G	G	G	G	G	G	2.7	2.0	2.4
8	2.0	G	B	G	G	2.8 F	(2.2) B	G	G	3.4	G	G	G	G	3.6	(3.6) B	3.0	G	G	2.0	G	G	3.0	3.2
9	G	G	G	G	G	G	G	G	G	G	G	G	G	3.8 F	G	G	G	(3.0) B	3.0	3.9 F	3.7	5.8	4.1	3.0
10	2.6	2.8	3.1	2.6	2.4	2.2	G	3.0	3.2	G	G	G	G	G	G	G	G	G	2.6	G	G	G	G	G
11	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	2.6	G	G	G	G	G	G	3.8
12	2.0 Y	G	G	G	G	G	G	G	G	G	G	G	G	G	G	3.2	3.6	3.6	3.0	G	G	G	G	G
13	G	G	G	G	G	G	G	G	G	3.7	G	G	G	G	G	G	G	G	G	G	G	G	G	G
14	G	G	G	G	G	G	G	G	G	G	(3.8) B	G	G	B	G	3.6 Y	G	G	2.2 Y	G	G	G	G	G
15	G	G	G	G	G	G	2.0	G	G	G	G	G	B	B	G	G	B	G	G	G	G	G	G	(2.2) B
16	G	G	G	G	G	G	G	G	G	G	B	B	G	G	G	G	G	G	G	G	G	G	G	G
17	G	G	G	G	G	G	G	G	G	3.6	G	C	B	B	G	3.6	3.5	G	2.2	G	G	G	G	4.8
18	G	G	(2.0) Y	G	G	G	G	G	G	C	G	G	G	G	B	G	G	G	3.1	G	G	G	G	G
19	1.4	1.3	1.5	2.0 F	1.8	G	(3.4) B	G	G	3.5	B	B	B	B	G	3.4	G	G	G	G	G	G	G	G
20	G	G	G	G	G	G	G	G	G	3.8 A	B	B	B	B	G	G	G	G	G	G	G	G	G	G
21	G	G	G	G	G	G	G	G	G	G	G	G	4.0	G	G	G	G	G	G	G	G	G	G	G
22	G	G	G	G	G	G	G	G	G	B	B	B	B	G	G	G	G	G	G	G	G	G	G	G
23	3.6 Y	1.6	G	G	2.6	2.2	2.0	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
24	G	(1.4) B	G	1.8	1.4	1.4	G	G	G	G	4.0	B	3.8	B	3.2	G	3.2	3.3	2.9	2.9	G	2.2	G	G
25	G	2.5	G	G	G	G	G	G	G	G	(4.0) B	(5.0) B	G	G	G	G	3.8	G	G	2.8	2.8	B	G	G
26	G	G	G	G	G	G	G	G	3.2 Y	G	G	B	B	B	3.6	G	G	G	2.2	G	G	G	G	G
27	G	G	G	G	G	G	G	2.7	3.6	G	G	G	G	G	G	G	G	2.6	2.6	B	G	G	3.0 Y	G
28	G	G	G	G	G	G	G	G	B	B	B	B	G	B	B	B	B	B	B	G	G	G	G	G
29																								
30																								
31																								
Median Value	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Count	28	28	27	28	27	28	28	26	26	23	21	18	19	17	24	27	25	27	27	27	28	27	28	28

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 8

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | (M3000)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	2.6	2.6	2.7	2.9	3.1	2.7	2.7	B	(3.2)	3.2	3.3	3.1	3.5	3.3	3.2	3.2	3.2	3.1	3.2	3.0	3.1	2.8	B	2.8
2	2.6	2.8	2.8	2.9	2.9	2.5	2.9	2.9	3.2	3.4	3.2	(3.0)	3.4	3.2	3.1	3.2	3.4	3.2	3.0	3.1	2.8	3.1	2.6	2.7
3	2.5	2.5	2.7	2.7	2.6	(2.9)	2.8	(3.0)	3.5	3.4	(3.1)	(3.1)	(3.1)	3.0	3.0	(3.1)	3.6	3.0	3.1	3.6	3.2	2.9	2.7	2.9
4	2.7	3.0	2.5	2.7	2.8	2.7	2.7	3.1	3.4	3.3	(3.4)	3.4	3.5	3.2	(3.2)	(3.1)	[3.2]	3.4	[3.3]	3.2	2.8	[2.8]	2.9	2.9
5	3.0	2.6	2.6	2.8	2.6	2.7	2.7	3.2	3.3	C	C	C	C	C	C	3.1	3.3	3.1	3.3	3.5	3.0	2.9	3.2	2.9
6	2.7	3.0	2.7	3.1	3.1	2.7	3.1	3.3	3.4	3.4	(3.2)	3.1	3.3	3.2	3.3	3.2	3.2	3.6	3.0	3.2	3.4	2.9	2.6	2.6
7	2.7	2.7	2.6	2.9	3.6	3.0	3.5	(3.3)	3.3	3.2	3.3	3.3	3.1	3.3	3.2	3.3	3.2	3.3	3.2	3.2	3.2	2.6	2.8	2.7
8	2.9	2.9	2.8	(3.0)	3.1	2.8	3.1	3.3	3.3	3.0	3.3	(3.3)	(3.5)	(3.4)	3.1	(3.3)	3.6	3.3	3.4	3.2	3.1	2.8	2.7	2.7
9	2.7	2.7	2.7	3.2	3.4	2.8	2.6	3.6	3.3	3.3	3.3	3.2	3.4	3.1	3.2	3.2	3.3	3.1	3.1	3.3	3.4	A	2.9	2.8
10	3.1	3.1	3.3	2.9	2.7	3.1	3.4	3.4	3.5	(3.2)	3.2	B	(3.1)	3.2	3.1	3.2	3.3	3.7	3.4	3.1	3.1	2.7	2.9	2.7
11	2.7	2.6	2.7	3.1	3.0	3.1	2.7	3.3	3.4	3.2	B	B	B	3.2	3.4	3.3	3.2	3.5	3.1	3.0	3.2	3.4	2.7	2.8
12	2.7	2.9	2.7	2.9	3.1	3.4	2.9	3.4	3.7	3.4	3.3	3.2	3.4	3.3	3.3	3.3	3.4	3.1	3.3	3.0	2.9	3.2	2.9	2.8
13	2.7	2.8	2.7	2.9	3.4	2.6	3.0	3.3	3.4	3.5	3.8	(3.5)	3.2	3.3	3.4	3.2	3.5	3.3	3.2	3.1	3.1	3.3	2.9	2.8
14	2.7	2.8	2.9	2.8	2.8	2.9	3.2	3.2	3.5	3.3	3.2	3.2	3.2	(3.2)	B	3.2	3.2	3.2	3.3	3.0	3.2	2.9	2.8	2.8
15	2.6	2.9	2.7	2.8	2.8	2.7	3.0	3.1	3.3	3.1	3.4	3.3	3.1	3.1	3.2	3.1	3.0	3.3	3.1	2.9	3.0	2.8	2.9	2.5
16	2.7	2.8	3.0	3.1	2.9	2.7	2.8	3.4	3.6	3.1	3.4	3.0	2.9	3.0	3.2	3.3	3.3	3.4	3.3	3.1	3.1	3.2	3.1	2.9
17	2.9	3.1	2.8	2.9	3.3	2.9	2.8	3.4	3.3	3.4	3.4	[3.2]	3.1	3.1	3.2	(3.1)	3.2	2.9	3.2	2.7	3.0	3.3	2.8	A
18	2.6	2.7	2.6	2.9	3.3	2.7	2.9	(3.2)	(3.4)	[3.2]	3.0	3.1	3.0	3.0	3.0	3.2	3.2	3.3	3.2	3.1	2.8	2.9	2.7	2.7
19	2.8	2.9	2.8	2.8	3.1	2.6	3.1	(3.1)	3.3	(3.3)	(3.2)	(2.9)	3.2	3.0	3.0	3.1	3.3	3.2	2.8	2.7	2.7	2.8	2.7	2.7
20	2.8	2.7	2.7	2.9	2.6	2.8	2.9	3.3	3.5	2.9	3.3	3.1	3.1	3.0	2.9	2.9	2.8	3.0	2.8	2.9	2.9	3.0	2.8	2.5
21	2.7	2.5	2.5	2.7	2.4	2.3	2.5	2.9	2.8	3.3	BH	3.0	2.9	2.8	3.0	3.0	2.9	3.0	3.0	2.9	2.9	2.7	2.9	2.5
22	2.6	2.6	2.8	2.7	2.8	3.0	2.7	3.0	3.1	(3.1)	3.0	B	B	2.9	3.0	3.0	3.2	3.2	2.9	2.9	2.7	2.9	2.9	2.7
23	2.7	2.6	2.4	2.7	2.6	2.7	2.7	3.4	3.2	3.4	3.1	2.9	2.9	2.9	(2.9)	3.1	3.1	3.2	3.3	3.2	3.1	2.8	BK	(2.5)
24	BK	2.4	2.5	2.3	2.4	2.5	2.9	2.9	3.3	2.7	3.1	2.9	3.3	3.2	3.1	2.9	3.0	3.0	3.0	2.8	2.9	2.7	2.6	2.4
25	2.4	2.8	3.0	3.0	3.1	2.6	3.0	3.3	3.3	3.1	B	3.2	3.1	3.1	2.9	3.2	3.2	(3.1)	3.1	3.1	3.0	3.0	2.5	2.7
26	2.5	2.8	3.0	2.7	2.6	2.7	2.8	3.0	3.4	3.0	3.2	3.0	3.3	3.2	3.0	3.2	3.1	3.3	3.3	3.1	2.9	2.8	F	F
27	2.8	2.7	F	FS	FS	FS	2.9S	3.4	3.3S	3.2	3.0	3.2	3.0	3.1	3.0	3.1	3.3	3.3	3.1	3.1	2.8	3.0	2.8	2.6
28	2.8	2.8	2.7	(2.6)	F	F	F	3.5	3.3	2.5	3.0	3.1	3.0	3.1	3.2	3.4	3.3	3.5	3.3	3.3	3.0	2.8	2.8	2.6
29																								
30																								
31																								
Median Value	2.7	2.7	2.7	2.9	2.9	2.7	2.9	3.3	3.3	3.2	3.2	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.1	3.0	2.9	2.8	2.7
Count	27	28	27	27	26	26	27	27	28	27	24	24	25	27	26	28	28	28	28	28	28	27	25	26

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 9

23

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | fminF | 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	1.2	1.2	1.3	1.3	1.3	1.2	1.4	2.8	2.4	3.1	3.4	3.8	3.9	3.8	3.3	2.9	2.3	1.8	1.5	1.6	1.4	1.3	1.3	1.3
2	1.1	1.1	E	E	E	E	E	1.8	2.8	5.0	5.4	5.0	4.6	5.0	3.4	3.8	2.6	2.0	1.6	1.4 A	1.5	1.4	1.3	1.4
3	E	E	E	E	E	1.1	1.6	2.7	2.7	2.9	4.0	5.0	4.1	3.6	4.9	4.6	2.9	1.9	A	A	1.6 A	1.4	1.4	1.6
4	1.4	1.2	1.4	1.6	1.5	1.5	1.6	1.7	2.6	3.0	3.4	5.4	3.8	A	C	3.2	C	A	A	A	A	A	A	1.4
5	A	1.4	E	E	E	E	1.3	3.8	3.0	C	C	C	C	C	C	2.9	2.4	1.3	1.6	1.2	1.2	1.2	1.2	1.2
6	1.2	1.3	E	E	E	E	1.4	2.0	2.8	3.0 F	3.8	3.5	3.4	3.4	3.5	3.0	2.3	1.8	1.4	1.4	1.4	1.3	1.4	1.4
7	1.4	A	A	A	E	E	1.4	2.0	2.6	2.9	3.2	3.5	3.4	3.5	3.2	3.0	3.1	1.8	1.4	1.4 A	1.4	1.5 A	1.5	1.4 A
8	1.3	E	E	E	E	E	1.3	1.9	2.5	2.8	3.4	3.8	3.9	3.9	A	3.0	2.5	1.6	1.6	1.9 A	1.7	1.5	1.6 A	1.8
9	1.5	1.6	E	E	E	1.1	1.6	2.1	2.6	2.9	3.0	3.1	3.4	3.4	3.3	4.0	2.8	A	A	A	1.5	A	1.5 A	1.3
10	A	1.2	E	E	E	E	1.3	1.8	2.7	3.2	3.3	3.5	3.6	3.9	3.1	2.9	2.5	1.7	A	1.6	1.5	1.5	1.6	1.6
11	E	E	E	1.2	1.2	1.5	1.2	2.0	2.6	2.9	3.5	3.5	3.5	3.9	3.8	3.0	2.2	2.0	1.6	1.4	1.4	1.4	1.6	A
12	1.2	1.1	1.4	1.2	1.2	1.4	1.5	2.1	2.5	3.2	3.3	3.4	3.5	3.2	3.3	3.2	2.7	A	A	1.6	1.3	1.3	1.3	1.4
13	E	E	E	1.4	1.4	E	1.2	1.8	2.6	3.2	3.6	4.0	4.0	3.5	3.2	3.2	3.0	2.1	1.6	1.4	1.4	1.4	1.4	1.4
14	E	1.1	E	E	1.1	E	E	2.0	2.6	A	A	3.8	4.0	3.4	4.6	3.2	2.7	2.1	1.4	1.4	1.4	1.4	1.4	1.4
15	1.2 F	1.2	1.6	1.1	E	E	1.4	2.1	3.0	3.0	3.2	3.5	4.8	4.7	3.9	4.0	7.6	2.2	1.6	1.4	1.4	1.4	1.4	1.4
16	1.2	1.4	E	E	1.2	E	1.5	2.0	2.6	4.0	4.4	4.5	4.7	4.4	3.7	3.4	2.7	2.2	1.7	1.6	1.6	1.4	1.5	1.4
17	1.4	1.4	E	E	E	E	1.4	2.0	2.5	3.6	3.5	C	4.2	5.2	4.0	3.2	A	2.3	1.7	1.6	1.6	1.4	1.4	A
18	1.3	1.4	A	E	E	E	1.4	2.2	3.0 C	C	4.2	4.0	4.2	4.2	5.6	4.0	2.9	2.1	1.6	1.5	1.5	1.5	1.5	1.4
19	1.4	1.1	E	E	E	E	1.3	2.2	3.0	3.6	3.8	4.5	5.6	4.1	4.0	A	2.9	2.3	1.6	1.6	1.6	1.5	1.6	1.6
20	1.2	1.4	E	E	E	E	1.8	2.4	2.9	3.4 F	4.9	5.3	4.8	5.0	3.8	3.4	2.9	2.3	1.6	1.4	1.4	1.4	1.4	1.4
21	E	1.2	E	E	E	E	1.5	2.5	3.0	3.5	4.0	3.9	4.0	4.0	3.8	3.3	2.8	2.3	1.4	1.4	1.4	1.4	1.4	1.4
22	1.2	E	E	E	E	E	1.4	2.2	2.5	7.0	4.7	4.0	3.8	4.0	3.8	3.4	2.8	2.4	1.8	1.4	1.4	1.4	A	1.4
23	A	A	1.5	1.4	1.4 A	1.4 A	1.4	1.9	2.9	3.3	3.5	3.8	3.6	3.3	3.5	3.2	2.8	2.1	1.4	1.4	1.4	1.4	1.4	1.4
24	1.2	1.2	E	E	E	E	1.4	2.2	2.8	3.4	4.4	3.0	5.0	4.0	4.8	3.2	2.8	A	1.8	A	1.8	1.4	1.4	1.6
25	1.3	1.1	E	E	E	1.4	1.4	2.5	2.6	3.0	A	A	3.8	4.0	3.9	3.3	2.9	2.3	1.4	2.2 A	2.0	2.0	1.4	1.6
26	1.4	2.0	1.8	E	E	1.1	1.5	2.4	3.1	3.1	3.5	4.2	4.4	4.0	3.5	3.3	3.2	2.3	1.8	1.8	1.6	1.5	1.4	1.4
27	1.4	1.4	E	E	E	E	1.3	2.5	2.7	3.3	3.6	3.7	3.6	3.6	3.9	3.2	2.8	2.2	2.4	2.2	1.6	1.6	1.4	1.4
28	1.4	1.6	E	E	E	E	1.4	2.3	3.0	4.0	3.8	4.0	4.8	3.8	3.8	4.0	4.0	3.8	2.0	1.6	1.5	1.4	1.4	1.4
29																								
30																								
31																								
Median Value	1.2	1.2	E	E	E	E	1.4	2.1	2.7	3.2	3.6	3.8	4.0	3.9	3.8	3.2	2.8	2.1	1.6	1.4	1.5	1.4	1.4	1.4
Count	25	26	26	27	28	28	28	28	28	25	25	25	27	26	25	27	26	24	23	24	27	26	26	26

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 10

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | fminE | 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	G	G	G	G	G	G	E	B	1.4	1.9	1.8	2.1	2.0	2.2	1.7	1.7	1.8	(1.5)B	G	G	G	G	G	G
2	G	G	G	G	G	G	E	B	B	2.8	2.5	2.6	2.6	2.4	1.8	1.8	1.6	1.6	G	1.4	1.4	G	G	G
3	G	G	G	G	G	E	1.4	1.6	1.6	1.6	1.8	3.2	2.4	2.4	2.5	1.9	1.7	1.7	1.4	1.4	1.4	G	G	1.6
4	1.4	G	G	G	G	G	E	1.6	1.9	1.6	2.2	2.6	3.0	2.2	[2.4]C	2.5	C	1.5F	1.4	1.4	1.4	1.4	1.4	1.4
5	1.4	1.6	E	G	E	E	E	S	1.5	C	C	C	C	C	C	1.7	1.8	1.2	G	G	G	G	G	G
6	G	G	G	G	G	G	E	1.8	1.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.2	G	G	G	G	G	G
7	G	1.2	(1.1)B	E	B	1.8	2.0	1.4	1.6	1.6	1.7	1.8	2.0	1.8	1.8	1.8	1.8	1.4	G	G	G	1.4	1.5	E
8	1.8	G	B	G	E	(2.0)FB	E	1.4	1.4	1.7	1.8	1.8	1.8	1.8	1.8	1.6	1.4	E	G	1.6F	G	G	1.6	1.8
9	G	G	G	G	G	G	1.7	1.7	1.7	1.6	B	1.7	1.8	2.2	2.0	2.0	2.0	1.8	1.8	1.6F	1.5	1.5	1.3	1.4
10	E	E	E	E	E	E	E	1.4	1.7	1.8	1.9	1.8	2.3	1.8	1.8	1.8	1.6	E	1.3	G	G	G	G	G
11	G	G	G	G	G	E	E	1.2	1.4	1.4	1.7	(1.8)B	2.6	1.8	1.8	1.8	1.9	1.7	GF	G	G	G	G	G
12	1.2	G	G	G	G	G	E	1.3	1.6	1.8	1.7	1.8	2.2	2.0	1.5	1.5	1.5	1.3	1.3	G	G	G	G	G
13	G	G	G	G	G	G	E	1.4	1.4	1.8	1.8	1.8	1.8	1.8	1.8	1.6	1.8	1.6	G	G	G	G	G	G
14	G	G	G	G	G	E	1.6	1.5	(1.5)B	1.8	1.8	1.8	2.0	2.0	B	1.8	1.7	1.7	1.4	G	G	G	G	G
15	G	G	G	G	G	G	1.9	1.8	1.7	1.8	2.2	2.4	2.0	2.6	2.3	2.2	B	1.8	G	G	G	G	G	(1.8)B
16	G	G	G	G	G	G	B	1.6F	1.8	2.0	2.0	2.0C	2.0	2.0	2.0	2.1	2.0	1.6	G	G	G	G	G	G
17	G	G	G	G	G	G	E	1.6	1.6	1.5	2.0	[2.0]	2.0	2.0	2.4	1.8	1.8	1.3	1.6	G	G	G	G	1.4
18	G	G	E	G	G	G	E	1.8	2.0	[2.0]C	2.0	2.2	2.2	2.6	B	2.4	1.7	1.8	1.4	G	G	G	G	1.4
19	1.2	1.1	E	E	E	G	(2.5)B	1.6	1.7	2.6	2.4	2.4	B	1.9	1.8	1.8	1.8	1.9	G	G	G	G	G	G
20	G	G	G	G	G	G	B	1.9	2.1	2.0	B	B	B	B	2.2	2.2	2.2	2.0	G	G	G	G	G	G
21	G	G	G	G	G	G	B	G	1.8	2.0	2.0	2.0	2.4	1.6	2.1	2.4	2.0	1.9	1.6	G	G	G	G	G
22	G	G	G	G	G	G	B	1.6	1.6	B	B	B	B	3.1	2.0	2.0	1.8	1.8	G	G	G	G	1.4	1.4
23	1.1	1.4B	G	G	1.8	1.8	1.6	B	2.4	2.2	2.4	2.0	2.6	2.4	1.8	1.6	1.4	1.4	G	G	G	G	G	G
24	G	(1.1)B	G	E	E	E	B	G	2.0	G	2.3	1.4	2.0	2.4	3.6	2.4	1.5	1.6	1.6	1.8	G	1.9	G	G
25	G	2.2	G	G	G	G	B	2.0	2.0	1.8	2.0	2.0	2.6	3.0	2.7	2.1	1.8	1.8	G	2.0	2.0	B	G	G
26	G	G	G	G	G	G	B	1.8	1.7	1.8	2.3	2.3	2.1	B	2.2	2.4	2.2	1.8	1.4	G	G	G	G	G
27	G	G	G	G	G	G	E	1.5	1.7	2.4	1.4	1.8	3.4	2.3	3.0	2.1	2.3	2.1	1.8	B	G	G	1.2	G
28	G	G	G	G	G	G	G	1.8	1.8	B	B	B	B	B	B	B	B	B	B	G	G	G	G	G
29																								
30																								
31																								
Median Value	G	G	G	G	G	G	G	1.6	1.7	1.8	2.0	2.0	2.1	2.1	2.0	1.8	1.8	1.6	G	G	G	G	G	G
Count	28	28	27	28	27	28	21	24	27	25	23	24	23	24	24	27	25	27	27	27	28	27	28	28

Sweep 1.0 Mc to 10 Mc in 15 min Manual

A 11

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Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb 1950 | f_0F2 | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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	3.5	3.7	3.6	3.6	3.3	2.5	2.7	5.8	8.0	10.0	11.9	10.5	10.8	BH	9.0 F	9.9	8.8	7.7	(6.8) C	5.9	4.3	3.8	3.9	4.2
2	3.0	3.5	3.9	4.3	3.1	2.4	3.0	7.4	8.7	9.9	9.9	11.8	11.9	9.9	9.4	9.6	8.7	7.4	6.4	5.9	4.4	4.6	3.8	4.4
3	4.2	4.2	3.6	3.2	3.0	3.2 P	3.2	7.7	8.8	9.3 P	12.6	12.7	11.2	11.3	9.1	9.9	8.9	7.3	6.3	5.8	4.8	4.2 P S	4.2	(4.1) C
4	4.0	3.8	3.4	3.4	3.3	3.1 F	3.0	6.6	10.0	11.5	10.6	11.4	11.2	11.0	10.0	9.5	8.9	7.2	6.9	4.5	3.1	3.2	3.3	3.3
5	3.4	3.1	3.6	3.8	3.1	3.5	3.6	7.1	8.5	9.9	12.3	12.7	12.3	10.4	9.5	10.1	9.8	7.8	6.6	6.7	3.0	2.9	3.2	3.3
6	3.4	3.5	3.5	3.7	3.0	2.8	3.1	6.7	8.2	10.1	11.4	12.7	11.6	10.7 S	9.7 F	9.4	8.8	6.8	5.3	6.0	4.8	2.8	3.0	3.0
7	3.1	3.4	3.5	3.6	3.0	2.7	3.0	6.1	7.5	8.7	10.0	10.9 B	11.2	10.5	9.5	9.9 S	8.8 B	7.3	6.0	5.2	4.7	3.6	3.7	3.5
8	3.7	3.8	4.0	3.9	3.4	(3.2) P	3.3	7.3	7.8	9.4 F	11.9	11.9	11.6	11.1	10.2	11.4	11.3	7.7	6.6	5.3	3.9	2.9	3.0	3.1
9	3.1	3.3	3.9	4.5 K	2.6 K	2.3	2.7	6.5	7.8	9.9	10.8	11.6	11.2	10.4	10.1	8.2	8.1	7.7	8.1 J	6.9	5.8	3.9	3.4	3.6
10	3.8	3.8	3.6	3.6	3.3	3.7	C	(7.0) P	8.7 S	9.2 P	(12.2) P	12.4	(12.7) P S	(12.2) P	11.8	(12.1) P S	(10.9) P S	9.9	5.8	4.0	4.0	3.2	3.0	3.0
11	3.2	3.4	3.5	4.1	3.5	2.3	2.4	6.2 P	7.7	8.7	10.4	9.9	10.1	9.6	8.6	9.5	8.2 P	7.1	5.0	4.5	5.1	4.4	3.7	3.8 V
12	3.6	3.7	3.8	3.8	3.8	3.0	2.9	6.3	8.3	8.8	9.9	10.6	11.0	11.2	10.9	9.1	7.8	7.2 F	6.5	5.0	4.7	4.1	3.6	3.6
13	3.6	3.6 F	3.6	4.1	4.5	3.1	3.2	6.2	8.7	9.7	9.5	10.2	9.9	10.6	10.3	9.4	S	7.5	6.5 S	5.0 P	5.2	4.5	3.6	3.7
14	C	C	C	C	C	C	C	8.7	9.3	7.4 J H	8.5	11.0	10.1	10.2 H	11.3	10.1	9.4	8.0	6.7	4.9	5.1	4.3	4.0 B	4.0
15	4.1	4.0	4.1	4.5	3.7	3.6	3.8	7.4	9.5	9.9	(11.1) P	(11.2) C	11.3	12.4 S	11.8	11.5 S	(11.1) P	(10.1) P S	5.6	5.7	5.3	4.5	3.5	3.5
16	2.7	3.7	4.3	4.5	3.2	3.3	3.3	7.2	9.7	9.8	9.9	11.5	11.1	11.5	11.2	9.6	9.7	8.3	7.6	4.8	4.5	4.4	4.4	4.0
17	4.4	4.2	3.9	4.1	3.6	2.9	3.3	7.3	9.3	C	C	C	C	C	C	C	C	6.4	7.4	5.7	5.8	5.5	4.2	4.0
18	3.9	4.1	4.0	4.3	3.3 P	3.1 P	3.6	8.7 P S	8.6	9.8	10.2	11.7	10.9	11.8	11.6	11.3	10.3 S	9.2	7.6	6.1	5.6	5.0	4.7	4.4
19	4.5	4.6	4.1	3.8	3.4	3.1	3.9 S	7.1 P	8.1	9.9	10.8	10.9	12.5	12.2	11.6	11.1	10.9	9.7	7.9	6.4	6.0	6.0	5.7	5.6
20	4.9	4.9	4.6	4.5	4.0	3.8	4.2	7.6	9.0	10.6	10.6	10.4	11.6	(11.4) P	10.5 P	11.0	10.0 P S	C	(8.9) P H	7.5 H	7.4 H	7.1 P H	6.3 H	4.9 H
21	4.4	4.5	4.0	4.3	3.4 K	(2.8) K B	3.8 K	6.7	7.2	10.7	11.4	13.5	12.8	12.6	12.4 P	12.7	(12.2) P	11.6	(9.9) P S	(8.3) F S	7.6	7.1	7.2	5.8
22	6.1	6.3	6.3	6.4	5.5	4.7	4.6	7.0	11.6	B	12.6	(12.9) F	12.7	12.2	12.5	12.4	12.0	9.5	8.6	6.8	7.2 S	5.7	4.7	4.8
23	4.5	(4.5) C	4.5 F	4.1	4.2	4.0	4.6	(9.4) P	9.3	(10.5) P	12.5 J F	14.3 F	B	14.3	13.6 F	(14.0) P	(12.8) P	B	8.1 P	7.6	6.0	4.5	4.1 K	3.8 K
24	3.6 K	3.8 K	4.1 K	3.6 K	3.5 K	3.5 K	4.6	8.6 F	(9.0) C	9.3	12.1	(15.6) F	14.2	13.0 S	13.3	12.5	11.3	10.2 B	9.9 B	7.5	6.1	5.3	5.3	5.3
25	5.4	6.1	6.0	4.8	3.3 F	3.1	4.2	9.0	9.6	11.5	11.4	13.3 S	12.0	13.4	12.8	12.2	10.[illegible]	[illegible]8	8.1 B	6.5	5.5	5.1	5.3	5.4
26	5.5	5.3	5.1	4.2	4.0	4.0	4.7	8.5	11.1	11.8	11.5	12.8	12.8 S	11.4	10.7	10.2	9.2	8.3	7.0	6.4	5.8	5.2	4.8	4.7
27	4.7	4.8	5.0	4.6	4.5 F	4.3 F	4.8	C	9.4	10.0	10.2	11.5	11.0	12.4	13.1	10.5	9.7	9.4	7.0	5.3	5.4	5.3	5.4	5.4
28	5.6	5.3	4.8	4.8	(4.9) P	4.8	6.2 P	8.2	B	10.4	10.6	12.1	(12.1) B	12.1	11.3	10.4	9.9	10.1 P	(9.4) F	6.5	5.7	5.2	5.2	5.4 F
29																								
30																								
31																								
Median Value	3.9	3.8	4.0	4.1	3.4	3.1	3.4	7.2	8.7	9.9	10.8	11.7	11.4	11.4	10.9	10.2	9.8	7.9	7.0	5.9	5.2	4.5	4.0	4.0
Count	27	27	27	27	27	27	26	27	27	26	27	27	26	26	27	27	26	26	28	28	28	28	28	28

Sweep 1.2 Mc to 17.2 Mc in 15 min Manual

K 1

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | hp F2 | 135° E Mean Time | **Kokubunji Tokyo** | Lat., 35° 42.4' N | Long., 139° 29.3E

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	420	380	340	240	360	360	280	270	290	300	280	410	B H	330^{P}	270	270	260	C	240	280	310	330	290
2	320	360	340	260	260	390	350	240	260	250	310	310	320	270	270	310	290	270	300	270	320	330	390	340
3	350	330	350	400	340	300^{P}	260	270	260	280^{P}	270	270	300	270	270	280	250	240	300	290	300	360^{S}	340	(320)^{C}
4	300	340	390	400^{E}	360	350^{F}	350	320	250	250	260	240	260	280	260	270	230	240	260	270	280	320	350	370
5	350	380	360	300	300	380	330	250	240	280	270	270	270	250	280	270	260	250	260	230	260	350	350	340
6	350	330	340	270	210	310	280	210	220	230	260	240	260	250^{S}	230^{P}	220	220	240	280	270	260	300	380	370
7	340	330	335	290	330	320	290	270	250	270	300	290^{B}	270	290	270	270^{S}	250^{B}	250	280	260	260	330	320	350
8	340	330	270	260	270	(360)^{P}	290	230	230	290^{P}	270	260	270	270	290	290	250	270	270	260	270	310	390	380
9	370	360	320	230^{K}	200^{K}	360	360	250	230	280	270	310	270	260	240	260	250	260	(270)^{J}	290	240	310	320	380
10	340	320	310	300	320	350	C	(250)^{P}	270^{S}	260^{P}	(250)^{P}	250	(260)^{S}	(280)^{P}	250	(260)^{P}	(240)^{S}	240	210	330	260	290	330	350
11	(350)^{B}	350	330	270	200	370	320	260^{P}	250	270	280	270	300	280	310	280	270^{P}	250	220	320	320	290	340	310^{V}
12	340	340	300	320	270	260	360	280	250	270	270	310	320	320	270	290	260	260^{F}	270	310	280	290	270	370
13	360	370^{F}	350	300	220	350	330	260	270	210	260	280	320	270	290	270	S	280^{S}	290^{S}	320^{P}	290	300	310	370
14	C	C	C	C	C	C	C	260	250	(260)^{J}H	270	290	290	320^{H}	300	270	280	280	290	310	340	300	370^{B}	360
15	370	260	370	340	310	340	350	260	270	260	(290)^{P}	(300)^{C}	310	300^{S}	280	290^{S}	(280)^{P}	(320)^{P}S	330	370	320	340	350	450
16	320	350	300	270	310	360	340	360	350	270	280	270	300	320	300	300	290	260	270	300	320	310	340	330
17	310	280	320	280	280	340	330	260	260	C	C	C	C	C	C	C	C	230	290	310	310	290	350	380
18	390	390	330	280	290^{P}	330^{P}	310	250^{P}S	230	280	310	320	270	330	320	300	280^{S}	280	280	330	320	350	330	380
19	360	320	300	310	340	400	320^{S}	240^{P}	260	300	300	320	280	300	310	310	280	290	280	310	330	320	340	350
20	330	350	360	330	330	370	340^{K}	270	260	260	260	260	280	(290)^{P}	300^{P}	320	280^{P}	C	310^{P}H	320^{H}	320^{H}	320^{P}H	320^{H}	330^{H}
21	380	370	420	340	490^{K}	(570)^{K}B	400	260	270	340	340	310	310	310	360^{P}	370	(300)^{P}	310	(290)^{P}	(340)^{P}S	300	350	320	410
22	380	370	320	310	260	320	340	280^{P}	290	B	300	(280)^{P}	310	300	330	300	300	280	270	310	290^{S}	320	340	400
23	360	(360)^{C}	370^{F}	290	410	430	330	(240)^{P}	250	(290)^{F}	(320)^{J}F	330^{P}	B	330	330^{P}	(350)^{P}	(310)^{P}	B	300^{P}	310	320	320	460^{K}	500^{K}
24	520^{K}	480^{K}	450^{K}	500^{K}	470^{K}	490^{K}	360	320^{F}	C	260	310	(310)^{P}	280	330^{S}	290	270	290	360^{B}	300^{B}	290	300	360	380	390
25	380	300	270	240	250^{F}	370	310	260	280	260	280	300^{S}	310	330	310	300	290	290	290^{B}	300	330	370	410	380
26	330	360	320	320	370	360	320	260	280	290	280	300	340^{S}	290	300	270	300	250	310	310	290	310	310	330
27	340	330	330	320	370^{F}	360^{F}	330	C	270	280	300	320	300	310	300	280	290	290	240	330	340	330	350	340
28	340	320	330	320	(350)^{P}	340	260^{P}	230	B	260	300	290	B	290	280	280	290	300^{P}	(300)^{P}	270	350	340	380	350^{F}
29																								
30																								
31																								
Median Value	350	350	330	300	310	360	330	260	260	270	280	290	300	290	290	280	280	260	280	310	300	320	340	360
Count	27	27	27	27	27	27	26	27	26	26	27	27	25	26	27	27	26	26	27	28	28	28	28	28

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

27.

K 2

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | h'F2 | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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	300	310	250	200	280	290	240	240	250	270	250	390	250[H]	260	250	230	210	(200)[C]	200	210	220	270	240
2	220	280	270	230	220	280	290	230	240	240	250	290	250	240	260	230	220	220	220	240	240	280[A]	A	280
3	250	260	280	320	320[F]	260[F]	230	220	220	240	240	250	240	250	220	220	210	230	230	210[A]	230	240	270	(260)[C]
4	260	260	300	300	260	270	300	240	230	210	220	210	250	220	220	230	210	210[A]	220	A	A	270	290[A]	310
5	320[A]	300[A]	300	250	220	290	270	210	220	200	190	210	A	210	210	210	220	210	210	200	230	270	300	210
6	280	270	270	230	190	260	220	200	200	190	200	210	200	210	190	200	190	200[A]	190	230[A]	A	250	330	310
7	280	260	270	240	200	220	250	230	210	A	A	A	250	B	200	210	220	200[A]	210	200[A]	210[A]	250	250	270
8	270	260	220	210	210	220	230	210	200	210	220	210	210	230	230	230	210	210	220	220	230	230	300	320
9	320	310	260	210[K]	180[K]	310	300	210	210	240	230	220	250	200	180	220[A]	220	220	A	230	200[A]	A	230	A
10	260	240	270	260	240	270	C	230	210	210	220	230	220	200	230	230	220	210	180	240	220	240	270	300
11	290	280	270	220	190	190	260	230	210	200	250	250	270	260[F]	290	260	230	210	200	270	270	250	280[F]	250
12	280	310[A]	260	260	220	210	280	240	200	230	260	290	220	250	250	230	230	220	220	240	220	230	270	300
13	300	290	280	250	200	280	250	220	220	200	240	270	260	250	250	230	240	230	220	230	230	230	230	280
14	C	C	C	C	C	C	C	230	220	220[H]	240	230	270	240[H]	270	240	250	230	220	230	270	260	280	300
15	290	190	300	260	210	250	290	240	240	250	240	(240)[C]	250	250	240	250	260	230	240	270	270	270	290	350
16	280	300	250	220	210	330	300	300	240	220	220	250	240	270	240	240	250	220	220	200	230	250	260	270
17	250	230	250	250	220	260	290	240	230	250	C	C	C	C	C	C	C	220	210	230	230	230	250	280
18	290	290	280	240	210	270	250	220	210	270	270	300	240	220	260	280	230	230	220	220	240	240	260[B]	280
19	A	260[A]	250	250[A]	230	320	280	220	220	280	240	300	260	290	240	300	240	230	230	220	250	250	230	270
20	270	280	270	240	230	270	280	240	220	220	230	220	280	210	240	280	250	230	210[H]	230[H]	240[H]	240[H]	230[H]	250[H]
21	260	290	330	260	A K	500[K]	350[K]	210	250	290	250	250	260	220	230	270	250	220	210	B	A	260[A]	B S	B S
22	290[A]	290	260	240	220	230	270	230	230	B	230	250	230	280	240	240	220	210	220	240	210[A]	220	230	290
23	280	(300)[C]	320[A]	250	A	340	280	210	200	220	280	270	280	260	270	230	250	220	210	250	230	250	350[K]	400[KA]
24	420[K]	380[K]	340[K]	380[K]	340[KA]	400[K]	260	270	(240)[C]	210	220	220	210	270	230	220	220	240[A]	240[A]	240[A]	230	260	300[A]	290
25	290	250	230	(200)[A]	(200)[A]	300[A]	270	240	230	220	210	260	210	280	220	260	220	200[A]	210[A]	230	250[A]	300[A]	300	280
26	270	250	250	220	310	300[A]	270	230	250	230	240	230	230	260	220	230	230	210	210	230	220	230	250	260
27	270	250	260	250	240	280	280	C	230	250	230	280	250	280	290	250	250	240	190	190	260	250	270	260
28	240	240	250	240	260	240	230	200	210	230	240	250	240	270	260	240	240	230	240[F]	220[AF]	240	250	270	260
29																								
30																								
31																								
Median Value	280	280	270	250	220	270	280	230	220	220	240	250	250	250	240	230	230	220	220	230	230	250	270	280
Count	26	27	27	27	25	27	26	27	27	26	26	26	26	26	27	27	27	28	27	26	25	27	26	26

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb 1950 | f_0F1 | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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							Q	Q	Q	Q	Q	L	L	L	L	L	Q	Q						
2							Q	L	L	L	Q	L	Q	Q	L	Q	Q	Q						
3							Q	Q	Q	L	L	L	L	L	Q	Q	Q	Q						
4							Q	Q	Q	Q	Q	Q	L	Q	Q	Q	Q	Q						
5							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
6							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
7							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
8							Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q						
9							Q	Q	Q	Q	Q	Q	L	Q	Q	Q	Q	Q						
10							C	Q	Q	Q	Q	L	Q	Q	Q	L	Q	Q						
11							Q	Q	Q	Q	Q	L	L	L	L	L	L	Q						
12							Q	Q	Q	Q	L	5.2	Q	L	L	Q	Q	Q						
13							Q	Q	Q	Q	L	L	B	L	Q	L	L	Q						
14							C	Q	Q	Q	L	Q	L	Q	B	Q	Q	Q						
15							Q	Q	Q	L	Q	C	L	L	Q	L	B	Q						
16							Q	Q	Q	Q	Q	L	Q	L	Q	Q	Q	Q						
17							Q	Q	Q	Q	C	C	C	C	C	C	C	Q						
18							Q	Q	Q	L	L	L	Q	Q	L	L	Q	Q						
19							Q	Q	Q	L	Q	L	Q	L	Q	L	Q	Q						
20							Q	Q	Q	Q	Q	Q	L	Q	Q	L	Q	Q						
21							Q	Q	Q	L	Q	Q	Q	Q	Q	L	L	Q						
22							Q	Q	Q	B	Q	B	Q	L	Q	Q	Q	Q						
23							Q	Q	Q	Q	L	(5.1)P	L	L	L	Q	L	Q						
24							Q	Q	C	Q	Q	Q	Q	L	Q	Q	Q	A						
25							Q	Q	Q	Q	Q	L	Q	L	Q	L	Q	Q						
26							Q	Q	Q	Q	Q	Q	Q	L	Q	Q	Q	Q						
27							Q	C	Q	Q	Q	L	L	L	L	L	Q	Q						
28							Q	Q	Q	L	L	L	L	L	L	Q	Q	Q						
29																								
30																								
31																								
Median Value							—	—	—	—	—	—	—	—	—	—	—	—						
Count							0	0	0	0	0	2	0	0	0	0	0	0						

Sweep 1.0 Mc to 12.0 Mc in 15 min Manual

K,,4

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | h'F1 | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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							Q	Q	Q	Q	240	240	210	230	240	240	230	Q						
2							Q	220	230	230	Q	240	Q	Q	220	Q	Q	Q						
3							Q	Q	Q	210	230	240	220	230	Q	Q	Q	Q						
4							Q	Q	Q	Q	Q	Q	210	Q	Q	Q	Q	Q						
5							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
6							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
7							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
8							Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q						
9							Q	Q	Q	Q	Q	Q	220	Q	Q	Q	Q	Q						
10							C	Q	Q	Q	Q	200	Q	Q	Q	200	Q	Q						
11							Q	Q	Q	Q	Q	210	220	210	220	240	220	Q						
12							Q	Q	Q	Q	240	240	Q	220	240	Q	Q	Q						
13							Q	Q	Q	Q	230	220	B	230	Q	220	220	Q						
14							C	Q	Q	Q	240	Q	230	Q	B	Q	Q	Q						
15							Q	Q	Q	240	Q	C	220	220	Q	240	B	Q						
16							Q	Q	Q	Q	Q	230	Q	230	Q	Q	Q	Q						
17							Q	Q	Q	Q	C	C	C	C	C	C	C	Q						
18							Q	Q	Q	240	220	220	Q	Q	240	240	Q	Q						
19							Q	Q	Q	220	Q	230	Q	220	Q	230	Q	Q						
20							Q	Q	Q	Q	Q	Q	200	Q	Q	230	Q	Q						
21							Q	Q	Q	220	Q	Q	Q	Q	Q	250	220	Q						
22							Q	Q	Q	B	Q	B	Q	210	Q	Q	Q	Q						
23							Q	Q	Q	Q	230	220	240	230	240	Q	240	Q						
24							Q	Q	C	Q	Q	Q	Q	210	Q	Q	Q	A						
25							Q	Q	Q	Q	Q	200	Q	230	Q	230	Q	Q						
26							Q	Q	Q	Q	Q	Q	Q	240	Q	Q	Q	Q						
27							Q	C	Q	Q	Q	220	220	240	270	230	Q	Q						
28							Q	Q	Q	200	200	200	210	210	220	Q	Q	Q						
29																								
30																								
31																								
Median Value							—	—	—	220	230	220	220	230	240	230	220	—						
Count							0	1	1	7	8	14	11	15	8	11	5	0						

Sweep 1.0 Mc to 12.0 Mc in 15 min Manual

K 5

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | f_o E | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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	A	2.4^{F}	3.2	3.4	3.5	3.6	3.6	3.4	3.4^{A}	2.5	1.8						
2							E	(2.1)^{B}	(2.8)^{J}	B	B	B	3.7	3.5	3.3	3.0	A	1.8						
3							B	2.0^{B}	2.6	3.1^{B}	3.4	B	3.4	3.4	3.4	3.0	A	2.0						
4							B	B	2.4	3.0	3.3	(3.6)^{A}	3.6	3.4	3.2	2.9	2.4	A						
5							E	1.9	2.6	2.9	3.1	3.5	A	A	A	A	2.5^{A}	2.0^{J}						
6							E	2.0	A	3.0	3.2	3.7	A	A	A	A	A	(1.6)^{A}						
7							E	1.9	2.7^{H}	A	A	A	A	B	B	2.9	A	A						
8							E	2.0	B	A	A	A	A	A	A	A	2.5	1.6						
9							E	(2.2)^{A}	2.5	(3.2)^{A}F	3.2	3.4	3.5	A	(3.3)^{A}	(3.0)^{A}	2.6	2.1						
10							C	A	2.8	B	B	B	B	B	B	B	2.6	A						
11							B	2.2^{F}	2.5	(2.6)^{A}	3.4^{H}	3.4	3.4	3.4	(2.3)^{B}	(2.8)^{A}	2.6	2.1^{H}						
12							1.4	2.1^{H}	2.6	3.3	A	4.0	3.7	B	(3.2)^{B}	(3.2)^{B}	2.6	2.0						
13							E	2.2	2.4	B	B	B	B	3.5^{B}	B	B	2.8 B	2.1						
14							C	2.5	2.8	3.1	3.4	3.7	3.6	3.7	B	B	2.8	1.9						
15							E	2.3	A	3.4	(3.7)^{B}	C	3.7	3.6	(3.4)^{B}	(2.9)^{B}	B	A						
16							E	2.0	2.6^{J}	3.3	3.5	AF	B	3.5	3.4	A	2.6	2.1						
17							E	2.3	2.9	(3.2)^{A}	C	C	C	C	C	C	C	1.9						
18							E	2.3	2.7	(3.0)^{B}	(3.4)^{B}	B	3.7	(3.5)^{B}	B	3.5	2.6^{J}	(2.0)^{J}						
19							(1.3)^{J}	2.1	2.8	3.1	3.4	3.6	B	(3.5)^{B}	(3.5)^{B}	3.3	2.9	2.4						
20							E	2.2	2.8	3.2	3.3	A	B	B	B	3.4	A	2.4						
21							1.3	2.4	2.8^{F}	3.4^{F}	AF	3.8^{A}	A	3.7	3.4	3.2	B	B						
22							E	2.1	2.7	B	(3.3)^{B}	B	B	3.8	3.6	B	(2.7)^{A}	2.3						
23							(1.5)^{B}	2.4^{H}	3.0	3.3	(3.6)^{A}	(3.8)^{A}	3.6^{B}	B	3.4^{B}	3.2	2.4	2.0						
24							1.3	A	C	3.1	3.3	(3.4)^{B}	B	A	B	A	A	A						
25							(1.5)^{J}	2.5	2.6	A	3.4	3.5	B	3.5	3.5	3.2	A	A						
26							B	A	(2.8)^{B}	3.2	3.3	3.6^{B}	3.7^{B}	3.9	3.7	3.3^{A}	2.7	2.2						
27							1.2	2.0	2.8	3.2^{B}	3.4^{B}	A	3.4	A	3.2	(3.1)^{B}	A	(2.2)^{B}						
28							(1.6)^{B}	2.3	2.9	3.4	B	3.5^{B}	A	B	(3.4)^{A}	(3.2)^{B}	2.8^{B}	2.1						
29																								
30																								
31																								
Median Value							E	2.2	2.7	3.2	3.4	3.6	3.6	3.5	3.4	3.2	2.6	2.0						
Count							22	23	24	21	19	15	13	15	17	18	17	21						

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

K 6

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | h' E | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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	A	110	100	100	110	110	110	120	110^{A}	100	120						
2							E	100	110	B	B	B	100	100	110	100	100	140						
3							B	100	100	100	100	100	100	100	100	100	110^{A}	110						
4							B	160	110	100	100	100^{A}	100	100	100	100	100^{A}	A						
5							E	130	100	100	100	100	A	A	A	A	A	100						
6							E	100	100	90	90	100	A	A	A	A	A	B						
7							E	(110)^{B}	110^{H}	A	A	A	100	100	100	100	100	A						
8							E	B	100	100	110	110	100^{A}	A	A	A	100	120						
9							E	A	100	100	100	100	100	A	100	100	100	100						
10							C	A	100	100	100	100	100	100	100	100	100	A						
11							B	130	110	(110)^{A}	100^{H}	100	100	110	110	110	100	120^{H}						
12							E	B^{H}	110	100	A	110	100	100	100	100	100	110						
13							E	130$^{B}_{H}$	110	100	100	100	B	100	100	100	100	100						
14							C	120	110	110	100	100	100	100	B	120	120	B						
15							E	150	A	100	100	C	110	110	110	110	B	A						
16							E	B	110	110	110	100^{A}	110	110	110	A	120	130						
17							E	100	110	120	C	C	C	C	C	C	C	110						
18							E	120	100	100	110	110	110	110	110	110	100	100						
19							B	100	110	110	110	110	B	100	100	100	100	100						
20							E	140	100	100	100	A	100	100	110	100	100	100						
21							E	B	110	110	100^{A}	100	A	100	120	110^{A}	B	B						
22							E	110	100	B	100	100	100	100	130	100	100	110						
23							B	110^{H}	100	110	120	120	120	120	110	120	110	130						
24							B	A	C	100	100	100	100	110^{A}	100	A	A	A						
25							(120)^{B}	B	110	A	90	100	100	100	110	100	100^{A}	A						
26							B	A	110	100	110	110	110	100	100	100	100	100						
27							E	120^{B}	100	110	110	100	100	A	120	120	130^{A}	110						
28							B	110	100	100	100	100	110	100	100	100	100	110						
29																								
30																								
31																								
Median Value								120	110	100	100	100	100	100	110	100	100	110						
Count								18	26	24	24	23	22	22	23	22	22	19						

Sweep 1.0 Mc to 12.0 Mc in 15 min Manual

K 7

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | fEs | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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	2.2 Y	G	G	G	G	1.7 YB	G	2.8	3.4	G	4.4 Y	4.3	4.2	G	G	3.4 Y	(3.2) Y	G	C	G	G	G	G	G
2	G	G	G	B	1.9	2.6 F	G	G	G	B	B	B	5.3	5.0	3.7	3.6	3.0	G	G	2.1	2.0	2.8	2.2	2.2
3	1.7	1.8	B	G	(1.8) F	1.6	B	G	2.8	G	3.0	5.2	5.0	4.0	4.8	4.6	3.2	3.0 Y	3.4	2.6	2.2	G	2.0	C
4	2.8	2.4 YF	1.6 F	1.7	1.6	2.8 YF	(2.8) Y	2.5	G	G	5.2	7.0	3.8	4.2	5.5	6.1	5.6	4.4	2.6	4.8	2.6	2.4	2.4	2.6
5	3.0	3.6	2.0	B	2.4	2.5	G	G	3.0	G	G	G	4.2	5.6	5.2	4.2	3.2	G	2.7 F	1.5	B	G	G	G
6	2.0 F	(2.3) Y	(2.1) YF	2.2 Y	B	2.1 Y	G	G	(5.2) YB	4.1	G	G	5.2	5.4	4.2 Y	4.4	3.4	2.6	2.0	2.8	2.2	2.2	G	2.0
7	G	G	3.3 Y	2.5	2.6	3.6	2.8	G	G	4.6	5.0	4.5	(4.0) B	B	G	G	3.5	3.0	2.2	2.3	2.5	G	G	G
8	1.7	1.4	G	G	2.0	2.0 F	1.6	2.1	G	3.4	G	G	4.2	4.6	7.0 Y	4.4 F	G	G	G	G	G	G	G	G
9	2.1	2.4 F	1.2	G	G	2.0	G	G	G	4.1 F	4.0 Y	4.2	G	4.1	G	4.4 F	3.4	G	8.9	2.4	1.7	3.0	2.4	4.5
10	2.9	2.4	2.0	2.4	2.0	1.8	C	3.0	3.4	G	G	G	B	G	G	G	G	3.4 Y	2.4	G	G	G	G	G
11	G	G	B	2.4	(2.4) F	B	G	G	G	G	G	G	G	G	4.1	4.1	G	G	G	G	G	G	G	G
12	G	4.0	2.7	2.9	2.1	2.3	G	G	G	G	(4.2) Y	G	G	3.6 Y	G	G	3.6	G	G	G	G	G	G	G
13	G	G	G	G	G	G	G	G	G	G	G	G	B	G	G	G	G	G	G	G	G	G	G	G
14	C	C	C	C	C	C	C	G	G	G	G	4.4	G	G	B	G	G	G	2.2	2.0	G	G	G	G
15	G	G	G	G	G	G	G	G	3.5	G	G	C	G	G	G	G	B	3.0	2.3	2.7 F	2.1	1.8	2.5 F	2.0 F
16	1.2	G	G	G	G	B	G	G	G	G	G	(4.2) YF	G	G	G	3.8	3.6 Y	G	G	G	G	G	G	G
17	G	G	1.6	G	G	2.4 Y	3.2 Y	G	G	4.4	C	C	C	C	C	C	C	G	2.0	1.9	1.6	1.7	G	G
18	G	G	2.2	2.4	1.3	G	G	G	G	G	G	G	G	G	G	G	G	2.8	3.4	2.8	B	G	G	2.6
19	(3.0) Y	3.4	2.8 F	2.2 F	2.0 F	G	G	G	G	4.1 Y	3.8	G	B	G	G	G	G	G	2.0	2.4	2.4	G	2.0	(2.9) B
20	2.4	2.7 Y	2.8	G	2.2	2.4	G	G	G	G	4.2	4.4	G	G	4.2 Y	G	G	G	G	G	G	G	G	G
21	G	G	2.6 F	G	(2.6) Y	2.4 YF	2.2 Y	G	G	4.8 F	5.3 F	5.2	4.7	4.2	4.2	3.8	B	B	B	3.6 Y	3.4 F	2.4	1.7	1.7
22	2.5	2.8	1.5	2.3	1.9	2.8	3.0 F	G	G	B	G	B	G	G	G	G	G	G	2.8	3.5	2.9	2.3	1.7	G
23	1.5	C	3.6	2.4	4.5	1.2	G	G	G	G	5.2	G	G	G	G	G	G	G	G	G	2.1	2.0 Y	G	(2.9) YF
24	G	2.5 Y	G	2.0 F	2.4 F	(2.8) YB	2.2 F	3.4	C	4.1	G	G	G	4.5	G	3.8	5.4	4.8	5.0	3.4	3.0	2.4	2.2	B
25	2.0	B	(2.2) Y	2.9	2.8	2.0	G	G	G	3.5	G	G	G	G	G	G	3.5	2.8	2.8	2.4	2.4	2.5	2.5	2.5
26	2.7	2.7	2.8	2.2	B	2.0	G	2.8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
27	G	G	G	2.2	1.9	2.9 F	2.9 Y	G	G	G	G	4.4	G	4.4 Y	G	G	3.2	G	G	G	G	G	G	G
28	1.7	2.4	1.8	2.4 Y	2.4	1.8	G	G	G	G	G	G	3.8	G	3.6	5.2 Y	4.4	5.0	4.2	5.8	G	2.2	2.6	G
29																								
30																								
31																								
Median Value	1.7	1.8	1.8	2.2	2.0	2.0	G	G	G	G	G	G	G	G	G	G	3.2	G	2.1	2.0	1.6	G	G	G
Count	27	25	25	25	25	25	25	28	27	26	26	24	24	26	26	27	25	27	26	28	26	28	28	26

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

33

K 8

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb 1950 | (M3000)F2 | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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	2.8	2.5	2.7	2.8	3.4	2.8	2.7	3.2	3.3	(3.2)B	3.2	3.2	(2.5)B	B H	2.8P	3.3	3.4	3.3	[3.4]C	3.5	3.1	2.9	2.9	3.1
2	2.9	2.8	2.9	3.3	3.3	2.6	2.9	3.5	3.4	3.4	3.0	3.1	3.0	3.2	3.3	3.1	3.2	3.3	3.1	3.4	3.0	2.9	2.6	2.8
3	2.7	2.9	2.8	2.5	2.8	3.1P	3.1	3.3	3.3	3.2P	3.2	3.4	3.1	3.3	3.3	3.1	3.4	3.4	3.1	3.1	3.1	2.8PS	2.8	(3.0)C
4	3.1	2.9	2.7	2.6F	2.7	2.9F	2.9	3.0	(3.5)S	3.5	3.2	3.4	3.3	3.2	3.3	3.3	3.6	3.4	3.4	3.2	3.1	2.9	2.8	2.8
5	2.9	2.7	2.7	3.1	3.0	2.6	2.8	3.5	3.6	3.2	3.3	3.4	3.4	3.3	3.2	3.4	3.4	3.4	3.3	3.6	3.3	2.8	2.8	2.9
6	2.8	2.9	2.9	3.3	3.8	2.8	3.2	3.7	3.6	3.7	3.3	3.6	3.3	3.6S	3.6P	(3.8)B	3.7	3.5	3.2	3.5	3.4	3.1	2.7	2.8
7	2.9	3.0	2.9	3.2	2.9	2.9	3.2	3.3	3.4	3.3	3.0	3.3B	3.4	3.2	3.2	3.3S	3.6B	3.5	3.3	3.4	3.4	2.9	2.9	2.8
8	2.9	2.9	3.3	3.3	3.2	(2.8)P	3.1	3.7	3.5	3.1P	3.5	3.3	3.4	3.3	3.2	3.3	3.5	3.2	3.3	3.4	3.2	3.0	2.6	2.8
9	2.9	2.7	3.1	3.6K	3.8K	2.7	2.7	3.1	3.7	3.3	3.3	3.1	3.3	3.3	3.6	3.3	3.4	3.3	(3.3)J	3.3	3.5	3.0	2.9	2.8
10	2.8	2.9	3.2	3.0	2.9	2.8	C	3.5	3.3S	3.2P	(3.5)P	3.5	(3.3)PS	(3.2)P	3.3	(3.3)P	(3.5)PS	3.6	3.8	3.0	3.3	3.1	2.9	3.0
11	2.9	2.9	2.9	3.2	4.0	2.7	3.0	3.3P	3.5	3.4	3.3	3.3	3.2	3.3	3.1	3.3	3.3P	3.3	3.6	2.9	3.1	3.2	2.9	3.0Y
12	2.9	2.9	3.1	3.0	3.3	3.3	2.8	3.2	3.5	3.3	3.4	3.1	3.0	2.9	3.5	3.2	3.3	3.4F	3.3	3.0	3.2	3.2	2.7	2.7
13	2.8	2.8F	2.9	3.1	3.9	2.9	2.9	3.4	3.3	3.7	3.3	3.3	2.9	3.3	3.1	3.3	S	2.5S	3.2	3.0P	3.1	3.2	3.0	2.8
14	C	C	C	C	C	C	C	3.4	3.6	(3.7)JH	3.3	3.3	3.3	2.9H	3.2	3.3	3.3	3.2	3.2	3.0	2.9	3.1	2.7B	2.9
15	2.8	3.4	2.7	2.8	2.9	2.8	2.7	3.4	3.5	3.5	(3.2)P	(3.2)C	3.1	3.1S	3.2	3.2S	(3.1)P	(2.9)PS	2.9	2.8	3.0	2.9	2.9	2.5
16	2.9	2.9	3.1	3.4	3.0	2.7	2.8	2.9	3.5	3.3	3.3	3.3	3.0	3.0	3.1	3.2	3.2	3.3	3.3	3.1	3.0	3.0	2.9	3.0
17	3.1	3.3	2.9	3.3	3.2	2.9	2.9	3.4	3.5	C	C	C	C	C	C	C	C	3.6	3.3	3.0	3.1	3.1	2.8	2.7
18	2.7	2.7	3.0	3.2	3.1P	2.9P	3.1	3.4PS	3.6	3.3	3.2	3.0	3.2	3.0	3.0	3.2	3.3S	3.2	3.3	2.9	3.0	2.9	2.9	2.8
19	2.8	2.9	3.1	3.1	2.8	2.7	3.0S	3.5P	3.3	3.1	3.1	2.9	3.2	3.0	3.0	3.0	3.2	3.2	3.1	2.9	3.0	3.1	2.9	2.8
20	2.9	2.8	2.8	2.8	2.9	2.7	2.9	3.2	3.4	3.4	3.4	3.4	3.2	(3.1)P	3.1P	3.0	3.3P	C	(3.1)PH	3.0H	3.0H	2.9PH	2.9H	2.9H
21	2.7	2.7	2.6	2.9	(2.5)KF	(2.1)KB	2.6K	3.2	3.3	3.0	2.8	3.0	2.9	2.9	2.7P	2.9	(3.0)P	3.0	(3.2)PS	(2.9)PS	3.1	2.8	3.1	2.5
22	2.7	2.7	2.9	3.0	3.3	2.9	2.8	3.2P	3.1	B	3.1	(3.1)P	3.1	3.0	3.0	3.0	3.1	3.1	3.2	3.0	3.2S	3.0	2.9	2.6
23	2.8	(2.8)C	2.8F	3.2	2.6	2.6	2.9	(3.5)P	3.5	(3.2)P	(3.0)JF	2.8P	B	2.9	2.9P	(2.8)P	(3.0)P	B	3.0P	3.0	3.0	3.0	2.4K	2.4K
24	2.3K	2.4K	2.4K	2.4K	2.4K	2.4K	2.7	S	C	3.3	3.0	(3.0)P	3.3	3.0S	3.2	3.2	3.1	3.1B	3.1B	3.1	3.1	2.8	2.7	2.7
25	2.8	3.1	3.5	3.6	3.4F	2.7	3.0	3.4	3.4	3.4	3.2	3.2S	3.0	2.9	3.1	3.1	3.2	3.1	3.1B	3.0	2.9	2.8	2.6	2.8
26	2.9	2.7	3.0	2.9	2.7	2.7	3.0	3.2	3.3	3.3	3.2	3.3	2.8S	3.2	3.1	3.3	3.1	3.4	3.0	3.0	3.2	3.0	3.0	2.9
27	2.9	2.9	2.9	3.0	2.7F	2.7F	2.9	C	3.3	3.3	3.0	3.0	3.1	3.0	3.1	3.2	3.1	3.1	3.4	2.8	2.9	3.0	2.9	2.9
28	2.9	3.0	3.0	3.0	(2.8)P	2.9	3.3P	3.5	B	(3.3)B	3.2	3.2	(3.2)B	3.3	3.2	3.2	3.2	3.3P	(3.1)P	3.2	2.8	2.9	2.7	2.8F
29																								
30																								
31																								
Median Value	2.9	2.9	2.9	3.1	3.0	2.8	2.9	3.4	3.4	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.2	3.0	3.1	3.0	2.9	2.8
Count	27	27	27	27	27	27	26	26	26	26	27	27	26	26	27	27	26	26	28	28	28	28	28	28

Sweep 1.2 Mc to 12 Mc in 15 min Manual

K 9

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | fmin F | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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	1.6	E	E	E	E	E	1.2	2.0	2.8	3.2	3.5	3.8	3.8	3.8	3.5	3.4	2.6	1.8	C	1.3	1.4	1.3	1.2	E
2	E	E	E	E	E	E	E	2.9	3.4	4.0	3.8	4.0	4.2	4.1	3.6	3.1	2.8	1.8	1.1	1.4	1.1	A	A	1.2
3	E	1.1	1.2	1.1	1.1 F	1.2 F	1.4	2.2	3.0	3.4	4.2	4.4	3.4	3.8	4.0	3.3	2.7	2.1 F	1.7	A	1.1	1.3	1.1	C
4	1.2	E	1.1	1.1	1.1	1.1	1.3	1.9	2.6	3.1	3.7	3.9	3.9	3.5	3.4	3.5	2.4	A	1.4	A	A	1.6	1.6 A	1.6
5	A	1.4 A	E	E	1.1	1.1	1.3	2.0	2.6	2.9	3.2	3.5	A	3.5	3.5	2.9	2.6	2.0	E	E	1.1	E	E	E
6	E	E	E	E	E	E	1.2	2.0	3.0	3.1	3.3	3.8	4.4	4.1	3.4	3.2	A	1.6	E	A	A	1.6	1.5	1.4
7	E	E	E	E	E	E	E	1.9	2.7	2.8	A	A	4.5	3.9	3.4	3.2	2.8	A	1.8 A	1.1 A	1.2 A	1.2	1.1	E
8	E	E	E	E	E	1.1	1.1	2.0	A	2.8	3.2	3.4	3.4	3.4	A	2.8	2.5	1.9	1.3	1.3	1.2	1.2	1.1	1.2
9	E	1.1	1.1	1.1	1.1	1.1	1.2	2.2	2.6	3.2	3.4	A	3.5	3.5	3.3	A	2.6	2.1	A	1.4	A	A	1.4	A
10	E	E	1.2	E	E	1.2	C	2.0	A	3.6	3.6	3.6	4.4	3.8	3.4	3.2	3.0	1.9	1.3	1.3	1.2	1.2	1.2	1.2
11	1.1	1.1	E	E	E	E	1.3	2.2	2.6	2.6	3.5	3.4	3.8	3.5	3.5	3.3	2.6	2.0	1.2	1.2	E	1.2	1.6 F	E
12	E	A	E	1.7 A	1.3	E	E	2.1	2.7	3.3	3.4	3.6	3.7	3.6	3.8	3.4	2.6	2.0	1.4	1.6	1.2	E	E	E
13	E	E	E	E	E	E	E	2.2	3.1	3.7	3.6	3.6	5.7	3.6	4.1	3.3	3.1	2.1	1.4	1.6	1.4	1.3	1.5	1.4
14	C	C	C	C	C	C	C	2.7	2.8	3.3	3.5	3.8	3.8	3.7	6.2	3.3	2.8	3.0	1.8	1.5	1.8	1.4	1.4	1.7
15	1.3	E	E	E	E	E	1.4	2.3	3.0	3.6	4.4	C	3.7	3.8	3.6	3.3	5.0	A	1.7	1.8 A	1.6	1.6	1.9 A	1.4
16	E	E	E	E	E	1.9	1.5	2.0	3.5	3.7	3.7	4.0	3.8	4.1	3.4	4.1	2.6	2.1	1.2	1.2	1.3	1.4	1.2	E
17	E	E	E	E	E	1.1	1.1	2.3	3.2	3.5	C	C	C	C	C	C	C	1.9	1.3	1.3	1.2	1.2	1.1	E
18	E	E	E	1.1	1.1	1.3	1.1	2.3	2.9	3.1	3.5	3.5	3.8	3.7	3.7	3.5	2.6	2.4	1.8	1.6	1.8	1.5	1.6	1.6
19	A	1.6 A	1.7 A	A	1.1	1.1	1.6	2.3	3.1	3.3	3.7	3.9	4.5	4.0	4.0	3.4	2.9	2.4	2.0	1.6	1.5	1.1	1.5	1.1
20	E	E	E	E	E	E	1.2	2.2	3.2	3.5	3.8	3.8	4.0	3.9	3.8	3.6	3.4	2.4	1.4	1.6	1.4	1.4	1.4	1.1
21	E	E	E	E	A	1.2	1.3	2.4	3.6	3.6	4.0	4.0	4.0	3.8	3.6	3.2	3.6	3.4	3.2	4.8	A	A	3.4 S	3.8 B
22	1.7 A	1.3	E	E	E	E	E	2.2	2.7	9.0	4.1	6.0	4.0	3.8	3.8	3.6	A	2.3	A	1.7 A	1.1	1.3	1.3	E
23	E	C	A	E	A	1.1	1.5	2.4	3.1	3.3	3.8	3.9	3.9	3.9	3.7	3.4	2.6	2.2	1.4	1.1	1.1	1.3	A	A
24	E	E	1.1	1.1	1.1 A	1.1	1.3	2.2	C	3.4	3.7	3.9	3.7	3.8	4.2	3.4	3.3	A	A	A	2.0	2.0 A	1.8 A	1.3
25	E	E	1.1	A	A	A	1.8	2.6	2.6	3.2	3.4	3.7	3.8	3.6	3.7	3.4	3.2	A	1.5 A	1.7	A	1.5 A	1.5	1.4
26	1.4	1.5	1.3	E	2.1	A	1.6	2.6	3.2	3.8	3.5	3.7	3.8	3.9	3.9	3.6	2.7	2.2	1.4	1.3	1.2	E	E	E
27	E	E	E	E	E	E	1.2	2.0	3.1	3.2	3.6	3.8	3.6	3.8	3.7	3.2	3.0	2.3	1.6	E	E	E	E	E
28	E	E	E	E	E	E	1.6	2.3	3.4	3.4	3.8	4.1	3.8	3.8	3.8	4.2 A	3.2	2.2	1.8	A F	1.4	1.2	1.2	1.4
29																								
30																								
31																								
Median Value	E	E	E	E	E	1.1	1.2	2.2	3.0	3.3	3.6	3.8	3.8	3.8	3.7	3.4	2.8	2.1	1.4	1.4	1.2	1.3	1.4	1.2
Count	25	25	26	25	24	25	26	28	25	28	26	24	26	27	26	26	25	23	24	23	23	25	26	25

Sweep 1.0 Mc to 1.7 Mc in 15 min Manual

K 1.0

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb 1950 | fmin E | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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	1.2	G	G	G	G	E	E	1.4	1.4	1.5	1.5	1.6	1.7	1.6	1.6	1.6	1.4	1.2	C	G	G	G	G	G
2	G	G	G	B	1.5	1.6	E	1.9	1.3	B	B	B	2.4	2.8	2.8	E	1.5	1.4	G	1.4	1.3	1.1	1.2	1.5
3	E	1.4	B	G	(1.1)F	1.2	B	1.6	1.6	1.6	1.6	1.9	1.6	2.0	2.0	1.6	1.6	1.2	1.3	1.2	1.6	G	1.6	C
4	E	E	1.3	1.1	1.4	1.1	B	1.6	1.4	1.4	1.5	1.5	1.4	1.6	1.6	1.5	1.4	1.2	1.6	1.4	(1.4)B	1.4	1.3	1.6
5	E	E	E	B	1.1	1.1	E	1.4	1.7	1.3	1.4	1.5	1.5	1.5	1.7	1.5	1.3	1.1	1.8F	E	B	G	G	G
6	E	E	(1.1)F	E	B	E	E	E	1.2	1.4	1.6	1.7	2.0	1.6	1.4	1.4	1.7	1.6	1.6	1.4	1.4	1.6	G	1.4
7	G	G	1.5	1.3	1.3	1.3	2.5	(1.2)B	1.4	1.6	2.0	2.0	2.0	1.8	1.6	1.2	1.6	E	1.2	1.1	1.2	G	G	G
8	1.1	1.1	G	G	1.8	1.6	E	1.6	1.6	1.4	1.4	1.6	1.6	1.6	1.6	1.2	1.6	1.3	G	G	G	G	G	G
9	E	E	1.1	G	G	1.1	E	1.1F	1.2	1.4	1.5	1.5	1.6	1.4	1.6	1.4	1.2	1.1	1.4	1.6	1.2	1.5	1.7	1.3
10	E	E	1.2	E	E	1.6	C	1.6	1.4	1.6	1.8	1.8	2.0	1.8	1.8	1.6	1.4	1.3	1.6	G	G	G	G	G
11	G	G	B	E	E	B	B	1.3	1.4	1.4	1.4	1.6	1.8	1.8	1.8	1.5	1.3	1.2	G	G	G	G	G	G
12	G	E	E	E	E	E	E	1.4	1.5	1.2	1.4	1.6	1.8	2.0	1.8	2.0	1.2	1.6	G	G	G	G	G	G
13	G	G	G	G	G	G	E	1.4	1.4	2.0	2.1	2.3	B	1.9	2.0	2.0	2.0	1.2	G	G	G	G	G	G
14	C	C	C	C	C	C	C	1.6	1.5	1.6	1.7	1.9	1.8	1.9	B	2.1	1.7	1.8	2.0	1.6	G	G	G	G
15	G	G	G	G	G	G	E	1.4	1.5	1.5	2.2	C	1.8	2.0	2.2	1.6	B	1.8	E	1.3	1.1	1.5	1.2	1.3
16	E	G	G	G	G	B	E	1.7	2.1	1.9	1.8	1.8	2.2	2.0	1.8	2.0	1.9	1.2	G	G	G	G	G	G
17	G	G	E	G	G	1.5	1.6	1.4	1.5	1.8	C	C	C	C	C	C	C	1.4	1.7	1.7	1.3	1.5	G	G
18	G	G	E	1.1	1.1	G	E	1.6	1.6	1.6	1.8	2.1	2.0	2.3	2.1	2.0	1.3	1.2	1.6	2.0	B	G	G	1.8
19	1.2	1.2	1.1	1.1	1.1F	G	G	1.7	1.6	1.5	1.8	2.1	B	2.2	1.8	1.5	1.4	1.3	1.7	1.6	1.5	G	1.8	(2.5)B
20	1.3	1.3	1.6	G	1.4	E	E	1.6	1.6	2.0	1.8	1.8	2.2	2.0	1.8	2.0	1.8	1.2	B	G	G	G	G	G
21	G	G	2.2F	G	E	(1.6)B	E	2.0	1.2	1.4	1.8	1.9	2.0	2.3	2.1	1.8	B	B	B	(1.3)B	(1.2)B	1.2	E	E
22	E	E	E	E	E	E	1.6	1.4	E	B	2.8	2.6	2.6	2.6	2.2	2.1	1.8	1.4	1.2	1.1	1.4	1.3	1.5	G
23	1.2	C	E	E	E	1.1	B	1.6	1.6	2.0	2.2	2.1	2.2	2.0	1.8	1.6	1.4	1.4	G	G	1.5	1.1	G	1.6
24	G	1.5	G	1.1F	1.1F	1.1F	1.7F	1.7F	C	1.6	1.7	1.8	2.0	1.9	2.3	1.7	1.3	E	1.4	1.6	2.0	1.5	1.8	B
25	1.4	B	1.4	E	E	E	1.8	(1.8)B	1.7	1.3	1.4	1.8	2.0	1.7	1.8	1.8	1.6	1.6	1.5	E	1.6	1.8	1.6	1.4
26	1.2	E	E	E	B	E	B	(2.0)B	2.0	1.6	1.5	1.8	1.7	1.9	2.0	2.0	1.6	1.5	G	G	G	G	G	G
27	G	G	G	E	1.7	1.4F	E	1.4	1.4	1.8	1.9	2.0	2.2	2.4	2.0	2.0	2.2	1.7	B	G	G	G	G	G
28	1.4	E	E	1.2	E	E	B	1.6	1.8	1.8	2.0	2.3	2.3	2.3	2.2	1.6	1.2	1.6	1.5	1.5	G	1.8	1.6	G
29																								
30																								
31																								
Median Value	E	E	E	E	E	1.1	E	1.6	1.5	1.6	1.8	1.8	2.0	1.9	1.8	1.6	1.5	1.3	1.4	1.1	1.2	G	G	G
Count	27	25	25	25	25	25	20	28	27	26	26	25	25	27	26	27	25	27	24	28	26	28	28	26

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

K 11

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | Zd | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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	80	120	90	100	230	100	130	80	120	70	50	70	120	BH	140 P	60	50	120	C	80	130	120	130	110
2	120	90	110	80	130	130	100	100	90	100	110	80	60	110	100	70	80	70	90	70	70	100	100	100
3	120	100	80	110	140	80 P	140	60	80	70 P	90	80	80	80	70	120	80	80	70	80	70	80 P S	80	C
4	60	90	80	80 F	140	100 F	70	80	50	60	70	170	110	80	110	90	70	90	60	90	120	140	100	80
5	60	100	110	80	160	100	150	80	70	70	70	60	60	100	100	50	70	70	120	50	60	170	140	100
6	110	90	70	70	50	100	90	70	70	60	80	60	90	30 S	80 P	50	50	80	80	60	70	110	130	90
7	70	70	90	80	180	140	120	70	80	80	90	50 B	70	80	90	70 S	50 B	60	60	70	80	80	100	80
8	60	80	70	80	80	(90) P	110	50	100	100 P	60	80	60	90	80	50	60	100	80	80	80	140	90	60
9	60	120	80	60	140	140	190	110	50	80	100	120	90	90	70	140	80	100	(70) J	40	80	70	120	50
10	140	90	50	80	130	100	C	(80) P	120 S	110 P	(90) P	90	(110) P S	(100) P	90	(100) P S	(60) P S	40	90	80	130	100	70	40
11	(90) B	80	80	90	40	180	130	90 P	60	50	60	60	50	80	60	70	90 P	100	80	120	70	60	60	110 V
12	60	70	70	70	60	140	90	90	50	70	50	60	90	100	50	70	80	70 F	60	80	90	80	90	70
13	80	70 F	60	90	30	100	90	90	70	110	110	70	80	100	90	90	S	90 S	70 S	90 P	90	70	130	80
14	C	C	C	C	C	C	C	70	40	(40) J H	80	60	70	100 H	50	50	50	80	60	70	80	80	80 B	60
15	90	140	120	110	160	120	170	60	50	50	(70) P	(80) C	90	110	90	70 S	(100) P	(110) P S	110	90	90	80	70	60
16	100	60	80	70	90	220	200	80	80	70	80	80	100	90	100	60	70	120	70	110	110	120	90	70
17	70	70	100	50	200	130	140	70	40	C	C	C	C	C	C	C	C	50	40	90	80	120	100	80
18	90	100	70	90	130 P	120 P	80	80 P S	80	90	70	130	100	70	120	60	80 S	70	80	90	90	150	100	60
19	70	130	80	70	150	90	70 S	90 P	100	80	80	100	70	130	110	110	90	90	120	130	70	60	80	110
20	100	110	90	100	80	100	90	110	70	70	60	80	80	(120) P	70 P	90	50 P	C	80 P H	80 H	110 H	90 P H	150 H	100 H
21	100	110	80	110	100	B	100	150	90	80	100	140	120	100	130 P	50	(140) P	110	(100) P S	(70) P S	70	90	50	130
22	80	100	100	100	110	110	110	90 P	100	B	80	(110) P	90	110	70	130	70	110	90	80	70 S	80	120	100
23	60	(60) C	70 F	60	100	70	80	(70) P	50	(60) P	(80) J F	130 P	B	80	90 P	(120) P	(140) P	B	100 P	80	100	80	90	70
24	80	90	90	60	80	50	130	110	C	100	90	(110) P	80	80 S	90	110	90	60 B	70 B	90	90	70	80	90
25	60	100	40	60	250 F	130	170	70	60	80	80	80 S	90	70	80	80	80	130	70 B	130	100	80	80	70
26	90	130	80	110	90	100	80	90	80	60	110	50	110 S	90	80	100	100	90	90	110	70	140	120	80
27	90	90	150	70	120 F	100 F	90	C	90	120	100	90	100	110	90	90	100	110	110	160	90	80	60	90
28	70	90	60	90	(100) P	70	90 P	70	B	80	60	70	B	60	110	80	80	60 P	(70) P	120	(100) S	110	120	100 F
29																								
30																								
31																								
Median Value	80	90	80	80	120	100	100	80	80	70	80	80	90	90	90	80	80	90	80	80	80	80	100	80
Count	27	27	27	27	27	26	26	27	26	26	27	27	25	26	27	27	26	26	27	28	28	28	28	28

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

K 12

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb: 1950 | f_0F2 | 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	4.8	4.1	3.7	3.8	3.8	2.7	2.4	4.1	7.4	[10.2]^{C}	12.9	11.0	9.9	11.8	12.1	10.3	10.2	10.1	10.1	8.1	5.8	6.2	6.9	6.7
2	4.1^{V}	4.8	5.4	4.3	2.9	2.4	2.9	4.3	8.9	10.3	11.1	12.2	13.2	13.4	11.6	11.3	11.3	10.5	9.8	8.3	5.9	5.6	6.7	5.9
3	5.6	5.1	4.5	4.2	3.7	3.9	4.2	4.8	8.4	10.9	12.8	12.9	12.1	11.1	11.2	9.9	9.6	9.3	9.3	6.6	6.8	6.5	5.9	5.2^{P}
4	4.6	4.0	3.5	3.0	3.2	3.1	3.0	3.9	9.0	12.0	12.1	12.2	13.0	13.5	13.2	10.1	10.7	9.6^{P}	9.2	8.7	5.9	4.8^{F}	3.7	4.0
5	4.0	3.4	3.5^{Z}	3.4	4.4	2.2	3.1	3.9	8.0	9.3	11.6	14.1	13.4	13.3	12.1	10.9	11.0	10.4	9.0	6.9	6.2	4.9	3.5	3.3
6	3.7	3.9	3.6	3.8	3.7	2.6	2.8	4.5	7.5	10.2	11.1	11.4	12.7	11.3	11.5	11.0	10.6	9.3	8.6^{Z}	6.2	5.5	5.6^{S}	3.9^{F}	4.5^{S}
7	4.0^{V}	4.9^{S}	4.1	3.7^{V}	3.7	2.2	2.4	3.5	6.4	7.9	10.2^{P}	12.0	12.2	11.5	11.1	10.0	10.2	9.6	8.4	6.9	5.2	5.3	5.1	3.5
8	3.4	3.5	4.1	3.2	3.0	3.0	2.8	4.5	6.4	8.3	11.7	13.7	12.7	12.7	13.0	13.2	12.6	11.6	9.5	6.6	6.2	5.9	4.6	3.8^{Z}
9	4.2	F^{K}	(4.4)^{KF}	SF^{K}	SF^{K}	2.1^{FK}	F^{K}	4.7^{FK}	8.3^{K}	9.3	10.1	10.6	11.5^{F}	11.7	11.3	8.7	8.7	9.2	9.1	7.1	6.5	6.0	5.3	4.9
10	4.2	3.6	3.5	3.6	3.5	3.1	2.8	4.5	7.3	9.2	11.2	11.3	12.1	12.3	14.2	13.7	13.1	11.3	8.2	5.2	5.1	(5.2)^{F}	4.8	3.8
11	(3.5)^{F}	3.6	3.7	4.0	3.5	3.2	3.0	4.7	6.9	8.4	9.4	11.1	10.1	10.7	11.0	11.0	11.5	12.0	7.9	6.1	5.0	4.7	4.2	3.5
12	3.5	3.5	3.6	3.8	3.8	2.8	3.0	4.7	7.3	8.4	9.2	10.3	9.8	10.9	12.0	9.8	8.7	9.9^{H}	8.1	7.8	7.2	5.3	4.2	4.2
13	4.1^{F}	3.9	3.8	3.8	4.2	3.2	2.2	4.5	8.4	10.1	(9.1)^{F}	11.2	10.9	11.7	10.8	10.5	9.9	8.7	7.9	6.5	5.9	6.9^{F}	5.8	4.7^{S}
14	4.8	5.5	5.2	4.5	4.2	3.8	3.3	5.8	7.5	8.0	8.7	10.6	11.4	11.2	11.4	12.0	10.6	9.3^{H}	8.8	7.4	[7.4]^{S}	7.5	6.0	(6.0)^{S}
15	6.2^{S}	6.3	6.3^{F}	5.6	4.8	4.7	3.5	5.4	7.7	9.7	11.2	11.4	13.1	13.5	13.8	13.2	13.1	12.1	8.9	7.2	5.9	7.0	4.6	4.1
16	3.9	4.4	4.5	4.7	3.4	3.1	3.0^{F}	5.1	C	C	C	C	C	C	C	C	C	C	C	C	[6.8]^{C}	6.5	5.1	5.1
17	5.1	5.0	4.4	4.3	4.1	2.8	2.7	5.2	8.1	10.3	11.7	13.2	12.3	12.4	13.8	13.9	12.2	12.0	11.2	10.5	8.5	8.8	6.9	5.8
18	5.2	5.2	5.6	5.7	4.5	3.0	3.0	5.3	7.5	9.4	10.4	12.0	12.2	11.8	13.5^{C}	13.2	12.1	11.6	9.8	8.2^{S}	8.8	9.3	7.9	5.6
19	5.1	4.8	4.6	4.1	3.8	3.1	3.3^{Z}	5.7	8.2	9.2	11.4	12.9	12.4	13.6	13.8	14.3	14.6	12.1	10.7	9.4	8.1	9.5	9.4	7.9
20	6.6	6.5	6.6	6.6	6.4	4.1	3.5	5.7	8.7	10.3	10.3	10.3	11.1	12.2	12.8	12.0	13.1	13.0	11.9	11.2	10.3	11.0	8.3	5.9
21	4.9^{H}	4.6^{H}	4.1^{H}	4.1	3.9	3.3	2.5	5.5	8.6	12.7	11.9	14.3	14.3	(10.9)^{H}	10.4	11.2	11.6	10.6	11.9	10.4	8.8	8.1	7.0	6.2
22	5.9	5.7	6.2	6.1	4.9	3.8	3.3	5.4	9.3	12.4	12.2	11.8	13.0	13.7^{P}	13.2	13.1	13.3	11.6	11.0	10.6	9.0	8.4	7.2	5.7
23	5.7	5.2	4.4	4.3	3.5^{H}	3.6^{ZK}	3.4^{K}	6.7	8.2	9.9	13.1	14.7	14.8	14.5	15.6	14.5	14.4	12.4	11.9	8.9	8.5	7.8	5.7	4.3
24	3.6	4.1	3.7	4.1	4.3	3.4	2.9	5.4	10.1	9.6	11.6	14.3	15.6	13.1	13.7	13.5^{H}	12.8	12.1	12.6	9.2	11.1	8.7	6.2	5.9
25	5.5	5.3	5.7	6.0^{B}	4.1	3.3	3.3	6.1	8.6	10.7	13.3	12.6	12.4	14.2	15.0^{C}	13.8	12.8	12.5	12.2	10.2	7.4	6.8	6.2	5.8
26	5.3	5.0	4.9	4.5	4.3^{F}	3.9	4.1	7.0	10.7	12.2	11.1	12.3	12.4	13.0	11.9	11.8	11.4	10.7	10.1	8.3	7.4	6.7	5.7	4.5
27	4.5	4.4	4.5	4.7^{Z}	4.1	3.8	3.9	6.1	8.0	9.4	10.1	11.3	11.4	11.8	11.8	12.0	12.3	11.9	9.8	7.9	6.0	7.2	6.8	3.9
29	6.3	5.0	4.6	4.1	4.7	4.4	4.0	7.7	8.6	9.8	11.3	11.2	11.5	12.2	12.4	12.1	11.4	11.4	11.6	9.6	5.5^{H}	6.0	5.6	(5.9)^{F}
29																								
30																								
31																								
Median Value	4.7	4.8	4.4	4.1	3.9	3.2	3.0	5.2	8.2	9.8	11.2	12.0	12.3	12.2	12.1	12.0	11.5	11.3	9.8	8.0	6.6	6.6	5.8	5.0
Count	28	27	28	27	27	28	27	28	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28

Sweep 1.2 Mc to 8.5 Mc in 15 min Manual

Y I

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | h_pF2 | 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	370	360	390	380	390	440	380	390	320	(310)C	300	290	350	340	340	360	320	310	300	300	350	360	330	360
2	380V	380	340	290	260	420	400	320	290	290	290	350	340	330	350	340	300	300	300	300	390	330	310	390
3	360	340	360	340	410	410	300	320	290	330	310	310	310	340	330	310	330	310	290	310	340	310	290	330
4	370	340	320	330	330	330	390	320	300	280	290	310	330	310	320	310	320	300H	290	290	370	(300)S	360F	410
5	370	400	400Z	280	350	340	380	390	280	300	320	320	320	320	310	290	310	300	280	280	310	280	390	380
6	370	350	340	340	320	400	360	320	300	290	280	310	300	310	300	290	280	300	290'	280	310	280S	400H	410S
7	400V	350S	330	310V	270	310	320	310	270	300	310F	340	340	300	320	290	300	290	280	270	330	320	300	390
8	380	380	390	300	320	360	370	300	270	340	360	300	310	310	310	320	300	300	260	260	310	320	340	420Z
9	380	FK	(410)K	SFK	SFK	420OK	FK	300OK	290K	280	310	300	340F	320	280	280	290	290	280	280	280	300	320	310
10	360	360	360	350	280	370	340	300	270	280	330	290	300	320	310	320	320	300	270	320	330	(320)F	320	380
11	(390)F	350	330	330	380	360	360	340	300	290	300	300	290	300	320	310	290	300	280	300	330	290	320	320
12	320	360	340	330	270	270	330	300	280	260	280	290	320	340	300	270	280	290H	290	260	270	300	310	330
13	370F	410	390	380	400	370	410	340	310	290	(310)F	310	320	310	310	290	300	270	270	280	310	320F	300	370
14	400	380	360	330	340	360	340	250	250	260	280	320	310	.320	320	320	280	300F	290	280	(300)C	320	330	(390)S
15	370S	400	400F	400	300	320	420	330	280	300	310	320	310	340	350	340	320	310	290	300	310	300	310	370
16	390	380	310	290	300	280	420F	320	C	C	C	C	C	C	C	C	C	C	C	310	(330)S	350	330	340
17	360	400	350	290	240	390	430	300	280	300	300	320	360	340	360	330	320	310	320	300	360	300	360	380
18	370	390	360	300	280	300	330	290	270	290	310	320	300	360C	(360)	350	330	300	300	330S	330	320	300	340
19	350	320	320	340	320	420	400Z	310	270	300	310	310	330	340	360	330	330	320	320	300	300	300	290	300
20	300	320	360	360	300	320	360	300	280	280	300	310	370	350	360	330	360	330	300	330	340	310	310	370
21	420H	400H	430H	420	340	240	310	220	310	330	360	320	310	(400)F	370	380	320	340	330	340	360	330	370	330
22	390	390	370	320	260	330	320	360	310	300	320	320	340	360F	350	360	330	320	330	320	320	310	300	380
23	370	360	340	280	440OH	470OZ	440K	290	270	330	320	310	330	340	410	340	330	310	300	300	320	310	350	460
24	380	500	430	440	410	380	380	350	290	300	380	350	300	350	370	360H	340	340	310	340	330	340	330	360
25	370	410	350	270R	280	450	400	300	300	340	320	330	340	380	340S	320	340	360	320	340	350	360	350	330
26	350	370	330	360	360F	380	390	290	300	300	310	310	330	320	290	310	300	310	300	320	340	330	300	340
27	380	360	360	330Z	300	380	390	260	250	280	300	320	300	330	330	360	330	280	270	300	300	330	320	350
28	300	330	320	340	370	360	360	320	280	290	310	310	340	330	330	330	300	300	290	270	380H	360	370	(380)F
29																								
30																								
31																								
Median Value	370	370	360	330	320	360	380	310	280	300	310	310	320	330	330	320	320	300	290	300	330	320	320	370
Count	28	27	28	27	27	28	27	28	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28

Sweep 1.2 Mc to 8.5 Mc in 15 min Manual

Y 2

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | 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	280	300	300	290	260	340 B	330 B	320	280	[260] C	250	240	250	330	300	270	240	280	260	220	230	280	270	250
2	280	290	280	250	240	280	320	280	250	250	240	290	290	300	280	260	250	260	230	240	250	300	250	300
3	300	300	290	250	320	290	250	280	260	250	260	250	290	290	290	240	270 A	270 A	250	250	270	270	250	300 A
4	300	280	270	240	250	260	330	240	280	250	250	240	270	280	280	230	270	250 H	250	250 A	230 A	▸AF	300 F	340
5	300	300	340	230	270	330	320	310	220	240	250	300	300	300	240	250	280	240	240	240	230	240	280	330
6	320	290	280	300	270	340	320	270	260	260	230	250	270	280	240	250	240 A	240	230	220	230	220	250	340
7	310	300	250	260	230	250	280	290	230	200	270	280	280	290	230	260	280	240	230	230 A	250	280	270	340
8	310	320	240	250	270	280	350	240	250	220	240	290	280	280	280	280	260	250	230	210	250	240	240	350
9	320	330 K	290 K	240 K	210 F K	340 K	AF K	290 A K	250 K	240	240	260 A	300	290	220	260	230	250	230	210	220 A	220 A	250	240
10	260	320	310	290	260	300	280	260	240	240	290	230	250	230	290	270	230	250	220	210	290	240	250	290
11	320	310	290	300	300	320	330	320	260	270	240	250	280	290	290	300	280	270	220	210	280	250	240	260
12	250	300	290	280	230	220	290	250	240	240	230	270	260	300	280	240	220 A	230 H	250	230	230 F	250	240	270
13	300	320	300	320	320	280	350	290	240	240	230	290	280	290	280	240	250	240	230	220 A	260	250	240	280
14	300	300	270	260	270	290	270	230	220	230	230	290	290	300	280	280	250	250 H	240	220	[240] C	250	260	230
15	270	280	250	300	270	280	300	290	250	250	250	290	290	300	300	300	270	260	230	230	240	240	250	280
16	310	300	270	240	240	250	280	280	C	C	C	C	C	C	C	C	C	C	C	200	[240] C	270 A	300	300
17	290	300	300	270	230	230	310	280	240	250	250	300	300	240	300	270	240	260	240	220	220	240	220	270
18	300	280	280	250	220	250	300 A	260	240	220	290	290	290	260	[260] C	250	250	260	250	210	250	240	230	280
19	300	300	290	260	280	290	320	250	230	300	290	290	290	310	320	280	280	270	220	220	240	250	230	230
20	250	260	250	270	240	230	270	280	230	240	240	230	220	270	260	290	290	250	240	250	240	240	220	240
21	300 H	310 H	350 H	340	290	200	270	220	270	300	320	270	290	280 H	300	280	280	260	260	240 A	A	230	280	270
22	290	310 A	290	250	220	250	260	280	260	260	250	240	290	290	270	280	270	240	250 F	240	240	260	240	290
23	290	300 A	300	240	230 H K	A K	400 K	250	230	300	280	290	290	290	290	290 H	270	270	220	230	260	260	270	380
24	360	390	390	380	370	310	320	300	260	240	250	270	270	230	250	250	270	260	250	210 A	250	300	300	290
25	320	310	290	230	220	260	310	260	240	270	300	250	300	300	300	300	300	300	240	220	240	260	260	270
26	270	280	270	320 A	260	290	310	260	250	260	240	250	280	290	230 A	230	230	230	220	200	240	230	240	270
27	300	290	280	270	250	270	300	220	220	240	210	300	290	280	290	290	280	270	230	220	220	250	240	260
28	260	280	300	300	310	300	320	250	250	250	270	230	250	280	300	240	230	240	250	230 A	250 H	270	A	280
29																								
30																								
31																								
Median Value	300	300	290	260	260	280	310	280	250	250	250	270	290	290	280	270	270	250	240	220	240	250	250	280
Count	28	28	28	28	28	27	27	28	27	27	27	27	27	27	27	27	27	27	27	28	27	27	27	28

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Y 3

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | f_0F1 | 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								Q	Q	C	Q	Q	Q	L	A	Q	Q	Q	Q					
2								Q	Q	Q	Q	L	L	L	L	Q	Q	Q	Q					
3								Q	Q	Q	Q	Q	L	L	Q	L	Q	Q	Q					
4								Q	Q	L	Q	Q	Q	Q	L	Q	Q	Q	Q					
5								Q	Q	Q	Q	L	L	L	Q	Q	L	Q	Q					
6								Q	Q	Q	Q	Q	L	L	Q	Q	A	Q	Q					
7								Q	Q	Q	Q	Q	Q	L	Q	L	L	Q	Q					
8								Q	Q	Q	Q	L	L	(4 9)'	L	4 6	Q	Q	Q					
9								Q	Q	Q	Q	Q	L	L	Q	L	Q	Q	Q					
10								Q	Q	Q	L	Q	L	Q	L	L	Q	L	Q					
11								A	Q	Q	Q	Q	L	L	L	L	L	Q	Q					
12								Q	Q	Q	Q	L	L	L	L	Q	Q	Q	Q					
13								Q	Q	Q	Q	L	L	L	L	Q	Q	Q	Q					
14								Q	Q	Q	Q	L	L	L	Q	L	L	Q	Q					
15								Q	Q	Q	Q	Q	L	L	L	L	L	Q	Q					
16								Q	C	C	C	L	C	C	C	C	C	C	C					
17								Q	Q	Q	Q	L	L	Q	L	Q	Q	Q	Q					
18								Q	Q	A	L	L	L	L	C	Q	Q	L	Q					
19								Q	Q	L	L	L	L	L	L	L	L	A	Q					
20								Q	Q	Q	Q	Q	L	L	Q	L	L	Q	Q					
21								Q	Q	L	L	L	L	L	L	L	L	Q	Q					
22								Q	L	B	Q	Q	L	L	Q	L	L	Q	Q					
23								Q	Q	L	L	L	L	L	L	L	Q	L	Q					
24								Q	Q	Q	Q	L	L	Q	Q	Q	L	Q	Q					
25								Q	Q	L	L	Q	L	L	L	L	L	L	Q					
26								Q	Q	L	Q	Q	L	L	Q	Q	Q	Q	Q					
27								Q	Q	Q	Q	L	L	L	L	L	L	L	Q					
28								Q	Q	Q	L	Q	L	L	L	Q	Q	Q	Q					
29																								
30																								
31																								
Median Value																								
Count																								

Sweep 1.2 Mc to 1.85 Mc in 1.5 min Manual

Y 4

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | h'F1 | 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								Q	Q	C	Q	Q	Q	230	A	Q	Q	Q	Q					
2								Q	Q	Q	Q	230	240	260	230	Q	Q	Q	Q					
3								Q	Q	Q	Q	Q	250	240	Q	240	Q	Q	Q					
4								Q	Q	250	Q	Q	Q	Q	220	Q	Q	Q	Q					
5								Q	Q	Q	Q	260	260	250	Q	Q	230	Q	Q					
6								Q	Q	Q	Q	Q	260	240	Q	Q	A	Q	Q					
7								Q	A	Q	Q	Q	Q	240	Q	230	230	Q	Q					
8								Q	Q	Q	Q	220	A	230	220	A	Q	Q	Q					
9								Q	Q	Q	Q	Q	A	240 A	Q	210	Q	Q	Q					
10								Q	Q	Q	240	Q	230	Q	200	240	Q	250	Q					
11								A	Q	Q	Q	Q	260	220	220 A	270	230	Q	Q					
12								Q	Q	Q	Q	220	220	220	250	Q	Q	Q	Q					
13								Q	Q	Q	Q	250	220	240	230	Q	Q	Q	Q					
14								Q	Q	Q	Q	230	240	220 B	Q	260	250	Q	Q					
15								Q	Q	Q	Q	Q	200	190	210	270	260	Q	Q					
16								Q	C	C	C	C	C	C	C	C	C	C	C					
17								Q	Q	Q	Q	T	240	Q	240	Q	Q	Q	Q					
18								Q	Q	A	230	220	240	230	C	Q	Q	250	Q					
19								Q	Q	240	240	240	250	220	220	A	A	Q	Q					
20								Q	Q	Q	Q	Q	Q	220	Q	240	250	Q	Q					
21								Q	Q	260	260 F	260	260	250	A	260	260	Q	Q					
22								Q	240	B	Q	Q	240	250 A	Q	240	240	Q	Q					
23								Q	Q	250	230	220	230	240	250	A	Q	A	Q					
24								Q	Q	Q	Q	250	A	Q	Q	Q	240	Q	Q					
25								Q	Q	240	260 A	Q	220	250	250	250	240	250	Q					
26								Q	Q	240	Q	Q	250	220	Q	Q	Q	Q	Q					
27								Q	Q	Q	Q	200	230	220	210	210	220	210	Q					
28								Q	Q	Q	220	Q	210	240	220	Q	Q	Q	Q					
29																								
30																								
31																								
Median Value									–	240	240	230	240	240	220	240	240	–						
Count									1	6	7	12	20	23	14	12	11	4						

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Y 5

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | f_0E | 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								B	2.5 P	(2.9 C)	3.3 B	3.6	3.7	(3.5) A	A	A	3.0	2.6	1.6 B					
2								(1.3) J	3.0	A	3.5 A	B	A	A	3.5	(3.3) A	(3.1) A	2.5 H	1.9					
3								1.5 B	(2.6) H	3.2 H	3.7	3.8 A H	3.5	3.5	A	A	A	A	B					
4								B	2.4 J	3.0	3.5 F	3.7 F	3.6	3.6 A	3.5	3.5 A	2.9	2.5	A					
5								B	A	2.6 A	A	A	A	A	3.4 A	3.3	2.9	2.4 P	1.5					
6								B	2.5 H	3.0	3.3	3.4	3.6	3.6	3.2	3.2	(3.0) A	2.3 A	1.6 A					
7								1.3 J	2.4 H	2.9	3.7	3.9	4.0	3.6	3.3	3.2	3.0	2.6	1.8 P					
8								1.4 J	2.4	2.7	A	B	A	A	3.5	A	A	2.5 A	1.7 B					
9								A	2.5 A H	2.6	3.0 A	A	A	A	3.4	3.2 A	2.8	(2.5) A	B					
10								(1.4) B	2.3	3.0	(3.0) A	(3.4) A	B	3.7 B	3.5	3.3 A	3.0 A	(2.5) A	1.8					
11								B	2.5	(3.0) H	3.4 H	3.4 H	3.4 A	3.6 A	A	B	3.0 A	A	A					
12								(1.5) B	2.5 A	3.1 A	3.4 H	3.5 A	3.6 A	3.5	A	3.3	A	A	A					
13								A	2.5	3.2 A	3.5 A	A	A	A	3.6	3.4	2.9 A	A	A					
14								1.6	2.3 B	(3.1) B	A	B	(3.6) A	(3.6) B	B	A	3.1	2.6	2.0 J					
15								1.7 J	2.5 A	3.1	3.5 H	3.6	3.8	3.8	3.8	3.8	A	2.7 J	(1.7) J					
16								1.6 J	C	C	C	C	C	C	C	C	C	C	C					
17								1.7	2.6 J	3.1	3.5	T	3.9	A	A	A	A	2.8	2.1					
18								1.8 J	2.4	A	3.4	3.7	A	A	C	3.4 J	(3.2) B	A	B					
19								1.7	2.5 A	3.1	3.6	3.6	B	3.8	A	A	A	A	B					
20								1.7	2.3	3.2	3.5	A	3.7 A	(3.8) A	3.7	3.7 A	3.4	2.9	B					
21								B	2.4	3.0	3.3	3.5 A	3.7	A	A	A	A	2.7 A	2.1 A					
22								1.8	2.5	B	B	B	B	A	3.3 A	3.0 A	A	A	A					
23								1.8	2.5	3.0	3.4 A	(3.7) A	3.7	3.7	A	A	A	A	B					
24								B	2.5	3.0	3.3	3.5	3.6	3.6	A	3.3 A	A	2.7	A					
25								1.7	2.4 A	A	A	3.6	3.6	3.6	3.7 A	(3.5) A	(3.1) A	2.7	2.1					
26								1.9	2.6	3.1	A	A	A	A	A	B	B	A	1.7					
27								1.9	2.7	3.4	3.4 A	3.6 A	A	A	A	A	A	A	B					
28								2.2 J	3.0	3.1	3.3	3.6	3.7	3.6	3.6	3.4	3.1	A	B					
29																								
30																								
31																								
Median Value								1.7	2.5	3.0	3.4	3.6	3.6	3.6	3.5	3.3	3.0	2.6	1.8					
Count								19	26	23	21	17	16	16	14	16	15	16	13					

Sweep 1.2 Mc to 19.5 Mc in 15 min Manual

Y 6

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | h'E | 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								B	110	[120]C	120A	120	120	120A	A	A	120	130	B					
2								B	120	A	A	110	A	A	110	110	110	110H	110					
3								B	AH	110H	120	120H	120	120	A	A	A	A	B					
4								B	100	110	110	110	110	110	110	110	120	120	B					
5								B	A	120	A	A	A	(120)A	110A	120A	120A	120	B					
6								B	(110)BH	120	110	110	110	110	110	110	110	110	B					
7								B	(110)BH	100	110	120	120	120A	110	110	120	120	110					
8								B	B	120	A	110	A	A	110	A	A	A	B					
9								A	AH	120	A	A	A	A	110A	(110)A	110	120A	120					
10								B	A	130	130	120	120	120	120	110	110	140A	B					
11								B	B	110H	110H	110H	110	110	100A	120	A	A	A					
12								B	120	A	110H	A	A	120	A	110	A	110	A					
13								A	140B	120	120	110A	110A	A	110	110	110	A	A					
14								B	120	120	110	110	110	120	110	A	110	110	130					
15								120	110	110	110H	110	110	110	110	120	A	A	B					
16								B	C	C	C	C	C	C	C	C	C	C	C					
17								(110)B	130	110	120A	T	120	A	A	A	A	120	150					
18								100B	110	110	110A	110	110A	110A	(120)C	120	110	A	B					
19								110B	110	110	110	110A	B	110	A	A	A	A	B					
20								B	120	110	110	110	110	110	110	110	110	110	B					
21								B	120	110	110	110	110	A	A	A	A	110	A					
22								150	130	B	B	110	B	A	110	110	110	A	A					
23								B	120A	110	110	110	110	110	110	A	A	A	B					
24								B	120B	120	110	110	110	110	A	120	A	120A	A					
25								B	120	A	A	130	130	130	130	130	140	130	150B					
26								120B	100	120	A	A	A	A	A	120	120	A	100A					
27								130	110	B	A	A	A	A	A	A	A	A	B					
28								120	120	A	110	120	120	110	100	100	110	• A	B					
29																								
30																								
31																								
Median Value								120	120	110	110	110	110	110	110	110	110	120	120					
Count								8	21	21	19	21	18	18	18	18	16	15	17					

Sweep 12 Mc to 18.5 Mc in 15 min Manual

Y 7

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | 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	2.4	G	2.3	2.6	G	G	G	B	G	C	5.0	4.4	5.2	4.8	5.6	4.4	3.2	G	4.0 Y	3.2 Y	(3.0) B	G	G	G
2	G	G	G	G	G	G	G	G	4.0 Y	4.0	4.2	G	4.4	4.2	G	4.4	G	G	G	3.2	G	2.4	G	G
3	G	G	G	G	G	G	G	2.4	3.0	4.3 Y	G	4.8	4.9	4.6 F	(4.5) B	6.4	3.7	4.1	2.2	3.0	3.0	3.0	2.6	2.6
4	2.4	G	G	G	G	2.2	2.5	G	G	3.4	5.0	4.7	5.4	5.0	5.0	G	3.1	4.2	2.9	4.4	3.2	6.6 Y F	3.4 F	2.6 F
5	2.5	2.5	G	G	2.1	2.3 F	G	G	3.1	G	4.2	5.8	4.2	4.8	4.5	5.2	4.8	G	G	2.2	G	G	G	G
6	G	G	G	G	G	G	G	G	G	4.6	G	5.0	5.4	4.8	4.2	G	3.6	G	2.6	G	G	G	G	G
7	G	G	G	G	2.4	G	G	G	G	G	G	G	G	4.2	5.2	G	G	G	G	3.0	3.0	2.4	2.2	G
8	G	G	G	G	G	G	G	G	G	G	4.6 Y	G	4.0	4.2	4.4	4.2	3.6	4.3	4.2	G	G	G	G	G
9	G	2.4	1.7	G	G	(1.7) B	3.0	3.7	4.1	G	4.2	4.6	4.8	4.6	3.9	4.3	4.8	3.6	2.7 Y	3.0 F	2.6	2.7	G	G
10	G	3.0 F	2.5 F	2.2	2.8 F	3.1	2.0	3.0	4.0	G	G	G	G	G	G	3.6	G	3.4	3.1	2.6	G	G	G	G
11	G	G	G	G	G	G	G	(3.8) B	G	G	G	4.0	5.0	4.8 F	4.9	G	3.3	3.2	2.2	G	G	G	G	G
12	G	G	G	G	G	G	G	2.4	G	4.0 Y	G	3.8	G	G	4.8	4.2	4.8	G	3.8	2.8	2.7	G	G	G
13	G	G	G	G	G	G	2.0	2.9	G	G	G	4.2	4.4	4.6	4.2	4.1	3.9	3.7	3.8	3.2	3.4	2.0	G	G
14	G	G	G	G	G	2.2	G	G	G	G	G	G	4.2	G	B	4.2	G	3.8	G	2.1	C	2.1	G	G
15	G	3.1	G	G	G	G	G	G	G	G	G	G	4.2	8.0 Y	8.6 Y	6.2 Y	4.6	3.6	G	3.0	2.2	G	G	(2.8) B
16	2.0	G	G	G	G	G	G	G	C	C	C	C	C	C	C	C	C	C	C	2.2	C	4.6 F	(3.5) B F	G
17	2.7	G	G	G	G	G	G	G	G	4.1	4.1	T	4.8 Y	4.2	4.6	5.0	3.8	G	G	2.4	2.4	G	G	G
18	G	G	G	G	G	G	2.2	G	3.2 Y	G	3.6	5.0	4.7	4.4	C	G	G	3.0	G	G	2.8	2.3	G	G
19	G	G	G	G	G	G	G	G	3.3	4.0 F	5.1 F	5.4 Y	B	4.8	4.4	4.6	4.2	4.4	B	2.2	G	G	G	2.4
20	G	G	3.5	G	G	G	2.2	2.8	2.6	3.8	G	5.0 Y	5.2	G	G	G	G	G	2.9	7.5 Y	3.0	G	G	G
21	G	G	G	G	G	G	G	G	G	3.9	5.2 F	5.1 F	4.8 F	6.0	5.6	4.8	5.2	3.4	2.8	3.6	5.0	G	2.8	G
22	G	2.8	3.6	G	G	G	G	G	G	B	B	G	B	4.8	5.4	4.8	4.4	3.4	4.4	4.2	3.4	3.6	3.8	3.4
23	2.0	2.4	G	G	G	3.3	G	2.7	3.2	G	5.2	4.4	G	6.7	5.6	5.6 Y	4.7	4.0	3.0	G	G	G	G	G
24	G	G	G	G	G	G	G	G	G	3.4	5.0	5.8 Y	5.2	5.0	4.2	4.8	4.2	4.2	5.4	4.4	3.1	4.1	4.1	3.5
25	G	G	4.2	G	G	G	2.1	4.0	3.0	4.4	4.2	5.4	4.4	4.7	4.7	4.1	3.6	G	G	G	G	G	G	G
26	G	G	G	G	G	G	G	G	G	G	4.2	4.2	4.4	4.2	4.0	G	G	3.2	2.3	2.1	G	G	G	G
27	G	G	G	G	G	G	G	2.5 Y	G	G	4.0	G	4.6	4.0	3.8	4.2	4.3	4.5	B	G	G	G	G	G
28	G	G	G	G	G	G	G	G	G	3.3	3.8	4.3	G	5.2	4.2 Y	G	(4.4) B	4.2	3.8	4.0 Y	2.8	G	4.8	3.2
29																								
30																								
31																								
Median Value	G	G	G	G	G	G	G	G	G	G	4.0	4.4	4.4	4.6	4.5	4.2	3.7	3.4	2.7	2.7	2.5	G	G	G
Count	28	28	28	28	28	28	28	27	27	25	26	26	25	27	25	27	27	27	25	28	26	28	28	28

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Y 8

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | (M3000)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	2.8	2.7	2.7	2.6	2.6	2.5	2.7	2.6	3.0	(3.0)L	3.1	3.1	2.8	2.9	2.9	2.7	3.0	3.1	3.1	3.1	2.7	2.7	2.9	2.7
2	2.7V	2.7	2.8	3.2	3.5	2.5	2.6	3.0	3.2	3.3	3.2	2.9	2.9	3.0	2.8	2.9	3.0	3.1	3.1	3.1	2.8	2.8	3.0	2.7
3	2.8	2.9	2.8	2.8	2.6	2.6	3.2	3.0	3.2	3.0	3.1	3.1	3.1	2.9	2.9	3.0	2.9	3.1	3.1	3.0	2.9	3.1	3.1	2.7F
4	2.8	2.8	3.0	3.0	3.0	3.0	2.7	3.1	3.1	3.2	3.2	3.1	2.9	3.1	2.9	3.0	3.0	3.1H	3.1	3.1	2.9	(3.1)F	2.7	2.6
5	2.8	2.7	2.6Z	3.2	2.8	2.9	2.6	2.6	3.2	3.1	3.1	3.2	3.0	3.1	3.0	3.0	3.0	3.1	3.2	3.3	3.1	3.2	2.7	2.7
6	2.7	2.8	3.0	2.9	3.0	2.6	2.6	3.0	3.2	3.2	3.3	3.0	3.1	3.0	3.2	3.3	3.3	3.1	3.2Z	3.2	3.0	3.2S	2.6F	2.6S
7	2.6V	2.8S	2.9	3.0V	3.4	2.9	3.0	2.9	3.2	3.1	3.0F	2.9	3.0	3.2	3.0	3.1	3.2	3.2	3.2	3.4	2.9	2.9	3.1	2.7
8	2.8	2.8	3.3	3.1	3.1	2.8	2.8	3.1	3.2	2.8	2.9	3.2	3.0	3.0	3.0	3.0	3.0	3.1	3.2	3.3	2.9	3.0	2.8	2.6Z
9	2.6	FK	(2.5)KP	SFK	SFK	2.6FK	FK	3.0FK	3.4K	3.2	3.3	3.2	3.0F	3.1	3.2	3.3	3.2	3.2	3.3	3.1	3.2	3.0	2.9	3.0
10	2.8	2.8	2.8	2.8	3.2	2.8	2.9	3.2	3.4	3.2	3.1	3.3	3.2	2.9	3.1	3.1	3.2	3.3	3.4	2.9	3.0	(3.1)P	3.0	2.6
11	(2.8)P	2.8	2.9	3.0	2.6	2.8	2.7	2.9	3.2	3.2	3.1	3.3	3.2	3.1	3.0	3.0	3.2	3.1	3.3	3.2	3.0	3.1	2.9	3.0
12	2.9	2.8	3.0	3.0	3.4	3.2	3.0	3.1	3.3	3.3	3.2	3.1	3.0	3.0	3.2	3.2	3.3	3.1H	3.2	3.3	3.2	3.1	3.0	3.0
13	2.8F	2.6	2.7	2.7	2.6	2.7	2.7	2.9	2.9	3.3	(3.0)P	3.1	3.0	3.1	3.0	3.2	3.1	3.3	3.4	3.2	3.2	2.9P	3.1	2.7
14	2.6	2.6	2.8	3.0	2.9	2.8	2.8	3.5	3.4	3.3	3.2	3.1	3.1	3.0	3.0	3.0	3.2	3.2H	3.0	3.0	(3.1)C	3.2	2.9	(2.6)S
15	2.7S	2.5	2.5P	2.5	3.1	3.1	2.5	3.0	3.2	3.3	3.1	3.0	3.0	2.9	2.8	2.8	3.0	3.1	3.1	3.0	3.1	3.1	3.1	2.7
16	2.8	2.8	3.1	3.1	3.1	3.2	2.6P	3.0	C	C	C	C	C	C	C	C	C	C	C	3.0	(2.9)C	2.8	2.9	2.8
17	2.8	2.6	2.9	3.2	3.5	2.5	2.5	3.0	3.3	3.1	3.1	3.0	2.8	2.8	2.9	3.0	3.0	3.0	3.0	3.1	2.7	3.0	2.8	2.7
18	2.7	2.7	2.8	3.1	3.3	3.0	3.0	3.1	3.3	3.1	2.9	3.1	3.2	2.9	(2.8)C	2.8	2.9	3.1	3.1	2.9S	2.8	3.0	3.1	2.8
19	2.9	3.0	3.0	2.9	3.0	2.5	2.7Z	3.0	3.3	3.1	2.9	3.0	2.9	2.9	2.8	3.0	2.9	3.0	3.1	3.0	3.0	3.1	3.2	3.1
20	3.1	2.9	2.7	2.8	3.1	2.9	2.8	3.1	3.3	3.3	3.2	3.0	2.7	2.8	2.8	2.8	2.8	2.9	3.1	2.9	2.8	3.0	3.1	2.7
21	2.7H	2.6H	2.5H	2.4	2.8	3.5	2.9	3.8	3.2	2.9	2.8	2.8	3.0	(2.7)H	2.8	2.8	3.1	3.0	2.9	2.8	2.8	3.0	2.7	2.9
22	2.6	2.7	2.7	3.0	3.4	3.0	3.0	2.8	3.0	3.1	3.1	3.0	2.9	2.8P	2.8	2.8	3.0	3.0	2.9	3.0	2.9	3.2	3.1	2.7
23	2.9	2.7	2.9	3.0	2.5H	2.5KZ	2.5K	3.1	3.3	2.9	2.9	3.1	2.9	2.8	2.7	2.9	3.0	3.0	3.2	3.0	2.9	3.1	2.8	2.5
24	2.7	2.4	2.6	2.6	2.6	2.9	2.7	2.8	3.2	3.2	2.7	2.8	3.1	2.8	2.8	2.8H	2.8	2.8	3.0	2.8	3.2	2.8	2.9	2.7
25	2.7	2.6	2.8	3.2D	3.2	2.4	2.7	3.1	3.1	2.9	3.1	2.9	2.9	2.7	2.9S	3.0	2.9	2.7	3.0	2.8	2.8	2.7	2.9	2.9
26	2.8	2.7	2.8	2.8	2.8F	2.7	2.7	3.1	3.1	3.2	3.2	3.1	3.1	3.0	3.1	3.0	3.2	3.0	3.0	3.0	2.9	2.9	3.1	2.8
27	2.8	2.9	2.9	2.8Z	3.0	2.7	2.6	3.4	3.5	3.2	3.0	3.1	3.2	3.0	3.1	2.9	3.0	3.2	3.3	3.1	3.1	2.8	3.0	2.8
28	3.1	3.0	3.0	3.0	2.7	2.8	2.8	3.0	3.3	3.2	3.2	3.0	2.9	3.0	2.9	3.0	3.0	3.1	3.1	3.2	2.8H	2.8	2.8	(2.7)P
29																								
30																								
31																								
Median Value	2.8	2.7	2.8	3.0	3.0	2.8	2.7	3.0	3.2	3.2	3.1	3.1	3.0	3.0	2.9	3.0	3.0	3.1	3.1	3.0	2.9	3.0	2.9	2.7
Count	28	27	28	27	27	28	27	28	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Y 9

Radio Regulatory Agency (Denpacho)

Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | $f_{min}F$ | 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	1.5	1.5	1.5	1.6	1.7	1.6	1.7	1.9	2.6	(3.0)C	3.5	3.7	3.7	3.5	A	A	3.1	2.8	1.6	1.5	1.4	1.4	1.4	1.4
2	1.4	1.4	1.4	E	E	E	1.4	1.4	3.1	3.7	3.5	3.7	3.6	4.2A	4.0	3.6	3.1	2.5	2.4	A	1.5	A	1.6	1.4
3	E	E	1.3	E	E	E	1.4	1.5	2.5	3.2	3.7	3.8	3.9	3.6	4.1	4.0	A	A	2.0	1.6	1.5	1.6	1.6	A
4	1.6	E	E	E	E	E	1.5	1.5	2.5	3.0	3.6	4.0	3.6	A	3.9	3.5	3.1	2.6	2.1	A	A	AF	1.5	A
5	1.5	1.4	1.3	E	1.7A	1.5	1.4	1.6	2.6A	2.8	3.2	3.8	3.6	4.2A	3.5	3.5	3.0	2.4	1.7	1.5	1.5	1.3	1.5	1.5
6	1.3	E	E	1.4	E	1.3	E	1.4	2.7	3.0	3.3	3.6	4.0	4.0	4.2	3.2	A	2.0	1.6	1.4	1.3	E	1.3	1.4
7	1.3	E	E	1.3	E	1.3	1.4	1.4	2.8	2.9	3.7	3.9	4.0	3.6	3.4	3.2	3.0	2.9	2.0	A	1.4	1.6	1.5	1.4
8	1.4	1.3	E	1.5	1.4	1.5	1.5	1.6	2.4	3.0	3.4	3.6	A	3.6	3.5	A	A	2.5	1.7	1.3	1.4	1.4	1.4	1.6
9	1.3	1.8	1.3	E	1.3	1.3	AF	(2.3)A	2.8	3.0	3.2	3.4A	4.2A	3.6A	3.5	3.2	2.9	2.7	2.0	1.8	A	1.9A	1.5	1.3
10	E	1.8	1.6	E	1.3	A	1.6	1.4	2.3	3.0	3.0	3.4	3.5	3.7	3.5	3.3	3.0	2.8	1.8	1.5	1.5	1.5	1.4	1.5
11	1.3	E	E	1.4	E	E	1.4	A	2.5	3.0	3.4	3.8	4.0	3.7	3.8A	3.4	3.0	2.8	2.0	1.4	1.6	1.6	1.5	1.5
12	1.5	1.4	1.4	E	E	E	1.4	1.5	2.5	3.1	3.4	3.5	3.6	3.5	3.6	3.4	3.2A	3.6B	A	1.8	1.5	1.5	1.4	1.4
13	E	E	E	E	1.4	E	E	1.4	2.5	3.2	3.5	3.6	3.6	3.8	3.6	3.4	3.1	2.8	A	A	1.7	1.4	1.5	1.4
14	1.4	1.3	1.3	E	E	1.4	1.4	1.6	2.3	3.2	A	3.8	4.0	4.2	4.8	3.8	3.1	2.6	2.7	1.8	(1.6)C	1.5	1.3	1.5
15	1.5	1.4	E	E	1.4	E	E	2.3	2.5	3.1	3.5	4.3	3.8	3.9	4.0	4.0	5.0	A	2.0	1.8	1.5	1.5	1.6	1.5
16	1.4	1.4	1.3	1.4	1.4	1.6	1.3	1.8	C	C	C	C	C	C	C	C	C	C	C	1.5	C	A	1.9	1.8
17	1.7	1.6	1.6	E	E	E	1.4	1.7	2.6	3.3	3.6	6.5S	3.1	4.2A	4.2A	A	3.2	2.8	2.1	1.6	1.4	1.4	1.4	1.4
18	1.3	E	E	E	E	E	1.6	1.8	2.4	A	3.5	3.7	4.1	4.2	(4.0)C	3.8	3.5	A	1.6	1.3	1.4	1.6	1.6	E
19	E	1.4	1.3	1.3	E	E	E	1.6	2.8	3.2	3.6	3.8	4.4	4.0	4.1	A	A	2.8	1.6	1.8	1.6	1.6	1.6	1.6
20	1.6	1.6	1.6	E	1.3	E	1.4	1.7	2.6	3.2	3.8	4.0A	4.0	4.0	4.0	3.7	3.4	3.0	2.8A	2.4A	1.4	1.4	1.5	1.4
21	E	E	1.3	1.3	1.5	1.5	1.3	1.7	2.9	3.4	3.6	4.0	4.2	A	A	A	A	2.8	2.1	A	A	1.4	1.6	1.4
22	1.3	A	A	E	E	E	1.5	1.8	2.5	6.4	4.4	3.8	4.0	A	3.9	A	3.4	2.8	A	2.2A	A	2.2A	2.0A	1.7
23	1.3	1.4A	1.4	1.4	E	A	1.4	1.8	2.8	3.1	3.5	3.8	4.0	4.1	4.2	A	A	A	2.8A	2.0	1.6	1.6	1.6	E
24	1.4	E	1.3	E	E	1.3	1.3	1.4	2.5	3.1	3.4	3.8	A	4.2	4.0	4.0	3.2	2.7	2.0	1.6A	A	A	A	1.9
25	1.7	1.3	1.8A	E	E	E	1.4	1.7	2.5	3.4	A	3.6	3.6	3.7	3.7	3.5	3.2	2.8	2.1	1.6	1.5	1.4	1.4	1.3
26	1.3	E	E	A	1.3	1.3	1.8	1.9	2.6	3.1	3.4	3.4	3.6	3.8	A	A	3.4	2.8	1.7	1.5	1.5	1.5	1.5	1.5
27	E	E	E	E	E	E	1.5	1.9	2.7	3.5	3.4	3.6	4.0	3.8A	4.0	4.2A	A	3.8A	2.0	1.8	1.6	1.8	1.5	1.5
28	1.5	1.4	E	E	1.4	E	1.4	2.4	3.0	3.2	3.4	3.8	4.1	4.4	3.7	3.6	3.3	3.0	2.6	A	1.7	1.5	A	1.5
29																								
30																								
31																								
Median Value	1.4	1.3	1.3	E	E	E	1.4	1.7	2.6	3.1	3.5	3.8	4.0	3.8	4.0	3.5	3.2	2.8	2.0	1.6	1.5	1.5	1.5	1.4
Count	28	27	27	27	28	26	27	27	27	26	25	27	25	24	24	19	20	23	24	22	22	24	26	26

Sweep 1.2 Mc to 12.5 Mc in 15 min Manual

Y10

Radio Regulatory Agency (Denpacho)
Aoyama-Kita-machi, Minato-Ku, Tokyo, Japan

IONOSPHERIC DATA

Feb. 1950 | fmin E | 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	1.6	G	1.4	2.0	G	G	G	B	1.5	[1.6]C	1.7	2.1	2.2	2.2	2.2	2.2	1.8	1.8	(1.6)B	1.9	2.0F	G	G	G
2	G	G	G	G	G	G	G	B	1.9	3.0	3.2	2.0	2.8	2.0	2.0	2.2	1.9	1.4	1.6	1.6	G	1.4	G	G
3	G	G	G	G	G	G	G	1.6	1.4	1.6	1.8	1.8	2.1	2.1	2.0	2.2	1.8	1.7	1.8	1.6	1.5	1.5	E	1.4
4	1.4	G	G	G	G	1.8	1.6	B	1.8	1.8	2.0	1.7	1.9	2.0	1.8	1.9	1.6	1.5	1.5	1.6	1.5	1.4	1.6	1.5
5	1.4	1.4	G	G	E	1.7	G	B	1.8	2.0	2.0	2.2	2.2	2.2	2.2	1.9	1.7	1.3	1.4	1.5	G	G	G	G
6	G	G	G	G	G	G	G	B	1.4	1.7	1.7	1.8	2.0	2.0	2.0	2.0	2.0	1.8	1.6	G	G	G	G	G
7	G	G	G	G	1.8	G	G	B	1.4	2.3	3.1	2.6	2.5	1.9	1.9	1.8	1.7	1.8	1.8	1.6	1.4	1.6	2.0	G
8	G	G	G	G	G	G	G	B	B	1.8	1.9	2.0	1.9	2.0	2.0	1.8	1.6	1.6	1.6	G	G	G	G	G
9	G	1.3	E	G	G	(1.3)B	1.4	1.3	1.5	1.8	1.8	2.4	2.2	2.2	1.8	1.7	1.6	1.6	1.3	1.4	1.6	1.3	G	G
10	G	1.6	1.3	1.6	E	E	1.6	1.4	1.8	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.8	1.8	1.5	1.8	G	G	G	G
11	G	G	G	G	G	G	G	(1.4)B	1.9	2.0	1.9	1.7	1.8	2.0	2.0	2.1	2.2	2.0	1.8	G	G	G	G	G
12	G	G	G	G	G	G	G	2.2	1.6	1.6	1.6	1.8	1.9	1.9	2.0	1.5	1.4	1.4	1.4	1.6	1.9	G	G	G
13	G	G	G	G	G	G	1.5	E	1.7	1.8	1.9	2.2	2.2	2.2	1.9	1.8	1.8	1.6	1.4	E	1.5	1.6	G	G
14	G	G	G	G	G	E	G	1.4	1.5	2.0	2.6	2.0	2.4	2.0	3.5	2.0	1.8	1.6	1.8	1.4	[1.4]C	1.5	G	G
15	G	E	G	G	G	G	G	1.7	1.5	1.6	2.0	2.2	2.0	2.1	2.1	2.4	2.1	2.2	B	1.6	1.8	G	G	1.6
16	1.4	G	G	G	G	G	G	B	C	C	C	C	C	C	C	C	C	C	C	1.6	[1.9]C	2.2	(2.9)B	G
17	1.6	G	G	G	G	G	G	1.4	1.4	1.5	1.9	T	2.8	3.4	2.4	2.2	2.2	1.8	1.4	1.4	1.8	G	G	G
18	G	G	G	G	G	G	1.8	1.8	1.6	2.0	1.8	2.1	2.1	2.4	[2.4]C	2.4	2.0	1.8	B	1.5	G	1.7	G	G
19	G	G	G	G	G	G	G	1.3B	1.4	1.7	2.0	2.3	B	2.2	2.3	2.4	2.2	2.0	B	1.6	G	G	G	2.0
20	G	G	G	G	G	G	2.0	1.4	1.6	2.0	2.2	2.0	2.0	2.2	1.9	2.3	1.8	1.6	2.3	2.1	1.6	G	G	G
21	G	G	G	G	G	G	G	B	1.5	1.8	1.8	1.9	2.2	2.2	2.2	2.2	2.0	1.9	1.4	1.3	1.4	G	2.3	G
22	G	1.4	E	G	G	G	G	1.4	1.4	B	B	3.0	B	3.6	2.3	2.3	2.0	1.8	1.7	1.5	1.5	1.6	1.5	1.5
23	1.8	1.4	G	G	G	E	G	1.4B	1.6	1.8	2.1	2.0	2.4	2.1	2.3	2.4	2.3	2.3	2.2	G	G	G	G	G
24	G	G	G	G	G	G	G	B	2.0	1.6	1.9	1.9	2.2	2.2	2.8	2.1	1.8	1.8	1.4	1.3	1.7	1.7	1.6	1.5
25	G	G	1.5	G	G	G	1.9	1.4	1.5	2.0	2.2	2.1	2.1	2.0	2.2	1.8	1.8	1.7	1.5	G	G	G	G	G
26	G	G	G	E	G	G	G	1.4	1.5	2.0	2.2	2.2	2.4	2.0	2.0	2.0	2.0	1.8	1.6	1.9	G	G	G	G
27	G	G	G	G	G	G	G	1.6	1.6	2.8	2.0	1.9	2.2	2.2	2.2	2.4	2.3	2.1	B	G	G	G	G	G
28	G	G	G	G	G	G	G	1.8	1.8	1.8	1.8	1.9	2.0	2.1	2.0	2.0	2.2	1.8	2.2	1.8	1.5	G	1.4	1.4
29																								
30																								
31																								
Median Value	G	G	G	G	G	G	G	1.4	1.6	1.8	2.0	2.0	2.2	2.1	2.0	2.1	1.8	1.8	1.6	1.5	1.4	G	G	G
Count	28	28	28	28	28	28	28	18	26	26	26	26	25	27	27	27	27	27	23	28	28	28	28	28

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Y 11

IONOSPHERIC DATE IN JAPAN FOR FEBRUARY 1950

電波觀測報告　第2卷　第2號

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