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IONOSPHERIC DATA IN JAPAN

FOR MARCH 1950

Vol. 2 No. 3

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PREPARED BY RADIO REGULATORY AGENCY

(DENPACHO)

TOKYO, JAPAN

RADIO REGULATORY AGENCY

(DENPACHO)

TOKYO, JAPAN

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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.

March 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

Mar 1950 | foF2 | 135° E Mean Time | **Wakkanai** | Lat. 45° 23.6' N | Long. 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	5.3	5.3	5.2	5.2	5.2	5.0	4.9	8.0	8.7	[10.0]C	11.3MP	12.4P	12.1	11.2	10.8	10.0	10.3	8.4S	6.8	6.5	5.9	5.6	4.9	5.3
2	5.2	5.5	5.0	4.9	4.5	4.6	5.6	8.5	9.6	10.6	10.9	12.2P	11.1	11.4	10.7	10.5	9.4	9.1P	7.1	5.6	4.8M	4.7	4.9	4.7
3	5.0	5.0	4.4	4.5	4.7	4.8	5.8	(8.3)PS	9.4JS	[10.2]S	10.9	12.3	12.5	11.3	10.6	10.3	9.4J	8.5	(6.9)PS	6.9PS	6.0S	5.5S	5.1S	5.2S
4	5.0	4.8	4.8	4.8	4.6	4.7	5.9	8.5	9.0	9.0P	12.3	11.9M	12.2	11.0S	10.7S	S	B	8.9	7.7	7.1	6.5	5.1	4.8	5.0F
5	5.0	4.8	4.6	4.8	4.2	4.3	5.5	8.7S	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	5.1
6	5.1	5.0S	5.0	4.9	4.7	4.5	5.4	8.6S	9.6P	11.4	11.8	12.8	12.3	11.9M	11.5	11.3	10.6	S	S	6.5M	6.4J	5.6	6.2	6.3
7	6.3M	5.3	4.5M	4.6	4.2M	4.2	5.9	S	B	11.2	12.4	12.3	12.0	12.2	11.6	10.8	11.1	8.4	9.3	8.4	(7.6)PS	7.3	7.3	5.9
8	6.4	5.0	4.0	4.0	4.0	4.0	6.2	9.7	11.1	13.5	11.5	10.9	12.1	C	C	C	10.5	8.4P	7.5	7.2	7.6	5.4	5.3	5.0
9	4.8	4.6	4.9	4.7	(4.7)PS	3.6	5.3	7.9	9.3P	(11.1)P	(11.7)P	12.2M	12.2	(12.7)P	(11.4)P	11.4P	(11.2)P	10.1	9.3BM	(7.8)P	7.0	6.3	6.0J	6.1
10	6.6M	5.7	5.7	5.5	4.9	4.8	6.3	8.9	10.2	12.1	11.2	11.8	12.1	11.9	12.0	11.5	11.2	S	(7.7)TP	[7.6]S	(7.4)PS	6.7	5.9	5.7
11	5.6	5.7	4.8M	5.4	5.3	4.9M	6.5	8.7	[10.0]SM	11.4	11.5M	12.2	12.2	11.9	11.4P	10.5	10.5	9.2	7.8	7.3	6.6	6.5	(5.8)P	5.4Z
12	5.2	5.4	5.1	5.2	5.2	5.3	7.6	8.8	9.6	(11.8)P	11.5P	11.6	12.3	11.2	12.1	12.0	10.7	9.3	7.8	7.4	6.6	6.4P	6.0	5.8
13	5.7	5.5	5.0	5.2	5.0	5.4F	7.1	10.2	11.0	11.6	(10.5)P	12.7S	12.4	(12.5)P	11.7P	11.7	10.2	(9.7)P	8.6	7.1	6.3	6.0	5.7	5.7
14	5.7	5.8	5.6M	5.8	5.6M	6.0PM	7.6	9.4	(11.1)P	11.2	12.2	12.4	12.4	12.5	11.7	11.3	10.0	S	S	(7.3)MS	7.3M	7.2P	(6.8)P	(6.8)P
15	6.8	6.6	6.6P	6.5	6.7V	6.6	(7.4)P	B	11.4	12.0	11.5	12.5P	12.1	12.0	12.1	12.7	12.1	10.3Z	7.4	7.0	7.3	7.0P	7.5	7.3
16	6.6	5.6	5.9	6.2	5.7	5.6	8.3	10.8P	10.5P	13.2	12.3	12.1M	(12.9)PS	12.3	11.5	11.0	11.2	10.5	9.4	7.5	6.9	7.1	6.3	6.3
17	6.5	6.4	6.0	5.7M	5.3	5.5	7.3	9.0	10.6	11.6	12.6	12.4	12.3	12.2	11.8	(11.9)P	11.4	10.8P	(9.7)PB	(6.9)P	7.2	(6.6)P	6.5P	5.9
18	6.4M	6.2	5.9	5.6	5.3	5.3	7.1	8.6	10.7	(11.8)P	12.9	12.5P	11.4J	11.5	12.4	12.1	11.7P	10.8	[9.0]S	(7.3)P	[7.0]S	6.7	6.4	6.2P
19	6.0	5.8M	5.4	5.5P	5.3	5.2F	6.8	B	C	C	C	C	C	C	11.7	11.4	10.9	9.5S	(7.2)TS	(6.0)TS	6.0J	(5.8)KJP	6.9KF	6.4KF
20	(14.5)KPEV	3.5KFZ	3.8KF	BK	3.2KFM	3.8K	6.2	6.8	8.9	(11.1)P	C	C	C	C	B	S	8.9S	8.7	7.3	C	C	C	C	C
21	C	C	C	4.8	4.3	4.8M	6.4S	7.4B	9.1B	10.2	9.2	(10.2)J	(11.0)P	11.4P	11.5	10.8	9.9	10.6M	[8.6]S	6.5	5.6	5.5	4.9	4.8
22	C	C	C	C	C	C	6.7	7.9	8.7	7.6	8.4	8.3	9.4S	8.5S	8.6	7.6	(8.4)S	7.5	C	C	C	C	C	C
23	5.7	5.8	5.8	5.4	4.6	4.8	7.3	7.5	8.8	[9.8]B	10.8	9.5	10.0	10.4	(9.7)PS	(9.5)PS	9.0	8.8	8.2	6.8	6.6	6.6	6.4	6.1
24	5.9	7.0	7.0	6.5	5.5	5.7	6.9	8.9	9.0	10.5	11.5P	11.3P	11.1	10.7	11.1	10.8	10.6	(10.2)P	8.3	7.8	6.8	6.9	7.0	7.1
25	8.2	7.3	6.7	6.6	6.5	6.5	9.3	9.5	10.3	10.8	10.9	11.7	11.6	11.7	11.2	11.0	10.6	11.1	10.0B	7.4S	7.0	(7.1)PH	6.6M	6.3
26	6.5M	6.5	6.1	6.0	5.5	5.6	(7.8)P	8.7M	10.1	11.2	11.2	10.8	10.9	12.1	11.7	11.1	10.6	S	S	(7.9)P	(6.6)P	(6.7)P	6.4	6.5P
27	6.3	6.6	6.0P	5.9	5.6	5.9	7.6	9.1	9.4	10.6M	11.3	10.8	11.2	12.0	12.2	11.2	11.0	10.4	(9.0)B	(8.9)B	(8.0)P	7.6	7.5	7.0
28	6.7	6.1	5.4M	5.8P	5.7M	6.2M	8.2	9.7J	10.9B	11.1	(12.3)P	12.6	12.3	12.7	12.7	C	C	C	C	C	C	C	C	5.4
29	5.5	5.6	5.7	5.5	5.2	5.4	7.0	8.5	10.4	10.9	11.7P	12.3	C	C	12.2	11.7	10.8	11.0	10.1	9.4J	8.6	7.4	6.9	6.8
30	6.6	6.4	6.3	6.2M	6.1	6.5M	8.2JS	9.1J	10.4	11.3	11.5	11.9	11.5	11.3	11.5	11.9	10.3	10.1	(10.0)JP	S	SF	7.4	6.4	6.1P
31	5.7	6.0M	5.5	6.4	5.9	5.8	6.9	(9.4)JS	10.1	11.1	12.1	11.6	11.7	11.8P	11.4	10.5	10.0P	9.2P	8.4P	7.5	7.5	7.1	6.6P	(6.6)PZ
Median Value	5.7	5.7	5.4	5.5	5.2	5.2	6.9	8.8	10.0	11.1	11.5	12.2	12.1	11.8	11.5	11.2	10.6	9.5	8.3	7.3	6.8	6.6	6.4	6.1
Count	29	29	29	29	30	30	31	28	28	29	28	28	27	26	28	26	28	25	25	26	26	27	27	29

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

Mar 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	390	380	410	390	360	370	360	340	300	(320)^{C}	350$^{Z}_{H}$	350$^{F}_{H}$	340	310	320	290	310	310^{S}	320	360	370	370	390	440
2	400	350	340	340	350	380	330	300	300	290	320	340^{P}	310	300	310	340	310	300^{P}	310	300	(440)$^{B}_{H}$	(370)^{B}	(460)$^{B}_{H}$	340
3	340	370	400	410	420	350	340	(310)$^{P}_{S}$	(330)$^{J}_{S}$	(320)^{S}	310	320	310	300^{F}	320	310^{S}	(260)^{J}	290	(320)$^{P}_{S}$	330$^{P}_{S}$	340^{S}	360^{S}	390^{S}	400^{S}
4	410	370	350	400	370	410	340	290	260	260$^{P}_{S}$	300	400^{H}	320	300^{S}	300^{S}	S	B	300	340	340	380	350	360	390
5	460	420	410	350	370	380	340	320^{S}	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	320
6	360	350^{S}	350	370	390	360	310	310^{S}	280^{P}	290	280	310	310	310^{H}	290	310	320	S	S	310^{H}	(420)^{J}	400	410	330
7	320^{H}	310	370^{H}	410^{H}	410^{H}	380	320	S	B	310	300	310	330	360	300	330	(310)^{B}	320	380	320	(380)$^{P}_{S}$	370	380	370
8	440	360	470	400	410	440	360	300	300	310	320	360	350	C	C	C	330	320^{P}	320	320	390	340	390	410
9	390	410	420	370	(350)$^{P}_{S}$	380	310	300	310^{P}	(300)^{P}	(320)^{P}	320^{H}	330	(360)^{P}	(320)^{P}	320^{P}	(330)^{P}	310	310$^{B}_{H}$	(400)^{P}	330	400	(430)^{J}	410
10	400^{H}	420	390	380	380	420	340	280	300	340	320	330	330	370	340	340	320	S	(310)^{J}	[320]^{S}	(340)$^{P}_{S}$	320	360	420
11	370	350	400^{H}	390	360	410^{H}	300	300	(300)$^{S}_{H}$	300	350$^{J}_{H}$	350	310	350	330$^{P}_{F}$	320	(330)^{F}	310	300	380	440	400	(400)^{P}	(430)$^{B}_{K}$
12	(380)^{B}	380	430	400	410	380	350	300	310	(320)^{P}	310^{P}	360	350	370	400	350	350	320	300	340	400	400^{P}	370	380
13	380	400	430	510	450	460^{F}	390	350	320	310	(330)^{P}	360^{S}	350	(380)^{P}	350^{P}	330	340	(330)$^{P}_{F}$	320	360	370	370	380	410
14	420	450	470^{H}	450	420^{H}	500$^{P}_{H}$	300	300	(320)^{P}	320	350	350	370	370	340	380	340	S	S	(340)$^{P}_{H}$	360^{H}	380^{P}	(440)^{P}	(410)^{P}
15	410	400	430^{P}	420	380^{V}	380	(300)^{P}	B	300	330	340	320^{P}	350	360	330	310	320	290^{Z}	320	360	420	370^{P}	380	330
16	330	350	390	370	340	410	340	330^{P}	300^{P}	300	320	310^{H}	(320)$^{P}_{S}$	300	300	320	320	310	300	320	340	420	380	380
17	400	360	390	420^{H}	420	390	310	300	310	300	310	320	330	330	320	(310)^{P}	320	(300)$^{P}_{S}$	(290)$^{P}_{B}$	(320)^{P}	320	(400)^{P}	400^{P}	400
18	440^{H}	370	400	360	360	350	300	290	320	(340)^{P}	340	320^{P}	(360)^{J}	360	350	370	350^{P}	330	[320]^{S}	(310)^{P}	[320]^{S}	330	360	390^{P}
19	340	390^{H}	340	380^{P}	400	400^{F}	300	B	C	C	C	C	C	C	310	340	350	320^{S}	(310)$^{J}_{S}$	(330)$^{J}_{S}$	(420)^{J}	(370)$^{J}_{F}$	480$^{K}_{F}$	390$^{K}_{F}$
20	(520)$^{K}_{V}$	510$^{K}_{Z}$	(470)$^{K}_{F}$	B^{K}	520$^{K}_{H}$	440^{K}	370	360	370	(340)^{P}	C	C	C	C	B	S	310^{S}	320	320	C	C	C	C	C
21	C	C	C	400	430	400^{H}	310^{S}	350^{B}	(330)^{J}	340	350	(330)^{J}	(340)^{P}	340^{P}	370	330	380	350$^{F}_{H}$	[320]^{S}	300	340	390	530^{F}	490
22	C	C	C	C	C	C	310	350	340	360	380	370	350^{S}	340^{S}	330	330	(370)^{J}	340	C	C	C	C	C	C
23	460	460	440	420	410	460	360	320	320	[320]^{B}	330	340	380	370	(340)$^{P}_{S}$	(370)$^{P}_{S}$	340	300	320	360	400	(420)^{B}	430	430
24	(420)^{B}	420	430	420	410	420	340	320	(320)^{B}	340	340^{P}	370^{P}	330	350	380	350	350	(350)^{P}	340	380	400	390	400	410
25	420	450	390	440	420	410	350	330	320	320	340	350	340	340	320	310	310	330	310^{B}	300^{S}	450	(360)$^{P}_{H}$	370^{H}	380
26	420^{H}	370	360	340	370	340	(320)^{P}	(280)$^{F}_{H}$	310	300	300	300	330	320	320	310	300	S	S	(290)^{P}	(310)^{P}	(350)^{P}	400	390^{P}
27	370	360	350^{P}	370	350	360	300	300	290	310^{H}	290	340	350	320	300	320	330	310	(310)^{B}	(330)$^{J}_{B}$	(360)^{P}	410	370	380
28	420	360	410^{H}	450^{P}	380^{H}	420^{H}	310	(290)^{J}	320^{B}	320	(340)^{P}	330	330	340	330	C	C	C	C	C	C	C	C	390
29	390	370	330	330	320	330	260	310	320	330	300^{P}	330	C	C	330	360	340	280	310	(310)^{J}	300	330	(370)^{F}	390
30	390	370	410	390^{H}	370	420^{H}	(300)$^{J}_{S}$	(300)^{J}	320	330	330	320	320	320	310	310	290	300	(290)$^{J}_{S}$	S	SF	310	350	400^{P}
31	420	460^{H}	420	400	360	360	310	(390)$^{J}_{S}$	340	310	(320)^{B}	310	340	380^{P}	330	300	320^{P}	300^{P}	330^{P}	330	290	380	350	(470)$^{Z}_{P}$
Median Value	400	370	400	400	380	400	320	300	320	320	320	330	330	340	320	320	320	310	320	330	370	370	390	390
Count	29	29	29	29	30	30	31	28	28	29	28	28	27	26	28	26	28	25	25	26	26	27	27	29

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 2

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar 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	300	290	300	280	260	250	300	320	250	(260)^{C}	280^{M}	280^{M}	280	220	240	260	240	230	270	270	280	300	300^{A}	300
2	300^{A}	290	270	270	280	300	290	260	220	220	240	240	210	260	230	250	A	300	280	210	300^{M}	300	310^{M}	300
3	290	290	290	320	300	270	240	240	250	240	230	290	290	250	290	290	220	230	200	230	270	270	300	300
4	320	300	280	300	270	310	290	210	220	200	200^{A}	270^{M}	250	250	240	290	230	250	250	280^{A}	300^{A}	300	280	310
5	310	320	270	250	250	270	300	270	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	280
6	270	270	280	270	290	300^{A}	290	220	200	210	210	270	210	200^{M}	210^{A}	200	220	300	280	230^{M}	300^{A}	310	300	270
7	250^{M}	240	280^{M}	290^{M}	300^{M}	300	300	240	280	300	260	290	280	300	300	280	300	280	270	260	290	290	300	280
8	300	260^{M}	250	310	290	310	300	300	300	300	290	300	300	C	C	C	300	270	230	280^{A}	270	260	280	300
9	290	300	300	290	250	280	270	270	230	280	250	270^{M}	290	290	260	260	280	300	270	A	290	290	300	300
10	310	300	300	270	250	310	280	250	280	270	250	280	250	280	280	280	280	270	220	260	280	260	280	300
11	300	290	300	290	270	280^{M}	250	200	230^{M}	240	250^{M}	300	290	270	260	290	280	270	250	260	300	300	270	290
12	300	300	300	300	300	290	290	250	230	270	290	230	230^{B}	280	310	280	270	240	270	260	270	300	280	310
13	300	300	310	370	320	320	310	270	270	250	280	220^{B}	270	290	300	230	260	270	250	250	270	290	300	300
14	310	320	310^{M}	300	310^{M}	310^{M}	260	230	290	280	310	300	310	310	240	260	270	280	290	250^{M}	270	280	290	300
15	310	300	300	300	270	270	250	220	220	280	300	300	300^{F}	290	250	290	250	220	210	270^{A}	290	290	290	270
16	260	290	290	270	260	290	260	240	240	230	230	220^{M}	270	240	230	240	240	230	230	240	240	240	260	270
17	280	280	280	300^{M}	300	290	250	230	210	300	270	260	290	280	290	290	220	260	250	240	270	260	290	300
18	300^{M}	290	290	270	280	270	240	240	300	240	240	240	250	260	250	270	270	230	230	250^{A}	280	290	300	310
19	300^{A}	300^{M}	300	300	290	290	240	250	230	C	C	C	C	C	230	290	270	260	260	280	340	310$^{F}_{K}$	370$^{F}_{K}$	280^{K}
20	460^{K}	460^{K}	340$^{A}_{K}$	300^{K}	420^{K}	420^{K}	310	270	270	240	C	C	C	C	240	250	270	260	250	C	C	C	C	C
21	C	C	C	300	300	310^{M}	200	A	290^{A}	310	270	240	240	240^{B}	260	240	270	280^{M}	220	230	250	300	450	400
22	C	C	C	C	C	C	280	280	290	340	360	320	320	320	310	300	290	310	C	C	C	C	C	C
23	330	310	290	290	290	350	300	300	300	300	310	290	350	310	310	250	250	230	210	240	260	300^{A}	310	300
24	320	320	310	310	300	300	270	260	240	240	280	290	300	300	300	300	280	260^{A}	240	270	300	290	290	300
25	300	300	270	310	300^{A}	300	270	270	270	240	250	250	210	300	290	260	240	280	240	220	360	300^{M}	300^{M}	300
26	310^{M}	280	270	250	260	270	260	240^{M}	230	220	210	220	260	220	220	240	240	220	220	230	230	270	280	300
27	290	280	280	290	270	300	240	260	250	250^{M}	250	300	290	270	260	280	240	250	260	270	290	270	280	290
28	300	270	310^{M}	310	290^{M}	300^{M}	250	240	230	220	280	290	290	290	280	C	C	C	C	C	C	C	C	290
29	300	300	260	260	290	250	230	230	220	220	260	270	210	(210)^{C}	210	240	230	250	240	260	250	250	260	280
30	300	290	290	290^{M}	290	280^{M}	260	250	270	240	310	290	300	300	230	240	220^{A}	220^{A}	310^{A}	200	220	230	270	290
31	350	340^{M}	340	300	300	300	290	230	300	280	280	300	300	300	300	280	290	280	280	270	230	260	250	300
Median Value	300	300	290	300	290	300	270	250	250	250	260	280	280	280	260	260	260	260	250	260	280	290	290	300
Count	29	29	29	30	30	30	31	30	30	29	28	28	28	27	29	28	28	29	28	26	27	27	27	29

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

Mar. 1950 | foF1 | 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	L	Q	C	L	Q	Q	Q	Q	L	Q	Q	Q					
2							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	L	L					
3							Q	Q	Q	L	Q	L	L	Q	L	L	Q	Q	Q					
4							Q	Q	Q	Q	Q	Q	Q	Q	Q	L	Q	Q	Q					
5							Q	Q	C	C	C	C	C	C	C	C	C	C	C					
6							Q	L	Q	Q	L	L	Q	Q	Q	Q	Q	L	L					
7							L	Q	L	L	L	L	L	L	L	L	L	Q	Q					
8							Q	Q	L	L	L	L	L	C	C	C	Q	Q	Q					
9							Q	L	Q	L	Q	L	5.2	L	Q	Q	L	L	L					
10							Q	Q	L	Q	Q	L	Q	Q	L	L	L	Q	Q					
11							Q	Q	Q	Q	Q	L	L	Q	Q	L	Q	Q	Q					
12							L	Q	Q	L	L	Q	Q	L	L	Q	Q	Q	L					
13							Q	Q	Q	Q	L	Q	L	L	L	Q	Q	Q	Q					
14							Q	Q	Q	Q	L	L	L	L	Q	Q	Q	L	L					
15							Q	Q	Q	Q	L	Q	L	L	Q	L	Q	Q	Q					
16							Q	Q	Q	Q	Q	Q	L	Q	Q	Q	Q	Q	Q					
17							Q	Q	Q	L	L	L	L	L	L	L	Q	Q	Q					
18							Q	Q	L	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
19							Q	Q	C	C	C	C	C	C	Q	L	Q	Q	Q					
20							Q	Q	Q	Q	C	C	C	C	Q	Q	Q	Q	Q					
21							Q	A	Q	L	Q	Q	Q	Q	Q	Q	Q	Q	Q					
22							Q	Q	Q	L	L	5.0	5.0	5.0	L	L	Q	Q	C					
23							Q	L	L	L	L	L	L	L	L	Q	Q	Q	Q					
24							Q	Q	Q	Q	4.7[P]	4.6	L	L	L	Q	Q	Q	Q					
25							Q	Q	Q	Q	Q	Q	Q	L	L	Q	Q	Q	Q					
26							Q	Q	Q	Q	Q	Q	L	Q	Q	Q	Q	Q	Q					
27							Q	Q	Q	Q	Q	L	L	L	L	L	Q	Q	Q					
28							Q	Q	Q	Q	L	L	L	L	L	C	C	C	C					
29							Q	Q	Q	Q	L	L	Q	C	Q	Q	Q	Q	Q					
30							Q	Q	Q	Q	L	L	L	L	Q	Q	Q	Q	Q					
31							Q	Q	L	L	L	L	L	L	L	L	L	Q	Q					
Median Value							—	—	—	—	—	—	—	—	—	—	—	—	—					
Count							0	0	0	0	1	2	2	1	0	0	0	0	0					

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

Mar. 1950 | hF1 | 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	300	Q	C	210	Q	Q	Q	Q	230	Q	Q	Q					
2							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	220	210[A]					
3							Q	Q	Q	220	Q	250	250	Q	250	270	Q	Q	Q					
4							Q	Q	Q	Q	Q	Q	Q	Q	Q	230	Q	Q	Q					
5							Q	Q	C	C	C	C	C	C	C	C	C	C	C					
6							Q	200	Q	Q	200	200	Q	Q	Q	Q	Q	230	210					
7							240	Q	230[A]	210	220	210	230	210	250	230	260	Q	Q					
8							Q	Q	250	280	250	250	250	C	C	C	Q	Q	Q					
9							Q	240	Q	250	Q	210	240	240	Q	Q	240	280	210[A]					
10							Q	Q	240	Q	Q	240	Q	Q	230	240	260	Q	Q					
11							Q	Q	Q	Q	Q	240	280	Q	Q	250	Q	Q	Q					
12							250	Q	Q	200	230	Q	Q	220	240	Q	Q	Q	230					
13							Q	Q	Q	Q	210	Q	250	220	240	Q	Q	Q	Q					
14							Q	Q	Q	Q	260	250	250	270	Q	Q	Q	230	230[A]					
15							Q	Q	Q	Q	240	Q	280	230	Q	210	Q	Q	Q					
16							Q	Q	Q	Q	Q	Q	220	Q	Q	Q	Q	Q	Q					
17							Q	Q	Q	260	230	200	200	200	220	220	Q	Q	Q					
18							Q	Q	250	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
19							Q	Q	C	C	C	C	C	C	Q	240	Q	Q	Q					
20							350	Q	Q	Q	C	C	C	C	Q	Q	Q	Q	Q					
21							Q	A	Q	250	Q	Q	Q	Q	Q	Q	Q	Q	Q					
22							Q	Q	Q	250	250	220	210	260	250	230[A]	Q	Q	C					
23							Q	270	260	250	250	250	220	250	240	Q	Q	Q	Q					
24							Q	Q	Q	Q	250	220	250	230	250	Q	Q	Q	Q					
25							Q	Q	Q	Q	Q	Q	Q	230	250	Q	Q	Q	Q					
26							Q	Q	Q	Q	Q	Q	210	Q	Q	Q	Q	Q	Q					
27							Q	Q	Q	Q	Q	(220)[A]	220	210	220	250	Q	Q	Q					
28							Q	Q	Q	Q	220	230	240	270	230	C	C	C	C					
29							Q	Q	Q	Q	200	200	Q	C	Q	Q	Q	Q	Q					
30							Q	Q	Q	Q	240	250	230	270	Q	Q	Q	Q	Q					
31							Q	Q	230	220	200	210	220	250	250	220	210	Q	Q					
Median Value							—	—	240	250	230	220	240	230	240	230	—	—	210					
Count							3	4	6	10	16	17	18	15	13	12	4	4	5					

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

Mar 1950 | $f_o E$ | 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							(1.2)^{B}	2.3^{B}	2.8	(3.0)^{C}	3.1	(3.6)^{B}	(3.5)^{A}	3.4^{A}	3.1	2.8	(2.6)^{A}	1.8^{F}	E					
2							(1.4)^{B}	2.3	2.8	3.2	3.3	3.4	3.4	3.2	3.3	2.9	A	A	A					
3							1.3	2.3	3.1	3.1	3.3^{F}	3.3	3.4	3.4	3.2	3.0	2.4	2.0	B					
4							1.5	2.4^{H}	2.7	3.0	3.2	S	A	3.3^{B}	(3.3)^{B}	(3.0)^{A}	2.7^{B}	2.4	E					
5							1.4	2.1^{F}	2.8	C	C	C	C	C	C	C	C	C	C					
6							(1.4)^{A}	2.3	2.8	3.1	3.3	3.5	3.6	3.4	(3.3)^{A}	(2.9)^{A}	2.5	1.7	E					
7							1.5	2.3	A	3.0	3.2	3.6	3.5$^{P}_{H}$	3.5	3.2^{H}	3.0^{F}	2.6	2.0^{H}	E					
8							A	2.6	2.9	3.1	3.5	3.5	3.4	C	C	C	2.4	2.2	1.3^{J}					
9							1.7	2.4	3.0	3.3	3.4	3.6	3.6	3.6	3.2	3.1$^{H}_{P}$	2.2	2.0	A					
10							1.7	2.4	2.9^{F}	3.4	3.4	3.5	3.3	(3.3)^{B}	3.3	3.1	2.9	1.8	A					
11							1.8	2.5	2.9	3.3^{F}	3.4	3.5	3.4	3.4	3.3^{B}	3.1^{F}	2.7	2.1	1.7					
12							1.9	2.4	3.1^{H}	3.2	3.4	3.4	3.5	3.4	3.4	3.2	(2.9)^{B}	2.1	(1.6)^{A}					
13							1.4	2.6	3.0	3.2^{H}	(3.4)^{B}	3.6	3.6^{B}	3.4	3.4	3.2	2.7	2.2^{H}	A					
14							1.8	2.3	3.0^{H}	3.3	3.4	3.5	3.6^{F}	(3.6)^{A}	3.4	3.2	2.9	A	A					
15							1.7	2.4	2.8	A	3.4^{H}	B	3.6	3.6	3.5	3.3	2.5	2.3	1.6					
16							1.7	2.5	2.8	3.3^{B}	3.4	3.4	3.4	3.4	3.4	3.0	2.8	2.2	1.4^{B}					
17							1.8	2.6^{H}	2.9	3.3^{H}	3.5	3.5^{P}	3.5	3.4^{P}	3.4	3.0	2.7	2.2^{H}	(1.6)^{B}					
18							(1.9)^{A}	2.5^{F}	2.8^{F}	3.3	3.2	3.7	3.6	3.5	3.3	3.0	(2.7)^{P}	2.2	A					
19							1.9	2.6	2.9	C	C	C	C	C	A	3.0	2.6	2.1	(1.6)^{A}					
20							2.1	2.7^{H}	3.1	3.2	C	C	C	C	3.1	3.0	2.7	2.2^{F}	1.2					
21							2.0	A	A	3.0	3.2	3.3^{A}	A	3.4^{B}	3.2	3.1	2.8	2.1^{F}	(1.4)^{A}					
22							1.8^{J}	2.5^{F}	3.0	3.0	3.1	3.1^{H}	(3.4)^{B}	(3.3)^{B}	3.3	3.2^{A}	2.7	2.2	C					
23							2.0	2.5	3.0	3.2	3.4	3.5	3.5	3.6^{B}	3.2	3.0	2.7	2.2	1.4					
24							2.1	3.0	3.3	3.3^{H}	3.4^{B}	3.4	3.5^{B}	3.5	3.5^{B}	3.2^{B}	2.6	A	1.5					
25							2.1^{H}	2.7	3.1	3.2	3.6^{H}	3.8^{H}	3.8^{H}	3.5^{B}	3.5^{H}	3.2	2.9	2.2	1.5					
26							2.2^{H}	2.5	3.0	3.4	3.4	3.4	3.4	3.5	3.5	3.3	2.6^{F}	2.2	(1.5)^{B}					
27							2.1	2.4	3.0	3.3	3.5^{B}	(3.4)^{A}	3.4^{F}	3.4	AF	3.2	2.7^{B}	2.3^{B}	1.8					
28							2.2^{H}	2.8^{H}	3.0^{H}	3.3	3.4	3.4	3.4	3.5	3.3	C	C	C	C					
29							1.9^{H}	2.6	3.2^{H}	3.3	3.3	3.6	3.5	[3.4]^{C}	3.3	(3.2)^{A}	(2.8)^{A}	2.3^{F}	1.4^{J}					
30							1.9^{H}	2.9^{H}	3.0	3.2	3.2	3.4	3.5	A	3.6	A	A	A	A					
31							1.9	2.9	3.1	3.4	3.2	3.5^{A}	3.6	(3.6)$^{B}_{H}$	3.5^{H}	3.0	2.8	2.4^{H}	A					
Median Value							1.8	2.5	3.0	3.2	3.4	3.5	3.5	3.4	3.3	3.1	2.7	2.2	1.4					
Count							30	30	29	28	28	26	26	26	27	27	27	25	19					

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 6

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

IONOSPHERIC DATA

Mar. 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							B	120	110	[110]^{C}	110	100	100	A	100	100	A	110	E					
2							B	B	110	A	A	110	110	120	120	120	A	A	A					
3							130	100	100	100	100	100	100	100	110	100	100	A	B					
4							B	110^{H}	100	100	100	100	A	100	100	A	100	100	E					
5							110	110	100	C	C	C	C	C	C	C	C	C	C					
6							A	100	100	100	100	100	100	100	A	100	100	100	E					
7							A	100	A	100	100	110	110^{H}	100	100^{H}	100	100	100^{H}	E					
8							A	100	100	100	100	100	100	C	C	C	100	150	130					
9							100	110	100	100	100	110	100	100	100	100^{H}	100	100	A					
10							B	130	110	130	100	100	100	100	100	100	100	100	A					
11							130	100	100	100	100	100	110	110	110	110	110	120	100					
12							B	130^{A}	100^{H}	100	100	100	100	100	110	110	110	110	A					
13							A	120	130	110^{H}	100	110	100	100	100	100	110	110^{H}	A					
14							B	110	110^{H}	100	100	100	100	A	100	100	A	A	A					
15							B	110	110	A	100^{H}	B	110	100	100	100	100	100	100					
16							100	100	100	100	100	100	100	100	100	110	110	120	120					
17							110	100^{H}	100	100^{H}	100	100	100	100	100	100	100	100^{H}	B					
18							A	110	110^{F}	110	120	100	110	120	100	100	120	100	A					
19							130	100	110	C	C	C	C	C	A	100	100	100	A					
20							130	100^{H}	100	110	C	C	C	C	110	110	110	100^{F}	E					
21							100	A	A	100	100	100	A	100	100	100	100	110^{F}	100					
22							A	120	130	100	100	100^{H}	100	100	110	110^{A}	110	110	C					
23							100	110	110	100	100	100	100	100	110	100	100	100	100					
24							100	100	100	100^{H}	100	100	100	100	100	100	100	A	100					
25							100^{H}	110	110	110	100^{H}	100^{H}	100^{H}	100	100^{H}	100	100	100	100					
26							110^{H}	100	110	100	100	100	100	100	100	100	100	110	100					
27							100	100	100	100	100	110	100	100	A	100	100	100	100					
28							110^{H}	100^{H}	100^{H}	100	100	100	100	100	100	C	C	C	C					
29							100^{H}	100	100^{H}	100	100	100	100	[100]^{C}	100	A	A	110	110					
30							100^{H}	100^{H}	100	120	120	110	120	A	120	A	A	A	A					
31							110	110	110	100	100	100	100	100^{H}	100^{H}	100	100	100^{H}	A					
Median Value							100	100	100	100	100	100	100	100	100	100	100	100	100					
Count							18	29	29	27	27	27	26	24	26	25	24	24	16					

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

Mar. 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	2.4	2.4	1.6	G	G	2.4	B	4.4^{Y}	3.4^{Y}	C	G	G	(6.0)^{B}	(5.0)^{B}	5.1	5.4	5.4	G	2.2	G	2.5	2.2	(2.9)^{B}	3.2
2	2.8	2.6	2.4	2.4	G	G	G	2.7^{Y}	G	3.8	3.4	G	G	G	G	G	3.5	3.7	2.6	G	2.6	2.9	2.3	G
3	2.1	2.4	2.5	G	(2.0)^{Y}	3.2^{Y}	G	G	4.4^{Y}	G	G	G	G	G	G	G	3.5^{Y}	2.4	1.8	2.4	1.8	G	2.2	1.9
4	G	2.4	2.2	1.6	B	2.4	G	G	G	3.8	3.6	S	3.7	G	G	3.1	G	3.3	1.6	(3.4)^{B}	3.4	3.6	G	G
5	2.3	G	G	G	G	G	G	G	G	C	C	C	C	C	C	C	C	C	C	C	C	C	C	2.4
6	3.0	3.6	2.6	1.7	2.2	2.4	2.5	G	G	G	G	G	G	G	4.0	4.0	3.3	G	1.2	G	2.1	2.6	G	G
7	G	G	G	G	G	G	G	G	3.6	4.5	G	G	4.0	G	G	G	G	3.0^{Y}	G	G	G	G	G	G
8	G	1.3	2.5^{Y}	1.2	2.4	2.2	2.2^{Y}	G	G	5.2	4.2	G	G	C	C	C	G	G	2.6^{Y}	(3.0)^{B}	2.4	2.4	2.4	2.2
9	2.4^{Y}	G	2.3	2.0	2.4	2.4	G	G	G	G	G	G	G	G	G	G	G	G	2.8	2.2	G	G	G	G
10	2.5	G	G	G	2.5	G	G	G	(3.8)^{B}	G	G	G	G	G	G	G	G	G	2.3	2.0	G	G	G	G
11	G	1.4	2.2	2.2	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	1.4	2.2	2.0	G	G
12	G	G	2.2	2.4	2.4	2.4	G	4.2^{Y}	3.5^{Y}	G	G	4.4^{Y}	G	G	G	G	G	G	2.4	G	2.0	G	G	1.7
13	3.4	1.5	2.0	2.2	2.5	2.4	1.6	G	G	3.8^{Y}	G	G	G	5.5^{Y}	G	G	3.6^{Y}	G	2.0	G	G	G	2.4	2.8
14	3.4	2.4	1.9	G	G	2.4	G	G	7.0^{Y}	G	4.2^{Y}	G	4.5	4.7	G	G	3.4	2.8	3.0	G	G	G	G	G
15	G	G	G	G	G	G	G	G	G	4.0	G	B	G	G	G	G	G	G	G	2.3	1.2	G	G	2.0
16	1.8	1.6	1.4	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	2.5^{Y}	G	1.2	G	G	G
17	G	2.3^{Y}	G	G	2.4	G	G	G	G	G	G	G	G	G	G	G	3.7^{Y}	G	G	G	G	G	G	G
18	G	G	G	G	G	G	2.0	G	G	4.3	G	4.5	G	G	G	G	G	G	2.0	2.1	G	G	2.2	3.2
19	2.3	G	G	G	2.4	2.2	G	G	G	C	C	C	C	C	4.3	G	G	G	2.8	2.5	G	G	G	G
20	(2.5)^{B}	2.0^{F}	2.6	4.4	2.2	2.0	G	G	G	G	C	C	C	C	G	G	G	3.2	2.3	C	C	C	C	C
21	C	C	C	3.1	3.3	2.4	G	(4.0)^{B}	5.0	3.9	4.2	4.7	3.9	G	G	G	G	G	G	G	G	G	(3.2)^{B}	2.6
22	C	C	C	C	C	C	2.4^{F}	3.4	G	G	G	G	G	G	4.4	5.0	G	G	C	C	C	C	C	C
23	2.6	2.0	1.9	B	2.6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	2.3	G	2.6	1.1	B
24	G	G	G	1.5	2.1	1.4	G	G	G	G	G	G	G	G	G	G	G	2.4	G	G	G	G	G	G
25	G	1.3	1.3	2.1	2.8^{Y}	1.4	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
26	2.5	2.7	G	G	G	G	G	G	G	G	G	G	G	G	G	G	3.2	G	G	1.7	2.0	1.5	1.8	G
27	1.4	1.2	1.3	1.2	2.7	G	G	G	G	G	G	4.3	4.7	G	3.5^{F}	G	G	G	3.2	2.3	G	G	G	G
28	2.6	2.0	G	1.3	2.5	2.3	G	G	G	4.1	G	G	4.4	G	G	C	C	C	C	C	C	C	C	G
29	G	1.6	G	G	2.2	2.4	G	G	G	G	G	G	G	C	G	3.5	3.2	G	G	3.4	4.4	G	G	2.4
30	2.4	G	G	G	G	G	G	G	G	G	G	G	4.9	5.4	G	4.4	3.3	3.5	3.4	2.1	G	G	G	G
31	G	G	G	G	G	G	G	G	G	G	4.4	G	G	G	G	G	G	G	3.2	G	G	G	G	2.2^{Y}
Median Value	2.1	1.4	1.3	G	2.2	1.4	G	G	G	G	G	G	G	G	G	G	G	G	2.0	1.4	G	G	G	G
Count	29	29	29	29	29	30	30	31	31	28	28	26	28	26	29	28	29	29	28	27	27	27	27	28

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

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

IONOSPHERIC DATA

Mar. 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	2.6	2.6	2.6	2.6	2.7	2.8	2.8	2.9	3.0	[2.9]^{C}	2.8$^{Z}_{H}$	2.8$^{P}_{H}$	2.9	3.0	3.1	3.1	3.1	3.0^{S}	2.9	2.8	2.7	2.6	2.6	2.4
2	2.6	2.8	2.8	2.8	2.9	2.7	2.8	3.1	3.1	3.1	3.0	2.8^{P}	3.0	3.0	2.9	2.9	3.0	3.1^{P}	3.0	3.1	2.5^{H}	2.8	2.4^{H}	2.9
3	2.9	2.7	2.6	2.5	2.5	2.9	3.0	(2.9)$^{P}_{S}$	(2.9)$^{J}_{S}$	[3.0]^{S}	3.1	3.0	3.1	3.1	3.0	3.2	(3.5)^{J}	3.1	(2.9)$^{P}_{S}$	2.8$^{P}_{S}$	3.0^{S}	2.7^{S}	2.7^{S}	2.6^{S}
4	2.6	2.8	2.8	2.6	2.7	2.5	2.8	3.2	3.4	3.3$^{P}_{S}$	3.1	2.7^{H}	3.0	(3.1)$^{B}_{S}$	(3.1)$^{B}_{S}$	S	B	3.1	2.8	2.8	2.7	2.8	2.7	2.6^{F}
5	2.4	2.5	2.6	2.7	2.7	2.7	2.9	3.0^{S}	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	3.0
6	2.8	2.8	2.8	2.7	2.6	2.7	3.0	3.0^{S}	3.2^{P}	3.1	3.1	3.0	3.1	3.1^{H}	3.1	3.0	3.0	S	S	3.0^{H}	2.6	2.6	2.6	3.0
7	3.0^{H}	3.0	2.6^{H}	2.5^{H}	2.6^{H}	2.8	3.0	S	B	3.1	3.1	3.0	3.0	2.7	3.1	2.9	(2.9)^{B}	3.0	2.8	3.0	(2.8)$^{P}_{S}$	2.7	2.8	2.7
8	2.5	2.7	2.3	2.6	2.5	2.4	2.7	3.0	3.1	3.0	2.9	2.8	2.8	C	C	C	2.8	3.0^{P}	2.9	3.0	2.6	2.8	2.6	2.6
9	2.6	2.6	2.5	2.7	(2.8)$^{P}_{S}$	2.6	3.0	3.0	3.0^{P}	(3.1)$^{P}_{B}$	(2.9)$^{P}_{B}$	3.0^{H}	2.9	(2.8)$^{P}_{B}$	(3.0)^{P}	3.0^{P}	(2.9)^{P}	3.0	(3.1)$^{B}_{H}$	(2.5)^{P}	2.9	2.6	(2.5)^{J}	2.6
10	2.6^{H}	2.6	2.6	2.7	2.7	2.5	2.8	3.2	3.0	2.8	2.9	2.9	2.8	2.8	2.9	2.8	2.9	S	(3.0)^{J}	[2.9]^{S}	(2.8)$^{P}_{S}$	2.9	2.8	2.5
11	2.7	2.9	2.7^{H}	2.7	2.7	2.6^{H}	3.0	3.1	[3.1]$^{S}_{H}$	3.1	2.7^{H}	2.8	3.0	2.8	2.9^{P}	2.9	2.9	3.0	3.2	2.7	2.4	2.7	(2.6)^{P}	2.5^{Z}
12	2.7	2.6	2.5	2.6	2.6	2.7	2.8	3.1	3.1	(2.9)^{P}	3.0^{P}	2.7	2.9	2.7	2.7	2.8	2.5	3.0	3.2	2.8	2.5	2.6^{P}	2.7	2.6
13	2.7	2.6	2.4	2.3	2.4	2.3^{F}	2.7	2.8	3.0	2.9	(2.9)$^{P}_{B}$	2.8^{S}	2.7	(2.6)^{P}	2.8^{P}	2.9	2.8	(2.9)^{P}	2.9	2.8	2.7	2.7	2.7	2.5
14	2.6	2.5	2.3^{H}	2.4	2.5	2.3$^{P}_{H}$	3.0	3.0	(2.9)^{P}	3.0	2.7	2.7	2.7	2.7	2.9	2.7	2.8	S	S	(2.8)$^{P_2}_{H}$	2.8^{H}	2.6^{P}	(2.5)^{P}	(2.6)^{P}
15	2.7	2.6	2.5^{P}	2.6	2.8^{V}	2.6	(3.1)^{P}	B	3.2	2.9	2.8	3.1^{P}	2.8	2.7	2.9	3.0	2.9	3.1^{Z}	2.9	2.7	2.7	2.7^{P}	2.6	2.9
16	2.8	2.8	2.6	2.7	2.8	2.6	2.8	2.9^{P}	3.1^{P}	3.0	2.9	3.0^{H}	(3.0)$^{P}_{S}$	3.1	3.1	3.0	2.9	2.9	3.0	2.9	2.8	2.5	2.4^{F}	2.6
17	2.6	2.8	2.6	2.5^{H}	2.5	2.7	3.0	3.1	3.1	3.1	3.1	3.1	2.9	3.0	3.1	(3.0)^{P}	0	3.2^{P}	(3.1)$^{P}_{B}$	(2.9)^{P}	2.9	(2.5)^{P}	2.6^{P}	2.6
18	2.4^{H}	2.7	2.6	2.8	2.8	2.8	3.1	3.1	2.9	(2.8)^{P}	2.9	2.6^{P}	(2.8)^{J}	2.8	2.8	2.7	2.9^{P}	2.8	[2.9]^{S}	(3.0)^{P}	[3.0]^{S}	2.9	2.8	2.6^{P}
19	2.8	2.7^{H}	2.8	2.6^{P}	2.6	2.6^{F}	3.2	B	C	C	C	C	C	C	3.0	2.8	2.8	2.9^{S}	(3.0)$^{J_2P}_{S}$	(3.1)$^{J}_{S}$	(2.6)^{J}	(2.7)$^{K_2P}_{F}$	2.4$^{F}_{K}$	2.6$^{F}_{K}$
20	(2.3)$^{K_2F}_{V}$	2.3$^{K_2F}_{Z}$	(2.3)$^{K_2B}_{F}$	B^{K}	2.3$^{K_2F}_{H}$	2.5^{K}	2.8	2.7	2.8	(2.8)^{P}	C	C	C	C	B	S	3.1^{S}	3.1	3.0	C	C	C	C	C
21	C	C	C	2.7	2.5	2.7^{H}	3.0	2.8^{B}	(2.9)$^{J}_{B}$	2.9	2.8	(2.9)^{J}	(2.9)^{P}	2.9^{P}	2.8	2.9	2.6	2.9$^{F}_{H}$	[3.0]^{S}	3.1	2.8	2.6	2.1^{F}	2.3
22	C	C	C	C	C	C	3.1	2.9	2.8	2.8	2.7	2.8	2.9^{S}	2.9^{S}	2.9	2.9	(2.8)^{S}	2.9	C	C	C	C	C	C
23	2.4	2.4	2.5	2.6	2.5	2.3	2.9	3.0	2.9	[2.8]^{B}	2.8	2.8	2.7	(2.7)^{S}	(2.8)$^{P_2}_{S}$	(2.7)$^{P}_{S}$	2.8	3.0	2.9	2.7	2.6	2.5	2.5	2.5
24	2.5	2.6	2.5	2.5	2.5	2.6	2.9	3.0	3.0	2.8	2.8^{P}	2.7^{P}	2.9	2.8	2.7	2.9	2.8	(2.8)^{P}	3.0	2.7	2.5	2.6	2.6	2.7
25	2.5	2.6	2.6	2.4	2.6	2.6	2.8	2.9	3.0	3.1	(2.9)^{B}	(3.0)^{B}	2.8	2.9	(3.1)^{B}	2.9	3.0	2.9	3.1^{B}	3.2^{S}	2.6	(2.8)$^{P_2}_{B}$	2.8	2.7
26	2.5^{H}	2.7	2.7	2.8	2.7	2.8	(3.0)^{P}	3.1^{H}	3.0	3.0	3.0	3.1	2.9	2.9	2.9	3.0	3.0	S	S	(3.1)^{P}	(3.1)^{P}	(2.8)^{P}	2.6	2.7^{P}
27	2.7	2.8	2.8^{P}	2.7	2.8	2.8	3.0	3.0	3.2	3.0^{H}	3.1	2.8	2.8	3.0	3.2	2.9	2.9	3.0	(3.1)^{B}	(2.9)$^{J}_{B}$	(2.9)^{P}	2.5	2.7	2.6
28	2.5	2.7	2.6^{H}	2.4^{P}	2.6^{H}	2.6^{H}	3.1	(3.3)^{J}	(3.0)^{B}	2.9	(2.8)^{P}	3.0	3.0	2.9	2.9	C	C	C	C	C	C	C	C	2.6
29	2.7	2.8	2.9	2.9	2.9	2.9	3.4	2.9	3.0	2.8	2.7^{P}	2.9	C	C	2.9	2.7	2.8	3.2	3.0	(3.0)^{J}	3.2	2.9	2.8	2.7
30	2.7	2.8	2.6	2.7^{H}	2.8	2.5^{H}	(3.1)^{J}	(3.1)^{J}	2.9	2.9	2.9	2.9	2.9	2.9	3.1	3.1	3.1	3.1	(3.1)$^{J}_{P}$	S	SF	3.1	2.8	2.6^{P}
31	2.6	2.4^{H}	2.6	2.6	2.7	2.7	3.0	(2.7)$^{J}_{S}$	2.9	2.9	2.9	3.0	2.8	(2.6)$^{P}_{B}$	(2.9)^{B}	3.0	3.1^{P}	3.1^{P}	2.9^{P}	2.9	3.2	2.6	2.8	(2.3)$^{Z}_{P}$
Median Value	2.6	2.7	2.6	2.6	2.6	2.6	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.0	3.0	2.9	2.7	2.7	2.6	2.6
Count	29	29	29	29	30	30	31	28	28	29	28	28	27	26	28	26	28	25	25	26	26	27	27	29

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

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

Sweep 1.0 Mc to 14.0 Mc in 1.5 min Manual

W 10

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

IONOSPHERIC DATA

Mar. 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	E	E	G	G	1.2	B	1.3	1.4	C	E	E	E	E	E	1.6	E	1.2	1.9	G	(1.5)B	1.4	1.2	(1.2)B
2	1.1	E	E	E	G	G	B	1.6	1.5	1.5	1.5	1.5	2.0	1.7	1.5	1.5	1.5	E	E	G	1.6	1.3	E	G
3	E	E	E	G	E	E	E	E	E	1.4	1.5	1.5	1.6	1.4	1.3	E	E	E	1.5	1.5	1.6	G	E	E
4	G	E	E	E	B	E	E	E	E	1.2	1.4	1.4	1.7	1.7	1.3	E	E	E	E	(1.2)B	1.2	1.1	G	G
5	E	G	G	G	G	G	E	1.2	E	C	C	C	C	C	C	C	C	C	C	C	C	C	C	E
6	E	E	E	E	E	E	E	1.2	1.3	1.1	1.4	1.5	1.5	1.6	1.8	1.7	1.4	E	E	G	E	E	G	G
7	G	G	G	G	G	G	E	E	E	E	1.2	1.3	1.4	1.3	1.3	E	1.2	E	E	G	G	G	G	G
8	G	E	E	E	E	E	E	E	E	E	1.2	1.3	1.4	C	C	C	1.4	1.2	1.1	1.1	1.5	1.8	1.1	1.7
9	E	G	1.8	E	E	E	E	1.1	1.2	E	E	2.0	2.1	2.0	1.4	E	E	E	E	E	G	G	G	G
10	1.7	G	G	G	2.3	G	1.2	1.5	1.4	1.1	E	2.1	1.6	1.6	1.6	1.6	E	E	E	E	G	G	G	G
11	G	1.2	E	E	G	G	E	E	E	1.2	1.5	1.6	2.0F	2.0	1.9	1.6	1.5	1.2	E	E	E	E	G	G
12	G	G	E	E	E	E	1.3	E	E	1.4	1.5	1.9	1.8	2.0	2.2	1.8	1.5	1.4	E	G	E	G	G	1.1
13	1.1	1.1	E	E	E	E	E	1.4	1.3	1.8	1.5	3.0	1.7	1.8	1.5	1.5	1.4	1.1	1.2	G	G	G	1.6	1.5
14	1.2	1.2	1.2	G	G	E	1.5	1.7	1.3	1.4	1.8	1.8	1.9	2.0	1.6	1.5	1.4	1.1	E	G	G	G	G	G
15	G	G	G	G	G	G	1.5	E	1.5	1.7	1.9	B	1.8	1.2	1.5	1.4	E	E	E	E	E	G	G	E
16	E	E	E	G	G	G	E	1.1	1.2	1.3	1.5	1.5	1.6	1.3	1.4	1.3	1.2	1.2	1.1	G	E	G	G	G
17	G	1.2	G	G	E	G	1.1	1.2	1.1	1.2	1.2	1.8	1.8	1.4	1.4	1.1	1.2	E	B	G	G	G	G	G
18	G	G	G	G	G	G	(1.3)B	1.2	1.2	E	1.2	1.2	1.4	1.1	1.1	1.4	E	E	E	E	G	G	1.4	E
19	E	G	G	G	E	E	1.4	1.4	1.3	C	C	C	C	C	1.1	1.2	1.3	1.2	1.2	1.1	G	G	G	G
20	(1.5)B	1.6F	E	E	E	E	E	E	E	E	C	C	C	C	1.3	1.2	1.2	1.2	E	C	C	C	C	C
21	C	C	C	E	E	E	E	1.5	1.3	1.4	1.4	1.4	1.5	1.5	1.3	1.4	1.3	1.2	1.2	G	G	G	(1.4)B	1.3
22	C	C	C	C	C	C	E	1.2	1.2	1.1	E	E	1.7	1.8	1.4	1.4	1.2	E	C	C	C	C	C	C
23	E	E	E	B	E	G	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
24	G	G	G	E	E	E	E	1.2	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.1	G	G	G	G	G
25	G	E	E	E	E	E	E	1.2	1.3	1.2	E	2.1	2.0	2.0	1.6	1.2	1.4	E	E	G	G	G	G	G
26	1.6	2.2	G	G	G	G	1.5	E	1.6	1.2	1.3	1.6	1.7	1.4	1.2	1.3	1.1	1.1	E	E	1.4	1.2	E	G
27	E	E	E	E	1.5	G	E	E	E	1.3	1.7	1.8	1.9	2.0	2.1	1.5	1.2	1.2	1.2	1.1	G	G	G	G
28	E	1.8	G	E	E	E	E	E	E	E	E	E	1.2	E	E	C	C	C	C	C	C	C	C	G
29	G	E	G	G	E	E	1.1	1.1	1.1	1.2	1.2	1.2	1.3	[1.2]C	1.2	1.2	1.3	1.2	1.2	1.2	1.2	G	G	2.0
30	E	G	G	G	G	G	E	1.3	1.2	1.1	1.5	2.1	2.1	1.4	1.4	1.4	1.1	1.2	E	E	G	G	G	G
31	G	G	G	G	G	G	1.2	E	E	1.4	1.4	1.8	1.5	1.3	1.7	1.8	1.3	1.2	1.2	E	G	G	G	E
Median Value	E	E	E	G	E	E	E	1.1	1.2	1.2	1.4	1.5	1.6	1.4	1.4	1.4	1.2	1.1	E	E	G	G	G	G
Count	29	29	29	29	29	30	29	31	31	28	28	27	28	27	29	28	29	29	27	27	27	27	27	29

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

Mar. 1950 | foF2 | 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	5.4	5.0	5.2	5.1	4.8	4.6	5.0	8.5 P	(11.2) P	11.7	12.4	11.2	12.5	12.1	(11.4) G	10.7	10.0	8.9	6.8	6.5	6.2 P	5.7	5.3 Z	5.0
2	5.4	5.3	5.1	4.9	4.8	4.6 P H	5.0	8.0	10.2	(11.7) P	12.2	13.3 P	12.6	11.8	11.4	10.9	10.4	9.1	7.0	5.7	5.1	5.3	4.8	5.0
3	5.1	5.2	4.7	4.6 P	4.7	4.9	5.5	7.7	9.7	9.4	11.0	12.3	13.2	12.8	11.2	10.4	9.5	8.7	7.6	6.0	6.0	6.0	5.3 P	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	6.9 H	5.6	5.4	4.5	4.8
5	4.7	4.8	5.0	4.5	3.9	3.6	4.9	7.7	9.8	10.1	10.2	11.9	11.9	11.6 H	10.8	9.8	9.8 B	10.1	8.4	5.9 S	5.5	5.3	5.3	5.0 P
6	4.9	4.8	4.7	4.6	4.3	4.0	4.8	7.8	10.0	11.5	12.5	12.6	13.0	12.3	12.1	11.3	11.0	9.8	8.1	6.8 S	6.4	6.3	6.6	7.0
7	6.2	5.3	4.4	4.4	4.2	4.4	5.4	7.9	10.0	10.9 A	11.0	12.3	12.5 H	11.4	(11.6) B	11.1	10.2	10.3	10.1	9.5 S	8.3 P	S	7.6	6.4
8	5.7 S	5.3	4.4	4.2	4.1	4.0	5.8	10.2	12.0	11.5	12.2	12.0	12.7	13.4	12.3	11.4	11.2	10.3	8.7	6.7	5.8	6.1	5.1	5.1
9	4.2	4.9	5.1	5.0	4.7	3.6	4.3	7.2	9.8	(11.5) B F	11.8	[12.2] B	12.5	11.9 B	12.2 H	12.1	11.7	11.5 H	10.5	7.8	A	6.5	6.4	6.3
10	6.2	6.7	6.6 V	5.9	5.3	5.0	6.1	9.5 Z	10.9	12.2	12.2 H	12.1	12.4	12.4	11.9	11.8	11.6	11.0	10.0	8.3	8.3	7.8	6.3	5.8 H
11	5.9	6.1	5.4	5.4	4.9	4.8	6.3	9.3	10.7 H	(11.6) J	12.0	11.6	12.7	13.3	11.9	11.0	11.1	10.5	9.8	8.1	7.3	(6.6) G	5.8	5.6
12	5.4	5.6	5.4	5.3	5.4	5.4	6.8	8.5	9.4	10.8	11.6	11.4	11.8	12.2	12.1	11.6	11.6	10.2	9.5 F	8.4	7.3	6.9	6.3	6.2
13	5.9	6.0	5.1	5.4	5.3	5.5	7.3	10.4	10.8	11.8	12.4	11.5	13.6	13.3	12.5	12.2	11.3	10.3	9.5	6.7	6.3	6.2	5.9	5.8
14	5.8	4.9 S	5.7 H	5.5	5.3	5.2	5.9	9.4	10.5	11.9	12.0	12.9	13.0	12.7	12.3	11.1	10.9	10.3	8.5	7.5	7.6	7.3	6.9	6.8
15	6.8	6.8	6.4	6.0	(6.1) P	6.0	7.2	8.9	10.8	11.0	11.5	12.6	12.5	12.0	12.2	12.9	12.0	10.6	8.2	7.0	S	6.9 Z S	7.9	7.1
16	7.1	7.0	6.7	6.4	5.6	5.4	6.4	9.4	10.5	(11.9) P	12.9	12.6	13.2 H	12.9	12.3	11.1	10.9 H	11.0	9.1	7.5	7.0	6.4	6.4	6.4
17	6.4	6.3	5.9	5.5	5.5	5.8	7.3	8.9	9.7	12.1	12.5	12.3	12.5	12.5	12.6	12.0	11.8 H	11.6	10.4	7.4	6.8	6.9	6.5	6.3
18	6.4	5.6	6.5	5.6	5.0	4.4 P H	7.0	8.8	9.4	11.5	11.7	12.6	12.3	12.1	12.6	12.7	12.6	12.5	10.7	8.0	7.8	7.4	7.0	6.0
19	6.1	6.0	6.0	5.8	5.2	5.0	6.8	C	10.4 H	C	C	C	C	C	C	12.3	12.0	11.4	9.3	6.0 H	9.0	8.4	7.8 H	F K
20	F K	F K	(6.9) Kz F	3.7 Kz F	3.6 F K	4.2 K	7.3	10.4	11.0	11.9	11.9	(13.0) G	14.0 H	14.5 H	14.1 F	12.0	11.3	10.8	10.4	8.6	7.6	6.9	6.3	6.0
21	6.1	6.1	5.7	5.0 F	4.6 F P	F	6.2 P F	8.6 P	10.4	10.6	11.3	12.7	12.8	13.0	13.1	12.3	11.6	11.7	11.2	7.1	5.0	(5.5) S	4.9	5.1
22	4.9	5.0	4.8	4.7	4.7	4.8	6.2	6.9	8.8	10.4	10.1	10.4	11.0	11.2	11.0	9.3	9.4	10.1	10.3	8.0	6.1	5.9	(6.3) P	6.1
23	5.8	6.0	5.6 S	5.4 S	4.8	4.7	6.8	9.3	9.0	9.5	11.2	11.7	10.7	11.3	11.2	11.0	10.7	10.2	8.5	7.0	6.8	6.6	6.7	6.6
24	5.2	6.6	6.3	6.1	4.8	4.8	7.2	8.9	9.2	10.2	11.0	11.3	12.0	11.7	11.7	11.9	(11.8) P	10.8	(9.8) S	8.8	8.7	7.2	7.8	7.4
25	7.3	7.6	7.6	6.5	6.2	6.6	8.6	9.5	9.4	11.0	11.3	11.8	12.1	12.2	12.6	11.6 P	11.2	11.6	11.4	9.1	6.8 H	6.9 S H	7.0	(7.0) G
26	6.9	6.9	6.9	6.6	5.5 H	5.7	7.2	9.1	10.0	10.8 H	11.3	10.8	11.4	12.3 H	13.0	12.2	11.7	10.8	10.3	9.4	7.4	6.6	6.8	6.9
27	6.7	6.6	6.6	6.2	5.7	5.8	7.7	9.0	10.2	10.2	10.8	11.2 P	12.4	12.1	13.2	12.0	11.8	11.6	11.0	9.5	8.7	8.2	7.7 S	7.6
28	7.2 S	7.0	6.2	6.3	(6.4) H	6.6	8.3	8.5	9.9	11.9	12.4	13.3	13.5	13.7	13.6	13.6	12.4	11.6	10.9	9.5 P	7.8	6.6	5.9	5.8
29	6.3	6.2	7.1	6.7	5.9	5.5	[7.4] G	8.9	10.2	10.9	(12.6) B H	(12.6) B P	B	B	13.3	12.3	12.1	12.0	11.2	10.1 H	9.0	7.2	7.4	7.5
30	6.7	7.0	6.7	6.8	6.7	6.4	8.8	9.2	10.3	12.0 P	12.3	12.6	13.1	12.3	12.5	12.1	11.6	11.2	10.6	9.1	7.6	6.8	6.7 S H	6.4 Z
31	6.5	6.6	6.9	7.1 H	5.6	5.4	7.1	8.8	10.9	11.9	11.8	12.2	12.1	12.6	12.7	12.2	11.2	11.1 H	10.4	9.1	8.7	7.4	7.0	6.6
Median Value	6.1	6.0	5.8	5.4	5.1	5.0	6.8	8.9	10.2	11.5	11.8	12.2	12.5	12.3	12.3	11.8	11.3	10.8	9.9	7.8	7.3	6.6	6.4	6.3
Count	29	29	30	30	30	29	30	29	30	29	29	29	28	28	29	30	30	30	30	31	29	30	31	29

Sweep 1.0 Mc to 17.0 Mc in 15-min Manual

A 1

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 1950 | hpF2 | 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	380	380	410	360	380	360	360	390 P	(290) P	280	310	290	290	280	(290) C	300	280	270	290	320	320 P	310	360 Z	390
2	340	330	330	360	340	380 H P	340	280	280	(290) P	300	310 P	280	290	280	300	290	280	290	300	320	340	370	320
3	330	320	360	380 P	390	360	300	260	260	290	310	290	310	290	280	290	270	260	270	370	320	330	320 P	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	300 H	310	370	300	340
5	380	370	310	290	330	340	320	250	270	290	280	310	310	300 H	290	280	290 B	280	260	260 S	360	350	350 S	340 P
6	370	320	380	340	300	380	300	280	300	280	310	310	320	320	310	310	310	290	300	360	390	400	370	320
7	320	300	370	380	410	380	300	280	300	300	300	330	360 H	320	(340) B	330	320	330	320	310 S	330 F	S	350	320
8	370 S	350	340	360	390	370	350	280	310	280	310	300	310	310	300	300	300	290	300	310	290	310	330	350
9	340	370	330	320	280	300	270	230	290	(280) B	310	(320) B	340	320 B	340 H	310	310	310 H	280	310	A	350	370	360
10	380	420	440 V	320	350	370	340	280 Z	280	300	290 H	300	330	300	300	300	310	270	290	310	340	290	330	400 H
11	360	320	360	370	360	370	330	280	320 H	(310) J	310	300	330	320	300	300	300	290	310	310	330	(340) C	350	350
12	380	360	380	330	380	340	330	260	270	320	310	320	330	340	340	320	320	300	320 F	330	320	320	360	370
13	380	390	400	400	390	370	300	280	280	290	320	320	330	320	330	320	320	280	290	280	350	360	380	380
14	380	340 P	420 H	380	370	360	410	300	280	290	310	350	320	340	300	330	300	290	300	370	380	330	370	400
15	390	360	360	390	(390) F	400	340	300	290	290	350	340	310	340	340	300	300	280	290	380	S	370 S Z	370	340
16	380	340	380	310	350	410	360	280	280	(300) F	310	300	360 H	330	330	320	320 H	290	290	340	340	380	390	390
17	380	360	330	410	400	370	290	260	280	320	310	300	330	330	330	310	310 H	300	280	280	370	370 S	350 S	380 S
18	380	310	330	310	360	320 H F	270	250	280	310	350	320	330	330	330	320	310	310	280	330	330	340	310	340
19	370	340	360	330	330	360	300	C	290 H	C	C	C	C	C	C	C	310	300	280	280	(440) J	320	400	(490) H F	F K
20	F K	F K	(560) K H	410 K Z	450 K F	420 K	340	290	320	310	280	(300) C	310 H	320 H	310 F	310	310	290	290	290	330	320	330	370
21	410	330	310	370 F	360 F	F	310 P	310 F	290	290	310	310	320	320	320	330	310	310	280	270	420	(400) P S	430	430
22	430	370	380	430	410	370	290	320	320	330	310	300	320	310	320	290	310	300	300	290	370	410	(520) P	340
23	390	410	340 S	350 S	380	390	300	290	300	310	330	300	360	310	310	320	290	280	290	310	370	380	400	380
24	380	350	340	300	380	370	300	270	270	290	310	330	320	340	330	330	(310) F	310	(320) S	330	390	330	400	390
25	380	350	340	360	410	360	290	270	270	300	310	320	320	340	330	300 P	310	290	290	280	380 H	370 S	360	(360) C
26	360	340	340	310	390 H	330	280	270	290	300 H	300	310	320	330 H	310	310	290	290	280	280	320	370	390	370
27	360	360	350	320	360	340	280	270	270	270	290	340 P	320	340	330	310	310	310	310	300	330	360	380 S	360
28	360 S	320	430	430	(390) F	370	300	310	330	320	320	340	340	350	330	320	310	300	290	290 F	370	330	420	410
29	400	330	310	290	320	360	(300) C	300	290	300	(310) F	(310) F B	B	B	320	330	320	310	290	290 H	300	330	370	390
30	340	380	390	390	370	390	280	270	300	320 F	290	350	310	310	320	320	310	300	280	290	320	350	360 S	370 Z
31	420	420	360	320 H	260	390	300	290	310	300	300	320	340	330	330	300	320	310 H	300	310	340	350	360	380
Median Value	380	350	360	360	380	370	300	280	290	300 D	310	310	320	320	320	310	310	290	290	310	330	350	370	370
Count	29	29	30	30	30	29	30	29	30	29	29	29	28	28	29	30	30	30	30	31	29	30	31	30

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

Mar. 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	280	290	280	270	240	270	310	230	250	250	250	220	250	260	(260)^{C}	250	A	230	220^{A}	A	290^{A}	250^{A}	300^{A}	300^{A}
2	300^{A}	270^{A}	240^{A}	260	250	270^{H}	260	220	240	270	280	260	270	280	250	210	250	230	220	240	240	240	290	290^{A}
3	270	250	260	290	300	260	260	220	250	250	280	220	290	230	230	230	230	220	230	210	240	240	260	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	210^{H}	250	270	290	270^{A}
5	330^{A}	290	240	250	260	280	260	220	240	260	270	290	240	260^{H}	260	220	220	240	210^{A}	A	260	270	280	280
6	290	270	280	250	260	280	260	210	250	240	230	240	240	240	280	270	240	220^{A}	A	260	260	280	310	260
7	240	240	270	270	300	310	230	220	260	260	260	270	230^{H}	260	270	270	260	290	240	250	250	250	260	250
8	250	250	250	300	300	290	270	240	240	230	280^{C}	270	290	290	270	230	230	230	220	240	(220)^{A}	250	250	280
9	310	280	270	280	210	250	250	210	250	250	260	280	300	280	280^{H}	230	220	230^{H}	220^{A}	A	A	260	300	280^{H}
10	280	290	280	250	260	280	280	220	240	280	240^{H}	250	220	250	260	260	270	240	210	220	240	230	240	280^{H}
11	270	270	240	270	230	280	270	230	230^{H}	220	240	230	300	280	250	270	240	250	250	210	240	(240)^{C}	240	270
12	280	230	280	270	280	270	230	230	220	280	220	270	300	300	270	270	250	220	250	210	240	250	250	250
13	250^{A}	270	300	310	260	270	250	240	230	260	250	250	280	260	280	280	250	240	230	210	240	240	270	280
14	300	290	300^{H}	280	280	280	300	240	240	240	260	280	270	270	250	260	220	230^{A}	240	250	280	270	270	300
15	300	270	280	290	280	290	270	240	230	210	270	300	260	210	260	240	230	(230)	230	270	290	290	290	260
16	280	270	270	230	250	290	240	230	220	240	250	260	260^{H}	260	270	280	280^{H}	240	210	230	260	260	290	300
17	290	290	270	300	310	290	240	230	220	260	270	270	260	290	300	260	230^{H}	240	220	210	240	280	260	290
18	280	260	250	230	250	250^{H}	220	240	220	270	250	280	260	280	280	250	260	230	220	220	250^{A}	250	240	260
19	290	270	260	230	260	260	250	220	220^{H}	C	C	C	C	C	C	240	240	250	250	310^{H}	280	290	260^{H}	300^{F}
20	310$^{F}_{K}$	300$^{F}_{K}$	250$^{KF}_{A}$	250^{F}	390^{K}	330^{F}	300	270	270	240	230	240	240^{H}	280^{H}	270	270	260	240	220	220	220^{A}	250	260	280^{A}
21	300	270	260	280	280	310	230	210	200	220	280	280	270	280	270	260	260	260	220	200	260	310	330	350
22	360^{A}	340	300	340	330	260	240	240	300	300	280	230	270	270	260	220	250	270	230	220^{A}	250	340^{A}	360	240
23	350	300	260	250	250	300	240	250	220	220	290	270	240	270	240	220	270	250	250	220	260	280	300	280
24	300	300	290	220	230	270	230	220	220	220	220	300	260	230	220	290	230	230	240	250	260	250	270	290
25	280	270	260	250	260	270	230	230	250	260	250	270	270	270	240	240	270	260	240	210	210^{H}	280^{H}	280	280
26	280	270	260	240	230^{H}	240	220	220	250	220^{H}	250	250	250	220^{H}	280	230	240	250	240	230	230	260	290	290
27	260	270	260	250	240	260	230	230	250	250	260	230	290	280	250	280	270	260	230	230	240	260	260	260
28	260	260	300	300	320	280	220	220	230	250	230	300	300	300	280	280	230	240	240	A	230	240	300^{A}	310
29	330	280	270	240	210	270	(230)^{C}	280	220	230	240	260	270	260	280	240	230	240	240	220^{H}	230	240	280	300
30	280	290	280	(270)^{A}	260	270	270	220	270	220	240	260	280	280	260	290	270	240	260	260	250	260	300^{H}	310
31	340^{A}	320	300^{A}	260^{H}	210^{A}	300	240	230	270	270	260^{A}	240	280	280	280	270	290	250^{K}	230	230	240	240	260	290
Median Value	280	270	270	260	260	280	240	230	240	250	250	260	270	270	270	260	250	240	230	220	240	260	280	280
Count	30	30	30	30	30	30	30	30	30	29	29	29	29	29	29	30	29	30	30	27	30	31	31	30

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

Mar. 1950 | foF1 | 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							L	Q	L	L	Q	Q	Q	L	C	Q	Q	L	Q					
2							Q	Q	L	L	L	L	L	L	L	Q	Q	L	Q					
3							Q	Q	L	L	L	Q	L	Q	Q	Q	Q	Q	Q					
4							C	C	C	C	C	C	C	C	C	C	C	C	C					
5							Q	L	Q	L	L	L	L	L	L	Q	Q	Q	Q					
6							Q	Q	L	Q	Q	Q	Q	Q	L	L	Q	Q	Q					
7							Q	Q	L	L	L	L	Q	L	L	L	Q	L	Q					
8							Q	Q	Q	Q	L	L	L	L	L	Q	Q	Q	Q					
9							Q	Q	L	L	L	L	L	L	L	Q	Q	Q	Q					
10							Q	Q	Q	L	Q	L	Q	L	Q	L	L	L	Q					
11							Q	Q	Q	Q	Q	Q	L	L	Q	L	Q	Q	Q					
12							Q	Q	Q	L	Q	L	L	L	L	L	Q	Q	Q					
13							Q	Q	Q	L	L	Q	5.3	L	L	L	Q	Q	Q					
14							Q	Q	Q	L	L	L	L	L	L	L	Q	Q	L					
15							Q	Q	Q	Q	L	Q	Q	Q	L	L	L	Q	Q					
16							Q	Q	Q	Q	Q	Q	L	L	L	L	L	Q	Q					
17							Q	Q	Q	L	L	L	L	L	L	L	L	Q	Q					
18							Q	Q	Q	L	L	L	L	L	L	L	L	Q	Q					
19							Q	Q	Q	C	C	C	C	C	C	Q	Q	L	Q					
20							A	L	(4.5)^{I}	Q	Q	Q	L	B	B	B	A	L	L					
21							Q	Q	Q	Q	L	B	L	Q	Q	Q	Q	Q	Q					
22							Q	Q	L	L	L	Q	L	Q	L	Q	Q	L	Q					
23							Q	Q	Q	Q	L	L	Q	L	Q	Q	L	Q	Q					
24							Q	Q	Q	Q	Q	L	L	Q	Q	L	Q	Q	Q					
25							Q	Q	Q	L	L	L	Q	Q	Q	Q	L	L	Q					
26							Q	Q	L	Q	Q	Q	Q	Q	L	Q	Q	Q	Q					
27							Q	Q	L	Q	Q	Q	L	L	Q	L	L	L	Q					
28							Q	Q	Q	Q	Q	L	L	L	L	L	Q	Q	Q					
29							C	L	Q	Q	Q	L	L	L	L	Q	Q	Q	Q					
30							Q	Q	Q	Q	Q	L	L	L	Q	L	L	A	A					
31							Q	Q	L	L	Q	Q	L	L	L	L	L	Q	Q					
Median Value									—				—											
Count									1				1											

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

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Radio Regulatory Agency (**Denpacho**)

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

IONOSPHERIC DATA

Mar. 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							290	Q	220	240	Q	Q	Q	230	C	Q	Q	220[A]	Q					
2							Q	Q	210	210	250[A]	220	220	220	230	Q	Q	230	Q					
3							Q	Q	230	220	220	Q	230	Q	Q	Q	Q	Q	Q					
4							C	C	C	C	C	C	C	C	C	C	C	C	C					
5							Q	200	Q	250	200	220	220	210	220	Q	Q	Q	Q					
6							Q	Q	210	Q	Q	Q	Q	Q	230	220	Q	Q	Q					
7							Q	Q	220	250	230	210	Q	220	240	250	Q	260	Q					
8							Q	Q	Q	Q	230	260	260	250	230	Q	Q	Q	Q					
9							Q	Q	210	230	230	230	240	220	250	Q	Q	Q	Q					
10							Q	Q	Q	240	Q	220	Q	220	Q	230	220	190	Q					
11							Q	Q	Q	Q	Q	Q	220	220	Q	240	Q	Q	Q					
12							Q	Q	Q	220	Q	240	220	230	230	230	Q	Q	Q					
13							Q	Q	Q	230	230	Q	210	240	250	240	Q	Q	Q					
14							Q	Q	Q	220	220	240	220	220	220	220	Q	Q	210[A]					
15							Q	Q	Q	Q	220	Q	Q	Q	220	210	200	Q	Q					
16							Q	Q	Q	Q	Q	Q	210	230	230	240	250	Q	Q					
17							Q	Q	Q	240	220	240	230	240	230	220	Q	Q	Q					
18							Q	Q	Q	230	220	220	230	240	250	230	230	Q	Q					
19							Q	Q	Q	C	C	C	C	C	C	Q	Q	240	Q					
20							A	A	230	Q	Q	Q	220	B	B	B	A	200	210					
21							Q	Q	Q	Q	220	B	B	Q	Q	Q	Q	Q	Q					
22							Q	Q	220	240	230	Q	240[A]	Q	240	Q	Q	250	Q					
23							Q	Q	Q	Q	240	230	Q	220	Q	Q	230	Q	Q					
24							Q	Q	Q	Q	Q	230	220	Q	Q	230	Q	Q	Q					
25							Q	Q	Q	210	220	210	Q	Q	Q	Q	220	240	Q					
26							Q	Q	220	Q	Q	Q	Q	Q	220	Q	Q	Q	Q					
27							Q	Q	230	Q	Q	Q	230	240	Q	250	230	240	Q					
28							Q	Q	Q	Q	Q	220	270[B]	250	250	230	Q	Q	Q					
29							C	220	Q	Q	Q	230	240	240	250	Q	Q	Q	Q					
30							Q	Q	Q	Q	Q	230	260	240	Q	240	220	A	A					
31							Q	Q	230	220	Q	Q	230	220	230	B	250	Q	Q					
Median Value							–	–	220	230	220	230	230	230	230	230	230	240	–					
Count							1	2	11	15	15	16	20	20	18	15	9	9	2					

Sweep 1.0 Mc to 12.0 Mc in 15 min Manual

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

IONOSPHERIC DATA

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

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

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Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

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

Sweep 1.0 Mc to 17.0 Mc in 1.5 min Manual

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

IONOSPHERIC DATA

Mar. 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	2.0	G	1.4	G	G	G	G	G	B	B	G	G	B	C	G	4.2	2.8	2.8	6.4Y	5.8	2.7	3.9	2.5
2	3.3	3.2F	3.6	3.2	2.4	1.4	G	G	G	G	(4.0)B	G	G	G	G	G	G	G	3.1Y	2.7	2.3	G	G	4.1
3	3.2	2.9	G	G	G	G	G	G	G	G	G	G	G	B	G	G	G	3.2	2.2	G	G	2.6	2.5	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	G	G	G	3.6F	3.8
5	3.0	2.6	2.8	G	G	G	B	G	3.6Y	3.7	G	G	G	G	G	3.7	G	2.9	3.1	2.8	G	G	G	G
6	G	G	G	G	G	G	G	G	G	G	B	B	B	B	B	3.4	3.2	2.6	2.0	2.4	2.1	G	G	G
7	G	G	G	G	G	G	G	G	G	G	4.2	G	G	B	G	G	3.2	G	G	G	G	1.9F	(2.6)B	(2.8)B
8	(2.4)B	2.3	G	G	G	G	2.6	G	G	4.0	G	G	B	B	G	3.8Y	G	G	G	G	3.4	G	2.2	G
9	G	G	G	G	G	G	G	G	G	G	3.6	G	G	G	G	G	G	G	2.3	6.2	9.6	2.6	G	G
10	G	G	G	2.4F	3.0Y	G	G	G	G	G	G	G	G	B	B	B	G	3.2Y	G	G	G	G	G	G
11	G	G	G	G	G	G	G	G	G	G	4.0	B	3.8	G	G	G	G	G	B	G	G	C	G	G
12	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
13	2.9	1.7	3.0	G	G	G	2.6	G	G	G	G	B	G	G	G	G	3.4	3.8	3.2	G	G	G	G	G
14	G	G	G	G	G	G	B	3.0	3.2	G	G	G	G	G	G	G	G	G	2.0	2.4	G	G	G	G
15	G	G	G	G	G	G	G	G	G	G	G	B	B	G	G	G	G	3.4	2.6	B	G	G	G	G
16	G	G	G	G	G	G	G	G	3.8Y	G	G	G	G	G	G	G	3.7	3.2	G	G	G	G	G	G
17	G	G	G	G	G	G	G	3.5Y	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
18	G	G	G	G	G	G	G	G	G	G	3.7	G	G	G	G	G	G	G	G	2.2	2.8	3.0Y	G	G
19	G	(2.4)B	G	G	G	G	G	G	G	C	C	C	C	C	C	3.9	3.2	2.5	G	(2.6)B	G	G	2.0	G
20	2.0F	2.6F	2.0F	1.8	1.8	(3.2)B	(3.2)B	3.8	G	G	G	G	B	B	B	B	5.0	3.0	2.1	2.4	4.0	2.8	3.0	3.0
21	1.8	G	G	2.1	G	G	G	3.4Y	4.0	3.7	5.4	B	B	B	B	B	B	G	G	G	G	G	G	G
22	3.4	3.8	2.4	G	G	2.2	2.7	G	G	G	4.6	4.6	4.6	4.2	G	G	G	G	G	3.3	5.0	3.7	3.6	G
23	4.1	3.4	G	G	2.8	G	G	G	G	3.8	G	G	G	G	G	G	G	G	B	B	G	G	G	G
24	G	G	G	G	G	2.3	G	G	G	G	G	G	G	G	G	G	G	G	2.4	2.4F	G	G	G	G
25	G	G	G	G	G	G	G	G	G	4.0	G	G	B	B	G	G	G	G	G	G	G	G	G	G
26	G	G	G	G	G	G	G	3.8	G	G	G	B	B	G	G	G	G	G	G	G	G	G	G	G
27	G	G	G	G	G	G	G	G	G	G	B	G	G	G	G	G	G	G	G	G	2.2Y	G	G	G
28	G	G	2.2	2.5	G	G	G	G	G	G	G	G	G	G	G	G	G	G	3.1	3.0	2.2	3.6	(3.2)B	2.0
29	2.2	G	G	G	G	G	C	G	G	G	G	G	G	G	G	G	G	G	G	2.4Y	2.2	G	G	2.6
30	1.8	G	G	3.8	G	G	(3.7)B	G	G	4.0	5.0	B	B	4.2	4.2	B	4.2	6.0	5.0	4.4	3.5	3.6	(3.6)B	(4.0)B
31	2.8	3.0	2.5	2.5Y	2.4Y	3.2	G	G	G	3.6	4.6	G	G	G	G	B	G	G	G	G	G	G	2.4	2.2
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	30	30	30	30	30	30	27	30	30	28	26	22	21	20	24	25	29	30	28	29	31	30	31	30

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 8

Radio Regulatory Agency (Dénpacho)

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

IONOSPHERIC DATA

Mar. 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	2.7	2.7	2.7	2.7	2.7	2.7	2.8	3.0	(3.2)	3.4	3.0	3.3	3.2	3.3	[3.2]	3.1	3.2	3.4	3.0	2.9	3.0	3.0	2.7	2.7
2	2.8	2.9	2.9	2.8	2.9	2.7	2.9	3.1	3.2	(2.9)	3.2	3.0	3.1	3.3	3.2	3.2	3.1	3.2	3.1	3.1	2.9	2.8	2.8	2.9
3	2.9	2.8	2.8	2.7	2.7	2.8	3.2	3.3	3.3	3.2	3.1	3.2	3.1	3.2	3.3	3.3	3.3	3.3	3.3	2.8	3.0	3.0	2.8	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	3.0	3.0	2.8	3.1	2.9
5	2.7	2.8	3.0	3.2	2.9	2.8	3.0	3.3	3.5	3.3	3.3	3.1	3.1	3.1	3.1	3.3	3.2	3.3	3.4	3.3	2.8	2.8	2.9	2.9
6	2.8	3.0	2.7	2.8	3.1	2.8	3.2	3.3	3.2	3.2	3.2	3.1	3.1	3.0	3.1	3.1	3.0	3.2	3.2	2.8	2.6	2.6	2.8	3.0
7	3.1	3.0	2.7	2.7	2.6	2.7	3.0	3.3	3.1	3.1	3.2	2.9	3.0	3.0	(2.8)	2.9	2.9	2.9	2.9	3.0	2.8	S	2.9	3.0
8	2.8	2.9	2.9	2.7	2.6	2.7	2.8	3.3	3.1	3.2	3.1	3.1	3.0	3.0	3.1	3.0	3.0	3.2	3.1	3.1	3.1	3.0	3.0	2.8
9	3.0	2.8	3.0	3.0	3.2	3.2	3.2	3.6	3.2	(3.2)	3.0	[3.0]	3.0	3.2	3.0	3.1	3.0	3.0	3.2	3.0	A	2.9	2.7	2.8
10	2.7	2.6	2.6	2.9	2.8	2.8	2.9	3.2	3.1	3.2	3.0	2.9	2.9	3.0	3.1	3.3	3.0	3.2	3.1	3.0	2.9	3.1	2.9	2.7
11	2.8	3.0	2.7	2.7	2.8	2.7	2.9	3.2	2.9	(3.1)	3.1	3.1	2.8	2.9	3.1	3.0	3.0	3.0	3.0	3.0	2.9	(2.8)	2.8	2.8
12	2.7	2.7	2.7	2.8	2.8	2.8	3.0	3.3	3.3	3.0	3.0	2.9	2.9	2.9	2.9	3.0	3.1	3.0	3.0	2.9	3.0	2.9	2.8	2.7
13	2.8	2.7	2.6	2.6	2.6	2.7	3.1	3.2	3.2	3.1	3.0	2.9	2.9	2.9	2.9	3.0	3.0	3.2	3.1	3.2	2.7	2.7	2.7	2.7
14	2.7	2.9	2.6	2.7	2.7	2.7	2.6	3.0	3.1	3.1	3.1	2.9	2.9	2.9	3.1	2.9	3.0	3.2	3.1	3.2	2.8	2.7	3.0	2.6
15	2.7	2.9	2.8	2.8	(2.7)	2.7	2.8	3.2	3.3	3.2	2.9	2.9	3.0	3.0	2.9	3.0	3.0	3.1	3.1	2.7	S	2.9	2.7	2.8
16	2.7	2.8	2.7	3.0	2.7	2.5	2.8	3.2	3.2	(3.1)	3.1	3.0	2.8	2.9	2.9	2.9	2.9	3.1	3.2	2.9	2.8	2.7	2.7	2.7
17	2.7	2.8	3.0	2.6	2.6	2.8	3.2	3.2	3.2	3.1	3.1	3.1	3.0	2.9	3.0	3.1	3.0	3.1	3.2	3.2	2.8	2.8	2.8	2.7
18	2.7	3.0	3.0	3.0	2.8	3.0	3.2	3.3	3.1	3.0	3.0	3.0	3.0	3.0	2.8	3.1	3.0	3.0	3.1	3.0	2.9	2.9	3.1	2.8
19	2.9	2.9	2.9	3.1	2.9	2.8	3.1	C	3.2	C	C	C	C	C	C	3.1	3.1	3.1	3.2	(2.5)	2.9	2.8	(2.4)	F
20	F	F	(2.2)	2.7	2.7	3.1	2.8	3.2	2.8	3.2	3.3	[3.2]	3.0	2.9	2.9	3.0	3.1	3.2	3.2	3.1	2.9	2.9	2.8	3.1
21	2.6	2.9	3.1	2.7	FF	F	3.0	3.1	3.2	3.2	3.1	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.3	2.6	(2.6)	2.4	2.4
22	2.5	2.7	2.7	2.5	2.7	2.8	3.1	3.0	3.0	2.8	3.0	3.0	2.9	3.0	3.0	3.1	2.9	3.1	3.2	3.1	2.7	2.6	(2.3)	2.9
23	2.7	2.6	3.0	2.8	2.7	2.6	3.2	3.4	3.2	3.0	2.9	3.1	3.0	3.0	3.0	2.9	3.2	3.2	3.2	3.0	2.8	2.8	2.7	2.7
24	2.8	2.8	3.0	3.1	2.7	2.8	3.0	3.3	3.2	3.1	2.9	2.9	3.0	2.8	2.9	2.9	(2.9)	3.0	[3.0]	2.9	2.7	3.0	2.7	2.7
25	2.7	2.8	2.9	2.8	2.6	2.8	3.1	3.4	3.3	3.2	3.0	3.1	3.0	3.1	2.9	3.1	3.1	3.1	3.2	2.8	2.8	2.8	2.8	[2.8]
26	2.8	2.8	2.8	3.0	2.7	2.8	3.4	3.3	3.2	3.2	3.1	3.1	3.0	2.9	3.1	3.1	3.2	3.2	3.2	3.2	2.9	2.8	2.6	2.7
27	2.8	2.8	2.8	3.0	2.8	2.9	3.2	3.4	3.3	3.2	3.1	2.9	2.9	2.8	2.9	3.0	3.0	3.0	3.0	3.0	2.9	2.7	2.7	2.8
28	2.8	2.9	2.5	2.5	(2.6)	2.7	3.1	3.1	2.8	2.9	2.9	2.9	2.9	2.8	2.9	3.0	3.1	3.1	3.1	3.0	2.7	3.0	2.4	2.4
29	2.7	3.0	2.9	3.2	2.8	2.8	[3.0]	3.1	3.3	3.1	(3.1)	(3.0)	B	B	3.0	2.9	3.0	3.0	3.2	3.1	3.1	2.9	2.7	2.7
30	2.9	2.9	2.7	2.6	2.8	2.8	3.1	3.4	3.2	3.0	3.2	2.9	3.0	3.2	2.9	3.0	3.0	3.0	3.3	3.0	3.2	2.7	2.8	2.8
31	2.5	2.5	2.8	2.9	3.2	2.6	3.1	3.1	3.1	3.2	3.1	3.2	2.9	2.9	2.9	3.0	3.0	3.0	3.1	3.0	2.8	2.8	2.8	2.7
Median Value	2.7	2.8	2.8	2.8	2.7	2.8	3.0	3.2	3.2	3.1	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.0	2.9	2.8	2.8	2.8
Count	29	29	30	30	29	29	30	29	30	29	29	29	28	28	29	30	30	30	30	31	29	30	31	29

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 9

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar 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	1.4	1.4	1.5	E	E	E	1.5	2.5	2.9	3.4	4.0	3.8	4.2	4.2	3.7	3.2	A	A	A	A	A	A	A	A
2	A	A	A	1.3	1.3	1.2	1.7	2.3	2.9	3.1	A	3.4	3.8	3.8	3.6	3.2	2.8	1.9	1.6	1.8	1.7	1.4	1.4	A
3	1.3	1.3	1.1	E	1.1	1.1	1.6	2.3	2.8	3.2	3.5	3.8	4.0	4.2	3.5	3.3	2.9	2.3	1.6	1.4	1.4	1.8 A	1.8 A	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	1.8	1.6	1.6	2.0	1.4 A
5	A	1.4	1.6	1.4	1.4	1.4	1.8	2.4	2.7	3.6	3.6	3.8	3.8	3.8	3.5	3.2	2.6	2.1	1.4	A	1.5	1.4	1.4	1.4
6	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.4	3.0	3.4	3.8	3.8	3.4	3.5	3.6	3.4	3.0	A	A	1.6	1.8	1.5	1.5	1.6
7	1.7	1.6	1.1	1.1	1.1	1.1	1.4	2.4	2.9	3.4	3.6	4.1	4.0	4.0	3.8	3.2	A	(2.4) B	2.0	1.4	1.4	1.4	1.5	1.5
8	1.2	1.2	1.2	1.2	1.2	1.4	1.6	2.2	3.1	3.9	4.0	4.8	4.8	5.2	3.8	3.4	3.0	2.4	1.6	1.4	A	1.4	1.4	1.4
9	1.4	1.2	1.2	1.2	E	E	1.7	2.6	3.0	3.4	4.1	4.0	4.2	3.8	4.0	3.4	3.1	2.6	A	A	A	1.6	1.6	1.6
10	E	E	E	1.2	1.1	1.4	1.7	2.6	3.1	3.4	4.0	3.8	4.0	4.2	4.8	4.0	3.2	2.1	1.6 F	1.5	1.4	1.4	1.5	1.5
11	E	E	E	E	1.1	E	1.6	2.7 B	3.1	3.4	4.2	5.0	4.0	3.8	4.0	3.4	3.0	2.4	1.6	1.4	1.4	(1.4) C	1.4	1.5
12	1.1	1.1	1.1	1.1	E	1.2	1.8	2.7	2.9	3.3	3.8	3.8	3.7	3.8	3.8	3.5	3.0	2.3	1.7	1.4	1.4	1.4	1.4	1.4
13	A	1.3	1.3	1.2	1.2	1.3	1.7	2.6	3.0	3.5	3.8	4.8	4.0	4.0	3.8	3.4	3.1	2.6	2.2	2.2	1.6	1.6	1.7	1.3
14	E	1.4	E	1.2	1.2	1.2	1.2	A	3.2	3.7	3.5	3.8	3.7	3.8	3.8	3.4	2.9	2.5	1.6	1.4	1.5	1.2	1.2	1.2
15	1.2	1.2	1.2	1.1	1.1	E	1.7	2.6	3.2	3.2	3.6	4.8	4.4	3.5	3.4	3.2	3.0	A	2.0	1.6	1.4	1.4	1.6	1.4
16	1.2	1.2	E	E	E	E	1.7	2.6	3.0	3.2	3.8	3.9	3.6	4.6	3.7	4.0	3.0	2.4	1.5	1.4	1.3	1.5	1.4	1.5
17	1.6	1.4	1.1	1.1	1.1	1.1	1.7	2.6	3.3	3.5	3.7	4.0	4.2	4.2	4.2	3.5	2.9	2.3	1.8	1.4	1.5	1.4	1.4	1.8
18	1.2	E	E	E	E	E	2.0	2.6	3.0	3.6	4.0	4.2	4.2	4.0	4.0	3.7	3.1	2.8	1.9	1.6	A	1.6	1.6	1.6
19	1.6	1.6	1.2	1.2	1.4	1.4	1.6	2.6	3.2	C	C	C	C	C	C	3.2	3.0	2.1	2.0	1.6	1.6	1.6	1.6	1.6
20	1.2	1.2	AF	1.8 A	1.2	E	A	A	3.0	3.4	3.2	4.0	4.0	5.0	6.0	5.0	A	2.3	2.1	1.8	A	A	A	A
21	1.4	1.3	1.4	1.5	E	1.4	2.2	2.4	3.2	3.4	3.7	5.4	4.6	5.0	5.4	4.4	3.0	2.5	1.6	1.6	1.4	1.4	1.4	1.4
22	A	A	1.8	1.8	1.6	1.7	1.9	2.6	3.1	3.5	A	A	A	4.5	4.2	3.6	3.0	2.5	1.9	1.8	1.6	A	1.6	1.4
23	A	1.8	E	E	E	1.2	1.9 F	2.6 F	3.0	3.3	3.8	4.0	4.0	4.0 B	3.8	3.2	2.9	2.3	1.8	1.8	1.8	1.8	1.6	1.4
24	E	E	E	E	E	1.2	2.6 A	2.6	3.4	3.6	3.5	3.9	4.0	3.9	3.5	3.4	3.0	2.4	1.7	1.6	1.4	1.4	1.4	1.4
25	1.3	1.3	E	E	E	E	2.0	2.8	3.0	4.0 A	4.0	3.8	4.6	5.0	4.0	3.8	3.0	2.6	1.8	1.4	1.4	1.4	1.4	1.4
26	1.2	1.2	E	E	E	E	1.9	2.9	3.3	3.6	3.8	4.2	3.6	3.8	3.6	3.6	3.0	2.5	1.8	1.7	1.7	1.8	1.6	1.2
27	E	1.1	1.1	1.1	1.1	1.1	2.1	2.7	3.1	3.6	5.0	4.3	4.2	4.3	4.0	3.4	3.0	2.6	1.8	1.4	1.6	1.5	1.5	1.4
28	1.1	1.1	1.2	1.2	1.1	1.4	1.8	2.7	3.8	3.7	3.9	3.9	4.6	4.4	4.2	3.4	3.0	2.5	A	A	1.6	A	A	1.4
29	1.4	1.2	E	1.2	1.4	1.5	[2.2] C	3.0	3.4	3.9	4.0	4.0	4.2	4.1	3.9	3.6	3.0	2.7	1.5	1.6	1.6	1.6	1.6	1.8
30	1.8	1.6	1.6	A	1.2	1.4	A	2.7	3.3	4.0	4.6 A	3.8	4.8	4.4	4.8	4.0	3.0	A	A	A	A	A	A	A
31	A	A	A	1.7	E	A	2.1	2.8	3.3	3.7	4.6	4.4	4.2	4.0	3.9	4.6	3.4	2.6	2.0	1.4	1.4	1.4	1.3	1.4
Median Value	1.2	1.2	1.1	1.2	1.1	1.2	1.7	2.6	3.1	3.5	3.8	4.0	4.0	4.0	3.8	3.4	3.0	2.4	1.8	1.6	1.5	1.4	1.5	1.4
Count	24	27	27	29	30	29	28	28	30	29	27	28	28	29	29	30	27	26	25	26	25	26	27	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

Mar. 1950 | fmin 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	G	1.4	G	E	G	G	B	1.8	1.8	B	B	B	3.8	B	C	2.2	1.8	1.6	1.6	1.5	1.6	1.4	1.4	1.4
2	E	1.1	1.1	1.1	1.1	1.2	B	1.7	2.2	2.0	2.0	2.0	2.0	2.0	1.8	2.2	1.8	1.5	1.6	1.6	1.7	G	G	1.4
3	1.9	1.3	G	G	G	G	B	1.8	1.7	1.6	2.2	2.2	2.2	2.1	2.1	2.2	1.8	1.8	1.6	G	G	1.4	1.4	C
4	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	G	G	G	2.2	(1.4)B
5	1.6	1.4	1.4	G	G	G	B	1.6	1.6	2.0	1.8	2.0	1.8	1.9	1.6	1.7	1.8	1.4	1.5	1.4	G	G	G	G
6	G	G	G	G	G	G	B	1.4	1.4	1.8	B	B	B	B	B	2.2	2.0	2.2	(1.4)B	1.7	1.8	G	G	G
7	G	G	G	G	G	G	B	1.4	1.7	1.8	1.8	1.8	1.8	1.8	2.2	2.2	2.1	2.0	1.8	G	G	1.7F	(2.2)B	1.8F
8	E	1.2	G	G	G	G	1.6	1.7	1.6	1.8	1.8	2.2	2.0	1.7	2.0	1.8	1.7	1.4	1.5	G	1.4	G	2.0	G
9	G	G	G	G	G	G	B	1.4	1.8	1.8	1.7	1.8	1.8	1.8	2.9	2.5	1.9	1.6	1.5	1.6	1.6	1.6	G	G
10	G	G	G	1.5	(1.1)B	G	B	1.4	1.6	1.8	1.8	2.0	1.8	1.8	B	B	1.6	1.6	B	G	G	G	G	G
11	G	G	G	G	G	G	1.4	1.6	1.6	1.8	1.8	2.0	1.6	1.8	1.8	1.7	1.6	1.7	B	G	G	G	G	G
12	G	G	G	G	G	G	B	B	1.8	1.8	2.0	2.4	2.4	2.6	1.8	1.8	1.8	1.7	B	G	G	G	G	G
13	1.2	1.4	1.2	G	G	G	1.4	1.8	1.8	1.6	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.7	1.6	G	G	G	G	G
14	G	G	G	G	G	G	E	1.6	1.8	2.1	2.5	2.0	2.2	2.2	1.9	1.8	1.7	1.8	1.9	1.8	G	G	G	G
15	G	G	G	G	G	G	1.4	1.4	1.4	1.8	1.8	B	2.8	2.4	2.0	2.0	1.8	1.8	1.6	B	G	G	G	G
16	G	G	G	G	G	G	1.4B	1.8	1.7	1.6	1.8	1.8	2.3	1.8	1.8	1.7	1.7	1.6	B	G	G	G	G	G
17	G	G	G	G	G	G	1.4	1.4	1.7	1.8	1.9	1.9	2.5	2.0	2.0	2.0	2.0	1.8	B	G	G	G	G	G
18	G	G	G	G	G	G	1.4	1.7	1.8	1.8	1.8	1.9	2.4	2.0	2.0	2.0	2.0	2.0	B	1.8	1.6	(2.0)B	G	G
19	G	1.8	G	G	G	G	B	1.7	1.8	C	C	C	C	C	C	1.8	1.8	1.8	1.7	(1.8)B	G	G	1.6	G
20	1.2F	1.2	1.2F	1.2	1.6	E	1.3	1.4	1.8	2.0	2.2	2.2	2.6	2.6	B	1.7	1.8	1.8	1.6	1.8	1.2	1.2	1.2	1.2
21	1.4	G	G	1.4	G	G	1.5	1.8	1.7	1.6	1.8	3.0	B	B	B	B	B	1.6	B	G	G	G	G	G
22	1.6	1.7	1.7	G	G	1.8	1.5	1.8	1.8	2.0	1.8	2.0	2.0	1.8	2.9	1.9	1.9	1.7	1.7	1.6	1.6	1.3	1.5	G
23	1.3	1.4	G	G	2.0	G	1.6F	1.7	1.7	1.7	1.8	2.2	2.0	2.2	1.8	1.8	1.8	1.8	B	B	G	G	G	G
24	G	G	G	G	G	1.6	1.4	2.0	1.8	2.0	2.1	1.8	2.1	1.9	1.8	1.8	1.8	1.7	1.6	1.7	G	G	G	G
25	G	G	G	G	G	G	1.6	1.8	1.8	1.8	1.8	1.8	B	2.5	1.8	1.8	1.6	1.6	1.7	G	G	G	G	G
26	G	G	G	G	G	G	1.6	1.5	1.6	1.6	1.8	B	B	2.2	1.8	1.8	1.7	1.6	B	G	G	G	G	G
27	G	G	G	G	G	G	1.6	1.8	1.7	2.0	1.8	1.9	1.9	1.9	2.0	1.8	1.8	2.0	1.6	G	1.4	G	G	G
28	G	G	1.8	1.8	G	G	1.8	1.5	1.9	1.7	1.8	1.8	1.8	1.7	1.7	1.7	1.8	1.6	1.5	(1.6)B	1.6	1.6	1.6	1.6
29	1.6	G	G	G	G	G	(1.4)C	1.4	1.9	1.7	1.8	1.8	B	B	1.8	1.9	2.0	1.8	B	(1.6)B	2.0	G	G	1.6
30	1.6	G	G	1.6	G	G	1.6	1.8	1.9	2.0	1.8	2.0	2.4	2.6	2.3	2.5	1.8	1.8	1.4	1.4	1.4	1.5	1.4	1.4
31	1.4	1.4	E	1.1	1.0	1.2	1.4	1.8	1.8	1.8	1.8	2.6	1.8	2.2	2.6	2.2	1.6	1.6	1.4	G	G	G	2.0	1.8
Median Value	G	G	G	G	G	G	1.4	1.7	1.8	1.8	1.8	2.0	2.0	2.0	1.8	1.8	1.8	1.7	1.6	G	G	G	G	G
Count	30	30	30	30	30	30	20	29	30	28	27	25	24	25	24	28	29	30	20	29	31	30	31	30

Sweep 1.0 Mc to 11.0 Mc in 15 min Manual

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

IONOSPHERIC DATA

Mar. 1950 | f_0 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	5.1^{F}	5.0^{F}	4.9	5.3^{F}	4.7^{F}	4.6	5.1^{F}	8.7	11.7	(11.9)^{f}	12.1	12.6	13.0	11.9	10.5	10.2	10.1	9.5	8.3	6.2	6.4	5.4	4.9	4.6
2	5.1	5.0	5.2	4.6^{B}	4.5	4.2	5.8	8.1^{B}	9.3	10.8	12.2^{P}	13.6	(14.2)^{P}	12.2	11.7^{P}	11.3^{P}	11.0	8.6	7.5	5.9	5.1	5.1	5.1	5.0
3	5.2	4.9	4.4	4.5	4.5	4.6	5.3	7.7	9.3^{P}	10.3	11.4	12.2	(13.0)^{P}	13.2	12.1	10.4	10.0	9.2	8.0	6.0	6.5	6.4	5.3	5.2
4	5.1	5.2	5.0	4.7	4.5	4.2	5.3	8.2^{P}	10.4	10.4	9.4	12.0	11.9	11.8	11.8	11.1	(10.1)$^{P}_{S}$	9.8	8.9	7.4	6.1	5.6	5.7^{P}	5.4
5	4.8	5.0	5.0	5.0	3.8	3.6	4.7	7.3	10.2	9.6	10.3	11.2	12.5	12.2	11.7	11.3	B	10.5	9.1	7.0	5.5	5.7	5.6	5.0
6	4.9	4.9	4.5	4.3^{S}	3.9	3.7	C	7.8	9.7^{P}	11.3	12.7	13.2^{P}	13.6	13.3	13.0	12.0	11.7	10.4	8.3$^{P}_{B}$	8.3	7.0	6.5	6.8^{B}	7.5
7	5.9^{S}	4.9	4.2	4.1	3.7	2.7	7.0	8.0	10.2	11.4	11.9	11.8	12.7	12.1	11.1	11.3	9.9$^{P}_{H}$	10.5	10.8	9.4^{H}	8.1	6.5	6.6	6.7
8	5.0	5.7	4.5	4.0	4.1	3.9	6.1	10.0	11.8	11.7	12.7	12.7	13.1	13.9	13.3	12.0	11.3	10.9	9.4	7.4	7.0^{P}	6.3	5.2	5.2
9	5.0	5.2	5.2	5.0	4.2	3.3	5.2	7.7^{F}	9.5	11.5	11.9	11.9	12.3	12.7	12.4	12.3	11.8	11.2^{S}	10.4	7.5^{S}	6.6	6.4	6.4	6.7^{F}
10	6.4	6.1	5.8	5.8	5.0	4.8	7.2	10.3	11.6	11.4	12.2	11.6	11.9	12.6	12.4	11.5	11.5	11.4	10.6$^{P}_{H}$	9.7^{S}	8.8^{P}	7.6^{P}	6.3	5.8^{Z}
11	6.0	5.7	5.4	5.5	4.8	4.7	6.0	8.6	10.8^{S}	11.4	12.8	12.5	12.5	13.5	12.8	11.3	11.3	10.9	10.4	9.3	8.1	6.6	5.9	5.9
12	5.7	5.5	5.5	5.4	5.0	5.1	6.4	8.2	9.4	10.1	12.0	11.6	12.1	13.0^{P}	12.2	12.0	11.9	11.4	10.2	9.3	(8.2)^{P}	6.8	6.6	6.5
13	6.3	5.8	5.5	5.4	5.3	5.5	6.7	B	10.6	10.5	12.2	12.4	13.2	13.7^{B}	12.9	12.4^{P}	12.1	11.4	9.6	7.4	6.7	6.2	6.1	6.1
14	5.9^{F}	5.6	5.6	5.5	5.0	4.9	6.3	8.7	10.7	11.2	12.6	13.2^{B}	13.5	13.4	12.9	11.8	10.7	10.4^{B}	8.8^{P}	7.3	7.5	7.4	6.6	6.8
15	6.7	6.6	6.7	5.8	5.7	5.8	7.4	9.8	10.6	10.6	11.9	12.8	12.9	13.0	12.0	12.9	12.0	10.6	8.6	6.7	(7.2)^{P}	7.4	7.5	7.2
16	7.3	7.0	6.7	6.3	4.9	4.8	6.3	8.8	10.5	11.7	12.5	13.3	12.4	12.5	12.5	11.3	11.1	11.0	9.6	7.6^{H}	7.0^{H}	6.5	6.3	6.4
17	6.3	6.4	6.3	5.2	5.2	5.6	6.7	8.4	9.5	10.6	12.2	12.2	12.4	12.5	S	12.4^{P}	12.1^{P}	10.8	10.1	7.7	7.0	6.9	6.7	6.6
18	6.6	7.0	6.5	5.4	4.4	4.4	(7.4)^{P}	B	10.0	11.1	11.4	12.6	13.0	12.6	12.7	(13.3)$^{P}_{S}$	12.8	12.5$^{P}_{S}$	11.2	8.3$^{P}_{S}$	7.7	7.6	7.2	6.6
19	6.3	6.1	6.1	6.1	4.7	4.4	6.0^{P}	8.8	10.3	11.5	12.7	13.2	13.6	13.5	13.5	13.0	12.6	11.6	(10.0)^{J}	7.4	S K	S K	B K	B K
20	7.7$^{K}_{P}$	F^{K}	F^{K}	F^{K}	F K	5.7$^{K}_{F}$	7.6	11.6	11.5	(13.2)^{B}	(14.8)^{P}	13.7	14.6	14.8^{J}	15.1	13.6	12.5	12.0	11.4^{J}	9.1	(7.7)^{S}	6.6	6.7	6.3
21	6.2	5.9	6.6^{S}	5.1^{F}	4.8	4.7	6.6^{F}	8.1$^{P}_{S}$	10.2^{S}	11.0	11.7	12.8	13.4	13.6	13.5	12.9	12.6	11.9	11.1	(7.6)$^{P}_{B}$	5.4	5.3	5.3	5.2
22	5.0	5.2	5.2	4.8	5.0	5.2	7.8^{S}	(8.7)^{P}	10.0	11.8	10.8	11.0	11.7	11.5	11.8	10.7	(10.1)$^{P}_{S}$	11.0	9.7^{J}	(8.0)^{P}	5.8	5.5	5.7	5.8
23	6.0	6.1	6.2	5.5	4.8	4.5	5.7	B H	10.3	9.1	10.4^{P}	13.0	12.1	11.5	11.8	12.0	11.7	10.3	(9.7)^{P}	6.8	6.1	6.5	6.4	6.3
24	6.0	6.3	6.3	6.5	4.3^{H}	4.2	7.2	8.7	8.8	9.8	10.2	11.3	11.8	12.2	11.9	12.4	12.2	11.4	9.7^{J}	B	B	7.4	6.0^{P}	6.9^{P}
25	6.1$^{B}_{S}$	B S	B S	5.9	5.7	6.2	8.1^{J}	S	9.2	10.3	11.7	12.5	12.5	12.7	13.4^{P}	13.0	12.2	12.1^{S}	11.5	(9.0)$^{P}_{S}$	6.8	6.8	7.2	7.4
26	7.1	7.1	(7.2)^{P}	6.4^{F}	5.1^{F}	5.2	B	8.9	9.8^{P}	10.3	11.0	11.8	12.3	13.1	13.5^{H}	13.3	12.2	11.2	10.9^{P}	9.5	7.2	6.5	6.6	6.7^{S}
27	6.8	6.5	6.7	6.0	5.5	5.5	8.2	9.1	9.4	10.0	9.4	11.7	12.4	12.2	13.1	12.3	12.0	12.0	11.3	10.0	8.4	8.2	6.1	7.7
28	7.5	7.2	6.2	6.0	5.5	6.2	7.5	8.7	9.3	11.5	12.5	13.3	13.8	13.8^{P}	13.9^{S}	(13.6)^{B}	13.3^{P}	12.0	12.0	10.1^{S}	7.8	7.5	6.7	6.7
29	6.7	7.9	8.2	7.5	5.5	4.6	8.1^{P}	8.8	10.6	11.5	12.4	13.2	13.6^{B}	13.7	13.5	13.1	13.0^{P}	12.7	S	B	8.9^{P}	(8.4)^{B}	7.9^{P}	7.5
30	7.6	7.0^{P}	6.9	6.6	6.4	6.0	9.2	8.8	9.5	10.2	12.4	12.7	14.1	14.3	13.2	13.0	12.8	11.9	11.2	S	7.1	6.7^{S}	6.7	6.6
31	6.4	6.6	7.3	7.2	4.7	4.8	6.5	(9.0)$^{P}_{S}$	C	C	C	C	C	C	C	12.7	12.2	12.1	11.5	(9.0)^{B}	7.4	7.5	6.9	6.8
Median Value	6.1	5.9	5.8	5.4	4.8	4.7	6.6	8.7	10.2	11.0	12.0	12.6	12.8	12.8	12.7	12.3	12.0	11.1	10.0	7.6	7.0	6.6	6.4	6.6
Count	31	29	29	30	30	31	29	27	30	30	30	30	30	30	29	31	30	31	30	28	29	30	30	30

Sweep 1.0 Mc in 12.0 Mc in 15 min Manual

K 1

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 1950 | h_pF2 | 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	360F	370F	380	360F	320F	350	350F	290	280	C	270	290	310	290	260	300	280	280	290	310	310	280	330	370
2	340	310	310	310B	330	370	300	270B	260	280	290P	280	(280)P	280	270P	270P	260	240	290	300	320	340	340	350
3	330	270	320	350	350	310	280	260	270P	280	290	310	(280)P	290	280	290	270	260	270	320	310	290	330	360
4	380	320	320	320	340	380	310	260P	260	270	310	310	280	310	300	B	(290)S	270	290	250	270	310	320P	320
5	350	350	290	280	290	340	280	260	260	270	270	300	280	290	300	280	B	280	270	260	330	330	300	330
6	320	300	330	320S	300	330	C	270	(280)P	290	300	290P	310	300	310	300	280	270	280PB	340	330	340	B	300
7	270S	300	330	360	420	360	250	260	270	280	270	310	300	300	320	310	320PH	300	290	300H	300	260	300	280
8	300	320	280	(360)B	350	310	300	260	260	260	280	290	310	290	290	280	280	280	270	290	290P	300	320	350
9	380	360	280	260	250	300	280	250F	260	290	290	320	300	310	320	320	300	280S	350	280S	330	320	360	340F
10	320	330	320	310	330	320	280	250	240	280	300	310	350	310	320	300	300	290	300FH	310S	320P	300P	320	370Z
11	350	340	350	340	360	360	310	270	270S	300	310	300	340	310	300	290	300	300	270	B	300	310	320	350
12	380	350	360	360	320	330	270	260	270	290	310	300	330	310P	310	300	310	280	280	300	(300)P	310	330	330
13	320	350	350	400	360	370	310	B	270	320	310	300	360	340B	320	340P	300P	270	280	300	320	310	340	350
14	330F	350	350	330	360	360	300	260	260	300	310	(300)B	320	330	310	300	300	270B	270P	370	360	330	350	390
15	380	330	330	330	390	400	310	270	280	320	320	330	330	320	350	330	310	300	300	390	(390)P	360	350	350
16	340	330	310	280	360	410	320	280	280	310	300	300	300	320	310	290	290	290	280	340H	360H	370	400	400
17	380	360	320	390	420	360	250	280	290	290	270	280	320	300	S	290P	290P	260	250	280	330	340	310	330
18	350	310	270	260	300	330	(270)F	B	270	270	300	310	300	320	320	(300)PS	290	(300)PS	270	320PS	360	340	310	300
19	330	320	320	300	340H	330	300P	280	290	330	330	350	330	330	340	330	310	300	(250)J	320	SK	SK	BK	BK
20	SK	FK	FK	FK	FK	370HF	350	310	(310)H	B	(290)P	310	360	(340)J	340	310	310	300	(300)J	S	(320)S	320	360	410
21	360	360	320S	380F	400	430	300F	290FS	300S	290	300	320	300	310	300	300	300	280	250	(240)FB	360	380	400	420
22	410	360	370	420	380	340	S	(270)P	300	280	250	280	320	320	300	300	(290)FS	280	(270)J	(270)P	310	370	420	390
23	360	340	330	310	350	360	290	BH	250	260	330F	300	310	300	310	300	290	260	(240)P	260S	330	340	350	330
24	380	310	320	270	360H	380	270	250	280	290	290	310	320	300	310	310	290	280	(290)J	B	B	290	300P	350P
25	330PS	BS	BS	300	340	300	(230)J	S	230	290	290	290	290	310	320F	300	300	C	250	(270)PS	290	310	340	310
26	310	310	(280)	290F	290F	330	B	270	270P	270	270	290	300	300	290H	300	260	260	260P	250	280	350	350	330S
27	330	330	300	280	300	300	230	250	250	250	280	290	290	300	290	290	300	270	260	270	290	310	280	320
28	300	300	320	340	310	310	250	220	250	280	270	280	280	280P	280S	B	270P	250	240	240S	300	310	370	380
29	370	320	290	270	280	340	270F	280	290	290	350	310	320B	330	320	320	320F	280	S	B	300F	B	360P	360
30	340	310P	330	360	330	360	270	240	260	290	320	340	310	320	310	300	290	300	300	S	320	350S	370	370
31	400	370	330	270	400	350	320	(280)FS	C	C	C	C	C	C	C	300	280	300	280	(320)FS	310	320	360	370
Median Value	340	330	320	320	340	350	280	270	270	290	300	300	310	310	310	300	290	280	280	300	320	320	340	350
Count	30	29	29	30	30	31	28	27	30	28	30	30	30	30	29	29	30	30	30	26	29	29	29	30

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

K 2

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

IONOSPHERIC DATA

Mar. 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	230A	280	290	260	220	260	280	230	230	(240)F	240	250	250	230	230	210	240	240	220	240	220	240	250	300A
2	290A	(300)A F	250A	260A	250	A	250	220	220	210	200	230	250	210	220	220	240	210	210	220	(270)B	(220)A	260	280
3	260	240F	240	270	250	230	210	220	220	250	260	220	260	210	250	240	240	220	230	210	250	230	250	280
4	290	250F	240	250	260	280	260	220	230	230	210	280	240	220	240	240A	240	230	220	200	220	230	260	250A
5	270	A	240	220	220	270	240	210	220	200	200	260	270	260	220	240	230	240	220	210	250	260	240	260
6	250	240	250	240	240	260	C	220	220	260	260	250	280	260	240	230	220	220	220	230	250	250	290	250
7	220	220	250	260	280	290	210	230	240	250	220	230	280	230	220	240	240H	240	240	230H	A	230	220A	230
8	240	240	250	250	270	280	250	210	220	210	210	210	280	260	220	220	220	230	210	200	240	210	230	260
9	280	280	230	210	210	230	240	220	220	240	230	290	280	280	280	270	260	210	220	210F	240	240	260	250
10	240	260	250	220	240A	240	220	210	210	220	280	220	290	280	270	230	240	240	230H	220	240	230	230	250
11	260	250	270	250	220	270	240	240	230	230	290	230	280	280	270	230	240	250	210	220	250	220	240	280
12	270	290	250	270	230	240	240	220	220	220	270	280	230	280	220	220	210	230	220	220	220	250	250A	250
13	250	250	260	300	260	270	260	220	220	210	280	280	310	280	270	240	250	240	220	210	250	250	260	270
14	270	280	280	250	250	260	250	230	220	210	290	260	300	270	270	220	220	230	200A	250A	270	260	250	300
15	280	250	250	250	250	300	250	230	230	230	300	270	280	280	270	230	250	240	210	240	280F	280	270	260
16	250	250	240	220	200	300	260	230	230	210	220	210	220	270	250	260	230	230	230	230H	250H	270A	290	300
17	290	280	250	280	310	290	230	240	230	240	250	250	220	270	270	220	220	230	210	200	240	260	250	250
18	250	250	220	210	220	250	220	220	210	200	200	270	260	280	200	270	A	240	230A	220	250	270	250	250
19	260	260	250	240	200H	260	260	230	230	270	280	280	300	280	250	240	250	250	210	220	290K	270K	210K	300K
20	280KF	270KF	220KF	240K	240K	300K	270	240	240	290	260	270	300	300	300	270	270	240	240	240	250A	250	310A	300
21	290	280	270	250	280	330	240	240	250	260	250	250	270	270	280	220	240	240	220	200	220	260	300A	350A
22	320AF	280	290A	280	290	250	240	240	240	250	230	260	280	280	270	240	250	240	230A	220A	210A	270	330A	290
23	270	260	250F	220	240	260	240	220H	230	240	280	280	250	230	280	270	260	220	220	220	250	250	280	260
24	290	270	250	220	200AH	290	240	220	210	230	260	300	290	250	240	250	250	230	230	210	230	220	260	270
25	270	250	230	200	250	240	200	200	200	240	240	250	240	260	210	250	220	250	210	80	200	260	270	260
26	240	250	230	210	210	250	190	210	210	210	200	210	280	270	250H	260	220	210	210	220	200	240	260	270
27	250	250	240	220	220	250	200	220	220	210	220	250	240	250	250	220	230	220	210	210	200	220	220	230
28	240	220	240	260	250	210	220	200	200	250	250	260	190	250	250	200	200	210	200A	200A	210A	280	320F	350
29	310	270	230	220	210	230	230	230	230	230	300	260	280	300	280	230A	240	220	220	210	220	220	300A	280
30	250	250	250	250	230A	250	240	220	220	230	280	290	290	280	220	250	250	240	240F	230A	220A	A	A	A
31	A	280	280	220F	200A	260F	240	230	C	C	C	C	C	C	C	250	220	250	230A	200A	250AF	220	270	290
Median Value	260	260	250	250	240	260	240	220	220	230	250	260	280	270	250	240	240	230	220	220	240	250	260	270
Count	30	30	31	31	31	30	30	31	30	30	30	30	30	30	30	31	30	31	31	31	30	30	30	30

Sweep: 2 Mc to 20 Mc in 15 min Manual

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 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	C	L	L	Q	Q	Q	Q	Q	Q	Q					
2							Q	Q	Q	Q	Q	Q	L	Q	Q	Q	LF	Q	Q					
3							Q	Q	Q	L	L	Q	L	Q	L	L	Q	Q	Q					
4							Q	Q	Q	Q	Q	L	Q	Q	Q	Q	Q	Q	Q					
5							Q	Q	Q	Q	Q	L	L	L	Q	L	L	Q	Q					
6							C	Q	Q	L	L	L	L	L	Q	Q	Q	Q	Q					
7							Q	Q	Q	L	Q	Q	L	Q	Q	Q	Q	Q	Q					
8							Q	Q	Q	Q	Q	Q	L	L	Q	Q	Q	Q	Q					
9							Q	Q	Q	Q	Q	L	L	L	L	L	L	Q	Q					
10							Q	Q	Q	Q	L	Q	L	L	L	Q	Q	Q	Q					
11							Q	Q	Q	Q	L	Q	L	L	L	Q	Q	Q	Q					
12							Q	Q	Q	Q	L	L	Q	L	Q	Q	Q	Q	Q					
13							Q	Q	Q	Q	L	L	L	L	L	Q	Q	Q	Q					
14							Q	Q	Q	Q	L	L	L	5.0	L	Q	Q	Q	Q					
15							Q	Q	Q	Q	L	L	L	L	L	Q	Q	Q	Q					
16							Q	Q	L	Q	Q	Q	Q	L	L	L	Q	Q	Q					
17							Q	L	Q	L	L	L	Q	L	L	Q	Q	Q	Q					
18							Q	Q	Q	Q	Q	L	L	L	Q	L	Q	Q	Q					
19							Q	Q	Q	L	L	L	L	L	Q	Q	Q	Q	Q					
20							Q	Q	Q	L	L	L	L	L	L	L	L	Q	Q					
21							Q	Q	L	L	L	L	L	L	L	Q	Q	Q	Q					
22							Q	Q	Q	Q	L	L	L	L	L	Q	Q	Q	Q					
23							Q	Q	L	L	L	L	Q	Q	L	L	L	Q	Q					
24							Q	Q	Q	Q	L	L	L	L	L	L	L	Q	Q					
25							Q	Q	Q	L	L	B	L	L	Q	B	Q	L	Q					
26							Q	Q	Q	Q	Q	Q	L	L	L	L	Q	Q	Q					
27							Q	Q	Q	Q	Q	L	Q	L	L	Q	Q	Q	Q					
28							Q	Q	Q	L	L	L	Q	L	L	Q	Q	Q	Q					
29							Q	Q	Q	Q	L	Q	L	L	L	Q	Q	A	Q					
30							L	Q	Q	Q	L	L	L	L	Q	L	Q	Q	Q					
31							Q	Q	C	C	C	C	C	C	C	Q	Q	Q	Q					
Median Value							—	—	—	—	—	—	—	—	—	—	—	—	—					
Count							0	0	0	0	0	0	0	1	0	0	0	0	0					

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

K 4

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

IONOSPHERIC DATA

Mar. 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	C	Z10	Z00	Q	Q	Q	Q	Q	Q	Q					
2							Q	Q	Q	Q	Q	Q	Z20	Q	Q	Q	Z20	Q	Q					
3							Q	Q	Q	Z20	Z10	Q	Z20	Q	Z20	Z20	Q	Q	Q					
4							Q	Q	Q	Q	Q	Z00	Q	Q	Q	Q	Q	Q	Q					
5							Q	Q	Q	Q	Q	Z00	Z10	Z20	Q	Z10	Z20[A]	Q	Q					
6							C	Q	Q	Z10	Z20	Z00	Z10	Z30	Q	Q	Q	Q	Q					
7							Q	Q	Q	Z30	Q	Q	Z10	Q	Q	Q	Q	Q	Q					
8							Q	Q	Q	Q	Q	Q	Z00	Z10	Q	Q	Q	Q	Q					
9							Q	Q	Q	Q	Q	Z20	Z00	Z30	Z40	Z40	Z50	Q	Q					
10							Q	Q	Q	Q	Z10	Q	Z10	Z20	Z20	Q	Q	Q	Q					
11							Q	Q	Q	Q	Z30	Q	Z10	Z20	Z20	Q	Q	Q	Q					
12							Q	Q	Q	Q	Z20	Z10	Q	Z10	Q	Q	Q	Q	Q					
13							Q	Q	Q	Q	Z20	Z40	Z30	Z30	Z20	Q	Q	Q	Q					
14							Q	Q	Q	Q	Z30	A	Z20	Z30	Z30	Q	Q	Q	Q					
15							Q	Q	Q	Q	Z30	Z40	Z40	Z30	Z30	Q	Q	Q	Q					
16							Q	Q	Z20	Q	Q	Q	Q	Z20[A]	Z10	Z30	Q	Q	Q					
17							Q	Z30	Q	Z10	Z10	Z00	Q	Z20	Z10	Q	Q	Q	Q					
18							Q	Q	Q	Q	Q	Z00	Z20	Z30	Q	Z20	Q	Q	Q					
19							Q	Q	Q	Z30	Z50	Z30	Z50	Z50	Q	Q	Q	Q	Q					
20							Q	Q	Q	Z30	Z30	Z20	Z20	A	Z30	Z40	Z40	Q	Q					
21							Q	Q	Z00	A	Z00	Z10	Z00	Z00	Z30	Q	Q	Q	Q					
22							Q	Q	Q	Q	Z00[A]	Z00	Z00	Z30	Z40	Q	Q	Q	Q					
23							Q	Q	Z10	Z20	Z20	Z40	Q	Q	Z40	Z20	Z30	Q	Q					
24							Q	Q	Q	Q	Z20	Z20	Z20	Z10	Z10	Z10	Z30	Q	Q					
25							Q	Q	Q	Z00	190	B	Z00	Z00	Q	B	Q	Z30	Q					
26							Q	Q	Q	Q	Q	Q	Z00	Z20	190	Z10	Q	Q	Q					
27							Q	Q	Q	Q	Q	190	Q	Z10	180	Q	Q	Q	Q					
28							Q	Q	Q	190	190	Z00	Q	Z00[A]	Z10	Q	Q	Q	Q					
29							Q	Q	Q	Q	Z40	Q	Z30	Z60	Z30[A]	Q	Q	A	Q					
30							Z10	Q	Q	Q	Z40	Z40	Z20	Z10	Q	Z30	Q	Q	Q					
31							Q	Q	C	C	C	C	C	C	C	Q	Q	Q	Q					
Median Value							—	—	—	Z20	Z20	Z10	Z20	Z20	Z20	Z20	Z30	—	—					
Count							1	1	3	9	Z0	19	Z2	Z3	18	10	6	1	0					

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

K 5

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 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							(1.2)B	2.1H	2.7	C	3.5H	A	3.6	3.5	3.4	3.2	2.6	1.8A	B					
2							B	2.0	2.6	A	3.4B	3.7B	(3.4)B	A	B	B	2.8	2.2	B					
3							1.1	1.9H	2.7	3.0	3.2	3.3	3.5	3.5	3.2A	B	B	2.3	1.6J					
4							1.5	2.1	2.7	3.2	3.2	3.4	3.4	(3.4)A	A	A	A	A	A					
5							(1.3)B	2.4	2.8	3.1B	3.3	A	A	3.6B	3.6B	(3.0)B	A	2.1	1.4					
6							C	2.3	2.9	3.2	3.3	3.5	3.7	3.5	3.4	3.1B	2.8	2.2	1.7					
7							A	2.5F	3.2	3.2	3.4	3.6	B	(3.8)B	A	(3.1)B	2.9	2.4	A					
8							(1.5)B	2.4J	(3.0)J	3.3	3.3J	3.4	A	3.7	3.6	A	3.0	2.3	B					
9							1.6H	2.6H	2.9	3.0	A	A	A	B	B	A	(3.1)A	A	A					
10							2.0	2.5	(2.9)A	3.3	3.4	(3.8)F	3.7B	3.6	B	(3.4)A	(3.0)B	2.4	1.5					
11							1.7A	2.6B	B	3.4	3.5	3.8B	A	3.7	3.6	3.4	2.8A	2.5	A					
12							1.4	2.4	B	A	B	3.8B	B	3.6	3.5	3.4F	B	A	A					
13							1.6	2.5	3.0	3.3	3.5	B	B	B	3.3B	3.3	3.0	2.4	A					
14							1.9J	2.3	3.2	3.6	(3.5)A	A	3.4	3.6	3.6B	3.4	(3.0)B	2.5	A					
15							1.8	2.6	2.9	3.4	B	B	3.8A	3.7B	3.6	3.4	(3.2)A	2.5	A					
16							1.8	2.5	3.0	3.4	3.2	(3.6)B	(3.9)A	A	3.6	3.4	2.9	2.3A	A					
17							(1.6)B	2.5	3.0	(3.4)A	3.5	(3.6)B	A	A	B	(3.3)A	2.9B	2.3	1.5B					
18							2.0	2.5	3.0B	3.2	3.1B	3.2B	3.6B	3.5	3.5	3.3	A	2.4	A					
19							1.8B	2.5	3.0	(3.2)A	B	B	B	3.6B	B	B	A	2.5	B					
20							A	2.4	3.0	3.2A	B	A	3.5	B	A	3.4B	A	2.4	1.9A					
21							1.8A	2.4	2.8	A	A	A	3.6	3.6	3.6	3.3	3.0	(2.5)A	B					
22							2.0	2.5	3.0B	(3.4)A	A	A	A	B	B	3.5	2.8	2.3	A					
23							1.8	B	A	3.3	3.4	B	3.4	3.8J	3.5	3.4	2.9	2.4	1.7A					
24							1.8	2.4	2.9	3.4	3.5	B	B	B	B	A	2.8	2.4	(1.7)A					
25							B	2.6	(3.0)A	3.5	3.8	B	B	B	3.5	3.3	2.8	2.4	A					
26							2.0	2.5	A	3.5H	3.4	3.4	(3.6)B	3.6	3.5	3.4	3.0	2.4	1.5					
27							1.7	2.6	3.3	(3.5)B	3.6	3.7	B	B	3.5B	3.4	3.1	2.5	(1.9)B					
28							1.8A	2.6	3.1F	3.3	A	A	A	A	3.6F	(3.5)A	A	2.4	A					
29							1.8	2.6	(3.2)A	3.4	B	B	B	B	A	3.4B	B	A	A					
30							A	A	3.2	(3.5)A	A	3.4	B	3.6	3.6	A	A	A	A					
31							2.0	2.4	C	C	C	C	C	C	C	3.4	(3.0)B	2.7	A					
Median Value							1.8	2.5	3.0	3.3	3.4	3.6	3.6	3.6	3.5	3.4	2.9	2.4	1.6					
Count							25	29	26	26	20	15	14	18	19	23	21	26	10					

Sweep 1.0 Mc to 12.0 Mc in 15 min Manual

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

IONOSPHERIC DATA

Mar. 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							B	100^{H}	100	C	100^{H}	100^{A}	100	110	110	100	100	110	B					
2							B	100	100	A	100	100	100	A	100	100	100	100	B					
3							E	110^{H}	100	100	100	100	100	100	100	100	100	100	(100)^{A}					
4							B	120	100	100	100	100	110	(110)^{A}	A	110^{A}	A	A	A					
5							B	110	100	100	100	A	100^{A}	100	100	100	A	100	B					
6							C	110	100	100	100	100	100	100	100	100	100	100	B					
7							A	110	100	100	100	100	100	100	A	100	100^{A}	110	A					
8							B	100	100	100	100	100	A	100	100	A	100	100	B					
9							170^{H}	120	100	100	A	A	A	100	110	A	110^{A}	A	A					
10							100	110	A	100	100	100	100	110	100	100	110	100	120					
11							A	110	100	100	100	100	A	100	100	100	100	A	A					
12							B	100	100	A	100	100	100	100	100	100	100	A	A					
13							B	110	100	100	100	(110)^{B}	100	100	110	100	100	100	A					
14							150	120^{B}	100	100	100	A	100	100	100	100	100	100	A					
15							160	110	100	100	110	B	110	110	100	100	100	100	A					
16							170	110	100	100	100	100	100^{A}	A	100	100	100	100	A					
17							B	120	(110)^{A}	100	100	100	A	A	100	100	100	100	110					
18							150	110	100	100	100	100	100	100	100	100	A	100	A					
19							100	120	110	120	120	B	100	100	100	120	100	110	B					
20							A	110	100	110	110	A	110	110	A	100	A	120	A					
21							100	120	110	A	A	A	100	100	100	100	100	A	B					
22							150	120	110	100	A	A	A	100	110	100	110	110	A					
23							140	100	A	A	100	100	100	A	100	100	100	100	A					
24							110	110	110	100	100	100	100	100	100	100	100	100	A					
25							B	100	100	100	100	100	100	100	100	100	100	100	A					
26							140	100	A	100^{H}	100	100	100	100	100	100	100	100	B					
27							110	100	100	100	100	100	100	100	100	100	100	100	100					
28							110	100	110	100	A	A	A	A	100	A	A	100	A					
29							120^{B}	A	A	100	100	100	100	100	100^{A}	100	100	A	A					
30							A	A	100	100	100	100	100	100	100	A	100^{A}	100	A					
31							110	110	C	C	C	C	C	C	C	100	100	100	A					
Median Value							140	110	100	100	100	100	100	100	100	100	100	100	—					
Count							17	29	26	25	26	21	24	25	27	27	26	25	4					

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

K 7

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 1950 | foEs | 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	3.2	B	G	G	G	B	G	G	G	C	G	5.1	G	G	4.4	3.4	3.6	2.4	2.3	G	2.6	G	G	2.2
2	2.4 F	5.0 F	3.4	3.4 Y	3.6	2.8	2.6	G	G	3.4	G	G	G	4.6	B	G	G	G	G	2.2	2.0 Y	2.7	2.2 Y	G
3	1.9	2.9 F	2.6	2.5	1.4	2.5 Y	G	G	G	G	G	G	G	4.2 Y	4.2 Y	G	3.7 Y	G	2.4	2.2	G	G	2.2	G
4	1.6	3.2	2.9	3.0	(2.9) F	(2.1) F	3.3 Y	G	G	3.4	4.2	4.4 Y	4.6 Y	4.6	4.7	(4.2) Y	3.6	2.3	2.3	2.4	2.0	2.2	2.2	3.6
5	(2.6) B	2.8	3.2	1.5	1.4	2.0	G	G	G	4.2 Y	4.6 Y	4.7	4.4 Y	G	G	4.0 Y	3.6 Y	2.8	G	2.9	(2.8) F B	2.4	G	G
6	B	G	2.0	G	G	G	C	G	G	G	G	G	G	G	G	G	G	G	G	G	2.4	1.9	G	G
7	2.0	2.2	G	G	G	2.5 F	2.0	3.3	G	3.7	G	G	G	G	4.2	3.5	G	G	2.4	2.2	(3.8) B F	1.6	2.1	2.0
8	2.0	2.0	1.7	1.3	1.5	1.7	2.4	G	G	4.6 Y F	G	4.7 Y	4.2	G	G	3.6	G	G	2.0 Y	2.8 Y	G	G	2.9	3.0 F
9	3.3 F	2.9 F	2.0	G	G	G	G	G	3.8	G	4.1	4.4	4.1	G	B	3.6	6.2	5.5	3.5	3.2	G	2.4	3.8	2.6
10	2.0	2.3	2.4	2.6	2.3	2.5	G	G	3.4	G	G	G	G	G	G	G	3.4	G	G	G	1.4	G	G	G
11	G	1.5 Y	1.5	1.6	1.5	1.8 F	3.4	G	3.4 Y	4.3	6.1	5.2	5.2	4.6	5.0	5.7	5.2	4.3	3.6	G	G	G	G	2.0
12	G	B	B	2.8	B	B	G	G	G	4.2	G	G	B	G	G	G	G	2.8 F	2.8	2.8	2.6	2.4	2.8	G
13	1.6	3.0 Y	G	B	1.4 F	2.8	G	G	G	G	G	B	B	G	G	G	3.4 Y	3.2	2.8	2.6 Y	2.4	G	2.3	G
14	2.2	2.6	2.0	B	2.4	2.4	2.3 Y	G	G	G	G	4.0 Y	G	G	5.0 Y	G	G	G	3.8	2.8	G	1.6	G	G
15	G	B	G	G	G	G	2.6	3.2	G	G	4.8 Y	B	G	G	G	G	4.0	G	2.8	2.9 F	2.5 Y	G	G	G
16	2.8	2.8	2.2	B	1.5	G	G	3.8 Y	G	4.2	G	G	4.3	4.3	G	G	G	3.4	2.8	2.4	2.0	2.6	(2.7) B	G
17	B	B	1.5	G	2.0	B	2.8	2.9	4.1	G	G	G	3.8	4.8	G	G	G	G	2.3 Y	1.4	G	G	G	G
18	G	G	2.8	(3.2) Y	(2.6) Y	1.8 Y F	G	G	G	3.6	4.5 Y	G	G	G	G	G	3.2	3.4	3.0	2.6	B	2.4	G	G
19	G	G	B	G	1.6	2.4	(2.7) Y F	3.7 Y	4.5 Y	G	G	B	B	B	B	G	3.5	G	B	G	G	G	2.0 Y	G
20	B	(2.2) Y B	G	2.2	2.4	B	2.6	G	4.0	G	G	4.4	4.2	G	4.2	G	3.4	G	2.8	3.8	(4.1) B	4.5 Y	4.2	3.0
21	2.9	2.5	1.4	2.0	2.0	G	2.9 Y	G	3.6	4.9	4.4	4.4	4.1 Y	G	G	G	G	3.0	2.5	2.0	B	2.8	2.1	3.2
22	3.2	2.2	3.2	2.2	2.4	2.0	2.8	G	G	4.6	4.6	4.4	4.6	B	B	G	G	3.3 Y	3.4	2.4	2.4	2.8	3.6	3.8
23	2.0	1.4	2.2	2.5	1.8 F	2.0	G	G	3.5	3.4	G	B	G	4.6	G	G	G	G	2.2	G	G	G	G	G
24	1.1	G	1.5	2.5	2.8	2.7	G	3.7	G	G	G	G	G	G	G	G	G	G	2.9	G	G	G	G	G
25	1.1	1.4	2.0	G	1.6	1.2	G	G	G	G	G	B	B	B	G	B	G	3.6 Y	3.4	2.8	G	G	G	G
26	G	2.0	G	G	G	G	G	G	3.6	G	G	G	G	G	G	G	G	G	G	1.4	G	G	G	G
27	G	2.8	2.8	2.4	B	B	2.9	3.4	G	G	G	G	G	G	G	G	G	G	G	1.4	G	G	G	G
28	G	G	G	G	G	G	G	G	G	4.5	4.8	4.8	5.1	5.2	G	4.3	4.2	G	(4.0) B	3.4	4.4	3.4	5.2 F	4.8
29	3.4 F	3.5	1.8	3.6 F	1.9	2.9	G	3.5	4.4	4.6 Y	5.6 Y	4.6 Y	4.8 Y	5.8 Y	5.3	(6.2) B	4.2 Y	5.6	4.2	2.4	1.8	G	3.2	G
30	G	2.8	2.2	3.2	3.0	2.4	3.2	2.9	G	4.4	5.2	G	B	G	4.4	4.9	6.0	4.7	3.7	5.2 Y	3.6	3.2	(5.2) B	(4.4) B
31	3.7	2.2	2.5	2.0 Y	2.2	2.2 Y	G	G	C	C	C	C	C	C	C	G	G	G	2.7	3.6	5.0	G	G	G
Median Value	2.0	2.2	2.0	2.0	1.6	2.0	G	G	G	3.4	G	G	G	G	G	G	3.2	G	2.8	2.4	2.0	G	2.0	G
Count	28	27	29	28	29	26	30	31	30	29	30	25	25	27	26	30	31	31	30	31	29	31	31	31

Sweept 2 Mc to 17.8 Mc in 15 min Manual

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

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

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.8F	2.8F	2.7	2.9F	3.0F	2.8	2.8F	3.2	3.2	(3.3)C	3.4	3.1	3.0	3.2	3.3	3.1	3.2	3.2	3.1	3.0	3.0	3.2	2.8	2.7
2	2.8	3.1	3.0	3.1B	2.8	2.7	3.1	3.3B	3.3	3.1	3.1P	3.2	(3.3)P	3.2	3.3P	3.3P	3.3	3.5	3.2	3.1	3.0	2.9	2.9	2.9
3	2.9	3.3	2.9	2.8	2.8	3.0	3.2	3.3	3.3P	3.3	3.2	3.1	(3.2)P	3.3	3.2	3.2	3.3	3.3	3.3	2.9	3.0	3.2	2.9	2.7
4	2.7	3.0	2.9	3.0	2.8	2.6	3.1	3.4P	3.4	3.3	3.0	3.1	3.1	3.0	3.1	B	(3.2)PS	3.4	3.2	3.3	3.2	3.0	2.9P	2.9
5	2.8	2.8	3.1	3.3	3.1	2.9	3.3	3.3	3.4	3.3	3.3	3.1	3.2	3.2	3.1	3.3	B	3.2	3.3	3.3	2.9	2.9	3.1	3.0
6	3.0	3.1	2.9	3.0S	3.0	3.0	C	3.3	3.3P	3.1	3.1	3.2P	3.0	3.1	3.1	3.1	3.2	3.2	3.1PB	3.0	2.9	2.8	B	3.1
7	3.3S	3.1	2.9	2.7	2.5	2.7	3.4	3.4	3.4	3.2	3.2	2.9	3.1	3.1	3.0	2.9	3.0PH	3.2	3.4	3.2H	3.0	3.4	3.2	3.2
8	3.2	2.9	3.3	2.8	2.9	3.0	3.2	3.6	3.3	3.3	3.3	3.1	3.2	3.2	3.3	3.2	3.3	3.2	3.3	3.2	3.1P	3.1	3.0	2.8
9	2.7	2.8	3.2	3.4	3.3	3.0	3.2	3.5F	3.3	3.2	3.3	2.9	3.1	3.0	2.9	3.0	3.1	3.1S	3.2	3.3S	3.0	3.0	2.8	2.9F
10	3.0	2.9	3.0	3.0	2.9	2.9	3.2	3.5	3.5	3.2	3.1	3.0	2.9	3.0	3.0	3.2	3.1	3.2	3.0PH	3.1S	3.0P	3.0P	3.0	2.8S
11	2.8	2.8	2.8	2.9	2.7	2.7	3.0	3.2	3.3S	3.1	3.2	3.1	2.9	3.0	3.2	3.1	3.0	3.2	2.8	B	3.1	3.0	3.0	2.8
12	2.7	2.9	2.8	2.8	3.0	2.9	3.3	B	3.3	3.2	3.1	3.1	2.9	3.1P	3.0	3.0	3.0	3.2	3.1	3.1	(3.0)P	3.0	3.0	2.9
13	2.8	2.9	2.8	2.6	2.9	2.8	3.0	B	3.3	2.9	3.1	3.0	2.8	2.9B	2.9	2.8P	3.0P	3.2	3.2	3.0	3.0	3.0	2.8	2.8
14	2.9F	2.8	2.9	2.9	2.7	2.7	3.0	3.3	3.4	3.0	3.1	(3.0)B	3.0	2.9	3.0	3.1	3.1	3.1B	3.1P	2.7	2.8	2.9	2.8	2.6
15	2.7	3.0	2.9	3.0	2.6	2.7	3.0	3.4	3.3	2.9	3.0	3.0	2.9	2.9	2.8	2.8	3.0	3.1	3.0	2.7	(2.6)P	2.7	2.9	2.8
16	2.8	2.9	3.1	3.2	2.8	2.6	2.9	3.2	3.3	3.0	3.0	3.2	3.0	2.9	3.0	3.1	3.2	3.1	3.2	2.8H	2.8H	2.7	2.6	2.7
17	2.7	2.8	3.0	2.6	2.5	2.8	2.9	3.2	3.1	3.2	3.3	3.2	3.0	3.1	S	3.1P	3.2P	3.3	3.4	3.2	2.9	2.9	3.1	2.8
18	2.8	3.0	3.3	3.4	3.0	3.0	(3.2)P	B	3.5	3.3	3.1	3.1	3.1	3.0	3.0	3.0	3.1	(3.1)PS	3.3	3.0PS	2.8	2.8	3.0	3.2
19	3.0	3.0	3.0	3.1	2.9H	2.8	3.2P	3.2	3.3	2.9	2.9	2.9	3.0	3.0	2.8	3.0	3.0	3.2	(3.4)J	2.9	S K	S K	B K	B K
20	(2.7)KP	F K	F K	F K	F K	2.6KF	2.8	3.0	3.0	(3.1)B	(3.2)P	3.0	2.8	(3.0)J	2.9	3.1	3.2	3.1	(3.1)J	S	S	3.0	2.8	2.6
21	2.7	2.8	3.2S	2.6F	2.6	2.5	3.0F	3.0PS	3.1S	3.1	3.1	3.0	3.1	3.0	3.1	3.1	3.0	3.3	3.5	(3.6)PB	2.7	2.7	2.6	2.5
22	2.6	2.8	2.7	2.5	2.7	2.8	S	(3.3)P	3.1	3.3	3.5	3.2	3.1	3.0	3.2	3.1	(3.2)PS	3.2	(3.3)J	(3.3)P	3.1	2.8	2.6	2.7
23	2.8	2.9	3.0	3.0	2.8	2.8	3.2	BH	3.5	2.9	2.9P	3.1	3.0	3.1	3.1	3.1	3.1	2.9	(3.3)P	3.3S	2.9	2.8	2.8	2.9
24	2.7	3.0	2.9	3.3	2.7H	2.7	3.3	3.4	3.2	3.2	3.2	3.1	(3.0)F	3.1	3.0	3.0	3.1	3.2	(3.2)J	B	B	3.1	3.1P	2.9P
25	3.0PS	BS	BS	3.1	2.9	3.0	(3.6)J	S	3.4	3.1	3.0	3.1	3.1	3.1	3.0P	3.1	3.2	C	3.4	(3.3)PS	3.1	3.0	2.9	3.0
26	3.1	2.8	(3.3)P	3.2F	3.1F	2.9	B	3.3	3.3P	3.4	3.2	3.2	3.1	3.2	3.3H	3.2	3.3	3.3	3.3P	(3.4)PB	3.2	2.9	2.9	2.9S
27	3.0	3.0	3.2	3.3	3.0	3.0	3.6	3.7	3.5	3.5	3.1	3.2	3.2	3.1	3.0	3.1	3.2	3.3	3.3	3.2	3.2	3.0	3.2	3.1
28	3.2	3.1	3.0	2.9	3.0	2.9	3.4	3.5	3.4	3.3	3.3	3.3	3.3	3.3P	3.3S	(3.3)B	3.3P	3.5	3.5	3.5S	3.1	3.1	2.8	2.7
29	2.7	3.0	3.2	3.4	3.1	2.9	3.3P	3.2	3.1	3.2	2.8	3.0	3.0B	3.0	3.1	3.0	3.0P	3.2	S	B	3.1F	B	2.8	2.8
30	2.9	3.0P	2.9	2.8	2.9	2.8	3.3	3.5	3.4	3.2	2.9	2.9	3.0	2.9	3.0	3.2	3.1	3.1	(3.1)B	S	3.0	2.8S	2.8	2.8
31	2.7	2.8	2.9	3.3	2.7	2.8	3.0	(3.3)PS	C	C	C	C	C	C	C	3.1	3.2	3.1	3.2	(2.9)B	3.0	3.0	2.8	2.7
Median Value	2.8	2.9	3.0	3.0	2.9	2.8	3.2	3.3	3.3	3.2	3.1	3.1	3.0	3.0	3.0	3.1	3.2	3.2	3.2	3.2	3.0	3.0	2.9	2.8
Count	31	29	29	30	30	31	28	26	30	30	30	30	30	30	29	30	30	30	30	26	28	29	29	30

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

K 9

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 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	1.2	E	1.1	1.1	1.1	1.1	1.3	2.3	2.8	C	3.6	3.8	3.9	3.7	3.5	3.2	3.2	2.0	1.8	1.6	1.4	1.1	E	A
2	1.2A	A	A	A	1.6A	A	1.6	2.4	2.7	3.4	A	4.0	4.0	3.8	4.3	4.0	3.3	2.2	1.8	1.4	2.9	(1.6)A	1.7	E
3	E	1.4AF	E	E	E	E	1.2	2.4	3.2	3.2	3.8	3.7	3.5	3.7	3.4	3.3	3.1	2.3	1.6	1.4	1.3	1.5	1.6	E
4	E	E	1.3A	E	E	E	1.5	2.5	3.2	3.4	3.7	3.8	4.0	4.2	4.0	A	3.2	A	A	1.2	1.4	1.1	1.4	A
5	1.2	A	A	E	E	E	1.3	2.6	2.8	3.5	3.7	3.8	3.7	3.8	3.8	3.3	3.2A	2.4	1.4	1.3	1.8	1.6	1.2	1.1
6	E	E	E	E	E	E	C	2.4	3.2	3.3	3.7	3.6	3.7	3.7	3.8	3.3	2.8	2.4	1.7	1.2	1.4	1.2	1.4	1.4
7	E	E	E	E	E	E	1.6	2.5	3.2	3.5	3.7	3.7	4.0	4.2	3.6	3.7	3.3	2.5F	1.7	1.5	A	1.3	A	1.5
8	1.4	1.3	1.4	1.2	1.3	1.3	1.5	3.0	3.2	3.5	4.0	4.1	3.9	4.1	3.8	3.5	3.2	2.4	1.4	1.1	1.1	1.1	1.4	1.6
9	E	E	E	E	E	E	1.6	2.6	3.1	3.0	3.2	4.1	4.1	4.0	4.1	3.5	3.2	2.3	2.2	1.7	1.7	1.7	1.7	1.3
10	1.1	1.1	1.2	1.2	A	1.3	2.1	2.6	3.2	3.3	3.5	3.8	3.8	3.8	3.8	3.5	3.2	2.4	1.5	1.1	1.1	1.1	1.1	1.1
11	E	E	1.1	1.1	1.1	1.1	1.7	2.6	3.2	3.5	4.0	4.3	4.1	3.8	4.2	A	4.2A	2.6	1.8	1.2	1.1	1.2	1.2	1.2
12	1.2	E	E	1.1	1.3	1.2	1.6	2.4	3.4	4.0	4.0	3.9	4.6	3.8	3.9	3.8	3.2	2.2	2.0	2.0	1.5	1.2	A	1.2
13	1.2	E	1.2	1.2	1.2	1.2	1.6	2.5	3.2	3.3	3.6	4.2	4.2	4.2	3.4	3.6	3.2	2.4	1.7	1.5	1.2	1.1	1.3	E
14	E	1.2	1.1	1.1	1.1	1.2	1.9A	2.3	3.2	3.6	4.0	A	4.2	3.9	4.6	3.5	3.2	2.5	A	A	1.2	1.2	1.1	1.1
15	1.1	1.1	E	E	E	E	1.8	2.6	3.2	3.8	4.0	4.2	3.8	3.8	3.8	3.6	3.2	2.5	1.7	1.3	1.3	1.1	1.2	1.2
16	1.2	1.1	1.2	1.1	1.1	1.1	1.8	2.5	3.2	3.5	3.7	3.7	3.9	A	3.7	3.4	3.2	2.4	1.8	1.6	1.8	A	1.6	1.6
17	1.2	1.2	1.1	1.1	1.2	1.1	1.6	2.7	3.2	3.4	3.8	4.0	4.2	4.4	4.0	3.4	3.2	2.3	1.6	1.4	1.1	E	E	E
18	E	E	E	E	1.1	1.1	2.0	2.7	3.1	3.5	3.6	4.1	4.1	4.1	3.7	3.4	A	2.4	A	1.6	1.4	1.4	1.4	1.4
19	1.2	1.2	1.2	1.1	1.1	1.1	1.9	2.5	3.2	3.7	4.0	4.1	4.4	4.8	4.0	3.7	3.2	2.5	1.7	1.1	1.1	1.1	1.2	1.2
20	1.4F	1.4F	1.2F	1.3	1.8	1.3	2.0	2.4	3.4	3.6	3.8	4.0	4.2	4.0	A	N	A	2.5	1.9	1.8	A	1.8	A	1.6
21	1.6	1.6	1.2	1.2	1.1	1.1	1.8	2.9	3.2	A	3.7	4.3	3.9	3.8	3.9	3.3	3.2	A	1.5	1.3	1.4	1.2	A	A
22	AF	1.1	A	1.2	1.2	1.2	2.4	2.7	3.2	4.0	4.0	4.4A	3.6	4.0	4.0	3.7	3.2	2.4	A	A	A	1.2	A	1.2
23	1.1	E	1.1F	1.1	1.2	1.1	1.8	3.2	3.1	3.3	3.9	4.5	4.0	4.4	4.0	3.9	3.2	2.4	1.7	1.5	1.4	1.1	E	E
24	E	E	E	E	A	1.1	2.2	2.7	3.2	3.6	4.1	4.1	3.8	4.0	4.0	3.6	2.8	2.8	1.7	1.1	1.2	1.2	1.4	1.1
25	1.2	1.1	1.1	1.1	1.1	E	2.0	2.8	3.2	3.5	3.9	6.5	3.9	4.0	4.0	6.5	3.5	2.4	2.2	1.2	1.2	1.2	1.2	1.2
26	1.2	1.2	1.1	1.1	1.1	E	2.0	2.7	3.2	3.5	3.8	3.9	3.9	4.1	3.8	3.4	3.1	2.4	1.7	1.4	1.2	1.7	1.1	1.2
27	1.2	1.2	1.2	1.1	E	1.1	2.0A	2.7	3.3	4.1	4.4	4.2	4.8	3.8	3.9	3.5	3.3	2.5	2.2	1.5	1.4	1.6	1.3	1.5
28	1.2	1.2	1.1	1.2	1.2	E	A	N	A	3.9	4.1	4.2	4.4A	A	4.0	3.5	A	2.4	AF	A	A	AF	AF	A
29	1.1	E	E	E	E	E	2.5	2.7	3.3	4.0	4.6	4.6	4.4	5.2	A	A	3.6	A	A	A	1.2	1.1	A	1.6
30	1.4	1.8	1.6	1.1	1.2A	1.7	2.3	2.7	3.3	4.1	4.1	4.4	4.4	3.6	4.2	3.9	A	2.4	2.0	A	A	A	A	A
31	A	1.6	1.2A	1.4	A	1.4F	2.0	2.9	C	C	C	C	C	C	C	4.1	3.1	N	2.0	A	AF	1.4	1.1	1.1
Median Value	1.2	1.1	1.1	1.1	1.1	1.1	1.8	2.6	3.2	3.5	3.8	4.1	4.0	4.0	3.9	3.5	3.2	2.4	1.7	1.4	1.3	1.2	1.2	1.2
Count	29	29	28	30	28	30	29	30	29	28	29	29	30	28	28	27	27	27	25	25	25	28	23	26

Sweep 1.0 Mc to 12.0 Mc in 15 min Manual

K 10

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

IONOSPHERIC DATA

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

Sweep 1.0 Mc to 12.0 Mc in 15 min Manual

K 11

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 1950 | 2d | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35°42.4'N | Long. 139°29.8E

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

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

Mar. 1950 | foF2 | 135° E Mean Time | **Yamagawa** | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	5.4	4.8	5.1	5.2	5.5	5.3	3.9	5.7	(9.6)P	11.5	11.8	[12.0]C	12.2H	13.0	12.2	11.3	11.0	10.7	10.5	9.0S	7.3	7.4	6.0	5.5
2	5.1	5.4	5.1F	5.7	5.2	3.8	3.5	5.7	8.2	10.3	12.0	12.3	14.1	13.4	11.8	12.8	12.2	11.7	9.5	7.5	5.8	5.4	5.7	5.5
3	5.4	5.1	5.4	5.2H	4.7	4.2	3.7	6.1J	7.8	10.0	11.6	11.6	12.5	13.2	13.5P	12.8	12.5	12.6	12.1	9.0	8.3	7.9	6.0	5.5
4	5.6	5.9	5.2	4.6	4.2	3.6	4.1	5.5	8.3	10.3	10.9	12.5	12.3	13.4	13.1	13.4	12.8	12.1	11.9H	11.1	(11.0)P	8.4P	8.4	7.7P
5	5.8	5.9	5.8	7.3SK	5.0FK	3.6RK	3.5K	5.9	8.7	9.7	9.5	11.6H	12.9	13.4	13.9	13.4	13.4	12.8	11.7	10.7	9.7	8.0	7.4P	6.3
6	6.2Z	5.4	5.5P	5.4	3.9	3.3	3.3	5.8	8.7	10.2	11.3J	13.8	14.9	14.8	14.8P	14.6	14.3P	12.4	11.2	10.2S	9.2	8.1	7.8	7.7
7	7.9	5.8	4.8	4.3	4.0	3.9	4.6	7.7	10.0	10.9	11.4	[12.2]C	13.1	13.0	11.7	12.7P	12.2P	12.1	12.3	11.1	9.3	8.9	6.2	6.0
8	5.5	5.3	5.9	3.9	3.8	3.8	3.8	7.4	9.7	11.7	11.6	12.4	13.7	14.6	14.0	13.1	12.4	11.6	11.7	10.3	7.7	7.2	5.7P	5.5
9	4.8	4.8	5.2	4.6	4.2	4.4	3.0	6.6J	9.0	10.1	11.5	11.7	13.6	12.9	13.2	13.5	13.2	12.0	11.4	9.7	8.1	7.3	7.0	6.8
10	6.6	5.3	5.3	5.5P	4.2	3.9	4.2	7.3J	10.0	11.0	11.8	12.0	12.3	13.0	13.0P	13.0P	12.7P	12.0	12.3	11.9	8.9	8.7	8.3	5.6
11	5.4	4.8	4.4	5.5P	4.8	4.3	4.4	7.9	9.9	11.2	12.1	12.8H	13.1	13.9P	(15.3)P	(13.4)P	13.3P	12.6	11.4H	11.7	10.8	8.0	8.1P	7.2P
12	6.8	6.4	5.8	5.1	4.5	4.3	4.3	6.8	8.4	9.7	10.8	11.8	13.2	13.2	13.0	12.7	12.1	13.0	13.1	11.8	10.6	10.2	9.3	8.3
13	7.8P	6.2	5.4	4.4	5.1	4.8	(4.8)P H	7.8	10.0	10.7	11.7	13.4	13.3	13.8P	14.3	13.9	14.3	13.8	12.3	11.0	9.0S	8.3	7.6	7.4
14	7.0	6.4	5.9	6.0C	5.1	4.8	5.0	7.3	9.7	10.6	11.6	13.4	13.3	14.1	14.3	13.4	12.2	12.0	11.5	10.6	8.9	8.7	7.5	6.8
15	6.9	7.1P	6.7	[5.9]	5.1	5.0H	5.3	7.3	8.9	9.0	11.6	12.7	(13.6)P	13.2	13.2	13.6	13.1	11.6	10.6	8.4P	7.9	8.4Z	8.1	7.7
16	7.0	7.3	6.9	6.1	4.0	3.9H	3.9	7.2	C	C	C	C	C	C	C	C	C	C	C	10.5P	8.0	8.3	7.3	7.5
17	8.0	8.0	8.0	5.9P	5.4	4.5H	4.8	7.7	9.2	10.3	11.2	12.8H	13.4	14.0	14.3	14.1	13.2	12.1	11.7	10.8	8.2	8.1	8.3	7.4
18	6.8	7.4	7.5	6.9	6.1	3.8H	4.2	7.6	9.5	9.8	10.6	12.4H	13.0	14.3	14.2	14.2	13.7	13.2	12.4	11.2	8.8	8.0	7.6F	6.6F
19	7.7	6.4	6.6	6.4	6.1	3.8	3.2	8.4	10.1	10.5	10.9	11.5	12.1	12.9	14.0	14.3	14.2	13.4	12.4	10.1	(11.4)PK	14.3K	11.5K	11.7HK
20	11.9K	11.1K	8.9K	5.9FK	4.7K	8.1K	7.9Z	10.5	10.5	11.6	15.2	15.4	14.6	14.8	15.1H	15.1	14.7	12.3	10.9	9.0	7.7	6.9	6.4	6.1
21	6.0	6.1	6.3	6.9	5.4	5.2H	5.5	7.1	8.6	10.6	12.1	13.2	14.0	14.6	15.4PJ	14.8P	14.2	C	C	10.1	7.7	5.6	7.3	6.6
22	4.8	5.7	6.5	5.8	6.0	5.8	6.4	7.5	10.6H	10.7	10.8	11.9	12.8	13.0	13.9	13.5	12.3	12.9	12.2	10.6	7.6	6.6S	6.6S	6.8
23	6.8	6.5	5.9	6.7	6.3	4.6	4.3	8.4	9.7	10.0	10.5	13.9	13.8H	12.8H	14.0	13.8	13.7H	13.2H	12.3	10.5	7.9	7.5	7.5	7.5
24	7.2	7.3	7.2	5.1	5.1	4.9	4.0	6.3	9.2	9.3	10.0H	11.5H	12.5	12.8H	13.5P	14.3	14.3H	13.1H	12.0	11.8	9.6	8.1	7.9	7.4
25	7.7	7.6	7.5	6.4	5.0	5.4	5.7	7.5	8.8	10.1	10.3	10.8	12.6	12.7	(13.3)P	13.5	13.4	13.5	13.3P	12.6	10.0	[9.0]C	8.0	8.1
26	8.1B	8.0	7.9	7.6	6.7	5.1	5.5	7.6	8.7	9.9	10.7	12.1	13.2	14.7	14.2	C	C	C	13.3P	11.7	10.8	9.5	8.8	7.4
27	6.3	7.5B	7.4	7.2	5.8	4.6	[6.1]C	7.6	9.7	9.5	9.0H	12.1	13.4	14.0P	13.0	12.4	12.8	[12.6]C	12.5	12.2	9.5	7.3	8.3	7.1
28	6.9	7.6	6.2	5.7	4.9	5.2	5.0	7.9	9.5	11.2H	12.4H	13.1	13.5	13.8P	14.3	(13.7)P	13.5	12.8	12.3	(12.4)P	(9.7)P	8.7P	(8.3)HP	8.1
29	8.3	9.1H	[8.4]C	7.7	4.6	3.9	[5.4]C	7.8	10.0	10.8	11.5	12.9	13.6	13.9P	14.0	13.9	(14.5)J	14.3	(14.5)PS	13.1	11.2	(11.5)PH	11.2	9.7
30	10.2	9.4P	7.6	6.2	5.8	4.8	5.4	7.7	9.1	[10.0]C	10.9	12.2	13.4	(14.6)P	14.7P	14.8P	14.0P	14.2	13.1	12.0	9.2	(7.3)P	7.4	7.8
31	8.1	7.8Z	8.1	8.0	5.6	3.9	4.9	8.4	10.1	9.4	11.0	12.2	12.4	13.4H	14.1	14.2	14.3H	15.8JP	(14.4)PH	13.0H	11.6	11.5	10.9	9.5
..																								
Median Value	6.8	6.4	6.2	5.9	5.1	4.4	4.4	7.5	9.5	10.3	11.4	12.2	13.2	13.4	14.0	13.6	13.3	12.6	12.2	10.8	9.0	8.1	7.6	7.3
Count	31	31	31	31	31	31	31	31	30	30	30	30	30	30	30	29	29	28	29	31	31	31	31	31

Sweep 1.2 Mc to 18.0 Mc in 15 min Manual

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 1950 | hpF2 | 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	350	390	410	390	310	400	380	330	(320)	310	300	[320]	350	320	310	300	350	320	290	280	340	340	330	380
2	360	350	(330)	350	280	310	390	300	260	310	310	310	330	310	320	330	320	290	300	300	320	340	360	360
3	350	350	320	350	320	340	320	(280)	290	290	300	300	320	340	340	320	300	330	310	300	330	310	330	350
4	380	350	370	330	320	330	340	290	290	300	340	310	310	320	340	330	310	330	300	310	(350)	350	410	310
5	340	400	370	310K	270K	350K	410K	300	300	300	310	370	350	350	340	320	300	300	300	300	350	320	340	370
6	400	350	360	290	300	340	360	310	280	310	(290)	330	340	330	340	340	310	330	330	330	330	360	360	310
7	320	270	340	340	360	340	360	290	300	290	330	[320]	320	340	330	370	360	340	310	320	300	300	320	320
8	340	290	340	280	380	390	350	290	300	300	300	340	350	350	340	340	330	330	330	300	310	300	320	340
9	400	410	390	300	280	360	350	300	340	300	330	370	340	350	390	370	350	350	310	310	330	360	330	340
10	300	370	380	340	300	380	370	(290)	260	280	320	310	320	340	350	330	350	320	330	300	300	310	360	360
11	350	320	340	380	330	380	380	280	290	300	310	340	370	330	(390)	(350)	360	350	300	300	290	300	320	270
12	280	360	340	340	320	320	300	290	270	280	320	360	340	350	350	360	360	350	310	310	310	310	350	350
13	370	330	320	300	360	370	(380)	300	290	310	370	290	290	400	380	380	360	330	320	320	310	350	390	390
14	350	370	380	350	290	410	400	290	280	300	330	330	340	370	370	340	370	350	310	310	350	330	350	410
15	390	360	350	[340]	330	380	440	320	290	290	360	360	(390)	350	350	360	350	340	320	340	370	360	340	340
16	360	330	310	300	300	410	420	300	C	C	C	C	C	C	C	C	C	C	C	310	350	380	330	400
17	380	340	310	360	420	390	330	300	310	320	340	350	350	360	360	340	330	330	310	310	350	380	330	350
18	370	350	330	320	310	330	360	310	320	290	330	350	370	360	360	350	330	340	330	300	310	350	340	330
19	340	360	350	310	320	320	380	360	310	330	340	340	380	350	370	350	330	320	320	330	(430)	310K	380K	410K
20	400K	370K	350K	360K	440K	380K	400	330	360	350	330	330	360	390	330	320	320	300	290	270	280	270	270	340
21	320	340	320	270	340	400	360	300	300	330	340	350	350	260	340	360	350	C	C	280	310	400	400	390
22	430	380	410	400	300	320	340	290	300	310	310	340	360	370	350	350	350	330	310	280	320	400	430	400
23	(380)	(380)	320	320	330	370	390	300	300	290	370	350	320	370	350	350	320	340	310	280	340	370	350	360
24	390	350	420	270	270	330	330	250	280	300	320	340	360	360	350	350	310	320	330	320	320	370	370	370
25	390	350	300	280	330	310	340	280	280	310	320	330	350	380	(350)	360	330	330	320	320	310	C	390	370
26	330	340	330	310	290	350	340	270	300	300	330	360	360	350	370	C	C	C	320	270	300	330	360	370
27	310	340	320	300	300	330	[290]	250	280	290	300	360	320	350	350	340	320	[310]	300	310	290	320	360	430
28	310	300	390	390	310	350	330	290	290	350	320	350	330	330	320	(340)	320	310	310	(300)	310	(330)	(390)	380
29	370	340	[300]	260	280	370	[340]	300	310	310	340	360	340	360	370	370	(340)	310	2905	290	310	(340)S	370	370
30	330	340	340	320	320	330	330	290	280	[310]	340	350	380	(360)	350	340	330	350	300	320	310	(400)	390	400
31	380	390	340	290	310	350	380	290	330	320	320	330	340	320	330	320	320	300	(310)	310	340	340	360	320
Median Value	360	350	340	320	310	350	360	290	300	300	320	340	340	350	350	340	330	330	310	310	320	340	360	360
Count	31	31	31	31	31	31	31	31	30	30	30	30	30	30	30	29	29	28	29	31	31	30	31	31

Sweep 1.2 Mc to 18.0 Mc in 1.5-min Manual

Y 2

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

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

Sweep 1.2 Mc to 16.0 Mc in 15 min Manual

Y 3

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 1950 | foF1 | 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							L	Q	L	L	L	Q	L	L	L	L	Q	Q	Q					
2							A	Q	L	L	L	L	L	L	L	L	L	Q	L					
3							Q	Q	Q	L	L	L	L	L	L	L	L	L	L					
4							Q	Q	Q	L	L	L	L	L	L	L	L	Q	Q					
5							Q	Q	Q	L	L	L	L	L	L	L	L	Q	Q					
6							Q	Q	Q	L	Q	Q	L	L	L	A	Q	L	Q					
7							Q	Q	Q	Q	L	C	L	L	L	Q	L	Q	Q					
8							Q	Q	L	Q	L	L	L	L	Q	Q	L	Q	Q					
9							Q	Q	Q	Q	L	L	4.9	L	L	O	L	L	Q					
10							Q	Q	Q	Q	L	L	L	L	L	L	L	L	Q					
11							Q	Q	L	L	L	L	L	L	L	L	L	L	L					
12							Q	Q	Q	L	L	L	L	L	L	L	L	L	Q					
13							Q	Q	Q	Q	Q	Q	L	L	L	L	A	Q	Q					
14							Q	Q	Q	Q	Q	L	L	L	A	L	Q	Q	Q					
15							Q	Q	Q	Q	Q	L	L	L	L	L	Q	Q	L					
16							Q	Q	C	C	C	C	C	C	C	C	C	C	C					
17							Q	Q	Q	L	L	L	Q	L	L	L	Q	Q	Q					
18							Q	Q	Q	Q	L	L	L	A	L	L	L	Q	Q					
19							Q	Q	L	L	L	L	L	L	L	L	L	Q	Q					
20							Q	Q	L	L	L	L	L	L	Q	L	Q	Q	A					
21							Q	Q	Q	L	L	A	A	L	A	L	L	C	C					
22							Q	Q	Q	Q	Q	L	L	L	L	L	L	Q	Q					
23							Q	Q	Q	Q	Q	Q	L	Q	L	L	L	Q	Q					
24							Q	Q	Q	L	L	L	L	L	L	L	L	Q	Q					
25							Q	Q	Q	Q	L	L	L	L	5.2	L	L	L	Q					
26							Q	Q	Q	L	L	L	L	L	L	C	C	C	L					
27							C	Q	Q	Q	Q	L	L	L	L	Q	L	C	Q					
28							Q	Q	Q	Q	Q	L	L	L	L	L	Q	Q	Q					
29							C	Q	Q	Q	L	L	L	L	L	Q	Q	Q	Q					
30							Q	Q	Q	C	L	L	L	L	L	L	L	L	A					
31							Q	Q	L	L	4.9	5	L	5.2	5.0	L F	L	Q	Q					
Median Value											—		—	—	—									
Count											1		1	1	1									

Sweep 1.2 Mc to 18.9 Mc in 15 min Manual

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Y 4

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

IONOSPHERIC DATA

Mar. 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							310	Q	A	220	230	Q	250	250	240	230	Q	Q	Q					
2							A	Q	220	220	230	240	230	240	250	230	220	Q	240					
3							Q	Q	Q	240	230	230	220	220	A	A	A	A	230					
4							Q	Q	Q	220	220	210	(200)A	210	220	240	250	Q	Q					
5							Q	Q	Q	240	240	260	240	240	230	230	230	Q	Q					
6							Q	Q	Q	220	Q	Q	250	240	230	A	Q	230	Q					
7							Q	Q	Q	Q	240	[240]C	250	240	240	Q	260	Q	Q					
8							Q	Q	240	Q	240	230	230	A	Q	Q	250	Q	Q					
9							Q	Q	Q	Q	230	230	220	240	260	Q	250	250	Q					
10							Q	Q	Q	Q	230A	230	220	230	220	230	230	260	Q					
11							Q	Q	230	230	240	230	240	230	210	230A	250	250A	220A					
12							Q	Q	Q	240	240	220	250	220	250	240	240	250	Q					
13							Q	Q	Q	Q	Q	Q	260	250	270	260	A	Q	Q					
14							Q	Q	Q	Q	Q	220	250	230	A	270	Q	Q	Q					
15							Q	Q	Q	Q	Q	280	270	290	250	240	Q	Q	240					
16							Q	Q	C	C	C	C	C	C	C	C	C	C	C					
17							Q	Q	Q	210	210	210	Q	250	230	240	Q	Q	Q					
18							Q	Q	Q	Q	210	200	240	A	250	240	240	Q	Q					
19							Q	Q	280	290	280	230	230	250	A	A	270	Q	Q					
20							Q	Q	250	240	240	240	A	A	Q	260	Q	Q	A					
21							Q	Q	Q	250	240	A	A	230	A	270	(240)A	C	C					
22							Q	Q	Q	Q	Q	260A	260	250	230	210	260	Q	Q					
23							Q	Q	Q	Q	Q	Q	250	Q	240	240	240	Q	Q					
24							Q	Q	Q	210	220	210	210	240	230	230	240	Q	Q					
25							Q	Q	Q	Q	220	220	A	220	A	A	240	240	Q					
26							Q	Q	Q	210	230	220	230	240A	230	C	C	C	250					
27							C	Q	Q	Q	Q	210	260	270	260	Q	250	C	Q					
28							Q	Q	Q	Q	Q	220	250	250A	260	260	Q	Q	Q					
29							C	Q	Q	Q	240	240A	250	260	240	Q	Q	Q	Q					
30							Q	Q	Q	C	230	250	240	240	240	250	A	250	A					
31							Q	Q	250	260	230A	A	240	210	220	220	240	Q	Q					
Median Value									240	230	230	230	240	240	240	240	240	250	240					
Count									6	15	22	24	26	26	23	20	18	7	5					

Sweep 1.2 Mc to 18.0 Mc in 15 min Manual

Y 5

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 1950 | $f_o E$ | 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							E	(1.8)B	2.7	B	3.3	3.6	A	3.9	3.7	3.4	A	A	2.2					
2							A	2.0A	2.6	A	3.4	3.4A	A	(3.4)A	A	A	A	(2.8)A	A					
3							E	1.9	2.7	3.0	3.3	3.5	3.5	3.5	A	A	A	A	2.0					
4							E	1.8B	2.8	3.2	3.6	3.4	A	A	3.7A	3.8	3.2	A	2.2					
5							B	1.9H	2.7H	3.4	3.4	3.6	A	A	3.5	A	3.2	2.7H	2.2					
6							E	1.9	2.9	B	A	A	A	A	3.5	(3.6)J	A	A	2.1					
7							E	2.4	2.5J	3.1	3.5	C	A	A	A	A	A	B	A					
8							E	2.1	2.7	3.2	3.5	3.6	3.6	(3.5)A	3.8	A	3.5	3.0	2.0A					
9							E	A	3.0	3.3	3.5	3.7	3.7	3.4	A	A	A	A	A					
10							B	2.0	2.9	3.0	A	A	A	A	A	A	3.2	A	1.8					
11							E	2.1H	2.6	B	3.5	4.0	(4.0)A	3.8	A	A	A	A	A					
12							B	1.8	2.7B	3.0	3.6	3.8	3.8	3.8	3.9	3.6	A	2.8	2.0F					
13							B	2.2	2.9	3.2	(3.3)A	A	A	A	3.7	3.5	3.3	A	2.2A					
14							B	2.1	2.8	3.4	A	3.5A	3.8	A	3.8	3.4	3.2	2.9	2.0J					
15							E	A	2.8	3.6	3.8J	3.9J	B	A	A	A	3.3A	A	(1.9)8J					
16							B	(1.9)A	C	C	C	C	C	C	C	C	C	C	C					
17							B	2.2	2.9	3.4J	3.6	3.7	A	4.0	3.7	3.4	A	2.9	2.0					
18							B	2.1	2.8	3.3	3.3	3.3	3.9	B	3.7	3.6	3.2	2.8	2.0					
19							E	2.1	3.0	3.1	3.0	A	4.0J	3.6J	A	A	3.1	2.8	1.9					
20							B	A	2.6	A	3.6A	A	A	A	A	A	A	A	A					
21							E	2.0	2.8	3.2	A	4.0A	A	4.0J	A	A	A	C	C					
22							E	2.1	A	(3.2)A	A	A	A	A	3.7	3.6	3.5	2.7	2.0					
23							E	(2.0)J	2.7	(3.1)J	(3.6)A	B	3.6B	A	A	3.6	A	A	A					
24							E	2.0	2.9A	3.2	3.3	3.5	3.8H	3.7	3.7	3.4	3.2A	2.8	2.0A					
25							B	2.2	2.8	(3.5)BH	A	3.8J	A	A	A	A	(3.3)A	2.8	2.2					
26							E	1.9A	3.1	A	3.6J	3.7	A4	A	A	C	C	C	A					
27							C	2.1	3.0H	A	A	A	A	A	A	A	A	C	2.3					
28							B	2.3	N	A	(3.5)A	(3.5)A	A	A	A	A	A	A	A					
29							C	2.2	3.0	3.2	A	A	3.8B	B	3.6A	A	A	A	A					
30							B	(2.1)J	2.7	[3.1]C	3.5	3.7	B	3.7	B	3.2	A	A	A					
31							B	2.3	2.9	N	A	A	A	A	A	A	A	(3.0)A	2.1					
Median Value							E	2.1	2.8	3.2	3.5	3.6	3.8	3.7	3.7	3.6	3.2	2.8	2.0					
Count								15	28	28	20	21	19	11	12	13	12	12	12	19				

Hroop 1.2 Mc to 18.0 Mc in 1.5 min Manual

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

IONOSPHERIC DATA

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

Sweep 1.2 Mc to 16.0 Mc in 15 min Manual

Y 7

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 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	3.3	3.2	G	2.5 B	G	3.1	G	G	(4.2) B	G	4.1	4.4	4.6	5.2	4.8	4.8	4.8	3.8	G	2.8	3.4	2.6	G	1.8
2	2.0	3.3	2.6	G	3.2	2.4 F	3.2	2.8	3.6	3.8 A	3.4	3.4	3.6	3.5	4.0	4.0	3.5	3.0	3.0	2.4	G	G	2.2	G
3	G	3.0	G	2.0	2.4	2.3	G	3.1	3.9 Y	4.8	4.7	4.7	5.1	4.6	4.7	4.3	4.4	5.3	G	2.2	2.1	G	G	G
4	G	G	G	G	G	G	G	3.0	G	G	G	G	4.6	4.2	G	4.7	3.8	4.0	3.2	3.0	3.6	4.2	3.2 F	4.7
5	2.9	3.2	3.4	2.2	G	G	2.4	3.2	4.0	4.7	4.6	4.6	5.0	4.8	4.4	4.4	3.9	3.5	G	2.4	2.6	1.8	G	4.2
6	2.4	2.6	3.0	G	G	G	G	G	G	G	3.6	4.2	(4.0) B	3.8	G	4.2	4.4	3.4	G	G	G	G	G	G
7	2.3	2.2	G	G	G	G	G	G	G	4.1	5.0	G	5.3	4.6	4.6	4.6	5.8	3.2	3.4	2.4	3.8	2.5	3.2	2.2
8	2.2	3.0	2.6	1.8	G	G	2.0	G	3.6	G	4.4	4.8 Y	5.0	4.8	G	4.0	G	G	3.2	2.6	2.1	G	G	G
9	G	G	G	G	G	G	G	3.0	G	G	4.4	4.4	4.2	4.3	4.2	5.4	5.6	5.0	3.0	3.2	3.6	3.8	2.0	2.2
10	1.8	2.4	G	G	G	2.4	G	G	3.8 Y	G	4.0	4.2	4.2	4.2	4.6	4.2	3.8	3.8	G	3.2	G	G	G	2.4
11	2.4	2.8	2.8	2.4	G	G	G	(3.1) B	3.8	4.4 Y	4.7	4.8 Y	4.9	5.0	4.7	5.4	4.0	3.8	2.2	4.2	4.4	3.8	2.4	G
12	G	G	G	G	G	G	G	G	G	G	4.2 Y	4.3	6.6	5.0 Y	G	G	G	G	G	G	2.3	2.2	G	2.4
13	2.0	2.1	2.4	G	G	G	G	2.8	G	G	3.8	4.4	4.4	4.2	5.2 Y	3.9	6.8	5.3	4.8	2.5	G	2.0	3.8	(3.9) B Y
14	3.8	2.6	G	G	G	G	G	G	G	G	3.5	G	5.0 Y	4.2	3.8	G	G	G	G	2.8	3.6	3.8	2.6	2.6
15	G	G	G	C	G	G	G	(3.4) B	G	G	G	G	4.7	5.2 F	4.9	4.9	4.3 Y	3.2	G	2.8	3.0	2.0	(2.7) B	2.0
16	3.0	2.8	2.6	G	2.4	G	2.4	3.0	C	C	C	C	C	C	C	C	C	C	C	2.5	2.2	3.4	2.3	3.3
17	4.4	G	1.8	(4.2) B	G	2.8	3.2	G	G	G	G	G	4.4	G	G	G	4.2	3.5	G	G	G	2.5	1.8	G
18	G	G	3.2	G	G	G	G	G	G	4.1 Y	4.6	G	G	5.2 Y	G	G	3.8	3.6	G	G	3.6	2.6	3.0	3.0
19	3.0	2.6	2.8	G	G	G	G	G	G	G	G	G	4.3	G	(5.2) B	5.2	G	G	G	(2.6) B	(3.0) B	G	G	G
20	G	2.2	G	2.4	4.6	3.8	3.8	3.8	4.2	4.8	5.0	5.6	6.2	5.6	6.2	6.0	4.4	9.1 Y	5.9	5.6	4.2	4.2	4.9	4.7
21	3.2	3.4	G	G	G	G	G	G	G	4.6 Y	5.0 F	5.0	5.0	5.2 Y	5.2 Y	5.0	4.6	C	C	4.4	3.6	G	G	2.8
22	3.2	2.0	3.0	3.6	3.4	2.6	G	G	4.2	4.2 F	5.2	4.8	4.6 F	5.4	G	G	4.2	4.0 Y	3.2	3.8 Y	G	6.8 Y	5.4	G
23	G	3.2	G	G	G	G	G	3.4 B	G	G	G	G	G	4.8	4.2	G	3.6	3.8 Y	4.0	G	3.8	G	G	G
24	G	G	G	G	G	G	2.7	G	G	G	G	4.8	4.7	G	G	4.8	G	3.2 Y	3.0	2.4 Y	2.4	G	2.8	2.8
25	G	G	G	2.4	G	G	G	3.0 Y	3.6	G	4.1	G	4.7	5.3	7.0	5.2	4.0	G	G	3.2	3.0	C	G	G
26	G	G	G	G	G	3.4	G	G	3.6	3.6	4.6	G	4.0	5.0	4.2	C	C	C	4.0	(6.2) B Y	B	3.2	4.1	G
27	G	3.1 Y	2.2	G	G	G	C	G	G	4.2	4.6	4.6	4.2	4.6 Y	4.2	4.2	3.6	C	G	G	(3.8) B	G	G	G
28	G	G	G	G	G	G	G	G	G	4.8	4.4	4.8	4.5	5.0	4.8	4.0	4.8	4.2	4.4	2.8	2.7	3.3	3.0	4.6
29	3.8	2.2	C	3.0	G	G	C	G	G	4.6	4.8 Y	4.8	4.8 Y	4.8 Y	(5.5) Y B	6.2	8.4	4.6	4.0	2.6	3.6	3.8	2.2	G
30	G	G	G	G	2.4	2.8	2.1	G	3.1	C	4.7 Y	5.4	5.2 Y	G	5.5 Y	5.4	5.5	4.0	4.0	5.8	4.4	2.0 S	3.4	2.8
31	5.0	3.8	3.8	G	1.6	2.4	(2.8) B	G	G	G	4.3	4.7	4.5	5.2	5.0	5.7	5.1	4.6	3.8	2.9	G	3.2	G	G
Median Value	2.0	2.2	G	G	G	G	G	G	G	G	4.4	4.4	4.6	4.8	4.5	4.4	4.2	3.8	3.0	2.6	3.0	2.4	2.2	2.0
Count	31	31	30	30	31	31	29	31	30	29	30	29	30	30	30	29	29	27	29	31	30	30	31	31

Sweep 1.2 Mc to 8.0 Mc in 15 min Manual

Y 8

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

IONOSPHERIC DATA

Mar. 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	2.9	2.8	2.6	2.6	2.8	2.6	2.7	2.9	(2.9)P	3.3	3.2	[3.2]C	3.1H	3.1	3.1	3.2	3.1	3.3	3.1	3.3S	2.8	2.9	3.0	2.7
2	2.8	2.9	2.9F	2.8	3.2	2.9	2.6	3.1	3.3	3.1	3.3	3.1	3.1	3.0	3.2	3.1P	3.1	3.2	3.1	3.1	2.9	2.9	2.8	2.8
3	2.8	2.9	2.9	2.8H	2.9	2.8	2.8	(3.2)J	3.2	3.1	3.2	3.1	3.1	3.0	2.8P	2.9P	3.1	3.1	3.1H	3.1	2.8P	3.1P	3.0	2.9P
4	2.8	2.8	2.9	2.8	3.0	3.0	2.9	3.1	3.2	3.1	2.9	3.0	3.0	3.0	2.9	3.0	2.9	3.0	3.1	3.1	(2.8)P	2.8P	2.5	3.3P
5	2.8	2.6	2.8	3.1SK	3.4F	2.7RK	2.6K	3.2	3.2	3.1	3.0	2.8H	3.1	3.0	3.0	3.0	3.1	3.0	3.1	3.2	2.8	3.0	2.8P	2.7
6	2.7Z	2.9	2.8P	3.1	3.1	2.9	2.8	3.0	3.3	3.2	(3.3)J	3.0C	2.9	3.0	2.9P	2.9P	3.0P	2.9	2.9	2.9S	2.9	2.8	2.8	3.1
7	3.1	3.2	3.0	2.9	2.7	2.8	2.7	3.1	3.1	3.3	2.9	[2.9]C	2.9	2.9	2.9	2.7P	2.7P	2.7	3.2	3.0	3.2	3.2	3.1	3.0
8	2.9	3.2	2.8	3.1	2.8	2.7	2.9	3.2	3.2	3.2	3.1	2.9	2.9	3.0	2.9	2.9	2.9	3.0	2.8	3.1	3.0	3.0	3.0P	2.8
9	2.7	2.7	2.7	3.0	3.2	2.8	2.9	3.1J	2.9	3.1	2.9	2.7	2.8	2.8	2.7	2.8	2.8	2.8	3.0	3.0	2.9	2.8	2.9	2.9
10	3.2	2.8	2.8	2.7P	3.1	2.6	2.8	(3.3)J	3.4	3.2	3.0	3.0H	2.9	3.0	2.9P	2.9P	2.8P	3.0	2.9	3.1	3.2	3.0	2.8	2.8
11	2.8	2.9	2.8	2.7P	2.9	2.7	2.7	3.2	3.2	3.1	3.1	3.0H	2.8	2.9P	(2.6)P	(2.8)P	2.7P	2.8	3.1	3.1	3.2	3.1	2.9	2.8
12	2.8	2.8	2.7	2.9	2.9	3.0	3.2	3.2	3.4	3.2	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.9	3.0H	3.0	2.9	3.0	2.8P	2.8
13	2.7P	2.8	2.9	3.0	2.8	2.8	(2.7)PH	3.1	3.1	3.0	2.9	2.7	2.7	2.8P	2.6	2.7	2.8	2.9	2.9	3.0	3.1S	2.8	2.6	2.8
14	2.8	2.8	2.8	2.8	3.1	2.6	2.7	3.1	3.3	3.2	3.0	3.0	3.0P	2.8	2.8	2.9	2.8	2.8	3.0	3.0	2.8	3.0	2.8	2.6
15	2.7	2.8P	2.8	[3.0]C	3.2	2.8	2.5	3.0	3.0	3.0	2.7	2.8	(3.1)P	2.8	2.9	2.8	2.8	3.0	3.0	2.9	2.7	2.8	2.9	2.8
16	2.8	2.9	3.1	3.1H	3.0	2.6H	2.6	3.1	C	C	C	C	C	C	C	C	C	C	C	3.0P	2.8	2.8Z	2.9	2.6
17	2.7	2.9	3.1	2.8P	2.5	2.6	3.0	3.1	3.0	3.0	2.9	2.9	2.8	2.8	2.8	2.9	3.0	2.9	3.0	3.0	2.8	2.7	2.9F	2.8
18	2.7	2.8	2.9	3.0	3.0	2.9H	2.8	3.0	3.0	3.1	2.9	2.8H	2.8	2.9	2.8	2.9	3.0	2.9	2.9	3.1	3.0	2.8	2.8F	F
19	2.9	2.8	2.9	3.1	3.0	3.0	2.7	2.9	3.1	2.9	2.9	2.8	2.9	2.8	2.9H	2.9	2.9	(2.9)B	3.0	2.8	(2.5)PK	3.1K	2.6K	2.6HK
20	2.7K	2.7K	2.8K	2.8FK	2.6K	2.8K	2.7	2.9	2.7	3.3	3.0	3.0	2.9	2.8	3.1H	3.1	3.1	3.1	3.2	3.2	3.2	3.1	3.4	3.0
21	3.1	2.9	3.1	3.2	2.9	2.6H	2.8Z	3.2	3.0	2.9	2.9	2.9	2.9	2.8	(2.7)JP	2.7P	2.8	C	C	3.2	2.9	2.7	2.6	2.7
22	2.6	2.8	2.7	2.6	2.8	3.0	2.8	3.2	3.1H	3.0	2.9	2.8	2.7	2.7	2.9	2.9	2.9	2.9	3.0	3.2	2.9	2.6S	2.5S	(2.6)B
23	2.8	2.7	3.0	3.0	3.0	2.7	2.8	3.2	3.2	3.0	2.7	2.8	2.9	2.8	2.8	2.9	3.0	2.9H	3.2	3.1	2.8	2.7	2.8	2.8
24	2.6	2.9	2.6	3.3	3.5	2.8	3.0	3.6	3.3	3.1	2.9H	2.8H	2.8H	2.8H	2.8	2.9	3.0H	2.9H	2.9	3.0	2.9	2.8	2.6	2.7
25	2.6	2.8	3.1	3.1	3.1	3.1	2.8	3.3	3.2	3.2	3.2	3.1	2.8	2.6P	(2.8)P	2.9	3.1	2.9	3.0	3.0	3.0	[2.8]C	2.6	2.7
26	(2.9)B	2.8	2.9	3.0	3.1	2.7	3.2	3.2	3.1	3.0	3.0	2.9	2.9	2.9	2.8	C	C	C	3.0P	3.4	3.0	2.9	2.7	2.7
27	2.8	2.9B	2.9	3.1	3.1	3.1	[3.2]C	3.4	3.3	3.2	3.1	2.9	3.0	2.9P	3.0	2.9	2.9	[3.0]C	3.1	3.1	3.1	3.0	2.7	2.8
28	3.1	3.1	2.7	2.9	3.1	2.8	2.9	3.2	3.2	2.8H	3.0H	2.8	3.0	3.0P	3.0	(2.9)P	3.0	3.0	3.0	(3.0)P	(3.0)P	2.9P	(2.6)BP	2.7
29	2.7	2.9H	[3.0]C	3.2	3.2	2.7	[2.9]C	3.2	3.0	3.0	2.9	2.8	3.0	2.8	2.8	2.8	(2.9)J	3.	(3.1)SP	3.2	3.0	(3.0)SP	2.8	2.7
30	3.0	3.0P	2.8	3.0	3.1	3.0	2.9	3.2	3.1	[3.0]C	2.8	2.8	2.8	[2.7]P	2.8P	2.9P	3.0P	2.9	3.1	2.9	3.0	(2.6)P	2.6	2.6
31	2.6	2.7	2.8	3.2	3.0	2.9	2.7	3.2	3.0	3.0	2.9	2.9	2.9	2.9	2.9	3.1	3.2	(3.2)JH	(3.0)PH	3.0H	2.8	2.8	2.8	2.9
Median Value	2.8	2.8	2.8	3.0	3.0	2.8	2.8	3.2	3.2	3.1	2.9	2.9	2.9	2.8	2.8	2.9	2.9	2.9	3.0	3.1	2.9	2.9	2.8	2.8
Count	31	31	31	31	31	31	31	31	30	30	30	30	30	30	30	29	29	28	29	31	31	31	31	30

Sweep 1.2 Mc to 30 Mc in 15 min Manual

Y 9

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Mar. 1950 | fminF | 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	1.7	1.7	1.3	1.7	1.8	1.5	1.4	2.0	A	3.0	3.3	4.0	4.2	4.1	4.2	3.7	A	A	2.2	A	A	1.6	1.6	1.6
2	E	A	1.6	E	1.5 A	E	A	2.0	2.6	3.8 A	3.4	3.4	3.6	3.5	A	3.5	3.0	2.8	A	1.8	1.4	1.6	1.4	1.4
3	E	1.3	E	1.3	1.6	1.5	1.4	2.0	2.7	3.1	3.5	3.9	3.9	4.0	A	A	A	A	2.0	1.8	1.7	1.6	1.5	1.4
4	1.5	E	1.4	1.3	1.3	1.5	1.5	1.8	2.8	3.4	3.6	3.7	3.7	3.9	3.6	3.8	3.4	A	2.2	A	A	1.9	1.8 F	1.5
5	1.9	2.0	A	1.5	E	1.6	1.5	1.9	2.7	3.4	3.7	4.4	4.2	4.2	3.9	3.4	3.3	2.7	2.2	1.4	1.8	1.6	1.5	A
6	1.4	A	1.6	1.3	E	E	1.3	1.9	3.2	3.0	A	3.5 C	4.0 A	A	3.5	A	A	2.6	2.2	1.4	1.5	1.5	1.4	1.6
7	1.6	A	E	E	E	E	1.4	2.4	3.1	3.4	3.6	[3.8]	4.1	4.1	3.8	3.7	3.2	3.0	2.0	1.8	A	A	A	1.8
8	A	1.5	1.4	1.3	1.4	1.3	1.4	2.1	2.7	3.7	4.0	4.2	4.1	4.2 A	4.2	4.0 A	3.5	3.3	2.8	2.0	1.5	1.5	1.5	1.5
9	E	E	E	1.4	1.3	1.6	1.5	A	3.0	3.4	3.8	3.8	3.9	3.9	A	A	3.4 A	A	2.0 A	1.5	A	A	1.5	1.3
10	1.4	A	E	1.3	E	A	1.6	2.0	2.9	3.0	A	3.6	3.8	3.6	3.6	3.6	3.4	2.7	2.3	2.0	1.5	1.4	1.4	E
11	1.6	A	A	A	E	E	1.4	2.2	3.0	3.6	3.7	4.1	4.1	4.1	4.3	A	3.6	3.0	2.0 A	A	A	A	1.8	1.5
12	1.5	1.4	1.4	1.5	1.5	1.6	1.6	1.8	2.8	3.4	3.6	4.0	4.0	4.0	4.0	3.6	3.4	2.9	2.2	1.5 A	1.6	1.6	1.7	1.4
13	1.3	1.8	1.8	1.7	1.4	1.3	1.4	2.1	2.9	3.2	3.8	4.2	4.2	3.8	4.3	3.9	A	A	2.2	2.1	1.5	1.8	1.6	1.8
14	1.6	1.3	1.3	E C	E	E	1.3	2.1 F	2.9	3.4	3.3	3.8	4.4	4.2	A	3.8	3.4	2.9	2.6	2.2	A	1.6	1.6	1.5
15	1.3	1.3	1.3	[1.4]	1.4	E	1.3	A	2.8	3.6	4.4	4.5	4.6	4.5	3.8	3.9	3.4	2.8	2.5	1.8	1.6	1.6	1.6	1.5
16	1.5	1.5	1.5	E	E	E	1.4	2.0	C	C	C	C	C	C	C	C	C	C	C	1.9	1.5	A	1.5	A
17	A	1.4	1.5	1.6	1.5	1.6	1.6	2.4	3.0	4.1	3.6	3.7	4.3 A	4.0	3.8	3.6	3.4	2.9	2.1	1.4	1.4	1.6	1.4	1.5
18	1.3	1.3	1.6	E	1.3	E	1.4	2.1	2.8	3.3	3.6	3.7	4.1	A	4.0	3.6	3.4	2.8	2.1	1.5	A	1.5	1.8	1.8
19	1.6	A	1.4	E	E	1.4	1.3	2.6	3.0	3.1	4.5	4.0	4.1	4.2	A	A	3.1	2.8	2.2	1.6	1.8	1.6	1.4	1.5
20	1.5	1.3	E	1.6	A	A	A	A	3.0	3.4	4.2	4.2	A	A	A	A	A	A	A	2.2 A	A	A	A	1.9 A
21	1.8	2.1 A	1.9	E	1.3	1.3	1.3	2.0	3.3	3.3	4.0 A	4.1	4.2	4.4	A	4.2 A	3.4	C	C	A	A	1.6	1.6	1.6 A
22	1.6 A	E	1.8 A	A	1.6	E	1.4	2.1	A	A	3.4 A	A	A	3.6	3.7	3.6	3.5	2.9	2.4	1.6	1.5	2.0	A	1.5
23	1.6	1.3	E	1.4	1.4	1.3	1.4	2.6	2.7	3.6	3.7	4.4	N	4.0	4.2	3.6	3.4	3.2	2.2	1.5	A	1.5	1.5	1.5
24	1.4	1.6	E	1.7	1.6	1.3	1.5	2.0	2.9	3.2	3.7	3.7	3.8	3.9	3.7	3.6	3.3	2.8	2.2	1.6	1.6	1.5	1.5	1.5
25	1.5	1.3	1.4	1.3	1.4	E	1.7	2.2	3.0	3.6	3.9	3.9	A	3.8	A	A	3.3	3.0	2.2	1.8	A	C	1.6	1.5
26	1.7	E	1.4	1.4	1.5	1.3	1.4	2.0	3.1	3.2	3.6	4.0	4.0	A	3.8 A	C	C	C	3.4	2.0	2.0	2.0	1.9	1.7
27	1.7	1.7	1.3	1.3	E	E	C	2.4	3.0	A	4.2 A	4.2	3.8	4.2	3.8	3.8	3.4	[2.8] C	2.3	1.8	1.5	1.5	E	E
28	E	E	1.4	E	1.4	E	1.6	2.3	N	3.8	3.8	4.0	4.2	3.8	4.2	3.8	3.8	2.7	A	2.0	1.8	1.8	1.8	1.6
29	1.4	1.3	[1.3] C	1.3	1.8	E	C	2.3	3.0	3.6	4.0	4.4 A	4.4	4.6	4.4	A	4.0	A	A	1.8	A	A	1.8 F	1.4
30	1.3	E	1.7	1.6	1.8	1.6	1.7	2.8	3.0	[3.5] C	4.0	4.6	4.4	4.3	4.1	4.2	A	3.0	A	A	A	1.8	A	1.6
31	A	1.8	1.7	E	A	1.6	1.8	2.3	2.9	3.0	A	5.6	4.3 A	A	A	4.2 A	4.0 A	3.1	2.1	1.6	1.5	1.5	1.5	1.4
Median Value	1.5	1.3	1.4	1.3	1.4	1.3	1.4	2.1	2.9	3.4	3.7	4.0	4.1	4.0	3.9	3.7	3.4	2.9	2.2	1.8	1.5	1.6	1.5	1.5
Count	28	25	29	29	29	29	27	28	27	28	27	29	26	25	21	21	23	21	24	26	18	24	27	29

Sweep 1.2 Mc to 8.0 Mc in 15 min Manual

Y 10

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

IONOSPHERIC DATA

Mar. 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	E	E	G	(2.0)B	G	1.9	1.4	(1.8)B	1.9	B	1.8	2.2	2.2	1.9	2.0	2.0	2.2	2.0	1.8	1.3	1.3	1.4	G	1.4
2	E	E	E	G	E	1.8	1.4	1.3	1.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.8	1.8	1.5	G	G	1.3	G
3	G	1.8	G	1.3	E	E	E	1.5	1.4	1.3	1.8	1.8	1.9	2.1	2.9	2.1	1.9	1.9	1.8	1.8	1.5	G	G	G
4	G	G	G	G	G	G	E	2.0	2.0	2.0	2.0	2.0	1.8	2.0	2.0	1.7	1.7	1.5	1.4	1.4	2.1	1.9	1.8	1.5
5	1.5	1.5	1.5	1.5	G	G	1.5	1.4	1.5	2.0	2.0	2.2	2.2	2.2	2.2	1.9	1.9	1.7	(2.0)B	1.4	1.4	1.4	G	1.4
6	E	E	2.2	G	G	G	E	1.3	1.4	2.0	2.0	2.0	2.0	1.8	2.2	2.0	1.9	2.0	1.6	G	G	G	G	G
7	1.4	E	G	G	G	G	E	1.5	1.8	1.4	1.9	[2.0]C	2.0	2.0	2.0	2.1	2.0	2.0	1.6	1.7	1.6	1.8	1.6	1.8
8	1.8	1.4	1.5	1.3	G	G	1.8	1.5	1.5	1.7	2.1	2.2	2.2	2.2	3.2	1.9	1.9	1.4	1.3	1.3	1.8	G	G	G
9	G	G	G	G	G	G	E	1.4	1.7	1.8	1.9	2.0	2.0	2.2	2.2	2.2	2.0	1.8	1.6	1.5	1.4	E	1.6	1.4
10	1.4	1.3	G	G	G	E	B	1.4	1.6	2.0	2.0	2.0	2.0	2.0	2.9	2.2	2.2	1.8	1.7	1.6	G	G	G	2.2
11	1.4	E	E	1.3B	G	G	E	1.4	1.5	1.5	1.9	1.9	2.1	2.1	2.1	2.2	2.1	2.0	1.7	1.6	1.5	1.6	1.5	G
12	G	G	G	G	G	G	B	B	1.8	1.8	2.0	1.7	1.6	2.0	1.9	2.0	1.8	1.7	1.4	B	1.6	1.6	G	1.4
13	1.3	1.3	1.4	G	G	G	B	1.6	1.6	1.9	2.0	2.4	2.2	2.2	2.1	2.0	2.0	1.6	1.3	1.5	G	1.8	36	1.4
14	2.0	1.8	G	G	G	G	B	1.4	1.4	2.0	2.0	3.0	2.2	2.2	2.0	2.0	1.8	1.8	2.0B	1.8	1.6	1.4	1.5	1.5
15	G	G	G	C	G	G	E	1.3	1.8	1.9	2.1	4.2	4.1	3.1	2.2	2.1	1.9	2.0	(1.8)B	2.0	2.0	1.8	1.6	1.6
16	1.6	1.6	2.0	G	2.0	G	1.6	1.7	C	C	C	C	C	C	C	C	C	C	C	1.6	1.5	1.5	1.4	1.5
17	1.4	G	1.6	2.8	G	2.0F	1.8	1.9	1.8	4.1	1.8	2.2	2.2	2.2	2.0	2.0	1.9	1.7	1.5	B	G	1.4	1.4	G
18	G	G	1.4	G	G	G	B	1.6	1.4	1.6	1.8	1.9	2.1	2.1	2.1	2.0	1.8	1.7	1.5	1.8	1.4	(1.4)B	1.8	1.5
19	1.6	E	2.0	G	G	G	E	1.6	1.8	2.0	2.1	2.2	2.1	2.3	2.1	2.2	1.9	1.7	1.5	1.9	(1.9)B	G	G	G
20	G	E	G	E	E	E	1.4	1.4	1.6	2.0	1.8	2.2	2.2	2.2	2.3	2.2	2.2	2.1	1.9	1.7	1.6F	1.6	1.9	1.7
21	1.7	1.6	G	G	G	G	E	1.6	1.9	2.0	2.2	2.2	2.2	2.8	2.0	2.0	2.4	C	C	1.7	1.6	G	G	1.4
22	1.3	1.6	E	E	E	E	E	1.5	1.8	1.6	1.5	1.8	2.0	2.2	2.2	1.8	1.6	1.7	1.6	1.8	G	1.7	1.5	G
23	G	1.3	G	G	G	G	E	(1.8)B	1.7	2.0	2.0	2.2	2.2	2.0	2.0	2.0	2.0	2.0	1.8	G	1.4	G	G	G
24	G	G	G	G	G	G	1.3	1.6	1.9	1.8	1.8	2.0	2.2	2.1	2.1	1.9	1.8	1.6	1.4	1.4	2.2	G	2.0	2.2
25	G	G	G	1.3	G	G	B	1.5	1.8	1.7	2.3	2.5	2.2	2.0	2.1	2.1	2.0	1.7	1.5	E	1.5	C	G	G
26	G	G	G	G	G	1.6	E	1.5	1.8	2.0	2.0	2.1	2.8	2.1	2.2	C	C	C	2.0	1.6	B	1.8	1.5	G
27	G	1.9	1.3	G	G	G	C	1.3	1.4	2.2	2.2	2.4	2.4	2.2	2.6	2.2	2.2	[2.0]C	1.8	G	(3.2)B	G	G	G
28	G	G	G	G	G	G	B	1.5	1.6	1.7	1.9	2.0	2.0	2.6	1.6	1.8	1.7	1.8	1.6	1.4	1.4	1.4	1.4	1.4
29	E	1.3	[1.3]C	1.3	G	G	C	1.6	1.6	1.8	2.0	2.2	2.2	2.1	2.2	2.2	2.0	1.4	1.4	1.4	1.3	1.4	1.4	G
30	G	G	G	G	1.7	1.8	1.6	1.7	1.9	[1.9]C	1.9	2.1	2.1	2.1	2.0	2.1	1.9	1.6	1.5	1.4	1.6	1.8	1.8	1.4
31	E	1.3	1.7	G	E	E	1.6	1.5	1.8	1.7	2.1	2.1	2.4	2.4	2.8	2.2	2.1	1.6	1.4	2.4	G	1.5	G	G
Median Value	G	G	G	G	G	G	E	1.5	1.7	1.9	2.0	2.1	2.2	2.1	2.1	2.0	1.9	1.8	1.6	1.5	1.5	1.4	1.4	1.4
Count	31	31	31	30	31	31	22	30	30	29	30	30	30	30	30	29	29	28	29	29	30	30	31	31

Sweep 1.2 Mc to 18.0 Mc in 15-min Manual

Y II

IONOSPHERIC DATE IN JAPAN FOR MARCH 1950
電波觀測報告　第2卷　第3號

1950年4月1日　印　刷
1950年4月5日　發　行

編集兼
發行人　莊　宏
東京都港區青山北町4丁目1

發行所　電波廳
東京都港區青山北町4丁目1
電話赤坂（48）{3913—3915
{3991—3995

印刷所　科學新興社
東京都千代田區丸ノ内2ノ2丸ビル740號室