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IONOSPHERIC DATA IN JAPAN

FOR JANUARY 1950

Vol. 2 No. 1

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PREPARED BY RADIO REGULATORY AGENCY

(DENPAGHO)

TOKYO, JAPAN

RADIO REGULATORY AGENCY

(DENPACHO)

TOKYO, JAPAN

IONOSPHERIC DATA IN JAPAN FOR JANUANY 1950

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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.

January 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

Jan. 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	3.7	3.4	2.8	3.0	3.1	3.1	3.5	5.4	S	S	S	11.3	9.9	10.6	9.4	(10.3)S	8.4	7.4	5.6	4.1R	3.6	3.1F	3.1F	3.2
2	3.1F	2.9F	3.1F	2.9	A	A	3.3	4.0Z	9.9	S	S	S	S	11.2	9.3	(8.7)S	(7.7)S	6.4	4.2	3.7	[3.4]S	(3.0)F	S	(3.0)J
3	3.1	2.9	3.1	3.0	3.5	3.3JS	2.4	4.2	(7.8)P	9.5	11.0J	9.4J	8.2	(8.5)PS	(10.7)P	6.6	7.4	6.9	4.7	3.1	2.5	2.7	2.5	2.7
4	2.8	3.1	3.1	2.8	3.2	4.6	(4.6)P	4.6	7.6	9.3	10.2	9.6	9.7	9.8	9.5	[8.1]B	6.7	(5.4)P	(4.1)PS	3.9	4.0	3.6	2.9	3.1
5	2.9	3.2	3.0	3.3	3.6	3.0F	2.5	5.6	B	C	S	10.5	10.2	8.8P	9.0S	S	7.3	5.3	4.1	4.1	2.9J	2.9JF	3.1F	3.2F
6	2.9JF	3.3J	3.4F	3.6F	4.2	3.0	2.6F	5.0	C	C	C	10.0	9.0	11.1	9.0J	8.0	8.2	(6.3)P	(4.0)PS	S	S	(3.1)PB	3.4	3.3
7	2.6	2.6	C	C	C	3.6H	4.0	6.5	S	12.1JP	(11.2)P	(11.2)P	(11.3)P	(11.1)JP	10.7	9.6P	[8.0]B	6.3	5.6	4.6	3.6	3.1	2.9	4.0
8	3.4	2.7	2.9	3.0	3.0	3.2	3.3	5.3	7.6J	S	S	S	(11.2)P	9.3J	8.9J	(8.5)PS	7.1	6.6	3.9	3.5	3.6	3.8	3.7	3.6F
9	3.3F	3.4	3.3	3.6	3.5J	3.2M	2.6	5.6	7.3J	[8.6]S	10.0	(10.0)JPS	9.3	9.0	9.2	8.7	7.2	6.8	5.8	(4.8)B	3.2	3.5FZ	3.8F	3.9F
10	(4.4)PF	4.3F	4.2F	3.5FJ	3.3JF	3.4F	3.3F	(7.5)P	(8.0)PS	10.8P	10.4	[9.9]C	9.4J	B	B	B	C	5.5SH	C	C	3.9	4.0	3.6	4.0F
11	4.0F	3.5F	3.4	3.5	3.9	S	S	5.4J	B	(12.6)P	11.4	11.2	(11.8)P	(11.5)P	9.3	9.3	8.1	5.3	4.3	3.0	3.1	3.1	3.3	3.0
12	3.2	3.6	3.6	3.7	3.5	3.6	3.1	4.3	7.3	9.9	(11.4)PS	10.6	S	S	S	8.4S	7.1S	6.6	5.5	3.4	2.8	3.2	3.6	3.5
13	3.5	3.6	3.6	3.7	3.6	3.8	3.1	5.5	8.6P	10.6	11.0P	9.9	10.3	10.3	10.1	8.6	8.2	6.4	5.6	4.4	4.2	3.3	3.4J	4.0
14	4.2	4.2	4.1	4.2	4.2	4.2	4.4	4.3	7.0	10.7	11.4PZ	12.4	11.7	10.9	10.8	8.9	7.4	C	C	4.1	4.0	3.9J	4.5	4.2
15	4.0	4.3	4.3	4.3	4.0	3.6	4.3JF	5.3	S	C	C	C	C	C	10.1	(9.3)P	7.6	6.8	6.7	6.8	4.1	4.1	4.2	4.2
16	4.2	4.3	4.0	3.0	3.5	3.1	3.1	5.4	8.3	10.5	10.9	10.5	10.1	9.9J	10.0S	SH	7.6S	7.3	6.3	5.4	3.4	4.0	4.0	4.0
17	3.8	4.1	4.0	4.0	4.0	4.0	3.5	5.0	7.2	8.7	10.7P	9.8	9.1J	9.5	9.5	S	7.2	6.1P	5.0	4.4	4.3P	3.6	4.0JF	3.9F
18	3.9JF	4.1FZ	3.9Z	3.8Z	4.0Z	3.9F	3.7V	(5.4)PJ	7.3	B	B	B	9.4B	(8.3)PS	8.2JP	B	7.4S	6.1	4.4	3.4	3.1	3.1	3.2Z	3.5
19	3.6	3.7	3.7	3.7	3.6	3.1F	2.8F	4.6	7.6PS	8.0S	9.8	10.7	11.0P	10.4	C	C	6.6F	6.5	5.3	3.5	3.3	3.2	3.0	C
20	C	C	C	C	C	C	C	C	C	C	9.2P	(10.4)B	11.5P	11.7	(10.8)P	(9.3)PS	S	C	6.3B	5.0S	3.6	4.0	4.1	4.0
21	3.6	3.9	3.8	3.6	3.6	3.2	3.5	5.9	10.1	11.5	13.0	13.4	(11.8)P	10.4	(9.7)P	9.2	S	(6.6)PS	5.3	4.6	3.9	3.2	3.3	3.5
22	3.4	3.4	3.5	3.5PZ	3.4	3.6	4.0	5.8	8.5	10.2	10.3	11.2Z	10.5	9.3	10.0	10.2	8.1	6.0	4.4	4.6	3.7	3.2	3.5F	3.8F
23	3.3	3.4	3.4	3.1	3.4	3.3	3.3	5.9	9.2JS	9.3	9.4P	9.9	10.0	9.3	9.2S	8.8J	(7.7)P	6.6	5.8	5.5	3.1	3.0	3.4	3.2
24	3.4	3.4	3.6	3.7	3.4	3.3	3.1	5.8	8.0	[8.7]S	9.4JS	(11.3)P	9.9J	[9.3]S	8.7J	S	(7.6)PS	5.9	6.2	6.1	4.7	3.9FK	4.0KF	3.6KF
25	3.5KF	3.1K	2.9K	2.6K	2.9KF	3.1KF	2.7K	6.5KPS	S K	7.8KS	12.2	11.7JS	11.7	12.4H	11.4	10.9	9.7	(7.6)PS	6.5	6.7	5.3	4.4	3.5	(4.1)P
26	4.4	4.4	4.3	4.3	3.9	3.5	3.8	6.7P	6.9J	9.5S	10.0	12.5PS	10.0H	(9.8)P	(10.3)PS	10.7J	9.5	6.9S	6.5	(6.0)PS	4.4	4.1	4.4	4.6
27	4.3	3.8	3.9	3.8	4.1	4.2	3.5S	FS	S	9.4	11.9	11.5	11.8	11.7	11.9	10.1	9.8	C	6.0	5.1	4.6	4.2	4.5H	4.5F
28	4.4	4.3	4.5	4.2	3.9F	3.2	3.0F	6.0	9.3J	10.4ZS	13.2	9.3	10.1	9.0JS	S	S	S	6.3JF	5.3J	5.2J	5.1	4.0	4.0	3.9J
29	3.8	3.6Z	3.7	3.7	3.6	2.6	2.8V	7.3P	9.3	8.5P	(11.7)P	11.6H	10.7	9.3	9.9C	[9.0]C	8.2	(6.3)S	5.7	(5.8)PS	S	3.6	2.9	3.5Z
30	3.5	3.4	3.4	3.5	3.0	3.1	3.2	6.3	S	S	9.5	9.7	10.2	10.2	9.4J	9.1J	[8.3]S	7.5P	7.1	5.8	4.8	4.4	4.4	3.8
31	3.7	3.7	3.6	3.6	4.2	2.6	2.2	6.2P	7.7	10.0	(10.5)S	11.2	9.4	[9.7]S	9.9	[8.8]S	(7.8)P	S	5.2	4.6	3.5	3.9	3.2	3.3
Median Value	3.6	3.6	3.6	3.6	3.6	3.3	3.3	5.6	7.8	9.7	10.8	10.6	10.2	9.8	9.7	9.0	7.7	6.4	5.5	4.6	3.6	3.6	3.6	3.7
Count	30	30	29	29	28	28	29	30	21	22	24	27	28	28	27	23	27	27	29	29	29	31	30	30

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

Jan. 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	350	400	380	370	320	290	300	270	S	S	S	270	(330)S	320	(300)S	(310)PS	290	310	280	340R	360	340F	410F	400
2	430F	410F	420F	350	A	A	370	410Z	290	S	S	S	S	420	320	(310)PS	(310)PS	320	330	410	S	(300)F	S	(300)J
3	390	400	400	390	350	(280)JS	320	300	(320)P	310	(290)J	(300)J	300	(320)PS	(350)B	330	330	300	260	300	410	380	360	400
4	310	410	(330)B	360	350	390	(410)P	290	310	290	300	270	(280)S	(290)PS	(270)S	[290]B	310	(300)F	(360)P	360	320	300	320	430
5	410	440	470	450	380	330F	320	290	B	C	S	300	360	300P	300S	S	(270)B	310	360	360	(410)J	(380)JF	430F	(430)FB
6	(420)JF	(410)J	460F	420F	(400)B	370	390F	390	C	C	C	250	280	300	(260)J	300	290	(280)P	(270)PS	S	S	(400)PB	440	(390)B
7	(370)B	400	C	C	C	390H	320	310	S	(280)JP	(280)P	(300)P	(310)P	(310)PJ	310	(360)PB	[340]B	320	310	320	380	380	440	440
8	320	420	450	360	420	370	310	350	(280)J	S	S	S	(300)P	(290)J	(290)J	(320)PS	290	290	310	320	380	360	360	370F
9	410F	420	420	360	(330)J	(330)NH	300	310	(250)J	[270]S	290	(290)JPS	300	300	300	290	280	360	300	(290)B	380	450FZ	390F	470F
10	(430)PF	390F	380F	(350)JF	(380)JF	380F	370F	(300)P	(280)JPS	270P	290P	[290]C	(290)J	B	B	B	C	350SH	C	C	370	430	370	380F
11	340F	400F	420	400	400	S	S	(330)J	B	(300)P	300	310	(360)P	(370)P	320	320	310	330	300	310	400	400	380	400
12	410	430	390	350	370	380	320	330	300	300	(360)PS	280	S	S	S	300S	300S	320	300	300	390	420	470	460
13	430	440	430	420	490	430	310	330	290P	390	310P	320	370	320	320	300	310	310	280	330	350	360	[380]A	410
14	400	410	450	450	430	370	270	340	300	300	300PZ	340	320	350	300	290	280	C	C	360	390	380	370	(360)B
15	400	400	410	400	(340)B	360	(380)JF	330	S	C	C	C	C	C	300	(300)P	270	320	320	320	320	330	390	440
16	430	370	310	420	430	440	340	300	270	290	260	300	290	(300)J	300S	SH	290S	320	330	330	330	350	380	370
17	390	430	400	450	(490)JF	350	310	330	330	320	290P	300	(270)J	300	290	S	290	310P	360	(340)B	(340)PB	410	(400)JF	500F
18	(430)J	370FZ	430Z	(380)BS	390Z	390F	370V	(380)PZ	280	B	B	B	300B	(290)PS	(300)JP	B	320S	310	310	310	330	400	400Z	440
19	400	400	400	390	340	370F	320F	340	300PS	300S	280	270	(360)PH	340	C	C	270S	340	310	360	340	350	300	C
20	C	C	C	C	C	C	C	C	C	C	(280)PS	[300]B	320P	330	(340)F	(300)PS	S	C	320B	300S	390	440	470	450
21	460	390	400	410	370	410	360	(290)B	310	310	310	310	(310)F	310	(320)P	300	S	(330)FS	330	320	360	(380)B	360	360
22	430	340	450	470FZ	410	430	(320)B	280	(300)B	(280)B	(320)B	300Z	300	290	310	320	(290)	310	320	350	320	340	400F	390F
23	380	390	380	370	410	390	340	320	(290)JS	(300)S	310P	310	(320)S	280	300S	(290)J	(290)P	320	330	340	330	350	390	380
24	430	460	450	410	370	360	280	280	290	[300]S	(310)JS	(330)F	(310)J	[300]S	(280)J	S	(300)PS	(320)F	370	330	(330)B	(400)KF	(420)KJF	420KF
25	430K	(490)K	(520)FK	(520)FK	340F	AFK	330K	(310)KP	S K	(280)KZS	(350)S	(330)JZ	350	390H	360	(310)S	(290)B	(320)FJH	290	(330)B	330	300	400	(490)F
26	(430)B	450	380	370	360	390	360	300P	(260)J	320S	300	330S	300H	(310)P	(300)F	(310)JS	(300)S	330S	320	(350)PS	350	380	390	380
27	390	440	420	410	430	340	310S	F S	S	(290)S	(320)B	(310)B	(330)B	(320)B	320	(330)B	340	C	300	310	370	470	410H	480F
28	420	420	420	370	380F	400	360F	300	(290)J	360Z	350	310	310	(330)JS	S	S	S	(280)JF	(300)J	(290)J	(310)B	(360)B	(400)B	(360)J
29	410	420Z	480	440	340	260	380V	(370)PB	270	280F	(310)F	330H	290	300	310	[300]C	(300)B	(330)S	370	(380)B	S	380	410	430Z
30	410	420	400	420	430	430	390	300	S	S	(340)S	(340)S	(320)J	(310)S	(340)JS	(320)J	[310]S	300F	370	360	320	400	360	400
31	440	420F	(440)F	500F	350	330	410	370P	320	330	(330)PS	330	320	[320]S	330	[340]S	(350)P	S	(320)B	340	420	410	390	440
Median Value	410	410	420	400	380	370	330	310	290	300	305	300	310	310	300	(310)	300	320	320	330	355	380	390	400
Count	30	30	29	29	28	27	29	29	21	22	24	27	28	28	27	23	27	27	29	29	28	31	30	30

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

Jan. 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	290	320	320	320	260	270	250	230	300	260	300	260	250	270	230	270	(220)A	250	230	A	A	290	A	A
2	A	360	370	(330)A	A	A	A	300	270	220	270	230	200A	380	280	260	260	200	(270)A	A	310	270	A	300
3	330	340	350	340	300	250	300	290	300	280	280	270	250	270	280	270	280	280	250A	A	B	340	(360)B	B
4	260	[260]B	270B	270	300	290	300	230	260	260	270	230	220	230	220	250	250	(250)A	250	280	300	290	300	370
5	340	370	380	340	290	[290]A	290	240	260	260	210	240	250	240	360	250	220	260	270	280	360	310	370	360
6	380	A	A	320	300	320	350	300	C	C	C	220	220	240	230	230	240	200	(200)A	220	A	270	(300)A	310
7	310	360	C	C	C	310H	280	220	250	240	230	260	270	270	290	240	230	210	240	240	280	290	360	290
8	290	320	310	310	360	320	250	280	(240)A	240	240	230	270	240	220	230	220	250	250	270	300	310	310	300
9	320	310	320	300	A	290H	280	270	210	240	240	240	250	250	270	270	250	270	240	(240)A	290	290	300F	280F
10	290F	300F	290F	290	310	300	300	260	240	230	270	[280]C	280	210	210	200	[210]C	220H	C	C	280	370	300	300
11	300	330	330	330	290	240	250	290	240S	260	280	220	220	250	280	260	250	260	230	240	310	350	300	300
12	330	340	290	290	300	290	280	270	240	270	250	250	270	240	280	230	250	220	A	250	300	330	340	320
13	310	350	340	330	370	330	240	240	270	270	300	280	280	260	260	260	250	260	230	A	300A	310	[310]A	310
14	310	290	320	340	280	250	260	230	250	240	270	230	280	270	270	250	240	A	A	A	A	A	310A	A
15	A	A	A	A	270	300	300	220	230	C	C	C	C	C	260	230	210	240	A	250	250	250	300	350
16	310	290	250	280	340	330	270	240	210	270	250	240	250	250	270	220H	220	230	240	250	290	290	300	300
17	300	320	300	B	BH	310	300	280	270	250	250	270	240	250	240	260	270	240	270	270	302	[300]B	290	310
18	310	290	290	290	300	290	290	280	230	300	300	290	290	250	300	280	260	220	280	250	260	A	340	320
19	300	300	300	300	280	N	290	280	280	250	260	220	270	250	C	C	220	300	280	280	300	310	260	C
20	C	C	C	C	C	C	C	C	C	C	240	280	280	310	310	260	210	290	280	270	300A	320	350	320
21	330	320	340	330	300	250	300	250	240	270	280	250	250	250	300	280	220	220	240	250	270	A	320	290
22	350	290	300	340	350	340	250	260	220	250	270	270	220	260	260	250	230	210	230	270	270	300	320	300
23	300	300	300	300	300	310	220	250	230	210	220	240	240	240	240	230	230	A	270	250	260	280	300	300
24	310	A	A	310	300	240	250	240	230	230	250	260	280	280	230	300	220	AF	300	270	250	300K	310F	330K
25	320K	330K	450A	400A	FK	AK	BFK	290K	300A	230K	230	300	240	290H	220	240	230	200	230	240	260	280	350	320
26	350	290	300	290	280	300	270	230	230	300	220	280	200N	300	300	290	290	200	210	200	230	300	280	280
27	270	300	310	320	310	260	280	220	220	240	250	200	200	260	260	270	220	250	220	260	270	320	310	320
28	320	380	340	300	290	300	300	240	270	200	280	270	290	300	300	280	220S	230	230	240	230	260	300	300
29	320	320	330	310	270	220	290	340	220	230	240	240H	240	250	250	[240]C	240	280	270	250A	250A	290	380	(340)B
30	320	(310)A	310	330	360	360	320	300	270	230	240	260	280	270	300	260	260	300	290	280	270	300	300	300
31	340	320	370	390	300	210	A	290A	290	290	280	300	270	300	280	300	250	300A	300A	260	310	300	320	350
Median Value	310	320	315	320	300	290	280	260	240	250	250	255	250	255	270	260	230	245	250	250	280	300	310	300
Count	28	27	26	27	25	27	27	30	29	28	29	30	30	30	30	30	31	28	27	25	27	28	27	27

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 3

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan. 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							A	Q	A	Q	L	L	Q	Q	Q	Q	A	A						
2							A	A	L	A	Q	Q	Q	L	Q	Q	Q	Q						
3							Q	Q	L	Q	Q	Q	Q	Q	L	Q	(3.4) P	L						
4							A	Q	A	Q	Q	Q	Q	Q	Q	Q	A	A						
5							Q	Q	L	Q	Q	L	Q	Q	Q	Q	A	Q						
6							Q	A	C	C	C	Q	Q	Q	Q	Q	Q	Q						
7							Q	Q	Q	Q	Q	L	L	L	L	Q	Q	Q						
8							Q	Q	A	Q	Q	Q	L	L	Q	Q	Q	Q						
9							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
10							Q	L	Q	L	L	C	L	Q	Q	Q	C	Q						
11							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
12							Q	Q	Q	Q	Q	Q	L	Q	Q	Q	Q	Q						
13							Q	Q	L	Q	L	L	L	Q	Q	Q	Q	Q						
14							L	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	A						
15							Q	Q	A	C	C	C	C	C	L	Q	Q	Q						
16							Q	Q	Q	L	Q	Q	Q	Q	Q	Q	Q	Q						
17							L	L	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
18							Q	Q	Q	L	L	Q	L	Q	L	Q	Q	A						
19							Q	Q	L	Q	L	Q	Q	Q	C	C	Q	Q						
20							C	C	C	C	Q	L	L	L	L	L	Q	L						
21							Q	Q	Q	Q	Q	Q	Q	Q	L	L	Q	Q						
22							Q	Q	Q	L	L	L	Q	L	L	L	Q	Q						
23							Q	Q	L	Q	Q	Q	Q	Q	Q	Q	Q	A						
24							Q	Q	Q	Q	Q	Q	Q	Q	Q	L	Q	Q						
25							B	Q	A	Q	Q	L	Q	Q	Q	Q	Q	Q						
26							Q	Q	Q	Q	Q	L	Q	L	L	L	L	Q						
27							Q	Q	Q	Q	Q	Q	Q	L	L	L	Q	Q						
28							Q	Q	L	Q	Q	Q	Q	L	L	Q	Q	Q						
29							A	L	Q	Q	Q	Q	Q	Q	Q	C	Q	L						
30							Q	L	L	Q	Q	Q	Q	Q	L	Q	Q	L						
31							A	A	Q	L	Q	Q	Q	Q	Q	L	Q	Q						
Median Value							—	—	—	—	—	—	—	—	—	—	—	—						
Count							0	0	0	0	0	0	0	0	0	0	1	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

Jan 1950 | h'F1 | 135° E Mean Time | **Wakkanai** | Lat. 45° 23.6' N, Long. 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							A	Q	A	Q	290	230	Q	Q	Q	Q	A	A						
2							A	A	220	A	Q	Q	Q	310	Q	Q	Q	Q						
3							Q	Q	270	Q	Q	Q	Q	Q	270	Q	270	250						
4							A	Q	A	Q	Q	Q	Q	Q	Q	Q	A	A						
5							Q	Q	220	Q	Q	230	Q	Q	Q	Q	A	Q						
6							Q	A	C	C	C	Q	Q	Q	Q	Q	Q	Q						
7							Q	Q	Q	Q	Q	220	220	250	240	Q	Q	Q						
8							Q	Q	A	R	Q	Q	240	220	Q	Q	Q	Q						
9							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
10							Q	240	Q	210	200	[210]	220	Q	Q	Q	C	Q						
11							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
12							Q	Q	Q	Q	Q	Q	210	Q	Q	Q	Q	Q						
13							Q	Q	220	Q	270	250	250	Q	Q	Q	Q	Q						
14							220	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	A						
15							Q	Q	A	C	C	C	C	C	230	Q	Q	Q						
16							Q	Q	Q	220	Q	Q	Q	Q	Q	Q	Q	Q						
17							250	240	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
18							Q	Q	Q	250	280	Q	250	Q	280	Q	Q	A						
19							Q	Q	230	Q	220	Q	Q	Q	C	C	Q	Q						
20							C	C	C	C	Q	260	270	260	280	220	Q	230						
21							Q	Q	Q	Q	Q	Q	Q	Q	260	240	Q	Q						
22							Q	Q	Q	230	220	220	Q	220	220	220	Q	Q						
23							Q	Q	210	Q	Q	Q	Q	Q	Q	Q	Q	A						
24							Q	Q	Q	Q	Q	Q	Q	Q	Q	270	Q	Q						
25							B	Q	A	Q	Q	240	Q	Q	Q	Q	Q	Q						
26							Q	Q	Q	Q	Q	230	Q	210	250	250	210	Q						
27							Q	Q	Q	Q	Q	Q	Q	230	240	230	Q	Q						
28							Q	Q	220	Q	Q	Q	Q	220	240	Q	Q	Q						
29							A	250	Q	Q	Q	Q	Q	Q	Q	C	Q	220						
30							Q	270	220	Q	Q	Q	Q	Q	250	Q	Q	250						
31							A	A	Q	270	Q	Q	Q	Q	Q	280	Q	Q						
Median Value							—	—	220	230	245	230	240	225	250	240	—	—						
Count							2	4	8	5	6	9	7	8	11	7	2	4						

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

Jan. 1950 | foE | 135° E Mean Time | **Wakkanai** | Lat. 45° 23.6' N, Long. 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							B	S	B	A	B	3.0	A	B	B	A	A	A						
2							A	A	A	A	A	A	A	A	A	2.1	B	A						
3							B	B	B	B	A	B	B	B	B	B	1.9	B						
4							B	B	B	(2.9)B	B	B	B	B	B	B	A	B						
5							B	B	B	(2.4)B	(2.7)B	3.0	3.2	B	B	2.4	2.2	B						
6							A	B	C	C	C	B	3.2	3.0	B	(2.5)B	B	E						
7							A	1.4J	2.1	2.7	2.9	2.9	A	A	(2.3)A	A	A	B						
8							B	1.7	A	2.7	2.8	3.1	2.9	2.9	B	2.8	S	B						
9							E	A	B	B	B	B	A	B	B	A	A	A						
10							E	A	1.7	2.7	2.9B	C	B	2.7J	B	2.6	C	E						
11							E	B	S	2.4	2.4	2.7J	3.2	B	3.0	2.5	1.9	E						
12							E	1.4	2.1	2.7	B	(3.0)B	2.9F	(3.0)B	B	2.2	(2.1)B	A						
13							E	1.7	(2.2)B	2.5	B	3.3	3.1	B	B	(2.6)B	1.6	1.2						
14							E	1.3	2.2H	2.7F	2.8	A	3.2	(3.1)B	3.0	(2.5)B	(2.0)A	A						
15							B	(1.4)B	A	2.8	C	C	C	C	2.8	A	2.1	1.2						
16							E	1.4	2.2	2.6C	AF	A	(3.2)B	3.1	2.7	2.5	(2.0)B	1.2						
17							E	E	A	A	3.1	B	B	B	B	B	A	B						
18							E	A	2.4A	B	B	B	B	B	B	B	B	B						
19							E	1.4	2.1AF	2.7F	2.7	3.0	A	3.0	C	C	2.2H	B						
20							C	C	C	C	S	3.4	3.6	3.1A	(3.1)J	B	S	E						
21							E	B	2.4F	2.4	3.0	3.3	3.2	3.1	3.0	2.6	2.2	1.7						
22							E	1.3	2.4	2.8	3.1	3.2	(3.2)B	(3.3)B	(3.2)B	2.5	1.9	A						
23							E	A	2.3	2.8	B	3.1	B	3.2	2.9	2.7	2.2	A						
24							E	(1.7)B	2.5	2.7	3.1	3.3	3.3	3.2B	(3.2)B	(2.7)B	2.4	AF						
25							B	2.2	2.2	3.0	3.1B	(3.3)B	3.3	3.2	3.1	2.7	2.6	1.1						
26							E	1.7	2.4J	B	3.2	3.3B	3.4	3.3	3.1	2.5	2.3	A						
27							AF	(1.6)B	(2.0)B	2.8	3.1	3.4	3.6	3.3	3.2	B	(2.3)B	A						
28							E	(1.5)B	2.2	2.9	3.0	(3.2)B	(3.3)S	S	3.0	2.8B	S	A						
29							A	1.6	2.2	2.7	3.1	3.1	B	3.2	3.0	[2.6]C	(2.1)B	(1.3)B						
30							E	1.5	2.3	2.9	3.0	3.3	3.4	3.2	3.0	•2.7	A	(1.8)B						
31							A	A	2.2F	2.7	(3.1)B	3.4	3.5	B	3.4	2.8	2.0B	A						
Median Value							E	1.5	2.2	2.7	3.0	3.2	3.2	3.1	3.0	2.6	2.1	1.2						
Count							17	17	19	22	18	20	18	17	17	20	18	11						

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

Jan. 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	S	100	A	100	100	A	100	100	A	A	A						
2							A	A	A	A	A	A	A	A	A	100	B	A						
3							B	B	B	B	A	B	B	B	B	B	B	B						
4							B	B	100	B	B	B	B	B	B	B	A	B						
5							B	B	B	B	100	110	120	100	120	110	110	B						
6							A	B	C	C	C	B	100	110	100	100	100	E						
7							A	110	100	100	100	100	A	A	A	A	A	B						
8							B	100	A	B	100	110	110	120	110	120	S	B						
9							E	A	B	B	B	100	A	100	100	A	A	A						
10							E	A	100	100	100	C	B	B	B	110	C	E						
11							E	B	S	100	100	100	100	100	100	100	100	E						
12							E	120	100	100	E	100	100	110	100	100	100 F	A						
13							E	B	120	B	B	B	B	110	110	120	100	B						
14							E	B	100 H	100	(110) B	A	110	170	120	110	A	A						
15							B	B	A	110	C	C	C	C	110	A	100	110						
16							E	110	100	110 F	AE	A	120	120	130	130	130	110						
17							E	E	A	B	B	B	B	B	B	B	A	B						
18							E	A	100	110	B	B	110	B	140	B	B	B						
19							E	110	AE	110	100	100	A	150	C	C	100 H	B						
20							C	C	C	C	S	B	100	100	B	120	120	E						
21							E	B	AE	100	100	110	100	110	100	100	100	E						
22							E	100	100	120	110	100	110	110	110	120 B	B	A						
23							E	A	110	100	100	100	110	100	100	100	100	A						
24							E	B	100	110	110	100	120	110	120	110	110	AE						
25							B	110	110	110 B	110	110	110	120	110	100	100	110						
26							E	100	110	110	110	110	110	110	110	110	100	A						
27							AE	110	100	100	100	100	100	100	100	100	100	A						
28							E	B	120	110	110	110	(120) B	130	110	B	S	A						
29							A	100	100	110	110	120	120	110	110	[120] C	120	B						
30							E	100	100	100	100	100	100	100	100	100	A	110 F						
31							A	A	110	110	120	130	120	120	120	110	120	A						
Median Value								110	100	110	100	100	110	110	110	110	100							
Count								12	19	20	19	19	20	23	23	21	17							

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 7

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

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

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.8	2.5	2.2	2.3	2.2	B	2.4	S	4.4Y	(3.4)B	3.9Y	4.4Y	3.2	G	G	2.7Y	4.0	3.1	1.4	5.3	4.3B	(2.6)Y	4.3	2.4
2	3.0F	2.6	3.2	2.6	3.7	3.7	3.2	2.3	3.4	5.9	4.3	5.1	5.0	4.0	5.0	3.9	B	1.5	4.2	3.6	2.7	3.0	3.4	2.0
3	2.0	G	G	G	2.5	B	B	G	G	B	3.3Y	B	B	B	B	B	B	B	3.0	3.7	G	G	2.4	B
4	2.6	B	G	G	G	2.4	7.2	B	7.2Y	3.7	B	B	B	B	B	B	4.9	2.9	3.8	3.3	2.6	2.6	2.1	2.2
5	G	G	G	G	2.7	4.7	B	B	B	B	G	3.3	3.6	3.5	3.5	G	6.8	2.2	1.8	G	3.5	3.1	G	G
6	2.4	(2.9)Y	1.5	1.1	B	(2.0)Y	1.2	3.4	C	C	C	B	C	G	G	G	G	G	1.6	2.2	2.5	2.9	3.3	1.6
7	2.6	1.3	C	C	C	G	1.4	G	3.7	G	G	G	4.8	2.8	2.4	2.3	2.3	1.6	G	G	G	G	G	G
8	3.0	G	G	G	G	G	G	G	3.8	G	G	G	G	G	G	G	S	B	B	4.0	1.9	G	G	G
9	G	2.4	2.5	1.1	1.2	G	G	1.5	B	B	B	G	3.4Y	B	3.6Y	3.7	3.2	2.4	2.4	2.8	G	G	G	G
10	2.0	G	G	G	G	G	G	2.2	G	G	G	C	B	G	B	G	C	G	C	C	G	G	G	G
11	G	G	G	G	G	B	G	2.5	S	G	G	G	G	G	G	G	(2.6)B	1.4	1.5	1.5	G	G	G	1.5
12	2.0	3.0	1.4	G	G	G	G	G	2.3	G	4.3	G	G	B	B	G	3.4Y	1.4	2.3Y	1.2	2.3	G	G	G
13	G	G	G	G	G	G	G	G	2.5B	4.2Y	G	G	3.5	3.4Y	4.0Y	G	G	G	G	3.4	4.2	3.3	5.2	2.7
14	1.6	1.5	1.5	G	G	G	G	G	G	G	3.1	3.3	G	G	G	G	G	3.8	4.5	3.0	2.5	3.8	3.8	3.5
15	3.5	3.7	2.4	3.1	2.6	1.8Y	G	(1.8)N	4.4	G	C	C	C	C	G	2.8	G	1.6	4.2	2.4	2.4	G	G	3.0
16	2.4	2.0	1.6	1.6	2.4	1.8B	2.0YF	2.0F	G	G	4.3F	3.2	G	G	G	G	G	G	G	G	2.4	G	G	G
17	B	2.2	1.2	G	G	G	G	G	(2.4)B	2.8	3.2	B	4.4	B	B	B	3.2	B	G	S	G	G	G	G
18	1.4	G	G	G	G	G	G	2.3	G	B	B	B	B	B	G	B	B	3.3	G	G	2.3F	3.6	3.1	G
19	1.5	G	G	G	G	G	G	(1.9)Y	4.5	4.8Y	3.8Y	3.2	3.4	3.2	C	C	G	3.3	4.3	2.6	3.4	G	1.7	C
20	C	C	C	C	C	C	C	C	C	C	S	G	G	4.4Y	4.8	B	S	G	1.3	G	3.2	3.3YF	G	1.3
21	G	G	G	G	G	G	G	2.0	2.7F	4.6	4.4Y	3.5	3.4	3.4	3.2	4.0	G	G	1.4	1.8	2.0	3.8	2.2	G
22	G	G	G	1.1	G	3.6	1.1	2.0Y	G	G	G	G	G	B	G	G	G	1.7	G	G	G	G	G	G
23	G	1.5	1.4	G	G	G	G	2.1	G	G	G	G	G	G	G	G	G	5.0	2.2	1.6	1.4	1.4	G	1.4
24	1.6	1.4	2.2	2.4	(2.4)Y	G	G	G	G	4.9Y	G	G	G	G	G	G	G	3.5F	2.4	B	G	2.8F	G	G
25	G	2.3Y	1.6	1.8YF	2.5Y	3.6F	(1.5)B	G	3.9	G	G	G	G	G	G	G	G	2.5Y	3.8	1.6	G	3.7	G	G
26	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	1.3	G	1.3	G	G	G	G
27	1.9	G	G	1.7	G	G	1.5F	2.1	B	4.6Y	G	G	G	G	G	G	G	1.4	G	G	2.8Y	G	G	G
28	G	G	G	G	G	G	G	2.4	G	B	G	B	G	G	G	G	S	1.6	G	G	G	G	G	G
29	G	G	1.4	1.4	1.2	1.1	2.0	G	3.8Y	G	G	G	G	G	G	C	G	G	2.1	3.2	2.1	2.4	G	G
30	2.8	2.4	1.3	1.4	G	G	G	G	G	G	G	G	G	G	G	G	3.2	G	G	G	G	G	G	G
31	G	G	1.2		G	G	(2.2)B	3.0	3.5Y	(3.3)B	G	G	G	G	G	G	G	3.8	3.2	B	1.7	G	G	G
Median Value	1.6	G	1.2	G	G	G	G	1.8	2.4	G	G	G	G	G	G	G	G	1.6	1.6	1.6	2.0	G	G	G
Count	29	29	29	29	28	27	28	27	25	24	25	23	26	23	25	24	24	28	29	27	31	31	31	29

Sweep 1.0 Mc to 14.0 Mc in 15 min Manual

W 8

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

IONOSPHERIC DATA

Jan. 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	2.8	2.6	2.7	2.7	2.9	3.1	3.1	3.2	S	S	S	(3.3)B	(2.9)S	2.9	(3.0)S	(2.9)PS	3.2	3.0	3.1	2.9A	2.7	2.9F	2.5F	2.7
2	2.5F	2.5F	2.5F	2.8	A	A	2.7	2.7Z	3.1	S	S	S	S	(2.5)B	3.2	(2.9)PS	(3.1)PS	2.9	2.9	2.5	[2.8]S	(3.2)F	S	(3.1)J
3	2.6	2.6	2.6	2.8	2.8	(3.3)JS	3.0	3.2	(3.0)P	3.0	(3.1)J	(3.2)J	3.0	(2.9)PS	(2.8)P	2.9	2.9	3.2	3.5	3.1	2.5	2.7	2.9	2.6
4	3.0	2.6	(3.0)B	2.8	2.8	2.6	(2.7)P	3.1	3.0	3.3	3.2	(3.2)B	3.3	(3.2)S	(3.3)S	[3.2]B	3.2	(3.0)P	(2.7)P	2.8	3.0	3.1	2.9	2.5
5	2.6	2.5	2.4	2.4	2.6	2.9F	2.9	3.2	B	C	S	3.1	2.7	3.1F	3.1S	S	(3.1)B	3.0	2.8	2.8	(2.6)J	(2.6)F	2.5F	2.5F
6	(2.6)JF	(2.6)J	2.4F	2.6F	2.6	2.7	2.6P	2.6	C	C	C	3.4	(3.2)B	3.2	(3.3)J	3.1	(3.1)B	(3.3)P	(3.2)PS	S	S	(2.5)PB	2.4	2.7
7	(2.8)B	2.7	C	C	C	2.6H	3.1	3.0	S	(3.1)JF	(3.2)P	(3.1)P	(3.0)P	(3.0)JP	2.9	(2.7)FB	[2.8]B	3.0	3.1	3.0	2.8	2.6	2.5	2.5
8	3.1	2.5	2.4	2.7	2.6	2.8	3.0	2.8	(3.2)J	S	S	S	(3.0)P	(3.1)J	(3.2)J	(2.9)PS	3.2	3.2	2.9	3.0	2.8	2.8	2.8	2.7F
9	2.6F	2.6F	2.6	2.7	(2.9)J	3.1H	3.1	3.2	(3.4)J	[3.3]S	3.2	(3.2)FS	3.2	3.1	3.0	3.2	3.2	2.8	3.2	(3.2)B	2.7	2.4F	2.6F	2.6F
10	(2.4)PF	2.6F	2.6F	(2.8)JF	(2.7)JF	2.7F	2.8F	(3.0)F	(3.2)JS	3.3P	3.2P	[3.2]C	(3.1)J	B	B	B	C	2.8H	C	C	2.7	2.5	2.7	2.7F
11	2.8F	2.7F	2.5	2.6	2.5	S	S	(3.0)S	B	(3.0)PB	(3.0)B	(2.9)B	(2.7)P	(2.7)PB	(3.0)B	(2.9)B	(2.9)B	2.9	3.0	3.0	2.5	2.6	2.8	2.5
12	2.6	2.5	2.6	2.7	2.7	2.6	2.9	2.9	3.2	3.1	(2.9)PS	3.3	S	S	S	(3.2)BS	3.1S	3.0	3.2	3.0	2.8	2.5	2.4	2.4
13	2.5	2.5	2.5	2.6	2.3	2.5	2.9	2.9	3.3P	2.7	3.0P	2.9	2.7	3.0	2.9	3.2	(2.9)B	3.0	3.1	2.9	2.8	2.7	A	2.5
14	2.5	2.5	2.4	2.4	2.5	2.8	3.2	2.8	3.0	3.1	3.2PZ	2.9	2.9	2.8	3.0	3.2	3.5	C	C	2.8	2.6	(2.6)J	2.8	(2.7)B
15	2.7	2.7	2.7	2.6	2.8	2.8	(2.6)JF	2.8	S	C	C	C	C	C	3.1	(3.0)P	3.2	2.9	3.0	2.9	2.9	2.9	2.6	2.6
16	2.5	2.7	3.1	2.5	2.6	2.5	2.9	3.2	3.2	3.2	3.2	3.1	3.2	(3.0)J	3.1S	SH	3.2S	3.0	2.9	2.9	2.9	2.8	2.6	2.7
17	2.7	2.5	2.5	2.5	(2.4)JH	3.0	3.0	2.9	2.8	3.0	3.1P	3.1	(3.3)J	3.0	3.1	S	3.3	3.0P	2.7	2.8	2.8P	2.5	(2.5)JF	2.3F
18	(2.5)JF	2.6Z	2.5Z	2.6Z	2.6Z	2.6F	2.7V	(2.6)PS	3.2	B	B	B	(3.1)B	(3.2)PS	(3.1)JP	B	3.1S	2.9	3.0	3.2	2.9	2.6	3.0Z	2.5
19	2.6	2.6	2.6	2.7	2.9	2.9F	3.0F	2.8	3.1FS	3.1S	(3.2)B	(3.2)B	2.7P	3.0	C	C	3.4S	2.9	3.0	2.8	2.8	2.8	3.0	C
20	C	C	C	C	C	C	C	C	C	C	(3.2)FS	[3.1]B	(3.0)BP	2.9B	(2.9)P	(3.1)PS	S	C	(3.0)B	3.0S	2.7	2.5	2.4	2.4
21	2.4	2.7	2.7	2.5	2.7	2.5	2.8	3.1	3.0	3.1	3.0	3.1	(3.0)P	3.0	(3.0)P	3.2	S	(3.0)PS	2.9	3.0	2.7	(2.7)B	2.8	2.8
22	2.5	2.9	2.4	2.3PZ	2.5	2.5	(3.0)B	3.2	(3.0)B	(3.1)B	3.0	3.2Z	(3.2)F	(3.1)F	(3.0)B	3.0	3.2	3.0	3.0	2.8	3.0	2.9	2.6F	2.6F
23	2.7	2.7	2.6	2.8	2.6	2.7	2.9	3.0	(3.1)JS	(3.0)S	(3.1)FS	(3.0)S	(3.0)S	3.3	(3.1)S	(3.1)J	(3.1)P	2.9	2.9	2.9	2.9	2.8	2.6	2.5
24	2.5	2.5	2.5	2.5	2.7	2.9	3.1	3.2	3.1	[3.0]J	(3.0)J	(2.8)F	(2.9)J	[3.0]S	(3.2)J	S	(3.0)PS	3.0	2.7	2.9	(2.9)B	(2.6)KF	(2.5)KJF	2.5KF
25	2.4KF	(2.2)KB	2.2KF	2.3KF	(2.0)KF	(2.1)KF	2.9K	(3.0)KJP	SK	(3.2)KS	(2.8)S	(3.0)JS	2.8	(2.7)HB	(2.8)B	(3.2)B	(3.0)B	(2.9)JPS	3.2	2.8	2.9	3.1	2.6	(2.3)P
26	2.5	2.5	2.7	2.7	2.7	2.6	2.7	3.1P	(3.3)J	(3.0)BS	3.1	3.0PS	3.1H	(3.0)F	(3.0)PS	(3.2)J	3.1	2.9S	3.0	(3.0)FS	2.7	2.7	2.7	2.6
27	2.6	2.4	2.5	2.6	2.5	2.8	3.0S	FS	S	(3.1)S	(2.9)B	2.9	(2.8)B	(2.9)B	(2.9)B	(2.9)B	(2.9)B	C	3.1	3.1	2.7	2.3	2.6H	2.3F
28	2.5	2.6	2.4	2.7	2.6F	2.5	2.8F	3.0	(3.2)J	2.8Z	3.0	(3.0)B	3.1	(3.0)JS	S	S	S	(3.3)J	(3.2)J	(3.1)J	(2.9)B	(2.7)B	2.6	(2.7)J
29	2.6	2.6Z	2.3	2.4	2.8	3.3	2.6V	(2.7)PB	(3.1)B	3.2P	(3.2)B	2.9H	3.1	(3.2)B	3.0	[3.0]C	3.0	(2.9)S	2.8	(2.7)FS	S	2.6	2.7	2.5Z
30	2.6	2.6	2.7	2.5	2.6	2.5	2.7	3.1	S	S	2.8	(2.8)S	3.0	3.0	(2.9)JS	(2.9)JS	[3.0]S	3.2P	2.7	2.7	3.1	2.7	2.8	2.6
31	2.5	2.5F	2.5F	2.2F	2.8	2.8	2.6	2.7P	2.9	2.9	(2.9)PS	2.8	2.9	[2.9]S	2.9	[2.8]S	(2.8)PS	S	(3.0)B	2.9	2.5	2.5	2.7	2.4
Median Value	2.6	2.6	2.5	2.6	2.6	2.7	2.9	3.0	3.1	3.1	(3.1)	(3.1)	(3.0)	(3.0)	(3.0)	(3.0)	3.1	3.0	3.0	2.9	2.8	2.7	2.6	2.6
Count	30	30	29	29	28	28	29	29	21	22	24	27	28	28	27	23	27	27	29	29	29	31	29	30

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

Jan. 1950 | f min F | 135° E Mean Time | **Wakkanai** | Lat. 45° 23.6' N | Long. 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1.4	1.3	1.5	1.6	1.3	2.2	1.7	2.7^{S}	3.6	2.9	3.2	3.3	3.2	2.9	2.7	2.4	A	1.6	1.4	A	A	1.9	(1.5)^{A}	(1.4)^{A}
2	(1.6)^{A}	1.7	1.2	A	A	A	A	A	2.7	A	3.9	A	A	3.0	2.3	A	2.4	1.4	A	A	1.2	1.3	A	1.3
3	E	E	E	E	1.7	1.2	1.7	1.5	2.4	2.8	3.2	3.1	3.5	3.8	2.8	3.0	1.9	1.5	A	A	1.4	1.5	2.0	2.1
4	1.5	2.0	1.4	1.4	1.4	1.4	1.3	1.6	A	3.0	3.5	3.4	4.2	4.0	3.3	2.9	A	2.0	1.9	1.4	1.5	A	2.0	1.8
5	1.1	E	E	E	1.3	A	1.3	1.8	2.3	3.0	2.8	3.1	3.9	3.5	3.4	3.0	2.3	1.8	1.4	1.4	E	E	1.3	1.3
6	1.3	A	A	1.2	1.1	(1.4)^{A}	1.6	2.0	C	C	C	2.6	3.2	3.6	2.5	2.5	2.0	E	A	E	A	1.2	A	E
7	1.2	1.2	C	C	C	E	E	1.4	2.5	3.0	3.2	3.2	3.2	2.8	2.4	2.0	1.8	A	1.6	1.3	1.3	1.2	1.2	1.2
8	1.4	1.2	1.2	1.2	1.2	1.2	1.2	1.7	A	2.7	2.9	3.1	3.3	3.1	3.2	2.9	2.0^{S}	2.4	2.1	1.3	1.6	1.4	1.3	1.5
9	E	E	E	E	1.1	1.2	1.1	1.4	2.3	2.7	3.1	3.7	3.9	3.9	3.9	3.2	A	2.5	A	(1.2)^{A}	1.2	E	E	E
10	E	E	E	E	E	E	E	1.5	1.8	2.7	3.2	(3.2)^{C}	3.3	3.4	3.1	2.6	[1.9]^{C}	1.2	C	C	E	E	E	E
11	E	E	E	E	E	2.1	E	2.1	S	3.0	2.8	3.6	3.4	3.4	3.2	2.8	2.6	1.4	1.5	1.2	1.2	1.3	1.3	1.3
12	1.2	1.2	1.1	E	E	E	1.2	1.6	2.3	2.8	3.0	3.0	3.1	3.1	3.2	2.4^{B}	2.1	1.3	A	1.1	1.4	1.1	E	1.2
13	1.1	E	E	E	E	E	E	1.8	2.3	2.7	3.6	3.4	3.4	3.4	3.6	2.8	1.6	1.2	E	A	A	1.7	A	1.3
14	1.3	E	1.3	E	E	E	E	1.4	2.5	2.9	3.1	3.5	3.7	3.7	3.1	2.5	2.0	A	A	A	A	A	A	A
15	A	A	A	A	A	E	1.3	1.4	2.3	3.0	C	C	C	C	2.9	2.7	2.1	1.4	A	1.2	E	1.3	1.2	1.2
16	1.1	E	E	E	E	1.2	1.2	1.4	2.2	2.6	3.3	3.2	3.5	3.2	3.1	2.5	2.1	1.2	1.2	1.2	A	E	E	E
17	E	E	1.1	1.1	1.1	1.1	E	1.1	2.5	2.8	3.2	3.8	5.1	3.2	3.8	3.1	3.6	1.8^{B}	1.2	2.2^{S}	1.6^{B}	1.2	E	E
18	E	E	E	E	E	E	E	1.8	2.6	3.1	3.2	3.9	3.8	3.8	3.1	2.8	2.4	1.2	E	E	1.3	A	1.6	E
19	E	E	E	E	E	E	1.3	1.4	2.4	2.9	2.9	3.3	3.5	3.3	C	C	2.2	2.3	A	1.3	1.4	1.5	1.5	C
20	C	C	C	C	C	C	C	C	C	C	3.5	3.7	3.8	3.6	3.4	3.3	3.5^{S}	1.2	1.3	1.1	A	1.5	1.1	1.1
21	E	E	E	E	E	E	E	1.4	2.4	3.1	3.2	3.6	3.4	3.4	3.0	3.0	2.6	1.8	1.2	1.2	E	A	1.4	E
22	E	E	E	E	E	E	1.2	1.4	2.4	2.9	3.1	3.2	3.2	3.3	3.2	2.6	2.1	(1.4)^{A}	1.3	1.2	E	E	E	1.3
23	E	E	E	E	E	E	E	1.8	2.4	3.0	3.2	3.3	3.3	3.3	3.1	2.8	2.3	A	1.6	1.6	1.2	1.4	1.4	1.4
24	1.2	A	A	1.2	E	E	E	1.0	2.6	3.0	3.3	3.4	3.5	3.5	3.6	3.2	2.5	AF	1.3	1.2	1.2	1.2^{A}	E	E
25	1.2	1.2	1.2	E	A	A	1.9	2.2	A	3.2	3.2	3.4	3.6	3.4	3.2	2.8	2.6	1.6	1.2	1.4	1.4	A	E	E
26	1.6	E	E	E	E	E	E	1.8	3.1	3.1	3.2	3.3	3.5	3.5	3.1	2.8	2.4	E	E	E	E	E	E	E
27	E	E	E	E	E	E	1.6	1.8	2.9	2.8	3.3	3.4	3.6	3.6	3.2	3.4	2.4	1.2	E	1.2	E	E	E	E
28	E	E	E	E	E	1.3	E	2.2	2.5	3.9	3.3	4.2	3.8^{S}	3.6	3.2	3.2	4.2^{S}	1.3	1.2	1.1	1.2	1.2	E	E
29	1.1	1.3	E	E	E	1.2	E	1.7	2.5	2.8	3.1	3.4	3.4	3.3	3.0	[2.6]^{C}	2.2	1.4	1.3	E	1.3	E	1.4	1.3
30	1.3	1.3	E	1.2	E	E	E	2.0	2.4	3.0	3.2	3.5	3.5	3.3	3.1	2.8	A	1.9	1.2	1.2	1.2	E	E	E
31	E	E	E	E	E	E	1.4	A	2.3^{F}	3.0	3.3	3.4	3.6	3.7	3.6	2.9	2.4	A	A	1.6	1.8	E	E	E
Median Value	1.1	E	E	E	E	E	1.1	1.7	2.4	3.0	3.2	3.4	3.5	3.4	3.2	2.8	2.3	1.4	1.3	1.2	1.2	1.2	1.1	1.1
Count	29	27	26	27	26	27	29	28	25	28	29	29	29	30	30	29	27	26	21	25	25	26	27	29

Sweep 1.0 Mc to 16.0 Mc in 15 min Manual

W 10

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

IONOSPHERIC DATA

Jan. 1950 | fmin 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	1.4	1.2	1.5	1.3	1.3	B	1.3	3	1.3	1.3	E	1.4	1.4	1.5	1.2	E	F	E	E	E	F	1.9	E	F
2	E	1.7	E	E	E	E	E	E	E	2.1	2.0	2.3	2.2	1.8	1.8	E	B	E	E	E	1.2	1.2	E	E
3	E	G	G	G	2.1	B	B	B	B	E	1.6	B	B	B	B	B	B	B	1.5	1.4	G	G	2.0	B
4	1.5	B	G	G	G	1.6	1.8	B	1.6	2.9	B	B	B	B	B	B	1.5	1.4	1.2	1.2	1.5	E	2.0	2.0
5	G	G	G	G	1.3	1.2	B	B	B	2.2	1.8	2.0	2.2	2.0	2.2	1.8	1.8	1.3	1.5	G	1.8	1.6	G	G
6	1.2	E	E	E	B	E	E	1.9	C	C	C	B	2.0	2.0	2.0	1.5	E	E	E	E	E	E	E	E
7	E	E	C	C	C	G	E	1.2	1.2	1.6	1.4	1.4	1.4	1.3	1.4	1.2	1.4	1.2	G	G	G	G	G	G
8	1.3	G	G	G	G	G	B	1.4	1.4	2.2	E	2.2	2.6	2.4	2.4	2.4	S	B	B	1.2	1.5	G	G	G
9	G	E	E	E	1.1	G	G	1.1	B	B	B	2.7	1.4	(1.7)B	2.5	1.5	1.4	1.3	E	E	G	G	G	G
10	E	G	G	G	G	G	E	1.3	E	1.6	2.2	C	B	3.2	B	2.2	C	E	C	C	G	G	G	G
11	G	G	G	G	G	B	E	2.1	S	1.6	1.8	2.2	1.2	1.4	1.2	E	E	E	1.2	1.3	G	G	G	1.3
12	1.2	1.2	1.1	G	G	G	E	E	E	1.4	3.8	2.1	1.6	1.9	2.1	2.0	E	E	E	E	1.1	G	G	G
13	G	G	G	G	G	G	E	(1.2)B	1.5	2.2	2.7	2.7	2.9	2.0	2.2	2.2	E	1.1	G	E	E	E	E	E
14	E	E	E	G	G	G	E	1.1	E	1.4	(1.5)B	2.2	2.2	2.6	2.1	2.2	1.2	E	E	E	E	E	E	F
15	E	E	E	E	E	(1.2)B	B	1.2	E	1.1	C	C	C	C	1.5	1.4	E	E	E	1.2	E	G	G	E
16	E	E	E	E	E	1.1	1.1	1.1	1.1	1.7	2.0	2.0	2.1	2.1	2.2	2.0	1.3	E	G	G	E	G	G	G
17	B	E	E	G	G	G	E	E	2.0	2.6	(2.5)B	B	4.3	B	B	B	1.5	B	G	S	G	G	G	G
18	E	G	G	G	G	G	E	E	1.3	1.2	B	B	2.8	B	2.6	B	B	1.2	G	G	1.3F	E	E	G
19	E	G	G	G	G	G	E	E	E	E	1.3	2.1	2.3	2.4	C	C	E	1.6	1.4	1.3	1.3	G	1.3	C
20	C	C	C	C	C	C	C	C	C	C	S	3.1	E	1.1	3.0	1.9	2.5	E	E	G	1.1	1.1	G	E
21	G	G	G	G	G	G	E	1.4	1.2	1.8	2.0	2.6	2.0	2.2	1.6	1.6	1.4	1.2	E	E	E	E	E	G
22	G	G	G	E	G	E	E	E	E	1.4	1.5	2.0	2.2	2.2	2.1	2.1	1.3	1.1	G	G	G	G	G	G
23	G	E	E	G	G	G	E	E	E	1.2	1.4	1.4	1.4	1.7	2.2	1.8	1.6	1.1	1.2	1.2	E	1.2	G	E
24	E	1.2	1.2	E	1.3	G	E	B	1.2	1.2	1.2	1.4	2.1	2.1	1.5	1.5	1.2	1.1	1.1	B	G	1.2F	G	G
25	G	1.2	1.2	E	E	E	1.1	E	1.1	(1.2)B	2.2	2.4	2.2	2.3	2.2	E	E	E	1.2	E	G	E	G	G
26	G	G	G	G	G	G	E	E	1.6	(1.1)B	2.3	2.2	2.3	2.1	2.2	1.5	1.2	E	G	E	G	G	G	G
27	E	G	G	E	G	G	E	1.2	E	1.4	1.6	1.6	2.4	2.1	2.4	2.2	E	E	G	G	1.5	G	G	G
28	G	G	G	G	G	G	E	1.5	1.3	1.9	1.8	2.4	2.4	2.6	2.4	2.4	S	E	G	G	G	G	G	G
29	G	G	E	E	E	E	E	E	E	1.3	2.2	2.3	2.3	2.3	1.9	[1.8]C	1.6	B	E	E	E	E	G	G
30	E	E	E	E	G	G	E	E	E	1.4	2.1	2.1	2.1	2.2	1.9	1.8	1.5	1.1	G	G	G	G	G	G
31	G	G	E	G	G	G	E	1.2	1.4	1.5	2.1	2.2	2.1	2.2	1.6	1.6	1.2	E	E	3	E	G	G	G
Median Value	E	G	E	G	G	G	G	1.1	1.1	1.4	1.9	2.2	2.2	2.1	2.1	1.8	1.2	E	E	E	E	G	G	G
Count	29	29	29	29	28	27	26	25	25	27	25	24	27	26	26	26	25	27	29	27	31	31	31	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

Jan. 1950 | f_0F2 | 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	3.7	3.3	2.9	2.8	2.9	3.1	2.8	6.0	8.2	12.0	(12.5)	13.0	(12.9)	(11.9)	(10.6)	9.2	9.4	8.7	6.0	4.2	2.8	3.2	3.5	3.7
2	2.6	3.2	3.5	3.2	3.1	2.9	2.4	5.5	8.5	11.5	(11.3)	(11.5)	9.2	10.3	10.3	9.0	8.0	7.5	5.1	3.6	3.5	4.4	3.6	3.3
3	3.1	3.0	3.1	3.1	3.2	3.0	2.7	5.4	7.4	(10.6)	B	B	8.7	10.3	9.8	8.4	6.2	6.7	7.5	4.8	[4.1]	3.4	3.1	3.3
4	3.3	3.8	3.8	3.5	2.3	2.3	2.8	5.1	7.3	C	B	B	B	8.7	B	8.7	7.1	6.9	5.7	5.2	3.9	4.2	3.6	3.4
5	3.2	3.1	2.9	3.0	3.2	2.6	2.4	(5.0)B	8.3	9.6	10.8	10.3	9.6	9.1	9.6	10.5	(7.9)	6.9	5.9	3.8	3.0	3.1	(3.3)F	3.7
6	3.4	3.3	3.2	3.4	3.1	3.1	2.9	C	8.4	B	B	10.5	9.8	10.1	11.0	8.3	8.0	7.9	4.6	3.5	2.9	3.2	3.2	3.0
7	3.0	3.0	3.0	3.5	3.4	3.5	3.7	7.3	11.1	B	13.5	(12.6)B	(12.3)B	10.8	11.2	10.9	8.3	8.5	6.6	4.7	3.4	3.4	3.8	(4.2)
8	3.5	3.2	2.8	3.0	3.0	3.0	3.0	5.0	(9.3)	B	14.0	12.3	10.6	10.6	9.4	8.8	7.0	6.8	6.2	4.1	3.6	3.7	3.8	3.5
9	3.2	3.2	3.4	3.8	3.3	3.5	3.6	4.9	7.9	10.0	10.1	10.9	10.4	9.8	9.3	9.1	7.4	6.7	6.1	4.2	3.1	3.4	3.6	3.8
10	4.0	4.2	4.0	3.4	3.4	3.6	3.9	5.3	9.1	10.5	10.6	10.8	10.8	11.0	8.9	SF	6.9	SF	6.1	5.1	3.8	3.9	4.2	3.9
11	[3.8]	3.6	3.5	3.5	3.8	4.3	2.5	6.1	C	C	C	B	10.3	10.1	10.6	9.6	7.8	7.0	4.8	3.4	3.3	3.3	3.6	3.5
12	3.5	3.6	3.5	3.5	2.9	3.2	2.8	5.0	7.0	10.2	11.5	(12.1)	10.8	9.1	9.6	10.2	(8.4)	6.5	6.4	4.3	2.7	2.9	3.5	3.3
13	3.4	3.7	3.5	3.5	3.6	3.5	3.1	5.1	8.4	9.6	10.5	(12.5)	10.4	10.9	10.6	10.1	8.2	6.8	6.3	5.6	4.7	3.6	3.8	4.1
14	4.0	4.1	3.9	S	S	4.1	3.2	5.1	7.8	11.2	B	B	B	10.8	11.3	8.9	8.2	7.2	6.6	5.2	4.4	4.0	4.8	4.5
15	4.3	3.8	4.3	4.2	3.9	3.8	3.9	5.7	BH	B	10.8	B	(11.7)	10.4	11.3	10.1H	7.8	6.7	6.8	6.6	5.1	3.5	4.3	4.0
16	3.9	4.5	4.3	3.4	3.0	2.9	3.6	5.7	(7.6)	9.4	11.3	10.3	10.3	10.4	9.5	9.5	9.2	6.7	6.8	5.5	4.1	3.5	3.8	4.1
17	3.7	3.7	[3.6]	3.4	3.8	4.0	4.4	5.9	6.7	9.2	(11.7)	10.7	8.9	8.3	8.7	9.3	7.7	6.4	6.8	5.2	3.4	3.3	3.6	3.7
18	3.8	4.0	4.3	4.4	4.0	4.1	4.4	6.3	7.9	8.8	B	(11.2)	(11.0)	9.4	9.2	8.8	8.5	5.6	5.3	C	C	3.1	3.3	3.4
19	3.6	3.8	3.8	3.8	3.4	3.1	3.4	5.4	7.2	8.1	9.2	B	B	9.7	8.4	9.1	8.2	5.6	6.3	4.4	3.5	3.2	3.2	3.6
20	3.6	3.7	3.7	3.8	3.9	3.2	3.7	7.8	8.7	11.1	B	B S	S	S	C	10.1	8.4	7.4	5.9	6.3	3.7	4.2	(4.2)	4.2
21	4.0	4.2	3.9	3.8	3.8	3.5	4.0	8.0	8.8	C	C	C	C	(9.8)	10.5	10.2	9.1	6.8	(6.5)	5.7	[4.6]	3.5	3.7	3.7
22	3.4	3.8	4.0	3.2	3.7	3.8	4.9	6.4	7.9	9.0	10.7	(11.4)	11.4	10.9	9.3	9.8	10.0	7.6	5.0	4.3	4.5	4.1	3.2	3.3
23	3.5	3.5	3.5	3.2	3.6	3.5	3.7	6.5	8.5	8.0	(10.5)	9.7	10.0	10.5	9.0	8.8	9.3	7.1	(6.0)	5.7	5.1	3.1	3.1	3.0
24	3.1	3.2	3.3	3.5	3.4	3.3	3.3	6.1	8.6	8.9	11.0	10.2	(12.5)	10.4	8.8	8.8H	8.7	6.7	5.8	6.2	5.5	4.5	4.1	FK
25	3.7	3.7	3.2	3.0K	3.2K	3.0K	3.8K	SK	SK	10.9	12.0	11.4	12.8	12.5	12.6	11.3	10.1	8.9	7.3	6.9	5.5	4.3	3.9	3.7
26	4.7	4.0	4.0	4.0	3.7	3.6	3.6	6.7	8.8	10.7	C	C	C	C	C	C	C	7.7	7.0	6.8	5.2	4.1	4.1	4.8
27	3.8	3.2	(4.0)	3.9	3.7	3.8	3.5	(6.4)	9.9	9.0	11.0	11.3	11.3	11.0	9.6	9.9	9.4	7.9	7.5	5.9	5.4	4.6	4.5	5.0
28	4.6	4.6	4.7	4.1	4.0P	3.6	3.2	6.3	8.0	10.3	S	S	B	10.1	9.4	9.7	10.1	9.0	5.8	5.7	4.8	4.1	3.9	3.9
29	3.9	4.0	4.0	3.9	4.2	3.2	3.1	6.8	10.2	S	10.3	12.3	12.3	10.0	10.2	10.1	8.8	7.6	5.8	5.0	(5.9)	3.7	3.8	3.7
30	3.7	4.0	3.9	4.2	3.6	3.3	3.3	6.2	9.1	8.5	10.4	11.2	(11.4)	(11.8)P	9.9	9.4	9.3	9.2	8.2	[7.0]	(5.8)	4.0	4.4	3.7
31	3.5	3.6	3.6	3.3	3.7	3.0	2.7	6.0	8.0	9.5	SH	S	10.1	9.5	9.3	9.7	9.0	7.5	7.3	5.2	3.4	3.4	3.7	3.4
Median Value	3.6	3.7	3.6	3.5	3.4	3.3	3.3	6.0	8.4	9.6	10.9	11.2	10.7	10.3	9.6	9.5	8.4	7.0	6.2	5.2	4.0	3.5	3.7	3.7
Count	31	31	31	30	30	31	31	29	28	23	20	20	24	29	28	29	30	30	31	30	30	31	31	30

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

Jan 1950 | RpF2 | 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	340	340	420	370	320	320	300	260	300	(280)	300	(280)	(300)	[280]	270	280	300	250	240	310	360	400	340
2	330	340	310	340	340	310	330	310	270	270	(280)	[280]	280	300	260	240	300	260	270	350	360	360	310	340
3	340	370	410	400	420	360	320	250	250	(290)	B	B	B	310	260	230	250	310	270	230	A	A	260	370
4	430	380	320	310	350	350	300	280	260	C	B	B	B	260	B	290	310	270	(290)	300	340	340	310	320
5	370	380	390	350	310	290	(300)	(320)	290	[280]	270	250	280	310	290	260	(250)	280	320	290	260	370	(390)	360
6	370	360	400	320	330	320	300	[290]	280	B	B	260	(290)	310	300	240	300	280	290	260	360	320	310	350
7	380	400	380	420	370	400	310	290	280	B	(270)	(280)	290	290	280	280	270	290	280	280	330	370	370	370
8	330	370	390	330	390	360	380	290	290	B	270	260	280	270	260	250	250	280	230	260	320	350	310	340
9	330	350	410	400	360	400	390	300	250	270	280	280	290	270	290	270	260	270	260	250	400	400	330	320
10	330	340	310	320	320	340	300	280	300	(280)	280	250	300	300	290	S	230	SF	(310)	270	320	360	340	300
11	[340]	370	400	390	390	320	340	350	C	C	C	B	270	290	270	280	(250)	260	260	280	340	370	350	330
12	400	360	330	300	300	350	260	270	260	320	280	(280)	250	270	310	270	(350)	320	270	240	300	380	400	360
13	350	370	400	390	420	400	210	270	270	230	(280)	250	(300)	270	290	280	270	280	290	310	310	400	360	350
14	360	330	350	S	S	S	230	240	260	310	B	B	B	310	280	270	260	310	270	310	330	320	300	270
15	330	320	350	340	290	380	340	300	BH	B	240	B	(290)	280	280	(280)	250	270	290	260	240	390	460	430
16	410	350	250	460	450	420	310	250	250	280	270	260	290	290	290	260	260	300	280	260	270	360	360	360
17	370	360	[360]	360	390	370	280	290	250	290	(290)	260	260	260	260	260	230	280	260	280	280	420	270	340
18	400	360	300	330	310	400	350	240	270	260	B	(290)	(270)	270	310	270	260	320	320	C	C	320	340	390
19	400	370	350	280	250	320	280	250	240	250	290	B	B	270	300	250	250	340	280	270	330	370	400	400
20	420	400	330	350	320	390	350	280	270	(280)	B	BS	S	S	C	290	270	270	360	280	290	380	(350)	430
21	410	440	400	410	350	350	340	270	260	C	C	C	C	(320)	310	280	250	270	(320)	280	B	340	390	360
22	350	350	340	430	410	400	330	250	240	250	280	(290)	280	290	280	290	270	250	300	330	290	330	390	360
23	410	350	350	340	380	350	310	250	230	240	(280)	(280)	270	300	250	300	310	280	(270)	300	290	300	310	400
24	400	370	390	400	340	380	320	280	280	250	270	260	(290)	280	280	230	290	280	330	310	300	300	390	FK
25	FK	430	480F	FK	450F	500F	2905	SK	SK	310	290	340	300	330	300	310	300	300	330	300	300	280	320	370
26	390	330	370	340	340	380	350	300	220	290	C	C	C	C	C	C	C	270	350	300	280	340	360	330
27	290	370	(430)	420	400	410	360	(250)	270	270	300	290	300	280	300	260	270	310	320	350	290	370	F	360
28	400	390	340	320	530	390	350	250	270	280	S	S	B	280	310	300	270	310	280	340	280	340	330	400
29	400	400	410	380	280	330	340	280	(250)	S	260	300	270	(300)	300	310	300	280	270	330	260	340	330	370
30	370	370	320	350	330	370	320	300	250	320	300	290	(320)	(280)F	290	300	280	310	280	[320]	(370)	340	360	350
31	390	400	400	420	350	300	400	310	240	390	SH	S	290	270	300	320	270	300	270	310	280	250	250	390
Median Value	370	370	360	350	350	365	320	280	260	280	280	280	290	290	290	270	270	280	280	285	300	355	345	360
Count	30	31	31	29	30	30	31	30	28	23	20	20	23	29	28	29	30	30	31	30	28	30	30	30

Swept 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

Jan 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	250	260	280	350	300	260 H	270	260	220	220	250	250 H	250	230	[230] C	210	240	230	A	A	A	A	A	(300) A
2	280	280	270	A	280	290	290	240	250	250	250	250	230	230	230	A	230 A	320 F	240 A	(240) A	260 A	280	270	260
3	270	270	310	310	300	260 B	270	230 A	210 F	250	250	230	210	250	250	220	220	240	(210) A	230	[240] A	(250) A	(230) A	290
4	350	310	230	220	220	290	250	230	220	230	250	230	260	230	230	220	220	A	A	250	260	270	270	270 A
5	(310) A	B	310	290	250	250	240	210	240	[240] C	250	220	250	210 H	270	220	210	A	A	230	230	330	A	(300) A
6	(310) A	300	340	290	A	270	280	280	270	220	220	240	280	300 H	250	230	270	(220) A	230	220	(280) B	(290) B	290	(300) A
7	300	(310) B	310	330	290	310	240	210	210	230	220	220	220	220	250	220	220	280	A	210	220	300	300	240 F
8	280	250	(270) B	280	300	310	310	290	240	270	220	220	230	230	230	230	210	220	220	230	280	(310) A	290	250
9	280	(280) A	310	300	300	300	290	A	220	240	230	240	250	250	260	240	240	250	220	210	270	310	290	270 F
10	290	280	240	260	260	280	260	230	250	240	200 H	230	220	220	220	220 F	200	210	230	A	260 A	290	(300) A	(240) A
11	[270] C	300 A	330	300	270	210	A	240	C	C	C	230	220	260	220	230	220	220	220	220	280 B	300	290	280 B
12	300	290	260	240	250	300	200	230	220	240	240	240	230	250	290	240	230	270	220	210	(230) B	290	300	(310)
13	290	300	300	290	300	320	200	210	210	220	230	220	300	230	230	240	210	240	230	230	230	310	300	280
14	280	270	250	310	300	270	200	210	230 H	240	260	260	250	210	250	240	210	230	(220)	250 A	250 A	A	280	A F B
15	270	A	290	260	240	310	230	230	220	230	220	230	230	210	250	220	200	220	210	210 H	220 A	B	330	310
16	320	310	230	210 H	340 H	340	250	200	200	250	250	200	260	260	240	240	220	200 B	230	210	230 B	280	290	250
17	270	290	[280] C	280	310	290	240	220	220	220	230	230	220	230	230	240	210	210 H	220	210	220 B	310	300	270
18	300	290	250	240	230	290	270	210	220	220	240	260	250	230	270	260	230	200	220	C	C	240	280	320
19	300	300	280	250	210	270	240	210	210	220	240	260	250	250	230	230	230	200	230	220	230	290 A	340	370
20	330	320	270	280	270	320	290	240	230	220? H	260	260	230	220	[230] C	240	220	220	210	230	210	290	290 A	A
21	300	310	320	310	280	270	280	230	230	240	C	C	C	230	220 *	210	210	220 F	220	230	230 A	270 A	300 A	A
22	A	A	250	320	300	320	250	230	220	220	250	220	240	230	220	240	230	220	220	240	260	250	300	310
23	300	300	280	280	300	260	250	230	220	220	210	230	240 A	260	230	230	230	220	220	230	220	250	280	290
24	300	320	310	320	290 K	260 K	280 K	240 K	250 K	230	230	220	270	240	270	230	230	220	230	230	230 H	230	250	FK
25	320 F K	330	390	390	370	380	200	230	230	280	240	240	260	250	250	240	A	A	240	230	220	240A F	(300) A	330 A
26	310	300	290	270	260	280	250	220	220	260	C	C	C	C	C	C	C	210	240	220	220	250	290	260
27	250	280	310	300	260	300	240	230	230	220	240	220	230	240	240	230	240	230	230	220	220	260	340 F	290
28	280	280	280	240 H	220 H	210 H	230 H	210	210	270	220 A	240 H	240	230	230	240	250	210 H	230	250	210	250	270	300
29	310	310	320	280	200	200 K	270 A	220	230	(220) A	(220) A	280 A	210	220	220	260	280	220	220	220 A	220 C	240	280	300
30	300	300	290	270	250	A	280	220	220	210 H	230	260 H	240	250	230	230	230	220	230	[240] C	250	270	290	280
31	300	310	300	320	270	200	270	250	220	220	220 H	230	220	220	250	250	220	230	220	210	230	200	(300) A	300
Median Value	300	300	290	285	275	285	250	230	220	230	235	230	240	230	230	230	220	220	220	230	230	275	290	290
Count	30	28	31	30	30	30	30	30	30	30	28	29	29	30	30	29	29	28	27	28	29	28	29	27

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 3

17

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

IONOSPHERIC DATA

Jan. 1950 | f_0F1 | 135° E Mean Time | Akita | Lat. 39° 43.5' N, Long. 140° 08.2' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							Q	Q	Q	Q	L	L	L	Q	C	Q	Q	A						
2							Q	Q	L	Q	Q	Q	Q	Q	A	A	Q	Q						
3							Q	Q	Q	L	L	L	Q	L	L	Q	Q	Q						
4							Q	Q	Q	C	L	Q	L	Q	Q	B	Q	A						
5							Q	Q	L	C	L	Q	L	Q	L	Q	Q	A						
6							Q	C	L	Q	Q	L	L	L	L	L	L	Q						
7							Q	Q	Q	Q	Q	Q	Q	Q	L	Q	Q	L						
8							Q	3.4	Q	L	Q	Q	Q	Q	Q	Q	Q	Q						
9							Q	A	Q	L	Q	Q	L	L	L	Q	L	L						
10							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
11							A	Q	C	C	C	L	L	L	Q	Q	Q	Q						
12							Q	Q	Q	L	L	L	L	L	L	L	L	L						
13							Q	Q	Q	Q	Q	Q	L	Q	Q	Q	Q	L						
14							Q	Q	L	Q	L	L	L	Q	Q	Q	Q	Q						
15							Q	Q	Q	Q	L	Q	Q	Q	L	Q	Q	Q						
16							Q	Q	Q	L	L	Q	L	L	L	Q	Q	Q						
17							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
18							Q	Q	Q	Q	Q	L	L	Q	L	L	L	Q						
19							Q	Q	Q	Q	L	L	L	L	Q	Q	L	Q						
20							Q	Q	L	Q	L	L	Q	Q	C	Q	Q	Q						
21							Q	Q	Q	Q	C	C	C	C	Q	Q	Q	Q						
22							Q	Q	Q	B	Q	Q	L	Q	Q	L	Q	Q						
23							Q	Q	Q	Q	Q	Q	Q	L	Q	Q	Q	Q						
24							Q	Q	L	Q	Q	Q	L	Q	L	Q	Q	Q						
25							Q	Q	Q	L	Q	L	L	L	Q	L	A	Q						
26							Q	Q	Q	L	C	C	C	C	C	C	C	Q						
27							Q	Q	Q	Q	Q	Q	Q	Q	L	Q	L	Q						
28							Q	Q	Q	L	Q	Q	Q	Q	Q	Q	Q	Q						
29							Q	Q	Q	Q	Q	L	Q	Q	Q	L	Q	Q						
30							Q	Q	Q	Q	Q	L	Q	Q	Q	Q	Q	Q						
31							Q	Q	Q	Q	Q	Q	Q	Q	L	L	Q	Q						
Median Value							—	—	—	—	—	—	—	—	—	—	—	—						
Count							0	1	0	0	0	0	0	0	0	0	0	0						

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 4

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

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

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							Q	Q	Q	Q	230	230	230	Q	C	Q	Q	A						
2							Q	Q	210	Q	Q	Q	Q	Q	A	A	Q	Q						
3							Q	Q	Q	A	220	220	Q	230	230	Q	Q	Q						
4							Q	Q	Q	C	230	Q	240	Q	Q	B	D	A						
5							Q	Q	220	220	220	Q	210	Q	240	Q	Q	A						
6							Q	C	A	Q	Q	220	240	220	230	220	240	Q						
7							Q	Q	Q	Q	Q	Q	Q	Q	(230)A	Q	Q	Q						
8							Q	250	Q	230	Q	Q	Q	Q	Q	Q	Q	Q						
9							Q	A	Q	220	Q	Q	210	B	230	Q	210	220						
10							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
11							A	Q	C	C	C	210	200	210	Q	Q	Q	Q						
12							Q	Q	Q	220	220	220	220	220	240	230	210	220						
13							Q	Q	Q	Q	Q	Q	250	Q	Q	Q	Q	210						
14							Q	Q	210	Q	230	220	230	Q	Q	Q	Q	Q						
15							Q	Q	Q	Q	210	Q	Q	Q	210	Q	Q	Q						
16							Q	Q	Q	210	210	Q	210	210	200	Q	Q	Q						
17							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
18							Q	Q	Q	Q	Q	230	230	Q	220	220	220	Q						
19							Q	Q	Q	Q	230	230	240	240	Q	Q	220	Q						
20							Q	Q	210	Q	230	230	Q	Q	C	Q	Q	Q						
21							Q	Q	Q	Q	C	C	C	Q	Q	Q	Q	Q						
22							Q	Q	Q	B	Q	Q	220	Q	Q	220	Q	Q						
23							Q	Q	Q	Q	Q	Q	Q	220	Q	Q	Q	Q						
24							Q	Q	230	Q	Q	Q	220	Q	240	Q	Q	Q						
25							Q	Q	Q	230	Q	230	230	230	Q	210	A	Q						
26							Q	Q	Q	230	C	C	C	C	C	C	C	Q						
27							Q	Q	Q	Q	Q	Q	Q	Q	220	Q	220	Q						
28							Q	Q	Q	210	Q	Q	Q	Q	Q	Q	Q	Q						
29							Q	Q	Q	Q	Q	220	Q	Q	Q	220	Q	Q						
30							Q	Q	Q	Q	Q	230	Q	Q	Q	Q	Q	Q						
31							Q	Q	Q	Q	Q	Q	Q	Q	220	240	Q	Q						
Median Value							–	–	210	220	225	225	230	220	230	220	220	–						
Count							0	1	5	8	10	12	15	8	12	7	6	3						

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 5

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

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

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 6

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan. 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	B	A	110	110	A	A	110	C	A	A	A						
2							E	B	130	120	A	A	110	A	A	A	A	A						
3							E	A	A	A	110 A	110	110	110	110	110	110	B						
4							B	A	120	A	120	120	B	A	B	110	B	A						
5							B	B	150	C	110	110	110	110	110	110	110	A						
6							E	C	A H	110	110	100	110	100	110	110	120	A						
7							E	(110) B	110 H	120	110 A	120 A	120	120 A	A	A	110	A						
8							E	B	A	110 A	110 A	110 A	110	110 A	120	110	160	B						
9							A	A	A	110 H	110	100	110	110	110	110	B	B						
10							B	110	110	110	100	110	110	110	110	110	110	A						
11							A	110	C	C	C	110	100	110	110 A	120 A	B	B A						
12							E	B	120 H	110	A	110	120	110	(110) A	(110) A	A	100						
13							E	B	120	110	110	110	110	120	110	120	(120) B	B						
14							B	A	120	110	120	110	110	110	110	110	A	B						
15							E	B	150	110	110	110	110	110	110	A	(120) H	B						
16							E	A	A	110	120	110	120	120	100	120	A	B						
17							E	B	B	B	S	S	S	S	S	S	110	(120) B						
18							E	B	110	120	B	110	110	110	110	120	110 B	110						
19							B	B	110	B H	120	120	110	120	110 H	110	(110) A	A						
20							E	B	110	110	100	110	110	110	C	110	120	B						
21							E	B	110	110	C	C	C	100	A	110	110	A						
22							E	110	110	110	110	100	110	110	110	110	130	B						
23							E	120	120	110	110	120	A	A	110	110	110	(120) B						
24							B	B	140	A	110	B	B	110	130 H	120	120	B						
25							E	120	120	120	120	120	120	120	100 H	100	100	A						
26							B	B	120	A	C	C	C	C	C	C	C	110						
27							E	150	110	110	110	110	110	110	110	110	A	B						
28							E	A	110	110	110	110	110	120	110	110	110	120						
29							E	B	110	A	110	110	100	100	A	110	A	110						
30							B	120	110	110	120	120	120	120	110	110	110	A						
31							B	B	120	110	110	110	110	110	110	110	120	A						
Median Value								115	120	110	110	110	110	110	110	110	110	110						
Count								8	23	22	24	25	24	26	23	25	18	7						

Sweep 1.0 Mc to 7.0 Mc in 15 min Manual

A 7

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

IONOSPHERIC DATA

Jan. 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	2.0	2.6	2.2	G	G	1.9	B	1.9	G	G	G	(3.2)	(3.2)	B	C	3.6	5.5	3.7	5.0	3.7	3.5	3.6	3.6	3.7
2	2.2	2.3	4.6	3.6	2.1	G	G	G	3.8	3.6	3.6	4.0	(4.7)	3.8	4.2	(9.2)	11.9	7.6	5.3	(2.6)	2.8	2.4	2.6	2.2
3	2.0	2.8	2.4	3.2	2.0	1.5	1.7	2.6	3.6	4.0	3.5	G	G	G	G	G	G	2.5	2.2	2.5	4.5	3.6	2.8	G
4	3.0	G	1.2	2.2	G	G	2.0	8.2	3.4	3.4	G	G	B	3.6	3.2	B	7.1	6.6	4.0	3.0	3.2	3.0	3.1	3.0
5	2.8	G	G	G	G	1.1	2.1	G	G	C	G	G	3.6	3.4	G	G	2.6	5.6	4.0	3.2	2.7	3.0	3.0	2.1
6	2.7	1.8	3.1	2.6	3.2	1.3	G	C	3.9	3.4	3.7	G	B	B	G	G	G	3.0	2.2	G	G	2.5	2.2	2.8
7	G	G	1.6	G	G	G	G	G	3.1	G	G	B	G	G	3.6	3.2	G	3.6	2.8	G	G	G	G	G
8	G	1.6	B	1.6	G	G	G	G	3.2	3.0	3.5	3.7	G	3.6	G	G	G	G	1.8	2.4	2.5	4.4	G	3.0
9	2.6	2.0	3.0	2.8	2.7	2.6	2.6	2.2	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	2.8
10	2.4	3.1	G	G	G	G	B	2.2	3.0	G	G	G	G	G	G	G	G	2.2	2.9	3.3	2.3	G	3.9	3.5
11	C	3.0	2.8	2.0	1.6	2.0	1.4	G	C	C	C	3.4	3.6	G	G	G	G	G	G	2.1	G	G	G	G
12	G	G	G	G	G	G	G	G	G	G	3.3	G	3.3	3.6	3.7	G	3.0	3.7	2.6	G	G	G	G	2.0
13	2.6	2.1	G	G	G	G	G	G	(2.9)	G	G	B	B	B	G	G	G	B	3.8	2.2	2.0	G	G	G
14	G	2.8	G	G	G	3.6	3.0	2.6	G	G	G	G	G	G	G	G	2.7	G	2.3	2.5	3.0	(3.2)	3.4	3.6
15	3.0	3.0	1.6	1.4	1.8	G	G	G	G	3.2	3.7	3.4	G	G	G	3.0	G	G	G	G	3.0	G	G	G
16	G	G	2.0	G	G	G	G	3.0	3.0	G	G	G	G	G	G	G	2.8	G	G	G	G	G	G	G
17	G	G	C	G	1.4	G	G	G	G	B	S	S	S	S	S	S	G	G	G	G	G	G	G	G
18	2.0	G	G	G	G	G	G	G	G	G	B	B	G	G	G	G	G	G	G	C	C	G	G	G
19	G	2.1	G	G	G	G	2.2	G	B	G	B	G	B	3.6	G	G	8.2	2.0	2.8	G	2.8	2.8	2.4	2.4
20	G	G	G	G	G	G	G	G	4.0	3.4	G	3.8	B	G	C	G	G	G	G	G	G	2.0	2.2	2.4
21	G	G	1.8	G	G	G	G	G	G	G	C	C	C	G	3.2	3.2	2.9	3.1	G	B	3.0	3.7	3.5	3.5
22	3.2	2.5	G	G	G	G	G	G	G	B	G	G	G	G	G	G	G	G	G	2.4	G	G	G	G
23	G	G	G	G	G	G	G	G	3.0	3.2	G	3.6	5.0	3.6	G	3.4	G	G	2.4	G	G	G	G	G
24	G	G	G	2.0	G	G	B	G	G	3.0	B	B	B	B	B	G	G	G	G	G	G	G	G	B
25	G	G	3.0	G	G	G	G	G	3.5	3.9	3.4	G	G	G	G	G	5.9	3.7	G	G	G	3.4	3.0	2.2
26	2.4	2.8	G	G	G	G	2.4	G	G	3.4	C	C	C	C	C	C	C	G	G	2.0	G	G	2.6	G
27	G	G	G	G	G	G	G	2.7	3.4	G	G	G	G	B	B	G	2.4	G	G	G	G	G	G	G
28	G	G	G	G	G	G	G	3.4	G	G	G	G	B	G	G	B	G	G	G	G	G	2.2	G	G
29	G	G	1.7	1.2	G	2.3	G	G	G	3.2	3.3	G	G	G	3.4	G	4.0	G	G	2.0	2.8	G	G	G
30	G	2.2	2.6	1.6	1.8	2.2	G	G	G	B	G	G	B	G	3.6	G	3.6	3.0	2.4	C	G	G	G	G
31	G	G	G	G	G	G	2.0	2.2	(2.8)	G	G	G	G	G	G	G	3.5	3.8	G	G	G	2.6	2.9	G
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	31	29	31	31	31	28	30	29	26	24	24	20	24	25	27	30	30	31	28	30	31	31	30

Sweep 1.0 Mc to 10 Mc in 15 min Manual

A 8

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan. 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	3.2	2.7	2.8	2.5	2.7	2.9 H	3.0	3.1	3.3	3.1 P	(3.2) P	3.2 H	(3.2) P	(3.1) P	[3.1] C	3.1	3.2	3.2	3.5	3.5	3.2	2.9	2.6	2.7
2	2.9	2.9	3.0	2.8	2.9	3.0	3.0	3.0	3.2	3.4 P	(3.2) P	[3.2] E	3.3	3.2 P	3.3	3.4	3.1	3.4	3.3 F	(2.7) B	2.8	2.8	3.0	2.8
3	2.9	2.8	2.5	2.6	2.5	2.7	3.0	3.3	3.3	(3.1) P	R	R	3.4 P	3.0	3.4	3.4	3.4	3.2 Z	3.3	3.7	A	A	3.4	2.7
4	2.5 F	2.7	3.0	3.0	2.7	3.0	3.1	3.1	3.4	C	B	B	B	3.2 P	B	3.1	2.9 P	3.3	(3.1) P	3.1	2.8	2.8	3.0	2.9
5	3.3	3.4	2.5	2.9	3.1	3.1 (3.0) J	(3.0) B C	3.1	[3.2] C	3.4	3.5	3.2	3.1 H	3.2	3.4	(3.4)	3.2	2.9	3.1	2.9	2.7	(2.7) H	2.7	2.7 F
6	2.7	2.9	2.8	3.0	2.9 F	3.0 F	3.1	[3.2] C	3.2	B	B	3.4	(3.2) P	3.0	3.2	3.4	3.1	3.2	3.2	3.0	2.7	2.9	3.1	2.8
7	2.6	2.6	2.6	2.5	2.8	2.6	2.9	3.2	3.4 H	B	(3.4) J F	(3.2) B F	(3.1) B F	3.3 H	3.2	3.2	3.2	3.1	3.2	3.2	2.9	2.7	2.6 F	2.6 F
8	2.9	2.6 F	2.6	2.8	2.6	2.7	2.7	3.1	3.4	B	3.3 P	3.4	3.3	3.2	3.4	3.4	3.3	3.2	3.6	3.4	3.0	2.7	3.0	2.8
9	2.9	2.6	2.5	2.6	3.0	2.6	2.7 F	3.0	3.5	3.2 P	3.3 H	3.4	3.1	3.3 P	3.2	3.4	3.3 S	3.1	3.4 F	3.4	2.5	2.5	3.0	3.0
10	2.8 F	2.7 F	3.0	3.0	3.0	2.8	3.1	3.2	3.1	(3.3) J	3.1	3.6	3.2 P	3.2	3.1	S	3.5 S	S F	(3.0) P F	3.4	3.1	2.8	2.9	3.2
11	[3.0] C	2.7 F	2.6 F	2.6 F	2.6	3.0	2.8	2.8	C	C	C	B	3.5	3.3	3.3	3.2	3.4 T S	3.3	3.1	3.2	2.9	2.7	2.8	2.9
12	2.5	2.7	2.9	3.1	3.1	2.9	3.2	2.9	3.4	2.9 P	3.2 J P	(3.2) F	3.4 F	3.2 F	3.2	3.4	(3.4) P	2.9	3.4	2.5	3.2	2.7	2.6	2.7
13	2.9	2.7	2.6	2.7	2.5	2.6	3.7	3.2	3.3	3.5 P	(3.1) P	3.5	3.3 P	3.4	3.2	3.2	3.2	3.2	3.1	3.0	2.9	2.6	2.6	2.7
14	2.8	2.9	3.0	S	S	2.9 S	3.6	3.3 S	3.4	3.1	B	B	B	3.1	3.3	3.4	3.4 J	2.8	3.5	3.0	2.8 P	3.1	3.1	3.2
15	3.2	3.1	2.8	2.8	3.1	2.7	2.8	3.0	B H	B	3.5	B	(3.1) P	3.2	3.2	(3.2) H	3.3	3.2	3.2	3.3 H	3.6 P	2.5	2.3	2.5 S
16	2.5	2.8	3.5	2.4 H	2.5 H	2.7	3.0	3.5	3.4	3.2	3.4	3.5	3.3	3.4	3.1	3.4	3.4	3.1 H	3.1	3.4	3.4	2.9	2.8	2.8 Z
17	2.7	2.8	[2.8] C	2.7	2.8	2.7	3.2 F	3.1	3.5	3.3	3.3	3.4	3.3	3.3	3.4	3.5	3.5	3.2 H	3.3	3.2	3.2	2.5	2.7	2.9
18	2.6	2.9	2.9	3.0	3.0	2.5 F	2.9 F	3.5	3.4	3.2	B	(3.3) P	(3.3) P	3.2	2.9	2.9	3.2	3.1 H	2.9	C	C	3.0 F	2.7 H	2.6
19	2.6	2.8 S	2.8	3.2	3.3	2.9	3.2	3.5	3.4	3.4	3.1 P	B	B	3.3	3.1	3.3	3.4	2.9	3.3	3.2	2.8	2.7	2.5	2.7
20	2.5	2.7	3.0	2.8	3.0	2.7	2.7	3.2	3.3	(3.4) J H	B	B S	S	S F	C	3.2	2.6 S	3.2	3.1	3.2	3.2	2.6 Z	2.7	2.7
21	2.6	2.4	2.7	2.6	2.8	2.8	2.9	3.1	3.3 P	C	C	C	C	(2.9)	3.0	3.2	3.4	3.2	(2.9) P S	3.3	B	2.9	2.7	2.7
22	2.8	2.9	2.9	2.5	2.5	2.6	2.8	3.5	3.2	3.4	3.2	3.0 F B	3.2	3.2	3.1	3.3 S	3.3	3.3	3.0	3.0 H	3.2	2.8	2.7	2.8
23	2.5	2.8	2.8 P	2.9	2.7	2.8	3.1	3.3	3.7	3.3 P	(3.2) P	(3.1) P	3.2 P	3.1	3.4	3.1	3.4 F	3.3	(2.7)	3.1 H	3.6	3.9	3.0	2.7
24	2.6	2.7	2.7	2.6	2.9	2.8 K	3.0 K	3.3	3.3	3.4	3.3	3.4 P	(3.2) P	3.3	3.1	3.1 H	3.2	3.2	2.9	3.0	3.0	3.1	2.6	F K
25	2.4 F K	2.5 K	2.3 F K	2.2 K	2.4 F K	2.2 F	3.1 S K	S K	S K	3.0 P	3.1	3.0 H	3.0	3.0	3.0	3.0	3.0	3.1	2.8	3.1	3.1 H	3.1	2.5	2.7
26	2.7	3.0	2.7	2.9	2.9	2.6	2.8	3.0	3.5	3.3 P	C	C	C	C	C	C	C	3.3	2.8	3.1	3.1	2.9	2.8	2.9
27	3.1	2.8	(2.5) P	2.5	2.6	2.5	2.7 F	(2.7) P	3.2	3.3	3.2	3.1	3.1	3.1	3.0	3.3	3.1	3.0	2.8 P	2.8	3.1	2.7	2.4 F	2.8
28	2.6	2.6	2.9	3.1 H	2.5 P H	2.5 H	2.8 H	3.3	3.2	3.3 S	S	S	-B	3.1 S	3.2	3.1	3.4	3.1 H	3.1	2.9	3.1	2.9	3.0	2.8
29	2.6	2.5	2.6	2.7	3.0	2.6 H	2.6	3.1 P	(3.5) J	S	3.3	3.2 B	3.2	(3.1) J	3.1	3.0	3.0	3.2	3.2	2.9	3.3 B	2.9 B	2.9 B	2.7 B
30	2.7	2.7 F	3.0	3.1	2.9	2.8	3.0	3.0	3.8	3.1 H	3.1	3.2 H	(2.9) F	(3.3) P J	3.1	3.0	3.1 P	3.0	3.1	[2.9]	(2.7) P C	2.9	2.9	2.9
31	2.4	2.6	2.5	2.5	2.9	2.7	2.5	3.0	3.5	3.2 B	S H	S	3.2	3.3 S	3.1	2.9	3.3	3.1	3.4	3.0 P	3.2	3.5	2.8	2.6
Median Value	2.7	2.7	2.8	2.8	2.8	2.7	3.0	3.1	3.4	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.2	3.1	3.1	3.0	2.8	2.8	2.8
Count	3.1	3.1	3.1	3.0	3.0	3.1	3.1	3.0	2.8	2.3	2.0	2.0	2.4	2.9	2.8	2.9	3.0	3.0	3.1	3.0	2.8	3.0	3.1	3.0

· Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

A 9

23

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

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

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

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

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1.2	1.6	1.8	G	G	E	B	1.8	1.6	1.4	1.4	1.6	1.8	2.0	(1.8) C	1.7	1.6	1.6	1.4 F	1.4	1.4	1.5	1.4	1.4
2	E	1.4	E	E	E	G	E	B	1.6	1.2	1.5	1.6	1.6	1.4	1.6	1.7	1.4	1.3	1.3	1.4	1.4	1.4	1.4	1.2
3	1.2	1.2	1.2	2.2	1.2	(1)	1.1	(1.4) B	1.4	1.5	1.6	1.7	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.6	1.4	1.2	1.2	G
4	2.2	G	E	E	G	G	1.8	1.5	1.6	1.7	2.0	2.9	B	2.8	2.8	2.8	1.8	1.6	1.8	1.6	1.6	1.6	1.6	1.6
5	1.6	G	G	G	G	E	1.9	B	2.1	C	1.8	2.0	2.0	2.2	2.2	2.2	2.2	1.4	1.4	1.4	1.4	1.4	1.4	1.5
6	1.2	1.1	E	E	E	E	E	C	1.5	1.7	1.8	1.7	1.8	1.6	1.4	1.4	1.4	1.4	1.4	G	G	1.5	1.5	1.4
7	G	G	E	G	G	G	E	2.0	1.8	1.6	1.6	2.4	2.2	2.4	1.6	1.8	1.8	1.7	1.2	G	G	G	G	G
8	G	1.2	B	E	G	G	E	1.6	2.0	1.6	1.8	1.6	1.8	1.9	2.4	1.8	B	B	1.4	1.4	1.4	1.4	G	1.4
9	1.6	1.4	1.1	1.1	1.2	1.2	1.2	1.2	1.6	1.6	1.7	1.8	2.2	2.6	1.8	2.2	1.8	B	G	G	G	G	G	1.4
10	E	E	E	G	G	G	B	1.4	1.6	1.8	1.9	1.9	2.6	2.6	2.1	2.0	1.5	E	1.4	1.6	1.3	G	1.3	1.3
11	C	E	E	E	E	E	E	1.2	C	C	C	1.7	1.8	1.8	1.8	1.8	B	B	G	1.7	G	G	G	G
12	G	G	G	G	G	G	E	1.4	1.4	1.8	1.8	1.8	1.6	1.8	1.6	1.6	1.6	1.1	1.6	G	G	G	G	1.8
13	1.2	1.2	G	G	G	G	E	B	1.7	1.7	1.8	1.9	2.1	2.4	2.1	1.8	1.9	B	1.4	1.4	1.2	G	G	G
14	G	1.2	G	G	G	E	1.7	1.4	1.5	1.8	2.0	2.0	2.0	1.8	2.0	1.9	1.8	B	1.4	1.4	1.4	1.4	1.4	1.3
15	1.4	1.4	E	E	E	G	E	B	1.6	1.5	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.4	G	G	1.6	G	G	G
16	G	G	1.9	G	G	G	E	1.4	1.6	1.8	2.1	2.2	2.4	2.2	2.4	2.2	1.8	B	G	G	G	G	G	G
17	G	G	C	G	E	G	E	B	1.8	B	S	S	S	S	S	S	1.7	1.6	G	G	G	G	G	G
18	1.4	G	G	G	G	G	G	1.4	1.8	1.6	B	2.4	2.2	2.2	2.0	2.2	1.8	1.6	G	C	C	G	G	G
19	G	E	G	G	G	G	2.0	B	1.8	2.8	2.1	2.7	2.6	2.6	1.8	2.0	1.7	1.1	1.6	G	1.4	1.3	1.4	1.6
20	G	G	G	G	G	G	E	1.6	1.4	1.8	1.8	2.5	2.6	2.6	C	1.5	1.8	1.4	G	G	G	1.8	1.8	1.4
21	G	G	1.6	G	G	G	E	B	1.4	2.6	C	C	C	1.8	1.7	1.8	1.8	1.5	G	B	1.3	1.3	1.3	1.3
22	1.1	E	G	G	G	G	E	1.2	1.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	B	G	1.8	G	G	G	G
23	G	G	G	G	G	G	E	1.5	1.6	1.4	1.5	2.0	1.8	2.2	1.9	1.8	1.8	E	1.7	G	G	G	G	G
24	G	G	G	1.6	G	G	B	B	1.6	1.6	2.2	B	B	2.6	2.6	2.1	1.6	B	G	G	G	G	G	G
25	G	G	1.4 F	G	G	G	E	1.5	1.5	1.6	1.8	1.8	1.8	2.0	1.7	1.8	1.8	1.8	G	G	G	1.3	1.3	B
26	2.2	2.0	G	G	G	G	1.7	B	1.6	1.6	C	C	C	C	C	C	C	1.3	G	1.4	G	G	1.6	G
27	G	G	G	G	G	G	E	1.5	1.6	1.6	1.8	1.8	1.8	2.2	2.0	2.0	1.8	B	G	G	G	G	G	G
28	G	G	G	G	G	G	E	1.4	1.5	1.9	1.7	2.1	2.0	2.2	1.7	1.8	1.8	1.5	G	G	G	1.4	G	G
29	G	E	E	E	G	E	E	1.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.6	G	1.4	1.6	G	G	G
30	G	1.2	E	E	E	E	B	1.4	1.8	1.8	2.2	1.8	1.8	2.2	1.7	1.7	1.6	1.2	1.5	C	G	G	G	G
31	G	G	G	G	G	G	1.8	1.8	1.4	1.6	1.6	1.8	1.8	1.7	1.6	1.8	1.8	1.4	G	G	G	2.4	1.4	G
Median Value	G	G	G	G	G	G	G	1.4	1.6	1.6	1.8	1.8	1.8	2.2	1.8	1.8	1.8	1.4	G	G	G	G	G	G
Count	30	31	29	31	31	31	27	21	30	28	26	27	26	29	28	29	28	22	31	28	30	31	30	30

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

4 11

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

IONOSPHERIC DATA

Jan 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	3.4	3.0	2.7	2.8	2.9	(3.2)^{J}	2.7	6.0	7.3	12.5	14.8	13.7	12.2	11.2	11.2	10.0	8.8	8.0	C	5.2	3.2^{JF}	3.1	(3.4)^{F}	3.7^{F}
2	3.5^{F}	3.0	3.2^{S}	3.0	2.9	3.2	2.6^{F}	5.8	(7.3)^{P}	C	11.5^{P}	12.3	10.4	10.0	(12.0)^{J}	9.0	6.9	7.5	A F	5.1^{JF}	4.1	5.1	5.2	3.9
3	2.9	3.0	2.8	2.9	2.9	(3.0)^{C}	3.0	5.6	8.6	9.6	13.0	13.1	11.3	9.5	10.1	9.0	8.7	6.3	8.2	6.6	4.3^{S}	3.6	3.9	3.8
4	3.7	4.0	4.3^{P}	3.7	2.1^{P}	2.3	2.8	6.4^{P}	9.1^{P}	(10.0)^{P}	C	C	10.2	9.9	9.3	[8.3]^{C}	7.1	(6.6)^{C}	6.2	5.3^{P}	4.8	4.7	4.0	3.2
5	3.5^{F}	3.2	3.1	3.3	2.7	3.3	2.3	5.4	7.3	10.9	11.8	10.6	9.4	9.7	10.3	10.8	8.8	7.4	5.6	4.5	3.0	2.9	F	3.2
6	3.5	3.4	3.2	3.5	3.1	3.4	4.0	5.8	7.6	11.4	(11.4)^{C}	11.0	11.1	10.8^{P}	(10.4)^{C}	9.9^{P}S	7.6	9.0	7.8	5.0	2.7	3.7	4.0	4.4
7	3.0	2.8	2.8	2.9	3.1	3.0	3.4	7.6	9.4^{P}	12.4	(13.5)^{P}	12.5	13.0	11.4	11.1	10.4	9.4	8.3^{P}	7.2	5.6	3.7	3.6	3.8	3.9^{F}
8	3.2^{F}	3.6	2.7	2.6	2.6	2.8	2.9	5.6	8.9	11.9	13.5	13.4	11.4	11.1	11.2	8.7	7.5	6.8	6.9	5.3	3.8	3.8	3.7	3.5
9	3.1	3.1	3.3	3.2	2.7	2.7	2.7	6.6	8.2	9.5	11.3	11.3	11.2	10.8	9.6	8.7	7.7	6.9	5.6	4.5	3.4	2.9	3.6	3.7^{P}
10	3.7	(3.6)^{C}	3.6	3.2	2.8	3.0	3.3^{F}	6.0	7.8	9.5	10.8	10.7	C	C	C	C	(8.3)^{PS}	6.4	6.3	6.3	4.2	3.9	4.0	3.6
11	3.6	3.3	3.3	3.4	3.5	3.9^{F}	2.4	5.6	9.0	9.1	12.0	13.5	12.2	10.9	11.8	11.2	10.0	7.9	6.2	4.1	3.5^{F}	3.0	3.3	3.2
12	3.1	3.2	3.5	3.3	(3.2)^{P}	2.9	3.4	5.6	7.4	9.5	11.2	12.1	12.0^{S}	9.5	9.7	11.8	8.8^{J}	6.6	6.4	5.1	3.6	3.1	3.4	3.4
13	3.5	3.5	3.4	3.4	3.5	3.4	3.3	5.2	8.6	12.1	10.8	12.5	12.0	11.3	9.5	9.8	9.6	7.3	5.9	5.8	4.4	3.3	3.6	4.0
14	4.1	4.2	3.5	3.5	3.8	3.8	3.6	6.4^{PS}	8.3^{PS}	9.0^{P}	(12.4)^{P}	12.2^{P}	11.3^{P}	11.5	10.7	9.4^{P}	8.1	7.4	6.7	5.5	5.0	4.6^{P}	4.9	4.8
15	4.5	4.2	4.2	4.2	3.9	3.5	3.8	6.0	9.4	12.5	13.2	12.6	11.8	11.2	10.3	10.0	7.9	B	6.2	6.4	4.8	3.5	3.6	4.0
16	4.1	4.4	4.5	2.5	2.5	2.5	3.5	7.4	7.5	8.1	S	10.4	10.3	(9.8)^{P}	S	10.0	(9.5)^{JS}	7.2^{P}	(7.1)^{P}	5.2	4.5^{P}	3.2	3.6	3.3
17	3.4	3.6	3.8	3.4	3.5	3.8	4.3	(6.4)^{J}	7.4	7.6	11.4	11.2	9.9	9.2^{P}	9.3^{P}	9.2	8.1	6.3	6.8	4.6	3.2	3.2	3.5	3.8
18	3.9	3.8	4.1	3.8	3.6	2.9^{F}	3.4	6.7	7.9	8.7	10.7	11.3	11.9	11.1	9.4	9.2	9.5	6.0	5.2	5.3	3.8	3.3	3.1	3.4
19	3.5	3.6	4.0^{P}	3.7	2.8	2.9	3.1	6.8^{P}	7.7	M	M	11.6	11.9^{P}	11.5	9.7^{J}	10.1^{J}	9.9^{J}	6.7	5.8	5.8	3.9	2.8	3.0	3.2
20	3.4	3.6	3.9^{P}	3.9^{F}	3.6	3.5	3.7	6.7	8.5	9.6	11.9	12.3	12.4	11.1	10.1	9.8	9.5	8.1	5.8	6.4	5.6	4.0	3.9	3.8
21	3.8	3.8	3.8	3.8	3.6	3.5	3.5	7.8	10.5	11.6	12.4	S	11.0^{F}	10.5	9.5	9.5^{P}	9.5	7.2	5.8	6.0	4.8	5.0^{Z}	3.6	3.7
22	3.7	3.9	4.0	3.4	3.7^{F}	3.6	4.2	6.4	8.3^{F}	9.4	10.6^{F}	11.4	11.7	11.7	(10.6)^{F}	9.8^{F}	(10.4)^{F}	8.8	6.4	4.7	4.8	4.3	2.8	3.0
23	3.3	3.3	3.3	3.3	3.3	3.3	3.7	C	8.5	8.7	8.3	10.2	10.8	10.0	C	C	8.7	7.8	5.8	5.8	5.5	3.4	2.9	2.6
24	2.9	3.1	3.1	3.3	3.0	3.2	2.5	6.5	8.8	B	11.1	12.0^{F}	11.6	11.3	10.0	9.4	8.8^{P}	8.0	6.6	6.0^{S}	5.7	4.3	3.5	3.2
25	3.5	3.6^{F}	3.7^{F}	3.0^{K}F	3.2^{K}	3.0^{K}F	B^{K}	B^{K}	10.5	11.7	13.1	11.8	14.2	13.6	13.6	12.4	10.2	10.1	8.2	7.1	B	4.4	4.0	4.2
26	4.2	4.2	3.7	3.9	3.3	3.1	3.7	7.7	9.5	10.8	11.2	12.2	11.4	11.5	11.2^{S}	11.0	9.6	[8.6]^{C}	7.5	7.1	6.1	4.7	4.5	4.6
27	4.3	2.9	3.2	2.0	3.4	3.0	3.0	5.0	9.1	10.1	10.4^{P}	11.8	11.2	10.4^{P}	9.7	10.4	9.0	6.5	7.5	6.3^{P}	6.1	4.6	4.6	4.6^{J}F
28	4.6^{F}	4.3^{F}	4.9	4.0^{F}	3.6	3.5	3.3	6.5	9.5^{P}	10.2	10.2	12.1	10.7	10.6	9.8	9.9	9.9	9.5	5.8	5.0	5.0	4.3	3.9	3.8
29	3.9	3.9	3.9	4.1	3.7	2.9	3.4	7.2^{S}	10.4	10.4	12.0	11.9	13.2	11.7	9.7	9.8	8.8	8.0^{PS}	5.8	5.4	5.5	4.2	3.6	3.6
30	3.5	3.6	4.0^{F}	4.0^{S}	3.4^{F}	3.3^{Z}	3.5^{F}	6.8	10.0	9.9	10.1	11.7	11.5	11.8	11.1	9.5	9.4	(9.0)^{C}	8.6J	6.6	5.6	4.5	4.0	3.5
31	3.6	3.7	C	C	C	C	C	C	C	C	C	C	C	C	C	C	9.1^{P}	B	7.3	5.2	4.5	2.9	3.6	3.6
Median Value	3.5	3.6	3.6	3.4	3.3	3.2	3.4	6.4	8.6	10.0	11.5	12.0	11.4	11.1	10.1	9.8	8.8	7.4	6.4	5.4	4.4	3.7	3.6	3.7
Count	31	31	30	30	30	30	29	28	30	27	27	28	29	29	27	28	31	29	29	31	30	31	30	31

Sweep 1.2 Mc to 12.2 Mc in 15 min Manual

K 1

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

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

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	330	320	360	360	350	(270)D	280	310	B	290	290	280	320	320	280	250	280	270	C	270	(310)JF	340	(340)AF	330F
2	310F	AF	290S	310	370	370	340F	280	(260)P	C	290F	280	290	310	(300)D	270	250	260	AF	(270)JF	330	330	280	320
3	310	340	310	350	350	C	280	270	250	250	250	300	260	260	280	240	230	310	270	230	330S	370	360	350
4	350	390F	290P	220	370P	350	290	260P	220P	(270)F	C	C	280	280	B	C	270	(270)C	270	(290)P	A	(330)A	280	350
5	350F	360	350	390	320	260	350	250	260	270	260	260	280	290	280	240	230	250	280	250	300	360	F	370
6	360	350	350	320	350	310	300	230	230	260	(260)C	260	250P	280P	(260)C	230PS	290	250	240	230	290	390	330	260F
7	340	320	380	400	350	380	310	250	270	270	(260)F	310	280	280	300	270	270	270P	260	250	310	340	340	320F
8	340F	300	280	370	360	320	340	240	230	250	280	260	270	280	280	260	260	260	250	230	260	310	A	290
9	310	340	350	280	310	310	290	250	260	240	270	250	270	280	260	270	240	260	270	280	300	330	350	320P
10	280	C	270	310	340	400	330F	280	250	230	260	260	C	C	C	C	(240)PS	280	260	280	280	310	330	260
11	320	340	350	380	370	350F	270	280	230	260	280	270	250	260	280	260	280	250	240	260	300P	320	350	310
12	330	320	280	290	(210)F	350	260	260	220	(270)S	260	280	270S	290	270	290	(230)J	260	270	210	250	310	340	320
13	300	340	380	340	370	370	280	270	260	230	280	260	240	260	230	260	240	250	290	280	280	330	370	330
14	330	320	310	340	380	280	260	230PS	240PS	260P	(270)F	260P	250F	260	280	240P	250	270	280	270	290	350P	360	320
15	310	350	320	300	360	270	280	270	280	230	230	290	240	230	230	240	220	B	280	250	230	370	370	370
16	330	300	260	270	290	270	270	230	220	260	S	240	260	(250)F	S	260	(250)JS	(290)F	(280)F	250	250P	320	280	320
17	330	320	320	310	260	220	230	(230)J	230	220	280	240	260	260P	290F	260	260	230	250	210	230	300	320	300
18	270	320	310	280	240	380F	320FV	240	230	250	300	260	300	260	260	290	250	240	310	230	270	280	360	370
19	360	340	300P	250	310	290	280	230P	220	M	M	270	270F	270	(270)J	(280)J	(260)J	260	320	270	250	320	410	410
20	400	380	340P	320F	370	290	300	260	260	270	290	260	300	270	270	290	260	260	280	290	B	350	320	320
21	390	400	390	400	370	360	330	290	260	270	270	S	250F	270	270	260P	250	220	290	250	260	300Z	380	350
22	340	360	310	380	420F	390	310	240	240F	260	260F	280	310	280	(290)F	300P	(290)F	250	230	260	280	250	340	370
23	330	300	370	360	380	350	280	C	240	250	240	260	310	270	C	C	270	270	270	300	260	330	350	390
24	390	380	360	360	320	350	350	240	260	B	260	260P	270	270	230	280	290P	280	270	290S	270	300	350	320
25	410	380F	380F	430KF	380K	420KF	BK	BK	300	280	310	290	370	310	400	340	300	280	290	290	B	350	400	420
26	390	320	320	340	360	390	310	280	250	290	280	270	310	310	200S	300	290	(320)C	340	290	320	310	320	320
27	280	340	370	270	310	370	340	280	260	280	290P	240	240	260P	260	250	250	270	270	260P	250	300	370	(350)JF
28	380F	380F	300	280F	360	350	330	290	260F	270	290	350	300	330	310	300	310	270	260	300	280	320	330	360
29	350	350	380	350	210	330	310	250S	270	270	310	320	300	280	310	280	260	290PS	280	320	230	250	330	360
30	350F	400	320F	270S	280F	360Z	360F	240	260	270	310	290	270	300	260	280	300	C	(260)P	320	340	350	440	330
31	400	400	420	C	C	C	C	C	C	C	C	C	C	C	C	C	270F	B	300	290	300	390	370	410
Median Value	340	340	320	330	355	350	300	250	250	260	280	265	270	280	275	270	260	265	270	270	280	330	350	330
Count	31	29	31	30	30	29	29	28	29	27	27	28	29	29	26	27	31	28	29	31	28	31	29	31

Sweep 1.2-Mc to 17.2-Mc in 15-min Manual

K 2

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

IONOSPHERIC DATA

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

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	250	230	230	240	240	240	250	210	230	240	230	230	230	240	260	230	230	210	210	210	210 F	230	AF	AF
2	250 F	AF	250 F	250	260	260	220	220	220	C	220	240	230	240	270	240	230	220	AE	270 AF	AF	290 AF	250	260
3	(310) A	290	280	310	260	270	240	230	220	210	210	270	260	300	220	220	210	220	240	210 A	220 A	230	270	270
4	300	300	250 A	280	270	310	250	210	210	220	260	250	260 B	250	B	C	B	260	230	230	A	280 A	250	260
5	280	300	280	300	250	210	240	220	220	240	240	220	220	210	250	230	210	230 A	230 A	200	250	270	280	350
6	300 A	290	300	260	230	250	210	200	200	230 F	(220) C	210	220	210	(200) C	200	200	230	220 A	230 A	240	280	270	250
7	300 A	290	300	260	230	250	210	200	200	230 F	(220) C	210	220	210	(200) C	200	200	230	220 A	230 A	240	280	270	250
8	260	250	240	250	310	280	230	210	200	230	220	240	190	220	260	220	220	200	200	200	210	230	A	240
9	260	290	280	230	250	250	240	220	220	210	270	230	240	250	240	230	240	210	190 A	220	220	250	280	260
10	230	(260) C	280	240	250	320	280	240	240	210	240	210	240	C	C	C	210	200	230	210	240	250	260	200
11	250	280	290	300 A	(300) A	190	220	220	220	210	210	240	240	200	260	230	210	210	200	200	230	240	280	250
12	300	270	220	220	200	200	230	230	200	250	240	240	220	220	240	250	200	200 A	210	200 A	200 A	240	270	250
13	240	260	300	260	280	290	250	210	200	210	200	230	200	220	200	210	220	210	210	230	210	240	300	270
14	260	260	210	250	230	210	210	190	200	200	230	200	210	230	270	220	240	220	240	220	230	250	280	250
15	240	260	250	240	240	260	220	200	230	210	220	260	220	220	200	200	260	200	200 A	220	200	240	290	290
16	270	230	220	200 A	320	310	230	220	220	200	200	200	200	200	200	210	200	190	210	200	200	200	240	250
17	250	260	260	220	160	160	210	200	210	200	250	220	220	240	260	230	200	190	200	200	210	250	270	250
18	210	240	260	220	210	320	270	210	200	220	220	230	250	240	250	240	230	200	230	210	220	240	260	290
19	260	260	240	210	240	230	240	200	200	M	M	240	250	220	250	240	230	210 A	240	220	220	220	300	310
20	300	300	270	260	250	310	250	200	210	210	210	230	250	250	240	240	210	220	200	250	200 A	260	260	280
21	300	300	300	300	280	240	250	250	250	220	230	220	220	210	230	220	220	200	190 A	220 A	240 A	220	240	270
22	300 A	A	A	310	220	300	240	210	220	230	230	250	260	250	250	250	240	200	200	220	230	220	230	310
23	280	250	270	270	270	250	240	C	200	240	220	230	250	250	C	C	240	220	200	240	210	220	260	320
24	300	300	300	300	250	280	270	210	220	220	200	210	250	210	190	220	210	220	210	220	220	210	230	240
25	310	300	320	330 K	310 K	330 K	260 K	B K	250	230	220	240	320	260	250	240	230	240	220	240	200	230	300	330
26	320	260	250	240	260	330	250	240	220	210	230	240	230	250	250	250 F	230	(220) C	200	210	230	240	260 F	250
27	240	280	280	190	240	280	280	200	220	220	240	220	170	190	200	200	190	200	210	200	210	220	290	290
28	300 F	300 AF	240	220	250	270	250	240	220	240	220	240	240	250	240	260	240	210	200	230	220	230	240	250
29	270	270	270	260	200	300	250	230	230	220	230	230	280	240	290	230	220	240	210	230	250	220	260	270
30	280	290	250	230	220	300	250	200	230	220	220	250	260	250	230	210	210 AF	(200) C	200	240	270	250	300	300
31	320	300	320	C	C	C	C	C	C	C	C	C	C	C	C	C	250 F	240	250 A	270 A	250	290	310	320
Median Value	270	270	270	250	250	280	245	215	220	220	230	230	235	240	240	230	220	210	210	220	220	240	270	265
Count	31	29	30	30	30	30	30	28	30	28	29	30	30	29	27	27	30	31	30	31	29	31	29	30

Sweep 1.2 Mc to 12.2 Mc in 15 min Manual

K 3

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan. 1950 | f_0 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	1	Q	Q	Q	Q	1	Q	Q	Q						
2							Q	Q	C	C	Q	Q	Q	Q	L	Q	Q	Q						
3							Q	Q	Q	Q	Q	L	Q	Q	Q	Q	Q	A						
4							Q	Q	Q	Q	L	B	B	B	B	C	A	A						
5							A	Q	Q	L	L	L	Q	Q	L	L	Q	A						
6							C	Q	Q	F	B	Q	Q	C	Q	Q	Q	Q						
7							Q	Q	Q	L	L	Q	Q	Q	L	Q	Q	A						
8							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
9							Q	Q	Q	Q	L	L	L	L	L	Q	Q							
10							Q	Q	Q	L	L	Q	L	C	C	C	Q	Q						
11							Q	Q	Q	Q	Q	L	L	Q	L	L	Q	Q						
12							Q	Q	Q	L	L	L	L	A	A	A	A	A						
13							(2.1) F	Q	Q	Q	Q	L	Q	L	Q	Q	Q	Q						
14							Q	Q	Q	Q	L	Q	Q	L	L	Q	Q	Q						
15							Q	Q	L	Q	L	L	L	L	Q	Q	Q	Q						
16							Q	L	L	Q	Q	Q	Q	Q	Q	Q	Q	Q						
17							Q	Q	Q	Q	L	Q	B	L	L	L	Q	Q						
18							Q	Q	Q	Q	Q	Q	L	L	L	L	Q	Q						
19							Q	Q	Q	M	M	Q	L	Q	L	Q	Q	Q						
20							Q	C	Q	Q	Q	Q	L	L	L	L	3	Q						
21							Q	Q	Q	Q	L	Q	Q	Q	Q	Q	Q	Q						
22							Q	Q	B	Q	Q	L	L	B	L	L	Q	Q						
23							Q	C	Q	Q	L	L	Q	L	C	C	L	Q						
24							Q	Q	Q	Q	Q	Q	B	Q	Q	Q	Q	Q						
25							Q	B	Q	Q	Q	L	L	L	A	Q	Q	Q						
26							Q	Q	Q	Q	L	L	L	L	L	L	Q	C						
27							Q	Q	Q	Q	L	L	Q	Q	Q	Q	Q	Q						
28							Q	Q	Q	Q	Q	Q	Q	C	A	L	Q	Q						
29							Q	Q	Q	Q	L	L	L	L	L	Q	Q	Q						
30							Q	Q	Q	Q	Q	L	L	L	L	Q	AF	C						
31							C	C	C	C	C	C	C	C	C	C	Q	Q						
Median Value							—	—	—	—	—	—	—	—	—	—	—	—						
Count							1	0	0	0	0	0	0	0	0	0	0	0						

Sweep 10-Mc to 20-Mc in 5-min Manual ○

K 4

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan 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	220	Q	Q	Q	Q	240	Q	Q	Q						
2							Q	Q	Q	C	Q	Q	Q	Q	240	Q	Q	Q						
3							B	Q	Q	Q	Q	240	Q	Q	Q	Q	Q	A						
4							Q	Q	Q	Q	220	B	B	B	B	C	A	A						
5							A	Q	Q	220	220	210	Q	Q	210	220	Q	A						
6							Q	Q	Q	220	C	B	Q	Q	C	Q	Q	Q						
7							Q	Q	Q	230	230	Q	Q	Q	220	Q	Q	220						
8							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q						
9							Q	Q	Q	Q	250	210	230	240	220	Q	Q	Q						
10							Q	Q	Q	210	200	Q	200	C	C	C	Q	Q						
11							Q	Q	Q	Q	Q	200	210	Q	200	220	Q	Q						
12							Q	Q	Q	220	220	210	200	190 A	A	230 A	A	A						
13							180	Q	Q	Q	Q	200	Q	200	Q	Q	Q	Q						
14							Q	Q	Q	Q	210	Q	Q	200	200	Q	Q	Q						
15							Q	Q	210	Q	210	210	210	200	Q	Q	Q	Q						
16							Q	200	210	Q	Q	Q	Q	Q	Q	Q	Q	Q						
17							Q	Q	Q	Q	230	Q	B	210	210	200	Q	Q						
18							Q	Q	Q	Q	Q	Q	230	220	230	210	Q	Q						
19							Q	Q	Q	M	M	Q	220	Q	210	Q	Q	Q						
20							Q	Q	Q	Q	Q	Q	220	240	230	220	Q	Q						
21							Q	Q	Q	Q	210	B	Q	Q	Q	Q	Q	Q						
22							Q	Q	B	Q	Q	210	230	B	220	230	Q	Q						
23							Q	C	Q	Q	220	220	Q	240	C	C	220	Q						
24							Q	C	Q	Q	Q	Q	B	Q	Q	Q	Q	Q						
25							Q	B	Q	Q	Q	210	250	230	A	Q	Q	Q						
26							Q	Q	Q	Q	210	220	220	230	230	230	Q	C						
27							Q	Q	Q	Q	220	200	Q	Q	Q	Q	Q	Q						
28							Q	Q	Q	Q	Q	Q	Q	B	A	240	Q	Q						
29							Q	Q	Q	Q	200	210	220	220	220	Q	Q	Q						
30							Q	Q	Q	Q	Q	210	230	210	210	Q	AF	C						
31							C	C	C	C	C	C	C	C	C	C	Q	Q						
Median Value							—	—	—	220	220	210	220	220	220	220	—	—						
Count							1	1	2	6	14	14	13	13	15	9	1	1						

Sweep 1.2 Mc to 12 Mc in 15 min Manual

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan. 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							A	2.0	2.3	2.6	A	A	A	A	A	A	A	1.2						
2							B	1.8	F	C	2.9	3.4 F	A	A	AF	2.6 A F	A	A						
3							B	1.5	2.3	A	A	3.4 A	B	B	A	A	2.4	A						
4							E	1.8	2.4	3.0	A	B	B	3.5	B	A	A	A						
5							A	A	2.3 A	3.1 B	3.2 B	3.3	3.5	3.3	3.2	2.7	2.0	A						
6							E	1.4	2.6	B	C	B	B	(3.3) B	C	(2.8) B	1.9	A						
7							E	1.9 A	B	2.6	3.1	3.5	3.5	B	B	2.8	2.1	A						
8							B	1.6	2.3	B	3.2	A	3.3	B	B	B	2.0	B						
9							E	A	A	(3.0) F	A	3.0 F	A	3.5	A	A	B	A						
10							E	1.5	2.4 F	3.0	3.2	3.4	3.4	C	C	C	2.3	A						
11							E	1.4 A	2.4 A	A	A	3.2 A F	A	A	A	2.8	2.2 A	A						
12							E	A	2.4 A	2.9	3.0 A	3.4	(3.2) A	A	A	A	A	A						
13							E	1.6 F	A	A	A	A	A	B	A	3.0	A	A						
14							E	1.8 F	2.4	2.8	3.1	(3.3) B	3.5	3.3 A	B	3.0	2.3	A						
15							AF	A	AF	2.8	2.8 A	3.2	A	A	A	2.7	2.3 H	1.4						
16							E	1.6	A	A	3.2 B	3.4 B	B	B	B	2.8	2.2 F	B						
17							E	1.8 A	B	2.8	B	3.3	3.4	B	B	2.8	2.3	1.8						
18							E	1.8	2.4	3.0	A	B	3.4	3.3	3.1	2.6	2.5	1.4 B						
19							B	1.9	2.5	M	M	A	B	3.2	3.2	A	A	A						
20							E	1.8	2.5	2.8	3.3	3.4	3.4	2.8	A	A	2.4	A						
21							E	1.8	2.4	3.3	B	B	B	B	3.3	A	2.8	(1.9) B						
22							E	1.8 B	A	3.0	3.2	3.4	3.6 B	B	3.3	2.9	2.5	1.8						
23							E	C	2.6	2.8 J	3.1	B	B	A	C	C	2.3	B						
24							E	2.0 F	2.7 B	A	3.0	3.6 B	B	3.6 B	B	B	2.6	1.7						
25							A	B	A	B	3.0	3.5	3.8	4.0 J	A	3.2 F	A	A						
26							E	2.3	A	3.2 A	3.5 A	3.7 A	3.7	B	3.6 B	AF	2.5 F	C						
27							E	B	B	A	3.4 A	3.6	A	3.6	A	A	2.5	1.9						
28							B	2.0	2.7	B	B	B	B	B	B	3.0	2.0 J	2.0						
29							B	2.2	2.8 A	3.1	3.4	3.5	B	A	3.2	3.0	2.5	A						
30							E	1.9 J	2.8	3.1	3.3	3.4	3.5	3.5	3.4	2.8	A	C						
31							C	C	C	C	C	C	C	C	C	C	A	A						
Median Value							E	1.8	2.4	3.0	3.2	3.4	3.5	3.4	3.2	2.8	2.3	1.8						
Count							20	23	19	18	18	20	13	12	8	16	21	9						

Sweep 1.0 Mc to 12.0 Mc in 15 min Manual

K 6

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan. 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							A	140	120	100	A	A	A	A	A	A	A	110					
2							B	110	110	C	100	100	A	A	AF	100 A F	A	A					
3							B	B	100	A	A	120 A	100	100	A	A	100	A					
4							E	130	100	110	A	110	B	110	110	A	A	A					
5							A	A	110	110	100	100	100	100	100	100	100	A					
6							E	B	100	100	C	110	110	100	C	100	100	100 A					
7							E	120	110	100	110	100	130 A	100	110	100	110	A					
8							B	180	100	100	100	A	100	100	100	110	100	B					
9							E	A	A	110 A	A	110	A	110	A	A	110	A					
10							E	130	110	100	100	110	100	C	C	C	100	A					
11							E	120 A	100 A	A	A	100	100	A	A	110	100	A					
12							E	A	100 A	100	100 A	100	100 A	A	A	A	A	A					
13							E	(160) F	110	A	100	A	100	100	A	100	A	A					
14							E	140	100	100	100	100	100	100	100	100	100	A					
15							AF	100 A	110	100	100	100	100	100	100	100	100	B					
16							E	120 B	A	100 A	100	100	100	100	100	100	110	B					
17							E	160	110	110	120	120	110	110	110	110	110	150					
18							E	130 B	100	100	110	100	100	100	100	100	100	B					
19							B	140	100	M	M	110	110	100	110	100	A	A					
20							E	(150) B	110	100	100	100	110	110	A	100	100	A					
21							E	B	100	110	100	100	100	100	100	A	100	100					
22							E	B	A	100	100	100	100	(110) B	100	110	110	160					
23							E	C	110	120	110	B	B	100	C	C	110	B					
24							E	150	100	A	100	90	90	90	90	100	100	B					
25							A	100	A	100	100	100	100	100	A	100	10	A					
26							E	A	100	100	100	100	100	100	100	AF	100	C					
27							E	B	(110) B	110	110	100	A	90	A	A	100	150 B					
28							(150) B	150	110	110	110	110	B	B	100	100	100	110					
29							B	120	100 A	100	100	100	100	A	100	100	100	A					
30							E	100	100	100	100	100	100	100	100	100	A	C					
31							C	C	C	C	C	C	C	C	C	C	A	A					
Median Value								130	100	100	100	100	100	100	100	100	100	110					
Count								20	26	24	23	26	23	23	17	20	23	7					

Sweep 10 Mc to 20 Mc in 15 min Manual

K 7

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

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

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3.1	2.9	2.7	2.4	2.0Y	1.9	1.8Y	2.4	3.4	4.1	3.3	3.5	4.4	4.1	3.7	3.6	2.7	3.7	3.7	3.5F	3.5	3.4F	6.3F	4.0F
2	3.8F	3.9F	2.9	2.8	3.2Y	2.8	3.7	2.5	3.2	C	3.3	3.5F	4.2F	5.2	5.2	3.3	4.0	7.5Y	9.4	7.2F	5.3F	3.7F	3.8F	2.8F
3	2.8F	2.8F	2.9F	3.7F	2.6	2.2Y	2.4	2.9	2.9Y	3.7	3.6	3.8	B	B	(5.5)Y	3.0	B	3.2	2.6	3.4	3.4	G	G	2.0
4	2.3	2.4	2.4YF	2.0	2.2	G	G	G	(3.5)Y	(3.5)Y	4.5	B	B	3.9	B	3.1	(4.0)Y	5.2	4.3	6.4	5.8	4.4	3.5	3.6Y
5	3.4	2.8	2.4	2.3	2.2YF	2.6F	2.6	3.5	3.5	3.6Y	3.7Y	3.8	4.8Y	3.8	G	2.7	3.4	5.8	4.4	(5.0)Y	3.2	2.1	2.8	2.4
6	2.4	2.4	2.7	3.0	2.2	2.7	G	2.1	3.0	B	C	B	G	G	C	B	G	2.5	4.0F	3.0	2.3F	2.2F	B	B
7	2.0	1.5	2.0	2.2	2.0	2.6	2.2Y	2.7	B	3.7	3.4	G	3.8	(3.5)Y	B	G	G	3.7	6.7Y	3.5F	3.9	2.8	3.5Y	2.9F
8	3.5F	3.3	2.0	(2.8)Y	G	G	2.6Y	2.4	G	(3.4)Y	(4.2)Y	(4.8)Y	4.5	5.6	(3.6)Y	(3.2)Y	B	(2.6)YF	2.4	2.1	G	G	4.2	3.0
9	(2.4)Y	(2.8)Y	2.6	(2.4)YF	3.2	2.0	G	2.8	3.5	3.0F	5.0	G	3.8	G	3.0	2.9	G	2.8	2.0	G	G	2.2	G	G
10	2.6F	C	G	G	G	G	G	2.1	3.5Y	3.5Y	(3.5)Y	G	G	C	C	C	G	3.0	2.3	2.8	3.7	3.5F	3.6	2.7
11	2.8	2.7	2.8	2.6	2.8	G	1.8	2.4	2.8	3.5	3.9	3.7	3.5	3.6	3.6	3.6	2.6	2.8	2.2	G	G	G	G	(2.0)Y
12	1.6	G	2.5	2.8F	3.6YF	2.6F	2.4F	2.2Y	3.6Y	(3.2)Y	3.4	G	3.6	5.0	4.4	4.4F	4.6	4.2F	3.9	2.6	1.8	G	G	G
13	2.6	3.2F	2.8	2.9	(2.9)F	(2.5)F	2.5Y	2.9	3.8F	3.6	3.5	3.7	3.5	B	4.0	(3.3)Y	3.2	3.2	2.7F	2.8F	2.2	G	2.1	G
14	G	2.5	2.6	2.2	2.0F	G	2.0Y	2.3	3.2Y	(3.2)Y	G	G	G	3.4	G	3.2	G	2.2	2.3Y	2.6	G	G	G	G
15	1.8YF	G	2.8	2.0F	2.0F	2.3F	3.0	2.9	3.7	(3.7)Y	3.6	3.8	3.7	3.6	3.4	2.8	G	2.0	2.0	2.8	2.8Y	B	2.5	B
16	2.8	2.4	2.4	2.2	2.0F	3.0	2.1	2.5	3.7	4.6	G	B	B	B	G	B	G	1.7	G	G	G	G	G	G
17	2.7F	2.8Y	2.2	G	G	G	G	G	G	(3.4)B	G	G	3.4	G	G	G	G	G	G	G	G	G	G	G
18	G	G	2.8	2.7	3.5Y	2.7F	3.0	2.9Y	2.9	3.6Y	3.5	B	3.5	G	3.7	3.2	G	G	G	G	G	G	G	G
19	G	G	G	G	G	G	B	G	(2.8)Y	M	M	3.8	G	3.4	3.4	(3.5)Y	3.4Y	2.8	3.5F	2.8F	2.7F	G	G	G
20	G	G	G	1.9	G	G	G	G	2.8	G	(4.5)Y	4.1	3.5	3.5	3.6	3.7	2.9Y	3.0	2.6	2.2	2.6	1.9	2.0	1.9
21	2.2	2.0	2.0	(2.2)Y	B	G	G	2.0	(3.0)Y	G	(3.8)Y	B	B	(3.8)Y	G	3.2	(3.3)Y	2.3Y	2.6	4.2Y	3.6	B	2.9	2.3
22	4.0Y	2.8	2.9	2.6	2.5	1.7	G	G	(5.6)Y	G	3.7	G	G	B	G	3.6Y	G	G	G	1.8	G	2.4	G	G
23	G	G	G	2.1	2.0	2.2	2.7Y	C	G	3.5	G	B	B	4.1	C	C	2.8	1.8	B	B	2.2	2.0B	2.4	(2.0)B
24	2.0	(1.7)B	G	G	G	G	G	G	G	3.6	3.4	G	B	G	B	B	G	G	G	G	2.2	G	G	G
25	G	G	B	1.8	2.0	G	1.4	B	3.6	3.4	G	G	G	G	6.6	G	2.6	3.5	4.7	4.4	2.4	2.2	2.0	3.3
26	2.4	2.0	2.2Y	2.8F	2.2	1.7	2.0	2.7	3.0	G	G	G	G	G	G	3.6F	G	C	G	2.2	2.7	2.2	1.7	2.3
27	2.1	2.9	1.3	1.2	G	G	G	B	G	3.6	3.6	4.1	4.5Y	G	3.5	3.6	G	G	G	G	G	G	G	G
28	G	2.5Y	1.5	2.6Y	(2.5)Y	2.9	B	2.5	G	B	B	B	B	B	4.6	G	2.8	G	G	G	2.7	1.7	G	B
29	G	G	G	G	G	G	B	G	G	G	4.2	G	G	3.7	3.3Y	3.6Y	3.4	3.5	3.4	G	2.6	G	G	G
30	G	G	G	G	G	G	G	G	2.8Y	2.8	3.7Y	G	G	G	G	5.2	4.5F	C	2.6	2.4	2.0	G	G	G
31	2.4	2.4	G	C	C	C	C	C	C	C	C	C	C	C	C	C	4.8	4.6	2.8	3.6	G	B	G	G
Median Value	2.2	2.4	2.4	2.2	2.0	1.7	1.8	2.4	3.0	3.5	3.5	G	3.5	3.5	3.4	3.2	2.6	2.8	2.6	2.6	2.3	G	G	G
Count	31	30	29	30	29	30	27	27	29	26	27	23	23	24	24	25	29	29	30	30	31	29	30	29

Sweep 1.2 Mc to 12 Mc in 15 min Manual

K 8

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

IONOSPHERIC DATA

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

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.9	3.0	2.7	2.7	2.8	(3.5)J	3.1	3.0	3.0	3.2	3.0	3.2	2.9	3.0	3.2	3.4	3.2	3.3	C	3.5	(3.0)J F	2.9	(3.0)A F	3.0 F
2	3.0 F	3.1	(3.2) S	3.1	2.8	3.0	2.8 F	3.2	(3.4) P	C	3.2	3.4	3.1	(3.1) B	(3.1) J	3.3	3.3	3.3	AF	(3.4) J F	3.0	2.9	3.2	3.2
3	3.2	2.9	3.1	2.8	2.8	C	3.2	3.2	3.5	3.5	3.5	3.1	3.4	3.4	3.2	3.5	3.7	3.0	3.4	3.6	2.9 S	2.7	2.8	2.8
4	2.8	2.7 F	3.1 P	3.7	2.7 P	2.8	3.2	3.3 P	3.7 P	(3.2) P	C	C	3.1	3.3	3.2	(3.2)C	3.3	[3.3] C	3.3	3.1 P	2.9	2.8	3.4	2.8 F
5	2.8 F	2.8	2.9	2.7	3.0	3.3	2.8	3.3	3.3	3.4	3.4	3.3	3.1	3.2	3.2	3.6	3.5	3.4	3.2	3.4	3.2	2.8	F	2.7
6	2.8	2.9	2.8	2.9	2.8	3.0	3.0	3.5	3.6	3.5	(3.4)C	3.4	3.4 P	3.2 F	(3.4)C	3.5 P S	3.1	3.5	3.5	3.6	2.7	2.6	2.9	2.5 F
7	2.9	3.1	2.7	2.6	2.8	2.7	3.1	3.4	3.3 P	3.3	(3.4) P	3.8	3.3	3.2	3.0	3.2	3.3	3.2 P	3.6	3.5	3.0	2.8	2.9	3.2 F
8	2.8 F	3.1	3.2	2.7	2.8	2.9	2.8	3.5	3.5	3.5	3.4	3.4	3.3	3.2	3.3	3.4	3.4	3.4	3.4	3.5	3.3	3.0	3.1	3.2
9	2.9	2.8	2.8	3.2	3.0	2.9	3.1	3.5	3.4	3.5	3.4	3.3	3.2	3.2	3.5	3.4	3.5	3.4	3.3	3.3	3.0	2.9	2.9	3.0 P
10	3.4	[3.0] C	2.7	3.0	2.8	2.8	2.9 P	3.2	3.5	3.5	3.5	3.3	C	C	C	C	(3.5) P S	3.1	3.4	3.3	3.2	3.0	3.0	3.3
11	3.0	2.9	2.9	2.7	2.8	2.8 F	3.4	3.3	3.7	3.4	3.3	3.4	3.5	3.3	3.3	3.3	3.2	3.4	3.5	3.4	3.2 P	3.0	2.9	3.1
12	2.9	3.0	3.2	3.1	(3.9) P	2.9	3.5	3.4	3.6	3.3	3.5	3.3	3.3 S	3.3	3.3	3.3	(3.7) J	3.4	3.2	3.7	3.3	2.9	2.8	3.0
13	3.1	2.9	2.7	2.8	2.7	2.7	3.2	3.2	3.4	3.7	3.2	3.5	3.5	3.3	3.5	3.4	3.7	3.4	3.2	3.3	3.2	2.9	2.7	3.0
14	2.9	3.0	3.0	2.9	2.6	3.2	3.3	(3.6) P S	3.5 P S	3.3 P	(3.3) P	3.5 P	3.4 P	3.4	3.3	3.6 P	3.5	3.3	3.3	3.3	3.1	2.9 P	2.8	3.1
15	3.1	2.8	3.0	3.2	2.8	2.8	3.2	3.3	3.2	3.6	3.7	3.3	3.5	3.2	3.6	3.5	3.7	B	3.2	3.4	3.7	2.7	2.8	2.8
16	2.9	3.1	3.6	3.2	2.6	2.6	3.2	3.5	3.7	3.5	S	3.5	3.4	(3.5) P	S	3.4	(3.5) J S	3.1 P	(3.2) P	3.4	3.5 P	3.0	3.1	3.0
17	2.9	2.9	2.9	3.0	3.3	3.6	3.6	(3.6) J	3.5	3.5	3.3	3.4	3.5	3.3 P	3.3 P	3.5	3.6	3.5	3.5	3.9	3.5	3.0	3.0	3.2
18	3.3	2.9	3.0	3.2	3.5	2.7 F	2.9 VF	3.5	3.6	3.4	3.2	3.3	3.1	3.4	3.3	3.3	3.5	3.6	3.0	3.6	3.3	3.2	2.8	2.7
19	2.8	2.9	3.2 P	3.6	3.0	3.1	3.1	3.5 P	3.6	M	M	3.2	3.2 P	3.2	(3.3) J	(3.2) J	(3.4) J	3.4	3.1	3.4	3.4	2.9	2.6	2.8
20	2.7	2.7	2.9 P	3.0 F	2.7	2.7	3.1	3.5	3.4	3.2	3.2	3.2	3.2	3.1	3.4	3.3	3.4	3.4	3.2	3.1	B	2.8	2.9	3.0
21	2.7	2.6	2.7	2.6	2.7	2.8	2.8	3.2	3.4	3.4	3.3	S	3.4 F	3.4	3.3	3.3 P	3.4	(3.7) S	3.2 S	3.6	3.3	3.1 Z	2.6	2.9
22	2.9	2.9	3.0	(2.8) B	2.6 F	2.6	3.0	3.5	3.6 F	3.5	3.3 P	3.3	3.0	3.1	(3.1) P	3.0 P	(3.2) P	3.5	3.5	3.3	3.2	3.4	2.8	2.7
23	2.9	3.1	2.7	2.8	2.6	2.8	3.2	C	3.6	3.6	3.6	3.4	3.2	3.4	C	C	3.3	3.2	3.3	3.3	3.4	2.9	2.8	2.8
24	2.6	2.7	2.8	2.7	3.0	2.8	2.8	3.5	3.4	B	3.4	3.4 P	3.3	3.3	3.5	3.2	3.1 P	3.2	3.3	3.2 S	3.2	3.0	2.8	3.0
25	2.6	2.7 F	2.7 F	2.6 K F	2.7 K	2.6 K F	B K	B K	3.1	3.2	3.2	3.2	2.8	3.0	2.5	2.9	3.0	3.1	3.1	3.2	B	2.8	2.6	2.5
26	2.8	3.0	2.9	2.9	2.7	2.6	2.7	3.2	3.6	3.3	3.3	3.3	3.0	3.1	(3.1) S	3.0	3.3	[3.0] C	2.8	3.1	2.9	3.1	2.9	2.9
27	3.3	3.0	2.7	3.2	3.0	2.7	3.0	3.2	3.5	3.3	3.2 P	3.4	3.6	3.2 P	3.4	3.5	3.4	3.2	3.2	3.3 P	3.4	3.0	2.7	(2.8) J F
28	2.7 F	2.7 F	3.1	3.2 F	2.8	2.8	2.9	3.1	3.4 P	3.5	2.4	2.8	3.0	3.1	2.9	3.1	3.1	3.3	3.4	3.1	3.3	3.0	3.0	2.7
29	2.9	2.9	2.7	2.9	3.8	2.9	3.0	3.5 S	3.4	3.3	3.0	3.0	3.2	3.2	3.0	3.3	3.3	3.1 P S	3.1	2.9	2.9	3.4	2.9	2.8
30	2.8 F	2.7	3.0 F	3.2 S	3.2 F	2.8 Z	2.8 F	3.4	3.4	3.4	3.2	3.1	3.1	3.1	3.4	3.1	3.3	[3.2] C	(3.2) J	3.0	2.8	2.8	2.5	2.9
31	2.6	2.6	2.6	C	C	C	C	C	C	C	C	C	C	C	C	C	3.2 P	B	3.1	3.2	3.1	2.6	2.7	2.6
Median Value	2.9	2.9	2.9	2.9	2.8	2.8	3.1	3.4	3.5	3.4	3.3	3.3	3.2	3.2	3.3	3.3	3.4	3.3	3.2	3.3	3.2	2.9	2.8	2.9
Count	3.1	3.1	3.1	3.0	3.0	2.9	2.9	2.8	3.0	2.7	2.7	2.8	2.9	2.9	2.7	2.8	3.1	2.9	2.9	3.1	2.9	3.1	3.0	3.1

Sweep 1.0 Mc to 12 Mc in 15 min Manual

K 1

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan 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	1.4	1.4	1.2	E	E	1.2	1.1	A	A	A	3.6	3.5	3.6	3.6	3.4	3.2	2.2	1.5	1.5	1.4	1.5	1.6	AF	AF*
2	1.9	AF	1.2	1.2	1.1	1.1	1.1	1.8	2.5	C	3.1	3.4	3.4	3.9	3.4	2.6	2.4	A	AF	AF	AF	AF	AF	2.0[A]
3	A	1.5	1.5	1.4	1.2	1.1	1.2	1.6	2.5	A	A	3.4	3.6	3.7	A	2.7	2.5	A	1.7	A	A	E	E	1.2
4	1.5	1.1	A	1.6	1.2	1.2	1.2	2.0	2.5	3.2	A	5.9	7.1	6.3	7.9	C	4.4	A	2.3[A]	2.0[A]	A	A	A	1.5
5	1.5	1.4	E	E	E	E	1.6	1.6	2.7	3.1	3.2	3.8	4.1	4.0	3.3	3.2	2.8	A	A	1.8	2.0[A]	1.2	2.0[A]	2.0[A]
6	A	1.6	1.5	1.3	E	E	1.3	1.5	A	3.2	C	4.0	3.6	3.4	C	(2.8)[B]	2.6	1.7	A	A	1.4	1.5	1.5	1.3
7	E	1.1	E	1.1	E	E	E	1.9	3.2	2.8	3.2	3.5	3.5	3.4	3.2	3.2	2.3	A	1.1	1.1	A	1.4	1.7	1.5
8	1.5	1.1	E	E	E	E	E	1.7	2.6	3.4	3.3	3.4	3.4	3.4	3.6	2.8	2.4	1.4	1.6	1.2	1.2	1.5	A	1.6
9	1.1	1.2	1.3	1.2	1.2	1.2	E	1.9	2.6	3.0	A	3.0	3.5	3.5	A	2.9	2.5	2.0	A	1.2	1.4	1.4	E	1.1
10	1.2	C	E	E	E	E	E	1.6	2.4	3.1	3.3	3.4	3.4	C	C	C	2.3	A	1.8[A]	1.6	1.4	1.7	1.4	1.4
11	1.3	1.3	1.1	A	A	E	E	1.7	2.4	3.2	3.2	3.4	3.5	3.4	3.4	2.8	2.2	1.7	1.6	1.4	1.4	1.4	1.4	1.6
12	1.6	1.1	E	E	E	E	E	1.6	2.4	3.2	3.2	3.4	3.2	A	A	A	A	A	AF	A	A	1.1	E	E
13	E	E	E	E	1.1	E	E	2.7	2.4	3.5	3.3	3.5	3.5	3.5	A	3.2	2.4	1.8	1.5	E	1.4	E	E	E
14	E	E	1.2	1.1	1.1	1.1	1.1	1.8	2.5	3.1	3.2	3.8	3.5	3.6	3.2	3.2	2.4	1.8	1.5	1.4	1.1	1.1	1.2	1.1
15	1.1	E	E	E	E	E	E	2.4	AF	3.1	3.2	3.3	3.8	3.5	2.8	2.7	2.3	1.8	1.7	1.4	1.4	1.2	1.1	1.4
16	E	E	E	E	E	E	E	1.8	A	A	3.2	4.0	4.2	4.0	3.5	3.8	2.4	1.7	1.2	1.2	1.1	1.1	1.4	1.1
17	1.1	1.1	1.1	E	E	E	E	1.8	2.4	3.4	3.7	3.3	4.6	3.4	3.3	2.8	2.5	1.8	1.3	1.3	1.2	1.2	1.1	E
18	E	E	E	E	E	E	1.1	1.8	2.5	3.0	A	3.6	3.6	3.5	3.2	2.8	2.5	1.5	E	E	E	E	E	E
19	E	E	1.1	1.1	1.1	1.3	1.6	2.0	2.6	M	M	4.1	3.6	3.6	3.4	A	2.6	A	1.7	2.0[A]	1.6	1.4	1.3	1.1
20	E	E	1.1	1.1	1.1	1.1	1.1	1.8	2.5	3.2	3.5	3.7	3.8	4.0	3.6	3.2	2.4	1.9	1.6	1.6	A	1.5	1.6	1.1
21	1.5	1.2	1.2	E	1.1	1.1	1.1	1.8	A	3.6	3.7	4.0	4.0	3.8	3.4	3.2[A]	2.9	1.9	A	A	A	1.4	1.4	1.5
22	A	A	A	1.5	1.1	1.5	1.1	1.8	4.9	3.3	3.6	3.8	3.8	4.8	3.3	3.2	2.7	1.8	1.2	1.4	1.3	1.3	E	E
23	E	E	E	E	E	E	E	C	2.6	3.2	3.5	3.9	4.0	4.1	C	C	3.0	2.0	1.6	1.2	1.6	1.4	1.6	1.2
24	1.1	E	E	1.3	1.1	E	1.3	2.1	2.8	3.3	4.0	3.8	7.4	3.7	3.7	3.2	2.6	2.2	1.5	1.4	1.6	1.2	1.4	1.3
25	E	1.1	1.1	1.1	1.1	1.1	1.5	B	2.8	3.2	3.3	3.5	4.2	4.7	A	3.3	2.4	1.8	1.8	1.6	1.6	1.2	1.1	1.5
26	1.1	1.1	1.1	1.1	E	E	E	2.4	3.2[A]	3.2	3.5	3.7	3.7	3.6	3.6	3.2	A	C	1.3	A	1.4	1.5	1.5	1.4
27	1.3	1.2	1.1	E	E	1.2	1.3	2.4	2.7	3.3	3.7	4.1	4.1	3.7	3.5	3.2	2.5	1.9	1.4	1.4	1.2	1.3	1.1	E
28	E	AF	E	E	E	E	1.1	1.9	2.7	3.6	3.7	A	4.1	4.4	A	3.5	3.3	2.0	1.1	1.5	1.4	1.2	1.1	1.1
29	E	E	1.1	1.1	1.2	1.4	1.8	2.8	2.8	3.1	3.5	3.9	3.7	3.9	3.6	3.7	2.8	2.4	1.5	1.2	1.4	1.2	1.1	E
30	E	E	1.1	1.1	1.1	1.1	1.2	2.1	3.1	3.2	3.4	3.8	3.7	3.6	3.6	3.6	3.6	AF	C	1.4	E	E	1.2	E	1.1
31	1.4	E	E	C	C	C	C	C	C	C	C	C	C	C	C	C	2.3	2.0	A	A	1.4	1.6	1.4	1.4
Median Value	1.1	1.1	1.1	1.1	E	E	1.1	1.8	2.6	3.2	3.4	3.7	3.7	3.6	3.4	3.2	2.5	1.8	1.5	1.4	1.4	1.3	1.2	1.2
Count	28	27	29	29	29	30	30	27	25	25	24	29	30	28	21	25	28	21	23	23	24	29	27	30

Sweep 1.0 Mc to 17.0 Mc in 15 min — Manual

K 10

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

IONOSPHERIC DATA

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

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	E	1.2	E	E	E	E	E	1.5	1.3	1.4	1.3	1.3	1.3	1.4	1.3	1.1	1.3	1.1	1.5	1.4	1.4	1.4	1.5	1.3
2	1.3	1.1	1.1	1.1	1.1	1.5	1.6	1.2	1.3	C	1.2	1.5	1.3	1.5	1.3	1.6	1.4	E	1.1	E	1.3	1.3	1.3	1.5
3	E	E	E	E	E	E	1.5	1.4	1.2	1.5	1.8	1.8	1.9	2.0	1.9	1.8	1.7	E	1.1	E	E	G	G	1.6
4	E	E	1.1	1.2	1.2	G	G	1.5	1.8	2.0	2.0	2.2	B	2.2	2.2	2.2	1.9	1.1	1.3	1.1	1.2	1.3	1.2	1.6
5	1.3	1.1	1.4	E	E	E	1.1	1.2	1.3	1.6	1.6	1.6	1.3	1.5	1.6	1.5	1.3	1.2	1.4	1.2	1.5	1.5	1.8	1.5
6	1.1	1.2	1.1	E	E	E	E	1.4	1.7	1.6	C	2.4	2.0	2.0	C	1.6	1.3	E	E	1.5	1.5	1.5	B	G
7	1.8	1.2	E	1.1	E	E	E	E	1.3	1.5	1.5	1.9	1.9	2.0	2.0	2.1	1.4	1.1	1.1	1.1	1.4	1.6	1.5	1.6
8	1.1	1.1	E	E	G	G	B	1.3	1.5	1.5	1.6	1.6	1.8	2.0	2.0	1.9	1.4	2.0	1.2	1.2	G	G	1.4	1.2
9	1.1	1.1	1.1	E	E	E	E	1.1	1.1	1.6	1.8	1.5	1.4	2.1	2.1	1.4	1.8	E	1.8	G	G	1.4	G	G
10	E	C	G	G	G	G	E	1.2	1.4	1.4	1.6	2.0	1.9	C	C	C	1.6	1.4	1.4	1.3	E	1.2	1.2	1.2
11	1.2	E	E	E	E	G	E	E	1.3	1.3	1.4	1.5	2.0	1.7	1.6	1.6	1.4	E	E	G	G	G	G	1.4
12	E	G	1.4	E	E	E	2.0	1.4	1.5	1.5	1.4	1.6	1.7	1.6	1.7	1.5	1.4	1.3	1.2	1.2	1.1	G	G	G
13	E	E	E	E	E	2.2 F	(1.6) B	1.1 F	1.6	1.8	1.8	1.8	2.0	1.9	1.8	1.8	1.2	E	1.7	1.7	1.8	G	1.8	G
14	G	E	E	1.1	1.1	G	B	1.4	1.6	1.5	1.6	2.0	2.2	2.2	2.0	1.7	1.2	1.1	1.2	1.6	G	G	G	G
15	1.1	G	E	E	E	E	E	E	E	1.4	1.4	1.5	1.8	2.0	1.7	1.5	1.3	1.2	E	E	1.6	G	1.8	B
16	1.2	E	E	E	E	E	1.6	1.4	1.2	1.4	1.8	1.8	2.0	1.8	2.0	1.6	1.6	1.4	G	G	G	G	G	G
17	1.1	1.1	1.1	E	G	G	E	1.7	1.6	2.2	2.4	2.6	2.3	2.2	1.8	1.6	1.6	1.3	G	G	G	G	G	G
18	G	G	1.8	1.9	2.0	1.4	1.5	1.4	1.4	1.4	1.5	1.6	1.8	1.5	1.6	1.4	1.7	B	G	G	G	G	G	G
19	G	G	G	G	G	G	B	1.6	1.4	M	M	1.7	1.6	1.4	1.6	1.1	1.4	1.1	1.2	1.2	1.4	G	G	G
20	G	G	G	1.5	G	G	E	1.6	1.6	1.5	1.6	1.9	2.2	2.3	2.1	1.5	1.5	1.3	1.6	1.6	B	1.5	1.6	1.4
21	1.1	1.6	E	E	B	G	E	1.6	1.1	2.2	2.0	2.2	2.4	2.0	2.0	1.8	(1.6) B	1.6	1.4	1.6	1.5	B	1.6	1.7
22	1.4	1.4	1.1	1.1	1.1	1.1	E	B	1.4	1.4	1.6	1.6	1.6	1.6	1.7	1.6	1.3	1.4	G	1.4	G	1.3	G	G
23	G	G	G	1.8	1.6	1.7	1.5	C	1.2	1.8	1.8	B	B	2.1	C	C	1.5	1.4	B	B	1.6	1.8	2.0	(2.0) B
24	1.9	1.5	G	G	G	G	G	1.5	1.6	1.6	1.9	1.4	2.1	1.7	2.0	1.7	1.7	1.5	1.2	G	1.3	G	G	G
25	G	G	B	1.1	1.1	G	1.1	1.2	1.3	1.3	1.5	1.5	1.7	2.2	1.4	1.4	1.3	1.2	1.6	1.6	1.5	1.6	1.8	1.5
26	1.1	B	1.1 B	1.1 F	B	.4	1.8	1.6	1.4	1.2	1.5	1.7	1.6	1.8	1.7	1.7	1.4	C	G	E	E	E	1.1	E
27	E	E	E	E	G	G	E	B	1.6	1.4	1.4	1.5	1.6	2.0	1.7	1.6	1.8	1.6	G	G	G	G	G	G
28	G	E	B	(1.7) B	1.4	E	B	1.5	1.5	1.6	1.8	2.2	B	2.0	2.0	2.0	1.4	1.4	G	G	1.4	1.6	G	B
29	G	G	G	G	G	1.1	(1.8) B	1.8	1.4	1.5	1.6	1.9	1.7	1.8	1.4	1.3	1.2	1.4	1.6	G	1.6	G	G	G
30	G	G	G	G	G	G	E	1.1	1.4	1.6	1.7	1.6	1.6	1.6	1.5	1.3	1.3	C	1.2	E	E	G	G	G
31	E	1.4	G	C	C	C	C	C	C	C	C	C	C	C	C	C	1.6	1.4	1.2	1.4	G	B	G	G
Median Value	E	E	E	E	E	E	E	1.4	1.4	1.5	1.6	1.7	1.8	2.0	1.7	1.6	1.4	1.2	1.2	1.1	1.2	G	G	G
Count	31	29	29	30	29	30	26	27	30	28	28	29	27	29	27	28	31	28	30	30	30	29	30	29

Sweep 1.0 Mc to 12.0 Mc in 1.5 min Manual

K 11

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

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

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	130	80	110	100	100	(50)J	120	100	B	70	130	70	100	80	80	110	80	80	C	60	(90)J F	100	(90)A F	80 F
2	90 F	AF	60 S	70	80	80	170 F	90	(50)P	C	50 P	50	100	(80)B	(70)J	90	70	80	AF	(50)J F	90	160	110	90
3	60	100	70	120	110	C	110	140	70	90	70	80	50	60	80	110	60	100	70	70	120 S	130	80	70
4	110	80 F	100 F	60	110 P	90	80	80 P	90 P	(90) P	C	C	80	50	B	C	90	(80)C	70	(90) P	A	(110)A	40	100 F
5	100 F	120	70	80	80	120	160	150	90	60	80	110	120	90	80	70	110	70	160	290	80	120	F	150
6	100	80	100	160	150	140	120	100	70	40	(40)C	30	90 P	70 P	(80)C	80 F S	90	60	90	100	110	90	80	90 F
7	160	80	120	90	110	80	90	80	80 P	50	(80) P	80	60	90	90	90	90	80 P	50	50	110	120	100	70 F
8	110 F	80	120	110	100	150	160	180	110	70	50	50	90	30	60	70	60	70	90	110	100	80	A	60
9	90	110	130	90	150	130	110	70	70	80	50	80	100	90	40	70	100	70	100	70	110	100	70	70 P
10	50	C	190	190	150	50	100 F	120	70	100	50	80	C	C	C	C	(90) F S	110	60	60	90	70	60	130
11	110	130	80	100	60	80 F	70	100	50	60	60	60	80	90	60	170	90	80	80	90	60 P	90	70	70
12	90	80	80	160	(50) P	100	40	110	80	(70) S	40	50	60 S	40	60	50	(60) J	100	130	90	140	190	150	90
13	80	80	80	100	120	90	190	130	80	50	90	60	90	80	90	100	50	70	70	80	80	180	80	90
14	90	100	110	70	110	70	80	80 P S	80 P S	130 P	(100) P	90 P	110 P	60	40	70 P	40	80	50	80	100	60 P	80	60
15	60	90	100	70	80	70	100	120	100	90	40	40	80	70	70	80	70	B	120	60	50	140	70	110
16	80	140	50	230	110	130	210	80	50	90	S	60	120	(60) P	S	60	(80) J S	(100) P	(100) P	120	60 P	140	60	100
17	110	90	110	90	90	80	70	(60) J	70	110	60	80	70	80 P	70 P	40	50	110	60	50	140	130	70	50
18	70	100	80	110	70	90 F	120 VF	80	70	80	70	100	70	80	100	40	70	70	80	80	80	110	100	80
19	70	60	60 P	30	80	110	120	90 P	70	M	M	80	110 P	100	(90) J	(70) J	(50) J	50	60	70	100	160	140	90
20	80	70	90 P	70 F	70	60	60	70	70	130	60	110	70	100	80	50	70	80	100	100	B	100	170	100
21	80	120	110	90	70	100	110	80	100	70	60	S	60 F	60	80	100 P	80	60	110	90	60	80 Z	110	70
22	80	70	80	50	60 F	90	100	100	50 F	50	110 P	70	80	90	(90) P	100 P	(80) P	70	110	70	70	80	120	130
23	110	100	110	100	120	150	110	C	50	60	80	70	60	50	C	C	90	120	60	50	50	140	170	70
24	110	120	80	120	70	100	100	60	70	B	110	100 P	70	50	130	70	80 P	80	90	60 S	90	90	90	110
25	80	80 F	80 F	90 F	90	70 F	B	B	70	130	60	170	70	130	200	80	90	130	100	50	B	150	80	120
26	40	80	100	90	140	120	160	90	70	40	70	100	100	100	180 S	110	60	(80)C	90	80	100	60	130	130
27	70	70	100	130	110	130	80	110	40	50	70 P	90	70	110 P	120	60	80	140	100	110 P	70	150	100	(90) J F
28	120 F	100 F	110	100 F	80	150	170	160	100 P	40	30	100	90	90	120	90	70	70	70	100	60	70	60	100
29	70	70	70	70	100	130	90	80 S	30	80	120	100	60	100	90	60	120	120 P S	100	140	90	130	100	80
30	90 F	60	110 F	150 S	110 F	90 Z	130 F	90	60	50	60	80	120	90	130	100	60	C	(80) J	70	150	110	90	120
31	90	140	100	C	C	C	C	C	C	C	C	C	C	C	C	C	70 P	B	80	60	90	100	80	70
Median Value	90	80	100	95	100	90	110	90	70	70	60	80	80	80	80	80	80	80	90	80	90	110	90	90
Count	31	29	31	30	30	29	29	28	29	27	27	28	29	29	26	27	31	28	29	31	28	31	29	31

Sweep 1.2 Mc to 12.2 Mc in 15 min Manual

K 12

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

IONOSPHERIC DATA

Jan. 1950 | f_0F2 | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3.9 F	3.7	2.7	2.9	2.7	3.3	3.0	3.2	8.1	11.2	13.3	15.0	15.1	16.1 P	15.1	16.3	15.8	9.9	9.7	7.7	7.1	6.1	4.0	4.3
2	3.8	3.3	3.1	3.3 J	2.5	2.8	2.6	3.9	8.3	9.6	10.4	14.2	13.9	12.0	9.4	9.7	9.1	8.0	7.1	6.9	7.0	5.0	5.9	5.0 Z
3	(4.3) S	4.4 Z	3.5	3.1	3.4	2.9	2.9	5.2	7.3	10.3	10.7	13.0	13.3	13.1	12.3	12.8	12.0	8.6	6.7	7.3	7.7	5.8	5.1 F	4.8
4	4.7	4.0 F	4.4 B	4.9	2.4	3.0	2.3	4.1	9.5	11.4	12.3	11.8	14.7 J	11.7	11.1	10.6	10.5	9.3	9.1	7.2	7.9	5.5	5.1	5.0
5	4.5	4.4	4.3	3.6	3.5	3.2	3.4	3.7	7.6	10.0	12.0	11.4	11.7	12.1	11.6	12.1	13.2	10.2	8.0	7.7	6.5	4.1	3.7	3.8
6	3.0	3.2	3.8	3.3	3.0	2.7	2.7	4.2	8.6	8.6	11.4	11.7	13.0	13.7	14.6	14.9	13.6	11.8	10.5	7.8	5.4	4.7	5.4	4.0
7	2.9	2.7	2.6	2.6 F	2.8	2.9	2.9	4.2	9.3 P	10.4	13.6	13.4	14.4	14.3	13.6	12.8	11.3	10.1	9.7	8.7	7.3	4.6	5.2	4.7
8	3.1	3.6	3.6	3.7	3.8	3.1	3.0 T	5.8	9.2	10.9	11.4	13.6	14.4	13.6	12.8	11.4	9.3	7.6	6.5	8.1	6.4	4.2 F	4.4 F	4.4
9	3.1 J	2.6	2.9	2.9	2.9	2.6	2.6	4.6	7.5	10.1	10.6	11.8	12.8	12.9	12.7	11.1	10.8	9.3	8.3	5.7	6.0	5.5	3.7	3.9
10	3.8	3.5	C	C	C	C	C	C	C	9.2	10.3	11.0	11.7	13.2	D	15.4 J	14.7 J	12.2	6.7	7.7	7.7	5.9	3.4	3.4
11	3.3	3.4 Z	3.1	3.6	2.8	3.2	3.3	5.3	8.1	8.5	10.9	14.4	14.3	14.5	B	15.2 P	14.8	13.0	10.6	6.6	6.6	6.2	4.5	4.8
12	4.3	4.2	4.0	3.8	3.1	[2.8] C	2.6	3.8	7.5	9.2	10.9	C	C	12.3	10.1	11.6	12.3	8.5	5.6	7.1	6.7	4.9	3.4	3.2
13	3.5 Z	3.2	3.0 V	3.4	3.5	3.2	3.4	4.1	7.7	8.8	11.0	12.8	13.3	12.5	11.6	11.4	12.1	11.1	8.3	6.9	6.7	5.6	4.2	4.2
14	4.1	3.4	3.4	3.3 Z	3.5	3.3	2.8 F	3.8	7.9	9.0	10.9	12.1	11.5	12.8	11.9	11.9	12.2	12.0	7.1	6.3	7.2	6.2	4.0	4.6
15	4.1	3.7	3.8	4.1	3.6	3.2	3.4	4.3	8.2	11.6	12.6	13.4	13.1	13.0	12.0	11.6	11.2	9.6	8.4	7.3 T	7.0	6.3	4.8	5.4
16	4.8 J	5.1	4.9	3.9	2.6	3.0 F	4.2	C	C	C	C	C	C	C	C	C	C	C	C	C	6.5	4.8	3.5	3.3
17	3.5	3.4	3.5	3.6	3.4	3.0 F	3.4 F	4.6	7.4	8.4	8.5	12.2	11.5	10.6	10.4	9.7	10.2	9.2	6.6	6.3	4.9	3.5	3.6	3.8
18	4.0	3.5	3.7	4.0	4.9	2.9	2.8	5.0	8.7	9.0	9.3	11.0	13.5	13.1 P	13.7	10.9	10.7	9.5	8.8	5.3	6.6 F	5.9 S	4.1	3.6
19	3.8	3.7	3.3	3.1 Z	3.0	2.9	3.0	4.3	7.4	9.3	9.3	11.0	12.2	13.0	12.6	11.8	11.9	10.6	7.4	6.2	6.1	5.0	4.8	3.3
20	3.1	3.2	4.0	2.8	3.4	3.0	3.3	4.4	7.6	8.9	11.1	11.8	13.7	13.4	13.1	12.0	11.9	[10.5] C	9.1	7.3 S	8.7	7.1	4.8	4.2
21	4.3	4.3	[4.2] C	4.2 Z	F	4.5	4.5	5.7	9.5	12.0	12.3	12.2	11.9	12.8	11.8	10.5	10.6	8.7	8.0	8.0	7.5	6.2	4.6	4.8
22	3.8	3.8	3.5	3.1	3.2	3.4	3.2	5.0 J	8.2	10.4	10.3	11.4	12.0	13.0	13.2	13.2	11.8	11.4	11.0	9.5	7.9	5.9	4.0 J	3.3
23	3.3	3.6	3.4	3.0	3.0	3.0	2.8	4.3	7.4	9.2	9.6	10.0	10.0	11.5	12.6	12.2	10.4	11.0	(10.2) P	8.7	8.9	6.9 J	3.7 T	3.0
24	3.0	3.1	3.1	3.0	3.4	3.7	2.7	4.0	8.4 P	9.5	11.9	12.4	10.8	12.0	12.1	10.2	9.8	10.0	9.5	8.1	7.1 P	6.5	6.6	4.2
25	3.7	3.9	3.7	3.3 H K	3.4 K	3.4 Z K	3.9 S K	5.2	8.0	11.9	12.9	11.9	13.8	15.0	15.4 P	13.7	12.9	11.4	12.4	9.2	7.7	7.2	(5.9) R	4.5 P
26	4.5	5.1	4.6	4.7	4.2	3.1	3.3	4.9	9.0	10.7	10.6	12.0	11.7	11.5	12.9	12.0	11.2	11.5	10.8 H	8.6	7.1	7.2	6.1 J	5.1
27	5.0	4.7	4.2	3.9	3.7	3.3	3.3	5.2	9.0	10.4	11.7	11.1	10.9	10.9	10.5	11.1	9.8	9.0	8.2	8.0	8.0	7.3	4.4	4.3
28	4.2	3.8	3.8	3.7	3.1	3.1	2.9	4.8	9.1	11.3	11.1	11.7	11.7	12.9	11.8	11.3	10.4	10.7	9.9	7.3	6.4	6.2	5.4	4.5
29	4.2	4.2 F	3.9	4.1	3.7	3.0	3.3	5.0	8.3	11.7 P	13.0	13.3	12.4	13.0	12.2	11.1	10.8	10.7	9.4	6.6	6.4	6.0	4.9	4.0
30	3.7	3.6	3.3	3.5	3.1	2.8	2.8 T F	4.5	8.3	10.8	11.8	12.9	13.7	12.3	13.1	13.1	12.0	11.1	10.8	9.2	6.7 S	6.5	5.3	3.8
31	3.8	3.7	3.9	4.0	3.3	3.5	2.6	4.0	7.8	12.6	12.7	13.3	13.6	13.6	12.0 F	11.6	10.5	10.7	11.0	7.7	5.9	5.1	4.5	4.6
Median Value	3.8	3.7	3.6	3.6	3.3	3.0	3.0	4.4	8.2	10.2	11.1	12.1	13.0	13.0	12.3	11.7	11.2	10.4	9.0	7.4	7.0	5.9	4.5	4.2
Count	31	31	30	30	29	30	30	29	29	30	30	29	29	30	29	30	30	30	30	30	31	31	31	31

Sweep 1.2 Mc to 15.5 Mc in 15 min Manual

Y 1

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan. 1950 | h_pF2 | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	370F	320	400	450	380	420	390	440	300	290	320	350	310	310F	320	320	290	320	290	300	280	310	290	260
2	260	290	240	(280)J	430	370	270	370	270	260	290	310	300	300	320	290	260	280	300	290	260	370	350	360Z
3	(450)Z	370F	350	370	320	400	340	330	260	260	300	300	300	310	310	320	290	240	330	310	270	300	400F	360
4	350	390F	330B	270	380	410	390	330	280	290	260	300	310	300	330	320	300	260	310	320	270	340	330	300
5	340	380	380	370	270	290	350	320	260	260	300	280	310	330	330	340	290	260	280	280	210	220	240	350
6	360	390	410	310	290	280	340	350	270	250	280	310	320	320	340	340	320	330	290	250	320	390	290	290
7	320	390	410	450F	420	400	380	340	280F	280	320	300	320	320	330	340	290	300	290	270	280	310	310	290
8	370	390	460	390	370	340	(400)J	300	290	310	300	320	340	340	310	310	270	260	310	290	270	280F	450J	300
9	(250)J	400	390	320	300	410	400	300	260	280	300	290	300	310	310	320	320	280	300	280	290	300	450	330
10	330	340	C	C	C	C	C	C	C	280	280	290	310	340	D	(330)J	(290)J	280	320	320	310	250	300	270
11	340	330Z	390	390	320	300	420	340	260	260	330	300	300	330	B	320F	330	300	290	290	310	340	380	430
12	420	340	390	300	300	(340)C	370	300	250	270	300	C	C	310	340	340	300	260	270	340	260	310	350	360
13	350Z	400	400V	370	320	380	310	350	260	290	310	300	300	300	310	310	310	290	300	310	280	340	360	360
14	300	270	330	420Z	390	310	340F	350	270	270	280	300	310	300	320	320	310	300	310	350	300	320	330	420
15	350	300	390	320	320	430	400	330	290	280	320	290	320	300	320	340	300	300	290	(290)J	290	300	340	370
16	(350)J	300	310	340	330	400F	400	C	C	C	C	C	C	C	C	C	C	C	C	C	270	260	310	400
17	390	360	360	360	370	(370)F	390F	310	260	270	260	300	320	310	300	310	300	270	310	290	280	350	400	360
18	330	340	330	310	300	370	320	340	280	270	270	350	320	300F	330	310	300	290	300	340	310F	260S	300	400
19	400	320	370	370Z	340	330	370	340	270	280	270	310	310	320	320	340	310	280	280	320	320	330	290	420
20	360	340	340	320	320	260	400	310	270	290	310	330	320	320	340	350	320	(300)J	290	330S	340	270	320	400
21	420	430	(420)G	420Z	F	360	310	330	280	300	280	310	290	310	320	310	310	280	310	310	300	280	300	390
22	380	350	330	380	400	330	370	(330)J	290	290	290	280	320	320	340	340	330	320	290	280	330	310	(370)J	340
23	410	360	350	350	340	330	400	340	250	280	280	320	320	360	340	300	350	300	(290)F	290	280	(260)J	(250)J	300
24	370	410	390	400	320	310	350	360	300F	290	300	290	320	320	320	320	330	310	300	340	360F	300	290	370
25	440	420	410	510H	450K	490Z	470S	340	290	330	300	390	370	350	350F	360	340	330	300J	320	300	310	(410)E	400F
26	410	340	320	320	310	400	370	320	300	290	310	290	330	350	350	330	340	310	340H	280	340	310	(310)J	370
27	360	340	370	370	350	420	390	330	300	300	310	300	320	360	320	330	330	310	330	320	340	300	330	360
28	340	330	360	340	270	310	350	420	290	300	310	360	360	380	360	390	340	340	320	300	360	340	360	400
29	410	400F	410	380	300	420	340	400	320	290F	340	310	380	350	320E	360	370	310	310	310	330	350	300	330
30	380	330	370	350	350	440F	(430)F	370	310	300	320	320	330	360	360	340	310	300	330	320	350S	320	340	410
31	410	390	390	340	450	370	320	390	330	300	300	330	340	300	330F	340	340	330	290	290	310	320	370	360
Median Value	360	350	375	365	330	370	370	340	280	285	300	300	320	320	325	330	310	300	300	305	300	310	330	360
Count	31	31	30	30	29	30	30	29	29	30	30	29	29	30	28	30	30	30	30	30	31	31	31	31

Sweep 1.2-Mc to 4.85-Mc in 15-min Manual

Y 2

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

IONOSPHERIC DATA

Jan. 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	300	250	320	360	370	380	370	370	280	250	250	280	290	280	300	290	240	220	220	210	220	220	210	210
2	200	200	210	210	300	300	290	300	250	250	240 A	300	270	250	220	220	250	230	220	220	220	250	300	250
3	270	300	300	A	A	320 A	300	(260) A	240	230	260	270	270	260	270	280	260	210	220	230	220	200 A	290	280
4	280	360 A	270	220 A	B	380	350	290	260	240	230	250	270	260	290	230	240	230	230	220	240	240	260	250
5	320	320	290	320	230	250	320	290	250	240	250	240	280	270	300	300	260	220	240	250	230	260	280	290
6	300	370	380	260	250	250	280	280	250	230	250	260	280	270	300	280	270	260	220	200	210	230	280	260
7	300 A	310	330	380	330	330	310	290	240	260	270	260	260	270	280	280	250	240	230	220	220	240	250	240
8	300	310	310	300	290	300 A	290	300	290	250	260	290	270	280	270	270	240	230	230 F	260 F	220	220	280	250
9	240	310	300	260	250	390	320	270	250	240	250	270	270	290	280	290	280	260	230	210	240	250	340	290
10	290	260	C	C	C	C	C	C	C	250	260	270	280	280	260	260	270	220	220	280	240	220 A	240	300
11	290	(300) A	310	320	300	260	350	320	240	240	300	280	270	270	270	270	270	250	220	220	230	260	290	320
12	310 F	300	310	260	250	(290) G	330	280	230	250	260	C	C	260	290	300	250	240	210	270	220	220	250	310
13	300	300	350	310	280	330	280	260	250	270	280	280	280	280	270	270	260	220	240	230	240	270	300
14	270	240	290	330	320	220	290	270	250	250	250	270	260	270	290	290	270	270	240	240	260	260	270	300
15	300	290	300	260	290	310	340	280	240	250	250	260	260	270	270	250	260	240	220	230	240	230	280	280
16	290	240	250	290	280	300	320	C	C	C	C	C	C	C	C	C	C	C	C	C	220	210	250	290
17	300	300	350	310	280	220	280	270	240	230	240	280	290	250	270	280	270	270	220	230	230	250	310	300
18	270	270	270	270	230	360	280	280	250	240	240	290	290	260	290	280	260	260	220	270	240	220	240	300
19	300	290	300	290	270	260	280	280	220	250	240	260	260	280	260	250	250	230	230	300 A	260	230	220	330
20	320	300	290	310	260	240	320	260	230	250	250	270	290	280	290	290	270	250	260	210	210	270	220	230	270
21	330	330	(330)	330	300	270	250	290	240	250	250	220	240	280	280	280	260	240	260 A	260	260	230	230 A	370
22	340	280	270	330	340	280	250	270	250	260	260	260	260	270	300	270	270	260	230	220	260	240	260	300
23	350	300	270	300	300	260	250	280	240	240	250	300	270	300	300	270	240	250	270	250	230	220	220	280
24	320	330	310	300	280	270	(280) B	300	280	230	280	280	250	270	300	260	250	270	240	220 A	240	240	230	270
25	350	350	330	420 H	370 K	410 K	360 K	260	260	250	250	300	300	300	280	270	240	300	240	220	220 A	220	240	290
26	310	280	240	270	240	320	290	280	240	(250) A	250	260	260	270	280	290	290	250	270 H	220	240	250	240	260
27	290	280	290	260	250	310	320	280	250	240	270	280	250	300	280	280	270	250	240	260	270	260	270	300
28	290	300	300 A	280	230	250	310	330	360	270	280	280	280	340	280	300	300	260	270	240 A	250	250	250	270
29	300	300	330	300	260	320	390	360	300	270	290	240	330	300	300	260	280	260	250	240 A	240	250	240	280
30	290	290	300	300	260	370	360	300	280	260	280	270	290	300	300	280	270 N	290	230 A	230	280 H	250	280	360
31	320	320	310	290	340	270	240	300	270	270	250	250	300	280	240	290	260	260	240 A	220	270	250 A	290	300
Median Value	300	300	300	300	280	300	300	280	250	250	250	270	270	275	280	280	260	250	230	230	240	240	260	290
Count	31	31	30	29	28	30	30	29	29	30	30	29	29	30	30	30	30	30	30	31	31	31	31	31

Sweep 1.2 Mc to 12.5 Mc in 15 min Manual

Y 3

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan 1950 | f_0F_1 | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							Q	Q	Q	Q	L	L	B	L	L	L	L	Q						
2							Q	Q	Q	L	A	L	L	L	A	A	A	A						
3							Q	A	Q	L	L	4.5^P	L	L	L	L	L	Q						
4							Q	Q	Q	Q	Q	L	L	L	L	Q	Q	Q						
5							Q	Q	L	L	L	L	L	L	L	L	Q	Q						
6							Q	Q	Q	Q	Q	L	L	L	L	L	L	Q						
7							Q	Q	Q	L	L	L	L	L	L	L	Q	Q						
8							Q	Q	L	L	Q	L	L	L	L	L	Q	Q						
9							Q	Q	Q	Q	L	L	L	L	L	L	L	L						
10							C	C	C	Q	L	L	L	L	L	L	L	Q						
11							Q	Q	Q	A	L	L	L	L	L	L	L	Q						
12							Q	Q	Q	L	L	C	C	L	L	L	Q	Q						
13							Q	Q	Q	L	L	L	L	L	L	L	L	Q						
14							Q	Q	Q	L	L	L	L	L	L	L	L	L						
15							Q	Q	Q	Q	L	L	L	L	L	Q	Q	Q						
16							Q	C	C	C	C	C	C	C	C	C	C	C						
17							Q	Q	Q	Q	L	L	L	L	L	L	L	L						
18							Q	Q	Q	Q	Q	L	L	L	L	L	Q	Q						
19							Q	Q	Q	Q	Q	L	L	L	L	L	Q	A						
20							Q	Q	Q	L	L	4.6	L	L	L	L	L	Q						
21							Q	Q	Q	Q	Q	Q	Q	L	L	L	Q	A						
22							Q	Q	Q	Q	Q	L	L	L	L	L	Q	Q						
23							Q	Q	Q	Q	Q	L	L	L	L	L	Q	Q						
24							B	Q	Q	Q	L	L	Q	L	L	L	Q	Q						
25							Q	Q	Q	Q	Q	L	(5.0^P)	L	L	Q	Q	L						
26							Q	Q	Q	A	Q	Q	L	L	L	L	L	Q						
27							Q	Q	Q	Q	L	L	Q	L	L	L	L	Q						
28							Q	Q	Q	L	L	L	L	L	L	L	L	Q						
29							Q	L	Q	Q	L	Q	L	L	L	Q	Q	Q						
30							Q	Q	L	Q	L	L	L	L	L	Q	Q	L						
31							Q	Q	Q	Q	Q	Q	L	L	Q	L	Q	Q						
Median Value							—	—	—	—	—	—	—	—	—	—	—	—						
Count							0	0	0	0	0	2	1	0	0	0	0	0						

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Y 4

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

IONOSPHERIC DATA

Jan 1950 | h'F1 | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							Q	Q	Q	Q	230	220	210	220	230	250	220	Q						
2							Q	Q	Q	230	A	270	240	230	A	A	A	A						
3							Q	A	Q	220	220	210	230	220	220	210	220	Q						
4							Q	Q	Q	Q	Q	220	230	240	220	Q	Q	Q						
5							Q	Q	Q	230	220	230	220	240	250	210	Q	Q						
6							Q	Q	Q	Q	Q	220	230	230	220	250	250	Q						
7							Q	Q	Q	230	230	220	220	240	250	250	Q	Q						
8							Q	Q	240	230[A]	Q	250	230	240	230	220	Q	Q						
9							Q	Q	Q	Q	230[A]	220	200	220	240	230	240	230						
10							C	C	C	Q	200	250	230	240	240	230	240	Q						
11							Q	Q	Q	A	250[F]	220	260	250	240	240	240	Q						
12							Q	Q	Q	230	230	A	C	230	220	240	Q	Q						
13							Q	Q	Q	240	240	A	220	240	230	230	250	Q						
14							Q	Q	Q	220[A]	230	250	230	230	250	A	240	250						
15							Q	Q	Q	Q	230[F]	220	240	230	240	Q	Q	Q						
16							Q	C	C	C	C	C	C	C	C	C	C	C						
17							Q	Q	Q	Q	220	240	220	220	260	220	230	230						
18							Q	Q	Q	Q	Q	230	220	240	270	A	Q	Q						
19							Q	Q	Q	Q	Q	230	220	240	220	220	Q	A						
20							Q	Q	Q	230	230	200	230	230	240	260	250	Q						
21							Q	Q	Q	Q	Q	Q	Q	220	240[B]	230[E]	250	Q						
22							Q	Q	Q	Q	Q	230	230	240[B]	230[E]	250	Q	Q						
23							Q	Q	Q	Q	Q	220	220	A	240	A	Q	Q						
24							B	Q	Q	Q	200	250	Q	230	250[A]	A	Q	Q						
25							Q	Q	Q	Q	Q	230	220	230	260	Q	Q	260						
26							Q	Q	Q	A	Q	Q	230	230	230	230	240	Q						
27							Q	C	Q	Q	240	250	Q	240	250	250	250	Q						
28							Q	Q	Q	250	250	260	260	250	250	280	270	Q						
29							Q	230	Q	Q	250	Q	240	220	260	Q	Q	Q						
30							Q	Q	240	Q	230	230	230[A]	240	240	Q	Q	A						
31							Q	Q	Q	Q	Q	Q	230	280	Q	250	Q	Q						
Median Value							–	–	–	230	230	230	230	230	240	235	240	–						
Count							0	1	2	10	18	24	26	29	28	20	13	4						

Sweep 1.2 Mc to 18 Mc in 15 min Manual

Y 5

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan 1950 | f_0E | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							B	B	A	A	3.0	A	B	3.6 J F	A	A	A	A						
2							E	B	2.2 A	2.8	A	A	3.6 J	(3.7) A	A	A	A	A						
3							E	A	A	2.6	3.4 A	3.4 A	3.5	(3.6) A	A	3.0	2.6	2.0						
4							B	A	2.2 A	A	3.2	A	A	A	3.5	3.1	A	A						
5							B	B ·	(2.2) A	2.8	3.2	3.4	3.6	A	A	3.4	2.7	2.3						
6							E	E	2.2 A	A	3.0 A	B	A	A	A	A	A	A						
7							E	B	A	F	A -	3.3	3.6 J	3.6	3.3	3.2	2.6 A	2.0 A						
8							E	B	2.4 J	A	A	A	A	A	3.3	3.1	2.7	2.0						
9							E	B	2.2 F H	2.7 A	A	3.3	3.5	3.5	A	AF	2.7	2.2						
10							C	C	C	3.1	B	3.6 J	A	A	B	A	A	2.2 A						
11							E	1.5 J	1.9 A I	AF	AF	A	3.6 A F	3.6 A F	3.4	A	2.7 A	2.0 A						
12							E	B	2.0 B	A	A	A	C	A -	3.4	3.1 P	2.8	2.9						
13							B	1.5 B	2.1	AF	3.2 A F	A	3.6 A	3.5	3.3	3.1	2.8	2.1						
14							E	1.4 J	2.2	A	A	A	A	A	A	A	A	B						
15							E	1.3 B	2.1 F	2.8 A F	A	3.4 J A	3.8 A	3.6	3.5 B	A	(2.6) A	2.1						
16							B	C	C	C	C	C	C	C	C	C	C	C						
17							E	B	2.1 A	2.7	3.0	3.3	3.5	3.5	A	A	A	A						
18							E	E	2.2	A	A	A	B	A	A	A	B	A						
19							E	1.5 B	2.2	2.8	3.2	3.4	A	3.7	3.4	3.2	2.9	A						
20							B	1.3 J B	1.8 B	2.7 A	3.1	3.4	3.5	3.7	A	A	A	A						
21							E	(1.2) J	2.6 F	(3.0) A	3.4	3.8 A	3.6 A	3.5	A	3.4 A	3.4	A						
22							E	B	2.3 H	3.0 B	A	B	B	B	B	A	(3.0) A	A						
23							E	1.3 J	(2.3) H	2.9	3.3 B	3.7	3.6	3.6 A	A	A	3.0 A	2.6						
24							B	B	(2.2) J	2.9	3.2	3.5	3.7	3.8	A	A	A	(2.1) A						
25							E	B	2.2	2.9	3.2 A	3.5 H	3.7	3.7	3.8	3.7	3.3	A						
26							E	A	2.4	A	B	B	A	A	A	A	B	A						
27							E	1.4 J	A	A	3.2 B	3.5	A	3.9	3.4	A	(3.0) A	2.4						
28							E	B	2.6 B	A	3.3	3.5	3.7	3.7	A	A	A	A						
29							E	E	2.2 J B	2.9 F	3.4	3.5	3.6 A	3.6	3.4	A	A	2.4						
30							F	1.4 J	2.3	3.2	B	B	A	3.5	3.3 J	3.2 J	B	A						
31							E	(1.3) B	2.3 H	3.0 A	(3.4) A	(3.6) A	4.0	3.8 B	3.5	A	3.1	A						
Median Value							F	1.3	2.2	2.9	3.2	3.5	3.6	3.6	3.4	3.2	2.8	2.1						
Count							23	14	25	17	17	17	17	20	13	11	16	14						

Sweep 1.2 Mc to 6.5 Mc in 1.5 min Manual

Y 6

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

IONOSPHERIC DATA

Jan. 1950 | h'E | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							B	B	B	A	110	A	120	110	A	100	B	A						
2							E	B	A	110	A	A	110	110	A	A	A	A						
3							E	A	A	100	110	110[A]	110	110	A	100	100	B						
4							B	A	120[B]	A	100	A	110	100	100	100	A	A						
5							B	B	B	100	100	100	100	100[A]	110	110	110	120						
6							E	E	A	A	110	100[B]	100[A]	100	110	A	A	A						
7							E	B	A	120[F]	A	110	110	110	110	110	110	120[A]						
8							E	B	110	A	A	A	A	A	110	110	110	110						
9							E	B	150[H]	110[A]	A	110	100	110	A	AF	110	120						
10							C	C	C	110	110	110	110	110	110	A	A	A						
11							E	B	A	AF	AF	110[A]	110	110[F]	110	A	A	110[A]						
12							E	B	B	A	A	A	C	A	110	110	110[A]	A						
13							B	B	B	110[F]	110	A	110[A]	110[A]	110	120	110	110						
14							E	B	A	A	A	A	A	A	A	A	A	B						
15							E	B	120[F]	120[F]	100	110[F]	110	110	(120)[A]	130	120	110						
16							B	C	C	C	C	C	C	C	C	C	C	C						
17							E	B	A	100	110	110	110	110	110[A]	A	A	A						
18							E	E	130	A	A	A	110	A	A	A	B	B						
19							E	B	130	120	110	110	110[A]	110	110	130	120	A						
20							B	B	B	110[F]	110	110	110[A]	110	A	A	A	B						
21							E	E	110[F]	120[A]	120	120[A]	110	110	110	110[A]	110	B						
22							E	B	120[H]	130[B]	A	110	110	B	B	A	A	A						
23							E	B	130[H]	120	120	120	110	110	110	120	120	120						
24							B	B	A	110[A]	110	110	110	110	120	A	A	B						
25							E	B	(120)[B]	110[A]	110	110[H]	110	110	110	130	130	A						
26							E	A	110	A	B	120	110	A	110	100	110	A						
27							E	B	A	A	110	110	(110)[A]	110	110	A	110	110						
28							E	B	B	130	130	130	130	130	A	A	A	A						
29							E	E	B	120	130	110	120	110	110	110	A	130						
30							E	B	140[A]	130	110	110	110	110	120	120	B	A						
31							E	B	120[H]	100	120	110	120	120	120	A	140	A						
Median Value									120	110	110	110	110	110	110	110	110	115						
Count									13	20	20	22	27	24	21	16	15	10						

Sweep 1.2 Mc to 15 Mc in 15 min Manual

Y 7

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan 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	3.2	2.6	2.5	G	G	G	B	B	3.4	4.0	3.8	4.4	G	G	4.7	5.2	4.5	3.1	3.4	3.8	3.8	4.2	3.2	2.3
2	2.1	2.2	2.9F	2.8	G	G	G	G	2.8Y	G	5.8	5.2	3.7	3.8	4.2	5.0	3.8	4.0	2.6	2.6	G	G	3.8	3.2
3	2.5	3.3	2.6	2.4	3.0	3.4	3.6F	5.5	4.2	4.2Y	4.4	3.8	G	5.0	3.4	(4.8)Y	3.0	3.0	G	G	G	2.4	G	3.0F
4	3.0	3.2F	3.0F	3.2	3.4	4.0	B	(3.8)B	3.2	3.4	4.6F	5.0	4.6	4.8	5.2	4.8	8.2	5.8	3.0	3.6	3.5	3.4F	3.0F	2.5
5	2.6	1.7	G	G	G	3.0	2.4	3.2Y	2.2	4.1	4.8	6.0Y	6.6	4.2	3.6	G	G	B	2.6	3.0	3.8	G	G	G
6	G	G	G	G	G	G	G	(1.9)B	2.7	3.0	3.2	B	3.4	4.0	4.3	4.6	4.6	3.1	4.0	3.7	2.8	3.6	3.3	2.6
7	2.9	G	G	G	2.8F	2.4	3.0Y	2.5F	3.7	4.6F	3.8F	4.6Y	4.6Y	4.0	G	3.7Y	G	3.0Y	B	2.2	3.2	G	G	2.2
8	3.0	2.8	G	G	G	2.9	G	3.8	G	3.8	3.6	4.2	4.2	4.0	4.5Y	G	3.7Y	4.2	4.4F	3.8F	3.2	3.2	2.4	3.2
9	2.4	2.2	G	G	G	G	G	B	G	4.6	5.2	5.5	4.2	G	4.9F	4.8F	G	2.4	3.4	3.0	2.6	G	G	G
10	G	G	C	C	C	C	C	C	C	G	G	G	G	G	G	3.2	2.8	2.4	3.0	3.4	4.0	5.1	3.1	3.0
11	3.1	3.3	3.5	3.2	3.0	G	G	G	3.6	4.8F	5.0F	4.6	4.8F	5.2F	4.8	3.4	3.4	3.2	3.0	2.4	2.5	2.7	1.9	2.4F
12	2.2	2.9	2.5F	3.0	3.0	C	2.0	2.4	G	3.5	3.4	4.2	C	4.2	4.2	3.7	3.8	G	G	(3.8)B	2.0	G	2.0	1.8
13	1.8	1.6	2.0F	2.4F	2.4F	G	2.0	G	G	3.8F	3.4	6.2	4.2	5.4	4.1	4.0Y	G	2.6Y	2.6	2.3	2.1	G	G	G
14	G	G	G	2.7	3.2	2.0	G	3.0F	2.9	3.2	3.6	3.4	4.0	4.0Y	3.9	4.4Y	4.4	3.1	2.3	G	G	G	G	G
15	G	3.0	2.8	2.8F	3.2	2.0	2.3	G	2.7	3.4F	4.4F	4.8F	4.8Y	4.6	4.8Y	4.2Y	3.6	G	2.4	G	G	3.2	2.4	2.4B
16	2.4	2.4	2.0	1.7	G	2.0	2.9B	C	C	C	C	C	C	C	C	C	C	C	C	C	G	G	G	G
17	G	2.2	3.1	2.0	G	G	G	2.4Y	2.6	3.4	5.4	4.8	5.1	5.0	4.4	4.2	3.6	2.8	G	2.5	G	1.8	G	G
18	G	G	G	G	G	G	G	G	G	3.0B	3.2	4.2	G	4.6	4.4	4.3	4.3	3.3B	3.2	G	G	G	G	G
19	G	G	G	G	G	G	G	G	G	G	3.8	4.2	4.2	G	4.0	G	G	5.6	5.4	5.0	2.9	2.6	2.5	1.8
20	2.5B	1.9B	2.2	G	G	G	2.6B	G	G	3.7	3.2	4.5Y	4.7	4.2	4.6	4.2	3.6	2.8	G	G	G	2.6	G	G
21	3.0F	2.6F	C	G	G	G	G	G	3.6	4.8Y	G	6.5Y	5.4	4.7	4.6	4.4	4.6Y	5.7Y	4.4	5.0	3.5	2.7	2.1	2.6
22	2.4	G	G	G	G	G	G	2.2	G	G	3.4	G	B	B	B	(3.8)B	4.2	3.3	2.5	B	G	G	G	G
23	G	G	G	G	G	G	G	G	G	G	4.0	4.5Y	(4.6)Y	4.8Y	4.7Y	4.2	G	G	2.7	2.2	(3.4)B	3.4	G	(2.0)B
24	2.2	2.8	G	G	G	G	B	G	2.9	3.7	4.1	4.5	4.4	G	G	4.8	3.8	3.4	G	2.4	3.6Y	G	G	G
25	G	G	G	G	G	G	G	2.8	G	4.5F	4.6Y	4.5	4.3	G	G	5.0Y	3.6	3.2	2.4	2.8	3.4	G	G	G
26	G	G	G	G	G	G	2.4	2.6	G	(5.0)B	G	B	3.8	4.3	G	3.8	G	4.0	G	G	G	G	G	G
27	G	G	G	G	G	G	B	2.6	3.8	4.4	4.0	(4.6)B	4.2	4.5Y	4.6B	4.7Y	5.0	G	3.0	G	G	G	G	G
28	G	2.2	2.1	2.2	G	G	2.5	2.8	G	G	G	4.9	5.2	5.4Y	4.8	3.8	3.6	3.6	3.3	3.4	2.4	2.4	2.6	G
29	G	G	G	G	G	G	G	G	G	5.1Y	4.8F	5.0F	5.0F	5.1	4.4	G	4.6	G	(3.8)B	1.9	1.9	G	G	G
30	G	G	G	G	G	G	G	G	2.8	G	G	4.4Y	G	G	G	G	9.3	5.0	4.2	G	G	G	G	G
31	G	G	G	G	G	G	G	G	3.8F	4.6F	4.6Y	4.2	G	4.6Y	4.0	4.2	G	3.8	3.0	2.4	3.0	2.6	2.6	2.8Y
Median Value	1.8	1.7	G	G	G	G	G	G	2.6	3.7	3.8	4.5	4.2	4.2	4.3	4.2	3.6	3.1	3.0	2.4	2.4	G	G	1.8
Count	31	31	29	30	30	29	26	27	29	30	30	28	28	29	29	30	30	29	29	29	31	31	31	31

Sweep 1.2 Mc to 12.5 Mc in 15 min Manual

Y 8

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

IONOSPHERIC DATA

Jan. 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	2.8F	2.9	2.6	2.4	2.7	2.5	2.6	2.5	3.1	3.2	3.0	2.9	3.0	3.2P	3.0	3.0	3.3	3.0	3.1	3.1	3.2	3.1	3.1	3.3
2	3.4	3.1	3.1	(3.2)J	2.4	2.7	2.6	2.7	3.3	3.3	3.2S	3.2	3.1	3.3	3.1	3.3	3.6	3.2	3.1	3.1	3.3	2.8	2.9	3.0Z
3	(2.9)Z	2.7Z	2.8	2.7	2.9	2.5	3.0	2.9	3.3	3.3	3.1	3.1	3.3	3.0	3.0	2.9	3.3	3.4	2.9	3.0	3.5	3.1	2.5F	2.8
4	2.8	2.6F	2.9B	3.3	2.7	2.6	2.8Z	2.8	3.2	3.2	3.4	3.2	3.1	3.1	2.9	2.9	3.0	3.2	3.0	3.0	3.4	2.9	2.8	3.1
5	2.9	2.7	2.6	2.8	3.3	3.2	2.9	2.9	3.4	3.3	3.2	3.2	3.1	2.9	3.0	2.9	3.1	3.3	3.1	3.3	3.1	2.9	2.8	2.8
6	2.8	2.7	2.7	3.0	3.0	3.2	2.7	2.8	3.3	3.4	3.3	3.0	3.0	3.1	2.9	2.9	3.0	2.9	3.2	3.3	3.1	2.6	3.2	3.2
7	2.9	2.5	2.6	2.5F	2.5	2.6	2.6	2.9	3.2P	3.2	3.0	3.1	2.9	3.0	2.8	2.8	3.1	3.0	3.2	3.2	3.2	3.1	3.0	3.2
8	2.8	2.6	2.5	2.7	2.9	2.9	(2.6)J	3.0	3.2	3.1	3.1	3.1	3.0	2.9	3.0	3.1	3.5	3.4	3.0	3.2	3.2	3.1F	2.5F	3.1
9	(3.5)J	2.6	2.6	3.0	3.1	2.6	2.6	3.0	3.4	3.3	3.2	3.2	3.1	3.0	3.0	13.0	2.9	3.1	3.1	3.1	3.1	3.1	2.4	2.8
10	2.9	2.9	C	C	C	C	C	C	C	3.2	3.2	3.2	3.2	2.9	D	(2.9)J	(3.3)J	3.2	2.9	3.0	3.1	3.3	3.1	2.9
11	2.8	3.0Z	2.9	2.6	2.9	3.1	2.6	2.8	3.4	3.4	2.9	3.3	3.3	2.9	.8	3.1P	2.9	3.0	3.2	3.1	2.9	2.7	2.7	2.5
12	2.4	2.8	2.6	3.1	3.2	(3.0)J	2.8	3.0	3.6	3.3	3.1	C	C	3.1	2.9	2.9	3.2	3.4	3.3	2.9	3.5	2.9	2.7	2.8
13	2.7Z	2.6	2.7V	2.9	3.0	2.7	3.1	2.9	3.3	3.2	3.3	3.2	3.3	3.1	3.0	3.0	3.1	3.3	3.0	3.0	3.2	2.8	2.8	2.7
14	3.1	3.3	2.8	2.6Z	2.7	3.0	2.7F	2.8	3.2	3.4	3.2	3.2	3.0	3.2	2.9	3.0	3.0	3.0	3.1	2.8	3.1	3.0	2.9	2.6
15	2.9	2.9	2.8	3.1	3.0	2.4	2.7	3.0	3.2	3.2	2.9	3.4	2.9	3.2	3.0	3.0	3.1	3.1	3.2	(3.2)J	3.2	3.1	2.8	2.7
16	(2.7)J	3.1	2.9	2.9	2.9	2.6F	2.6	C	C	C	C	C	C	C	C	C	C	C	C	C	3.3	3.3	2.9	2.6
17	2.6	2.8	2.7	2.7	2.8	(2.9)F	2.7F	3.0	3.5	3.4	3.2	3.2	3.1	3.1	3.2	3.1	3.2	3.4	3.0	3.1	3.1	2.8	2.6	2.8
18	3.0	2.9	2.8	3.1	3.1	2.7	2.9	2.9	3.3	3.4	3.4	2.8	2.9	3.2P	2.9	3.1	3.0	3.1	3.1	2.8	3.1F	3.3S	3.1	2.6
19	2.7	2.9	2.8	2.8Z	2.9	2.9	2.7	3.0	3.2	3.3	3.3	3.0	3.1	3.0	2.9	2.8	3.1	3.2	3.3	3.0	3.0	2.9	3.2	2.5
20	2.9	2.9	2.9	3.0	3.0	3.5	2.7	3.2	3.4	3.1	3.0	2.9	3.0	3.0	2.9	2.9	3.0	(3.1)C	3.2	(2.9)S	2.9	3.3	3.0	2.7
21	2.5	2.6	(2.6)[	2.6Z	F	2.8	3.1	3.0	3.2	3.2	3.3	3.1	3.1	3.0	3.0	3.0	2.9	2.9	3.0	3.1	3.2	3.1	3.0	2.7
22	2.8	2.9	2.9	2.7	2.6	3.0	2.7	(2.8)J	3.2	3.3	3.2	3.3	3.0	3.0	2.9	3.0	2.9	2.9	3.2	3.2	3.1	3.0	(2.7)J	2.8
23	2.6	2.8	2.7	2.9	2.9	2.9	2.6	2.8	3.5	3.2	3.3	3.0	3.0	2.8	2.9	3.1	2.9	3.2	(3.1)F	3.2	3.2	(3.7)J	(3.5)J	3.1
24	2.7	2.6	2.7	2.6	2.9	3.0	(2.5)B	2.8	3.0F	3.2	3.1	3.1	3.0	2.9	3.1	3.0	2.9	3.0	3.2	3.1	2.8P	3.1	3.1	2.7
25	2.4	2.6	2.6	2.6H	2.4K	2.3Z	2.4K	2.8	3.2	2.9	3.0	2.7	2.8	2.9	2.8F	2.8	2.9	2.9	3.1	3.0	3.0	2.9	(2.5)H	2.6P
26	2.5	2.9	2.9	3.0	2.9	2.8	2.6	3.0	3.2	3.3	3.1	3.2	3.0	2.9	2.8	2.9	2.9	3.0	2.9H	3.1	2.8	3.0	3.0	2.7
27	2.8	2.9	2.7	2.8	2.8	2.5	2.6	2.9	3.2	3.2	3.0	3.2	2.9	2.7	2.9	2.9	2.9	3.0	2.9	3.0	2.8	3.2	2.9	2.8
28	2.8	2.9	2.8	2.9	3.3	3.0	2.7	2.5	3.1	3.2	3.1	2.8	2.8	2.7	2.8	2.7	2.9	3.0	3.0	3.1	2.7	2.8	2.7	2.6
29	2.6	2.6F	2.6	2.7	3.1	2.5	2.9	2.6	3.1	3.2P	2.9	3.1	2.8	2.8	2.9	2.7	2.7	3.0	3.0	3.0	2.9	2.8	3.0S	2.9
30	2.7	2.9	2.8	2.8	2.8	2.6	(2.5)F	2.7	3.0	3.1	3.0	3.0	3.0	2.9	2.9	2.9	3.1	3.2	2.9	2.9H	2.9	2.9	2.9	2.6
31	2.6	2.8	2.6	2.9	2.5	2.8	3.0	2.6	3.0	3.1	3.1	2.9	2.9	3.2	2.9P	3.0	2.8	2.9	3.2	3.2	3.0	3.0	2.8	2.8
Median Value	2.8	2.8	2.7	2.8	2.9	2.8	2.7	2.9	3.2	3.2	3.1	3.1	3.0	3.0	2.9	3.0	3.0	3.1	3.1	3.1	3.1	3.0	2.9	2.8
Count	31	31	30	30	29	30	30	29	29	30	30	29	29	30	28	30	30	30	30	30	31	31	31	31

Sweep 1.2 Mc to 16.5 Mc in 15 min Manual

Y 9

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Jan. 1950 | f_{min} F | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1.8	1.5	1.3	1.4	1.2	1.3	1.5	1.6	2.4	A	3.1	3.6	3.9	3.7	A	3.6	A	2.5	1.8	A	2.6	2.3	2.2	2.1
2	1.9	1.5	1.6	1.4	E	1.3	1.3	1.4	2.2	3.1	A	A	4.1	3.7	3.5	3.0	3.0	1.8	1.6	1.7	1.5	1.5	1.9	1.8
3	1.8	2.0	1.5	A	A	A	1.3	A	2.0	2.8	3.6	3.4	3.6	3.6	3.4	3.2	2.8	2.1	1.5	1.4	1.4	A	1.6	1.8
4	1.8	A	2.0	2.0[A]	1.8	1.8	1.4	1.4	2.2	2.8	3.5	4.2	4.2	4.2	3.5	3.1	A	A	A	2.0	A	A	1.8	1.9
5	1.8	1.6	1.4	1.5	1.6	1.4	1.6	1.7	2.3	3.0	3.2	3.5	3.7	3.8	3.6	3.4	2.9	2.3	A	1.6	1.6	1.6	1.4	1.6
6	1.4	1.4	E	E	E	E	1.4	1.4	2.9	2.8	A	3.4	3.2	3.8	3.8	3.6	A	2.7	1.8	1.4	1.5	1.7	1.7	1.7
7	1.7[A]	1.3	1.3	1.4	E	E	1.4	1.4	2.3	3.0	3.3	3.6	3.6	3.7	3.6	3.3	2.8	2.3	1.8	2.0	2.0	1.8	1.6	1.8
8	1.6	1.6	1.3	1.8	1.6	1.6[A]	1.3	2.0	2.7	A	3.4	3.8	4.2	3.8	3.4	3.3	2.8	2.1	1.7	1.8	1.8	1.8	1.6	1.6
9	1.4	E	E	E	E	1.8	1.3	1.5	2.4[F]	2.9	A	3.3	3.6	3.7	3.4	3.1	2.8	2.4	2.4	2.0	1.6	1.4	1.3	1.4
10	1.3	1.4	C	C	C	C	C	C	C	3.2	3.8	4.1	4.3	4.3	3.3	3.0	2.8	2.3	1.7	1.6	1.5	A	1.4	1.5
11	1.4	A	1.3	1.8	1.6	1.4	E	2.1	2.5	A	A	3.4	3.6	3.6[F]	3.5	3.4	2.7	2.3	1.8	2.0	1.9	1.9	1.9	2.0
12	1.8	1.9	1.8	1.6	1.6	(1.6)[C]	1.5	1.8	2.0	2.4	2.6	A	C	3.6	3.5	3.2	3.0	2.9	1.4	1.6	1.5	1.4	1.4	1.4
13	1.4	E	1.3	1.4	1.8	1.4	1.6	1.5	2.3	3.2	3.4	A	3.6	3.5	3.5	3.1	2.8	2.6	2.0	1.4	1.5	1.5	1.5	1.4
14	E	E	1.4	1.4	E	E	1.3	1.4	2.3	A	A	A	3.8	3.6	4.8	A	A	A	1.7	1.5	1.6	1.6	1.4	1.5
15	1.4	1.6	1.4	1.3	1.4	E	1.3	1.4	2.1	2.8	3.4	3.4	3.8	3.8	3.6	3.6	A	2.1	1.8	1.6	1.6	1.5	1.5	1.5
16	1.5	1.6	1.6	1.6	1.9	E	1.7	C	C	C	C	C	C	C	C	C	C	C	C	C	1.5	1.4	1.5	1.5
17	1.3	1.4	A	E	1.3	E	E	1.8	2.1	2.7	3.1	3.8	3.5	3.5	4.1[A]	3.4	2.8	2.4	1.3	2.0	1.3	1.8	1.6	1.6
18	1.5	1.5	1.4	E	1.4	E	1.3	1.4	2.2	2.4	A	3.5	3.6	3.6	3.8	3.8	3.7	2.9	1.6	1.5	1.5	1.5	1.5	1.5
19	1.4	1.4	E	E	E	E	1.4	1.5	2.3	2.8	3.2	3.6	3.6	4.0	3.4	3.3	2.9	A	A	A	1.9	1.6	1.5	1.4
20	1.5	1.5	1.4	1.5	1.6	1.5	1.6	1.5	1.8	3.0	3.1	3.5	3.6	3.8	4.2[A]	3.4	2.6	2.2	2.0	1.6	1.4	1.4	1.4	1.4
21	1.6	1.6	(1.4)[C]	1.3	1.3	E	1.3	1.4	2.4[F]	3.1	3.4	3.8	3.7	3.5	3.7	3.4	A	A	A	2.2	A	A	1.5[A]	2.2
22	2.2	1.4	1.3	E	E	E	1.4	2.2	2.3	3.0	3.0	3.8	3.6	3.8	3.9	A	3.0	2.5	1.7	1.5	1.6	1.6	1.4	1.5
23	1.5	1.4	E	1.3	1.3	E	1.3	1.4	2.3	2.9	3.3	3.7	3.7	A	3.8	A	3.0	2.6	2.5	1.8	1.6	1.8	1.6	1.8
24	1.4	1.3	E	E	1.5	2.6	2.3	1.5	2.9[F]	2.9	3.7	4.1	3.8	3.9	3.7[A]	A	A	2.2	1.8	1.5[A]	1.6	1.4	1.4	1.4
25	1.3	1.3	1.4	1.3	1.3	1.3	1.4	1.4	2.2	2.9	3.3	3.5	3.7	4.0	4.2	3.7	3.4	2.2	1.6	1.6	1.6[A]	1.5	1.4	1.4
26	1.3	1.3	E	1.4	E	E	1.4	2.0	2.5	A	3.6	3.7	4.0	4.0	3.8	3.8	3.3	2.4	1.8	1.5	1.4	1.5	1.4	1.5
27	1.3	E	E	E	E	E	1.4	1.5	2.4	3.2	3.2	3.9	3.9	3.9	3.8	3.6	3.2	2.4	1.8	1.7	1.7	1.6	1.8	1.5
28	1.8	1.8	1.5[A]	1.3	1.3	1.3	1.5	2.0	2.6	3.4	3.3	3.8	(4.0)[A]	3.8	3.4	3.6	A	A	A	1.4[A]	1.6	1.6	1.5	1.4
29	1.4	1.3	1.3	1.3	E	E	E	1.4	2.8	2.9	3.4	3.5	3.8	3.8	3.5	3.5	A	2.5	1.9	A	1.5	1.5	1.4	1.3
30	1.3	1.3	E	E	E	E	1.4	1.4	2.3	3.2	3.4	3.6	A	3.5	4.1	3.9	A	A	1.7[A]	1.3	1.5	1.6	1.6	A
31	1.3	E	E	E	E	E	1.4	1.4	2.3	3.0	3.4	3.6	4.0	4.6	3.6	A	3.3	2.9	2.0[A]	2.0[A]	2.0[A]	A	1.5	1.5
Median Value	1.4	1.4	1.3	1.3	1.3	E	1.4	1.5	2.3	2.9	3.4	3.6	3.7	3.8	3.6	3.4	2.9	2.4	1.8	1.6	1.6	1.6	1.5	1.5
Count	31	29	29	29	29	29	30	28	29	25	24	26	28	29	29	25	20	24	25	27	29	26	31	30

Sweep 1.2-Mc to 3.5-Mc in 15-min Manual

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

IONOSPHERIC DATA

Jan. 1950 | f_{min} E | 135° E Mean Time | **Yamagawa** | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1.5	1.8	1.5	G	G	G	B	B	1.8	1.3	1.6	1.8	1.9	2.5	2.7	2.8	2.7	2.0	1.3	1.4	1.4	1.3	E	E
2	E	E	1.3	1.4	G	G	G	B	1.5	1.7	1.6	1.5	1.8	1.9	1.7	1.6	1.8	1.5	1.8	1.8	G	G	1.5	1.4
3	E	E	E	E	E	E	1.5	1.5	1.3	1.8	1.8	1.9	1.9	2.2	1.8	1.8	1.8	1.8	1.8	G	G	1.5	G	1.5
4	1.4	1.3	E	1.4	1.8	1.8	B	B	1.8	2.0	1.8	2.2	2.2	2.2	2.0	1.9	1.8	1.4	1.6	1.6	1.5	1.6	1.4	1.5
5	E	1.3	G	G	G	1.6	1.6	B	2.0	1.5	1.7	2.0	1.7	2.0	2.0	2.1	1.9	1.5	1.8	2.2	1.6	G	G	G
6	G	G	G	G	G	G	E	E	1.6	1.8	1.8	1.8	2.0	1.8	2.0	2.2	2.4	2.3	1.3	1.4	1.6	1.5	1.5	1.6
7	1.3	G	G	G	1.4	1.9	1.4	1.8	1.6	1.6	1.8	2.0	2.2	2.2	2.0	1.8	1.7	1.5	B	1.8	1.6	G	G	2.0
8	2.0	2.0	G	G	G	2.3	G	2.9	1.6	2.0	2.2	2.4	2.6	2.8	1.8	1.8	1.6	1.4	1.4	1.6	1.5	1.8	2.2	2.6
9	2.2	2.1	G	G	G	1.3	G	B	1.3	1.5	1.7	1.7	1.8	1.9	1.8	1.8	1.8	1.7	1.8	1.4	1.4	G	G	G
10	G	G	C	C	C	C	C	C	C	1.9	2.1	2.1	2.0	2.1	2.0	2.0	1.8	1.8	1.7	1.6	2.0	1.4	1.4	1.4
11	1.3	E	E	1.4	E	G	E	B	1.6	1.4	1.4	1.8	2.0	1.8	1.8	1.7	1.5	1.3	1.8	1.8	1.7	1.7	1.6	1.7
12	1.7	2.1 F	2.0 I	2.0	1.6	[1.6] C	1.6	1.8	2.0	1.4	2.0	2.4	[2.4] C	2.4	2.0	1.8	1.4	1.6	B	1.4	1.5	G	1.4	1.4
13	1.4	E	1.3	2.0 F	1.8	G	1.8	B	1.8	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.6	E	1.4 B	1.4	1.5	G	G	G
14	G	G	G	E	1.6	1.6	E	1.6	1.7	1.8	2.0	1.8	1.8	2.0	2.1	2.7	2.4	2.5	2.0	E	G	G	G	G
15	G	E	E	1.3	1.5	1.6	1.5	B	1.4	1.6	1.8	1.8	2.0	1.8	1.8	1.8	1.7	1.5	1.8	G	G	2.8	1.8	2.0 B
16	1.8	1.8	1.4	E	G	1.6	2.6 B	C	C	C	C	C	C	C	C	C	C	C	C	C	G	G	G	G
17	G	1.4	E	E	G	G	E	1.6 B	1.6	1.7	1.5	1.9	1.9	2.0	2.4	2.2	2.2	2.0	E	1.6	G	1.6	G	G
18	G	G	G	G	G	G	G	E	1.8	2.0	2.0	2.5	2.0	2.2	2.4	2.7	3.4	2.4	2.6	G	G	G	G	G
19	G	G	G	G	G	G	G	B	1.6	2.0	2.0	2.0	1.8	1.8	1.9	1.9	1.8	1.4	1.8	1.6	1.5	1.5	1.3	1.3
20	1.5	1.5	1.4	G	G	G	2.0 B	B	B	1.7	1.7	1.8	2.2	2.4	2.2	2.4	2.0	2.0	B	G	G	2.2	G	G
21	1.4	1.4	C	G	G	G	E	E	1.4	2.1	2.0	2.1	1.9	2.2	2.0	2.0	2.2	1.7	1.8	1.6	1.5	1.5	1.5	1.5
22	1.3	G	G	G	G	G	E	1.7	1.4	2.0	2.0	2.4	2.0	B	B	2.6	2.6	1.9	2.1	B	G	G	G	G
23	G	G	G	G	G	G	E	B	1.4	1.5	1.6	1.7	2.2	2.2	2.2	2.0	1.8	1.3	1.5	1.8	(2.8) E	2.8	G	(1.6) B
24	1.6	1.6	G	G	G	G	B	G	2.2	1.6	1.7	1.8	2.1	2.2	2.2	2.2	2.2	2.2	2.0	1.4	1.5	1.6	G	G
25	G	G	G	G	G	G	E	1.8	1.8	1.4	1.8	1.8	1.8	2.2	2.2	2.2	2.2	1.8	1.4	1.5	1.6	G	G	G
26	G	G	G	G	G	G	E	1.5	1.6	2.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.7	G	G	G	G	G
27	G	G	G	G	G	G	E	2.0	1.4	1.8	1.8	2.0	2.2	2.0	2.0	1.7	1.8	1.7	1.8	G	G	G	G	G
28	G	1.6	1.3	E	G	G	1.8	2.0	2.0	1.8	1.8	1.8	1.9	2.1	2.0	2.2	1.8	1.6	1.5	2.1	1.8	2.2	1.8	G
29	G	G	G	G	G	G	E	E	1.6	1.7	1.8	1.8	1.8	2.0	1.8	1.8	1.6	1.5	1.4	1.7	1.8	G	G	G
30	G	G	G	G	G	G	E	B	1.6	2.0	2.0	2.0	2.0	2.0	2.1	2.6	3.1	2.2	1.5	G	G	G	G	1.4
31	G	G	G	G	G	G	E	B	1.5	1.4	2.0	2.0	1.9	2.0	2.1	2.0	2.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Median Value	G	G	G	G	G	G	G	1.6	1.6	1.7	1.8	1.9	2.0	2.0	2.0	2.0	1.8	1.7	1.6	1.5	1.5	G	G	G
Count	31	31	29	30	30	30	27	16	28	30	30	30	30	29	29	30	30	30	26	29	31	31	31	31

Sweep 1.2 Mc to 8.5 Mc in 15 min Manual

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IONOSPHERIC DATE IN JAPAN FOR JANUARY 1950
電波觀測報告 第2卷 第1號

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