IONOSPHERIC DATA IN JAPAN

FOR OCTOBER 1949

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RADIO REGULATORY AGENCY

(DENPACHO)

TOKYO, JAPAN

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FOREWORD

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

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

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

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

November 1949

Tsuyoshi Amishima
Radio Regulatory Commissioner

SITE OF THE IONOSPHERIC STATIONS

Ionospheric observation is carried out at five stations in Japan.

The stations are situated as follows:

	longitude	latitude	site
Wakkanai	141° 41.1′ E	45° 28.6′ N	Wakkanai-machi, Soya-gun, Hokkaido
Fukaura	139° 54.1′ E	40° 36.6′ N	Fukaura-machi, Nishitugaru-gun, Aomori-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.

NOTICE

The Ionospheric observatory at Shibata was closed at the end of September 1949.

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | f_0F2 | 135° E Mean Time | **Wakkanai** | Lat. 45° 23.6' N | Long. 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	5.8	5.8	5.6	5.6	5.5	6.0	7.4	10.2	(11.5)$^{P}_{S}$	11.8	[11.4]^{B}	11.0	11.5$^{S}_{A}$	11.5	[11.3]^{S}	11.1^{J}	11.0	10.2	(8.6)$^{J}_{S}$	7.4	6.5	6.2	5.6	5.6
2	5.2	5.4	5.6	5.2$^{J}_{B}$	5.2	5.1	8.3^{P}	10.1	C	C	C	C	C	C	C	C	C	B	B	B	(8.0)^{P}	6.5	6.2	5.9^{P}
3	5.8	5.5	5.7	5.6	5.2^{H}	6.1^{H}	C	C	11.5	14.0	13.0^{P}	13.1^{J}	12.0	(13.8)^{P}	(13.9)^{J}	12.3^{P}	12.3	S	S	S	7.1	6.4	6.4	6.2
4	5.7	6.2	6.8	5.9	5.5	S	S	10.5	12.0	11.3^{J}	11.5	11.9	13.1	12.6	12.8	12.8	12.4	11.4^{P}	9.3	[8.6]^{S}	(7.8)$^{P}_{S}$	(7.9)$^{P}_{S}$	7.5^{P}	6.5
5	6.2	6.8^{P}	[7.0]^{B}	(7.2)^{P}	3.7^{F}	4.0	7.5	10.4^{P}	13.4	14.0	13.5^{P}	13.9	13.4	(14.5)^{P}	(13.5)^{P}	12.3	11.7	(10.3)$^{P}_{S}$	10.3$^{P}_{S}$	9.0	S	S	6.9	5.6^{P}
6	6.6^{P}	6.0	6.0	5.3	5.2	4.6	6.4	6.9	(8.7)^{P}	9.8	10.7$^{P}_{S}$	10.8	11.9	11.1$^{P}_{B}$	11.1^{J}	10.9^{J}	B	(9.1)^{P}	[7.9]^{S}	6.7^{P}	6.7	6.5	5.2	4.6
7	4.5	4.6	4.1^{D}	(4.6)^{P}	4.7	5.3	7.3	9.9	11.6^{P}	(11.8)^{P}	(12.7)^{P}	B	B	B	12.1	(11.8)$^{J}_{F}$	(11.7)$^{J}_{F}$	11.1	9.6	7.0	6.7	6.7	6.3	5.5
8	5.6	5.3	4.4^{K}	4.1^{K}	4.2^{K}	3.9^{K}	4.4^{K}	6.0^{K}	6.4^{K}	[8.2]$^{B}_{K}$	8.7^{K}	9.3^{K}	9.1^{K}	9.6^{K}	9.2^{K}	9.0^{K}	8.7$^{J}_{K}$	7.5^{K}	C^{K}	4.3$^{S}_{K}$	[8.6]$^{B}_{K}$	3.0^{K}	4.3^{K}	3.5^{K}
9	3.9^{K}	3.8$^{K}_{F}$	3.5$^{F}_{K}$	3.0$^{F}_{K}$	3.5$^{F}_{K}$	3.5^{K}	6.5	7.9^{J}	(9.9)$^{J}_{P}$	9.9	10.0	9.8$^{P}_{S}$	9.6	9.3	9.6	9.9	8.5	8.3	8.2	7.7$^{P}_{S}$	7.7	6.5	6.1	5.2
10	5.9^{A}	5.3	5.1	5.2	4.8	5.8	[7.7]^{C}	9.6^{P}	10.7	11.2	12.6	13.0	12.9^{P}	11.3	12.0	11.5	10.3^{P}	10.0	9.7^{P}	8.6	7.7$^{P}_{S}$	6.8	6.5^{F}	6.7^{F}
11	7.0	7.0^{F}	5.5	6.0^{H}	5.8	6.0	8.2^{P}	9.8	10.9	10.9^{P}	(12.7)^{P}	12.0	(11.6)$^{J}_{P}$	11.1^{P}	12.2^{P}	12.0^{P}	11.5^{P}	9.7	8.7	8.7	(7.5)^{P}	6.8	6.6	5.4
12	5.8	4.6^{P}	4.6	4.8	5.1^{F}	5.2^{F}	6.5^{F}	9.2	(11.3)$^{P}_{S}$	12.9	14.0	13.2	(11.5)^{P}	12.0	11.6^{P}	(11.2)$^{J}_{P}$	10.6	9.7	9.1	7.5^{P}	7.1	6.9	6.6	6.6
13	6.1	6.5	6.4	6.3	5.9	6.7	7.8^{P}	10.5	12.8^{H}	12.6	12.7	12.6	12.6	12.0^{J}	11.9^{J}	11.6	11.5^{J}	10.4	8.9	8.1^{P}	6.8^{P}	7.0	6.8	6.6^{P}
14	[6.6]^{C}	6.6	5.7	4.9	6.5^{J}	7.3	8.7	11.0^{J}	11.7^{P}	12.5	12.6	13.0	12.5	12.2^{J}	12.0$^{P}_{S}$	(12.1)^{P}	9.7	10.3$^{P}_{S}$	9.0	(8.8)^{P}	7.2	7.0	7.2	7.2
15	6.6	(5.5)^{F}	F	5.3^{F}	5.5^{F}	5.1^{P}	5.7	5.6	8.1^{F}	7.1	9.9	10.3	10.6	10.6	11.5	11.3	10.6	10.5	9.3	6.4	7.1^{F}	6.6	5.6	4.9
16	4.4^{K}	B^{K}	A^{K}	A^{K}	3.4$^{A}_{K}$	3.2$^{A}_{K}$	3.2^{K}	3.2^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	6.5^{K}	6.1^{K}	5.1^{K}	4.2^{K}	4.9^{K}	5.2^{K}	4.8
17	4.9	5.1	4.8	5.1^{F}	[4.8]^{C}	4.6^{P}	7.1	8.9	9.8	(10.4)$^{P}_{S}$	12.3	S	S	11.0	(11.0)^{B}	(10.5)^{B}	9.8	9.8	8.2	6.4	6.2	6.1^{P}	5.9	[5.4]^{A}
18	4.8	4.7	4.9	5.2	4.6^{F}	5.6^{F}	8.2	11.4	12.2	11.2	11.7^{P}	13.2	12.8	12.6	12.1	11.2	11.2	(9.5)$^{P}_{S}$	(8.2)$^{P}_{S}$	(7.9)$^{P}_{S}$	6.0	5.3	4.8	4.4
19	4.5	4.7^{F}	4.4^{F}	4.3	4.3	4.9	(8.3)^{S}	10.9	12.1	12.6	(13.0)^{J}	13.3^{P}	12.8	(11.8)^{P}	(11.4)^{P}	(12.0)^{P}	(10.6)^{F}	9.4^{P}	8.0^{J}	6.8	5.9	5.1	4.8	5.0
20	5.0	4.5	4.5	4.3	4.5	4.4	4.6	7.4	9.4	12.1	11.7	12.8	C	C	C	C	C	9.5	7.2	5.4	4.3	4.4	4.3	3.6
21	3.9	4.5	4.6	4.1	3.1	3.7	5.8	10.3	11.7	12.5	12.1	12.9	12.6	12.1	11.7	11.7	11.6	10.5	9.6	7.0	6.6	3.9	3.9	[4.0]^{C}
22	4.1	4.1	4.4	3.9^{P}	4.0	4.5	8.4	11.1^{J}	(12.3)^{P}	13.1^{P}	12.9	13.1	13.0	(13.3)^{P}	12.5^{J}	12.3	11.9^{P}	[10.8]^{P}	(9.7)$^{P}_{S}$	(8.0)$^{P}_{S}$	6.0^{P}	5.2^{H}	5.0	4.7
23	4.6	4.9	4.4	4.5	4.7^{F}	4.8$^{P}_{S}$	6.5	11.0$^{P}_{S}$	12.4	11.7^{P}	13.5^{P}	13.2^{P}	(13.7)^{P}	13.4^{P}	12.3	12.4	[10.8]^{P}	9.3^{P}	(8.8)$^{P}_{S}$	(8.2)$^{P}_{S}$	6.6	6.5	5.4	5.5
24	5.1	4.8	4.6	4.7	4.2	[4.9]^{C}	5.6	7.5	9.8	C	C	13.8	13.9	13.2	13.5	12.9	11.6	7.4	7.1	6.9^{B}	C	C	C	5.1
25	4.5	4.7	4.8	4.7	4.4	4.3	6.5	(9.2)$^{P}_{S}$	11.7	12.4	12.8	13.6	13.1	12.3	12.1	(11.7)$^{P}_{B}$	(10.3)^{P}	7.3	7.5	7.2^{P}	5.8^{P}	5.9	4.6	4.1
26	3.5^{J}	1.6^{K}	(1.3)$^{K}_{F}$	(2.0)$^{P}_{K3}$	2.7^{K}	3.0^{K}	3.9^{J}	4.8^{J}	T	C	12.8	12.8	12.8^{P}	13.1	13.1	12.5^{P}	B	S	7.1	6.6	S	S	4.2	5.9
27	4.1	4.4	4.2	4.2	4.2	4.1	5.5	9.3	(10.8)$^{P}_{S}$	(12.1)^{P}	(12.3)$^{J}_{P}$	(12.5)^{P}	(12.8)$^{P}_{S}$	(12.3)^{P}	(12.6)^{P}	(12.0)^{P}	(11.6)^{P}	9.2	8.5	6.7	5.4	4.7	4.7	4.5
28	3.7	3.8	4.1	4.2	3.5	3.6^{F}	4.7	8.2^{J}	11.0^{P}	11.6	11.2	13.5	A	A	13.6	12.6^{F}	S	A	A	A	S	A	A	A
29	A	6.0	6.3	6.3	5.7^{F}	5.6^{H}	6.6	10.3^{F}	12.2	12.0	11.8	13.1	12.3	11.8	11.2	11.7	(10.1)$^{J}_{P}$	(9.6)^{P}	(8.7)^{P}	8.9	6.2	5.2	5.2	4.2
30	(4.7)$^{J}_{F}$	(4.6)$^{J}_{F}$	4.6	4.6	3.3	3.9	5.9^{P}	(10.0)^{P}	(13.2)^{P}	12.5^{P}	13.6	14.3	12.7	11.5	12.1	12.6	S	7.7	7.2	6.2	4.6	4.1	3.8	3.7
31	3.9	4.1	4.3	3.7	4.1	3.7	5.1^{F}	C	11.3^{J}	12.1	B	B	13.0^{P}	12.9	C	C	C	C	C	A	A	A	A	4.1
Median Value	5.0	4.8	4.7	4.8	4.6	4.7	6.5	9.8	11.5	12.0	12.6	13.0	12.7	12.0	12.1	11.8	11.0	9.6	8.6	7.2	6.6	6.3	5.5	5.2
Count	30	30	29	30	31	30	29	29	28	27	27	26	25	26	27	27	23	26	26	27	26	26	28	30

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

W 1

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | hpF2 | 135° E Mean Time | **Wakkanai** | Lat. 45° 23.6' N, Long. 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	390	420	420	400	430	380	330	330	(310)S	320	(310)B	(300)B	300S	290	[300]S	(300)J	300	300	(310)JS	310	320	350	380	350
2	400	360	(410)B	(370)B	350	(360)B	310P	280	C	C	C	C	C	C	C	C	C	B	B	B	(340)P	390	360	370P
3	390	400	400	390	410H	400H	C	C	310	300	280P	(300)J	290	(320)JP	(330)J	300P	290	S	S	S	380	330	390	420
4	430	410	450	400	380	S	S	310	290	(280)J	310	320	(340)S	(310)S	(310)S	(310)S	300	310P	(320)S	[350]S	(380)PS	(380)PS	380P	470
5	470	500P	B	(300)P	430F	420	330	320P	290	320	320P	340	330	(320)P	(310)P	320	300	(270)PS	320PS	300	S	S	340	360P
6	360P	320	360	380	440	410	420	380	(330)J	(330)S	300PS	300	320	250PS	(300)J	(310)J	B	(300)P	[300]S	300F	360	380	380	420
7	420	440	440P	(460)P	420	400	300	320	330P	(330)P	(360)S	B	B	B	310	(310)P	(310)J	350	(300)S	370	370	420	440	430
8	460	400	460K	AK	(430)AK	(310)BK	300K	400K	(410)BK	(420)BK	(380)BK	(380)BK	(300)BK	(340)BK	(330)BK	300K	(300)JK	310K	CK	350S	[350]BK	350K	460K	480K
9	510K	(480)KF	(510)KF	520FK	520FK	350K	300	(260)J	(300)P	290	310	320PS	310	(370)S	300	310	300	340	320	420S	(330)S	350	400	370
10	A	A	480	430	350	380	C	(300)FS	320	320	370	390	400P	340	380	340	320P	360	380PS	340	330FS	370	450	(410)F
11	410	370F	410	500H	490	430	340P	300	300	(330)B	(350)P	330	(300)JP	360P	360P	340P	330P	320	330	(320)B	(370)P	380	430	460
12	420	510P	500	480	390F	400F	300F	(360)B	(340)PS	300	380	380	(380)P	430	400P	(370)JP	380	360	(390)S	360P	410	390	490	470
13	450	460	440	390	360	400	300P	310	(300)JK	330	350	350	380	(350)J	(340)J	320	340F	400	(340)S	380P	340P	360	400	440P
14	[420]C	410	420	450	(450)J	350	310	(300)J	310P	300	360	380	400	(390)JP	400PS	(320)P	300	330PS	(340)S	(380)PS	410	490	500	420
15	500	(510)F	F	610F	510F	400P	380	B	(320)FB	320	350	350	340	360	(350)S	340	320	330	350	550	470F	(460)F	(400)B	370
16	450K	BK	AK	AK	600AK	520AK	540K	380K	CK	CK	CK	CK	CK	CK	CK	CK	CK	400K	(390)BK	(440)BK	410K	480K	520K	410
17	420	480	440	480F	[420]C	350P	340	(300)S	290	(310)PS	350	S	S	(390)B	(380)B	(350)B	340	320	(300)B	320	370	(360)FB	380	[400]A
18	(420)B	450	460	480	420F	420F	(380)B	300	290	310	320P	380	380	320	320	310	290	(300)PS	(290)FB	(310)PS	360	380	420	410
19	510	500F	440F	390	380	370	(310)S	290	280	310	(320)JP	320P	330	(310)BP	(330)P	(310)P	(320)P	(330)FB	(280)J	320	340	370	430	480
20	460	440	460	490	530	500	400	340	(320)S	310	310	310	C	C	C	C	C	(300)B	380	370	400	490	470	510
21	460	430	400	350	320	390	310	340	300	300	310	350	300	320	350	320	320	280	300	310	330	400	430	[450]C
22	470	450	430	460P	350	420	310	(300)J	(300)P	320P	300	320	310	(300)JP	(320)J	300	290P	[280]	(270)PS	(250)PS	(280)J	330	360	380
23	360	370	[410]	420	440F	410PS	320	290PS	280	280P	330P	300P	(340)P	320P	300	310	[320]C	340PS	(390)PS	(380)PS	340	390	460	400
24	410	410	400	490	480	[430]C	380	340	320	C	C	(330)S	340	340	310	280	320	400	350	330B	C	C	C	320
25	430	500A	430	400	410	410	330	(290)PS	300	(320)S	(360)S	330	330	310	(290)P	(250)PB	(240)PB	240	270	270F	370P	340	350	390
26	(410)J	410K	AK	AK	410K	390K	(370)J	(330)J	T	C	(300)S	(280)S	(300)PS	(280)S	300	(270)PS	B	S	290	290	S	S	(300)B	370
27	400	440	390	370	320	300	280	260	(270)PS	(230)FB	(230)PF	(260)PF	(240)PS	(230)PF	(250)PB	(240)PF	(250)PJ	(380)S	(380)S	310	350	310	350	430
28	490A	470A	360	390	380	430F	320	(270)J	290P	280	300	300	A	A	330S	310P	S	A	A	A	S	A	A	A
29	A	440	430	330	380P	(420)JK	340	300P	(310)S	(320)S	370	350	320	350	340	(340)S	(330)J	(340)PS	(310)PS	300	300	350	360	420
30	(430)JP	(410)JPS	410	(470)B	(400)B	390	360	(310)F	(280)P	(400)S	360	370	(300)S	380	(400)S	420	S	350	400	310	350	430	450	430
31	500	450	460	420	480	500	460F	C	(450)J	340	B	B	250P	(250)S	C	C	C	C	C		A	A	A	300
Median Value	430	440	430	420	420	400	330	305	300	320	320	330	320	320	330	310	310	330	320	320	360	380	400	415
Count	29	29	27	28	31	30	28	28	28	27	27	26	25	26	27	27	23	26	26	27	26	26	28	30

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

W .2

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | hF2 | 135° E Mean Time | **Wakkanai** | Lat. 45° 23.6 N | Long. 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	300	320	300	300	280^{A}	300	280	300	260	230	220	220	270	210	240	250	260	260	230	280^{A}	250	250	280	280
2	290	300	320^{A}	260^{A}	260	250^{A}	250	250	C	C	C	C	C	C	C	C	C	(200)^{A}	(200)^{A}	260	270	270	280	260^{A}
3	(300)^{A}	(300)^{A}	(290)^{A}	300	300^{H}	300^{H}	C	C	220	220	210	200	210	260^{B}	220	220	190	210^{A}	270	230	280	240	300	300
4	300	320^{A}	300	290	300	290	250	270	220	210	270	300^{S}	270	260	220	280	230	230	220	230	280	280	280	290
5	330	340	230	210	290	390	300	220	250	230	240	230^{B}	230^{B}	270^{B}	230	260	240	220	200	200	200	220	230	260
6	290	270	290	280	300	300	300	280	240	300	250	260	270	200	270	280	270	230	210	210	250	280	300	330
7	370	330	310	310	330	270	230	240	220	220	290	230	230	240	240	270	250	270	220	260	260	300	300	300
8	330	300	350$^{A}_{K}$	A^{K}	(270)$^{A}_{K}$	(260)$^{A}_{K}$	230^{K}	270^{K}	400$^{A}_{K}$	390^{K}	320^{K}	320^{K}	280^{K}	280^{K}	290^{K}	240^{K}	240^{K}	280^{K}	C^{K}	260^{K}	300^{K}	310^{K}	340^{K}	380^{K}
9	400^{K}	400^{K}	390^{K}	400^{K}	360^{K}	350^{K}	250	250	260	220	280	260	300^{A}	310	280	290	230	230	280^{B}	250	280	280	380^{A}	300
10	A	A	390^{A}	340	280	250	270	250^{B}	260	220	270	250	270	260	260	270	250	250	250	270	270	280	(300)^{A}	(300)^{A}
11	310	300^{A}	300^{A}	380^{H}	390	310	300	280	220	210	210	310^{B}	240	270^{B}	270	220	200	220	290	240	270	280	290	380^{A}
12	380	400	380	380	270	240	230	240	230	230	240	270	290	270	280	280	290	300	250	280	290	300	360^{A}	350
13	330	310	300	300	290	280	270	240	240^{H}	240	280	280	240	230	270	230	230	210	300	290^{A}	280	300^{A}	300	310
14	370	300^{A}	300	370	320	270	250	250	240	240	280	290	270	250	270	260	250	280	280	300	300	350	400	330
15	330	400	430	460	380	310	280	A	260	240	270	260	240	260	250	270	250	220	230	490	370	360	300	280
16	410$^{A}_{K}$	A^{K}	A^{K}	A^{K}	(500)$^{A}_{K}$	460$^{A}_{K}$	410^{K}	380^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	300^{K}	300^{K}	300^{K}	320^{K}	320^{K}	400^{K}	350
17	300^{A}	310	300^{A}	310	[300]^{C}	(300)^{A}	(300)^{A}	250	240	240	240	230	220	270	270	300	300	230	230	250	280	280	270	[300]^{A}
18	330	310	320	280^{A}	330^{A}	340^{A}	210^{A}	220	210	210	210	300	220	300	280	230	220	230^{A}	240	220^{A}	280	280	300	330$^{A}_{F}$
19	400$^{A}_{F}$	400^{A}	(420)^{A}	330^{A}	320^{A}	300	280	210	210	220	240	240	240	250	260	250	240	230	210	260	250	250	390^{A}	390^{A}
20	380	380	320	360	400	400	320	280	250	210	230	220	C	C	C	C	C	250	280	280	280	390	390	400
21	370	380	(300)^{A}	280	290	300	290	290	210	210	220	250^{S}	220	220	260	250	250	230^{A}	220	220	250	300	320	[320]^{C}
22	320	350	360	370	240	330	280^{A}	260	270	(220)^{T}	200	300	220	250	220	250	220	(210)^{A}	200^{A}	(200)^{A}	(200)^{A}	230^{H}	280	300
23	300	300	310	300	320	300	260	230	200	210	210	210	210	210	210	230	[240]^{C}	260	330^{F}	280$^{A}_{F}$	270	270	370	330
24	330	380$^{A}_{F}$	390$^{A}_{F}$	400$^{A}_{F}$	400^{A}	[340]^{C}	290	250	220	(200)^{A}	(200)^{A}	280	290	240	210	220	230	(300)^{A}	250^{A}	230	300	C	C	280
25	A	A	300	300	290	300^{A}	250	220	220	240	230	260^{A}	290	210	200	210	210	200^{A}	200^{A}	210	210	240	280	300
26	350	(400)$^{A}_{K}$	(400)$^{A}_{K}$	(400)$^{A}_{K}$	310^{K}	280^{K}	280	280	220	[220]^{C}	230	210	200	200	210	210	210	210	220	220	220	220	220	300^{A}
27	300	380	300^{A}	300	280	250^{A}	200	200	200^{A}	200^{A}	200^{A}	210	200^{A}	200^{A}	200^{A}	200^{A}	200	260	220	240	260	270	270	300
28	410^{A}	400^{A}	290	280	240	310	280	200^{A}	220	200^{A}	210	200	250	A	A	(200)^{A}	220	A	A	A	250	A	A	A
29	A	300	300	280	280	300^{H}	300	300	270	240	260	270	250	260	230	240	250	230	220	220	220	250	280	320
30	330	320	320	310^{F}	320	310	280	220	220	300	300	300	300	350	390	320	300	300^{A}	290	270	270	310	360	350
31	400	370	310	310	350	360	300	C	330	210	180	200	190	200	C	C	C	C	C	A	A	A	A	(300)^{A}
Median Value	330	325	310	310	300	300	280	250	230	220	240	260	240	250	255	250	240	230	230	250	270	280	300	300
Count	28	28	30	29	31	31	30	28	29	29	29	29	28	27	26	27	27	29	28	29	30	28	28	30

Sweep 10 Mc to 170 Mc in 15 min Manual

W 3

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | foF1 | 135° E Mean Time | Wakkanai | Lat 45° 23.6' N | Long 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17.	18	19	20	21	22	23
1						Q	Q	L	L	Q	Q	Q	L	Q	Q	Q	Q	Q	Q					
2						A	Q	Q	C	C	C	C	C	C	C	C	C	Q	Q					
3						Q	C	C	Q	Q	Q	Q	B	B	Q	A	A	Q	L					
4						Q	Q	Q	Q	Q	L	5	Q	Q	Q	Q	L	Q	Q					
5						2.6	3.6	L	Q	Q	Q	Q	Q	Q	Q	5	Q	Q	Q					
6						Q	Q	Q	Q	Q	O	L	Q	Q	L	L	Q	Q	Q					
7						Q	Q	Q	Q	Q	L	Q	Q	Q	Q	Q	Q	Q	Q					
8						A	A	Q	A	B	B	B	A	B	Q	A	A	4.3	C					
9						L	A	A	A	Q	L	Q	A	A	B	L	Q	Q	B					
10						Q	5	B	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
11						A	L	L	Q	Q	Q	B	Q	B	A	Q	Q	Q	L					
12						Q	Q	Q	5	Q	Q	Q	Q	Q	Q	Q	Q	L	Q					
13						Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	L					
14						Q	Q	Q	Q	Q	B	L	Q	Q	Q	Q	L	Q	Q					
15						Q	Q	A	A	B	Q	4.5	Q	Q	Q	Q	Q	Q	Q					
16						A	A	Q	C	C	C	C	C	C	C	C	C	L	Q					
17						A	A	Q	Q	A	Q	Q	Q	Q	Q	Q	Q	Q	Q					
18						A	A	Q	Q	Q	Q	B	Q	L	L	Q	Q	A	Q					
19						A	L	Q	Q	Q	Q	Q	Q	Q	A	A	Q	Q	Q					
20						Q	Q	Q	Q	Q	Q	Q	C	C	C	C	C	Q	Q					
21						Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	A					
22						Q	A	Q	Q	B	Q	L	Q	Q	Q	Q	Q	Q	Q					
23						Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	C	Q	A					
24						C	A	Q	Q	A	A	L	B	Q	Q	Q	Q	A	A					
25						A	A	Q	Q	Q	A	A	L	Q	A	Q	Q	Q	A					
26						A	Q	Q	Q	C	Q	Q	Q	Q	Q	Q	Q	Q	A					
27						A	Q	A	A	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
28						AF	AF	A	Q	A	A	A	A	A	A	A	A	A	A					
29						Q	L	L	L	Q	O	Q	Q	Q	Q	Q	Q	Q	Q					
30						Q	Q	Q	Q	A	Q	Q	Q	L	L	A	A	A	A					
31						Q	A	C	Q	Q	Q	Q	44	Q	C	C	L	C	C					
Median Value						—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Count						1	1	0	0	0	0	1	1	0	0	0	0	1	0					

Sweep 1.0 Mc to 17.0 Mc in 1.5 min Manual

W 4

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct 1949 | h'F1 | 135° E Mean Time | **Wakkanai** | Lat. 45° 23.6' N | Long. 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1						Q	Q	260	240	Q	Q	Q	220	Q	Q	Q	Q	Q	Q					
2						A	Q	Q	C	C	C	C	C	C	C	C	C	Q	Q					
3						Q	C	C	Q	Q	Q	Q	B	B	Q	A	A	Q	240					
4						Q	Q	Q	Q	Q	220	230	Q	Q	Q	Q	220	Q	Q					
5						300	250	210	Q	Q	Q	Q	Q	Q	Q	230	Q	Q	Q					
6						Q	Q	Q	Q	Q	Q	210	Q	Q	200	270	Q	Q	Q					
7						Q	Q	Q	Q	Q	230	Q	Q	Q	Q	Q	Q	Q	Q					
8						A	A	Q	A	(330)[B]	B	L	A	B	Q	A	A	210	210[A]					
9						300	A	A	A	Q	250	Q	A	A	B	220	Q	Q	B					
10						Q	240	B	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
11						A	280	260	Q	Q	Q	220	Q	B	A	Q	Q	Q	210					
12						Q	Q	Q	S	Q	Q	Q	Q	Q	Q	Q	Q	250	Q					
13						Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	240					
14						Q	Q	Q	Q	Q	220	220	Q	Q	Q	Q	210	Q	Q					
15						Q	Q	A	A	B	Q	220	Q	Q	Q	Q	Q	Q	Q					
16						A	A	Q	C	C	C	C	C	C	C	C	C	240	Q					
17						A	A	Q	Q	A	Q	Q	Q	Q	Q	Q	Q	Q	Q					
18						A	A	Q	Q	Q	Q	220	Q	220	240	Q	Q	A	Q					
19						A	260	Q	Q	Q	Q	Q	Q	Q	A	A	Q	Q	Q					
20						Q	Q	Q	Q	Q	Q	Q	C	C	C	C	C	Q	Q					
21						Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	A					
22						Q	A	Q	Q	B	Q	210	Q	Q	Q	Q	Q	Q	Q					
23						Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	C	Q	A					
24						C	A	Q	Q	A	A	240	220	Q	Q	Q	Q	A	A					
25						A	A	Q	Q	Q	A	A	240	Q	Q	A	Q	Q	Q	A					
26						A	Q	Q	Q	C	Q	Q	Q	Q	Q	Q	Q	Q	A					
27						A	Q	A	A	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
28						AF	AF	A	Q	A	A	A	A	A	A	A	A	A	A					
29						Q	270	270	210	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
30						Q	Q	Q	Q	A	Q	Q	Q	290	300	A	A	A	A					
31						Q	A	C	Q	Q	Q	Q	170	Q	C	C	C	C	C					
Median Value						—	260	—	—	—	—	220	—	—	—	—	—	—	—					
Count						2	5	4	2	1	4	8	4	2	3	3	2	3	4					

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

W 5

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | f_0E | 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	2.1	2.6	3.0	B	A	A	B	B	3.2	2.5	2.4	2.1	A					
2						A	A	2.7[H]	C	C	C	C	C	C	C	C	C	A	A					
3						1.4	C	C	2.5	B	3.3[J]	A	B	B	B	A	A	A	A					
4						A	B	2.1	2.5	3.0	3.5	B	B	3.5	3.1[J]	2.8[J]	2.5[J]	A	A					
5						E	S	A	3.2[J]	3.2	B	3.5	B	B	B	2.7	2.5	A	A					
6						E	2.2	2.7	A	B	B	B	B	S	B	2.6	2.6	1.7	A					
7						E	2.0	A	2.8	3.1	B	B	B	B	B	2.5	2.3	A	A					
8						A	1.3	2.3	2.7	B	B	A	A	B	B	3.3[B]	A	B	A					
9						A	1.8	2.4	3.1	3.3	(3.6)[B]	A	A	A	A	3.1	2.4	2.1	A					
10						A	A	2.5	A	3.3	3.4	A	B	B	B	3.1	2.5	B	A					
11						A	1.5	1.8	2.8	B	B	B	B	3.2	2.6	A	A	A	A					
12						A	B	B	3.3	S	S	S	3.5	3.5	S	A	3.0	2.5	A					
13						A	2.0	2.3	B	B	B	B	B	B	B	B	T	A	B					
14						A	B	2.4	2.6	3.0	B	B	B	B	2.7	A	B	B	B					
15						E	B	2.4	B	3.2	B	A	3.2	A	B	B	2.4	A	E					
16						A	B	2.2	C	C	C	C	C	C	C	C	C	A	A					
17						A	A	2.3	A	A	A	3.4[J]	A	B	B	B	2.6	2.3	A					
18						A	A	A	A	B	A	B	A	B	A	A	A	A	A					
19						A	A	B	2.6	2.7	A	A	A	2.8	A	A	A	A	A					
20						E	1.3	2.7	2.9	A	3.4	3.5	C	C	C	C	C	A	A					
21						E	A	2.2	B	A	S	S	B	B	B	2.7	2.0	A	A					
22						E	A	A	A	A	A	B	3.4	B	(2.5)[B]	2.5	2.2	A	A					
23						-E	1.5[F]	(2.2)[B]	2.6	A	3.2	3.2	3.4	A	A	2.8[B]	[2.5][C]	2.2	A					
24						C	A	2.1	2.4	A	A	B	S	B	B	2.4	A	A	A					
25						A	A	2.3	B	3.1	A	A	3.3	A	A	(3.0)[B]	B	A	A					
26						A	B	1.6	3.2	C	B	3.3	B	B	B	A	A	A	A					
27						A	1.3	2.3	A	A	A	A	A	A	A	A	A	A	A					
28						AF	AF	A	3.0	2.8	A	A	A	A	A	A	A	A	A					
29						E	A	A	2.6	A	A	B	B	S	B	B	B	A	A					
30						E	E	A	B	B	A	3.2	A	3.3	2.8	A	A	A	A					
31						E	A	C	BF	A	3.6	B	3.5	A	C	C	C	C	C					
Median Value						E	1.5	2.3	2.8	3.1	3.4	3.4	3.4	3.3	2.8	2.7	2.5	2.2	—					
Count						12	11	20	17	10	7	6	6	5	6	13	13	6	1					

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

W 6 9

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct 1949 | 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						A	110	100	100	100	100	100	100	100	100	100	100	100	A					
2						A	A	100[H]	100	C	C	C	C	C	C	C	C	A	A					
3						100	C	C	100	B	100	A	100	B	100	A	A	A	A					
4						A	100	100	100	100	100	100	100	100	100	100	100	A	A					
5						E	100	A	100	110	120[B]	110	100	(100)[B]	100[B]	100	120	A	A					
6						E	100	100	A	100	100	100	100	100	B	100	100	100	A					
7						E	110	A	100	100	100	100	100	100	100	100	100	A	A					
8						A	130[B]	100	100	100	100	A	A	100	100	100	A	100	A					
9						100[A]	110	100	110	100	100	A	A	A	A	100	100	100	A					
10						A	A	100	A	100	100	A	110	100	100	100	100	100	A					
11						A	100	100	100	100	B	B	100	100	100	A	A	A	A					
12						A	B	B	110	S	S	100	100	100	100	A	100	100	A					
13						A	100	100	100	100	B	B	100	100	100	100	100	100	B					
14						A	100	100	100	120	110	100	100	100	100	A	100	100	100					
15						E	B	110	110	100	100	A	100	A	100	100	100	A	E					
16						A	100	110	C	C	C	C	C	C	C	C	C	A	A					
17						A	A	110	A	A	A	100	A	100	100	100	100	100	A					
18						A	A	A	A	100	A	100	A	100	A	A	A	A	A					
19						A	A	100	100	100	A	A	A	100	A	A	A	A	A					
20						E	100	100	100	A	100	100	C	C	C	C	C	A	A					
21						E	A	100	100	A	100	100	100	100	100	100	100	A	A					
22						E	A	A	A	A	A	100	100	100	110	100	100	A	A					
23						E	B	100	100	A	100	100	100	A	A	100	(100)[C]	100	A					
24						C	A	100	100	A	A	100	S	B	100	100	A	A	A					
25						A	A	100	100	100	A	A	100	A	A	100	100	A	A					
26						A	B	100	100	(100)[C]	100	100	100	100	100	A	A	A	A					
27						A	100	100	A	A	A	A	A	A	A	A	A	A	A					
28						AF	AF	A	100	100	A	A	A	A	A	A	A	A	A					
29						E	A	A	100	A	A	100	100	100	100	100	100	A	A					
30						E	E	A	100	100	A	100	A	100	100	100	A	A	A					
31						E	A	C	(170)[F]	A	100	100	100	A	C	C	C	C	C					
Median Value							100	100	100	100	100	100	100	100	100	100	100	100	—					
Count							14	21	24	18	16	18	19	19	19	18	17	10	2					

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | 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	G	G	G	2.4	3.2	2.4	3.2	2.7	3.2	3.8	3.6	3.7	B	G	B	2.8	G	2.5	2.5	2.4	2.0	G	G	G
2	G	G	2.6	2.3	2.2	(2.4)Y	2.5	G	G	C	C	C	C	C	C	C	C	3.0	3.2	3.2	2.4	1.7	2.5	2.6
3	2.5	2.3	2.2	G	1.4	G	C	C	G	B	G	4.3	B	B	B	6.2	5.7	2.6	2.8	3.4	2.6	1.8	1.6	G
4	G	1.9	1.5	G	1.3	1.4	G	2.5	G	C	G	G	G	G	G	G	G	2.9	3.0	2.0	2.1	1.6	1.2	1.4
5	G	G	G	G	G	G	G	2.9	G	3.7	B	B	B	B	B	G	G	2.3	1.6	G	G	G	G	G
6	(2.2)Y	1.2	G	G	G	G	G	G	3.4	B	B	G	B	S	B	2.8	2.6	1.7	1.4	2.7	2.6	G	G	1.5
7	2.0	G	G	G	G	G	G	2.6	(3.0)Y	B	B	B	B	B	B	G	G	2.6	2.4	G	G	G	G	2.0
8	2.4	G	2.5	3.6	3.8	4.2	2.8	2.7	6.4Y	3.4	B	6.9Y	4.5	B	B	B	4.5	B	B	G	G	G	G	G
9	G	G	G	G	1.7	2.2	5.0	5.1	5.0	3.8	B	4.8	13.4Y	6.0	3.8	3.2	2.9	G	3.7	6.3Y	2.8	2.4	4.1	6.6
10	6.4	5.2	2.3	3.2	1.3	2.5	3.4	B	4.6	4.0	4.7	3.7Y	B	B	B	3.2	G	G	(2.3)Y	3.0	2.9	2.0	3.5	3.4
11	5.2	3.5F	3.6	3.0	3.5	2.9	G	2.0	3.7	(4.0)Y	B	B	B	(6.0)Y	5.5	3.9	3.6	2.4	1.8	6.8	4.0	3.1	3.7Y	3.8
12	3.4	2.0	1.8	2.2	4.0	2.2	G	G	G	S	S	S	B	3.7	4.5	3.6	4.6	4.5	3.5	3.0	1.8	2.5	3.5	3.5
13	3.5	1.7	1.8	G	2.7	1.9	G	B	B	B	B	B	B	B	B	G	T	G	G	3.5	2.6	3.7	3.7	3.0Y
14	2.5	2.2	1.4	1.6	G	1.5	G	B	B	B	B	B	B	B	B	3.3	G	G	G	1.3	G	G	G	G
15	G	G	G	(2.3)Y	(2.4)Y	G	1.8	4.6Y	4.6	3.5	4.8	4.7	3.6	4.1	B	G	2.5	2.3	G	C	G	G	G	2.4
16	3.7	4.4	4.7	4.4	(3.8)B	3.7	G	G	C	C	C	C	C	C	C	C	C	3.0	2.4	2.2	1.7	(1.9)B	2.1	4.2
17	2.7	3.5	3.5	3.5	C	6.0	4.6	G	4.7	5.6Y	3.6	G	3.9	B	B	B	G	G	2.2	G	G	2.1	5.6	6.2
18	2.4	1.7	2.5Y	3.8	3.4	3.4	3.3	3.8	3.6Y	(3.4)Y	4.5	B	4.5	B	4.5	4.5	3.5	3.6	2.4	3.5	3.6	3.7	4.8	3.3F
19	3.3F	6.6	4.3	3.5	3.5	3.0	2.4	G	3.5	3.0	4.2	3.6	3.6	3.7	6.2	6.9	3.8	3.8	3.0	2.0	2.2	G	3.6	3.6
20	3.2	3.7	2.4	1.5	3.2	(3.5)Y	G	G	3.2	3.5	G	G	C	C	C	C	C	4.5	(3.5)Y	G	1.8	2.3	2.4	1.8
21	1.5	2.6	2.7	2.3	G	G	1.8	G	(3.0)Y	3.9	4.2	S	G	B	G	G	2.5	3.6	3.7	2.6	(3.4)Y	2.6	B	C
22	G	1.5	1.8	2.8B	G	G	4.4	3.7	3.8	3.6	3.6	G	G	G	G	G	2.4	3.5B	(3.5)B	(3.5)B	1.6	G	G	G
23	G	G	G	1.8	G	G	1.6F	G	G	3.4	G	G	G	3.5	3.4	G	C	3.3	6.4	3.7F	2.2	3.6	7.2	4.5F
24	4.9F	7.8F	7.5F	5.4F	4.2	C	2.7	2.6	3.6	7.3	9.8Y	6.7Y	9.4	B	B	B	2.4Y	3.8	6.0	5.0	3.8	C	C	5.0
25	3.3	5.2	4.2	2.6	3.1	3.1	2.4	2.6	G	G	6.8	6.8	3.3	5.2	4.5	3.5	B	2.7	4.5	4.7	2.1	2.0	2.3	2.3
26	2.5	1.2	1.4	1.2	G	1.7	B	G	G	C	B	G	G	G	5.0Y	2.6	2.8	2.3	2.8	1.6	4.3	G	G	3.4
27	3.7	2.4	2.2	1.5	2.8	2.0	G	4.6	4.6Y	3.2	3.3	3.6	3.6	3.7	3.6	3.1	3.8	2.2	3.2	2.4	4.0	3.8	3.6	3.5
28	3.0	3.2	2.0	2.7	2.2F	3.2F	2.8F	3.5	G	6.5	5.8	6.2	13.7	13.3	(10.0)B	6.5	5.0	7.1	6.9	6.7	5.5	5.0	5.3	6.4Y
29	6.9Y	1.5	1.3	1.7B	(2.4)B	G	1.7	3.8	G	3.6	5.0	G	B	S	G	G	G	2.5	2.0	3.4	3.4	G	2.4	1.8
30	1.3	G	G	1.8	G	G	G	2.5	G	9.0Y	4.0	G	4.1	(4.5)B	G	6.0	6.7Y	6.0	3.8	4.7	2.2	3.2	2.2	G
31	2.4	3.6	2.0	1.9	2.0	G	2.5F	C	G	5.2	B	G	G	3.8	C	C	C	C	C	6.0	6.0	5.6	4.6	3.4
Median Value	2.5	1.9	2.0	2.2	2.2	2.0	1.8	2.6	3.1	3.6	4.1	3.6	3.6	3.7	3.8	3.0	2.6	2.6	2.8	3.0	2.4	2.0	2.4	2.8
Count	31	31	31	31	30	30	29	26	28	22	18	21	17	15	15	24	24	29	29	31	31	30	29	30

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

W 8 11

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct 1949 | (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	2.7	2.5	2.5	2.6	2.5	2.7	2.9	2.9	(3.0)$^{F}_{S}$	3.1	[3.0]^{B}	3.1^{B}	3.1^{S}	3.2	[3.2]^{S}	(3.2)^{J}	(3.2)^{B}	3.1	(2.9)$^{J}_{S}$	3.0	2.9	2.8	2.6	2.8
2	2.6	2.8	2.5^{B}	(2.6)$^{J}_{B}$	2.9	(2.7)^{B}	3.0^{P}	(3.1)^{B}	C	C	C	C	C	C	C	C	C	B	B	B	(2.8)^{P}	2.6	2.8	2.7^{P}
3	2.6	2.7	2.6	2.8	2.6^{H}	2.7^{H}	C	C	3.0	(3.0)^{B}	3.1	(3.1)^{J}	3.3	(3.1)^{P}	(3.0)^{J}	3.0^{P}	3.0^{B}	S	S	S	2.7	3.0	2.9	2.6
4	2.6	2.5	2.4	2.6	2.7	S	S	3.1	3.2	(3.3)^{J}	3.0	3.0	2.8	3.0	3.0	3.0	3.2	3.0^{P}	(2.9)$^{F}_{S}$	[2.8]^{S}	(2.6)$^{F}_{S}$	(2.7)$^{F}_{S}$	2.6	2.3
5	2.4	2.3^{P}	B	(3.2)^{P}	2.4^{F}	2.5	2.9	3.0^{P}	3.0	2.9	2.9^{P}	2.8	2.9	(3.0)^{P}	(3.0)^{P}	3.0	3.2	(3.4)$^{P}_{S}$	3.0$^{P}_{S}$	3.1	S	S	2.9	2.8^{P}
6	2.7^{P}	3.0	2.7	2.6	2.5	2.6	2.5	2.7	(3.0)$^{J}_{P}$	(2.9)^{S}	3.1$^{P}_{S}$	3.1	3.1	3.3$^{P}_{B}$	(3.3)^{J}	(3.2)^{J}	B	(3.1)^{P}	S	3.2^{P}	2.8	2.7	2.7	2.6
7	2.6	2.6	2.5^{P}	(2.5)^{P}	2.7	2.6	3.1	3.0	3.0$^{P}_{S}$	(2.8)$^{P}_{S}$	2.8	B	B	B	B	(3.0)^{B}	(3.0)$^{J}_{P}$	(3.0)$^{J}_{P}$	2.8	3.0	2.7	2.7	2.5	2.4	2.5
8	2.4	2.6	2.4^{K}	2.1^{K}	2.4^{K}	(3.0)$^{A}_{K}$	3.0^{K}	2.8^{K}	2.5^{K}	(2.5)$^{B}_{K}$	(2.6)$^{B}_{K}$	(2.6)$^{B}_{K}$	(3.0)$^{B}_{K}$	2.9^{K}	(2.8)$^{B}_{K}$	3.2^{K}	(3.0)$^{J}_{K}$	2.9^{K}	C^{K}	2.9$^{S}_{K}$	[2.8]$^{B}_{K}$	2.8^{K}	2.4^{K}	2.3^{K}
9	2.4^{K}	(2.4)$^{K}_{F}$	(2.3)$^{K}_{F}$	2.1$^{F}_{K}$	2.3$^{F}_{K}$	3.0^{K}	(3.0)^{B}	(3.2)^{J}	(3.2)$^{J}_{P}$	3.2	3.1	2.9$^{P}_{S}$	3.1	2.8	3.2	3.0	3.0^{S}	2.8	3.0	2.5$^{P}_{S}$	2.9	2.8	2.6	2.6
10	A	(2.6)^{A}	2.3	2.5	2.8	2.7	C	3.0^{P}	3.1	2.8	2.7	2.7	2.7^{P}	2.8	2.6	2.7	2.9^{P}	2.7	2.7^{P}	2.9	2.9$^{P}_{S}$	2.7	2.4^{F}	(2.6)^{I}
11	2.6	2.7^{F}	2.5	2.4^{H}	2.4	2.5	2.8^{P}	3.0	3.1	(2.8)$^{P}_{B}$	(2.8)$^{P}_{B}$	2.9	(2.9)$^{J}_{P}$	2.7^{P}	2.7^{P}	(2.8)$^{P}_{B}$	2.9^{P}	3.0	(2.9)^{B}	2.9	(2.7)^{P}	2.6	2.4	2.5
12	2.5	2.3	2.4	2.4	2.6^{F}	2.6^{F}	3.0^{F}	(2.7)^{B}	(2.8)$^{P}_{S}$	3.1	2.7	2.7^{S}	(2.7)$^{P}_{S}$	2.6	2.7^{P}	(2.7)$^{J}_{P}$	2.6	2.8	(2.6)^{S}	2.8^{P}	2.6	2.7	2.3	2.4
13	2.5	2.4	2.5	2.6	2.6	2.5	3.2^{P}	(3.0)^{S}	(3.1)$^{J}_{H}$	2.9	2.8	2.7	2.6	(3.0)^{J}	(3.1)^{J}	3.0	2.8^{P}	2.6	2.8	2.7^{P}	2.8^{P}	2.8	2.6	2.4^{P}
14	[2.6]^{C}	2.7	2.6	2.5	(2.4)^{J}	2.8	3.0	(3.1)^{J}	3.0^{P}	3.0	2.9	2.7	2.7	(2.7)^{J}	2.6$^{P}_{S}$	(2.9)^{P}	3.3	2.9$^{P}_{S}$	(2.8)^{S}	(2.8)$^{P}_{S}$	2.8	2.5	2.4	2.6
15	2.3	(2.3)^{F}	F	2.0^{F}	2.2^{F}	2.6^{P}	2.7	(2.6)^{B}	(2.9)$^{B}_{F}$	2.9	2.8	2.8	2.8	2.7	2.7	2.8	3.0	2.8	2.8	2.2	2.3^{F}	2.5	2.6	2.7
16	2.6^{K}	B^{K}	A^{K}	A^{K}	2.0^{K}	2.2$^{A}_{K}$	2.1^{K}	2.7^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	C^{K}	2.6^{K}	(2.6)$^{B}_{K}$	(2.5)$^{B}_{K}$	2.6^{K}	2.4^{K}	2.2^{K}	2.5
17	2.6	2.3	2.5	2.4^{F}	[2.6]^{C}	2.9^{P}	2.9	3.1	3.2	(3.0)$^{P}_{S}$	2.8	S	S	2.6	(2.6)^{B}	(2.8)^{B}	2.9	2.9	(3.0)^{B}	2.9	2.7	2.7^{P}	2.6	[2.6]^{A}
18	(2.5)^{B}	2.5	2.4	2.4	2.5	2.5^{F}	2.6	3.1	3.1	2.9	3.0^{P}	2.7	2.7	(2.9)^{B}	2.9	3.0	3.1	(3.1)$^{P}_{S}$	(3.2)$^{J}_{P}$	(3.0)$^{P}_{S}$	2.8	2.7	2.6	2.7
19	2.4	2.3^{F}	2.5^{F}	2.7	2.7	2.7	(3.2)^{S}	3.3	3.3	3.1	(3.0)$^{J}_{P}$	3.0^{P}	2.9	(3.0)$^{P}_{B}$	(2.9)^{P}	(3.1)^{P}	(3.0)^{P}	(3.0)$^{P}_{B}$	(3.2)^{J}	3.0	2.8	2.7	2.5	2.4
20	2.4	2.6	2.4	2.3	2.3	2.3	2.6	2.9	3.0	2.9	3.1	3.0	C	C	C	C	C	3.0	2.6	2.7	2.6	2.3	2.3	2.3
21	2.4	2.4	2.6	2.8	2.9	2.6	3.1	2.8	3.1	3.2	3.1	2.9	3.1	2.9	2.9	2.9	3.0	3.2	3.1	3.0	3.0	2.6	2.6	[2.5]^{C}
22	2.4	2.4	2.5	(2.4)$^{P}_{B}$	2.8	2.5	(3.0)^{S}	(3.2)^{J}	(3.1)$^{J}_{P}$	3.0^{P}	3.1	3.0	3.0	(3.1)$^{J}_{P}$	(2.9)^{J}	3.1	3.2^{P}	[3.2]^{S}	(3.2)$^{P}_{S}$	(3.3)$^{P}_{S}$	(3.2)$^{J}_{P}$	2.8^{H}	2.7	2.6
23	2.8^{a}	2.7	2.6	2.5	2.5^{F}	2.6$^{P}_{S}$	3.0	3.1$^{P}_{S}$	3.1	3.3^{P}	3.0^{P}	3.1^{P}	(2.8)^{P}	2.9^{P}	3.0	2.9	[2.8]^{C}	2.8$^{P}_{S}$	(2.7)$^{P}_{S}$	(2.8)$^{P}_{S}$	2.9	2.6	2.4	2.5
24	2.5	2.6	2.6	2.4	2.3	[2.5]^{C}	2.7	2.9	3.0	C	C	2.9	2.8	2.9	3.0	3.2	(2.9)^{S}	2.6	2.8	3.1^{B}	C	C	C	3.0
25	2.4	2.2	2.5	2.6	2.5	2.5	2.9	(3.2)$^{P}_{S}$	(3.1)^{S}	(2.9)^{S}	2.7	2.9	2.9	3.2^{S}	3.2	(3.5)$^{P}_{B}$	(3.4)$^{P}_{B}$	3.5	3.2	3.2^{P}	2.7^{P}	2.8	2.8	2.6
26	(2.5)^{J}	2.5^{K}	2.4^{K}	(2.5)$^{J}_{K}$	2.5^{K}	2.6^{K}	(2.6)^{J}	(2.9)^{J}	T	C	3.2	3.2	3.2^{P}	3.2	3.2	3.3^{P}	B	S	3.1	3.3	S	S	3.0	3.0
27	2.6	2.4	2.6	2.8	3.0	3.1	3.2	3.3	(3.3)$^{P}_{S}$	(3.4)$^{P}_{R}$	(3.5)$^{J}_{P}$	(3.3)$^{P}_{B}$	(3.5)$^{P}_{S}$	(3.6)$^{P}_{B}$	(3.4)^{P}	(3.5)^{J}	(3.5)^{J}	2.7	2.6^{S}	3.0	2.9	3.1	2.8	2.5
28	2.4	2.4	2.6	2.7	2.6	2.5^{F}	3.0	(3.2)^{J}	3.2^{P}	3.3	3.1	3.1	A	A	(3.6)^{S}	3.0^{P}	S	A	A	A	S	A	A	A
29	A	2.4	2.4	2.8	2.6^{P}	(2.3)$^{J}_{H}$	2.8	3.0^{P}	3.0	3.0	2.7	2.8	3.0	2.8	2.8	3.0	(3.4)$^{J}_{P}$	(2.8)^{P}	(3.1)^{P}	3.0^{S}	3.0	2.8	2.8	2.5
30	(2.5)$^{J}_{P}$	(2.5)$^{J}_{P}$	2.6	2.4	2.6^{B}	2.6	2.7^{P}	(3.0)^{P}	(3.1)$^{P}_{B}$	2.6^{P}	2.7	2.7	3.1	2.8	2.7	2.6	S	2.8	2.7	3.1	2.8	2.5	2.4	2.5
31	2.4	2.4	2.4	2.6	2.4	2.3	2.4^{F}	C	(2.5)^{J}	2.8	B	B	3.4^{P}	3.5	C	C	C	C	C	A	A	A	A	3.1
Median Value	2.5	2.5	2.5	2.5	2.5	2.6	2.9	3.0	3.1	3.0	3.0	2.9	2.9	2.9	3.0	3.0	3.0	2.9	2.9	2.9	2.8	2.7	2.6	2.6
Count	29	30	28	30	31	30	28	29	28	27	27	26	25	26	27	27	23	26	25	27	26	26	28	30

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

W 9

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | f min F | 135° E Mean Time | **Wakkanai** | Lat. 45° 23.6' N | Long. 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	E	E	E	E	A	1.4	2.1	2.9	3.4	3.8	4.0	4.0	4.6	4.2	4.3	3.2	2.7	2.2	1.6	1.9	E	1.2	E	E
2	E	E	1.1	1.2	1.3	1.2	2.2	2.8	3.0	C	C	C	C	C	C	C	C	A	A	A	1.3	1.4	1.5	E
3	E	A	A	E	E	1.5	C	C	3.2	4.0	4.1	4.0	B	8.6	4.9	4.0	2.2	2.8	3.2	A	A	1.8	1.6	1.2
4	E	2.0[A]	1.2	E	E	E	2.1	2.3	3.2	3.2	4.0	4.2	4.0	4.0	4.0	4.0	3.3	2.3	2.2	1.3	1.7	1.5	1.4	1.3
5	E	E	E	E	E	E	2.0	3.0	3.9	3.4	4.8[B]	4.8[B]	4.8[B]	6.0	4.6[B]	3.0	3.0	1.6	1.6	1.4	1.4	1.6	1.6	1.4
6	1.4	1.3	1.2	E	E	E	2.2	2.9	4.0	4.8[B]	4.9[B]	3.6	4.7[B]	4.4	4.2	3.0	2.8	1.9	E	E	E	E	E	1.5
7	E	E	E	E	E	E	2.0	1.8	4.2	4.0	4.2	4.0	4.2	4.2	3.8	3.0	2.5	(2.1)[B]	2.2	1.4	1.4	E	E	1.4
8	E	E	1.4	A	(1.2)[A]	(1.2)[A]	2.0	2.3	A	(4.7)[B]	5.7	A	5.8	5.5	4.6	4.2	A	3.4	1.4[A]	1.4	1.7	1.2	E	E
9	E	E	E	E	E	1.4	A	A	A	4.6	4.6	A	A	A	5.4	3.2	3.1	2.2	5.2	1.8	A	1.7	A	1.5
10	A	A	A	1.7	1.4	E	3.3	5.0	4.0	4.1	A	4.0	5.0[B]	4.6	4.0	3.2	3.0	2.1	1.6	2.0	A	E	A	A
11	1.2	AF	1.7	A	A	E	1.6	3.0	3.7	4.2	4.5	(6.0)[B]	4.4	6.0	A	4.2	(3.2)[B]	2.0	1.8	A	2.0	2.2	1.6	A
12	A	1.4	1.3	1.5	1.5	1.2	2.1	2.5	3.7	4.5	5.0	4.8	4.3	4.3	4.6	4.3	4.2	3.2	1.4	A	E	E	A	A
13	2.0	E	E	E	E	E	2.0	2.9	5.0	4.7	5.9	6.0	4.1	4.6	5.8	3.2	4.5	2.0	1.5	A	A	A	A	A
14	A	1.8	1.2	1.3	1.1	1.4	2.0	4.0	3.7	4.0	4.0	4.1	4.0	4.1	4.1	4.0	3.1	2.3	2.2	1.4	1.3	E	E	E
15	E	E	E	E	E	E	1.5	A	A	4.2	5.0	4.0	4.1	4.2	5.4	3.0	2.6[B]	1.7	1.5	1.6	1.3	1.6	1.3	1.2
16	A	A	A	A	A	2.0	2.0	2.4	C	C	C	C	C	C	C	C	C	2.2	2.3	2.2	1.7	2.0	1.8	2.2
17	2.1	1.5	A	E	C	A	A	2.8	A	A	4.4	4.6	4.0	3.8	4.0	3.2	3.1	2.3	2.3	1.3	1.3	1.3	1.3	A
18	1.7	1.5	1.6	E	A	1.8[A]	A	A	A	A	A	5.1	6.0	3.3	4.5	3.3	2.9	2.2[A]	2.5	A	A	2.0	1.4	AF
19	2.0[F]	A	A	E	2.0[A]	1.3	1.8	2.6	3.3	3.2	3.5	3.6	3.7	3.2	2.9	A	4.3	3.0	2.3	2.0	1.8	1.4	A	A
20	A	1.8	E	E	E	E	1.5	2.9	3.1	3.2	3.5	3.5	C	C	C	C	C	3.2	1.5	1.1	1.2	1.8	1.4	1.2
21	E	1.3	A	E	E	E	1.4	2.5	3.0	2.7	3.6	S	3.4	3.5	3.1	2.8	2.3	A	(2.2)[A]	2.2	2.7	2.0	1.4	C
22	E	E	E	E	E	E	A	3.0	2.9	(3.6)[T]	3.3	3.4	3.6	3.2	3.0	2.8	2.2	A	A	A	A	E	E	E
23	E	E	-	E	E	E	1.5	2.2[F]	3.0	3.4	3.3	3.4	3.5	4.0	3.0	2.8	[2.6][C]	2.4	2.1[F]	AF	2.3	1.4	1.5	1.5
24	1.1	AF	AF	1.2	1.4	[1.4][C]	1.5	2.2	3.0	A	3.4	3.5	3.7	4.2	4.1	3.9	1.8	A	A	A	A	C	C	1.2
25	A	A	E	E	1.2	E	1.5	2.4	2.9	3.2	A	A	3.6	3.2	2.8	3.2	4.0	A	A	1.4	1.4	1.5	1.2	1.3
26	1.3	1.2	1.2	1.2	E	E	1.6	1.7	3.6	[4.0][C]	4.3	3.3	3.5	3.6	3.2	2.2	2.2	1.3	1.8	1.6	S	1.2	1.2	A
27	1.4	1.4	A	E	A	A	1.5	2.3	A	A	A	3.2	A	A	A	A	3.4	1.6	2.2	2.0	1.8	2.0	1.6	1.5
28	2.0	1.8	1.5	E	E	E	1.4	A	3.0	3.2	3.2	3.5	A	A	A	A	3.0	A	A	A	A	A	A	A
29	A	1.3	E	E	E	E	1.5	3.1	3.1	4.2	3.9	3.5	3.7	4.0	3.0	3.0	2.3	1.6	1.4	1.2	1.6[S]	1.4[S]	1.4	1.4
30	1.4	E	E	E	E	E	E	2.1	3.2	3.4	4.5	3.6	4.4	4.1	3.0	2.4	2.3	A	2.0	A	1.8	1.8	1.6	1.4
31	1.5	1.6	1.2	E	E	E	1.4	C	3.1	A	B	3.2	3.8	4.0	C	C	C	C	C	A	A	A	A	A
Median Value	1.1	1.2	E	E	E	E	1.7	2.6	3.2	4.0	4.2	4.0	4.0	4.1	4.0	3.2	3.0	2.2	2.0	1.4	1.4	1.4	1.4	1.2
Count	24	24	23	28	26	30	26	25	24	24	24	25	24	25	24	24	26	23	25	19	21	27	23	20

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

W 10

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | f_{min} 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	G	G	G	1.4	E	E	1.4	1.3	1.5	1.4	2.2	2.4	2.2	2.1	2.1	1.3	1.3	1.1	1.1	E	E	G	G	G
2	G	G	E	E	E	E	E	E	1.3	C	C	C	C	C	C	C	C	1.3	E	E	E	E	E	E
3	E	E	E	G	E	E	C	C	E	B	2.2	2.2	1.6	B	2.2	1.2	E	E	E	1.2	1.2	1.1	1.2	1.2
4	G	1.2	E	G	E	E	E	E	F	E	1.2	1.4	1.4	1.6	1.4	1.5	1.6	1.3	E	E	1.3	E	E	E
5	G	G	G	G	G	E	1.2	1.6	2.3	1.7	1.9	1.5	E	2.2	1.6	1.5	1.5	1.4	1.2	G	G	G	G	G
6	E	E	G	G	G	E	1.2	1.3	1.3	1.7	2.2	2.1	1.4	1.3	B	1.3	E	E	E	E	E	G	G	E
7	E	G	G	G	G	E	1.2	E	E	E	1.3	1.3	1.2	1.3	1.3	1.3	1.1	E	1.4	G	G	G	G	1.2
8	E	G	E	E	F	E	1.2	1.4	1.5	1.2	1.5	2.0	1.4	2.3	1.4	1.2	E	E	1.1	G	G	G	G	G
9	G	G	G	G	1.4	1.2	E	1.1	1.4	1.5	1.6	2.2	2.4	2.5	2.2	1.4	1.4	1.3	1.2	1.2	1.2	1.1	1.1	1.1
10	1.1	E	E	E	E	E	1.4	1.5	1.5	1.6	1.6	1.5	1.6	1.6	1.7	1.4	1.4	1.1	E	E	E	E	E	E
11	E	E	E	E	E	E	E	E	E	1.6	B	B	1.8	2.7	1.6	1.2	1.2	E	1.4	E	E	1.2	1.4	1.4
12	E	E	E	E	E	E	B	B	S	S	S	1.9	2.0	2.3	2.1	2.0	2.0	1.4	1.1	E	E	E	E	E
13	E	E	1.1	G	1.2	E	1.2	1.2	1.2	1.7	B	B	2.3	1.5	1.5	1.4	1.4	E	B	E	1.2	E	E	E
14	E	E	E	E	G	E	E	1.2	1.3	2.1	2.1	2.1	1.9	1.3	1.2	1.3	1.3	1.3	1.2	E	G	G	G	G
15	G	G	G	E	E	E	B	1.2	1.5	1.6	2.3	1.2	1.2	1.4	1.2	E	E	E	E	G	G	G	G	E
16	E	1.2	E	E	E	E	1.2	1.5	C	C	C	C	C	C	C	C	C	1.3	1.5	1.4	1.2	(1.2)[B]	1.5	1.5
17	1.2	E	E	E	C	E	E	1.3	1.5	1.8	1.8	1.5	1.5	1.4	1.4	1.4	1.4	1.3	1.3	G	G	1.2	1.2	1.2
18	1.1	E	E	E	E	E	E	E	1.4	1.7	2.9	(2.0)[B]	1.7	1.7	1.6	1.4	1.3	E	E	E	E	E	E	E
19	E	E	E	E	E	E	E	E	E	E	1.2	1.3	1.3	1.4	1.2	1.3	1.2	1.2	1.3	1.2	1.3	G	1.4	1.4
20	1.2	1.2	E	E	E	E	E	E	1.2	1.3	1.4	1.5	C	C	C	C	C	1.1	1.3	G	1.1	1.4	1.4	1.6
21	1.1	E	E	E	E	E	E	E	1.3	E	E	E	E	E	E	E	E	E	E	1.4	1.6	1.6	B	C
22	G	E	E	E	G	E	E	1.2	1.3	2.0	1.3	1.4	1.3	1.5	1.4	E	E	E	E	E	E	G	G	G
23	G	G	G	E	G	E	1.4	E	E	1.6	2.4	1.8	2.3	1.8	E	1.2	[1.4][C]	1.5	1.5	1.5[F]	1.5	1.4	1.4[F]	1.4
24	1.1[F]	1.1[F]	E	E	E	C	1.4	1.4	1.5	2.2	1.9	2.2	3.1[B]	B	1.2	1.2	E	E	E	E	E	C	C	E
25	1.2	E	E	E	E	E	E	1.2	1.2	1.5	1.6	1.8	1.9	1.6	1.5	1.5	1.5	E	E	E	E	E	E	E
26	E	E	E	E	G	E	B	1.2	E	C	1.7	1.5	1.5	1.5	1.4	1.3	1.3	1.2	1.1	S	S	G	G	E
27	E	E	E	E	E	E	E	E	E	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.2	1.2	1.2	1.1	E	1.2
28	1.2	E	E	E	E	E	E	E	E	E	E	1.1	1.2	1.2	1.2	1.2	1.4	1.5	1.3	1.4	1.5	1.5	1.5	1.5
29	1.2	E	E	E	1.9	E	E	1.3	1.1	1.2	1.2	1.2	1.5	1.5	1.5	1.5	1.1	1.2	1.2	1.2	1.6[S]	G	1.4	1.2
30	E	G	G	E	G	E	E	1.1	1.4	2.0	1.9	1.9	1.8	1.6	1.4	1.3	1.6	1.4	1.4	1.2	1.4	1.3	1.4	G
31	1.2	E	1.2	E	E	E	E	C	1.4	E	E	1.4	1.4	1.2	C	C	C	C	C	2.4[B]	1.2	E	E	E
Median Value	E	E	E	E	E	E	E	1.2	1.3	1.6	1.6	1.5	1.5	1.5	1.4	1.3	1.3	1.2	1.1	E	E	E	E	E
Count	31	31	31	31	30	30	27	28	29	26	26	27	28	26	26	27	27	30	29	30	30	30	29	30

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

W 11

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | foF2 | 135° E Mean Time | Fukaura | Lat. 40° 36.6' N | Long. 139° 54.1' 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	6.2	6.0	5.8	5.6	5.6	6.0	8.1	C	C	C	C	C	C	C	C	C	C	C	C	C	7.1	6.9	6.2	5.8
2	5.4	5.1	5.2	5.0	5.0 Z	6.2	9.7	10.6 J	B	10.6	10.7	10.7	B	B	B	B	11.6 P	11.0	8.9	6.9	6.6	6.5	6.4	6.1
3	6.0	5.8	5.8	5.7	5.5	5.7	9.9	10.3	10.6	C	B	B	B	C	B	B	C	10.6	C	7.2	7.1	6.9	6.4	6.5
4	6.2	6.5	6.4	6.2	5.6	5.9	8.0	10.0	11.7	11.0	11.4 P	B	B	B	B	B	B	11.4	9.5	7.6	7.9	8.3	7.8	6.7
5	6.6	6.6	7.4 V	6.8	3.5	5.1	6.4	10.4	11.4	12.0	B	B	B	B	12.2	12.0	12.0	11.2	S	S	S	7.6	7.1	6.7
6	6.6	6.6	6.0	6.0	5.7	5.7	7.4	10.5	B	B	B	B	B	C	C	C	C	9.8 P	B	(7.2) P	(7.0) C	6.8	B	4.7
7	5.0	4.6	5.2	5.2	4.8	5.0	S	10.0	B	B	B	B	(12.7) P	(12.7) B	12.7 P	B	B	B	9.6	7.3	7.7	7.1	6.8	6.7
8	6.2	6.3	5.4	4.8	4.9	5.1	6.5	7.2	9.5	10.2	11.6 P	(11.9) P	(11.6) C	11.3	11.1	(10.4) C	9.6	(8.8) C	8.1	6.3 H	6.0	5.9	5.7	5.1
9	4.8	4.8	3.8	3.6	3.7	4.0	7.8	9.9	11.1	11.0	10.7	11.5	11.6	10.8	11.0	11.2	10.0	9.3	7.8	7.4	6.5	A	A	A
10	A	A	A	(5.2) F	5.6	6.1 Z	(8.3) F	10.0	10.4 H	11.0	11.3	11.2	(12.1) P	(12.2) C	12.2	12.0	11.2	10.2	9.6	9.2	(8.6) S	7.3	6.7	S
11	7.2	6.7	6.2	6.5	6.3	6.8	9.1 J	11.4	B	(11.6) B	B	(12.3) B	S	S	B	B	B	11.2 P	9.2	8.3	7.1	6.8	6.6	5.6
12	F	5.7 V	6.0 V	6.0 V	5.8 V	5.9	7.4	10.1	B	B	B	B	B	11.9	12.1	11.9	11.3	10.5	9.1	8.3	7.8	7.3	7.0	7.1
13	6.7	6.7	6.6	6.5	5.7	6.6	8.3	10.2	B	B	B	C	B	B	B	B	11.2	10.9	9.4	8.6	7.8	7.4	7.0	6.7
14	6.6	6.7	6.1	5.6	5.9	6.7	8.6	10.3	C	C	C	C	C	C	C	C	C	C	9.2	9.4 P	8.2	C	C	8.7 P
15	7.5	7.1	7.1	7.1	7.2	7.4	9.3	10.4	9.3	10.9	B	B	B	B	B	11.7	11.7	10.4 P	9.2 J	T K	(8.8) FR K	B K	F K	F K
16	6.6 JF K	6.4 H K	4.7 K	4.6 K	4.1 J K	3.3 K	4.5 K	4.0 K	4.3 K	G K	7.2 K	7.8 K	8.0 K	7.8 K	8.8 K	8.6 K	8.8 K	8.1 K	7.9 K	7.1	5.8	5.1	4.8	5.4
17	5.6	5.1	4.9	5.1	4.9	4.4 F	6.4	9.4	11.1	11.8 P	12.1	12.4 P	B	BH	11.6 H	11.8 P	11.2 P	10.8	9.2	7.6	6.7	5.8	5.7	5.2
18	5.4	5.6	5.2	5.3	4.6	4.5	7.2	10.0	11.4	11.7	B	12.0	B	B	B	B	11.3	10.0	10.0	8.1	7.3	5.7	5.1	4.9
19	4.8	5.0	5.0	5.1	5.0	5.0	7.2	10.7	B	B	B	B	B	12.2	12.4 P	12.4	11.6	9.7	8.5	7.2	6.6	5.9	5.5	5.5
20	5.6	5.6	5.3	5.1	5.0	5.1	6.2	S	B	B	B	B	B	B	12.3	11.1	10.8	9.5	7.6	5.6	4.8	4.7	4.8	4.4
21	4.9	4.6	4.8	4.2	3.4	C	C	C	C	C	C	C	C	C	C	C	C	C	8.9	7.0	5.4	4.7	4.5	4.5
22	4.6	5.0	5.0	4.7	5.5 Z	5.5 Z	7.6	11.0	B	B	B	B	B	B	B	B	B	11.1	9.4	7.6	5.6	5.4	5.1	4.8
23	5.0	5.0	4.8	4.6	4.8	4.9	7.2	(9.2) C	11.1	B	B	B	B	B	B	B	B	11.0	9.3	8.0	6.9	6.1	5.9 S	5.9
24	6.3	5.9	5.2	4.8	4.8	5.4	7.1	9.5	11.2	B	B	B	B	B	C	B	B	9.2	6.8 H	6.7	6.7	5.2	5.1	5.2
25	5.1	5.1	5.0	4.9	4.7	4.4 H	(6.2) J S	(9.8) J S	B	B	B	B	B	B	B	12.2 P	11.6	9.6	6.8	6.6	5.6	4.6	4.5	4.3
26	4.2	4.4	4.5	4.5	4.4	4.4	5.7	9.7 S	10.4	11.0	(11.3) P	B	11.5	B		B	11.1	(9.5) C	7.9	6.7	6.6	4.8	4.6	4.1
27	3.9	4.4	4.2	4.4	4.4	4.0	6.1	10.0	10.7	10.2	11.2	B	B	B	B	12.3	11.4	10.0	9.4	7.3	6.7	4.9	5.0	4.7
28	4.2	4.8	4.4	4.6	3.7	3.9	5.5	8.3	10.5	B	S	12.6 P	B	12.0 P	12.3 P	11.5	11.7	10.9	10.3	8.6 P	8.5 S	6.3	6.6	6.2
29	6.6	6.3	(6.2) C	6.2	4.9	5.5	6.7	S	S	S	B	B	B	(12.2) B	B	11.9	11.2	9.4 J S	9.0	8.5	6.3	5.4	5.2	C
30	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
31	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Median Value	5.6	5.7	5.2	5.1	4.9	5.2	7.2	10.0	10.7	11.0	(11.3)	(11.9)	(11.6)	(12.0)	12.2	11.8	11.2	10.2	9.2	7.4	6.8	6.0	5.7	5.5
Count	27	28	28	29	29	28	27	25	15	13	9	9	6	9	11	14	18	25	25	25	23	26	25	25

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

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

IONOSPHERIC DATA

Oct. 1949 | h_pF2 | 135° E Mean Time | Fukaura | Lat. 40° 36.6′ N | Long. 139° 54.1′ 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	380	380	390	400	380	270	C	C	C	C	C	C	C	C	C	C	C	C	C	300	320	340	320
2	370	370	330	310	320 Z	300	280	(260) J	B	270	290	300	B	B	B	B	300 P	280	280	330	340	330	330	350
3	370	370	350	350	360	350	270	250	260	C	B	B	B	C	B	B	C	290	(290) C	290	320	330	360	370
4	370	390	340	310	350	330	270	290	260	270	310 P	B	B	B	B	B	B	290	300	370	410	370	320	440
5	360	430	330 V	270	400	340	320	300	270	290	B	B	B	B	310	290	320	320	S	S	S	310	340	360
6	400	340	360	360	380	400	320	300	B	B	B	B	B	C	C	C	C	300	B	B	C	320	B	360
7	400	380	410	420	470	330	S	310	B	B	B	B	310 P	B	320	B	B	B	300	330	340	380	410	410
8	430	390	450	410	480	430	360	360	340	350	320 P	(350) P	(340) C	320	320	(300) C	270	(280) C	290	340 H	370	400	370	400
9	400	510	430	520	480	490	300	310	310	290	320	330	320	340	330	320	290	310	330	320	350	A	A	A
10	A	A	A	(390) F	400	410 Z	(310) F	280	360	290	400	300	(320) P	(340) C	360	340	320	330	320	330	(320) S	320	430	S
11	420	340	380	470	400	390	(280) J	290	B	(280) B	B	(320) B	S	S	B	B	B	310 B	310	320	380	380	330	400
12	F	490 V	500 V	460 V	410 V	420	300	300	B	B	B	B	B	340	350	350	320	330	370	380	400	390	400	390
13	390	400	390	370	330	360	290	280	B	B	B	C	B	B	B	B	320	330	350	370	340	350	370	430
14	410	380	410	450	320	340	250	270	C	C	C	C	C	C	C	C	C	C	340	420 P	430	C	C	430 P
15	410	350	340	390	470	390	320	300	310	300	B	B	B	B	B	310	300	310 P	(330) J	I K	(400) FR K	B K	F K	F K
16	F K	720 H K	550 K	A K	(480) J K	540 K	A K	380 K	G K	G K	430 K	390 K	360 K	390 K	340 K	340 K	330 K	340 K	360 K	390	460	390	480	450
17	450	430	420	410	390	380 F	310	290	280	400 P	310	320 P	B	BH	300 H	320 P	300 P	300	310	280	310	370	340	400
18	400	400	400	410	440	430	290	270	290	300	B	320	B	B	B	B	300	320	330	300	320	340	370	390
19	450	460	420	A	440	400	310	270	B	B	B	B	B	340	360 P	350	280	290	320	330	360	350	430	440
20	430	410	420	420	470	480	420	S	B	B	B	B	B	B	310	300	290	280	280	310	390	390	370	430
21	450	410	340	320	390	C	C	C	C	C	C	C	C	C	C	C	C	C	300	300	320	390	430	370
22	450	450	390	450	420	380	320	310	B	B	B	B	B	B	B	B	B	290	290	270	340	390	400	400
23	390	340	370	390	380	360	290	(280) C	260	B	B	B	B	B	B	B	B	310	310	300	320	360	420	390
24	390	320	400	390	440	380	310	280	270	B	B	B	B	B	C	B	B	270	300 H	340	330	360	390	260
25	370	340	330	330	330	300 H	(300) J S	300	B	B	B	B	B	B	B	(300) P	290	270	300	310	300	310	330	360
26	390	380	440	450	380	330	300	290	270	290	(280) P	B	290	B	B	B	320	(300) C	290	330	290	320	350	380
27	430	470	400	420	380	390	310	270	290	290	310	B	B	B	B	310	280	290	300	290	320	390	400	430
28	480	520	460	410	350	450	370	310	300	B	S	330 P	B	(330) P	310 P	300	340	320	330	350 P	320 S	400	420	410
29	430	360	(350) C	340	320	370	300	S	S	S	B	B	B	(310) B	B	310	300	310 J	290	300	320	320	350	C
30	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
31	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Median Value	400	390	395	390	400	380	300	290	290	290	(310)	(320)	(320)	(340)	320	310	300	300	305	330	340	360	370	400
Count	26	28	28	27	29	28	26	25	15	13	9	9	6	8	11	14	18	25	26	25	27	26	25	25

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

F 2

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949. | h'F2 | 135° E Mean Time | Fukaura | Lat. 40° 36.6' N | Long. 139° 54.1' 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	300	310	300	400	380	270	C	C	C	C	C	C	C	C	C	C	C	C	C	250	250	250	270
2	280	270	S	250	280	250	220	210	220	220	230	250	260	240	240	280	250	240	210	240	280	260	270	260
3	280	290	290	270	300	300	230	230	210	(220)C	220	230	270	(270)C	270	260	(240)C	230	(240)C	240	260	270	270	290
4	300	270	260	240	260	250	220	240	220	220	210	230	270	250	250	270	240	240	210	240	300	280	270	320
5	270	320	220	200	240	240	250	240	220	230	250	250	230	240	240	250	230	230	220	230	250	260	250	270
6	270	280	280	290	290	300	250	250	230	230	230	240	250	240	250	C	C	230	(220)B	B	C	250	250	280
7	300	320	310	310	400	300	230	210	250	240	220	270	260	250	270	260C	250	240	230	250	270	290	290	290
8	330	330	290	300	370	350	290	230	240	250	270	300	(280)C	260	270	(250)C	230	220	220	230	340	330	310	320
9	310	390	350	400	360	300	280	260	250	250	240	260	260	270	240	240	230	230	250	250	260	A	A	A
10	A	A	A	A	280	270	250	230	220	220	270	260	260	250	250	250	240	240	240	240N	230	250	300	340
11	300	290	300	380	350	300	230	220	220	230	260	250	250	250	240	250	250	240	210	250	220	300	300	(320)A
12	380	390	370	350	270	270	250	230	240	240	240	240	230	250	300	300	240	250	280	280	270	270	290	290
13	290	290	290	280	250	250	250	220	220	220	250	250	250	300	260	270	240	240	250	260	270	270	290	300
14	320A	290	300	350	220	280	220	230	C	C	C	C	C	C	C	C	C	C	290	310	290	C	C	320
15	260	260	260	280	320	290	290	240	240	280	260	240	270	230	270	260	220	240	260	500K	310FK	300K	280K	290K
16	270K	200HK	AK	AK	480K	AK	AK	380K	GK	GK	370K	370K	300K	340K	290K	290K	290K	300K	290K	290A	280	320A	380	350
17	330	360	350A	300	250	240	270	230	250	340	270	270	230	240H	260H	260L	240L	220	260A	230	B	290	280	310
18	300	300	300	330	300	330	230	230	230	230	240	230	240	230	240	240	230	240	250	240	250	250	300	300
19	390	390	360	A	370	A	260	240	240	220	230	240	260	250	250	240	230	260	230	240	270	290	320	310
20	320	300	310	340A	390	270	300	240	220	250	250	250	240	240	240	240	240	220	270	220	290	290	300	310
21	A	340	270	230	240	C	C	C	C	C	C	C	C	C	C	C	C	C	210	220	250	330	320	310
22	340	330	270	340	300	280	230	230	220	220	230	230	260	240	250	260	220	230	240	240	240	300	270	290
23	310	290	300	300	300	280	230	(220)C	220	230	240	230	240	240	230	230	220	220A	230A	230A	A	270	310	310
24	300	260	290	300	A	280	250	260	230	230	220	220H	220	230	220	230	240	220	230H	290	A	280	310	200
25	310	290	290	300A	290	300H	270	220	250	240	230	250	260	250	270	240	230	220	240	240	220	260	280	310
26	310A	A	A	A	270	250	230	220	210	210	210	260	240	260	220	240	210	(220)C	220	240	230	230	290	290
27	290	300	310	290	280	280	240	220	220	220	240	220	220	240	260	240	230	210	220	220	220	270	280	320
28	420	390	360	310	280	360	220	230	230	230	220	300	250	240	250	250	240	250	270	220	260	220	300	300
29	330	290	(280)C	270	240	310	220	210	210	210	230	230	250	250	240	250	230	220	240	220	230	250	300	C
30	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
31	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Median Value	300	300	300	300	290	280	250	230	225	230	240	250	250	250	250	250	240	230	235	240	260	270	290	300
Count	27	27	25	25	28	26	27	27	26	26	26	26	26	26	26	25	25	26	28	27	25	27	27	27

Sweep 1.0 Mc to 7.0 Mc in 15 min Manual

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

IONOSPHERIC DATA

Oct. 1949 | foF1 | 135° E Mean Time | Fukaura | Lat. 40° 36.6'N | Long. 139° 54.1'E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							Q	C	C	C	C	C	C	C	C	C	C	C	C					
2							B	B	B	B	B	B	B	B	B	L	A	Q	Q					
3							Q	Q	B	C	B	B	B	C	L	Q	C	Q	C					
4							Q	L	L	Q	Q	B	B	B	B	A	Q	Q	Q					
5							Q	Q	Q	B	Q	B	Q	Q	Q	Q	Q	Q	Q					
6							Q	Q	Q	Q	Q	B	B	B	B	C	C	Q	Q					
7							Q	Q	B	Q	Q	B	B	B	B	B	B	Q	Q					
8							Q	Q	A	Q	B	B	C	B	B	C	B	B	Q					
9							Q	Q	L	Q	B	Q	B	A	B	Q	Q	Q	Q					
10							Q	Q	Q	Q	A	A	A	B	Q	Q	Q	Q	Q					
11							Q	Q	Q	A	A	B	B	B	B	Q	B	Q	Q					
12							A	Q	B	B	B	B	Q	A	A	Q	L	L	A					
13							L	Q	Q	Q	B	B	B	L	B	B	Q	Q	Q					
14							Q	Q	C	C	C	C	C	C	C	C	C	C	L					
15							L	Q	Q	L	A	Q	Q	Q	Q	Q	Q	Q	B					
16							A	27[J]	L	46	A	50	Q	L	L	B	B	A	A					
17							Q	Q	L	Q	A	Q	Q	B	B	L	L	Q	A					
18							Q	L	A	A	A	Q	A	B	Q	A	A	A	A					
19							Q	Q	Q	Q	B	A	A	A	Q	Q	Q	Q	Q					
20							Q	42	Q	B	B	B	B	Q	Q	Q	Q	Q	Q					
21							C	C	C	C	C	C	C	C	C	C	C	C	Q					
22							Q	A	A	Q	A	A	A	B	B	Q	Q	Q	Q					
23							Q	C	Q	Q	Q	Q	B	Q	Q	Q	Q	Q	Q					
24							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
25							Q	Q	L	Q	L	L	L	L	L	Q	Q	Q	Q					
26							Q	Q	Q	Q	Q	B	B	B	Q	B	Q	C	Q					
27							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
28							Q	Q	Q	A	Q	Q	Q	Q	Q	Q	Q	Q	Q					
29							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
30							C	C	C	C	C	C	C	C	C	C	C	C	C					
31							C	C	C	C	C	C	C	C	C	C	C	C	C					
Median Value							–	–	–	–	–	–	–	–	–	–	–	–	–					
Count							0	2	0	1	0	1	0	0	0	0	0	0	0					

Sweep 1.0 Mc to 11.0 Mc in 15 min Manual

F 4

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | h'F1 | 135° E Mean Time | Fukaura | Lat. 40°36.5'N Long. 139°54.1'E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							Q	C	C	C	C	C	C	C	C	C	C	C	C					
2							B	B	B	B	B	B	B	B	B	250	A	Q	Q					
3							Q	Q	B	C	B	B	B	C	230	Q	C	Q	C					
4							Q	220	220	Q	Q	B	B	B	A	Q	Q	Q	Q					
5							Q	Q	Q	B	Q	B	Q	Q	Q	Q	Q	Q	Q					
6							Q	Q	Q	Q	Q	B	B	B	B	C	C	Q	Q					
7							Q	Q	B	Q	Q	B	B	B	B	B	B	Q	Q					
8							Q	Q	A	Q	B	B	C	B	B	C	B	B	Q					
9							Q	Q	200	Q	B	Q	B	A	B	Q	Q	Q	Q					
10							Q	Q	Q	Q	A	A	A	B	Q	Q	Q	Q	Q					
11							Q	Q	Q	A	A	B	B	B	B	Q	A	Q	Q					
12							A	Q	A	B	B	B	Q	A	A	Q	240	210	A					
13							240	Q	Q	Q	B	B	B	240	B	B	Q	Q	Q					
14							Q	Q	C	C	C	C	C	C	C	C	C	C	250					
15							260	Q	Q	240	A	Q	Q	Q	Q	Q	Q	Q	B					
16							A	320	240 A	B	A	240	Q	280	B	A	B	A	A					
17							Q	Q	220	Q	A	Q	Q	B	B	230	220	Q	A					
18							Q	220	A	A	A	Q	A	B	Q	A	A	A	A					
19							Q	Q	Q	Q	B	A	A	A	Q	Q	Q	Q	Q					
20							Q	210	Q	B	B	B	B	Q	Q	Q	Q	Q	Q					
21							C	C	C	C	C	C	C	C	C	C	C	C	Q					
22							Q	A	A	Q	A	A	A	B	B	Q	Q	Q	Q					
23							Q	C	Q	Q	Q	Q	B	Q	Q	Q	Q	Q	Q					
24							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
25							Q	Q	230	Q	220	220	220	220	230	Q	Q	Q	Q					
26							Q	Q	Q	Q	Q	B	B	B	Q	B	Q	C	Q					
27							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
28							Q	Q	Q	A	Q	Q	Q	Q	Q	Q	Q	Q	Q					
29							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
30							C	C	C	C	C	C	C	C	C	C	C	C	C					
31							C	C	C	C	C	C	C	C	C	C	C	C	C					
Median Value							–	–	220	–	–	–	–	–	–	–	–	–	–					
Count							2	2	5	1	1	2	1	3	2	2	2	1	1					

Sweep 1.0 Mc to 7.0 Mc in 15 min Manual

F 5

19

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

IONOSPHERIC DATA

Oct. 1949 | f₀E | 135° E Mean Time | Fukaura | Lat. 40° 36.6'N | Long. 139° 54.1' 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 1	C	C	C	C	C	C	C	C	C	C	C	C					
2							A	B	B	3.4	B	B	B	B	B	B	A	A	A					
3							B	2.9	B	C	B	B	B	C	(3.2) B	B	C	2.1	C					
4							2.C	2.6	2.8	3.2	B	B	B	B	B	3.4	2.7	A	B					
5							B	2.3	A	B	B	B	B	B	3.3	3.1	2.7	(2.2) B	A					
6							(2.0) B	A	A	3.2	B	B	B	B	B	C	C	(2.3) B	B					
7							(2.1) A	(2.6) A	A	B	B	B	B	B	B	B	B	(2.1) B	B					
8							B	2.6 P	3.0 A	B	B	B	C	B	B	C	B	B	B					
9							A	(2.3) A	A	A	B	B	B	A	A	A	A	A	A					
10							B	2.8	3.3	B	A	A	A	B	A	3.2	A	A	A					
11							B	2.5	A	A	B	B	B	B	B	3.2	A	B	B					
12							A	A	2.1	B	B	B	B	B	B	A	A	A	A					
13							1.9	2.8	3.2	B	B	B	B	B	B	B	A	B	B					
14							2.2	2.3	C	C	C	C	C	C	C	C	C	C	A					
15							A	A	A	A	B	B	B	A	A	A	A	B	B					
16							2.0	2.1	B	B	B	A	A	A	B	A	A	A	A					
17							1.6	2.4	2.6	A	A	A	B	B	B	B	B	A	A					
18							1.9	2.2	A	A	A	A	A	B	B	A	A	A	A					
19							B	A	A	A	B	A	A	A	A	A	A	A	A					
20							1.9 I	2.9	B	B	B	B	B	3.2	A	2.8	2.3	B	B					
21							C	C	C	C	C	C	C	C	C	C	C	C	B					
22							A	A	A	B	A	A	A	B	B	2.8	2.3	A	B					
23							B	C	B	B	A	A	B	B	B	2.9	A	A	A					
24							B	A	A	A	A	B	B	A	3.3 P	A	B	A	A					
25							(1.5) B	2.2	A	B	B	B	B	B	B	B	B	B	E					
26							E	2.3	2.8	3.2	B	B	B	B	B	B	B	C	A					
27							1.7	(2.6) A	A	A	B	B	B	3.1 B	B	2.8	2.2 B	B	B					
28							B	2.1	3.0 A	A	A	A	A	3.3	A	2.8	A	A	A					
29							B	(2.0) B	B	B	B	B	B	3.1	3.0	2.6	2.2	1.8	B					
30							C	C	C	C	C	C	C	C	C	C	C	C	C					
31							C	C	C	C	C	C	C	C	C	C	C	C	C					
Median Value							1.9	2.4	2.9	-	-	-	-	-	-	2.8	2.3	2.1	-					
Coun							3	9	8	4	C	0	0	4	1 4	0	6	5	1					

Sweep 1.0 Mc to 17.9 Mc in 15 min Manual

F 6

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | h'E | 135° E Mean Time | Fukaura | Lat. 40° 36.6 'N | Long. 139° 54.1' 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	C	C	C	C	C	C	C	C	C	C	C	C					
2							A	B	B	110	B	B	B	B	110	A	A	A	A					
3							B	130	B	C	B	B	B	C	110	120	(100)C	110	C					
4							120	120	110	110	110	B	110	110	110	110	10	A	B					
5							B	120	A	B	B	110	120	110	120	120	120	B	A					
6							130	A	A	120	110	110	110	120	110	C	C	B	B					
7							A	110	A	110	110	B	110	110	110	110	110	110	B					
8							B	110	110	B	110	B	C	B	B	C	B	B	B					
9							A	120	A	A	110	B	110	A	A	A	A	A	A					
10							B	(140)B	120	120	A	A	A	120	A	120	A	A	A					
11							B	120	A	A	B	B	B	110	110	110	A	B	B					
12							A	A	110	110	110	110	110	110	110	A	A	A	A					
13							120	110	110	110	110	110	100B	B	120	120	A	B	B					
14							B	120	C	C	C	C	C	C	C	C	C	C	A					
15							A	A	A	A	110	120	110	A	A	A	A	B	B					
16							B	110	120	120	110	110A	A	A	110	A	A	A	A					
17							120B	110	120	B	A	A	110	B	B	B	B	A	A					
18							B	110	A	A	A	A	A	110	110	A	A	A	A					
19							B	A	A	A	110	A	A	A	A	A	A	A	A					
20							110	110	100	110	100	110	110	120	A	120	110	B	B					
21							C	C	C	C	C	C	C	C	C	C	C	C	B					
22							A	A	A	110	A	A	A	110	B	110	120	A	B					
23							B	C	110	110	A	A	120	B	120	110	A	A	A					
24							B	A	A	A	A	110	110	A	120	A	B	A	A					
25							B	110	A	110	120	110	110	120	110	120	120	B	E					
26							E	110	110	110	110	110	B	B	B	B	B	C	A					
27							B	B	A	A	110	110	110	110	B	120	110	B	B					
28							B	B	110	A	A	A	A	110	A	110	A	A	A					
29							B	B	B	B	B	B	B	110	120	110	120	B	E					
30							C	C	C	C	C	C	C	C	C	C	C	C	C					
31							C	C	C	C	C	C	C	C	C	C	C	C	C					
Median Value							120	110	110	110	110	110	110	110	110	110	110	—	—					
Count							6	16	11	13	14	11	14	14	15	14	9	2	2					

Sweep 1.0 Mc to 12.0 Mc in 15 min Manual

F 7

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Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | fEs | 135° E Mean Time | Fukaura | Lat. 40° 35.6′ N | Long. 139° 54.1′ 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	G	B	B	B	B	B	G	C	C	C	C	C	C	C	C	C	C	C	C	C	B	1.9	G	G
2	G	2.0	S	G	B	2.4	(3.0)B	B	B	B	B	B	B	B	B	3.4	4.9	4.8	4.4	3.6	3.2	2.6	2.6	G
3	G	2.3	2.0	2.2	G	G	B	G	B	C	B	B	B	C	G	B	C	G	C	3.4	3.0	3.2	3.0	G
4	G	G	2.7	2.0	2.7	2.1	G	2.9	3.0	G	B	B	B	B	7.4	G	3.2	3.2	2.4	G	G	G	G	G
5	G	G	G	G	G	G	B	2.5	3.3	B	B	B	B	B	G	G	3.2	B	2.5	3.0	1.8	G	2.0	2.0
6	1.8	G	G	G	G	G	G	3.4	3.2	G	B	B	B	B	B	C	C	B	B	B	C	3.0	1.9	G
7	1.8	G	G	G	2.2	G	3.0	3.4	3.2	B	B	B	B	B	B	B	B	3.1	1.8	2.8	G	2.6	G	2.3
8	G	G	G	G	G	G	2.4B	G	4.4	4.8	B	9.2	C	9.2	B	C	4.6	3.2	B	3.2	4.4B	3.2	4.4	3.0
9	G	2.2	G	G	G	2.3	5.5	3.1	3.1	B	B	B	B	5.0	3.4	3.8	4.0	4.0	3.0	3.0	6.4Y	9.4	8.0	8.4
10	8.6	8.4	6.6	4.2	2.5	2.4	3.0	G	G	B	6.6	5.0	5.4	6.1	4.6	3.8	2.9	3.3	2.8	3.2Y	2.0	G	G	2.5
11	2.3	2.1	3.1	3.0	2.2	1.9	B	3.5	4.4	5.0	4.8	5.0	B	B	B	3.4	3.2	B	B	B	B	B	B	5.0
12	5.0	4.1	2.1	2.9	3.2	2.8	4.0	3.2	3.2	B	(5.0)Y	(6.2)Y	B	6.4	5.4	3.4	4.4	3.5	5.3	5.8	3.4	3.3	3.2	3.1
13	2.3	G	G	G	G	G	G	3.1	G	G	B	B	B	B	B	B	3.4	B	B	B	2.8	2.5	3.0	2.4
14	3.2	3.4	G	G	G	3.2	2.5	2.4	C	C	C	C	C	C	C	C	C	C	2.9	2.0	2.0	C	C	2.0
15	3.0	3.2	3.2	2.0	G	G	3.6	3.3	4.8	5.8	5.0Y	4.4Y	5.4Y	5.2	5.0	5.0	2.8	B	B	B	2.7	3.0	B	B
16	G	4.2	(4.0)B	4.7	4.2	3.4	4.6	3.2	3.3	B	5.0	4.6	4.4	4.0	B	3.6	3.0B	4.9	7.8	7.4	6.4	3.4	3.2	3.7
17	4.0	4.3	3.8	2.2	G	G	1.9	3.3	5.2	B	12.2	5.2	B	B	B	B	B	3.4	(4.2)B	3.0	3.6	2.8	3.0	3.4
18	2.6	2.2	1.9	3.2	3.1	3.4	B	G	4.0	4.4	6.2F	4.5	4.6	B	B	4.2	4.6Y	4.0	3.0	3.0	2.6	G	G	2.0
19	3.0	4.8	3.4	7.2	5.6	4.4	4.8	3.2	3.4	3.2	B	7.0	5.2	4.3	4.4	3.3	3.4	3.8	3.2	2.1	G	G	3.2	3.0
20	3.2	4.6	3.0	4.0	2.2	1.6	3.4	3.6	B	B	B	B	B	3.3	3.4	3.2	G	B	2.2	3.0	3.2	2.4	2.6	2.4
21	5.2	2.3	G	1.2	G	C	C	C	C	C	C	C	C	C	C	C	C	C	2.3	3.5	G	5.2	3.0	2.1
22	G	2.0	2.0	G	2.0	2.0	2.2	3.5	4.1	B	5.3	4.8	7.2	B	B	G	2.7	3.2	B	G	G	G	G	G
23	G	G	G	G	G	G	B	C	B	B	4.6	5.0	B	B	B	G	4.0	3.2	8.2	4.1	7.0	4.1Y	2.3	G
24	G	G	G	2.0	4.0	G	B	3.0	4.4	3.5	4.0	B	B	4.0	B	5.3	(4.2)B	3.4	3.2	4.1	6.5	3.0	3.4	5.2
25	3.5	3.0	3.0	3.4	3.2	2.5	2.0	3.0	3.2	B	B	B	B	B	B	B	B	B	G	G	G	2.4	3.1	3.0
26	3.4	3.8	4.8	3.2	2.2	G	G	3.2	G	G	G	B	B	B	B	B	B	C	4.2	B	3.2	2.2	2.8	B
27	G	2.1	2.3	G	1.9	G	G	3.6	3.1	4.1	B	B	B	B	B	G	B	B	B	G	2.2	2.0	2.2	2.0
28	3.2	G	G	G	G	G	B	B	4.6	5.4	6.2	5.6	5.2	4.8	3.9	3.4	4.4	3.3	4.4	2.4B	G	G	B	G
29	2.0	G	C	G	G	G	B	B	B	B	B	B	B	B	3.3	3.4	G	G	G	G	3.2	2.1	G	C
30	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
31	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Median Value	2.0	2.2	2.0	1.6	1.9	G	2.5	3.2	3.3	3.5	5.0	5.0	(5.2)	4.9	3.9	3.4	3.4	3.3	3.0	3.0	2.8	2.5	2.6	2.2
Count	29	28	26	28	27	27	20	23	21	13	12	12	7	10	11	18	19	17	20	23	26	27	25	26

Sweep 1.0 Mc to 12.0 Mc in 1.5 min Manual

F 8

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | (M3000)F2 | 135° E Mean Time | Fukaura | Lat. 40° 36.6' N | Long. 139° 54.1' 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	2.9	2.7	2.6	2.6	2.6	2.7	3.5	C	C	C	C	C	C	C	C	C	C	C	C	C	3.1	3.0	2.9	3.1
2	2.7	2.8	3.0	3.1	3.0 Z	3.2	3.2	(3.3) J	B	3.4	3.3	3.2	B	B	B	B	3.1 P	3.3	3.2	2.9	3.0	3.0	3.0	2.8
3	2.8	2.8	2.8	2.9	2.8	2.8	3.4	3.6	3.4	C	B	B	B	C	B	B	B	C	3.2	(3.2) C	3.2	3.0	2.9	2.8	2.8
4	2.7	2.7	3.0	3.1	2.9	3.1	3.3	3.3	3.4	3.4	3.0 P	B	B	B	B	B	B	B	3.2	3.1	2.7	2.6	2.8	3.1	2.5
5	2.8	2.5	3.0 V	3.2	2.7	2.9	2.9	3.2	3.3	3.3	B	B	B	B	3.0	3.2	2.9	3.0	S	S	S	3.1	2.9	2.8
6	2.6	2.9	2.8	2.9	2.7	2.6	3.0	3.2	B	B	B	B	B	C	C	C	C	3.2	B	(3.4) P	[3.2] C	3.1	B	2.9
7	2.8	2.7	2.7	2.6	2.5	3.0	S	3.1	B	B	B	B	(3.1) P	B	3.2 P	B	B	B	3.2	3.0	2.9	2.6	2.6	2.5
8	2.5	2.6	2.4	2.6	2.5	2.6	2.4	2.6	2.9	2.8	2.9 P	(2.9) P	[2.9] C	2.9	3.0	(3.1) C	3.2	(3.2) C	3.1	2.9 H	2.7	2.7	2.6	2.7
9	2.6	2.3	2.4	2.2	2.3	2.3	3.2	2.9	3.0	3.2	2.9	2.9	3.0	2.9	2.9	3.0	3.1	3.0	2.9	3.1	2.8	A	A	A
10	A	A	A	(2.8) F	2.7	2.5 Z	(2.9) F	3.3	3.3 H	3.1	3.1	3.2	(2.9) P	[2.8] C	2.8	2.8	3.0	2.9	3.0	2.9	(2.9) S	2.9	2.5	S
11	2.6	2.9	2.7	2.4	2.7	2.7	(3.1) J	3.1	B	(3.4) B	B	(3.1) B	S	S	B	B	B	3.0 P	3.0	3.1	2.8	2.7	2.9	2.9
12	F	2.3 V	2.3 V	2.4 V	2.6	2.5	3.1	3.1	B	B	B	B	B	2.8	2.8	2.8	3.0	2.9	2.8	2.8	2.6	2.7	2.6	2.7
13	2.7	2.6	2.7	2.8	2.9	2.8 •	3.1	3.2	B	B	B	C	B	B	B	B	2.9	2.9	2.8	2.7	2.9	2.8	2.7	2.5
14	2.7	2.7	2.6	2.5	3.0	2.8	3.4	3.2	C	C	C	C	C	C	C	C	C	C	2.9	2.7 P	2.5	C	C	2.6
15	2.6	2.8	2.8	2.6	2.4	2.7	2.9	3.1	3.0	3.2	B	B	B	B	B	3.1	3.1	3.1 P	(2.8) S	I K	(2.8) K	B K	F K	F K
16	JF K	1.9 H	2.1 K	2.1 K	(2.2) B K	2.2 K	2.2 K	2.7 K	2.7 K	G K	2.5 K	2.7 K	2.7 K	2.7 K	2.8 K	2.8 K	2.9 K	2.8 K	2.7 K	2.6	2.6	2.6	2.4	2.4
17	2.4	2.6	2.5	2.6	2.6	2.7 F	3.0	3.2	3.3	2.8 P	3.2	3.1 P	B	BH	3.3 H	3.0 P	3.2 P	3.1	3.1	3.2	3.0	2.9	2.8	2.6
18	2.6	2.6	2.7	2.6	2.6	2.5	3.2	3.3	3.1	3.0	B	3.2	B	B	B	B	3.1	3.0	3.0	3.1	3.0	2.9	2.8	2.7
19	2.6	2.4	2.6	2.6	2.4	2.8	3.2	2.4	B	B	B	B	B	3.0	2.8 P	2.8	3.2	3.2	3.1	3.0	2.7	2.8	2.5	2.5
20	2.5	2.5	2.5	2.5	2.5	2.4	2.7	S	B	B	B	B	B	B	3.2	3.2	3.2	3.2	3.3	3.0	2.7	2.7	2.8	2.6
21	2.6	2.6	2.9	3.0	2.6	C	C	C	C	C	C	C	C	C	C	C	C	C	3.1	3.0	3.0	2.7	2.5	2.6
22	2.6	2.5	2.7	2.5	2.5 Z	2.7 Z	2.9	3.1	B	B	B	B	B	B	B	B	B	3.0	3.1	3.3	2.9	2.6	2.6	2.6
23	2.7	3.0	2.8	2.6	2.8	2.8	3.2	(3.2) C	3.3	B	B	B	B	B	B	B	B	3.1	3.1	3.2	3.0	2.7	2.7 C	2.7
24	2.8	2.9	2.7	2.7	2.5	2.7	3.1	3.3	3.3	B	B	B	B	B	B	C	B	B	3.3	3.1 H	2.8	3.0	2.7	2.8	3.3
25	2.8	2.9	3.0	3.0	2.9	2.8 H	(3.0) J S	(3.2) J S	B	B	B	B	B	B	B	(3.0) P	3.2	3.3	3.1	3.0	3.0	3.0	3.1	2.8
26	2.7	2.7	2.5	2.5	2.7	3.0	3.1	3.3	3.4	3.1	3.2 P	B	3.4	B	B	B	3.0	(3.0) C	3.1	3.0	3.1	2.9	2.8	2.7
27	2.4	2.4	2.7	2.5	2.7	2.7	3.2	3.3	3.1	3.1	3.1	B	B	B	B	3.1	3.2	3.2	3.1	3.3	3.1	2.7	2.6	2.6
28	2.4	2.2	2.5	2.6	2.8	2.5	3.3	3.0	3.2	B	S	3.0 P	B	(3.1) P	3.0 P	3.1	2.9	3.0	2.9	2.8 P	2.9 S	2.7	2.5	2.6
29	2.5	2.9 C	[2.9]	2.9	2.9	2.8	3.1	S	S	S	B	B	B	(3.0) B	B	2.9	3.1	(3.0) J	3.1	3.1	3.0	3.0	2.8	C
30	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
31	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Median Value	2.6	2.6	2.7	2.6	2.7	2.7	3.1	3.2	3.3	3.1	(3.1)	(3.1)	(3.0)	(2.9)	3.0	3.0	3.1	3.1	3.1	3.0	2.9	2.8	2.8	2.7
Count	27	28	28	29	29	28	27	25	15	13	9	9	6	8	11	14	18	25	26	26	28	26	25	25

Sweep 1.0 Mc to 11.0 Mc in 15 min . Manual

F 9 23

Radio Regulatory Agency Denpacho

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

IONOSPHERIC DATA

Oct. 1949 | fminF | 135° E Mean Time | Fukaura | Lat. 40°36.6'N | Long. 139°54.1'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	1.6	2.0	2.0	2.0	2.0	2.0	2.2	C	C	C	C	C	C	C	C	C	C	C	C	C	1.7	1.7	1.4	1.4
2	1.1	1.1	S	1.3	2.3	1.6	(2.4)B	6.0	4.4	5.0	5.0	5.4	5.8	5.6	4.2	4.0	A	A	A	A	A	1.6	1.6	1.4
3	1.2	1.2	1.2	1.4	1.4	1.7	1.8	2.9	5.8	(5.6)C	5.5	5.8	6.0	(5.0)C	4.0	4.0	(3.2)C	2.4	(1.9)C	1.4	2.0	1.4	1.7	1.7
4	1.2	1.2	1.3	1.4	2.0	1.4	2.0	2.6	3.5	4.0	4.2	5.0	5.0	4.8	A	4.0	2.8	2.2	2.2	2.0	2.0	2.0	1.9	2.0
5	1.8	1.2	1.2	1.2	1.2	1.3	2.0	2.7	3.8	4.4	4.2	5.0	4.1	4.1	4.2	3.1	3.7	2.3	2.1	A	1.5	1.5	1.5	1.6
6	1.4	1.4	1.4	1.4	1.4	1.4	2.6	3.0	A	4.2	4.7	5.2	5.2	5.4	C	C	C	2.3	2.8	6.2	C	1.6	1.6	1.4
7	1.5	2.2	1.8	2.0	A	1.8	2.2	2.7	A	4.0	4.7	6.0	5.6	5.4	5.6	6.0	5.8	A	1.7	1.4	1.3	1.2	1.4	1.7
8	1.3	1.8	1.1	1.1	1.2	1.8	2.0	2.9	A	4.0	5.4	5.0	(5.4)C	5.8	4.9	(4.5)C	4.1	4.0	2.0	2.0	A	A	2.0	2.0
9	2.0	2.0	1.7	1.4	1.3	1.7	2.3	3.1	2.7	3.1	4.7	4.2	5.4	A	5.0	4.0	2.8	3.0	2.0	1.8	2.4	A	A	A
10	A	A	A	A	1.9	1.8	1.8	2.9	4.0	4.2	A	5.5	A	5.0	A	5.6	2.8	A	2.2	2.0	A	1.8	1.8	3.0
11	1.8	2.2	A	A	A	1.7	1.8	1.8	A	A	A	A	5.0	5.2	4.4	4.0	4.0	2.0	2.7	2.7	2.8	4.2	4.0	2.2
12	3.0	2.2	1.7	2.0	1.5	1.9	A	2.4	4.0	4.4	5.0	4.6	4.6	A	A	3.8	A	2.2	A	A	1.8	1.7	1.6	1.4
13	1.6	1.7	1.7	1.7	1.7	1.6	1.9	3.0	3.8	3.8	5.0	5.4	5.8	5.2	5.6	5.4	A	2.2	1.8	2.0	2.0	2.0	A	2.0
14	2.3A	2.0	2.0	2.0	2.0	2.0	2.3	2.6	C	C	C	C	C	C	C	C	C	C	A	2.2	1.8	C	C	1.8
15	1.9	1.8	1.8	1.8	1.8	2.0	A	3.0	A	A	A	4.5	5.6	A	5.4	5.6	2.6	3.8	4.2	4.4	1.4	4.0	3.0	3.9
16	1.8	A	A	A	A	A	A	3.8	A	A	A	4.2	5.1	4.6	4.4	4.4	4.6	A	A	A	1.7	1.5	1.9	A
17	1.8	A	A	1.2	1.2	1.2	1.7	2.6	3	4.4	A	A	4.6	6.0	5.6	5.3	3.8	A	A	2.8	5.4	2.8	2.0	2.0
18	2.0	1.3	1.6	2.0	1.7	2.3	2.0	2.4	A	A	A	A	A	4.4	4.0	A	A	A	A	A	A	1.8	1.8	1.6
19	2.2	2.3	2.2	A	A	A	A	A	2.0	3.0	5.0	A	A	5.1	A	2.8	A	A	A	1.4	1.4	1.4	1.4	1.3
20	1.4	A	A	A	1.9	1.4	2.4	A	A	5.2	5.0	4.8	4.0	4.2	4.0	2.9	2.5	1.8	1.7	1.4	1.4	1.5	1.4	1.4
21	A	A	E	A	1.1	C	C	C	C	C	C	C	C	C	C	C	C	C	1.7	1.8	1.7	2.3	1.8	1.8
22	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.7	A	4.4	A	A	A	4.6	5.0	2.8	2.7	2.2	2.0	1.8	2.0	1.8	1.7	1.8
23	1.8	2.0	2.0	2.0	2.0	2.0	2.0	(2.6)C	3.2	4.0	A	A	4.8	5.0	4.0	2.9	2.2	A	A	A	A	2.0	1.7	1.8
24	1.7	1.8	1.8	1.6	A	1.8	2.2	2.8	A	3.0	3.5	3.8	4.0	4.2	4.0	A	A	2.0	1.8	1.8	A	1.7	1.4	1.5
25	1.5	1.8	1.8	A	1.8	1.4	1.8	2.4	2.9A	4.3	3.9	3.9	4.0	4.0	3.8	3.8	2.6	1.7	1.6	1.8	1.5	1.3	1.3	1.5
26	1.8A	A	A	A	1.2	1.2	1.4	2.4	3.8	3.4	3.9	4.6	5.4	5.8	4.0	5.5	5.3	C	A	2.2	A	2.2	2.0	2.0
27	1.8	1.2	1.2	1.2	1.2	1.2	1.7	2.8	3.0	3.0	4.0	4.0	4.5	4.0	4.0	2.8	2.4	1.6	1.6	1.6	1.6	1.8	1.8	1.8
28	A	1.9	1.8	1.8	1.8	1.8	1.8	2.6	A	A	A	A	A	4.1	A	3.4	2.8	A	2.1	1.7	1.8	1.8	1.8	1.5
29	1.3	1.8	(1.6)C	1.5	1.6	1.8	1.8	3.0	2.8	2.8	4.4	4.4	3.9	4.0	3.3	2.9	2.4	2.0	1.4	1.4	1.8	1.5	1.4	C
30	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
31	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Median Value	1.8	1.8	1.7	1.6	1.6	1.7	2.0	2.7	3.5	4.0	4.7	4.8	5.0	5.0	4.2	4.0	2.8	2.2	2.0	1.8	1.8	1.8	1.7	1.8
Count	26	23	22	21	24	26	24	25	15	21	17	19	21	23	20	23	19	16	19	22	21	26	26	26

Sweep 1.0 Mc to 10.0 Mc in 15 min Manual

F 10

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | fminE | 135° E Mean Time | Fukaura | Lat. 40° 36.6' N | Long. 139° 54.1' 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	G	B	B	B	B	B	2.0	C	C	C	C	C	C	C	C	C	C	C	C	C	B	1.8	G	G
2	G	1.8	S	G	B	1.6	1.7	B	B	2.6	B	B	B	B	2.4	2.6	2.6	1.8	1.6	1.6	1.7	1.6	1.6	G
3	G	1.9	1.8	1.9	G	G	B	1.7	B	C	(2.8)B	B	2.9	(3.6)C	2.4	2.0	2.0	1.7	(1.6)C	1.4	2.0	1.4	1.7	G
4	G	G	1.3	1.4	1.4	1.9	1.5	1.7	1.8	2.2	2.5	B	2.6	3.0	2.6	2.2	1.7	1.9	2.0	G	G	G	G	G
5	G	G	G	G	G	G	B	1.9	2.0	B	B	2.2	2.7	2.5	2.3	2.1	1.7	G	1.5	1.5	1.5	G	1.5	1.8
6	1.4	G	G	G	G	G	1.6	1.8	1.8	1.9	2.0	2.6	2.0	2.0	2.0	C	C	1.5	B	B	C	1.5	1.7	G
7	1.4	G	G	G	1.6	G	1.4	1.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8	B	1.8	1.9	1.7	1.4	G	1.2	G	1.7
8	G	G	G	G	G	G	G	1.8	2.4	4.0	1.9	5.0	(5.4)C	5.8	B	C	4.1	2.8	B	2.0	2.0	2.0	2.0	2.0
9	G	1.6	G	G	G	1.7	1.7	1.7	1.7	1.8	2.2	2.9	2.8	2.0	2.0	1.8	1.7	1.8	1.6	1.8	1.6	1.6	1.6	1.6
10	1.6	2.0	1.8	1.8	1.8	1.9	8	1.9	2.0	2.2	2.0	2.0	2.7	2.7	1.6	2.0	1.7	1.8	1.7	1.8	1.4	G	G	1.5
11	1.8	1.7	1.8	1.7	1.7	1.8	B	1.8	1.8	1.8	4.0	4.6	B	2.8	2.7	2.0	2.0	B	B	B	B	B	B	2.2
12	1.4	1.3	1.4	1.3	1.3	1.3	1.7	1.6	1.8	2.0	2.9	2.9	2.8	2.6	2.8	2.0	1.8	1.4	1.5	1.4	1.5	1.5	1.4	1.5
13	1.2	G	G	G	G	G	1.5	2.0	1.8	2.0	2.6	2.8	1.9	B	2.7	2.8	1.8	B	1.8	B	2.0	2.3	1.8	2.1
14	2.0	2.0	G	G	G	2.0	1.8	2.0	C	C	C	C	C	C	C	C	C	C	1.5	1.5	1.8	C	C	1.9
15	1.3	1.3	1.4	1.5	G	G	2.6	2.6	2.2	2.2	2.8	2.8	2.8	2.8	2.9	2.0	2.0	B	B	B	1.4	2.6	B	B
16	G	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.7	1.7	1.8	1.8	2.8	2.8	2.2	2.6	2.4	1.7	1.7	1.6	1.7	1.4	1.3	1.2
17	1.3	1.2	1.2	1.2	G	G	1.5	1.5	1.4	2.2	2.8	2.8	1.8	B	B	B	B	2.0	2.0	2.0	2.0	2.0	2.0	2.0
18	2.0	1.3	1.2	1.2	1.2	1.2	B	1.8	1.7	1.6	1.8	2.0	2.0	2.0	1.6	1.8	1.8	2.0	1.8	1.4	1.6	G	G	1.6
19	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.0	2.0	2.0	2.4	2.2	2.3	2.3	2.2	2.1	1.8	1.9	1.2	1.2	G	G	1.2	1.2
20	1.4	1.4	1.4	1.8	1.8	1.1	1.5	1.8	1.4	1.6	1.8	1.8	1.9	2.2	2.2	2.0	2.0	B	1.9	1.4	1.4	1.4	1.4	1.4
21	1.2	1.1	G	1.1	G	C	C	C	C	C	C	C	C	C	C	C	C	C	1.7	1.7	G	1.8	1.7	1.8
22	G	1.3	1.7	G	1.6	1.3	1.4	1.7	2.0	2.6	2.3	2.0	2.0	2.0	B	2.1	1.8	2.0	B	G	G	G	G	G
23	G	G	G	G	G	G	B	C	1.7	1.7	2.2	2.9	2.6	2.6	2.6	1.8	1.9	1.5	1.5	1.5	1.5	1.5	1.7	G
24	G	G	G	1.8	1.8	G	B	1.8	2.8	2.2	2.4	2.2	2.2	2.2	2.2	2.2	2.2	1.8	1.8	1.4	1.4	(2.9)B	1.4	2.8
25	1.4	1.4	1.8	1.4	1.2	1.4	1.8	1.4	1.8	2.6	2.6	2.6	2.6	2.3	2.4	2.0	2.0	B	G	G	G	1.3	1.3	1.3
26	1.3	1.2	1.2	1.2	1.2	G	G	1.5	1.4	1.8	1.8	2.7	B	B	B	B	B	C	2.2	B	2.2	1.8	2.0	B
27	G	1.2	1.2	G	1.2	G	1.5	2.0	2.0	1.8	2.0	2.0	1.8	2.0	B	2.0	1.8	B	B	G	1.6	1.6	1.7	1.8
28	1.6	G	G	G	G	G	B	1.8	1.9	2.0	2.0	2.1	2.1	2.3	2.2	2.1	1.8	1.8	1.4	1.7	G	G	B	G
29	1.5	G	-	G	G	G	B	1.8	B	B	3.0	B	B	2.3	2.1	1.8	1.8	1.5	G	G	1.4	1.4	G	C
30	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
31	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Median Value	1.3	1.2	1.2	1.2	1.2	G	1.7	1.8	1.8	2.0	2.2	2.4	2.4	2.3	2.2	2.0	1.8	1.8	1.6	1.4	1.5	1.5	1.4	1.5
Count	29	28	26	28	27	27	30	25	23	23	24	22	22	22	21	21	23	19	22	23	26	27	25	26

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

F 11

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

IONOSPHERIC DATA

Oct. 1949 | f_0 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	6.2	6.0	5.7	5.6	5.6	5.7	8.3	10.8	12.4	13.3	13.7	12.6	12.8	13.9^{P}	13.2	12.9	11.6	11.1	10.2	7.8	7.5	7.5	6.3	5.9
2	5.8	(5.6)^{C}	5.3	5.5	4.5	4.6	7.1	10.7	11.7	10.5	10.8	12.0	C	C	C	C	11.1	11.3	10.1	6.6	6.5	6.7	6.4	6.3
3	6.2	6.2	5.8	5.7	5.9^{P}	6.8	8.6	10.4	11.2	(11.8)^{C}	12.4	12.9	12.9	13.1	13.2	12.5	12.0	11.7	9.8	7.9	7.4^{S}	6.8	6.5	6.6
4	6.4	6.5	6.7	6.0	5.3	(6.8)^{C}	8.3	9.9	11.1	11.3	12.2	13.6	13.3	13.3	13.1	13.1	12.6	12.4	9.2	7.0	8.1	8.5	7.3	6.5
5	6.5	6.6	7.0	5.9	4.3	3.6	6.4	10.7	13.6	13.3^{E}	13.2	14.2	14.7	13.6	14.2	12.9	12.3	11.7	11.4	8.9	7.7	8.0	7.3	6.8
6	6.4	6.7	5.7	5.5	5.2	5.4	7.7	11.3	B	13.1	13.9	13.8	12.5	12.9	13.1	11.9^{S}	11.3	10.2	9.1	7.6^{P}	(7.6)$^{P?}$	6.7	6.0	5.9^{P}
7	5.4	5.4	5.3	5.2	4.9	5.8	7.8	11.1	13.2	13.7	13.6	13.8	14.5	14.1	14.2	12.5	13.1	11.3	10.2	(9.1)^{C}	7.9	7.3^{B}	7.4^{P}	7.1
8	6.5	6.3	6.0	5.3	5.4	6.0	7.0	8.9	11.4	12.6	13.6	14.5	13.5	13.3	(11.9)^{C}	10.5	10.4^{S}	C	C	6.2	(6.4)^{A}	6.5	6.0	5.7
9	5.1	4.8	4.6	4.1	4.3	4.7	6.9	9.9	11.0	11.6	11.4	13.0	13.2	12.8	12.6	12.4	10.9	9.4	7.7	7.0	6.7	6.7	5.9	7.0
10	6.1	5.9	5.4	5.6	5.6	6.2	7.3	8.7	12.2	10.5	12.7	13.5	13.9	13.6	13.5	12.5	12.4	11.0	9.7	9.2	8.5	7.9	6.7	6.9
11	7.4	6.8	6.1	5.6	5.9	6.4	(9.7)^{S}	11.2	12.1	12.5	13.9	14.1	14.3^{P}	14.4^{P}	14.2	13.9	13.5	13.2	10.3	8.6	8.2	7.7^{S}	7.3	7.0
12	6.4	5.8	5.7	5.9^{P}	5.9	5.8^{P}	9.7^{P}	11.0	13.1	13.6	13.9	14.1	13.7	12.6	12.5	12.1	12.0	11.1^{S}	(9.0)^{S}	8.4	8.3	7.6	7.4	7.6
13	7.4	6.9	7.0	6.7	5.6	6.8	7.6	11.0	11.6	12.1	C	C	13.1	13.1	12.8	12.5	11.8	S	9.1^{S}	8.1	7.6^{S}	7.2	7.0	6.7
14	6.5	6.7	C	C	C	C	C	C	C	C	S	13.7	12.7	12.6	12.7	12.7	11.5	9.6	9.2	8.9	8.7	8.7	(8.0)^{P}	8.5
15	(8.3)^{C}	7.1	7.0	6.8	7.8^{PF}	F	F	9.3	10.8	12.9	12.2	14.1	14.0	13.1	12.5	12.5	12.1	11.1	9.6	FN^{K}	F^{K}	F^{K}	F^{K}	F^{K}
16	S^{K}	S^{K}	S^{K}	S^{K}	A^{K}	A^{K}	A^{K}	S^{K}	6.7^{K}	6.3^{K}	11.0	10.3	9.8	9.6	10.0	10.8	10.1	9.2	8.3	7.5	5.8	(5.4)^{A}	5.1	5.5
17	5.3	5.0	4.9	4.6	4.4	4.0	6.2	10.4	12.5	11.9	11.8	12.9	13.1	13.4	13.0	12.5	12.2	12.1	10.7	8.6	6.5	6.4	5.6	5.0
18	5.1	5.2	5.0	4.7	4.7	4.9	8.1	S	10.7	11.7	13.9	14.8^{P}	B	14.0^{P}	14.0^{P}	13.4	12.3	10.1	(8.9)^{C}	8.7	7.1	6.8	5.2^{K}	4.6^{K}
19	4.3^{FK}	3.2^{K}	3.2^{K}	3.2^{K}	3.1^{K}	3.1^{K}	5.5^{K}	11.0^{K}	13.8^{K}	13.0^{K}	14.0	S	13.5	13.5	13.7^{S}	12.9	12.4	10.5	8.5	(7.8)^{C}	7.0	7.1	6.1	5.5
20	5.6	5.6	5.2	5.3	5.2	(6.0)^{C}	6.9	10.6	13.3	14.1	C	C	14.1	14.0	13.2	12.2	11.1	9.9	7.0	5.4	5.1	4.8	5.0	5.0
21	4.8	4.8	5.0	4.2	3.6	3.2	(7.5)^{J}	10.1	11.9^{P}	12.3	13.0	14.2	14.9	13.6	14.1	13.4	12.3	10.5	9.0^{P}	6.3	5.2	5.1	4.6	4.4
22	4.6	4.7^{P}	4.9	4.3	4.3	4.4	7.1^{S}	10.2^{S}	12.6	13.4	13.9	14.3	14.3	13.6	13.4	13.0	(12.1)^{C}	11.2^{A}	8.6	6.6	5.6	5.5	5.1	4.9
23	5.0	5.1	4.9	4.7	4.1	4.6	7.1	10.6	11.1	13.0	14.1	14.4	14.7^{P}	14.4	14.6	14.9^{P}	13.2	12.1	9.7	8.2	7.2	6.5	6.5	6.6
24	6.9	6.7	5.8	5.5	4.8	4.7	7.7	11.0	13.3	13.2	15.2^{P}	15.9^{P}	16.2	16.0	(15.2)^{B}	14.5	13.6	10.1	7.2	6.5	7.1	5.5	5.2	5.3
25	5.1	5.4	5.3	4.9	4.4	4.0	7.5	11.0	12.9	12.6	13.8	13.6	13.8	14.2	14.0	13.0	12.5	11.5	8.1	6.7	6.5	4.8	4.8	4.2
26	4.2	4.9	4.1	4.2	4.3	4.4	6.9	9.2	10.5	11.8	12.5	12.4	13.6	13.8	14.2	13.4	13.1	(10.5)^{B}	7.9	7.4	6.7	5.5	4.7	4.4
27	4.3	4.1	4.0	4.2	3.9	3.9	5.7	S	11.2	10.3	11.6	12.4	13.4	13.6	13.3	12.6	11.6	10.6	9.1	7.3	5.3	4.9	5.2	4.8
28	4.3	4.2	4.5	4.2	4.1	3.9	C	C	C	C	C	C	14.5^{P}	13.8	13.2	12.8	11.9	11.2	9.8	8.6	8.1	6.5	5.7	6.1
29	6.0	6.3	5.8	5.3	4.7	4.9	7.7	8	12.6	12.2	13.6	13.3	13.4	13.5	13.4	12.5	11.6	11.1	8.4	9.6	7.1	C	C	5.1
30	5.0	5.0	5.1	4.8	4.6	4.3	6.6	10.8	12.8	13.1	14.5	13.9	13.1	13.4	13.1	12.8	12.5	C	7.7	7.1	7.0	4.9	4.2	4.5
31	4.5	4.6	4.9	4.8	4.1	3.7	6.1	10.1	10.9	12.5	13.5	13.6	13.5	13.4	13.2	13.4	12.7	11.3	8.3	8.2	6.8	5.3	4.8	4.1
Median Value	5.7	5.6	5.3	5.3	4.7	4.6	7.3	10.6	12.0	12.5	13.6	13.7	13.5	13.6	13.2	12.8	12.1	11.1	9.1	7.8	7.1	6.7	6.0	5.8
Count	30	30	29	29	29	28	27	25	28	29	27	27	29	30	30	30	31	28	30	30	30	29	29	30

Sweep I.E. Mc to Mc in min Manual

K 1

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949. | hp F2 | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4 N | Long. 139° 29.3E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	360	330	400	370	330	360	240	250	240	240	260	270	300	280 P	280	270	260	240	230	280	300	300	280	300
2	300	(310) C	320	270	310	300	240	240	210	230	260	290	C	C	C	C	230	250	220	260	300	280	310	310
3	320	320	300	300	320 P	260	240	230	220	(240) C	270	280	280	280	270	270	260	250	230	240	290 S	310	310	280
4	310	290	280	240	210	(260) C	230	230	270	260	290	300	320	320	310	300	290	260	240	270	340	300	280	380
5	400	400	290	280	300	350	300	270	250	290 E	300	310	300	300	290	300	290	280	280	290	330	300	300	300
6	330	280	310	330	320	330	240	240	B	270	290	280	280	280	280	260 S	260	250	270	270 P	(260) J	290	310	320
7	370	360	370	370	430	340	260	280	280	260	270	300	310	300	280	280	290	250	270	(300) C	320	350 B	330 P	370
8	390	400	390	440	410	380	300	230	300	270	270	300	280	290	(270) C	250	250 S	C	C	300	(330) A	360	330	360
9	400	440	420	470	420	410	280	270	260	310	310	320	310	320	330	300	260	230	280	300	350	340	300	310
10	390	390	430	400	350	290	250	240	250	250	300	320	320	300	300	310	310	260	280	280	270	300	350	360
11	310	270	310	400	350	300	240 S	250	260	280	290	310	330 P	320 P	310	300	290	270	290	300	300	310 S	300	350
12	390	420	410	420 P	360	330 P	270 P	270	250	290	300	290	360	320	320	320	310	S	310 S	320	330	330	350	350
13	310	290	310	290	280	260	250	230	260	290	C	C	320	330	320	320	340	S	310 S	370 S	360 S	370	380	360
14	430	360	C	C	C	C	C	C	C	C	S	310	330	340	300	330	330	340	360	410	360	400	490	380
15	(430) C	480	490	520	F	F	F	260	300	320	300	340	350	340	340	320	320	290	330	F N K	F K	F K	F K	F K
16	S K	S K	S K	S K	A K	A K	A K	S K	290 K	300 K	360	310	310	300	310	320	290	300	330	320	360	(400) A	450	390
17	400	380	360	360	320	340	320	280	270	280	280	340	330	320	350	320	320	290	310	290	350	330	350	380
18	400	390	380	340	390	380	220	S	280	310	310	300 P	B	320 P	320 P	340	330	310	(300) C	290	310	330	380 K	380 K
19	410 F K	410 K	370 K	350 K	310 K	300 K	280 K	270	310	300	290	S	350	360	330 S	330	310	280	280	(300) C	330	350	380	440
20	450	420	440	460	490	(400) C	310	290	290	270	C	C	320	290	310	270	220	230	250	300	280	310	330	350
21	420	340	290	220	A	400	(220) J	230	240 P	320	320	320	300	300	320	280	270	250	240 P	290	320	320	320	350
22	380	360 P	300	340	340	320	240 S	(230) S	240	260	270	280	290	270	320	310	C	A	290	300	400	380	360	390
23	380	350	360	390	420	380	290	280	290	380	310	300	300 P	320	300	300 P	280	280	300	310	360	370	440	410
24	290	310	310	380	410	450	270	260	270	300	290 P	300 P	300	310	B	300	280	250	260	310	280	280	350	330
25	340	310	330	300	300	390	280	280	270	300	280	310	300	310	280	290	260	260	270	300	300	330	310	340
26	370	360	350	380	340	320	260	240	280	280	300	290	320	300	300	290	280	B	290	310	290	280	330	350
27	350	360	370	360	360	330	280	S	(270) S	300	300	320	330	300	300	290	270	290	270	300	310	360	330	380
28	440	470	440	380	360	430	C	C	C	C	C	C	340 P	350	350	340	340	320	320	300	330	250	440	400
29	370	370	300	330	420	450	260	B	270	320	300	320	340	320	310	300	310	280	260	290	290	C	C	330
30	360	340	310	300	370	400	300	290	270	280	300	290	320	310	320	300	270	C	280	290	290	310	(350) A	380
31	390	370	320	280	260	380	280	250	250	300	280	300	310	320	320	(270) B	290	260	290	290	280	320	310	340
Median Value	385	360	350	360	350	345	260	250	270	290	290	300	320	310	310	300	290	260	280	300	315	320	330	355
Count	30	30	29	29	27	28	27	25	28	29	27	27	29	30	29	30	30	25	30	30	30	29	29	30

Sweep 1.0 Mc to 17.0 Mc in 1.5 min Manual

K 2 27

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | h'F2 | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.1 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	280	250	270	270	250	250	210	200	200	190	200	200	210	210	210	220	210 AF	210	200	190	220	230	220	250
2	230	(230) C	230	210	190	230	200	200	200	190	190	230	C	C	C	C	200	200	200	200	200	200	230	200
3	250	250	230	220	220	220	200	200	190	(190) C	190	240	230	230	230	210	210	200	180	190	210	210	210	240 F A
4	240	230	230	210	210	(210) C	210	200	200	210	220	250	240	250	250	240	210	220	210	220	230	250	230	280
5	350	280	220	200	180	200	230	230	210	200	200	200	230	240	250	210	210	220	210	(230) A	220 A	240 A F	220	230
6	240	220	220	240	230	260	210	200	190	200	190	200	200	200	210	210	200	200	200	200	210	210	220	230
7	260	250	270	280	310	270	210	210	200	200	220	200	190	220	210	200	210	200	200	(240) C	270 A	230	250	250
8	250	270	280	230	330	290	250	200	200	210	200	220	220	210	(210) C	210	200	C	C	230 AF	(250) A	270	280 A F	300 A F
9	350 A F	390 A F	280	370	350	300	240	250	240	230	190	200	220	200	210	220	210	220	260 A F	290 A F	270 A F	270 A	270	260
10	290	300	300	270	210	250	200	200	220	200	200	250	220	260	260	250	220	200	220	210	210	210	240	270
11	240	220	220	290	280	220	180	180	180	200	230 AF	260	210	200	200	200	210	210	190	210	200	220	230	230
12	290	280	300	260	210	190	210	190	200	220	220	200	280	280	250	210	240	210	200	230	240	240	240	270
13	240	230	250	220	220	230	220	200	200	190	C	C	260	270	230	220	220	230	230	270	250	240	270	270
14	300	260	C	C	C	C	C	C	C	C	250	270	240	270	230	240	240	250	260	310	290	310	370	300
15	(330) C	360 AF	380	370	370	250	220	210	240	220	220	200	210	250	240	220	230	220	230	F N K	(310) F	(250) F K	210 K	250 K
16	220 K	A F K	A F K	A F K	A K	A K	A K	220 K F	280 K	280 K	290	250	290 A	250	240	230	240	240	240	220	240 A	A	A	310 A
17	300	290	300	250	240	240	240	240	220	230	240	210	240	280	230	240	240 F	230 F	230	220	220	250	250	290
18	300	280	290	290	290	300	200	210	220	210	250	200	270	270	210	240	230	230	(230) C	230 A F	230	250	270 K	290 K
19	350 K	270 K	330 K	290 K	250 K	260 K	260 K	250	230	240	250	260	270	270	210	250	230	210	210	(240) C	260	280	270	290
20	330	310	290	320	360	(320) C	280	220	250	250	C	C	220	240	220	230	200	200	200 F	200	200	250	250	270
21	300	280	220	200 A	A	A	210	190	220	250	270	250	250	270	230	220	220	200	180	190	220 A	(240) A F	290	280
22	290	270	240	260	270	270	200	200	210	200	190	190	200	190	270	240	C	A	220	240 A F	300 AF	300	(300) A	300
23	300	250	270	290	340	290	240	230	220	220	220	230	220	220	220	230	220	220	210	240	230 F A	310	330	310
24	300	230	250	290	240	360	220	210	210	200	220	210	210	230	210	210	210	200	210 A	290 A F	230	220	250	270
25	280	270	260	250	230	260	250	230	230	200	250	240	240	240	240	220	220	200	200	230	230	290 A F	250	270
26	280	280	280	300	270	250	220	210	210	210	210	220	230	250	250	230	220	190	210	220	210	220	A	260
27	270	280	290	280	250	260	240	210	210	220	240	230	240	270	240	250	220	220	230	220	230	270 A F	300 A F	300
28	350	380	340	210	290	310	C	C	C	C	C	C	(220) A	240	220	230	230	230	230	250 A	240 F	200	250	310
29	300	290	240	230	230	330	230	220	240	230	220	260	260	230	240	230	230	240	230 A F	220 A F	220	C	C	250
30	270	260	250	250 A F	240	300	240	220	200	220	240	240	220	260	250	240	220	C	180	220	210	230	A F	320
31	320	280	270	220	210	270	240	220	210	210	220	220	230	220	230	230	210	210	210	240	210	230	260 A	250 A
Median Value	290	280	270	260	245	260	220	210	210	210	220	225	230	240	230	230	220	210	210	225	230	240	250	270
Count	31	30	29	29	28	28	28	29	29	29	28	28	30	30	30	30	30	28	30	30	31	29	27	31

Sweep 1.2 Mc to 17.0 Mc in 15 min Manual

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | f_0F1 | 135° E Mean Time | **Kokubunji Tokyo** | Lat 35° 42.4' N | Long 139° 29.3E

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

Sweep 1.0 Mc to 12.0 Mc in 15 min Manual

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

IONOSPHERIC DATA

Oct. 1949 | h'F1

135° E Mean Time

Kokubunji Tokyo

Lat. 35° 42.4' N
Long. 139° 29.3E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1						Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Z00	AF	Q	Q					
2						Q	Q	Q	Z00	Q	Q	190	C	C	C	C	Q	Q	Q					
3						Q	Q	Q	Q	C	Q	Z00	190	Z00	190	A	A	A	Q					
4						C	Q	Q	Q	190	Q	Z20	Z10	Z20	230	Z20	A	AF	AF					
5						Q	Q	Z10	Q	Q	Q	Q	Z10	Z00	Z10	Q	Q	Q	Q					
6						Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Z00					
7						Q	Q	Q	Q	Q	Z00	Q	Q	Z00	Q	Q	Q	Q	A					
8						Q	Q	Q	Q	Q	Q	Z00	A	A	C	A	A	C	C					
9						Q	Q	Z30	Z10	A	Q	Q	Q	Q	Q	Q	A	AF	AF					
10						Z20	Q	Q	Z00	Q	Q	Z00	Q	Z20	Z20	Z20	Q	Q	Q					
11						Q	Q	Q	Q	A	AF	Z10	Q	Q	Q	Q	Q	Q	Q					
12						Q	Q	Q	Q	Z00	Z00	Q	Z10	Z00	190	Q	Z10	Q	Q					
13						Q	Q	Q	Q	Q	C	C	Z00	190	Z00	Z00	Z10	Z20	Z10					
14						C	C	C	C	C	Z10	Z00	Z10	Z00	190	Z20	Q	AF	AF					
15						Q	Z10	Q	Z20	Q	Q	Q	Q	Z20	Q	Q	Z20	Q	Q					
16						A	A	A	340	250	Z30	AF	AF	Q	Z10	Z10	A	Z30	Q					
17						Q	Q	Z20	Q	Z10	Z10	Q	Z30	Z10	Q	A	AF	AF	AF					
18						Q	Q	Q	Z10	Q	Z00	Q	Z20	Z10	Q	Q	B	B	C					
19						Q	Z50	Z30	Z20	Z20	Z00	Z20	Z10	Z30	Z30 AF	Z50	A	A	A					
20						C	Z70	Q	Z20	Z30	C	C	Q	Z20	Q	Z20	A	AF	AF					
21						A	A	Q	Z00	Z10	Z10	Z20	Z00	Z20	Z10	Q	Q	Q	Q					
22						Z50	A	Q	A	Q	Q	Q	Q	Q	Z20	Q	C	A	A					
23						Q	Z30	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q					
24						A	Q	Q	A	Q	Z00	Q	Q	Z10	Q	Q	Q	Q	AF					
25						Q	Q	Q	Z20	Q	Z20	Z30	Z20	Z20	Z20	Z20	Q	A	Q					
26						Q	Q	Q	Q	Q	Q	Q	Q	Z20	Z20	Z20	Q	Q	Q					
27						Q	Q	Q	Q	Q	Z00	Z20	Z10	Z30	Q	Q	Q	Q	Q					
28						Q	C	C	C	C	C	C	Q	Q	Q	Q	Q	Q	Q					
29						Q	Q	Q	Z20	Z20	Q	Q	Z20	Q	Z30	Q	Q	Z10	AF					
30						A	Q	Q	Q	Q	Z10	Z10	Q	Z10	Z20	Z30	Q	C	Q					
31						A	Q	Q	Q	Q	Q	Q	Z20	Q	Q	Q	Q	Q	Q					
Median Value						—	—	—	Z20	Z15	Z05	Z10	Z10	Z10	Z20	Z20	—	—	—					
Count						2	4	4	11	8	12	12	14	19	15	11	3	3	2					

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

K 5

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | f_o E | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

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

Sweep 1.0 Mc to 12.0 Mc in 15 min Manual

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

IONOSPHERIC DATA

Oct. 1949 | h'E | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4 N | Long. 139° 29.3E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1						E	100	100	100	100	B	100	A	100	90 B	A	A	A	B					
2						E	A	100	100 A	A	A	100	C	C	C	C	100	100	B					
3						B	B	100	100	C	A	A	100	B	A	A	100	A	A					
4						C	A	100	100	100	110	110	110	100	100	100	100	100	A					
5						E	100	100	100	A	100	100	100	100	100	A	100	A	A					
6						B	120	110	100	100	100	(90) B	90	90	B	90	100	A	B					
7						E	100	100	(100) A	100	100	100	100	100 B	A	A	100	A	A					
8						E	A	A	100	100	A	A	A	A	C	A	A	C	C					
9						B	A	100	100	100	A	A	A	A	100	100	A	A	A					
10						E	A	100	100	A	A	A	A	A	B	A	100	A	A					
11						B	B	100	100	100	A	B	B	B	100	B	100	120	B					
12						E	120 A	100 A	A	100	100	100	100	100	100	100	100	A	100 A					
13						A	A	100	A	A	C	C	100	(100) B	100	100	100 A	A	B					
14						C	C	C	C	C	B	90	100	90	90	100	A	AE	AE					
15						E	A	110	110	A	100	A	A	A	(100) B	A	110	100	A					
16						A	A	100	100	100	100	A	A	A	A	100	90	A	90					
17						B	120	A	A	A	A	A	100	A	A	A	A	A	A					
18						A	B	100	B	A	100	100	A	A	(100) B	100	B	A	C					
19						B	A	A	A	110	100	A	A	A	A	A	A	A	A					
20						C	A	A	A	A	C	C	A	100	100	100	A	A	A					
21						A	A	90	A	A	A	A	A	A	A	A	A	(110) B	A					
22						B	A	A	A	100	A	A	A	90	100	100	C	A	A					
23						A	B	110	110	110	110	100	100	110	A	100	100	B	B					
24						A	B	110	110	100	A	A	A	100	100	A	A	100	A					
25						A	100	100	110	110	110	110	(100) B	100	100	(100) B	110	A	B					
26						E	B	B	110	100	100	100	110	90	100	100	A	A	A					
27						A	100	(120) A	110	100	100	110	100	A	A	100 A	100 A	A	A					
28						A	C	C	C	C	C	C	100	100	110	100	100	90	A					
29						E	150	110	110	110	110	120	A	110	110	110	100	B	A					
30						110	B	100	100	100	100	100	100	A	100	A	110	C	E					
31						A	A	100	100	110	100	100	100	110	110	A	A	A	A					
Median Value							100	100	100	100	100	100	100	100	100	100	100	100						
Count							9	23	21	19	16	16	16	17	19	16	18	7	3					

Sweep 1 Mc to 12 Mc in 5 min Manual

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | 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	G	G	G	G	G	G	G	3.4	G	4.4	B	3.8	4.2	B	B	3.6	5.6	3.0	1.9	B	B	2.8	B	B
2	G	C	G	G	G	B	3.0	3.4	3.4	3.7	3.9	G	C	C	C	C	4.1	G	2.6	1.7	3.0	4.4	2.7	3.0
3	2.6	2.0	G	G	G	G	G	G	4.6	C	5.5	5.7	4.4	B	3.7	5.5	5.5	4.8	2.8	3.0	3.4	3.6	3.8	3.0
4	2.4	(2.8)Y	3.8Y	2.0	G	C	2.8	3.2	3.6	3.4	G	G	B	G	4.6	4.4	5.0	6.4	3.4	3.0	2.8F	2.2	2.5	2.8FY
5	3.0	3.2	3.2	2.1	G	G	2.5	3.2	3.4	3.6	B	B	B	B	3.8	3.4	4.6	4.7	8.3	6.0	6.0	5.5	4.0	3.2
6	3.0	2.0	G	G	2.0	G	3.0Y	(3.2)Y	G	G	B	B	B	B	B	G	4.0	2.8	2.0Y	G	2.4	G	2.0	G
7	(2.2)YF	2.2F	2.2F	G	(1.9)F	2.0Y	(2.8)F	3.8	3.8	5.4	4.1	G	3.8	3.7Y	5.0	3.6	3.7	(3.0)Y	3.8	C	4.8	2.5Y	B	G
8	G	G	3.0	2.0	G	G	3.0	3.8	5.0	6.0	5.2	5.6	7.6	5.4	C	6.0	5.4	C	C	3.6F	9.2	3.6F	3.8F	4.8
9	3.4	3.6F	2.8	2.4	2.2	2.6	2.6	3.4	4.6	6.2	4.8	7.1	6.0	3.8	4.1	5.8	5.2	6.2	6.4	6.6F	5.2	3.7	3.6	3.5
10	5.5Y	(5.4)YF	3.0	(3.2)F	1.8Y	2.8Y	3.5	4.2	4.0	4.0	4.4	4.6	4.8	5.0	B	4.6	G	4.5	3.2	3.0	2.4	2.8F	2.8	2.8F
11	3.6	3.4	3.0	B	1.6	1.8	G	G	G	6.8	10.6	B	B	B	B	B	B	G	1.8	1.8	2.2	2.2	B	G
12	(1.8)Y	1.4	G	1.8	1.7	G	2.2	3.0	4.6F	B	4.0Y	4.7Y	(4.7)Y	5.0	4.1	3.6	4.0	3.4	2.8	2.8	2.8	B	B	2.8Y
13	2.2Y	1.6	1.8	3.0	2.4	2.4	2.4	2.6	3.9	4.8	C	C	G	B	B	B	2.8	3.2	2.4	2.9	3.4	2.4	2.3	3.0
14	4.8	(4.1)Y	C	C	C	C	C	C	C	C	B	B	B	B	B	B	3.4	4.2F	4.0	2.8	3.3	3.3F	2.7	2.7
15	C	3.4	3.0F	4.0	2.3	1.1	3.3	3.2	3.2	4.8	5.2	4.8	4.8	4.8	B	4.0	B	G	2.0	1.3	4.2	3.1	G	3.2
16	8.0	8.3F	8.6	8.8	13.2	12.0	9.0	8.0	4.6	5.1	4.3	12.0Y	9.1Y	7.2	5.4	4.9	6.0	4.2	2.6	(2.2)Y	3.0	9.2	4.2	4.0F
17	3.6F	3.6	3.8	2.4	2.6	2.8	G	(3.4)Y	3.6F	5.2	4.3	4.3F	4.6F	5.7	5.6	5.6	5.6	5.6	5.0	3.8	2.6	3.6	2.7F	3.5F
18	3.4F	2.8F	2.8YF	2.8F	2.0	2.0	G	B	B	4.0	(3.7)Y	B	6.2	3.8	B	B	(3.8)Y	B	C	3.0F	2.5	2.0	2.2F	3.2B
19	B	(2.7)YF	3.2Y	3.0Y	B	2.0	2.6	3.0	3.2	3.8	4.2	4.2	4.5	4.0	4.5	3.8	4.4	4.1	4.5	C	3.1	2.0	B	B
20	1.7	1.5	3.7	2.6	3.1	C	2.9	3.7	4.0	4.6	C	C	4.0	B	B	2.6	4.4	3.6	3.4	2.1	2.8	1.8	B	1.6
21	G	G	G	4.1	3.4	3.0	4.0	3.4	3.6	3.4	4.0	4.2	4.0	4.6	5.0	5.0	3.2	3.2Y	2.8	2.0	3.6	3.6	3.6	2.8F
22	3.0F	1.6	2.6F	2.8F	2.8YF	(2.2)FB	2.8	3.6F	5.5	3.6	3.7	3.5	3.7	3.4	4.2Y	3.2	C	11.3	9.0	9.0	5.2	3.5	3.4	2.9F
23	B	1.8Y	2.0	2.0	2.4	1.8	B	2.9F	3.5F	3.8	5.0F	B	B	G	6.0	3.5	2.8	B	3.0	8.5	7.7	6.6	4.8	3.6
24	2.8	3.4	2.8	3.4	2.4	3.8F	3.4	3.6	5.8Y	7.6	5.2	5.8F	4.4	B	3.7	3.8	3.4	G	5.4	4.8	B	3.4	2.2	1.6
25	2.9	3.0YF	2.9	3.3F	3.5	4.9Y	B	3.3Y	3.7	4.3	B	B	B	B	B	B	G	3.9	B	3.0F	3.0F	3.9	2.1	3.0
26	3.2	3.0	2.4	G	G	G	G	G	3.8	9.4Y	3.9Y	B	(5.6)Y	B	3.2	4.0	3.6	3.8	4.0	2.8	2.4	2.4	3.2	G
27	1.2	1.2	B	(2.5)Y	(2.8)YF	3.1F	3.0	3.2Y	3.2YF	3.5	G	4.1Y	3.6	4.5	3.8	3.7F	3.5	2.9	2.5	2.4	3.0	4.8F	3.6F	3.0
28	3.5F	3.6Y	(2.8)Y	3.0	3.2	3.0	C	C	C	C	C	C	5.6	5.2	3.7	3.6Y	3.8	3.0	3.2	7.6	(5.4)Y	4.4	2.2	3.0
29	3.0F	3.8Y	1.7	G	2.9	G	2.3Y	3.0	3.6	(3.6)Y	3.8	B	4.0	4.0	3.5	3.4	3.2Y	3.4	4.6	3.9F	3.3	C	C	2.4
30	G	2.0	3.0	3.3	2.6	3.3Y	(3.0)Y	3.0Y	3.7	3.8	4.5	4.4	5.6	4.0	5.2	4.2	3.0	C	G	G	2.4	3.0	4.0F	3.6
31	G	G	1.1	3.2	1.7	2.0	3.0F	2.8F	3.6	3.8	3.6	3.4	G	B	G	5.0	5.6	4.0	3.0F	3.0	G	3.0	5.0	3.0
Median Value	2.8	2.8	2.8	2.5	2.2	2.0	2.8	3.2	3.7	4.0	4.2	4.3	4.5	4.0	4.1	3.8	3.9	3.6	3.1	3.0	3.0	3.3	3.0	3.0
Count	28	30	29	29	29	27	27	28	28	27	23	19	23	18	19	25	28	27	28	28	29	29	24	29

Sweep 1.0 Mc to 12.0 Mc in 1.5 min Manual

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | (M3000)F2 | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.9	3.0	2.6	2.7	2.9	2.8	3.5	3.5	3.5	3.5	3.3	3.3	3.1	3.2[P]	3.3	3.3	3.3	3.4	3.5	3.2	3.1	3.2	3.3	3.1
2	3.1	(3.2)[C]	3.4	3.3	3.1	3.1	3.5	3.5	3.9	3.5	3.3	3.2	C	C	C	C	3.6	3.3	3.1	3.3	3.1	3.2	3.1	3.0
3	3.0	3.0	3.2	3.2	3.0	3.4	3.4	3.6	3.7	(3.5)[C]	3.3	3.2	3.2	3.2	3.3	3.2	3.3	3.4	S	3.3	3.1[S]	3.1	3.1	3.1
4	3.0	3.2	3.2	3.5	3.1	(3.3)[C]	3.5	3.6	3.3	3.3	3.1	3.1	3.1	3.0	3.0	3.0	3.2	3.3	3.6	3.2	2.8	3.3	3.2	2.7
5	2.4	2.6	3.4	3.2	3.1	2.8	3.1	3.3	3.4	3.3[E]	3.1	3.1	3.2	3.1	3.2	3.1	3.1	3.2	3.2	3.1	2.9	3.1	3.1	3.1
6	2.9	3.2	3.0	2.9	3.0	2.9	3.4	3.4	B	3.3	3.3	3.4	3.2	3.3	3.3	3.3[S]	3.5	3.4	3.3	3.3[P]	(3.4)[J]	3.2	3.0	3.0[P]
7	2.8	2.7	2.7	2.8	2.5	2.8	3.4	3.3	3.3	3.3	3.3	3.1	3.0	3.2	3.3	3.3	3.2	3.3	3.3	[3.2][C]	3.0	2.8[B]	2.9[P]	2.7
8	2.6	2.6	2.7	2.4	2.6	2.7	3.1	3.7	3.3	3.1	3.2	3.1	3.3	3.1	[3.3][C]	3.4	3.3	C	C	3.1	(3.0)[A]	2.8	2.9	2.7
9	2.6	2.5	2.5	2.5	2.5	2.6	3.2	3.3	3.2	3.0	3.0	3.0	3.0	3.0	2.9	3.0	3.4	3.6	3.3	3.1	2.8	2.9	3.1	3.1
10	2.6	2.6	2.5	2.5	2.8	3.1	3.4	3.4	3.4	3.3	3.1	3.0	3.0	3.1	3.0[B]	3.0	3.0	3.2	3.1	3.3	3.4	3.1	3.8	2.8
11	3.1	3.3	3.1	2.6	2.8	3.1	(3.4)[S]	3.4	3.3	3.1	3.3	3.0	3.0[P]	2.9[P]	2.9	3.0	3.1	3.3	3.1	3.3	3.1	3.0[S]	3.1	2.8
12	2.6	2.6	2.6	2.5[P]	2.7	2.8[P]	3.2[P]	3.3	3.4	3.1	3.1	3.1	2.9	3.0	2.9	2.9	3.0	S	3.1[S]	3.1	3.0	3.0	2.8	2.9
13	3.0	3.2	3.0	3.2	3.2	3.3	3.4	3.5	3.3	3.1	C	C	2.9	2.9	2.9	3.0	2.8	S	2.9[S]	2.7[S]	2.7[S]	2.7	2.7	2.8
14	2.4[S]	2.8	C	C	C	C	C	C	C	C	S	3.0	2.9	2.8	3.1	2.9	2.9	2.8	2.7	2.6	2.7	2.6	(2.3)[P]	2.8
15	(2.6)[C]	2.4	2.3	2.3	2.3[PF]	F	F	3.3	3.1	2.9	3.0	2.9	2.7	2.8	2.8	2.9	2.9	3.0	2.9	F N K	F[K]	F[K]	F[K]	F[K]
16	S[K]	S[K]	S K.	S[K]	A[K]	A[K]	A[K]	S[K]	3.2[K]	3.1[K]	2.8	3.1	3.0	3.1	3.0	3.0	3.1	3.0	2.8	2.9	2.7	A	2.4	2.6
17	2.6	2.6	2.8	2.7	2.9	2.9	2.9	3.2	3.4	3.2	3.2	2.8	2.8	3.0	2.8	2.9	2.9	3.1	3.0	3.2	2.8	2.9	2.9	2.6
18	2.6	2.7	2.7	3.0	2.6	2.7	3.7	S	3.2	2.9	3.1	3.1[F]	B	3.0[P]	3.0[P]	2.9	2.9	3.0	(3.0)[C]	3.1	3.1	2.9	2.7[K]	2.7[K]
19	2.6[F K]	2.6[K]	2.8[K]	2.9[K]	3.1[K]	3.2[K]	3.3[K]	3.2	3.1	3.0	3.1	S	2.8	2.8	2.9[S]	2.9	3.0	3.1	3.2	(3.0)[C]	2.9	2.8	2.7	2.4
20	2.4	2.5	2.5	2.3	2.3	(2.6)[C]	3.0	3.2	3.1	3.0	C	C	3.1	3.3	3.1	3.2	3.6	3.6	3.3	3.1	3.2	3.1	2.8	2.8
21	2.5	2.9	3.2	3.7	4	2.6	(3.8)[J]	3.5	3.4[P]	2.9	3.0	3.1	3.0	3.0	3.0	3.2	3.2	3.3	3.0	3.2	3.0	3.0	3.0	2.8
22	2.6	2.8[P]	3.2	2.8	2.9	3.0	3.0[S]	3.5[S]	3.6	3.4	3.3	3.3	3.2	3.3	2.9	3.0	(3.0)[C]	(3.0)[A]	3.1	3.0	2.5	2.7	2.7	2.6
23	2.7	3.8	2.8	2.7	2.6	2.8	3.2	3.2	3.2	3.1	3.0	3.1	3.1[P]	2.9	3.1	3.1[P]	3.1	3.2	3.1	3.1	2.8	2.7	2.5	2.6
24	2.6	3.1	3.0	2.7	2.5	2.6	3.2	3.3	3.3	3.1	3.2[P]	3.1[P]	3.1	3.1	(2.8)[B]	2.5	3.3	3.4	3.3	3.1	3.0	3.2	2.8	2.9
25	2.9	3.0	2.9	3.0	3.1	2.6	3.2	3.3	3.4	3.1	3.4	3.1	3.1	3.1	3.2	3.2	3.3	3.4	3.4	3.1	3.1	2.9	3.1	2.9
26	2.7	2.8	2.8	2.7	2.8	3.0	3.3	3.4	3.1	3.2	3.2	3.1	3.0	3.1	3.1	3.2	3.3	(3.2)[B]	3.2	3.2	3.3	3.2	2.9	2.8
27	2.8	2.8	2.8	2.8	2.7	2.9	3.1	S	3.5	3.1	3.1	3.0	2.9	3.1	3.1	3.1	3.2	3.1	3.3	3.1	3.0	2.8	2.8	2.7
28	2.5	2.4	2.5	2.6	2.7	2.5	C	C	C	C	C	C	2.8	2.8	2.9	2.9	2.8	3.4	2.9	3.1	2.9	3.4	2.5	2.7
29	2.7	2.7	3.1	2.9	2.5	2.5	3.5	B	3.3	3.0	3.1	2.9	2.9	3.0	3.0	3.1	3.1	3.2	3.4	3.4	3.2	C	C	2.9
30	2.8	2.8	3.0	3.1	2.7	2.6	3.1	3.2	3.3	3.2	3.1	3.1	3.0	3.0	3.0	3.1	3.3	C	3.2	3.2	3.2	3.1	(2.8)[A F]	2.8
31	2.7	2.8	3.0	3.2	3.3	2.7	3.2	3.4	3.4	3.1	3.2	3.1	3.1	3.0	3.0	3.2	3.2	3.4	3.2	3.3	3.2	3.0	3.0	2.9
Median Value	2.6	2.8	2.8	2.8	2.8	2.8	3.3	3.4	3.3	3.1	3.1	3.1	3.0	3.0	3.0	3.0	3.2	3.3	3.2	3.1	3.0	3.0	2.9	2.8
Count	30	30	29	29	28	28	27	25	28	29	27	27	29	30	30	30	31	27	29	30	30	29	29	30

Sweep 1.0 Mc to 12 Mc in 15 min Manual

K 9

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | fmin F | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N | Long. 139° 29.3E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1.6	1.6	E	E	E	E	2.0	3.0	3.2	3.9	3.8	4.1	4.0	4.3	B	3.6	A	2.4	1.8	1.8	1.8	1.9	1.8	1.8
2	1.1	(1.1)C	E	E	E	E	2.2	2.8	3.2	3.6	4.0	4.0	C	C	C	C	2.3	2.0	1.8	1.4	1.4	1.4A	1.4	1.4A
3	1.2	1.1	E	1.1	1.1	1.5	2.0	3.6	3.4	(3.8)C	4.2	4.2	3.8	4.4	4.0	A	3.4	A	2.0	A	A	A	AF	AF
4	2.0	1.8	1.4	1.3	E	C	1.8	2.7	3.2	3.6	4.2	4.2	4.2	4.3	4.2	3.8	3.6	AF	AF	2.0	1.8	1.4	1.7	1.5
5	1.4	E	E	1.1	E	E	1.8	2.9	3.4	3.7	4.4	4.0	4.1	4.0	A	3.4	3.6	3.4	2.5	A	A	AF	1.8	1.8
6	1.6	1.2	1.2	1.2	1.2	1.6	2.2	2.8	3.6	3.6	4.2	4.3	4.2	4.0	4.8	3.6	3.2	1.9	1.4	1.3	A	1.4	1.6	1.2
7	1.2	1.2	1.1	1.1	1.1	1.1	2.0F	2.8	2.8	3.6	4.0	3.8	4.0	4.0	4.1	3.5	2.9	2.0	A	C	A	1.5	1.8	1.2
8	1.2	1.2	1.8	1.1	1.1	1.1	A	2.5	3.6	4.1	4.2	A	A	A	C	A	A	C	C	AF	A	A	A	AF
9	AF	AF	1.2	1.4	1.9	1.8	1.8	2.6	3.7	A	4.0	4.2	A	4.0	3.6	3.6	A	AF	AF	AF	AF	A	1.8	1.7
10	1.1	1.2	1.6	E	E	E	2.2	2.8	3.2	4.0	3.6	4.2	4.4	4.4	5.0	4.0	3.2	2.6	1.8	1.8	1.6	1.8	A	1.4
11	1.5	1.5	1.5	1.6	1.6	2.0	2.1	2.8	3.3	4.1	AF	5.2	4.4	4.0	3.8	3.6	3.8	2.2	1.6	1.6	1.7	1.7	1.8	1.6
12	1.7	1.6	E	1.2	E	E	2.5	2.8F A	3.4	3.8	4.0	4.2	4.2	4.4	4.0	3.4	3.0	A	2.0	1.8	1.9	1.8	1.8	1.6
13	1.6	1.3	1.4	1.4	1.3	1.3	2.0	2.0	2.8	3.5	C	C	4.1	3.9	3.8	3.9	3.0	2.1	1.8	1.6	1.8	1.7	1.8	1.8
14	A	1.6	C	C	C	C	C	C	C	C	4.4	4.2	4.2	4.0	3.8	3.6	3.0	AF	AF	2.0	1.8	AF	1.8	A
15	C	1.9	1.9	1.6	1.4	E	1.9	1.7	2.6	3.8	3.9	2.8	3.8	4.0	4.0	3.6	3.5	2.0	1.7	1.8	AF	F	1.2	E
16	1.2	AF	AF	AF	A	A	A	2.6	A	A	3.9	AF	AF	4.0	3.8	3.7	A	3.5	2.0	1.8	A	A	A	A
17	1.8	1.8	A	1.6	1.6	1.1	1.8	2.6	3.2	3.4	3.6	3.7	4.1	4.0	3.8	A	AF	AF	4.0	2.0	1.8	1.6	1.5	1.6
18	A	1.8	1.6	1.6	1.6	1.6	2.0	3.2	3.2	3.4	3.7	4.0	4.6	3.2	4.6	4.0	3.8	3.8	C	A	2.0	2.0	2.0	2.0
19	1.8	1.6	1.6	1.4	1.5	1.5	1.8	2.5	3.4	3.2	3.4	4.0	4.0	4.0	3.4F A	3.8	2.4	1.7	A	C	1.8	1.8	1.6	1.8
20	1.3	1.2	E	E	1.7	(1.8)C	1.9	2.7	2.6	3.4	C	C	4.1	4.0	4.0	3.8	AF	A	AF	1.4	1.8	1.8	1.4	1.1
21	1.1	E	E	AF	A	A	A	3.8	2.6	3.8	4.2	3.7	3.6	3.6	3.7	3.6	2.7	1.8	2.0	1.4	A	A	A	1.8
22	1.6	1.6	1.6	1.1	1.1	1.1	2.6	A	3.4A	3.6	3.7	3.6	3.8	2.8	3.6	3.2	C	A	2.0	AF	1.5	1.6	A	1.6
23	1.5	E	E	1.2	1.8	A	1.8	2.6	3.0	3.4	3.8	4.5	4.0	3.7	3.8	3.2	2.7	1.8	1.8	2.4	2.3	A	2.3	1.9
24	1.8	1.1	1.8	E	E	A	1.8	2.4	3.0	3.1	3.7	4.2	3.6	3.7	3.7	3.2	3.0	2.0	2.0	AF	1.5	1.7	1.8	1.4
25	1.4	1.1	1.1	1.5	1.1	1.1	2.0	2.5	3.0	3.6	3.9	4.2	4.1	4.0	3.8	3.5	2.8	2.0	1.4	1.4	1.7	AF	1.4	1.3
26	1.2	1.1	1.6	E	E	1.1	1.6	2.4	3.2	3.3	3.7	4.2	4.0	3.6	3.6	3.6	2.8	2.2	2.0	1.6	1.2	1.8	A	1.1
27	1.1	1.1	1.1	1.1	1	1.1	1.5	2.5F	2.8	3.2	3.5	3.5	3.6	3.8F A	3.6	AF	2.6	2.8	1.7	1.7	1.6	AF	1.8	1.5
28	1.6	1.7	1.5	1.2	1.6	1.2	C	C	C	C	C	C	4.7	4.2A	3.5	3.1	3.2	1.6	2.0	1.6A F	AF	AF	1.2	1.1
29	1.1	1.1	E	1.1	1.1	1.1	1.7	2.8	3.0	3.8	3.5	4.5	3.8	3.9	3.5	3.0	2.6	1.5	AF	AF	1.5	C	C	1.4
30	E	1.8	1.3	AF	E	1.4	1.7	2.5	3.2	3.4	3.3	3.8	A	4.0	A	3.1	2.4	C	1.1	1.2	A	2.0	A	A
31	1.2	1.1	E	E	E	A	1.8	1.9	3.0	3.2	3.6	3.7	3.7	4.8	3.8	3.6	A	1.8	1.8	2.0	1.2	1.6	A	1.6
Median Value	1.4	1.2	1.2	1.1	1.1	1.1	1.9	2.6	3.2	3.6	3.8	4.2	4.0	4.0	3.8	3.6	3.0	2.0	1.8	1.7	1.8	1.7	1.8	1.6
Count	27	28	28	27	28	24	26	28	28	27	27	26	26	29	26	26	23	21	22	21	20	18	21	26

Sweep 1.2 Mc to 17.2 Mc in 15 min Manual

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

IONOSPHERIC DATA

Oct. 1949 | 5 min 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	G	G	G	G	G	E	E	1.6	1.7	1.7	B	1.8	1.9	2.1	2.0	1.6	1.8	1.6	1.8	B	B	1.8	B	B
2	G	C	G	G	G	E	1.2	1.2	1.8	1.7	1.8	2.7	C	C	C	C	1.5	1.7	1.7	1.1	1.1	1.1	1.1	E
3	E	E	G	G	G	B	B	1.8	1.8	(1.8)C	1.8	2.0	3.1	B	3.0	2.5	1.8	1.8	1.8	1.2	1.5	1.8	1.8	1.8
4	2.0	1.6	1.4	1.3	G	C	1.5	1.7	1.8	1.8	2.0	2.7	2.6	2.0	1.9	1.8	1.7	1.2	1.1	1.1	1.8	1.1	1.1	1.1
5	1.1	E	E	E	E	E	E	1.1	1.8	2.2	(2.0)S	E	2.0	1.8	1.8	1.8	2.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
6	1.1	1.2	G	G	1.8	B	1.8	2.0	1.8	1.8	2.0	2.0	1.8	2.0	B	2.0	1.6	1.3	1.3	G	1.2	G	1.2	G
7	E	1.2	1.1	G	(1.1)F	1.1F	1.1	1.6	1.6	1.7	1.8	2.2	2.0	2.4	2.0	1.7	1.7	1.2	1.2	(1.4)C	1.6	1.2	B	G
8	G	G	E	1.1	G	G	1.6	2.4	2.0	2.0	2.0	2.6	2.0	4.0	(2.8)C	(1.6)B	1.6	C	C	1.5	1.4	1.8	1.2	1.4
9	1.2	1.8	E	1.4	1.8	1.2	(1.5)F	1.6	1.7	1.7	2.6	3.0	3.2	2.0	2.1	1.7	1.6	1.7	1.4	1.3	1.2	E	E	E
10	E	E	E	E	E	E	1.5	1.6	1.7	2.0	3.2	2.2	2.8	2.0	B	2.5	2.0	1.6	E	E	E	1.1	1.1	E
11	E	E	E	B	1.2	1.6	B	1.8	1.6	1.8	2.2	B	B	B	1.8	B	1.8	1.8	1.5	1.3	1.2	1.8	B	G
12	E	E	G	E	E	E	1.6	1.7	1.8	1.8	1.9	1.9	1.8	1.7	1.7	1.6	1.2	1.8	1.2	1.8	1.6	B	B	1.1
13	1.2	1.3	1.1	1.2	1.3	1.2	1.2	1.7	2.0	1.8	C	C	2.3	2.8	2.3	2.4	1.8	1.6	1.6	2.1	1.7	2.2	1.8	2.0
14	1.1	E	C	C	C	C	C	C	C	C	B	1.6	1.8	1.8	1.6	1.8	1.6	1.2	1.2	1.1	1.1	1.1	E	E
15	C	E	E	E	E	E	1.1	1.8	1.8	1.8	2.3	2.4	3.2	2.8	2.8	1.8	1.8	1.3	1.2	1.1	1.1	1.1	G	E
16	E	E	E	1.2	1.2	1.2	1.2	1.6	1.6	1.8	1.8	1.9	2.0	1.9	1.8	1.6	1.6	1.6	E	1.4	1.2	1.2	1.2	E
17	E	E	1.1	1.1	E	(1.1)B	1.1	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.7	1.6	1.5	1.7	1.6	2.0	2.0	1.3	1.4	1.4
18	1.4	1.2	1.2	1.4	1.3	1.1	B	1.8	B	2.0	1.6	1.6	1.6	1.8	2.8	2.6	2.8	1.3	(1.4)C	1.5	1.8	1.2	1.8	3.0
19	B	1.7B	1.7	2.7	B	1.4	1.4	1.7	1.7	2.0	1.8	2.1	1.9	1.9	1.8	1.8	1.8	1.5	1.5	(1.3)C	1.1	1.4	B	B
20	E	E	E	E	E	C	1.4	1.1	1.6	1.8	C	C	2.0	2.0	2.0	1.8	1.8	1.5	1.4	1.8	1.3	1.2	B	1.1
21	G	G	G	E	1.1	1.1	1.6	2.2	1.6	2.2	1.8	2.0	1.7	1.6	1.7	1.7	1.8	1.6	1.4	1.2	1.2	1.2	1.2	E
22	E	1.2	1.1	(1.1)B	1.1	(1.1)B	1.1	1.3	1.7	1.9	1.7	1.7	1.6	1.8	1.8	1.2	(1.3)C	1.4	1.3	1.3	1.3	1.3	1.4	1.4
23	B	E	E	E	2.2	E	B	1.7	1.5	1.5	1.8	1.8	1.8	1.9	1.7	1.5	1.4	1.6	1.4	1.4	1.5	1.5	1.4	1.4
24	1.1	1.1	2.0	E	E	E	1.4	1.4	1.4	1.7	1.7	1.7	1.8	1.9	2.0	1.7	1.6	1.4	1.5	1.4	B	1.4	1.4	1.4
25	E	E	E	E	E	E	E	1.1	1.2	1.8	1.8	2.0	1.9	2.1	2.0	2.0	2.0	1.8	B	1.8	1.1	1.1	1.9	1.1
26	E	E	E	G	G	E	B	B	1.6	1.5	1.5	1.7	2.2	1.6	1.4	E	1.2	1.1	1.1	1.1	1.6	1.4	1.1	G
27	1.1	1.1	B	(1.1)B	(1.1)BF	1.1	(1.1)B	1.4	1.6	1.5	1.4	1.5	1.7	1.6	1.6	1.6	1.4	1.4	1.4	1.3	1.4	1.4	1.4	1.2
28	E	1.1	1.5	1.1	E	1.2	C	C	C	C	C	C	(1.7)B	1.8	2.0	1.6	1.6	1.4	1.5	1.2	1.1	1.2	1.1	1.3
29	1.1	1.1	E	G	1.1	E	1.1	1.5	1.4	1.6	1.4	1.9	1.8	1.8	1.6	1.6	1.4	1.5	1.2	1.1	1.5	C	C	E
30	G	E	E	E	E	E	1.1	1.4	1.4	1.1	1.8	1.6	1.7	2.0	1.5	1.8	1.5	C	G	G	1.1	1.1	1.1	1.1
31	G	G	E	E	E	E	E	E	1.2	1.4	1.3	1.1	1.1	2.9	1.8	1.5	1.2	1.3	1.4	1.4	G	1.2	E	1.2
Median Value	E	E	E	E	E	E	1.2	1.6	1.7	1.8	1.8	1.9	1.8	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.2	1.1
Count	28	30	29	29	29	26	24	28	28	29	26	27	29	28	28	29	31	29	29	30	29	29	24	29

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

K 11

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | 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	70	60	120	120	90	110	80	60	80	70	70	90	100	140 P	70	80	90	80	100	120	90	100	50	70
2	110	(100) C	80	90	90	90	80	60	50	80	100	80	C	C	C	C	90	110	100	110	100	70	110	110
3	120	110	80	60	110 P	90	120	70	70	(90) C	100	80	90	70 •	90	90	90	90	90	70	130 S	70	80	100
4	90	80	90	70	150	(120) C	90	70	80	100	90	70	80	80	70	90	80	90	40	120	100	50	120	90
5	100	90	100	170	110	160	180	100	80	80 R	100	70	60	100	70	100	90	90	100	110	90 ·	100	90	100
6	110	90	170	100	100	130	120	100	B	80	70	60	120	80	80	80 S	70	90	70	80 P	(60) J	80	90	100 P
7	90	130	100	110	90	150	70	80	80	100	100	120	90	60	60	80	70	90	80	(90) C	90	100 B	120 P	110
8	120	100	130	140	90	110	100	50	150	120	90	90	60	90	(80) C	70	110 S	C	C	100	(90) A	80	120	140
9	130	90	120	60	100	110	80	80	140	90	130	100	90	90	110	120	60	60	140	110	110	70	100	60
10	120	130	120	110	130	120	170	100	100	200	110	100	90	60	130	100	140	100	120	80	50	80	90	100
11	90	80	100	90	90	100	90 S	70	80	110	100	80	100 P	110 P	120	100	90	100	100	70	120	90 S	90	160
12	130	110	110	120 P	170	140 P	110 P	70	70	100	80	100	80	100	120	110	110	S	60 S	60	90	60	90	90
13	90	70	90	70	80	100	90	110	100	80	C	C	90	90	90	100	120	S	130 S	120 S	120 S	110	120	90
14	140	80	C	C	C	C	C	C	C	C	S	100	140	150	130	140	110	110	120	100	120	100	140	80
15	[80] C	80	90	100	F	F	F	90	110	130	140	100	90	100	130	130	120	140	160	F N	F	F	F	F
16	S	S	S	S	A	A	A	S	70	130	140	90	120	100	120	100 ·	90	110	140	130	130	(120) A	100	110
17	140	170	120	120	180	100	180	80	60	80	100	100	120	90	110	110	120	100	130	90	110	100	90	120
18	110	120	120	50	130	120	80	S	100	130	90	130 P	B	80 P	110 P	90	100	100	(110) C	120	70	130	90	90 ·
19	100 F	100	90	60	70	70	120	130	90	120	100	S	80	100	90 S	90	90	120	120	(110) C	80	110	110	150
20	120	140	90	160	110	(100) C	80	90	90	100	C	C	90	60	60	100	120	60	90	100	80	70	140	130
21	120	80	80	60	A	100	(40) J	120	30 P	100	80	70	90	120	110	120	100	100	(130) P	60	110	160	140	120
22	130	(110) P	70	130	100	80	70 S	(70) S	70	60	60	50	100	90	110	110	C	A	90	120	160	120	140	130
23	100	100	70	70	70	70	100	90	100	100	110	100	100 P	110	90	100 P	100	80	90	90	90	140 ·	120	100
24	130	70	140	110	110	50	140	120	70	100	120 P	80 P	100	80	B	80	80	70	130	70	130	130	140	110
25	140	140	120	140	90	90	100	70	60	100	70	60	110	70	100	110	60	50	60	90	100	100	90	100
26	90	110	80	90	110	90	120	120	130	70	80	100	80	90	90	80	90	B	80	60	70	100	80	90 ·
27	110	90	80	110	110	90	160	S	(40) S	80	90	100	80	100	80	110	100	80	110	80	90	100	80	80
28	100	100	120	130	140	130	C	C	C	C	C	C	110 P	120	70	110	110	80	120	100	90	110	120	100
29	120	110	100	100	100	70	60 ·	B	70	100	110	120	90	90	70	120	90	110	110	90	100	C	C	190
30	100	120	100	120	160	120	140	90	110	80	110	110	90	80	90	150	100	C	110	90	130	90	(100) A	60
31	80	70	100	130	160	110	80	80	80	110	80	100	70	90	80	(110) B	110	80	80	50	90	110	110	100
Median Value	110	100	100	110	110	100	100	80	80	100	100	100	90	90	90	100	95	90	105	90	95	100	100	100
Count	30	30	29	29	27	28	27	25	28	29	27	27	29	30	29	30	30	25	30	30	30	29	29	30

Sweep 1.0 Mc to 17.0 Mc in 15 min Manual

K 12

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct 1949 | 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	8.1	7.1	6.9	6.2	5.7	5.4	6.3	10.0	12.2	12.6	13.5	13.7	14.5	(15.0) J	15.3 H	(14.8) P	14.4	14.4	[13.0] C	11.7	10.6	11.2	10.0	8.5
2	7.9	7.5	6.0 P	6.8	5.4	[5.2] C	5.0	10.2	12.1	11.6	12.2	12.9	[13.4] C	14.0	14.4	14.5	14.3	[13.5] C	12.6	11.6	8.6	8.4	7.6	6.1 T
3	8.0	7.6	6.9	7.0	7.1	5.4	6.1	10.1	11.1	11.3	12.6	14.5	14.1	14.3	13.7	13.1 P	13.8	13.8 P	13.5	10.7 S	9.3 P	9.6	8.9	8.7
4	9.0	8.4	8.7	8.2 H	5.2	4.2	4.9	8.3	10.3	11.3	12.4	14.3	15.0	14.4 P	14.7 J	14.6	13.3	12.2	12.3	9.4	9.5	10.8	9.6	8.3
5	8.0	8.0	8.1	7.4	6.5	3.7	2.3	4.2	8.5	10.3	14.3	15.2	15.6 J P	15.8 J B	15.0 J P	14.5	13.2	13.0	12.2	12.2	9.4	8.9	7.7	7.1
6	8.0	[7.4] C	6.7 P	5.5	5.3	5.0	5.4	9.9	12.6	13.0	13.0 BJ	14.4 BJ	14.4	14.5	14.3 P	14.4 J	13.7 B	12.7 H	10.7	8.0	8.7	8.8	7.7 P	7.2 P
7	5.9	6.1 P	6.2 P	5.6 P	5.2 P	5.7 P	6.5	10.5	12.7	11.8	(9.9) P	(11.0) P	12.1	12.0	13.0 P	12.7 B	13.8 P	14.1	S	S	S	7.7	(8.2) S	(8.1) S
8	S	(7.7) S P	(6.7) S P	5.9 S P	5.6 S P	6.2 J P	6.5	11.3	11.5	11.8	13.6 P	14.8 P	C	C	14.6	14.1	14.4 P	13.8	14.2	14.5	13.5	5.8	(7.3) B	6.5
9	6.2 J	5.0 J P	5.0 P	4.8	5.0	4.8	5.8	8.7	12.4 P	13.5	13.9	15.6 J B	[15.8] S	15.9 J P	15.1	(15.4) J P S	14.6	14.0	13.3	A	8.4	8.6	8.3	8.2
10	8.2	8.0 J	(7.1) B	5.9	5.1	5.4	6.0	8.0	9.4	10.8	13.2	13.6	14.8	14.4 J	15.0	14.4	14.9	13.8	12.7	10.8 P	11.4	10.5	C	C
11	C	C	C	C	5.5	5.7	6.9	10.3	(11.8) P	(11.8) P	B	B	S	S	S	S	S	B	15.4 P	(11.5) P	(12.2) P	11.9	11.5	10.0
12	8.5	7.8	7.0	7.2	(6.3) J	(5.1) J	(4.9) J	C	C	C	C	C	T	T	T	T	14.6	13.6 J	S	S	10.8	10.4	(10.1) P J	9.0
13	8.3	8.1	7.9	8.1	8.7	C	5.5	9.6	11.2	12.2	12.5	14.3	14.6	14.3 J	14.4 J	[14.6] C	14.8	14.3	11.8	11.3	10.8	10.7 J	10.1	9.8
14	8.9	8.1	7.1	6.8	5.6	4.9	6.4	8.5	11.6	12.8	13.5	13.6	14.3	14.3	14.3	14.0	13.5	13.7	10.8 J	9.3	T	T	. T	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	(11.6) P	C	C	C	C	C
16	10.2 K	8.8 K	8.7 K	(8.6) K J F Z	(6.7) K J F	6.7 K	C K	C K	6.8 K	7.0 K J	10.5 K	[11.6] K C	10.7 K	11.1 K	11.5 K	11.8 K	10.5 K	9.6 K	9.7 K	9.6 K	7.0	5.5	5.2	5.8
17	5.6	5.1	4.9	5.6	4.4	3.6	4.0	C	C	C	C	C	C	C	C	C	C	C	13.1	11.3	9.4	8.8	7.0	6.3
18	5.7	5.9	5.5	5.3	4.6	4.5	4.8	8.4	10.1	11.8	13.7	14.1 J	14.5 F P	14.7 P	(14.4) J P	(14.3) J P	14.3 J	13.1	11.9	12.4	13.2	[11.6] C	10.0	7.6
19	6.8	5.6	5.5	5.0	4.9	2.9	4.5	7.1	11.0	12.8	14.7	13.6	14.5 P	[14.6] B	14.6 J	14.0 J	[13.8] B	13.7 P	11.0	9.6	10.1	10.7	9.1	8.2
20	7.1	7.0	6.2	5.5	5.4	5.3	6.0	8.4	13.5 P	B	S	14.2	[14.3] B	14.4 J	14.3 J	14.2	13.7	13.2	10.6 P	8.8	8.9	9.5	8.5	7.7
21	6.4	6.6	7.0	6.7	6.4	6.1	3.6	8.6	10.9	11.4	12.3	14.8	14.7 B	14.9	14.7	13.7 P	14.6	14.7	11.5	8.7	7.5	8.0	7.4 F	6.8
22	5.5	5.2	5.3	4.9	4.4	4.6	5.0	8.4	10.9	13.1	13.8	13.9	15.0	14.4	S	(14.3) P	14.0	13.7	11.7	10.9	8.1	8.4	7.9	7.6
23	6.2	6.0	6.3	5.3	4.5	4.3	4.7	C	10.0	12.9	13.0	14.4	13.8	14.6	15.1	14.3 J	14.2	13.4	12.4	B	8.7	9.4	9.4	9.0
24	8.0	8.3	7.9	5.4	4.7	4.5	4.7	8.9	11.5	11.8	14.6	B	B	B	B	S	S	13.6	11.8	9.2	8.9	7.5	6.2	6.3
25	5.2	5.0	4.8	3.9	4.5	3.6	4.3	9.1	11.6	11.8	13.5	14.0 P	14.1	14.3	14.4	14.5	13.6	13.4	12.2	9.6	9.6	9.3 P	7.6	6.0 P
26	5.3	4.7	4.4	4.3	5.0	5.0	5.2	7.0 J	9.5	11.3	12.5	13.2	13.4	14.7 J P	(14.3) J	14.6 B	14.6	14.4	13.9 P	12.7	12.4 P	11.8	10.0	7.5
27	5.8	6.5	5.3	C	C	C	4.8	C	9.9	10.3	11.7	12.3	13.3	14.0	14.5	[13.9]	13.3	12.9	10.2	10.0	8.3	8.4	8.4	7.8
28	6.0	4.7	4.9	5.0	4.5	3.7	4.4	7.5	9.9	[12.2] C	14.2 P	13.0	[13.5] C	14.0 J	14.3	13.4	13.0	13.1	11.6	10.2	9.5	9.2	5.5	5.1
29	5.6	6.0	6.2	4.7	3.8	3.9	4.4	8.7	11.4	12.6	14.7	14.9	14.5	14.0	14.2	14.3	14.3	15.2	13.0	11.2	10.8	8.7	7.1	6.4
30	5.8 J	5.6	5.2	4.6	3.9	3.9	4.1	9.1	11.5	11.7	13.5 P	14.1	12.7	14.2	13.6	13.6	13.0	12.8	10.7	9.2	9.1	8.9	8.3 P	6.3
31	5.3	5.0	5.0	5.0	5.3	3.1	4.2	8.4	10.2	11.0	13.5	13.6	13.5 F	13.8	S	14.7	13.7	13.6	13.6	11.9 P	11.5	9.7 P	8.5 P	6.9 P
Median Value	6.6	6.6	6.2	5.6	5.3	4.8	4.9	8.7	11.2	11.8	13.5	14.0	14.3	14.4	14.4	14.3	13.8	13.6	12.2	10.8	9.4	9.2	8.3	7.6
Count	28	29	29	28	29	28	29	25	28	27	26	26	25	25	24	26	27	28	29	26	28	28	28	29

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Y 1

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | 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	330	270	350	330	370	360	360	280	280	280	270	320	330	(310)J	320	310	320	280	[280]C	290	260	260	250	300
2	320	300	310	290	310	[320]C	330	260	260	320	-300	320	(320)C	330	370	320	350	(330)C	310	330	330	370	320	(350)J
3	320	320	330	320	340	320	370	260	330	300	310	320	320	340P	360	350P	310	290P	280	(280)S	320	350	340	340
4	320	350	300	290	240	310Z	310	270	250	300	340	330	310	350P	350	340	310	320	300	340	380	340	310	380
5	460	390	350	290	280	270	340	270	230	210	360	360	(340)JP	(350)JP	(320)JP	350	340	300	290	300	340	330	340	300
6	330	(320)C	310	350	360	350	350	290	280	290	320	330	320	340	330	330P	340P	330	300	310	350	320	320P	350P
7	410	400	360P	380	430	380	320	280	280	280	(280)JP	(300)JP	330	330	400P	(330)JP	330P	360H	S	S	S	310	(340)S	(350)S
8	S	(350)SP	(330)SP	360	420SP	(390)SJ	440	300	280	320	300P	350P	C	C	370	350	340	330	310	290	280	SB	B	A
9	A	(400)J	450P	360	440	410	420	280	290P	310P	310	(320)	S	(350)J	(330)J	S	330	330	330		340	340	350	380
10	320	(340)J	340	390	370	290	320	310	300	270P	320	330	350	(360)J	360	350	360	340	310	340	350P	300	C	C
11	C	C	C	C	410	420	330	280	290	(290)P	B	B	S	S	C	S	S	B	330	(300)P	(340)P	310	330	350
12	390	390	420	420	(380)J	(330)J	370	C	C	C	C	C	T	T	T	T	410	(380)J	S	S	390P	380	(380)J	360
13	360	360	360	330	320	C	390	320	300	320	340	400	410	(300)J	(390)J	[380]C	370	350	320	330	380	(330)J	320	380
14	(370)J	330	320	330	410	330	390	300	300	330	340	380	360	350	380	400	410	390	330J	400	T	T	T	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	(300)JP	C	C	C	C	320
16	400K	350K	360K	FK	CK	CK	CK	CK	CK	CK	CK	CK	CK	CK	CK	CK	320K	330K	360K	320K	350	410	410	400
17	420	390	390	420	330	320	420	C	C'	C	C	C	C	C	C	C	C	C	300	330	340	320	350	380
18	370	360	350	340	330	420	370	260	290	330	340	(310)J	370F	360B	B	B	(350)J	300P	310	370	380	[350]C	320	360
19	(460)S	430	420	420	390	340	350	320	310P	310	310	300	370P	[360]B	360J	(340)J	[330]B	320P	270P	330	340	340	300	380
20	410	410	410	350	430	450	450	340	330P	B	S	340	[360]B	(380)J	(350)J	360	330	340	310P	340	360	330	330	350
21	430	400	320	320	320	310	300	310	280	290	340	330	330B	330	340	330P	330	340	300	300	420	380	370F	(390)S
22	390	420	360	350	390	390	310	290	290	330	300	310	340	350	S	(330)P	330	320	290	280	270	340	340	360
23	360	340	310	350	S	400	380	C	280	310	330	350	370	380	340	(330)J	340	310	330	B	340	340	390	380
24	330	350	310	350	330	390	400	290	300	320	340	B	B	B	B	S	S	310	310	320	330	320	320	390P
25	320	370	340	300	290	400	400	290	290	310	310	330P	340	340	340	340	320	310	300	280	340	320	330	350P
26	390	390	360	360	340	340	360	(280)J	310	300	310	340	380	(360)JP	(320)J	310	320	310	300	300	300	320	270	320
27	340	390	340	C	C	C	340	C	270	310	310	360	330	350	330	(320)B	310	310	300	300	A	390	320	350
28	280	450	460	360	300	400	340	310	300	[300]C	300	370	(340)C	(320)J	360	370	370	330	350	340	350	290	360	390
29	400	350	290	290	380	450	380	280	310	310	330	330	370	320	340	370	360	380	320	310	320	320	370	360
30	(350)J	320	340	300	380	430	400	280	290	310	320	290	360P	350	320	330	320	320	300	300	300	310P	300	330
31	380	320	300	300	290	420	380	300	280	310	330	300	360P	350	S	320	300	320	290	320	310	330P	340	360P
Median Value	370	360	340	350	360	380	370	290	290	310	320	330	340	350	345	340	330	325	300	315	340	330	330	360
Count	27	29	29	27	27	27	29	25	27	26	25	25	23	24	22	23	27	28	29	26	27	28	27	28

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Y 2 39

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

IONOSPHERIC DATA

Oct. 1949 | 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	250	230	230	240	280	260	290	230	230	(220) A	(210) A	220	240	250	230	230	240	240	240	230	220	230	230	240
2	250	250	260	220	230	[240] C	250	240	250	250	240	240	250	260	280	230	260	240	260	220	240	300	260	270
3	270	260	270	270	260	240	280	230	220	240	230	240	260	270	250	300	270	260	220	210	240	260	250	260
4	260	260	260	210	190	210	240	230	220	230	(260) A	230	240	270	240	260	250	260	250	240	290	270	230	260
5	320	(300) A	230	220	220	220	300	230	220	200	230	250	260	250	250	240	260	280	240	230	230	240	250	270
6	250	[240] C	230	220	270	260	290	240	220	240	240	240	270	290	290	260	280	250	260	260	A	270	250	260
7	280	(300) A	280	300	370	300	220	240	230	240	230	230	(310) B	(320) B	(310) B	(300) B	280	270 H	250	220	240	260	230	(300) A
8	(300) A	250	260	(250) A	300	330	300	240	220	240	260	270	C	C	280	290	280	260	240	230	230	S B	(290) A	A
9	A	350	A	A	A	320	320	260	240	240	270	260	250	250	280	290	250	240	250	A	290	280	280	280
10	240	280	260	320	300	260	270	280	260	250	220	290	C	C	C	C	C	230	230	230	250	250	C	C
11	C	C	C	C	310	310	260	230	210	230	240	300	290	350	C	290	230	220	230	210	250	240	240 A	250
12	300	340	350	320	340	290	(320) B	C	C	C	C	C	260	260	240	280	260	250	250	240	AS	(290)	(300) A	300
13	300	300	280	290	260	C	B	280	250	260	250	270	300	280	300	(300) C	290	250	230	230	250	290	250	270
14	260	300	290	270	320	230	260	240	260	250	300	260	250	280	280	280	260	270	260	300	320	330	360	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	240	C	C	C	C	C
16	C K	C K	C K	C K	C K	C K	C K	C K	C K	C K	320 K	(310) C K	300 K	300 K	290 K	280 K	280 K	260 K	280 K	260 K	260	300	(300) A	(350) A
17	A	320	(350) A	310	260	270	340	C	C	C	C	C	C	C	C	C	C	C	240	230	230	250	220	280
18	290	270	270	280	270	310	320	230	240	230	280	270	300	300	300	300	270	270	260	210	250	[240] C	230	260
19	310	330	330	320	300	270	290	230	230	260	280	270	280	300	290	270	240	250	230	230	280	270	240	250
20	280	280	300	300	300	350	390	260	240	240 A	230	250	300	280	300	250	250	250	220	(300) A	280	250	250	260
21	300	300	240	220	A	240	270	270	250	(250) A	250	280	250	280	260	260	260	260	250	230	260	290	(300) A F	280 A
22	280 A	320	300	280	320	310	250	230	260	250	260	260	250	290	290	270	240	260	240	240	230 A	270	270	270
23	270	280	280	270	280	280	290	240	260	260	260	250	290	290	260	260	260	250	230	220	240	250	280	290
24	250	250	240	280	260	390	350	240	240	280	260	270	260	290	240	250	260	240	260	240	300	260	(300) A	300 A
25	300 A	300 A	300 A	280	280	320	320	270	250	240	260	250	310	290	260	280	270	260	230	220	240	240	240	280
26	300	300	300	300	280	270	270	240	230	260	240	260	280	300	300	270	240	250	220	220 A	230	220	220	250
27	270	280	280	C	C	C	280	C	240	270	270	270	280 C	260	270	270	260	260	(220) A	230	A	280	250	260
28	280	360	360	300	260	380	300	260	250	270	270	290	[280]	270	270	270	290	260	260	270	270	240	310	310
29	300	360	260	220	270	380	310	250	250	260	270	270	300	260	270	260	290	260	240 A	210	250	230	250	270
30	280	260	270	250	260	320	330	250	240	240	240	260	250	250	260	240	240	230	240 A	230	210	210	230	250
31	260	270	260	280	240	380	300	260	250	230	250	270	270	300	300	260	240	240	220	210	230	220	240	250
Median Value	280	290	270	280	275	290	290	240	240	240	255	260	270	280	280	270	260	250	240	230	250	260	250	270
Count	26	28	27	26	26	27	28	26	27	27	28	28	27	27	27	28	28	29	31	29	27	29	29	27

Sweep 1.2 Mc to 8.5 Mc in 15 min Manual

Y 3

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct 1949 | f_0F1 | 135° E Mean Time | **Yamagawa** | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	L	L					
2							Q	L	L	L	L	L	B	L	L	L	L	Q	Q					
3							Q	L	L	L	L	L	L	L	L	A	L	L	Q					
4							Q	L	Q	Q	Q	Q	Q	L	Q	Q	L	Q	L					
5							Q	Q	Q	Q	Q	L	L	Q	Q	Q	Q	Q	Q					
6							Q	Q	Q	L	L	L	L	L	L	L	Q	Q	L					
7							Q	Q	Q	L	L	Q	B	B	B	B	B	L	L					
8							Q	Q	Q	Q	Q	B	C	C	B	B	B	Q	Q					
9							Q	Q	Q	Q	Q	A	L	L	A	A	Q	Q	A					
10							Q	Q	Q	Q	Q	C	C	C	C	C	C	Q	Q					
11							Q	L	Q	Q	L	L	L	7.2	C	F	Q	Q	Q					
12							B	C	C	C	C	C	L	L	L	L	Q	Q	Q					
13							Q	Q	Q	L	L	L	L	L	L	L	L	Q	Q					
14							Q	Q	L	L	L	L	L	L	L	L	L	L	L					
15							C	C	C	C	C	C	C	C	C	C	C	C	A					
16							C	C	C	C	C	C	L	L	L	L	L	Q	Q					
17							Q	C	C	C	C	C	C	C	C	C	C	C	A					
18							L	Q	Q	Q	L	L	L	L	L	L	L	4.3 F	L					
19							Q	Q	Q	L	L	L	L	L	L	L	Q	Q	AF					
20							A	Q	Q	Q	Q	L	L	L	L	Q	Q	L	Q					
21							A	Q	Q	Q	Q	L	Q	L	L	L	L	L	L					
22							Q	Q	L	L	L	L	Q	L	L	L	Q	Q	L					
23							Q	Q	Q	Q	Q	Q	L	L	Q	Q	Q	Q	Q					
24							Q	Q	Q	L	L	L	L	L	Q	Q	Q	Q	L					
25							Q	Q	Q	Q	L	L	L	L	L	L	L	L	L					
26							Q	Q	Q	Q	Q	L	L	L	L	L	Q	Q	Q					
27							Q	C	Q	L	L	L	L	L	L	A	Q	Q	A					
28							Q	Q	Q	L	L	L	C	Q	Q	Q	L	L	L					
29							Q	Q	L	Q	L	Q	L	L	Q	Q	L	Q	Q					
30							Q	Q	Q	Q	Q	L	L	L	L	Q	Q	Q	Q					
31							Q	Q	Q	Q	L	L	L	L	L	L	Q	Q	Q					
Median Value							—	—	—	—	—	—	—	—	—	—	—	—	—					
Count							0	0	0	0	0	0	0	1	0	0	0	1	0					

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Y 4 41

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | 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	Q	Q	Q	Q	Q	Q	Q	220	230					
2							Q	220	220	220	230	200	B	230	(210)A	210	220	Q	Q					
3							Q	220	210	210	210	200	220	220	220	A	240	230	Q					
4							Q	210	Q	Q	Q	Q	Q	230	Q	Q	Q	220	Q	220				
5							Q	Q	Q	Q	Q	220	230	Q	Q	Q	Q	Q	Q	Q				
6							Q	Q	Q	210	210	210	230	210	230	240	Q	Q	A					
7							Q	Q	Q	220	220	Q	B	B	B	B	B	250	220					
8							Q	Q	Q	Q	Q	B	C	C	B	B	B	Q	Q					
9							Q	Q	Q	Q	Q	A	220	220	A	A	Q	Q	A					
10							Q	Q	Q	Q	Q	C	C	C	C	C	C	Q	Q					
11							Q	210	Q	Q	220	250	A	240	(240)C	230	Q	Q	Q					
12							B	C	C	C	C	C	230	200	B	230C	Q	Q	Q					
13							Q	Q	Q	230	230	220	240	250	260	(260)A	250	Q	Q					
14							Q	Q	240	240	230	230	220	250	220	(270)	A	220	250					
15							C	C	C	C	C	C	C	C	C	C	C	C	A					
16							C	C	C	C	C	C	270	250	240	250	250	Q	Q					
17							Q	C	C	C	C	C	C	C	C	C	C	C	A					
18							240	Q	Q	Q	220B	220	220	210	240	250	250	240	240					
19							Q	Q	Q	230	220	210	210	250	230	250	Q	Q	AF					
20							A	Q	Q	Q	Q	220	220	220	240	Q	Q	A	Q					
21							A	Q	Q	Q	Q	230	Q	240	240	240	250	240	240					
22							Q	Q	240	240	230	240	Q	220	230	220	Q	Q	200					
23							Q	Q	Q	Q	Q	Q	240	240	Q	Q	Q	Q	Q					
24							d	Q	Q	240	220	250	220	220	Q	Q	Q	Q	230					
25							Q	Q	Q	Q	230	220	230	220	220	220	260	220	Q					
26							Q	Q	Q	Q	Q	240	240	260	250	230	Q	Q	Q					
27							Q	C	Q	220	210	240	250	250	B	A	Q	Q	A					
28							Q	Q	Q	250	250	240	C	Q	Q	Q	250	A	220					
29							Q	Q	230	Q	230	Q	250	240	Q	Q	260	Q	Q					
30							Q	Q	Q	Q	Q	240	220	220	240	Q	Q	Q	Q					
31							Q	Q	Q	Q	230	250	210	240	250	250	Q	Q	Q					
Median Value							-		230	230	225	230	230	230	240	240	250	230	230					
Count							1	4	5	11	16	19	19	23	16	14	10	7	9					

Sweep 1.2-Mc to 16.5-Mc in 15-min Manual

Y 5

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | f_0E | 135° E Mean Time | **Yamagawa** | Lat. 31° 12.5' N | Long. 130° 37.7' E

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

Sweep 1.2 Mc to 12.5 Mc in 15 min Manual

Y 6

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

IONOSPHERIC DATA

Oct. 1949 | h'E | 135° E Mean Time | **Yamagawa** | Lat. 31 12.5' N | Long. 130° 37.7' E

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

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 — 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	G	G	G	G	G	G	B	3.2	3.8	4.6	4.2	4.4	4.6	4.2	4.4	5.4	4.0	3.8	G	2.2	G	G	G	2.6
2	2.5	2.6	(5.2)	G	2.0	C	2.2	3.0	3.0	4.7	4.4	4.4	B	B	4.4	B	G	4.8	3.8	3.2	G	G	G	G
3	G	G	G	G	G	G	B	G	4.2	5.5	5.3	4.7	4.7	4.8	3.9	4.7	4.4	B	3.8	4.4	4.2	3.0	G	G
4	G	G	G	G	G	G	G	G	G	6.6	5.8	4.8	4.4	4.8	4.2	4.4	3.6	5.0	3.5	3.9	2.7	2.3	3.0	2.4
5	3.0	3.2	G	G	G	3.7	2.1	G	2.9	3.8	3.6	G	3.8	5.2	G	4.4	4.6	9.0	7.2	7.2	4.4	3.4	2.4	4.2
6	4.4	C	G	G	G	G	G	G	G	G	G	3.7	5.4	3.9	3.8	4.2	G	5.8	5.8	5.4	13.0	5.2	3.8	3.2
7	2.6	2.4	2.4	G	G	G	B	G	4.2	3.6	B	B	5.4	5.2	7.9	5.6	B	B	8.2	2.6	4.8	2.8	3.8	4.2
8	3.4	G	G	3.2	3.0	G	3.0	3.8	5.8	4.2	5.6	B	C	C	B	B	B	B	B	B	3.0	5.0	5.1	6.6
9	6.0	4.9	3.9	4.4	3.2	3.0	3.8	G	G	3.7	5.6	9.4	6.0	8.8	7.6	7.6	5.0	3.8	5.4	12.0	4.2	4.2	4.2	4.0
10	4.0	G	3.0	G	G	G	G	3.2	4.2	3.8	5.4	B	C	C	C	C	C	3.8	4.0	3.6	3.8	3.8	C	C
11	C	C	C	C	G	G	G	3.5	4.6	4.2	3.8	5.2	10.0	6.2	C	7.6	B	B	B	4.4	B	3.8	3.2	2.0
12	G	4.0	3.2	2.6	4.8	4.4	B	C	C	C	C	C	B	G	B	4.2	5.4	7.4	7.2	7.2	5.2	4.2	4.8	B
13	B	B	B	5.4	5.4	C	B	B	B	4.2	4.4	4.3	G	3.7	4.4	C	G	B	G	2.6	G	3.8	4.2	G
14	G	G	G	G	G	3.2	B	2.4	3.4	3.6	3.6	B	4.2	4.2	4.1	4.2	4.4	4.3	4.0	3.2	2.7	2.6	3.6	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	8.2	C	C	C	C	C
16	6.8	7.0	C	C	C	C	C	C	6.5	C	C	C	B	4.2	G	4.2	4.2	3.1	3.0	3.6	3.6	3.6	3.2	5.0
17	5.4	4.2	4.8	4.2	3.6	3.2	3.2	2.4	C	C	C	C	C	C	C	C	C	C	3.8	3.2	G	3.2	G	G
18	G	G	G	G	G	G	2.2	2.2	2.8	B	G	G	4.6	G	4.4	G	4.4	4.5	3.8	3.0	2.4	C	G	2.8
19	2.1	G	G	G	G	G	2.4	3.4	3.6	3.2	G	3.7	4.0	G	G	G	4.1	3.2	4.2	2.8	2.2	3.0	3.8	G
20	G	G	(4.2)	G	G	4.0	3.0	B	2.8	4.4	4.5	4.1	5.2	4.2	4.6	3.8	3.6	3.8	3.8	6.0	3.8	3.8	3.2	3.0
21	G	G	G	G	4.2	3.8	3.0	3.0	3.6	4.0	3.8	5.0	G	5.0	5.1	B	3.4	3.3	3.2	3.8	2.6	4.3	4.4	3.1
22	2.9	1.7	G	G	G	G	G	3.6	G	B	G	G	B	4.2	G	B	G	G	3.0	4.3	5.2	4.2	3.9	2.4
23	2.5	2.7	3.0	G	G	G	B	(2.8)	3.5	3.8	4.2	4.2	4.8	4.6	B	3.8	3.4	G	B	G	2.4	2.6	2.6	3.0
24	2.0	3.0	3.0	3.0	2.8	2.2	1.8	(3.2)	3.8	(5.2)	4.6	4.8	(4.2)	G	G	4.2	3.6	3.2	B	2.4	3.8	4.2	4.2	3.9
25	3.8	3.2	2.8	3.2	3.8	2.8	2.5	3.4	3.4	3.8	G	G	B	4.2	4.2	B	3.7	3.5	3.6	5.4	3.4	2.4	2.4	G
26	G	4.0	2.6	2.4	3.0	G	B	B	(3.0)	3.8	3.8	3.8	4.4	4.4	3.8	3.8	G	3.8	3.6	3.8	2.6	2.6	2.2	G
27	G	3.0	G	C	C	C	2.4	C	5.2	4.6	4.4	4.4	4.4	3.8	G	8.2	3.0	5.0	5.2	3.8	8.8	3.8	G	2.8
28	2.0	G	G	G	G	B	G	G	G	4.2	5.0	5.5	C	7.0	5.8	5.4	5.2	3.4	3.6	4.6	3.6	3.2	3.4	2.2
29	G	G	G	G	G	B	B	G	2.9	G	3.6	G	4.6	4.4	4.8	3.4	3.9	G	3.4	3.0	2.7	3.2	G	3.4
30	G	3.8	G	G	G	G	B	2.4	3.8	(4.2)	4.2	4.4	4.2	4.2	3.8	3.6	3.4	5.6	4.4	G	G	G	G	3.6
31	4.2	G	G	3.4	G	3.2	B	G	3.0	G	4.2	4.8	4.4	B	4.4	4.2	4.0	3.2	3.6	3.8	2.6	4.4	3.4	3.0
Median Value	2.2	1.7	G	G	G	G	2.2	2.4	3.4	4.0	4.2	4.4	4.4	4.2	4.2	4.2	3.7	3.8	3.8	3.8	3.0	3.4	3.2	2.8
Count	28	27	27	27	28	24	18	24	27	25	26	23	21	25	24	22	25	24	27	29	29	29	29	27

Sweep 1.2 Mc to 16.5 Mc in 15 min — Manual

Y 8 45

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | (M3000)F2 | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.9	3.3	2.8	2.9	2.7	2.8	2.8	3.2	3.2	3.2	3.3	3.0	3.0	(3.2)	3.1	(3.2)	3.0	3.1	(3.2)	3.2	3.4	3.4	3.6	3.2
2	3.0	3.1	3.0	3.3	2.9	(2.9)	2.9	3.3	3.3	2.9	3.1	2.9	(2.9)	2.9	2.8	3.0	2.7	(2.8)	3.0	3.0	2.8	2.9	2.9	(2.8)
3	2.9	3.1	2.9	3.0	3.0	2.9	2.7	3.4	3.5	3.2	3.0	3.1	3.0	2.8	2.9	2.9	3.1	3.2	3.2	(3.2)s	2.9	2.8	2.9	2.8
4	2.9	2.8	3.1	3.1	3.4	3.0	2.9	3.2	3.4	3.2	2.8	3.0	3.2	2.9	2.9	2.9	3.0	3.0	3.2	2.7	2.8	2.8	3.0	2.7
5	2.4	2.6	2.8	3.2	3.2	3.4	2.9	3.4	3.8	3.8	2.9	2.8	(3.1)	(2.7)	(3.0)	2.9	2.9	3.0	3.2	3.2	2.8	2.9	2.8	2.8
6	2.9	(3.0)	3.0	2.9	2.8	2.7	2.8	3.1	3.3	3.1	2.9	3.0	3.0	3.0	3.0	3.0	2.9	3.0	3.2	3.0	2.8	3.0	3.0	2.9
7	2.7	2.6	2.7	2.7	2.4	2.6	2.9	3.2	3.2	3.3	(3.3)	(3.1)	3.0	2.8	2.7	(2.0)	2.9	2.9	5	5	5	3.1	(2.9)s	(2.9)s
8	5	(2.7)s	(2.9)s	2.6 s	2.5	(2.6) s	2.4	3.2	3.2	2.9	3.2	2.9	(	(	2.8	3.0	3.0	3.1	3.2	3.3	3.4	5.8	2.9	2.8
9	A	(2.7)	2.5	2.4	2.3	2.6	2.5	3.1	3.2	2.9	3.0	(3.0)	5	(2.9)	(3.0)	(2.9)	2.8	2.9	3.0	A	2.9	2.8	2.8	2.6
10	2.9	(2.8)	3.0	2.7	2.8	3.1	2.9	3.1	3.2	3.4	2.9	3.0	2.9	(2.9)	2.8	2.9	3.0	2.9	2.9	2.7	2.7	3.1	(	(
11	(	(	(	(	2.5	2.5	2.8	3.2	(3.2)	(3.2)	B	B	5	5	(	5	5	B	3.0	(3.2)	(2.9)	3.0	2.8	2.8
12	2.6	2.6	2.5	2.6	(2.7)	(3.0)	(2.7)	(	(	(	(	(	T	T	T	T	2.6	(2.7)	5	5	2.6	2.9	(2.7)	2.7
13	2.7	2.8	2.8	2.8	2.9	(	2.6	3.0	3.2	3.0	2.9	2.8	2.7	(2.7)	(2.8)	(2.8)	2.8	2.8	3.1	3.0	2.9	(2.9)	3.0	2.7
14	(2.8)	2.9	3.0	3.1	2.5	2.8	2.8	3.0	2.9	3.0	2.8	2.7	2.8	2.8	2.7	2.7	2.6	2.7	2.9	2.6	T	T	T	(
15	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(3.2)	(	(	(	(	3.1
16	2.7	2.8	2.7	EK	CK	2.7	CK	CK	2.6	CK	3.0	(2.8)	2.7	2.7	2.8	2.8	2.9	2.9	2.7	2.9	2.7	2.5	2.6	2.6
17	2.6	2.7	2.7	2.7	2.9	3.0	2.6	(	(	(	(	(	(	(	(	(	(	(	3.0	2.9	2.8	2.9	2.8	2.7
18	2.7	2.7	2.8	2.9	3.0	2.6	2.7	3.3	3.2	3.0	2.9	(3.1)	2.8	2.9	(2.8)	(2.9)	(2.9)	3.1	3.1	2.7	2.6	(2.8)	2.9	2.7
19	2.4	2.5	2.5	2.6	2.7	2.8	2.9	3.3	3.1	2.9	3.1	3.2	2.9	(2.9)	2.9	(3.0)	(2.8)	2.9	3.4	2.9	2.9	2.8	3.1	2.6
20	2.6	2.6	2.6	2.8	2.6	2.5	2.4	2.8	2.9	B	5	2.9	(2.9)	(2.9)	(3.0)	2.9	2.9	2.9	3.0	2.9	2.8	2.9	2.8	2.8
21	2.6	2.6	2.9	3.2	3.0	3.2	3.0	3.1	3.2	3.0	2.8	2.9	(3.0)	3.0	2.9	2.9	3.0	2.9	3.1	3.0	2.5	2.7	2.7	2.7
22	2.7	2.6	2.8	2.7	2.7	2.7	3.0	3.1	3.1	2.9	3.0	3.1	2.8	3.0	5	(3.0)	3.0	3.0	3.1	3.4	3.3	2.9	3.0	2.8
23	2.9	3.0	3.0	2.9	2.7	2.7	2.7	(	3.3	3.0	3.0	2.8	2.8	3.0	3.0	(3.1)	3.0	3.1	3.0	B	2.9	2.8	2.6	2.7
24	3.0	2.8	3.1	2.8	2.9	2.3	2.5	3.1	3.2	3.0	2.8	B	B	B	B	5	5	3.1	2.9	3.1	3.0	3.1	3.0	3.0
25	2.9	2.6	2.9	3.0	3.1	2.6	2.7	3.2	3.2	3.2	3.1	3.0	2.9	2.9	2.9	3.0	3.2	3.3	3.2	3.2	2.9	3.0	2.8	2.7
26	2.6	2.6	2.8	2.7	2.8	2.8	2.7	(3.2)	3.3	3.1	3.0	2.9	2.8	(2.8)	(3.1)	3.2	3.0	3.0	3.0	3.0	3.0	3.1	3.3	3.0
27	2.9	2.7	3.0	(	(	(	2.9	(	3.3	3.1	3.1	2.8	2.9	2.9	3.0	(3.0)	3.0	3.1	3.3	3.1	2.8	2.6	2.9	2.8
28	2.6	2.4	2.4	2.8	3.1	2.5	2.9	3.2	3.0	(3.0)	3.1	2.7	(2.8)	(3.0)	2.8	2.7	2.7	2.8	2.8	2.9	2.8	3.1	2.9	2.6
29	2.7	2.7	3.3	3.1	2.7	2.4	2.8	3.2	2.9	3.1	3.1	2.9	2.9	3.1	2.9	2.8	2.8	2.9	3.0	3.1	2.9	3.0	2.8	2.7
30	(2.8)	2.9	2.9	3.1	2.7	2.6	2.6	3.3	3.2	3.0	2.9	3.2	2.9	2.9	2.9	2.9	2.9	2.9	3.2	3.0	3.0	3.1	3.2	2.9
31	2.6	3.0	3.0	3.2	3.3	2.6	2.6	3.2	3.2	3.0	2.9	3.2	2.8	2.8	5	3.0	3.0	3.0	3.0	2.9	3.0	2.9	2.8	2.7
Median Value	2.7	2.7	2.9	2.9	2.8	2.7	2.8	3.2	3.2	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.9	3.0	3.1	3.0	2.9	2.9	2.9	2.8
Count	27	29	29	27	28	28	29	25	28	26	26	26	24	25	24	26	27	28	29	26	28	28	28	29

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Y 9

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | fmin 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	1.4	1.3	E	1.3	E	E	1.3	2.5	3.1	A	4.2	4.2	4.4	4.0	4.2	4.0	3.8	2.8	2.0	1.8	1.6	1.8	1.8	1.8
2	1.6	1.6	1.6	1.4	1.8	[1.8] C	1.8	2.0	2.5	3.5	4.0	4.0	5.2	4.2	4.2	2.9	3.1	3.0	2.0	1.8	1.6	1.4	1.5	1.4
3	1.4	1.6	1.4	1.5	1.4	1.6	1.5	2.4	3.2	4.2	4.0	4.2	4.3	A	4.1 A	4.3 A	A	N	2.4	A	A	A	1.4	1.4
4	1.4	1.3	E	E	E	E	E	2.3	3.3	A	A	A	4.2	(1.6) A	(4.2) A	(4.2) A	3.6	3.2	2.9	A	1.4	1.4	1.7	1.4
5	1.3	E	E	E	E	E	1.4	I	E	A	4.0	4.2	4.2	A	4.2	4.0	3.6	A	A	A	A	2.0	1.8	1.8
6	1.5	[1.6] C	1.5	E	E	E	E	2.4	3.0	3.5	4.0	4.2	A	4.2	4.4	A	4.2	A	A	A	A	A	A	A
7	A	(1.6) A	1.4	1.4	1.4	1.3	1.4	2.4	A	3.3	4.2	4.8	8.6	9.1	7.5	8.5	5.7	3.4	2.0	2.0	A	A	A	A
8	A	1.7	1.6	A	1.5	1.6	2.2	2.3	3.4	3.8	A	6.6	C	C	6.9	7.4	8.0	4.3	3.4	3.0	A	A	A	A
9	A	A	A	A	A	(2.2) A	2.0	2.6	3.1	3.4	8.6	A	4.5	4.3	A	A	A	3.2	A	A	A	A	A	A
10	1.5	1.5	1.6	1.4	1.4	1.6	1.6	A	3.0	3.2	4.0	5.8	C	C	C	C	C	3.2	A	2.8	2.2	A	C	C
11	C	C	C	C	1.3	E	1.4	2.7	2.9	4.2	4.0	4.6	A	A	C	A	3.8	2.8	2.8	2.0	3.2	2.8	2.4	2.0
12	2.0	A	2.4	2.9	3.3	3.0	3.2	C	C	C	C	C	4.4	4.2	4.2	4.0	A	A	A	A	A	3.2	A	4.0
13	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.0	4.3	4.0	4.3	4.2	[3.8] C	3.3	3.2	2.0	1.8	1.8	A	2.8	1.6
14	1.6	1.4	1.4	1.6	1.4	1.4	1.5	2.4	3.2	3.6 A	A	I	A	3.6	A	A	4.0	A	2.0	2.2	4.2	4.2	2.8	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	A	C	C	C	C	C
16	C	C	C	C	C	C	C	C	C	C	C	C	4.2	4.0	4.2	3.6	3.2	2.5	2.4	1.9	A	A	A	A
17	A	A	A	1.6	2.2 A	1.8	2.0	2.2	C	C	C	C	C	C	C	C	C	C	2.2	2.4	1.4	1.8 C	1.6	1.4
18	1.3	E	E	1.5	1.5	1.5	1.6	1.8	2.8	3.4	3.6	4.0	4.0	4.0	4.0	3.6	3.4	A	2.2	2.0	1.7	[1.7] C	1.7	1.5
19	1.3	E	E	E	E	E	1.4	1.8	A	3.2	3.7	4.0	4.1	4.2	3.6	3.8	3.8	2.5	2.6	A	2.2	2.2	2.0	1.6
20	1.6	1.6	1.8	1.8	1.5	1.6	A	3.1	A	3.3	4.0 A	4.1	4.1	4.2	4.2	3.8	3.4 A	3.2	A	A	2.0	2.0	2.2	2.2
21	1.8	1.6	1.4	1.4	A	A	A	A	3.6	3.6	A	4.2	4.0	4.2	A	3.2	A	A	2.2	A	A	A	A	A
22	A	E	E	E	E	E	E	2.2	2.8	3.6	3.4	4.0	4.2	3.8	3.7	3.4	3.0	3.0	3.2	A	A	A	A 1	1.9
23	A	2.0 A	A	1.8	E	E	1.4	2.0	3.2	3.2	4.0	4.2	4.2	4.2	3.6	3.2	3.2	2.4	2.0	2.0	1.8	2.0	2.2 A	A
24	1.5	1.5	1.6	2.0	2.0	1.6	1.3	2.2	2.4	4.1	3.2	4.2	4.0	3.9	4.0	3.4	2.9	2.4	2.0	1.8	A	A	A	A
25	A	A	A	1.4	2.0 A	1.6	1.4	2.2	2.9	3.5	3.7	3.4	3.3	4.0	4.1	3.8	3.7	3.3	2.8	2.8	2.3	1.8	1.5	1.8
26	(1.3) B	1.8	1.8	1.8	1.6	1.6	1.8	2.0	2.7	3.6	3.3	3.6	4.2	4.2	3.7	3.2	3.1	2.8	2.1	A	A	2.2	1.9	1.8
27	1.7	1.8	1.8	C	C	C	1.4	C	3.2	3.2	3.4	4.0	4.1	4.2	4.0	A	3.0	2.2	A	2.2	A	2.0	1.6	1.8
28	1.4	1.4	1.6	1.6	1.6	2.2	1.6	2.2	3.1	3.4	4.0	4.1	C	A	A	A	A	2.8	2.0	A	1.6	2.0	1.8	1.3
29	E	E	E	1.6	1.6	2.0	2.0	2.0	2.8	4.0	3.4	3.6 A	4.2	4.4	A	3.2	3.0	2.4	2.2	1.5	1.7	A	1.5	1.5
30	1.5	1.5	1.6	E A	1.3	1.4	1.5	2.0	2.4	3.2	A	(3.6) A	3.8	4.0	3.7	3.2	3.0	3.8	A A	1.6	1.6	1.5	1.4	E
31	E	E	1.3	2.4 A	1.6	1.8	1.8	2.8	2.8	3.1	3.8	4.2	4.1	4.1	4.1	3.5	3.0	2.4	2.6 A	2.2	1.8	2.4	A	A
Median Value	1.5	1.5	1.4	1.5	1.4	1.6	1.5	2.2	3.0	3.5	4.0	4.2	4.2	4.2	4.2	3.7	3.4	2.9	2.2	2.0	1.8	2.0	1.8	1.6
Count	21	24	24	25	26	27	27	24	24	24	22	24	23	23	22	22	23	22	22	18	17	18	19	19

Sweep 1.2 Mc to 18.5 Mc in 15 min Manual

Radio Regulatory Agency (Denpacho)

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

IONOSPHERIC DATA

Oct. 1949 | fmin E | 135° E Mean Time | **Yamagawa** | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	G	G	G	G	G	G	B	1.4	1.6	2.0	2.2	2.2	2.8	3.2	3.6	2.2	2.2	2.0	2.0	1.8	G	G	G	1.6
2	E	E	E	G	1.8	[1.8]C	1.8	1.8	1.8	2.0	2.1	2.2	B	3.2	3.2	2.2	1.8	1.8	1.6	1.6	G	G	G	G
3	G	G	G	G	G	G	B	1.5	1.6	2.2	2.4	2.2	2.1	2.2	2.5	3.1	2.8	B	1.6	1.4	1.3	1.3	G	G
4	G	G	G	G	G	G	G	1.4	1.8	2.0	2.2	2.2	3.2	4.2	3.2	2.8	2.0	1.8	1.7	1.4	1.4	2.0	1.3	2.0
5	1.3	1.4	G	G	G	3.1	E	E	E	2.0	2.2	2.3	2.4	3.0	2.4	2.2	2.0	1.8	1.8	1.8	1.6	1.6	1.6	1.6
6	1.5	C	G	G	G	G	G	1.4	1.5	1.8	2.3	2.2	2.2	2.1	2.2	2.0	2.0	1.6	1.4	1.6	1.4	1.4	1.6	1.3
7	1.3	1.4	1.4	G	G	G	B	1.4	1.7	1.9	1.8	3.0	3.4	4.2	7.3	4.8	B	B	1.6	1.8	1.5	1.6	2.0	1.8
8	1.8	G	G	E	1.3	G	E	1.5	2.2	2.2	2.2	2.4	C	C	B	B	B	B	B	B	2.2	2.2	2.0	2.0
9	1.8	1.5	1.4	1.6	1.6	1.8	1.6	1.8	2.4	2.2	2.9	3.2	3.4	3.1	2.4	2.2	2.2	2.0	1.8	1.8	1.8	1.8	1.6	1.6
10	3.0	G	1.6	G	G	G	G	1.6	1.8	1.8	2.4	3.2	2.6	2.4	2.8	2.8	2.8	1.9	1.5	1.4	1.4	1.5	C	C
11	C	C	C	C	G	G	G	1.7	1.6	3.0	3.0	4.8	4.0	4.2	[4.1]C	4.0	B	B	B	2.0	1.6	1.6	1.6	1.5
12	G	1.6	1.8	1.8	3.3	3.6	B	C	C	C	C	C	2.6	2.8	2.8	2.3	2.2	2.0	1.8	1.8	2.9	3.2	3.2	B
13	B	B	B	4.0	4.0	C	E	B	B	2.2	3.2	2.3	3.2	2.3	3.2	[2.7]C	2.2	B	B	1.8	G	1.6	1.6	G
14	G	G	G	G	G	1.6	B	1.8	1.6	2.0	2.0	2.5	3.1	3.6	3.1	2.0	2.0	1.9	2.0	1.4	2.4	2.1	2.5	C
15	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	2.0	C	C	C	C	C
16	C	C	C	C	C	C	C	C	C	C	C	C	B	3.2	2.2	2.5	2.0	2.2	1.8	1.6	1.5	1.4	1.6	1.4
17	1.4	1.4	1.6	1.4	1.3	E	1.5	1.6	C	C	C	C	C	C	C	C	C	C	2.0	2.0	G	1.4	G	G
18	G	G	G	G	G	G	1.8	2.0	2.2	B	2.2	2.2	2.2	2.2	2.2	G	2.0	2.1	2.0	1.4	1.3	C	G	1.7
19	2.1	G	G	G	G	G	1.8	1.6	1.8	2.2	2.2	2.3	2.1	2.5	2.8	2.4	2.0	2.0	1.8	1.8	1.8	1.8	2.2	G
20	G	G	2.8	G	G	2.0	2.0	B	2.0	1.5	1.8	2.2	2.2	2.2	2.2	2.4	2.0	2.0	2.0	1.6	1.4	1.4	1.4	1.6
21	G	G	G	G	1.4	1.5	1.6	1.6	1.8	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.0	1.8	1.6	E	E	E	E
22	E	1.3	G	G	G	G	G	1.4	2.0	B	2.2	2.4	2.2	2.2	2.1	B	2.0	2.2	2.0	1.9	1.6	1.6	1.5	1.2
23	E	E	E	G	G	G	B	B	1.6	2.0	2.0	2.6	3.0	3.2	B	2.2	2.2	2.0	B	G	2.0	1.4	1.4	1.6
24	1.6	1.6	1.6	E	E	E	1.4	1.6	1.8	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.0	1.6	B	2.2	1.6	1.6	1.5	1.6
25	1.8	1.4	1.6	1.4	1.5	2.1	2.2	B	1.9	3.4	2.2	2.0	B	3.0	3.4	B	3.3	2.1	1.8	1.8	1.4	1.4	2.2	G
26	G	3.2	2.3	2.0	2.2	G	B	B	1.8	2.0	2.0	2.2	2.4	2.4	2.3	2.3	2.2	2.1	2.0	2.0	1.7	1.6	1.8	G
27	G	2.2	G	C	C	C	2.2	C	1.8	2.0	2.0	2.2	2.2	3.6	3.2	2.3	2.0	2.0	1.8	1.6	1.6	1.6	G	1.4
28	1.4	G	G	G	G	B	G	1.8	2.0	1.9	2.2	2.2	[2.4]C	2.6	3.2	3.4	2.0	2.0	2.0	1.6	1.5	1.4	E	2.0
29	G	G	G	G	G	B	B	2.0	2.0	2.4	2.2	2.3	2.2	2.2	2.2	2.2	2.1	1.8	2.0	1.3	1.3	1.5	G	1.6
30	G	2.0	G	G	G	G	B	1.3	1.5	1.8	2.2	2.2	2.1	2.2	2.2	2.2	2.2	1.8	1.8	G	G	G	G	3.0
31	3.8	G	G	1.6	G	1.4	B	1.8	1.8	2.2	2.2	2.2	2.2	B	2.8	2.4	2.1	2.2	1.8	1.8	1.8	1.5	1.6	1.6
Median Value	E	E	G	G	G	G	1.4	1.6	1.8	2.0	2.2	2.2	2.4	2.6	2.8	2.3	2.0	2.0	1.8	1.6	1.5	1.5	1.5	1.6
Count	27	26	27	27	28	25	18	22	26	25	27	27	25	27	27	26	26	24	26	29	30	29	29	27

Sweep 1.2 Mc to 8.5 Mc in 15 min Manual

Y 11

IONOSPHERIC DATE IN JAPAN FOR OCTOBER 1949

電波觀測報告　第1卷　第10號

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