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IONOSPHERIC DATA IN JAPAN

FOR OCTOBER 1955

Vol. 7 No. 10

Issued in November 1955

Prepared by

THE RADIO RESEARCH LABORATORIES

KOKUBUNJI, TOKYO, JAPAN

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CONTENTS

PREFACE

The origin of ionospheric sounding in Japan dates back to 1931 and the results of the work have been published in the form of the monthly "Ionospheric Data in Japan" since 1949. As a result of the reform of administrative structure of the Japanese Government effective on August 1, 1952, the observation, data coordination and publication were handed over to the charge of the Radio Resarch Laboratories newly set up within the Ministry of Postal Services.

The Radio Research Laboratories consists of three Divisions, i. e., First, Second and Administrative Divisions, located in Tokyo and five local radio wave observatories established at Wakkanai, Akita, Hiraiso, Inubo and Yamagawa, respectively.

The First Division has the following three sections:

Ionospheric Propagation Section which shall carry on researches on ionosphere and wave propagation;

Tropospheric Propagation Section which shall carry on researches on troposphere and wave propagation; and

Data Coordination Section which shall conduct the collection and arrangement of observational results, supply of operational data relating to radio propagation, preparation of radio propagation forecasts and radio disturbance warnings broadcast of URSIGRAM and physical basic studies of wave propagation in general.

The Second Division has the following two sections:

Frequency Standard Section which shall carry on researches on the frequency standard and broadcast the standard frequencies and time signals (J. J. Y.); and

Apparatus Section which shall carry on researches on radio apparatus used for radio regulatory purpose and conduct the approval service of types of radio equipments.

The Administrative Division shall conduct the general affairs of the Laboratories.

The ionospheric sounding is, as heretofore, being carried out by the four observatories at Wakkanai, Akita, Kokubunji (Tokyo) and Yamagawa.

This report prevides the results of ionospheric sounding with symbols determined and in the form established on an international basis in the same way as followed by the former Radio Regulatory Commission and it is hoped that it will make any contribution toward the progress in world-wide short wave communications.

This report is intended for distribution on request to the largest possible number of organizations concerned all over the world, and any and every information that the organizations concerned might forward to us in exchange therefor would be highly appreciated.

Shogo Amari
Chief, Radio Research Laboratories,
Ministry of Postal Services

Aug, 1952

SITES OF THE IONOSPHERIC STATIONS

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

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

REMARKS ON SYMBOLS

All symbols in the table are used in accordance with "Production and Reduction of Ionospheric Data Standards. Symbols and Conventions (Recommendation No. 6 of Stockholm) at VIth Plenary Assembly C. C. I. R. Geneva, 1951" except f_{min} E and f_{min} F for E and F regions respectively instead of f_{min}, taken as f_{min} s in the above Resolution, in order to avoid the interruption of preceding form of data.

SOLAR RADIO EMISSION

Data on solar radio emission observed at Hiraiso Radio Wave Observatory has appeared from Vol. 6 No. 8 (F–68).

The location of the Observatory is as follows:

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

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

IONOSPHERIC DATA

Wakkanai

Lat. 45° 23.6' N
Long. 141° 41.1' E

Oct. 1955 | **foF2** | 135° E Mean Time

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	(5.0)F	(5.2)F	(5.0)P	4.6	4.3	4.6	6.0	7.0	7.5	7.6	7.3 U	6.8 U	6.1	6.0	6.6	6.6	6.8	7.8 U	6.3	6.6	6.6	6.0	4.3	4.6
2	4.6F	4.3	4.6	4.6	4.3	4.0	6.2 U	(6.0) C	6.9 U	6.6	7.6	7.5	7.5	7.7	7.3	7.0 U	6.8	7.5	6.5	6.5	6.3 F	6.0 F	(4.5) SF	4.0
3	3.7	3.6	3.5	3.4	3.5 F	(3.6) F	6.0 F	6.5	7.5	8.5	8.0	8.2	7.4	8.0	(8.0) C	8.0	7.0	7.1	6.1	(5.7) A	6.3	4.8	(4.4) A	4.1
4	4.0	4.3	4.0 F	4.1 F	4.6 F	(4.4) F	6.6	6.7	8.0	8.5	7.9	7.8 U	8.0	8.1	7.6	7.2	7.6 P	7.5 P	7.4	6.7	6.6	6.1	6.2	6.0
5	5.0 F	4.9 F	4.9 F	4.8 F	4.7	4.6	6.0	7.6 P	8.8 U	8.5	8.3	8.6 J	8.1	8.0	7.3	7.8 U	7.7	(8.0) UP	7.0	6.2	6.0	6.6	6.8	4.8
6	4.3	5.1 F	5.2 F	4.8 F	4.8	5.0	5.3	(7.6) C	10.0 P	9.6	10.0	10.2	9.1	9.4	9.0	8.6	8.6	8.2 J	6.2	6.6	6.2	5.3	4.4	4.6
7	4.3	4.2	4.1	4.1	4.3	4.4	6.0	7.2	7.5	8.3 U	8.5 U	10.9 U	10.1	8.6	8.6	8.3 U	8.6	8.0	6.5	6.1	6.0	6.7	6.6	6.0
8	5.0	(5.0) C	5.0	5.0	4.9	4.4	5.0	(6.6) C	8.0	9.6	10.1	10.6	8.0	8.3 U	8.9 U	8.8	8.5	7.8	7.0	7.3 U	(6.6) C	6.0	5.3	5.2
9	F	F	F	5.3	4.7	4.3	6.0	6.9	8.0	C	C	C	C	C	C	C	8.4 U	8.1	6.5	6.8	6.8	6.8	5.3	F
10	5 F	(5.0) FS	(5.0) FS	(5.3) FS	(4.9) F	(4.6) F	6.1	7.4 P	8.0	8.5	10.3	8.5	9.0	8.8 J	8.3 UP	8.0 U	7.8 U	7.8 U	7.0	6.0	6.3	6.6	5.6	4.8
11	5.3	5.4	5.5	4.7 P	4.8	4.5	6.3	8.3 U	10.0	9.0 U	9.4	10.3	9.5	9.2	8.0	8.5	8.3	7.0	6.8	6.6	6.6	6.3	5.0	4.7
12	4.8 P	4.7	4.7	4.8	4.5	4.4	6.0	7.0	7.9	9.0 U	9.2	9.5	9.5	8.5	8.2	8.0 PJ	7.8 U	7.1 U	6.6	6.3	5.5	4.7	4.6	4.5
13	4.4	4.3	4.1	4.2	4.0	4.1	6.5	8.3 U	8.7 J	8.2	8.5	8.7 PJ	8.7 PJ	8.5	8.5	8.2	8.4	7.2	6.2	6.2	5.0	5.0	4.3 U	4.1
14	4.0	[4.0] A	4.0	4.1	4.1 U	4.2	5.7	7.5	8.0	8.6	8.5	8.6	9.0	8.5	8.7	9.0	8.7	7.5	6.7 P	6.5	5.3	5.0	4.5 PJ	(4.1) PJ S
15	(5.1) SF	(5.0) P	5.2 P	(5.2) SF	5.1	6.0 F	6.5	8.0	7.8	8.7	8.3	9.0 P	10.6	8.6	8.5	7.8	7.8	6.5	6.0	5.0	(4.8) S	4.8 U	4.0	4.0
16	4.2	4.3 U	4.3	4.4	4.3 U	4.0	5.4	7.3 U	8.0	8.0	8.8	10.4	10.2	8.5	8.6	8.3	6.5	6.0	5.7	5.2	5.2	(5.0) US	(5.0) US	4.0
17	4.2	4.2	4.1 U	4.2 U	4.1 U	3.5	4.8	7.0 P	8.0	8.3	8.7	8.9	8.3	8.2	[9.1] C	8.0	(7.5) C	6.0	4.8	4.0	(4.0) S	(4.0) S	4.0 U	4.0 U
18	4.1 U	4.1	4.3 U	4.0	4.1	4.1 U	5.2	6.7	7.8	8.8	8.0	8.0	10.3 U	8.5	8.5	8.0	7.0 U	6.8	5.3	(5.0) S	4.7 U	4.8 U	4.7 U	4.5
19	4.6	4.5 U	4.5	4.6	5.0	5.0 S	4.9	6.1	6.9	8.1	8.0	7.8	8.3	7.5 U	(7.3) A	7.1 U	7.4 U	7.0	S	S	4.3 U	4.3 U	C	C
20	4.2 U	4.6	4.3 U	4.5 U	(4.0) P	4.7	4.5	7.0	7.1 U	7.5	8.0	8.6	8.8	8.3 J	7.6	7.1 U	7.5	6.4 J	4.5	A	C	C	C	4.3 UJ
21	3.8	4.0 U	4.5 J	4.8	4.5	3.2 SF	4.3 U	7.5	8.0	[8.0] C	(8.0) PJ	7.5	7.6	6.9	7.1	6.6	6.8 U	6.8	4.3 U	4.1 U	3.8	3.4	3.5	3.8
22	F	F	(3.7) JF	(4.0) JF	(3.7) F	3.7	4.6	6.0	7.3 U	7.8	8.0 U	8.6	8.0 U	7.6	6.7	8.6	7.0	7.0	4.5	[4.2] C	3.8	4.0 U	3.5	(3.5) JF
23	F	F	3.7 U	(3.6) F	[3.8] F	3.9	4.7	6.5	7.0	C	C	C	C	C	C	C	C	C	A	5.0 U	4.3 J	A	A	A
24	4.1	4.3 U	4.0 U	4.3 U	4.3 U	4.0	4.6 U	6.7	8.0 PJ	(8.3) PJ	B	B	A	8.3 PJ	8.2	7.8	6.8	6.7	A	A	A	A	A	4.0 U
25	5 F	F	F	F	F	F	5.3	7.0	7.3	8.6	7.0	8.3	8.6	8.2	8.0	8.8 PU	8.6 U	7.3 U	6.5	4.6 U	4.3 U	4.1 U	3.8 P	3.7 P
26	3.0	3.0	(3.0) A	3.2	3.2	3.1 F	(4.8) A	6.2	(7.0) PJ	8.0 J	B	B	B	8.8 U	(7.6) PU	7.3	7.2 P	6.6	6.0	4.0	3.8	3.1 U	3.7	3.6
27	3.4	3.6	3.6	(3.4) C	3.1	3.0	4.3	5.8	7.1	(8.3) PJ	8.0	7.6	10.0	10.0 U	8.3	7.2	(7.6) C	6.0	4.8	4.0	5 F	5 F	5 F	5 F
28	5 F	5 F	5.2 F	5.0	5.0	3.1	4.6	6.8	7.6 U	8.3 UP	7.2 P	7.7	8.8 U	8.1	B	B	8.6 P	5.9	4.1	4.0	5	5	5	5 F
29	A	5 F	5 F	F	F	3.9 J	5 F	B	(8.3) PJ	(8.7) P	10.8 U	10.6	(9.3) C	8.0	8.2	8.3	(8.6) P	(7.4) P	5	C	5	(5.4) S	(5.0) S	5.0
30	5.0	5.0	5.0	5.4	(5.4) A	5.6 U	4.3 U	(7.0) P	(8.3) PJ	8.7	(7.6) C	10.2 U	(9.5) B	8.8 U	9.6	8.6	8.0	6.7	4.8	4.0	3.9	(3.6) P	4.4	5.0
31	(3.6) PS	3.7	3.8	3.8 U	3.8 J	(3.7) FU	5.3	8.6 P	8.0 P	8.7	9.6 P	9.5	9.8	9.5	9.6	8.8 J	8.7 J	7.0	5.0	5.0	5.0	(5.0) C	4.0 U	5.3 U
Mean Value	4.3	4.3	4.3	4.3	4.3	4.1	5.3	7.0	7.9	8.5	8.3	8.0	8.3	8.5	8.3	8.1	7.8	7.0	5.7	5.3	4.9	4.7	4.5	5.3
Median Value	4.2	4.2	4.2	4.3	4.3	4.1	5.2	7.0	8.0	8.6	8.3	8.3	8.3	8.5	8.2	8.2	7.8	7.0	5.7	5.3	4.9	4.5	4.4	5.1
Count	24	25	28	29	29	30	30	30	29	29	29	29	29	29	28	28	30	30	29	29	26	26	26	26

foF2

Sweep 1 Mc to 22 Mc in 1 min ☐ Manual ☒ Automatic

W 1

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

IONOSPHERIC DATA

Wakkanai

Lat. 45° 23.6' N
Long. 141° 41.1' E

Oct. 1955

h'F2

135° E Mean Time

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	310	300	280	320	280	310	260	260	260	280	290	320	280	280[L]	300	270	260	240	220	270	260	260	270	300
2	310	310	300	260	240	260	240	[250][C]	260	260	260	260	260	260	260	260	250	240	230	280	280	260	280	300
3	300	310	320	310	310	320	240[A]	250[L]	250	250	250	280	270	270	[270][F]	270	250	250	260	[260][A]	270	300	[300][A]	290
4	300	300	240	310	300	300[F]	240	230	260	250	260	270	270	270	250	270[L]	280	250	240	240	240	270	290	290
5	290	260	260	260	260	260	230	230	250	260	260	260	260	260	240	260	250	240	230	260	250	260	290	290
6	310	300	300	290	290	280	220	[240][C]	260	260	250	250	260	270	260	260	250	230	230	250	260	260	320	290
7	260	300	320	320	310	250	230	230	240	270	260	280	270	260	260[L]	260	250	230	240	260	250	260	270	310
8	330	300	[280][C]	260	240	240	240	[240][C]	240	260	260	260	240	250[L]	260	250	250	240	260	260	[260][F]	250	250	270
9	(360)[F]	320	310	260	220	250	220	220	250[L]	C	C	C	C	C	C	C	240	230	220	250	250	260	310	300[F]
10	300	310	300	270	250[F]	260	240	240	240	260	260[L]	240	260	260	250	260	250	230	240	230	270	250	280	270
11	300	290	280	230	260	250	240	240	240	240	260[L]	260	260	260[L]	260	250	240	230	240	250	310	280	300	310
12	310	300	280	280	270	260	260	270	260	260	260	260	260	260	250	240	230	250	230	240	270	280	260	270
13	290	270	280	270	270	270	230	240	240	230	240	260	260	250	260	250	240	240	250	240	250	270	270	290
14	310	[320][A]	320	320	310	300	240	240	240	250	240	250	260	260	260	260	250	230	260	260	240	270	270	270
15	310	300	280	280	280	280	240	240	230	250	240	260	270	250	260	250	250	230	260	270	260	260	280	320
16	300	280	280	280	260	260	230	230	230	250	260	270	250	250	250	240	230	240	260	260	250	260	250	310
17	320	320	310	300	260	230	230	240	230	250	260	260	270	260	[260][C]	250	[240][C]	220	250	250	290[S]	300[S]	310	320
18	300	290	290	290	270	270	280	220	240	240	230	270	250	260	250	240	230	220	250	[260][S]	270	260	280	280
19	280	270	300	300	260	230	220	220	230	260	230	220	260	240[L]	[250][A]	280	240	240	A	S	290	300	[300][C]	300
20	280	270	260	280	260	230	270	240	240	240	240	260	260	260	260	250	230	210	240	A	A	A	A	310
21	260	240	340	280	250	250	220	240	230	240	250	250	250	260	260	240	230	220	250	250	250	300	310	300
22	280	310	310	270	280[F]	250	230	270	230	230	250	260	270	250	250	260	240	220	250	[280][C]	300	260	260	300
23	310	320	310	280	290	280	210	250	240	C	C	C	C	C	C	C	C	C	A	260	260	A	A	A
24	330	320	310	290	270	250	220	230	240	240	250	250	[250][A]	250	250	240	230	240	A	A	A	A	A	300
25	310	300[F]	320	[300][A]	270	220	220	220	230	250	230	240	260	250	270	260	230	220	260	270	330	350	400	360
26	340	350	[370][A]	390	(460)[A]	360	[310][A]	260	270	260	270	260	260	250	250	250	240	240	250	250	300	310	350	350
27	[360][A]	360	350	[350][C]	350	320	260	220	230	240	250	250	260	250	250	240	220	230	250	250	(300)[FS]	(300)[FS]	(350)[FS]	(350)[FS]
28	(380)[FS]	(350)[ES]	400[A]	320	310	300	250	230	230	260	230	260	260	250	260	240	230	230	240	260	310	330	330	340
29	[330][A]	320	320	260	260	[260][A]	270	250	250	250	260	250	250	230	240	250	240	240	S	C	S	(360)[S]	350[S]	320
30	320	340	340	310	[280][A]	260	250	240	240	230	[240][C]	240	[250][A]	260	260	250	<250[C]	230	230	280	260	300	320	350
31	330	300	280	310	<380[C]	310	260	230	230	220	260	250	250	250	250	250	230	240	260	290[A]	[300][C]	310	300	320
Mean Value	310	300	300	290	280	270	240	240	240	250	250	260	260	260	260	250	240	230	240	260	270	280	300	310
Median Value	310	300	300	290	270	260	240	240	240	250	250	260	260	260	260	250	240	230	240	260	260	270	300	300
Count	31	31	31	31	30	31	31	31	31	29	29	29	29	29	29	29	29	30	27	27	28	28	28	30

h'F2

Sweep 1 Mc to 22 Mc in 1 min ☐ Manual ☒ Automatic

W 2

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

IONOSPHERIC DATA

Oct. 1955 | fEs | Wakkanai | Lat. 45° 23.6' N | Long. 141° 41.1' E

135° E Mean Time

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.0	2.6	3.0Y	4.2	6.0	4.3	G	G	G	G	G	G	G	G	G	G	4.5	3.5	E	2.5	2.3Y	3.5	3.0	3.5
2	2.5	3.5	2.0	E	2.3Y	2.3	G	C	4.0	G	G	G	G	G	G	G	G	G	3.5	2.5Y	3.0	3.5	3.5	2.5
3	2.3	2.5	E	E	2.3Y	2.6	4.2	3.5	G	G	G	G	G	G	C	4.5	5.3	3.5	5.3	7.0	7.0	5.7	4.5	2.5
4	2.3	2.7	2.0	2.0	3.0	4.2	3.5	3.5	G	G	G	G	G	G	G	G	G	G	2.8	E	E	E	E	E
5	E	E	E	E	E	E	G	G	G	G	G	G	G	G	G	G	G	G	E	E	E	2.0	E	E
6	E	2.3	E	2.0	2.2	E	2.3	C	G	G	G	G	G	G	G	G	G	G	E	E	E	E	E	E
7	E	2.3	2.5	2.2	E	E	G	4.3	G	5.0	5.3	G	G	G	G	G	G	G	2.7	2.8	E	E	2.6	E
8	2.6	C	C	2.3	2.0Y	E	C	C	G	G	G	G	G	4.0	4.0	3.5	3.5	3.5	3.5	2.8	C	2.2	E	3.5
9	4.0	3.5	3.5	2.3F	2.3	2.0	G	G	G	C	C	C	C	C	C	C	2.5	2.5Y	E	3.5	E	E	4.2	5.0
10	5.0	7.0	3.5Y	2.6	2.2F	2.2	G	G	G	G	4.2	6.2Y	6.0	4.9	5.2	4.2Y	3.5	2.5Y	E	2.0	E	E	E	E
11	E	E	E	E	2.5	2.5	G	G	G	4.0Y	G	G	G	G	G	3.2	2.8	G	E	E	3.1	3.0Y	E	E
12	E	E	2.5	E	2.3	E	G	G	G	5.0	7.0YF	G	5.2Y	G	4.1	G	3.5	3.5	2.7	2.6	2.3	E	E	E
13	2.3Y	E	E	2.3	E	E	G	G	G	G	G	C	G	G	G	G	G	E	E	E	2.0	3.3Y	2.5	E
14	3.0Ys	5.0	E	2.3	3.5	4.0Y	G	G	G	G	G	G	G	G	G	3.5	G	4.0	3.5	5.2	E	E	E	4.2
15	3.0	2.5Y	E	E	4.2	3.5	G	G	G	G	G	G	G	G	4.5	5.0	3.5	G	3.5	3.0	E	E	E	E
16	E	E	E	E	E	E	G	G	G	G	G	G	G	G	G	G	G	3.0	3.5	E	E	E	E	4.0
17	E	E	E	E	E	2.3	G	G	G	G	4.0Y	G	G	G	C	G	C	E	E	E	3.5	E	E	E
18	2.6	E	2.5	2.3	2.0	2.5	G	G	4.8	4.5	5.2	6.5	8.0	5.3Y	G	G	3.3Y	3.5	3.0Y	4.0	3.0	E	E	3.5
19	3.5	E	3.5	3.0	2.5	E	G	G	G	G	G	G	G	6.0Y	10.1Y	4.1	4.9	5.0	4.2	3.5	3.0	E	E	E
20	E	E	2.8Y	3.5	2.3	E	E	G	G	4.1J	G	G	G	5.2F	G	G	G	E	E	6.5	4.5	3.5	3.5	3.5
21	E	E	4.5	2.6	3.0	E	E	G	G	5.0Y	4.2Y	5.2	G	G	6.0Y	3.5	3.5Y	E	E	E	E	E	E	E
22	2.3	E	E	E	3.5	2.3	2.3	3.5Y	G	G	G	G	G	G	G	G	G	3.0	4.2Y	4.5Y	3.5	E	E	E
23	E	E	E	E	E	E	G	G	5.3	C	C	C	C	C	C	C	C	C	8.5	6.0	3.5	4.9	5.3	6.5
24	5.0	3.5	E	3.0	2.0	E	E	G	G	G	G	8.5	9.3	6.0	G	G	2.6	3.5	7.0	7.0	6.5	5.0	6.0Y	2.5
25	E	E	3.5	6.0	3.5	2.5	E	G	G	G	5.3Y	5.3FY	5.3Y	4.0Y	4.5Y	7.5F	G	E	E	E	E	E	E	E
26	E	2.0	6.2	3.5	5.3Y	5.0Y	6.5	3.5	G	4.8Y	4.2Y	G	G	G	G	G	G	3.5	3.3	E	2.5Y	E	3.5	3.0Y
27	3.5	3.5	5.2Y	C	3.5Y	E	G	G	G	G	4.7Y	G	G	4.2Y	4.0	5.0	4.1	5.0Ys	5.0	E	3.1Ys	E	E	E
28	3.5	4.5	4.2	3.0	3.0F	3.0F	E	G	G	G	5.2	5.2	4.2Y	4.2	G	G	G	E	3.5	4.0	3.1	3.0	E	E
29	5.1	3.5	4.5	5.0	3.2Y	4.1	3.5Y	4.5	3.5	>3.5C	4.6	4.4	7.8FY	6.5FY	4.2Y	4.0	3.6	4.7	6.5	C	E	E	E	E
30	E	E	E	4.8Y	4.3	E	G	G	G	G	>5.2C	5.9	7.8	5.2	G	6.5	>3.5C	4.1	3.5	E	E	E	E	5.0
31	3.0	E	2.3	E	E	2.1	2.3	G	G	G	G	G	G	G	G	G	G	4.3	4.8	3.5	C	E	3.2	E
Mean Value	3.2	3.4	3.4	3.1	3.0	3.0	3.5	3.8	4.4	4.6	4.9	5.9	6.7	5.0	5.2	4.5	3.7	4.3	4.2	4.1	4.3	3.6	3.8	3.8
Median Value	2.3	E	2.2	2.3	2.3	2.2	G	G	G	G	G	G	G	G	G	G	G	2.8	3.3	2.6	2.3	E	E	E
Count	31	30	30	30	31	31	30	28	31	28	28	28	29	29	27	29	28	30	31	30	29	31	31	31

fEs

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

W 3

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

IONOSPHERIC DATA

Akita

Lat. 39° 43.5' N
Long. 140° 08.2' E

Oct. 1955 | foF2 | 135° E Mean Time

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	(3.8)P	(4.5)P	(4.1)P	4.0	4.0	C	C	C	C	C	B	8.2	[7.2]C	(6.3)P	7.1	6.8P	8.1	C	C	5.2P	5.3	4.6	4.5F	4.2
2	4.4F	4.5	4.4	4.3	4.4	4.0J	5.5	6.5P	7.2J	6.6	6.6	(7.1)P	[7.4]C	7.7	[7.5]C	(7.3)P	C	C	6.1P	4.8	5.3	4.9JF	[4.7]C	4.5
3	4.4	4.2	4.2	4.2	4.0	4.0F	5.9	6.7	8.0	8.7	9.0	8.4	6.8	7.7	7.7	8.5	8.0	6.6	6.8	[5.8]B	4.7	A S	A	A
4	4.0F	4.2	4.0F	3.9F	4.0F	4.5F	6.1J	7.5	7.6	8.6	(7.5)P	7.3P	B	8.1	(7.7)P	6.9	C	C	C	C	5.6	C	C	4.6
5	4.8°	4.6	4.7	4.8	4.8	4.5	(6.2)P	C	C	C	C	C	C	C	C	6.6PJ	[6.8]C	6.9P	6.7	5.8	5.6	4.8	4.6	4.5
6	4.5	4.5	4.5	4.7	4.1	5.0	6.7	7.6	8.5	10.3	8.7	11.0	10.3	10.1	9.7	10.2	9.7J	9.1J	6.2	5.0	4.7	4.8	4.5	4.7
7	4.5	4.5	4.4	4.2	4.4	4.5	6.0	7.8	8.1	8.4	C	C	C	C	9.0	(7.8)P	[8.2]B	(8.7)P	[7.6]C	6.6	6.5	[6.4]P	[5.6]P	5.0
8	5.1	5.1	5.2	5.3	4.9	4.4	6.5	6.7	[8.2]C	9.6	C	C	9.4	[9.4]C	9.5	8.4PJ	B	B	7.3	(6.7)P	6.5	6.4	5.5	5.4
9	4.9	5.0	5.0	5.1	4.6	4.0	5.8	7.0	C	C	C	C	(8.9)P	[9.0]C	9.0	C	C	C	7.4	5.4	5.0	4.7	4.6	4.8
10	4.6	5.0	4.6	4.6	4.5	4.5	6.5	(8.1)P	[8.2]C	8.4	C	C	C	9.2	8.6	[9.2]C	9.9	C	C	(6.0)P	(5.5)P	(6.2)P	5.0	5.1
11	4.8	4.9	4.9	5.1	4.3	4.4	6.3J	8.7P	8.3P	8.8P	8.6	C	C	8.6	(8.8)P	(10.0)P	(7.7)P	7.5	5.8P	5.4	5.1	5.5	4.5	4.5
12	4.5	4.5	4.5	4.7	4.6	4.7	6.6	8.0P	C	(8.5)P	[9.2]C	9.8J	10.4	C	C	8.2	8.0	7.5P	6.6	4.9P	4.7	4.6	4.5	4.1
13	4.1	3.8	3.9	4.1	4.1	3.7	(6.1)P	8.9PJ	8.3	8.4	C	C	(9.0)P	9.7J	(9.6)P	9.0P	8.1	8.0	6.6	6.7	4.3	4.0P	4.0	3.8
14	(3.9)P	4.0	4.2	4.0	3.8P	4.1	6.6	7.2	C	8.5P	7.9P	C	C	8.3	9.2P	[9.5]P	(9.6)P	8.2	6.6	6.6	5.3	4.5	4.3	4.5
15	4.2	4.5	4.5F	4.5	4.2	4.1	6.5	7.8	(8.6)P	8.0	8.3P	C	C	9.6	8.8J	8.3P	8.0	A	6.5	4.8	4.6	4.7	4.1	3.7F
16	3.9F	3.8F	4.0	4.1	4.2	3.5F	5.6	7.3	7.7	7.9	8.3	9.8	11.4	9.8	8.5	7.5	7.4	6.5	5.6	5.3	4.9	5.3	4.4	3.5
17	3.6	3.9P	3.9P	3.9P	4.2	3.4	5.1	6.6	7.4P	(8.4)P	8.7P	9.0J	9.6	8.9J	9.3	9.5	9.6	6.6	4.1	4.3	(4.0)P	(4.0)P	(4.4)P	[4.7]P
18	(4.8)P	[4.5]C	(4.2)P	(4.4)P	(4.4)C	(4.3)P	6.5	7.2	7.5	8.6	8.1	8.8	[9.0]C	9.1	8.2	8.4	7.8	6.4	5.5	4.3	4.4	4.0	4.0	4.0
19	4.2	4.4	4.3	4.4V	4.5F	4.1	5.1	6.6	7.4	7.5	8.4P	7.7	7.0	8.2	8.6	7.1	7.4	6.7	4.5	4.1	3.6	3.9F	3.8F	3.6
20	3.9	3.9	3.9	4.0F	4.2F	3.6F	4.5	6.0	8.3J	8.0	7.2	8.3P	8.7	8.9P	8.3	8.0	6.6	5.9	3.6	3.6	3.5	3.8	3.6	3.7
21	3.8	3.7VF	3.7VF	3.8VF	3.8F	2.7VF	4.9	4.5	(8.5)P	7.8	8.7	(8.5)P	7.7	8.0	7.1	7.8	6.3	5.9P	A	A	A	3.7F	3.6F	3.5
22	3.4	3.5	3.4	3.5	3.6	3.5	5.2P	7.0	6.8	7.2	(7.8)P	(8.5)P	8.0J	8.5P	8.1	7.4	8.7P	6.0	A	A	3.6	3.5	3.5	3.5
23	3.5	3.4	3.5	3.7	3.6	3.6F	4.8	6.6	C	8.1	8.8	11.0P	[9.5]C	8.6	8.0P	8.2J	(8.2)P	7.0	5.1	5.3	4.1P	4.0	3.9	3.8
24	4.0F	4.0	3.9	4.0	4.2	3.4	5.1	7.6	8.2J	C	C	9.5J	9.3	8.0	C	C	C	6.2	5.8	4.7	3.7	3.5	3.7	3.8F
25	3.8F	3.9F	4.0	3.7	4.0P	4.0P	4.7	7.5P	7.6P	(7.9)P	8.0J	8.0P	8.8	8.1	(8.1)P	9.9	9.9	C	4.5	4.2	4.3	4.2	4.0	4.0
26	3.3	3.5	3.5	3.6	3.1	3.8	5.1	6.7J	9.0J	10.1	[10.4]C	10.7	9.2	C	(7.9)PJ	C	8.0	6.8	5.9P	4.7	3.8	4.0	3.8	3.7
27	3.6F	3.7	3.6	3.5	3.5	3.3	4.9	7.0	7.6	(7.4)P	8.4J	(8.8)P	8.8P	10.3	9.5	8.9	8.6	6.4	4.6	4.1	3.5	3.5	3.7	3.6
28	3.7	3.7F	3.8F	4.4F	4.9F	3.6F	4.8	7.2	7.8J	[8.8]C	9.7	10.5	9.9	9.7	9.9	9.6	(8.4)P	7.0	4.7	3.9	3.0V	3.1	3.2F	3.4
29	3.4	3.5F	3.7F	4.0F	3.7F	3.1V	4.7	6.9P	8.4	9.9	10.6	10.5	9.4	8.4	(8.5)P	8.4	8.6	C	3.9J	[3.4]A	2.9	3.0	3.1	3.2
30	3.3	3.3	3.4	3.4	3.5	3.5	4.7	(8.0)P	7.9J	8.4	8.5	9.2	8.9	[8.7]C	8.5	8.2	8.1	6.7	4.5	[4.2]A	3.8	3.9	3.8	3.6
31	3.6	3.6	3.9	3.5	3.4	3.5	5.1	8.7	9.0	8.7P	8.5	8.7	[9.0]C	9.4	C	C	C	6.6	4.5	3.7	3.8	4.0	4.1	4.1
Mean Value	4.1	4.1	4.1	4.2	4.1	3.9	5.6	7.2	8.0	8.4	8.5	8.7	8.9	8.8	8.5	8.3	8.2	7.0	5.7	5.0	4.5	4.4	4.2	4.1
Median Value	4.0	4.0	4.0	4.1	4.2	4.0	5.6	7.2	8.1	8.4	8.5	8.8	9.0	8.7	8.5	8.3	8.1	6.7	5.8	4.8	4.4	4.0	4.1	4.0
Count	31	31	31	31	31	30	30	29	25	27	23	22	24	27	27	27	25	22	26	28	30	29	29	30

foF2

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

A 1

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

IONOSPHERIC DATA

Oct. 1955 | h'F2 | 135° E Mean Time | Akita | Lat. 39° 43.5' N | Long. 140° 08.2' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	350	300	300	300	310	C	C	C	C	270	290	290	[300]C	310	280	290	260	250	250A	260	290F	250	310	310
2	[320]AF	340	330	270	260	260F	250	250	250	250	270	300	270	L	L	280L	250	250	240	250	290	310F	[300]C	290
3	300	340	340	300	340	340F	250A	260	270L	270	270	270	280L	280	280L	290	250	250	250A	250A	280	300	320F	[310]A
4	300	320F	320	350F	350F	300F	250	250	250	280	260	290	320	300	280	270	270	250	250	240	260	320	[310]A	300
5	300	290	310	290	280F	290	250	250	250	260	280	270L	300	270L	270	280L	260	270	240	260	280	280	300	330
6	340	310	310	310	310	330	250	240	260L	260	270A	290	280	310A	280	290	280	250	230	260	280	280	310	300
7	280	310	330	330	310	260	240	250	250	260	280	300	310	280	280L	270	260	250	250	260	270	280	290	300
8	340	310	300	290	250	250	240	240	250	270L	270	260	270L	290	290L	270L	270	250	250	280	250	270	270	300
9	300	320	330A	260	240	250	250L	240	260	260	270	260	300L	290L	280L	270L	250	250	240	250	280	A	A	350A
10	330	300	280A	290	270	300	250	250	260L	260	280	280	280	280L	280L	280	260	250	260A	[280]A	290	280	280	300
11	320	300	300	270	270	280	250	250	250	260	270	290	290	270	290L	280L	250	250	250	290	320	290	290	310
12	320	340	340	310	300	270	250	250	260L	250	270	270	290	270L	280L	260	250	250	250	280A	300	320	290	300
13	300	290	310	290	270	310	250	250	250	260L	270	270	260	290	280	260	260	250	230	250	250	300	290	300
14	320	320	310	350A	310	340A	260	240	260	250	290L	280	270	280L	290L	260	260	250	250	250	250	260	290	280
15	290	280	310	310	260	300	260	250	250	250	280	270	250L	270	270	270	250	260	240	290	280	250	270	330F
16	310	300	300	290	270	260	250	240	240	250	270	270	290	270	260	250	250	250	[260]A	270	310	280	250	300
17	330	320	310	290	250	250	240	240	240	250	260	270	270	270	290	260	250	240	240	270	260	290	300	300
18	290	290	300	290	270	270	240	240	250	250	270	290	[280]C	260	270	260	240	230	240	250	270	280	290	310
19	300	290	290	290	260	250	230	240	240	260	280	250	250	290	280	250	250	250	250	250	250	320	340	310
20	300	300	290	290	260	270	240	250	250	250	250	290L	270	290	270	250	240	230	220	230	300	320	A	270
21	300	350	350	320	250	310	250	240	250	260	270	260	260	290L	270	260	230	250	A	A	A	310	320	300
22	A	300	310	290	270	260	250	240	250	260	260	270	290	270L	260	260	250	240	A	A	290	310	320	300
23	320	320	330	320	310	310	250L	240	250	260	290	280	260	260	270L	260	240	250A	250	240	250	280	320	300
24	340	300	320A	320	270	250	260L	240	240	240	260	270	270	260	260	260	240	240A	260	250	270	280	290	370A
25	340A	320A	320A	300	260	220	240	240	240	240	260	270	290	280	260	280	250	220	260	280	330	360	330	370
26	230	360A	400A	310	A	340	260	[270]A	280	260	280	290	270	290	260	270	260	240	260	250	350A	(350)A	340	350A
27	300	350A	320	350A	[340]A	340	260	230	240	260	290	290	300	230	270	250	250	230	250	250	280	300	350A	320
28	350A	350	300F	300F	290F	270F	250	240	250	250	280	270	270	270	280	240	240	230	240	250	260A	340	[360]A	320A
29	350	320	310	250	290	270	250	250	250	280	260	260	260	260	270	260	250	240	A	A	A	350	360	340
30	320	340	350	310	300	300	250	250	240	250	260	260	250	[260]L	280	270	240	230	240	[260]A	280	300	300	340
31	350A	310	290	300	380	340	280	240	250	250	270L	270	[280]C	280L	C	C	C	240	260	270	310	360A	320	310
Mean Value	310	320	320	300	290	290	240	250	250	260	270	280	280	280	280	270	250	240	250	260	280	300	310	320
Median Value	320	310	310	300	270	280	250	240	250	260	270	270	280	280	280	260	250	250	250	260	280	300	300	310
Count	30	31	31	31	30	30	30	30	30	31	31	31	31	30	29	30	30	31	28	28	29	30	29	31

h'F2

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

A 2

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

IONOSPHERIC DATA

Akita

Lat. 39° 43.5' N
Long. 140° 08.2' E

Oct. 1955

fEs

135° E Mean Time

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.2	E	2.3	2.8	2.5	C	C	C	C	3.5	G	3.7	G	G	G	3.5	4.0	3.2	3.2	3.5	4.1	3.5	3.0	2.8
2	3.0	2.7^{F}	2.5^{F}	2.2^{Y}	2.5	2.5^{F}	2.0^{F}	3.0	4.0	3.5	G	G	3.5	G	G	G	G	2.0	E	3.0	2.6	3.5	3.0	2.2
3	2.3	1.7	2.0	E	2.5	2.5	6.6^{Y}	4.0	4.6	5.2	5.0	4.4	4.3	G	3.5	G	4.7	3.5	3.8	4.1	3.5	6.6^{Y}	6.6	4.6
4	4.0	3.5	4.0	2.4	2.3	4.0	3.4	3.5	3.6	G	G	G	G	G	G	G	G	2.8	2.5	2.2	2.7	>3.1^{C}	>3.2^{C}	E
5	2.3	2.5	2.3	2.3	4.5^{F}	E	G	3.5	G	G	3.5	3.5	3.5	3.5	G	G	G	2.8	2.9	3.0	3.1	4.5	2.4	3.0
6	2.4^{F}	3.0^{Y}	2.5^{Y}	2.5^{Y}	3.1	2.5^{F}	2.6^{Y}	3.2	G	5.0	6.0	5.7	4.3	7.5	5.0	7.2	7.0	C	3.5	3.0	2.4	2.4	2.0	2.3
7	2.3	2.0	2.5	2.1	3.0	E	2.2	3.0	5.0	5.1	6.5	6.5	4.5	4.0	4.7	5.5	4.5	3.5^{F}	3.5	3.1	3.0	3.0	2.2	2.4
8	3.5	3.0^{F}	3.0	2.4	3.1	3.5	3.4	3.5	3.5	4.2^{Y}	3.5	3.5	3.5	5.5	3.5	4.2	3.5	3.5	3.0	3.5	2.2^{Y}	2.2^{Y}	E	2.8^{Y}
9	2.0^{Y}	E	3.7	3.4	2.2	2.8	3.0^{Y}	3.3^{Y}	G	G	G	4.0	5.5	3.5	3.5	G	G	3.0	2.7	2.4	3.5	6.6	4.7	4.5
10	4.5	4.5	4.9	2.8	3.3	3.5	3.5^{Y}	G	3.5	G	3.9	4.7	5.3	4.7	4.3	4.4	5.2	4.0	4.0	4.8	1.9^{Y}	2.0^{Y}	3.0^{Y}	2.0
11	3.0^{Y}	2.3^{Y}	3.3	2.2^{Y}	2.2	2.1	G	3.0^{Y}	3.7	3.5	4.2	4.7	3.5	3.5	4.3	3.2	3.5	3.5	3.5	3.5	3.4	3.5	3.5	2.0
12	2.2^{Y}	2.9	2.9^{Y}	2.0	3.2^{Y}	2.6^{Y}	3.1	3.1	G	G	4.3	4.0	5.2	4.4	4.3	4.7	3.5	4.1	4.5	4.0	2.0^{Y}	3.5	5.0	2.6
13	2.0	2.0	2.2	2.0^{Y}	3.0^{Y}	3.5	G	G	G	3.5	5.5	4.7	4.1^{Y}	6.5	5.3	4.7	4.7	4.7	2.2^{Y}	E	2.9	3.3	4.5	3.5^{Y}
14	2.0	3.0^{Y}	3.0	5.5	3.0	3.5	3.0	G	G	G	G	4.5	3.5	4.0	4.9	3.6	3.5	3.5	4.5	E	E	E	1.8	E
15	1.8	1.8	3.5	3.3	3.5	3.1	2.2	3.5	3.5	3.5	G	G	4.3	G	3.5	G	2.9	6.5	3.5^{Y}	3.6	2.8	2.3	2.7	3.5
16	3.5	2.0	2.4	3.5	3.5	2.9	2.7	G	G	4.5	G	G	4.5	3.5	3.5	3.1	G	3.5	7.0	6.5	3.5	3.1	2.0	1.9
17	E	2.0	2.0^{Y}	2.1^{Y}	3.0^{Y}	E	3.0	G	G	3.5	G	3.5	G	G	3.5	3.3	4.9	3.0	E	E	E	E	2.6^{Y}	2.6
18	2.5	E	E	2.0^{Y}	2.0^{Y}	2.5	3.4^{Y}	3.5	G	4.2	>3.5^{C}	>3.5^{C}	C	3.4	3.5	3.5	3.4	4.3	3.0	3.0	4.5	4.5	2.5	3.0
19	3.5	2.8	3.5	3.0^{Y}	2.2	3.5^{Y}	3.5	3.4^{Y}	4.1	5.5	5.5	3.5	3.5	4.7	3.5	3.4	4.5	4.8	4.7	4.5	3.5	7.0	3.0	3.5
20	3.5	3.0	2.5	3.3	3.5	3.5	3.5^{Y}	3.2^{Y}	G	4.5	4.7	4.5	G	G	G	G	3.1	4.5	3.5	4.5	3.5	8.2	5.5	2.5
21	3.5	3.5	4.6	3.5	4.5	3.5^{F}	2.5^{F}	G	4.0	4.4	4.5	4.2	4.0	4.5	4.7	3.5	4.2	4.5	5.8	7.5	7.5	3.5	2.5	2.8
22	3.5	2.5	2.8	2.5^{Y}	2.5^{Y}	E	G	G	G	G	4.5	G	G	G	5.7	4.3	4.5	4.2	6.6	6.6	4.0	2.8	2.7	2.5
23	2.5	2.5^{Y}	2.5	2.8	2.9	2.7^{Y}	2.7	G	4.5	4.7	7.5	4.1^{Y}	3.3	G	G	G	G	5.7	4.2	2.5	3.5	4.5	3.2	3.0
24	3.0	2.1	3.2	3.4	3.0	2.5	2.5^{Y}	G	4.1	4.3	3.6	3.4	G	G	G	G	G	4.5	3.5	2.7	3.7	3.1	2.5	4.6
25	4.2	3.3	3.5	3.0	2.5	2.2	G	G	3.5	4.6	5.1	6.9^{Y}	3.4	4.6	4.6	3.5	G	2.4	E	2.6	E	E	E	E
26	E	4.0	3.5	3.0	3.1	2.5	3.5	5.5	7.0	4.5	7.0	6.6	G	5.1	4.7	4.6	4.4	4.5	3.9	3.9	3.7	4.0	6.9	4.5
27	7.0	4.5	3.0	4.5	4.5	2.5	2.5^{Y}	3.0	G	4.5	7.0	6.5	10.5	6.5^{Y}	4.2	5.5	3.5	4.5	6.8	3.4	3.0	4.5	3.5	2.6
28	3.0	3.0^{F}	2.5^{F}	3.0^{F}	2.7^{F}	2.5^{F}	G	G	G	4.5	G	G	3.1^{Y}	G	G	G	4.1	3.4	3.0	3.0	3.0	2.5	3.0	3.0
29	2.9	2.5	2.5	3.0	3.5	3.5	2.5^{Y}	G	G	5.0	5.3	3.7	6.5	3.5	5.5	3.5	4.5	6.5^{Y}	5.7	6.4	4.5	3.1	2.5	2.5^{Y}
30	3.0^{Y}	3.5	3.0	3.5	6.9	2.9	3.2	G	G	G	G	G	G	3.8	G	G	G	3.3	3.0	4.5	3.6	2.5^{Y}	2.5^{Y}	2.5
31	3.5	3.0	2.5	2.5	2.5	3.0	3.4	3.1	3.9	4.2	4.1	5.0	C	4.3	C	C	C	3.0	3.7	3.5	3.0	3.5	3.0	2.8
Mean Value	3.1	2.8	2.9	2.9	3.1	2.9	3.1	3.4	4.2	4.3	5.1	4.6	4.5	4.6	4.1	4.2	4.2	3.9	4.0	3.9	3.4	3.8	3.3	2.9
Median Value	3.0	2.7	2.8	2.8	3.0	2.6	2.7	3.0	G	4.2	4.2	4.0	3.5	3.5	3.5	3.4	3.5	3.5	3.5	3.5	3.1	3.4	3.0	2.6
Count	31	31	31	31	31	30	30	30	30	31	30	30	29	31	30	30	30	30	31	31	31	30	31	31

fEs

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

A 3

6

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

IONOSPHERIC DATA

Oct. 1955 | foF2 | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3.6	3.9	3.9	4.0	3.9	4.1	7.2	8.4	8.5	9.2	8.5	8.3	8.4	8.0	8.0	7.8	9.3	8.5	8.6	5.7	4.8	4.3	4.3	4.3
2	4.2	4.2	4.4	4.3	4.5	3.9	5.9	7.9	7.8	6.9	7.5	8.5	9.2	8.5	9.0	9.4	9.0	6.6	7.0	4.8	4.7	4.7	4.6	4.3
3	4.3	4.3	4.2	4.1	4.0	3.7	5.8	7.0^{P}	9.7	8.5	8.9	9.7^{P}	8.0	7.3^{P}	8.5	8.9	8.8	7.4	7.0	5.3	4.5	4.0	4.1	4.1
4	4.1	4.0	4.0	3.9	4.0	4.2	6.1	7.9	7.9	8.4	8.3	9.1	8.8	8.0	8.5	8.1	8.0	8.0	6.9	6.7	5.3	4.4	4.6	4.6
5	4.8	4.3	4.3	4.5	4.5	4.3	6.6	8.8	9.7	9.3	9.7	9.7	9.1	9.6	9.0	9.4^{J}	[8.4]$_{B}$	7.5	[6.8]$_{C}$	6.0	5.4^{J}	4.2^{P}	4.0	3.3^{P}
6	4.0	4.2	4.2	4.2	4.2	4.3	7.1	8.5^{P}	8.0^{P}	>7.0$_{C}$	>6.8$_{C}$	>7.5$_{C}$	11.5	(10.0)^{HP}	10.9^{P}	10.7	10.5	9.5	6.0	4.8	4.8	5.0	4.8	4.5
7	4.6	4.4	4.4	4.4	4.5	4.4	6.4^{J}	7.2	9.1	8.5	10.4	9.4	11.0	11.5	10.5	9.6	9.9	9.2	7.8	5.9	6.0	5.2	5.1	5.0
8	5.0	4.9	4.8	5.0	4.5	4.1	6.3^{P}	7.4	8.8	9.4	11.3^{P}	10.1	10.2^{H}	(9.9)^{P}	9.8	9.3	9.1	9.1	7.7	6.1	6.2	5.6	5.4	5.3
9	5.0	4.9	5.0	4.8	4.5	3.7	6.0	7.7	(10.5)$_{B}$	9.5	9.9	10.0^{H}	10.3	10.4^{H}	9.5	9.5	9.0	9.5	8.2	4.9	4.8	4.8	4.6	4.8
10	4.6	4.6	4.6	4.4	4.2	4.3	6.3^{P}	8.4	9.8	8.4	9.7	(11.0)^{J}	10.4	9.8	9.3	8.4	9.8	9.1	6.8	6.1	5.7	5.8	5.9	5.4
11	5.0	5.1	4.9	5.3^{P}	4.4	4.7	7.0	7.9	8.6	8.7	9.3	9.0	8.9	8.8	9.1	(10.8)$_{B}$	9.2	8.5	6.3^{P}	4.9	4.9	5.3	4.4	4.3
12	4.2	4.2	4.2	4.4	4.5	4.5	7.3^{P}	9.0	9.5	C	C	C	C	9.9	9.6	9.5	8.0	8.4	6.5	[5.8]$_{A}$	5.0	4.5	[4.4]$_{C}$	4.3
13	4.1	3.8	3.8	3.8	3.7	3.5	6.5	8.0	7.8	8.7	9.3	10.3	10.4	10.3	9.8	10.2^{P}	9.1	8.6	8.6	5.2^{J}	4.3	4.0	3.8	3.6
14	3.9	4.0	4.0	4.1	4.0	4.1	5.9	8.0	10.0	7.6	8.5	9.7	9.3	9.3	9.9	9.7	9.7	9.0	7.0	5.2^{P}	5.0^{S}	4.4	4.1	4.2
15	3.8	3.8	3.8	4.0^{P}	4.0	3.5	6.0	7.9	8.9	8.6	9.0	>9.0$_{B}$	10.0	10.4	9.9	9.6	8.7	8.1	[6.3]$_{A}$	4.5	4.3	[4.6]$_{A}$	4.8	3.8
16	3.9	4.0	[4.0]$_{A}$	4.1	4.1	3.2	5.9	7.4^{P}	7.5	6.6	8.5	10.5	10.9	10.8	9.0	7.7	7.3	7.0	6.1	5.3	4.7	4.4	3.8	3.6
17	3.7	3.8	3.9	4.0	4.2	3.2	5.4^{J}	6.7	7.4	8.0	8.5	9.0	9.6	9.3	10.0	10.0	8.5	7.0	4.3	4.0^{J}	4.1	3.9^{J}	4.0^{J}	4.1
18	4.1	4.0	4.0	3.9	4.1	3.9	6.0	7.0	8.0	8.0^{J}	8.2	9.9	10.3	9.6	8.5	8.4	8.5	6.9	4.8	4.5	3.9	3.8	3.6	3.7
19	3.6	3.8	4.0	4.1	3.9	3.8	5.4^{J}	6.2	8.6	7.6^{J}	8.0^{J}	8.5	7.5	6.7	9.5	8.5	7.5	7.2	4.6	3.8	3.6	3.6	3.7	3.7
20	4.0	3.8	3.6	3.6	4.0	3.0	4.9	6.5^{P}	7.1	8.4	8.0	[8.8]$_{B}$	9.5	8.8	9.6	8.5	7.0	5.6	4.2	3.6	3.8	4.2	4.0	3.8
21	3.7	3.3	3.3	3.5	3.5	2.8	5.0	6.8	7.6	9.9	9.3	9.6	9.0	7.6	7.9	7.3	6.6	5.5	[4.6]$_{A}$	3.8	3.7	3.7	3.6	3.7
22	3.4	3.5	(3.2)$_{A}$	3.4	3.4	3.5	4.7^{P}	6.5	7.2	8.0	8.3	8.4	9.1	9.9	9.1	7.2	7.2	7.3	6.0	[4.8]$_{A}$	3.7	3.3	3.6	3.5
23	3.5	3.4	3.4	3.7	3.6	3.4	5.3	6.7	7.5	8.7	9.5	11.8	12.0	10.8	9.0	8.9	9.0	7.4	5.8	5.1	4.3	3.7	3.8	3.8
24	3.7	3.8	3.7	3.8	3.9	3.2	5.4	8.4	8.7	8.5	8.1	9.6	11.4^{P}	9.4	9.0	9.1	9.4	6.6	4.8	4.7	3.5	3.4^{P}	3.4	3.6
25	3.5	3.6	3.5	3.5	3.9	3.6	4.2	6.9	8.4	7.9	7.8	9.5	10.0	9.8	9.8	10.4	12.0	8.9	3.9	4.4	4.4	4.5	4.7	4.3
26	4.9	4.1	F	F	4.7^{F}	5.0	6.7	8.4	11.6	12.0	11.0	10.9	10.0	10.2	9.6	8.8	9.3	8.1	5.4	5.1	A	A	4.0	(4.2)^{F}
27	4.0^{F}	3.9^{F}	3.8^{F}	3.8^{F}	3.5	3.5	5.1	7.6	8.1	7.9	9.2	10.2	10.9	11.5	11.4^{P}	10.3	9.3	A	4.7	4.3	3.5	3.5	3.5	3.6
28	3.8	3.5	3.8	3.9	4.2^{F}	4.4^{F}	5.2	7.4^{P}	8.7	9.1	9.1	(11.0)^{P}	11.3	11.7	12.0	12.0	9.3	7.8	4.7	3.8	3.2	3.0	3.1	3.2
29	3.3	3.5	3.4	3.8	3.4	2.6	4.9	7.3	9.6^{H}	10.7^{P}	11.8	11.9^{J}	10.9	10.9	10.4	10.2	9.5	8.7	4.7	3.5	2.7	2.8	3.0	3.1
30	3.2	3.2	3.1	3.2	3.3	3.2	5.3	7.0	8.5	9.3	10.5	10.8	10.9	9.5	9.1	10.0	9.3	7.1	4.4	3.6	3.8	3.9	3.9	3.7
31	3.7	C	C	C	C	C	C	C	C	C	C	10.0	10.0	10.2	11.0	10.6	10.0	6.9	4.8	4.0	3.5	3.7	4.0	3.9
Mean Value	4.0	4.0	4.0	4.0	4.0	3.8	5.9	7.6	8.6	8.7	9.2	9.8	10.0	9.7	9.6	9.3	8.9	7.8	6.0	4.9	4.4	4.2	4.2	4.0
Median Value	4.0	4.0	4.0	4.0	4.0	3.8	5.9	7.5	8.6	8.5	9.0	9.7	10.0	9.8	9.5	9.4	9.1	7.9	6.0	4.8	4.4	4.2	4.0	3.9
Count	31	30	29	29	30	30	30	30	30	28	28	28	30	31	31	31	31	30	31	31	30	30	31	31

foF2

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

K 1

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

IONOSPHERIC DATA

Oct. 1955 | h_pF2 | 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	400	340	340	320	320	310	240	260	280	270	290	290	280	290	270	280	270	260	260	240	310	350	360	360
2	360	360	340	320	270	260	250	250	250	260	270	310	300	300	300	280	270	240	260	250	350	340	320	340
3	330	360	360	350	330	370	260	250[P]	250	270	310	260[P]	300	300[P]	300	270	270	270	270	270	300	340	350	350
4	320	340	340	410	410	320	240	250	250	290	290	270	290	270	300	290	270	260	280	270	280	350	380	360
5	330	320	360	340	320	320	260	250	260	270	290	270	320	310	310	(270)[J]	(260)[B]	250	(260)[C]	260	(280)[J]	300[P]	360	310[P]
6	390	370	370	350	360	370	230	240[P]	250[P]	C	C	C	300	(310)[H]P	320[P]	280	280	270	260	340	340	330	340	340
7	330	350	370	360	350	300	(240)[J]	250	260	270	300	280	320	310	290	300	300	280	270	290	310	310	330	340
8	370	360	330	310	290	300	250[P]	250	250	270	280[P]	300	310[H]	(280)[P]	280	280	300	280	270	350	290	340	340	370
9	360	360	340	330	300	350	280	270	(270)[B]	260	300	290[H]	310	330[H]	280	300	290	280	270	280	350	340	350	320
10	340	340	320	330	340	330	270[P]	250	270	260	300	(280)[J]	300	300	300	280	290	270	280	320	360	310	310	350
11	360	350	360	310[P]	330	310	240	240	250	280	260	280	290	280	320	(290)[B]	270	260	270[P]	330	370	340	340	360
12	390	380	400	370	370	310	270[P]	250	270	C	C	C	C	290	290	280	260	250	280	(290)[A]	300	300	(320)[Q]	350
13	330	350	350	310	310	350	260	240	240	280	280	280	300	310	310	280[P]	270	270	300	(270)[J]	310	300	310	330
14	370	370	350	350	380	350	260	250	260	260	280	290	290	310	300	300	270	270	270	300[P]	280[S]	310	310	300
15	310	340	340	300[P]	270	330	270	240	260	260	280	B	300	310	310	270	280	250	(280)[A]	310	310	(320)[A]	330	300
16	300	340	(320)[A]	300	260	310	250	230[P]	250	230	310	290	290	280	260	270	260	270	260	320	320	310	320	320
17	340	350	350	310	260	300	(250)[J]	230	240	260	250	300	290	320	300	260	250	250	260	(330)[J]	330	(330)[J]	(330)[J]	330
18	320	330	340	320	270	270	250	230	250	(230)[J]	280	270	290	280	270	270	250	250	270	290	300	320	300	310
19	340	340	330	310	260	310	(250)[J]	230	230	(240)[J]	(260)[J]	260	250	310	300	250	260	250	280	300	300	310	330	340
20	320	310	320	310	270	280	250	230[P]	260	250	250	(260)[B]	280	290	280	260	240	250	270	330	360	320	320	310
21	310	320	360	310	230	320	250	230	270	250	270	270	270	270	270	260	250	250	(280)[A]	320	320	320	330	330
22	330	320	A	320	290	290	240[P]	230	250	260	280	280	280	310	260	240	270	260	260	(280)[A]	310	370	360	350
23	360	380	370	330	300	390	260	230	240	260	300	300	290	290	280	280	260	270	(280)[A]	290	270	320	350	370
24	380	360	340	330	270	340	270	240	240	240	260	310	280[P]	270	280	280	250	230	300	290	300	340[P]	360	350
25	340	380	360	330	280	240	260	240	240	260	300	280	310	300	310	320	260	250	270	350	380	400	390	430
26	320	400	F	F	420[P]	390	320	280	330	280	260	330	240	290	290	280	270	250	300	280	A	A	340	(380)[F]
27	350[F]	380[F]	370[F]	350[F]	350	390	290	240	240	250	290	280	290	290	280[P]	280	270	A	280	310	330	330	390	370
28	360	340	370	340	350[F]	310[F]	270	250[P]	250	260	280	(310)[P]	290	290	280	280	250	230	270	280	330	360	370	380
29	390	380	320	300	260	320	280	250	300[H]	290[P]	270	(260)[J]	280	290	280	270	270	240	260	270	A	A	360	380
30	350	360	360	360	320	360	260	230	260	270	270	270	300	270	300	270	260	250	260	280	350	350	320	360
31	330	C	C	C	C	C	C	C	C	C	C	320	280	290	300	280	260	250	270	280	340	350	330	320
Mean Value	350	350	350	330	310	320	260	240	260	260	280	290	290	290	290	280	270	260	270	290	320	330	340	340
Median Value	340	350	350	330	300	320	260	240	250	260	280	280	290	290	290	280	270	250	270	290	310	330	340	340
Count	31	30	28	29	30	30	30	30	30	28	28	28	30	31	31	31	31	30	31	31	29	29	31	31

h_pF2 | Sweep 1.0 Mc to 17.2 Mc in 2 min | ☐ Manual ☒ Automatic | K 2

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

IONOSPHERIC DATA

Kokubunji Tokyo

Lat. 35° 42.4' N
Long. 139° 29.3' E

Oct. 1955

h'F2

135° E Mean Time

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	320	280	280	270	270	260	230	240	240	240	230	260	270	270	250	260	260	230	230	200	260	260	300	300
2	300	300	280	250	230	210	230	220	230	240	260	270	270	260	270	250	230	220	220	200	270	270	250	280A
3	260	290	280	270	300	300	230	230	230	240	250	250	250	270	280	250	240	230	230A	220	270A	260	280	320A
4	260	270	270	320	330	270	220A	230	230	250	250	250	270	260	280	270	250	230	240	220	230	300A	300	300
5	260	250	280	260	240	250	230	230	230	240	250	260	270	280	270	260	250	230	[240]C	250	250	250	300	290
6	310	300	290	270	280	300	220	210	230	250	<260C	<270C	260	250H	270	260	230	230	220	230	260	280A	260	270
7	260	290	300	290	260	240	220	220	240	250	270A	250	280A	280A	270A	250A	280A	240	250A	[270]A	290A	250A	280A	270
8	300	280	270	260	230	230	220	220	230	240	240	230	240H	260	240	260	250	240A	230	230	230	250	260	290
9	290	290	270	240	220	240	230	230	240	240	240	230H	270	250H	260	260	230	240	220	210	250	260	270	260
10	290	290	260	270	280	270	230	230	240	240	270	260	260	260L	260	240	250	230	230	260S	300	270	260	270
11	290	280	270	240	230	250	220	220	230	240	250	250	250	260	270	260	230	230	210A	300	310A	280A	280A	300A
12	340A	310	300	290	320	280	240	230	240	C	C	C	C	260	260	260	230	240	270A	[280]A	280A	270	[290]C	310
13	280	270	280	260	250	300	230	210	230	250	250	270	270	280	270	240	230	240	240	230	260S	290S	260	[290]C
14	320	310	290	280	300	320S	230	230	240	220	260	260	250	260	270	260	240	<240C	<230C	250S	260S	300	310S	290
15	260	280	280	240	230	300S	240	230	240	240	250	260	260	250	260	230	240	230	[220]A	220A	250	[280]A	300A	250
16	250	300A	[280]A	260	220	250	220	220	230	230	280A	260	250	250	240	240	230	230	220A	240	240	260A	280A	300
17	290	300	280	250	210	250	230	220	230	240	240	270	260	250	270	240	230	220	230A	250	260	260	280	280
18	260	250	270	250	240	240	220	220	230	220	250	250	250	250	240	230	230	220	200	230	250A	260	250	300A
19	280	280	290	250	210	250	230	210	230	230	230	250	240	250	270	240	230	220	200	230	240	250	300	300
20	250	250	300A	280	230	250	220	220	240	230	240	250	270	260	260	240	230	210	210	280	340	270	260	270
21	250	270	320	260	200A	280	230	220	250	230	250	250	250	260	260	230	240A	240	[240]A	250	250	270	290	270
22	270	300A	A	300A	250	260	210	220	230	260	260	240	260	280	240	230	230	240	240A	[260]A	280A	330A	320A	300
23	300	300	300	250	240	310	220	220	230	240	260	260	250	240	240	240	230	220	[220]A	230	240	310A	280	300
24	310	300	280	260	230	280	250	220	230	230	240	240	240	240	240	240	230	210	210	250A	230	250	300	300
25	300	350A	350A	280	230	220	210	220	230	250	230	240	270	260	260	270	230	210	240	300A	320	330	310	370A
26	260	330A	370AF	290F	280F	320	250	250	260	250	240	280	230	250	270	250	240	210	240A	250	A	A	300	330A
27	300	320	310A	300A	310	300	240	210	230	240	270	250	250	260	250	240	220	A	250A	270A	270	280	350A	320
28	330	290	310	270	270	240	210	220	230	240	250	280	250	260	250	240	230	220	210	260A	260	330	330	340
29	330	310	280	240	210	280	250	220	250LH	240	240	240	260	250	250	240	230	210	200	250A	A	A	310	366A
30	290A	300	310	280	260	310	230	210	230	240	240	250	270	250	250	240	230	210	210	230	290	280	270	290
31	270	260	C	C	C	C	C	C	C	C	C	230	240	260	250	240	230	210	240A	230	280	310	290	260
Mean Value	290	290	290	270	250	270	230	220	240	240	250	250	260	260	270	250	240	230	230	240	270	280	290	300
Median Value	290	290	280	260	240	260	230	220	230	240	250	250	260	260	260	240	230	230	230	250	260	270	290	300
Count	31	31	29	30	30	30	30	30	30	29	28	29	30	31	31	31	31	29	31	31	29	29	31	31

h'F2

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

K 3

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

IONOSPHERIC DATA

Oct. 1955 | foF1 | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							L	B	L	4.4L	4.5	4.3	4.9H	4.8H	4.5	L	4.0	A						
2							L	LH	4.2L	4.5	4.8	4.8	5.0	5.0L	5.0	4.5	L	Q						
3							Q	L	4.0	4.5	4.5	4.9	4.5	4.8L	5.0L	4.5L	Q	Q						
4							A	3.9L	[4.2]A	4.5	4.6L	4.7L	4.9L	4.6	5.0	4.5	3.9	Q						
5							L	3.8L	4.6L	4.5	4.8L	5.0	5.0	5.0L	[4.8]B	4.5	B	Q						
6							L	Q	L	4.9	C	C	5.0L	4.9L	5.0	4.8	L	L						
7							Q	3.2L	L	A	A	4.7	A	A	A	A	A	A						
8							Q	3.3	Q	4.8L	4.5	5.0L	4.8L	4.8L	4.8L	A	A							
9							Q	Q	L	L	4.2L	L	5.0	L	4.7L	4.5L	3.4L							
10							Q	L	4.8L	4.6	5.0L	5.0L	4.9L	L	4.5L	L	L	Q						
11							Q	L	Q	4.5L	4.8L	[4.6]C	4.5	4.5L	4.3L	L	3.4	Q						
12							L	L	L	C	C	C	C	A	L	L	A	A						
13								Q	4.0L	4.3	4.5	4.8	5.2L	4.9	4.9L	4.5L	C							
14								C	4.5L	Q	L	4.9L	4.8L	L	4.7L	4.5L	Q	C						
15							Q	3.2	L	4.5	4.6	[4.4]C	4.3	4.7L	L H	3.9L	Q	Q						
16								3.0L	3.7L	A	A	4.6L	4.5	4.5L	4.4L	3.3	Q	Q						
17								3.5	L	4.2	4.2	4.3	4.4	4.2L	4.7	3.7	A	Q						
18								L	4.0L	[4.4]L	4.8	4.1	L	4.5L	L	L	Q							
19							Q	Q	4.0	4.2	4.4L	4.5	4.3	4.2	4.5	3.9L	A	Q						
20								3.3L	4.1L	4.3	4.7	4.5	4.6	4.8	4.2	3.9	L	Q						
21								L	4.0	A	A	4.7	A	A	A	L	A	A						
22								Q	Q	4.5L	L	4.5	4.9LH	4.9	4.5L	[3.7]A	2.9L	A						
23							Q	Q	Q	4.2L	4.2	4.6L	4.0L	4.7L	4.2L	Q	Q	Q						
24							L	L	Q	4.1C	4.3	4.3	4.7L	4.8L	4.6L	4.0L	A							
25								Q	L	4.7L	4.2L	4.2L	[4.3]A	4.4L	4.5L	4.6L	Q							
26								L	A	4.6	A	A	L	N	4.8L	A	Q	Q						
27								Q	4.0	4.2LH	5.0L	4.2L	4.9L	4.9L	L	Q	Q							
28								Q	3.6	4.5L	4.6L	5.0L	4.4L	L	L	L	Q							
29								Q	L	L	4.5	4.5	4.6	[4.6]L	4.0L	A	A							
30							Q	Q	3.5	LH	4.5	4.5	5.2	4.9	4.9	Q	Q							
31							C	C	C	C	C	4.5L	4.7	4.9	4.2	L	Q							
Mean Value								3.4	4.1	4.4	4.6	4.5	4.7	4.7	4.6	4.2	3.5							
Median Value								3.3	4.0	4.5	4.5	4.6	4.8	4.8	4.6	4.5	3.4							
Count								8	15	22	22	27	26	23	24	16	5							

foF1

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

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

IONOSPHERIC DATA

Kokubunji Tokyo

Lat. 35° 42.4' N
Long. 139° 29.3' E

Oct. 1955

h'F1

135° E Mean Time

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							240	B	230	200	200	200	200H	190H	230	260	250	A						
2							240	200H	210	200	200	190	200	230	230	230	230	Q						
3							Q	220	200	220	200	200	230	240	240	250	Q	Q						
4							A	220	[210]A	200	200	200	180	230	230	230	240	Q						
5							240	230	210	200	200	240	200	260	[240]B	230	B	Q						
6							220	Q	220	<230C	C	C	220	230	250	230	240	240						
7							Q	220	230	A	A	200	A	A	A	A	A	A						
8							Q	200	Q	230	210	210	220	200	230	A	A							
9							Q	Q	230	230	200	190	230	260	230	230	230							
10							Q	230	230	220	220	200	190	230	220	230	240	Q						
11							Q	230	Q	230	230	[230]C	230	230	230	250	230	Q						
12							230	220	220	C	C	C	C	A	240	250	A	A						
13								Q	220	210	230	210	240	220	230	240	C							
14								C	230	Q	<250C	<260C	240	<250C	230	250	Q	C						
15							Q	230	230	240	250	[240]C	230	250	220H	240	Q	Q						
16								220	220	A	A	260A	220	250	240	210	Q	Q						
17								220	230	200	200	230	200	240	250	240	A	Q						
18								220	210	220	200	190	240	230	230	240	Q							
19							Q	Q	230	210	210	210	210	220	A	230	A	Q						
20								210	210	230	240	230	240	240	230	230	230	Q						
21								230	240	A	A	250	A	A	A	240	A	A						
22								Q	Q	230	A	220	190H	230	230	[230]A	230	A						
23							Q	Q	Q	240A	200	210	200	230	210	Q	Q	Q						
24							230	230	Q	220	190	180	180	230	230	230	A							
25								Q	230	210	200	190	[220]A	240	[240]A	240	Q							
26								240	A	220	A	A	A	220	250	A	Q	Q						
27								Q	210	220H	240	210	240	250	250	Q	Q							
28								Q	210	220	220	250	220	220	240	240	Q							
29								Q	240	230	240A	200	200	230	230	240	A	A						
30							Q	Q	230	220H	210	200	200	240	230	Q	Q							
31								C	C	C	C	220	230	220	230	230	Q							
Mean Value							230	220	220	230	210	210	220	230	230	240	240	240						
Median Value							240	220	220	220	200	210	220	230	230	240	230	240						
Count							6	17	24	24	22	27	27	27	28	25	9	1						

h'F1

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

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

IONOSPHERIC DATA

Oct. 1955 | **f_oE** | 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							B	B	2.9	3.0	3.1	3.2	3.2	3.3	3.0	2.8	2.5	1.5						
2							A	A	A	3.2	3.2	3.2	3.3	>3.0^{B}	3.1	3.0	2.5	A						
3							A	A	2.5	A	A	A	A	3.3	3.3	2.8	2.5	A						
4							A	A	A	A	3.2	3.3	3.2	3.3	3.1	3.1	2.6	1.5						
5							1.8	2.1	2.6	A	A	A	3.2	[3.1]^{A}	3.0^{B}	3.0	B	1.8						
6							B	A	A	C	C	C	(3.3)^{B}	3.2	(3.1)^{B}	3.0	2.4	A						
7							B	2.1	3.0	(3.2)^{A}	3.2	3.2^{B}	A	A	A	A	A	A						
8							A	3.0	2.9	3.0	3.1	3.2^{B}	[3.3]^{A}	3.3	A	A	A							
9							B	A	B	3.4	B	A	A	A	3.4	3.0	2.5							
10							1.9	[2.4]^{A}	2.8	3.2	3.2^{B}	A	A	A	A	3.0	2.4^{A}	B						
11							1.5^{A}	2.5^{A}	2.9	A	A	A	A	A	A	A	A	A						
12							B	C	C	C	C	C	C	A	A	A	A	A						
13								B	2.7	(3.1)^{B}	C	C	C	C	C	C	C							
14								C	C	C	C	C	C	C	C	C	C	C						
15							A	B	B	C	C	C	3.2	3.2	3.0	2.6	2.1	A						
16								2.5B	2.7	2.9	3.0	(3.0)^{A}	3.0	3.2	3.0	2.6	A	A						
17								A	A	3.0	[3.0]^{A}	3.0	2.9	3.0	3.0	2.7	A	A						
18								A	2.6^{A}	[2.8]^{A}	3.0	3.0	3.2	3.0	2.9	2.6	A							
19							1.6	(2.2)^{A}	2.7	2.9	2.9	A	A	3.2	3.1	2.6	A	A						
20								A	2.6^{A}	2.9	3.1	3.2	3.2	3.2	3.0	2.7	A	A						
21								2.1	2.7	2.9	2.9	3.1	3.2	3.0	(2.7)^{A}	2.6	2.2	A						
22								2.1	2.6	2.9	3.1	3.2	3.2	A	A	A	A	A						
23							1.5	2.2	2.7	3.0	A	A	A	3.1	3.1	2.8	2.2	A						
24							A	2.3	2.9^{J}	(3.0)^{A}	A	A	3.3	[3.2]^{A}	3.0	2.8	2.2							
25								A	A	A	A	A	A	A	A	2.7	2.0							
26								2.2	2.6	A	A	A	A	3.2	3.2	2.8	2.1^{A}	A						
27								2.2	2.8	3.1^{A}	3.1	3.2	3.3	3.3	3.1	2.5	A							
28								A	2.7	3.0	3.2	3.3	[3.2]^{A}	3.1	3.0	A	2.3^{A}							
29								A	2.8	3.1	3.2	A	A	A	A	A	A	A						
30							A	A	A	2.9^{A}	3.1	3.3	3.2	3.3	3.2	2.7	2.3^{A}							
31								C	C	C	C	A	3.2	3.1	3.1	2.7	2.3^{A}							
Mean Value							1.7	2.3	2.7	3.0	3.1	3.2	3.2	3.2	3.1	2.8	2.3	1.6						
Median Value							1.6	2.2	2.7	3.0	3.1	3.2	3.2	3.2	3.1	2.8	2.3	1.5						
Count							5	13	20	20	17	14	18	20	21	22	16	3						

f_oE

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

K 6

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

IONOSPHERIC DATA

Oct. 1955 | h'E | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

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

h'E

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

K 7

The Radio Research Laboratories

Koganei-machi, Kitatama-gun, Tokyo, Japan

IONOSPHERIC DATA

Oct. 1955 | fEs | 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	2.2	1.8	2.1	3.3	3.2	E	B	B	3.4	3.5Y	G	G	G	G	G	4.5	4.0	4.8	3.7	4.0	4.0	3.3	4.5	4.2
2	3.2	3.0	3.0	3.2	3.0	2.1	3.9Y	3.2	3.5	3.2	G	G	G	3.1	3.3	3.3	3.8	2.9	E	E	E	E	4.8	2.9
3	2.9	2.7	2.0	2.2	2.9	3.0	2.8	3.5	4.0	4.7	4.4Y	3.5	3.2	G	4.3	4.5	4.5	3.9	4.3	3.2	7.0	3.3	6.5	4.8
4	4.8	3.0	E	2.0	3.9	4.8	4.7	4.8	6.0	3.7	3.7	G	3.8	G	G	4.3	4.1	3.5	3.8	3.0	2.8	3.2	2.7	3.2
5	3.2	3.0	3.3Y	3.4	2.9F	E	3.3	3.3	3.8	4.8	3.9	4.3	3.8	4.4	3.3	G	B	3.1	3.4	3.7	3.8	4.8	3.0	1.9
6	3.3Y	2.2	3.3	2.1	3.0Y	E	B	3.3Y	3.8	C	C	C	G	3.9	3.0	3.2	3.2	4.0Y	2.0	3.2	3.8	2.0	3.0	3.0Y
7	4.0Y	E	2.2	3.5	3.0Y	E	B	3.0	3.3	6.0	8.0	3.7	5.9	8.5	7.0	7.0	8.5	7.0	7.0	7.0	5.5	4.5	3.2	2.7
8	3.7	3.3	3.7	7.0	3.9	3.1Y	3.8Y	3.3	3.3	4.4	3.5	G	4.8	4.7	4.8	6.5	5.8	4.8	E	E	E	E	E	E
9	E	E	2.1Y	2.2	2.0	E	B	3.2YS	B	3.6	4.1Y	4.8	4.8	5.0	3.1	G	3.0	3.0	E	E	E	2.2S	3.0	4.8
10	3.2	3.9	3.3	3.4	3.2	E	G	3.0	3.7	G	G	3.3	3.8	4.4	3.8	G	3.5	3.5	3.5	4.4	4.8	3.5	3.2	E
11	E	2.1	1.9	2.1Y	2.2	E	1.6	3.6	3.5	3.7	3.8Y	3.9	>2.9C	3.0	3.6	3.7	3.5	3.6	2.9	4.1Y	6.3Y	5.0	4.7	4.7
12	2.8	1.7	2.0	2.2	3.9	2.7Y	B	C	C	C	C	C	C	5.5	4.7Y	5.0	5.5	7.0	6.4YS	(7.1)Y	4.5	E	C	E
13	E	2.0	E	E	2.2	E	B	B	G	3.3	C	C	C	C	C	C	C	C	C	(3.2)S	S	2.8S	(5.0)S	C
14	2.8	E	E	E	2.2	3.2	2.8S	C	C	>2.1C	C	C	>3.7C	C	C	C	C	C	C	C	(3.4)S	E	E	C
15	E	E	1.8	1.7	2.1	2.2S	2.3S	B	B	C	C	C	G	G	3.2	3.2	4.7	6.0	5.9	5.9	4.9	6.4	4.5	4.9
16	E	5.0	5.1	3.3	2.1	E	2.0	3.1	3.3	4.9	6.1	4.9	G	3.7	3.5	3.4	3.2	3.5	3.5	4.7Y	E	3.9	3.0	E
17	2.2Y	E	2.1	1.9	3.1	1.9Y	2.6Y	2.9	3.1	3.2	G	G	G	G	G	3.0	3.3	3.3	2.1	1.9	3.1	E	E	E
18	E	2.1	2.1	2.3	3.7	2.8Y	3.5Y	4.2	4.0	3.5	3.5	3.5	3.8	4.2	3.8	3.8	3.7	3.3	E	3.2	4.9	4.4	4.9	4.2
19	2.4	3.0	2.8	2.2	3.1Y	2.3	2.9	4.9	4.6	4.1	3.3	4.2	4.8	4.1	4.9	4.1	4.8	3.0	E	E	E	E	5.0	6.0
20	4.7	4.8	4.4	4.4	3.5	3.7	3.1	3.3	3.5	4.5	5.0	4.8	4.7	4.5	4.6	3.5	3.1	3.3	3.0	3.0Y	3.3	2.2	3.7	4.0Y
21	E	E	3.8	3.0	3.2	3.3	E	3.3	5.0	5.7	6.0	5.1	6.1	5.8	6.5	4.2	5.4	4.8	6.0	3.1	3.2	2.8	3.1Y	2.3
22	2.4	3.1	4.8	3.2	4.9	5.0	2.7	3.4	4.5	8.0	5.7	3.7	3.7	4.9	3.0	4.4	3.4	4.4	5.1	8.4	6.0	5.0	4.2	3.4
23	2.4	3.7	2.1Y	2.2	2.4	E	2.6	3.9	4.3	5.0	4.4	4.5	3.8	3.5	3.5	G	3.7	3.7	5.5	2.9S	4.9	4.5	3.3	2.2
24	3.2Y	3.5	2.2	2.0	3.0	3.7Y	2.7	G	3.9	4.5	3.7	4.0	3.5	3.9	4.5Y	3.4	4.5	3.2	3.7YS	3.3	3.0Y	E	5.0	2.2
25	3.3	3.6	4.4	2.2	2.1	2.4	E	3.0	3.5	3.8	4.2	4.4	6.9	4.8	5.6	4.1	3.3	3.5	5.0	5.0	E	2.9	3.0	3.2
26	2.3	3.0	4.8	3.6	2.6	E	E	3.4	6.0	3.6	9.2	6.5	6.6	3.6	3.4	4.8	4.4	3.4	3.0	3.8	4.9	5.5	4.9	9.4
27	4.6	5.0	4.4	6.0	4.8F	2.0	E	3.1	3.4	3.8	4.7	3.5	4.7	4.8	4.7	5.6	5.6	7.9	5.2	4.8	3.3	2.7	3.0	E
28	3.4	4.0	4.9	2.0	3.5	E	E	2.7Y	3.2	3.4	3.6	4.8	3.5	3.5	3.5	3.4	3.6	3.4	3.5	3.1	2.8	2.6	E	E
29	1.6	3.2	2.1	2.1Y	2.8	E	E	3.4	3.2	4.8	7.0	4.0	6.2	3.6	4.5	4.0	5.0	4.5	3.6	4.1	6.5	3.8	4.5Y	3.5
30	3.4	3.0	2.5	2.0	4.9	4.8	3.8	4.9	4.6	3.7	4.8	3.1	3.3	3.9	4.4	4.0	3.5	E	E	2.7	3.2	E	E	1.8
31	E	>2.1C	C	C	C	C	C	C	C	C	C	6.5	3.8	4.0	3.6	3.8	4.3	3.0	5.9	E	3.2	3.0	3.0	3.3
Mean Value	3.1	3.2	3.1	2.9	3.1	3.1	3.0	3.5	3.9	4.3	4.9	4.3	4.5	4.4	4.2	4.2	4.0	4.1	4.3	4.1	4.3	4.1	3.9	3.8
Median Value	2.8	3.0	2.4	2.2	3.0	2.0	2.6	3.3	3.6	3.8	4.1	4.0	3.8	3.9	3.6	3.8	3.9	3.5	3.5	3.2	3.4	2.9	3.2	3.0
Count	31	30	30	30	30	30	24	25	26	26	25	26	27	29	29	29	28	29	29	30	30	31	30	29

fEs | Sweep 1.0 Mc to 17.2 Mc in 2 min | ☐ Manual ☒ Automatic | K 8

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

IONOSPHERIC DATA

Oct. 1955 | **(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	2.6	2.9	2.9	3.0	3.0	2.9	3.5	3.4	3.2	3.3	3.2	3.2	3.2	3.2	3.3	3.4	3.3	3.5	3.5	3.6	3.0	2.9	2.8	2.9
2	2.8	2.9	2.9	3.0	3.3	3.3	3.5	3.6	3.5	3.4	3.3	3.0	3.2	3.1	3.2	3.2	3.4	3.5	3.5	3.5	2.8	2.9	3.0	2.9
3	2.9	2.8	2.8	2.9	2.8	2.8	3.4	3.5[P]	3.5	3.4	3.1	3.5[P]	3.1	3.2[P]	3.2	3.3	3.4	3.4	3.4	3.3	3.0	3.0	2.9	2.9
4	2.9	3.0	2.9	2.6	2.6	3.0	3.6	3.5	3.5	3.3	3.2	3.3	3.2	3.3	3.2	3.3	3.4	3.3	3.2	3.4	3.3	2.8	2.7	2.8
5	3.0	2.9	2.9	2.9	3.1	3.0	3.3	3.5	3.4	3.3	3.2	3.3	3.0	3.1	3.1	(3.2)[J]	[3.4][B]	3.6	[3.5][C]	3.4	(3.3)[J]	3.2[P]	2.8	3.1[P]
6	2.8	2.8	2.8	2.9	2.8	2.7	3.6	3.5[P]	3.5[P]	C	C	C	3.2	(3.1)[H][P]	3.2[P]	3.3	3.2	3.3	3.4	2.9	2.9	3.0	2.9	2.9
7	3.0	2.8	2.7	2.8	2.8	3.1	(3.6)[J]	3.5	3.5	3.3	3.2	3.3	3.0	3.1	3.2	3.1	3.2	3.3	3.3	3.2	3.1	3.1	3.0	3.0
8	2.9	2.8	3.1	3.1	3.2	3.1	3.4[P]	3.5	3.4	3.3	3.3[P]	3.1	2.9[H]	(3.3)[P]	3.2	3.2	3.2	3.3	2.9	2.9	3.2	2.9	2.9	2.9
9	3.0	2.9	3.0	3.0	3.2	2.9	3.3	3.4	(3.3)[B]	3.4	3.2	3.2[H]	3.1	3.0[H]	3.1	3.2	3.2	3.3	3.4	3.2	2.9	2.9	2.8	3.0
10	2.9	2.8	3.0	2.9	2.9	2.9	3.3[P]	3.4	3.4	3.3	3.2	(3.4)[J]	3.2	3.2	3.2	3.2	3.2	3.4	3.2	3.0	2.8	3.1	3.1	2.9
11	2.9	3.0	2.8	3.1[P]	2.9	3.1	3.5	3.5	3.4	3.2	3.5	3.4	3.2	3.2	3.0	(3.3)[B]	3.3	3.4	3.4[P]	3.0	2.8	3.0	2.9	2.8
12	2.7	2.8	2.6	2.7	2.8	3.1	3.3[P]	3.4	3.4	C	C	C	C	3.2	3.2	3.2	3.5	3.3	3.3	[3.2][A]	3.2	3.1	[3.0][C]	2.9
13	3.0	2.8	2.8	3.1	3.1	2.9	3.4	3.7	3.7	3.2	3.3	3.3	3.1	3.1	3.1	3.2[P]	3.4	3.3	3.2	(3.2)[J]	3.0	3.0	3.1	2.9
14	2.7	2.7	2.8	2.9	2.7	2.8	3.4	3.7	3.5	3.4	3.2	3.2	3.1	3.1	3.2	3.1	3.4	3.4	3.4	3.3[P]	3.2[S]	3.0	3.0	3.1
15	3.0	2.9	2.9	3.1[P]	3.2	2.8	3.4	3.6	3.4	3.3	3.3	B	3.2	3.1	3.1	3.3	3.2	3.5	[3.2][A]	3.0	3.0	[3.0][A]	2.9	3.1
16	3.1	3.0	[3.0][A]	3.0	3.5	3.1	3.5	3.5[P]	3.5	3.6	3.1	3.1	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.0	3.0	3.0	2.9	3.0
17	2.9	2.8	2.8	3.1	3.5	3.0	(3.6)[J]	3.7	3.6	3.4	3.4	3.2	3.2	3.1	3.2	3.4	3.4	3.5	3.3	(3.0)[J]	3.0	(3.0)[J]	(2.9)[J]	3.0
18	3.0	3.0	2.9	3.0	3.1	3.2	3.5	3.5	3.5	(3.5)[J]	3.2	3.4	3.3	3.3	3.2	3.3	3.4	3.5	3.3	3.2	3.0	3.0	3.1	3.1
19	3.0	2.8	3.0	3.1	3.5	3.0	(3.5)[J]	3.7	3.7	(3.5)[J]	(3.4)[J]	3.2	3.5	3.1	3.2	3.6	3.4	3.5	3.1	3.1	3.0	3.0	2.9	3.2
20	3.0	3.1	3.0	3.1	3.3	3.1	3.4	3.5[P]	3.4	3.5	3.5	[3.4][B]	3.3	3.2	3.4	3.4	3.7	3.5	3.2	2.9	2.7	3.0	3.0	3.0
21	3.1	3.0	2.9	3.1	3.7	3.0	3.6	3.6	3.5	3.6	3.4	3.4	3.4	3.4	3.4	3.5	3.6	3.6	[3.3][A]	3.0	3.0	3.0	3.0	3.0
22	3.0	3.1	A	3.0	3.2	3.2	3.5[P]	3.5	3.5	3.5	3.3	3.2	3.1	3.2	3.5	3.6	3.3	3.4	3.4	[3.2][A]	3.1	2.8	2.8	2.8
23	2.8	2.8	2.7	3.1	3.1	2.7	3.5	3.6	3.5	3.5	3.2	3.3	3.4	3.2	3.2	3.3	3.5	3.3	3.3	3.3	3.3	2.9	2.8	2.7
24	2.7	2.8	2.9	3.0	3.3	2.9	3.4	3.6	3.6	3.6	3.4	3.0	3.3[P]	3.4	3.3	3.2	3.6	3.6	3.1	3.2	3.1	2.9[P]	2.9	2.9
25	3.0	2.8	2.8	3.1	3.4	3.6	3.5	3.6	3.6	3.5	3.2	3.3	3.1	3.1	3.1	3.0	3.4	3.4	3.3	2.8	2.7	2.6	2.7	2.5
26	3.1	2.7	F	F	2.6[F]	2.8	3.1	3.2	3.1	3.4	3.5	2.9	3.6	3.2	3.2	3.2	3.4	3.4	3.1	3.3	A	A	3.0	(2.7)[F]
27	2.9[F]	2.6[F]	2.8[F]	2.8[F]	2.9	2.7	3.3	3.6	3.6	3.5	3.2	3.3	3.1	3.3	3.3[P]	3.3	3.4[P]	A	3.2	3.0	3.0	3.0	2.7	2.8
28	2.8	3.0	2.7	2.9	2.9[F]	3.1[F]	3.3	3.5[P]	3.4	3.5	3.2	(3.1)[P]	3.3	3.3	3.3	3.4	3.6	3.6	3.2	3.1	2.9	2.9	2.9	2.8
29	2.7	2.7	2.9	3.1	3.5	3.1	3.3	3.6	3.2[H]	3.3[P]	3.3	(3.3)[J]	3.3	3.3	3.2	3.3	3.3	3.6	3.4	3.0	2.9	3.0	2.9	2.8
30	2.8	2.8	2.8	2.8	3.0	2.8	3.4	3.6	3.5	3.3	3.3	3.4	3.3	3.3	3.2	3.3	3.5	3.5	3.3	3.2	2.8	2.8	3.0	2.7
31	2.9	C	C	C	C	C	C	C	C	C	C	3.1	3.3	3.3	3.1	3.3	3.4	3.5	3.3	3.1	2.9	2.8	3.0	3.0
Mean Value	3.0	2.9	3.0	3.0	3.1	3.0	3.5	3.5	3.5	3.5	3.3	3.2	3.2	3.2	3.2	3.3	3.4	3.4	3.3	3.1	3.0	2.9	2.9	2.9
Median Value	2.9	2.8	3.0	3.0	3.1	3.0	3.4	3.5	3.5	3.4	3.2	3.3	3.2	3.2	3.2	3.3	3.4	3.4	3.3	3.2	3.0	3.0	2.9	2.9
Count	31	30	28	29	30	30	30	30	30	28	28	28	30	31	31	31	31	30	31	31	30	31	31	31

(M3000)F2

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

K 9

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

IONOSPHERIC DATA

Oct. 1955 | **fminF** | 135° E Mean Time | **Kokubunji Tokyo** | Lat. 35° 42.4' N, Long. 139° 29.3' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1.3	1.4	1.2	1.4	1.5	1.4	2.3	4.0	3.1	3.4	3.5	3.5	3.5	3.4	3.5	3.8	3.3	(2.8)A	1.6	1.5	1.8	1.6	2.2	1.6
2	1.5	1.5	1.7	1.4	1.2	1.4	1.8	2.5	3.2	3.4	4.0	3.4	3.5	3.9	3.4	3.2	2.5	2.3	1.5	1.5	1.5	1.5	1.9	2.1A
3	1.3	1.4	1.2	E	E	1.4	2.3	2.6	3.0	3.4	4.0	4.0	4.2	4.2	3.8	3.8	3.4	3.4A	3.2A	2.4	3.0A	1.4	1.6	2.5A
4	1.6	1.6	1.0	1.0	1.7	1.5	4.0A	3.0	5.0A	3.4	3.8	3.5	3.4	3.8	3.5	3.4	2.6	2.1	2.5	1.5	1.9	2.4A	1.5	2.0
5	1.4	1.7	1.4	1.0	E	1.4	1.9	2.5	3.0	3.3	3.9	4.2	3.8	4.3	4.5	3.3	4.8	3.2	(2.7)C	(2.2)A	2.4	1.4	1.5	1.5
6	1.5	1.5	1.3	1.0	1.0	1.5	2.4	3.7	3.4	<4.5C	<5.0C	<6.3C	4.0	3.9	3.9	3.1	2.5	2.2	2.3	1.4	1.4	2.2A	1.5	1.5
7	1.6	1.5	1.3	1.2	1.0	1.5	2.1	2.6	3.3	5.4A	6.0A	4.0	5.0A	7.4A	7.3A	5.5A	7.4A	4.0A	5.1A	4.8A	4.0A	2.5A	2.4A	1.8
8	1.5	1.4	1.7	1.7	1.1	1.5	2.2	3.0	3.6	3.8A	3.5	3.5	3.5	3.5	4.0A	4.5A	4.0A	4.6A	3.5	1.8	1.6	1.5	1.8	1.6
9	1.6	1.4	1.3	1.0	1.2	1.4	2.5	3.0	3.4	4.0	3.5	3.9	4.2A	4.3A	3.5	3.1	2.5	2.4	1.5	1.2	1.5	1.4	1.7	1.8
10	2.4	2.4	1.7	1.5	1.3	1.4	1.9	2.5	3.1	3.4	3.8	3.6	3.6	4.0	3.4	3.0	2.8	2.8	2.6	3.0S	2.5	2.4	1.8	1.5
11	1.5	1.4	1.0	1.3	E	1.3	2.2	2.7	3.2	3.4	4.0	<4.4C	4.0	4.0	4.0	3.5	3.0	3.0	2.5A	3.0S	3.2A	2.5A	2.5A	2.5A
12	2.5A	1.4	1.1	1.4	1.9	2.3	2.4	2.5	3.4	C	C	C	C	4.5A	4.0A	3.5	3.5	4.8A	5.0A	(4.5)A	4.0A	<3.4C	C	2.4
13	1.9	1.4	1.3	1.0	1.1	1.3	2.5	3.4	3.5	3.3	4.0	4.0	4.3	4.0	3.4	2.2	3.3	3.3	4.8	3.3S	3.3S	3.4S	1.9	<3.3C
14	2.0	1.4	1.3	1.4	1.5	2.8S	2.2S	3.5	3.3	<4.0C	<4.3C	<4.9C	<4.4C	<4.3C	3.5	3.0	3.5	<4.8C	<4.8C	3.4S	3.0S	3.4	3.0S	3.3
15	1.4	1.4	1.2	1.1	1.4	2.5S	3.3	2.5	2.8	4.3	4.4	5.0	3.7	3.8	3.5	2.8	2.5	2.1	(2.2)A	2.2A	1.7	(2.2)A	2.7A	1.7
16	1.4	2.5A	(2.0)A	1.5	1.5	1.5	2.3	2.6	3.4	4.5A	5.4A	4.5A	3.5	3.5	3.5	2.6	2.7	2.4	2.5A	1.9	1.5	3.0A	2.4A	2.0
17	1.7	1.4	1.2	1.0	1.0	1.8	1.9	2.5	2.7	3.2	3.6	3.9	3.3	3.6	3.5	3.0	3.5A	2.5	2.5A	1.4	1.4	1.5	1.5	1.5
18	1.4	1.4	1.0	E	E	1.5	1.6	2.5	3.0	3.6	3.5	3.6	3.7	3.5	3.5	3.1	2.5	2.4	1.5	1.5	2.4A	1.9	1.5	(1.5)A
19	1.5	1.4	1.2	E	E	1.4	2.5	3.3	3.3	3.3	3.5	3.6	3.8	3.5	4.2A	2.7	3.2A	1.5	1.4	1.6	1.5	1.4	2.0	1.7
20	1.5	1.4	(1.6)A	1.7	1.5	1.9	2.0	2.5	(3.1)A	3.7	3.4	4.2	3.9	3.3	3.2	2.8	2.5	2.0	1.5	1.7	1.7	1.5	1.8	2.2
21	1.4	1.3	1.8	1.4	(1.4)A	1.4	1.6	2.5	3.8	4.8A	5.4A	4.0	5.9A	5.2A	5.5A	3.4	A	A	4.0A	1.6	1.7	1.6	1.7	1.5
22	1.5	2.1A	A	A	1.7	2.3A	1.9	2.5	3.8	3.9A	4.3A	3.7	3.3	3.4	3.3	3.4A	2.3	3.3A	4.0A	(3.3)A	2.6A	2.4A	2.3A	2.0
23	1.4	1.4	1.2	1.0	1.0	1.2	1.7	2.9	2.9	3.9	3.4	3.5	3.3	3.4	3.1	3.0	2.2	1.7	5.0A	1.3	2.5	(2.0)A	1.5	1.5
24	1.5	1.4	1.5	E	1.2	1.3	2.3	2.5	3.0	3.4	3.3	3.4	3.4	3.5	3.4	2.8	4.0A	2.5	1.6	2.5A	1.5	1.5	1.5	1.7
25	2.0	2.5A	2.5A	1.5	E	1.4	1.5	2.5	3.0	3.4	3.3	3.5	5.4A	3.4	4.0A	3.3	2.4	2.5	2.5	2.5A	1.6	1.6	1.7	2.4A
26	2.1	2.4A	2.4A	1.7	1.0	1.6	1.6	2.5	5.5A	3.3	7.3A	5.7A	4.3A	3.5	4.1	4.1A	3.2	2.2	2.4A	2.5A	A	A	2.0	(2.0)A
27	2.0	1.3	2.2A	(2.1)A	2.0F	1.5	1.7	2.7	3.2	3.3	3.6	3.5	4.0	3.9	3.9	3.3	A	A	3.3A	3.0A	1.7	1.8	2.2A	1.9
28	2.2A	1.7	1.4	E	1.2	1.4	1.4	2.4	3.0	3.3	3.7	3.9	3.6	3.5	3.6	3.3	2.4	2.5	1.7	2.5A	1.5	1.9	1.7	1.5
29	1.3	1.4	1.3	E	1.0	1.4	1.6	2.5	3.4	3.2	4.3A	3.4	3.5	3.3	3.0	3.2	3.3A	A	2.0	2.5A	2.3A	2.4A	1.5	2.3A
30	2.0A	1.4	1.4	E	1.7	1.6	2.3	2.6	2.6	3.3	3.3	3.5	3.5	3.8	3.7	3.1	2.4	1.6	1.4	1.8	1.8	1.6	1.3	1.5
31	1.4	1.5	C	C	C	C	C	C	C	C	C	4.1	3.9	3.5	3.3	3.0	2.6	1.9	3.2A	1.5	2.0	2.0	2.0	1.5
Mean Value	1.7	1.6	1.6	1.3	1.3	1.6	2.2	2.8	3.3	3.7	4.1	3.9	3.9	3.9	3.8	3.3	3.1	2.7	2.7	2.3	2.1	2.0	1.9	1.9
Median Value	1.5	1.4	1.3	1.1	1.2	1.4	2.2	2.6	3.2	3.4	3.8	3.7	3.7	3.6	3.5	3.2	2.9	2.5	2.5	2.2	1.8	1.9	1.8	1.8
Count	31	31	29	29	30	30	30	30	30	27	27	27	29	30	31	31	29	27	30	31	30	29	30	30

fminF

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

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

IONOSPHERIC DATA

Oct. 1955 | fminE | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1.5	1.5	1.4	E	1.1	E	B	B	1.5	1.6	2.3	2.3	2.3	2.3	1.6	1.5	1.4	1.5	1.3	1.3	1.0	1.5	1.5	1.4
2	1.4	1.3	1.0	E	1.0	1.6	1.3	1.3	1.4	1.4	2.4	2.2	2.0	1.5	1.5	1.4	1.1	1.4	E	E	E	E	1.4	1.4
3	1.5	1.4	1.3	1.0	1.4	1.2	1.4	1.5	1.5	1.5	2.5	2.5	1.6	1.5	1.5	1.5	1.6	1.5	1.4	1.4	1.3	1.4	1.0	1.2
4	1.4	1.4	E	1.4	E	1.2	1.4	1.4	1.4	2.2	1.6	2.4	2.5	2.3	2.5	1.5	1.5	1.4	1.4	1.3	1.4	1.3	1.3	1.5
5	1.5	1.3	1.0	1.0	1.5	E	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.4	B	1.0	1.4	1.5	1.3	1.4	1.3	1.4
6	1.5	1.5	1.5	1.5	1.4	E	B	1.6	2.4	C	C	C	1.6	1.7	2.4	2.3	1.5	1.5	1.4	1.4	1.4	1.4	1.3	1.5
7	1.5	E	1.2	E	1.3	E	B	1.5	1.5	1.8	2.4	2.4	1.7	2.2	2.3	1.8	1.6	1.4	1.5	1.5	1.5	1.5	1.4	1.5
8	1.5	1.5	1.0	1.0	1.0	1.4	1.5	1.5	1.5	1.5	1.5	1.4	2.4	1.4	1.4	1.4	1.5	1.5	E	E	E	E	E	E
9	E	E	1.5	E	1.0	E	B	1.5	[1.5]B	1.5	1.4	1.6	2.3	1.5	1.5	1.5	1.5	1.5	E	E	E	1.2	1.4	1.4
10	1.4	1.4	1.0	1.0	1.0	E	1.4	1.5	1.4	1.5	2.5	2.4	2.3	2.3	1.4	1.5	1.5	2.5	1.4	1.5	1.4	1.4	1.4	E
11	E	1.4	1.5	1.5	1.3	E	1.2	1.4	1.4	1.5	1.1	<2.6C	<2.4C	2.4	2.3	2.2	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4
12	1.0	1.0	1.5	1.0	1.0	1.3	B	C	C	C	C	C	C	2.5	1.7	1.5	(2.0)B	1.7	1.5	1.5	1.4	E	C	E
13	E	1.4	E	E	1.0	E	B	B	2.0	2.5	C	C	C	C	C	C	C	C	C	E	S	1.5	1.7	[1.6]C
14	1.4	E	E	E	1.1	1.4	1.4	C	C	1.5	C	C	C	C	C	C	C	C	C	C	1.9	E	E	C
15	E	E	1.4	1.4	1.1	1.3	1.1	B	B	C	C	C	1.7	2.0	2.0	1.4	1.4	1.5	1.4	1.4	1.6	1.4	1.5	1.4
16	E	1.2	1.0	1.0	E	E	1.5	2.5	2.0	2.5	2.2	2.5	1.5	1.9	1.8	1.9	1.5	1.4	1.5	1.4	E	1.4	1.6	E
17	1.4	E	1.5	1.6	1.4	1.4	1.4	1.9	1.5	1.6	2.1	2.3	1.5	2.1	1.5	1.4	1.4	1.4	1.5	1.5	1.5	E	E	E
18	E	1.5	1.1	E	E	1.3	1.4	1.5	1.5	1.5	1.5	1.6	1.5	1.5	1.5	1.5	1.4	1.5	E	1.4	1.4	1.5	1.5	1.4
19	1.3	1.5	E	E	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.5	1.5	1.3	1.4	E	E	E	E	1.0	1.3
20	1.4	1.1	E	E	E	1.4	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.4	1.5	1.4	1.5	1.4	1.4	1.3	1.4	1.4
21	E	E	E	E	E	1.4	E	1.4	1.4	1.7	1.5	1.5	1.7	1.7	1.9	1.5	1.7	1.5	1.5	1.1	1.1	1.0	1.3	1.4
22	1.3	1.3	E	E	E	1.0	1.5	1.4	1.5	1.3	1.4	1.5	1.4	1.5	1.3	1.3	1.4	1.4	1.0	1.1	1.0	1.1	1.5	1.4
23	1.4	1.1	E	1.1	1.5	E	1.5	1.4	1.5	1.4	1.5	1.4	1.4	1.5	1.5	1.4	1.3	1.2	1.4	1.2	1.0	1.4	1.5	E
24	1.0	1.2	E	1.0	E	1.3	1.3	1.2	1.2	1.4	1.5	1.5	2.4	1.5	1.3	1.5	1.5	1.4	1.5	1.2	1.2	E	1.2	1.3
25	1.3	1.3	E	E	1.0	1.4	E	1.4	1.4	1.4	1.6	1.5	2.4	1.5	1.4	1.4	1.4	1.5	1.1	1.5	E	1.2	1.1	1.4
26	1.0	1.3	E	E	E	E	E	1.3	1.7	1.4	2.2	2.4	2.4	2.3	1.8	1.5	1.4	1.3	1.3	1.4	1.5	1.5	1.4	1.4
27	1.2	1.3	E	E	E	1.4	E	1.4	1.4	1.5	1.7	2.4	2.3	2.3	1.6	1.7	1.5	1.4	1.5	1.6	1.5	1.6	1.5	E
28	1.3	1.3	E	E	E	E	E	1.4	1.4	1.4	1.7	1.8	1.5	1.6	1.3	1.4	1.4	1.6	1.4	1.5	1.3	1.3	E	E
29	1.0	1.3	E	1.0	E	E	E	1.4	1.4	1.5	1.6	1.4	1.7	1.4	1.5	1.4	1.4	1.5	1.4	1.4	1.4	1.0	1.2	1.3
30	1.3	1.1	1.2	1.0	E	E	1.5	1.3	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.4	1.5	E	E	1.3	1.4	E	E	1.4
31	E	1.0	C	C	C	C	C	C	C	C	C	2.2	1.5	1.5	1.4	1.5	1.4	1.4	1.5	E	1.3	1.3	1.3	1.6
Mean Value	1.3	1.3	1.3	1.2	1.1	1.3	1.4	1.5	1.5	1.6	1.8	1.9	1.8	1.8	1.7	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.4	1.4
Median Value	1.3	1.3	1.0	1.0	1.0	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.3	1.4	1.4
Count	31	31	30	30	30	30	24	25	27	27	25	25	27	29	29	29	28	29	29	30	30	31	30	30

fminE

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

K 11

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

IONOSPHERIC DATA

Kokubunji Tokyo

Lat. 35° 42.4' N
Long. 139° 29.3' E

Oct. 1955

yp F2

135° E Mean Time

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	90	80	70	80	80	100	60	60	80	60	70	60	80	70	80	90	60	50	50	60	90	60	80	60
2	80	70	70	70	60	60	50	30	40	60	60	80	50	80	30	70	40	60	50	90	80	90	80	70
3	80	90	90	90	120	80	80	40 P	40	50	60	40 P	90	60 P	60	50	50	50	50	80	90	60	70	80
4	90	60	70	90	90	70	40	50	60	60	70	90	60	80	60	40	50	50	70	50	70	70	70	70
5	70	80	60	60	60	80	50	50	50	60	50	60	70	60	50	(80) J	[60] B	30	[60] C	80	(70) J	60 P	70	80 P
6	60	70	80	60	80	80	50	30 P	50 P	C	C	C	60	(50) HP	40 P	70	60	70	70	100	70	70	100	70
7	70	80	50	70	100	100	(30) J	50	40	70	60	50	50	60	70	60	60	30	60	60	70	80	70	60
8	60	70	50	70	70	60	60 P	50	60	60	40 P	70	50 H	(40) P	70	80	60	50	60	70	60	60	110	60
9	50	60	60	80	60	70	70	50	(80) B	50	60	70 H	80	80 H	70	60	70	60	70	90	70	70	90	80
10	70	60	90	80	80	70	50 P	40	40	80	50	(40) J	50	50	60	80	60	50	80	80	70	80	70	70
11	60	60	70	60 P	90	90	60	50	70	70	50	40	50	80	60	(60) B	60	70	50 P	70	70	60	80	70
12	80	80	100	110	60	60	80 P	70	50	C	C	C	C	60	50	80	60	70	70	[60] A	60	70	[70] C	70
13	60	70	70	60	80	50	70	60	70	70	50	60	100	70	50	90 P	50	60	70	(80) J	90	80	70	80
14	90	80	70	70	80	90	60	50	60	70	50	60	90	70	60	40	50	80	60	50 P	60 S	90	80	100
15	80	60	60	60 P	80	70	50	40	60	60	40	B	60	50	80	50	60	50	[60] A	80	70	[80] A	80	90
16	80	60	[80] A	90	40	40	50	60 P	50	50	100	70	50	40	40	40	50	40	40	80	80	90	80	80
17	70	60	60	60	40	50	(30) J	30	30	60	50	30	60	60	40	40	60	40	80	(70) J	70	(70) J	(80) J	70
18	70	80	70	80	80	60	50	60	50	(50) J	60	50	50	40	50	50	50	50	70	90	100	80	90	80
19	60	60	70	50	60	80	(50) J	50	30	(40) J	(40) J	50	50	50	50	30	40	50	80	100	80	90	70	70
20	80	80	80	80	60	70	50	50 P	60	50	50	[40] B	40	60	30	60	30	40	90	70	90	90	80	80
21	60	60	80	60	30	80	50	40	30	30	50	40	50	50	40	40	40	40	[60] A	80	80	80	60	70
22	60	50	A	70	70	70	60 P	60	50	40	60	90	60	50	40	60	80	60	60	[80] A	90	60	70	60
23	60	50	60	40	70	60	50	50	70	60	50	60	50 P	60	90	70	40	80	[70] A	60	60	90	80	80
24	80	70	70	60	90	70	60	60	60	50	50	70	60 P	50	60	50	30	60	100	60	80	70 P	50	60
25	60	50	70	50	30	50	60	40	60	50	90	40	60	60	80	80	60	70	90	80	70	70	70	90
26	70	80	F	F	80 F	60	60	90	60	40	40	80	60	60	60	70	60	80	70	60	A	A	60	(70) F
27	60 F	90 F	60 F	60 F	80	80	60	40	60	70	50	60	80	70	70 P	50	50	A	80	100	70	70	90	60
28	70	70	70	70	60 F	60 F	80	50 P	70	50	70	(60) P	50	40	70	40	50	70	100	80	80	50	50	60
29	40	60	30	60	30	70	60	60	40 H	30 P	60	(40) J	60	50	70	60	50	40	80	80	A	A	60	70
30	60	60	80	70	70	70	60	60	40	60	50	50	40	60	40	50	50	40	90	110	100	90	80	80
31	80	C	C	C	C	C	C	C	C	C	C	50	50	40	50	60	50	50	50	100	70	70	70	90
Mean Value	70	70	70	70	70	70	60	50	50	60	60	60	60	60	60	60	50	50	70	80	80	70	80	70
Median Value	70	70	70	70	70	70	60	50	60	60	50	60	60	60	60	60	50	50	70	80	70	70	70	70
Count	31	30	28	29	30	30	30	30	30	28	28	28	30	31	31	31	31	30	31	31	29	29	31	31

yp F2

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

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

IONOSPHERIC DATA

Oct. 1955 | foF2 | 135° E Mean Time | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	C	C	C	C	C	C	C	C	C	C	8.7	9.4	11.1	11.4	10.4^{J}	9.4	9.5^{S}	11.3	9.5	4.3	4.1	4.1	4.4
2	4.1	4.1	4.3	4.6	3.9	3.4	4.2	7.2	7.8	8.0	7.5^{H}	8.5^{H}	10.4	10.9	10.6	10.7	10.0^{S}	8.4	9.5	5.9	4.8	5.0	4.8	4.5
3	4.4	4.4	4.2	4.1	3.9	3.8	3.9	7.9^{J}	10.4	8.7	8.7	10.1$^{J}_{H}$	10.4	8.0	10.9	9.8	9.0	9.0	S	7.7	4.4	4.0$^{P}_{H}$	4.1	4.0
4	4.2	4.2	4.0	3.8	3.9	4.1	4.7	8.1$^{J}_{P}$	8.4	8.5	9.6	10.0	10.1	9.8^{J}	[9.6]^{S}	9.5	8.8	8.8	8.4	7.2	5.9	5.3	5.1	5.3
5	5.5	4.5	4.3	4.2	4.1	4.1	4.9	7.8	8.3	9.6$^{J}_{S}$	8.5	9.5	12.0^{H}	13.0	12.4	12.0	[10.5]^{S}	9.0	9.3	7.7^{S}	5.1	4.5	3.9	3.9
6	3.9	4.0	3.9	4.0	4.0	4.1	5.4	6.8	7.3	9.2	10.0$^{J}_{H}$	11.8	12.0	12.6	14.3	13.2	12.6	11.2	9.5^{J}	6.7	5.9	5.9^{H}	5.6	4.7
7	4.6	4.3	4.2	4.3	4.3	4.2	4.5	6.9	8.5	9.7	11.0	10.5	10.6^{H}	12.0^{H}	13.0	11.5	11.0	10.4^{J}	[9.4]^{S}	8.5	6.4	5.9	5.5	5.6
8	5.2	5.0	5.0	4.9	4.0	3.4	4.2	6.5	8.5	10.2	9.8	10.5	11.0	11.5	12.0	11.0	10.4	S	S	7.3	6.4	5.9^{H}	5.5	4.9
9	4.9	4.9	5.0	4.7	4.1	3.8	4.3	7.8^{S}	8.8	10.2	10.4	10.0	10.9	11.9	11.6	10.9	10.2	9.2	9.6	7.4	5.7	5.6	5.6	5.2
10	5.2	5.1	4.4	4.1	3.7	3.5	4.0	7.6^{P}	8.7	9.5^{S}	8.7	10.0	10.0	11.6	11.6	10.5	11.0	11.6	9.6	7.2	6.6	6.9^{H}	6.5^{H}	5.5
11	5.5	4.9	4.6	4.7	4.2^{H}	3.9^{H}	4.3	7.0	7.9	8.7	9.8	10.6	11.1	9.2	10.9^{H}	11.5	11.6	10.9	9.8	7.0	5.9	6.0	5.8	4.9
12	4.5	4.1	4.0	4.1	4.1	4.2	4.6	8.2	8.9	8.8	10.0$^{V}_{S}$	12.0	8.6	11.2^{H}	12.5	12.9	11.5	10.1^{J}	9.0^{J}	8.7	6.9	6.5	5.6	5.0
13	4.6	4.4	4.2	4.3	4.0	3.7	4.4	6.6	6.8	8.1	9.5	10.1	11.5	10.5	11.5	11.3	11.5	10.5	9.2	6.0	4.4	4.1	3.5	3.4
14	3.5	3.6	3.7	3.8	3.7	3.7	4.1	7.6	7.6	9.0	8.7	8.7	10.1	10.1	11.0	11.5	10.8	10.2	9.4	7.1	5.9	4.9	4.5	4.4
15	4.4	4.2	4.1	4.6	4.1	3.1	3.7	7.0	7.9	9.9^{H}	10.9	11.0	11.5	10.9	11.1	10.0	11.0	10.4	8.3	5.7	5.1	5.4	4.6	3.8^{V}
16	3.9	3.9	3.8	3.8	3.6	2.8	3.4	7.2	7.3	7.9	9.6	11.3	12.5	12.5	12.3	10.3^{P}	9.4	8.6	7.0	5.4	4.6^{V}	4.6	4.7^{H}	4.3
17	4.4	4.4	4.1	4.2	4.5	3.6	3.5	6.1	7.2	7.8	8.3	9.4	11.0	11.0	11.5	10.6	9.5	7.7	7.0	4.5	4.4	4.6	4.1	3.8
18	3.8	3.8	3.8	3.7	4.5	3.5	3.5^{H}	5.9	7.9	7.0	8.7	9.5	10.5^{H}	10.0	C	C	9.2	9.5	7.3	5.4	4.7	4.7	4.5	3.9
19	4.0	3.6	3.6^{V}	3.8	4.1	3.2	3.8	5.9	6.6	8.6	7.3	7.9	9.0	8.9	10.8	11.0	9.8	8.8	7.4	5.8	4.4	4.5	4.6	4.0
20	3.8	3.5	3.4	3.4	4.2	3.2	3.3	5.8	6.5	8.0	9.5^{J}	8.5	8.8	9.5	11.0	10.0	9.0	7.4	5.9	4.3	3.9	4.2	4.9	3.8
21	4.0	3.9	3.7	3.7	3.9	3.7	3.6	6.1	7.8	9.0	9.6	9.9	9.5	10.2	10.5	9.7	7.8	7.0	5.7	4.5	4.6	4.3	3.7	3.8
22	4.0	4.1	3.4	3.3	3.5	3.5	3.6	5.9	6.9	7.5	8.5	9.2	9.0	11.1	11.5	9.8	7.7	8.4	7.5	6.0	4.2^{H}	4.1^{H}	4.0	4.0
23	3.8	3.7	3.4	3.7	3.9	3.3	4.4^{H}	6.0	6.2	7.5	9.3	10.0	10.9	11.6	10.5	10.5	9.9	8.7	7.9	5.9	4.8	3.7	3.2	3.4
24	3.4	3.5	3.9	3.3	3.5	3.3	3.7	7.3	7.8	7.6	8.4	10.0	11.0	11.2	12.5	13.5	13.5	11.5	7.1	(5.8)$^{P}_{H}$	(6.5)$^{P}_{H}$	(5.8)^{P}	4.5	4.2$^{P}_{F}$
25	4.2	4.0^{P}	4.3	5.0	5.5	3.8	3.4	6.6	7.5	7.5	9.0	9.4	9.5	10.1^{H}	11.6	12.7	13.0	9.7^{J}	7.0	6.2	7.9	8.7	8.2	6.4F
26	FS	F	F	5.5	5.5	6.5	7.6	9.4^{P}	11.9^{J}	13.1	13.0	10.5	11.8	11.5	13.0	11.6	11.0	10.1	8.5	6.8	6.0	5.2	4.8	4.3^{J}
27	4.5	3.9	4.5	4.1	[4.0]^{A}	4.0F	F	7.4	7.2	7.5	8.9^{H}	12.0	12.5	12.8	12.9	12.5	12.5	11.1	8.1	5.4	5.1^{H}	4.8	4.2	3.8
28	3.9	3.7	3.8	3.8	3.8	3.5F	3.2	6.5	7.9	8.5	9.5	10.5	11.5	13.0	13.3	13.1	12.1	12.5	8.0	6.3^{P}	5.5	5.0^{P}	4.1	3.9
29	4.0	3.5	3.4	3.8	3.5	2.4	2.8	6.5	8.5	11.0	12.2	13.0	10.6	13.2	14.0^{J}	13.7	13.1	11.5	10.8	(8.4)^{P}	6.5	6.8	F	5.4^{S}
30	4.7^{S}	4.8^{S}	4.8	4.4	4.1	3.4	3.9	6.7	7.8	9.2	11.2	11.7	11.2	11.3	12.2	12.2	11.2	9.5	7.0	5.5^{H}	5.9	6.4	5.7	5.0
31	4.6	5.0	5.4$^{P}_{H}$	3.8	3.1	3.3	3.7	7.5	7.9	8.1	9.5	10.3	11.6	11.9	12.5	12.8	11.9	9.9	7.4	6.0	6.0	5.4	5.3	5.1
Mean Value	4.3	4.2	4.1	4.1	4.0	3.7	4.1	7.0	8.0	8.8	9.5	10.2	10.7	11.1	11.8	11.4	10.6	9.7	8.3	6.5	5.4	5.3	4.8	4.5
Median Value	4.2	4.1	4.1	4.1	4.0	3.6	3.9	7.0	7.8	8.6	9.5	10.0	10.9	11.2	11.6	11.2	10.8	9.6	8.3	6.2	5.5	5.0	4.6	4.3
Count	29	29	29	30	30	30	29	30	30	30	30	31	31	31	30	30	31	30	29	31	31	31	30	31

foF2

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

Y 1

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

IONOSPHERIC DATA

Oct. 1955 | 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	C	C	C	C	C	C	C	C	C	C	C	260	270	300	290	270	280	270	240	210	200	290	320	300
2	290	300	280	230	230	250	240	220	230	240	240^{H}	250^{H}	280	280	280	260	250	240	230	200	230	300	250	280
3	300	290	290	280	300	300	290	240	240	240	240	260^{H}	260	290	300	260	250	240^{A}	240	210	230^{A}	300^{H}	290	300
4	310	300^{A}	300	340	340	300	230^{A}	240	230	240	270	280	300	280	290	270	250	250	240	240	240	290	310	300
5	250	250	280	220	260	270	270	230	240	250	240	270	290^{H}	270	290	260	240	240^{A}	250	220^{A}	210^{A}	260^{A}	270	350^{A}
6	330	330	300	270	280	270	240	210	220	240	240^{H}	270	280	280	290	270	250	240	220	220^{A}	250	270^{H}	240	270
7	280	290	330	290	250	250	240	220	240	250	270	240	250^{H}	280^{H}	290	260	260	250	240	210^{A}	250	270	270	290
8	300^{A}	300	270	230	200	260	250	220	240	240	250	250	270	290	290	250	250	250	230	230^{A}	250	280^{H}	250	290
9	300	280	250	250	220	280	290	240	240	250	240	270	280	290	280	270	250	250	240^{A}	220	230	270	260	260
10	280	250	240	250	240	270	270	240	240	250	250	250	250	280	280	260	270	250	240	210	290	240^{H}	250^{H}	330^{A}
11	290	250	270	280	250^{H}	240^{H}	240	220	240	250	260	250	260	250	250^{H}	280	250	250	230^{A}	210	250^{A}	260	250	280
12	350^{A}	340	310	300	290	250	240	240	240	250	280	260	250	250^{H}	280	270	250	240	230	220	220^{A}	240	240	250
13	290	290	290	280	250	250	240	250	220	250	270	270	290	250	290	260	250	240	230	210	250^{A}	250	290	330
14	340	320	300	290	260	260	260	230	230	250	240	250	290	280	280	260	250	240	240	220^{A}	240	240	270	280
15	280	280	270	250	210	230	270	240	240	270^{H}	240	250	260	260	280	250	260	230	230	250	250	240	240	280
16	290	280	250	240	220	240	260	240	230	250	290	290	270	260	270	250	250	240	230	230	300^{A}	310^{A}	290^{H}	330^{A}
17	300^{A}	290	280	270	240	210	240	230	230	240	250	270	280	290	270	250	240	240	230^{A}	240	250	250	270	290
18	290	290	270	250	230	220	250^{H}	220	230	240	290	250	270^{H}	240	C	C	240	230^{A}	220^{A}	230^{A}	250^{A}	250	270^{A}	290
19	300	(350)^{A}	320	280	240	240	240	220	220	230	250	270	250	320	290	260	240	240	220^{A}	240	260^{A}	250	290	290
20	280	250	290	330^{A}	250	210^{A}	280^{A}	200^{A}	240	260	250	240	250	290	280	250	240	220^{A}	220^{A}	250^{A}	290	300	250	250
21	290	270	300	290	240	240	240	240	240	250	240	260	240	270	260	240	240	210	220	240	250	240	290	320
22	290	260	260	290	300^{A}	260	250	220	230	240	260	240	250	260	260	240	240^{A}	240^{A}	210	200	250^{H}	260^{H}	280	310^{A}
23	350^{A}	320	330^{A}	290	250	280	250^{H}	210	220	250	270	250	260	260	240	250	240^{A}	230^{A}	220	200	220	240^{A}	(390)^{A}	320
24	310	330^{A}	250	(340)^{A}	270	270	250	210	220	220	240	280	250	260	280	270	240	220	240	200^{H}	240^{H}	250	300	310
25	350	[340]^{A}	330^{A}	270	220	200	260	230	220	240	270	250	290	260^{H}	280	280	240	220	200	290	300	290	270	290
26	240	340^{F}	310	300	280	330	280	240	250	240	250	240	270	250	270	250	240	230	230	220	260^{A}	290	250	290
27	300	300	350^{A}	270	[290]^{A}	310^{A}	260	210	220	240	250^{H}	260	260	260	260	250	240	220	200	220	290^{H}	270^{A}	300	330^{A}
28	330^{A}	350	300	290	280	250^{A}	290^{A}	230	230	240	250	250	270	280	280	250	240	230	200	250^{A}	280^{A}	290^{A}	300^{A}	320
29	300	300	280	250	210	300^{A}	290	230	240	250	250	240	240	290	270	250	240	230	210^{A}	210^{A}	(300)^{A}	280	260	290
30	300	300	290	280	240	280	260	210	230	240	250	240	250	270	280	270	240	220	210^{A}	220^{A}	250	250	250	300
31	300	260	240^{H}	240	330	370	290	210	210	230	250	250	270	280	290	260	240^{A}	220	210	220	270	240	260	250
Mean Value	300	300	290	270	260	260	260	230	230	240	250	260	270	270	280	260	250	240	230	220	250	270	270	300
Median Value	300	300	290	280	250	260	260	230	230	240	250	250	270	280	280	260	240	240	230	220	250	260	270	290
Count	30	30	30	30	30	30	30	30	30	30	30	31	31	31	30	30	31	31	31	31	31	31	31	31

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

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

IONOSPHERIC DATA

Oct. 1955 | fEs | Yamagawa | Lat. 31° 12.5' N | Long. 130° 37.7' E

135° E Mean Time

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	C	C	C	C.	C	C	C	C	C	C	C	G	G	G	G	G	G	3.3	2.4	2.3	2.4^{F}	3.0^{F}	2.4^{F}	2.3
2	2.1	2.1	2.3	2.4^{F}	E	3.3	2.3	G	G	G	G	5.9^{Y}	5.9^{Y}	5.9^{Y}	5.9^{Y}	G	G	3.3	2.4	E	E	E	2.3	E
3	2.1	E	2.1	2.2	E	E	2.2^{F}	G	3.8	5.9^{Y}	5.9	G	G	5.0	5.0	5.9	5.9	6.7	5.9$^{Y}_{F}$	3.8^{F}	3.6^{F}	3.2	2.4^{F}	2.3
4	3.5	5.9	3.2	2.3	2.3	3.5	3.4	3.2	G	G	G	G	5.8	8.9	G	G	G	3.5	2.8	3.2	4.1	3.4	3.0	2.1
5	2.3	2.3	E	2.1	E	2.3	2.3	3.0	4.1	8.9^{Y}	5.7^{Y}	5.0	5.0	8.4^{Y}	6.3	5.7	5.9	4.8	3.3	5.3	6.2	3.5	2.4	3.7
6	2.1	2.3	2.1	2.1.	2.1	2.1	2.3	3.3	3.8	5.9	5.9	4.9	5.6	4.9	G	5.9	3.8	G	E	2.5	2.3	2.1	E	E
7	E	E	E	1.7	E	2.3	E	G	3.6	6.0	4.7	4.9	5.9	5.9	6.3	6.0	6.5	6.7	5.9F	3.8	3.2	5.9	3.4^{F}	3.0
8	2.3	2.3^{F}	3.0	2.3	2.1	2.1	2.1	G	G	11.8^{Y}	5.9^{Y}	4.7	G	5.0	5.9	4.8	6.0	6.0	5.9	6.5	2.4	3.8	E	E
9	E	2.3	E	E,	2.9	E	E	G	5.9	5.9	5.9^{Y}	5.9^{Y}	G	5.9^{Y}	G	G	5.9^{Y}	3.7	3.8	2.5	1.9	2.1F	2.5	3.2^{F}
10	3.4	2.3^{F}	2.8	2.1	2.2	E	2.3	3.2	5.9^{Y}	4.4	5.9	3.8	5.9^{Y}	G	G	3.7	5.8^{Y}	5.7	4.8	2.3	E	2.3	E	6.8
11	E	2.3	2.3	E	E	E	E	G	G	G	4.9	G	G	5.9^{Y}	G	5.9	5.0	7.7	6.9	2.3	3.8	7.5	3.7F	5.9^{Y}
12	4.5	2.3	2.3	E	2.3	E	E	G	G	G	5.9^{Y}	G	3.8	3.8	6.5	G	G	3.2	E	E	2.3	3.2	2.3	2.3
13	2.3	2.3	2.0	3.3	3.7F	3.4^{F}	3.4^{F}	3.3	3.5F	G	G	G	G	G	G	G	G	3.8	2.9	3.2	5.9	6.6	3.8	5.8
14	3.1	2.5	2.4	2.4	2.4	2.1	2.3	3.1	4.8	G	5.9	5.9	12.0^{Y}	4.5	5.9.	G	5.3	3.8	7.9F	3.7F	2.4^{F}	2.4F	2.4	2.3
15	E	E	E	E	2.1F	2.1	E	2.8	G	G	G	G	G	G	5.9	3.8	5.9	7.2	5.8	7.2	5.8^{Y}	E	E	2.3
16	2.3	E	E	2.3	2.3	2.3	2.3	2.9	4.2	5.7	5.9	8.5^{Y}	5.0	7.5	6.5	5.9	G	3.8	3.6	3.5	6.4^{F}	7.0	3.4	3.9
17	3.6	3.3	1.8	E	E	2.3	E	2.3	G	G	5.9^{Y}	5.6^{Y}	G	G	3.7	5.9	6.4^{F}	5.5^{F}	5.1	3.1	E	E	2.1	E
18	E	E	E	2.6	2.3	2.1	2.1	G	G	G	5.9^{Y}	5.9	G	5.9^{Y}	C	C	G	5.8^{F}	8.7	5.8^{Y}	5.9	5.9^{Y}	3.2	3.0
19	3.3	3.5	2.8	3.3	E	E	E	3.3	3.8	5.5	G	G	G	G	5.8^{Y}	G	3.7	5.9^{Y}	3.0	5.9	3.8	3.2	3.0	E
20	E	3.1	5.9	3.5	3.7	3.6	5.9	5.9	13.1	G	4.8	5.9	6.0	5.4	5.7	5.9	5.9	5.7	8.1	5.9	2.3	3.1	3.2	2.9
21	2.3	3.5	3.5	2.3	2.1	E	E	G	3.6	5.2	G	5.9	G	G	5.7	G	3.4	G	E	E	2.0	3.2	2.3	3.1
22	E	3.6	E	2.0	2.9	3.6	3.2	G	G	5.0	6.8	5.9	5.9	5.8^{Y}	5.9	G	4.0	3.8	2.3	E	2.3	E	E	5.9^{Y}
23	4.3	3.2^{F}	3.5	2.7^{F}	2.3	2.3	3.4^{Y}	3.3	4.0	6.5	6.8	5.9	5.9	G	G	3.7	5.5	7.0	2.6	3.2	3.1	3.4	3.2	2.3
24	2.0	3.6	3.6	4.1	2.9	2.3	3.1	3.1	4.5	5.3	7.0	5.9	13.1	5.9	4.4	G	3.6	G	2.2	2.4	E	2.1	3.2	5.9^{Y}
25	5.9^{Y}	4.9	3.8	3.0	3.1	3.2^{Y}	E	G	3.8	5.9^{Y}	5.9	3.8	G	5.2	8.0	8.9	5.9	3.2	E	3.3	2.3	2.2	3.4	3.0
26	3.1	3.1	3.7	2.3	2.3	2.3	2.3	G	3.3	G	4.4	G	5.7^{Y}	G	G	3.8	3.4	G	2.4	E	4.5	3.7	2.4	8.9F
27	8.9^{F}	5.8	7.0	5.9	10.7^{F}	3.7	3.4^{F}	G	G	G	7.9	5.9^{Y}	G	5.9	7.1	12.7	3.7	6.5	3.7	3.2	3.2	3.5	3.7	3.5
28	3.8	5.9	2.9	3.5	3.0	3.2	3.1	G	G	G	4.4	4.8	5.0	6.5	5.9	5.9	3.8	G	2.1	6.9	3.3	3.8	3.3	2.4
29	2.3	2.1	E	4.6	3.1	3.0	3.8^{F}	2.9	3.8	5.8	6.5	4.9	G	5.8	5.0	5.1	4.1	3.6	7.0^{F}	5.9	5.9	8.9	7.0^{F}	3.8^{S}
30	3.5	2.3	3.3	2.3	3.0	3.5	2.3	G	G	3.8	G	G	13.0	G	6.2	4.6	6.0	3.2	3.8	5.9	4.9	3.5	2.3	3.8
31	3.1	2.3	E	3.0	2.3	2.3	E	G	G	5.8	G	G	G	G	5.0	5.1	4.2	3.6	E	2.3	3.0	3.4	E	2.3
Mean Value	3.3	3.2	3.2	2.8	3.0	2.7	2.9	3.3	4.7	6.1	5.9	5.5	6.8	5.9	5.8	5.7	5.0	4.9	4.4	4.1	3.7	3.9	3.1	3.7
Median Value	2.3	2.3	2.3	2.3	2.3	2.3	2.3	G	3.6	4.7	5.9	4.9	3.8	5.0	5.7	4.2	4.0	3.8	3.3	3.2	3.1	3.2	2.4	3.0
Count	30	30	30	30	30	30	30	30	30	30	30	31	31	31	30	30	31	31	31	31	31	31	31	31

fEs

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

Y 3

SOLAR RADIO EMISSION

OCT., 1955

Observing Station: HIRAISO Frequency: 200 M

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

Daily Data

Date	Steady Flux		
	00-03	03-06	Daily Averages
1	9	7	8
2	26	31	28
3	8	8	8
4	9	11	10
5	7	8	8
6	10	12	11
7	7	8	7
8	11	9	10
9	9	10	9
10	8	6	7
11	15	-	-
12	7	7	7
13	6	7	7
14	6	6	6
15	6	6	6
16	5	5	5
17	5	6	6
18	6	6	6
19	5	4	4
20	5	5	5
21	6	6	6
22	5	6	5
23	4	5	4
24	7	9	8
25	9	9	9
26	8	9	9
27	24	41	35
28	33	19	25
29	26	23	24
30	27	15	21
31	37	25	33

Data for Active Day

Date	Hourly Value										Max. level / Time
	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08 ...	22-23	23-24	
2	-	22	34	29	34	35	24	33	-	-	49/0755
26									18	18	-
27	30	18	32	41	24	24	94	-	-	52	134/0706
28	30	16	21	23	15	17	18	-	-	24	-
29	24	22	21	28	24	22	22	-	-	-	-
30	33	25	14	14	17	17	18	-	39	29	130/2257
31	19	25	29	29	23	22	-	-	-	-	-

Outstanding Occurrences

Date	Starting Time	Duration	Type	Peak Flux	Time
4	0228-10s	40s	SD	223	-
26	0103-30s	-	SD	136	-
	0111-30s	-	SD	178	-
30	0604-50s	1m	SA	940	0605
	2236-40s	1m #	SA	1470	2237

... 5% above the steady level

26th to 31st ... small bursts continued

IONOSPHERIC DATA IN JAPAN FOR OCTOBER 1955

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