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IONOSPHERIC DATA IN JAPAN

FOR JULY 1955

Vol. 7 No. 7

Issued in August 1955

PREPARED BY THE RADIO RESEARCH LABORATORIES

KOKUBUNJI, TOKYO, JAPAN

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THE RADIO RESEARCH LABORATORIES

KOKUBUNJI, TOKYO, JAPAN

IONOSPHERIC DATA IN JAPAN FOR JULY, 1955

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

Jul. 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	4.6	4.5	4.2F	4.4	4.2	(4.8)F	5.1	(5.6)F	6.2	5.5	[5.6]A	5.6	6.1	5.7	6.0	6.0	[5.6]A	5.3	6.1	5.8	6.0	6.3J	5.6	5.5
2	5.3F	F	F	F	F	(5.8)F	6.0F	6.5P	6.2J	(6.0)F	5.6	5.5	[5.6]A	5.7	A	A	A	(5.6)F	A	A	(6.6)S	5F	S	5F
3	FS	SF	SF	FS	(4.8)F	F	A	A	5.9	6.5	F	A	5.8	[5.8]A	5.7	5.9	6.5	6.5	6.0	6.0	6.0	Fs	Fs	A
4	F	F	F	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
6	C	C	C	C	C	C	C	C	C	C	C	C	C	6.4	5.8	[5.9]A	6.0	6.2	6.5	A	S	A	S	A
7	A	F	F	F	(5.0)F	5.2	6.0Z	A	A	A	A	A	A	6.9	[6.8]A	6.8	6.6	5.7	5.3	5.8	6.3	7.0Fs	Fs	Fs
8	5.7	5.1	5.0	5.1F	5.5	6.0	5.7	5.8	5.8	6.2	6.2	6.1	5.8	[5.8]A	5.8	5.5	5.9	6.0	6.0	7.0	6.5	S	S	S
9	5.9	5.8	5.5	F	F	F	A	5.6	A	A	A	A	5.1	5.3	[5.2]A	5.1	4.9	4.7	5.3	6.0	6.0	6.2	A	F
10	F	F	F	F	4.5J	5.4	5.3	5.5	6.3	6.3	6.3	6.2	6.2	5.7	5.6	5.6	6.1	5.6	5.6	6.1	(7.0)S	(7.0)S	6.5	F
11	F	5.8F	5.3F	[4.9]C	4.5	5.1	5.9	5.7	(5.3)F	5.6	5.4	5.7	5.3	5.2	5.1	5.3	5.4	5.3	5.7	7.1J	6.6	6.6	6.1	6.1
12	5.7	5.6	5.5	5.2F	A	A	A	5.3F	4.9	A	A	A	A	A	A	A	5.0	4.8	5.3	[5.9]A	6.5	6.5	6.2	5.8
13	5.8JF	(5.8)JF	(5.3)F	[5.2]F	(5.2)F	5.5	5.2F	5.3	(5.2)F	4.7	4.8	[5.0]A	5.2	5.3	5.2	5.0	4.8	4.9	[4.8]A	4.8	5.2	5.8	5.6	5.5F
14	(5.3)F	(5.2)F	(4.7)Fs	(4.0)Fs	4.2	(4.6)F	A	A	A	A	5.3	A	A	5.6	5.3	A	A	A	A	7.0	[6.5]C	6.0	(5.3)JF	F
15	Fs	F	F	F	4.0F	(4.8)A	(5.5)F	(5.6)Fs	A	A	A	5.7V	5.3	4.8P	4.8	4.9P	4.9	5.3	5.5	5.3	A	Fs	F	F
16	F	F	F	(4.7)F	[4.8]Fs	(4.9)F	A	A	5.0	5.2F	5.3	4.9	[5.1]A	5.3	5.3	5.5	4.9	4.8	4.9	5.3	6.0	Fs	A	Fs
17	F	F	F	Fs	(4.6)Fs	5.0F	6.0	C	C	C	A	4.9	5.5	4.9P	A	A	5.0	[5.5]A	6.0	A	A	A	A	F
18	F	F	F	F	4.0F	(4.8)F	5.4	[6.7]A	8.0	6.8J	5.7	5.4	5.5	5.2	5.3	5.5	6.5	C	C	C	C	C	C	C
19	C	C	C	C	C	C	C	C	C	C	5.5	5.3	5.2	5.3	[5.0]A	4.8	[4.8]A	4.9	5.3	6.2	6.6	6.6J	F	F
20	F	AF	AF	F	F	F	6.1F	6.0	6.1	A	A	A	A	A	4.9H	5.3	A	A	A	(7.1)J	8.0	8.0	8.0	3.9J
21	4.2	4.2F	F	F	(3.9)F	4.8FV	5.8	6.0	5.3	7.0	[6.0]A	5.0	5.0	5.0	5.3	A	A	5.4	A	A	6.5	7.3	[6.2]FS	5.0F
22	4.2	[4.1]J	4.0F	[3.9]F	3.8F	4.5	6.0	7.5	6.2	[5.9]A	5.6	5.4	5.0	5.5	5.6	5.0	5.6	5.5	6.0	6.2	5.8S	(7.7)Fs	(5.7)F	(5.0)F
23	F	Fs	(4.6)F	(4.3)F	(4.3)F	4.3	5.0	A	A	A	A	5.6	5.6	5.2	5.5	5.3	5.2	A	A	5.3	6.2	[6.4]Fs	6.5	5.0
24	[4.9]A	(4.8)JF	Fs	Fs	A	4.2	A	A	C	C	C	C	C	C	C	C	C	A	5.3	[5.8]A	6.3	6.0	5.6	5.2
25	5.3	4.7	4.6F	(4.5)F	4.1	4.7F	4.7F	[5.1]A	5.5	5.5	5.8	5.2	5.1	4.6	5.3	5.5	5.3	4.9	4.8	5.5	6.0	C	C	C
26	C	C	C	C	C	C	C	C	C	5.3	6.0F	5.6	5.4F	5.2	5.4	5.2	4.8	5.2	5.4	5.8	6.5	6.5	7.0	6.1
27	5.0J	4.5V	4.4F	(4.6)JF	(4.5)F	4.5	5.0	5.7	[5.9]A	6.1	4.6	5.0	[5.4]A	5.7	4.9	5.4	5.0	4.9	5.3	5.5	6.0	6.1	6.1	4.3J
28	4.0	3.8	3.7F	(3.6)Fs	3.6	4.3	5.0	5.3	5.6	[5.4]A	5.2	A	A	5.3	4.8	4.8F	4.9	A	A	6.1	6.8J	F	F	F
29	F	(4.0)F	(4.1)F	(4.1)F	4.0F	5.0	5.5	5.5	5.3	5.3	5.1	4.8	5.3	5.3	5.2	A	A	A	A	A	6.8	6.7	(5.3)FJ	A
30	F	F	5.3F	4.0F	4.0F	3.6	[5.0]A	6.4	7.2J	7.3	5.8	A	A	5.1	A	A	A	5.4	A	A	6.3J	A	Fs	Fs
31	F	F	F	F	F	4.0F	4.6F	5.3	5.3	A	C	5.4	A	A	5.3	5.7	5.7	5.4	5.5	5.8	6.7	7.0	6.5J	Fs
Mean Value	5.1	4.9	4.7	4.5	4.4	4.8	5.4	5.8	5.9	5.9	5.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.5	6.0	6.4	6.6	6.1	5.3
Median Value	5.3	4.8	4.6	4.4	4.2	4.8	5.4	5.6	5.8	5.9	5.6	5.4	5.4	5.3	5.3	5.4	5.2	5.4	5.4	5.8	6.5	6.5	6.1	5.5
Count	13	14	14	14	20	22	20	19	19	17	18	19	20	25	24	21	22	22	20	22	25	18	15	11

foF2

Sweep 1.0 Mc to 22.0 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

Jul. 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	260	270	270	260	240	320	290	320F	270	340	[380]A	410	330	350	350	350	[340]A	340	300	300	300	270	240	270
2	260	280F	260F	300F	310	300	300	310	280	360	310	360	[360]A	350	A	A	A	A	A	A	270	300Fs	280	230
3	280	270	310	250	260	350	A	A	290	310	320	[340]A	370	[380]A	400	400	380	310	260	280	380	[340]As	310	[300]A
4	300F	290F	270	F	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
6	C	C	C	C	C	C	C	C	C	C	C	C	C	320	370	[350]A	330	300	330A	[320]A	310S	A	A	A
7	A	AF	310F	310F	280	240	310	A	A	A	A	A	A	350	[350]A	350	290	330	320	280	290	310	280	250F
8	250	270	280	280	270	250	270	350A	340	340	370A	320	370	[380]A	400	420	350	330	290	280	280	270	270	270
9	270	320	290	320	320	400A	[400]A	400	A	A	A	A	530	420	[430]A	440	460	480	350	290	260	300	[300]A	300
10	290	270	290	260F	260	280	450	320	340	320	350	340	380	370	380	390	330	320	320L	290L	270	260	260	300
11	280	260	300F	[320]C	340	400	360	360	450	350	490	410	450	570	520F	430	380	380	350	290	260	260	310	280
12	270	290	270	300F	A	A	A	420	480	A	A	A	A	A	A	A	450	390	380	[340]A	290	270	290	350A
13	290	350A	340F	290F	320	300	390	420	350F	500	600A	[540]A	480	440	420	460	440	430	[350]A	270	(350)A	290	290	310
14	300	310	250	290	280	270	A	A	A	A	460	A	A	400	420	A	A	A	A	300A	[280]C	250	310	280F
15	270	280F	250F	310F	310F	320L	360	300	A	A	A	430	410	450	450	450	450	330	310	260	[280]A	300	310	360
16	350	[350]F	350F	310F	260	280	A	A	460	430	400	550	[500]A	460	400	360	360	370	330	290	300	310	[300]A	300A
17	300F	310	FA	FA	270	350	260	C	C	C	A	400	420	500	A	A	430	A	300	A	A	A	A	260
18	250F	280F	290F	270F	290	380	370	[340]A	300	290	340	410	390	480	440	410	300	C	C	C	C	C	C	C
19	C	C	C	C	C	C	C	C	C	C	360	420	410	370	[410]A	450	[400]A	350	350	270	260	260	[260]F	270F
20	250F	A	A	F	290F	300	280	[280]A	280	A	A	A	A	A	500H	400	A	A	A	300A	300A	260A	220	300
21	320	310	280	270	260	370	290	310	430	280	[300]A	330	510	450	360	A	A	290	A	A	300	400A	300A	250
22	250	310	290	290F	270	310	400	280	260	[270]A	280	340	420	370	310	430	360	350	300	250	(350)A	[320]A	280	290
23	250	[260]A	280	250	240	250	270	A	A	A	A	350	350	410	290	330A	370A	A	A	340	300A	300A	260	290
24	[300]A	310	310	300	[260]A	230	A	A	C	C	C	C	C	C	C	C	C	A	340A	[300]A	260	260	300	260
25	250	230	280	260	270	260	390	[340]A	290	320	280	370	400F	560	360	340	280	320	320	260	260	C	C	C
26	C	C	C	C	C	C	C	C	C	310	330	340	350	360	340	340	370	340	310	290	270	290	270	240
27	220	280	360	270	280	280	300	310	[290]A	270	410	400	[340]A	290	420	330	340	320	300	270	280	270	230	240
28	290	270	310	290	280	290	330	340	280	[320]A	350	A	A	380	410	400	400	A	A	270	260	250F	260F	280S
29	300A	270	300F	280F	290F	260	320	310	310	320	320	430	360	440	370	A	A	A	A	A	270	250	250	[240]A
30	230	260	270	260	260	240	[280]A	320	300	270	310	A	A	350	A	A	A	310	A	A	260	A	A	270
31	250	260	260	240	210	230	380	320	A	A	C	360	A	A	370	350	330	310	290	310A	320A	280	300A	A
Mean Value	270	290	290	280	280	300	330	330	330	330	370	390	410	410	390	410	370	330	320	290	290	290	280	280
Median Value	270	280	290	280	270	290	320	320	300	320	340	380	400	380	400	400	360	330	320	290	280	280	280	280
Count	26	25	25	24	25	25	21	19	18	17	19	20	20	25	24	20	22	20	20	23	27	24	24	25

h'F2

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

W 2

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

IONOSPHERIC DATA

Wakkanai

Lat. 45° 23.6' N
Long. 141° 41.1' E

Jul. 1955 | foEs | 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	3.5	2.8	2.5	2.8^{F}	3.5^{Y}	G	G	4.5	5.1	6.0	8.0	5.3^{Y}	G	G	4.6^{Y}	6.0	6.1	8.0^{Y}	4.0	7.0	6.5	3.5	2.3	3.5
2	4.1	5.2^{F}	3.5^{F}	6.0^{F}	4.0^{F}	2.9	6.0	6.0	6.0	6.2	6.2	6.0	7.6	6.1	9.5	12.0	12.5^{F}	8.0^{F}	8.0^{F}	9.0^{Y}	9.5^{FY}	5.8	4.3	2.3
3	4.5	4.3	6.0	6.0	4.0^{F}	4.3	8.0	8.0	6.0	6.5	6.5	8.0	5.2^{FY}	6.0	6.0	7.5^{F}	6.5	9.1^{Y}	4.0	4.2	6.0	7.5^{Y}	5.8^{Y}	7.0
4	6.0	5.5^{FY}	6.0^{F}	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
6	C	C	C	C	C	C	C	C	C	C	C	C	C	5.2	5.3	7.5	6.7	5.0	6.2	8.5	6.0	11.0	9.0	9.5
7	9.5	6.0	5.5^{F}	4.3	4.0	3.5	G	12.5	6.3	6.0	6.1	10.5	7.4	6.3	7.6	4.7	>3.3^{C}	3.8	G	3.4	3.2	4.0	6.2	4.0
8	2.3	4.8	2.3^{Y}	2.0	2.3	G	G	6.0	6.0	6.0	6.2	5.7	5.7	13.0	5.3	6.0^{F}	5.1	4.2	G	3.2^{Y}	3.5	3.5	4.2	3.7
9	3.5	4.3	3.5	4.0	4.5^{F}	5.0	8.5	6.0	6.4	6.2	6.4	6.1	6.0	16.0^{Y}	5.0	4.0	3.5	4.4	5.3	3.5	2.7	7.5	5.8	6.0
10	3.5^{F}	4.3	4.0^{F}	3.9	2.4	G	G	G	6.0	6.0^{Y}	5.2^{Y}	G	G	G	G	G	G	G	G	G	2.3	3.5	3.4	2.3	2.6
11	3.5	2.0	3.5^{F}	C	2.3	G	G	4.8	8.0	5.2^{Y}	4.8^{Y}	5.0^{Y}	G	G	G	G	G	G	G	G	3.0^{Y}	2.3	3.0^{Y}	2.0
12	2.3	2.3	2.2	5.0	7.0^{Y}	7.5	6.6	5.2	G	6.7	8.0^{Y}	12.5	12.0	11.5^{Y}	11.0	9.5	4.8^{Y}	4.6	4.2	6.9	2.4^{Y}	2.9^{F}	2.3	4.3
13	4.8^{F}	6.5	5.5^{F}	3.5	3.2	5.0	4.5	6.0	5.0	5.5	7.6	9.5	4.0	5.7	G	G	6.0	6.0	9.0	6.0	5.0	2.5	3.5	4.1
14	4.4	3.5	2.3	2.7	G	3.5	10.4	6.8	7.3	8.0^{Y}	5.3	7.0	10.0^{F}	5.3^{Y}	5.0^{Y}	6.2	9.6	12.0	12.0	6.5	C	6.0^{Y}	3.8	3.5
15	2.5	2.8	2.9	2.7	3.2^{YF}	G	6.5	11.5	13.4	11.1	11.8	4.5^{Y}	G	6.4	G	6.0^{F}	5.3	4.5^{Y}	5.0	5.0	7.3	3.5	3.8	6.0
16	6.5	6.0	6.0	4.2	2.7	4.0	6.0	8.7	G	5.9	6.3	5.1	7.5	9.5	4.1	5.3	5.9	4.7	4.8	3.5	5.7	5.0^{Y}	8.0	7.0
17	6.0^{F}	7.0^{F}	6.5^{F}	6.0^{F}	4.0^{F}	4.2	5.0	C	C	C	9.5	6.1	G	5.0	6.8	7.9	9.5	7.0	6.0^{F}	9.0	10.5	11.8	9.5	4.3
18	4.5	2.6	4.2	2.5	3.9	4.0	5.8	8.0	8.0	6.0	7.7	5.2	6.2	5.3	4.3	G	G	C	C	C	C	C	C	C
19	C	C	C	C	C	C	C	C	C	C	5.3	4.8^{Y}	5.0	6.0	5.2^{Y}	5.2^{F}	4.5	6.1	5.1	3.5^{Y}	3.0	4.3	4.5	7.5^{Y}
20	4.5	7.0^{Y}	6.5	4.3^{F}	3.5^{F}	5.8	8.0	6.5	7.5^{YF}	9.5	6.6	7.3	6.7	6.5	5.3	G	6.3	10.5	9.5	6.0	9.0^{Y}	5.5	4.2^{Y}	5.0^{Y}
21	4.5	4.7	2.5	3.5	3.5^{F}	G	5.1	G	6.0	6.5	10.0	8.5^{Y}	5.5	4.6^{Y}	5.7	7.3	6.7	7.2	7.7	6.6	8.0	6.5	7.0	6.5
22	6.5	5.7	3.5	3.5	2.5	4.5	9.0^{Y}	7.0	6.0	7.8	5.1	8.0^{Y}	7.7	6.1	G	G	G	G	5.5	4.3	6.5	8.5	7.0	4.5
23	5.7	5.7	4.2	4.2^{F}	3.5^{F}	G	5.0	6.8	6.4	7.3	9.5	5.0^{F}	G	G	4.2	5.6	5.3	6.5	11.0	5.3	7.2	7.5	8.5	6.5
24	6.0	6.0	6.0	6.0	6.5	6.5	7.7	6.6	C	C	C	C	C	C	C	C	C	8.0	5.6	7.1	7.5	4.5	7.0	6.5
25	2.3	2.6	3.5	3.0	3.5	3.5	4.7	6.1	G	5.6	5.1	4.6^{Y}	4.1	G	G	G	4.1^{Y}	G	6.0^{Y}	3.3^{Y}	2.9	C	C	C
26	C	C	C	C	C	C	C	C	C	9.5	7.0^{F}	4.6	6.5	5.3	G	G	G	G	4.3	4.2	3.5	4.4	2.3	2.5
27	3.5^{F}	3.5^{F}	3.5^{F}	3.5	2.3	G	4.5	5.9	8.0	G	G	4.7	12.5	5.0	4.5	4.2	G	3.2	6.5^{Y}	4.5	3.5	3.5	3.5	4.0
28	2.3	2.5^{F}	3.5	3.5^{F}	3.5	3.0	4.0	5.3	6.0	14.5	5.8	7.8	7.1	G	7.2	5.8	6.2	11.0	9.1	5.6	4.5	4.5	5.0	4.5
29	4.3	2.6	3.5^{F}	2.6^{F}	2.9^{F}	3.5	G	5.3	G	5.3	5.8	4.2	4.3^{Y}	8.0	11.8	6.0	6.5	8.5	8.0	7.2	12.8	7.0	4.0	10.5
30	6.5	2.5	4.0	4.6	2.5^{F}	4.2	7.2	6.8	7.0	6.0	4.5	12.0	12.5	9.0	6.3	11.7	12.8	9.0	10.6	6.5	6.0^{Y}	9.0	6.5	3.7
31	7.5	3.5	2.7	2.3	2.3	2.3	G	G	6.2	9.5	C	5.3	8.7	9.0	5.3	5.3	G	4.2	4.6	5.1	6.0	7.2	8.5	8.0
Mean Value	4.7	4.7	4.1	3.9	3.4	4.8	6.5	6.8	6.9	7.2	6.8	6.7	7.6	6.6	6.2	6.7	6.1	6.8	6.8	5.5	5.8	5.7	5.2	5.3
Median Value	4.5	4.3	3.5	3.5	3.5	3.5	5.0	6.0	6.0	6.0	6.2	5.7	6.0	5.8	5.1	5.4	5.3	5.5	5.6	5.2	6.0	5.0	4.5	4.5
Count	27	27	27	25	26	26	26	25	24	25	26	27	27	28	28	28	27	28	28	28	27	27	27	27

foEs

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

Jul. 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	5.1	4.8	4.5	4.3	4.4	5.0	5.9^{P}	5.0^{J}	5.9^{P}	5.5	5.4	5.7	6.5	6.2	6.9	6.9	6.0^{J}	5.6	5.9^{P}	6.4	6.7	(4.9)^{P}	5.9^{F}	(5.5)^{P}
2	4.5	4.5^{F}	4.5^{F}	4.3^{F}	4.0	M	5.6	6.5	6.5^{V}	5.9^{J}	5.2	5.2	6.0	5.7	6.5	6.2	5.4	5.9^{J}	6.0	6.6	6.8^{V}	7.0^{F}	6.0^{F}	[5.0]^{A}
3	3.9	4.1	4.5^{F}	4.1^{F}	4.0^{F}	4.6^{F}	6.6	7.8^{P}	8.3^{P}	A	A	C	6.2	A	5.6	6.6	7.1	6.5	[6.2]^{A}	5.9^{J}	5.7	5.8	5.7^{F}	6.0^{F}
4	5.5	[5.2]^{AF}	4.9^{F}	4.8^{F}	4.2^{F}	4.8	6.1^{J}	6.2	A	A	A	6.0	[6.0]^{A}	6.0^{J}	5.7	5.3	5.7	6.3	6.7	7.5	8.0^{P}	6.6	5.6	(5.4)^{P}
5	5.0	4.8^{PF}	4.7^{F}	4.8	4.2^{F}	4.9	(6.4)^{PJ}	6.2	B	A	A	A	A	A	A	A	6.0^{J}	6.5	6.6	7.0	7.3	[7.0]^{AF}	6.8^{PF}	6.6^{F}
6	[6.0]^{AF}	5.4^{F}	5.5^{F}	5.2^{F}	4.6^{F}	4.2^{VF}	A	A	A	A	A	A	A	6.5	A	C	A	A	A	A	A	A	6.5^{F}	[6.2]^{AF}
7	6.0^{JF}	6.0^{JF}	5.8^{JF}	4.9^{F}	6.0^{JF}	5.0	5.0	6.2	6.0	5.6	5.1	[5.8]^{A}	6.5	7.2	7.6	8.5	8.1	6.7	6.0^{P}	6.1^{P}	6.8	6.5^{JF}	6.6^{JF}	6.5^{JF}
8	5.8	5.3^{F}	5.1^{F}	5.5^{F}	5.5^{F}	5.6	6.4	6.8	6.4	A	A	6.4	5.7	[5.8]^{A}	5.8	6.2	6.8	6.6	6.6	7.3	6.7	6.6	6.2^{JF}	6.1^{F}
9	5.4	5.4^{F}	5.9^{F}	5.7^{JF}	4.7^{F}	5.1	5.0^{F}	5.6	A	A	A	A	A	6.0^{J}	5.8	5.4	5.0	[5.2]^{A}	5.3^{P}	5.7	5.9^{J}	5.6	5.6	5.7^{JF}
10	5.2^{F}	5.6^{F}	4.8^{F}	4.9^{F}	4.8^{F}	4.8	5.5	6.0^{J}	6.7^{P}	6.3	[6.2]^{A}	6.2	[6.2]^{A}	6.2	6.6	6.4	6.1^{J}	6.2^{J}	6.0^{J}	6.6	7.2	6.6	6.6	6.1^{J}
11	6.0^{JF}	6.1^{JF}	5.9^{JF}	5.4^{F}	5.2^{F}	4.6	5.7	5.9^{J}	6.5	6.3	[6.1]^{A}	5.9	[5.6]^{A}	5.2	6.3	6.5	5.8	5.5	6.5	7.0	6.1	6.6	4.7^{J}	M.
12	6.5	6.4	5.9^{J}	5.5	5.4	5.2	5.4	5.3	4.8	[5.2]^{A}	5.5	A	A	6.6	6.6	[5.9]^{A}	5.2	5.4	5.7	[6.1]^{A}	6.5^{J}	5.6	6.4^{F}	5.7^{F}
13	5.8	5.9^{JF}	5.5^{F}	5.5^{F}	5.0	5.2	5.2	5.3	5.0	5.1	A	A	5.4	5.5	5.0	4.8	4.9	5.0	4.7	4.9	5.7	5.8	5.6	5.6
14	5.3^{P}	5.0	5.0^{F}	5.0^{F}	4.0^{F}	4.9	[5.8]^{A}	6.8	6.5	5.6	6.0^{J}	[5.8]^{A}	5.6	6.0^{J}	5.9^{J}	A	A	6.1	A	A	6.8	5.4^{F}	5.5^{F}	5.6^{F}
15	5.3	4.5^{F}	5.0^{F}	4.9^{F}	4.7	5.5^{V}	(4.9)^{P}	5.6	5.5^{P}	(5.6)^{P}	[5.6]^{A}	5.5	5.5	5.1	5.0^{P}	5.0	5.4	5.5	6.0	5.7	5.4	5.3	5.1	5.2^{F}
16	4.9^{F}	5.3^{F}	4.7^{F}	4.8^{F}	4.9^{F}	4.5	5.9^{J}	[5.3]^{A}	4.7	5.0^{J}	[5.5]^{A}	6.0	6.2	6.1	[6.0]^{A}	6.0	6.5	5.0^{P}	5.1	5.2	6.6	6.4^{F}	6.1	5.3^{F}
17	4.9^{F}	4.5^{F}	4.3^{F}	4.5^{F}	4.2^{F}	5.7	6.4	5.3	[6.2]^{A}	7.0	7.0	5.8^{P}	A	A	A	A	A	6.0^{J}	[6.4]^{A}	6.7	6.5^{F}	[5.8]^{A}	5.1^{F}	5.1^{F}
18	4.6^{F}	4.5^{F}	5.0^{F}	4.5^{F}	4.4^{JF}	4.5^{F}	5.4	7.1	8.3	A	A	A	A	5.9^{J}	A	A	6.0^{J}	A	A	6.8	6.7^{F}	6.9^{JF}	6.2^{JF}	5.2
19	3.7^{F}	3.8^{F}	4.0^{F}	4.3^{F}	3.9^{JF}	3.9^{P}	4.9	A	A	5.1	[5.2]^{A}	5.3	5.6	5.5	[5.2]^{A}	5.0	5.6	5.4	[6.1]^{A}	6.8^{P}	7.0^{F}	6.5	A	A
20	A	3.6^{F}	3.4^{F}	3.8^{F}	3.6^{F}	4.3	5.9	5.6	[5.9]^{A}	6.2	A	A	A	A	A	C	6.3	5.7	6.8	[7.7]^{A}	8.7	7.2^{F}	F	A
21	4.6	4.3	4.3^{F}	4.1^{F}	4.2^{F}	4.6^{E}	5.0^{J}	6.0^{B}	6.0^{J}	6.0^{J}	6.1	5.6	A	A	A	A	6.0^{P}	5.9^{P}	5.9	6.6	6.6	[6.2]^{A}	5.9^{P}	5.5^{JF}
22	5.4^{JF}	4.4^{F}	4.1^{F}	3.7^{F}	4.0^{F}	3.9	5.3	[5.6]^{A}	6.0^{J}	5.8	6.3	[5.8]^{A}	5.2	5.7	5.4	5.7	A	A	C	6.0^{P}	[5.6]^{C}	5.3	4.8^{F}	5.1^{F}
23	4.7^{F}	4.8	4.5	4.1	3.7^{F}	3.7	4.4	4.9	C	A	A	A	A	5.7	6.2	[6.1]^{A}	6.0	5.0	5.4	5.5	A	F	4.8^{F}	5.5^{F}
24	5.3^{F}	5.3^{F}	4.8^{JF}	5.0^{F}	4.7^{ZF}	3.6	4.6	5.3	6.5	8.0	A	A	A	A	A	5.7	6.2	[5.8]^{A}	5.4	6.5	6.8	6.2^{J}	C	C
25	5.0^{JF}	4.5^{F}	4.1^{F}	4.3^{F}	4.0^{F}	4.5	5.0^{P}	5.6	A	A	A	A	A	A	5.3	5.8^{P}	5.6	4.5	4.8	5.4	5.9	5.1^{F}	F	F
26	6.5^{F}	4.3^{F}	4.1^{F}	4.0^{F}	4.6^{F}	4.0	5.1	5.6	6.6	5.6	[5.5]^{A}	5.4	[5.7]^{A}	6.0	[5.6]^{B}	5.1^{P}	A	A	A	6.5	6.6^{J}	6.6	6.3	B
27	5.0^{P}	4.6	4.0	4.0	4.2^{F}	4.6	4.8	6.0^{J}	A	A	A	5.3	6.0^{P}	6.5	5.6	5.4	[5.2]^{A}	5.0	5.0	6.0^{P}	6.6	6.2^{P}	5.0^{F}	5.0^{F}
28	A	A	A	A	A	4.1	B	A	6.5	C	C	C	C	C	C	A	A	5.5	A	A	A	6.0^{J}	A	A
29	3.8^{JF}	4.2^{F}	3.9^{F}	3.6^{F}	3.6^{F}	4.2^{F}	5.0^{P}	5.6	5.8^{P}	5.7	5.2	5.1	4.9	5.2	5.3	6.0^{P}	A	A	A	A	6.6^{F}	5.5^{F}	F	F
30	F	F	F	4.0^{F}	4.0^{F}	4.0	5.1	6.0^{J}	[6.2]^{A}	6.5	5.9^{P}	5.2	5.6	A	A	5.6	5.5	5.5^{P}	4.8	[5.4]^{A}	6.0^{F}	5.6^{F}	5.3^{F}	A
31	F	F	5.3^{F}	4.7^{ZF}	3.9^{F}	3.7	4.4	5.3	6.4	A	A	A	A	5.9^{P}	[6.0]^{A}	6.1	6.2	5.2	5.2	6.4	6.5^{JF}	7.1^{F}	F	F
Mean Value	5.2	4.9	4.8	4.6	4.4	4.6	5.4	5.9	6.2	5.9	5.7	5.7	5.8	5.9	5.9	5.9	5.9	5.7	5.8	6.3	6.6	6.1	5.8	5.6
Median Value	5.2	4.8	4.7	4.6	4.2	4.6	5.3	5.6	6.2	5.7	5.6	5.8	5.7	6.0	5.8	5.9	6.0	5.6	6.0	6.4	6.6	6.2	5.8	5.5
Count	27	28	29	30	30	30	29	28	23	19	16	18	18	22	22	23	24	26	24	27	28	29	24	21

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

Jul. 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	270	290	250	290	300	250	290	290	290	290	390	390	350	370	340	300	320	350	310	260	A	250A	300	250
2	300A	280	290	290	290	250	300	320	(320)A	310	450	400	370	400	320	320	350	340	310	290	280	290	250	(280)A
3	300	350A	310	250	250	350	320	300	270	A	A	C	A	A	480	350	310	320	A	A	A	300	310	A
4	350A	(320)AF	300	280	290	290L	300	A	A	A	A	A	A	380	390	420	390	340	330	290	240A	A	A	290
5	300	320A	300	270	290	280A	A	290	B	A	A	A	A	A	A	A	380	320	330	(290)A	250	(270)AF	290F	280
6	(300)AF	310	300F	280	250F	260	A	A	A	A	A	A	A	A	A	C	A	A	A	A	A	A	A	A
7	320F	360F	350F	A	290F	270	250	310	310	440	L	A	A	A	A	340	320	300	310	290	320	300F	300F	280F
8	280	300F	300	310AF	270	250	320	330	A	A	A	350	A	A	470	390	340	(330)A	320A	290	270	290	290	310
9	(330)A	350	290F	290	340F	310	450	360	A	A	A	A	A	400	410	420	A	A	340	(320)A	310	310	300	300
10	370	270	300F	310A	290	250	290	360	330	350	(360)A	370	(390)A	410	350	390	350	330	320	280	260	280	290	310
11	360F	300F	300F	320F	340	420	390	430	370	410	(430)A	450	(540)A	640	450	390	350	380	330	280	250	300	300	340
12	290	300	260	280	300	280	500L	360	450L	(440)A	420	A	A	400	380	(410)A	440	390	340	(300)A	270	300	340F	330F
13	(320)A	300	290	310	310	360	370	420	450	490	A	A	480	410	590	560	440	390	300	300	320	310	310	300
14	300	300	300	290	260	290	A	A	A	400	440	(460)A	480	390	380	A	A	350	A	A	250	A	A	370
15	320A	300	310F	290	370	260	A	390	L	490	A	A	370	A	A	500	400	370	380A	290	280	320	370	340
16	330F	350F	350F	300	270	290L	280	(400)A	520	430	420	400	460	420	(390)A	360	320	A	260	330A	310	310	260	260
17	310F	340F	320F	310	300	290	270	330	(340)A	350	300	370	A	A	A	A	A	A	A	280	290	(280)A	270F	320F
18	320	320F	320F	350AF	310AF	310	390	A	A	A	A	A	A	A	A	A	A	A	A	300	320	270F	260	250
19	270F	330F	310F	320F	300F	420	360	A	A	340	A	A	350	360	(430)A	500	(410)A	320	(300)A	280	270F	270	A	A
20	A	290F	300F	330F	260	300	270	330	(320)A	310	A	A	A	A	A	C	350	320	A	A	230A	220A	320F	A
21	A	310	320A	(300)A	290F	280	300	(300)B	300	300	330	A	A	A	A	A	320	340	310	270	260	(260)A	270	280F
22	270F	270	280F	290	300F	390	320	(290)A	260	330	350	(380)A	410	410	450	380	A	A	C	220A	(260)C	290	290	310
23	290F	290F	260	260	260	260	A	A	C	A	A	A	A	A	340	A	A	A	320	300	A	A	260	310F
24	310F	310F	270F	270F	240F	250	L	A	A	280	A	A	A	A	A	350	310	(320)A	320	310	290	A	C	C
25	270F	270F	310	290F	260	310	(310)L	310	A	A	A	A	A	A	470	340	340	L	A	280	310	320F	320	310F
26	220	250	280	280	260	L	280	290	270	280	(340)A	400	(370)A	340	(370)E	400	A	A	A	320	310	270	250	270F
27	260	310A	340	310A	290	310	310	320	A	A	A	420	360	310	380	350	(350)A	350	300	320	260	260	270	300
28	A	A	A	A	A	280	B	A	B	C	C	C	C	C	C	A	A	340	A	A	A	240	A	A
29	250F	A	290	310	300F	290	(280)L	270	300	320	350	350	550	400	400	340	A	A	A	A	A	270	(260)A	260F
30	A	AF	AF	280F	240A	340L	A	A	A	310	340	420	360	A	A	320	330	L	A	A	310	290	280	(320)A
31	360F	290	280F	260F	250	240	(280)L	320	300	A	A	A	A	390	(370)A	350	340	300	320	300	280	280	A	A
Mean Value	300	310	300	290	290	300	320	330	340	360	380	400	420	400	410	390	360	340	320	290	280	280	290	300
Median Value	300	300	300	290	290	290	300	320	320	340	360	400	380	400	390	370	350	340	320	290	280	280	290	300
Count	27	28	29	29	30	30	23	22	16	19	13	13	14	16	20	22	21	20	19	24	25	26	24	24

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

Jul. 1955 | fEs | 135° E Mean Time | Akita | Lat. 39° 43.5' N | Long. 140° 08.2' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3.0	6.5^{Y}	3.5^{F}	3.0^{Y}	2.6	3.0	G	G	G	4.5	5.5	4.3	5.5	5.0	5.5	5.5	4.8	4.5	4.1	3.5	11.5	7.5	3.5	7.5
2	4.5	2.5	3.0	3.0^{Y}	2.4	G	3.6	4.5	7.5	8.8	6.9	7.0	6.5	4.3	5.2	5.0	4.4	4.6	4.5	4.1	4.5	5.6	7.0	7.0
3	4.5	4.5	6.5	3.5	4.0	3.5	4.6	7.0	6.5	8.4	10.2	C	9.5	5.5	5.5	6.5	4.7	4.6	6.9	7.8	6.4	5.5^{Y}	6.5	5.5
4	7.5	6.4	4.5	3.5	3.1	2.6	4.6	8.5	8.5	9.1	6.6	7.1	11.9	6.5	4.7	4.5	4.0	3.5	4.5	2.7	4.2	7.0	6.5	4.5
5	3.7	4.3	3.6	3.2	3.4	3.5	5.5	3.5	4.3	8.5	5.5	11.0	5.6	7.5	7.5	6.8	4.0	3.4	5.7	5.5	6.9	7.1^{F}	3.5	5.7
6	7.0	4.5	4.1	5.0^{F}	3.7^{F}	3.6	6.5	8.5	9.5	12.0	10.2	7.5	11.6	8.8	12.0	C	12.5	8.0	11.5	12.5	10.0	8.5	7.5	8.1
7	6.8	6.0	6.5	6.3	4.6	4.7	4.8	G	6.5^{Y}	5.5	4.8	12.5	6.8	7.2	7.9	4.9	3.9	3.6	3.1	4.1	4.5	5.0	4.5	5.6^{F}
8	6.5	3.5	2.9	4.6^{F}	3.2^{F}	2.7^{F}	4.2	4.9	6.5	9.8	8.0	5.4	6.8	7.1	7.6	4.9	3.6	6.5	6.5	3.5	3.1	5.0	3.8	4.6
9	5.6	4.6^{F}	4.3	5.2^{F}	6.5^{F}	3.5^{F}	7.1	6.3	9.8	7.1	7.7	8.5	7.6	8.4	5.0	6.9	7.1	7.5	5.0	5.5	4.8	3.6	3.5	7.0^{F}
10	5.0^{F}	3.2	3.6	5.0	5.6	4.6	G	G	6.8	7.1	8.5	6.8	12.5	4.6	4.2	4.0	3.8	5.5	3.5	3.3	3.5	3.5	3.5	3.5
11	5.2^{F}	4.1	2.8^{F}	3.0^{Y}	3.5^{F}	3.2	G	5.5	5.6	8.5	9.5	7.1	10.5	4.8	4.5	3.5	4.4	3.4	3.0	3.0	2.5	4.0	4.4	3.0
12	3.0	4.3	3.0	3.0	4.1	3.5	6.0	4.4	4.3	5.3	5.5	7.1	6.1	7.5	7.0	7.5	G	G	4.4	8.5	7.4	6.5	2.5	4.3
13	6.3	4.7	3.5	3.5^{F}	2.0^{Y}	2.6^{Y}	4.5	4.5	6.2	4.1	5.8	5.4	7.0	G	4.5	G	4.5	6.0	6.4	3.5	3.5	3.0	3.5	3.0
14	2.8	2.6	2.7	2.5	2.5^{Y}	3.0	7.5	9.5	8.7	5.5	6.5	8.2	6.1	4.5	8.5	7.7	7.1	4.6	10.5	13.5	4.5	6.5	5.5	5.5
15	6.8	4.5	4.0^{F}	4.2	5.5	3.5	5.5	7.0	6.0	5.5	9.0	7.2	5.2	5.5	4.5	5.0	4.8	3.5	5.5	7.4^{YF}	3.5	4.5	4.0	4.5^{F}
16	5.0	4.2	4.1^{F}	3.5^{F}	4.0	3.5^{Y}	4.0	5.0	4.7	5.6	10.1	6.7	7.2	7.9	6.8	6.9	4.8	5.0	3.3	4.6	3.5	6.6	4.0^{F}	4.2
17	3.6	3.5^{F}	3.0^{F}	3.5	2.5^{F}	3.1	4.5	4.4	12.0	6.7^{Y}	4.6	7.0	11.2	14.0	12.3	12.5	10.5	14.0^{F}	8.0^{F}	6.5^{F}	7.0^{F}	8.5	6.5^{F}	6.0^{F}
18	6.8	6.8^{F}	6.6^{F}	4.5	4.2^{F}	5.1^{F}	5.5	8.1	9.5	12.5	9.7	8.7	7.2	6.9	7.2	8.0	6.5	7.7	8.5	4.4	6.5	6.5	4.5	3.5
19	3.5^{F}	3.3^{F}	3.0^{F}	2.9^{F}	3.0^{F}	4.2	5.0	9.5	7.9	10.5^{Y}	7.5	5.5	6.6	4.8	7.9	6.5	6.8	6.2	8.6	6.5	7.1	5.6	7.3	6.5^{Y}
20	7.0	3.1	3.1	3.4	2.9	3.5	5.2	9.7	12.5	6.5	8.0	8.2	11.5	10.9	7.2	C	5.5	5.5	10.1	12.6	6.5^{F}	7.0^{F}	6.5^{F}	4.2
21	6.6	3.3	4.1	4.3	4.2^{F}	4.0	3.6	4.4^{Y}	5.6	6.0	6.9	7.0	7.9	10.7	9.6	9.6	5.6	11.0^{F}	5.6	2.5	E	7.5	4.7	5.6^{F}
22	5.6	3.5	3.6	2.9	3.2	3.5	4.7	8.7	11.0^{Y}	5.6	6.2	8.4	4.8	5.6	3.8	4.9	13.5	13.5	C	5.0	C	4.4	5.0^{F}	5.7^{F}
23	4.7	3.2	2.6^{F}	3.2	3.6	5.0	4.7	6.0	C	6.5	8.5	6.9	7.9	6.6	6.9^{Y}	10.0	7.0	6.0	5.5	4.9	10.0	7.4	11.8^{F}	6.8
24	5.6^{F}	4.6^{F}	4.5^{F}	5.0^{F}	3.5^{F}	3.3	3.5	5.3	11.5	6.4	8.0	9.7	8.7	6.9	6.4	6.2	5.0	7.9	4.8	5.6	6.9	8.4	C	C
25	6.5^{F}	6.9	4.3^{F}	3.2	3.4^{F}	4.5	5.0	5.6	7.3	6.6	6.2	5.5	7.3	7.6	5.7	G	4.1	3.5	5.3	2.7	3.9	5.0	4.5	4.7^{F}
26	4.0	3.5	2.5	3.5^{F}	4.0	2.6^{F}	3.5	3.8	4.7	6.8	5.6	10.0	9.0	4.3	3.5	5.5	6.7	7.1	10.6^{Y}	5.5	6.8	6.1	2.4	3.1
27	3.5	4.0	4.4	3.4	3.5^{F}	3.4	3.5	6.7	7.4	8.2	7.7	4.0	4.6	4.1	4.2	5.5	7.0	4.0	4.0	4.5	3.4	3.4	4.2	3.5
28	6.5^{Y}	6.6	6.1^{Y}	6.1^{Y}	4.2	3.3	3.5	7.5^{Y}	3.5	C	C	C	C	C	C	7.7^{Y}	7.4^{Y}	6.1	4.5	7.6	6.8	6.8^{Y}	6.9	7.0
29	5.5	6.8	4.5	4.6	3.5	4.2	3.5	4.9	5.6	3.9	4.0	4.5	4.5	4.3	4.2	6.1	9.5	12.5	11.5	11.5	8.0^{F}	10.7	7.1^{F}	11.6^{Y}
30	6.5	7.1^{F}	6.5^{F}	4.5^{F}	3.5^{F}	3.1	7.1	14.8	12.5	10.0	7.0	5.5	G	8.0	8.5	5.5	7.5	6.5	5.5	6.8	4.6	6.7	5.5^{F}	12.0
31	7.5^{F}	6.7	4.2^{F}	3.0^{F}	2.8	2.6	2.6	G	4.2	6.0	6.9	7.0	8.5	5.0	9.5	6.7	3.5	5.6	6.5	6.3	5.5	4.5	7.1	5.6
Mean Value	5.4	4.6	4.1	3.9	3.6	3.5	4.8	6.6	7.5	7.3	7.2	7.2	7.8	6.7	6.6	6.5	6.2	6.4	6.2	6.0	5.8	6.1	5.3	5.6
Median Value	5.6	4.3	4.0	3.5	3.5	3.5	4.6	5.5	6.6	6.6	7.0	7.0	7.2	6.6	6.6	6.1	5.0	5.6	5.5	5.5	5.2	6.5	4.6	5.6
Count	31	31	31	31	31	31	31	31	30	30	30	29	30	30	30	29	31	31	30	31	30	31	30	30

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

Jul. 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	(4.5)F	5.0	4.2	4.4	4.2F	4.5J	4.9	6.5	5.6	(5.0)JB	[5.1]A	5.2P	6.0	7.0	>7.2B	>7.1B	6.5	6.1	6.0	6.9	6.7P	4.9	5.4F	(6.0)F
2	(5.0)FP	(4.1)P	4.8F	5.0F	4.9F	5.3	5.2	6.2	(6.3)J	A	A	A	5.8P	6.1P	6.7	5.8	5.9	A	A	7.2	7.3P	6.5	5.1	A
3	A	A	A	4.3F	4.1VF	4.3	5.4	7.3	>7.0B	A	A	A	6.0J	A	A	A	7.3	6.6	7.4	6.0	5.2J	5.4FP	5.4JF	5.6F
4	F	AF	(4.8)F	5.0F	4.9F	4.8	6.9	6.2	6.1	A	A	A	6.6	A	A	6.0J	6.1	6.9	7.9P	8.5	7.7	5.6F	(5.6)FP	5.2P
5	4.5	4.5F	4.8F	4.4	4.3	5.0	6.5	5.9	5.7P	A	A	B	A	5.2J	5.5	6.1	7.2	(6.6)A	6.7	7.3	[7.2]A	7.0	6.6JF	6.3JF
6	6.0F	5.4F	5.4	5.2	4.1	4.2	5.0	6.3	>6.6B	A	A	5.7	A	A	A	A	6.3	[6.6]A	7.0	A	A	7.0	6.0	5.8
7	(5.8)F	6.2F	6.5F	6.0	5.3	5.4	6.2	6.0	6.0J	5.7	5.6	5.7	6.4	A	A	A	8.8P	7.9	6.8	6.7	7.0	6.9	6.3F	7.0
8	6.2F	5.8	5.6	6.5F	5.3	5.3	6.1	6.8	7.0	8.0J	[7.2]A	6.5	5.9	[6.2]A	6.5	7.1	7.4P	6.8	7.0	7.5	7.3	7.0	6.7	6.4
9	5.8	5.6	5.9	5.4F	4.9	5.5	4.7	4.9J	G	A	A	A	A	A	6.2	6.0	5.4	5.8	5.5	5.5	>5.0B	(5.5)P	5.5	5.4
10	5.5	4.9JF	4.6	5.0F	4.5	4.7	5.4	6.0	6.4P	>5.0A	6.1J	6.6	A	A	7.0	[6.7]A	6.4	6.7	6.7	8.0	6.6	6.2	6.0	5.9
11	6.0	(5.9)F	5.5F	5.6F	5.2F	4.5	5.7	5.7	6.1	6.2	A	A	6.0J	6.0J	[6.3]A	6.6	6.2	6.0	7.4	6.5	6.0	6.1	6.0	6.1
12	6.3	(5.5)B	6.0	6.0	5.4	5.1	5.0	5.0	5.0	A	A	A	5.9	[5.9]A	5.9	A	A	6.3	6.3	6.1	5.9	5.9	6.0Z	6.0
13	5.5	5.9	5.8	5.1	4.9	4.7	5.0	5.0J	(5.0)B	A	B	>4.9B	(4.9)J	B	B	B	5.4	4.9	4.9	5.1J	6.0	5.9	5.6	5.5
14	5.4	5.3	5.2	4.6	4.9	4.9	6.2	7.1	A	A	A	6.0J	6.6	6.6	[6.4]A	6.2	6.2	7.0	7.3P	8.0P	6.5	5.2	[5.6]A	6.1
15	[6.0]A	(5.9)JF	[5.4]A	5.0	(5.0)F	6.4	6.0J	5.5	5.6	A	A	5.5	5.6	A	A	5.1	5.4	5.6	6.1	6.0	5.2	5.0	4.9	4.9
16	4.9J	A	4.9F	5.4F	4.7	4.9	6.4	5.5	G	5.0	5.9	A	A	A	A	6.6	6.4	5.6	A	A	6.4P	6.4	6.5	5.2
17	4.6	4.9	4.5	4.4F	4.7F	4.7	5.2	[6.0]A	6.8	8.0J	6.5	6.6	[6.4]A	6.2	A	A	(6.1)A	6.5P	6.1	7.0	6.5F	[5.7]A	4.9F	(6.1)F
18	[5.4]A	(4.7)BF	(5.0)F	[4.6]AF	4.3F	4.0	5.4	7.0	A	A	A	A	A	6.2	6.5	[6.5]A	6.5	5.7	6.0	6.4	6.8	(6.6)F	6.3	[5.0]A
19	3.7F	3.9	3.7	4.2ZF	4.0F	3.6	5.0	6.3	5.9	4.8	G	(5.4)BP	[5.4]A	5.5	A	A	A	A	6.6	7.4	7.5	6.6	5.2P	4.4
20	[4.8]A	5.2F	4.5F	3.6	3.6	4.3	5.9	5.7	6.9	A	A	A	A	A	A	5.7	5.9P	5.9	6.8	(8.5)P	(7.9)J	5.3	4.3	3.8
21	[4.1]A	4.4J	4.9JF	[4.8]A	4.8F	A	A	6.7	6.3	5.5	6.4	[5.7]A	5.0	5.9	5.7	A	A	6.1	6.6	6.7	6.9	6.0	5.5	5.3
22	4.9	5.0F	[4.5]C	4.0P	5.5	C	C	7.2	A	5.7	A	A	A	7.8J	A	B	7.0	[7.1]A	7.2	6.2	6.2	5.2P	5.0	5.4JF
23	5.0F	5.1JF	5.1F	4.4	3.5	3.5	4.7	5.9	A	A	A	A	A	A	A	A	6.0	5.7	6.1	6.1	6.0	5.7F	5.7F	4.4F
24	5.0F	4.0JF	4.2P	3.7	(3.7)F	3.8	4.6P	6.2	A	(8.2)P	B	B	B	A	6.7	B	C	C	C	C	C	C	C	C
25	4.8F	4.5JF	(4.2)F	4.5JF	4.0	4.2F	5.4	6.1	A	A	5.4	A	A	A	A	A	A	A	A	A	5.6	5.7	5.5	5.6JF
26	[5.4]AF	5.3JF	5.0F	4.4JF	(4.0)F	4.1F	5.0	5.6	6.5	A	A	A	A	6.4	5.7	5.4	A	A	5.6	5.6J	7.2	[6.4]A	5.6	(4.7)F
27	F	4.5F	4.2	3.8	3.9JF	4.0	C	C	C	A	A	A	A	6.7	5.6	5.4	5.0	5.1P	[6.0]A	7.0	7.7	5.2	4.5	F
28	A	A	A	A	A	4.0	4.5	[6.0]A	7.5	5.7	A	A	5.0	[5.6]A	6.2	5.6	6.0	A	A	5.3J	6.1J	A	4.0F	A
29	A	A	4.4JF	3.7F	(3.7)F	4.1	5.1	6.1	A	A	A	A	A	A	A	6.7	6.5	A	A	A	A	5.6	6.1JF	4.4JF
30	4.7F	(4.7)A	A	A	AF	4.0	[5.0]A	5.9	(6.6)A	5.3A	6.0	5.9	5.6	5.6	6.2	6.2	[5.8]A	5.3P	5.3	5.8	5.5	5.4F	5.6F	A
31	AF	(4.9)F	5.0F	5.0F	4.8F	4.4	5.1	5.4	6.1	6.5	5.7	A	A	A	A	6.3	[5.6]A	4.9	A	6.5F	6.2	A	A	A
Mean Value	5.2	5.0	5.0	4.8	4.5	4.6	5.4	6.1	6.2	6.1	6.0	5.9	5.8	6.2	6.2	6.1	6.2	6.2	6.5	6.7	6.6	5.9	5.6	5.5
Median Value	5.0	5.0	4.9	4.6	4.7	4.5	5.3	6.0	6.3	5.7	5.9	5.9	5.9	6.2	6.2	6.2	6.2	6.1	6.6	6.6	6.5	5.7	5.6	5.6
Count	25	26	28	29	29	29	28	30	23	13	11	11	16	16	16	19	25	24	24	26	27	28	29	25

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

Kokubunji Tokyo

Lat. 35° 42.4' N
Long. 139° 29.3' E

Jul. 1955

hpF2

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	(350)F	300	340	350	310F	(300)J	320	250	A	U	A	U	340	330	B	B	310	290	310	290	260P	300	340F	(340)F
2	(360)F	(330)P	340F	340F	320F	250	300	310	(280)J	A	A	A	U	A	A	320	380	A	A	320	290P	280	280	A
3	A	A	A	340F	290VF	340	370	320	B	A	A	A	U	A	A	A	310	320	280	290	(340)J	310FP	(340)JF	360F
4	F	AF	(350)F	300F	370F	310	270	260	A	A	A	A	320	A	A	(360)J	360	330	320P	290	260	350F	(350)F	320P
5	350	350F	360F	340	340	300	270	290	280P	A	A	B	A	A	A	A	310	(320)A	320	310	(320)A	330	(320)JF	(310)JF
6	340F	360F	330	280	290	240	310	280	B	A	A	A	A	A	A	A	A	A	320	A	A	310	310	340
7	(320)F	350F	350F	320	320	330	260	250	(270)J	U	U	A	A	A	A	A	320P	340	320	350	350	330	320F	320
8	330F	360	360	350F	290	310	310	300	350	(310)J	(310)A	310	U	A	360	340	310P	320	330	300	310	350	350	320
9	380	370	330	360F	360	270	A	U	G	A	A	A	A	A	A	A	U	310	300	310	B	(400)P	360	350
10	330	(330)JF	330	320F	320	260	310	290	300P	A	A	360	A	A	A	A	350	320	320	310	300	370	380	360
11	350	(420)F	350F	370F	380	400	350	U	A	A	A	A	B	A	A	340	330	360	300	290	360	380	370	400
12	350	(380)B	360	340	320	250	340	U	U	A	A	A	A	A	A	A	A	330	310	300	340	370	400Z	390
13	360	370	300	350	360	340	360	U	B	A	B	B	B	B	B	B	B	A	350	A	350	350	360	370
14	360	370	350	270	300	300	310	300	A	A	A	A	A	330	A	A	A	350	300P	280P	270	330	(340)A	340
15	(380)A	(410)F	(360)A	310	(300)F	230	(260)J	A	U	A	A	A	A	A	A	A	U	310	300	280	300	350	360	350
16	(370)J	A	350F	350F	350	310	270	A	G	U	360	A	A	A	A	A	290	300	A	A	370P	330	290	330
17	360	400	360	350F	360	280	A	A	360	(310)J	310	280	A	A	A	A	A	310P	A	300	280F	(320)A	360F	(410)F
18	(380)A	(340)BF	(320)F	(330)AF	340F	330	A	290	A	A	A	A	A	A	A	A	310	(310)A	310	320	(300)AF	(280)F	350	(360)A
19	380F	350	370	350F	350F	U	330	280	270	U	G	U	A	A	A	A	A	A	340	310	290	280	300P	390
20	(380)A	370F	350F	340	310	300	280	310	280	A	A	A	A	A	A	360	310P	350	350	(290)P	(240)J	290	350	360
21	(350)A	(340)J	(320)JF	(340)A	360F	A	A	310	260	A	290	A	U	U	A	A	A	330	310	310	310	290	310	340
22	350	330F	(320)C	320P	320	C	C	250	A	A	A	A	A	A	A	B	330	(300)A	280	(300)A	310	320P	320	(330)JF
23	300F	(320)JF	310F	330	330	270	320	270	A	A	A	A	A	A	A	A	A	290	270	300	320	300F	270F	430F
24	310F	(300)JF	280P	280	(260)F	270	290P	350	A	(240)P	B	B	B	A	340	B	C	C	C	C	C	C	C	C
25	300F	(350)JF	(330)F	(290)JF	290	330F	290	240	A	A	U	A	A	A	A	A	A	A	A	A	360	320	320	(340)JF
26	(320)AF	(310)JF	300F	(280)JF	300F	290F	280	310	270	A	A	A	A	300	A	U	A	A	A	(300)J	310	(300)A	280	(290)F
27	F	320F	330	340	(320)JF	320	C	C	C	A	A	A	A	290	U	U	310	310P	(320)A	320	280	260	370	F
28	A	A	A	A	A	300	320	(280)A	250	270	A	A	U	A	300	U	280	A	A	(290)J	(280)J	A	270F	A
29	A	A	(320)JF	330F	(340)F	250	280	280	A	A	A	A	A	A	A	290	270	A	A	A	A	320	(310)JF	(360)JF
30	340F	(280)A	A	A	AF	280	(270)A	260	A	A	A	A	U	U	A	310	(300)A	300P	290	280	310	340F	360F	A
31	AF	(360)F	370F	310F	270F	330	290	300	280	A	U	A	A	A	A	330	(330)A	330	A	380F	360	A	A	A
Mean Value	350	360	340	330	320	300	300	290	290	280	320	320	330	310	330	330	320	320	310	300	300	320	330	350
Median Value	350	350	340	340	320	300	300	290	280	290	310	310	330	320	340	330	310	320	310	300	310	320	340	350
Count	25	26	28	29	29	28	25	23	14	4	5	3	2	4	3	8	18	22	22	25	28	28	29	25

hpF2

Sweep 1.0 Mc to 22.2 Mc in 2 min ☐ Manual ☒ Automatic

K 2

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

IONOSPHERIC DATA

Jul. 1955 | h'F2 | 135° E Mean Time | Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	290F	250	250	270	240	240	260	250	270	300	[350]A	400	340	330	310	300	310	270	300	270	220	250	296F	260F
2	290F	300	280F	270	260F	240	300	310	280	A	A	A	370	[360]A	350A	320	360	A	A	A	260	230	230	A
3	A	A	A	280	260	340	360	310A	250	A	A	A	380	A	A	A	290	300	250	230	260F	260	328AF	310F
4	310AF	[320]AF	320F	250F	290F	270	260	260	A	A	A	A	320	A	A	360	360	310	280	240	210	230	260F	270F
5	290	300A	290	260	280	240	260	290	280	A	A	B	A	A	430	360	300	A	310A	260	[240]A	230	290F	240F
6	280F	290	250	230	230	230	310	280	280	A	A	A	A	A	A	A	A	A	290	A	A	298	250	280A
7	300A	300F	280	270	240	230	260	250	270	350	360	460	450A	A	A	A	290	300	280	330A	300A	260	260F	280
8	280	300A	300A	270	230	240	280	280	340	300	[300]A	310	390	[380]A	360	340	300	310	300	250	250	310A	280F	270
9	310	300	260	270	290	260	400	330	G	A	A	A	A	A	340	330	390	310	260	250	250	290	290	300
10	270	270	280A	260	240	230	300	280	300	300	370A	360	A	A	350A	[350]A	350	320	300A	266A	220	270	300	300
11	300	350	300F	340A	300	400	340	400	370A	340A	A	A	460	A	A	230	330	360	270	230	270	290	300	310
12	290	300	300	270	250	250	330	350	480	A	A	A	A	A	380	A	A	330	250	260A	250	300A	320A	320
13	330	300	240	280	250	330	350	400	400	A	B	(490)B	(460)B	B	B	B	370	A	350A	A	270	280	280	300A
14	300	290	280	220	250A	250	300	290	A	A	A	A	A	330	[360]A	380	370A	350A	280A	240	210	300A	[310]A	320
15	[340]A	(360)A	[330]A	300A	250F	230	250	320A	350	A	A	400	390	A	A	A	350	310	300	230	220	280	350A	300A
16	330A	A	300A	270	260	250	270	400	G	500	360	A	A	A	A	350A	290	300	A	A	318AF	260F	230F	260
17	250	310A	320	290	280F	250	280	[300]A	320	300	310	280	A	A	A	A	A	310	A	260F	250AF	[260]A	270F	350A
18	[340]A	330A	310A	[280]AF	260	250	A	290	A	A	A	A	A	320A	A	A	300	330A	300	260F	[260]AF	270AF	A	A
19	320A	300	290	280	260F	390	330	280	270	310	G	400	[400]A	390A	A	A	A	A	310	270A	240	250A	260AF	300F
20	350	290	280	270	250	290	270	290	270	A	A	A	A	A	A	360	310	340	330A	260A	230	190	270	300
21	[300]A	290	290F	[280]A	280F	A	A	290	250	380A	290	[300]A	320	350	350A	A	A	310	300	270	240	230	240	240
22	300	290F	[270]C	250	310	C	C	240	A	A	A	A	A	A	A	B	320	[280]A	230	[260]A	300A	300A	280	300A
23	310F	280F	250	250	300	240	320	270	A	A	A	A	A	A	A	A	300A	280	260	230F	250	298AF	230	360A
24	260F	270	250	240	230F	230	290	330	A	240	B	B	B	A	330	B	C	C	C	C	C	C	C	C
25	260A	280A	300	280	250	260	250	240	A	A	380	A	A	A	A	A	A	A	A	A	330A	250	268AF	300A
26	[280]AF	250	250	230	250F	250	270	310	270	A	A	A	A	300	300A	300	A	A	338	266A	260	[260]A	256A	250
27	300	250	270	280	270	250	C	C	C	A	A	A	A	290	320	310	310	310	[300]A	300A	230A	230	318A	328AF
28	A	A	A	A	A	250	L	A	250	280	A	A	420	[360]A	300	350	280	A	A	260A	270A	A	230	A
29	A	A	300	300A	270	250A	280	270	A	A	A	A	A	A	A	290	270	A	A	A	A	250	280	290
30	250	260A	A	A	AF	260	[260]A	250	A	A	430	340	350	340	[320]A	310	[300]A	300	270	240	260	306F	300F	[300]A
31	310A	300	330A	270F	220	250	290	300	280	280	280	A	A	A	A	330	[330]A	330	A	310F	310A	A	A	A
Mean Value	300	290	290	270	260	260	300	300	300	320	340	370	390	340	340	330	320	310	290	260	260	260	280	290
Median Value	300	300	280	270	260	250	280	280	280	300	360	380	390	340	340	330	310	310	300	260	250	260	280	300
Count	28	27	28	29	29	29	26	29	21	12	11	10	13	11	14	17	23	21	23	24	28	28	28	26

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

Kokubunji Tokyo

Lat. 35° 42.4' N
Long. 139° 29.3' E

Jul. 1955

foF1

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							3.5	A	A	4.5	A	A	4.5	A	A	B	4.1	3.8	3.6					
2							3.9L	4.6	4.3	A	A	A	A	A	A	A	4.3	A	A					
3						3.0	3.6	A	A	A	A	A	A	A	A	A	4.2	4.0	3.2L					
4							4.0	A	A	A	A	A	A	A	A	B	4.3	A	3.4H					
5							4.0	4.2	A	A	A	B	A	A	A	A	4.2	A	A					
6						Q	3.9	A	A	A	A	A	A	A	A	A	A	A	3.6					
7							3.8	4.2	4.3	4.4	4.7H	A	A	A	A	A	A	A	3.4L					
8							4.1L	4.1	A	A	A	A	A	A	4.8	A	A	4.1	3.8					
9						3.0	[3.5]A	4.0	4.1	A	A	A	A	A	4.5	[4.4]A	4.4	4.0	3.5L					
10							LH	4.2	4.5	4.6	A	A	A	A	A	A	4.5	A	A					
11						3.2	3.9	4.3	A	A	A	A	4.7	A	A	A	A	A	3.4					
12							3.6	4.1	4.2	A	A	A	A	A	B	A	A	4.0	3.3					
13						3.0	3.9H	4.5	B	A	B	4.6	4.5	B	B	B	A	A	A					
14							A	A	A	A	A	A	A	A	A	4.5	A	A	A					
15						L	4.0	[4.2]A	4.3	A	A	A	A	A	A	A	4.2	4.0	A					
16						Q	3.7	[4.2]A	4.6	4.3	4.5	A	A	A	A	A	4.3	A	A					
17							A	A	4.2HL	4.4	4.8	A	A	A	A	A	A	A	A					
18							A	A	A	A	A	A	A	A	A	A	4.1	[3.7]A	3.3					
19						2.8	3.6	4.0	A	4.3	4.6	4.5	A	A	A	A	A	A	A					
20						L	L	4.0	A	A	A	A	A	A	A	A	A	4.0	A					
21							A	4.0L	4.2	[4.2]A	4.2	[4.4]A	4.5	A	A	A	A	4.0	A					
22							C	3.5	A	A	A	A	A	A	A	A	A	A	A					
23							3.8	4.1	A	A	A	A	A	A	A	A	A	3.7	3.2					
24							3.7	A	A	A	A	A	A	A	4.0	B	C	C	C					
25							L	4.0	A	A	4.5	A	A	A	A	A	A	A	A					
26							3.6	4.0	4.1	A	A	A	A	A	A	A	A	A	A					
27							C	C	C	A	A	A	A	4.7	4.6	4.2	4.0	A						
28							L	A	A	4.3	A	A	4.3	A	A	4.2	A	A	A					
29							3.7	L	A	A	A	A	A	A	A	A	A	A	A					
30							A	A	A	A	A	A	A	4.5	[4.4]A	4.2	[4.0]A	3.8	L					
31							3.5	4.0	4.2	A	A	A	A	A	A	A	A	3.9	A					
Mean Value						3.0	3.8	4.1	4.3	4.4	4.6	4.5	4.5	4.6	4.5	4.3	4.2	3.9	3.4					
Median Value						3.0	3.8	4.1	4.2	4.4	4.6	4.5	4.5	4.6	4.5	4.2	4.2	4.0	3.4					
Count						5	20	19	11	8	6	3	5	2	5	5	12	12	11					

foF1

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

K 4

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

IONOSPHERIC DATA

Jul. 1955 | h'F1 | 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							190	A	A	200	A	A	A	A	A	B	220	230	220					
2							230	250[A]	230	A	A	A	A	A	A	A	230	A	A					
3							240	230	A	A	A	A	A	A	A	A	260[A]	230	230					
4							240	A	A	A	A	A	A	A	A	A	240	A	240[H]					
5							230	220	A	A	A	A	A	A	A	A	A	A	A					
6						Q	250	A	A	A	A	A	A	A	A	A	A	A	260					
7							230	240	200	200	200[H]	A	A	A	A	A	A	A	240					
8							230	240	A	A	A	A	A	A	200	A	A	A	240					
9						250	[250][A]	250	230	A	A	A	A	A	260	[260][A]	270	220	230					
10							220[H]	230	230	200	A	A	A	A	A	A	250	A	A					
11						290	240	230	A	A	A	A	250	A	A	A	A	A	250					
12							230	270	200	A	A	A	A	A	B	A	A	250	260					
13						240	240[H]	B	B	A	B	260	230	B	B	B	A	A	A					
14							A	A	A	A	A	A	A	A	A	200	A	A	A					
15						230	230	[260][A]	280	A	A	A	A	A	A	A	250	250	A					
16						Q	250	[220][A]	200	200	200[A]	A	A	A	A	A	230	A	A					
17							A	A	230[H]	210[A]	260	A	A	A	A	A	A	A	A					
18							A	A	A	A	A	A	A	A	A	A	250	A	A					
19						260	250	220	A	230	210	230	A	A	A	A	A	A	A					
20						240	260[A]	230	A	A	A	A	A	A	A	A	A	210	A					
21							A	280	260	[230][A]	200	[200][A]	210	A	A	A	A	230	A					
22							C	250	A	A	A	A	A	A	A	A	A	A	A					
23							230	240[A]	A	A	A	A	A	A	A	A	A	250	240					
24							240	A	A	A	B	B	A	A	220	B	C	C	C					
25							230	210	A	A	A	A	A	A	A	A	A	A	A					
26							230	220	220	A	A	A	A	A	A	A	A	A	A					
27							C	C	C	A	A	A	A	230	210	220	220	A						
28							230	A	A	230	A	A	210	A	A	200	A	A	A					
29							250	220[A]	A	A	A	A	A	A	A	A	A	A	A					
30							A	A	A	A	A	A	A	280	A	A	A	270[A]	230					
31							240	200	230	A	A	A	A	A	A	A	A	260[A]	A					
Mean Value						250	240	240	230	210	210	230	230	260	220	220	240	240	240					
Median Value						240	240	230	230	200	200	230	220	260	220	210	240	240	240					
Count						6	24	20	11	8	5	3	4	2	4	4	10	10	11					

h'F1

Sweep 1.0 Mc to 19.2 Mc in 2 min ☐ Manual ☒ Automatic

K 5

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

IONOSPHERIC DATA

Jul. 1955 | foE | 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							2.5	2.6	3.0	[3.2]A	3.3	3.4	3.2	3.5	3.5	[3.4]B	3.2	2.5	A					
2							2.3	2.8	3.0	3.2	3.3	3.6	3.4	A	A	A	A	2.6	A					
3						A	A	3.0	3.1	3.2	3.4	3.5	3.5	3.1	3.2	A	2.9A	2.8	A					
4							2.3	2.7	3.0	3.4	3.5	A	A	3.2	3.0	A	A	A	A					
5							2.5	A	A	3.0	A	A	3.7	3.5	3.2	3.0	A	A	A					
6						A	2.5	2.8	3.0	3.3	A	(3.4)A	A	A	A	3.1	A	A	A					
7							2.5	2.8	3.2	3.6	3.5	3.6	3.7	3.5	A	A	A	A	2.2					
8							2.4	2.9	3.2	3.4	3.5	A	A	A	A	A	A	A	2.2A					
9						B	A	2.5	(3.3)B	3.5	3.5	A	A	A	A	A	A	A	A					
10							2.4	2.7	3.0	3.2	A	A	A	A	A	A	A	A	A					
11						1.5	2.4	2.8	3.1	A	A	A	A	A	A	A	A	A	2.0A					
12							A	3.0A	A	3.4A	A	A	A	A	A	3.3	3.0	2.7	2.1					
13						1.9	2.5	2.5	3.0	3.1	3.5B	A	A	(3.3)A	3.3	[3.2]A	(3.0)B	2.5	1.9					
14							2.2	2.7	(3.1)A	3.1	3.2	[3.3]A	3.4	(3.2)A	3.1	[3.1]A	3.1	2.6	A					
15						A	2.5	2.8	2.9	3.3	(3.5)A	3.6	3.5	[3.4]A	3.2	3.1A	2.7	2.6	(1.8)A					
16						1.6	2.3	2.5	[2.8]A	3.1	3.3	3.2	3.0	3.0	3.0	3.0	2.6	2.5	A					
17							2.2	2.8	3.0	3.3	3.2	(3.5)A	3.4	3.4	3.1	3.0	2.9	2.4	A					
18							2.3	2.5	2.9	3.2	3.2	A	A	3.1	A	A	A	2.6	A					
19						1.6F	2.5	[2.7]A	2.9	3.0	3.1	3.2	A	A	A	A	A	A	A					
20						A	A	A	3.0	3.2	A	A	A	A	A	3.2	3.1	2.6	A					
21							A	A	2.8	A	A	3.2A	3.4	3.3	3.2	3.2	A	A	A					
22							C	2.6	2.8	A	A	A	A	A	A	A	A	A	A					
23							2.0	2.6	2.9	3.0	3.1	3.1	(3.2)A	(3.2)A	[3.1]A	3.0	2.6	A	A					
24							2.0	2.6	3.0	A	>3.2B	>3.4B	B	A	A	3.0	C	C	C					
25							2.3	2.6	2.8	3.2	3.3	3.2	3.3	3.3	3.2	(3.0)A	A	A	A					
26							A	A	2.9	3.2	3.2	A	A	A	A	3.2	2.8	2.6	A					
27							C	C	C	3.2	3.3	3.2	3.2	A	A	A	A	A						
28							A	2.8	A	A	A	A	A	A	3.2	3.0	2.7	2.5	1.6					
29							A	2.5	A	A	A	A	A	A	A	3.3A	2.8	2.5	1.6					
30							2.1	2.6	[2.8]A	3.0	3.3	A	A	3.5A	3.4	3.0A	2.8	2.5	A					
31							2.2	2.5	2.9	A	A	A	A	A	A	A	A	A	A					
Mean Value						1.7	2.4	2.7	3.0	3.2	3.3	3.4	3.4	3.3	3.2	3.1	2.9	2.6	1.9					
Median Value						1.6	2.3	2.7	3.0	3.2	3.3	3.4	3.4	3.3	3.2	3.1	2.8	2.6	2.0					
Count						4	20	26	26	24	19	14	13	15	14	18	14	15	8					

foE

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

K 6

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

IONOSPHERIC DATA

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

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

Kokubunji Tokyo

Lat. 35° 42.4' N
Long. 139° 29.3' E

Jul 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	3.6	2.5	2.8	3.5	4.2	2.5Y	3.0	7.0	7.0	6.9	9.5	5.0	5.5	5.4	6.5	5.4Y	G	4.5	5.0	4.3	3.9F	3.0	4.0	3.9
2	3.5	4.7	4.8	7.6	5.0	2.7Y	4.5	7.0	5.0Y	5.0	7.0	7.0	6.1Y	7.0	7.0	4.4	4.5	7.0	7.1	6.9	4.4	4.7	4.5	5.7
3	6.4	7.0	5.0	3.4	3.0	3.0	3.4	5.9	5.0	7.0	6.9	7.0Y	7.0Y	6.7	7.4	10.0	4.4	5.0	5.5	7.2	8.5F	7.1F	7.2F	4.0F
4	5.0F	7.0F	7.0F	4.4	5.5F	4.8	4.0	5.5	7.1	7.5	9.9	8.5	6.3	8.6	9.0	3.7	7.0	6.7	3.5	3.2	2.5	7.0	3.9F	3.9F
5	4.3F	4.0	3.3	3.5	3.9	2.9	3.4	7.3Y	6.5	7.0	6.8	3.8	7.0	8.7Y	7.0	5.8	4.1	8.3	7.0	4.8F	8.6F	5.0F	4.9F	4.8
6	3.8	3.1	4.0	2.9	3.4	3.8	3.5	5.5	5.6	10.0	8.4	7.5	10.0	8.4	9.9	7.6	7.4	10.0	4.0	10.0	10.0	7.6	6.0	4.8
7	5.0	5.0	3.7	2.8	5.0	1.9	3.5	4.5	3.8	G	4.0	5.2	6.8	10.0	8.5	7.0	6.1	5.6	2.7	6.0	4.7	3.8	4.2F	4.5
8	5.0	5.0	7.0	2.7	2.6	2.7Y	4.4	4.4	5.7	6.3	7.2	5.0	5.5	7.2	5.0	5.9	7.0	4.5	3.5	3.5	3.8	8.5	4.0F	4.3
9	3.7	3.6	3.0	3.2	3.3	B	4.3	7.0	G	7.0	7.2	5.1Y	6.7	7.1Y	3.8	5.5	6.2	4.5	4.0	5.3Y	4.5	3.5	3.5	3.3
10	3.0	4.5Y	5.9	4.0	2.9	2.5Y	G	4.2	4.7	7.0Y	6.0	6.7	8.5	7.5	6.0	7.3	4.5	5.0	5.7	4.5	3.2	E	2.8	4.5
11	3.5	6.0	5.5	6.0	4.5	3.5	3.9	4.4	5.6	6.3	7.6	8.6	4.0	7.0	6.7	5.5	7.5	7.3	3.5	3.5	3.0	3.0	3.2	4.0
12	4.4	5.6	7.0	4.6	3.8	4.5	3.5	4.5	4.2	5.8	6.5	7.2	6.5	7.0	3.0	7.2	9.8	2.9	4.0	5.4	4.3	4.0	4.5	5.8
13	5.4	5.9	4.0	3.0	2.9	2.7	4.0	3.7	3.6	6.5	B	4.2	3.7	4.5	G	(4.2)Y	3.5	7.2	10.0	7.0	4.9	2.8	2.5	3.9
14	E	E	2.9	2.7	2.0	2.7	4.5	6.5	7.2	10.0	8.6	7.4	6.7	5.6	7.6	4.7	6.0	7.0	6.5	2.9	2.8	8.6	8.4	4.5
15	7.0	7.2	7.0	5.4	4.3	3.5	4.5	8.4Y	5.5	6.9	7.2	8.5	8.6Y	8.4	6.1	5.5	3.6	4.4	4.5	3.8	2.9	3.3	6.5	5.9
16	6.9	7.2	3.5	3.0	2.9	2.4	4.2	7.0	5.7	4.4	4.5	9.9	6.1	7.2	8.5	7.0	3.9	7.0	10.0	7.0	10.1	5.3	3.9	3.5
17	3.5	4.0	3.8	3.0	4.5F	4.2	7.2	7.1	4.2	5.5	5.7	7.2	8.4	6.5	8.0	6.9	7.2	8.9	7.0	8.6	8.4F	8.4	6.8	7.0
18	9.5	6.5	7.0	5.0	3.0F	3.9	7.0	7.0	9.5	8.3	9.9	8.5	10.2	6.6	6.9	7.5	5.4	7.0	5.9	8.5	9.0F	7.0	6.9	8.6F
19	5.5	3.0	2.7	2.7	4.3	4.0	5.0	7.0	5.6	7.0	5.0	5.0	9.5	7.5Y	9.5	7.4	8.0	7.5	6.0	6.9F	5.9F	5.5	5.0	3.8
20	5.5	3.4	2.9	2.1	4.4	2.7	5.0	5.0	5.6	8.5	6.8	7.1	7.2	5.7	5.8	4.4	5.2	5.0	7.0	7.0Y	7.0	3.4F	5.0	3.4F
21	7.0	4.8F	5.0	5.7	7.0	7.2	7.2F	7.2	8.5	7.2	5.0	5.0	4.4	7.2	5.4	7.2	7.0	6.9	7.0	5.0F	2.7	2.0	2.8	3.0
22	4.5	3.0	C	2.2	4.2	C	C	4.4	7.2	5.6	10.6	7.0	7.2	10.0	10.0	5.0	6.0	9.4	7.2	6.5	5.5	4.2	4.7	4.7
23	4.4	4.5	4.9	4.5	4.5	3.7	3.1	4.5	8.0	7.2	8.0	8.5	10.7	9.0	9.5	10.2	7.4	4.5	3.2	4.5	3.0	6.0	4.5	8.6
24	6.0	4.7	4.5	3.0	2.9FY	3.1	3.7	4.7Y	5.0	4.8	G	G	4.8Y	9.9	5.5	3.3	C	C	C	4.2	C	C	C	C
25	4.5	7.0	4.7	5.0	5.5	4.4	3.2	3.4	7.1	9.0	7.4	9.0	10.1	9.5	10.4	10.1	10.0	9.0	9.5	7.4	5.0	4.3	7.2	6.0Y
26	6.1	3.4	4.5	3.0	3.4	3.1F	4.8	4.8	4.5	7.6	10.1	7.9	10.5	4.7	5.6	5.5	7.5	7.9	6.5	7.5	7.0	7.7	5.8	4.3
27	4.8	3.3	4.4	3.3	4.7	5.4	C	C	C	8.5	10.4	10.0	10.7	4.4	4.7	4.5	4.5	4.9	6.5	7.9	7.5	3.5	4.2	4.1
28	7.1	7.0	7.4	6.0	6.8	6.0	4.8	9.5	7.9	7.0	10.0	7.9	6.0	7.9	4.5	4.2	8.0	10.0	7.7	7.0	7.0	7.6	7.4	7.2
29	7.0	6.5Y	5.5	3.9	7.0	5.0	7.4	4.5	12.0	10.7	10.0	10.2Y	7.8	7.1	7.6	5.8	6.5	6.5	6.8	7.8	8.4	7.0Y	7.0	6.5
30	7.5	7.5	9.0	7.5	7.4	7.7	8.5	10.0	8.5	9.6	5.6	5.9	5.0	4.8	6.5	5.0	6.5	4.8	3.5	3.0	7.0	4.5	5.5	8.9
31	7.0	4.5	5.2	3.5	3.0	2.9	3.3	4.2	3.1	6.2	5.5	7.5	7.0	10.2Y	7.5	7.1	8.5	7.3	7.0	10.0F	10.6Y	10.0F	9.0	6.0
Mean Value	5.1	5.0	4.9	4.0	4.3	3.7	4.6	5.9	6.2	7.2	7.5	7.1	7.2	7.3	7.0	6.2	6.3	6.6	5.9	6.0	5.9	5.5	5.2	5.1
Median Value	5.0	4.7	4.8	3.5	4.2	3.5	4.2	5.5	5.6	7.0	7.2	7.2	7.0	7.2	6.9	5.8	6.4	7.0	6.2	6.5	5.2	4.8	4.8	4.5
Count	31	31	30	31	31	29	29	30	30	31	30	31	31	31	31	31	30	30	30	31	30	30	30	30

fEs

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

K 8

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

IONOSPHERIC DATA

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

(M3000)F2 Sweep 1.0 Mc to 17.2 Mc in 2 min ☐ Manual ☒ Automatic

K 9

72.3
3.00

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

IONOSPHERIC DATA

Kokubunji Tokyo

Lat. 35° 42.4' N
Long. 139° 29.3' E

Jul. 1955

fminF

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	1.5	1.5	E	1.0	2.0	2.5	4.0^{A}	5.0^{A}	3.5	(4.0)^{A}	4.5^{A}	4.3^{A}	4.7^{A}	6.0^{A}	5.8	3.5	3.4^{A}	2.7	4.0^{A}	1.5	2.6	3.5$^{A}_{F}$	2.2$^{A}_{F}$
2	2.1	2.3	2.2^{A}	1.4	1.0	2.3	3.2	4.1^{A}	3.7	A	A	A	4.6^{A}	5.5^{A}	6.0^{A}	4.3^{A}	3.5	A	A	6.0^{A}	3.2	2.2	2.0	A
3	A	A	A	1.8	2.2	2.1	2.7	5.7^{A}	4.4^{A}	A	A	A	4.9^{A}	A	A	A	3.7^{A}	2.8	2.4	1.5	1.9	2.0	(2.0)$^{A}_{F}$	2.0
4	A	AF	2.5$^{A}_{F}$	2.0$^{A}_{F}$	(2.2)$^{A}_{F}$	2.3	2.6	4.9^{A}	5.6^{A}	A	A	A	5.0^{A}	A	A	4.5	3.5	4.1^{A}	2.5	2.4	1.4	2.2^{A}	1.5	2.3
5	2.1	(1.9)^{A}	1.7	1.4	1.5	2.2	2.6	3.2	4.6^{A}	A	A	A	A	5.5^{A}	4.9^{A}	5.1^{A}	4.0^{A}	(5.5)^{A}	5.4^{A}	3.3^{A}	(2.4)^{A}	1.4	2.1	2.1
6	1.6	2.1	1.4^{F}	1.4	1.1	2.0	2.8	4.3^{A}	5.5^{A}	A	A	5.5^{A}	A	A	A	A	5.5^{A}	(4.4)^{A}	3.3	A	A	5.2^{A}	2.5	3.4^{A}
7	A	2.1	1.5	1.4	1.1	2.1	2.9	3.5	3.6	3.6	4.0	5.3	5.7^{A}	A	A	A	5.4^{A}	5.0^{A}	2.2	5.1^{A}	A	2.5	2.1	2.1
8	2.9^{A}	A	A	1.7	1.2	1.8	2.5	3.5	4.5^{A}	5.5^{A}	(5.2)^{A}	5.0^{A}	5.1^{A}	(4.6)^{A}	4.0^{A}	5.0^{A}	5.5^{A}	4.0^{A}	2.4	2.1	2.2^{F}	4.0^{A}	2.1	2.1
9	2.2	2.0	1.5	1.5	1.7	2.0	4.0	3.5	3.7	A	A	A	A	A	4.1	4.5^{A}	4.0	2.9	2.3	2.1	2.3	1.8	1.9	1.8
10	2.0	1.6	2.4^{A}	1.5	1.4	1.9	2.5	3.5	4.0	4.0	6.0^{A}	5.1^{A}	A	A	6.0^{A}	(5.0)^{A}	3.9	4.5^{A}	5.0^{A}	2.8^{A}	1.8	1.5	2.0	2.0
11	2.1	2.4	1.5	2.5^{A}	1.3	2.5	2.8	3.5	5.2^{A}	5.5^{A}	A	A	4.1	6.5^{A}	(5.5)^{A}	4.5^{A}	4.2^{A}	4.5^{A}	2.5	2.0	2.1	2.0	1.6	2.1
12	2.0	1.6	2.1	1.5	1.5	2.3	2.7	3.3	3.6	A	A	A	5.5^{A}	(5.4)^{A}	5.3	A	A	2.9	2.8	2.5^{A}	2.3	2.8^{A}	2.4^{A}	2.3
13	2.3	2.2	1.3	1.7	1.4	2.1	3.3	4.2	4.7	A	B	4.3	4.2	B	B	B	4.8^{A}	4.6^{A}	4.0^{A}	5.0^{A}	1.6	1.5	2.1	2.5^{A}
14	1.6	1.4	1.4	1.4	2.5^{A}	2.0	4.5	5.0^{A}	A	A	A	6.1^{A}	6.0^{A}	5.0^{A}	(4.3)^{A}	3.6	5.4^{A}	5.7^{A}	4.8^{A}	2.1	1.5	3.5^{A}	(2.8)^{A}	2.1
15	(2.8)^{A}	3.5^{A}	A	A	2.1$^{A}_{F}$	2.1	3.2	4.7^{A}	4.0	A	A	4.7^{A}	5.0^{A}	A	A	4.9^{A}	3.5	3.0	3.7^{A}	1.6	1.5	1.7	3.5^{A}	(2.9)^{A}
16	2.3^{A}	A	A	1.4	1.0	1.9	3.0	5.0^{A}	3.2	3.6	4.0	A	A	A	A	6.1^{A}	3.2	4.5^{A}	A	A	4.0$^{A}_{F}$	2.2^{F}	2.2^{F}	2.0
17	1.4	(1.7)^{A}	2.0	1.4	1.5	3.1^{A}	4.6^{A}	(4.1)^{A}	3.6	4.0	4.3^{A}	4.8^{A}	(5.4)^{A}	6.0^{A}	A	A	5.5^{A}	4.5^{A}	5.7^{A}	2.5^{F}	(4.1)$^{A}_{F}$	(3.1)$^{A}_{F}$	2.1	3.4^{A}
18	(3.6)^{A}	3.8^{A}	3.5^{A}	(2.5)$^{A}_{F}$	1.5	2.1	4.8^{A}	5.5^{A}	A	A	A	A	A	A	5.9^{A}	(4.8)^{A}	3.7	4.5^{A}	3.2^{A}	2.3	6.0$^{A}_{F}$	4.5$^{A}_{F}$	5.2^{A}	A
19	A	1.4	E	1.4	1.1	1.7	3.1	3.2	4.4^{A}	4.1	4.1	4.0^{A}	(4.5)^{A}	5.0^{A}	A	A	A	A	4.9^{A}	4.0$^{A}_{F}$	2.7$^{A}_{F}$	4.0^{A}	2.7$^{A}_{F}$	2.2
20	2.5	2.2	1.3	E	1.7	2.2	3.4^{A}	3.2	5.0^{A}	A	A	A	A	A	A	4.7^{A}	4.8^{A}	2.9	(4.0)^{A}	5.2^{A}	2.4^{A}	1.5	1.6	1.7
21	(1.6)^{A}	1.6	1.6	(1.4)^{A}	1.3	A	A	2.6	4.0	5.2^{A}	4.0^{A}	(3.8)^{A}	3.6	4.6^{A}	5.0^{A}	A	A	2.6	5.0^{A}	2.5^{A}	1.5	1.5	1.6	1.5
22	2.5	2.0	(1.7)^{C}	1.4	3.7^{A}	C	C	2.8	A	5.0^{A}	A	A	A	7.9^{A}	A	A	5.4^{A}	(4.8)^{A}	4.2^{A}	5.4^{A}	A	A	2.2	(2.1)^{A}
23	2.0	2.5	1.5	1.5	1.7	2.0	2.3	3.7	A	A	A	A	A	A	A	A	5.1^{A}	2.8	2.4	2.2^{F}	2.0	2.5^{A}	1.6	2.2^{A}
24	1.5	1.6	1.6	1.5	1.7	1.6	2.5	4.4	A	6.0^{A}	B	B	A	A	3.6	B	C	C	C	A	C	C	C	C
25	2.5^{A}	2.5^{A}	2.5	2.4	2.5	2.1	2.3	2.8	A	A	4.2^{A}	A	A	A	A	A	A	A	A	A	4.0^{A}	1.6	2.5^{A}	2.5^{A}
26	(2.2)^{A}	1.8	1.2	1.5	1.7	2.1	2.5	2.8	3.4	A	A	A	A	5.0	5.0^{A}	4.2^{A}	A	A	4.5^{A}	2.4^{A}	1.6	(2.8)^{A}	3.9^{A}	2.0
27	2.5^{A}	1.7	1.7	1.2	1.5	1.9	C	C	C	A	A	A	A	3.6	3.4	3.4	3.0	4.0^{A}	A	A	3.8^{A}	1.9	2.5^{A}	2.5^{A}
28	A	A	A	A	A	2.5	3.0	(4.6)^{A}	4.1^{A}	4.0	A	A	4.0	(4.2)^{A}	4.5^{A}	3.6	4.0^{A}	A	A	4.0^{A}	5.0^{A}	A	1.5	A
29	A	A	2.6^{A}	2.5^{A}	1.2	3.2^{A}	2.9	A	A	A	A	A	A	A	A	5.0^{A}	4.7^{A}	A	A	A	A	1.6	2.5	1.5
30	1.6	3.6^{A}	A	A	AF	2.5	A	4.0	5.9^{A}	5.0^{A}	5.3^{A}	5.0^{A}	4.5^{A}	4.0	5.8^{A}	4.2^{A}	(3.8)^{A}	3.5^{A}	2.2	2.2	2.5	2.5	2.2	A
31	A	1.7	2.6	2.5	1.1	2.1	2.6	3.0	3.5	5.6^{A}	4.5^{A}	A	A	A	A	4.4^{A}	(4.0)^{A}	3.5^{A}	(3.1)^{A}	2.7^{AF}	3.5^{A}	A	A	A
Mean Value	2.2	2.1	1.9	1.7	1.6	2.2	3.0	3.9	4.3	4.6	4.5	4.8	4.8	5.2	5.0	4.6	4.3	4.0	3.6	3.1	2.7	2.5	2.4	2.3
Median Value	2.1	2.0	1.6	1.5	1.5	2.1	2.8	3.7	4.1	4.6	4.2	4.9	4.8	5.0	5.0	4.5	4.0	4.0	3.2	2.5	2.3	2.2	2.1	2.1
Count	24	25	25	28	29	29	27	29	23	14	11	12	16	15	16	19	25	24	24	25	26	27	29	25

fminF

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

K 10

19

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

IONOSPHERIC DATA

Jul. 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	1.4	1.4	1.2	E	1.0	1.4	1.4	1.4	1.5	1.5	2.1	2.3	2.1	1.6	2.1	1.8	2.1	1.5	1.5	1.4	1.4	1.4	1.4	1.5
2	2.1	1.4	1.3	1.0	E	1.4	2.2	1.4	2.1	2.1	2.1	2.1	2.0	2.0	1.7	2.2	2.0	2.2	1.5	1.4	1.5	1.5	1.2	1.5
3	1.4	1.4	1.4	1.0	E	1.4	1.5	2.1	1.5	1.4	1.6	2.0	1.5	1.5	1.6	1.5	1.4	1.5	1.4	1.4	1.5	1.4	1.5	1.4
4	1.4	1.4	E	E	E	1.4	1.4	1.4	1.5	2.0	2.1	2.1	2.3	2.3	2.1	1.5	1.9	1.5	1.5	1.3	1.5	1.2	1.2	1.2
5	1.3	1.4	1.0	E	E	1.4	1.4	1.4	1.3	1.4	2.2	2.2	2.4	2.2	1.9	2.1	1.5	1.5	1.4	1.4	1.5	1.5	1.4	1.4
6	1.4	1.4	E	E	E	1.4	1.4	1.5	2.1	1.5	2.4	2.8	2.2	1.8	2.1	2.1	1.6	1.6	1.5	1.5	1.4	1.5	1.4	1.5
7	1.4	1.3	E	1.3	E	1.5	1.5	1.5	1.5	2.1	2.0	2.1	1.6	2.0	2.0	2.1	1.7	1.5	1.4	1.4	1.5	1.5	1.4	1.3
8	1.0	1.4	1.2	E	E	1.4	1.4	1.5	1.4	2.1	1.4	1.5	2.5	1.5	2.2	2.1	2.1	1.5	1.4	1.4	1.4	1.4	1.2	1.2
9	1.5	1.4	1.2	1.4	E	B	2.1	1.6	1.4	2.1	2.1	2.1	2.8	2.1	2.1	2.1	1.5	1.5	1.4	1.4	1.5	1.5	1.4	1.5
10	1.4	1.4	1.4	E	E	1.5	1.5	1.5	1.5	1.5	2.1	2.1	2.1	2.0	2.1	1.5	1.5	1.5	1.5	1.4	1.5	E	1.4	1.4
11	1.4	1.3	1.2	E	E	1.4	1.4	1.4	1.5	1.5	1.5	1.5	2.8	1.5	1.5	1.5	1.5	1.6	1.5	1.4	1.5	1.5	1.5	1.4
12	1.4	1.4	1.4	1.3	E	1.3	1.5	1.5	1.5	2.1	2.3	2.1	2.1	2.1	1.8	2.2	2.2	1.5	1.5	1.5	1.5	1.6	1.4	1.4
13	1.4	1.4	1.3	1.0	1.4	1.4	1.5	1.5	1.5	1.5	2.3	2.1	1.7	2.1	2.1	1.5	1.8	1.5	1.5	1.4	1.6	1.5	1.6	1.5
14	E	E	1.3	1.4	1.5	1.4	1.4	1.5	1.5	2.1	1.5	2.1	1.5	2.2	2.1	2.1	1.5	1.4	1.4	1.4	1.5	1.4	1.3	1.3
15	1.4	1.4	1.4	E	E	1.4	1.5	1.5	1.5	2.3	2.3	2.3	1.5	1.5	1.5	1.4	1.5	1.4	1.4	1.4	1.5	1.3	1.3	1.4
16	1.4	1.4	E	E	E	1.4	1.4	1.4	1.5	1.6	1.4	1.5	1.5	1.4	1.3	1.5	1.5	1.4	1.4	1.5	1.5	1.4	1.4	1.2
17	1.4	1.4	1.2	E	E	1.4	1.4	1.4	1.4	1.5	1.4	1.4	1.5	1.5	2.0	1.4	1.5	1.4	1.4	1.4	1.4	1.5	1.4	1.2
18	1.4	1.4	E	E	E	1.4	1.2	1.4	2.1	2.1	1.5	1.4	2.1	2.1	2.1	2.1	1.4	1.5	1.4	1.4	1.5	1.4	1.5	1.4
19	1.4	1.3	E	E	E	1.4	1.4	1.5	1.4	1.4	1.5	1.5	1.5	2.1	2.3	2.2	1.3	1.5	1.4	1.5	1.5	1.2	1.5	1.5
20	1.4	1.4	1.4	E	1.0	1.4	1.4	1.4	1.5	1.5	1.9	2.0	2.0	2.0	2.0	2.1	2.0	1.5	1.4	1.4	1.5	1.5	1.5	1.5
21	1.5	1.0	1.3	1.4	E	1.2	1.3	1.4	1.5	1.5	1.4	1.7	1.6	1.6	2.9	1.5	1.5	1.2	E	1.3	1.5	1.6	1.5	1.5
22	1.4	1.5	[1.6]C	1.7	1.5	C	C	1.4	2.1	2.1	2.1	2.1	1.6	2.1	2.1	1.4	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5
23	1.4	1.5	1.1	1.3	1.4	1.4	1.4	1.4	1.7	1.4	1.7	1.6	2.1	2.1	2.1	1.6	1.5	1.1	1.5	1.5	1.5	1.5	1.5	1.5
24	1.3	1.5	1.2	1.5	1.3	1.5	1.7	1.5	1.5	2.1	2.2	2.1	2.5	2.1	1.5	2.2	C	C	C	1.6	C	C	C	C
25	1.5	1.5	1.0	E	1.5	1.5	1.4	1.5	1.5	1.6	2.2	1.5	2.1	2.1	2.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
26	1.4	1.4	1.0	1.0	E	1.5	1.5	1.5	1.5	1.5	2.1	2.0	2.1	2.0	1.9	1.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
27	1.5	1.5	1.0	1.0	1.1	1.5	C	C	C	1.5	1.5	1.8	2.0	2.1	1.6	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.5	1.5
28	1.2	1.4	1.0	1.0	1.0	1.5	1.0	1.5	1.5	1.5	1.5	2.0	1.6	2.1	1.9	1.5	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.6
29	1.4	1.4	1.0	1.0	E	1.5	1.4	1.5	1.6	2.0	2.1	2.2	2.1	1.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4
30	1.3	1.0	1.0	1.0	E	1.4	1.5	1.5	1.5	1.5	1.4	1.5	1.8	2.0	2.0	1.8	1.5	1.5	1.5	1.5	1.5	1.4	1.5	1.5
31	1.4	1.4	1.3	1.0	1.0	1.5	1.4	1.5	1.4	1.7	1.5	1.5	2.1	1.5	2.1	1.5	1.5	1.4	1.5	1.5	1.2	1.4	1.5	1.5
Mean Value	1.4	1.4	1.2	1.2	1.2	1.4	1.5	1.5	1.6	1.7	1.9	1.9	2.0	1.9	2.0	1.8	1.6	1.5	1.5	1.4	1.5	1.5	1.4	1.4
Median Value	1.4	1.4	1.2	1.0	E	1.4	1.4	1.5	1.5	1.5	2.0	2.0	2.1	2.0	2.0	1.6	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.5
Count	31	31	31	31	31	29	29	30	30	31	31	31	31	31	31	31	30	30	30	31	30	30	30	30

fminE

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

K 11

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

IONOSPHERIC DATA

Kokubunji Tokyo

Lat. 35° 42.4' N
Long. 139° 29.3' E

Jul. 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	(60)F	60	60	60	90F	(60)J	80	30	A	U	A	U	80	50	B	B	70	70	60	70	40P	70	60F	(60)F
2	(60)FF	(60)P	60F	70F	60F	70	70	80	(80)J	A	A	A	U	A	A	40	90	A	A	70	70P	70	60	A
3	A	A	A	70F	60VF	70	40	60	B	A	A	A	U	A	A	A	80	70	50	60	(70)J	50FP	(90)JF	80F
4	F	AF	(50)F	80F	90F	60	50	80	A	A	A	A	70	A	A	(40)J	50	80	80P	60	80	50F	(60)FF	80P
5	60	60F	60F	60	70	70	80	50	30P	A	A	B	A	A	A	A	50	A	80	80	[80]A	90	(60)JF	(110)JF
6	50F	70F	60	110	70	80	40	70	B	A	A	A	A	A	A	A	A	A	70	A	A	50	60	70
7	(80)F	70F	70F	80	80	70	50	40	(40)J	U	U	A	A	A	A	A	60P	60	80	60	100	80	70F	80
8	90F	70	40	80F	80	90	70	90	50	(70)J	[80]A	80	U	A	50	50	60P	80	90	50	90	60	60	80
9	80	40	70	70F	70	60	A	U	G	A	A	A	A	A	A	A	U	50	50	70	B	(80)P	50	60
10	60	(60)JF	50	60F	80	50	80	40	60P	A	A	50	A	A	A	A	60	50	50	40	60	60	60	90
11	60	(80)F	60F	60F	60	60	100	U	A	A	A	A	B	A	A	60	60	70	50	100	100	70	70	60
12	100	(70)B	80	60	70	50	60	U	U	A	A	A	A	A	A	A	A	80	50	50	70	80	70Z	50
13	90	80	90	50	80	60	50	U	B	A	B	B	B	B	B	B	B	A	50	A	100	60	70	80
14	90	80	80	50	60	40	70	50	A	A	A	A	A	40	A	A	A	90	50P	70P	60	80	[70]A	60
15	[80]A	(100)JF	[80]A	60	(70)F	70	(50)J	A	U	A	A	A	A	A	A	A	U	60	60	60	100	80	70	60
16	(70)J	A	60F	80F	60	50	50	A	G	U	50	A	A	A	A	A	60	40	A	A	80P	60	70	70
17	70	70	60	60F	90F	100	A	A	50	(50)J	60	40	A	A	A	A	A	80P	A	100	70F	[60]A	60F	(80)F
18	[80]A	(70)BF	(50)F	[60]AF	60F	50	A	80	A	A	A	A	A	A	A	A	60	A	90	90	[80]AF	(60)F	60	[60]A
19	70F	80	60	60 2F	90F	U	50	80	50	U	G	U	A	A	A	A	A	A	60	40	80	50	60P	80
20	[70]A	60F	60F	50	60	60	80	40	80	A	A	A	A	A	A	60	60P	80	70	(70)P	(70)J	70	80	90
21	[80]A	(80)J	(60)JF	[60]A	60F	A	A	90	70	A	60	A	U	U	A	A	A	90	60	60	60	70	50	50
22	50	50F	[60]F	70P	50	C	C	50	A	A	A	A	A	A	A	B	80	[80]A	70	[70]A	70	50P	70	(90)JF
23	100F	(90)JF	40F	70	70	70	40	50	A	A	A	A	A	A	A	A	A	80	70	70	90	50F	80F	100F
24	70F	(70)JF	70P	80	(60)F	60	60P	100	A	(50)P	B	B	B	A	60	B	C	C	C	C	C	C	C	C
25	60F	(80)JF	(80)F	(70)JF	70	60F	70	50	A	A	U	A	A	A	A	A	A	A	A	A	70	80	50	(60)JF
26	[60]AF	(50)JF	50F	(60)JF	70F	70F	30	60	40	A	A	A	A	60	A	U	A	A	A	(80)J	60	[60]A	70	(60)F
27	F	50F	70	80	(80)JF	80	C	C	C	A	A	A	A	40	U	U	30	30P	[60]A	80	70	40	60	F
28	A	A	A	A	A	90	90	[70]A	50	50	A	A	U	A	40	U	60	A	A	(60)J	(60)J	A	60F	A
29	A	A	(70)JF	60F	(80)F	80	40	60	A	A	A	A	A	A	A	40	50	A	A	A	A	70	(60)JF	(80)JF
30	90F	(80)A	A	A	AF	60	A	60	A	A	A	A	U	U	A	90	[70]A	50P	80	80	60	80F	60F	A
31	AF	(70)F	100F	60F	50F	60	30	50	40	A	U	A	A	A	A	70	[60]A	40	A	80F	70	A	A	A
Mean Value	70	70	60	70	70	70	60	60	50	60	60	60	80	50	50	60	60	70	70	70	70	70	60	70
Median Value	70	70	60	60	70	60	60	60	50	50	60	50	80	40	50	60	60	70	60	70	70	60	60	80
Count	26	26	28	29	29	28	24	23	12	4	4	3	2	4	3	8	18	20	22	25	27	28	29	25

yp F2

Sweep 1.0 Mc to 19.2 Mc in 2 min ☐ Manual ☒ Automatic

K 12

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

IONOSPHERIC DATA

Jul. 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	5.1 F	F	F	F	4.5 F	4.4 F	5.9	5.1	5.3	5.0	5.5	[5.8] A	6.0 J	7.0	7.8	7.8 P	8.4	8.2	7.4	7.0	7.0	7.1	5.3	BS
2	F	F	F	F	F	3.8 F	5.1	6.3	5.9	[6.0] A	6.0	A	A	A	6.6	7.4	7.8	7.5	8.0	8.4	8.0	7.4	5.5	5.7
3	5.4	F	F	4.8 F	5.0 P F	3.8	4.8	6.2	6.4	5.5	6.2	6.0	[6.5] A	7.0	6.8	7.4	(8.2) P	7.3	6.9	7.6	5.9	5.5	AS	A
4	A	5.8	[5.4] F S	5.1 F	5.0 F	4.6 F	5.7	6.9	5.7	A	A	6.3	A	A	7.3	8.2	8.2	A	A	A	6.9	6.1	5.8	F
5	FS	F	F	F	F	4.8	5.2	6.1	6.0 J	5.6	5.5	[5.8] A	6.2	A	A	C	C	C	A	A	7.3	7.0	5.8	5.3
6	A	7.4 J	6.9 F	6.0 F	[5.1] F	4.2	5.5	5.7	5.9	6.5	A	A	A	A	8.9	8.5	[8.2] A	8.0	8.0 P	8.3	8.3	7.7	6.7	5.9
7	6.3 F	6.5	6.9 P	6.3 J	6.3	6.3	6.0 J	5.1	5.6	5.9	A	A	A	A	A	9.3	9.4	9.3	8.7	7.8	7.4	7.5	7.0	6.5 F
8	7.0	F	F	6.5 F	6.4	6.2	5.8	6.3 H	8.6	8.5	6.8	A	A	7.9 J	8.9	8.9	[8.9] A	8.9	9.2 P	9.5	7.9 P	6.5	6.5	6.4 F
9	6.5	7.0 F	[6.4] F	5.8 F	5.1 F	6.0	7.0	6.7	4.9	5.4	5.0	4.8	5.4	5.6 J P	6.4	5.9	6.3	[5.9] A	5.5	5.7	[5.8] A	5.8 J	5.9	6.0
10	5.9	5.8 F	5.9	5.5 F	4.8 H	4.4	5.1	6.3	6.0	6.8	A	A	6.6	6.9	7.4	7.9	7.7	[8.2] A	8.6	7.9	6.6	6.6	6.9	6.5
11	6.3 F	6.4 F	6.3 H	6.2	6.1	5.9	5.4	5.6	6.4	6.6	5.8	5.6	5.9	B	A	A	5.8 J	B	A	5.8	5.3 H	5.9	(6.5) P	[6.2] A
12	5.8	5.3	5.2 F	5.5 F	4.7	4.4	5.0	4.5	6.0	(6.7) J P	6.5	B	5.4	A	A	A	A	7.4	6.5	6.3	6.9	6.9	6.5 F H	6.5 F H
13	6.6 F	[6.8] A	7.1	5.7 F	4.5	4.6 F	5.1	[5.4] A	5.7	A	A	4.8	5.6	6.0 J	5.0	5.3	5.5	5.2	5.2	5.5	6.3 J	5.8 F E	F	F
14	F	5.5 F	5.5 F	5.1 F	4.5 F	3.9	4.6	5.6	6.0	5.9	5.9	6.0	6.3	7.5	7.2	6.8	6.4	7.2	7.5	7.6	[7.0] C	6.5	5.1	F
15	F	6.0 F	F	F	5.6	3.5 F	4.4	4.8	6.1	6.3	6.4	6.4	6.6	6.4	6.4 J	[6.3] C	6.2	6.5	6.7	6.7	5.4	6.0 Z	5.9	6.1
16	6.3	6.5	6.4	5.8 V	4.9 V	5.3	5.9	5.1	5.1	[5.6] A	6.1	5.9	6.3	6.4	A	A	A	A	A	A	6.9	6.5	5.6	[5.5] F
17	5.4 F	4.4 J F	4.2	4.3 F	4.4 F	3.9	4.4	5.5	7.3	[7.0] A	6.6	6.0 J	6.0 J	[6.7] A	7.4	7.3	A	7.3	8.9	(9.5) P	7.0	4.9	A	F
18	F	A	F	F	F	4.0 F	4.6	5.9	6.7	6.1	A	A	6.5	7.0	A	A	A	7.8	[8.2] A	8.5	9.9	6.9	A	F
19	F	F	F	F	F	A	4.6	5.8	6.0	5.2	5.2	5.6	[5.8] A	5.9	5.8	5.5	6.0	6.7	7.7	7.9	8.6	6.5	4.5	4.7 J
20	5.1 F	F	F	5.2 V	4.6 F	4.2	4.7	5.6	[6.0] M	6.4	A	A	5.1	5.7	6.0 P	5.9	6.0	6.8	8.8	10.5	[7.5] A	4.5	4.4	F
21	F	F	A	F	F	3.8 F	5.3	6.1	C	C	C	C	C	C	C	C	C	C	7.8	8.0	7.4 J	6.9	4.6	4.6
22	F.	F	F	4.6 F	4.4 J F	4.1	5.4	6.2	5.4	5.1 H	5.7	5.5	A	A	5.6	A	A	8.3	7.4	7.0 J S	5.9	5.9	5.4	4.4
23	F	F	F	F	F	3.8	4.6	6.0	6.5	6.0 H	A	C	A	6.3	A	A	C	A	A	(6.0) P	C	C	5.1 J F	5.0
24	4.8	4.5	4.5	4.2	4.1	3.6	4.1	5.9	7.9	5.6	A	A	A	A	A	7.7	7.3	8.0	7.8	7.8	7.8	6.9	[5.8] F	4.6
25	F	F	F	F	F	3.8 F	5.0	5.4	5.3	5.1	[5.5] A	5.9	7.2	[7.1] A	7.0	[6.8] A	6.6	6.5	6.2	6.0	6.2	6.0	5.9	5.5 F
26	F	F	F	F	F	F	3.9	5.4	6.1	A	A	A	6.8	7.8	7.2	[6.2] A	5.2	[5.4] A	5.7	6.3	7.7 F	A	A	A
27	F	F	F	F	F	F	5.2	4.7	5.6	5.9	6.4	7.4	6.4	6.5	A	A	A	A	6.0	7.5	8.3	4.7 H	5.0 F	5.0
28	F	F	F	4.6 F	F	A	3.9	5.9	6.6	5.9	5.5 H	5.2	6.0 J	6.2	6.2	6.1	6.0 J	[6.0] A	5.9	5.9	[6.2] F S	6.6	A	A
29	A	F	3.8 F	F	A	3.2	4.6	5.5	5.9	5.3	5.0	5.0	6.1	6.1 J	6.5	6.8	6.4	6.6	6.1	6.4	7.0	7.2 P	5.4 J F	5.3 F
30	[4.8] F	4.3 F H	[4.2] F	4.0 F	4.0 F	3.6 F	4.9	5.8	5.7	5.1	6.0	5.9	5.6	A	A	5.9	A	A	A	5.8	5.7	5.5	A	F
31	F	5.4 F	5.5 F	F	F	3.5 R	4.0 P	6.1	5.9	A	A	A	A	A	6.6	7.0	6.2	5.9	6.2	6.9	9.0	5.4 H	4.9	5.5 X
Mean Value	5.8	5.8	5.6	5.3	4.9	4.4	5.0	5.7	6.1	6.0	5.9	5.8	6.1	6.6	6.9	7.0	7.0	7.2	7.2	7.3	7.1	6.3	5.7	5.6
Median Value	5.8	5.8	5.5	5.4	4.8	4.1	5.0	5.8	6.0	5.9	5.9	5.8	6.1	6.5	6.7	6.9	6.4	7.3	7.4	7.2	7.0	6.5	5.8	5.5
Count	14	15	15	18	19	27	31	31	30	26	19	18	21	19	20	22	21	23	25	28	30	29	24	20

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

Jul. 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	270	340	300^{A}	290^{F}	300^{A}	250	240	240	280	370	370	[380]^{A}	390	330	330	340	300	290	300^{A}	250	250	250	240	250
2	310	300	240^{F}	300^{F}	230	240	250	240	290	[340]^{A}	(400)^{A}	A	A	A	380	370	310	330	300	260	240	230	270	270
3	300^{A}	290	300^{A}	260	230	250	240	260	240	310	400	380	[360]^{A}	340	380	360	(320)^{A}	290	300	260	300^{A}	(350)^{A}	380	A
4	A	350^{A}	350^{A}	250	260	250	280	250	(310)^{A}	A	A	(350)^{A}	A	A	380	340	A	A	A	A	250^{A}	250	250	340^{A}
5	250	280^{F}	300	290	270^{A}	240	250	250	270	350	400	[390]^{A}	380	A	A	C	C	C	A	290^{A}	250	250	200^{A}	400
6	[340]^{A}	280	290	240	230	270	220	270	310	300	A	A	A	A	310^{A}	310	[320]^{A}	340	290	290^{A}	260	250	250	300^{A}
7	300^{A}	300^{A}	270	250	280	240	230	230	280	340	A	A	A	A	A	340	330	300	290^{A}	280	300	260	240	320^{F}
8	290	300	270	250	280	250	250	290^{H}	300	280	310	A	A	A	A	300	A	A	340^{A}	260	260	290	300^{A}	330
9	300^{A}	300	250	240	310	290	250	270	370	350	540	700	470	410	350	380	350^{A}	[340]^{A}	(340)^{A}	A	A	350	390	300^{A}
10	290	300^{A}	280	240	260^{H}	290	270	300	320	300	A	A	A	400	350	340	330	[320]^{A}	300^{A}	250	250	300^{A}	290	250
11	300	320	290^{H}	290	290	300	[340]^{L}	380	350	310	510	500	510	380	A	A	350	310	A	A	300$^{A}_{H}$	340	300	[300]^{A}
12	290	300	300	290^{A}	260	260	240	240	350	350	340	350	490	A	A	A	A	330^{A}	290	320	350^{A}	250	290$^{F}_{H}$	300^{H}
13	350$^{A}_{F}$	[310]^{A}	270	(300)^{A}	350^{A}	300	(290)^{A}	[320]^{A}	340	A	A	730	450	350	560	450	390	410	370	320	300	250^{A}	300	320^{A}
14	300	300	280	250	240	230	220	270	310	340	490	420	400	340	340	300	370	340	300^{A}	290^{A}	[270]^{C}	250	340^{A}	350
15	340$^{A}_{F}$	340$^{A}_{F}$	300	250	220	250^{A}	240	(270)^{A}	[280]^{A}	290^{A}	330	380^{A}	360	370	360	[360]^{C}	360	310	290	250	250	290	300	320
16	300	290	250	250	280	240	230	220	420	[360]^{A}	310	400	360	380	A	A	A	A	A	A	270	280^{A}	250	320^{F}
17	270^{F}	290	300	300^{A}	250	240	240	290	260	[280]^{A}	300	390	400	A	A	330	300	340	290	230^{A}	200	250	[300]^{A}	350^{F}
18	360^{F}	[330]^{A}	300^{A}	250	300^{A}	260	270	290	260	330^{A}	A	A	350	340	A	A	A	(370)^{A}	[340]^{A}	300^{A}	250	210$^{A}_{F}$	[300]^{A}	400
19	300	300	300^{F}	330	300^{F}	340	310	310	260	350	410	390	[400]^{A}	400	390	420	350	340	300	270	250	250	(280)^{A}	300
20	310	310	310	250	250	250	260	250	280	250	A	A	470	440^{A}	A	390	380	340	300^{A}	230^{A}	[240]^{A}	240	340	340
21	280	340	[320]^{A}	290F	250	250	270	240^{A}	C	C	C	C	C	C	C	C	C	C	290	250	240	200^{A}	280	300
22	290	270	270	250	260	250	240	260	260	250^{H}	[280]^{A}	310	A	A	(480)^{A}	A	A	290	270	250	290	280	280^{A}	260
23	300^{F}	250	300^{F}	250	270	270	240	260	260	270^{H}	A	C	A	390^{A}	A	A	C	A	A	A	C	C	300^{A}	280
24	290	300	280	250	240	260	300	270	250	250	A	A	A	A	A	A	370	310	270	290	240	230	250^{A}	290
25	330	300^{F}	250	300	250	280	240	240	360	320	[340]^{A}	350	300	[320]^{A}	330^{A}	[340]^{A}	350	300^{A}	[300]^{A}	300^{A}	(300)^{A}	260	290	270
26	310	280	250	250	240^{F}	240	230	270	A	A	A	A	340^{A}	290^{A}	300	[340]^{A}	380	[360]^{A}	340	290	240	A	A	A
27	270	250	250	280^{A}	260	200	220	320	300	320	340	310	330	A	A	A	A	A	310	270	200^{A}	250^{H}	290	300
28	250	300^{F}	250	240^{A}	250^{F}	[260]^{A}	(270)^{A}	270	250	260	340^{H}	390	340	340	330	310	330	[320]^{A}	300	240^{A}	260	240^{A}	A	A
29	A	290^{A}	300	270	A	A	250	250	250	270	350	490	350	360	340	310	310	340	290	330^{A}	250	250	300	300
30	260	270^{H}	270	250	250	240	240	240	250	300	340	320	380	A	A	300	A	A	A	250	250	240	[270]^{A}	300
31	350^{A}	290	250	250	250	270	260	250	280	A	A	A	A	A	340	320	330	360	340	280	220	200^{H}	280	280
Mean Value	300	300	280	270	260	260	250	270	290	310	370	420	390	360	370	350	340	330	310	270	260	260	290	310
Median Value	300	300	280	250	260	250	250	260	280	310	340	390	380	360	350	340	340	330	300	270	250	250	290	300
Count	29	31	31	31	30	30	31	31	29	26	19	19	20	17	17	21	20	23	25	26	29	29	29	28

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

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

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3.7	3.3	5.9	6.5F	3.4F	2.4F	G	5.7	8.5	9.0	9.0	10.5	6.1	5.7	G	G	3.8	4.7	9.2	5.9	5.9F	3.4F	3.8F	2.3
2	2.4	2.9	3.1	3.6F	3.0	2.1	3.3	3.8	5.4	8.9	9.1	12.1	12.2	12.8	7.0	6.4	8.5	3.3	3.5	5.5	6.4Y	3.8	3.4	2.4
3	3.1	2.4	2.9	2.1	2.4	2.4	G	4.8	G	G	5.9	6.3	8.5	5.8	6.5	7.3	6.4	5.8	5.9	5.9F	8.9F	8.5F	11.6F	8.9F
4	8.9	5.9	5.8	4.3	2.9	2.3	3.8	6.0	7.1	7.1	8.9	12.0	9.0	8.5	8.6Y	10.0	8.5	11.0	12.1	10.7	7.0	3.6	5.8	5.9F
5	5.9F	5.8F	3.5	3.7	3.7	2.4	3.6	3.6	6.0	10.0	9.5	14.0	13.5	11.5	9.3	C	C	C	13.1	11.8F	5.6	3.6	2.3	4.3F
6	5.9	5.7	5.8	3.0	3.3	3.5	3.2	4.1	G	5.7	18.1	17.6	17.8	13.5	15.6	6.1	11.1	15.2	4.4	5.3	4.5	5.6	6.5	5.3
7	3.5	2.9	3.4	3.8	3.8	3.4	2.3	3.7	5.5	8.9	6.4	10.5	12.9	12.5	12.2	7.2	5.6	6.8	7.1	5.9	5.7	5.5Y	3.2	5.9F
8	3.7	5.8F	3.8F	2.7	3.2	2.3	G	3.7	5.0	5.9	5.9	7.8	8.9	8.2	9.5	5.9	11.4	11.5	8.5	7.0	5.8	5.8	5.7	5.1
9	3.6	7.0	3.7	2.3F	3.2	3.0	2.3	3.4	3.8	G	G	G	G	5.9	G	5.9	6.2	7.0	6.5	7.3	7.2	5.0F	5.9	3.5
10	5.9	4.9	3.4	2.3	2.3	2.3	3.0	3.5	7.8	5.8	11.5	8.9	8.9	9.6	6.3	G	5.9	11.2	9.1	4.9	5.9	3.3F	3.3	2.4
11	3.0	2.3	2.3	3.0	3.4	2.1	3.2	9.5	5.7	8.8	8.7	5.9	6.1	5.8	11.8	8.9	8.9	6.1	8.9	5.9	3.6	3.7	5.9	6.2
12	5.7	6.0	5.9	3.8	3.0	2.3	3.4	5.3	G	5.9	6.0	5.9	5.9	6.7	8.6	7.1	8.4	7.0	6.2	5.8	9.5	6.7	3.4	1.8
13	5.9	13.0	8.5	6.7	4.8	3.1F	4.7F	5.8	8.1	8.7	13.8	6.7	5.1	4.9	9.6	6.3	3.6	3.8	5.6	5.6Y	7.1	6.5	5.8F	3.7
14	3.2	5.7	3.0	2.9	3.1Y	2.8	2.3F	G	6.7	3.8	3.6	G	5.9	6.1	8.7	4.8	5.9	6.6	5.9	4.4	C	5.9	6.2	3.8
15	3.6F	3.3	3.0	2.3	2.8	5.9	3.4	5.2	10.1	8.9	9.0	8.9	5.9	3.8	5.1	C	G	3.7	3.8	4.9	3.2	2.0	2.1	3.2
16	2.4	2.2	3.1	2.3	2.3	2.3	2.8	3.7	5.7	9.2	8.7	6.3	6.0	6.5	9.0	13.5	11.8	13.2	13.0	15.4	6.7	5.9F	5.7F	3.5
17	3.2F	3.2	3.1	2.4	2.3	E	3.1	4.2	9.5	13.5	16.4	9.5	7.0	13.0	9.0	7.0	7.2	6.3	13.4	8.4	11.8Y	9.5	11.7Y	5.9F
18	5.9	7.4	6.4	3.3	3.8	3.0	3.8	4.8	5.9	6.0	8.8	8.7	6.5	5.9	6.9	8.7	12.9	8.9	12.7	8.8	8.9	9.5F	8.5F	4.8
19	9.5	9.0	8.6Y	3.2	6.3F	8.0F	5.9F	6.9	6.0	8.9	8.5Y	9.6	12.5	G	5.3	5.9	5.1	4.6	5.1	5.9	5.9	6.6	3.8	5.9
20	5.9	3.6F	3.6F	2.3F	2.3	3.2	5.9Y	5.9	5.0	4.9	11.5	12.5	6.7	16.5	13.5	9.6	5.8	8.9	8.5	6.5	9.5	3.1	5.0	5.9
21	5.9F	5.7F	5.9F	5.5F	3.6F	2.3	5.9	8.7Y	C	C	C	C	C	C	C	C	C	C	3.8	6.0F	5.9F	3.8F	2.5	2.9
22	2.4	2.3	2.4	2.2	2.1	2.3	3.2F	3.4	4.1	5.8	6.5	5.9	10.0	11.7	5.9	8.9	11.5	8.8	5.9	6.0	5.0	3.8	5.0	3.5
23	3.8	3.5	3.6	3.1	3.7	3.6	2.3	5.5	7.0	5.9	7.2	C	9.2	7.0	9.0	8.0	C	12.2	12.5	9.7	C	C	3.8	2.9
24	2.3	2.9	3.0	2.3	2.3	E	2.9	3.8	4.7	7.9	11.5	8.7	9.5	10.0	15.5	13.5	6.4	3.5	3.2	3.0	3.2	5.8	9.2	3.8
25	3.0	5.8F	5.9Y	3.8	3.2F	3.4	3.4	3.6	5.9	6.7	9.5	6.8	9.9	8.0	6.0	11.8	5.7	6.1	6.7	6.7	8.5	5.9	2.9	3.3
26	7.1F	9.5F	5.9F	3.2	3.3	2.3	3.5	3.8	6.6	7.4	7.5	7.6	9.5	11.5	5.9	13.5	G	7.8	13.4	3.1	5.9	13.0	8.9F	9.0F
27	5.9	3.1	8.5Y	5.9	5.9	5.8	3.4	4.7	6.6	5.9	6.5	8.1	6.2	7.0	10.6	18.5	12.7	7.2	4.0	3.8	3.2	3.8	3.0	5.9
28	3.5	5.9	7.0	6.0	3.5	4.8	3.8	5.3	7.1	5.9	12.0	8.5Y	11.9	6.9	5.9	3.9	7.3	11.0	6.5	5.9	3.2	8.9F	8.9F	8.8F
29	9.5	8.9Y	3.7	6.5	5.2	4.9	3.6	3.8	3.5	G	5.5	8.6Y	5.9	5.9	5.7	5.6	6.3	5.9	5.5	5.9	4.6	5.5	7.0	3.8F
30	3.1	2.3F	2.4YF	2.1Y	2.4	2.1	2.4	3.4	G	3.8	4.9	6.1	7.2	10.0	13.0	6.5	6.9	13.6	8.9	7.0	5.9	7.0	8.9	5.9
31	7.1	5.6	6.6	5.9	3.5	4.9	3.8F	4.8	5.8	12.8	13.0	12.2	12.2	13.5	10.5	8.8	5.7	6.5	13.2	9.2	5.8F	3.7	2.3F	2.4
Mean Value	4.8	5.1	4.6	3.6	3.4	3.3	3.5	4.8	6.3	7.5	9.1	9.1	8.9	8.8	8.9	8.4	7.7	7.9	7.9	6.7	6.2	5.6	5.5	4.6
Median Value	3.7	5.6	3.7	3.2	3.2	2.4	3.3	4.2	5.8	6.4	8.8	8.6	8.7	7.5	8.6	7.1	6.4	7.0	6.7	5.9	5.9	5.6	5.7	3.8
Count	31	31	31	31	31	31	31	31	30	30	30	29	30	30	30	28	28	29	31	31	29	30	31	31

fEs

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

Y 3

SOLAR RADIO EMISSION

JULY, 1955

Observing Station: HIRAISO — Frequency: 200 Mc/s.

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	5	5	5
2	4	4	4
3	5	5	5
4	6	5	6
5	-	-	-
6	10	10	10
7	5	11	8
8	17	17	17
9	8	6	7
10	5	5	5
11	5	5	5
12	5	5	5
13	6	6	6
14	5	5	5
15	5	5	5
16	5	5	5
17	5	5	5
18	5	5	5
19	-	-	-
20	5	6	5
21	5	5	5
22	5	-	(5)
23	4	4	4
24	4	5	4
25	4	5	5
26	5	6	5
27	5	4	4
28	5	4	5
29	5	4	4
30	5	4	5
31	4	4	4

Outstanding Occurrences

Date	Starting Time	Duration	Type	Peak Flux	Time
3	2321-40s	50s	SD	330	2322-00s
	2343-30s	1m30s	SD	240	2344-10s
	2348-30s	1m00s	SD	130	2349-00s
4	2241-30s	1m40s	SD	910	2242-00s
	2245-20s	50s	SD	170	-
7	0723	10m	CA	680	0725 ...1st peak
				140	0729-30s...2nd peak
	0754	1m	CA	150	0754-10s...1st peak
				120	0754-50s...2nd peak
8	0005-00s	1m30s	SA	260	0005-50s
	0009-30s	40s	SA	180	0010-00s
	0123-00s	2m00s	CA	250	0124-30s
	0532-40s	50s	SA	85	-
	0834-30s	30s	SA	140	-
9	0530-00s	3m	CD	165	0530-30s

IONOSPHERIC DATA IN JAPAN FOR JULY 1955

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