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IONOSPHERIC DATA IN JAPAN

FOR SEPTEMBER 1955

Vol. 7 No. 9

Issued in October 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

Sep. 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	4.3J	4.2	4.2	4.0	4.2	3.8	3.6	6.0	5.7	6.0	5.6	6.5	6.7	6.2	5.9	5.8	6.3	7.0	6.9	7.0	7.0J	6.8Js	4.5	3.8
2	3.8	3.7	[3.8]C	3.8	4.0F	4.5JF	4.5V	4.7	6.5	5.2	[5.4]A	5.7P	[6.0]D	6.3	6.2	6.4	[6.0]A	5.6	5.6	6.6	6.6	6.7	5.0	4.2
3	4.0	4.4	3.5	3.5F	3.6F	3.6F	A	A	5.3	4.8	5.0	4.7	4.8	4.7	4.8	4.8	5.0	[4.9]A	4.8	5.0	5.3J	(5.3)F	5.0	5.2
4	5.6J	(3.8)JF	2.7	3.1	(3.3)F	3.8	5.3	6.0	7.3	6.2	5.9	5.3	6.2	6.0	5.3	6.2	6.1	6.3	6.0	C	C	C	C	C
5	C	C	C	C	C	C	C	C	C	C	6.3	6.0	6.3	6.1	5.7J	6.0	6.0	5.8J	6.0	6.8J	6.1Js	6.2	4.0	3.8
6	3.8J	4.0F	4.0F	3.5F	3.5F	3.5FH	4.6JH	5.3	5.7	4.8	5.8	6.3	6.0	6.0	6.1	6.0	6.0	6.0	6.1	6.0	5.8J	5.3P	5.4P	4.7
7	4.5	4.1	4.1	4.2	3.8	4.3	5.0	6.1	(6.5)P	7.3J	6.8J	6.6	6.7	7.2	6.7J	6.2	6.8	6.3	6.0	5.9	6.0	6.0	4.6	4.4
8	4.0	4.1	4.0	3.9	4.0	4.5	6.2	6.6	6.0	6.5	7.8	7.2	6.7	6.8	6.8	6.3	5.9	6.3	7.1	6.8J	6.7	6.3	5.7	5.4
9	5.1	4.9	4.7	4.8	4.5	4.7P	5.9	6.2	6.7	6.9	6.8J	6.7	7.7	7.6	6.7	7.3	7.6	7.0	6.6	6.2	(6.3)JPs	6.0	5.8	5.8
10	6.0	5.0	4.8	4.8	4.8	5.2	6.2	6.3	7.3J	7.1	7.0J	6.4	6.8	7.8	7.7	6.8	7.2	7.1J	7.7	(7.7)Ps	6.7	6.0	5.4	5.3
11	5.3	5.3	5.3	5.5	5.1	5.0	6.0	6.2	C	C	C	C	C	C	C	C	C	C	6.3	6.5	6.3	5.8	5.8	(5.5)Js
12	5.3	5.3	5.2	5.0	5.3	4.3	5.0	6.5P2	7.6	8.3J	8.5	8.4J	8.5	7.9	7.7	7.5	7.3	7.0	7.6	7.6J	(7.8)P	6.5	4.7	4.6
13	4.6	4.3	4.5	4.6	4.3	3.5	5.2	6.3	6.5	7.3	7.2	7.5	8.0	7.5	6.7	6.1	6.2	6.0	5.8	5.8	6.2	6.0	5.7P	4.5
14	4.5	4.3	4.3	4.1	4.3	4.3	5.7	6.5P	6.0	6.1	6.4P	6.7P	6.5P	7.1J	6.2	6.4	7.1J	6.4	6.3	6.7	6.7P	5.5	(4.0)P	[4.0]D
15	4.1	4.1	4.1	4.1	4.0	4.3J	5.0	5.0	5.8	(7.1)P	6.3	(6.4)P	6.0	6.0	6.0	6.0	6.0	5.7	5.7	5.6	[5.4]S	5.2	5.2	[5.0]S
16	(4.8)S	4.5P	4.3J	3.3J	3.8	3.8	5.5	5.8	6.5	5.2	6.2	6.3	(6.7)P	6.5P	6.8J	6.1	6.3	6.3	6.5	6.0	6.0	5.8	5.3	4.8
17	4.7	4.5	4.2	4.0	3.6	3.7	4.9	6.0	6.5P	(6.8)P	6.5	6.7	6.2	6.3	6.7	5.8	6.8	6.8P	6.7P	6.1	6.0	5.5	4.4	4.5
18	4.5F	4.5F	4.5F	3.1	3.0	3.7	4.6	6.0	(6.5)P	6.9J	(6.8)P	6.5	6.2	6.0LH	6.5	6.0	5.8	6.5	7.0	6.2	6.0	5.0	5.0	4.8
19	4.5	4.8	4.1	4.0F	3.7	3.6F	4.2	4.7	4.7	5.2	5.3	5.7	5.8	5.5	6.2	5.6	5.7	6.0	6.7	6.0	5.2	4.9	4.6	4.6
20	4.3	4.5	4.2	3.9	3.7	3.6	4.5	5.2	5.7	6.0	6.6	6.2	6.1	6.3	6.1	6.0	5.6	5.8	6.0	5.5	5.3	5.3	5.3	5.2
21	4.5	4.5	4.5	4.4	4.5	4.7	5.3	5.5	6.0	6.7	6.3	6.5	6.2	6.1	6.3	6.0	6.0	6.7	5.8	5.5	5.3	4.9	4.6	4.5
22	4.0	4.0	3.6	3.6	3.5	3.7	4.8	5.7P	6.2	6.2	7.5	7.3	6.1	[6.3]D	6.5	6.3	6.9	7.3	6.8	6.2	5.5	4.8	5.0	4.7
23	4.7	4.5	4.5	4.4	4.2	3.7	5.0	5.9	7.3	8.5	6.8J	6.7	6.4	6.5	6.9	6.6	6.7	6.6	6.5	5.3	5.2	4.5	4.5	4.5
24	4.3	4.1	4.2	4.2	4.1	4.1	5.3	5.5	6.1	7.1	7.3	8.0	7.6	7.8	7.0	5.8	6.2	6.8	6.5	6.0	5.3	4.7	4.3J	4.3
25	4.3	C	C	4.3	4.0	4.3J	4.7	5.6	C	C	C	C	C	C	C	C	C	C	A	5.3	5.6	4.7	5.3J	4.8
26	4.8J	4.6	4.2	4.3	4.2	4.3	5.5	6.0	[6.5]C	7.0	6.5	8.0	7.2	6.8J	6.5	6.3	6.5	6.6	6.0	6.0	5.8JF	(5.3)F	(5.3)JFs	[5.2]Js
27	5.2	5.2	5.3	5.3	[5.3]C	5.3F	6.5	6.0	7.0	8.0	7.8	7.5	7.3	7.5	7.6	7.0	6.5	6.7	6.0	6.0	5.8	5.3	(5.3)F	5.3
28	(5.3)JFs	5.0	(5.0)S	(5.2)FS	(4.5)JF	(4.6)JF	5.2	6.6	7.5	7.8	8.5J	9.4	7.4	7.6	6.9	6.8	6.6	7.8	8.8J	6.3	4.8	4.5	4.3J	4.5
29	4.6	4.6	4.5	4.5	4.3	4.3	5.3	6.6J	7.5	7.8	7.3	8.5J	7.7	8.8J	8.0	7.0	6.8J	6.3	6.2	[5.8]A	(5.5)JFs	(5.3)Fs	(5.0)JF	(5.3)
30	5.2F	4.7F	(4.8)JF	Fs	Fs	5.3J	5.6	6.8J	6.8P	7.2	7.3J	8.0	8.3J	8.5	7.5	7.3J	6.7	7.5	(7.5)PJ	(7.3)PJs	6.6	4.3	4.5	4.1
31																								
Mean Value	4.6	4.5	4.3	4.2	4.1	4.2	5.2	5.9	6.4	6.7	6.7	6.8	6.7	6.8	6.6	6.3	6.4	6.5	6.5	6.2	6.0	5.5	5.0	4.7
Median Value	4.5	4.5	4.2	4.2	4.0	4.3	5.2	6.0	6.5	6.9	6.7	6.6	6.6	6.5	6.6	6.2	6.3	6.4	6.3	6.0	6.0	5.3	5.0	4.7
Count	29	28	28	28	28	29	28	28	27	27	28	28	28	28	28	28	28	28	29	29	29	29	29	29

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

Sep. 1955 | **h'F2** | 135° E Mean Time | **Wakkanai** | Lat. 45° 23.6' N, Long. 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	300	300	290	280	260	250	250	310	300	260	320	320	300	310	320	320	310	280	260	260	260	250	260	260
2	310	310	[300]C	300	310	280	260	360	320	300	[320]A	350	320	360	360	300	[320]A	350A	300	280	310	260	260	260
3	280	260	270	280	310F	310	A	A	360	520	460	710	520	550	420	360	380	[340]A	310	300	320	310	260	310
4	260	200	360	310	300	300	300	320	270	300	310	350	350	310	290L	340	300L	280	260	C	C	C	C	C
5	C	C	C	C	C	C	C	C	C	C	330	360	330	340	340	320	260	[280]A	300	260	300	280	260	310
6	310	300	290	280	310	310H	300H	310	300	310	400	340	320	370	320	320	280	280L	250	260	300A	270	270	270
7	260	280	270	280	260	270	260	300L	380	270	310	320	360	310	300	310	280	250	260	260	290	260	260	280
8	290	310	310	300	270	260	260	250	260L	310	300	300	320	310	280	280L	320L	280L	260	260	260	260	260	270
9	300	290	300	290	250	240	250	260	260	280	310	330L	310	290	290	290	270	260	250	250	270	260	260	260
10	280	290	280	290	250	250	240	220	250	270	270	280	340	310	290	270	280	260	270	240	240	260	290	290
11	310	310	310	260	230	260	230	260L	C	C	C	C	C	C	C	C	C	C	240	250	280	290	310	290
12	310	290	290	270	230	250	220	280	280	280	270	310	300	290	290	270	270	260	260	260	260	240	280	350
13	350	340	300	260	230	250	260	300	330L	320	300	320	310	290	300	270	280	250	270	270	290	260	270	320C
14	310	310	350	340	290	310	260	310	270	320	300	320	310	310	290	300	270	270	260	260	260	240	280	[300]
15	310	310	300	310	300	270	240	240	320	300	310	290	330	320	310	260	270	250	260	240	260	270	280	280
16	290	310	260	250	250	260	230	250	310	270	270	280	300	310	270	260	270	260	260	250	260	270	270	270
17	260	270	260	270	240	250	230	280	250	270	280	280	270	310	280	270L	270	260	250	230	260	250	260	270
18	300	260	260	210	260	260	250	280	280	280	280	280	300	300LH	280	270	260L	260	240	240	260	290	310	330
19	290	260	250	260	280	270	240	300	340	330	320	320	320	300	320	260	260	260	240	250	270	290	300	270
20	270	280	240	270	250	240	240	270	290	300	290	280	310	310	290	280	270L	260	240	260	300	280	270	260
21	250	260	260	270	260	260	240	260L	290	260	270	300	280	270	300	260L	270L	260	240	260	270	260	260	260
22	270	270	270	260	240	240	220	250	260	270L	270	270	260	310	270	280L	270	260	240	250	230	270	290	260
23	270	290	260	280	220	250	220	270L	290	260	270	280	280	310	270	290	260	240	240	240	260	260	270	270
24	260	280	270	260	240	240	230	240	260	280	260	300	290	270	260	250L	260	260	230	240	240	260	260	260
25	270	C	C	250	250	260	220	250	C	C	C	C	C	C	C	C	C	C	A	280	240	260	270	270
26	280	260	260	240	260	240	230	240	250	260	280	270	270	290	260	260	260	240	230	250	260	250	270F	260
27	260	270	260	260	250	230	220	240L	260	260	260	270	270	280	270	210	250	230	230	[260]A	300	290	300	300
28	290	260	290	250	280	290	260	260	280	280	280	270	270L	280	260	260	270	260	230	230	230	280	310	290
29	280	260	270	260	240	250	240	260	270L	260	290	270	300	270	270	240	250	240	240	[250]A	260	270	300	310
30	270	270	310	310	310F	240	250	240	260	260	270	280	280	270	260	270	260	260	230	250	220	260	330	310
31																								
Mean Value	290	280	280	280	260	260	240	270	290	290	290	320	310	310	300	280	280	270	250	250	270	270	280	280
Median Value	280	280	280	270	260	260	240	260	280	280	290	300	300	310	290	270	270	260	250	250	260	260	270	270
Count	29	28	28	29	29	29	28	28	27	27	28	28	28	28	28	28	28	28	29	29	29	29	29	29

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

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

IONOSPHERIC DATA

Sep. 1955 | fEs | 135° E Mean Time | Wakkanai | Lat. 45° 23.6' N | Long. 141° 41.1' E

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.0	2.5	2.5	2.3Y	E	3.0Y	4.1	5.3	7.7Y	7.0Y	G	G	G	G	G	G	4.5	6.0	2.8	3.5	3.5	3.5	4.0Y	2.6
2	2.4	2.5	C	4.0FY	3.0	4.0	4.0	G	4.5	G	5.7Y	4.0	5.0F	G	G	4.8	6.5	7.8	4.2	3.6	6.0	6.5	3.0	3.0
3	2.5	E	2.6	E	2.6	2.6F	5.3	6.6	5.3	G	G	G	4.8	5.3	G	G	G	6.1	4.2	3.5	3.7	2.8	E	2.7
4	E	E	3.6	3.5	2.3Y	3.5	4.0	4.0	G	4.2	G	G	G	G	G	G	G	4.7	3.5	C	C	C	C	C
5	C	C	C	C	C	C	C	C	C	C	6.0Y	G	G	5.3	G	G	5.5	6.3	5.3	2.6	4.0	5.0	3.4	E
6	2.2	E	E	2.5	2.3	2.5Y	G	3.9	4.2	4.2Y	4.2Y	5.0Y	4.9Y	G	G	G	G	G	2.7	4.5	3.5	2.5	3.0	E
7	E	E	2.1Y	2.3F	2.0Y	E	4.1	G	G	G	G	G	G	G	G	G	G	G	2.8	2.8	2.7Y	2.8	3.5	2.7Y
8	2.5F	2.0	2.3	2.3	2.3YF	2.3F	G	G	G	G	G	G	G	G	G	G	G	G	2.3Y	2.7	2.5	E	2.5	2.3
9	2.7	E	2.5	2.1Y	2.4	G	G	G	4.9	4.8Y	G	G	G	G	G	G	G	3.5Y	2.5Y	2.3	2.6	4.1	E	E
10	E	E	E	E	E	E	G	G	G	G	G	G	G	G	G	G	4.0	3.6	3.5Y	2.6	2.6	2.3	4.0	3.0
11	3.3	4.1	3.0	2.3Y	2.3Y	2.7	3.4Y	G	C	C	C	C	C	C	C	C	C	C	3.0	2.7	3.7	3.6	3.5	3.0
12	3.0	2.7	3.1	2.5	3.8	3.6	G	4.0	G	G	G	G	G	G	G	G	G	G	2.6	5.5Y	4.5	4.2	3.3	4.2
13	4.0	2.8	2.8	2.0Y	2.5	2.3	G	G	G	4.7	G	G	G	G	G	G	G	3.5	4.2	2.8	3.8Y	3.5	2.9	2.3
14	2.3	3.5	3.7	3.6	2.7	3.0	G	G	5.2	G	G	G	G	G	G	G	5.0	7.2Y	3.5Y	3.5	2.3	4.0	3.5F	C
15	2.7	2.6	2.5	2.7	6.0	4.3	3.3Y	3.5	G	G	G	G	G	G	G	4.0	3.5	4.2	3.5	E	E	2.7	E	2.7
16	2.7Y	3.5	2.7	2.2	E	E	G	G	G	G	G	G	G	G	G	G	G	3.6	3.5Y	3.5Y	3.7	3.5	2.0	E
17	2.0	2.3YF	2.0Y	2.9Y	2.5	E	G	3.5Y	5.5Y	4.0Y	G	G	G	G	G	G	G	3.3Y	2.3	3.0	4.2	2.6	E	3.0
18	3.5	3.4Y	3.0F	2.5	2.3Y	2.4	G	G	G	G	G	G	G	G	G	G	3.5Y	G	E	2.6	2.5	4.2	3.5	3.5
19	2.0	2.0	2.3	E	2.3	2.5	2.7Y	G	G	G	G	G	G	G	G	G	G	G	3.5	3.4	3.5H	3.9	E	E
20	E	E	E	2.3	2.3	2.3	G	G	G	G	4.8	G	G	G	G	G	G	G	E	2.5	5.5	2.5	2.5	2.5
21	2.3	2.3	2.3	4.7Y	2.0	4.0Y	G	G	G	G	G	G	G	G	4.5	G	G	3.4	2.5Y	E	3.0	E	E	2.2
22	2.0	2.0	2.0	E	E	E	G	G	G	G	G	G	G	G	G	3.5	G	G	E	E	3.0	2.3	2.5	E
23	E	2.0	2.5	2.6	2.3	E	G	G	G	G	G	G	G	G	G	G	G	3.0	2.8	2.3	E	E	E	E
24	E	2.1	2.3	2.3	2.0	2.0	G	G	G	G	4.2	G	G	G	G	G	G	2.6	2.5	E	E	2.7	2.0	E
25	E	C	C	3.4	2.3Y	2.5	G	G	C	C	C	C	C	C	C	C	C	C	6.5	4.0	2.3	4.0	2.5	E
26	E	2.3	2.3	E	2.3	E	G	G	G	G	G	G	G	4.2	5.7	4.0	3.5	G	2.6	2.6	5.3	3.5	7.5	6.0
27	E	E	1.9	2.8	2.5	2.5	G	G	G	G	G	G	G	G	G	G	G	G	E	6.1	3.7	3.5	3.5	3.0
28	2.5	2.0	2.2	2.3Y	2.5	E	G	C	G	G	G	G	G	4.5Y	5.0	3.5	G	3.1	4.0	>3.5C	6.0Y	E	2.5	E
29	E	E	3.0	2.4	2.3	2.5	4.0	G	G	G	G	G	6.0	6.2	6.0	4.5	3.5	G	2.5	9.5	9.0	4.2	3.0	3.5
30	2.8	2.6F	2.5	4.0	E	E	G	3.5Y	G	G	G	5.0	5.3Y	G	G	G	4.0	3.0	3.5	2.7	2.5	2.3	E	2.5
31																								
Mean Value	2.6	2.6	2.6	2.6	2.6	2.7	3.9	4.3	5.3	5.8	5.0	4.7	5.2	5.1	5.4	4.9	4.4	4.4	3.3	3.5	3.8	3.5	3.2	2.9
Median Value	2.2	2.0	2.5	2.3	2.3	2.5	G	G	G	G	G	G	G	G	G	G	G	3.0	2.8	2.8	3.5	3.5	2.5	2.5
Count	29	28	27	29	29	29	29	28	27	27	28	28	28	28	28	28	28	28	30	29	29	29	29	29

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

Sep. 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	4.0	4.0	3.8	3.9	3.8	3.7	4.9	7.1	6.9	6.0	6.0 J	6.9	6.8	6.3	5.9 J	5.7 J	6.5	6.8	7.3	7.2	7.1	6.5	5.4 P	4.8
2	(4.3) A	3.8 F	3.8 F	3.8 F	3.7 F	3.9	5.7	6.6	6.2	6.2	5.9 J	6.1 J	6.4	6.0 P	6.3	6.6	6.1 J	6.5	6.0 P	7.0	7.3	6.5 F	5.9 JF	5.9 F
3	4.3	4.5	4.2	3.5	3.5 F	3.6 F	4.6 F	A	A	5.2	G	G	5.0	5.2 J	5.1	4.8	5.0	5.2	4.8	5.4	5.5	5.3 F	5.4 F	5.2
4	5.4	3.3 F	2.5	3.0 F	2.9 F	3.4 F	5.2	7.2	6.7	7.0	6.0 J	6.5	6.5	6.9	6.3	6.3	6.8	6.8	6.6	6.5	6.0 P	5.6 P	5.7	5.7 P
5	5.5	4.7	4.0	4.4 F	4.6 F	4.5 F	5.5	5.7	6.6	6.3	C	C	C	C	6.1 J	6.1	6.4	5.7	6.0 P	6.6	6.2	6.0	3.5	3.5
6	(3.4) A	3.4	3.5	3.7	3.5 F	3.3	4.8	5.6	5.7	5.6	6.2	6.9	6.5	6.9	6.5	6.6	6.4	6.5	6.6	6.6	5.4	4.9	4.7 F	4.6 F
7	4.5 F	4.3	4.0	3.9	4.0	4.0 F	6.5	6.0	7.9 P	7.4	8.0 Z	C	C	C	C	C	C	C	C	6.2	6.4 P	6.5	4.5	4.6
8	4.4	4.3	4.2	4.2	4.0	4.3	6.5	7.0	6.6	7.0	7.5	7.9	7.5	7.3	6.9	6.5	6.5	6.9	7.3	7.8	6.6	6.2	6.0	5.6
9	5.3	5.0	5.0	4.9	4.6	4.8	6.2	7.2	6.7	6.5	7.0	7.5	8.5	8.1	7.6	7.5	7.5	7.5	7.3	6.5	6.3	6.2	6.5	5.1
10	4.9	4.9	4.9	4.7	5.2	4.9	6.1	7.4	7.4	7.0	6.5	7.1	6.9	7.5	8.5	8.2	7.5	7.4	7.5	7.5	6.6	6.3	5.5	5.5 P
11	5.5	5.5 P	5.4	5.5	4.7	4.7	6.0	7.4	7.0	7.5	8.0	8.3	8.4	9.0 P	10.2	7.7	7.6	6.9	6.8	6.7	6.0 P	6.0	5.5	5.5
12	5.3	5.3	5.2	5.1	5.2	3.7	5.6	6.2 P	7.6	8.0	8.0	9.0	9.1 P	(8.4) C	7.6	7.6	7.8	6.8	(7.4) C	7.9	6.6	5.8	5.0	4.8
13	4.7	4.5	4.6	4.8	4.4 F	3.2 F	5.0	6.9	8.0	(8.2) C	8.4	9.5	9.0 P	8.0	C	C	C	C	6.7	6.7	5.8	5.7	5.2 P	4.8
14	4.8	4.6	4.6	4.6	4.8	4.5	5.9 P	7.4	6.8	8.4	7.3	6.9	6.9	6.9	6.9	7.3	6.9	7.7	7.0	6.8	6.8	5.2	4.5	4.2
15	4.0	4.1	4.0	3.8	4.0	4.2	5.1	(5.9) A	6.6	7.0	7.3	7.8	7.0	6.5	6.8	6.5	5.9	6.0	6.5	6.6	5.6	5.1	5.2	(4.9) PJ
16	4.9	5.1	4.7	4.7	4.1	3.8	4.9	6.0	6.2	7.0	7.5	6.6	7.3	8.1	6.6	6.5	6.1	6.9	7.3	7.4	6.2	5.6	5.2	5.1
17	5.1	4.5	4.5	4.2	4.2	4.0	5.3	6.2	6.5	7.6	7.1	6.4	6.5	7.4	6.7	6.4	6.6	7.5	8.2	7.0	6.3	5.1	4.7	4.9
18	4.5	4.7	4.5	3.8	2.8	3.1	5.0	5.8	7.2	7.8	7.1	7.0	7.6	6.6	5.9	6.3	6.6	7.5	7.0	6.5	5.3	5.0	5.0	5.0
19	4.7	4.8	4.9	3.8	3.7	3.7	4.6	5.5 Z	5.8	6.6	6.1	6.2	6.8	7.4	6.4	6.9	5.9	6.6	7.2	5.6	4.5 F	4.3	4.2 F	4.1
20	4.2	4.2	4.1	3.6	3.5	3.5	4.3	5.4	5.9 J	7.0	7.1	7.4	6.0	6.6	7.4	6.5	5.9	6.2	6.5	5.6	5.0	5.1	5.4 V	C
21	C	(4.1) P	(4.3) P	4.3	4.2	4.2	(5.2) P	(6.0) C	6.7	6.3 P	(6.0) P	(6.2) C	6.5	6.6	6.4	6.2 J	6.1	C	C	C	C	C	(4.1) P	(4.0) P
22	(4.0) P	(4.4) C	4.9 P	3.8	3.7	3.7	C	C	C	6.5	6.4	(6.8) P	6.6	6.3	C	C	C	C	(6.4) P	4.9	4.0	3.8	3.9 F	4.0
23	3.9	3.8 P	3.8	3.7	3.7	3.9	5.0	5.8	(6.0) P	7.0	8.5	6.5	6.8 P	6.2 PJ	6.4	C	C	8.4	7.6	5.7	5.0	4.7	4.7	4.8 P
24	4.8 P	4.5	4.6	4.3	3.8 P	3.6	5.5	5.6	7.6	9.0 P	9.1 P	7.5	(6.8) P	8.1	7.2	6.6	6.7 P	(6.8) A	7.0	5.8	4.7	4.5	4.5	4.5
25	4.3	4.3	4.2 F	4.3 F	3.7	4.0 F	5.9 P	6.0 J	6.2 J	(6.4) C	6.5	C	8.0	7.5	7.5	6.6	6.6	5.9 P	C	5.5	5.0	4.6 F	4.6	4.5 F
26	4.6 F	4.4	4.1	4.0	3.5 F	3.6 F	5.3	C	C	6.7 P	6.7 P	7.5	(7.0) P	6.6	7.2	6.5	6.4	7.1	6.4	5.5	5.4	5.1	4.8	4.8
27	4.9	4.6 V	4.4	4.4	4.0	3.9	5.7 P	C	C	C	C	C	(7.3) P	C	C	C	(6.7) P	(6.6) C	6.6	5.0	5.5	5.1 F	5.1 F	4.9 F
28	5.3 F	5.5 F	5.3	5.5	5.0 F	4.6 F	5.6 F	C	C	7.7	8.8	8.5 P	C	C	7.2	7.0	7.9	(8.2) C	8.5	(5.9) P	4.2	4.1	4.1	4.5
29	4.5	4.5	4.5	4.5	4.4	3.5	5.1	(6.0) C	(7.0) P	C	C	C	C	C	C	7.5	(7.0) C	6.6	(6.5) P	5.6	4.6	4.5	4.5 F	4.5 F
30	4.5 F	4.5	4.4 F	4.5 F	4.4 F	4.9 F	5.0	7.0	6.0	6.9	7.7	8.7	8.4	8.2	8.1	7.5	7.8	8.6	(8.2) C	(7.7) P	(5.7) A	3.7	3.8	4.2 P
31																								
Mean Value	4.6	4.5	4.4	4.2	4.1	4.0	5.4	6.4	6.7	7.0	7.2	7.3	7.2	7.1	6.9	6.7	6.7	6.9	6.9	6.4	5.7	5.3	4.9	4.8
Median Value	4.6	4.5	4.4	4.2	4.0	3.9	5.3	6.0	6.7	7.0	7.1	7.0	6.9	6.9	6.8	6.6	6.6	6.8	7.0	6.5	5.7	5.1	4.9	4.8
Count	29	30	30	30	30	30	29	25	25	28	27	25	26	25	25	25	26	26	27	29	29	29	30	29

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

Sep. 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	330	310	310	320	300	300	370	290	260	280	350	330	310	330	330	L	320	290	280	290	[260]A	240A	280	290
2	[300]A	320F	340F	310F	300	300	300	300	250	390	350	350	350	340	350	330	320	300	290	310	260	290F	280	290F
3	330	300	250A	360A	310	360	L	A	A	410	G	G	480	420	470	460	430L	310	290	[320]A	340	340F	330F	290
4	250	240	360	330	310	320	260	290	280	260	330L	380	450L	330	350	350	310	290	260	280	310	280	330	300
5	270	[320]A	360	330F	320	340F	280	270	330	330	C	C	C	C	350	350	300	260	290	270	290	260	320	340
6	[340]A	350A	[320]A	290	310F	360	320	320	310	300	390	350	340	310	350	340	300	290	260	270	300A	330A	300	290
7	300	290	280	300	270	290	250	260	300	270	290	C	C	C	C	C	C	C	C	260	290	260	260	310
8	310	320	300	290	250	290	280	260	270	330	310	310	310	310	330	290	280	300	280	250	250	270	300	280
9	290	300	300	290	290	290	250	250	280	300L	300L	330	320	320	320	300	290	280	250	240	260	260	250	300
10	300	320	300	300	280	250	250	250	260	280	300	350	310	350	310	300	280	270	260	250	240	250	290	340
11	310	300	340	260	240	300A	260A	260	250	310	300	340	340	330	290	280	270	250	250	250	250	290	300	310
12	310	310F	290	280	240A	280	250	250	290L	300	310	300	310	[320]C	330	310	290	270	[260]C	250	240	250	300	350A
13	360F	350	310	270	220A	260	270	290	330	[330]C	330	310	290	300	C	C	C	C	260	270	270	300	350	290
14	320	310	320	330	310	290	280	280	270	290	310	330	330	330	320	300	290	280	250	260	250	250	270	300
15	320	310	290	280	280	250	260	[280]A	290	320	300	300	310	320	300	270	280	270	250	250	260	260	290	300
16	320	300	300	290	260	280	250	260	280	280	300	370	310	310	290	290	280	280	250	260	250	300	300	300A
17	290	270	280	260	250	250	250	250	270	280	280	300	310	300	300	290L	300L	290	250	240	250	280	300	310
18	310	300	240	250	250	310	260	260L	300	280	300	300	290	290	L	300	290	280	250	240	280	310	300	290
19	300	280	250	260	270	300	240	270	280	280	280	320	320	290	330	300	250	280	250	240	280	300	320	310
20	300	280	280	270	280	250	250	250	[270]C	290	300	300	320	330	290	290	280L	280	250	230	330	300	290	C
21	C	290	290	290	280	270	250	260	290	290	280	C	C	C	C	290L	290	[270]C	250	240	290	270	300	280
22	290	290	290	260	250	250	C	C	C	290	290	310	[320]C	340	320	[300]C	280	250	220	240	250	300	310	300
23	300	300	300	290	260	250	230	250	300	280	280	280	330	310	[300]L	290	[280]C	260	240	230	300	290	310	280
24	300	300	270	250	240	290	250	270L	300	280	270	290	300	290	280	270	270	260	250	250	270	270	270	300
25	310	310	320	280	250	310	240	250	250	270	280	300	280	310	300	[280]L	270	260	250	260	290	300	260	270F
26	260	280	290F	270	280A	260	230	[240]A	260	270	280	300	300	300	280	260L	260	260	240	250	250	290	290	300
27	290	300	290	270	250	270	240	250	260	[270]C	280	300	300	310	290	290L	260	250	240	270	300	310	310	300F
28	310	300	310	290	290F	310	250	260	270	290	290	300L	A	A	300	290	280	260	250F	[250]AF	250	300	300	310
29	300	300	300	260	250	260	250	250	280L	280	280	290	C	330	270	290	250	250	250	240	250	270	290	310
30	290	300	340	310	310	250	240	250	240	260	280	280	290	280	260L	280	280	260	260	A	A	300	350	300
31																								
Mean Value	300	300	300	290	270	290	260	270	280	300	300	320	320	320	310	300	290	270	260	260	270	280	300	300
Median Value	300	300	300	290	280	290	250	260	280	280	300	310	310	320	300	290	280	270	250	250	260	290	300	300
Count	29	30	30	30	30	30	28	28	28	30	29	27	25	26	26	27	28	28	29	29	29	30	30	29

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

Sep. 1955 | **fEs** | **Akita** | Lat. 39° 43.5' N | Long. 140° 08.2' 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	3.5	2.7	2.5 Y	3.5	3.0 Y	3.0	4.2	4.1	5.5	4.5	4.0	4.5	4.3	4.2	3.3	G	G	4.9	4.5	7.2	6.3	5.5	5.5	7.0
2	6.7	5.6 F	3.5 F	3.0 YF	2.5 F	4.0	3.5	4.4	4.2	4.8	G	4.3	4.2	G	4.0 Y	3.5	G	5.0	4.4	5.5	4.2	7.5	7.2 F	7.0
3	4.7 F	4.1 F	4.2 F	3.6	3.6	3.3	3.6	7.8	6.9	3.8	3.5	3.5	3.5	G	G	G	G	5.0	4.2	4.7	4.7	4.2	3.2	2.3 Y
4	E	2.7 Y	2.4	2.3 Y	6.0	2.4	3.3	4.2	3.7	4.0	G	G	G	G	G	4.0	G	G	3.6	3.6	2.7	3.0	3.0	2.7
5	2.7 F	4.3	4.0	6.5	7.0	3.5	4.9	5.1	4.7	4.2	C	C	C	C	3.5	G	G	G	3.5	3.5	6.8	6.3	6.2	3.5
6	4.5	4.2	4.3	2.3	2.4	3.3	3.2	G	G	4.1	4.2	5.0	5.3	6.2	4.2	3.5	5.2	3.5	4.0	4.5	4.3	6.5	6.8	3.0
7	2.2	E	2.9 Y	2.0 Y	2.2 Y	E	3.5	4.3	4.0	3.6	3.5	C	C	C	C	C	C	C	C	2.2	2.2	3.5	4.5	3.1
8	2.5	3.0 Y	2.3 Y	2.3 Y	3.1 Y	2.6 Y	3.5	3.6	3.7	3.5	G	G	G	4.1	4.3	3.6	3.6 Y	3.5	2.6 Y	2.7	1.8	1.8	3.0	2.3 Y
9	3.0	3.5 Y	2.7	2.5 Y	2.5 Y	E	G	3.5	3.4	3.5	3.6	G	G	G	G	G	G	G	2.7 Y	2.3	3.0	2.4	2.6	3.6
10	3.0	2.9	2.1	2.2 Y	2.4 Y	2.4	G	3.4	G	3.6	3.5	G	G	G	G	G	4.2	3.6	2.9	2.9	3.5	3.5	2.7	3.5 Y
11	3.0	2.7	3.5	2.4	4.1	4.3	4.3	3.8	4.6	5.3	5.5	99 Y	4.4 Y	3.9	3.5	3.5	3.5	3.5	3.0	E	3.1	2.9	2.9	4.0 F
12	3.9 F	3.5 F	3.1 F	3.1 F	3.3 F	3.8 F	3.5	3.5	G	G	5.5	5.5	G	C	4.5	4.2	3.6	4.2	C	3.0	2.7	3.5	4.7	3.5
13	3.5	3.0	2.5	2.2 F	3.1	2.3	2.7	3.5	4.6	C	4.2	4.9	3.6	G	C	C	C	C	3.5	3.4	3.5	3.5	3.5	3.5
14	2.3	2.8	2.6	2.2	2.2 F	2.3	G	G	G	3.5	G	4.5	G	G	4.7	G	4.6	4.7	2.9	E	3.5	4.0	1.8	2.2 Y
15	2.4	2.2	E	1.8 Y	E	E	4.5	7.7	4.4	4.9	4.7 Y	G	G	3.4 Y	G	3.6	3.5	3.5	3.4 Y	E	3.0	E	3.0 Y	4.5
16	3.6	2.3	3.0	3.6	3.0 F	2.2	2.4	3.2	3.5	4.2	4.0	5.0	4.0	G	G	G	3.4	4.5	3.5	3.2	4.0	3.0	3.7	3.2
17	3.1	2.2	2.1 Y	4.1	2.3	2.5	3.5	3.7	6.5 Y	4.5	G	G	G	G	3.5	G	3.5	3.1	3.1	2.8	3.5	4.0	4.5	4.4
18	3.4	3.4	3.2	2.5	2.3	2.7	3.3	3.1	3.6	G	4.9	5.1	G	G	G	3.6	3.3	3.0	2.7	2.5	3.0	3.4	3.4	2.5
19	3.0 Y	2.4	2.2	E	2.2	2.3	2.6	3.2	4.3	4.4	3.7	>3.5 C	3.5	G	G	G	3.2	3.4	2.7	2.7	7.0 Y	3.5	3.5	2.8
20	2.5	2.4	2.5	3.0 F	2.8	2.4	G	2.6	G	G	G	G	3.5	4.0	3.7	3.6	G	3.0	2.5 Y	2.3 Y	4.1	2.6	3.4	3.2
21	2.5	2.1	2.5	2.5	2.2	E	G	G	3.5	3.5	3.2	3.3	G	3.2	3.6	3.6	4.4	C	3.6	3.5	3.5	E	E	3.2
22	3.0	2.3 Y	2.2	3.0	E	2.2	3.0	G	G	G	G	G	G	G	4.0	G	3.5	2.7	3.0	E	3.3 F	2.3	3.0 F	3.0 Y
23	E	2.8 Y	2.5	3.3 Y	E	2.2 Y	2.5 F	G	G	3.5	G	G	G	G	G	G	C	3.5	2.9	3.3	3.6	2.9	2.9	2.0
24	2.3 Y	2.2 Y	2.9 Y	2.9 Y	2.8	E	G	G	G	4.5	4.6	4.5	4.2	G	G	G	G	7.5	8.5	2.4	2.5	2.4	5.5	4.6
25	3.5	3.0	4.5	3.0	2.2 F	3.5	G	4.5	4.8	4.5	4.8	3.7	G	G	G	G	G	G	E	4.4	5.5	5.2 F	3.5	3.5 F
26	3.1 Y	3.5	3.1 Y	3.5	3.5	2.1	G	5.6	G	4.3	5.0	4.5	4.2	3.5 Y	G	G	3.5	2.0	2.3	2.4	2.4 Y	2.8	3.0	2.1
27	E	2.2	E	E	2.1	3.0 Y	2.9	G	G	C	G	G	G	G	3.5	3.5	3.1	3.2	3.5	4.0	2.6	4.0	6.5	3.0
28	4.5	4.0	3.4	3.0	3.0	2.2 Y	3.2	4.1	4.3	4.2	>6.4 C	>6.5 C	>6.5 C	>6.5 C	>5.5 C	G	G	3.5	5.0	>6.5 C	3.5	2.5	5.5	2.2
29	4.6	3.0	3.0	2.5	3.0	2.2	4.5	3.3	3.5	G	G	G	>6.5 C	G	G	4.0	3.5	3.0	3.5	E	E	2.3	2.2	2.4
30	E	E	2.0	2.4	2.4	2.4	1.9	3.0	3.5	3.5	3.5	G	G	3.5	3.5	G	G	3.5	3.2	4.5	5.5	4.0	E	2.5
31																								
Mean Value	3.3	3.0	2.9	2.9	3.0	2.8	3.4	4.1	4.4	4.1	4.2	4.9	4.1	4.0	3.8	3.7	3.7	3.8	3.5	3.5	3.8	3.7	4.0	3.3
Median Value	3.0	2.8	2.6	2.5	2.5	2.4	3.1	3.5	3.6	3.9	3.5	3.5	G	G	3.4	G	3.3	3.5	3.3	3.0	3.5	3.4	3.4	3.2
Count	30	30	30	30	30	30	30	30	30	28	29	28	28	27	28	28	27	27	28	30	30	30	30	30

fEs

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

A 3

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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

Sep. 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	4.0F	4.0	3.8	3.8	3.8	3.7P	6.0	(8.4)P	6.5	5.9	6.6	7.3	7.7	6.5	6.7	6.9	7.3	7.4	8.0P	(7.3)S	7.3	5.8	5.5	5.0
2	4.5	4.4J	4.3	4.3F	4.0	3.9	6.1	>7.5B	6.5	6.3	6.5	6.3	6.8	7.0	6.6	7.2	6.6	6.9	7.2	7.2	7.5	6.8	5.5F	5.1
3	4.4VF	4.7	4.7	[4.2]A	3.8	4.0	5.0	5.1J	5.5	G	A	5.3	4.8	5.9	5.1	5.1	5.4	5.6	[5.6]A	5.6	5.4F	5.5JF	5.4JF	5.5
4	4.6	3.1	2.2	2.5JF	2.9F	2.9F	5.4	7.1	6.8	6.1	6.0	6.0	6.1	7.0	7.2	6.7	7.1	7.0	7.2	6.7	6.0	5.7	5.6	5.9
5	5.5	5.1	4.4	4.5	4.4	4.5F	5.4	7.3	6.6	6.4	6.4	6.8	[7.2]M	7.4	7.7P	6.8	6.8	7.0	6.7	7.3	7.0	4.0	4.1	[4.2]A
6	4.3	3.8P	3.8	3.9	3.5	3.6F	5.6	5.9	6.6	6.5	6.4Z	7.1	8.0P	(8.0)P	7.2	7.3	7.6	7.0	7.3	6.4	5.1	4.9F	[4.6]A	4.4F
7	4.5F	4.3	4.2	4.0	4.0	4.2	5.4	7.1	9.0J	8.1P	7.2	7.2	7.8P	(8.1)P	>7.4B	>7.4B	6.8	6.7	6.6	6.5	6.0	5.7	5.2	5.0
8	(4.5)P	4.6	4.5	4.7	3.9	4.0	6.0	(8.3)P	7.7P	8.2	7.2	[7.8]B	8.4J	(8.0)P	7.0	6.5	>7.5B	6.8	7.5	8.1	6.0	5.6	5.7	5.7
9	5.4	5.3	4.9	4.8	4.8J	4.9	6.5	>7.5B	6.1	7.1	7.7	[8.4]B	(9.0)B	>7.5B	>7.5B	(8.0)P	8.0P	(8.0)B	7.7	7.0	6.4	6.0	5.5	5.5
10	5.0	5.0	5.0	4.9	4.9	4.9	6.5	>7.5B	7.4	6.6	6.5	(8.0)B	7.9P	8.0P	>7.4B	>7.5B	8.2	[8.4]B	8.5	8.1	7.3	5.4	5.3	5.4
11	5.3	5.3	5.5	4.9	4.9	4.9	6.8	8.0	(8.1)P	6.7	>7.5B	>7.5B	>7.5B	>7.5B	>7.5B	>7.5B	7.5	7.1	>7.5B	7.5	5.9	5.7	5.7	5.8
12	5.7	5.4	5.5	5.5	4.4	4.1	5.8	6.7	7.8P	7.7	(8.6)B	>7.5B	>7.4B	9.0	(8.8)B	(9.1)B	(8.8)B	8.3P	8.0	8.4P	6.4	5.1	4.9	4.7
13	4.4	4.6	4.8	5.0	4.4	3.3	5.4	7.9P	>7.5B	>7.5B	>7.5B	>7.5B	>7.5B	7.9P	8.0P	7.0	6.8	7.8P	>7.5B	7.3	4.5	5.0	5.0	5.0
14	4.9	4.9	4.5	4.5	4.5	4.5F	5.8	>7.5B	7.8P	(8.0)P	7.5P	7.0	7.8P	6.8	8.7	[8.6]C	8.6	8.6	9.0	8.0S	6.8	5.5	4.8	4.8
15	4.3	4.2	4.2	4.0	4.3	4.1	5.8	6.8	8.2	6.5	8.3	8.9	8.4	7.1	8.3	6.4	6.1	6.3	6.8	7.4	5.5	5.4	5.0	5.3
16	5.1	5.0	5.0	4.9	4.3	3.9	5.9	6.6	6.9	7.1	7.5	7.7	8.6	8.5	8.3	7.2	6.5	6.9	7.7	8.3	6.2	5.1	5.1	5.0
17	5.0	4.6	4.7	4.4	4.4	4.4	5.9	6.8	7.0	7.8	8.2	6.4	8.0	7.5	7.0	6.7	7.0	8.9	9.7	7.2P	6.0	4.7F	4.6	4.9
18	4.5	4.6	5.0	3.2	2.7	3.0	5.0	6.3	8.4	8.7	7.6	7.8	7.5	6.9	5.9	6.7	8.5	8.6	8.3	6.1	4.8	5.0	4.8	4.9
19	4.5	4.7	4.5	3.5	3.5	C	C	C	C	C	5.7	6.1	7.0	8.0	6.8	7.0	7.1	6.5	7.1	6.0	3.7	3.7	3.5	3.8
20	3.9	3.9	4.0	3.5	3.5	3.3	4.8	5.5	6.0	7.4	8.3	7.6	7.7	7.6	8.0	6.6	6.0	6.0	6.8	6.3	5.0	4.9	4.9	4.7
21	4.2	4.4	4.5	4.3	4.2	4.2	5.6	6.1	7.0	7.4	7.0	6.5	7.1	6.6	6.6	6.2	6.5	7.1	8.2	7.2	4.4	4.4	4.0	3.9
22	4.0	3.8	3.9	3.9	3.6	3.3	5.2	5.7	6.1	6.6	6.7	7.0	7.0	6.6	7.8	8.0	8.7	9.5	6.4	4.3	3.5	3.8	[3.8]C	3.9
23	3.9	(3.5)P	3.7	3.7	3.7	3.7	5.0	5.8	6.5	7.7	8.5	7.2	7.2	7.0	6.9	7.4	7.6	9.0	8.0J	5.0	4.5	4.6	4.6	4.7
24	4.7	4.3	4.5	3.9	3.3	3.3	5.2	6.3	7.5	10.0	9.2	8.4	8.8	8.5	8.3	7.4	7.6	7.3	6.6	4.8	4.3	[4.4]A	4.6	4.8
25	4.5F	4.3F	4.2	3.8	3.6	3.7	6.4	7.2	6.5	7.0	6.9	8.4	9.1	8.5	7.4	7.2	7.0	6.8	6.2	6.0	4.9	4.8	4.9	4.5
26	4.8	4.0	3.9	3.9	3.6	3.5	5.5	6.5	7.0	7.2	8.0	7.8	8.0	9.0	7.4	6.8	7.2	7.6	6.9	5.3	4.9	4.9	4.6	4.6
27	4.7	4.2	4.2	4.1	3.8	3.5	5.7	8.3	8.0	7.0	7.9	8.1	8.2	7.5	7.7	7.2	7.5	7.9	7.5	5.2	4.7	4.6	4.6	4.5
28	4.5	4.8	4.6	4.8	4.8F	4.8F	6.6	7.2	7.9J	7.0	8.8	9.4	9.8	8.5	8.0	8.1	9.0	9.2	8.9	5.5	3.9	4.0	4.2	4.3
29	4.4	4.3	4.5	4.9	4.0	3.4	5.4	6.9	7.0	8.0	9.2	9.0	8.9	8.9	9.4	8.5	8.4	7.2	6.6	5.0	4.4	4.0	4.4	4.3
30	4.4	4.2	4.0	4.5	4.7	C	C	6.6	[6.9]C	7.2P	8.9	9.8	>7.1C	>7.1C	8.1	8.1	8.5	10.0	10.0	7.9	4.4	[4.1]A	3.8	>4.0C
31																								
Mean Value	4.6	4.4	4.4	4.2	3.9	3.9	5.7	6.8	7.1	7.1	7.5	7.5	7.8	7.6	7.5	7.2	7.4	7.6	7.5	6.6	5.4	5.0	4.8	4.8
Median Value	4.5	4.4	4.4	4.2	4.0	3.9	5.6	6.9	7.0	7.1	7.5	7.6	7.8	7.6	7.6	7.2	7.5	7.2	7.4	6.8	5.2	5.0	4.8	4.8
Count	30	30	30	30	30	28	28	29	29	29	27	27	26	27	26	30	29	30	28	30	30	30	30	29

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

Sep. 1955 | **f_0F2** | 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	350F	350	370	370	370	360P	290	240P	240	290	340	310	300	310	320	290	310	300	310P	(270)S	280	310	330	320
2	360	(380)J	380	360F	340	350	300	B	260	320	310	340	330	300	340	310	320	310	320	320	270	320	300F	360
3	(360)JF	340	320	(340)A	370	360	320	(310)J	A	G	A	U	U	U	U	U	350	290	(310)A	330	380F	(400)JF	(400)JF	320
4	310	230	360	(360)JF	350F	350F	300	280	270	270	340	350	U	350	310	300	290	290	280	300	350	340	370	340
5	340	320	400	360	320	360F	280	260	270	310	310	330	(320)M	320	310P	290	300	290	310	310	270	A	390	(370)A
6	350	370P	350	350	380	380F	290	260	280	260	U	330	320P	(320)P	320	310	300	270	280	280	330	340F	(340)A	340F
7	350F	320	340	350	320	310	260	290	(260)J	280P	380	330	370P	(320)P	B	B	280	280	290	310	320	320	360	350
8	(320)P	360	350	320	310	320	270	(260)P	280P	270	310	(300)B	(280)J	(290)P	300	300	B	300	310	280	270	350	360	340
9	360	360	350	350	(340)J	350	250	B	270	270	330	(320)B	(300)B	B	B	(290)P	280P	(280)B	290	290	320	310	320	370
10	360	360	350	350	320	300	270	B	250	270	300	(300)B	330P	320P	B	B	280	(300)B	310	320	280	310	370	370
11	370	350	360	320	310	310	260	260	(250)P	280	B	B	B	B	B	B	280	290	B	300	300	350	360	350
12	350	370	340	300	300	310	250	250	310P	320	(310)B	B	B	290	(320)B	(310)B	(320)B	290P	280	300P	270	330	350	390
13	410	400	380	350	310	350	300	320P	B	B	B	B	B	300P	300P	290	310	310P	B	280	230	380	410	330
14	390	380	390	390	390	340F	290	B	290P	(260)P	330P	280	300P	320	300	(300)C	300	310	290	310S	290	310	350	370
15	360	340	330	330	310	310	270	280	260	290	340	280	340	300	280	280	280	280	290	300	280	330	360	360
16	360	340	320	300	310	310	280	250	280	290	280	310	300	300	290	290	290	280	300	290	240	310	360	330
17	340	340	340	320	300	280	250	260	260	300	270	280	300	300	290	300	320	310	270	270P	260	390F	340	340
18	340	340	270	260	280	340	270	280	280	270	300	280	290	270	280	300	290	270	260	270	330	350	350	320
19	340	310	270	360	340	C	C	C	C	C	260	300	310	310	290	270	250	260	270	260	260	310	360	360
20	330	320	320	320	300	280	250	260	280	300	250	310	270	310	280	270	260	270	270	280	340	350	310	290
21	330	330	330	320	320	320	260	250	250	260	270	270	300	300	300	270	280	280	270	240	270	330	350	340
22	350	330	310	300	270	290	230	230	260	270	260	300	280	310	330	290	280	260	240	290	340	350	(350)Q	350
23	330	(330)P	340	340	290	330	240	280	260	270	250	270	300	310	300	300	290	270	(240)J	300	360	330	370	330
24	340	340	300	230	350	330	260	270	300	280	300	290	300	300	290	280	270	280	260	280	320	(340)A	360	380
25	350F	350F	340	310	320	350	240	240	240	280	290	320	300	280	270	280	270	260	280	280	310	290	350	330
26	320	340	330	310	280	330	240	240	250	270	260	290	310	280	270	270	270	270	240	300	320	330	340	350
27	330	340	340	310	280	310	260	260	240	260	290	280	280	310	290	280	280	280	250	280	330	380	370	370
28	370	350	360	350	310F	360F	260	280	(250)J	280	290	290	300	290	300	280	290	270	250	240	320	350	350	360
29	360	360	350	280	260	300	260	260	280	290	290	300	300	310	300	270	250	250	260	260	310	340	350	350
30	350	350	370	350	370	C	C	250	C	C	300	290	C	C	290	290	300	280	280	240	370	(380)A	390	C
31																								
Mean Value	350	350	350	330	320	330	270	270	270	280	300	300	310	300	300	290	290	280	280	290	300	340	360	350
Median Value	350	340	340	330	320	330	260	260	260	280	300	300	300	300	300	290	290	280	280	280	310	340	360	350
Count	30	30	30	30	30	28	28	25	26	27	26	26	24	26	25	26	29	30	28	30	30	29	30	29

f_0F2 | Sweep 1.0 Mc to 17.2 Mc in 2 min | ☐ Manual ☒ Automatic | **K 2**

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

IONOSPHERIC DATA

Sep. 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	310^{AF}	330	300A	300A	290	330	280	230	240	280	340	310	290	300	320	290	290	280	280	240	240	250	280	250
2	330A	300	310	280	290	310A	280	240	260	310	310	330	330	300	340	300	300	280	250	A	230A	280A	250A	300^{A}
3	320	300A	300A	[310]A	320A	300	290L	310A	350A	G	A	430	270	350	430	380	350	290	[300]A	300A	340A	340A	320	250
4	210	200	300	320	290	300	270	270	260	280	330	350	400	350	300	300	280	270	240	230	250	250	300	270
5	260	250	310	270	260	300^{F}	280A	250	270	310	310	330	[320]M	320	310	290	290	270	270	260A	240A	A	300	[290]A
6	280	300	280	300	320	300	280	260	280	260	410	330	310	320	310	300	280	260	250A	220	240	300A	[290]A	280
7	280	270	250	270	240	250	230	250	250	250	300	310	340	320	280	280	270	260	240	230	240	250	260	270
8	290	300	290	250	220	260	240	250	270	250	310	290	280	280	300	280	260	260	250	240	210	250	270	270
9	260	280	260	260	260	270	230	280	L	260	330	320	280	280	290	270	270	250	250	230	240	240	240	290
10	280	280	270	270	240	240	230	230	240	260	260L	310	310	320	300	270	260	260	240	240	240A	240	300	350A
11	290	270	280	220	240	240	230	230	240	260	340	290	290	290	280	260	240	260	260	230	230	260	290	270
12	260	280	260	230	210	250	230	230	250L	260	290	290	280	280	290	290	270	260	250	240	210	230	280	320
13	340	330	280	240	210	290	240	270	270	270	290	280	260	280	290	280	270	250	240	230	220A	300	310	270
14	310	300	310A	290	310	270	250	250	260	260	270	280	280	290	280	[280]C	280	260	240	230A	230	240	270	290
15	290	280	260	250	250	260	240	260	250	270	300	270	330	300	270	260	270	250	250	250	240	250	300A	280
16	280	270	260	230	220	250	240	230	270	280	280	310	290	280	280	280	260	240	260A	240	210	230	290	280
17	260	260	260	240	230	230	230	240	240	270	260	270	290	280	290	280	280	270	240	230	230	310A	300	290
18	300A	290A	240A	200	220	270	240	260	270	250	290	280	280	270	280L	290	260	240	230	220	250	290	300	250
19	270	250	210	250	250	C	C	C	C	C	260	300	310	290	280	270	250	240	230	220	200	270	300	300
20	280	290A	250	250	250	240	220	240L	270	280	240	290	280	300	270	250	240	250	240	220	250	300	250	230
21	290	260	270	250	250	250	230	240	240	250	260	270	300	300	280	260	270	250	230	200	230	250	300	270
22	240	280	250	240	230	250	210	230	240	270	260	300	270	300	300	270	260	230	200	220	240	280	[280]C	290
23	280	280	270	260	230	230	200	250L	250	270	240	270	280	290	290	280	270	240A	230A	250A	280	270	290	270
24	290	270	250	200	250	270	230	250	270	260	260	270	280	280	270	260	260	240	210	230A	270	[300]A	320	310A
25	300A	280	270	210	250	280	230	230	230	270	290	300	280	270	260	250	250	230	220	220	230	240	250	250
26	260	300	300A	280A	220	260	210	220	240	260	260	280	290	270	260	260	250	240	220	220	250	280	270	300
27	270	280	270	250	220	250	230	240	230	250	280	270	270	270	260	260	250	250	220	220	290	300	300	330^{S}
28	300	280	290	270	250	290	240	230	230	260	280	280	270	260	270	270	260	240	230	230	300A	310	310	300
29	300	280	280	230	210	250	230	230	230	260	270	280	270	280	270	250	240	230	230	220	260A	290A	280	280
30	260	260	300	270	300	C	C	220	[240]C	250	290	270	260	260	250	260	260	250	230	210	300A	[300]A	310	310
31																								
Mean Value	280	280	270	260	250	270	240	250	260	260	280	300	290	290	290	280	270	250	230	230	250	270	290	280
Median Value	280	280	270	250	250	260	230	240	250	260	290	290	280	290	280	280	260	250	240	230	240	270	290	280
Count	30	30	30	30	30	28	28	29	28	29	29	30	30	30	30	30	30	30	30	29	30	29	30	30

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

Sep. 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							3.8L	4.1	4.3	[4.6]A	5.0	4.9	4.9	4.7	4.8	4.5	4.3	A						
2							L	4.2	4.3	4.5	5.0	5.0	4.9	4.9	5.0	4.5	4.3L	3.8L						
3							3.3L	A	A	4.5	[4.5]A	4.5	4.2	4.5	4.5	4.4	4.2	A						
4							L	4.2	4.3	4.5	5.0	5.0	5.0	5.0	4.8	4.7	4.3	4.0L	A					
5							A	A	A	4.7	5.0	5.0	[5.0]M	4.9	4.9	4.5	4.4	3.5L						
6							3.5L	[4.0]A	4.5	4.7	5.3	4.8	5.0	5.0	4.9	4.5	4.3	A						
7							2	4.0L	4.6	4.3	5.0L	5.0L	5.1L	5.0	4.9	4.7	4.0	L						
8								4.1L	4.4L	4.9H	5.0	5.0	5.1	4.8	4.9H	4.4L	4.0L	L						
9							2	4.2	L	4.8	5.0H	5.0H	5.0	4.8	5.0H	4.6H	4.2	3.5						
10							2	4.0	4.4	4.8L	4.6H	5.3	5.2L	5.0	5.1	4.9	L	L						
11							L	L	4.5	4.5	5.3	4.9	[5.0]A	5.0	5.0	4.5	4.0	A						
12							L	2	L	L	5.0	4.9	4.4	4.9	4.7	4.4L	4.1L	3.5L						
13							2	4.0L	4.5L	4.4L	4.9	4.9	4.9	4.7L	5.0L	4.5L	L	2						
14							2	4.1L	4.4	4.4	4.5L	4.6	5.0L	4.6L	4.4	[4.3]C	4.2L	L						
15							2	4.0	4.3	4.4L	4.6	4.6	4.5	4.9	4.5	4.0	4.0	2						
16								L	4.3L	4.5	4.5	5.1	5.0	4.5	4.6	4.3	3.7L	2						
17							2	L	4.3L	4.4	4.7L	4.6	4.8	4.5	4.5	4.5L	4.2L	L						
18							2	3.9	4.2	4.4	4.8	4.8	4.9	4.5	4.5L	4.4L	3.9	3.4L						
19							C	C	C	C	4.5	4.5H	4.8H	4.7L	4.2	4.1L	3.8	L						
20							2	L	4.4L	4.5	4.4	4.8	4.6	4.6	4.5	4.0	L	L						
21								4.0L	4.2	4.4	4.5	4.5	4.8	4.8	4.5	3.8	3.5	3.2						
22							2	L	4.0L	4.4	4.5	[4.5]A	4.5	[4.5]A	4.5	4.2	3.9	L						
23							2	L	4.1L	4.4	4.5	4.7	4.5	4.5	4.5	4.3	A	A						
24							2	2	A	A	A	A	A	4.8	[4.4]A	4.0	3.7	L						
25							2	3.5L	4.0L	4.5	5.0	4.9	4.7L	4.8L	4.3	3.9	3.3	2						
26							2	L	4.0L	4.5	[4.6]A	4.8	4.9	4.6	4.5	4.0L	3.9L	A						
27								L	4.1L	4.4	4.8L	4.8	4.5	4.7HL	4.3	4.0L	3.7L	2						
28							2	L	4.1L	4.6L	4.5	4.5	4.9	4.4L	4.3L	4.4L	A	A						
29							L	L	L	L	4.9	4.9	4.9	5.0L	4.9	[4.4]A	4.0L	2						
30							C	2	C	C	5.0	4.7	L	C	L	4.0L	3.8L	2						
31																								
Mean Value							3.5	4.0	4.3	4.5	4.8	4.8	4.8	4.7	4.7	4.3	4.0	3.6						
Median Value							3.5	4.0	4.3	4.5	4.8	4.8	4.9	4.8	4.5	4.4	4.0	3.5						
Count							3	14	22	25	29	29	28	29	29	30	25	7						

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

Sep. 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							250	220	240[A]	A	A	220	220	210	210	220	230	A						
2							A	230	210	190	220	210	190	230	220	210	240	240						
3							250	A	A	A	A	220	270	200	220	200	220	A						
4							230	220	210	200	200	200	200	190	220	230	230	250	A					
5							A	A	A	230	210	200	[210][H]	220	210	240	250	240						
6							250	[240][A]	230	210	270	200	230	200	220	220	250	A						
7							Q	230	230	240[A]	250	180	180	250	230	220	220	230						
8								220	220	200[H]	200	200	230	210	200[H]	220	250	230						
9							Q	230	210	200	200[H]	190[H]	230	220	200[H]	230[H]	230	240						
10							Q	230	210	200	190[H]	180	230	210	240	270	260[A]	240						
11							240	230	240	230[A]	280	270	[260][A]	250[A]	260[A]	A	230	A						
12							220	Q	230	220	[220][A]	210	210[H]	220	210	210	240	240						
13							Q	240	250	210	210	220	230	230	220	260[A]	250[A]	Q						
14							Q	240	220	200	230	220	280	250	220	[220][C]	230	260[A]						
15							Q	230	220	200	210	200	250	230	250	200	240	Q						
16								230	200	200	180	240	210	250	200	210	230	Q						
17							Q	220	210	200	250	210	200	200	220	200	250	250						
18							Q	230	210	220	220	210	210	270	250	200	210	240						
19							C	C	C	C	230	190[H]	200[H]	250	240	220	250	240						
20							Q	230	220	230	250	230	200	200	220	230	240	240						
21								230	240	200	240	200	230	250	200	240	230	240						
22							Q	230	220	220	250	[260][A]	270[A]	[260][A]	250	220	220	240						
23							Q	240	240	220	200	200	180	270	250	250	A	A						
24							Q	Q	A	A	A	A	A	280[A]	[250][A]	220	250	230						
25							Q	230	230[A]	210	250	270	250	280	220	230	220	Q						
26							Q	220	210	230	[220][A]	210	180	260	260	220	240	A						
27								240	220	200	230	230	210	190[H]	200	220	250	Q						
28							Q	230	230	230	210	210	270[A]	230	230	250	A	A						
29							210	240	230	240	210	250	250	220	220	[240][A]	250	Q						
30							C	Q	C	C	260	200	C	C	230	230	240	Q						
31																								
Mean Value							240	230	220	210	230	220	220	230	230	230	240	240						
Median Value							240	230	220	210	220	210	220	230	220	220	240	240						
Count							7	24	25	25	27	29	28	29	30	29	28	16						

h'F1

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

K 5

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

IONOSPHERIC DATA

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

foE

Sweep 1.0 Mc to 12.2 Mc in 2 min ☐ Manual ☒ Automatic

K 6

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

IONOSPHERIC DATA

Sep. 1955 | h'E

Kokubunji Tokyo | Lat. 35° 42.4' N | Long. 139° 29.3' 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							A	110	110	110	110	110	A	A	A	110	120	120						
2							A	120	110	(110)A	110	A	A	A	A	110	130A	110						
3							120	110	110	110	A	A	A	A	110	110	110	110						
4							110	110	A	A	A	110	(110)A	110	A	A	110	110	120					
5							A	110	110	110	A	A	M	110	110	110	110	120						
6							130	110	(110)A	110	110	A	A	110	110	110	110	110						
7							110	110	110	(110)A	110	A	A	A	110	110	110	120						
8								A	110	110	A	A	110	110	A	A	110	110						
9							130	110	(110)A	110	110	(110)A	110	A	A	110	110	120						
10							120	110	110	(110)A	110	110	110	110	110	110	110	120						
11							A	120	110	110	110	110	110	A	A	A	A	A						
12							A	110	(110)A	110	A	A	A	A	130A	120A	110	A						
13							130	110	110	(110)A	120A	110	110	110	110	(120)A	120	120						
14							A	A	130A	110	110	110	110	110	A	C	110	120						
15							A	A	110	110	(110)A	110	A	A	110	120A	130A	A						
16								110	130A	120	110	110	120A	120	A	A	120	A						
17							A	120	120	110	110	110	110	A	A	110	110	A						
18							A	110	110	A	A	A	110	110	A	A	A	A						
19							C	C	C	C	110	110	110	110	110	110	110	120						
20							A	110	110	110	110	110	A	A	A	110	A	A						
21								A	110	110	A	A	A	A	110	110	110	120						
22							110	(110)A	110	110	110	110	110	110	(110)A	110	110	110						
23							150	A	A	110	(110)A	110	110	110	110	110	110	120						
24							140	110	110	110	110	110	110	120	120	110	120	A						
25							B	120	110	(110)A	110	110	120	110	110	120	120	A						
26							A	A	120	120	120	120	110	120	110	120	120	A						
27								B	B	110	B	B	120	B	B	120	(120)A	130						
28							130	120	120	110	110	110	110	110	110	110	120	A						
29							A	A	A	A	110	110	110	110	110	110	110	120						
30							C	B	C	C	110	110	C	C	120	110	120	A						
31																								
Mean Value							130	110	110	110	110	110	110	110	110	110	120	120	120					
Median Value							130	110	110	110	110	110	110	110	110	110	110	120	120					
Count							11	20	24	25	22	20	19	17	18	24	27	18	1					

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

Sep. 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	4.0	3.8	4.0	3.9	2.9	3.0	5.0	4.9	5.5	5.0	7.3	4.8	4.9	5.3	4.9	3.3	4.0	5.8	6.0	4.3	7.0	7.0	4.3	5.0
2	5.3	2.9Y	2.7Y	2.9	3.0	3.5	4.3	4.1	5.0	5.0	7.0	5.0	4.0	3.6	4.2	4.0	3.7	2.9	3.2	5.5	7.4	7.2	7.2	7.3
3	7.1	7.2	6.7	7.0	5.0	2.1	3.2	6.0	7.5	5.2	7.4	5.3	3.5Y	3.5	3.4	3.4	3.0	5.0	7.1	4.5	5.5	4.8	5.5	E
4	E	1.9	2.7	1.9	2.7	2.8	2.9	2.9	5.0	3.9	3.5	G	3.8	G	3.1	3.8	4.9	3.5	2.6	2.0	2.7	2.9	2.9	2.2
5	3.4	1.7	7.0Y	5.0	2.9	4.0	5.3	5.7	5.7	5.0	5.0	3.7	M	3.5	G	4.3	4.3	3.4	4.0	5.1	3.8	5.7	5.7	7.2
6	3.2	2.8	2.8	3.0	3.0	4.1Y	3.2	5.3	4.5	4.5	5.3	4.8	4.0	3.8	3.6	4.2	4.5	6.6	7.1	2.9	4.3	4.5	5.5	3.1
7	2.8Y	3.0	2.0	1.8	E	2.0	2.8	3.4	5.5	4.2	3.7	3.2	3.7	3.2	G	G	2.9	G	2.8Y	E	E	E	3.0	3.1
8	2.7	2.1	2.1	E	1.9	E	2.7	2.7	3.5	4.3	3.4	3.1	3.8	4.2	3.9	4.2	3.9	3.8	3.4	3.0	3.9	1.9	E	E
9	1.6	E	1.8	1.9	1.9	3.0	3.2	3.0	3.7	3.8	3.7	3.7	3.1	4.0	3.0	3.6	4.0	3.2	3.0	E	E	3.0	5.9	2.8
10	3.0	2.9	2.0	1.8	1.8	E	2.8	7.0	3.8	4.6	G	G	3.8	G	G	4.2	4.5	3.7	2.0	3.0	4.9	2.8	2.9	4.8
11	E	E	3.0	2.2	2.2	2.1	2.9	4.0	6.5	6.6	5.2	5.6	6.5	4.9	5.0	5.0	4.0	4.3	3.7	3.1	2.5	E	2.2	E
12	E	2.0	2.2	2.2	2.2	2.2	3.0Y	3.8	3.9	3.9	4.5	3.5	4.0	4.4	3.8	4.7	3.1	3.5	3.3	2.8	E	1.8	4.1	4.0
13	3.1	2.6	1.9	2.1	2.0	2.1	1.7	2.8	4.0	4.5	3.8	4.8	4.5	4.5	4.5	5.5	4.4	3.3	4.5	3.3	5.0	5.0	4.0	3.2
14	4.3	2.0	3.0	2.2	2.3	2.8	2.9	3.3	3.4	3.5	3.8	5.0	4.8	G	3.7	C	3.0	4.0	5.0	5.0S	2.8	3.7	E	2.8
15	2.6	2.8	2.2	2.2	2.2	3.0	3.0	3.6	4.0Y	4.0	3.7	G	4.0	4.3	3.7	3.7	3.9	2.9	3.8	3.2	4.0	E	3.5	E
16	2.2	1.9	2.2	2.0Y	2.1	2.1	3.0	3.1S	3.7	3.8	3.2	3.8	3.8	3.0	4.1	3.9	2.9	3.7	4.4	3.9	2.9Y	2.9	3.9	2.8
17	2.9	1.9	1.8Y	2.1Y	2.1Y	2.0	2.0	3.6	4.0	3.6	3.6	3.6	4.2Y	4.5Y	4.5	3.6	3.2	4.0	6.5	5.8	7.0	7.1	4.1	4.0
18	4.0	3.0	4.0	4.0Y	3.3Y	4.1Y	3.7	3.8	3.6	4.6Y	4.0	3.0	4.0	4.0	2.9	3.9	4.7	3.0	4.4	5.5	4.5	3.6	2.9	2.9
19	E	2.1	2.8	2.0	3.0	C	C	C	C	C	G	G	G	3.5	G	G	3.6	2.9	E	3.0	E	3.1	E	2.9
20	2.8	3.9	3.5	3.9	3.0	2.5	3.5	3.8	4.2	G	4.7	4.5	3.8	3.9	3.5	4.7	4.5	3.1	2.2	2.0	2.8	3.0	2.8	3.0
21	4.5	3.1	3.2	3.4	2.2	2.7	1.8	3.2	3.5	G	3.0	3.3	3.7	3.0	4.2	3.3	3.4	3.3	E	3.0	4.8	3.4	4.0Y	E
22	E	3.9Y	3.5Y	2.4Y	2.2	3.0	2.9	3.0	3.3	3.5	4.7	5.3	4.8	5.2	3.8	3.3	3.6	4.0	3.2	3.7	3.2	2.2	C	E
23	E	2.0	3.3Y	2.0	2.0	2.5Y	3.2	3.7	4.0	3.4	4.5	4.4	3.5	4.5	3.5	3.5	5.0	6.0	6.0	4.8	3.4	4.8Y	4.7	4.8
24	3.2	3.0	2.9	5.1Y	2.0	3.5	3.2	3.8	5.7	6.5	6.3	5.4	5.3	5.1	4.5	G	3.5Y	3.0	3.5	4.0	3.7	6.0	3.8	4.3
25	3.2	2.9	2.5	3.0	2.1	E	1.9	3.1	4.3	4.0	G	G	G	3.7	G	G	3.2	2.9	E	2.8	3.8YS	E	6.0	3.5S
26	3.8	3.5	3.0	3.3	5.6Y	E	2.7	3.0	3.8	4.7	5.3	G	3.8	3.7	4.4	3.9	3.5	3.0Y	7.0	E	4.0	3.8	E	2.7
27	2.9Y	2.1	2.2	2.2	2.2	2.2	E	B	B	3.1	3.7	B	G	B	B	G	3.1	2.9	E	2.7S	3.3	2.2S	2.0S	5.0
28	3.1Y	E	2.2	2.1	2.1	E	G	2.8	3.3Y	4.7	4.0	5.0	4.9	G	3.3	G	4.0	3.8	3.2	4.9	5.5	2.8Y	4.9	3.8
29	2.8	2.6	2.8	2.2	2.0	E	3.0	3.0	3.5	3.2	G	G	3.7	3.8	3.7	4.8	3.7	3.2	2.7Y	4.9	3.5	2.9	E	E
30	E	3.0Y	2.1	2.0	2.0	C	C	B	C	C	G	G	C	C	G	G	3.6	3.7	2.2S	3.9	3.6	6.9	3.3	2.2
31																								
Mean Value	3.4	2.8	2.9	2.8	2.5	2.6	3.1	3.8	4.5	4.2	4.6	4.3	4.2	4.0	3.9	3.9	3.8	3.7	4.1	3.8	4.2	4.0	4.1	3.8
Median Value	2.9	2.7	2.8	2.2	2.2	2.4	3.0	3.6	4.0	4.2	3.8	3.7	3.8	3.8	3.7	3.8	3.7	3.4	3.4	3.2	3.8	3.0	3.8	3.0
Count	30	30	30	30	30	28	28	27	27	28	30	29	28	28	29	29	30	30	30	30	30	30	29	30

fEs

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

K 8

17

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

IONOSPHERIC DATA

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

(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

Kokubunji Tokyo Lat. 35° 42.4' N Long. 139° 29.3' E

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

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

Sep. 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	1.3	1.4	1.3	1.1	E	1.4	1.5	1.5	1.5	1.5	1.5	2.2	1.6	2.2	2.0	1.6	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.5
2	1.5	1.5	1.2	1.2	1.1	1.5	1.4	1.4	1.5	1.7	2.0	2.2	2.5	2.2	1.7	1.6	1.5	1.5	1.6	1.5	1.5	1.5	1.5	1.5
3	1.5	1.5	1.2	1.2	1.1	1.5	1.5	1.5	2.2	2.3	2.5	2.2	1.8	2.0	2.5	1.5	1.5	1.5	1.5	1.5	1.3	1.5	1.4	E
4	E	1.5	1.5	1.5	1.1	1.4	1.5	1.5	1.5	2.3	2.0	2.3	2.3	2.3	2.2	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.5	1.5
5	1.5	1.5	1.5	1.1	1.0	1.4	1.5	1.5	1.4	1.6	1.7	2.5	[2.4]M	2.4	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
6	1.5	1.2	1.0	1.1	1.1	1.3	1.5	1.5	1.5	1.6	1.5	1.7	1.5	1.5	1.6	1.5	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5
7	1.4	1.5	1.1	1.3	E	1.5	1.5	1.4	1.4	1.6	2.2	1.6	1.6	1.5	1.6	1.6	1.5	1.5	1.5	E	E	E	1.5	1.5
8	1.5	1.5	1.3	E	1.3	E	1.5	1.5	1.6	1.5	1.5	2.0	2.1	2.2	1.5	1.5	1.5	1.5	1.3	1.5	1.5	1.4	E	E
9	1.4	E	1.5	1.4	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	E	E	1.5	1.4	1.4
10	1.5	1.5	1.4	1.4	1.3	E	1.5	1.5	1.5	1.5	2.3	2.3	1.5	2.4	2.4	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.5	1.5
11	E	E	1.2	1.1	1.1	1.5	1.5	1.5	1.5	1.5	1.6	2.5	2.4	2.4	2.3	2.3	2.3	1.5	1.4	1.5	1.3	E	1.5	E
12	E	1.5	1.2	1.5	1.5	1.6	1.5	1.5	1.5	2.3	2.2	2.4	1.6	2.1	1.5	1.6	1.5	1.5	1.4	1.5	E	1.6	1.5	1.5
13	1.4	1.3	1.2	1.2	1.2	1.5	1.4	1.5	1.4	2.2	1.5	1.6	2.2	1.5	1.5	2.2	1.6	1.5	1.4	1.5	1.4	1.4	1.5	1.4
14	1.4	1.5	1.0	1.3	1.1	1.4	1.4	1.5	1.5	1.5	1.7	1.6	2.5	2.4	1.6	[1.6]C	1.5	1.4	1.4	1.4	1.4	1.4	E	1.3
15	1.4	1.4	1.2	1.5	1.2	1.4	1.4	1.5	1.5	2.2	2.4	1.7	2.3	2.4	1.5	1.5	1.5	1.5	1.8	1.2	1.6	E	1.5	E
16	1.4	1.6	1.1	1.5	1.5	1.7	1.0	1.5	1.5	1.5	1.5	1.4	1.6	1.5	1.5	2.4	1.5	1.5	1.4	1.0	1.2	1.1	1.5	1.4
17	1.4	1.6	E	1.2	E	1.5	1.4	1.5	2.6	1.5	1.5	1.5	1.5	1.5	1.4	1.5	1.5	1.4	1.4	1.4	1.5	1.4	1.4	1.3
18	1.1	1.3	E	1.0	1.1	1.5	1.4	1.4	1.4	1.4	2.4	1.5	1.9	1.4	1.5	1.5	1.4	1.2	1.4	1.5	1.4	1.4	1.4	1.5
19	E	1.4	1.3	1.4	1.5	C	C	C	C	C	1.5	1.7	1.6	1.5	2.4	1.4	1.5	1.6	E	1.5	E	1.3	E	1.4
20	1.3	1.4	E	E	E	1.5	1.4	1.5	1.5	1.5	1.5	2.2	1.5	1.5	1.5	1.6	1.4	1.5	1.4	1.5	1.5	1.4	1.4	1.4
21	1.0	1.2	E	E	1.0	1.4	1.4	1.5	1.4	1.5	2.0	1.5	1.6	1.6	1.5	1.5	1.5	1.5	E	1.0	1.3	2.0	1.5	E
22	E	1.4	1.3	E	E	1.5	1.4	1.4	1.5	1.5	2.1	1.5	2.1	1.5	2.2	1.5	1.5	1.4	1.5	1.4	1.5	1.3	C	E
23	E	1.4	1.1	1.4	1.4	1.4	1.5	1.4	1.4	1.5	1.5	1.5	1.5	2.5	1.5	1.5	1.3	1.4	1.4	1.5	1.4	1.5	1.5	1.5
24	1.4	1.5	1.5	1.5	1.4	1.5	1.4	1.5	1.5	1.5	2.4	2.5	2.3	2.4	2.4	1.4	1.4	1.4	1.3	1.4	1.3	1.4	1.5	1.3
25	1.3	1.3	1.4	E	E	E	1.5	1.5	1.4	2.3	2.3	1.5	2.5	1.7	1.5	1.5	1.4	1.3	E	1.3	1.0	E	1.4	1.5
26	1.4	1.4	1.1	1.1	1.5	E	1.3	1.5	1.5	2.5	2.4	2.5	1.3	2.4	1.4	2.4	1.6	1.6	1.5	E	1.3	1.4	E	1.3
27	1.3	1.5	E	E	E	1.3	E	B	B	1.5	3.4	B	2.5	B	B	2.5	1.4	1.5	E	1.3	1.0	1.5	1.3	1.4
28	1.2	E	1.2	1.0	1.3	E	1.4	1.4	1.5	1.7	2.5	2.5	2.5	2.3	2.3	1.5	1.6	1.4	1.4	1.5	1.3	1.4	1.4	1.4
29	1.3	1.4	E	E	1.5	E	1.4	1.5	2.5	2.4	2.3	2.5	1.5	1.6	1.5	1.5	1.5	1.5	1.4	1.2	1.5	1.4	E	E
30	E	1.5	1.3	1.3	1.5	C	C	B	C	C	2.5	2.5	C	C	2.4	1.5	1.5	1.3	1.0	1.5	1.5	1.5	1.4	1.4
31																								
Mean Value	1.4	1.4	1.3	1.3	1.3	1.4	1.4	1.5	1.6	1.8	2.0	2.0	1.9	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.4	1.5	1.5	1.4
Median Value	1.4	1.4	1.2	1.2	1.1	1.4	1.4	1.5	1.5	1.5	2.0	2.2	1.9	2.0	1.6	1.5	1.5	1.5	1.4	1.5	1.4	1.4	1.5	1.4
Count	30	30	30	30	30	28	28	27	27	28	30	29	29	28	29	30	30	30	30	30	30	30	29	30

foE

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

Sep. 1955 | **ypF2** | 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	50^{F}	70	60	70	60	70^{P}	60	30^{P}	90	80	30	50	50	60	20	60	70	60	40^{P}	(60)^{S}	70	90	30	60
2	70	(80)^{J}	50	70^{F}	50	80	40	B	50	100	50	80	70	70	60	80	70	60	80	50	60	80	60^{F}	70
3	(60)^{VF}	60	70	[70]^{A}	70	60	50	(50)^{J}	A	G	A	U	U	U	U	U	60	60	[70]^{A}	80	70^{F}	(60)^{JF}	(60)^{JF}	70
4	90	80	50	(70)^{JF}	60^{F}	60^{F}	60	80	40	60	60	60	U	60	50	60	60	80	60	60	90	80	70	90
5	80	60	100	80	80	90^{F}	40	60	60	50	60	50	[60]^{M}	60	70^{P}	70	80	80	60	70	60	A	70	[60]^{A}
6	60	40^{P}	50	60	50	60^{F}	50	70	50	90	U	50	50^{P}	(40)^{P}	60	80	70	90	80	70	60	50^{F}	[80]^{A}	100^{F}
7	80^{F}	80	80	70	80	90	60	70	(70)^{J}	50^{P}	50	80	50^{P}	(70)^{P}	B	B	80	60	60	90	80	70	40	60
8	(60)^{P}	80	80	80	80	70	50	(70)^{P}	50^{P}	30	70	[60]^{B}	(40)^{J}	(30)^{P}	70	60	B	60	60	40	80	50	90	80
9	90	70	60	80	(70)^{J}	80	50	B	90	80	40	[40]^{B}	(30)^{B}	B	B	(50)^{P}	80^{P}	(70)^{B}	40	60	80	70	100	80
10	50	80	80	60	80	60	80	B	70	60	100	(40)^{B}	60^{P}	70^{P}	B	B	80	[60]^{B}	50	90	80	90	50	60
11	60	60	70	100	90	90	60	60	(50)^{P}	100	B	B	B	B	B	B	100	90	B	80	110	80	70	50
12	60	60	70	50	100	70	70	60	70^{P}	80	(90)^{B}	B	B	100	(40)^{B}	(70)^{B}	(50)^{B}	60^{P}	70	80^{P}	70	50	50	70
13	60	80	90	80	90	70	90	80^{P}	B	B	B	B	B	70^{P}	70^{P}	80	60	50^{P}	B	70	70	70	70	60
14	80	80	80	70	70	80^{F}	60	B	60^{P}	(40)^{P}	70^{P}	80	60^{P}	80	50	[40]^{C}	30	30	50	60^{S}	80	70	80	80
15	60	80	100	50	90	70	80	70	40	60	50	80	60	50	40	70	50	80	60	90	50	60	60	60
16	70	70	80	80	90	60	60	70	50	60	100	50	50	50	70	70	80	90	40	50	70	70	50	70
17	60	80	70	90	80	80	70	90	70	60	40	70	40	70	60	50	80	60	40	50^{P}	70	100^{F}	70	60
18	90	60	40	70	100	90	80	60	40	70	70	70	60	90	70	80	30	50	60	70	80	80	60	60
19	50	80	60	50	70	C	C	C	C	C	40	50	70	60	60	80	40	60	60	50	90	80	60	90
20	100	70	70	60	60	90	70	60	70	50	50	60	50	40	40	60	50	50	80	70	60	80	50	90
21	80	90	90	50	90	90	60	50	50	60	50	90	40	40	50	60	50	60	40	50	80	70	90	80
22	60	70	90	100	70	40	60	70	40	40	40	70	50	60	70	40	40	50	60	100	60	60	[80]^{C}	90
23	70	(70)^{P}	70	70	80	40	60	70	70	60	40	30	100	60	80	50	50	50	(60)^{J}	70	60	60	60	70
24	60	60	80	80	100	80	80	50	40	80	50	70	90	90	70	50	50	70	60	80	100	[90]^{A}	80	60
25	60^{F}	60^{F}	70	80	70	70	60	60	90	80	70	90	60	70	60	70	70	60	50	70	90	70	60	60
26	70	70	70	60	70	70	60	70	50	50	70	70	60	50	80	50	60	60	50	100	60	70	60	80
27	80	60	60	60	90	30	60	50	80	50	70	50	30	50	50	70	80	80	70	70	80	70	70	60
28	80	70	70	50	50^{F}	70^{F}	60	90	(70)^{J}	70	90	70	90	80	60	50	40	40	70	60	80	50	80	50
29	70	50	70	60	40	50	90	60	120	50	50	60	60	60	50	60	50	50	40	60	90	70	70	60
30	100	80	80	70	80	C	C	40	C	C	70	70	C	C	70	60	70	50	70	70	80	[80]^{A}	70	C
31																								
Mean Value	70	70	70	70	80	70	60	60	60	60	60	60	60	60	60	60	60	60	60	70	70	70	70	70
Median Value	70	70	70	70	80	70	60	60	60	60	60	60	60	60	60	60	60	60	60	70	80	70	70	70
Count	30	30	30	30	30	28	28	25	26	27	26	26	24	26	25	26	29	30	28	30	30	29	30	29

ypF2

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

K 12

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

IONOSPHERIC DATA

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

22

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	4.2	A	A	3.5^{F}	[3.6]^{F}	3.7^{F}	4.8^{F}	7.9	6.9	6.4	6.6	6.5	6.7	6.6	7.4	7.1	7.2	8.0	8.9	9.9	7.3	6.0	5.6^{F}	5.3^{F}
2	5.3^{F}	F	F	5.0^{V}	4.7^{F}	4.0	5.2	8.0	6.8	6.3	6.6	7.0	7.2	8.1	8.3	8.5	8.5	8.7	8.9	8.7	9.6	7.9	5.5$^{F}_{H}$	6.4$^{J}_{F}$
3	6.1$^{J}_{F}$	5.6$^{J}_{F}$	5.5^{F}	5.2$^{J}_{F}$	F	F	5.3	6.2	6.8	5.9^{J}	5.8	5.8	5.8	5.7	5.5	5.9	5.7	5.9	5.9	6.0	6.5	6.1	5.9$^{J}_{F}$	6.0$^{J}_{F}$
4	5.9	5.6$^{J}_{F}$	3.4$^{V}_{F}$	[3.3]^{F}	3.2^{F}	3.1	4.0	7.1	6.6	6.5	5.9	5.8	6.6	7.7	8.6	8.1	8.0	7.6	7.9	7.9	6.5	6.4	6.0	5.9
5	5.7	5.5	4.9	4.8	4.6	4.3	5.1	6.9	7.9	6.4	7.5	8.6	8.3	8.2	9.4	9.0	8.5	8.2	8.0	8.2	7.0	3.9^{H}	3.8	4.0
6	4.2^{F}	4.3	4.2	4.1^{J}	4.0	3.8	4.5	6.6	6.5	6.8	6.7	7.4	9.2	9.9	8.9	8.8	8.0	8.3	8.0	7.1	5.5^{S}	5.1$^{J}_{S}$	4.9	5.1^{F}
7	F	F	5.0	4.3^{H}	4.3	3.6	4.2	7.2	7.8	6.8	6.7	7.2	9.0	10.5	10.8	10.0	7.6	7.3	7.4	7.4	6.4	5.5	5.4	5.3
8	5.1	5.1^{F}	5.2^{F}	5.4$^{X}_{F}$	4.7^{F}	3.5^{F}	4.6	6.6	8.2	7.6	7.0	8.0	9.0	8.0	7.5	7.9	7.9	7.8	8.0	8.0	7.5	5.5	5.8	5.5
9	5.5	5.2	5.2	4.8	4.6	4.6	5.9	7.0	6.3	7.2	7.8	8.5	10.0	10.1	10.0	9.9	8.5	8.5	8.8	9.0	7.4	5.0	4.5	4.5
10	4.5	4.6	4.6	4.6	4.6	4.4	5.1	6.5	7.3	6.5^{H}	6.7	7.3	8.2	9.0	9.5	10.0	9.0	8.6	7.8	A	A	5.3	4.6^{H}	4.7
11	4.7	4.8	4.9	4.6	4.0	3.5	4.5	6.8	6.8	7.0	7.4	8.8	10.0	11.6	11.1	10.3	9.0	8.6	10.5	9.6	6.5	5.5	5.6	5.7
12	5.9	5.5	5.7	5.8	3.9	3.7	4.3	5.9	[7.0]^{C}	8.2	8.7	9.0	8.8	10.0	9.5	8.8	8.9	9.9	9.7^{J}	9.6	8.0	5.6	5.1	4.8^{H}
13	5.1^{F}	5.1	4.9	4.7	4.5	3.5	4.0	6.9	9.5	9.0	9.5	11.0	8.5	8.0	8.9	8.0	9.4	8.7	9.5	7.7	5.3	4.7	4.5	4.8
14	4.5	4.6	4.2	4.4	4.1	4.4	5.6	6.6	7.7	7.0	7.3	8.5	9.6	9.7	9.3	8.5	8.5	9.2	9.9^{J}	9.0	7.8^{J}	5.4	4.9$^{X}_{F}$	A
15	A	4.7	4.6^{J}	3.8	3.9	3.6	4.4	8.0	7.5	7.0	7.8	8.0	8.9	9.8	9.0	7.3	6.8	6.6	6.6	7.4	7.3	5.4	4.9	4.9
16	5.0^{H}	5.0	4.6	4.7	3.8	3.4	4.0	6.6	7.1	6.5	6.5^{H}	8.3	9.4	10.0	10.0	8.5	7.2	6.7^{H}	7.4	8.4	8.6	4.5	4.6	4.8
17	4.7	4.5	4.4	4.4	4.5	4.3	5.0	6.1	6.6	6.9	7.1	7.7	8.1	C	C	C	C	C	C	(10.4)$^{J}_{P}$	6.5	4.0^{P}	4.5	4.3
18	4.4	4.4	5.1	2.6^{J}	2.2^{F}	2.3^{F}	3.7	5.9	7.9	7.7	7.6	8.0	8.9	8.8	7.9	8.5	9.6	9.9	9.3	6.8	5.3	4.8	4.7^{H}	4.7
19	4.7	4.5	4.6	3.4	3.3	3.2	4.1^{J}	5.9	C	C	C	C	C	C	C	C	C	C	C	7.0	5.8	4.0	4.0	3.6
20	4.1^{P}	3.6	3.7	4.0	3.9	3.0	3.9	5.3	6.5	8.3	8.8	8.0	9.5	10.0	10.0	8.7	7.5	7.2	7.4	7.1	5.8	5.0	4.8	4.5
21	4.5	4.3	4.4	4.2	4.0^{P}	3.7	4.4	6.9	6.5	7.6	7.2	7.2	7.4	7.0^{H}	7.3	7.5	7.2	7.2	8.1	8.6	6.4	4.3	4.2	4.0
22	4.0	3.9	4.0	4.0	3.4	3.5	4.4	5.4	6.0	6.4	6.4	7.0	8.0	8.0	9.1	10.9	10.8	9.8	7.9	4.8	4.4	4.2^{J}	4.3	4.1
23	4.2^{J}	4.1^{P}	3.9	4.0	4.2	3.0	4.1	5.5	6.9	8.4	7.9	6.5	7.3	8.3	8.8	8.4	9.0	10.0	8.5	5.8	4.3	4.5	4.5	4.5
24	4.6	4.3	4.1	4.2	3.1	3.0	3.8	6.1	7.1	8.7	8.6	8.6	9.6	10.5	10.0	9.5	8.3	7.3	7.0	6.4	5.0	4.5	4.6	4.8
25	5.2	4.8	4.5^{H}	4.3	4.1^{P}	3.5	4.6	6.6	6.4	6.5	7.4	8.4	10.3	10.3	8.9	8.2	8.1$^{P}_{S}$	7.8	7.9	7.7	5.5	4.5	4.6	4.6
26	4.7^{H}	4.7	4.4	4.1	3.8	3.3	4.0	7.0	7.0	7.4	7.1	7.5	9.0	10.0	8.8	8.2	7.2	8.3	8.4	6.7	4.2	4.0	4.1	4.3^{F}
27	4.4^{F}	4.3	4.3^{J}	4.0	4.0	3.2	3.8	6.9	7.8	7.7	7.1	8.7	9.4	9.7	9.4	7.6	7.5	8.8	9.5	7.7	4.2	4.4	4.4	4.5
28	4.4	4.6	4.5	4.5	4.8	4.0^{H}	4.5	6.5	8.1	7.6	8.7	9.8	10.0	10.9	11.0	11.6	10.4	9.5	9.5	6.5	4.4	4.2^{P}	4.3	4.1
29	4.3	4.3	4.8	4.9	2.7	2.6	3.8^{V}	6.5	8.6	8.5	8.3^{V}	9.0	10.1	10.4	9.6	10.4^{S}	[9.6]^{C}	8.9	C	C	C	C	C	C
30	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
31																								
Mean Value	4.8	4.7	4.6	4.3	3.9	3.6	4.5	6.6	7.2	7.2	7.4	7.9	8.7	9.1	9.1	8.7	8.3	8.3	8.3	7.8	6.3	5.0	4.8	4.8
Median Value	4.7	4.6	4.6	4.3	4.0	3.5	4.4	6.6	7.0	7.0	7.2	8.0	9.0	9.7	9.1	8.5	8.3	8.3	8.0	7.7	6.4	4.9	4.6	4.7
Count	27	26	27	29	28	28	29	29	28	28	28	28	28	27	27	27	27	27	26	27	27	28	28	27

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

Yamagawa

Lat. 31° 12.5' N
Long. 130° 37.7' E

Sep. 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	270	380	[340]A	300	330	260	240A	240	250	270	280	350	310	290	310	310	340	290	290	260A	210	250	300	280
2	300	330	300	270	270	280	240	240	240	260	[280]A	290	350	330	320	320	300	290	270	250	240	230A	220AH	340A
3	260	270	250	260	290	250	270	250	260	300	340	[370]A	400	400	450	390	370	320	290	[300]A	300	280	280	280
4	270	250	290	340	310	290	270	240	240	290	280	400L	400	350	300	300	300	280	260	240	230	270	280	280
5	270	260	300	310	250	290	270	250	250	270	310	300	310	340	310	290	290	290	260	250	210	200H	340	340
6	330	310A	350A	300	320A	270	250	240	260	260	330	340	320	300	320	300	300	270	250	260	250	300	290	310A
7	360	340	270	250H	250	250	250	250	240	240	260	400	340	310	290	270	300	280	250	240	230	250	280	290
8	290	300F	300	250	220	270	250	250	250	250	280	320	290	290	330	310	290	280	260	250	230	240	290	280
9	290	280	280	270	270	270	240	240	240	290	300	310	320	290	290	280	290	280	250	250	220A	210	260	300
10	300	300	290	250	240	240	240	220	240	230H	270	330	330	300	300	300	300A	280A	250	A	A	260	290H	320
11	300	290	250	250	210	230	240	240	240	250	300	330	300	300	280	270	260	320	260	230A	210	290	300	300
12	300	300	280	240	250	260A	240A	220	[260]C	290	280	290	290	300	280	290	300	270	270	250	200	220	250	320H
13	350	300	290	250	240	290	270	280	250	270	290	260	270	290	290	310	290	270	250	230A	(300)A	350A	340A	300
14	290	290	300	300	320	270	240	250	260	250	270	320	290	300	290	290	290	270	240	240	250	[270]A	290	A
15	A	320A	300	280	250	250	270	240	240	250	290	290	300	280	290	260	260	270	250	260	220A	210	250	300
16	300H	290	280	240	200	240	250	230	240	240	250H	310	300	290	280	260	270	240H	260	260	210A	210A	300	310
17	290	260	260	250	240	230	220	240	240	240	270	300	270	C	C	C	C	C	C	230	210A	250	300	330
18	310A	300A	240	220	230	260	250	240	240	250	260	280	280	290	300	300	280	250	240	240	240	270	290H	330
19	300	280	240	240	250	300	250	210	C	C	C	C	C	C	C	C	C	C	C	230A	210	250	260	280
20	300	310A	290	250	230	220	220	220	250	260	260	310	300	270	290	260	270	260	250	240	200A	290	300	290
21	290	290	290	270	260	240	250	230	240	250	250	300	290	290H	290	290	270	270	250	230	200	250	250	290
22	300	270	290	250	220	250	230	210	230	250	270	290	300	340	330	270	250	230	220	220A	250	270	280	290
23	290	290	280	260	230	250	240	220	250	250	250	270	320	310	290	290	280	250	220	210A	250	290	280	300
24	290	290	290	210	250	290	270	240	260	260	260	300	300	290	280	260	250	230	240	240	220A	310A	290	290
25	280	250	250H	250	210	250	250	220	240	250	280	310	280	270	270	290	260	260	220A	220A	200	240H	290	290
26	270H	260	270	240	260	260	250	230	240	260	250	300	300	270	270	280	260	250	230	240A	220A	330A	290	300
27	300	280	270	250	230	220	240	230	240	250	260	290	270	280	260	260	290	260	240	210	220	300	300	320A
28	320A	300	280	290	270	300H	250	240	240	270	270	280	290	300	290	270	250	240	240A	200	290	350A	280	300
29	300A	290	270	240	200	290	300	230	240	240	240	280	280	270	280	260	[250]C	240	C	C	C	C	C	C
30	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
31																								
Mean Value	300	290	280	260	250	260	250	240	250	260	280	310	310	300	300	290	280	270	250	240	230	270	280	300
Median Value	300	290	280	250	250	260	250	240	240	250	270	300	300	290	290	290	290	270	250	240	220	260	290	300
Count	28	29	29	29	29	29	29	29	28	28	28	28	28	27	27	27	27	27	26	27	27	28	28	27

h'F2

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

Y 2

23

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

IONOSPHERIC DATA

Sep. 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	5.9	6.5	5.9	5.3	3.6	3.3	3.3	4.9	7.0	5.9	8.6	5.8	5.9	5.8	3.8	G	G	5.7	5.9	9.9	5.9	10.2	8.9F	5.9
2	3.7	3.1F	3.0F	3.0F	3.3	3.1	3.4	3.7	5.9	6.4	10.3Y	9.5	8.7	5.9	G	G	G	3.6	3.0	E	2.3	6.6	6.5F	5.8
3	5.9	3.6	3.6	2.4	2.4	2.9	2.4F	3.7	5.9	5.9	9.0	12.2Y	12.8	G	G	5.9	G	5.9	5.9	6.5	6.3	9.5F	6.1	7.0
4	3.5	3.7	2.4	2.4	2.3	2.3	3.3	3.8	3.8	G	5.8Y	8.5Y	4.8	5.8	4.9	4.5	3.8	G	3.0	2.3	2.3	2.5	3.0	3.0
5	2.4	2.3	2.1	E	E	E	2.3	3.3	6.7	4.8	5.9	3.6	G	G	G	G	8.7	G	3.6	2.4	2.3F	3.2	3.6	2.3
6	3.4	5.9	5.9	5.9	4.7	2.5	3.4	3.7	3.7	5.9	G	G	3.5	G	G	G	5.5	3.5F	7.0	9.5	8.9F	5.9	3.8	5.9
7	5.9F	3.6	3.0	2.4	2.1	E	2.4	3.1	3.8	3.7	3.8	G	G	G	G	G	G	G	G	2.1	E	E	E	E
8	E	2.3	2.4F	2.0	E	E	2.3	3.2	G	5.0	6.6	4.9	3.7	4.3	6.0	3.7	3.7	3.6	2.4	3.1	2.3	2.2	E	2.2
9	E	E	E	E	E	E	2.3F	3.4	G	G	3.7	5.9	3.8	10.0Y	5.9Y	5.9Y	5.9Y	3.5	3.4F	4.5	3.2	2.2	2.3	2.2
10	2.3	3.5	2.4	2.4	2.3	2.3F	2.3F	G	8.0Y	G	3.8	3.5	3.8	4.8	4.8	6.4	10.0	6.5	4.5	13.5	11.5	7.0	3.6	2.1
11	2.3	E	2.2	2.1	2.1	E	2.1	G	4.2	4.9	4.6	5.9Y	G	5.6	5.1	G	3.6	4.0	2.9	3.2	3.6	3.4	3.5	3.4
12	3.5	5.8	4.6	3.7	2.4F	3.8	3.3	3.4	C	4.5	4.8Y	5.8	5.9	3.7	G	3.8	3.8	5.9F	3.8	3.0	2.2	2.1	2.0	5.9
13	4.6	3.2	2.3	2.3	2.3	3.2	3.1	G	3.7	4.2	4.5	G	4.9	4.7	4.7	4.9	4.9	G	3.1	3.8	8.5	5.8	5.0	E
14	E	E	E	E	2.1	2.3	2.1	3.1	3.7	4.2	5.9Y	5.5	6.3	6.2	5.9Y	4.2	4.0	3.4	5.5	5.9Y	9.7	5.9	3.2	5.9
15	6.7	4.3	3.7F	3.5	3.0	2.3	2.3	3.1	3.8	3.8	G	G	G	3.7	5.9Y	G	G	3.8	3.8	4.2	2.9	2.4	E	3.2F
16	3.2	3.4	2.3	2.2	E	2.2	2.2	G	3.8	G	G	G	G	G	G	G	G	G	G	4.9	5.7	3.1	2.2	3.2
17	2.3	2.3	2.4	2.3	2.2	2.3	2.4	3.1	3.7	G	G	G	G	C	C	C	C	C	C	3.6	3.5	3.1	3.1	3.5
18	3.8	3.8	3.1	2.4	E	2.3	2.2	3.4	3.8	G	4.2	6.1	5.9	5.9	5.9	5.0	3.8	4.3	3.1	3.6	2.4F	3.1	2.4	3.7
19	2.4	E	E	E	E	E	2.3	3.1	C	C	C	C	C	C	C	C	C	C	C	3.0	2.4	E	E	2.3
20	3.3	3.8	3.4F	2.3	E	E	E	3.2	3.7	3.8	G	3.8	G	G	G	3.8	3.7	G	2.3	3.6	3.4	3.4	3.6	3.4
21	3.1	2.4	3.0	2.3	3.0	2.3	2.2	2.9	3.6	3.7	6.0Y	6.0Y	5.8Y	B	G	G	G	G	2.3	E	E	E	E	2.3F
22	2.3F	E	E	E	E	E	E	G	3.7	5.8	3.6	G	G	5.9	G	4.3	4.1	3.5	2.3	2.6	2.9	2.4F	2.2	2.3
23	2.2	E	2.3	E	E	E	2.3	3.3	4.0	4.2	4.8Y	G	G	G	5.0	5.7	5.0	3.8	G	E	E	3.8	3.1	3.4
24	3.1	2.4	2.3	2.3	E	E	2.4	3.2	G	4.9	4.6	9.0	G	5.9Y	5.8	G	3.7	3.3	2.4	3.7	3.1	3.4	3.6	2.3
25	E	E	E	E	3.0Y	E	E	3.2	5.0	6.5	3.8	G	G	G	G	G	6.2Y	4.7	3.8	3.4	3.5	3.0	3.0	2.3
26	2.3	3.0	2.3	2.4	2.3	E	2.3	3.2	4.8	4.8	G	G	G	5.9	G	G	3.8	3.6	3.7	6.6	3.4	7.0	3.7	3.0
27	2.4	2.3	2.3	2.3	2.4	2.3	E	G	6.5	G	G	G	G	G	5.9	5.9	G	G	2.4	E	2.0	2.3	3.1	3.6
28	3.5	3.1	3.2	2.3	3.4	3.8	2.3	G	3.8	G	G	G	G	G	G	G	G	4.5	5.9	3.8	2.4	8.7	2.3	3.2
29	4.6	3.4	2.4	2.3	E	2.3	2.4	3.0	3.8	5.8	G	G	G	G	G	G	C	3.5	C	C	C	C	C	C
30	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
31																								
Mean Value	3.5	3.5	3.0	2.8	2.7	2.7	2.5	3.4	4.6	4.9	5.5	6.4	5.8	5.6	5.4	4.9	5.0	4.2	3.7	4.7	4.3	4.5	3.6	3.6
Median Value	3.1	3.1	2.4	2.3	2.2	2.3	2.3	3.2	3.8	4.2	4.0	3.6	G	4.0	G	G	3.8	3.5	3.1	3.6	3.0	3.2	3.1	3.2
Count	29	29	29	29	29	29	29	29	27	28	28	28	28	26	27	27	26	27	26	28	28	28	28	28

fEs

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

Y 3

SOLAR RADIO EMISSION

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

\# Maximum level: 47 at 0000.
\#\# Maximum level: 63 at 0230.

Outstanding Occurrences: None.

ONOSPHERIC DATA IN JAPAN FOR SEPTEMBER 1955

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