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IONOSPHERIC DATA IN JAPAN

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CONTENTS

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INTRODUCTION

This Series contains data on ionosphere (I) and solar radio emission (S) obtained at the following stations under the National Institute of Information and Communications Technology, Independent Administrative Institution in Japan.

Station	Geographic		Geomagnetic (IGRF2000)		Technical Method	
	Latitude	Longitude	Latitude	Longitude		
Wakkanai	45°23.6'N	141°41.1'E	36.4°N	208.6°	Vertical Sounding	(I)
Kokubunji	35°42.4'N	139°29.3'E	26.6°N	207.9°	Vertical Sounding	(I)
Yamagawa	31°12.1'N	130°37.1'E	21.4°N	199.8°	Vertical Sounding	(I)
Okinawa	26°40.5'N	128°09.2'E	16.8°N	198.4°	Vertical Sounding	(I)
Hiraiso	36°22.0'N	140°37.5'E	27.4°N	209.2°	Solar Radio Emission	(S)

A. IONOSPHERE

Ionospheric observations are carried out at the above four stations in Japan by means of vertical sounding using ionosondes. The ionosonde produces ionograms, which are recorded digitally on computer storage medium. The digitally-recorded ionograms are collected from each station by the central computer and reduced to numerical values and Summary Plots by the automatic processing system. The ionograms obtained at Kokubunji are manually scaled as well by experienced specialists to supplement automatically-scaled parameters.

A1. Automatic Scaling

Digital ionograms are automatically scaled by the pattern recognition method. The following five factors of ionospheric characteristics are published for the present. The reliability of these factors has been ascertained by comparison of the automatically-scaled parameters with the manually-scaled values of large amounts of test ionograms.

The published data consist of tabulations of hourly values of three factors (*foF2, fEs, fmin*) and monthly medians of two factors (*h'Es ,h'F*), daily Summary Plots and monthly medians plot of *foF2*.

a. Characteristics of Ionosphere

foF2	Ordinary wave critical frequency for the ***F2*** layer
fEs	Highest frequency of the ***Es*** layer whether it may be ordinary or extraordinary
fmin	Lowest frequency which shows vertical ionospheric reflections
h'Es ***h'F***	Minimum virtual height on the ordinary wave for the ***Es*** and ***F*** layers, respectively

b. Descriptive Letters

The following descriptive letters are used in the tables.

A Impossible measurement because of the presence of a lower thin layer, for example *Es* (for *foF2*).

C Impossible measurement because of any failure in observation.

G Impossible automatic scaling because of too small ionization density of the layer (for *fEs*).

N Impossible automatic scaling because of complex echoes.

Blank No digital record because of trouble in the automatic data processing system, but existence of film record.

c. Definitions of the CNT, MED, UQ and LQ

Median count (**CNT**) is the number of numerical values from which the median has been computed. In addition to numerical values, the count may include a descriptive letter G.

Median (**MED**) is defined as the middle value when the numerical values are arranged in order of magnitude, or the average of the two middle values if there is an even number of values.

Upper quartile (**UQ**) is the median value of the upper half of the values when they are ranked according to magnitude; the ***lower quartile*** (**LQ**) is the median value of the lower half.

If CNT is less than 10, there are blank spaces left.

d. Reliability of Automatic Scaling

The results of the comparison between automatically-scaled values and manually-scaled ones showed that hourly values of *foF2* , *fEs* and *fmin* were scaled within a difference of 1 MHz from about 90, 90 and 99%, respectively of the test ionograms.

e. Summary Plot

Daily Summary Plots which are made from quarter-hourly digital ionograms are published to present general ionosphere conditions. The upper and middle parts of a Summary Plot show the diurnal variation of the frequency range of the echoes reflected from the *F* and *E* regions, respectively. The two solid arcing lines indicate the predicted values of *fxE* and *foE* calculated by the method described in the CCIR report 340. The lower part shows the diurnal variation of the virtual height where the echo traces become horizontal.

A2. Manual Scaling

The published data consist of tabulations of hourly values of the ionospheric characteristics and figures of daily *f*-plot.

All symbols and terminology in the tables or figures of ionospheric data are used in accordance with the "URSI Hand-book of Ionogram Interpretation and Reduction (Second Edition) 1972 " and its revision of chapters I-4, published in July 1978.

a. Characteristics of Ionosphere

fxI	Top frequency of spred ***F*** trace
foF2 ***foF1*** ***foE*** ***foEs***	Ordinary wave critical frequency for the ***F2***, ***F1***, ***E*** and ***Es*** including particle ***E*** layers, respectively
fbEs	Blanketing frequency of the ***Es*** layer, e.g. the lowest ordinary wave frequency visible through ***Es***
fmin	Lowest frequency which shows vertical ionospheric reflections
M(3000)F2 ***M(3000)F1***	Maximum usable frequency factor for a path of 3000 km for transmission by ***F2*** and ***F1*** layers, respectively
h'F2 ***h'F*** ***h'E*** ***h'Es***	Minimum virtual height on the ordinary wave for the ***F2***, whole ***F***, ***E*** and ***Es*** layers, respectively
Types of ***Es***	See below b. (iii)

b. Symbols

(i) Descriptive Letters

The following letters are entered after, or used to replaced a numerical value on the monthly tabulation sheets, if necessary.

A Measurement influenced by, or impossible because of, the presence of a lower thin layer, for example *Es*.

B Measurement influenced by, or impossible because of, absorption in the vicinity of *fmin*.

C Measurement influenced by, or impossible because of, any non-ionospheric reason.

D Measurement influenced by, or impossible because of, the upper limit of the normal frequency range in use.

E Measurement influenced by, or impossible because of, the lower limit of the normal frequency range in use.

F Measurement influenced by, or impossible because of, the presence of spread echoes.

G Measurement influenced by, or impossible because the ionization density of the layer is too small to enable it to be made accurately.

H Measurement influenced by, or impossible because of, the presence of a stratification.

K Presence of particle *E* layer.

L Measurement influenced or impossible because the trace has no sufficiently definite cusp between layers.

M Interpretation of measurement questionable because the ordinary and extraordinary components are not distinguishable.

N Conditions are such that the measurement cannot be interpreted.

O Measurement refers to the ordinary component.

P Man-made perturbations of the observed parameter; or spur type spread *F* present.

Q Range spread present.

R Measurement influenced by, or impossible because of, attenuation in the vicinity of a critical frequency.

S Measurement influenced by, or impossible because of, interference or atmospherics.

T Value determined by a sequence of observations, the actual observation being inconsistent or doubtful.

V Forked trace which may influence the measurement.

W Measurement influenced or impossible because the echo lies outside the height range recorded.

X Measurement refers to the extraordinary component.

Y Lacuna phenomena, severe layer tilt.

Z Third magneto-electronic component present.

(ii) Qualifying Letters

The following letters are entered in the first column before a numerical value on the monthly tabulation sheets, if necessary.

A Less than. Used only when *fbEs* is deduced from *foEs* because total blanketing of higher layer is present.

D Greater than.

E Less than.

I Missing value has been replaced by an interpolated value.

J Ordinary component characteristic deduced from the extraordinary component.

M Mode interpretation uncertain.

O Extraordinary component characteristic deduced from the ordinary component. (Used for x-characteristics only.)

T Value determined by a sequence of observations, the actual observation being inconsistent or doubtful.

U Uncertain or doubtful numerical value.

X Measurement deduced from the third magneto-electronic component.

(iii) Description of Types of *Es*

When more than one type of *Es* trace are present on the ionogram, the type for the trace used to determine *foEs* must be written first. The number of multiple trace is indicated after the type letter.

The types are:

f An *Es* trace which shows no appreciable increase of height with frequency.

l A flat *Es* trace at or below the normal *E* layer minimum virtual height or below the part *E* layer minimum virtual height.

c An *Es* trace showing a relatively symmetrical cusp at or below *foE*. (Usually a daytime type.)

h An *Es* trace showing a discontinuity in height with the normal *E* layer trace at or above *foE*. The cusp is not symmetrical, the low frequency end of the *Es* trace lying clearly above the high frequency end of the normal *E* trace. (Usually a daytime type.)

q An *Es* trace which is diffuse and non-blanketing over a wide frequency range.

r An *Es* trace showing an increase in virtual height at the high frequency end similar to group retardation.

a An *Es* trace having a well-defined flat or gradually rising lower edge with stratified and diffuse traces present above it.

s A diffuse *Es* trace which rises steadily with frequency and usually emerges from another type *Es* trace.

d A weak diffuse trace at heights below 95 km associated with high absorption and large *fmin*.

n The designation 'n' is used to denote an *Es* trace which cannot be classified into one of the standard types.

k The designation 'k' is used to show the presence of particle *E*. When *foEs* > *foE* (particle *E*) the *Es* type precedes k.

c. Definitions of the CNT, MED, UQ and LQ

Median count (**CND**) is the number of values from which the median has been computed. In addition to numerical values, the count may include certain descriptive letters.

Median (**MED**) is the middle value when the numerical values are arranged in order of magnitude, or the average of the two middle values if there is an even number of values.

Upper quartile (**UQ**) is the median value of the upper half of the values when they are ranked according to magnitude; the ***lower quartile*** (**LQ**) is the median value of the lower half.

B. SOLAR RADIO EMISSION

Solar radio observations at 200, 500 and 2800 MHz are carried out at Hiraiso. The observation equipment consists of three parabolic antennas, one with 10-meter diameter for 200 MHz Measurement, one with 6-meter diameter for 500 MHz measurements and one with 2-meter diameter for 2800 MHz measurements, each being equipped with a pair of crossed doublet antennas as a primary radiator, and three appropriate receivers. Each pair of the crossed doublet antennas is used as a polarimeter. Observations are continuously carried out almost from sunrise to sunset.

B1. Daily Data at Hiraiso

The three-hourly mean and daily mean values of the solar radio emission intensities are tabulated for 500 MHz measurements. The intensities are expressed by the flux density in 10^{-22} Wm^{-2} Hz^{-1} unit.

The following symbols are used in the tables, when interference or radio bursts prevented measuring the base-level flux densities or determining the variability indices:

* Measurement impossible because of interference.

B Measurement impossible because of bursts.

Daily data within parentheses mean that the observation time does not exceed one third of the period.

B2. Outstanding Occurrences at Hiraiso

The table is a list of outstanding occurrences of solar radio emission bursts observed at 200, 500 and 2800 MHz during a month.

Listed in the table are the date, frequencies, the type of event, the start time and the time of maximum, both in U.T.

expressed in hours, minutes and tenths of a minute, the duration in minutes, the peak and mean flux densities in 10^{-22} Wm^{-2} Hz^{-1} unit, and the polarization.

The type of event is expressed by a combination of a numerical code and a letter symbol in accordance with the "Descriptive Text of Solar Geophysical Data, NOAA" as defined by H. Tanaka in the "Instruction Manual for Monthly Report of Solar Radio Emission, WDC-C2" in January 1975:

SGD Code	Letter Symbol	Morphological Classification
1	S	Simple 1
2	S/F	Simple 1F
3	S	Simple 2
4	S/F	Simple 2F
5	S	Simple
6	S	Minor
7	C	Minor+
8	S	Spike
20	GRF	Simple 3
21	GRF	Simple 3A
22	GRF	Simple 3F
23	GRF	Simple 3AF
24	R	Rise
25	R	Rise A
26	FAL	Fall
27	RF	Rise and Fall
28	PRE	Precursor
29	PBI	Post Burst Increase
30	PBI	Post Burst Increase A
31	ABS	Post Burst Decrease
32	ABS	Absorption
40	F	Fluctuations
41	F	Group of Bursts
42	SER	Series of Bursts
43	NS	Onset of Noise Storm
44	NS	Noise Storm in progress
45	C	Complex
46	C	Complex F
47	GB	Great Burst
48	C	Major
49	GB	Major+

The polarization is expressed by the polarization degree and sense as follows:

R or L	right or left-handed polarization,
W, M or S	weak, moderate or strong polarization,
0	almost zero or unable to detect polarization due to small increase of flux,
00	polarization degree of less than 1

One of the following symbols may be attached after numerical values, if necessary.

D	greater than, or later than,
E	less than or earlier than,
U	approximate, or uncertain.

B3. Summary Plots of F10.7 at Hiraiso

The 10.7 cm solar radio flux at Hiraiso is plotted over a one month period. The 10.7 cm flux ($F_{10.7}$) is determined by adjusting the 10.7 cm radio flux measured at Hiraiso to the Pentincton 10.7 cm radio flux. The figure on the right-hand side shows the $F_{10.7}$ index estimated at Hiraiso.

The following symbols are used in the $F_{10.7}$ index:

*	Measurement made not at 3h U.T..
B	Measurement affected by bursts.

HOURLY VALUES OF foF2 AT Wakkanai

MAR. 2006

LAT. 45°23.5'N LON. 141°41.2'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

DH	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	37	37	36	32	34	34	38	54	65	66	71	66	66	62	67	65	66	60	43	34	42	40	40	41
2	37	41	40	32	38	41	41	46	58	62	71	62	78	71	59	60	57	55	52	37	37	37	37	37
3	38	37	38	40	41	40	45	52	62	60	67	66	73	76	62	58	56	50	44	45	38	34	37	41
4	34	42	42	38	41	38	45	54	58	56	60	66	70	60	72	55	46	54	44	43	44	40	40	40
5	40	38	40	31	36	36	40	50	63	58	58	64	68	69	65	60	54	54	42	34	35	34	32	32
6	36	36	37	38	40	42	47	56	57	54	53	62	72	62	58	60	54	58	41	42	43	43	42	42
7	40	42		44	45	42	44	53	58	68	70	58	76	83	66	66	57	55	53	50	52	51	45	44
8	42	39	41	41	C	C	C	C	C	C	65	66	67	69	68	62	61	55	52	47	41	38	40	40
9	37	34	32	31	36	36	41		54	60	55		56	57	63	66	62	53	48	43	40	34	32	34
10	32	32	34	32	37	32	44		55	58	66	57	63	67	61	64	57	50	53	38	41	40	32	41
11	43	44	44	45	44	34	41	51	54	55	63	64	68	65	62	57	60	55	54	51	51	36	32	34
12		34	32	34	34	31		51	51	54	64	62	58	70	67	58	57	55	51	44	44	42	40	40
13	42	41	32	32	36	37	41	53	57	54	58	58	65		63	C	56	51	47	45	40	31	34	34
14	32	32	32	34	36	35	40	48	46	56	61	56	62	63	59	58	52	55	51	36	32	32		34
15	33	36	36	36	34	32	41	48	49	55	61	66	64	58	64	55	60	56	52	41	40	38	37	40
16	38	38	32	40	42	37	42	52	61	55	63	76	73	70	62	58	55	58	51	38	40	32	37	42
17	43	44	44	42	44	38	40	47	50	58	72	70	65	58	64	52	55	55		A	A	22	A	A
18	40	40	41	40	40	37	44	44	46	56	60	A	66	56	64	60	52	52	51	44	44	46	44	43
19	32	37	32	32	32	31	40	57	51	58	61	77	72	72	67	58	62	53	58	40	46	43	38	44
20	42	40	42	40	41		41	40	46	53	67	C	60		61	63	60	55	52	48	48	45	44	43
21	44	43	42	40	40	37	41	49	58	65	70	68	61	68	74	68	55	54	52	47	52	54	53	44
22	52	41	40	30	29	32	38	48	61	61	60	70	76	84	74	61	58	51	48	44	43	32	42	43
23	42	40	40	38	31	36	42	47	48	57	57	64	60	61	62	65	58	56	45	42	39	32	31	31
24	34	32	34	34	34	39	41	48	59	57	64	75	67	64	58	57	54	54	51	40	42	41	41	40
25	40	40	41	40	40	41	46	65	56	54	60	66	63	56	65	59	53	55	64	54	52	51	48	48
26	45	47	47	49	46	48	51	48	58	56	60	75	67	65	60	61	56	56	49	46	46	44	38	53
27	52	52	48	54	54	52	40	44	45	56	56		57	70	64	61	55	52	53	53	54	C	C	C
28	C	C	C	C	C	C	C	C	C	C	65	69	62	57	52	58	60	57	54	54	50	51	48	48
29	50	52	48	46	41	41	44	46	55	55	60	72	64	60	61	60	56	55	53	52	40	41	47	45
30	44	48	45	47	46	45	45		60	58	65	71	62	62	62	58	53	58	57	44	40	51	46	40
31	43	45	40	42	43	44	50	54	51	58	64	67	64	63	67	64	57	59	58	52	58	54	51	44
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	29	30	29	30	29	28	28	26	29	29	31	27	31	29	31	30	31	31	30	30	30	30	28	29
MED	40	40	40	39	40	37	41	50	56	57	63	66	65	64	63	60	56	55	52	44	42	40	40	41
U Q	43	43	42	42	42	41	44	53	58	59	66	70	70	70	67	63	60	56	53	48	48	45	44	44
L Q	36	37	34	32	35	34	40	47	50	55	60	62	62	60	61	58	54	53	48	40	40	34	37	38

NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, JAPAN

HOURLY VALUES OF fEs AT Wakkanai

MAR. 2006

LAT. 45°23.5'N LON. 141°41.2'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

D \ H	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	G	G	G	29	G	G	G	G	G	G	G	G		G	G	G	35	G	G	G	G	G	G	G
2	G	G	G	G	G	G	G	G	G	G	49	38	G	G	G	G	G	G	G	G	G	G	G	G
3	G	G	G	G	G	G	G	28		G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
4	G	G	G	G	G	G	G	32	G	G	44	38	G	G	39	G	G	G	G	G	G	G	G	G
5	G	G	G	G	G	G	G		32	38	40	G	G	G	G	G	G	G	G	G	G	G	G	24
6	G	G	G	G	G	G	11		32	40	38	G	G	G	G	35	G	G	G	G	G	G	G	G
7	G	G	G	G	G	G	G		G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
8	G	G	G	G	C	C	C	C	C	C	40	40	G	G	G	G	G	G	G	G	G	G	G	G
9	G	G	G	G	G	G	G		34	38	39		G	G	G	48	31	G	G	G	G	G	G	G
10	G	G	G	G	G	G	G		G	G	G	G	G	G	G	G	G	G	28	G	G	G	G	G
11	G	G	G	G	G	G		33	G	40	G	G	G	N	G	G	G	G	G	28	G	G	G	G
12	28	G	G	G	G	G		G	G	G	G	G	G	N	G	39	32	G	G	G	G	G	G	G
13	G	G	G	G	G	24	29	G	G	48	40	G	39	G	G	C	G	G	G	G	G	G	G	G
14	G	G	G	G	G	G		38	33	42	40	38	41	47	46	38	G	G	G	G	G	G	G	G
15	G	G	G	G	G	G		36	38	G	G	G	G	G	G		G	G	G	G	G	G	G	G
16	G	G	G	G	G	G			33	39	40	G	G	G	G	G	G	G	G	G	G	G	G	G
17	G	G	G	G	G	G		32	G	45	G	G	G	G	G	G	31	G	49	59	45	G	60	39
18	29	G	G	G	25	G	G	G	G	G	G	46	G	G	G	G	G	G	32	G	G	G	24	32
19	G	G	G	G	G	G		33	39	39	39	G	48	G	G	G	G	G	G	G	G	G	G	G
20	G	G	23	G	G	G		G	G	G	48	C	G	G	38	G	35	39	24	G	G	G	28	G
21	28	G	G	G	29	G	38	34	G	44	40	G	40	G	G	G	G	G	G	30	G	G	G	G
22	G	G	G	G	G	G	G	33	G	39	41	G	G	G	G	G	G	G	G	G	G	G	G	G
23	G	G	G	G	G	G	G	G	39	38	40	39	G	G	G	G	34	G	G	G	G	G	G	G
24	G	G	G	G	G	G	34	36	G	G	G	G	40	G	G	G	G	G	G	G	G	G	G	G
25	G	G	G	G	G	G	G	G	G	G	G	G		G	G	G	G	G	G	G	G	G	G	G
26	G	G	G	G	G	G		G	G	43	G	50	G	G	G	G	G	G	G	G	G	G	G	G
27	G	G	G	G	G	G		34	34	46	45	G	G	G	G	39	G	G	G	G	G	C	C	C
28	C	C	C	C	C	C	C	C	C	C	G	G	46	45	G	G	G	G	G	G	G	33	30	G
29	G	G	G	G	G	G	32	35	G	38	G	G	G	G	G	G	G	G	G	G	G	G	G	G
30	G	G	G	G	G	G	35		G	G	G	G	G	G	G	G	G	G	G	26	G	G	G	G
31	G	G	G	G	G	G	G	36	G	G	G	40	G	39	G	G	G	G	G	G	G	G	G	G
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	30	30	30	30	29	29	19	22	28	29	31	29	29	29	31	29	31	31	31	31	31	30	30	30
MED	G	G	G	G	G	G	G	32	G	38	G	G	G	G	G	G	G	G	G	G	G	G	G	G
U Q	G	G	G	G	G	G	29	34	32	40	40	38	G	G	G	G	G	G	G	G	G	G	G	G
L Q	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G

HOURLY VALUES OF fmin AT Wakkanai

MAR. 2006

LAT. 45°23.5'N LON. 141°41.2'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

D \ H	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	15	14	18	14	15	15	15	20	15	15	14	15	21	18	17	16	14	20	15	15	15	15	18	21
2	14	15	17	15	16	15	15	22	16	14	14	17	15	18	17	14	14	18	14	15	15	17	17	18
3	16	15	15	15	15	16	15	16	14	15	18	17	18	20	17	17	15	18	15	15	15	15	15	16
4	17	15	16	15	15	16	14	15	15	15	18	16	18	17	15	15	22	18	15	15	17	16	18	17
5	14	15	15	17	14	18	14	17	14	15	16	17	15	14	14	17	22	18	14	15	15	17	18	18
6	14	14	14	15	14	15	15	20	14	17	14	18	18	16	16	14	14	17	15	15	14	15	16	15
7	14	17	15	18	15	15	15	21	15	15	14	14	18	17	17	14	14	18	15	15	15	17	17	17
8	15	16	15	15	C	C	C	C	C	C	16	18	16	15	18	16	15	17	16	15	15	18	18	20
9	15	15	17	15	17	17	15		15	17	15		16	20	17	14	15	16	16	18	15	18	16	20
10	15	15	15	16	17	15	15		15	15	14	20	14	16	20	16	15	18	15	15	15	15	15	16
11	15	15	16	14	14	15	15	16	15	15	14	15	20	16	15	14	15	20	15	15	16	15	17	15
12	17	14	14	14	14	15		20	16	16	17	20	18	18	17	16	14	18	20	16	15	15	17	15
13	14	15	16	15	15	16	17	14	14	16	20	18	16	24	14	C	14	17	15	15	15	20	18	17
14	15	15	15	14	14	18	17	14	15	18	20	18	17	18	15	14	15	18	15	14	17	17	20	18
15	16	15	16	14	14	15	18	14	14	14	16	18	18	14	18	14	15	18	15	15	15	17	15	18
16	15	17	15	15	14	15	17	20	14	18	18	20	16	16	14	15	16	18	22	14	15	20	16	15
17	15	15	15	15	14	15	17	14	14	15	15	18	20	18	17	15	15	20	15	17	14	16	15	14
18	15	14	15	14	14	15	17	14	14	17	18	18	14	16	17	17	16	20	15	17	18	15	15	15
19	20	15	17	15	15	15	17	16	17	17	14	18	16	14	21	15	15	18	15	14	15	15	15	15
20	16	17	15	14	15	20	16	15	14	18	18	C	15	15	18	18	14	14	15	15	14	17	17	16
21	15	17	15	17	14	15	20	14	17	17	16	18	15	17	17	17	15	14	18	15	16	14	17	18
22	15	14	15	16	16	16	18	15	15	16	18	14	18	20	14	17	15	22	15	14	14	15	15	15
23	15	15	15	15	15	18	18	22	14	14	16	15	17	16	15	20	15	20	15	16	15	14	15	16
24	15	15	15	15	15	17	21	15	14	17	17	18	18	18	20	15	15	21	15	17	15	14	16	15
25	15	15	14	15	15	15	14	21	14	15	18	18	20	18	16	18	15	18	15	17	15	17	15	16
26	14	14	14	15	14	15	20	15	15	15	18	18	18	16	18	18	15	20	14	15	15	18	18	15
27	14	14	15	14	15	15	20	15	15	15	14	17	18	17	18	21	14	20	15	14	15	C	C	C
28	C	C	C	C	C	C	C	C	C	C	17	20	27	20	18	18	17	14	15	15	16	16	14	15
29	15	15	15	14	15	15	15	14	15	16	15	15	18	17	17	17	14	21	15	14	16	14	17	14
30	16	16	16	15	15	15	15		14	17	20	20	17	18	17	16	14	20	14	15	14	14	15	14
31	15	15	15	14	14	15	21	14	17	14	17	21	20	15	16	15	14	20	15	15	18	15	15	15
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	30	30	30	30	29	29	28	26	29	29	31	29	31	31	31	30	31	31	31	31	31	30	30	30
MED	15	15	15	15	15	15	16	15	15	15	16	18	18	17	17	16	15	18	15	15	15	16	16	16
U Q	15	15	16	15	15	16	18	20	15	17	18	18	18	18	18	17	15	20	15	15	16	17	17	18
L Q	15	15	15	14	14	15	15	14	14	15	14	16	16	16	15	15	14	18	15	15	15	15	15	15

HOURLY VALUES OF foF2 AT Kokubunji

MAR. 2006

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

D \ H	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		30	31	30	32	27	35	59	62	66	61	63	69	67	55	71	80	59	54	30	30	34	30	
2	34		34	34	36	26	34	47	66	76	58	61	72	71	81	66	62	58	49	A	A	A	35	37
3	36	34	34		37	28	32	52	38	66	63	78	84	71	81	74	67	55	52	34	36	36		
4	32	32	32	34	36	35	41	54	51	59	55	61	81	78	62	61	55	55	60	39		34	34	
5	34	34	30	34	37	34	35	54	59	62	64	63	86	91	87	80	58	55	60	A		32	28	24
6	31		32	30	34	30	32	48	52	55	66	62	66	67	65	71	58	59	57	43		32	32	34
7	32	32		28	34	32	34	48	58	58	75	85	82	71	75	69	68	57	47	51	47	48	34	34
8	36		36	36	34	28	34	51	64	64	54	66	86	66	57	65	70	66	60	45	34	32	34	34
9	34	36	36	36	36	28	42	62	62	61	59	57	75	82	68	59	72	69	63	47		28		27
10	28	31	30		25	24	42	52	58	57	58	57	67	74	69	C	64	64	55	38		36	36	39
11	37	41	43	40	42	28	36	54	59	53	56	84	84	69	67	61	59	77	81	45	28			
12	32		32	34	36		37	51	59	58	54	64	78	51	70	69	67	60	53	37	30	34	34	
13		34	36	32	34	28	41	47	58	62	55	67	84	90	69		66	67	62	39		26		30
14	30	32	34	34	32		41	45	54	57	57	65	66	62	69	68	59	58	55	28		28		26
15	32	34	28	32	28		38	44	56	55	55	64	81	77	72	65	59	58	55	39	30	34	32	26
16	34	34	34	35	34	26		45		58	62	72	91	100	82	65	63	53	51	45	30		34	34
17	34	34	26	36	36	30	43	51	54	54	63	77	97	81	62	55	60	58	55	54	34	34	37	
18	41		40	42	36		41	54	56	57	56	68	81	75	64	61	60	56	55	36	36	38	38	37
19	43	34		32		27	36	54		64	72	85	90	69	72	63	61	65	71	51	37	38		
20	39	38	39	36	28		36	54	64	75	77	78	71	67	80	67	65	69	71	47	43	42	44	43
21	47	43	42	43	36	30	41	57	52	59	73	78	84	72	71	67	62	59	52	43	39	39	34	38
22	39	37	38			28	42	48	62	69	68	86	82	74	75	82	62	55	55	42	38	36	41	39
23	39		37	37	A			59	56	62	66	66	77	77	74	67	64	62	54	41	38	36	36	27
24		36	38				41	51	54	59	62	70	85	84	66	58	52	59	57	46			34	34
25	34	35	34	35	28	26	42	56	59		62	A	76	74	60	58	56	59	62	52	44		36	42
26	43	42	44	43	34	32	47	54	58	59	65	59	81	80	72		58	54	52	48	38	36	37	38
27	39	42	42	41	34		49	55	52	55	61	80	84		78	62	57	59	59	54	47		45	44
28	43	43	43	42	37	34	45	48	56	60	68	85	77	62	59	59	63	75	62	53	36	34		37
29	38	37	42	37			41	51	49	55	63	74	86	67	61	61	59	57	62	61	47	44	43	43
30	27	38	36	38	38	38	48	55	56	68	59	75	78	71	65	67	63	59	59	53	34	37	39	
31	38	39	42	44	36	34	41	51	54	59	62	76	84	76	76	61	67	67	64	61	44	42	44	43
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	28	25	29	27	26	22	29	31	29	30	31	30	31	30	31	28	31	31	31	29	22	25	24	23
MED	35	35	36	36	35	28	41	52	56	59	62	69	81	73	69	65	62	59	57	45	36	36	36	37
U Q	39	38	41	40	36	32	42	54	59	64	66	78	84	78	75	68	66	65	62	51	43	38	38	39
L Q	32	34	32	34	34	27	35	48	54	57	57	63	76	67	64	61	59	57	54	39	34	33	34	30

HOURLY VALUES OF fEs AT Kokubunji

MAR. 2006

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

D \ H	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	29	G	G	G	G	G	G	32	G	39	39	47	G	G	G	42	40	29	G	G	G	G	G	
2	G	26	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	60	53	33	46	G
3	G	G	G	G	G	G	G	45	G	44	G	G	G	G	G	G	G	G	G	G	G	G	G	
4	G	G	G	G	G	G	G	G	G	G	G	41	40	G	G	43	53	39	40	26		G	G	26
5	G	G	G	G	G	G	G	G	G	42	G	G	G	47	45	G	G	G	30	40	27	G	G	G
6	G	G	G	G	G	G	G		47	G	G	G	G	39	G	G	G	29	G	G		G	G	G
7	G	G		G	G	G	G	G	G	G	41	G	41	G	G	43	G	G	G	G	G	G	G	G
8	G		G	G	G	G	G	G	G	G	G	G	G	40	G	G	47	31	G	G	G	G	G	G
9	G	G	G	G	G	G	G	G	G	G	G	G	G	51	53	37	40	35	33	G		G	G	G
10	G	G	G		G	G	G	G	34	G	G	G	G	40	G	C	35	43	30	G	32	29	G	G
11	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G			
12	G		G	G	G	G	G	G	G	G	G	G	40	50	G	G	36	33	G	G	G	G	G	
13		G	G	G	G	G	23	G	G	G	G	40	G	G	G	G	G	G	G	G	G	G	G	25
14	G	24	G	G	G		39	G	G	G	G	82	G	G	G	G	42	49	37	G		G		29
15	G	G	G	G	G	G	G	34	G	G	G	G	G	G	G	G	G	34	G	G	G	G	G	G
16	G	G	G	G	G	G		G		G	G	G	G	40	G	46	G	28	G	G	G		G	G
17	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	30	27	G	G	G	G	
18	G		G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
19	G	G		G		G	G	G		G	G	G	G	G	G	G	G	G	G	G	G	G		
20	G	G	G	G	G		28	G	G	G	G	G	G	G	G	G	33	G	G	G	G	G	G	G
21	G	40	G	G	G	G	G	G	39	G	43	G	G	G	G	G	G	G	G	G	G	G	G	G
22	G	G	30	28		G	28	35	40	42	45	G	G	G	G	G	G	G	G	G	G	G	G	G
23	25	G	G	23	45	26	39	33	G	G	G	G	G	G	40	G	G	G	G	G	G	G	G	G
24		G	G	G		G	29	36	G	G	G	G	G	G	G	G	G	G	G	G	27	25	G	G
25	G	G	G	G	G	G	28	G	G	G	G	79	51	40	G	G	G	G	G	G	G		G	G
26	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	34	31	G	G	G	G	G
27	G	G	G	G	G	G	G	G	G	G	44	G	54	82	45	47	35	34	26	G	28		G	G
28	39	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G		G
29	G	G	26	G			G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
30	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
31	G	G	G	G	G	G	G	36	G	G	G	G	G	G	G	G	35	33	G	G	G	G	43	G
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	29	28	29	30	27	28	30	30	29	31	31	31	31	31	31	30	31	31	31	31	27	27	27	25
MED	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
U Q	G	G	G	G	G	G	G	G	G	G	G	G	G	40	G	G	35	33	26	G	G	G	G	G
L Q	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G

HOURLY VALUES OF fmin AT Kokubunji

MAR. 2006

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

D \ H	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	13	14	13	14	17	17	15	13	13	15	20	18	17	18	17	15	23	13	15	14	14	22	14	
2	14	18	14	20	14	14	14	22	14	13	17	41	42	40	15	17	13	24	14	14	14	13	14	13
3	14	15	14	15	14	14	14	25	13	14	15	40		39	40	13	13	21	14	14	14	14	15	
4	14	14	15	14	14	15	14	23	15	17	20	24	40	40	15	14	14	13	14	18		14	14	15
5	14	14	14	13	13	14	17	22	13	15	15	42	23	18	20	30	15	22	14	14	14	13	20	15
6	14	15	14	14	14	13	13	13	13	18	14	41	46	22	39	33	13	14	14	17		15	14	13
7	14	14		18	15	14	14	21	13	39	28	42	20	42	14	13	13	20	15	14	14	14	14	17
8	21		13	14	14	14	14	24	14	14	20	40	40	21	18	14	13	14	14	14	14	17	17	15
9	13	14	13	13	14	15	14	23	13	17	20	20	23	20	13	13	15	14	13	14		15	21	17
10	18	14	13		14	15	14	23	15	14	18	43	42	21	39	C	14	14	13	21	14	14	14	14
11	13	14	13	14	14	14	15	24	14	14	21	44	42	40	39	17	13	13	13	15	14			
12	17		13	13	13	14	15	13	14	17	25	43	18	34	40	38	14	14	15	20	14	13	14	
13		13	15	17	14	13	14	14	13	14	15	46	28	44	24	40	15	23	18	14	14	18	17	14
14	14	13	14	13	15		14	13	18	14	42	41	43	44	33	34	25	15	13	14		17		13
15	14	15	14	13	14	15	15	25	15	34	18	46	51	22	21	20	15	18	14	14	14	14	13	13
16	14	13	14	14	13	15		20		17	21	25	24	21	21	14	13	13	14	14	22		21	17
17	14	15	25	22	13	15	17	13	14	39	20	49	42	42	22	18	14	13	13	20	14	20	15	
18	17		14	14	14	14	18	25	15	20	39	45	45	42	39	37	28	22	18	18	14	22	14	18
19	14	15		17		17	20	26		40	40	42	42	32	38	13	35	23	22	14	14	14		
20	17	14	18	13	20		13	13	17	15	41	28	41	43	38	33	18	23	17	18	15	21	13	15
21	13	14	14	13	14	14	18	17	15	20	41	28	22	43	40	42	17	14	17	14	15	17	17	13
22	14	18	14	13		13	13	13	18	29	29	41	49	44	21	36	15	13	15	17	17	22	13	13
23	15	14	14	14	13	14	13	13	17	13	23	23	23	25	18	18	13	22	15	14	21	17	13	14
24		14	15	14		17	13	22	13	15	43		22	46	41	21	14	24	14	14	14	17	14	14
25	14	13	15	18	20	14	13	13	15	14		29	25	23	21	21	13	24	14	14	14		21	14
26	14	14	13	14	14	14	20	14	18	18	44	31	48	43	40	42	34	18	13	14	14	18	21	14
27	13	13	14	13	13	13	20	14	14	35	22	46	28	22	21	15	14	14	13	23	15		14	17
28	17	17	14	14	13	13	22	28	13	13	42		43	42	42	21	15	28	20	14	17	13		14
29	14	14	15	13			13	14	17	20	41	45	42	42	40	38	17	14	15	15	14	15	18	21
30	22	14	13	14	14	13	21	13	18	40	45	42	42	41	17	22	18	13	14	14	18	22	14	22
31	17	13	14	14	18	13	21	22	14	18	43		48	42	33	34	13	13	15	18	17	17	13	17
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	29	28	29	30	27	28	30	31	29	31	30	28	30	31	31	30	31	31	31	31	27	27	27	25
MED	14	14	14	14	14	14	14	20	14	17	22	41	42	40	24	21	14	14	14	14	14	17	14	14
U Q	17	15	14	14	14	15	18	23	16	20	41	43	43	42	39	34	17	22	15	18	15	18	17	17
L Q	14	14	13	13	13	13	14	13	13	14	20	28	23	22	18	15	13	13	14	14	14	14	14	13

HOURLY VALUES OF foF2 AT Yamagawa

MAR. 2006

LAT. 31°12.1'N LON. 130°37.1'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

D \ H	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	28	28	29	31	30	26	52	69		67	70	76	67	72	85	83	82	62	41	34	32	34	34
2	A		31	32	36	29	29	47	75	60	70	75	70	74	92	85	71	67	58	54	41		37	26
3	34	34	34	34	37	35		42	52	56	69	82	78	73	86	83	85	75	61	47	A	36	28	26
4			30	32	34	32	34	44	49	50	62	64	66	81	81	74	75	43	66	A	A	A	31	A
5	A	32	30	32	38	32	28	45	54	60	58	65	81	96	95	86	83	75	63	54	30		30	30
6	30	32	32	29	34	34		40	48	50	66	51	60	62	72	78	70	67	68	50	29	28	32	32
7		34	28	34	38	30	30	51	54	55	70	97	86	73	78	91	80	61	57	54	50	44	42	34
8	34	34	34	34	37	30	28	48	59	61	67	59	72	84	62	71	85	70	66	51	36	29		30
9	32	34	32	34	30	28	29	46	52	68	61	58	68	91	80	56	70	78	72	52	36	26	26	28
10	30	28	28	29	30	28		50	48	54	60	52	61	77	70	74	67	68	59	45	31		A	37
11	34	36	36	44	29	28	28	45	51	54	61	73	87	86	70	75	76	88	88	63	34	36	36	29
12	34	34		34	36	29	28	46	52	62	62	66	87	96	91	95	83	75	66	46	32	32	33	37
13	38	37	34	34	29			42	60	67	72	78	87	96	87	82	80	94	76	51	32	29	28	32
14	32	32	32	34	28			42	58	60	61	54	68	63	72	75	72	67	55	45	36	30	34	34
15	32	32	30	29	34		49	48	54	55			71	87	90	78	80	65	51	48	32	32	28	32
16	32	34	34	36	34		28	44	54	59	70	76	88	106	108	90	70	62	57	48	42	31	31	34
17	32	34	30	34	36		28	50	52	58	61	68	89	107	94	70	64	71	70	59	34	29	30	32
18	34	34	34	29	32	28	26	48	44	65	62	62	81	95	83	78	78	68	61	50	46	40	43	42
19	42	37	34	34	40	28	29	54	44	64	66	76	94	71	81	76	68	76	78	70	32	30	34	36
20	37	38	36	38	31			46	61	76	76	74	71	72	81	81	77	71	72	66	43	37	40	42
21	41	44		40	40		34	51	56	67	78	86	88	92	86	76	67	67	62	51	43	38	26	34
22	38	42	37	26	28	30	34	46	66	66	71	94	90	92	91	87	71	66	58	51	45	38	37	34
23	34	40	34	32	34		A	50	59	63	61	61	74	97	93	81	67	62	55	50	41		32	32
24	34	36	41	26		28	31	51	58	66	68	71	86	96	91	75	70	60	60	60	38	32	32	32
25	32	34	34	36	29			48	59	67	62	64	77	78	64	62	63	65	60	58	47	34	36	34
26	38	38	38	37	32	30	34	48	57	64	61	68	76	92	90	82	65	60	56	51	47	42	40	36
27	38	37	34	30	32	29	35	50	53	52	57	78	85	86	87	64	61	64	66	63	54	44	45	42
28	44	42	44	42	34	28	32	45		71	73	74	87	90	81	67	66	78	71	52	48	38	40	37
29	36	36	41	42	19		30	48	54	61	66	76	86	91	85	70	63	68	65	66	61	45	38	37
30	40	32	34	34	36		31	47		61	61	67	90	94	98	92	93	76	57	50	47	36	37	28
31	40	34	31	34	37		30	47	54	64	51	71	92	91	90	81	62	68	75	66	48	37	37	37
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	26	29	29	31	30	19	23	31	29	30	30	30	31	31	31	31	31	31	31	30	29	26	29	30
MED	34	34	34	34	34	29	30	47	54	61	64	70	81	90	86	78	71	68	62	51	41	35	34	34
U Q	38	37	35	36	36	30	34	50	59	66	70	76	87	95	91	85	80	75	70	59	47	38	37	37
L Q	32	33	30	30	30	28	28	45	52	56	61	64	71	74	78	74	67	65	58	50	33	30	30	32

HOURLY VALUES OF fEs AT Yamagawa

MAR. 2006

LAT. 31°12.1'N LON. 130°37.1'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

D \ H	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	40	G	G	G	G	G	G		34		40	41	46	G	G	G	39	36	G	11	G	G	G	G
2	46	G	G	G	G	G	G		G	G		G	46	42	46	G	39	33	G	G	G	27	34	24
3	32	38	G	G	G	11		G	G	38	38	40			G	G	G	31	25	25	46	G	G	G
4	G		G	24	G	G	G		G	G	38	G	48	54	47	46	48	50	45	67	59	39	G	54
5	40	G	G	G	G	11	G		G	43	45	48	50	55	G	G	G	G	G	11	G	G	G	22
6	G	22	G	G	G	11			G	50	43	G	45	43	G	G	41	33	43	G	G	G	G	G
7	29	G	30	G	G	G	G	26	G	G	G	42	43	G	G	G	G		26	25	G	G	G	G
8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	39	35	G	G	G	G		G
9	G	G	G	G	G	G	G	G	34	G	G	N	G	G	G	G	40	G	G	G	G	G	G	G
10	G	G	G	G	G	G	G		G	G	G	G	G	G	G	41	40	39	26	G	27	25	48	32
11	G	G	G	G	G	G	G	60	G	G	G	G	G	G	G	42	38	33	G	11	G	G	G	G
12	G	G	G	G	G	G	G	G	G	G	G	46	46	41	G	G	39	32	G	G	G	G	G	G
13	G	G	G	G	G		G	G	G	G	38	G	G	G	G	39	G	G	G	19	G	23	G	G
14	G	G	G	32	28		G	G	G	G	G	G	G	G	46	48	52	32	30	G	G	G	G	27
15	G	G	G	G	G	G	G	G	33	120			46	47	41	G	G	G	28	23	G	G	G	G
16	G	G	G	G	G		G		G	G	G	G	G	G	G	39	38	33	31	28	G	24	G	26
17	G	G	G	G	G		G	G	G	36	44	48	44	G	G	G	G	G	G	G	11	G	G	G
18	G	G	G	G	G	G	G	29	G	G	G	G	41	G	G	G	39	G	G	G	G	G	G	G
19	G	G	G	G	G	G	G	33	40	G	46	G	G	G	G	G	39	G	G	27	G	G	G	G
20	G	G	G	G	G		G	31	36	G	40	58	49	49	61	G	G	32	28	G	25	G	23	G
21	G	G		G	G		34	30	34	G	G	48	G	41	G	39	G	G	G	24	G	G	G	G
22	26	G	G	G	G	G	G	32	39	41	43	49	45	G	G	G	52	38	35	27	G	34	G	G
23	G	G	G	G	G		33	32	36	42	G	44	48	44	50	59	58	34	40	26	24		G	G
24	G	G	G	G	G	G	G	33	38	G	G	G	G	G	G	43	41	36	26	G	G	G	26	31
25	36	G	G	G	G	G	G	33	G	G	43	44	58	G	40	39	G	G	26	27	23	G	G	G
26	G	G	G	G	G	G	G	G	G	38	44	G	G	G	G	G	42	G	30	29	G	G	G	G
27	G	G	G	G	G	G	G	G	G	G	G	43	48	52	55	53	43	38	G	G	34	27	G	G
28	33	27	G	G	G	G	G	33		42	46	44	G	G	44	G	40	36	36	30	G	G	G	G
29	G	G	42	31	27		24	29	G	G	G	G	G	41	G	41	42	37	48	32	24	G	G	G
30	G	G	G	G	G	G	G	32		G	G	45	48	G	G	G	G	33	35	28	G	26	G	G
31	G	G	G	G	G	G	G	39	G	G	G	G	G	G	N	45	G	42	31	33	G	G	G	26
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	31	30	30	31	31	23	29	24	29	30	29	29	30	30	30	31	31	30	31	31	31	30	30	31
MED	G	G	G	G	G	G	G	29	G	G	G	G	42	G	G	G	39	33	26	19	G	G	G	G
U Q	26	G	G	G	G	G	G	32	34	38	43	44	46	42	41	41	41	36	31	27	23	23	G	22
L Q	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G

HOURLY VALUES OF fmin AT Yamagawa

MAR. 2006

LAT. 31°12.1'N LON. 130°37.1'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

D \ H	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	15	14	15	16	14	14	15	17	14	14	17	17	18	18	17	14	14	14	15	15	15	15	15	15
2	14	15	15	15	15	15	15	17	15	14	15	16	14	17	17	18	14	14	16	15	16	15	14	15
3	14	14	14	14	15	15		20	14	14	16	18	17	20	20	18	15	14	17	14	14	15	15	17
4	18		15	15	17	15	15	18	14	14	18	17	18	21	20	17	14	14	15	15	14	14	15	14
5	14	15	14	15	15	15	15	17	14	14	15	14	20	20	18	17	14	14	17	15	14	18	15	14
6	14	14	15	14	14	15		15	14	14	17	18	20	29	21	18	15	15	15	14	15	15	16	15
7	14	15	14	14	14	14	16	16	14	14	14	15	28	15	22	16	15	15	15	14	15	15	14	15
8	15	15	17	14	14	14	16	20	14	15	17	17	20	17	17	16	15	14	16	14	15	16		14
9	14	14	14	16	14	15	14	16	14	14	14	15	17	18	34	17	14	14	15	16	15	15	15	14
10	15	14	15	15	15	14	15	15	14	14	14	17	20	20	16	17	16	14	15	15	15	15	14	14
11	14	14	15	14	14	18	14	18	14	14	15	16	17	20	17	16	15	14	17	14	15	15	15	14
12	14	15	20	14	14	14	14	15	14	15	18	17	18	20	20	15	15	15	17	15	15	15	14	15
13	15	15	15	15	14		17	15	14	14	16	17	18	17	18	18	18	14	16	14	15	15	15	15
14	16	15	15	14	15		15	20	14	14	17	18	18	18	18	17	16	14	14	15	14	15	15	14
15	15	15	15	14	14	15	15	20	14	14			18	16	21	18	14	14	14	14	14	15	17	16
16	14	14	14	15	14		16	14	14	14	14	17	18	28	22	26	14	14	14	15	14	15	14	15
17	15	15	15	14	14		15	15	14	14	15	17	29	20	24	18	17	14	16	14	16	15	16	14
18	15	15	15	14	14	15	17	14	14	14	14	18	21	46	21	14	15	14	18	14	15	15	15	16
19	15	15	15	16	14	16	15	16	14	14	17	17	18	35	21	18	14	14	17	14	14	15	16	15
20	15	15	14	14	14		16	15	14	15	18	20	17	17	17	17	15	14	14	14	15	15	14	15
21	14	14		14	14		14	14	14	14	15	20	27	18	15	14	15	14	20	15	14	15	15	15
22	14	15	14	15	14	15	15	14	14	15	15	24	23	20	18	15	14	14	14	15	15	14	14	15
23	15	15	14	15	14		14	14	14	15	17	21	18	21	16	16	14	14	14	15	15		16	15
24	14	14	15	14	15	14	14	16	14	14	18	20	20	22	20	17	17	14	15	15	14	21	15	16
25	14	14	14	14	15	15	15	16	14	14	16	20	18	18	20	17	14	14	14	14	15	15	14	15
26	15	15	15	14	15	15	14	22	14	14	15	16	24	15	22	17	14	14	14	15	16	15	17	16
27	15	14	15	15	15	15	15	17	14	17	18	21	18	24	20	17	17	14	14	15	14	14	15	15
28	14	14	14	14	14	18	15	15		17	15	18	21	20	22	21	18	15	14	14	15	17	16	14
29	15	14	14	14	14		14	15	15	15	18	20	18	20	24	18	15	14	14	15	14	14	15	14
30	14	14	16	15	15	15	16	14		32	20	22	22	22	24	18	14	14	14	14	15	15	15	16
31	14	15	15	15	14	15	14	24	14	14	17	22	18	22	17	18	16	14	15	14	14	15	16	14
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	31	30	30	31	31	23	29	31	29	31	30	30	31	31	31	31	31	31	31	31	31	30	30	31
MED	14	15	15	14	14	15	15	16	14	14	16	18	18	20	20	17	15	14	15	15	15	15	15	15
U Q	15	15	15	15	15	15	15	18	14	15	17	20	21	22	22	18	16	14	16	15	15	15	16	15
L Q	14	14	14	14	14	14	14	15	14	14	15	17	18	18	17	16	14	14	14	14	14	15	14	14

HOURLY VALUES OF foF2 AT Okinawa

MAR. 2006

LAT. 26°40.5'N LON. 128°09.2'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

D \ H	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	26				31			42	60	60		82	92	96	100	106	102	95	78	64	60		26	30
2	34	34	29	30	28	26		44	60	56	65	87	100	86	106	118	108	101	86	64	66	52		46
3	32	40	32	43	41			38	50	59	72	92	83	91	107	128	130	127	110	87	66	46	34	36
4	30	34	30		34	31		41	48	50	58	76	76	81	105	106	108	101	88	64	A	A		29
5	30	30	29	28	34			38	51	55	54	66	91	102	108	111	124	127	97	78	45		28	29
6	30	A	30	30	41			36	46	47	58	80	82	72	76	90	91	93	89	62	41			30
7	30			31	41			47	54		70	100	87	77	96	106	104	88	71	67	64		42	36
8	34	34	34	36	37		28	45	54	64	71	68	66	86	82	78	94	97	81	65	42	31	29	30
9	32	30	31	29	29	26		44	56	57	66	72	68	91	96	80	73	92	95	66		31	28	28
10	30	31	31	26	36			42	48	50	62	74	75	80	77	82	88	82	65	43	35		30	30
11	34	30	30	44				45	58	56	62	77	86	84	87	96	101	115	110	64	39	34	A	37
12	30		32	34	34			48	54	67	72	90	115	137	141	142	146	128	108	79	53	A	46	38
13	48	50	50	54	47			44	60	60	73	92	106	114	130	132	132	131	108	74	51	43	43	44
14	40	43	43	52	38	A		44	51	57	64	64	70	94	71	82	86	81	66	52	44	36	30	30
15	32		30	30	30			52	56	60	63	64	74	98	105	107	116	98	72	53	43	34	34	
16	31	32	34	41	32			42	50	62	78	93	102	114	124	123	109	105	66	60	51	37	32	
17	38	36	36	34	34			44	58	63	66	74	87	111	124	104	90	95	86	52	41	30	32	34
18	32	32	34	34	32			47	60	62	69	80	87	105	120	112	108	103	84	52	52	47	38	42
19	40	34	32	34	30	N	N	48	65	66	74	78	97	105	101	112	107	117	101	78	34	29		30
20	34	42		29				45	52	76	88	77	80	81	92	104	85	76	72	74	48	37	36	
21	40	41	37	40	29			48	62	78	87	91	101	115	109	105	88	90	83	62	43	34	40	40
22	47	47	28	26				46	60	78	85	83	87	108	115	105	106	90	62	58	50	40	A	37
23	29	28	42	44		A	A	48	60	69	66	61	77	108	111	94	92	73	62	51	40	29	28	29
24	32	41	23					49	57	70	77	83	96	114	120	117	118	106	86	87	84		42	
25	A	34	34	38				47	54	72		68	72	86	76	76	80	71	71	66	44	A	34	30
26	34	36	36	36				50	56	66	67	70	84	104	111	108	98	80	66	57	50	41	30	33
27	36	36	34	32		28		48	56	54	65	76	105	94	95	82	73	81	74	73	71	51	A	40
28	40	43	44	48	26	30		47	55		78	73	92	114	125	100	92	85	86	74	61	46		40
29	36	38	32	62				47	54	63	73	90	100	110	114	105	105	90	88	87	64	52	36	34
30	32	32	34	37	29			42	55	71	73	75	91	114	142	131	131	127	88	61	54	37	34	34
31	31	32	32	36	34			47	56	67	78	84	91	107	124	130	108	101	87	81	44	30	36	34
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	30	26	28	28	22	5	1	31	31	29	29	31	31	31	31	31	31	31	31	31	29	22	23	27
MED	32	34	32	35	34	28	28	45	56	62	70	77	87	102	107	106	104	95	86	64	50	37	34	34
U Q	36	41	35	42	37	30	14	48	60	68	75	87	97	111	120	117	109	106	89	74	60	46	38	38
L Q	30	32	30	30	30	26	14	42	52	56	64	72	77	86	95	94	90	85	71	58	42	31	30	30

HOURLY VALUES OF fEs AT Okinawa

MAR. 2006

LAT. 26°40.5'N LON. 128°09.2'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

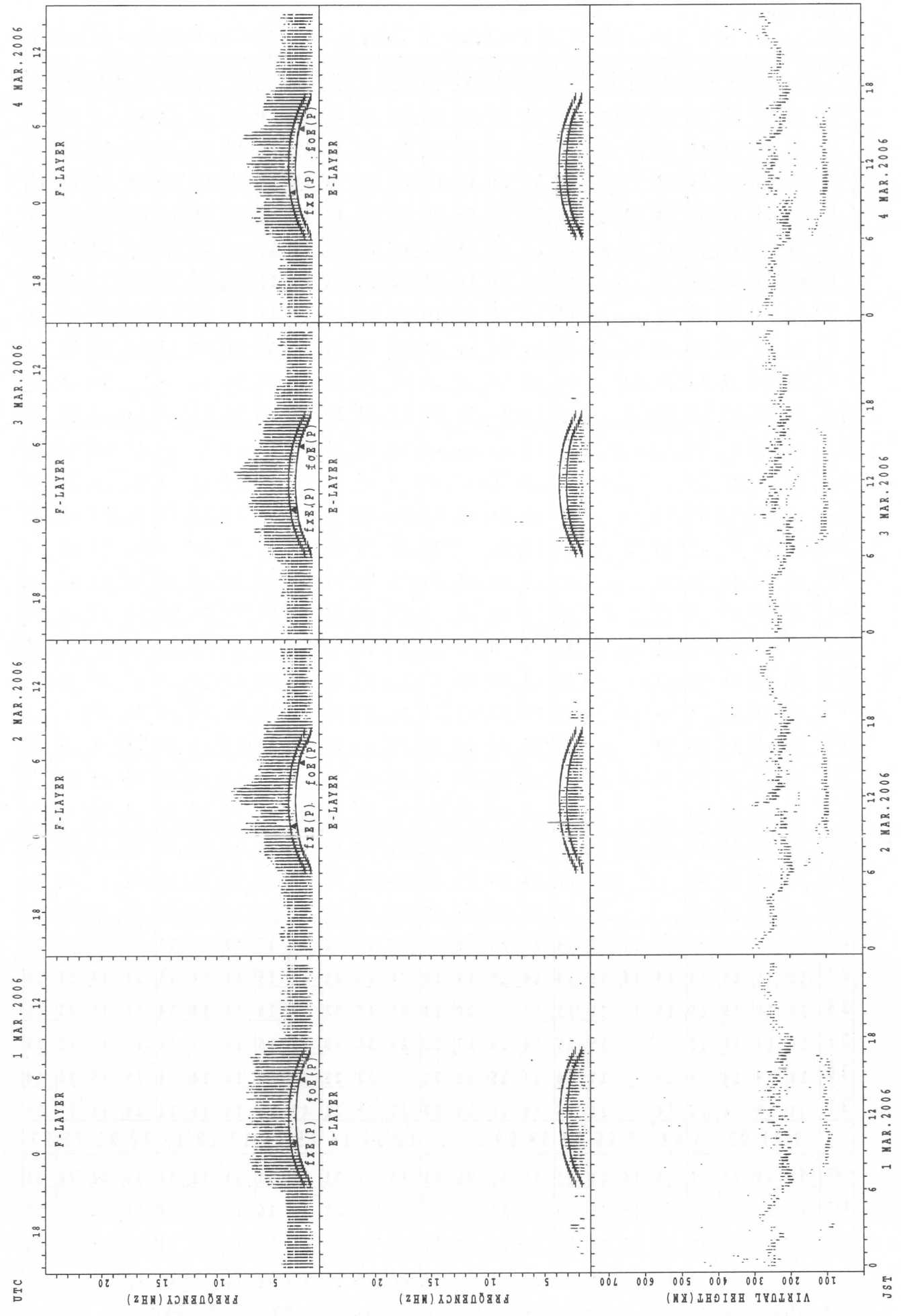
D \ H	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	24	41	G	34	G	25	G	G	G		G	G	G	G	G	45	41	40	33	G	G		G	G
2	G	G	G	G	G	G	G	G	G	G	39	G	G	G	40	41	37	34	G	11	G	26	33	28
3	G	25	G	G	29			G	35	46	46	G	G	G	G	G	45	34	G	11	11	26	27	G
4	G	G	G	G	G	26	G	G	G	36	47	48	40	51	48	49	G	36	33	29	36	82	32	26
5	G	G	G	G	G	G	G	G	G	G	47	48	47	G	G	G	G	G	G	20		G	G	G
6	G	35	G	G	G			32	42	43	44	46	47	50	46	G	G	36	G	11	G		24	G
7	G	32	G	G	G		G	G	G	G	G	47	45	44	G	42	G	G	G	G	G	G	G	G
8	G	28	G	G	G	G	G	G	G	G	G	G	G	G	G	G	41	G	G	G	G	G	G	G
9	26	G	G	G	G	G		25	G	G	G	G	G	45	G	G	G	G	34	G		G	G	G
10	G	G	G	G	G	G		G	G	40	G	42	G	42	G	G	54	60	52	36	29	G	27	36
11	49	26	G	G				G	G	G	G	44	G	G	G	G	G	G	G	11	G	G	36	28
12	G		G	G	24		26	G	G	G	G	G	G	G	G	G	41	38	29	29	25	40	29	G
13	27	G	G	G		G		G	G	37	45	G	G	G	G	G	G	G	G	26	G	32	G	G
14	G	G	G	G		34	G	G	G	36	G	G	G	G	G	G	G	G	G	24	G	G	G	G
15	25	29	G	G	G				G	G	G	G	46	50	43	G	G		39	G	G	G	G	G
16	26	G	G	G	G			G	37	G	45	47	48	G	G	G	G	36	G	G	G	G	G	28
17	G	27	G	G	G	G	G	G	35	43	46	48	48	42	G	42	38	G	G	11	G	G	G	G
18	G	G	G	G	G				G	42	G	43	G	G	G	G	G	G	G	G	G	G	G	G
19	G	G	G	G	G	G	G	29	G	G	47	45	G	G	G	G	G	G	G	11	G	G		G
20	G	G	G	G	G			28	35	G	G	G	G	G	G	45	G	G	G	26	G	G	G	G
21	G	G	26	G	G	G	G	28	G	G	G	47	G	43	G	G	G	G	G	26	G	28	G	G
22	G	G	G	G			G	30	39	G	G	48	46	G	52	57	G	G	36	40	26	31	36	27
23	G	G	G	G	26	29	29	31	36	G	G	G	49	54	48	62	83	62	50	29	G	G	G	G
24	G	G	G	G			G	30	G	G	G	45	G	G	42	G	37	35	G	G	11		G	32
25	44	24	G	26			G		G	G	G	G	48	56	G	G	46	47	50	41	38	30	28	G
26	G	G	G	G		G	G		G	G	G	G	56	45	G	G	G	33	G	G	G	23	G	49
27	28	G	G	G	G	G	G	29	36	G	G	G	47	66	49	G	G	36	50	24	37	50	40	G
28	G	G	25	G	G	G	G		36		G	G	G	G	G	44	39	39	29	34	G	G	G	G
29	G	G	G	G			G	28	G	G	G	G	G	G	G	G	N	G	G	G	28	G	G	G
30	G	G	G	G	32		G	G	33	G	G	G	G	63	G	G	38	36	36	30	26	G	G	G
31	G	G	G	G	G		G	40	35	G	G	G	G	G	G	G	G	36	37	37	32	G	G	24
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	31	30	31	31	23	16	21	26	31	29	31	31	31	31	31	31	30	30	31	31	29	28	30	31
MED	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	34	G	11	G	G	G	G
U Q	24	25	G	G	G	13	G	29	35	36	44	46	47	45	40	42	39	36	36	29	26	27	27	26
L Q	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G

HOURLY VALUES OF fmin AT Okinawa

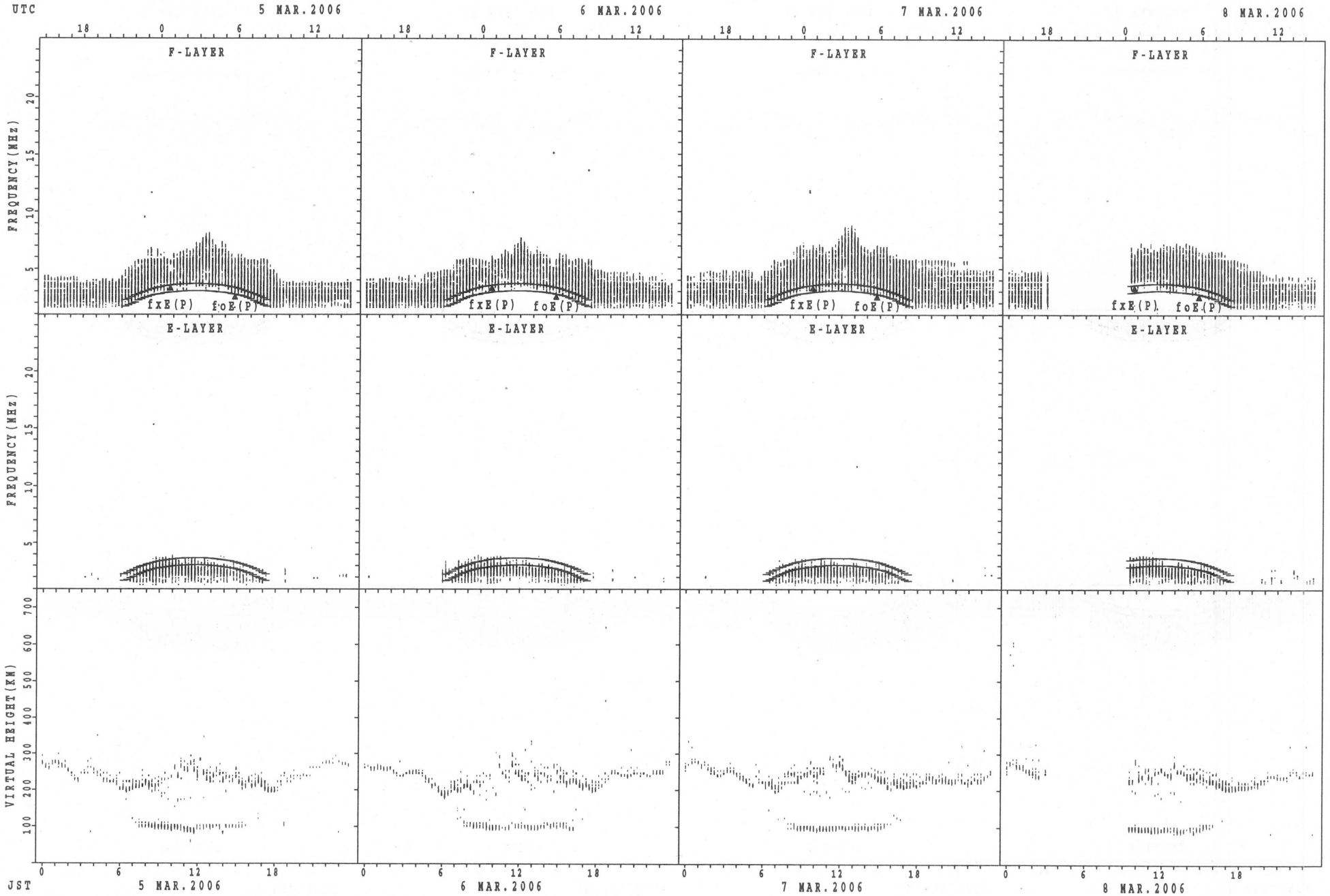
MAR. 2006

LAT. 26°40.5'N LON. 128°09.2'E SWEEP 1.0MHz TO 30.0MHz AUTOMATIC SCALING

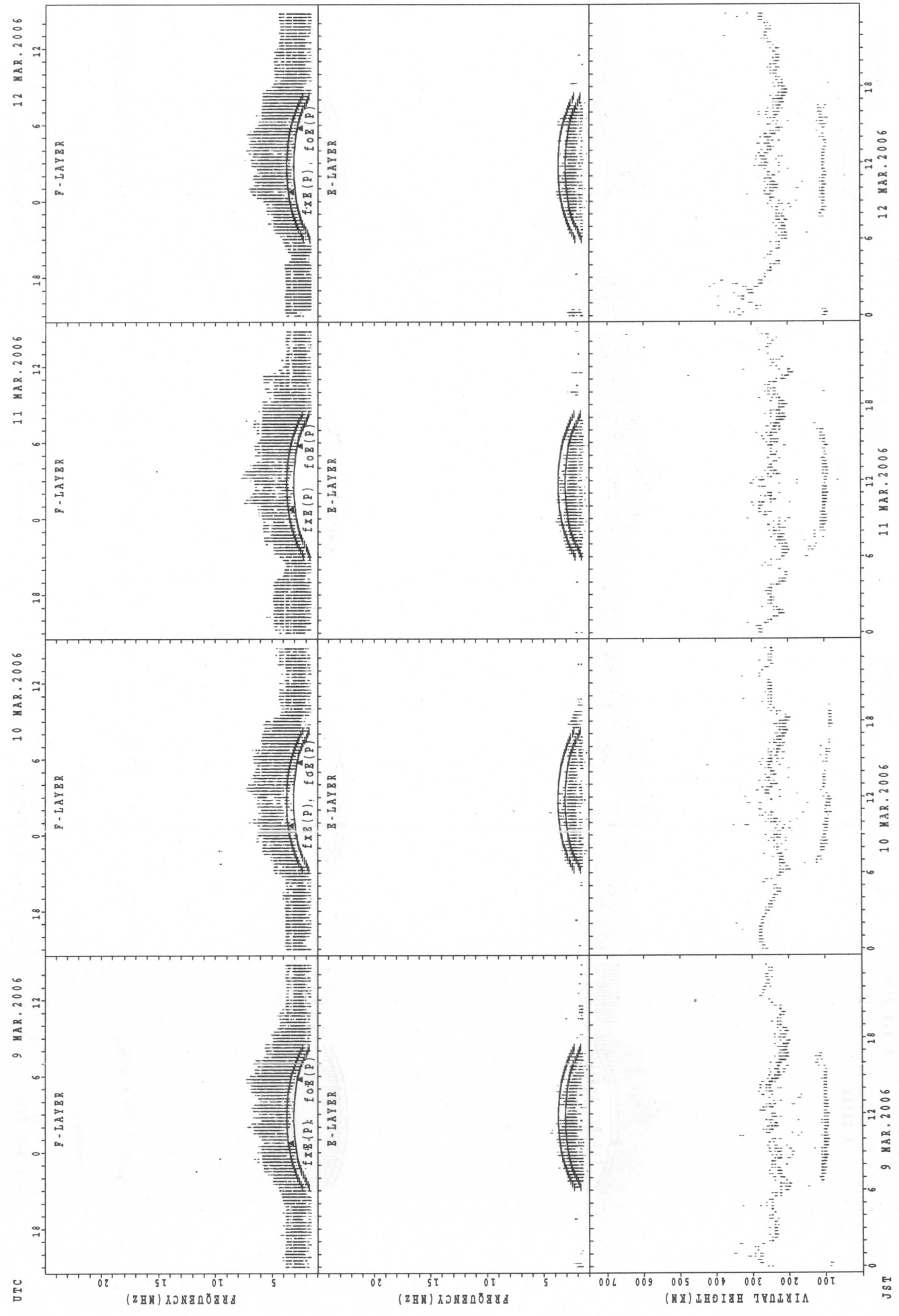
D \ H	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	15	14	15	14	14	15	15	15	14	14	17	18	27	21	20	16	14	14	14	15	14		15	15
2	15	15	15	14	15	14	15	16	14	14	15	18	20	20	22	17	14	14	17	14	15	15	15	14
3	15	15	16	14	15			17	14	14	14	17	21	22	21	15	18	14	18	15	14	14	15	15
4	14	14	15	15	14	15	14	16	14	14	15	20	20	35	21	17	15	14	14	14	15	15	14	14
5	15	14	15	14	15	15	14	15	14	14	14	21	16	16	21	16	15	14	17	15	14	17	15	15
6	15	14	15	14	14			15	14	14	14	17	22	21	22	20	14	14	18	15	15		15	17
7	16	14	15	15	15		15	17	14	14	14	15	20	20	21	20	17	14	16	15	15	15	15	14
8	15	14	15	15	17	14	14	18	14	15	15	20	21	21	20	17	16	14	17	14	14	15	15	14
9	15	15	15	14	14	16		14	14	14	14	16	21	22	17	15	23	14	14	14		15	15	15
10	15	15	15	14	15	15		15	14	14	15	22	20	20	21	17	14	14	14	14	14	15	14	15
11	15	15	14	15				14	14	14	15	18	18	17	15	18	17	14	16	14	15	15	14	14
12	15		15	14	14		14	14	14	14	17	23	22	44	33	22	16	14	15	14	16	14	14	23
13	15	15	15	15	14	15		15	14	14	15	18	20	21	22	17	15	14	14	14	15	14	15	15
14	14	14	15	20	15	14	16	17	14	16	18	20	21	22	21	18	23	14	14	14	15	14	15	20
15	15	15	14	14	14			17	14	14	15	20	21	20	21	21	17	14	14	14	14	15	15	15
16	15	14	14	14	15			15	14	14	15	22	22	21	28	21	15	14	14	14	15	15	14	15
17	15	15	15	15	14	15	15	15	15	14	16	22	21	21	21	20	15	14	14	14	14	15	16	14
18	17	15	16	14	15			14	14	14	15	23	23	22	48	18	14	14	18	14	15	15	14	15
19	14	15	15	14	14	15	15	14	14	14	17	17	22	22	22	14	16	14	14	15	15	15		15
20	15	15	14	14	14			14	15	17	20	22	22	20	21	20	17	14	20	14	15	15	15	17
21	15	15	15	15	14	15	14	14	14	14	16	17	21	20	44	14	14	14	14	14	14	14	15	15
22	15	15	14	14			15	15	14	16	18	21	21	22	22	15	14	14	14	14	15	14	14	15
23	14	14	15	15	15	14	14	15	14	14	21	20	23	22	22	21	18	14	14	14	15	15	18	14
24	14	14	15	14			14	15	14	15	21	20	21	20	21	20	16	14	18	15	15		15	14
25	14	14	14	14			15	15	14	14	16	27	22	21	22	20	17	14	14	14	14	15	14	15
26	15	15	15	14		15	15	14	14	15	18	24	23	21	22	21	17	17	14	15	14	15	16	14
27	15	15	15	14	14	14	15	14	14	15	18	18	24	26	21	21	15	14	14	14	14	14	14	15
28	16	16	15	15	15	14	16	15	14		20	21	21	47	21	23	18	15	14	14	14	15	23	16
29	15	14	16	15			15	15	14	14	17	22	46	30	20	23	15	14	14	14	14	17	15	14
30	14	14	14	15	15		17	14	14	15	21	21		22	21	21	16	14	14	14	15	15	16	14
31	14	15	14	15	14		14	16	14	16	18	22	22	26	21	42	14	14	14	14	14	15	15	16
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	31	30	31	31	25	16	21	31	31	30	31	31	30	31	31	31	31	31	31	31	30	28	30	31
MED	15	15	15	14	14	15	15	15	14	14	16	20	21	21	21	20	16	14	14	14	15	15	15	15
U Q	15	15	15	15	15	15	15	16	14	15	18	22	22	22	22	21	17	14	17	15	15	15	15	15
L Q	14	14	14	14	14	14	14	14	14	14	15	18	21	20	21	17	14	14	14	14	14	14	14	14


SUMMARY PLOTS AT Wakkanai
UTC
JST
1 MAR.2006
2 MAR.2006
3 MAR.2006
4 MAR.2006
F-LAYER
E-LAYER
FREQUENCY(MHz)
VIRTUAL HEIGHT(KM)
fxE(P)
foE(P)
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

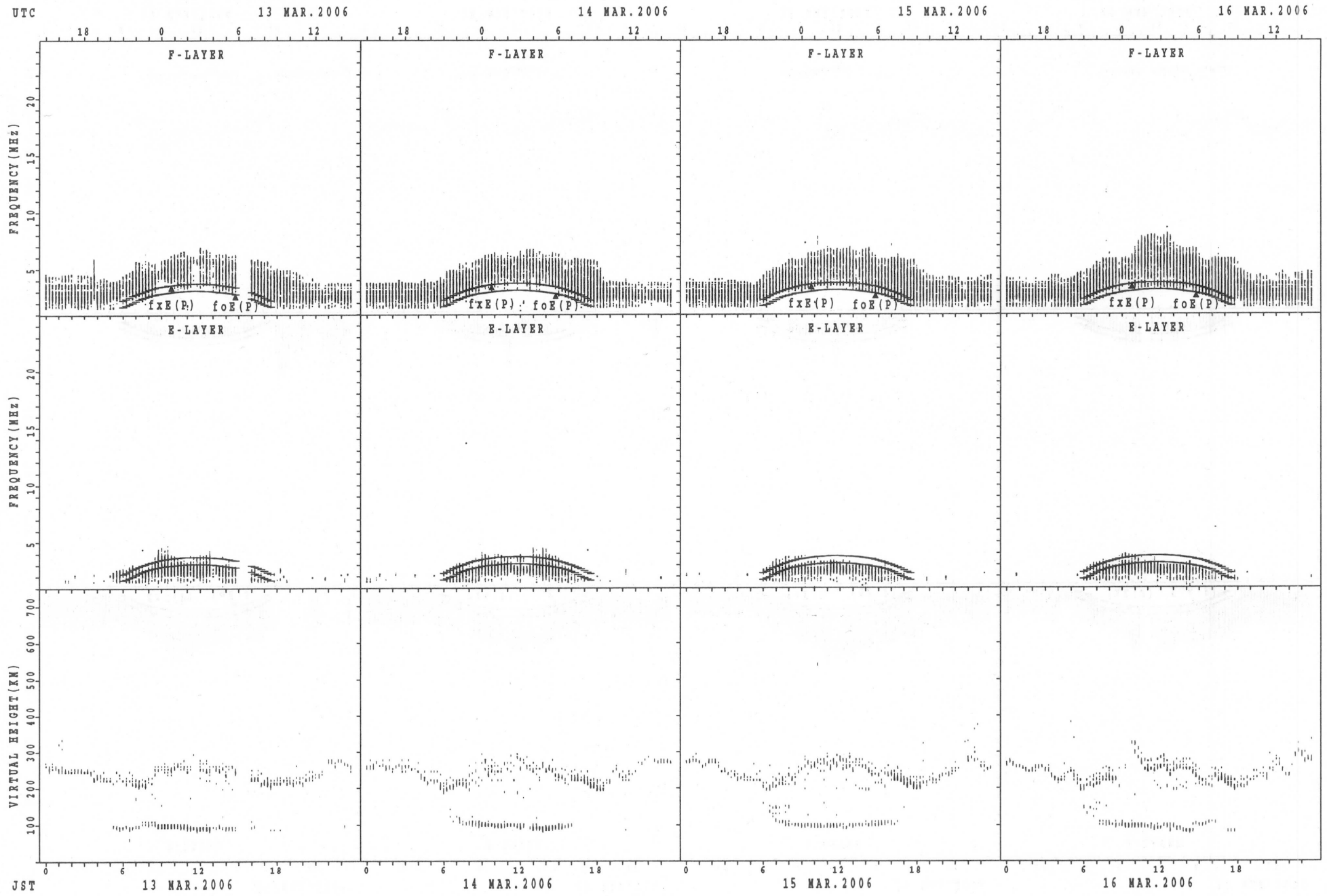
SUMMARY PLOTS AT Wakkanai



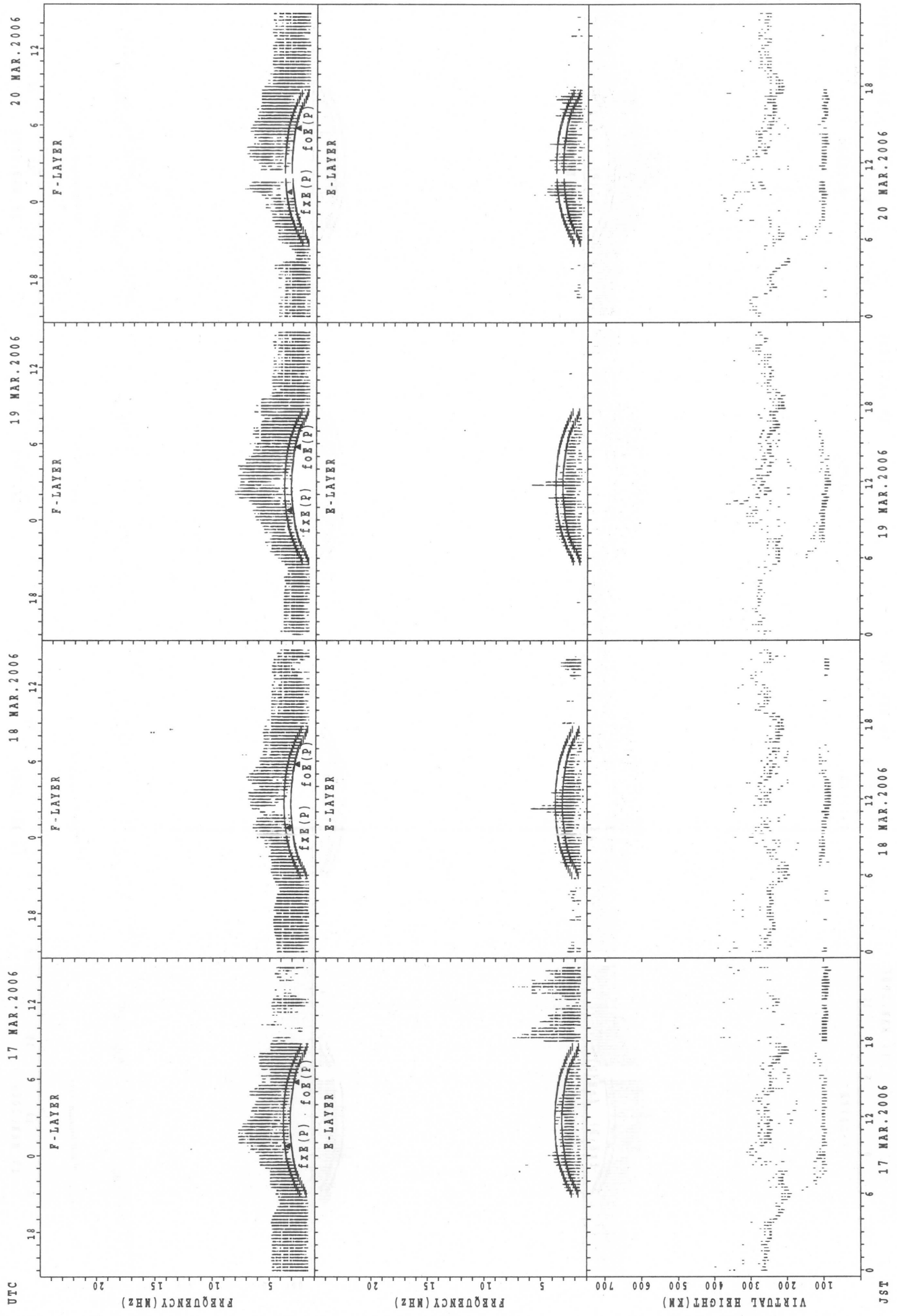
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE


SUMMARY PLOTS AT Wakkanai
UTC
JST
9 MAR.2006
10 MAR.2006
11 MAR.2006
12 MAR.2006
F-LAYER
E-LAYER
FREQUENCY(MHz)
VIRTUAL HEIGHT(KM)
fxE(P), foE(P)
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

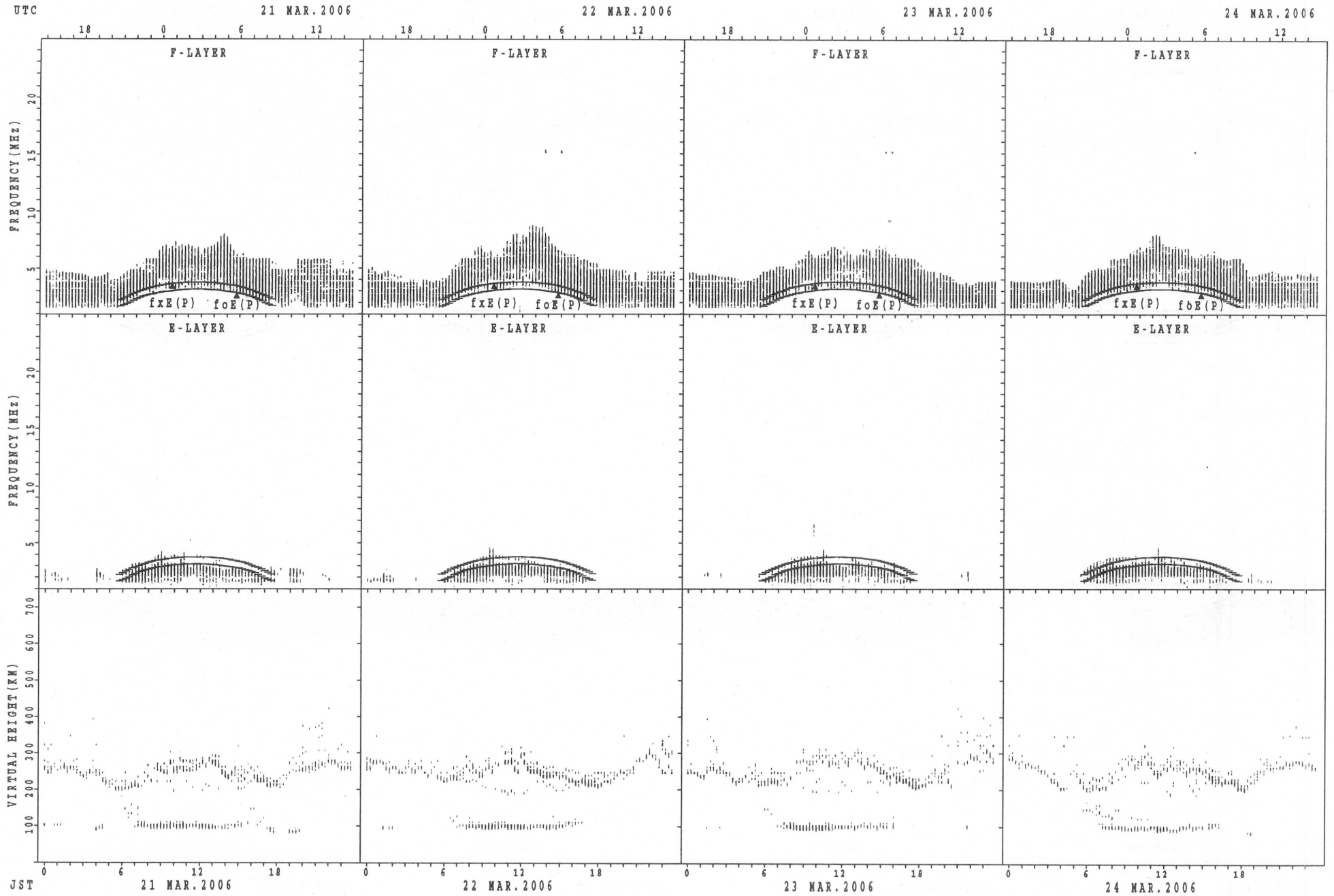
SUMMARY PLOTS AT Wakkanai



fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

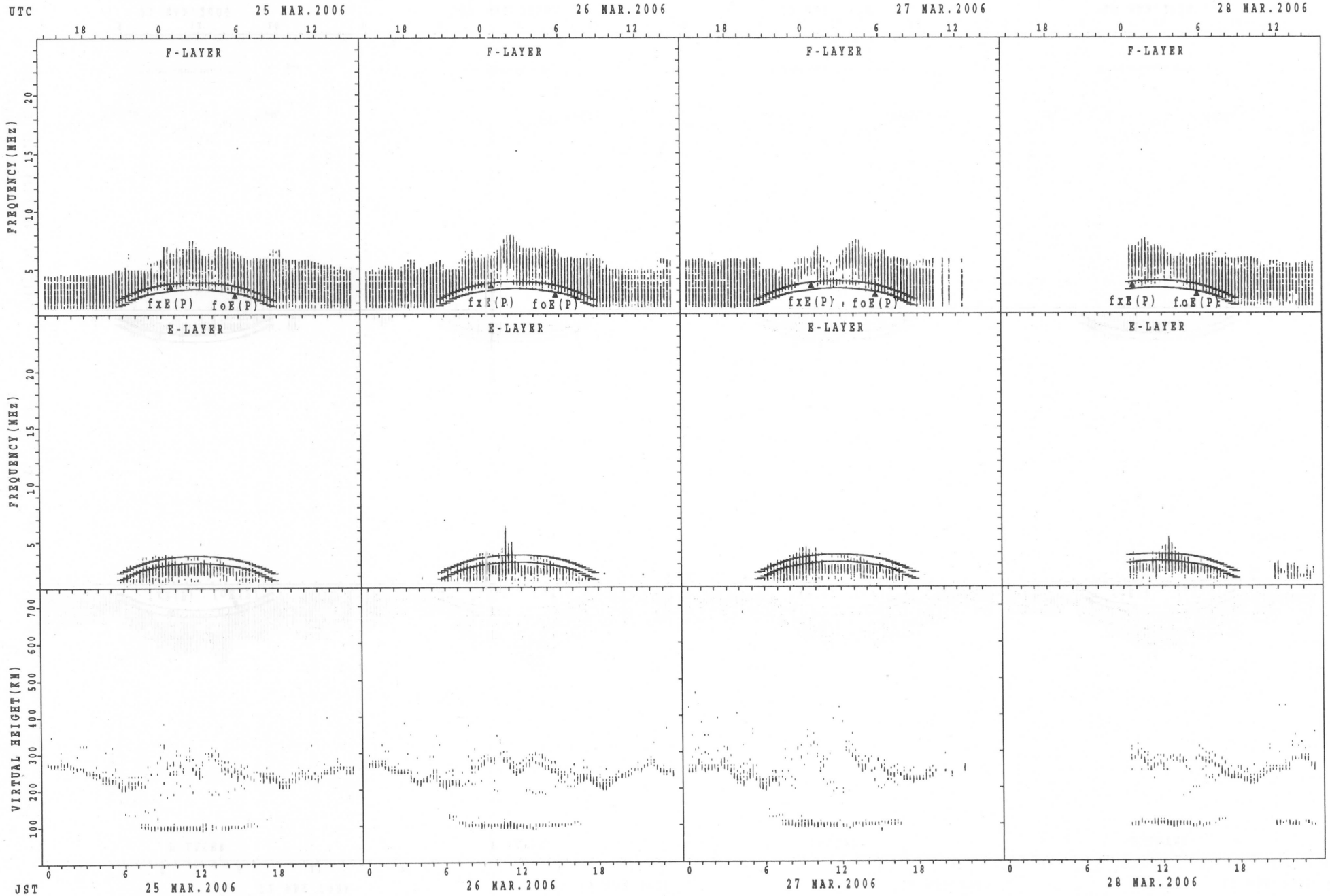

SUMMARY PLOTS AT Wakkanai
UTC
JST
17 MAR.2006
18 MAR.2006
19 MAR.2006
20 MAR.2006
F-LAYER
E-LAYER
FREQUENCY (MHz)
VIRTUAL HEIGHT (KM)
fxE(P)
foE(P)
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Wakkanai



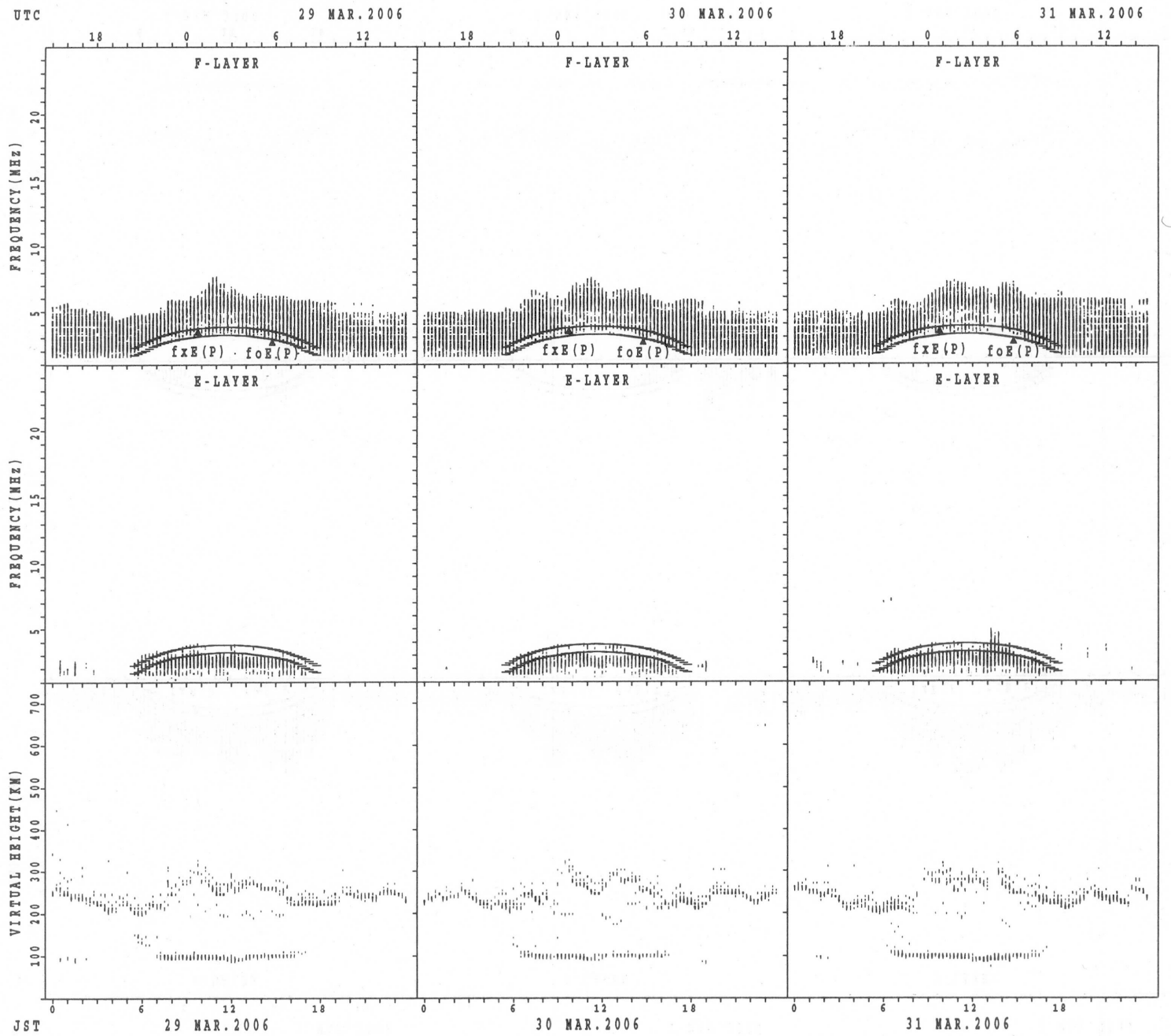
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Wakkanai



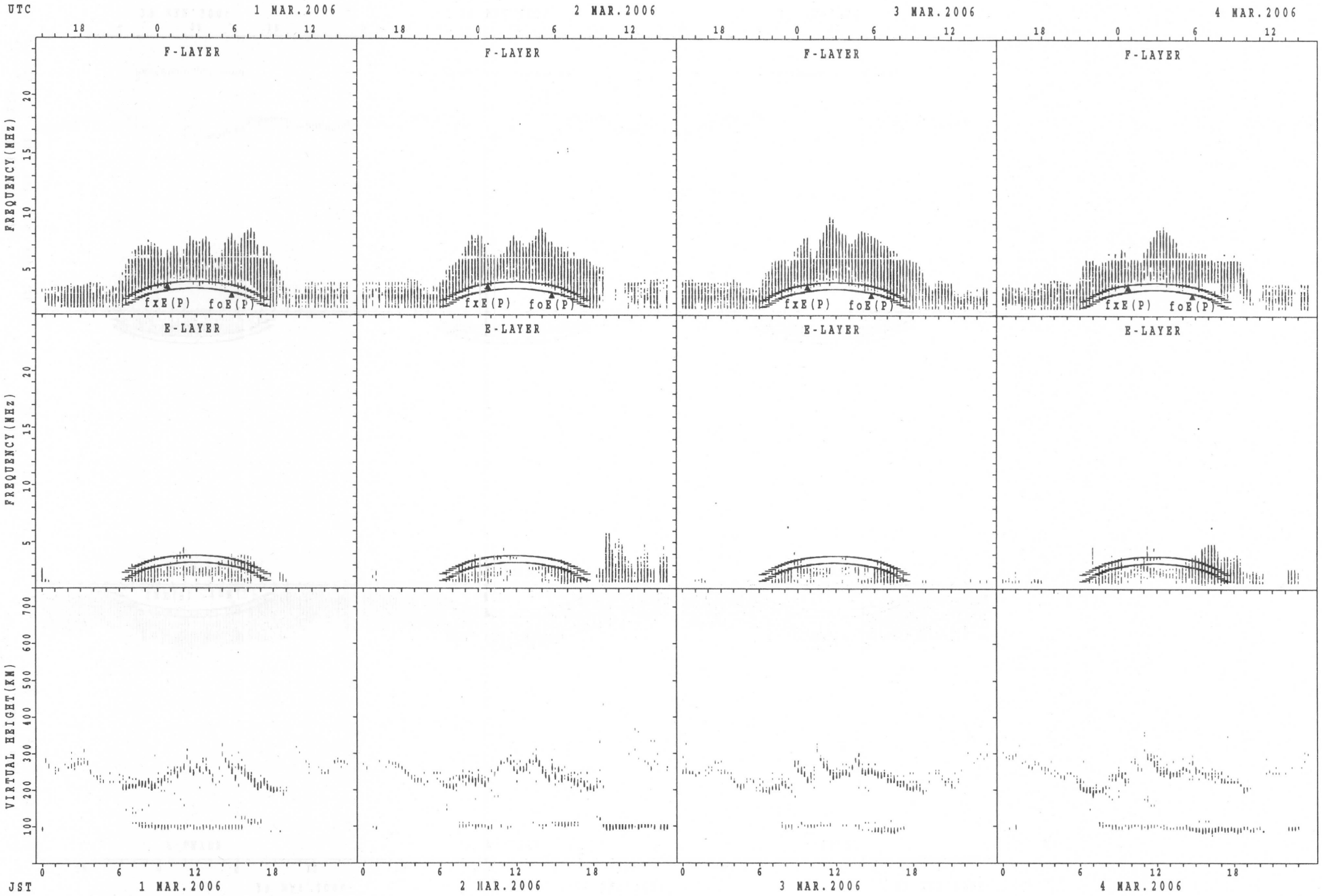
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Wakkanai



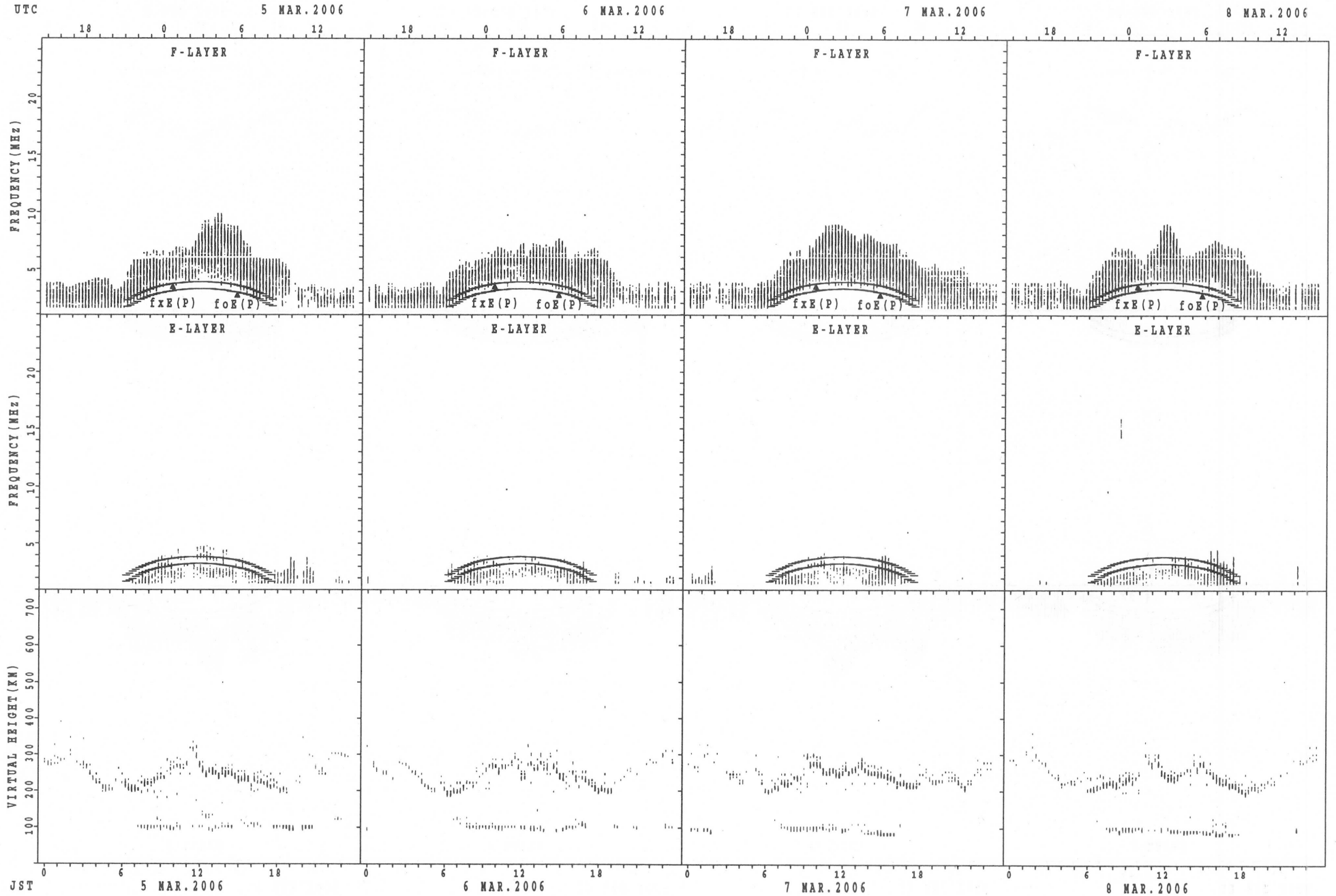
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Kokubunji



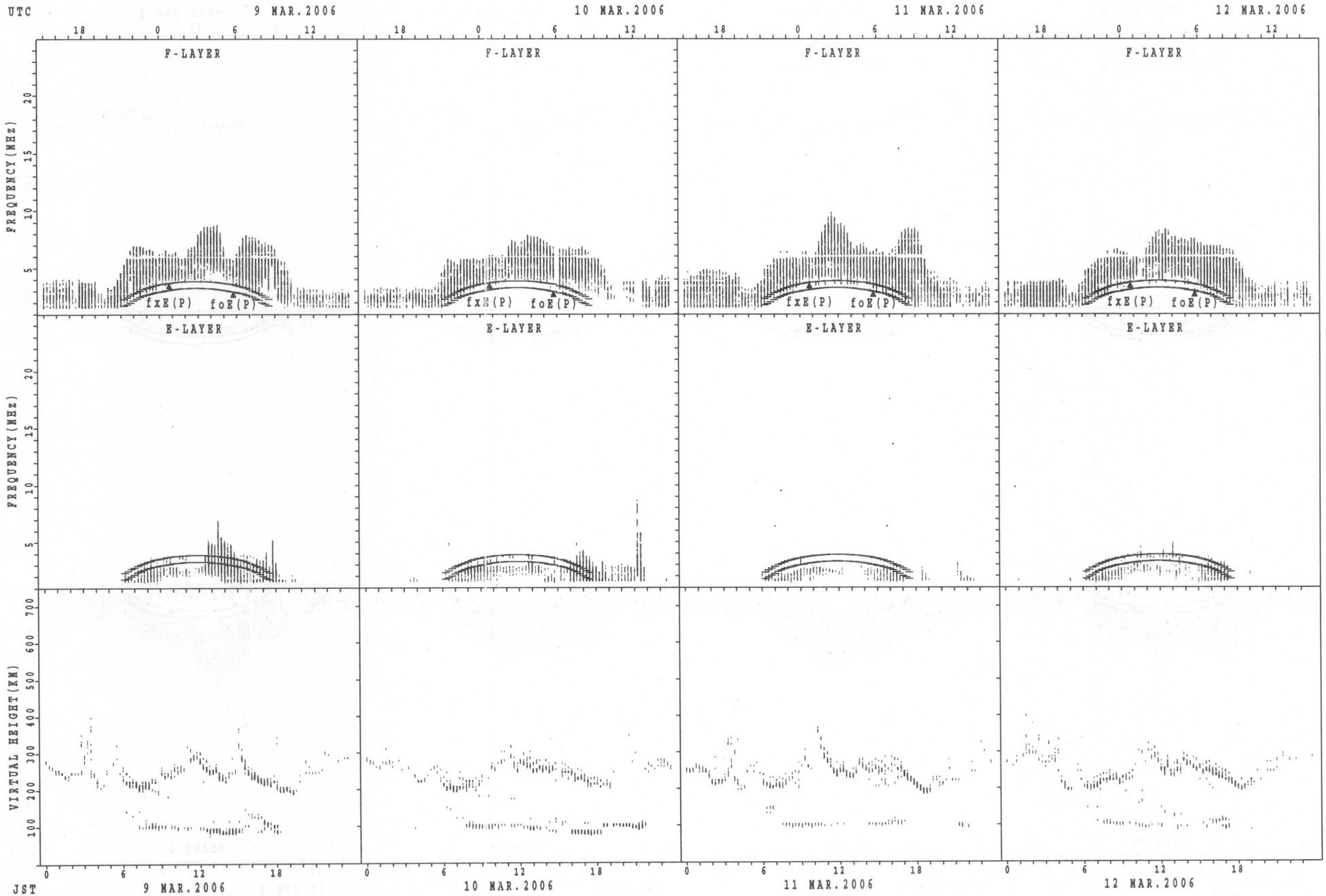
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Kokubunji



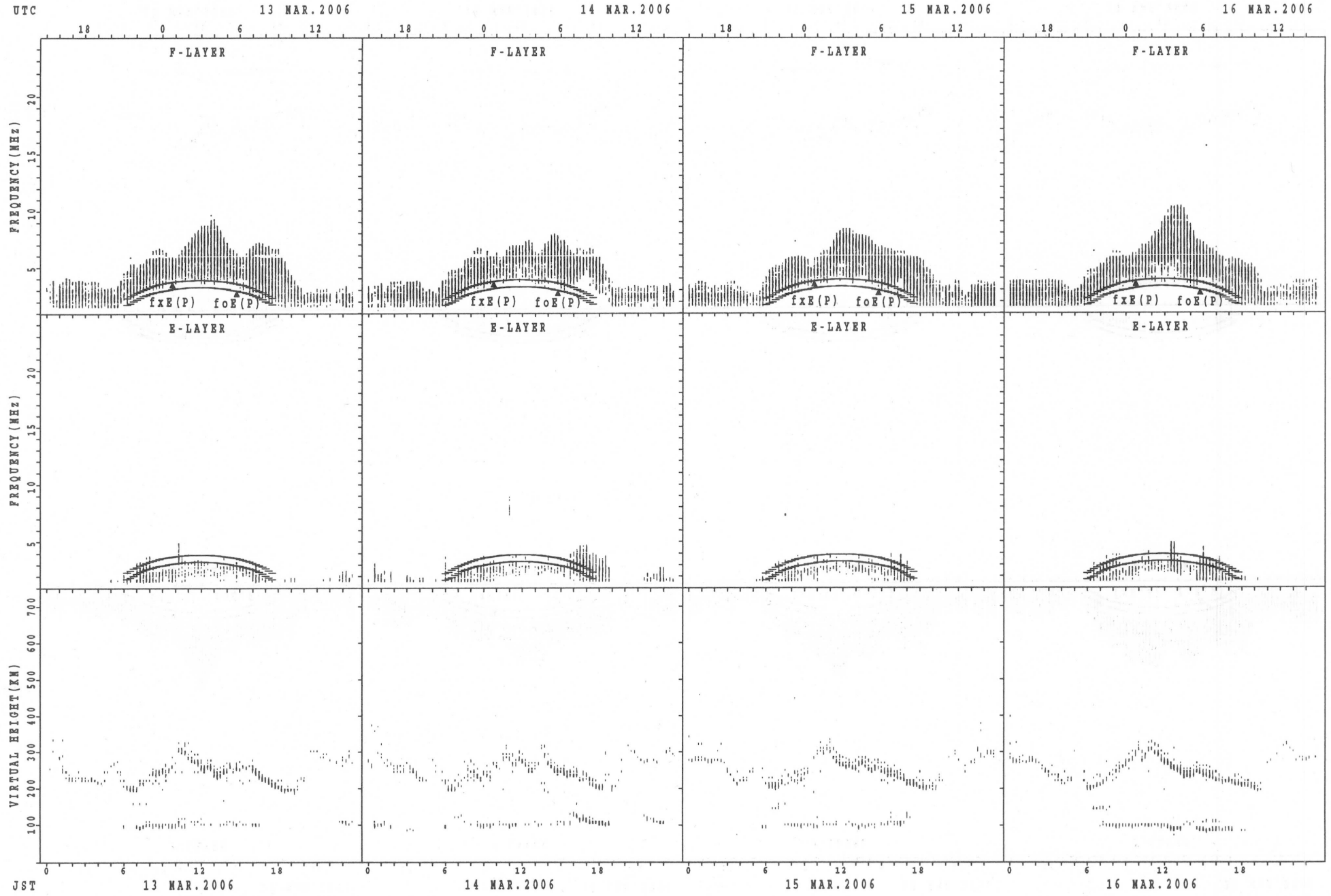
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Kokubunji



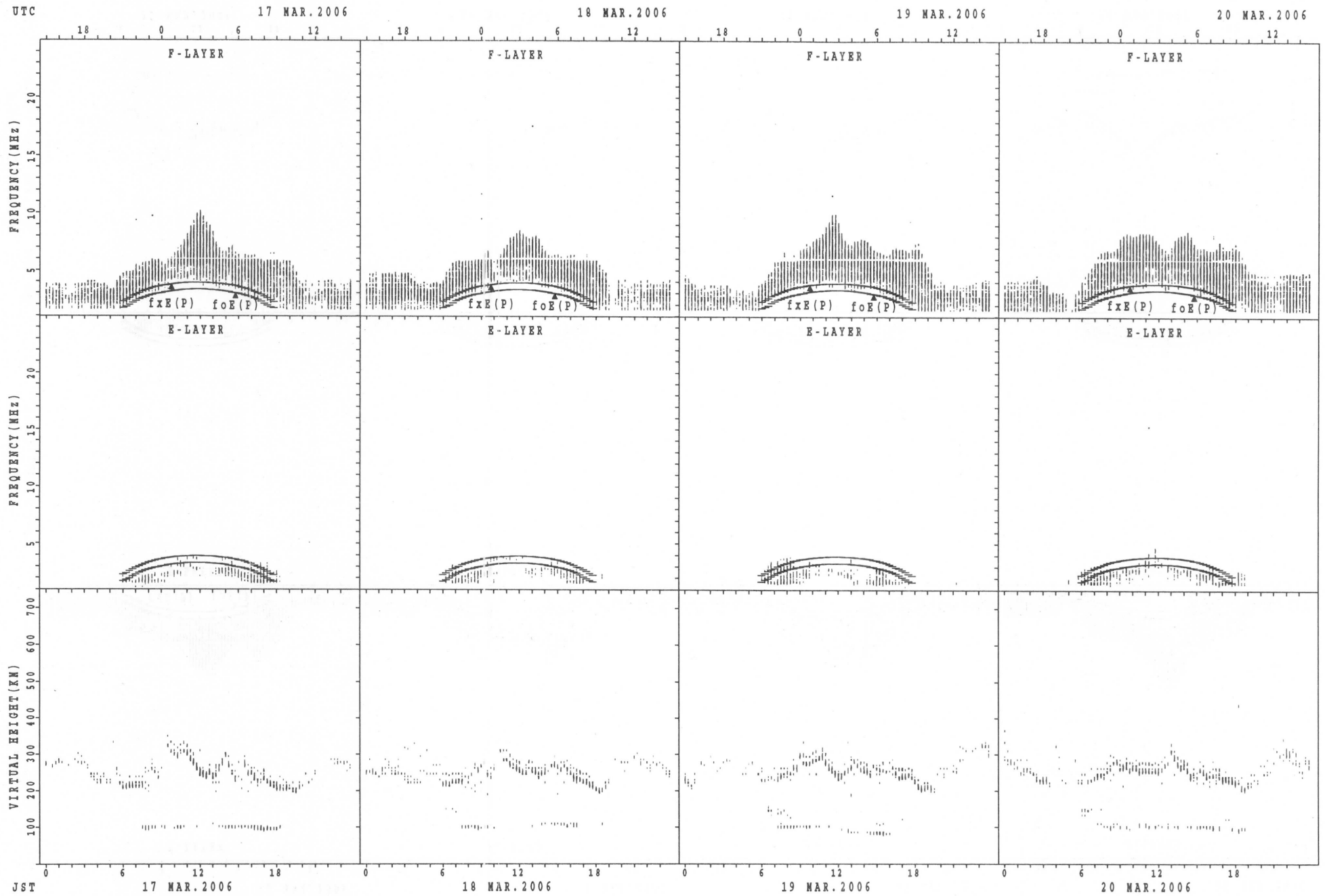
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Kokubunji



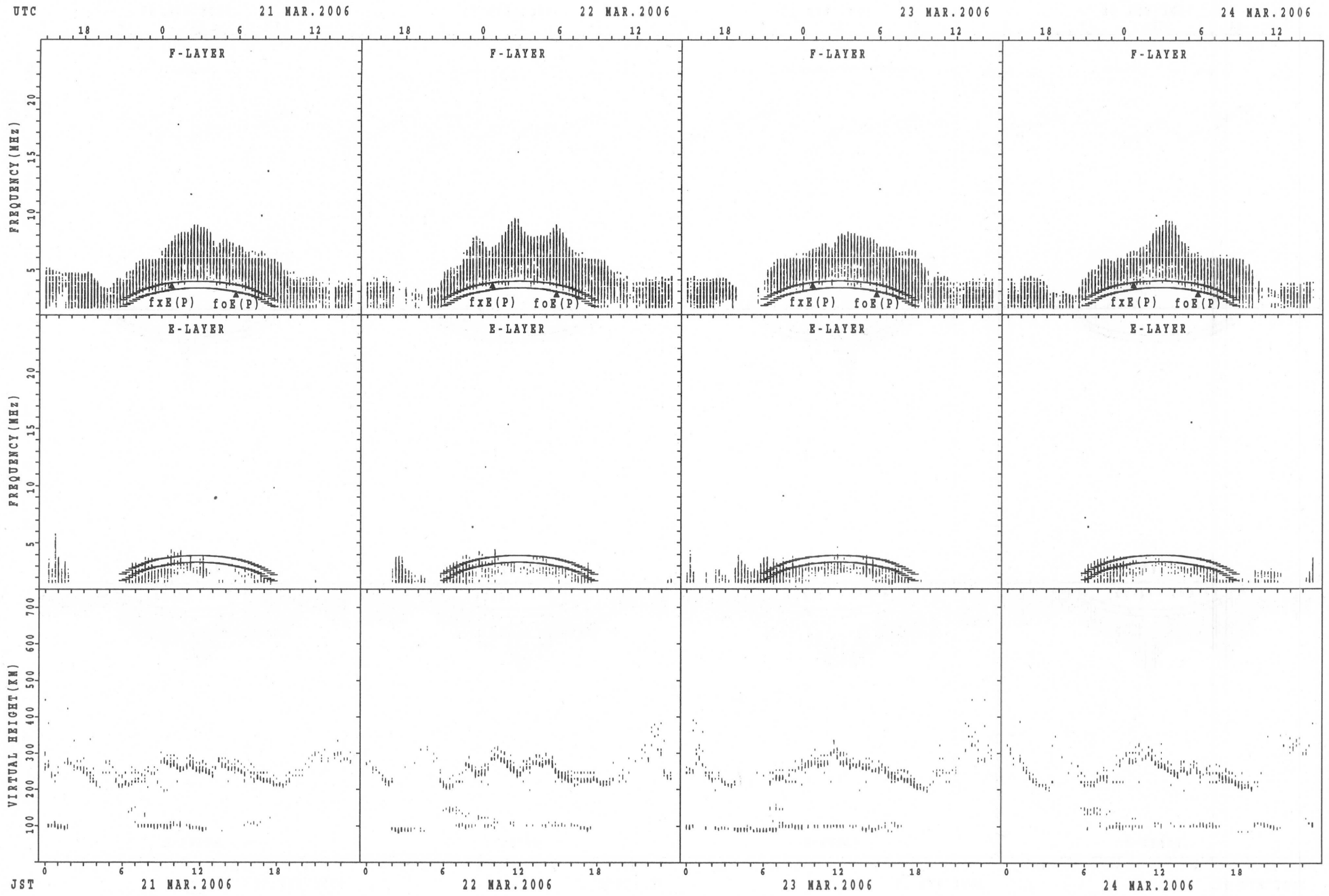
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Kokubunji



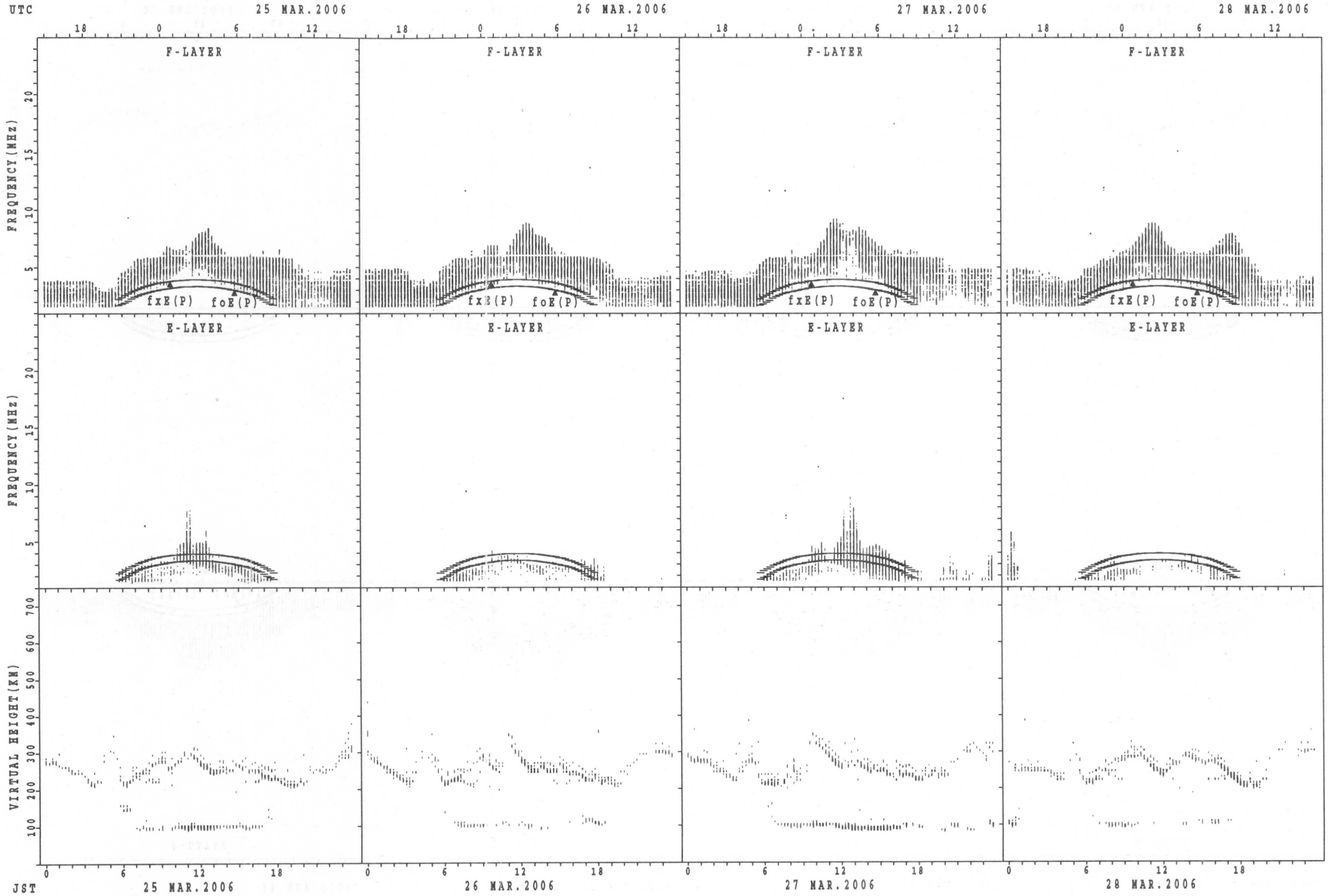
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Kokubunji



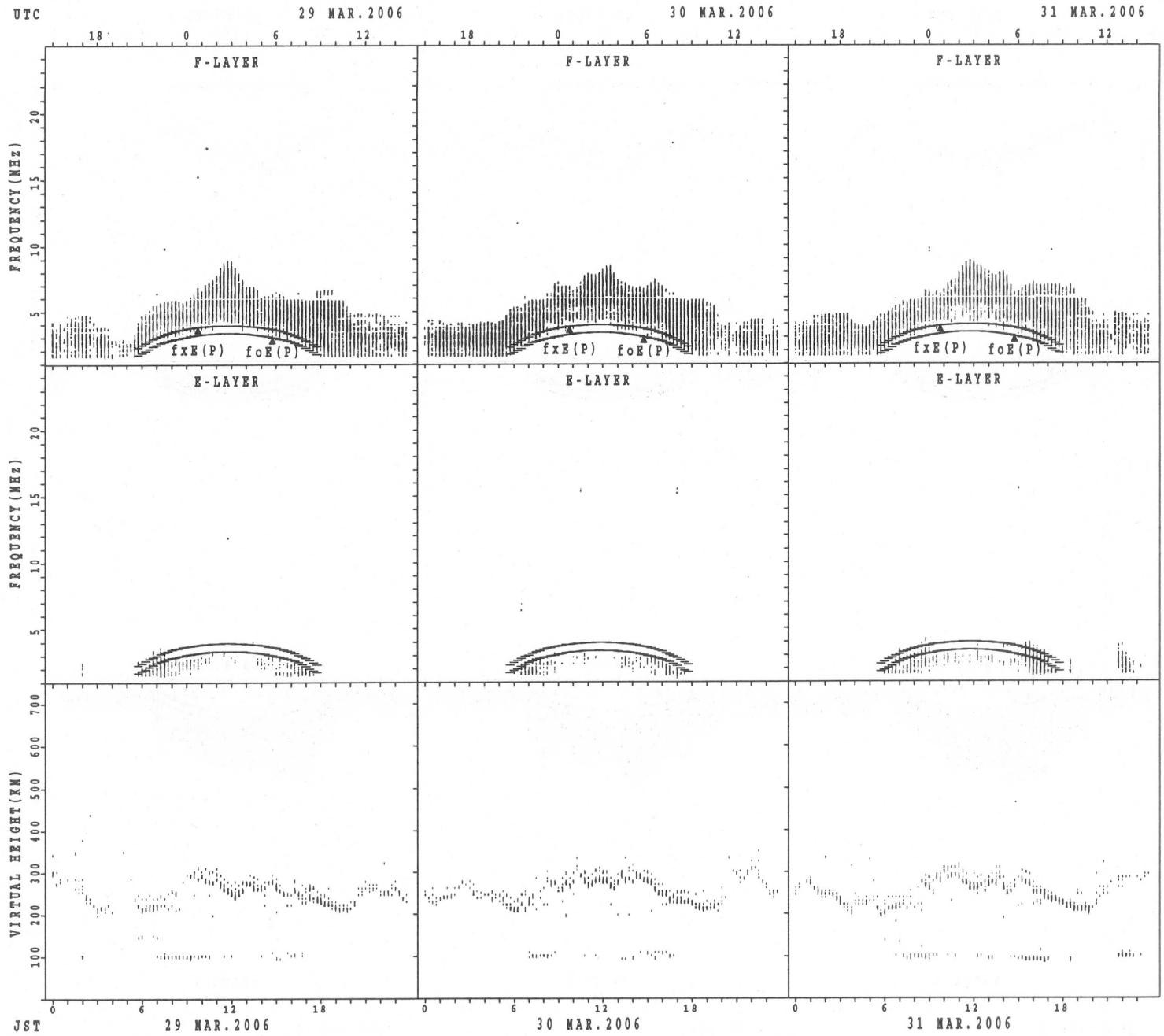
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Kokubunji



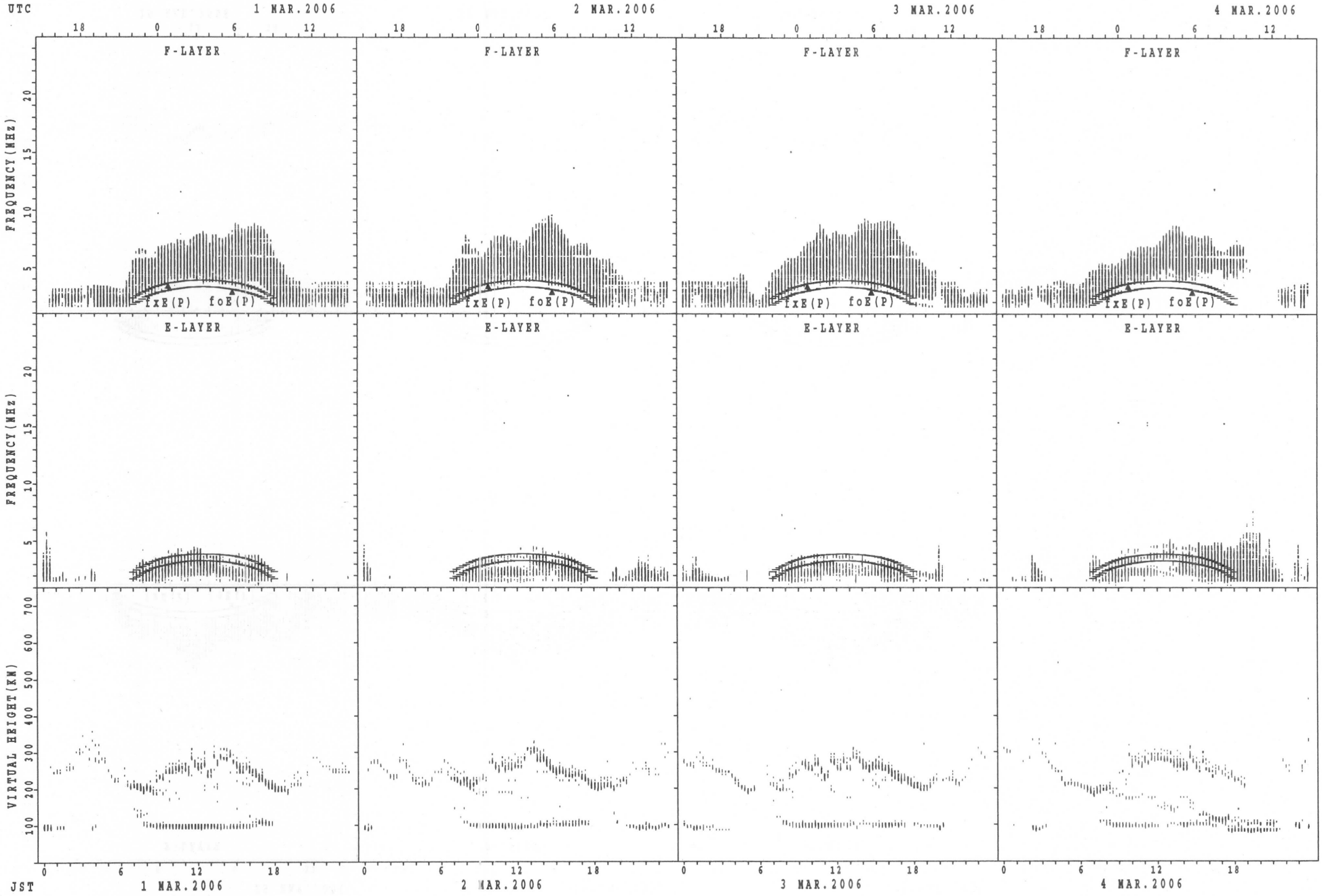
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Kokubunji



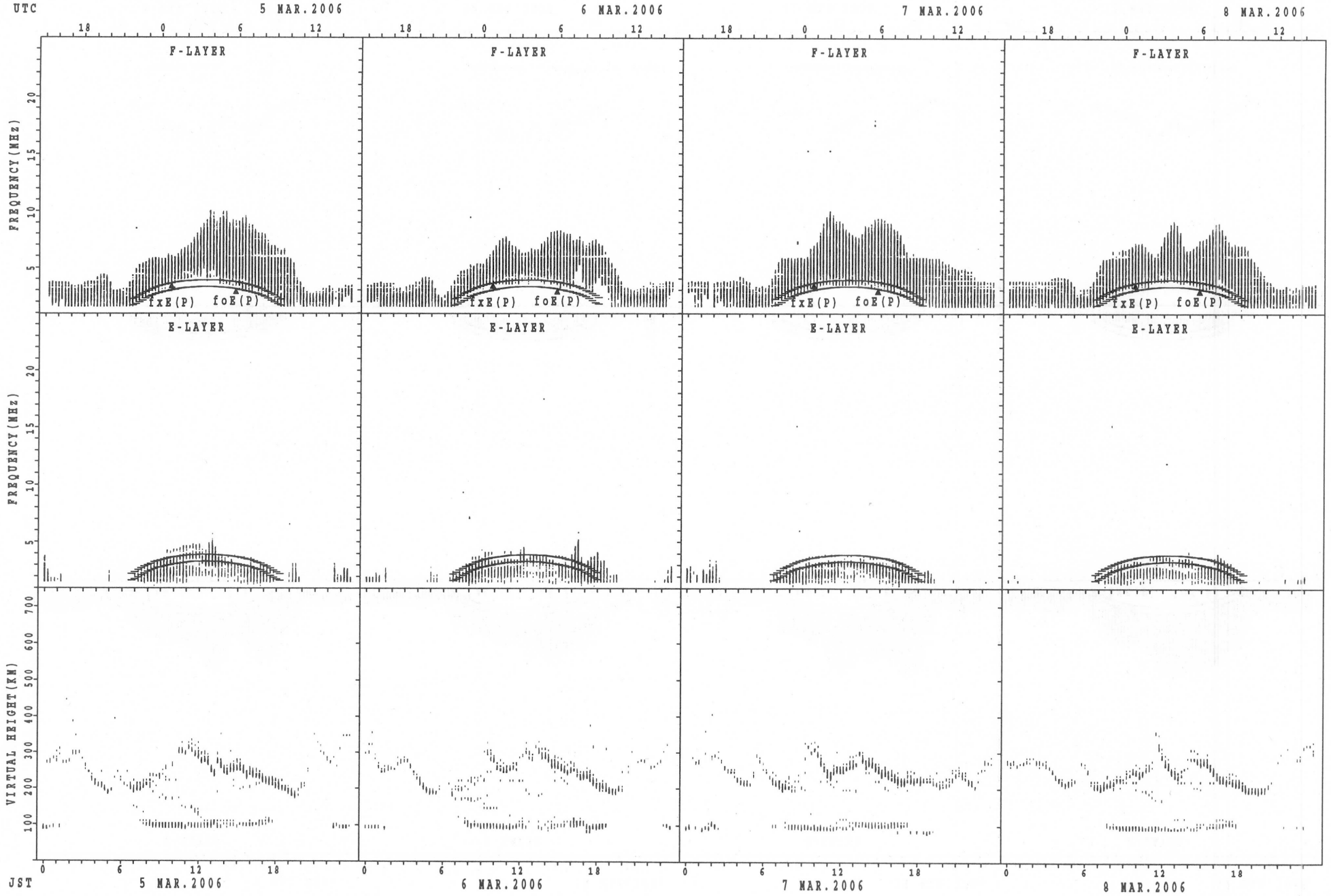
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Yamagawa

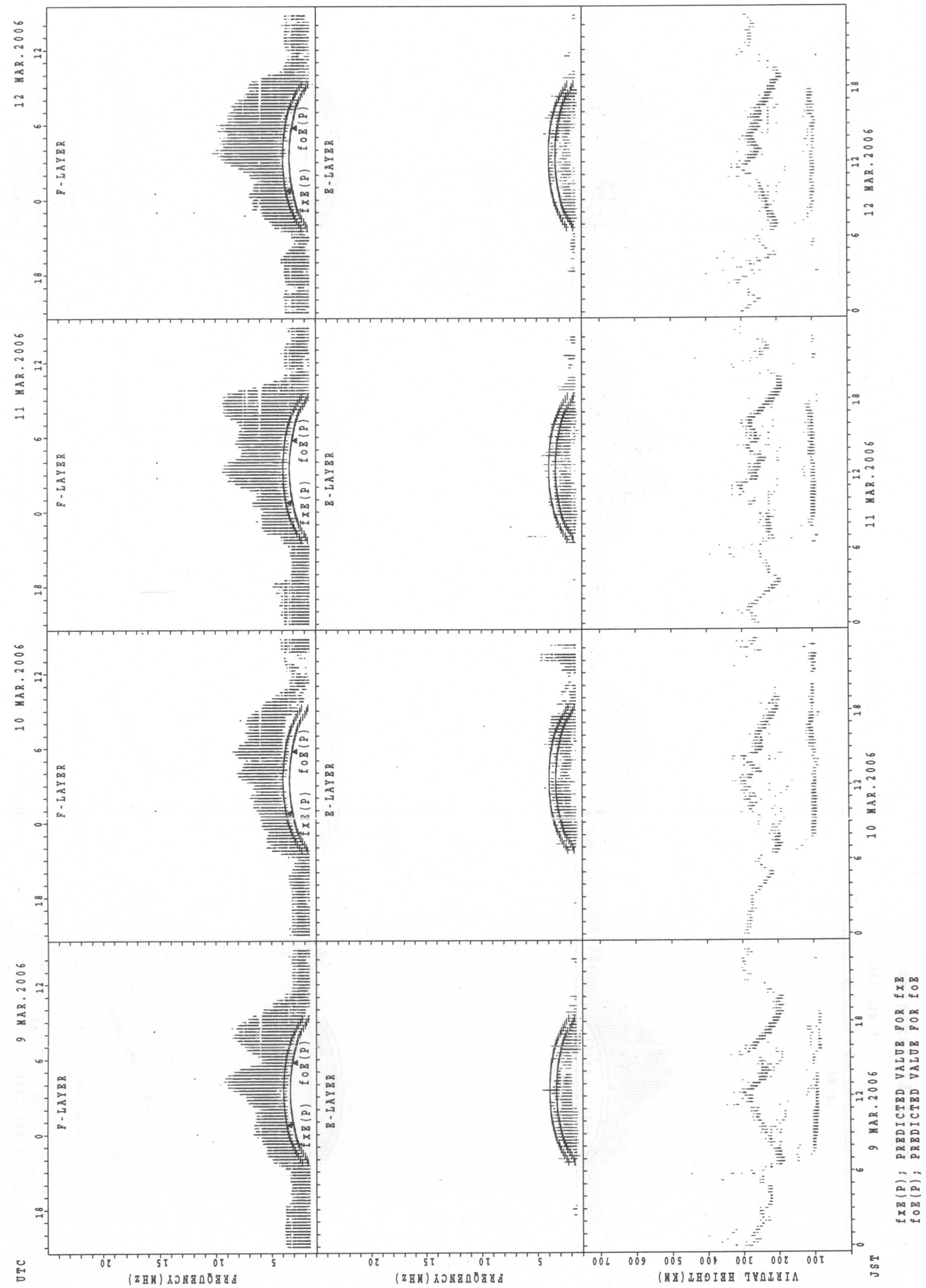


fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

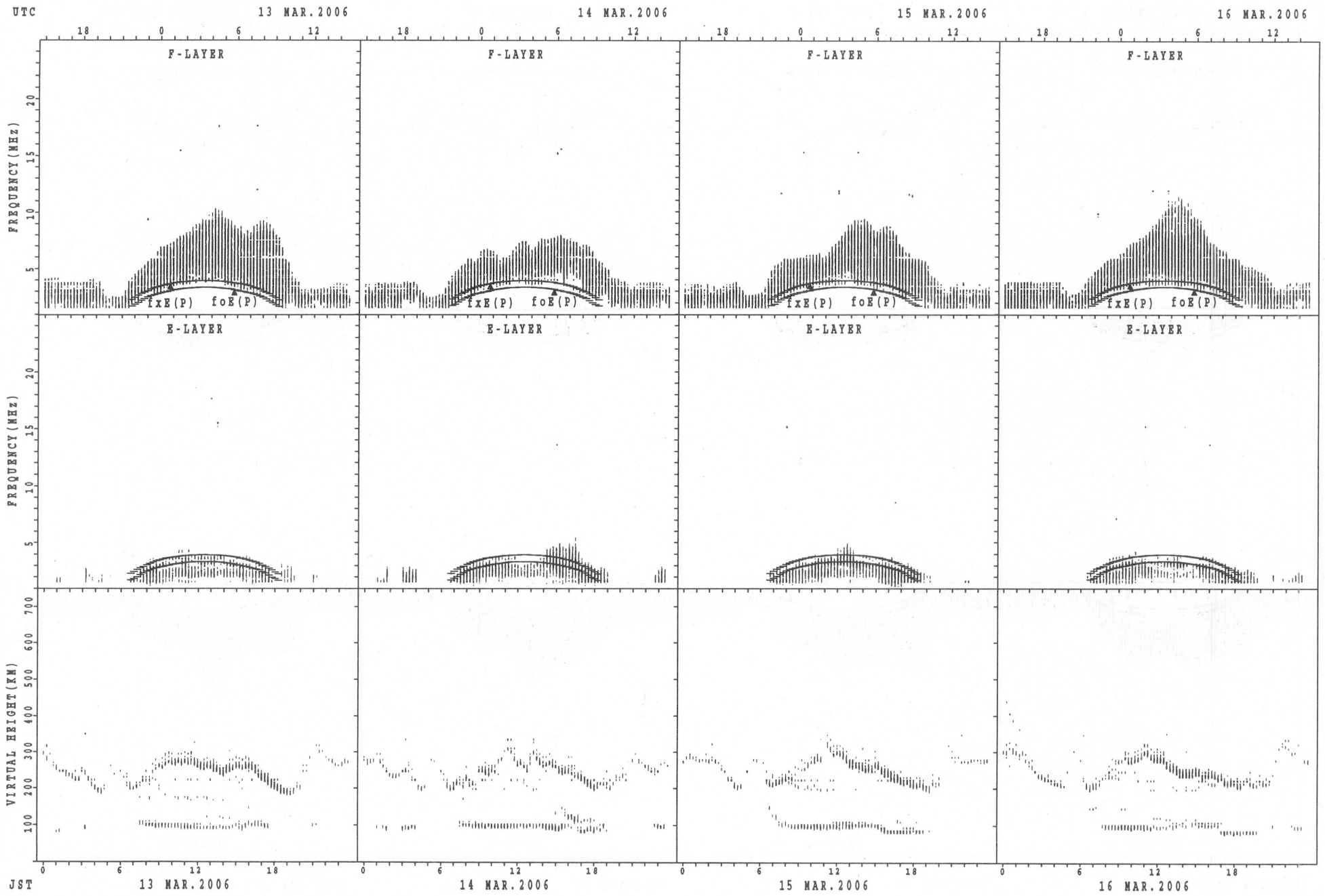
SUMMARY PLOTS AT Yamagawa



fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

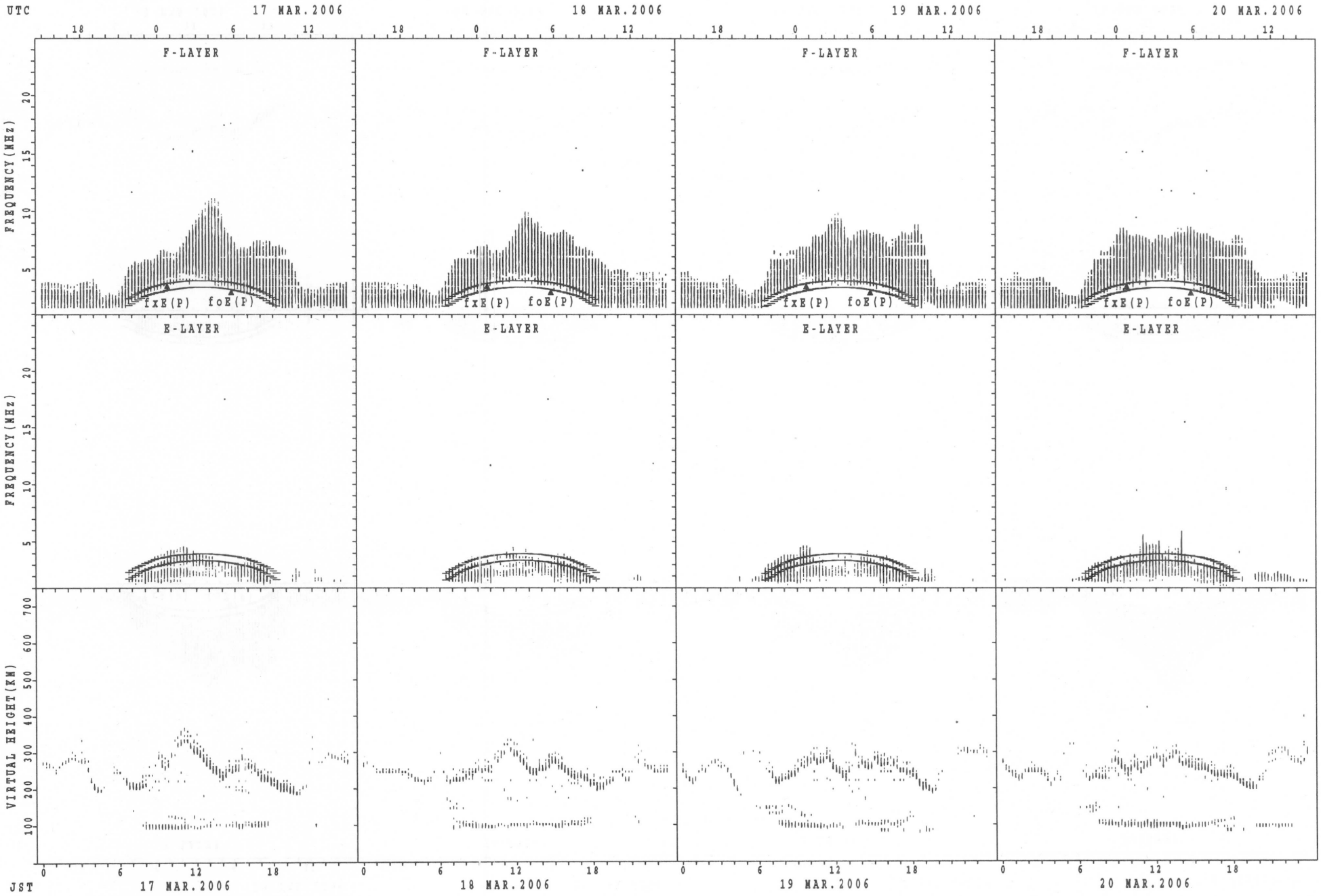

SUMMARY PLOTS AT Yamagawa
UTC
JST
9 MAR.2006
10 MAR.2006
11 MAR.2006
12 MAR.2006
F-LAYER
E-LAYER
FREQUENCY (MHz)
VIRTUAL HEIGHT (KM)
fxE(P)
foE(P)
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Yamagawa



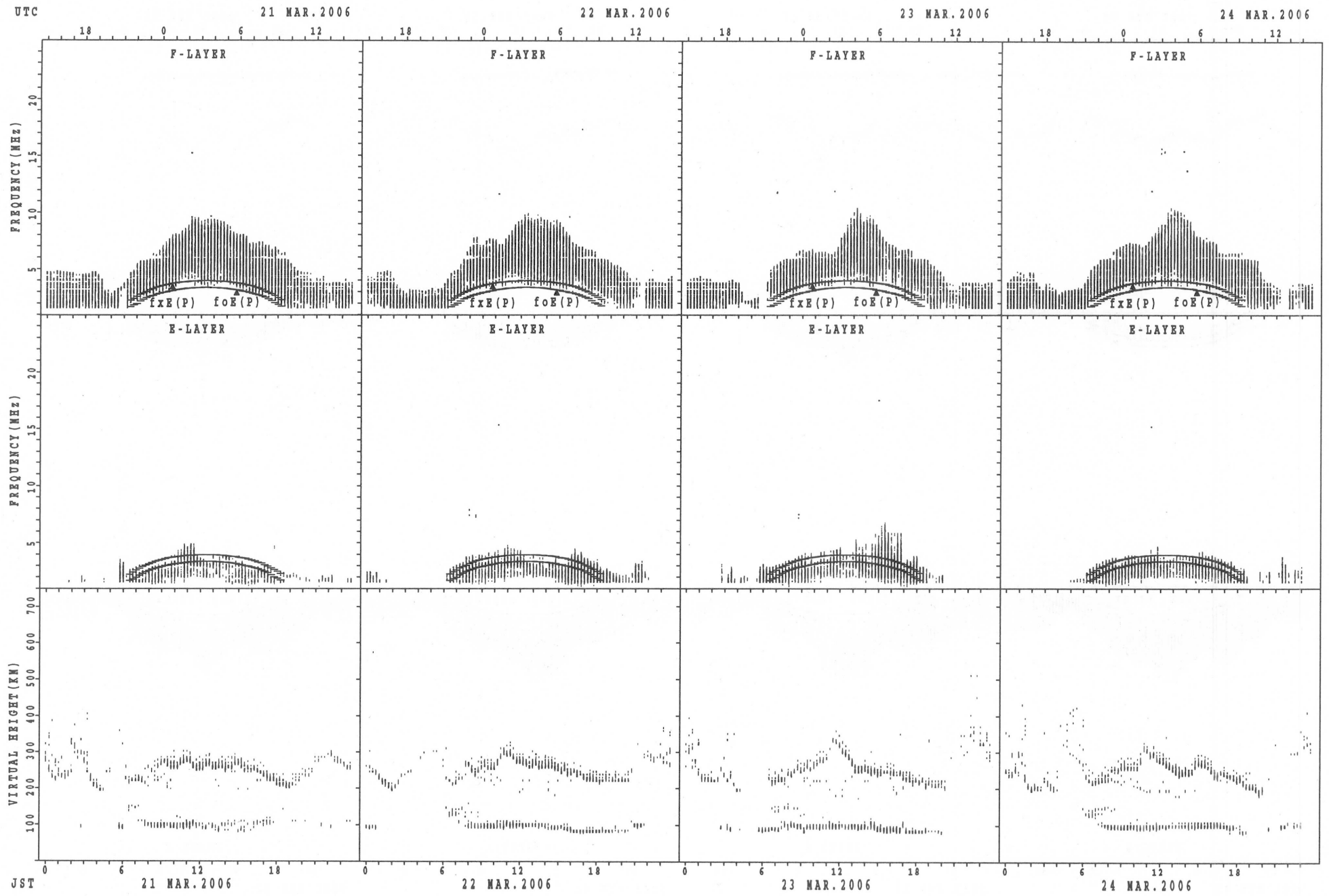
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Yamagawa



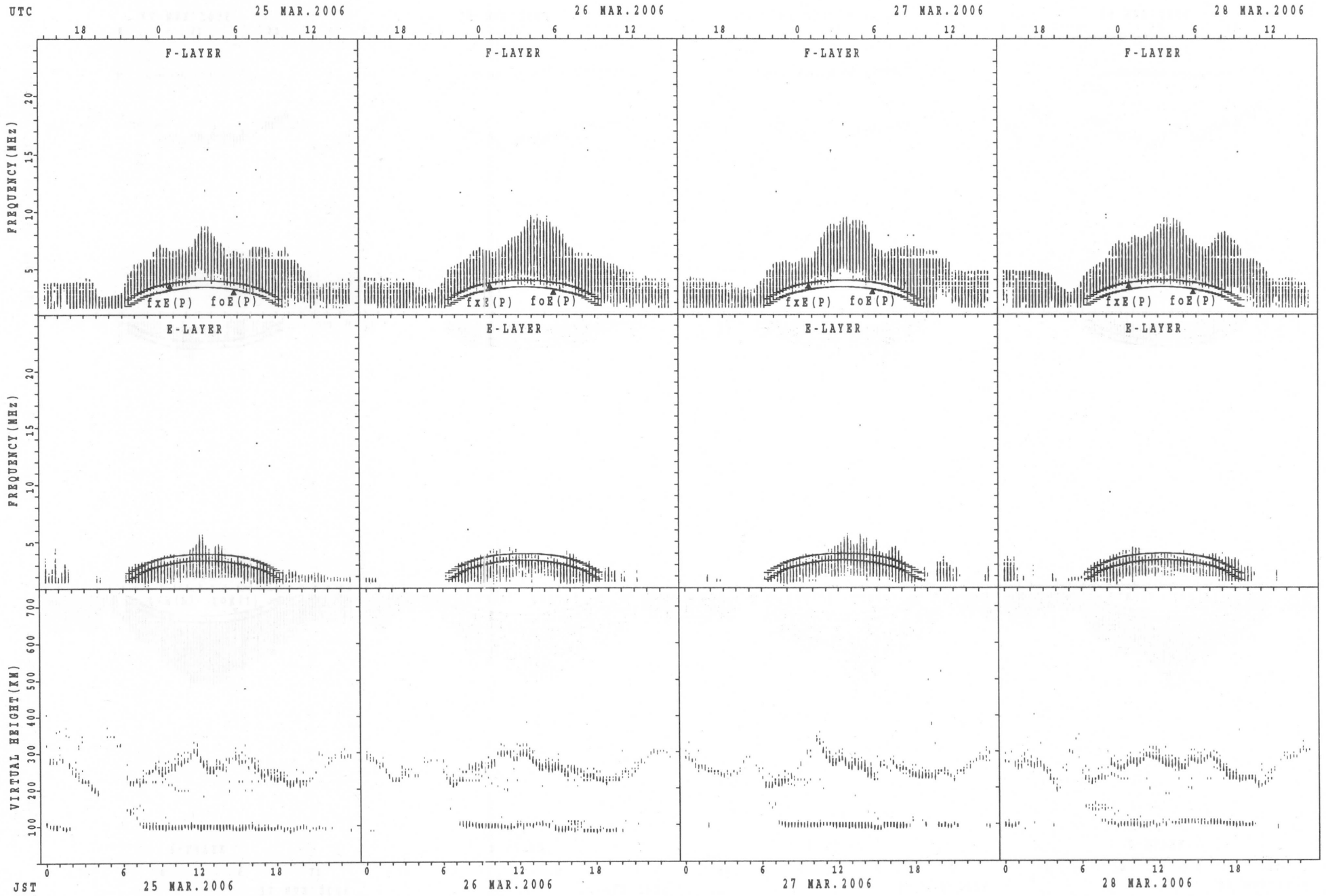
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Yamagawa



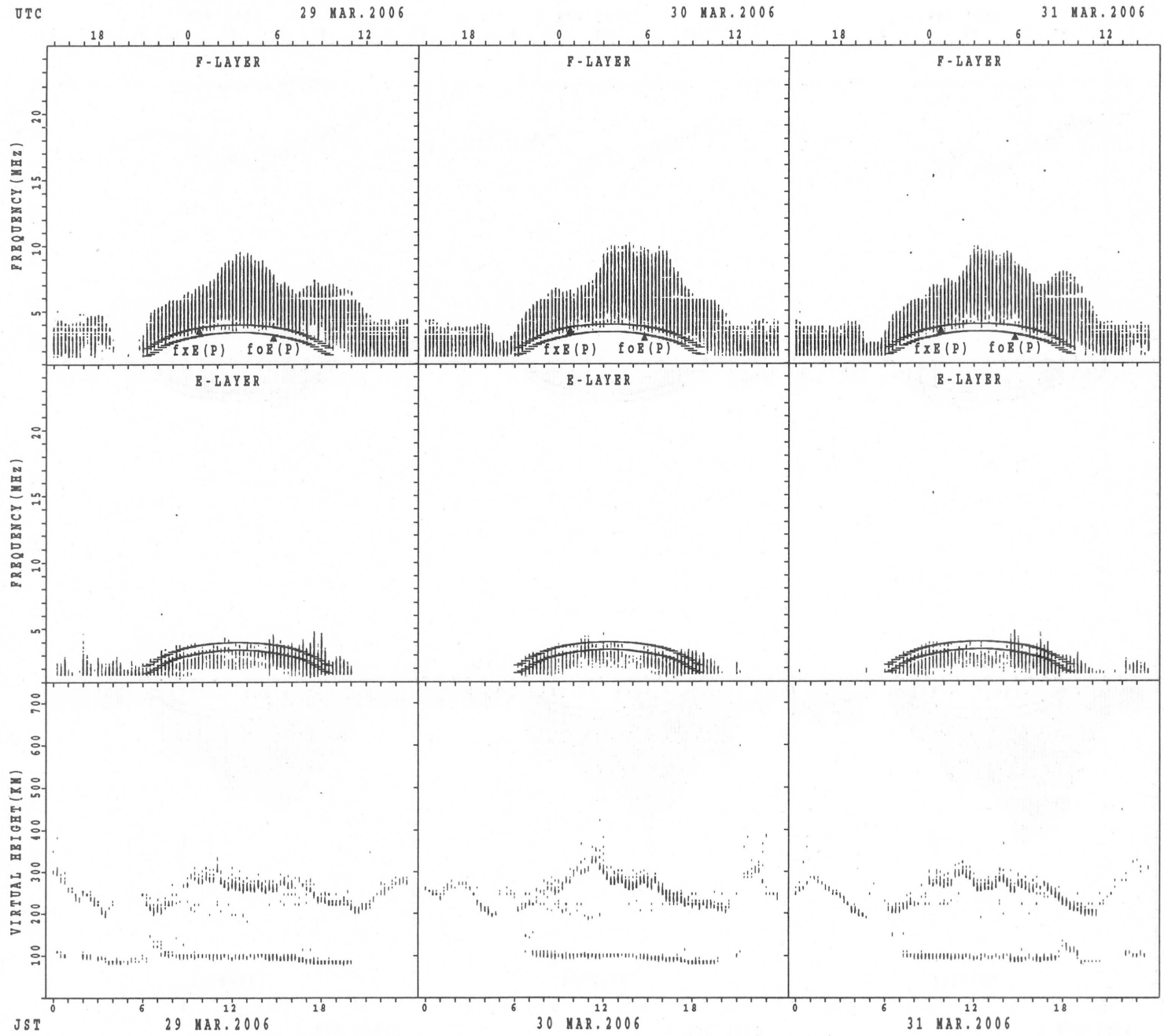
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Yamagawa



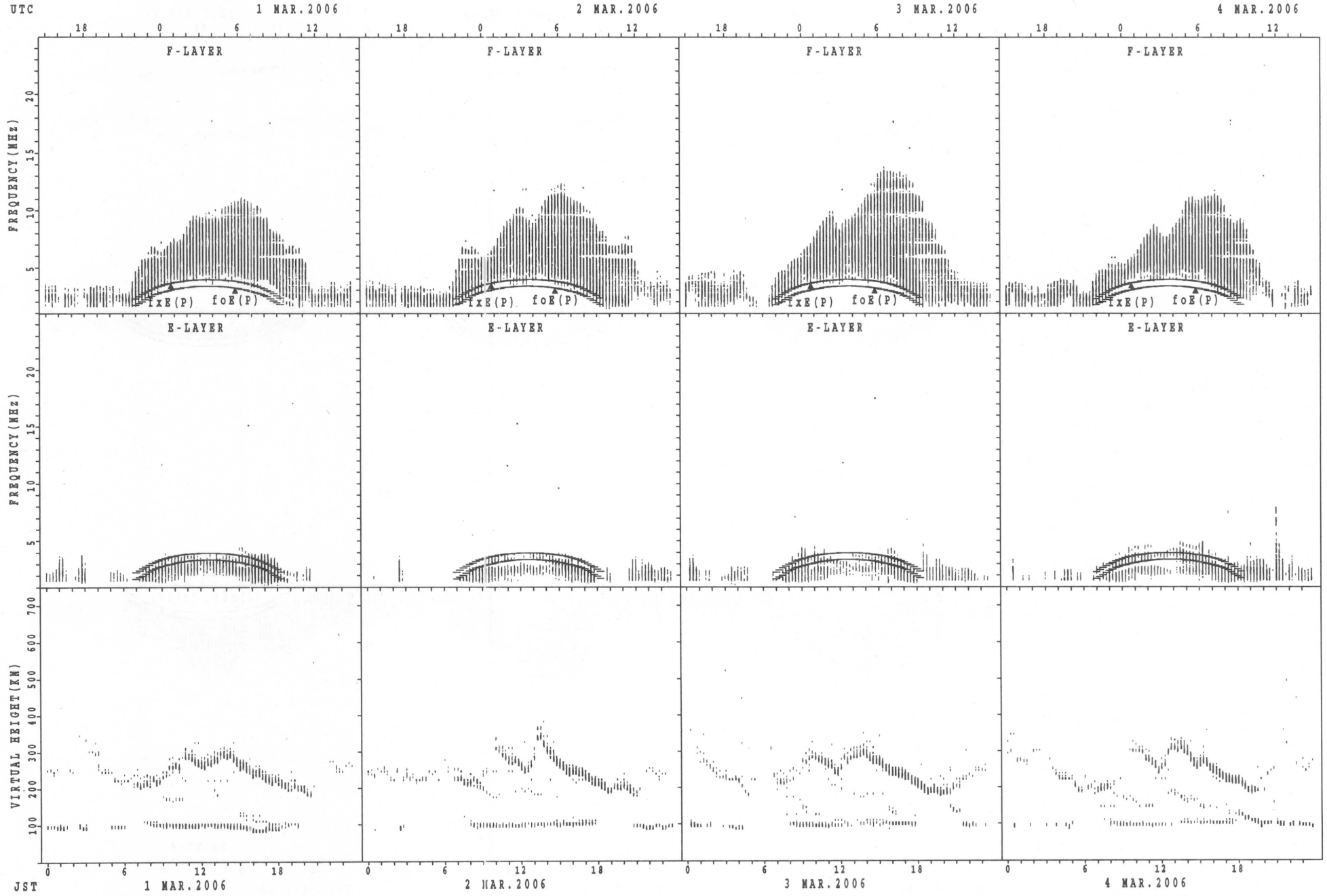
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Yamagawa



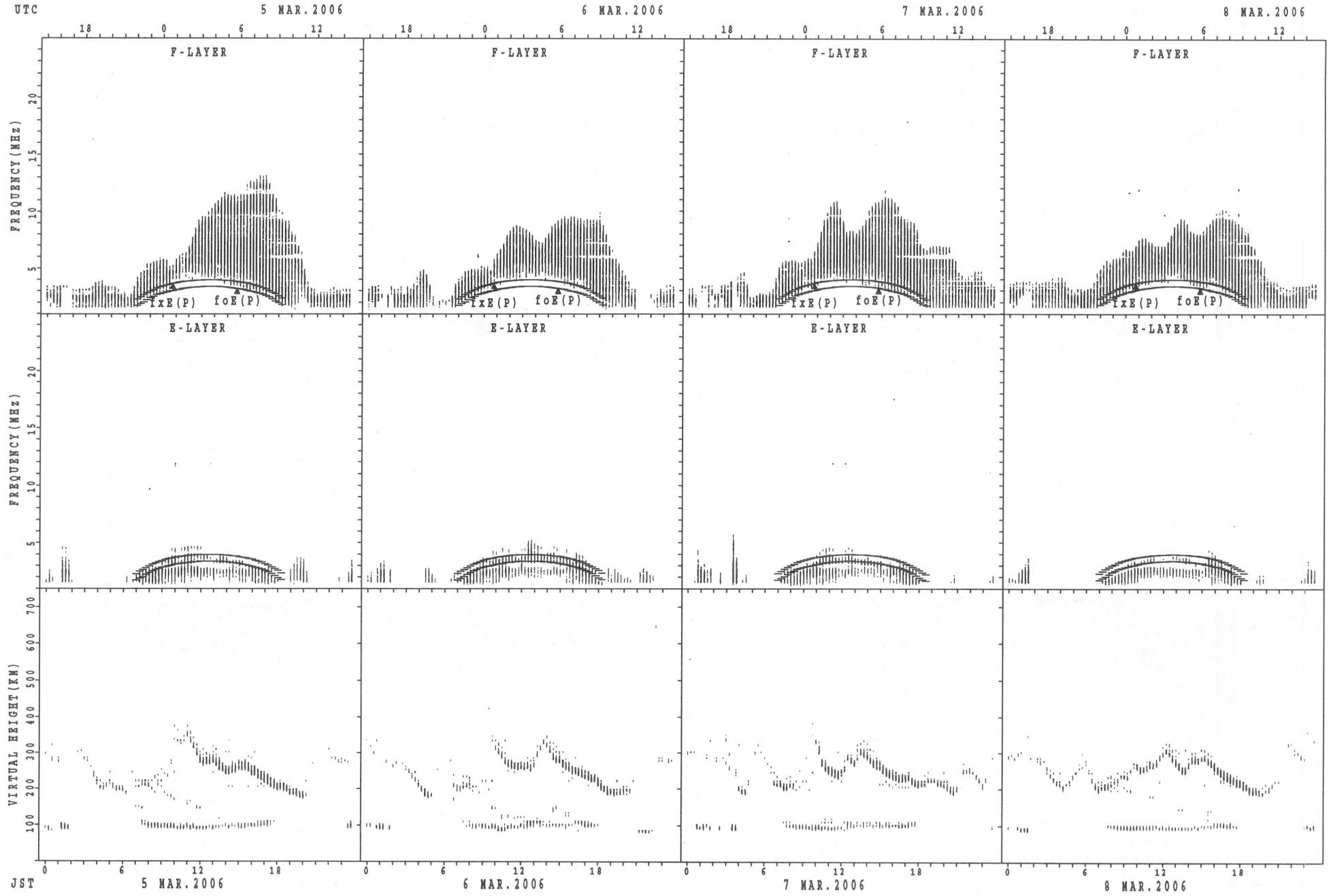
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Okinawa



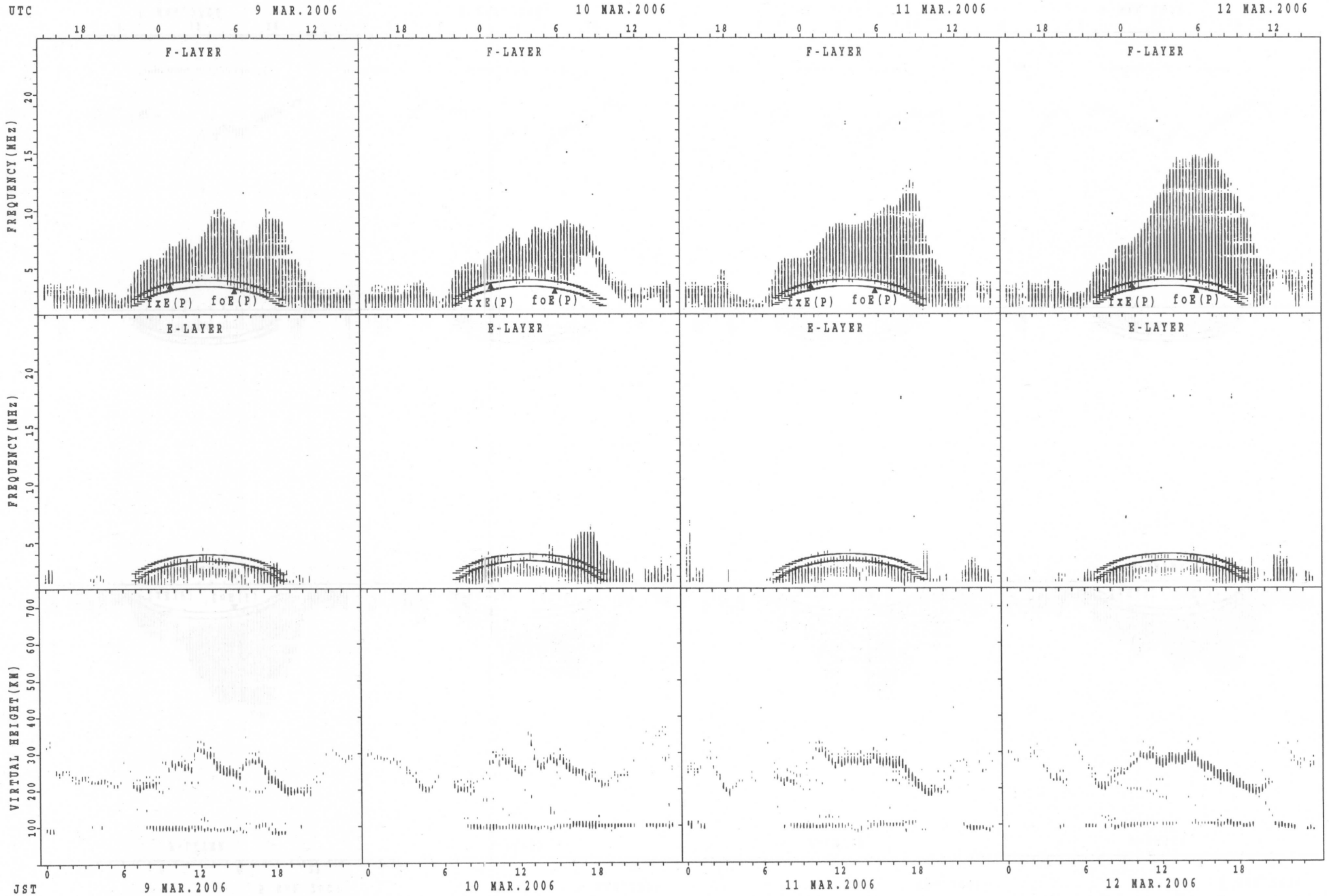
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Okinawa



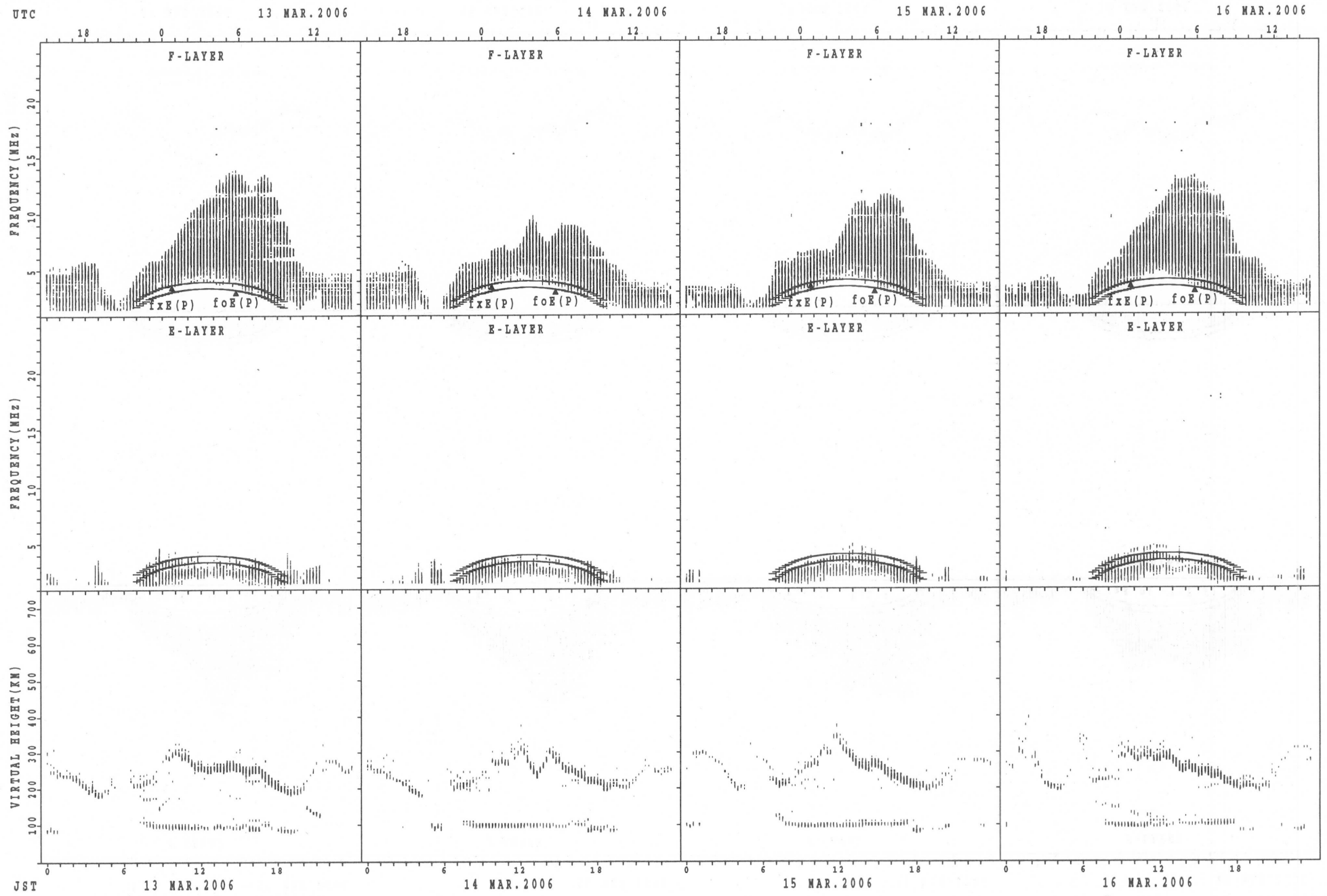
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Okinawa



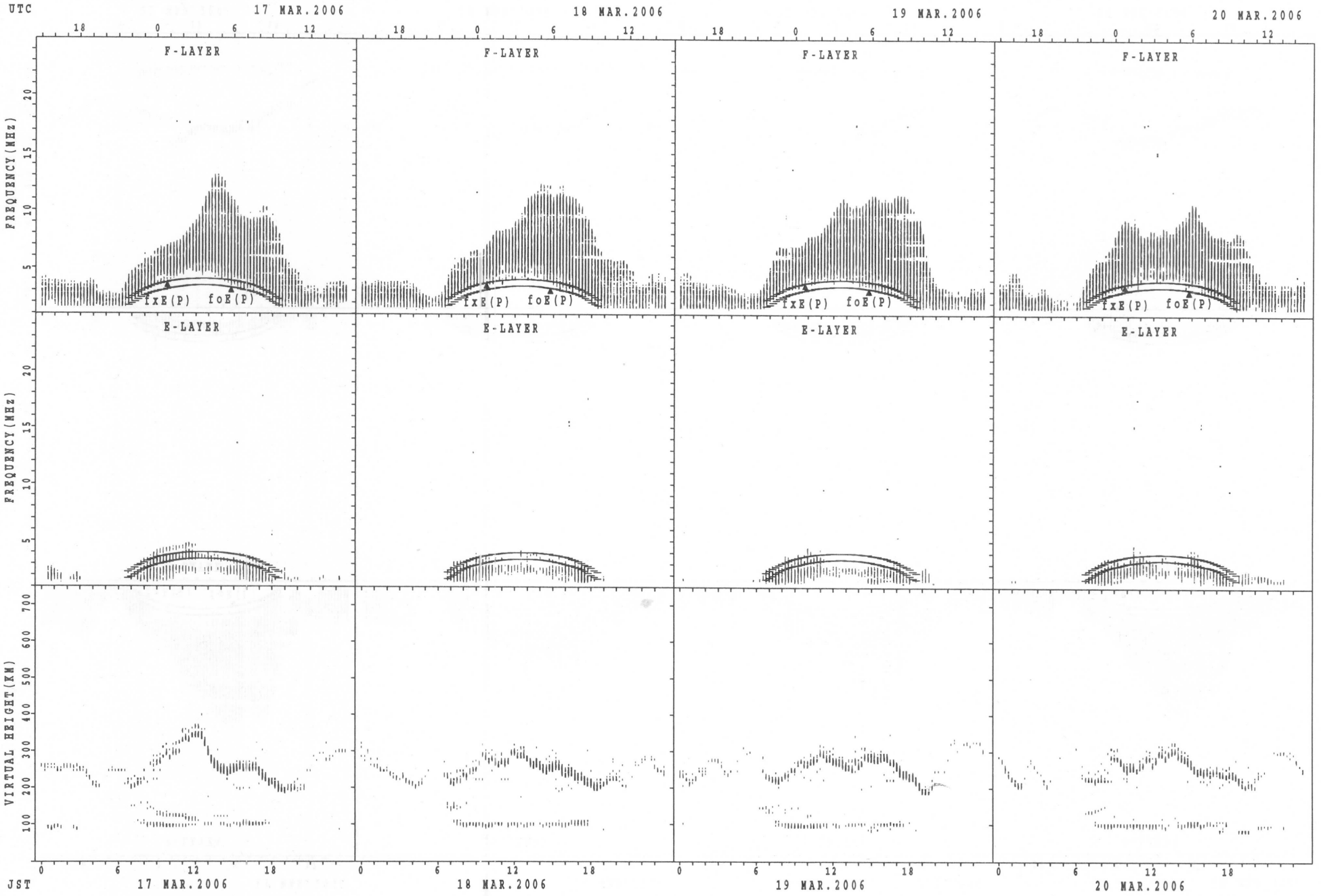
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Okinawa



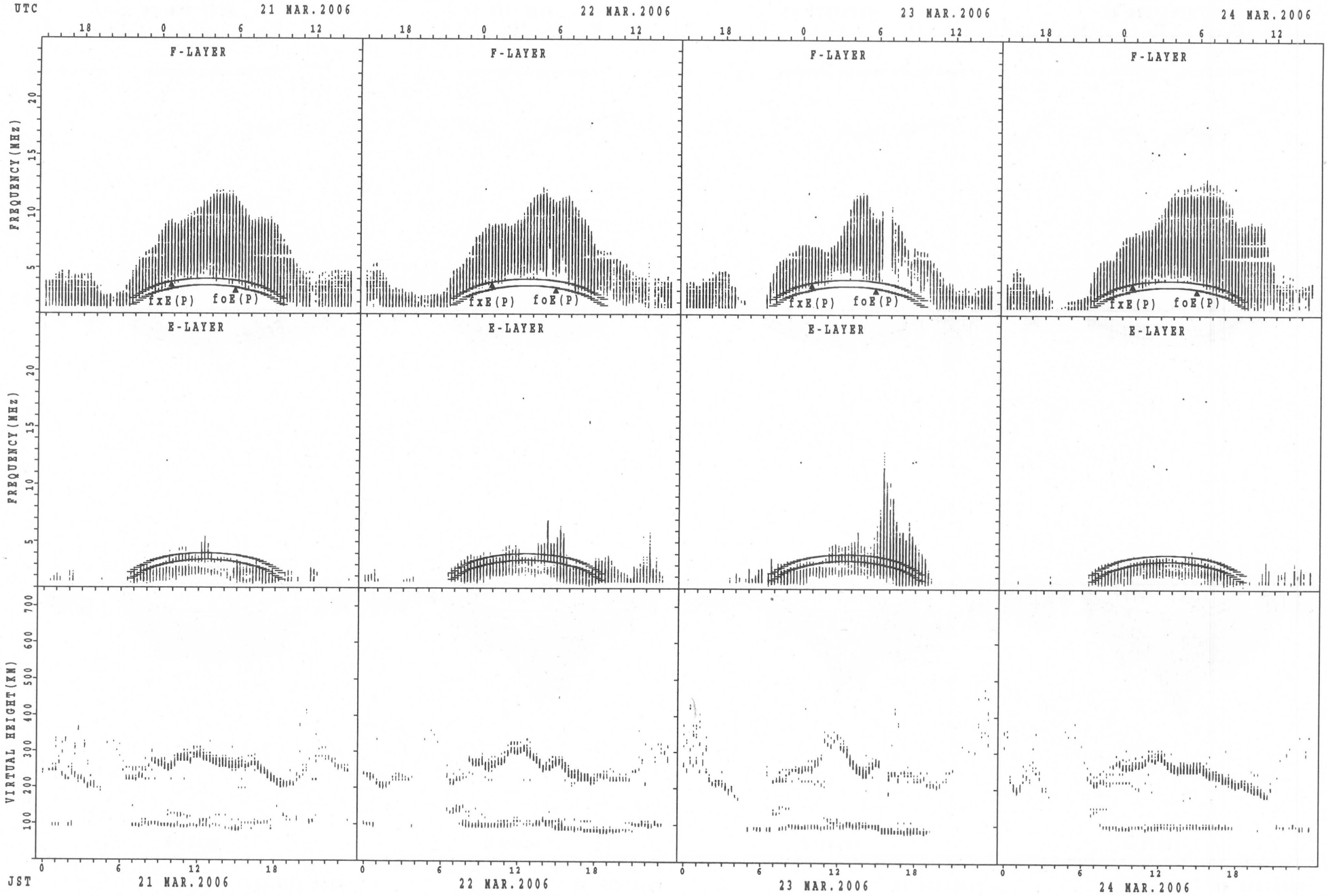
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Okinawa



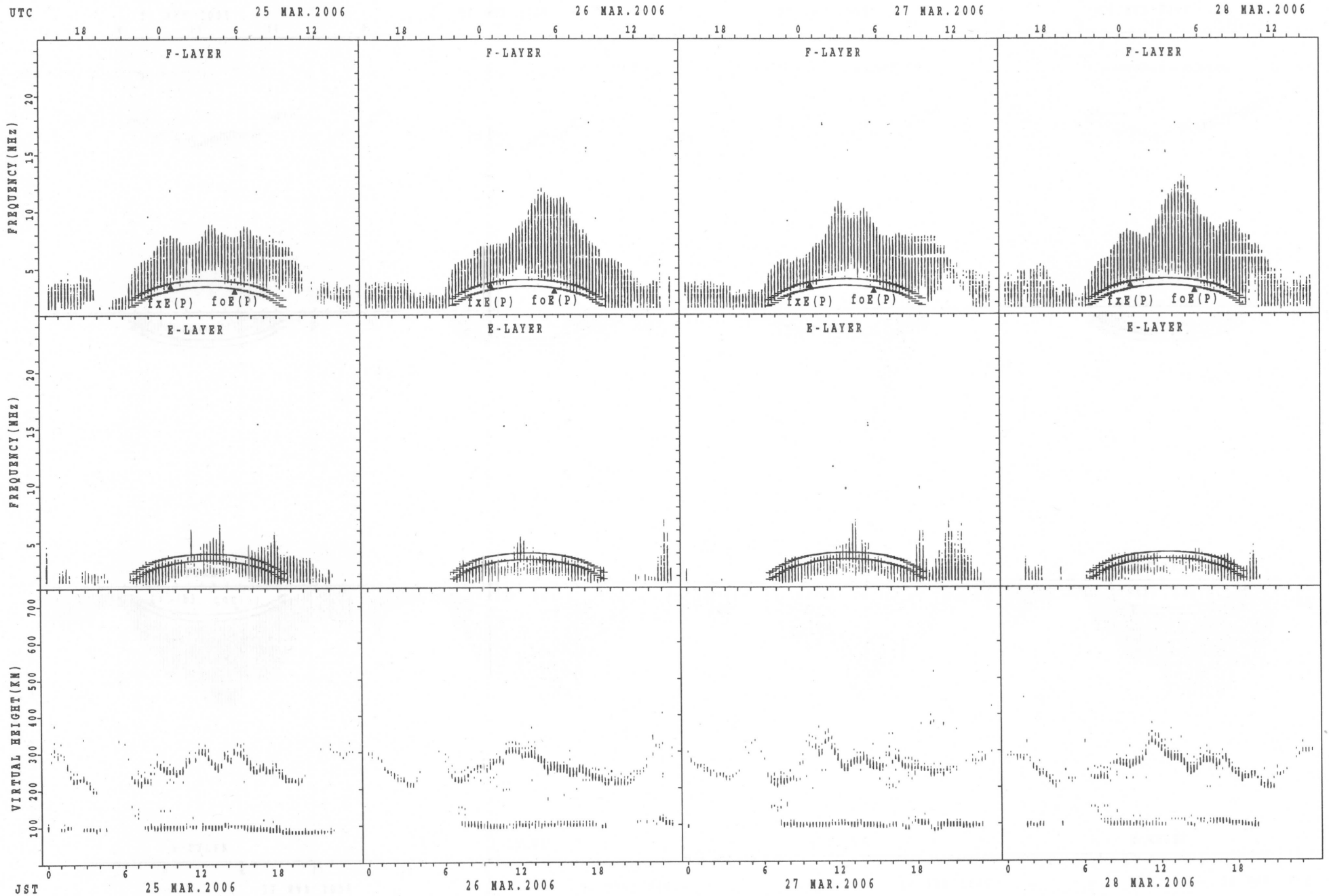
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Okinawa



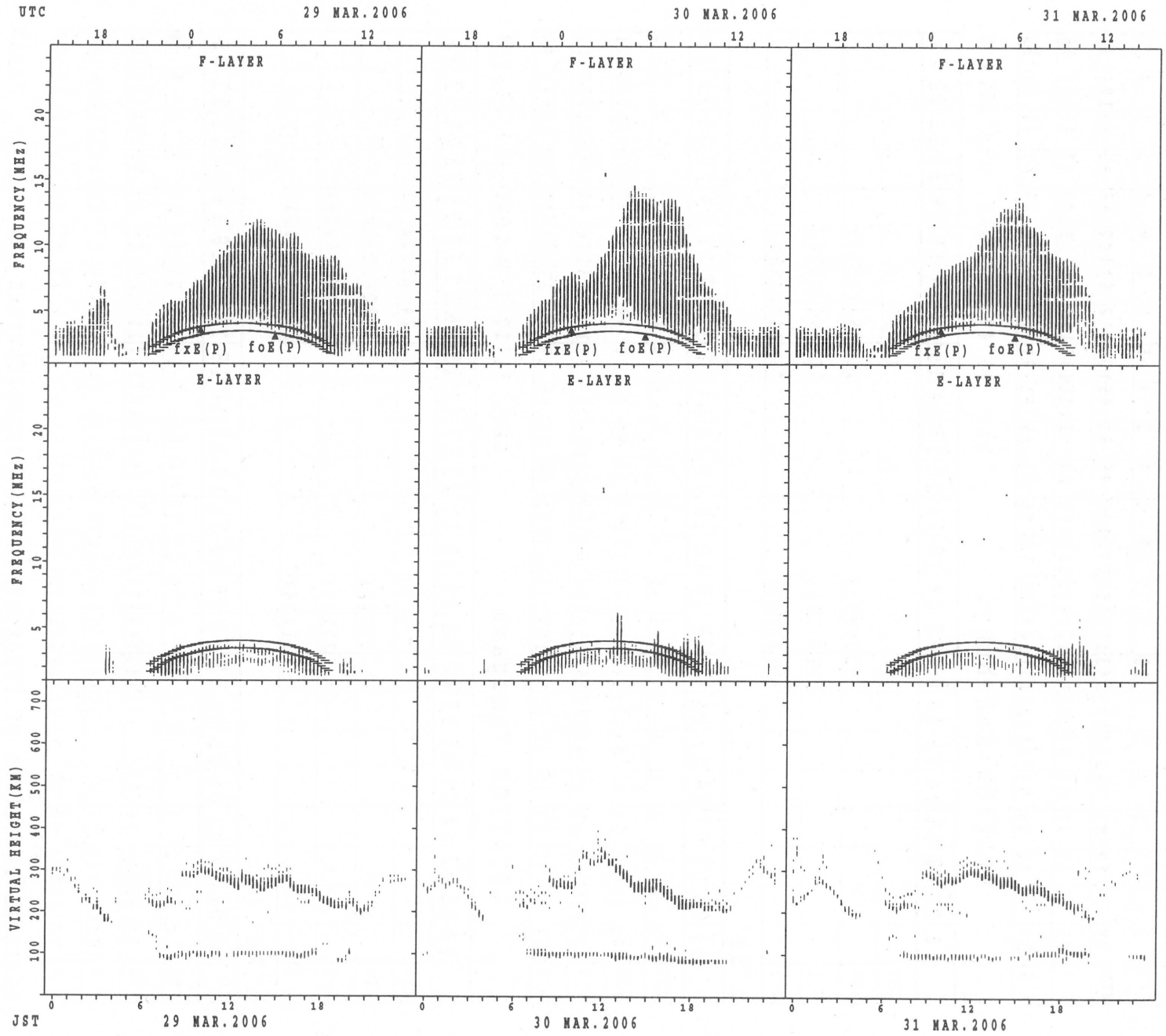
fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Okinawa



fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

SUMMARY PLOTS AT Okinawa



fxE(P); PREDICTED VALUE FOR fxE
foE(P); PREDICTED VALUE FOR foE

MONTHLY MEDIANS OF h'F AND h'Es

MAR. 2006 135E MEAN TIME(UTC+9H) AUTOMATIC SCALING

h'F STATION Wakkanai LAT. 45°23.5'N LON. 141°41.2'E

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT									7	6						17	4							
MED									234	246						262	260							
U Q									272	252						266	266							
L Q									230	230						249	253							

h'Es

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	3		1	1	2	1	5	13	9	15	15	8	6	3	3	5	6	1	4	4	1	1	4	3
MED	99		99	91	94	103	149	143	107	103	101	103	95	91	95	105	112	91	102	96	95	99	101	91
U Q	105		49	45	95	51	168	149	128	105	103	145	99	95	171	185	115	45	129	104	47	49	104	95
L Q	97		49	45	93	51	116	131	103	101	97	98	91	89	91	91	107	45	94	89	47	49	99	91

h'F STATION Kokubunji LAT. 35°42.4'N LON. 139°29.3'E

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT								1	7	3						12	15	9	7					
MED								222	248	232						255	252	240	232					
U Q								111	272	256						265	262	256	248					
L Q								111	222	228						243	244	236	228					

h'Es

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	3	3	2	2	1	1	7	7	4	4	5	5	5	9	4	6	10	14	8	3	5	3	2	3
MED	101	99	101	94	91	97	139	143	125	144	107	105	99	95	92	92	99	97	96	97	101	101	106	111
U Q	107	105	105	95	45	48	145	151	159	179	109	169	153	113	139	95	117	113	106	99	105	103	107	113
L Q	97	97	97	93	45	48	97	139	109	110	102	101	95	95	89	89	91	95	89	97	96	99	105	99

h'F STATION Yamagawa LAT. 31°12.1'N LON. 130°37.1'E

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT									3	13							24	22	12	3				
MED									218	268							249	241	231	228				
U Q									232	279							266	248	242	232				
L Q									216	261							244	230	215	218				

h'Es

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	8	3	2	3	2		3	14	9	9	13	14	16	11	9	13	19	20	18	16	8	8	4	8
MED	97	95	106	95	92		95	143	143	119	107	103	106	105	107	107	107	105	89	89	97	103	103	100
U Q	102	105	107	97	95		95	149	155	149	169	107	161	173	164	112	119	108	97	95	100	104	108	104
L Q	97	93	105	93	89		89	137	131	100	107	103	104	99	97	93	101	98	87	88	89	99	98	97

MONTHLY MEDIANS OF h'F AND h'Es

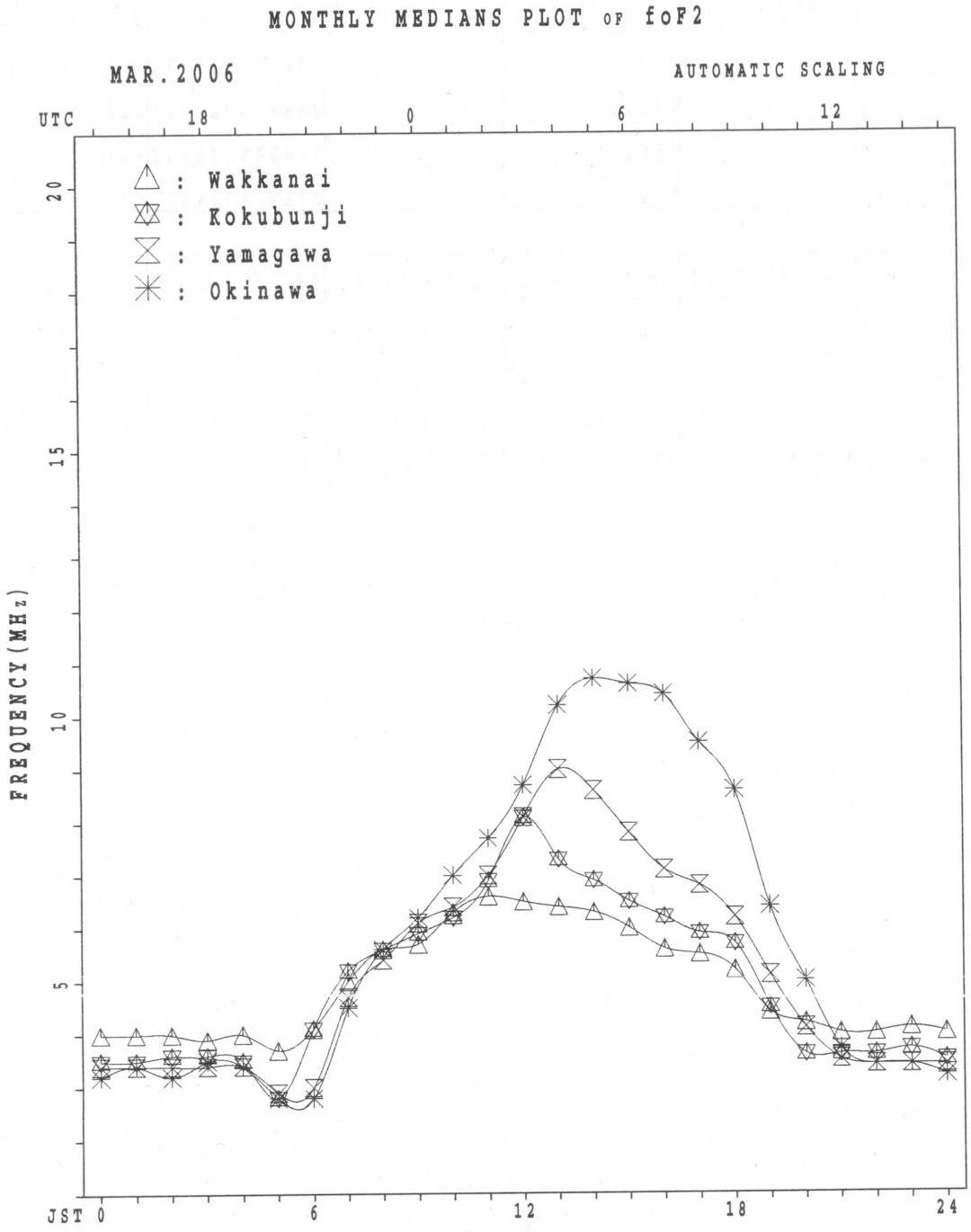
MAR.2006 135E MEAN TIME(UTC+9H) AUTOMATIC SCALING

h'F STATION Okinawa LAT. 26°40.5'N LON. 128°09.2'E

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT				1					2	12							31	31	25	11	1			
MED				234					244	264							246	230	222	220	214			
U Q				117					256	268							258	248	234	232	107			
L Q				117					232	259							238	224	214	212	107			

h'Es

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	8	9	2	2	4	4	2	11	11	8	9	13	12	13	8	9	12	15	13	14	9	10	10	9
MED	98	95	97	96	140	97	94	137	149	163	139	113	112	107	112	107	105	103	95	90	95	101	95	97
U Q	103	98	97	97	186	100	95	149	159	173	167	140	113	168	162	115	111	105	106	99	105	111	97	104
L Q	95	95	97	95	93	93	93	133	139	131	117	106	104	98	103	104	100	95	88	87	88	95	91	92


MONTHLY MEDIANS PLOT OF foF2
MAR. 2006
AUTOMATIC SCALING
UTC
18
0
6
12
△ : Wakkanai
⛛ : Kokubunji
⧖ : Yamagawa
✳ : Okinawa
FREQUENCY(MHz)
20
15
10
5
JST 0
6
12
18
24

IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 fxI (0.1MHz) 135°E MEAN TIME (G.M.T. + 9 H)

LAT.35°42.4'N LON.139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	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	X 34	X 37	X 36	X 37	X 38	X 38	X 40												X 59	X 37	X 37	X 41	X 42	X 42
2	X 43	X 41	X 42	X 42	X 43	X 38	X 40												X 56	O X 50	X 38	X 39	X 43	X 41
3	X 41	X 41	X 39	X 40	X 43	X 37	X 39												X 59	X 44	X 44	X 43	X 35	X 36
4	X 38	X 38	X 39	X 41	X 41	X 40	X 46												X 66	X 47	X 40	X 41	X 39	X 40
5	X 40	X 39	X 38	X 40	X 43	X 38	X 41												X 62	X 45	X 36	X 38	X 35	X 36
6	X 37	X 38	X 39	X 38	X 39	X 38	X 43												X 64	X 49	X 38	X 40	X 39	X 40
7	X 40	X 40	X 40	X 40	X 40	X 37	X 43												X 53	X 57	X 52	X 56	X 41	X 42
8	X 42	X 41	X 41	X 42	X 42	X 36	X 40												X 66	X 52	X 42	X 40	X 38	X 39
9	X 42	X 42	X 42	X 40	X 41	X 34	X 46												X 68	X 52	X 35	X 36	X 35	X 36
10	X 37	X 37	X 36	X 38	X 37	X 35	X 47									C			X 63	X 44	X 39	X 41	X 42	X 45
11	X 46	X 46	X 51	X 50	X 46	X 35	X 44												X 87	X 51	X 42	X 42	X 36	X 35
12	X 39	X 39	X 38	X 38	X 41	X 31	X 43												X 62	X 45	X 38	X 40	X 40	X 40
13	X 41	X 40	X 42	X 39	X 39	X 34	X 46												X 69	X 46	X 32	X 34	X 36	X 37
14	X 38	X 37	X 38	X 38	X 37	X 32	X 44												X 61	X 41	X 34	X 37	X 37	X 37
15	X 39	X 38	X 37	X 38	X 35	X 31	X 44												X 60	X 46	X 36	X 39	X 38	X 38
16	X 38	X 39	X 38	X 40	X 40	X 32	X 46												X 56	X 52	X 36	X 38	X 40	X 40
17	X 41	X 40	X 40	X 41	X 41	X 37	X 48												X 66	X 60	X 44	X 41	X 42	S 44
18	X 48	S 47	50	52	X 41	41	X 46												X 62	X 46	X 46	X 46	X 45	X 45
19	X 48	X 38	X 39	X 38	X 36	X 34													X 76	X 57	X 45	X 45	X 43	X 42
20	X 44	X 43	X 45	X 42	X 34	X 28	X 43												X 76	X 55	X 50	X 50	X 50	X 50
21	X 52	X 48	X 48	X 47	43	X 37	X 46												X 58	X 49	X 46	X 46	X 46	X 45
22	X 46	X 46	X 44	X 38	X 34	X 34													X 60	X 52	X 46	X 44	X 45	X 46
23	X 45	44	46	X 41	A	X 29	X 46												X 62	X 45	X 44	X 43	X 41	47
24	46	46	45	X 38	33	X 28													X 63	X 52	X 35	X 39	X 39	42
25	X 40	X 41	X 41	X 40	X 35	34													X 66	X 63	X 52	X 50	X 46	53
26	52	51	51	50	44	44													X 60	X 55	X 45	X 43	X 43	X 44
27	47	50	52	50	46	51													X 65	X 63	X 59	X 53	X 51	X 50
28	X 52	X 50	X 50	X 48	X 45	X 39													X 74	X 59	X 44	X 45	X 46	X 44
29	X 44	X 45	X 44	X 42	37	33													X 69	X 66	X 53	X 50	X 51	X 49
30	X 47	X 44	X 42	X 43	X 43	X 43													X 64	X 59	X 46	X 45	X 45	X 48
31	X 45	X 45	X 47	X 48	X 40	X 39													X 70	X 66	X 50	X 49	X 49	X 49
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	31	31	31	31	30	31	21												31	31	31	31	31	31
MED	X 42	X 41	X 42	X 40	X 40	X 36	X 44												X 63	X 52	X 44	X 42	X 42	X 42
U Q	X 46	46	46	X 43	X 43	X 38	X 46												X 68	X 57	X 46	X 46	X 45	X 46
L Q	X 39	X 39	X 39	X 38	X 37	X 33	X 42												X 60	X 46	X 37	X 39	X 38	X 39

MAR. 2006 fxI (0.1MHz)

NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, JAPAN

IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 foF2 (0.1MHz) 135°E MEAN TIME (G.M.T. + 9 H)

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	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	28	31	30	31	32	32	34	58	68	66	61	62	68	70	65	71	79	61	53	31	30	35	35	36
2	37	35	36	36	37	32	34	48	66	76	59	61	71	69	82	65	61	59	50	44	32	33	36	35
3	35	35	33	34	37	30	33	51	56	65	65	78	83	70	80	74	65	56	53	38	38	36	29	30
4	32	32	32	35	35	34	40	55	53	59	56	61	81	77	62	62	56	54	60	41	34	35	33	34
5	34	33	32	34	37	32	35	54	60	61	63	62	85	93	86	79	58	55	56	39	30	32	29	30
6	31	32	33	32	33	32	37	48	52	56	64	62	68	67	65	72	59	60	58	42	32	33	33	34
7	34	34	34	34	34	31	37	49	58	59	74	84	82	71	75	68	68	56	47	50	46	50	35	36
8	36	35	35	36	35	30	34	50	66	65	54	65	86	65	58	64	70	65	60	46	36	34	32	33
9	36	36	36	34	35	28	40	64	62	60	60	59	75	81	67	59	73	68	62	46	29	30	29	30
10	31	31	30	32	31	28	41	51	53	52	56	60	66	75	70	C	63	63	56	38	33	35	36	39
11	40	40	45	44	40	28	37	54	55	53	54	84	84	69	67	63	60	76	81	45	36	36	30	29
12	33	33	32	32	35	25	37	50	58	61	55	64	78	74	71	70	66	63	56	39	32	34	34	34
13	35	34	36	33	33	28	40	47	58	62	55	69	83	89	68	58	66	66	63	40	26	28	30	31
14	31	31	32	32	31	25	38	46	57	57	58	65	66	60	70	68	61	60	55	34	28	31	31	31
15	33	32	31	32	29	25	38	46	54	54	55	65	80	76	72	64	61	58	54	40	30	33	32	32
16	32	33	32	34	34	26	40	46	58	58	61	72	90	98	82	66	58	52	50	46	30	32	34	34
17	35	34	34	35	35	31	42	50	53	54	62	78	98	80	62	60	58	58	60	54	38	35	36	S
18	41	S	F	F	35	F	40	53	54	58	51	69	80	75	63	59	59	56	56	40	40	40	39	39
19	42	32	33	32	30	28	37	53	57	65	71	86	88	70	72	64	60	65	70	50	39	39	37	36
20	38	37	39	35	28	22	37	55	64	75	77	80	72	68	79	67	64	68	70	49	44	44	44	44
21	46	42	42	41	F	31	40	51	57	60	76	78	83	72	72	66	62	59	52	43	40	40	40	39
22	40	40	38	32	28	28	43	48	68	69	66	86	82	74	75	82	62	56	54	46	40	38	39	40
23	39	F	F	35	A	23	39	54	56	60	66	66	76	76	73	66	65	62	56	39	38	36	35	F
24	F	F	F	31	F	22	40	50	53	56	61	72	84	84	65	57	55	58	56	46	29	33	33	F
25	34	35	35	34	29	F	40	51	54	58	63	65	75	73	59	58	58	59	60	57	46	44	40	F
26	F	F	F	F	F	F	46	52	53	58	65	59	81	80	71	58	57	56	54	49	38	37	37	38
27	F	F	F	F	F	F	48	54	52	54	60	78	86	78	78	65	58	58	59	57	53	47	45	44
28	46	44	44	41	38	33	45	48	52	60	68	84	78	64	58	58	63	74	68	53	38	39	40	38
29	38	39	38	36	F	F	42	51	56	55	62	73	85	66	60	61	55	56	63	60	47	44	45	42
30	41	38	36	37	37	36	48	54	55	65	62	74	78	71	64	66	66	57	58	52	40	39	39	42
31	39	39	41	41	34	33	42	50	54	61	62	76	82	75	76	61	67	65	64	60	44	43	43	43
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	28	26	26	28	25	26	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	27
MED	36	34	34	34	34	29	40	51	56	60	62	69	81	74	70	64	61	59	56	46	38	36	35	36
U Q	40	38	38	36	36	32	42	54	58	65	65	78	84	78	75	68	66	65	62	50	40	40	39	39
L Q	33	32	32	32	31	26	37	48	53	56	56	62	75	69	64	60	58	56	54	40	30	33	32	32

IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 foF1 (0.01MHz) 135°E MEAN TIME (G.M.T. + 9 H)

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1										L	L	L	L	L	L 452	A	A							
2									L	L	L	L 444	L 444	L	L	L	L							
3									L	L 388	L	L 448	L 444	L 440	L 432	L								
4									L	L 412	U L 452	L 452	A	L 436	L	L								
5									L	L	U L 440	L 448	A	A	A	L 412	L							
6									L	L	L	L 436	L 432	L 432	L 424	L	L							
7										L	L 440	L	L	L	L	L	L							
8									L	L	L	L 432	L 440	L	L	L	A							
9										L	L	U L 452	L 444	A	A	424	A							
10									L	L	L 428	U L 440	L 432	L 428	L 428	C	L							
11										L 404	U L 408	L 440	L	L	L	L	L							
12										L	L	L 464	L 436	L 460	L 432	L	L							
13									L	L	U L 448	L 444	L 440	440	L	L	L							
14										L	L 444	L 448	L 444	L 436	408	L								
15									L	L	U L 440	L 436	L 448	L 436	U L 412	L	L							
16										U L 420	L 452	456	L 436	L 444	L 432	A								
17									L	L	L 428	440	L 444	L 440	L 448	L	L	L						
18									L	L	L 428	424	L 428	L 436	L	L 400	L							
19									L	L 436	L 440	L 444	L 448	L 432	L 420	L	L							
20									L	L	L	L 444	L 444	L 460	L 416	L	L							
21									L	L	L 440	L 440	L 448	L 440	L	L								
22									L	L	L 444	L 448	L 452	L 444	L 436	L								
23									L	L 428	L	L 448	L 452	L 460	L 436	L	L							
24										L	L 444	L 452	L 444	L 436	L 440	L								
25									L	L 436	L 440	A	L 448	444	L	L	L							
26									L	L 436	L 436	L 456	440	440	L 428	L	L							
27										L	428	448	L 448	L 444	444	E A								
28									L	L 436	L 444	L 444	L	L 456	L	L	L							
29									L	L 444	L 448	L 448	L 448	L	L 432	L								
30									L	L 436	L 444	L 452	452	L 452	444	L 424	L							
31										L 432	L 452	L 472	L 460	L 448	L 436	L	L							
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT										12	22	28	25	23	19	4								
MED										L 434	L 440	L 448	L 444	L 440	L 432	L 418								
U Q										L 436	L 444	L 452	L 448	L 448	L 440	424								
L Q										L 416	L 436	L 440	L 440	L 436	L 424	L 406								

MAR. 2006 foF1 (0.01MHz)

NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, JAPAN

IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 foE (0.01MHz) 135°E MEAN TIME (G.M.T. + 9 H)

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	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								192	252	U R 296	R	344	332	324	A	U A 284	A	B						
2								192	264	304	R	340	348	A	320	A	U R 260	U A 180						
3								220	U R 268	U R 304	R	R	R	U R 328	U R 308	U R 292	U R 252	U R 172						
4								U R 216	U R 260	A	R	A	U R 348	R	R	A	A	A						
5								U R 208	U A 248	A	A	A	372	A	312	U R 288	A	U A 184						
6								216	272	U R 312	A	332	332	308	R	284	248	A						
7								U A 180	A	A	A	A	U R 340	R	U R 316	A	A	U R 192						
8								204	252	A	R	A	332	A	304	U A 280	A	A						
9								U A 192	A	R	R	R	336	A	A	324	248	U A 188						
10								204	U R 276	R	R	R	U R 324	R	308	C	A	A						
11								204	268	R	R	R	320	R	R	U R 288	U R 260	U R 216						
12								220	U R 284	A	A	R	332	A	A	R	A	A						
13								208	264	U R 296	R	A	A	R	320	300	256	196						
14								U R 216	U R 272	A	A	A	R	R	U R 316	292	256	U A 212						
15								212	272	304	320	A	A	A	U R 312	U R 288	A	212						
16								208	276	A	A	R	A	A	U R 316	A	A	A						
17								212	R	A	A	R	U R 336	R	U R 312	U R 292	U R 252	A						
18								216	U R 268	R	R	R	R	U R 324	316	308	A	U R 208						
19							B	220	U A 276	R	R	A	R	R	A	R	R	R						
20								216	A	A	A	A	A	R	R	288	A	A						
21								240	U A 268	A	A	R	A	B	U R 316	A	A	U A 192						
22							B	220	U A 268	A	A	A	R	U R 324	U R 320	U R 300	R	A						
23								268	280	R	A	A	A	R	A	R	U R 264	212						
24							B	228	A	A	A	A	A	R	U R 328	U R 308	R	R						
25							B	232	284	A	A	A	A	A	R	R	R	R 200						
26							B	236	280	A	A	A	A	R	U R 316	U R 308	R	A						
27							B	236	A	A	A	A	A	A	A	A	A	A						
28							B	R 288	R	R	A	A	R	R	U R 300	R	R						
29							B	248	R	A	A	A	R	R	R	U R 300	U R 268	U R 220						
30							B	R	A	R	A	R	R	R	R	R	R	U R 228						
31							B	252	A	A	A	R	356	R	R	R	U R 260	A						
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT								29	22	6	1	3	13	5	16	18	11	15						
MED								216	270	U R 304	320	340	336	U R 324	U R 316	U R 292	U R 256	U 200						
U Q								230	276	U R 304		344	348	U R 326	U R 318	U R 300	U R 260	U R 212						
L Q								206	264	U R 296		332	332	316	312	U 288	252	U A 188						

MAR. 2006 foE (0.01MHz)

NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, JAPAN

IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 foEs (0.1MHz) 135°E MEAN TIME (G.M.T. + 9 H)

LAT.35°42.4'N LON.139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	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	J A 26	E B 16	E B 15	E B 15	E B 16	E B 15	E B 15	26	29	32	G 27	40	37	38	35	36	33	21	J A 18	E B 15	E B 15	E B 15	E B 15	E B 15
2	E B 15	J A 23	E B 15	E B 16	E B 16	E B 15	E B 16	23	30	35	G 26	40	40	35	36	34	G 20	20	J A 18	J A 54	J A 52	J A 38	J A 44	J A 17
3	J A 23	20	19	E B 15	E B 15	E B 15	E B 15	27	G 22	G 25	G 26	G 28	G 29	G 26	G 21	G 25	J G 24	J A 23	E B 16	E B 15	E B 16	19	E B 15	E B 15
4	19	J A 23	E B 15	19	19	E B 15	E B 15	G	G 22	31	G 23	33	41	G 25	G 26	J A 38	J A 49	J A 37	J A 36	J A 21	J A 20	20	21	J A 21
5	E B 16	E B 16	E B 15	E B 15	E B 16	E B 14	E B 15	G	28	34	36	35	42	41	41	G	29	21	J A 26	J A 34	J A 21	J A 40	18	18
6	J A 17	E B 14	E B 15	E B 15	E B 16	E B 15	E B 15	G	G 22	G 26	34	38	40	37	G 24	32	30	25	E B 15	J A 21	19	J A 17	19	J A 19
7	J A 21	J A 21	J A 23	18	E B 16	E B 16	E B 15	22	30	33	34	35	J A 36	G 24	G 25	J A 44	J A 25	G	E B 16	E B 14	E B 15	E B 16	E B 15	E B 15
8	E B 16	E B 15	19	E B 15	E B 16	E B 16	E B 15	24	28	30	G 27	34	38	J A 49	36	32	J A 42	J A 26	18	E B 15	E B 16	E B 15	E B 15	E B 15
9	E B 16	E B 16	E B 15	E B 14	E B 15	E B 15	E B 16	24	32	G 26	G 28	28	38	J A 47	J A 48	37	34	J A 29	J A 28	E B 16	E B 15	20	E B 15	E B 15
10	E B 15	E B 15	E B 15	E B 15	20	E B 15	E B 15	23	J A 35	J A 30	G 26	G 24	G 29	G 32	35	C	J A 32	J A 38	J A 26	J A 25	J A 26	J A 23	E B 16	E B 15
11	E B 16	E B 16	E B 15	E B 16	E B 16	E B 15	E B 16	24	30	G 28	G 24	G 26	35	G 24	G 25	G 22	G 20	G 20	E B 15	E B 15	E B 16	E B 15	21	E B 15
12	E B 16	19	18	E B 15	E B 15	E B 15	E B 15	25	G 24	34	34	G 30	40	J A 47	35	G 23	J A 31	J A 28	E B 15	E B 20	E B 16	E B 14	E B 16	E B 14
13	E B 15	E B 15	E B 15	E B 16	E B 15	J A 20	J A 20	26	32	G 23	G 24	J A 37	36	G 26	37	35	29	22	E B 15	E B 15	19	E B 15	20	J A 19
14	J A 20	J A 21	19	J A 18	20	E B 15	J A 42	G 18	G 22	33	34	J A 86	G 31	G 30	G 27	32	36	J A 43	J A 31	J A 21	E B 15	19	20	J A 24
15	E B 15	E B 15	E B 15	E B 15	E B 15	19	J A 22	28	G 22	34	35	37	37	36	G 28	G 22	31	29	E B 16	E B 14	E B 15	E B 16	E B 15	E B 15
16	E B 16	E B 15	E B 15	E B 16	E B 15	E B 15	E B 16	28	34	34	35	G 33	35	J A 40	G 23	J A 41	J A 36	J A 27	21	18	E B 16	E B 14	19	E B 16
17	E B 16	E B 16	E B 15	E B 15	E B 15	E B 15	E B 15	25	G 23	32	34	G 26	G 29	G 29	G 29	G 26	G 24	J A 28	J A 22	A E 15	E B 15	E B 16	E B 15	E B 15
18	18	E B 15	E B 15	E B 14	E B 15	E B 16	E B 16	27	G 21	G 24	G 26	G 27	G 27	39	36	G 23	32	G	E B 15	E B 16	E B 16	E B 16	E B 16	E B 16
19	E B 16	E B 16	E B 16	E B 15	E B 15	E B 15	19	28	33	G 21	G 34	38	G 27	G 24	35	G 25	G 21	G	E B 15	E B 16	19	E B 15	E B 15	E B 15
20	E B 14	E B 15	E B 16	E B 15	E B 15	21	21	27	32	35	35	J A 42	J A 42	G 30	G 30	32	27	23	J A 21	J A 21	E B 15	E B 15	E B 15	E B 15
21	E B 15	J A 34	J A 24	E B 16	E B 15	E B 15	E B 15	28	32	31	J A 41	G 33	38	E B 36	G	33	29	23	E B 14	E B 16	20	20	E B 15	E B 15
22	E B 16	18	J A 35	J A 26	J A 19	E B 15	J A 23	28	34	36	J A 41	36	G 29	G 29	G 26	G 27	G 24	31	18	E B 15	E B 15	E B 16	19	E B 15
23	J A 19	E B 15	E B 16	J A 19	J A 41	J A 25	J A 34	28	32	G 29	38	J A 39	36	G 32	J A 40	G 24	G 21	G	J A 17	E B 15	E B 15	E B 14	E B 14	E B 14
24	E B 15	E B 15	E B 15	E B 14	20	E B 15	22	30	34	36	38	37	J A 44	G 29	G 25	G 25	G 24	G 19	J A 16	21	J A 24	J A 20	J A 17	19
25	E B 16	E B 15	E B 15	19	E B 15	E B 15	21	28	32	36	38	J A 74	J A 49	J A 36	G 28	G 25	G 22	27	E B 15	E B 15	E B 15	E B 15	E B 15	E B 16
26	E B 15	E B 14	E B 15	E B 15	E B 14	E B 14	20	27	31	35	38	J A 41	38	G 29	G 22	G 20	G 24	27	J A 27	J A 19	E B 15	E B 15	E B 16	20
27	E B 14	E B 14	E B 15	E B 14	E B 14	E B 16	E B 15	26	32	35	J A 40	37	J A 50	J A 86	J A 46	J A 42	J A 30	27	J A 20	J A 25	J A 24	J A 30	J A 20	J A 24
28	J A 52	J A 24	E B 15	E B 15	E B 15	E B 15	21	G 20	33	G 27	G 27	37	38	G 28	G 30	G 24	G 23	G 20	E B 15	E B 15	E B 16	E B 15	J A 18	18
29	E B 16	E B 15	J A 22	E B 15	E B 14	E B 14	24	30	G 25	33	34	36	G 30	G 27	G 28	G 26	G 21	G	E B 15	E B 15	E B 16	E B 15	E B 15	E B 15
30	E B 15	E B 16	E B 15	E B 16	E B 15	E B 16	19	G 20	31	G 26	35	G 28	G	G 30	G 22	G 24	G 21	G	E B 15	E B 14	E B 15	E B 15	E B 15	E B 15
31	E B 16	E B 16	E B 15	E B 16	E B 15	E B 14	21	30	34	37	37	G 31	40	G 30	G 27	G 26	J G 29	J A 29	A E 15	B J 19	A E 15	B E 15	B J 38	A J 18
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31
MED	E B 16	E B 16	E B 15	E B 15	E B 15	E B 15	E B 16	26	31	32	34	36	37	30	G 29	G 26	29	23	16	E B 16	E B 16	E B 16	E B 16	E B 16	E B 15
U Q	J A 18	J A 19	18	16	16	16	21	28	32	35	37	J A 38	40	J A 38	36	34	32	J A 28	J A 21	J A 21	J A 19	J A 20	19	J A 18
L Q	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15	G 23	G 24	G 27	G 27	G 30	G 31	G 28	G 25	G 24	G 23	G	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15

IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 fbEs (0.1MHz) 135°E MEAN TIME (G.M.T. + 9 H)

LAT.35°42.4'N LON.139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	E B 16	E B 16	E B 15	E B 15	E B 16	E B 15	E B 15	24	28	32	G 27	38	36	37	33	36	32	20	16	E B 15	E B 15	E B 15	E B 15	E B 15
2	E B 15	19	E B 15	E B 16	E B 16	E B 15	E B 16	22	29	34	G 25	38	37	34	34	32	G 19	19	E B 15	30	22	16	17	E B 16
3	E B 15	E B 15	E B 16	E B 15	E B 15	E B 15	E B 15	26	G 20	G 25	G 25	G 28	G 29	G 26	G 20	G 21	G 20	G 16	E B 16	E B 15	E B 16	E B 16	E B 15	E B 15
4	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15	G	G 19	30	G 23	32	40	G 24	G 23	32	30	22	26	20	E B 16	E B 16	E B 15	18
5	E B 16	E B 16	E B 15	E B 15	E B 16	E B 14	E B 15	G	27	32	35	35	41	40	38	G	26	20	25	31	19	E B 16	E B 15	E B 15
6	E B 15	E B 14	E B 15	E B 15	E B 16	E B 15	E B 15	G	G 20	G 23	33	36	38	36	G 23	30	27	24	E B 15	E B 15	E B 15	E B 15	E B 15	E B 16
7	E B 16	E B 15	E B 15	E B 15	E B 16	E B 16	E B 15	21	27	32	34	34	G 28	G 24	G 22	30	25	G	E B 16	E B 14	E B 15	E B 16	E B 15	E B 15
8	E B 16	E B 15	E B 15	E B 15	E B 16	E B 16	E B 15	22	28	29	G 27	32	36	38	34	31	38	24	E B 15	E B 15	E B 16	E B 15	E B 15	E B 15
9	E B 16	E B 16	E B 15	E B 14	E B 15	E B 15	E B 16	22	30	G 26	G 28	G 26	37	39	42	35	32	27	23	E B 16	E B 15	E B 16	E B 15	E B 15
10	E B 15	E B 15	E B 15	E B 15	16	E B 15	E B 15	23	G 22	G 23	G 26	G 23	G 29	G 29	34	C	30	32	21	21	25	E B 16	E B 16	E B 15
11	E B 16	E B 16	E B 15	E B 16	E B 16	E B 15	E B 16	24	29	G 25	G 23	G 26	34	G 24	G 24	G 20	G 19	G 18	E B 15	E B 15	E B 16	E B 15	E B 16	E B 15
12	E B 16	E B 15	E B 16	E B 15	E B 15	E B 15	E B 15	24	G 24	34	34	G 30	38	39	34	G 22	29	24	E B 15	E B 15	E B 16	E B 14	E B 16	E B 14
13	E B 15	E B 15	E B 15	E B 16	E B 15	E B 15	E B 16	26	31	G 23	G 24	35	35	U Y 26	36	33	28	22	E B 15	E B 15	E B 15	E B 15	E B 15	17
14	E B 15	E B 16	E B 15	E B 15	15	E B 15	E B 15	G 17	G 21	32	34	35	K 31	G 29	G 26	31	34	40	27	E B 15	E B 15	E B 16	E B 15	19
15	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15	20	27	G 22	32	34	36	36	34	G 27	G 21	30	26	E B 16	E B 14	E B 15	E B 16	E B 15	E B 15
16	E B 16	E B 15	E B 15	E B 16	E B 15	E B 15	E B 16	26	32	32	34	G 33	35	37	G 23	37	31	24	18	E B 16	E B 16	E B 14	E B 15	E B 16
17	E B 16	E B 16	E B 15	E B 15	E B 15	E B 15	E B 15	24	G 23	32	32	G 25	G 29	G 28	G 28	G 25	G 23	21	E B 16	E B 15	E B 15	E B 16	E B 15	E B 15
18	E B 16	E B 15	E B 15	E B 14	E B 15	E B 16	E B 16	26	G 21	G 23	G 25	G 27	G 26	36	36	G 22	30	G	E B 15	E B 16	E B 16	E B 16	E B 16	E B 16
19	E B 16	E B 16	E B 16	E B 15	E B 15	E B 15	18	26	31	G 20	G 34	35	G 26	G 22	34	G 23	G 18	G	E B 15	E B 16	E B 15	E B 15	E B 15	E B 15
20	E B 14	E B 15	E B 16	E B 15	E B 15	E B 15	20	26	30	32	34	35	34	G 30	G 28	31	26	21	16	E B 16	E B 15	E B 15	E B 15	E B 15
21	E B 15	22	E B 15	E B 16	E B 15	E B 15	E B 15	26	30	31	35	U Y 33	36	E B 36	G	31	27	22	E B 14	E B 16	E B 15	16	E B 15	E B 15
22	E B 16	E B 15	16	18	E B 15	E B 15	20	28	31	34	37	35	G 29	G 28	G 25	G 27	G 23	22	E B 15	E B 15	E B 15	E B 16	E B 15	E B 15
23	E B 16	E B 15	E B 16	16	A A 41	E B 15	27	G 21	30	U Y 29	37	35	35	G 30	34	G 22	G 17	G	E B 15	E B 15	E B 15	E B 14	E B 14	E B 14
24	E B 15	E B 15	E B 15	E B 14	E B 14	E B 15	22	29	33	34	36	36	36	G 29	G 25	G 25	G 23	G 19	15	E B 15	19	17	E B 15	E B 15
25	E B 16	E B 15	E B 15	E B 15	E B 15	E B 15	20	27	31	35	34	45	37	36	G 28	G 25	G 22	25	E B 15	E B 15	E B 15	E B 15	E B 15	E B 16
26	E B 15	E B 14	E B 15	E B 15	E B 14	E B 14	20	25	29	33	35	36	36	G 28	G 20	G 20	G 19	26	23	15	E B 15	E B 15	E B 16	E B 15
27	E B 14	E B 14	E B 15	E B 14	E B 14	E B 16	E B 15	25	29	31	35	35	37	35	36	37	26	26	16	20	18	19	16	E B 16
28	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15	21	G 19	32	G 26	G 27	36	36	U Y 28	G 28	G 24	G 22	G 20	E B 15	E B 15	E B 16	E B 15	E B 15	E B 14
29	E B 16	E B 15	15	E B 15	E B 14	E B 14	21	28	G 25	32	33	34	G 30	G 27	G 27	G 23	G 19	G	E B 15	E B 15	E B 16	E B 15	E B 15	E B 15
30	E B 15	E B 16	E B 15	E B 16	E B 15	E B 16	19	G 20	30	G 26	34	G 28	G	G 29	G 22	G 23	G 20	G	E B 15	E B 14	E B 15	E B 15	E B 15	E B 15
31	E B 16	E B 16	E B 15	E B 16	E B 15	E B 14	20	28	32	36	35	G 31	39	G 30	G 26	G 24	G 22	22	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31
MED	E B 16	E B 15	E B 15	E B 15	E B 15	E B 15	E B 16	24	29	32	34	35	36	G 30	G 28	G 26	26	22	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15
U Q	E B 16	E B 16	E B 15	E B 16	E B 16	E B 15	20	26	31	32	35	36	37	36	34	31	30	24	16	16	16	16	E B 15	E B 16
L Q	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15	G 21	G 23	G 26	G 27	G 30	G 30	G 28	G 24	G 23	G 20	G	E B 15	E B 15	E B 15	E B 15	E B 15	E B 15

IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 fmin (0.1MHz) 135°E MEAN TIME (G.M.T. + 9 H)

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	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	16	16	15	15	16	15	15	14	16	14	15	16	15	16	15	13	14	16	14	15	15	15	15	15
2	15	14	15	16	16	15	16	15	14	13	15	13	14	15	15	16	12	13	15	14	15	14	15	16
3	15	15	16	15	15	15	15	16	14	14	14	17	16	16	16	15	13	14	16	15	16	16	15	15
4	15	15	15	15	15	15	15	16	16	14	16	16	19	16	15	16	14	14	16	15	16	16	15	14
5	16	16	15	15	16	14	15	15	14	14	16	15	16	19	16	15	16	14	15	15	14	16	15	15
6	15	14	15	15	16	15	15	15	13	16	14	14	16	12	16	14	15	14	15	15	15	15	15	16
7	16	15	15	15	16	16	15	14	16	12	14	16	15	13	14	14	15	16	16	14	15	16	15	15
8	16	15	15	15	16	16	15	15	14	14	15	15	16	20	15	14	14	14	15	15	16	15	15	15
9	16	16	15	14	15	15	16	15	15	16	15	16	18	16	16	15	16	14	14	16	15	16	15	15
10	15	15	15	15	15	15	15	15	14	15	16	16	17	16	14	C	14	15	14	15	15	16	16	15
11	16	16	15	16	16	15	16	15	15	15	16	17	17	16	16	14	16	16	15	15	16	15	16	15
12	16	15	16	15	15	15	15	14	15	15	18	15	17	17	18	13	14	15	15	15	16	14	16	14
13	15	15	15	16	15	15	16	15	14	13	15	16	20	16	17	22	16	16	15	15	15	15	15	15
14	15	16	15	15	15	15	15	15	14	15	14	17	17	16	16	16	15	16	14	15	15	16	15	15
15	15	15	15	15	15	15	14	15	15	16	15	17	14	17	14	13	14	14	16	14	15	16	15	15
16	16	15	15	16	15	15	16	15	14	15	15	17	17	20	16	12	15	15	15	16	16	14	15	16
17	16	16	15	15	15	15	15	14	15	15	15	21	19	21	17	15	15	14	16	15	15	16	15	15
18	16	15	15	14	15	16	16	14	14	14	15	18	21	19	18	14	16	17	15	16	16	16	16	16
19	16	16	16	15	15	15	14	15	15	16	15	16	15	17	15	14	14	14	15	16	15	15	15	15
20	14	15	16	15	15	15	15	15	14	16	16	17	18	22	22	14	14	15	15	16	15	15	15	15
21	15	14	15	16	15	15	15	14	14	16	16	14	20	36	16	15	16	15	14	16	15	15	15	15
22	16	15	16	15	15	15	14	14	15	16	15	16	18	17	16	16	16	14	15	15	15	16	15	15
23	16	15	16	15	14	15	15	14	14	13	18	16	20	16	14	14	15	14	15	15	15	14	14	14
24	15	15	15	14	14	15	15	14	14	15	15	18	17	18	15	16	14	14	14	15	14	15	15	15
25	16	15	15	15	15	15	15	14	15	15	15	15	15	16	18	16	15	14	15	15	15	15	15	16
26	15	14	15	15	14	14	15	14	13	14	18	14	16	16	15	15	16	14	15	15	15	15	16	15
27	14	14	15	14	14	16	15	14	14	15	12	20	21	19	16	14	13	16	14	14	14	15	14	16
28	15	15	15	15	15	15	15	15	14	14	16	16	16	16	18	16	15	16	15	15	16	15	15	14
29	16	15	15	15	14	14	14	15	14	14	16	26	16	18	15	15	14	15	15	15	16	15	15	15
30	15	16	15	16	15	16	16	15	13	17	15	18	27	16	13	16	14	14	15	14	15	15	15	15
31	16	16	15	16	15	14	15	15	14	14	14	16	18	18	19	15	14	14	15	15	15	15	15	15
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31
MED	16	15	15	15	15	15	15	15	14	15	15	16	17	16	16	15	15	14	15	15	15	15	15	15
U Q	16	16	15	15	15	15	15	15	15	16	16	17	19	19	17	16	16	16	15	15	16	16	15	15
L Q	15	15	15	15	15	15	15	14	14	14	15	15	16	16	15	14	14	14	15	15	15	15	15	15

MAR. 2006 fmin (0.1MHz)

NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, JAPAN

IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 M(3000)F2 (0.01) 135°E MEAN TIME (G.M.T. + 9 H)

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	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	308	327	322	306	337	341	352	377	378	383	335	360	345	371	334	350	361	361	369	378	312	316	333	315
2	313	312	318	323	344	329	349	370	365	362	359	318	357	331	350	365	369	357	362	374	310	329	306	312
3	327	341	319	329	353	357	359	381	386	369	349	340	360	361	358	353	365	364	359	365	340	365	303	313
4	299	300	316	320	324	340	381	416	383	341	343	340	346	357	349	354	350	360	371	390	308	323	340	316
5	308	316	300	325	344	357	357	377	376	372	352	335	326	349	340	366	382	363	374	378	303	323	311	301
6	313	316	333	318	347	373	385	396	370	359	360	350	372	345	338	355	356	363	375	373	323	323	316	296
7	311	310	324	340	343	320	372	352	370	311	335	340	327	341	345	347	361	375	333	330	318	347	327	302
8	301	290	301	327	353	340	355	364	387	369	362	343	357	365	333	347	360	366	381	359	331	318	305	314
9	312	328	324	311	356	315	354	387	399	363	359	319	336	345	379	316	358	361	365	375	313	329	321	312
10	313	322	326	316	359	328	366	405	394	376	362	314	332	336	351	C	362	363	372	374	310	313	314	311
11	336	321	358	357	359	322	356	388	371	342	322	331	347	359	363	363	329	349	368	371	340	342	318	308
12	326	313	298	318	340	399	374	385	378	379	354	330	350	354	349	341	356	369	371	361	317	306	306	307
13	311	295	351	350	363	325	377	385	361	360	324	334	346	359	346	352	360	367	370	380	338	308	314	316
14	331	309	331	324	351	327	381	375	356	375	373	344	345	354	346	357	350	366	376	367	299	313	320	316
15	300	313	313	332	346	337	362	385	362	368	331	332	335	337	352	356	353	378	366	363	302	314	308	299
16	302	303	316	345	367	314	384	374	355	352	326	310	332	343	359	366	377	365	366	380	316	300	314	309
17	308	309	316	321	342	336	370	391	358	345	326	308	351	364	332	348	358	360	375	357	337	318	313	S
18	323	S	F	F	333	F	350	365	369	350	365	329	348	348	352	362	358	368	362	338	307	293	312	318
19	347	330	305	316	310	323	357	353	373	324	332	320	355	335	343	340	334	345	348	353	311	315	306	286
20	318	317	328	348	302	316	350	345	356	337	333	340	357	325	340	344	345	360	354	328	306	292	288	307
21	309	332	303	317	F	326	370	353	360	346	339	335	344	349	341	358	345	361	351	326	321	304	307	308
22	313	333	352	326	312	307	373	368	345	365	334	335	351	328	323	357	365	357	354	344	326	310	312	316
23	335	F	F	364	A	323	371	365	364	354	345	343	333	334	341	347	362	358	375	338	337	312	305	F
24	F	F	F	374	F	351	379	361	361	339	337	321	336	364	367	375	340	359	368	375	307	310	300	F
25	310	317	331	342	360	F	369	358	358	346	345	330	342	356	362	345	348	356	340	346	329	318	313	F
26	F	F	F	F	F	F	377	377	352	342	363	314	332	346	360	338	353	377	356	347	310	308	303	293
27	F	F	F	F	F	F	361	385	355	359	314	317	337	330	351	345	346	346	346	328	336	319	299	307
28	316	310	326	322	336	311	365	353	355	347	327	342	360	330	331	337	333	347	367	345	324	297	298	298
29	299	296	320	354	F	F	375	368	360	341	331	324	350	345	358	353	341	342	345	347	335	311	312	319
30	329	331	318	317	325	339	379	367	340	353	344	341	322	326	333	335	351	366	361	350	345	305	288	319
31	318	316	330	334	328	335	379	373	349	359	329	324	343	321	353	330	351	356	354	352	319	319	302	301
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	28	26	26	28	25	26	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	27
MED	313	316	321	326	344	328	370	374	362	354	339	332	345	345	349	351	356	361	366	359	318	314	311	309
U Q	324	327	330	344	354	340	377	385	376	368	359	340	351	357	358	357	361	366	371	374	335	323	314	316
L Q	308	309	316	318	330	322	357	364	356	342	331	320	335	334	340	344	346	357	354	345	310	308	303	301

MAR. 2006 M(3000)F2 (0.01)

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IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 M(3000)F1 (0.01) 135°E MEAN TIME (G.M.T. + 9 H)

LAT.35°42.4'N LON.139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1										L	L	L	L	L	L 378	A	A							
2									L	L	L	L 382	L 384	L	L	L	L							
3									L	L 423	L	L 374	L 397	L 386	L 367	L								
4									L	L 401	U L 391	L 409	A	L 382	L	L								
5									L	L	U L 393	L 390	A	A	A	L 370	L							
6									L	L	L	L 407	L 407	406	L 382	L	L							
7										L	L 367	L	L	L	L	L	L							
8									L	L	L	L 407	L 363	L	L	L	A							
9										L	L	U L 393	L 390	A	A	380	A							
10									L	L	L 404	U L 408	L 407	L 393	L 383	C	L							
11										L 402	U L 418	L 377	L	L	L	L	L							
12										L	L	L 410	L 390	L 390	L 393	L	L							
13									L	L	U L 382	L 397	L 381	382		L	L							
14										L	L 393	L 381	L 393	L 401	424	L								
15									L	L	U L 396	L 415	L 390	L 390	U L 410	L	L							
16										U L 386	L 369	377	L 400	L 376	L 382	A								
17									L	L	L 404	393	L 394	L 391	L 384	L	L	L						
18									L	L	L 411	430	L 415	L 382	L	L 399	L							
19									L	L 378	L 363	L 368	L 370	L 414	L 403	L	L							
20									L	L	L	L 380	L 382	L 363	L 395	L	L							
21									L	L	L 375	L 393	L 382	L 382	L	L								
22									L	L	L 389	L 393	L 386	L 400	L 390	L								
23									L	L 400	L	L 394	L 389	L 372	L 379	L	L							
24										L	L 388	L 386	L 395	L 395	L 380	L								
25									L	L 384	L 399	A	L 392	387	L	L	L							
26									L	L 377	L 396	L 397	417	387	L 392	L	L							
27										L	408	379	L 338	L 393	376	E A								
28									L	L 373	L 380	L 395	L	L 382	L	L	L							
29									L	L 373	L 389	L 393	L 392	L	L 384	L								
30									L	L 388	L 394	L 405	393	L 385	378	L 373	L							
31										L 395	L 380	L 384	L 376	L 396	396	L	L							
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT										12	22	28	25	23	19	4								
MED										L 387	L 392	L 393	L 390	L 387	L 384	L 376								
U Q										L 400	L 399	L 406	L 396	L 395	L 395	390								
L Q										L 378	L 380	L 382	L 382	L 382	L 379	L 372								

MAR. 2006 M(3000)F1 (0.01)

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IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 h'F2 (KM) 135°E MEAN TIME (G.M.T. + 9 H)

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	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										228	254	258	262	248	294	232	242							
2									240	234	260	276	248	278	254	236	238							
3									210	256	238	262	236	242	248	250								
4									220	246	276	314	256	242	262	256								
5									228	240	268	276	272	250	246	236	236							
6									224	250	268	258	236	260	262	250	254							
7										262	274	252	248	260	254	250	238							
8									232	240	252	268	244	244	266	276	234							
9										250	258	302	276	248	226	318	240							
10									224	230	262	282	268	252	254	C	258							
11										260	256	278	246	236	254	252	266							
12										234	248	302	250	244	262	262	244							
13									250	242	278	284	262	246	244	260	260							
14										242	260	282	276	254	274	246								
15									236	248	294	306	266	260	258	250	244							
16										264	312	306	270	254	240	240								
17									264	260	300	302	250	240	294	240	250	240						
18									238	266	258	282	258	256	250	264	252							
19									242	292	284	280	232	266	258	268	266							
20									260	266	262	258	254	310	266	246	254							
21									256	276	272	266	256	242	268	258								
22									270	246	288	266	242	268	278	244								
23									242	262	270	272	278	270	264	258	246							
24										290	278	302	268	248	246	244								
25									262	278	268	294	272	248	254	268	266							
26									264	284	256	342	278	250	256	266	248							
27										248	320	288	262	270	258	248								
28									268	274	284	260	240	266	290	278	280							
29									260	290	292	286	250	272	262	268								
30									272	258	276	272	278	276	282	278	256							
31										260	296	286	258	268	260	288	256							
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT									21	31	31	31	31	31	31	30	22	1						
MED									242	258	270	282	258	254	258	254	251	240						
U Q									263	266	284	302	270	268	266	268	258							
L Q									230	242	258	266	248	246	254	246	242							

MAR. 2006 h'F2 (KM)

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IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 h'F (KM) 135°E MEAN TIME (G.M.T. + 9 H)

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	E B 262	242	246	E B 262	236	216	212	208	212	198	196	E A 242	196	A	208	A	A	208	200	190	E B 276	244	238	E B 256
2	E B 248	E A 274	E B 250	E B 252	224	210	218	208	212	210	198	206	212	214	222	210	210	H 200	198	222	E A 270	E A 266	E A 258	E B 250
3	238	230	232	240	220	208	196	206	H 188	H 182	198	202	H 196	H 182	H 194	210	224	214	202	194	232	206	236	E B 272
4	E B 278	E B 274	E B 258	E B 250	240	230	208	190	188	H 188	194	H 180	A	226	H 190	212	220	222	214	198	E B 250	230	220	E A 266
5	E B 274	E B 266	E B 272	E B 256	224	202	220	206	194	188	198	H 176	A	A	A	H 190	208	220	212	224	E A 276	E B 254	E B 262	E B 284
6	E B 276	E B 250	228	E B 258	234	200	210	200	H 182	H 186	204	H 190	200	196	210	206	218	228	204	200	218	238	E B 258	E B 288
7	E B 274	E B 258	258	242	220	E B 254	200	208	204	202	218	218	204	H 188	200	208	208	220	218	224	224	220	210	E B 250
8	E B 260	E B 298	E B 282	E B 252	214	214	206	210	208	200	198	H 184	E A 228	E A 224	210	210	A	216	206	204	208	218	E B 258	E B 272
9	E B 262	242	234	E B 274	214	238	228	218	208	196	192	186	196	A	A	226	A	218	208	194	222	226	E B 260	E B 260
10	E B 272	E B 250	E B 260	E A 256	216	234	214	198	198	H 182	H 184	H 184	H 170	200	210	C	222	224	210	204	E A 302	E B 256	E B 250	E B 264
11	238	248	216	216	206	238	212	208	200	H 182	H 184	194	200	200	208	206	H 200	242	208	190	204	208	E B 260	E B 276
12	268	E B 262	E B 284	E B 256	242	194	206	206	224	194	190	H 168	228	214	198	H 194	H 194	220	202	206	224	246	E B 270	E B 272
13	E B 272	E B 270	224	218	214	242	210	192	212	192	212	H 192	196	204	214	212	226	222	208	192	200	E B 268	E B 264	270
14	E B 258	E B 280	242	246	226	240	210	H 184	H 190	204	196	H 186	H 186	200	196	220	236	224	206	198	E B 256	E B 262	E B 252	E A 282
15	E B 270	E B 272	E B 266	E B 246	210	234	212	206	198	202	H 184	H 190	202	200	H 182	216	212	214	206	200	234	E B 256	E B 270	E B 272
16	E B 276	E B 258	E B 268	234	E B 216	E B 256	204	210	220	H 182	H 200	204	194	210	196	A	220	216	210	202	228	E B 248	E B 286	E B 272
17	E B 268	E B 270	E B 256	E B 262	224	218	212	216	198	200	H 190	H 180	180	214	190	H 184	H 192	214	212	204	202	222	E B 266	E B 258
18	244	232	244	226	212	234	220	216	H 192	192	H 184	H 172	196	E A 232	212	H 192	228	222	204	214	E B 260	E B 264	E B 262	E B 246
19	226	234	E B 264	E B 254	E B 270	238	226	230	E A 230	204	236	212	208	194	H 180	226	214	236	224	204	232	232	E B 288	E B 284
20	E B 280	E B 258	E B 248	220	E B 268	E B 256	220	228	226	222	214	206	H 190	200	202	214	216	230	218	204	230	250	E B 284	E B 260
21	E B 252	224	E B 258	242	210	E B 242	208	218	208	202	214	198	206	202	196	188	232	220	214	214	232	E A 276	E B 276	E B 282
22	E B 262	234	212	E A 250	E B 258	E B 282	212	216	224	218	210	198	216	190	178	H 196	220	226	224	210	216	E B 258	E B 276	E B 264
23	234	E B 274	218	212	A	E B 274	222	226	214	H 198	A	H 186	H 176	202	208	202	222	220	210	198	214	228	E B 290	E B 258
24	E B 258	E B 276	218	202	E B 256	E B 244	210	222	224	212	206	204	200	198	188	194	214	H 212	212	200	E A 272	E A 270	E B 296	E B 294
25	E B 264	E B 258	244	226	210	E B 274	216	236	220	206	208	A	188	190	206	H 194	208	230	230	208	210	238	232	E B 274
26	E B 284	E B 262	230	218	E B 252	E B 264	216	226	210	208	202	190	188	H 176	206	198	214	228	218	216	220	248	E B 280	E B 288
27	E B 278	E B 268	E B 254	232	E B 222	E B 266	212	212	202	200	198	200	E A 248	212	206	A	222	228	226	226	232	E A 252	E A 280	E B 280
28	E B 254	238	238	240	218	E B 258	216	224	216	H 190	214	208	206	200	196	190	220	234	210	202	200	E B 276	E B 278	E B 276
29	E B 284	E B 268	E B 250	202	208	E B 262	208	214	208	200	204	198	194	198	198	202	216	224	232	214	210	E B 248	E B 248	242
30	228	226	240	E B 254	232	224	210	222	198	204	198	192	194	194	204	202	222	226	224	210	210	E B 272	E B 288	E B 250
31	E B 238	E B 258	E B 232	224	206	212	202	212	212	206	H 188	206	204	186	192	H 194	H 208	228	222	206	206	234	E B 258	E B 262
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	31	31	31	31	30	31	31	31	31	31	30	30	29	28	29	27	28	31	31	31	31	31	31	31
MED	E B 262	E B 258	U 231	U 222	218	U 223	212	212	208	200	198	192	196	200	200	202	217	222	210	204	217	U 233	E B 262	E B 272
U Q	E B 274	E B 270	E B 258	E B 254	E B 236	E B 256	216	222	216	204	208	204	206	211	208	212	222	228	218	214	E 250	E B 262	E B 280	E B 280
L Q	248	242	232	224	214	216	208	206	198	H 190	H 192	H 186	192	194	193	H 194	H 209	216	206	198	210	230	252	E B 258

MAR. 2006 h'F (KM)

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IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 h'E (KM) 135°E MEAN TIME (G.M.T. + 9 H)

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	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								112	118	122	116	112	116	116	112	112	124	B						
2								118	116	118	112	112	114	114	116	118	124	114						
3								116	118	116	114	120	114	114	110	112	114	108						
4								118	124	114	114	A	116	114	112	A	A	A						
5								116	116	114	114	A	122	116	116	114	114	122						
6								118	120	120	108	112	114	116	112	116	120	A						
7								110	A	118	A	A	114	116	108	A	A	110						
8								122	122	112	116	A	114	A	116	116	A	A						
9								112	120	114	116	112	116	A	A	116	114	118						
10								120	124	120	116	112	114	116	114	C	A	A						
11								128	124	118	112	114	116	116	116	120	116	126						
12								122	122	116	A	114	114	116	118	118	120	A						
13								116	112	114	112	112	118	114	112	120	120	118						
14								122	122	116	A	A	116	114	114	120	116	120						
15								122	122	118	116	114	A	A	114	114	118	122						
16								124	114	114	112	112	A	A	118	A	116	A						
17								116	118	116	112	112	116	118	122	122	122	A						
18								114	114	110	112	112	116	120	114	118	120	120						
19							B	112	114	110	110	A	112	114	116	112	114	116						
20								112	116	116	114	A	A	122	122	122	A	A						
21								114	114	116	110	114	A	B	114	118	124	110						
22							B	116	116	116	A	A	120	116	114	120	118	A						
23								118	112	112	112	A	A	120	A	114	112	114						
24							B	114	116	120	116	116	A	114	114	122	120	120						
25							B	122	120	116	114	A	A	A	118	116	112	114						
26							B	114	114	114	108	114	A	118	114	114	114	122						
27							B	122	120	116	A	A	A	A	A	A	A	A						
28							B	122	122	116	116	116	A	112	118	118	118	118						
29							B	116	118	116	A	A	116	112	116	114	112	118						
30							B	118	116	116	112	112	110	118	112	112	116	112						
31							B	122	116	116	112	114	120	114	114	114	120	A						
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT								31	30	31	25	19	21	24	28	26	25	19						
MED								118	118	116	112	112	116	116	114	116	118	118						
U Q								122	122	118	116	114	116	117	116	120	120	120						
L Q								114	116	114	112	112	114	114	113	114	114	114						

MAR. 2006 h'E (KM)

NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, JAPAN

IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 h'Es (KM) 135°E MEAN TIME (G.M.T. + 9 H)

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

D \ H	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	96	B	B	B	B	B	B	138	152	156	100	156	154	160	116	120	116	112	92	B	B	B	B	B
2	B	98	B	B	B	B	B	146	162	162	102	164	138	118	154	118	106	120	138	100	100	100	100	102
3	118	96	92	B	B	B	B	160	100	98	100	102	104	102	94	90	96	94	B	B	B	102	B	B
4	96	96	B	92	100	B	B	G	104	116	104	100	148	96	96	94	94	94	92	94	92	96	102	100
5	B	B	B	B	B	B	B	G	122	110	114	102	138	128	166	G	110	126	106	100	100	106	106	120
6	98	B	B	B	B	B	B	G	102	104	112	126	148	152	98	162	136	108	B	110	106	102	102	102
7	104	100	94	98	B	B	B	128	102	120	102	102	96	98	92	92	86	G	B	B	B	B	B	B
8	B	B	102	B	B	B	B	164	168	128	102	102	156	96	126	136	88	90	90	B	B	B	B	B
9	B	B	B	B	B	B	B	134	114	106	104	100	148	92	90	160	132	118	102	B	B	98	B	B
10	B	B	B	B	94	B	B	156	100	100	102	96	100	96	142	C	86	84	84	100	102	98	B	B
11	B	B	B	B	B	B	B	146	154	102	100	102	128	98	104	106	106	108	B	B	B	B	98	B
12	B	96	96	B	B	B	B	150	106	126	100	96	140	124	138	100	116	96	B	92	B	B	B	B
13	B	B	B	B	B	96	96	154	148	98	104	116	118	106	158	152	166	150	B	B	104	B	122	112
14	110	102	98	94	92	B	92	104	100	116	106	98	104	104	106	160	128	118	110	106	B	134	118	110
15	B	B	B	B	B	92	94	146	104	136	122	114	104	104	100	100	128	122	B	B	B	B	B	B
16	B	B	B	B	B	B	B	144	128	126	110	102	102	92	102	110	114	94	86	88	B	B	100	B
17	B	B	B	B	B	B	B	164	98	120	112	102	104	106	106	104	102	100	98	B	B	B	B	B
18	96	B	B	B	B	B	B	138	104	102	102	100	106	148	160	104	118	G	B	B	B	B	B	B
19	B	B	B	B	B	B	152	140	132	104	104	102	102	92	118	84	84	G	B	B	122	B	B	B
20	B	B	B	B	B	152	140	138	150	136	122	106	106	104	104	156	102	98	94	96	B	B	B	B
21	B	102	108	B	B	B	B	134	128	136	112	102	96	B	G	108	132	124	B	B	108	108	B	B
22	B	116	92	92	92	B	144	138	122	118	108	104	106	102	102	104	104	98	98	B	B	B	104	B
23	100	B	B	92	92	92	92	92	138	102	112	104	102	100	94	94	94	G	92	B	B	B	B	B
24	B	B	B	B	100	B	138	140	134	120	120	120	106	106	102	102	106	104	88	90	108	100	138	132
25	B	B	B	96	B	B	144	150	142	118	110	102	102	102	100	104	100	122	B	B	B	B	B	B
26	B	B	B	B	B	B	140	142	142	122	116	112	102	102	100	100	96	124	108	108	B	B	B	100
27	B	B	B	B	B	B	B	156	112	122	104	104	98	98	94	92	92	98	98	96	92	98	90	96
28	104	140	B	B	B	B	136	106	156	102	100	120	106	102	100	108	104	104	B	B	B	B	96	96
29	B	B	104	B	B	B	148	148	104	114	102	102	102	102	102	100	94	G	B	B	B	B	B	B
30	B	B	B	B	B	B	138	104	120	102	120	102	G	98	96	100	102	G	B	B	B	B	B	B
31	B	B	B	B	B	B	138	132	132	118	120	102	144	98	102	98	94	94	B	94	B	B	104	102
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT	9	9	8	6	6	4	14	28	31	31	31	31	30	30	30	29	31	25	16	13	10	11	13	11
MED	100	100	97	93	93	94	138	141	122	118	104	102	106	102	102	104	104	104	96	96	103	100	102	102
U Q	107	109	103	96	100	124	144	150	142	126	112	112	138	106	118	119	116	121	104	103	108	106	112	112
L Q	96	96	93	92	92	92	96	134	104	102	102	102	102	98	98	99	94	95	91	93	100	98	99	100

MAR. 2006 h'Es (KM)

IONOSPHERIC DATA STATION Kokubunji

MAR. 2006 TYPES OF Es 135°E MEAN TIME (G.M.T. + 9 H)

LAT. 35°42.4'N LON. 139°29.3'E SWEEP 1.0MHz TO 30.0MHz IN 15.0SEC IN MANUAL SCALING

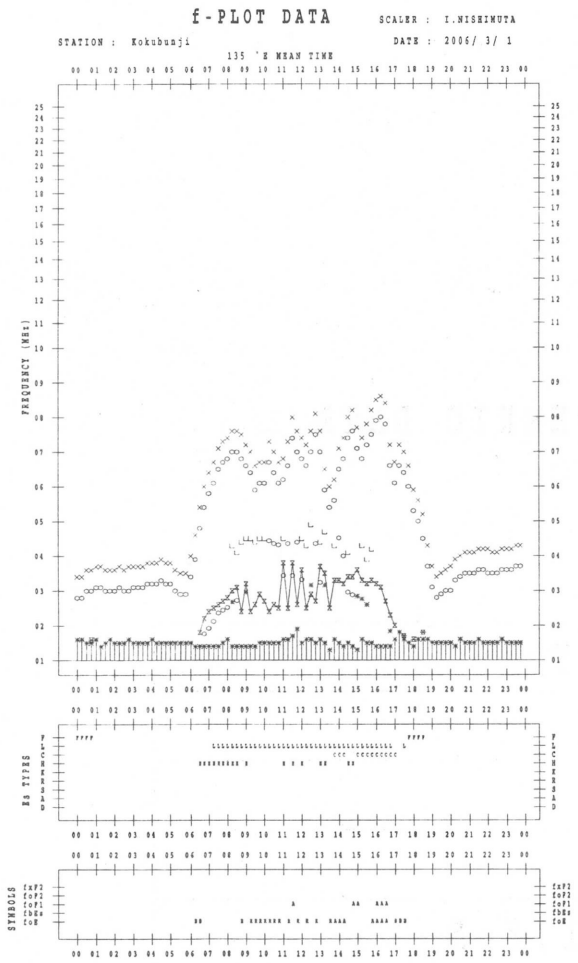
D \ H	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	F 2							H 2	HL 12	HL 11	L 1	HL 11	HL 11	HL 11	CL 11	CL 21	CL 21	C 3	F 1					
2		F 3						H 2	HL 11	HL 11	L 1	HL 11	HL 11	CL 11	HL 11	CL 11	L 1	CL 11	F 1	F 4	F 4	F 3	F 2	F 2
3	F 2	F 1	F 1					HL 11	L 2	L 1	L 1	L 1	L 1	L 1	L 2	L 2	L 2	L 2				F 1		
4	F 2	F 2		F 2	F 2				L 2	CL 11	L 1	L 2	HL 11	L 2	L 2	L 3	L 4	L 3	F 4	F 3	F 2	F 1	F 1	F 2
5									CL 12	CL 11	CL 11	L 1	HL 11	CL 11	HL 11		C 1	CL 11	F 2	F 4	F 3	F 1	F 1	F 2
6	F 3								L 2	L 1	CL 22	CL 11	HL 11	HL 11	L 1	HL 12	HL 12	L 2		L 1	F 1	F 2	F 2	F 1
7	F 2	F 2	F 1	F 1				C 1	L 2	CL 11	L 1	L 2	L 2	L 1	L 2	L 2	L 2							
8			F 1					HL 11	HL 11	CL 11	L 1	L 2	HL 11	L 2	C 2	HL 12	L 3	L 5	F 1					
9								C 2	CL 21	L 1	L 1	L 2	HL 11	L 2	L 3	HL 12	HL 21	CL 32	F 2			F 1		
10					F 2			H 1	L 1	L 1	L 2	L 1	L 2	L 2	HL 11		L 3	L 3	F 3	F 2	F 2	F 3		
11								HL 11	HL 11	L 2	L 1	L 1	CL 11	L 1	L 1	L 2	L 2	L 3					F 2	
12		F 1	F 1					HL 11	L 1	CL 12	L 2	L 2	HL 11	CL 21	CL 12	L 2	CL 22	L 2		F 1				
13						F 1	F 1	HL 21	HL 22	L 1	L 1	CL 11	CL 11	L 1	HL 11	HL 11	HL 12	HL 11			F 1		F 2	F 3
14	F 2	F 2	F 3	F 4	F 2		F 2	L 2	L 2	CL 11	L 1	L 2	L 2	L 1	L 1	HL 11	HL 21	CL 31	F 3	F 2		F 1	F 2	F 5
15						F 2	F 1	HL 21	L 1	HL 11	CL 11	CL 11	L 1	L 1	L 2	L 1	CL 21	CL 22						
16								H 2	HL 11	CL 11	CL 11	L 1	L 1	L 2	L 2	CL 13	CL 12	L 3	F 2	F 1			F 1	
17								H 1	L 2	CL 11	CL 11	L 2	L 1	L 1	L 2	L 1	L 2	L 3	F 1					
18	F 1							HL 21	L 1	L 1	L 1	L 1	L 2	HL 11	H 1	L 1	CL 21							
19							H 2	H 2	CL 21	L 1	L 1	L 1	L 1	L 2	CL 11	L 2	L 2				F 1			
20						F 1	F 2	H 2	HL 11	CL 11	CL 11	L 2	L 2	L 2	L 2	HL 11	L 2	L 3	F 2	F 2				
21		F 3	F 2					H 2	CL 11	HL 11	CL 21	L 1	L 1			CL 11	CL 11	C 1			F 1	F 2		
22		F 1	F 3	F 2	F 2		H 2	HL 32	CL 12	CL 11	L 1	L 1	L 1	L 1	L 1	L 1	L 2	L 2	F 1				F 1	
23	F 3			F 2	F 3	F 2	F 3	L 2	HL 11	L 1	CL 11	L 1	L 1	L 2	L 2	L 2	L 2		F 2					
24					F 1		H 2	H 2	HL 21	CL 11	CL 11	CL 11	L 1	L 1	L 1	L 1	L 2	L 2	F 1	F 1	F 4	F 2	F 1	F 1
25				F 2			H 2	HL 22	HL 11	CL 11	CL 11	L 2	L 1	L 1	L 1	L 1	L 1	CL 11						
26							H 2	H 1	HL 11	CL 11	CL 11	CL 11	L 1	L 2	L 1	L 1	L 2	CL 21	F 3	F 2				F 1
27								H 1	CL 11	CL 11	L 1	L 1	L 2	L 2	L 2	L 3	L 2	L 2	F 2	F 2	F 3	F 2	F 2	F 2
28	F 2	F 2					HL 22	L 1	HL 11	L 1	L 1	CL 11	L 2	L 1	L 2	L 2	L 1	L 2					F 2	F 1
29			F 3				H 3	H 2	L 1	CL 11	L 1	L 1	L 1	L 1	L 2	L 2	L 2							
30							H 2	L 1	CL 12	L 1	CL 11	L 1		L 1	L 1	L 1	L 1							
31							H 2	HL 11	HL 11	CL 11	CL 11	L 1	HL 11	L 1	L 2	L 2	L 3	L 2		F 1			F 2	F 1
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CNT																								
MED																								
U Q																								
L Q																								

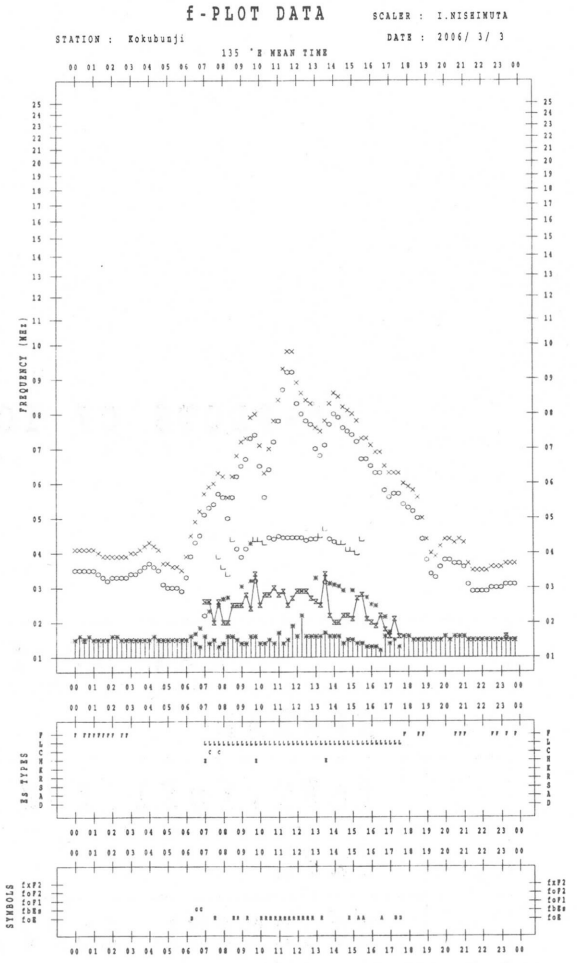
MAR. 2006 TYPES OF Es

NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY, JAPAN

f-PLOTS OF IONOSPHERIC DATA

KEY OF f-PLOT	
	SPREAD
	foF2,foF1,foE
	fxF2
	DOUBTFUL foF2,foF1,foE
	fbEs
	ESTIMATED foF1
	fmin
	GREATER THAN
	LESS THAN


f-PLOT DATA
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/ 1
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
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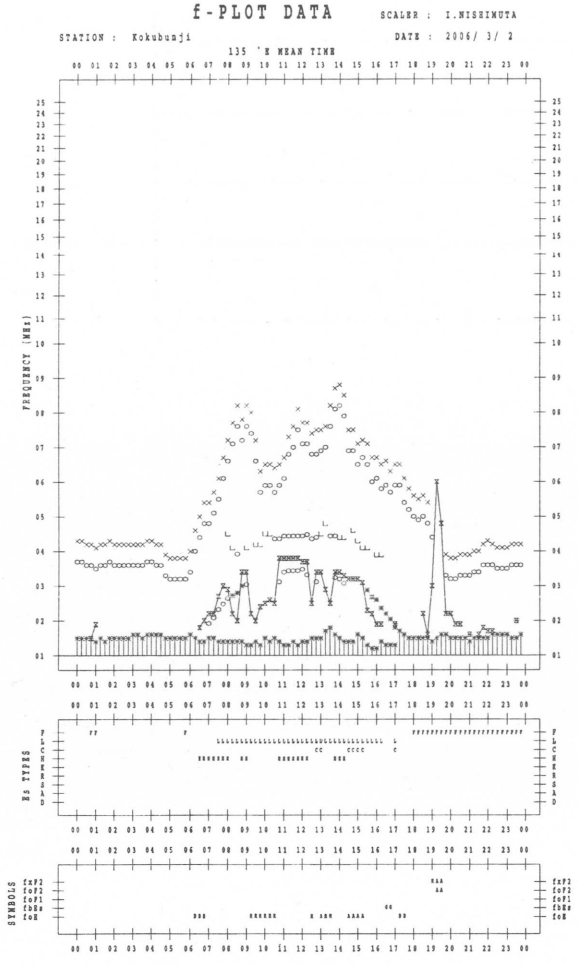
STATION : Kokubunji
DATE : 2006/ 3/ 3
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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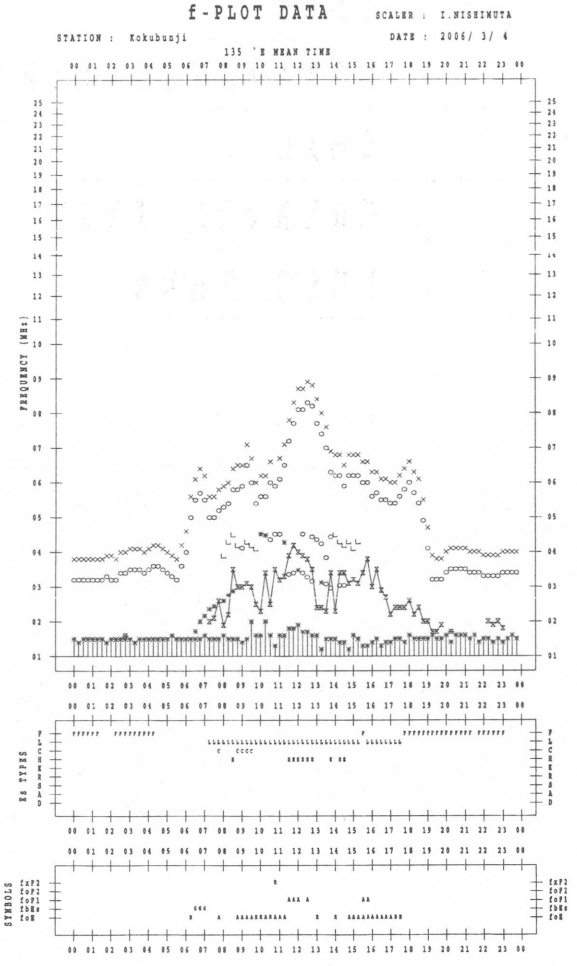
STATION : Kokubunji
DATE : 2006/ 3/ 2
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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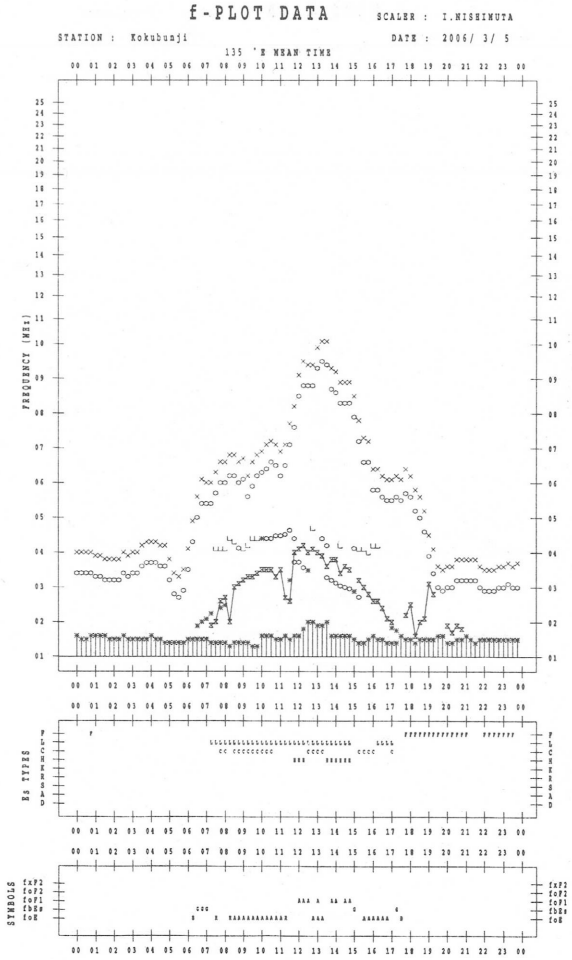
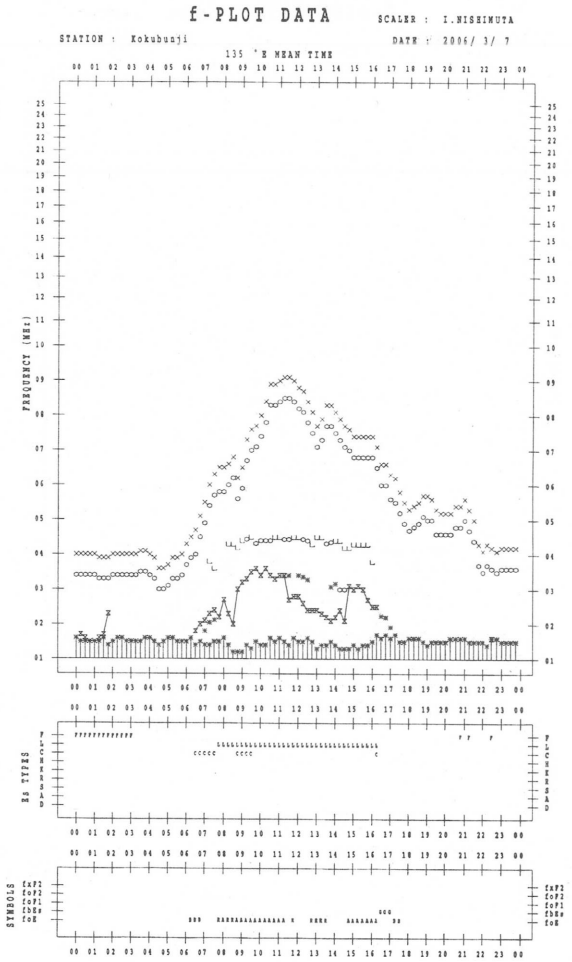
STATION : Kokubunji
DATE : 2006/ 3/ 4
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/ 5
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
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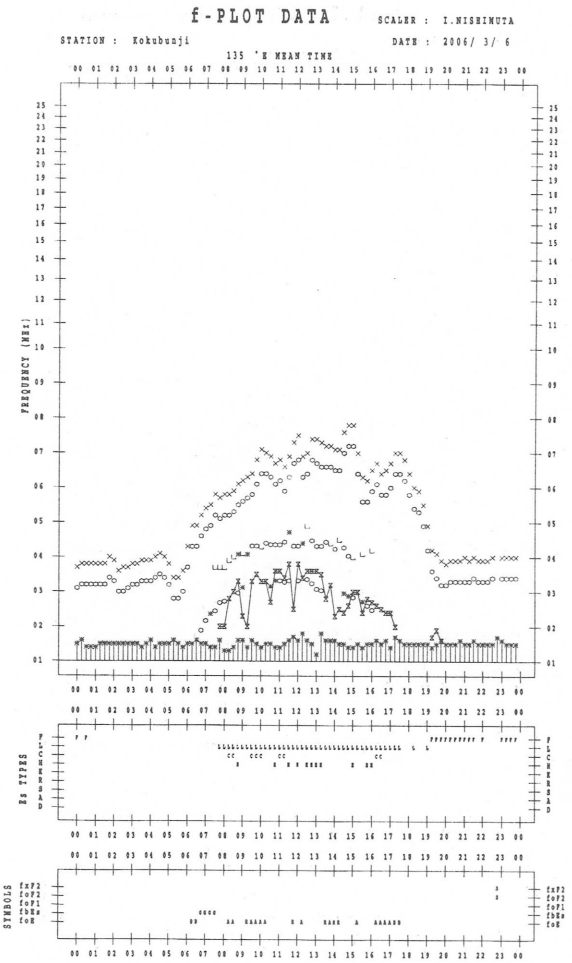
STATION : Kokubunji
DATE : 2006/ 3/ 7
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
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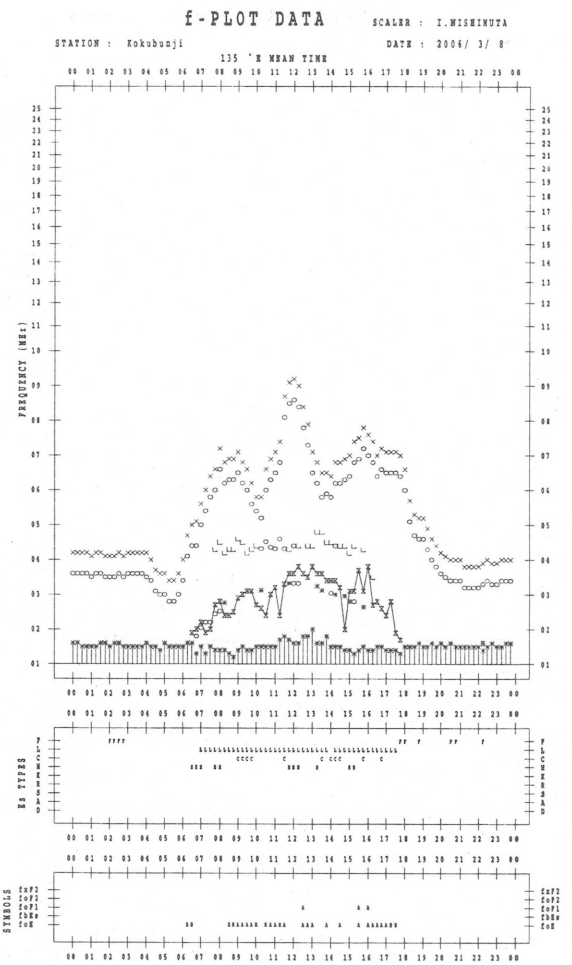
STATION : Kokubunji
DATE : 2006/ 3/ 6
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
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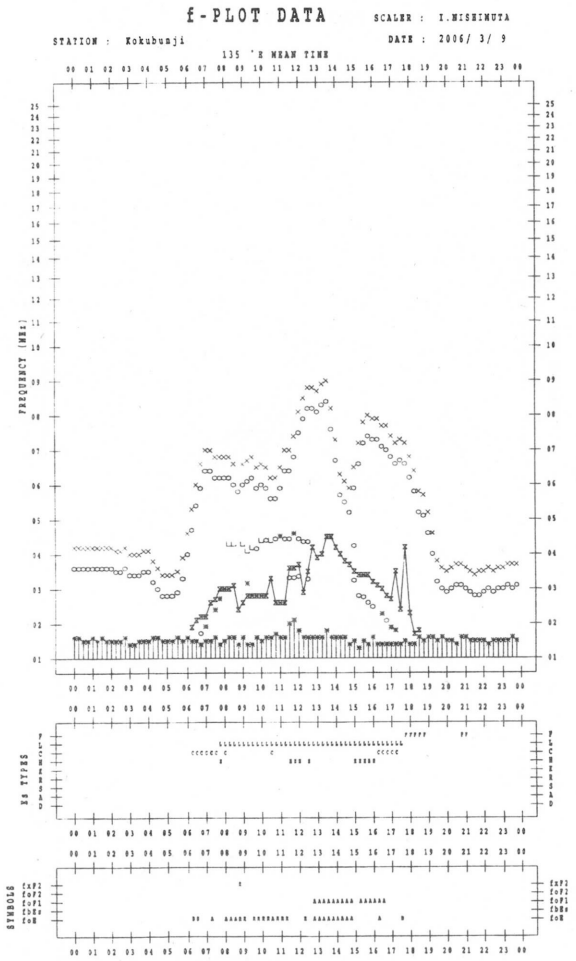
STATION : Kokubunji
DATE : 2006/ 3/ 8
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
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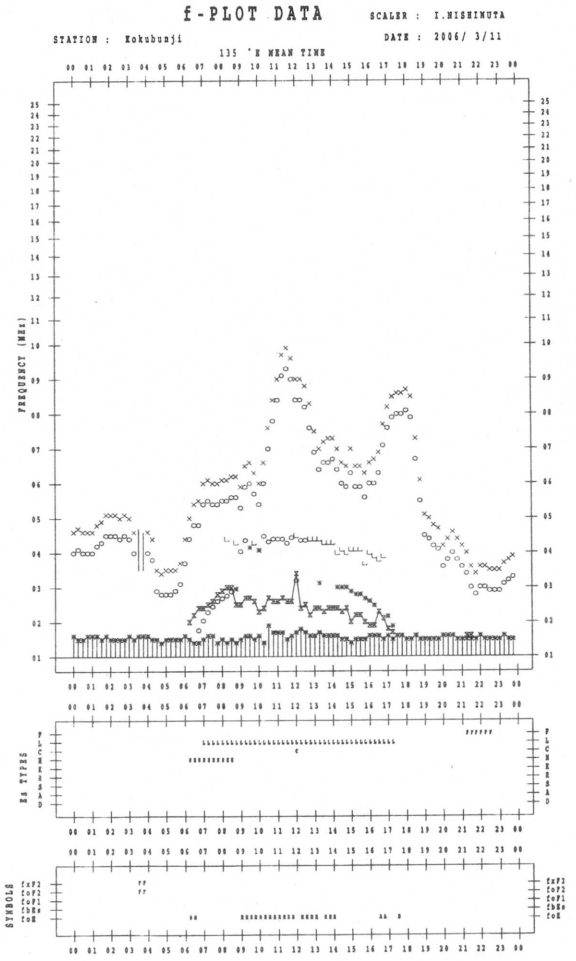
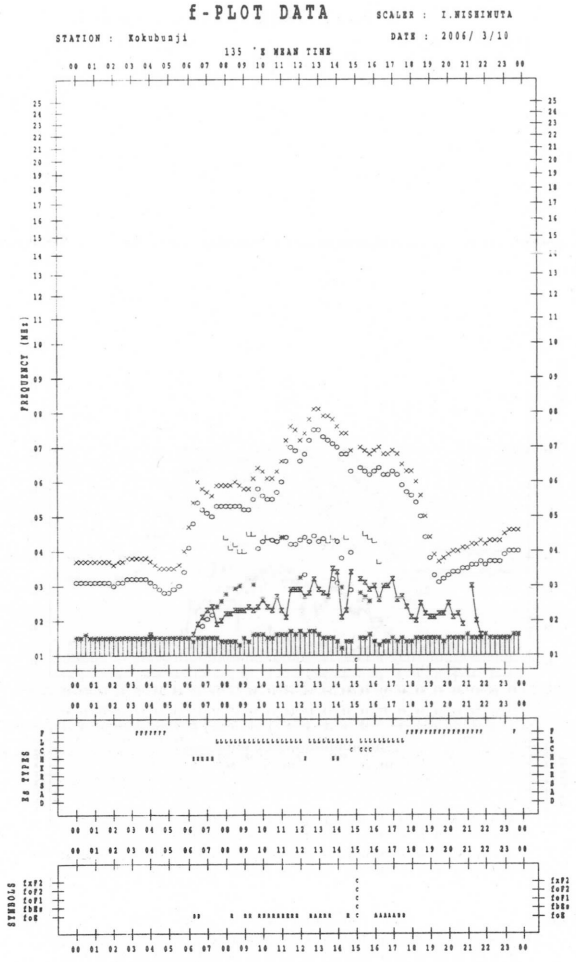
STATION : Kokubunji
DATE : 2006/ 3/ 9
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/11
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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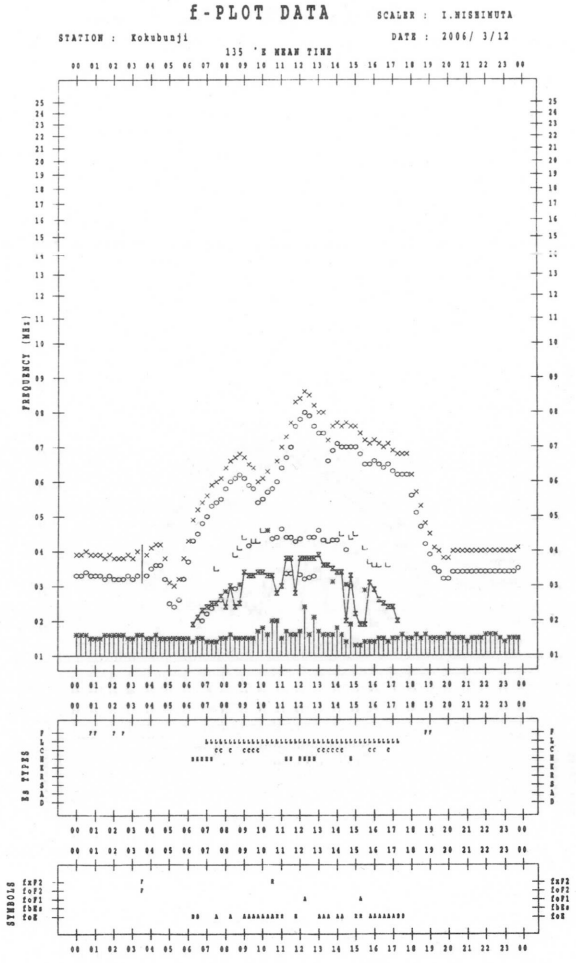
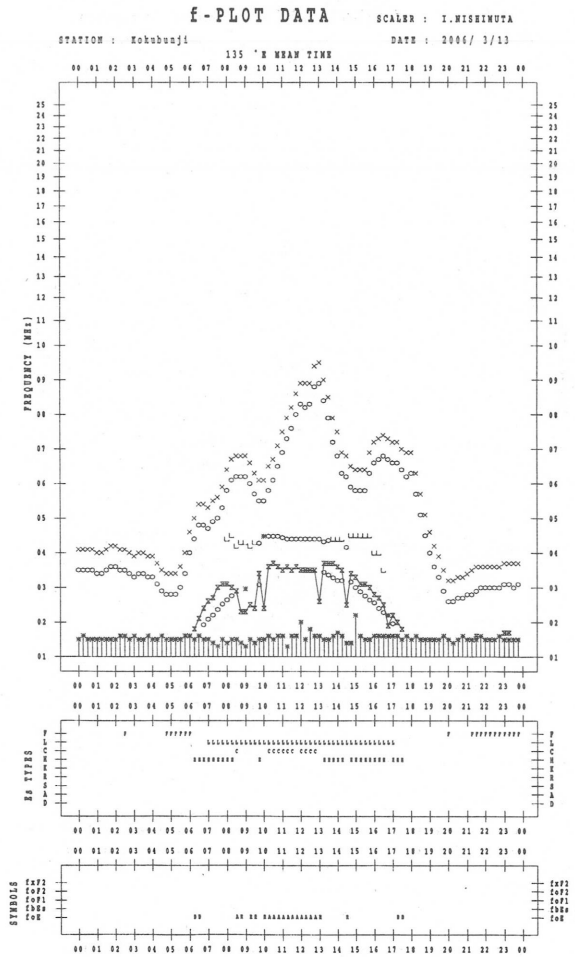
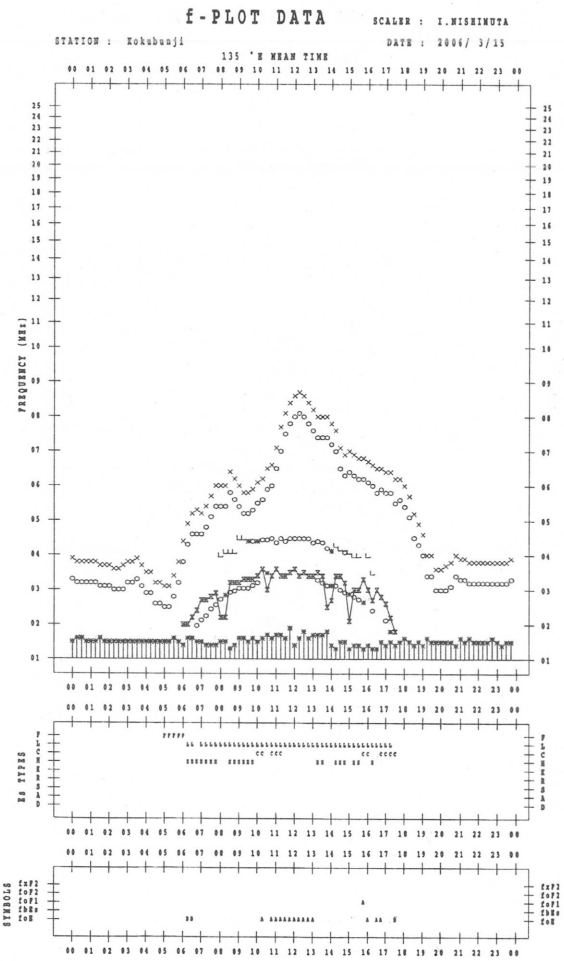
STATION : Kokubunji
DATE : 2006/ 3/10
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/12
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/13
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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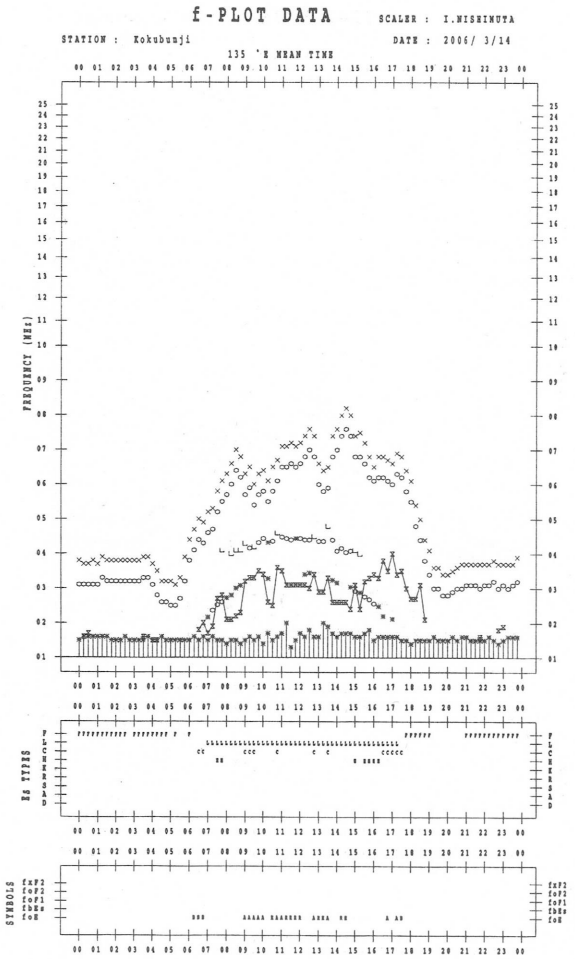
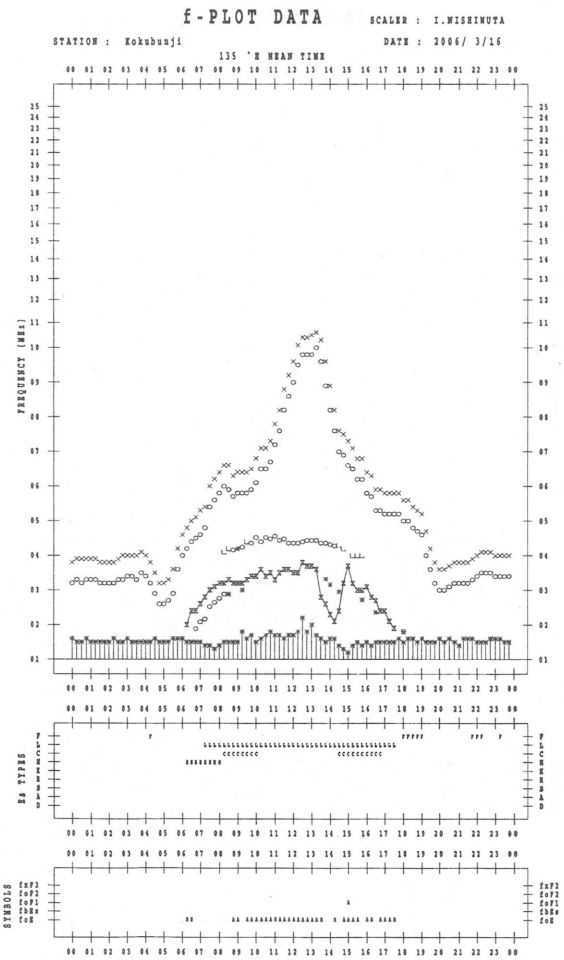
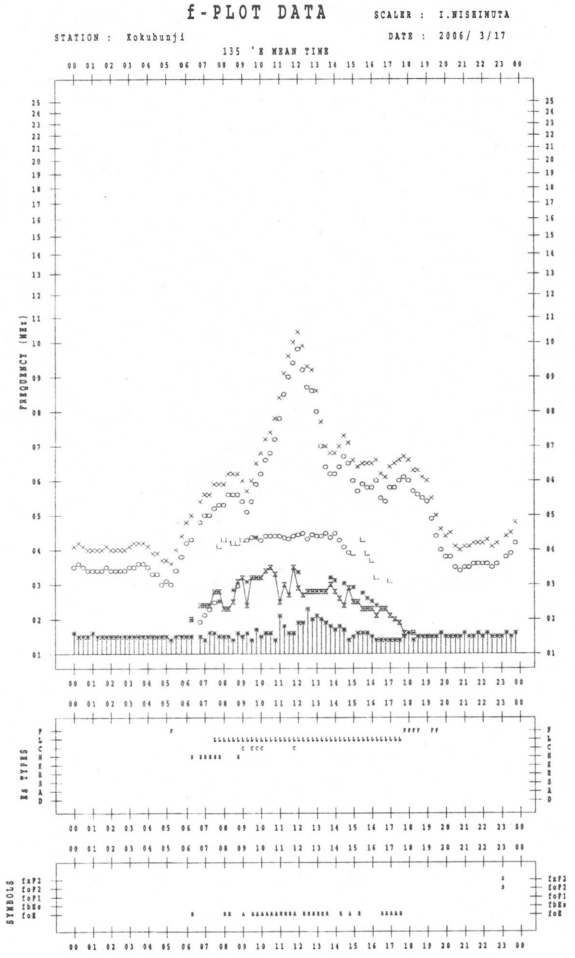
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/15
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/14
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/16
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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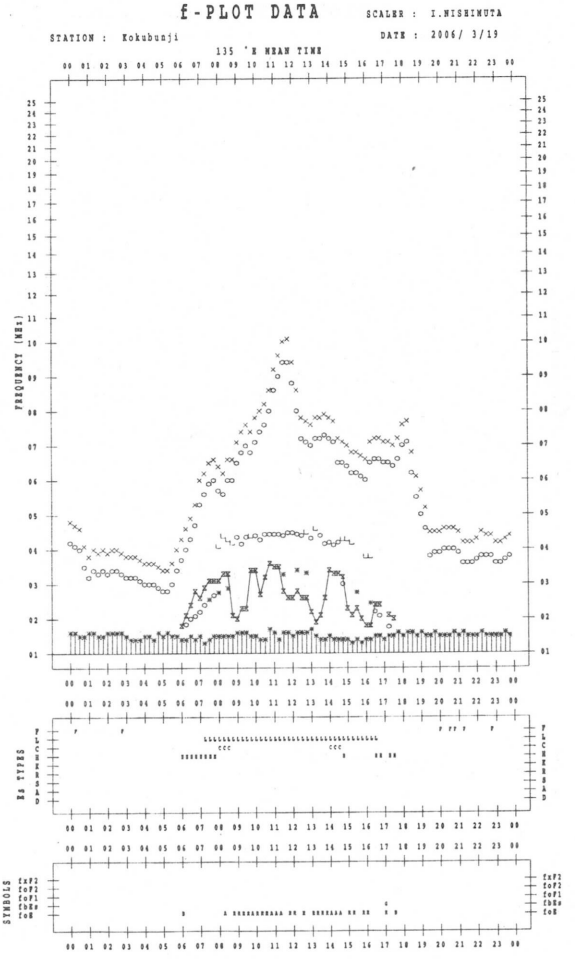
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/17
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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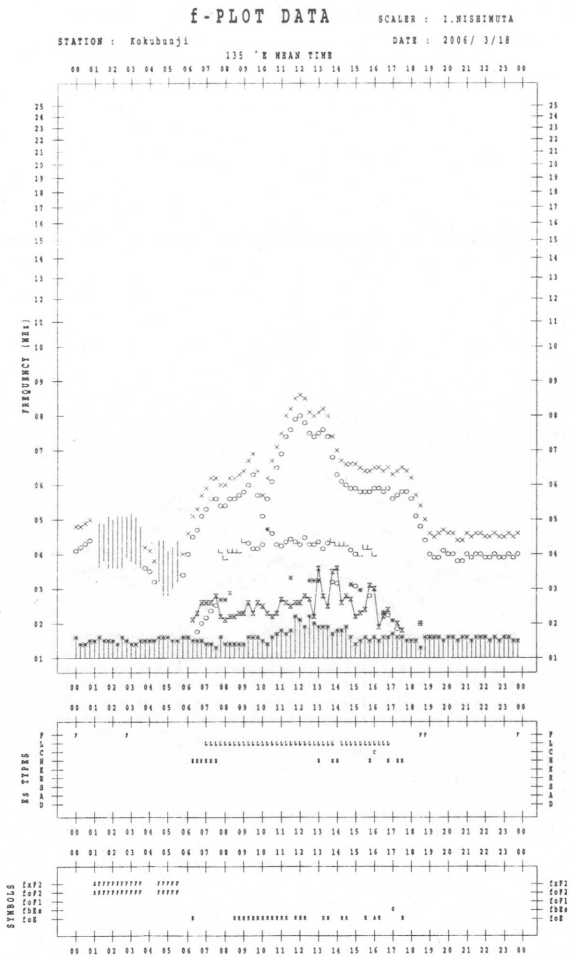
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/19
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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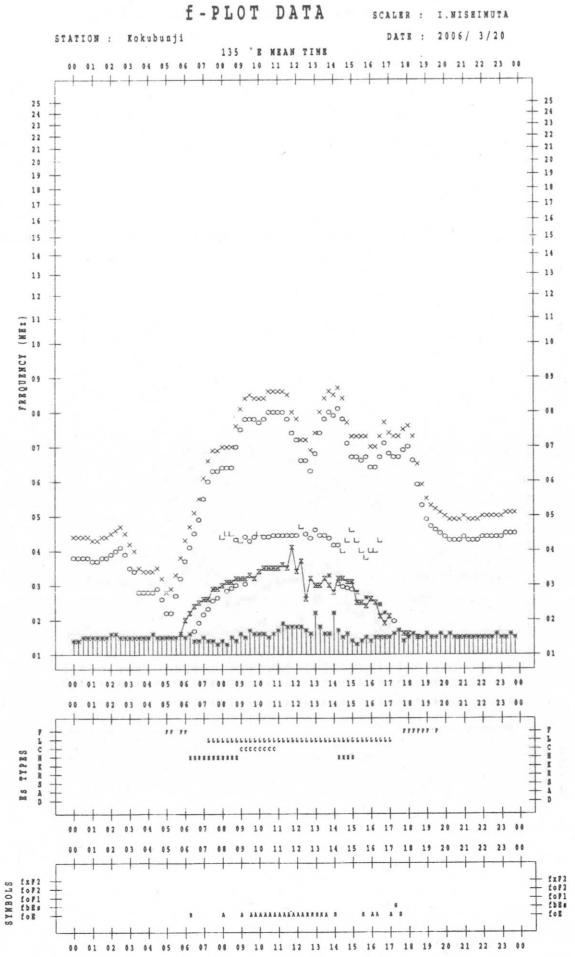
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/18
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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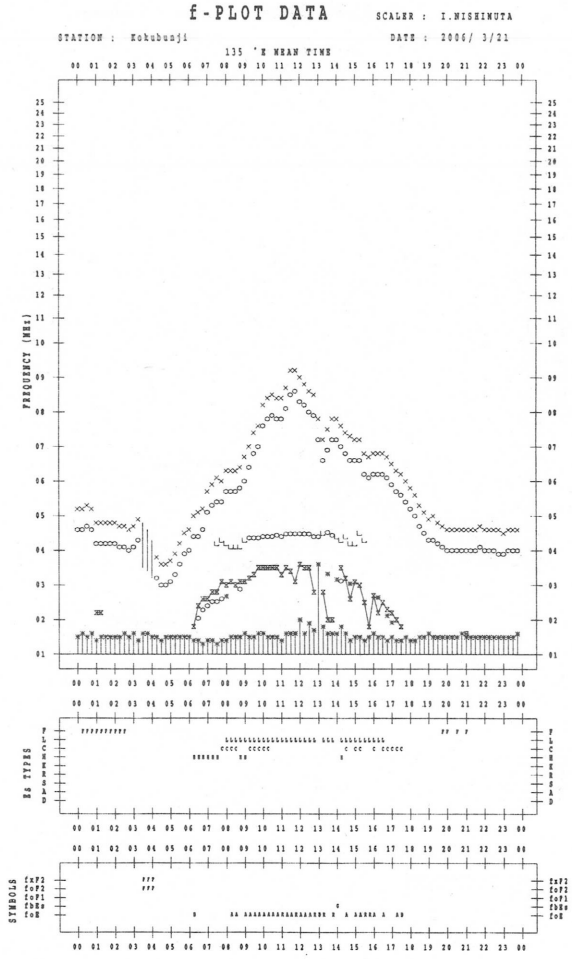
STATION : Kokubunji
DATE : 2006/ 3/20
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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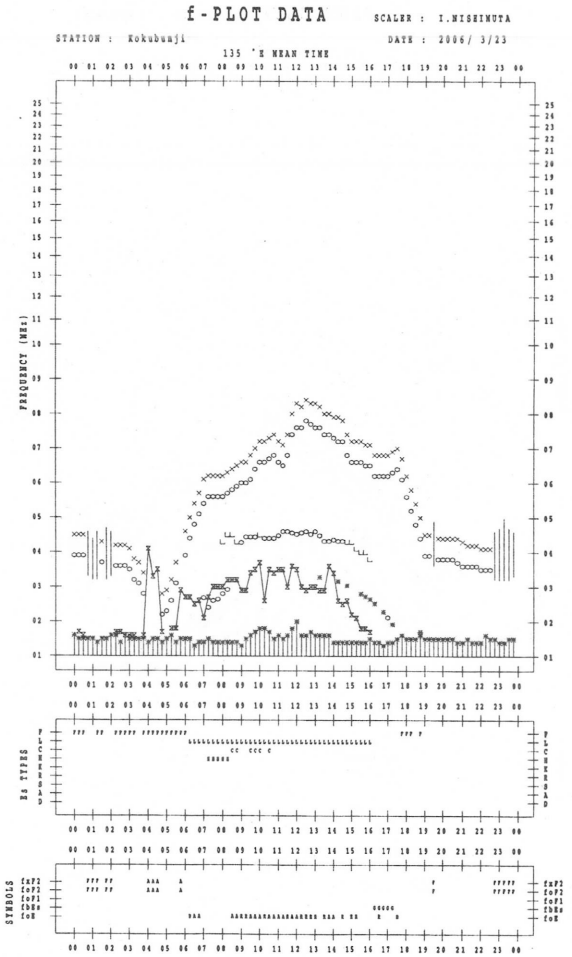
STATION : Kokubunji
DATE : 2006/ 3/21
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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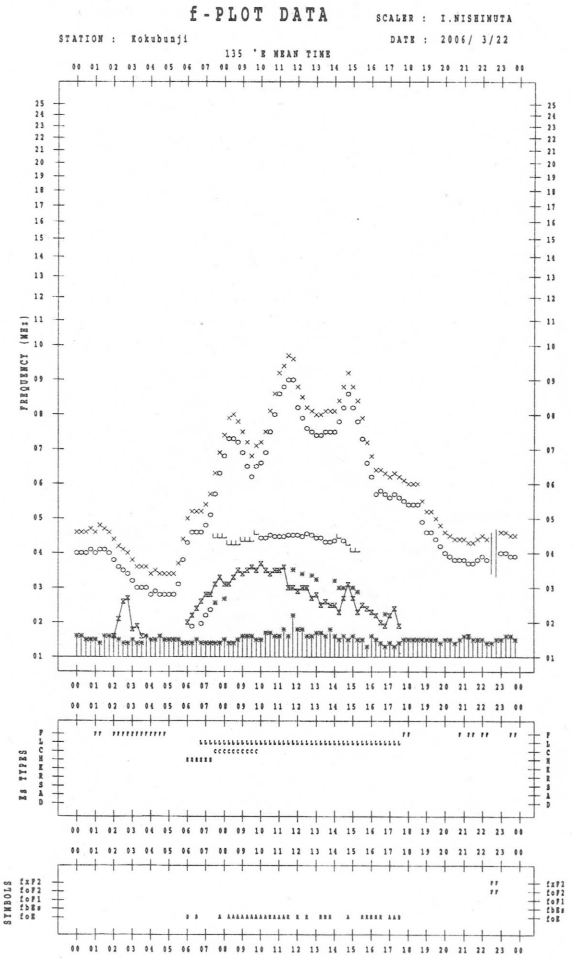
STATION : Kokubunji
DATE : 2006/ 3/23
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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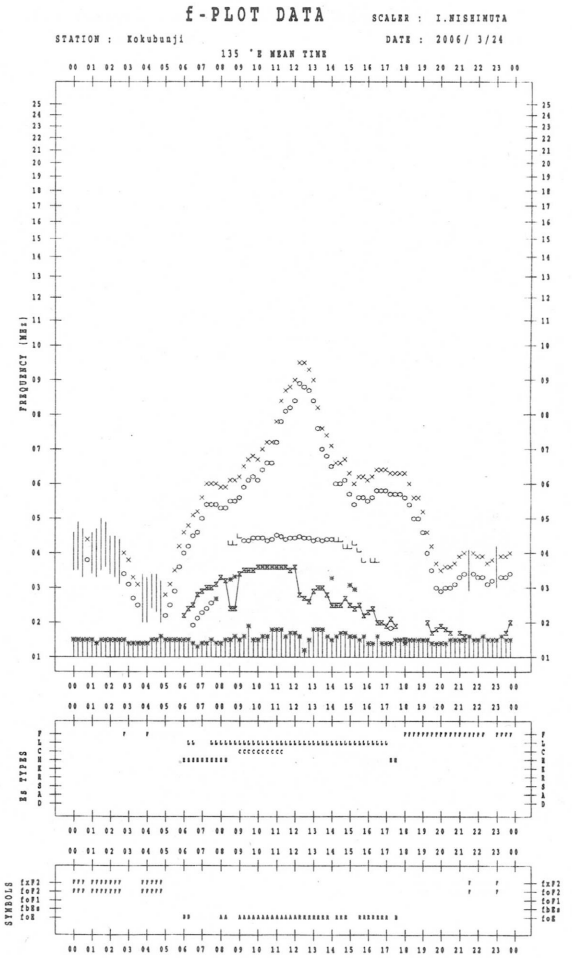
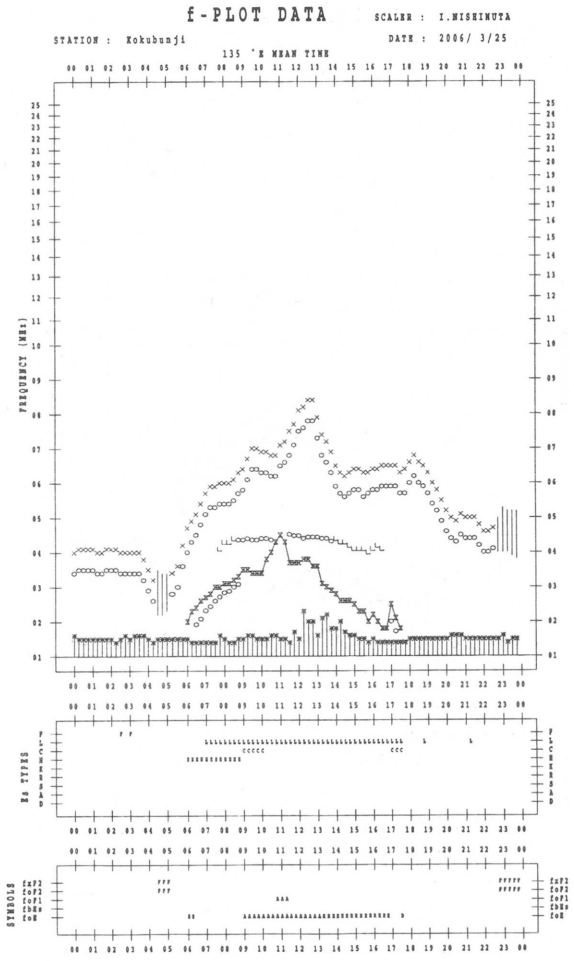
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/22
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/24
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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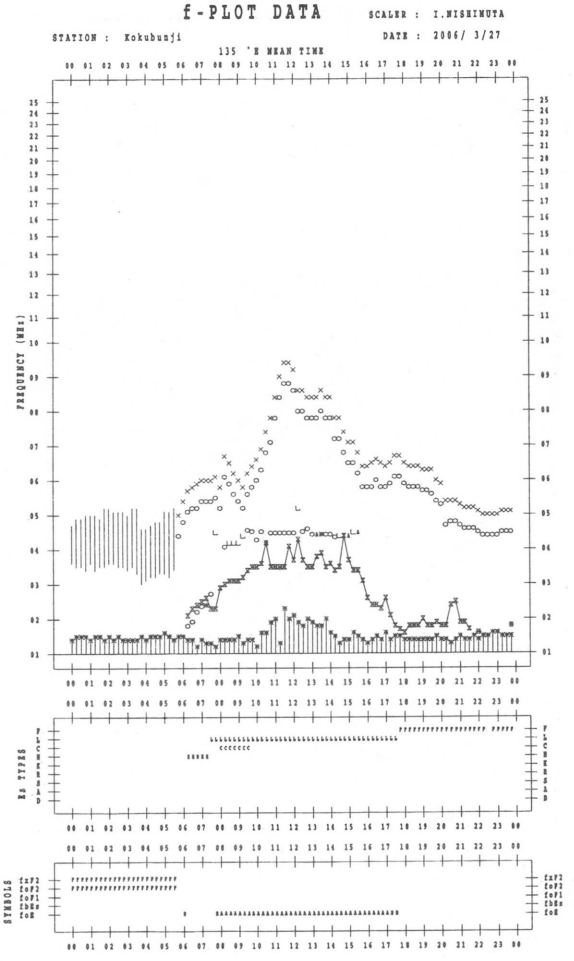
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/25
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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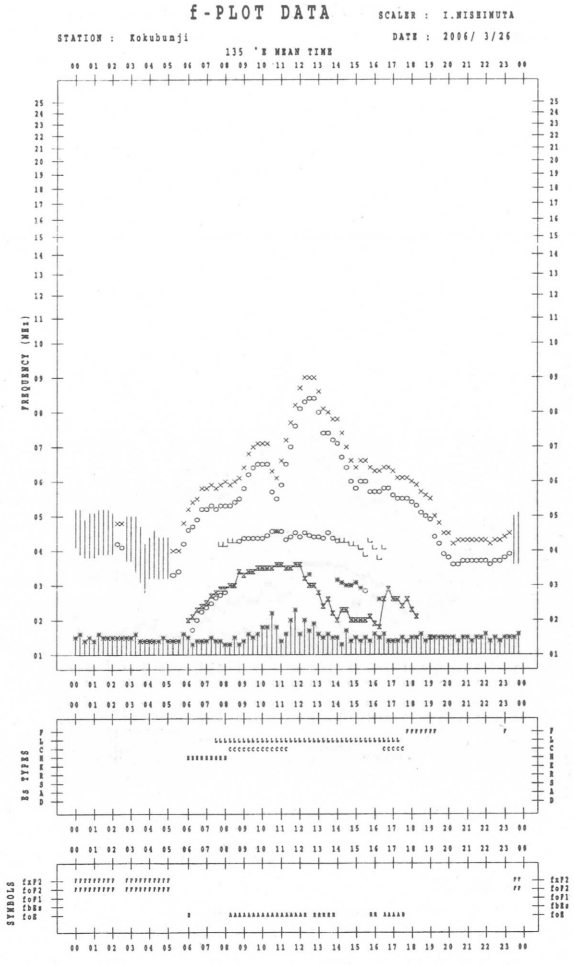
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/27
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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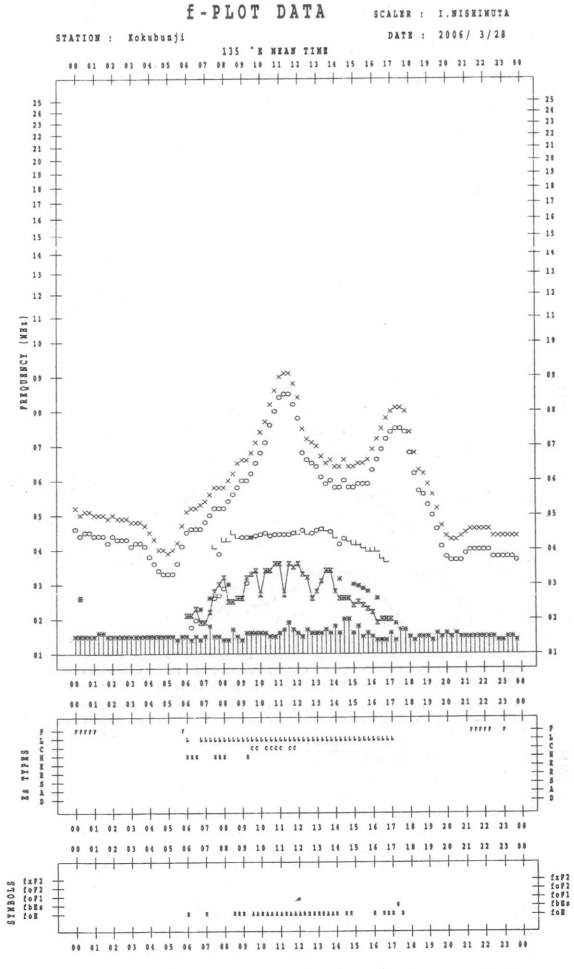
STATION : Kokubunji
DATE : 2006/ 3/26
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS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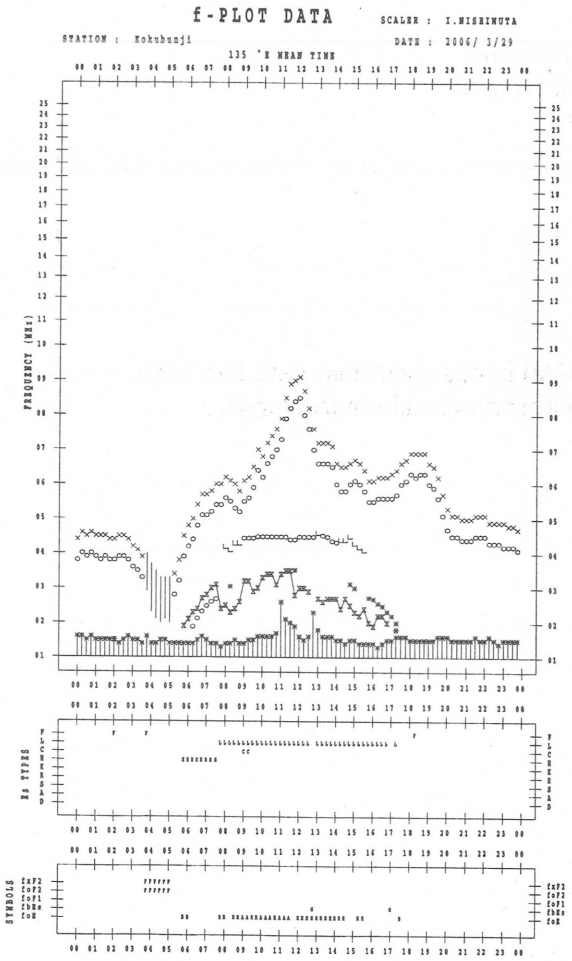
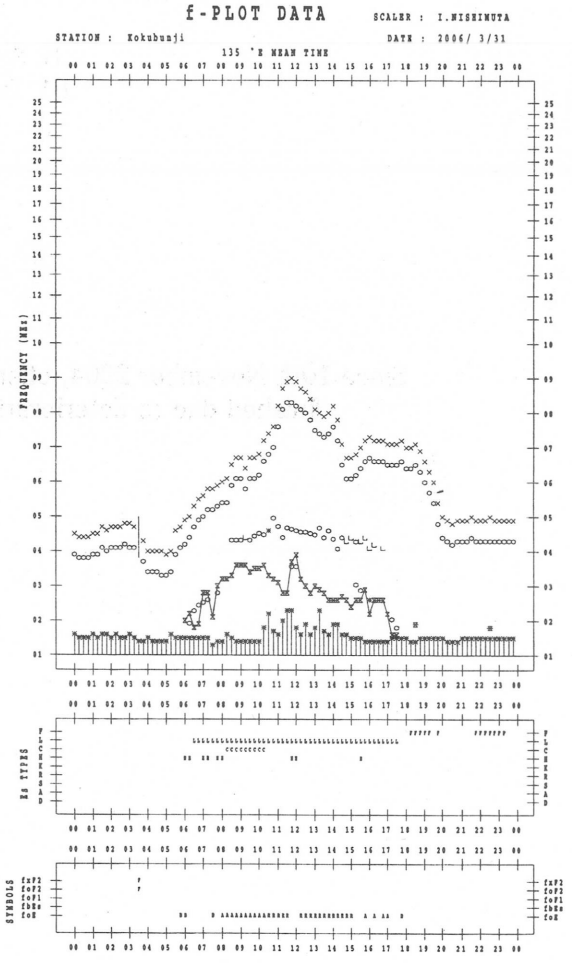
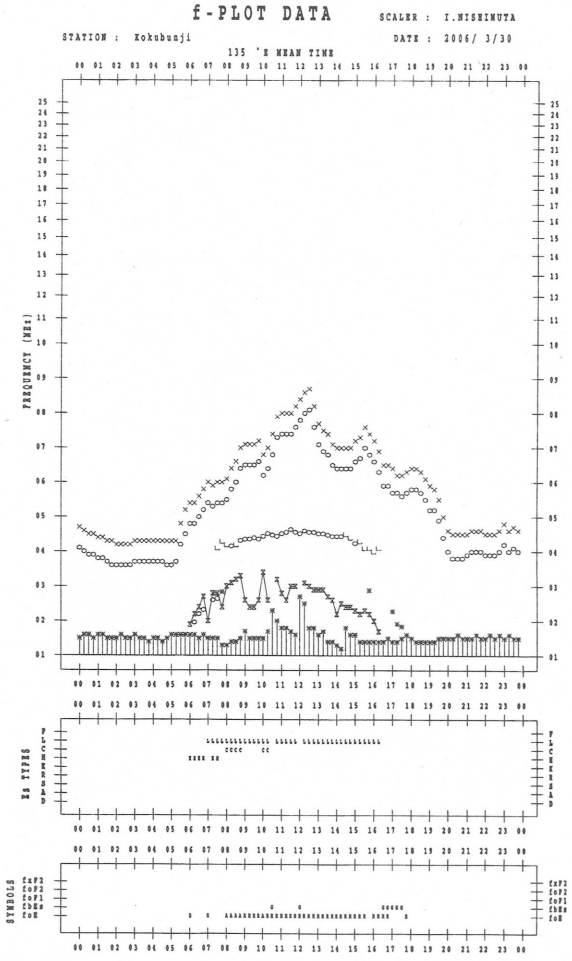
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/28
135 'E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/29
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/31
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS


f-PLOT DATA
SCALER : I.NISHIMUTA
STATION : Kokubunji
DATE : 2006/ 3/30
135 °E MEAN TIME
FREQUENCY (MHz)
Es TYPES
SYMBOLS

B. Solar Radio Emission
B1. Daily Data at Hiraiso
500 MHz

Since 10th November 2004, offering of 500MHz observational data has been finished due to deterioration of the observational environment.

B. Solar Radio Emission

B2. Outstanding Occurrences at Hiraiso

Hiraiso March 2006

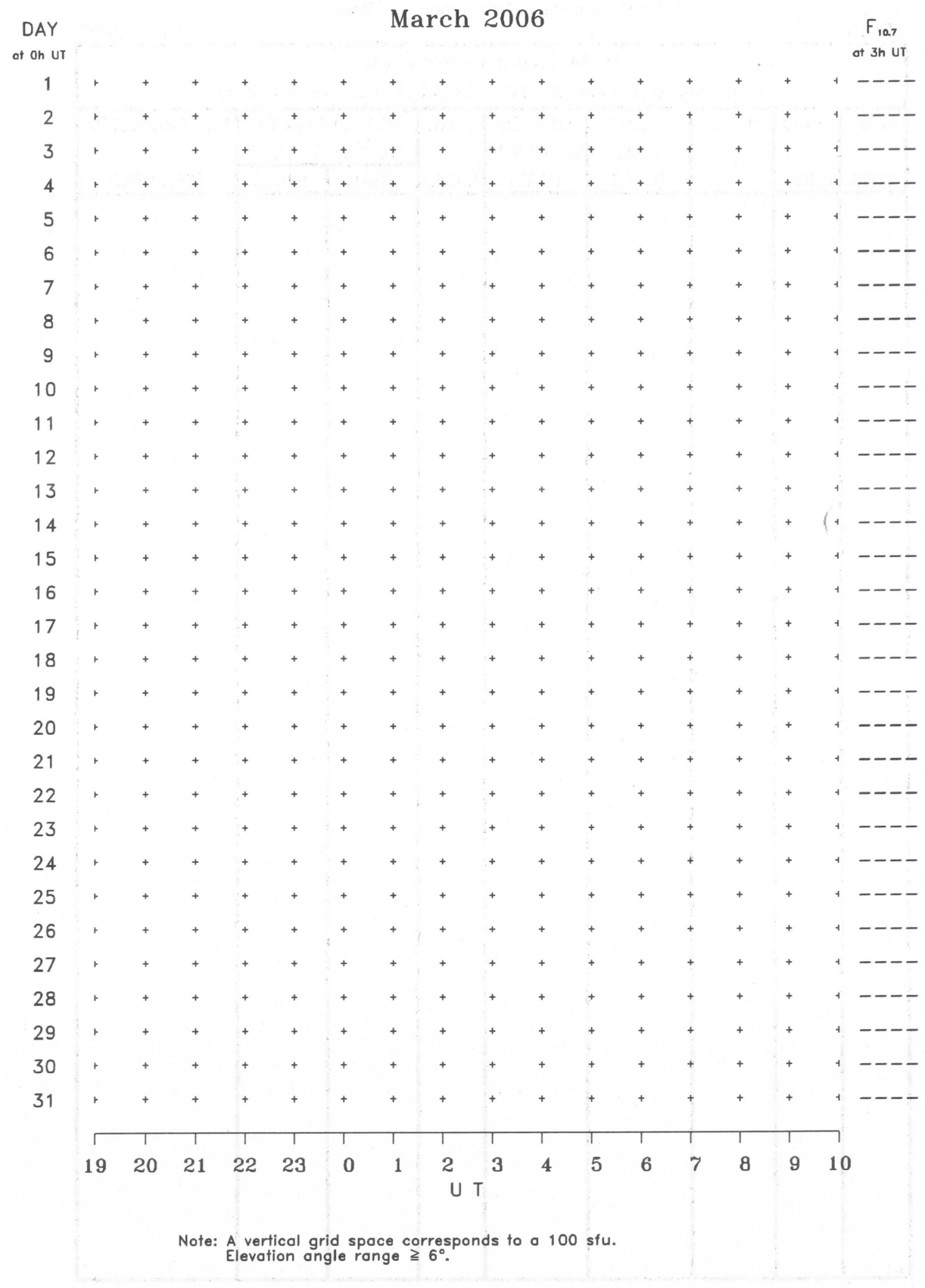
Single-frequency observations

Normal observing period: 2145 – 0845 U.T. (sunrise to sunset)

MAR. 2006	FREQ. (MHz)	TYPE	START TIME (U.T.)	TIME OF MAXIMUM (U.T.)	DUR. (MIN.)	FLUX DENSITY (10^{-22} W m^{-2} Hz^{-1}) PEAK	FLUX DENSITY (10^{-22} W m^{-2} Hz^{-1}) MEAN	POLARIZATION REMARKS

B. Solar Radio Emission

B3.Summary Plots of $F_{10.7}$ at Hiraiso



IONOSPHERIC DATA IN JAPAN FOR MARCH 2006
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☎ (042) (327) 7 5 4 0 (直通)

Queries about "Ionospheric Data in Japan" should be forwarded to :
National Institute of Information and Commnications Technology
2-1 Nukui-Kitamachi 4-chome, Koganei-shi, Tokyo 184-8795 JAPAN