## IONOSPHERIC VERTICAL INCIDENCE PARAMETERS

### F Layer Parameters

| Parameter | Dimension | Description |
|---|---|---|
| foF2 | 00.1 MHz | F2 layer o-mode (ordinary) critical frequency |
| fxF2 | 01.1 MHz | F2 layer x-mode (extraordinary) critical frequency |
| fzF2 | 02.1 MHz | F2 layer z-mode critical frequency |
| M3000F2 | 03.01 | F2 layer M factor (the ratio of the maximum usable frequency divided by the critical frequency). |
| h'F2 | 04 km | F2 layer o-mode minimum virtual height |
| hpF2 | 05 km | An estimate of the true height of the F2 layer (measurement of the ordinary mode virtual height at a frequency of 83.4% of the foF2). |
| h'Ox | 06 km | F layer minimum virtual height of the x-mode trace at a frequency equal to the foF2 |
| MUF3000F2 | 07.1 MHz | F2 layer maximum usable frequency for a 3000km path |
| hc | 08 km | The height of the maximum obtained by fitting a theoretical h'F curve for the parabola of best fit to the observed ordinary mode trace near foF2 and correcting for under-lying ionization |
| qc | 09 km | F layer scale height |
| foF1 | 10.01 MHz | F1 layer o-mode critical frequency |
| fxF1 | 11.01 MHz | F1 layer x-mode critical frequency. |
| M3000F1 | 13.01 MHz | F1 layer M factor (see code 03) |
| h'F1 | 14 km | F1 layer o-mode minimum virtual height |
| h'F | 16 km | F layer o-mode minimum virtual height |
| MUF3000F1 | 17.1 MHz | F1 layer maximum usable frequency (see code 07) |

### E Layer Parameters

| Parameter | Dimension | Description |
|---|---|---|
| foE | .01 MHz | E layer o-mode critical frequency. |
| foE2 | .01 MHz | E2 layer o-mode critical frequency (when it occurs it is between the normal E and F1 layers). |
| h'E | km | E layer o-mode minmum virual height. |
| h'E2 | km | E2 layer o-mode minimum virtual height. |

### Es Layer Parameters

| **Parameter** | **Dimension** | **Description** |
|---|---|---|
| foEs | .1 MHz | Es layer hightest o-mode frequency are which a mainly continuous Es trace is observed. |
| fxE | .1 MHz | Es layer highest x-mode frequency are which a mainly continuous Es trace is observed. |
| fbEs | .1 MHz | The blanketing frequency of layer used to derive foEs. |
| ftEs | .1 MHz | Top frequency of the Es trace (any mode). |
| h'Es | km | The minimim virtual height of the layer used to derive foEs. |
| Type of Es | | A characterization of the shape of Es trace. |