



## Observations of F3-Layer at Equatorial Region during 2005

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The existence of the F3-layer has been observed at Brazilian equatorial stations. The layer has also been observed at the newly established ionosonde station at Batu Pahat (lat.  $1^{\circ} 86'$  N, long.  $103^{\circ} 8'$  E), Malaysia. This station has been in operation since October 2004. Continuous sweep soundings are made every 15 minutes along with single frequency soundings. Greatest appearance of the F3-layer is around local noon while the least is after local dawn. The mean height for the layer is about 600 km reaching a maximum of about 900 km during the winter of 2004/2005. It is seen that the critical frequency of the F2 layer decreases with the appearance of the F3-layer. Similar observations have been reported at other equatorial ionosonde locations. This phenomena can be attributed to the equatorial anomaly and the upward neutral wind and  $\mathbf{E} \times \mathbf{B}$  drift. The observation reported is based on a one year recording of ionograms.