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TIDs propagation properties over the South Africa region

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Abstract content
 (Max 300 words)

Travelling Ionospheric Disturbances (TIDs) are said to be produced by the atmospheric gravitational waves propagating through the neutral ionosphere. These are smaller in amplitude and period when compared to most ionospheric disturbances and hence more difficult to measure.

Very little is known about the properties of the travelling ionospheric disturbances (TIDs) over the Southern Hemisphere regions since studies have been conducted mostly over the Northern Hemisphere regions. This paper presents a review of the physical properties and driving mechanisms of TIDs. The main aim of the project is to study the characteristics of the TIDs, such as period, velocity and temporal variations, using HF Doppler measurements taken in South Africa. Therefore possible data analysis methods for obtaining these characteristics will be discussed. The information gathered from this study will be valuable in future radio communications and will serve as means to improve the existing ionospheric models over the South African region.

Apply to be
 consider for a student
 award (Yes / No)?

Yes

Level for award
 (Hons, MSc,
 PhD)?

MSc

Main supervisor (name and email)
and his / her institution

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Would you like to
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No

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