

# **Solar Terminator-Related Ionosphere Derived from GPS TEC Measurements: A Case Study**

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## **A b s t r a c t**

We present a case study of ionospheric wave activity during solar terminator crossing using GPS TEC measurements. As a basic tool, the spatial gradient of total electron content (TEC) has been used. We tested with positive result the hypothesis on anisotropic response to assumed one-dimensional solar terminator forcing. The approximate drift velocity of irregularities has been computed. The wavelet analysis gave an interesting insight into variable frequency content of TEC gradient time series. We also proposed a filtering with respect to spatial scale allowing for resolving the spatio-temporal ambiguity.

**Key words:** ionosphere, solar terminator, total electron content, GPS.