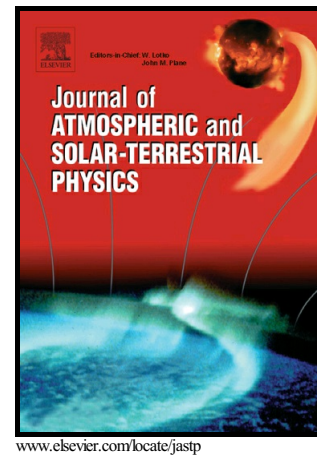


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# Seasonal, inter-annual and solar cycle variability of the quasi two day wave in the low-latitude mesosphere and lower thermosphere

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## Abstract

We analyzed 17 years (1993-2009) of horizontal winds measured by the medium frequency (MF) radar located at Tirunelveli (8.7°N, 77.8°E) and 10 years (2005-2014) of horizontal winds measured by a meteor radar located at Thumba (8.5°N, 77°E) to examine the seasonal, inter-annual, and solar cycle variability of the Quasi-Two Day Wave (QTDW) in the mesosphere and lower thermosphere region. These two radars are nearly co-located, but differ in their measurement technique. Comparison of the estimated QTDW amplitudes by the two radars shows that the amplitudes are larger in the meteor radar than those in the

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