



## Abstract Details

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**Title:** IWG01; Peculiar behavior of tropopause observed in tropical and extra tropical latitudes with CHAMP/GPS Radio Occultation measurements

**Abstract:**

A global analysis of structure and variability of tropopause is presented. The present analysis is based on radio occultation measurements by CHAMP/GPS from May 2001 to December 2003 (123,923 occultations). Tropopause height is defined by conventional lapse rate and cold point tropopause (LRT analysis). It is found to be increasing from tropics to extra tropical latitudes in comparison with earlier observations. This feature is more prominently observed in the Indian and Pacific oceans, and less observed in the parts of North and South America. Moreover the height of the tropopause is found to be increasing significantly in winter hemisphere. Significant hemispheric differences are also found both in the tropopause height and temperature. To elucidate the observed nature of the tropopause, we discuss the role of dynamical processes and their impact on chemical composition.

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