



## **VERTICAL RESOLUTION EFFECTS IN STUDIES OF TROPICAL TROPOPAUSE CLIMATOLOGY**

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The tropical tropopause region modulates the stratospheric-tropospheric-exchange of chemical species in the atmosphere. Radiosonde observations of high vertical resolution have been used in the past to address the characteristics of the tropopause but lack global coverage over the ocean regions. Model analyses and reanalyses offer global coverage but lack the vertical resolution necessary to identify some of the sharp tropopause features.

Temperature profiles of high vertical resolutions (between 100-1000 m) were retrieved from GPS radio occultations to look at the climatology of the tropical tropopause. The longitudinal and seasonal characteristics of the tropical tropopause, the impact of having higher vertical resolution retrievals, as well as the main differences with the analyses are discussed.