



## **Statistics of global tropopause from NCEP-NCAR reanalysis**

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In the last two or three decades the interest of the scientific community about tropopause is increasing and several works are done to better understand the physical mechanisms of the tropopause maintenance.

An accurate analysis of the observed tropopause state could lead to an improvement into the understating the nature of this transition region and which mechanisms determine its structure.

In this work we would like to exhibit an analysis of the climatological features and intraseasonal variability of the tropopause and we would extend those kinds of analysis to the whole NCEP-NCAR reanalysis dataset (1948-2005), in particular we will concentrate on the winter tropopause pressure.

The variability and the wave like structure of mid-latitude tropopause observed confirm the theories about the nature of this atmospheric features in this regions, strictly related to planetary waves, orographic waves and baroclinic disturbances;

We have also analysed changes in global and regional monthly means of tropopause pressure for the period in analysis. We have found a generalised increase in the tropopause height in the last two decades.

Our result are in according with the analyses obtained from ECMWF Reanalyses.

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