



ERA-5 and MERRA-2 temperature trends in the stratosphere

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The long-term trend of different atmospheric parameters has been studied separately during previous years in many papers. This study is focused on the temperature trends during 1980-2017. We present the trend for each month with respect to ozone turnaround during mid 1990s. The different reanalyses (MERRA-2 and ERA-5) are used for comparison. We analyzed every grid point to reduce the problem with zonal averages in different pressure levels. The results will show the complex view on the trend in the middle atmosphere (troposphere, stratosphere and lower mesosphere). We use different statistical method to reduce problem with discontinuity. We also compare results with AMSU observation, GPS-RO or radiosonde soundings.