Detail Analysis Of Stratospheric Trends Using ERA5

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Abstract

We analyze temperature, wind and other dynamical parameters climatology and trend. We study trends for every decade from 1980 to 2020 and their changes during this period. This study is focused on the pressure levels between 100-1 hPa which covers whole stratosphere and part of the mesosphere. We will also analyze impact of SSW or other stratospheric phenomenon. This will help us to find detail of trend behaviour in stratosphere. ERA 5 is one of the newest reanalysis which is widely used for middle atmosphere. It is based mainly on the satellite observations.

Keywords: ERA 5, homogeneity test, long term trends

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