



Comparison of wind characteristics from project ERA-40 and NCEP/NCAR reanalysis in the stratosphere

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This paper deals with comparison of wind characteristics between ERA-40 and NCEP/NCAR reanalysis in the selected pressure levels in the stratosphere. We compare wind speed in 100 and 10 hPa levels for selected grid point (32.5°N, 52.5°N and 72.5°N). All data from the period 1952 - 2002 are separated into 2 (1952 - 1989, 1990 - 2002) or 3 subperiods (1952 -1978, 1979-1994, 1995-2002) according to the trend of total ozone. Results for each grid point are averaged through all subperiod for regions 0-90°E, 300-360°E and are presented as an occurrence frequency. In this paper we compare only winter months (October- March). It can be seen that in pressure levels 100 hPa there are no differences between ERA-40 and NCEP in any regions and periods. But in the 10 hPa we can find little differences between these two reanalysis. Especially in the region 300-360°E of 32.5°N and 52.5°N we can see difference in peak frequency about 1%. In this paper will be also analyze trends of wind speed from both reanalysis in mention subperiods.