



## **Detail comparison of wind characteristics from ECMWF and NCEP/NCAR reanalysis in the middle latitude stratosphere**

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We are focusing on the detail comparison of reanalysis dataset from ECMWF and NCEP/NCAR centers. We compare reanalysis of wind speed and wind direction (pressure level 10 and 100 hPa) from NCEP/NCAR (1958-2008), ERA-40 (1958-2001), ERA-operim (2002-2008) and ERA-Interim (1989-2008). In this paper various differences between examined reanalysis can be seen. We use yearly and monthly averages of wind speed for selected region of middle latitude ( $52.5^{\circ}\text{N}$ ). Here we can see differences about 15-30% for 10 hPa and about 10% for 100 hPa. The bigger differences are observed between reanalysis ERA-Interim and other ones. In this work is also done a comparison of raw data for selected year (year and month with the biggest differences) and maps of differences for area  $30^{\circ}\text{N}-80^{\circ}\text{N}$  in the period 1958-2002 for each grid point ( $2.5^{\circ}\times 2.5^{\circ}$ ). Rather large differences were observed in some days between both wind speeds and wind directions.