



Long term trends of middle latitude stratospheric winds from NCEP/NCAR reanalysis

Michal Kozubek, Peter Krizan, and Jan Lastovicka

Institute of Atmospheric Physics, Aeronomy, Prague, Czech Republic (kozubek.michal@ufa.cas.cz)

NCEP/NCAR reanalysis provides us wind time series for period 1958 – 2010 in $2.5^\circ \times 2.5^\circ$ vertical resolution. That is why we can study long term trend of wind behaviour. We focus on two pressure levels (100 and 10 hPa) in middle latitudes (52.5°N). We study wind direction and speed and their connection to the other tropospheric/stratospheric phenomena (NAO, QBO etc.). The behaviour of wind characteristics in different longitudinal sectors of middle latitudes is compared, study of their sensitivity to NAO, QBO etc. is performed as well as study of the influence of wave propagation (planetary or stationary waves). The comparison of wind characteristics with characteristics of other important stratospheric variables (ozone, temperature etc.) is also planned.