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The 11-yr solar cycle in MERRA reanalysis and CCM SOCOL v3.0

Michal Kozubek (1), Peter Krizan (1), and Eugene Rozanov (2)

(1) Institute of Atmospheric Physic, Prague, Czech Republic (kozubek.michal@ufa.cas.cz), (2) PMOD/WRC and IAC ETHZ, Davos Dorf, Switzerland

This poster shows connection between several atmospheric parameters (temperature, eastward and northward wind component) and different solar/stratospheric/tropospheric phenomena (10.7 cm flux, QBO, NAO, and ENSO). We analyze monthly mean data from MERRA reanalysis and model output of CCM SOCOL v3.0 for pressure levels: 1000 - 1 hPa (MERRA) and 1000 - 0.1 hPa (model). The previous studies analyzed data just from ERA-40 until 2008. We cover period from January 1979 to December 2012. We are looking for trend and statistical significance of temperature and wind components zonal averages in this period using multi-linear regression. We compare results from MERRA reanalysis and model output.