

**Simulation of the hail storms with the COSMO NWP model**

Zbynek Sokol

Institute of Atmospheric Physics ASCR, Czech Republic

Pesice, Petr (Institute of Atmospheric Physics ASCR)

Bliznak, Vojtech (Institute of Atmospheric Physics ASCR)

Zacharov, Petr (Institute of Atmospheric Physics ASCR)

*E-mail: sokol@ufa.cas.cz*

Several observed convective storms accompanied by hail from 2012 and 2013 will be simulated using the COSMO NWP model. The model will be integrated with a horizontal resolution of 1 km in the domain of the Czech Republic and observed radar reflectivity and satellite data from the METEOSAT will be assimilated. The model will use two-moment microphysics proposed by Seifert and Beheng. The aim of the study will be the evaluation of the model ability to nowcast severe convective events accompanied by hail. The forecast quality will be studied in dependence on lead time and assimilated data.