Using the high-resolution observations for the precipitation forecast assessment: benefits and difficulties.

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The ICE-POP 2018 project was focused on winter weather prediction over complex terrain based on an intensive observation campaign. Existing observational network has been expanded by adding new stations near sports venues and by creating supersites. The last ones were equipped with a tools set of different types to observe precipitation – radars, cameras and other sensor systems.

Dense ground observational network together with radar data open possibility for verification of the high-resolution models and for data cross validation as well.

We analyzed ground observations for eight major snow events during November 2017 - March 2018 to determine their variability and benefits for verification of COSMO model with 550 m grid spacing. Precipitation assessments using different approaches of "observation – simulation" matching are presented.