



The evaluation of the operative QPF of convective rainfalls over the Czech territory

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We present the verification results of the QPF produced by the NWP model ALADIN CZ, operated in the Czech Hydro-meteorological institute (CHMI). The CHMI operational product MERGE, which merges the radar-based rain rate with the data from the gauge stations, was the source of the verification data. In addition to the traditional verification scores we applied the spatial (fuzzy) verification techniques. The contribution consists of two parts as the forecast of 3h rainfalls was tested in two steps.

Firstly, the QPF of rainfalls from convective period in 2009 was verified before and after the ALADIN CZ modification. In June and July 2009, convective rainfalls with the return period of more than 100 years caused devastating flash floods in many Czech localities. The verification results prove a successful modification of convection parameterization.

In the second part, the results of the verification analysis are presented for the operational QPF produced by the modified ALADIN-CZ. We verified the summer period 2013 which includes the 2013 flood in the central Europe. The verification analysis considers the influence of (i) convective forcing, (ii) the area extent and duration of the convective events, (iii) threshold precipitation, and (iv) forecast lead time. We conclude with the discussion what intelligible user-oriented information about the QPF skill follows from the verification.