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Forming of the products of non-hydrostatic modelling systems for short-range weather prediction COSMO-RuBy (Hydrometcentre of Russia) и WRF-ARW (Belhydromet) / Rozinkina I.A., Rivin G.S., Burak R.N., Astakhova E.D., Alferov Yu.V., Blinov D.V., Bykov Ph.L., Vaskova D.V., Volkova V.A., Vorob'eva E.V., Zayko P.O., Zhabina I.I., Nedachina A.Yu., Prockharenya M.I., Eliseev G.V. // Hydrometeorological Research and Forecasting, 2021, no. 4 (382), pp. 6-29.

The paper considers the results of activities on the development of output products for the non-hydrostatic short-range numerical weather prediction systems: COSMO-RuBy with a grid spacing of 2.2 km at the Hydrometcentre of Russia and WRF-ARW with a grid spacing of 3 km in Belhydromet. The important results of the activities are the organization of the exchange of unified products between the countries and the development at the Hydrometcentre of Russia of two technologies for obtaining the unified products: the multi-model lagged ensemble system and the system for the complex correction based on machine learning of model results. A specialized web-site providing convenient work of forecasters with the COSMO-RuBy results and unified products was created at the Hydrometcentre of Russia based on the feedback from forecasters. The systems of common visualization and verification of COSMO-RuBy and WRF-ARW results are implemented in Belhydromet.

Keywords: numerical weather prediction, ensemble forecasting, visualization, machine learning

Tab. 4. Fig. 9. Ref. 9.