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Experimental Methods of the Hydrometcentre of Russia for Producing Storm Warnings about Adverse and Severe Weather Events / Dmitrieva T.G., Smirnov A.V., Alekseeva A.A., Vasil'ev E.V. // Hydrometeorological Research and Forecasting, 2023, no. 4 (390), pp. 46-71.

The results of testing a method for very-short-range forecasting of precipitation intensity (for a period up to 12 hours) and wind gusts (up to 2 hours), as well as the technology for the diagnosis of severe convective events based on radar data for use in the operational practice of storm warning about adverse and severe convective weather events are analyzed. Case studies of synoptic conditions for the occurrence of such events are considered. New types of cartographic products of the Cosmo-Ru-2.2 high-resolution numerical model are presented. The benefit from using new experimental methods in operational practice is assessed.

Keywords: adverse and severe weather events, nowcasting, precipitation intensity, squall, wind gusts, radar-based diagnosis, DMRL-C, COSMO-Ru2.2 high-resolution numerical model

Tab. 2. Fig. 21. Ref. 10.