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Development of the long-range forecast system at Hydrometcentre of Russia in 2020 /

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A brief description is given for the works carried out in 2020 to implement the long-range forecast technology based on the SLAV072L96 multiscale hydrodynamic atmosphere model. The purpose of these works was an improvement in simulating the deep convection and stratosphere dynamics.

The works comprised the improvement and verification of the parameterizations for subgrid-scale processes and the whole model using long-range forecasts computed from historical initial data. As a result, the model correctly reproduces the main features of the annual mean precipitation field and zonal mean wind in the stratosphere.

Keywords: long-range forecasts, global atmosphere model, parameterizations of subgrid-scale processes

Fig. 3. Ref. 26.