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**Formation conditions of hazardous hard rime accretion in the Polar Urals** / Leonov I.I. // Hydrometeorological Research and Forecasting, 2022, no. 4 (386), pp. 20-35.

Synoptic conditions for the formation of high-intensity hard rime accretion on the territory of the Polar Urals are considered. A leading role of mesoscale processes primarily related to the terrain features in the formation of hard rime is revealed. Numerical experiments are implemented to reproduce the cases of hard rime formation on the territory of the Rai-Iz mountain range using the WRF-ARW mesoscale model. The simulation results and the methods used to interpret them made it possible to obtain detailed fields of meteorological parameters necessary for the correct assessment of the probability and intensity of the hard rime formation. It was also shown that it is reasonable to use model spatial steps of not more than 2 km for successful modeling of ice accretion in the form of hard rime.

*Keywords:* severe weather events, ice accretion, icing, rime, hard rime, numerical weather prediction, WRF-ARW

Tab. 1. Fig. 7. Ref. 11.