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Forecasts for the 2025 spring flood were verified based a methodology developed and used at Sberbank based on an artificial intelligence model. Water level forecasts for the 2025 spring flood were verified using Sberbank's model for 1,083 river gauges located virtually throughout Russia. Long-term maximum water level forecasts for the 2025 flood period were verified for 88 river gauges using various methodologies. However, these forecasts currently do not fully meet the functional requirements of end users for Roshydromet forecast products and are inferior to those issued by the Hydrometeorological Center of Russia. A proposed correction to the forecasts based on Hydrometcentre of Russia methodology significantly improves their reliability. A methodology for generating probabilistic forecasts is recommended, based on the assumption that deterministic forecast errors flow the normal distribution with constant variance.

Keywords: flood forecasts, artificial intelligence, hydrological model, river gauge, water level, hydrograph, long-term forecast, verification, correction

Tab. 3. Fig. 4. Ref. 23.