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For the rivers of the Kama basin, two methods have been developed for daily short-term forecasting of average daily water discharges with a lead time of 1, 2, and 3 days.

The first technique uses the HBV-96 river runoff formation conceptual model and the subsequent correction of forecasts outputs. The second technique is based on the hydrograph extrapolation method and is limited to the data of hydrological observations available by the date of the forecast.

For the first technique, the expected values of the COSMO-Ru meteorological model temperature and precipitation forecasts are used for the lead-time period of the hydrological forecast. The influence of meteorological forecast errors on the accuracy of river streamflow forecasts was analyzed.

The results of the verification based on an independent sample showed that, in general, both methods give a satisfactory forecast quality. The technique that uses the runoff formation model and meteorological information is slightly more accurate than the hydrograph extrapolation method, and its advantage increases with increasing forecast lead time.

Keywords: Kama basin, water discharge, hydrological model, correction, extrapolation, verification, forecast quality

Tab. 3. Fig. 2. Ref. 26.