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A quantitative assessment of the influence of the uncertainty in meteorological elements during the period of the lead time of long-term river runoff forecasts on their error is proposed.

Examples of such assessment are given for long-term forecasts of various characteristics of the water inflow into the Cheboksary Reservoir and the runoff of rivers in the Oka, Kama, Tobol and Don basins, which were obtained using the ECOMAG, DWAT, HBV river runoff formation models and the ensemble approach.

It is shown that the influence of the uncertainty in the course of meteorological characteristics depends not only on climatic conditions of the formation of river runoff, but also on the accuracy of its modeling. As increasingly advanced river runoff formation models are introduced, this uncertainty will become the main factor determining the quality of its forecasting.

Keywords: river runoff, forecast, lead time, error, meteorological elements, uncertainty, assessment

Tab. 5. Ref. 20.