

**DOI: <https://doi.org/10.37162/2618-9631-2024-1-118-134>**

**Short- and medium-range streamflow forecasting of the Don basin rivers** / Khristoforov A.V. // Hydrometeorological Research and Forecasting, 2024, no. 1 (391), pp. 118-134.

For the rivers of the Don basin, the Hydrometcentre of Russia has developed a methodology for daily short- and medium-range forecasting of streamflow and water levels. Average daily discharges and water levels are predicted throughout the year with a lead time of 1 to 10 days based on the hydrograph extrapolation method, which takes into account their values for the date of the forecast and for the previous 5 days. To estimate the parameters of the forecasting scheme, hydrological observation data for each river section are used.

The technique gives satisfactory results and can be used within the framework of an automated system for preparing and issuing forecasts in order to provide necessary forecast information for making operational decisions on the use of water resources of the Don basin rivers and protecting the population from dangerous floods.

*Keywords:* Water discharge, water levels, forecast, lead time, verification, error, forecast accuracy

Tab. 5. Fig. 3. Ref. 14.