Modeling of The River Rioni Flow

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The assessment of such processes as floods and flash floods, made conditional on a number of undetermined factors, cannot be entirely accurate. However, the implementation of calculations instills confidence that the existing problems can be solved with approximations sufficient for practical purposes.

The present research work uses the methods of the mathematical modeling of the river Rioni flow to develop a forecast method for catastrophic discharges of flash floods. To predict the properties of catastrophic flash floods, it is essential to establish the average number of falling-outs of peak discharges in a given time period, the magnitude of peak discharges, their average duration, and average intervals between catastrophic discharges of freshets. The solution to these and related issues presents one of the pressing problems of hydrology.