

Towards modelling of streamflow using soft tools

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Abstract Streamflow modelling is perhaps the most sought after research topic for hydrologists all over the world owing to its vital importance in design, construction, operation and maintenance of many hydraulic structures. Accurate forecasting of streamflow well in advance will help in saving human life as well as property damage. This paper presents modelling of streamflow using soft computing tools of Artificial Neural Networks (ANN) and Genetic Programming (GP) at two stations in the Narmada River basin, India. The developed models forecast streamflow one day in advance with reasonable accuracy. The relatively new soft technique of GP seems to work better than already established technique of ANN.

Key words streamflow; soft tools; artificial neural networks; genetic programming