عنوان مقاله:

Prediction of river discharge using the bayesian neural network

محل انتشار:

نویسنده:

Reza Dehghani - *Master of Water Resources, University of Tabriz*

خلاصه مقاله:

Prediction of river discharge is importance for reliable planning, design and management of water resources projects. This study investigates the applicability of Bayesian Neural Network (BNN) for prediction of river discharge time series in the Soufichay river, Iran. Daily river discharge time series for period of 1997 to 2010 of Tazehkand hydrometric station from Soufichay river was used. To obtain the best input–output mapping, different input combinations of antecedent daily river discharge were evaluated. The performance of the models were evaluated through the four performance criteria: Correlation Coefficient (CC), Root Mean Square Error (RMSE), the Nash–Sutcliffe efficiency coefficient (N-S) and Bias criteria. The results showed that the bayesian neural network model with CC (0.991), RMSE (0.031m3/s), N-S (0.981) and Bias(-0.006) performance acceptable predicted for daily river discharge time series

کلمات کلیدی:

Bayesian neural networks, Discharge, Soufichay

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