

عنوان مقاله:

Comparison of Regression, ARIMA and ANN Models for Reservoir Inflow Forecasting using Snowmelt Equivalent (a (Case study of Karaj

محل انتشار:

مجله علوم و فناوری کشاورزی, دوره 7, شماره 1 (سال: 1383)

تعداد صفحات اصل مقاله: 14

نویسنده:

خلاصه مقاله:

The present study aims at applying different methods for predicting spring inflow to the Amir Kabir reservoir in the Karaj river watershed, located to the northwest of Te-hran (Iran). Three different methods, artificial neural network (ANN), ARIMA time se-ries and regression analysis between some hydroclimatological data and inflow, were used to predict the spring inflow. The spring inflow accounts for almost *F*₀ percent of annual inflow to the reservoir. Twenty five years of observed data were used to train or calibrate the models and five years were applied for testing. The performances of models were compared and the ANN model was found to model the flows better. Thus, ANN can be .an effective tool for reservoir inflow forecasting in the Amir Kabir reservoir using snowmelt equivalent data

كلمات كليدى:

Artificial Neural Network, ARIMA, Regression analysis, River flow forecasting

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/1816274

