

Study on simplified model for estimating evaporation from reservoirs

ABSTRACT

In this study, the Linacre evaporation model was tested for its accuracy using daily, weekly and monthly records. The records were collected from class A evaporation pan installed at Algardabiya Reservoir, Sirt, Libya. The records for three years were used to calibrate and validate the model. Statistical tests show that the model gives a reasonable accuracy. The errors in the model prediction are 5.8%, 8% and 8.5% for weekly, monthly and daily prediction respectively. Thus, the Linacre model can be used when the available meteorological data is limited (air temperature only) and for all types of record such as daily, weekly and monthly.

Keyword: Prediction; Evaporation; Model; Reservoir; Algardabiya; Arid region; Testing