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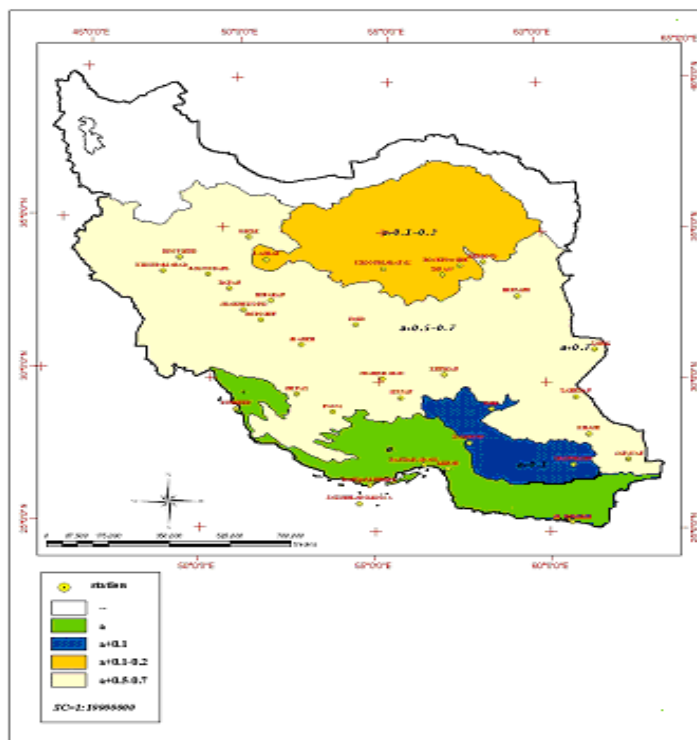
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بحث و نتیجه گیری

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Calibration of data from Class A pan with Thornthwaite method in arid regions of Iran

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(Received: 16 November 2008, Accepted: 27 April 2009)

Abstract

The most precise and simple method of evaporation measurement is application of pans in which class A pan is used in Iran. In contrast, there are many empirical methods which are used for estimating the evapotranspiration. In this study, Thornthwaite method was used due to the simplicity of its parameters and then we tried to use it for evaluating evapotranspiration by changing its parameters. Because of its improper estimation in Iran's climatic conditions in comparison with pan data we concluded that a considerable percentage of monthly evaporation with thornthwaite method with corrected alfa in different stations, have a good conformity with monthly evaporation measured with class A pan in the error range of 30% and in we added 0.5 unit to the exponent of Thornthwaite formula to having acceptable results for arid and semi arid region. In fact, the formula is not efficient in measurement of evapotranspiration without correction.

Keywords: Evapotration, class A pan, thornthwaite method