

Comparison of different methods for the estimation of the reference crop evapotranspiration in the Florina region

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This research work deals with the estimation of the evapotranspiration of the reference crop. Many scientists dealt with this problem, some of them theoretically, other empirically and gave equations that relate meteorological observation with the evapotranspiration of a reference crop. The study area is the prefecture of Florina in Western Macedonia, where several automatic meteorological stations operating since November 2001, are available. In this paper the observations recorded in two of these stations are used to calculate the evapotranspiration of a reference crop with the methods of Penman - Monteith, Blaney - Criddle, modified Blaney - Criddle, Makking, Jensen - Haise, and Thornthwaite. The results of each method are compared and some differences among them are as high as 50%.