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Usage the Point Analysis Algorithm (SANN) on Drought Analysis

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Abstract : In arid and semi-arid regions like our country Evapotranspiration is the greatestportion of water resource. Therefor knowlege of its changing and other climate parameters plays an important role for planning, development, and management of water resource. In this search the Trend of long changing of Evapotranspiration (ET0), average temprature, monthly rainfall were tested. To dose, all synoptic station s in iran were divided according to the climate with Domarton climate. The present research was done in semi-arid climate of Iran, and in which 14 synoptic with 30 years period of statistics were investigated with 3 methods of minimum square error, Mann Kendoll, and Vald-Volfoytz Evapotranspiration was calculated by using the method of FAO-Penman. The results of investigation in periods of statistic has shown that the process Evapotranspiration parameter of 24 percent of stations is positive, and for 2 percent is negative, and for 47 percent. It was without any Trend. Similary for 22 percent of stations was positive the Trend of parameter of temperature for 19 percent , the trend was negative and for 64 percent, it was without any Trend. The results of rainfall trend has shown that the amount of rainfall in most stations was not considered as a meaningful trend. The result of Mann-kendoll method similar to minimum square error method. regarding the acquired result was can admit that in future years Some regions will face increase of temperature and Evapotranspiration.

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