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Analysis of precipitation trends in the Central Kavir basin of Iran during 1951-2007

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Abstract

In this research study the daily and annually trends of precipitation in the central Kavir basin of Iran during 1951-2007. The pixel data of daily precipitation from APHRODITE's data base with a spatial resolution of 0.25° have been used. The Mann-Kendall (MK) non- parametric test has been used for determining the precipitation trend in this area. The trends have been tested in 3 levels 90%, 95% and 99%. This study illustrated that in confidence level of 99%, some area such as Loot Kavir had decreasing trend and some other area such as western and north heights of basin had rising trend of precipitation. But more than 80% of area doesn't indicate any significant trend for annually precipitation in this 58 years period.

Keywords: Precipitation, Trend, Man-Kendall, Central Kavir.

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