O 37. HOMOGENITY AND TREND ANALYSIS OF ANNUAL TEMPERATURE CHANGE IN KONYA KARAPINAR BASIN

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ABSTRACT: Homogenity and trend analysis are two important features of hydrological meteorological time series. In this study, Karapinar meteorological station (station No. 17902), located in the Konya basin in Turkey, with an average annual temperature trends of meteorological parameters and homogeneity analyses were performed. The annual average temperature data were evaluated statistically and the presence of a trend and hydrological change point, if any, was investigated. The data of average annual temperature of 56 years has been provided by the General Directorate of Meteorology (MGM) and if the data are random among themselves or not was determined by using Run Test. Annually change was determined by Pettitt and Standard Normal Homogeneity test methods. Annually temperature change was determined 95% confidence interval. Both methods gave consistent results in determining the annual average temperature variation. For trend analysis, Sen's T Test, and Spearman's rho (SR), Test Statistics methods gave consistent results. These tests were examined according to the 0.05 significance level.

Keywords*: Konya Basin, Trend analysis, Standard normal homogeneity test, Pettitt test*