



## **Temperature Trends in Iran During the Last Half Century**

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Iran is located in mid latitude dry zone. Mean annual temperature of the country is about 18 degree Celsius. During the past 50 years we could see positive and negative trends in temperature time series in Iran. In order to evaluate the trends, temperature records from Jan 1951 to Dec 2000 were examined using about 414000 observations throughout Iran. Kriging interpolator was applied to monthly temperature records and 600 maps with a spatial resolution of 15\*15 Km have been made. So each map consists of 7238 pixels. In order to detect the spatial pattern of temperature trends, time series of maximum, mean, and minimum temperature over every pixel of the maps have analyzed using least squares regressions.

This trend analysis suggests that mean annual temperature of Iran shows a positive trend during the last half century by a factor of about 2.2 degree Celsius per century. Increasing trend of maximum temperature of Iran is about 1.4 degree Celsius per century. Meanwhile the magnitude of increasing trend for minimum temperature of the country is about 3.0 degree Celsius per century.