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## Analysis of Air Temperature, Relative Humidity and Evaporation over Iraq Using ECMWF Reanalysis

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**Abstract:** The study was for an examination conducted to analyze air temperature and relative humidity as well as evaporation in selected areas of Iraq. One of the most important ways in which this system can be described and with the development of climatology and its availability by centers and periods that encourage us to conduct a climate study where the European Center data for the time research period (1979-2016). Two different observations, day and night, were used to find the difference in temperature, humidity and evaporation at this time through a comparison between the months of the year, as Man Kendall's results showed that there is an inverse relationship between temperatures and relative. Humidity, in contrast to the relationship between temperature and evaporation, was positive and this is what is observed in all months of the year depending on the nature of the geographical area.

Keywords: Air Temperature, Relative Humidity, Evaporation, ECMWF, Iraq