



An Introduction to a new precipitation uncertainty index over the Eastern Mediterranean.

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The quantification the assessment and the understanding, of the uncertainties in several climatological parameters are of major interest in the recent climate studies. Especially, in the case of precipitation the identification of the uncertainties associated with the rainfall time series is considered to be crucial, as it influences many aspects of the human activity such as agriculture, tourism and water management.

The present study focuses on the examination and the quantification of the uncertainties of the precipitation time series, over the Eastern Mediterranean. Daily rainfall data were applied derived from stations over the study region for a 42-years time period. The uncertainty index applied to the rainfall data is a combination (total) of the departures of the rainfall season length, of the median data of the accumulated percentages and of the total amounts of rainfall. Therefore, it defines the departures form the Most Expectable Rainfall Regime (MERR) of the precipitation time-series and it combines both the temporal rainfall distribution and the total rainfall amounts.

For a more detailed description of the uncertainty index, its scores were classified into five categories, from very low to very high uncertainty. From the primer results of the analysis it was found that generally the selected stations were characterized, on an average basis, by medium and high uncertainty, while the greatest mean value was found in the station with the most intense thermal urban effect

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