



Stochastic investigation of temperature process for climatic variability identification

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The temperature process is considered as the most characteristic hydrometeorological process and has been thoroughly examined in the climate-change framework. We use a dataset comprising hourly temperature and dew point records to identify statistical variability with emphasis on the last period. Specifically, we investigate the occurrence of mean, maximum and minimum values and we estimate statistical properties such as marginal probability distribution function and the type of decay of the climacogram (i.e. mean process variance vs. scale) for various time periods.

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