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Stochastic investigation of wind process for climatic variability identification

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The wind process is considered one of the hydrometeorological processes that generates and drives the climate dynamics. We use a dataset comprising hourly wind 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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