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Bayesian trend analysis for daily rainfall series of Barcelona

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Abstract. A Point-Over-Threshold approach using a reparameterization of the Generalized Pareto Distribution (GPD) has been used to assess changes in the daily rainfall Barcelona series (1854–2006). A Bayesian approach, considering the suitable scale and physical features of the phenomenon, has been used to look for these alterations. Two different models have been assessed: existence of abrupt changes in the new GPD parameters due to modifications of the observatory locations and trends in these GPD parameters, pointing to a climate change scenario.

Full Article in PDF (PDF, 763 KB)

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