



Multifractal analysis of rainfall time series: uncertainty assessment and drawbacks through different fixed-size techniques

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We investigate the multifractal behaviour of a 15 years long rainfall time series at the time resolution of 1 minute considering different fixed-size approaches, namely, standard box-counting procedures, the generalized correlation integral method, and wavelets transform techniques. We estimate the fractal dimensions of rainfall and the uncertainty of estimate associated to the different fixed-size techniques. Particular emphasis is given to the problems related to the highly intermittent behaviour of rainfall in time.