



Fractional Lévy Motions: A fresh look at dependence and climate-scale variability

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Different estimation methods are being used to assess the type of scale behaviour of hydro-meteorological variables at climatic scales. Fractional low-order joint moment behaviour is analysed for different scales and lags. Results indicate the existence of a non-trivial dependence structure. The implications of the findings, in terms of inter-annual persistence and quality of model validation, are being discussed.