



A trendy analysis for the identification of extremal changes and trends in hydroclimatic processes; application to global precipitation

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During the last decades it has been trendy to identify trends in extreme phenomena and attribute them to anthropogenic climate change. Although the majority of analyses tend to identify increasing (and sometimes decreasing trends in hydrometeorological extremes, there are a few works that show no significant change in the distribution tail of the processes. A few analyses have shown that changes in the extremes can be adequately explained by the Hurst-Kolmogorov (HK) behaviour. In this work, we test the tail behaviour of several well-known distributions when combined to an HK model. Finally, we provide illustrative examples on whether or not the observed variability in precipitation extremes could be explained by the HK behaviour.

Acknowledgement: This research is conducted within the frame of the course "Stochastic Methods" at the School of Civil Engineering of the National Technical University of Athens (NTUA), Greece. The students, PhD candidates, Fellow Researchers, Post-Doc Researchers and Professors are struggling to deliver research results without any financial support.