

Interactive comment on “Identifying global patterns of stochasticity and nonlinearity in the Earth System” by Fernando Arizmendi et al.

Anonymous Referee #1

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While the topic is potentially interesting for the earth system dynamics community, the manuscript in my opinion is not suitable for publication. The paper applies two known metrics to compare temperature and radiation time series from different locations, in search for nonlinear interactions and deterministic vs random components. Interactions are obviously expected in such time series and the results are presented in forms of spatial maps, without attempt to go in depth into the physical, meteorological and climatic meaning of the findings. Very little attention is given to the underlying physics or to the meaning of nonlinearity and stochasticity's (time scales? Determinism?) for the underlying radiative-forced climate system.

For these reasons, the paper does not represent a novel enough contribution to the Geophysical literature to be recommended for publication in ESD.

C1

Interactive comment on Earth Syst. Dynam. Discuss., doi:10.5194/esd-2016-47, 2016.

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