

Interactive comment on “Unraveling the spatial diversity of Indian precipitation teleconnections via nonlinear multi-scale approach” by Jürgen Kurths et al.

Anonymous Referee #1

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The authors use two approaches namely the Wavelet Coherence Analysis (WCA) and Multi-Scale Event Synchronization (MSES) method to look at Indian precipitation teleconnections. They conclude that MSES is superior to WCA. I have a little problem with this and I would like the authors to address my following observation. If one carefully compares Figures 3 and 4 one will find out that the significant peaks in WCA are almost ALWAYS at lower time scales than the significant time scales in MSES. Why is that? Are we looking at two methods each being more appropriate for a certain time scale range? In this case, what is the point in comparing the two methods?

The above being my major comment, I also have some more comments:

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1) In Figure one (upper left) should Even be Event? 2) The 95% confidence levels appear to be similar for all indices in each method. Why should this be so? 3) Figure 2: The community structure is based on Agarwal et al (2018b). How robust is it? The whole paper is based on this community structure. The authors should compare their approach to other approaches in the literature.

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