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Interactive comment

Interactive comment on "Technical Note: Partial wavelet coherency for improved understanding of scale-specific and localized bivariate relationships in geosciences" by Wei Hu and Bing Si

Anonymous Referee #1

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In this paper, the authors mainly developed a partial wavelet coherency method, for identifying the relationship between variables. It is an important issue but also a difficult problem for geo-data analysis, and the method developed would be helpful for the data analysis in geosciences. The following comments are suggested to be considered for further improving the paper: (1) In lines 108-110: the "sufficient number" should be clarified, as it has a big influence on the uncertainty estimation, that is, what number is sufficient? Furthermore, the reason of using first-order autocorrelation coefficient for MC simulation should be explained and discussed. (2) Lines 121-122, some theoretical lines can be provided to show the difference between Eq. (9) and Eq. (14). (3) Regarding the structure, is it more suitable to reorganize the Section 3 and 4, that is,



Discussion paper



the artificial data and their results are analyzed and discussed in Section 3, while those of real data are analyzed and discussed in Section 4?

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