

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 #3

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Partial wavelet coherency for improved understanding of scale-specific and localized bivariate relationships in geosciences Wei Hu and Bing Si

Comments In this paper, the authors presented an improved variant of PWC for identifying the relationship between variables. This should be reflected in the title (like Improved PWC etc to be included in the title) to convey novel contribution. Also at present it is misleading like the authors proposes PWC concept

Overall the paper is well written. I recommend for minor revision

• Line 18– and producing more accurate results.- pl give quantitative statements
• Line 31- provide the developments in chronological order – should be checked at

C1

all places • What is the real advantage in bringing the phase information in practical cases ? this should be mentioned in the introduction section • Line 109 .. sufficient number of times using ..pl make it clear • Line 214- significance band • Conclusion: Avoid the statements like – ‘this new method produces slightly more accurate coherence’ • Line 450-455 should be explained better ; how can you overcome such problems ? I think better to provide a discussion section before conclusion where such references and unfamiliar terms can be explained in a better way. Then conclusion section should be presented as more specific

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-315>, 2020.