

Interactive comment on “Using paleoclimate reconstructions to analyse hydrological epochs associated with Pacific Decadal Variability” by Lanying Zhang et al.

Anonymous Referee #1

Received and published: 18 May 2018

This paper provides very interesting results, and topic of the research is within the scope of this journal. The manuscript is well written and organized, but I have several minor comments as follows.

[General Comments] In the dynamic threshold method, three parameters (windows width: w , cut-off frequency: y and confidence level: α) should be specified, and sensitivity of w is discussed in this study. However, how about the sensitivity of y and α on extracting run length? # If authors could provide some comments/ideas on that, it would be helpful for readers. # (but do not have to conduct additional sensitivity analysis.)

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[Specific comments]

P13, P24-25: How did you set the value of “confidence level α (=90%)” and “cutting-off frequency (=1/11)” for this analysis? A little more explanation is expected (if possible). # P10, L14: $y=100$ (?)

P15, L13- “The absence of a consistent difference ... may be a consequence of sampling variability ... ” → The meaning of this part is a little unclear. # What is “sampling variability”?

P28, Fig.1 What blue broken lines in (a4), (b4) and (c4) of Fig.1 are representing? # 95% confidence bands for zero autocorrelation (as described P7, L8)?

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2018-173>, 2018.

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