Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2019-563-AC2, 2020 © Author(s) 2020. This work is distributed under the Creative Commons Attribution 4.0 License.



## Interactive comment on "PAttern REtrieval or deNegation Testing Scheme (PARENTS) v.1.0 – Identifying the degree of presence of given patterns in spatial time series" by Benjamin Müller et al.

## Benjamin Müller et al.

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Answer to Anonymous Referee #2 (Received and published: 14 February 2020):

Original comment in plain text, answers in italic.

This paper describes a testing "scheme [which] seeks a different approach to identifying these surface characteristics that control the generation of such observation time series". Right away, I am confused about the objective of the paper. The sentence

C1

above is a good example – what approach, what surface characteristics, and what observation time series are the authors' talking about? Abstract and the first few sentences of the paper do not clearly state the objectives, or even a problem statement that the paper will address. The Introduction, the first paragraph makes a general statement, but does not point to a problem or issue that the work attempts to answer or solve.

The need for a much clearer presentation of the objective was raised by both reviewers. We therefore decided to apply mayor revisions on the introduction and the abstract, to make clear how the methods evolved from Müller et al. 2014 and 2016 to this paper, instead of the current writing approach.#M1

One very simple reason why this paper is difficult to understand is that the authors are using indirect language to describe their ideas, which obfuscates their meaning.

We will revise the text with respect to the use of direct formulations, where applicable.

An example of this is the use of a lot of acronyms very early on in the paper. The composition would be much stronger if the authors simplified the paper to remove extensive use of acronyms.

We will reduce the use of acronyms, especially if they are of limited recurrence.

At some point in the Introduction, the authors start to talk about 'TS'. So, perhaps this is a focus of their work, but it is not clear. They also randomly talk about PCA, which may or may not be an interesting way to examine TS. But, again, it is not clear.

See mark M1 in the comment above.

The paper has unconventional organization. I suggest following a more standard flow. For example, having two results sections is confusing. These could be combined to

make it easier for the reader to follow.

We discussed different structures throughout the writing process and found the current structure - separating the two case studies - to be the better solution. However, we will improve the guidance through the structure at the end of the introduction.

There is no discussion of the results, per sec. A discussion would be nice, and perhaps this could help the authors to organize their ideas from Introduction to Discussion and Conclusions.

The discussion in this paper was merged with the results to avoid too many subsections. This will be emphasized.

I think if this paper were rewritten to have clear objectives, and cleaner /clearer flow of ideas and expression, it would be easier to follow the reasoning in the paper from concept to results/discussion. My recommendation is to return this paper to the authors for major revision

## Thank you for your valuable input and constructive comments.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2019-563, 2019.