

Interactive comment on “HER: an information theoretic alternative for geostatistics” by Stephanie Thiesen et al.

Anonymous Referee #1

Received and published: 17 March 2020

Dear Authors,

Thank you very much for this work.

I think the work is very interesting but the paper requires some reviews before it can be published.

My main concerns are with respect to the structure of the paper. In its current status, I think the sections are unbalanced in terms of the length and some of them are mixed. E.g. in section 5. Summary and conclusions, the section is missed with the discussion – also i would suggest not including references in the conclusions.

I would suggest to shorten the paper by 1) stating clearly the messages in the paragraphs, 2) rephrasing unclear wording (e.g. lines 31-33, 37-43, etc), 3) removing un-

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necessarily wording (e.g. 87-88 “This section is based on...”-> see details in Cover and thomas, 2006) and/or, 4) including necessary explanations (e.g. line 101, i suggest remove the word “best” or include from what point of view is “best”).

I also recommend using math notation consistently, e.g. bold for vectors, capital for random variables, etc.

Please, also: - add references for nearest neighbors, and inverse distance weighting (see line 25), - use complete names before using abbreviations (e.g. Sect.2 – the full name should be given before providing any abbreviation), - have a look at the typos (there are many), and - maybe, good to briefly explain what is the “infogram cloud” - i am not sure that all readers are familiar with it.

In case that the editor asks a revised version of the the manuscript, i am very happy to serve as reviewer of the revised version.

Once again, thank you very much for this work.

Kind Regards, Reviewer

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2020-5, 2020.