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Discussions

Interactive comment on "Technical Note: A simple generalization of the Brutsaert and Nieber analysis" *by* T. L. Chor and N. L. Dias

Anonymous Referee #1

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In their technical note "A simple generalization of the Brutsaert and Nieber analysis" Chor and Dias propose a generalized recession analysis based on solutions for a semi infinite aquifer recently proposed by the authors.

While the overall topic is interesting for the community of HESS, the submitted manuscript may need additional support to show that the presented analysis is of sufficient impact to merit publication in HESS. Explicitly the authors have to show that their extension of the BN analysis is an advancement rather than just a "different" result. This can be achieved through the analysis of widely available groundwater well and streamflow data comparing classical BN results with the proposed method. As the authors suggest a new BN analysis they should explicitly perform such an analysis in details and compare the two methods step by step with real data, including figures

supporting their argumentation.

I understand that this suggestion proposes considerable additional work for the authors. However as length is not an issue for this manuscript the addition of a real data example/comparison would strengthen the paper considerably and help readers to understand their argumentation. Below the authors find some minor comments and suggestions on the text.

Section 1: "... can be compared to the predictions from analytical solutions..." The authors may want to extend this paragraph by showing explicitly which analytical solutions they have in mind and how they are used.

"... does not account for that case." and "... is not strictly true ..." The two statements seem to contradict each other and need clarification.

Section 2: As the solutions of Chor (2013) and Dias (2014) are essential in this paragraph it may be worth noting the equations together with one or two sentences of explanation. This will give the reader the possibility to focus on the text rather than getting distracted by consulting the references to understand what follows.

After eq. 12: Where do the numerical values for eq 12 come from? Please clarify.

The discussion of the results and their impact on the way how a BN-type analysis is done could be more extensive.

In summary, I think that if the authors consider the suggestions above the manuscript can be improved sufficiently to merit publication in HESS.

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