Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2018-119-RC1, 2018 @ Author(s) 2018. This work is distributed under the Creative Commons Attribution 4.0 License.



## **HESSD**

Interactive comment

## Interactive comment on "Potential of seasonal hydrological forecasting of monthly run-off volumes for the Rhone and Arve Rivers from April to July" by Oriane Etter et al.

## **Anonymous Referee #1**

Received and published: 9 April 2018

This manuscript on seasonal forecasting does not present any significant methodological advance. It might after major revisions qualify a manuscript type called "Cuttingedge case studies", which according to HESS standards can be published if they "report on case studies that require (a) broadening the knowledge base in hydrology as well as (b) sharing the underlying data and models." https://www.hydrology-and-earth-system-sciences.net/about/manuscript\_types.html

These two conditions will probably not be met for this paper and accordingly, I do not think that this paper is within the scope of HESS.

Given the above, I do not provide a full review at this stage. I have nevertheless the

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Discussion paper



following detailed comments:

- The paper does not sufficient details about the used model. It refers to old papers but from the reading of the paper I get the impression that the model is used in real engineering applications, meaning that it has certainly undergone significant development since its original publication
- The model apparently contains some glacier surface evolution module, which is not mentioned in the model description section ("the models were calibrated over the full periods, in order to quasi eliminate the error due to initialization and to ensure a good evolution of the glacial surfaces (corrected within the model)."
- Model calibration is mentioned many times in the results section but not discussed in the methods section. As far as I see, model calibration is just mentioned as "The tuning of the temperature and of the snow melt variation is therefore made more accurate through the calibration of the radius, the precipitation and temperature gradients, the degree day of the snow pack, a.s.o". This is not sufficient by any means.
- -The method section mixes methodological descriptions and details about the case study data and results

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