

## ***Interactive comment on “A stochastic model for drought risk analysis in The Netherlands” by Ferdinand L. M. Diermanse et al.***

**V. Blauhut (Referee)**

veit.blauhut@hydrology.uni-freiburg.de

Received and published: 29 April 2018

Review drought in the Netherlands.

The paper ‘A stochastic model for drought risk analysis in The Netherlands’ is a well written manuscript which is well formulated. From the scientific the abstract promised drought risk analyses with a focus on synthetic time series. After reading through the paper, drought risk is not addressed at all. Thus, Heading and abstract are misleading. Since I’m stepping a little out of my comfort zone reviewing on synthetic, my comments are focusing on a meaningful application for drought risk analysis. Please find my more explicit comments in the PDF attached. In general I recommend a more explicit review work in the introduction. Of cause you reference to previous work, but I do not

C1

think that an international audience will understand the danger of drought, especially for The Netherlands. More details of the kind of assets at risk are of need. Also, the need of synthetic time series did not make it to me. What is this contributing to drought risk analysis in general, especially for the case of the Netherlands? Besides, I recommend to show this in a full drought risk analysis. You “only” take care of the hazard. As other authors already pointed out, synthetic time series are not novel, I recommend to extend your work to a full drought risk analysis for the Netherlands, highlighting the added value of synthetic time series (if there is any). → this would be novel and of added value for the community. Your selected hazard indices are of very different nature. The majority of the catchment area of the River rhine is not in the Netherlands, but in Switzerland and Germany (far away). Thus, I do not think that there is any (big) connection between the variables. If so, the only signal might be large scale, long term pattern. Thus, I do not understand why you are combining them at all. For more detailed comments and recommendation, please see the attachment. Kind regards, Veit Blauhut.

Please also note the supplement to this comment:

<https://www.hydrol-earth-syst-sci-discuss.net/hess-2018-45/hess-2018-45-RC2-supplement.pdf>

---

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2018-45>, 2018.

C2