

Interactive comment on “Technical Note: Temporal Disaggregation of Spatial Rainfall Fields with Generative Adversarial Networks” by Sebastian Scher and Stefanie Peßenteiner

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Dear Reviewer,

Thank you for your thorough and constructive review. We appreciate the generally positive evaluation of our manuscript and the valuable suggestions, which we plan to incorporate in our revised article in large part. We particularly agree with the main point of a missing benchmark and necessary probabilistic verification. We here outline how we intend to address the major concerns. A detailed point-by-point response will be included with the submission of our revised manuscript.

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We plan to:

- Elaborate more on the size of the chosen domain, the sensitivity of results and potential limitations thereof.
- Add cautionary remarks on the generalization of the trained model to different domains in other climatic regions.
- Include a stochastic disaggregation baseline as to provide a benchmark for our results.
- Incorporate additional evaluation metrics such as the CRPS.
- Adapt the mentioned Figures for better readability.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-464>, 2020.

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