

Hydrol. Earth Syst. Sci. Discuss., referee comment RC1
<https://doi.org/10.5194/hess-2021-554-RC1>, 2021
© Author(s) 2021. This work is distributed under
the Creative Commons Attribution 4.0 License.

Comment on hess-2021-554

Anonymous Referee #1

Referee comment on "Flood forecasting with machine learning models in an operational framework" by Sella Nevo et al., Hydrol. Earth Syst. Sci. Discuss.,
<https://doi.org/10.5194/hess-2021-554-RC1>, 2021

This paper presents a complete workflow for an operational flood forecasting and mapping case study.

The paper details all the critical steps in an operational system for data scarce regions, including remote sensing data integration, forecasting, inundation mapping, and communicating forecasts to the public.

The model performance comparison against linear regression and simple hydraulic models is not a very challenging task compared to evaluating performance against better performing ML and physical models cited in the paper.

The spatial and temporal resolution of the input data for rainfall, elevation, and other datasets is rather low to achieve comparable forecasts, but still useful in data scarce regions with limited resources.

Some of the details, like how AIO pixels are defined in the flooding regions, are not clear in the paper.