

Interactive comment on “Using nowcasting technique and data assimilation in a meteorological model to improve very short range hydrological forecasts” by Maria Laura Poletti et al.

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The scope of the paper is timely relevant and contributes to the topic of flash-flood forecasting in small areas. I particularly like the new features added to the Metta et al. (2009) nowcasting technique. The newly introduced relaxation of the volume constrain is a good idea and worth being evaluated.

Already in the abstract the main issue of this manuscript is raised, namely only three major events in a specific area are evaluated. There is no chance to detect false alarms

C1

of such an approach. We work on similar topics and approaches (e.g. Antonetti et al, 2019) and are always requested to provide justification when we use a limited number of events.

Another issue I want to be addressed is the "distributed analysis", which considers different basin classes but show no distributed results. I would expect a map of the target area which spatial visualization of the index of agreement chosen.

The section discussion and conclusion need a major re-arrangement, as no actual discussion is presented.

Best regards

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See commented PDF for additional inputs.

References: Antonetti, M., Horat, C., Sideris, I. V., and Zappa, M.: Ensemble flood forecasting considering dominant runoff processes – Part 1: Set-up and application to nested basins (Emme, Switzerland), Nat. Hazards Earth Syst. Sci., 19, 19-40, <https://doi.org/10.5194/nhess-19-19-2019>, 2019.

Please also note the supplement to this comment:

<https://www.hydrol-earth-syst-sci-discuss.net/hess-2019-75/hess-2019-75-RC2-supplement.pdf>

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2019-75>, 2019.

C2