

***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

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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

Massimiliano Zappa

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>

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

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