

Interactive comment on “Brief communication: Preliminary hydro-meteorological analysis of the flash flood of 20 August 2018 on “Raganello Gorge”, Southern Italy” by Elenio Avolio et al.

Anonymous Referee #2

Received and published: 17 April 2019

The manuscript is well written and nicely shows the potential of WRF-Hydro for flash flood forecasting. Still, I have some comments which should be considered before publication in nhess.

(Major) comments

Page 4, line 11 to line 26: It seems that no spinup has been applied to generate the initial condition of land surface variables, including soil moisture. This may be problematic for a WRF-Hydro application, as a too wet soil condition in the forcing data may cause a discharge peak artifact at the beginning of the simulation. In the case of Senatore et al. (2015) a two-month spinup time was used. Please discuss this issue in

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the revised version.

Page 5 line 23 to page 6 line 7: the comparison between the different model configuration results would be much more powerful in the framework of a model ensemble. The authors could generate a small ensemble based for example on randomly perturbed initial soil moisture condition, and assess how robust the differences between the model configurations are.

Minor comment

page 4, line 8: I suggest to replace “the diurnal cycle of Sea Surface Temperature” by “Sea Surface temperature dynamics”, unless the author confirm that their input data provides subdaily variation of SST.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2019-62>, 2019.

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