

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

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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.

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