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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Evaluation of two hydrometeorogical ensemble strategies for flash flood forecasting over a catchment of the eastern Pyrenees" *by* Hélène Roux et al.

Anonymous Referee #1

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The paper presents a comparison of two ensemble strategies to forecast flash floods in the eastern Pyrenees. This topic is not totally new, but the problem is still an unsolved problem of the hydro-meteorological modelling and is worth further investigation as that one undertaken by authors of this paper. I found the paper interesting and well written. I recommend it for publication after minor revision. Comments: Fig. 1 I find it difficult to understand. It's not easy to distinguish position of radar, discharge gaging stations and the dam. I suggest to you use more distinguishable marks and associated legend to show relevant elements. P. 4 L 2. Area of tributaries and basin intercepted by dam are mentioned. I suggest to give information about total basin area that is reported in Table 1 (is it 1053 km2?). I think this is relevant to understand how dam

can affect hydrograph of outlet section. P. 4 L. 18. Rain-gauge network are provided by the regional flood forecast service. I suggest to add a reference to figure 2 that shows locations of raingages across the investigated area. P.7 L2-3 There's no need to give details about how Thiessen polygon interpolation method works. P. 8 what is the spatial resolution used in the hydrological model? P.8 L22. How the spatial daily root-zone humidity maps are used to initialize the hydrological model? P9 L16 The Bransby Williams formula is used for computing time of concentration. There are many equations in literature for time of concentration and the spread they do is very high. Why did you choose this one? May the model performance assessment affected by the choice of formula for time of concentration? P 9 L 26 Can raingages distribution explain, at least partially, the different performance of the model across the basins?

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