This manuscript presents an approach for deriving the flood design hydrographs (FDH) which may be useful for flood risk applications. In order to form a model chain for grasping the objectives, the authors suggest to combine several components: a stochastic model for rainfall generation, a conceptual fully distributed model for simulation of rainfall-runoff process and a proposed copula-based model for derivation of FDH. The proposed approach is then applied for a case study of Imera catchment in Sicily, Italy.

In general, I see that the manuscript is an interesting piece of work and may be appropriate for the publication in NHESS after adequately considering a few comments below:

1. I do not completely agree with the authors on the claim, which I see 'over optimistic', in the Abstract section (p.2, line 15-17). That is because the applicability of the proposed approach may be suffered from a large uncertainty resided in the modelling work of each mentioned component. The uncertainty source should be clearly defined and discussed properly in each working step (see e.g. Serinaldi, 2013).

2. The manuscript is not very well structured although I see the authors attempt to propagate a nice story about the work. Could the author spend a little time to restructure it? For example, bring the first paragraphs of the results section to the methodology section (with some modification) in order to form a new section 3.3.

3. P.6, line 18: please add "In two-dimensional context"

4. P.7, line 1: please change "multivariate" to "bivariate"

5. Equation (3) should be rewritten in the form: F(…) = C(…) because our target is the bivariate distribution function form.

6. P.6, lines 6-7: please rewrite the whole sentence for the sake of clarity.

7. P.20, lines 20-21: please give some reasons for selecting these distributions as candidates but not the others (for example, the common Generalized Pareto Distribution, GPD). The lognormal used in this study is two parameter lognormal, this should be clearly written in the whole manuscript.

8. P.11, line 7: change "in" to "into"

9. Section 4.2: Please give the reason on why the author do not use more recent event for the calibration purpose? They are not available or the mentioned event was an extraordinary event?

10. P.19, line 24: It would be good to cite also Apel et al. (2004, 2006).

11. P.20, line 2: These probability values should be shown in the Fig. 16 for the sake of clarity as well.

12. P.20, line 6: I would prefer to cite Salvadori et al. (2005, 2011) and Graeler et al. (2013)

13. P.20, line 14: Please rewrite this sentence and add a clear note that this kind of bivariate return period is the so-called "OR-return period". By the way, could the author please add one sentence to reason this subjective selection (why not AND-return period)?

14. P.20, line 17: I would prefer to cite Salvadori et al. (2011) and Graeler et al. (2013)

15. P.21, line 2-3: Please check these values carefully. I see u2,T is unlikely to be 0.99 (because T bivariate = 100, T marginal should be different in this case) . Furthermore, from what I know the most likely event should be located on the curve describing the full dependence of the two variables.

16. Definitely, I am not a native English speaker! However, I see there may be some typos or grammatic errors in the current version of the manuscript which need to be corrected before getting published. I am not sure if NHESS could provide this service or not. Please contact them for this purpose.

References:

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