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Hydrology and Earth System Sciences
Discussions

Interactive comment on "On the quest for a pan-European flood frequency distribution: effect of scale and climate" *by* J. L. Salinas et al.

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The manuscript analyses a large dataset of daily peak flow time series with the aim to verify the existence of a parent flood frequency distribution across Europe.

This kind of papers, as similar previous ones like Papalexiou et al., 2013, that study dataset of thousand time series are particularly precious and useful for the Scientific community and not only.

So, I would suggest to accept it for publication in HESS.

However, I fully agree with the comments of the two colleagues that already reviewed the paper specifically with the comments 1 & 3 of Francesco Laio and, in addition, I

have some other few suggestions.

Title and introduction should be better adapted to the paper results and consistent to the conclusions, indeed at the beginning of the paper the reader has the felling that the authors are able to provide a parent flood frequency distribution (FFD) on a European scale. Moreover, also the usefulness of the FFD should be better clarified at the beginning of the introduction. It seems that the parent FFD could be used in ungauged basins to estimate the design flood, where maybe simplified approaches starting from rainfall information could be more effective or at least an option.

Table 1 should be richer of information. Instead, or other, to include the Station-year of data, I would include the mean, the minimum and maximum of number of years. Similarly I would add the Basin Area information (average, min, max). A map of Europe could be also useful for the reader to easily catch the region variability.

Minor suggestions

page 6232 line 23: there is a typo (dot).

page 6327 line 13: I would not mention here the Figure 1a.

page 6327 line 19-21: This brief intro could be removed.

Figure 1a: Dark ring should be specified in the caption.

Reference cited in this comment:

Papalexiou,ÂăS.ÂăM., Koutsoyiannis,ÂăD., and Makropoulos,ÂăC.: How extreme is extreme? An assessment of daily rainfall distribution tails, Hydrol. Earth Syst. Sci., 17, 851-862, doi:10.5194/hess-17-851-2013, 2013.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 6321, 2013.