Interactive comment on "Improving the understanding of flood risk in the Alsatian region by knowledge capitalization: the ORRION participative observatory" *by* Florie Giacona et al.

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This paper presents a thorough review of the ORRION database, it details the content, spatial and temporal extent of the database and provides some preliminary analysis of the results.

The paper is of particular interest to those interested in the Alsatian region, but more could be done to highlight why this is of interest beyond this particular case-study. I have added a broader range of references to the attachment which the authors may find of value, many more are available beyond these which would strengthen some of the arguments you make. There are some interesting points in the paper, but these

need to be clearly teased out in the conclusion, as it is a long paper.

I was surprised that the paper did not reference any previous work using the historical descriptors as either a proxy flood level indicator and in indices production, I have added suggestions from the literature, this may just be an oversight in writing the paper up, with this undertaken during the development phase. It would be good to know how you accounted for recorder bias through time, e.g. a potentially more interested individual at a site, and changing literacy rates.

I am very surprised that no attempt at flood reconstruction is undertaken, either in a simple e.g. level to discharge estimation, or in a more advanced manner (Herget & Meurs, 2010). Surely the documentary evidence would permit such in some instances, particularly if sufficient information to map flood extents. If this is planned state that, as this is of value to flood risk managers. It would be good to see some comment on the influence of the engineering activities over several decades on some of these systems in more detail – can they account for the changes? Or guide reader to other work that has undertaken this.

I felt the discussion would benefit from some comparison of the flood rich years that emerge potentially being discussed in more detail and comparison with other databases on long flood series from across Europe - no more that that is possible at present until underlying trends within the data resulting from social factors are addressed – the lack of this limits the utility of the results to a database compilation.

Further discussion on quality control of public database contributions is needed, a statement on how this was managed.

p.5/6 I would benefit from some indication of size of river discharges being considered, I don't recall seeing anything of this nature – consider adding.

Herget, J., & Meurs, H. (2010). Reconstructing peak discharges for historic flood levels in the city of Cologne, Germany. Global and Planetary Change, 70(1–4), 108–116.

https://doi.org/10.1016/j.gloplacha.2009.11.011

Please also note the supplement to this comment:
https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2018-210/nhess-2018-210-RC2-supplement.pdf

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2018-210, 2018.