

Interactive comment on “Documentary evidence of historical floods and extreme rainfall events in Sweden 1400–1800” by D. Retsö

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General comments

The paper presents and discusses the evidence of major historical floods in Sweden in the pre-instrumental period (1400-1800). The assessment is based on documentary sources. The magnitude of extreme events is evaluated according to the duration, spatial extent and damage/human casualties. The results indicate two flood-rich periods: 1590-1670 and early 18th century.

Overall, it is an interesting paper, within the scope of a special issue in HESS. The evaluation of large amount of documentary sources is very impressive. From the hydrological point of view, I have only few comments, which might be considered before

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recommending the manuscript for publication in HESS:

- 1) The introduction section is very short. Please consider to extend it, in order to introduce a more general context of historical flood investigations in other parts of Europe. What are the other relevant studies and what did they find?
- 2) Results section needs to be more balanced. In the current form, there are only two pages of text referring to Results, but the Table in Appendix has 6 pages. Please consider to put more information from Table to text. It will be interesting to complement the information about extreme events with some additional information about political and socio-economic changes during selected time period.
- 3) I would suggest to add a separate Discussion section. It will be interesting to put the results in light of other findings from the literature. E.g. how do the flood-rich/poor periods correspond with studies from other parts of Europe? Are the results similar/different and why?

Specific comments

- 1) p. 10088, l.3: "at an early point in time ...". Please be more specific here.
- 2) p. 10088, l. 18: "most important catchments". Please be more specific, in term of what?
- 3) p. 10093, l.8: "the lack of coherence with data from other parts of Europe". Please consider to discuss the similarities and differences in results from different studies in the Discussion section. Please, be more specific, which coherence with which data, etc.
- 4) p. 10094, "Medieval floods and harvest failures". This section is not well introduced before. Why it does appear here? How it is linked with the main objective of the paper?
- 5) Figures. Figure 1 and 2. X-axis description is missing. Is in Fig.1 a total number of floods presented (and color distinguishes flood types)?

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6) Figures 3 and 4 refer probably to data section, so refer to them in the Data section (and change the numbering). What is the difference between the figures? Are both needed? The link to presented text is not clear. Are all provinces referred in text?

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