

Interactive comment on “The Potential of Historical Hydrology in Switzerland” by Oliver Wetter

Anonymous Referee #3

Received and published: 25 September 2017

A well researched and written paper that includes extensive detail and review of historical flood record use and application in Switzerland. The paper has considerable value contributing to the international literature. Excellent use of images. Below are several points I would encourage the author to consider addressing in revising the paper, in addition to the annotated version. 1. I would encourage the author to support further the statements that are made through reference to the wider international literature. For a paper of this length I felt a broader literature base could and probably should be presented, with some papers missing that I would expect to see e.g. Kjeldsen et al. (2014) 2. I understand why you make several of the statements that you do concerning Fig.12, but I am a little uncomfortable that you need further evidence of a reduction in the flood magnitudes nearing the present, why is this not just a flood poor period

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comparable to 1375-1500, further justification needed. 3. Take care with the images, ensure all figures have clear axis labels and are aligned – e.g. Fig17 requires careful alignment of the various sections of the figure. I would remove the curves from Fig17, I think it is more powerful without these and have reservations about how they are derived/presented. 4. I felt that the conclusion could be more powerful, if it linked back to how this work could improve understanding of flood risk and possibly related back to the drivers for the funding outlined at the start of the paper.

Please find attached an annotated version of the paper with extensive improvements to the English language which will help the flow of the paper. I hope the author finds this helpful. If the scanned version presents any problems please let me know.

Kjeldsen T.R. et al., 2014, Documentary evidence of past floods in Europe and their utility in flood frequency estimation, Journal of Hydrology, 517: 963-973 DOI: 10.1016/j.jhydrol.2014.06.038

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Please also note the supplement to this comment:
<https://www.hydrol-earth-syst-sci-discuss.net/hess-2017-410/hess-2017-410-RC3-supplement.pdf>

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2017-410>, 2017.

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