

Interactive comment on “A consistent set of trans-basin floods in Germany between 1952–2002” by S. Uhlemann et al.

Anonymous Referee #3

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This paper is a comprehensive study on the risk of large scale floods in Germany. A well founded methodology has been developed in order to account at the same time on the magnitude of the flood and the dispersion on different basins within the German state territory. A sensitivity study has been established in order to ensure the plausibility of assumptions in the choice of parameters. Based on a large number of discharge stations and based on the time period 1952–2002 the result is that most widespread and important floods are observed in winter season in all basins whereas in summer the often stronger local magnitudes have been observed especially in the Elbe and Danube basin. A higher frequency of events has been observed in the second half of the observation period.

Discussion: This comprehensive and very interesting paper of high quality is rather

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long with about 25 pages. Maybe the authors could think about shortening the level of details in certain sections in favour of more understandability. The structure of the paper is not always consistent. Eg. one could imagine to shift the chapter 5 "sensitivity analysis" close to the chapter on "Methods". Similarly, in chapter 6 page 1516 lines 6 ff down to page 1517 line 24 could be shifted over there (or write some subheadings in chapter 6).

page 1511, line 10: it really seems not to make much sense to calculate 50 years flood in a not stationary time series of 51 years.

Tab 2 and Fig 4: please make the link from Tab 2 to Fig 4 and vice versa in the respective captions.

Fig 4: for me it is not really clear the fragmentation into classes: it seems to be done depending on the fraction of L. But in Fig 4 the events are ranked depending on s. How this fits together?

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