

## ***Interactive comment on “HANZE: a pan-European database of exposure to natural hazards and damaging historical floods since 1870” by Dominik Paprotny et al.***

### **Anonymous Referee #1**

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Presented for the review is the dataset by D. Paprotny et al. “HANZE: a pan-European database of exposure to natural hazards and damaging historical floods since 1870”, containing a variety of socio-economic data referred to natural hazards, namely floods of different origin, for the majority of European countries. The dataset is provided in both table (xlsx) and gridded (multiple available) formats, well documented and easy to access. The concept behind the dataset compilation is a variety of spatial disaggregation methodologies employed to combine multiple heterogeneous datasets into comprehensive and consistent database, for provisional use to assess the socio-economic impact from floods. The authors show a significant effort to produce the presented dataset, as the initial data for it should have been thoroughly obtained, analyzed, re-

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gridded and remodeled. As it can be seen from the well-referenced corresponding section, the regridding methodology itself is not new, but the authors employ it with full competence in order to create new datasets of land use, total population, gross domestic product and wealth in the research domain. The database of past flood damages for the period 1870 – 2016 is itself an outstanding effort in compiling a large dataset of heterogeneous socio-economic data in a sublime and useful form of an Excel spreadsheet. The dataset is definitely useful for a large group of specialists ranging from hydrologists to socio-economists. The data quality is appropriate for further scientific usage, as well as its presentation. The article is fairly longer than expected, but offers the presentation of concepts behind the dataset creation in detail. However, the authors emphasize that the methodology and data sources of the database should be analyzed by potential users to determine the relevance for their task. I suggest the HANZE dataset is published as is, with the article undergoing minor technical corrections. Noticed typos:

p. 4 line 29: “populated”

p. 8 table 2 row 1 “according to changes”

p. 9 line 13 “change in household”

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