Interactive comment on “Statistical model for economic damage from pluvial flood in Japan using rainfall data and socio-economic parameters” by R. Bhattarai et al.

Anonymous Referee #1

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Content: â€” The slope calculation are bases on a km² raster, small flow lines are not detectable at this resolution but are essential for the pluvial flooding process. Better DTMs are available, why are they not being used? â€” The population is used for distribution of assets, but infrastructure and public buildings often effected a lot by pluvial flooding, also the economic sector. This approach does not really sufficiently describes the vulnerability. â€” The daily precipitation rate is used, pluvial floods often last only few minutes to hours. Are there no intensity data available? At least the problem should be better addressed. â€” Where do the population density classes come from? Are there better results reached by other classes? â€” What types of losses are used for the calculations? Is a net or gross concept used? What types of damages / losses are included in the statistical data used for this study? â€” Formula 5 and 6 need some more explanation, formula 5 also contains an error.

Formal: â€” Prices should always be in USD. â€” Should be grammar and spell checked. â€” The diagrams are sometimes hard to read: Units at Fig4a missing, quite small, especially the numbers. â€” Also the maps are not really readable.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 3, 6075, 2015.