

Interactive comment on “Urban pluvial flood risk assessment – data resolution and spatial scale when developing screening approaches on the micro scale” by Roland Löwe and Karsten Arnbjerg-Nielsen

Anonymous Referee #2

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This paper shows interesting research on the impact of spatial aggregation on urban pluvial flood risk assessments. The article presents a good work, complemented by detailed explanations, tables, and figures. I have some concerns and suggestions.

****Abstract:** “Future work needs to focus on training regression approaches where different degrees of flood-awareness in landuse management can be considered”. It is not a good practice to provide the future work in the abstract. It is, in turn, expected to be found within the discussion section.

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****Method:** “Fast urban development models that are useful for exploratory modeling would typically provide outputs resembling those where building areas were rasterized to resolutions between 25 and 500m.” Why? Please provide justifications/references.

****Model setup:** “To test the impact of spatial data resolution, we fitted regression models to datasets with 80 different resolutions”. Did you examine the relationship and ensured that it is a linear relationship? That may lead to a misleading conclusion.

****I would recommend the authors to discuss the transferability of their finding to other places in the discussion section.**

****I believe that urban layout setting impacts the flooding according to the findings of some studies (Mustafa et al., 2018). The authors should discuss this point in the discussion section. Mustafa, A., Wei Zhang, X., Aliaga, D.G., Bruwier, M., Nishida, G., Dewals, B., Ercicum, S., Archambeau, P., Piroton, M., Teller, J., 2018. Procedural generation of flood-sensitive urban layouts. Environ. Plan. B Urban Anal. City Sci. 0, 1–23. <https://doi.org/10.1177/2399808318812458>**

****English needs improvements.**

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