

Interactive comment on “Coastal vulnerability assessment of Puducherry coast, India using analytical hierarchical process” by R. Mani Murali et al.

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Sea level rise will be one of major natural hazards of this century (and probably millennium). Recent reports on climate change effects highlighted this critical issue. The readers could find the recent work by Levermann et al. (2013), published in PNAS, very useful for the debate, and any speculations. Papers discussing this topic, how assess coastal vulnerability and mitigate the related risk in densely populated areas are more than welcome. The paper is interesting, and the authors provided a detailed reply to all the comments raised by the reviewers. Having said that I would like to call the attention to these critical issues that seem to still remain in the paper:

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1) Accuracy of dataset used and uncertainty in the analysis: The table 11, which lists the uncertainties involved and their significance, proposed by the authors is not enough, and it is still subjective. The information addressed are too vague and one cannot quantify the uncertainty behind the dataset used and also the suitability of final results. 2) Topography (slope and elevation): the authors in table 2 showed the vulnerability ranking criteria, where the different classes of slope and elevation are in the order of one degree (and less) and few meters. What is the accuracy and vertical error of topographic data used? Are the values of slope and elevation proposed in table 2 affected by these errors? The numbers are small, and probably very close to the errors derived from considered topographic data.

Minor comments: i) A flow diagram summarizing the methodology proposed should help the readers to better understand; ii) Improve the figure 1 with a scale bar and also a picture taken in the field in order to give an idea of the environment investigated.

References

Anders Levermann, Peter U. Clark, Ben Marzeion, Glenn A. Milne, David Pollard, Valentina Radic, and Alexander Robinson, 2013. The multimillennial sea-level commitment of global warming. PNAS, doi:10.1073/pnas.1219414110.

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