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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Understanding epistemic uncertainty in large-scale coastal flood risk assessment for present and future climates" *by* Michalis I. Vousdoukas et al.

Anonymous Referee #2

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The manuscripts quantifies different types of epistemic uncertainties and the effects they can have on the results from broad-scale flood risk assessments. Here, the authors focus on two case studies, one relatively small (which I wouldn't necessarily refer to as "large-scale") and the other one much larger, covering the Iberian coast. Uncertainties are assessed for most of the key variables involved in flood risk assessments. I find the manuscript really interesting and well written. The analysis is technically sound using the latest data sets and the conclusions are supported by the results. I only have some minor comments which I would like to see addressed in a revised version.

1-26 and elsewhere: check order of references

2-14 Was there a specific reason for using 25 km?

2-25 I didn't understand the reference to "ten years into the present century" in the context of the sentence.

4-13 This approach seems a bit outdated and could be removed without losing any relevant information.

5-23 It wasn't clear to me what kind of tidal signal is used here and where it comes from. Is the tide level assumed constant throughout an event?

6-7 I am wondering what the predominant type of protection is in the study areas and whether or not it could make sense to actually try and calculate runup (e.g. with the Stockdon formula) for places where dunes are the primary defense and where erosion (and possibly breaches) are initiated with overtopping. I am not saying the authors need to change their approach, but interested to hear their thoughts on this.

7-1 I think this needs a reference.

10-10 "in large-scale. . ."

12-14/15 This sentence needs rewording, I didn't understand what it is telling me.

Fig 3 Not all curves are visible in each panels, do they overlap? Maybe consider using dashed lines for some of them.

Fig A1 Needs numbers on the x-axis.

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