

We thank the third reviewer very much for reviewing our paper and for her/his constructive advices to improve the manuscript. In the following we answered your questions and have indicated what information we added in our manuscript.

1. In the Introduction the sentence, “The German Bight located in the south-east of the North Sea with its flat coastal areas could be especially vulnerable” appeared a bit surprisingly. The authors started with a global perspective and I wondered why the German Bight was the area of choice. In addition, why is the German Bight especially vulnerable compared to other flat and low-lying coasts?

*We changed this part of the introduction. We focus on the German Bight as one example for low-lying coastal areas. The low-lying coast of the German Bight is not more vulnerable than other coasts with the same conditions like the Dutch coast. This part of the introduction shall say that the flat German coast with the Wadden Sea is more vulnerable than a steep rocky coastline like the east coast of Great Britain.*

2. As the authors motivated their study by differences in the response of global models, can the conclusions from the German Bight be generalized?

*Our motivation for this study is to show that depending on the model setup and especially the resolution of the bathymetry different responses to the same mean sea level rise can be estimated. This is especially effective in shallow coastal waters where the small-scale topographic structure has a great influence. Thus we would say that the conclusions could be transferred to other regions which show a comparable tidal regime and similar topographical characteristics like e.g. flat intertidal areas but could not be generalised without restrictions.*

3. Model set-up and experiments need some more explanation, in particular

a. Why did the authors choose to include meteorological forcing and not just used a tide-only simulation, in particular as they said they choose the summer to “ensure that the results are not influenced by storm surges or extraordinary high river discharge” (page 7).

*Tide-only simulations would have been also a good option. In the first place we decided to include meteorological forcing to be more realistic. Since we choose a summer period for our analyses, in which wind speeds are small, the meteorological forcing does not influence the results. Thus it is not critical whether we include meteorological forcing. We added a short explanation in the manuscript.*

b. The salinity boundary condition (page 5) needs some explanation as I expect that readers are not necessarily aware of what was done in the referenced project.

*We added additional information about the salinity boundary condition in the manuscript. The aim of the project AufMod was to develop a model-based tool to analyse long-term sediment transport and morphological processes. During this project a numerical model of the North Sea was set up. The used salinity boundary condition is a result of a reference simulation carried out during AufMod.*

c. A source for the river discharge data and their time resolution should be provided.

*The data for the river discharge is provided by the Water and Shipping Authorities and the “Gewässerkundliches Jahrbuch” which are published by the Hamburg Port Authority for the Elbe and the NLWKN for Ems and Weser. The time resolution of the data is one day. We added this information in the manuscript.*

4. Figure 6 and following: The gray color bar should be explained in the caption. I was not able to clearly identify gray areas in the Figures.

*We removed the grey colour bar in the figures where it isn't necessary. The grey colour which indicates dry areas is now explained in the caption.*

5. Page 19, line 29: What exactly is “sufficiently fine”? There are probably substantial changes in bathymetry over time as well. What would the authors then consider a “sufficiently fine” resolution?

*You are right; the formulation “sufficiently fine” is not a very clear choice. The answer to the question what we would consider as a “sufficiently fine” resolution cannot be given easily. It depends on the concrete research question. In particular, for questions related to locations close to the coast the model bathymetry should incorporate the main characteristics of the Wadden Sea. To give a proper answer further research is needed. One way to explore which resolution is needed could be a sensitivity study, in which the resolution is systematically varied as suggested by reviewer #2. We added this aspect in the discussion at the corresponding text position.*