

Comments by Luis Matias, University of Lisbon

Major comments

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I agree with the author's comments, but I am in favour that this information should somehow appear in the manuscript to emphasize the use of the methodology to other slow deforming regions.

Following the suggestion we have included this in lines 80 – 83.

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In my opinion, some short version of this information should appear on the manuscript, not for the benefit of the reviewer, but for the benefit of the reader.

The information provided in the first answer to the reviewer is included in lines from 141 to 154.

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The figure on the next page shows the geographical area of figure 1 as presented in the manuscript and as plot with Mercator projection by GMT. I added a rectangle 1o by 1o on both plots. This shows that the projection used in the manuscript is not Mercator as claimed. I do not suggest redoing the figure, just mention on the caption the geographical projection used, for the benefit of the reader.

We added a note on Figure 1 caption.

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I see that the authors address (ii) above but not (i). It is a detail that is missed in many tsunami simulations but for this manuscript its relevance may be considered second order.

We have included a note on this issue on lines 229-231, and included the reference to Lotto and Dunham (2015).

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This is not completely satisfying. The figures presented in the manuscript show only "maximum elevation" but no inundation, generating the question in my original comment. Is it possible to show one inundation map as supplementary material?

We have included new subfigures in figure 8 showing a more detailed map of some results including inundation.

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This comment is indeed true if the tsunami propagation extends to the inundation phase. The mentions of "inundation" in the manuscript are scarce:

Lines 232-233: ... a Manning's roughness coefficient of 0.02 when computing the inundation.

Lines 250-251: and with relevant inundations, in the Almerian coast (Figure 9).

Figure 9 only shows maximum elevation, not inundation that we might see. At least it is not mentioned in the caption.

Line 253: and with relevant inundations, in the Almerian coast (Figure 9).

Line 303: and consequently the statistical distribution of maximum elevations and inundations.

I believe that the computation of inundation in tsunami modelling should be clarified or emphasized, given its relevance for the discussion. For inundation the authors need a detailed DTM for the land mass but no mention to it is found on the manuscript.

We have included additional information on tsunami inundation on lines 227, 235. The original resolution for the topography is a DTM of 25m from the National Geographic institute of Spain as is mentioned and referenced in line 236.

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The inundation is computed by means of the COMCOT numerical model.

The only reference to COMCOT is found on line 224: In order to model the tsunami propagation we have resort to the highly used and validated code COMCOT.

In my opinion “tsunami propagation” is not equivalent to the computation of “tsunami inundation” which is more demanding computationally and requires new detailed datasets not mentioned in the manuscript.

As has been said before the details on the inundation DTM is included in the text. Also new mentions to the inundation have been included. In lines 227, 235 and figure 8 caption.