

Comments to the revised version – Reviewer#2

General comments

The paper by Haider and coauthors has significantly improved after the revision and is now more clear and complete: I appreciated their great effort.

However, in my opinion some minor issues still need attention before publication: they are reported in the “Specific comments” section below, together with some typos in the following section.

Specific comments

3. *Methods*

Line 67: “*In addition to the recorded tsunami wave height of 12-15 m in 1945 at Pasni...*” This information has not been provided before, but here is commented as already known. Maybe it should be included in the Introduction where the 1945 tsunami effects in Pasni are described, and then recalled here.

Lines 78-79: the utility of the “Fins scenario” is not totally clear: if it is used to “validate” the tsunamites, why isn’t the respective flooding shown and discussed as the other scenarios? Anyway, in Table 1 it is denoted as scenario D, so for coherence it should be cited like that in the text.

Line 80: With “*The other tsunami sources*” are you referring to other kind of tsunami sources (landslide, etc), or to other potential seismic sources? This is a bit misleading.

Line 81 (see also comment of Line 67): the information about the 1945 Pasni tsunami could be moved to Introduction or can be left here but the sentence at Line 67 has to be removed.

Line 92 and Table 1: do A, B, C refer to 7m, 10m and 15m scenarios respectively? If yes, write it explicitly, or refer to these scenarios in the text accordingly.

Lines 100-101: this sentence causes a bit of confusion. Since the authors have already cited three scenarios, are these two additional?

Line 133: the assumption of 0.99 for the parameter C_D should be motivated, at least with a citation.

4. *Results and interpretations*

Line 199: the authors should explain (in the previous “Methods” section) how this probability is computed and used. Is this the probability for each building to be destroyed? Or is it the percentage of destroyed buildings over the total? Are partial damages accounted for? Add a brief description of the application of the vulnerability method.

5. *Discussion and conclusions*

Lines 238-240: indeed, also wave dispersion can play a role, if the wavelength is reduced considerably and the shallow-water approximation isn’t valid anymore.

Line 290: tsunamis do not manifest on the coast only by sea retreat. The polarity of the first arrival depends on many features: the source characteristics, non-linear effects in shallow water, the position of the coast with respect to the source.

Minor issues and typos

Line 79: "*The tsunamis ARE generated*".

Line 80: "*Table 1*" instead of "*table 1*".

Line 97: "*multiproxy proxy*" does not sound correct; remove "*is*" after "*return period*".

Line 140: "*experiences*" instead of "*experience*".

Line 143: "*In the 10 m wave scenario, along with first wave a secondary wave with a wave height of 8 m is generated*". The word "*wave*" is repeated too many times, rephrase this sentence or change wording.

Line 193: At the end of the sentence, remove "*.*".