Comment on nhess-2021-375
Anonymous Referee #1

Referee comment on "Tsunami scenario triggered by submarine landslide offshore of northern Sumatra Island and its hazard assessment" by Haekal Azief Haridhi et al., Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2021-375-RC1, 2022

Overall evaluation:

I think this is a good work and is helpful for tsunami hazards in Sumatra region. I recommend publication after the following revisions.

Tsunami scenario triggered by submarine landslide offshore of

northern Sumatra Island and its hazard assessment

Haekal A. Haridhi et al.
Comments:

Figure 1: Some text is Figure 1a cannot be read. Please increase fontsize.

L25-28; what is meant by this: “In an extreme case, an earthquake of Mw 7 or more occurred, and

the strong ground shaking triggered a submarine landslide off the northern shore of Sumatra.”? Is this about a real event? Or hypothetical?

Abstract: make your abstract more specific by adding some numbers and values from your modelling, like wave heights and etc.

L43-55: Another good example of tsunami from strike-slip event from this region is the event of March 2016. See reference below. You could add something like this: "Heidarzadeh et al. (2017) showed potential tsunami hazards from strike-slip events by analysing the tsunami from the Mw 7.8 strike-slip earthquake in the Wharton Basin".

Figures 2 & 3: here we have two issues: the fonts are small; and please write the owner of the data in the caption; is that from Malod and Kemal, 1996? Please also write that they are digitized from paper versions. These two figures are key figures of the paper and you need to be very clear about them.


L295: Another good ref here: Tsuji et al. (2011):


L170: Yes, it is true that COMCOT can model landslide tsunamis as well. Would be useful to add another reference here of other people who used COMCOT for landslide tsunamis. I
recommend Heidarzadeh and Satake (2015):


L316: I think here you could cite one more article; I suggest Heidarzadeh et al. (2019):


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