

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC2
<https://doi.org/10.5194/nhess-2021-183-RC2>, 2021
© Author(s) 2021. This work is distributed under
the Creative Commons Attribution 4.0 License.



Comment on nhess-2021-183

Gerasimos Papadopoulos (Referee)

Referee comment on "Characterisation of fault plane and coseismic slip for the May 2, 2020, Mw 6.6 Cretan Passage earthquake from tide-gauge tsunami data and moment tensor solutions" by Enrico Baglione et al., Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2021-183-RC2>, 2021

The generation of large tsunamis in the Mediterranean Sea is infrequent. Therefore, the study of small tsunamis is of particular interest for the reason that it provides better understanding of both the tsunami generation mechanisms and propagation away from the source. This is the case of the paper by Baglione et al. which focuses on the 2 May 2020 seismic tsunami generated offshore south Crete in the Hellenic Subduction Zone.

The paper is well-organized, the tsunami simulation method is well explained and documented from the literature point of view and the results presented clearly. I recommend publication after minor improvement following the next comments:

- 72 "Guidoboni and Comastri, 1997". Wrong citation, those authors reported on the 1303 tsunami not on the 365 one. Suggested citations for the 365 earthquake and tsunami are, among others, the books by Ambraseys (2009) and Papadopoulos (2011).
- 75. Papadopoulos et al., 2014. The correct citation is Papadopoulos et al., 2012 (see reference).
- 139. "a steep south-dipping plane". Please say a few words that may support from geotectonic point of view the possibility of considering such a type of fault in that area.
- 337 "Both synthetic signals reproduce quite well the first oscillations". Please mention how many sec are covered by the first oscillations, up to ~30 sec?
- 381 "not too distant from the source". It is better saying "in the near-field domain"
- 492-493 "leaves very little time for warning". This operationally critical point was examined in details by Papadopoulos et al. (2020) as regards the 2 May 2020 seismic tsunami.

Figure 1. Please draw an inset to show the region where the study area is situated.

Reference

Geological evidence of tsunamis and earthquakes at the eastern Hellenic Arc: correlation with historical seismicity in the Eastern Mediterranean Sea. *Research in Geophysics*, 2e12,

90-99 (+electr. suppl.), 2012 (G.A. Papadopoulos, K. Minoura, F. Imamura, U. Kuran, A., Yalçiner, A. Fokaefs, T. Takahashi).

G.A. Papadopoulos

Athens, 5 Aug. 2021