

# ***Interactive comment on “Detectability of seismic waves from the submarine landslide that caused the 1998 Papua New Guinea tsunami” by Akio Katsumata et al.***

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Received and published: 15 December 2018

Review nhess-2018-317 PNG Been through the paper and two previous reviews (RC1 and RC2), and agree with both. Fryer identifies missing references and the potential for T-phase warning which could provide an alternative approach. I question some of the interpretations of the different tsunami mechanisms in the Mediterranean. There are major seismic hazards here, such as Messina, 1908 and the EBTP of 365 AD. There are other earthquake tsunamis in the Ionian Sea. The work of Salamon et al., is questionable as it is based on the interpretation of ancient texts in earthquake identification (intensities) and not on modern methodologies of marine mapping and

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seismological identification of earthquakes and their magnitudes. A more appropriate reference is: Papadopoulos, G.A., Gràcia, E., Urgeles, R., Sallares, V., De Martini, P.M., Pantosti, D., González, M., Yalciner, A.C., Mascle, J., Sakellariou, D., Salamon, A., Tinti, S., Karastathis, V., Fokaefs, A., Camerlenghi, A., Novikova, T., Papageorgiou, A., 2014. Historical and pre-historical tsunamis in the Mediterranean and its connected seas: Geological signatures, generation mechanisms and coastal impacts. *Marine Geology* 354, 81-109.

The anonymous reviewer (RC2) undoubtedly identifies a fundamental flaw in the analysis. The PNG 09.02 'seismic' event is unique and was identified by Synolakis et al. as reflecting the slump movement, not a seismic event. The modelled and observed signals do not match. The authors have to go back and revisit the frequency signal at this time, and address this before the paper can be published – it is fundamental to the papers conclusions and the possibilities for tsunami warning from submarine landslides.

To confirm, the PNG landslide was a slump. I mapped it.

The Salamon reference is missing. I don't think there is a peer reviewed paper from 2011. 2007 maybe from the eastern Med?

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Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2018-317>, 2018.

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