

## ***Interactive comment on “Numerical simulations of tsunami generated by underwater volcanic explosions at Karymskoye lake (Kamchatka, Russia) and Kolumbo volcano (Aegean Sea, Greece)” by M. Ulvrová et al.***

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I would like to add a few more comments regarding the volcanological part of the study before the public review process is over:

- The main point I was trying to make was not related to the discussion of the source and inundation of the 1650 tsunami, but rather aimed at considering that an eruption with similar characteristics may occur in the future. This means that the authors should also talk in the manuscript about the possibility of a flank eruption for the sake of com-

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pleteness, even if they do not perform additional numerical simulations.

- I do not agree with the absolute certainty of D. Papanikolaou that a flank eruption is not possible because some previous eruptions occurred very near the Columbo crater. The 1650 eruption is classified by the Smithsonian Global Volcanism database as a flank eruption and the fact that its effects were felt by the population of Thera (based on historical sources) points to the possibility that its origin was much shallower than 400-500 m. Mastin and Witter (2000) have done a global survey of submarine eruptions and found that most of these eruptions that have breached the sea surface occurred in shallow depth (meters to tens of meters). Even if we accept that the "usual" eruptive behavior of Columbo is to erupt through its central vent, I do not think that on volcanological grounds a flank eruption can or should be excluded as a possibility. Additionally, a future eruption like that of 1650 would clearly be the most dangerous scenario from the volcanic hazards point of view.

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