

## ***Interactive comment on “Large-scale numerical modeling of hydro-acoustic waves generated by tsunamigenic earthquakes” by C. Cecioni et al.***

**C. Cecioni et al.**

claudia.cecioni@uniroma3.it

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The authors would like to thank Emiliano Renzi for the valuable comments and suggestions, which all have been considered in the new version of the manuscript.

Answers to E. Renzi main comments

- 1) A short discussion on the elastic bottom effects on hydro-acoustic waves has been added in the Introduction.
- 2) It has been clarified in the Introduction that the presented model involves just the first-order effects of sea water compressibility on the generation of both tsunamis and hydro-acoustic waves. And the following sentence has been added in the Discus-

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sion: “This appealing feature of hydro-acoustic waves has recently been considered by Renzi and Dias (2014) for the wave field generated by a localized surface pressure disturbance; their work could lead to the design of innovative alert systems for coastal flooding management, based on the measurements of hydro-acoustic wave.”

Answers to E. Renzi minor comments

- 1) The figures 4 and 9 have been changed by adding the labels 3D and DI for each subplot indicating if the plotted results come from the three dimensional model (3D) or the Depth-Integrated one (DI).
- 2) It has been specified in the revised manuscript that the system (1) is valid within the framework of a linearised theory.
- 3) The authors checked and corrected some grammar errors throughout the manuscript

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