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www.nat-hazards-earth-syst-sci-discuss.net/2/C3341/2015/

Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Inversion method for initial tsunami waveform reconstruction" *by* V. V. Voronin et al.

Anonymous Referee #1

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The authors study the problem of recovering sources of tsunami using measurements of waves at certain receivers. The potential practical application of a successful solution of this problem is clear. They use a new model linked with the solution of an inverse source problem for the wave equation. In this case the unknown source is the right hand side of this equation. The resulting problem is ill-posed. The authors solve it using the least squares minimization approach and single value decomposition method. Results of numerical experiments show that even with the data recorded on a very few receivers, one can still somehow reconstruct the tsunami source. "Somehow" is sufficient for practical applications since the exact location of the source can hardly be discovered. The paper is of very good international standards and can be published in its current form.

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Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 7735, 2014.

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Fig. 1.

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Interactive Comment