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Discussions

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

Anonymous Referee #2

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[Major comment]

The authors investigated capability of tsunami inversion technique in terms of what minimum number of marigrams should be used, and how these are distributed to reconstruct a tsunami source accurately enough via the numerical experiments. This paper was carefully written to lead the readers to the conclusion. It is good that they kindly explained the least square approach with SVD they used in the manuscript while the inversion method would be a conventional one. I believe they successfully provided useful information designing a monitoring system for tsunamis in the manuscript. I recommend this paper to be accepted for the upcoming issue of NHESS.

However, some modifications would be needed in figures before publication. The au-

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thors should embed "unit" along x and y axes in the figures. For example, the x axis would indicate "distance [km]" in left figure of Figure 1. (It may be better to mention it "Figure 1a" after adding "(a)" in the above.) In the middle of Figure 1, the x axis is "number of singular values", that should be also mentioned in the figure, not only in the figure caption. It would be hard to understand right of Figure 1 because the different values are shown in the one y axis without unit. In Figure 2 and 3, the units of color scale bar should be mentioned as well as the units along x and y axis. The authors therefore must check again the all figures along this manner.

[Minor comments]

Page 7747, line 13. The double "on" is seen.

Page 7756, line 5. It would be in Fig 10, not in Fig 11.

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