

Interactive comment on “Tsunami response system for ports in Korea” by H.-R. Cho et al.

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Received and published: 6 June 2015

Comment-by-Comment for Anonymous Referee 2

First of all, we heartily appreciate your interest and comments again. Your comments improve the quality of the manuscript.

1) The authors respond to the first remark. The fact that a tsunami was not disastrous but observed should be considered in such paper. As the vulnerability increased drastically during the last 50 years it could be considered that a similar tsunami could generate damage if it occurs now. The NGDC data base should be scrutinized to check if other tsunamis had impacted the Korean coastlines in the XIX and XX centuries. The response about the delay of warning and travel time map is not satisfactory. The authors refer to 14 travel time maps in Shin et al. Adding in that paper the travel time map

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of the closest source epicenter would provide to the reader valuable complementary information. Additional comments on this map considering the delay time would help to demonstrate the global use of the method.

Authors Response:

We have scrutinized NGDC and a Japanese Report entitled “A Full Survey of Tsunamis Attacked Japan” [in Japanese $\text{æ}\text{Ű}\text{ě}\text{æ}\text{I}\text{ñ}\text{è}\text{ć}\text{n}\text{á}\text{ó}\text{ş}\text{á}\text{I}\text{ř}\text{é}\text{I}\text{J}\text{Ĝ}\text{æ}\text{t}\text{u}\text{æ}\text{ž}\text{ć}\text{y}\text{ı}\text{æ}\text{ř}\text{ñ}$] to find other tsunami events during 19 and 20 centuries around the Korean Peninsula. We have found the other tsunami generated in East Sea (Sea of Japan). The tsunami had been generated in 1833 and the epicenter of the earthquake was near that of 1983 event. However, there is no record in the Korean History. Although the tsunami had killed 100 people and destructed 495 houses in Japan, there had been no damage in Korea. Of course, we do not make a travel map for the 1833 event, but it may be similar to that of 1983 event as shown in Figure 2 of the manuscript. Thus, authors believe that the travel times of 3 historical and 11 virtual tsunami events are enough to make EAPs at Ports in Korea.

2) Last and new point, in the abstract, important information is missing on details about tsunamis that impacted the Korean coastlines. Referring to 1983 and 1993 disastrous events in the abstract would provide valuable information. The length of the abstract is too short and additional relevant sentences would give the opportunity to attract readers.

Authors Response:

We have revised the abstract to cover some details of 1983 and 1993 events. And, we have included some information such as the magnitude of earthquakes and damage due to 1964, 1983 and 1993 events in the manuscript and provided some references [See page 3 just before Figure 1].

Please also note the supplement to this comment:

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<http://www.nat-hazards-earth-syst-sci-discuss.net/3/C908/2015/nhessd-3-C908-2015-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 3, 2025, 2015.

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