

Developmental status of real-time tsunami inundation forecast system using S-net

*Naotaka YAMAMOTO¹, Shin Aoi¹, Wataru Suzuki¹, Narumi Takahashi¹, Takeshi Nakamura¹, Kenji Hirata¹, Takashi Kunugi¹, Hiromitsu Nakamura¹

1. National Research Institute for Earth Science and Disaster Resilience

We designed a database-driven real-time tsunami inundation forecast system based on the multi-index method with correlation coefficient and two kinds of variance reductions. And we implemented a prototype system for the Pacific coast of Chiba prefecture (Kujukuri-Sotobo region), Japan using the Seafloor Observation Network for Earthquakes and Tsunamis (S-net). To evaluate the propriety of our developed system, we investigated whether it is possible to select appropriate tsunami scenarios from Tsunami Scenario Bank (TSB) for the 1677 Enpo Boso-oki earthquake as “pseudo observation” and the November 22, 2016 Mw 7.0 earthquake off Fukushima prefecture, Japan. This work was partially supported by the Council for Science, Technology and Innovation (CSTI) through the Cross-ministerial Strategic Innovation Promotion Program (SIP), titled “Enhancement of societal resiliency against natural disasters” (Funding agency: JST).

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