

# Rapid estimation of tsunami source information based on forward analysis of real-time data from dense offshore observation network

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Tsunami source information is generally obtained by inversion analysis of observation data. For the real-time tsunami forecast, predicted coastal tsunami height is derived by forward calculation using tsunami source model derived by the inversion of seismic waveforms or tsunami waveforms. However, the inverted source information has possibly large uncertainties in the real-time tsunami forecast because forecast information should be issued before arriving to the coast. In this study, we propose the method for estimating tsunami source information based on the forwarding analysis of offshore tsunami observation data from Dense Oceanfloor Network system for Earthquakes and Tsunamis (DONET) and the Seafloor Observation Network for Earthquakes and Tsunamis (S-net).

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