Anomalous wave dispersion of distant tsunamis in a coupled system between the self-gravitating elastic Earth and ocean

WATADA, Shingo¹

¹Earthquake Research Institute, University of Tokyo

Traveltime delay and waveform dispersion of distant tsunamis that propagated over the Pacific after the 2010 Chilean and 2011 Tohoku-Oki earthquake can be understood as a propagating wave in a unified gravitationally and elastically coupled system between the solid Earth and ocean.

Keywords: Tsunami propagation delay, Tsunami phase velocity measurements, Tsunami waveform dispersion, Tsunami initial phase with reversed polarity, Tsunami precursor, DART tsunami records from the 2010 Tohoku-Oki earthquake and