

## Coseismic slip distribution of the 2003 off Fukushima interplate earthquake (M6.8) estimated from seismic waveform inversion

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We estimated coseismic slip distribution of the 2003 off Fukushima interplate earthquake (M6.8) using teleseismic waveform data observed by IRIS network. We adopted the waveform inversion method developed by Yagi et al. (2004).

There exist a few large coseismic slip areas with a spatial extent of about 10 x 10 km<sup>2</sup>. Most distinct slip area locates near the mainshock hypocenter and the second largest slip area is to the east of the mainshock hypocenter. Spatial extents of the whole coseismic slip areas are almost consistent with those of the aftershock area and tsunami source area. Comparison of spatial extent of the coseismic slip area with bathymetry off Fukushima prefecture suggests that a subducted seamount possibly acts as the asperity of the present M6.8 earthquake.