

Examination of submarine active fault off southeast Izu Peninsular, central Japan

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Faunal compositions and ¹⁴C ages of emerged sessile assemblages at four sites in the southern part of Izu Peninsula, central Japan, indicate that co-seismic uplift occurred at 1256-950 BC, AD 1000-1270, AD 1430-1660, and AD 1506-1815 (Kitamura et al., submitted). This study found emerged sessile assemblages at two sites (Kujyuhama and Tarai Cape) which are located at outside of the previous studied area, and examined their faunal compositions and ¹⁴C ages. Moreover, we estimated average co-seismic vertical displacement based on combination of previous works and new data obtained in this study. Using these values and source fault model, we examined submarine active fault that caused four uplift events. The results showed that a reversal fault has 12 km length and 15 km width (strike = 70, dip = 25N, slip = 3 m, Mw = 6.7), and is located about 5 km off Shimoda.

Keywords: submarine active fault, southeast Izu Peninsular, coseismic uplift events, fault model