

## History of interplate earthquakes along the Sagami Trough from uplifted coasts in the Boso Peninsula

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We surveyed tectonically uplifted coast, Heisa-ura, in the southernmost part of the Boso Peninsula, central Japan, for the estimation of the recurrence history of subduction earthquakes. The megathrust earthquakes along the Sagami Trough, located to the south of Tokyo, are known to repeatedly occur as represented by the 1703 M8.2 Genroku Kanto Earthquake. The interval time of these earthquakes is previously believed to be longer than 2,000 years from the investigations of the marine terraces in the Boso Peninsula (e.g. Nakata+, 1980). However, the recent dating survey indicated that their interval time might be 500–800 years at the shortest (Komori+, 2017) and required more detailed investigation. The Heisa-ura coast, we surveyed in this study, has not been investigated well before because no significant landform such as marine terraces are developed there. This region is, however, considered to suffer the fastest averaged uplift rate in the surrounding area from the recent study of the marine terrace distribution. Thus the buried sedimentary structure in Heisa-ura possibly records the emergence history of this coast. Here we show the result of the detailed geological survey using Geoslicer done in Heisa-ura for the first time. We obtained 8 sedimentary structure ~2 m deep along a survey line perpendicular to the coast. This investigation revealed that shoreface deposit contains shell fragments is placed deeper than 0.5–1.0 m beneath the surface. Additionally, the sedimentary structure is different between the survey points above and below the estimated elevation of the paleo-shoreline angle. These results indicate that the sedimentary structure beneath the Heisa-ura coast might records the chronicle of crustal deformations which has not been explored. This survey would give us several important factors for the discussion of the mechanisms of the subduction earthquakes along the Sagami Trough and the future hazard assessment of them.

Keywords: Sagami Trough, interplate earthquakes, marine terrace