

Preliminary report on paleotsunami study in Nankoku City, Kochi Prefecture, western Japan

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Kochi Prefecture has been struck repeatedly by large tsunamis generated by subduction zone earthquakes along the Nankai Trough. Historical records through approximately 1,300 years indicate great earthquakes ($M \sim 8$) basically occurred at intervals of 100-200 years along the Nankai Trough. However, because historical documents are relatively sparse before the 16th century, it is difficult to evaluate magnitudes and rupture areas of earthquakes during this period. Tsunami deposits provide basic data for reconstructing not only the long-term earthquake history but also the magnitudes and the rupture areas. Therefore we studied tsunami deposits in Kochi Prefecture.

We drilled in coastal lowlands of Toyo Town, Nankoku City, Shimanto Town and Kuroshio Town. We obtained cores and geoslices at 9 sites in a coastal lowland up to 3 m in elevation in Nankoku City. Deposits above the Kikai-Akahoya tephra (erupted ca. 7,200 cal BP) consist mainly of mud, peat and include event sand sheets. We present initial findings following the preliminary results of radiocarbon dating and fossil diatom analysis for some cores.

Keywords: tsunami deposit, fossil diatom analysis, Nankai Trough, Nankoku City, Kochi Prefecture