

Survey of tsunami deposits at an archaeological site along the eastern Nankai trough

Keita Takada[1], Kenji Satake[1], Akira Sangawa[2], Koichi Shimokawa[1], Hiroyuki Kumagai[3], Kenichi Goto[4], Tsuyoshi Haraguchi[5], Akira Aoshima[6]

[1] Active Fault Research Center, GSJ/AIST, [2] Active Fault Research Center,GSJ/AIST, [3] NIED, [4] Board of Education Kosai City, Shizuoka Prefecture, [5] Fukken.,Tokyo, [6] Hamamatsu Kita High School

Surveys of tsunami deposits have been performed at an archaeological site on the coast of Enshu-nada, Kosai City, Shizuoka Prefecture. It is documented that this site was damaged by the tsunami from the 1707 Hoei earthquake along the Nankai trough. An archaeological survey revealed two sand layers, which may have been brought by tsunamis from the 1707 and 1605 earthquakes. An additional unusual sand layer has been found at the depth of 1.7 m from the ground surface. Geoslicer surveys at this site showed, from the surface down to the depth of 6 m, massive dune sand, laminated sand, silty clay including burrows, and beach gravels. Four unusual sand layers have been identified in the Geoslicer samples. The unusual sand layers below the possible 1605 tsunami deposit may be also caused by tsunamis from older Tokai earthquakes. The carbon 14 dating is under way for several plant fragments in the samples, which may constrain the dates of the unusual sand layers.