

14C age of stump buried in dammed lake sediments of Koinami in Yatsuo Town, Toyama City, central Japan

Satoru Kojima[1]; Noriaki Okamura[2]; Kazuhiro Suzuki[3]; Tomoyuki Ohtani[1]; Tamotsu Nozaki[4]; Hidehisa Nagata[5]

[1] Dept. of Civil Eng., Gifu Univ.; [2] Dept. Civil Eng., Gifu Univ.; [3] Nagoya University Center for Chronological Research; [4] Arcegeo Inc.; [5] Fu-Sui-Do Co. Ltd.

Koinami in Yatsuo Town, Toyama City is located on a small flat basin along the Besso River south of the Toyama Plain. The basin is about 460 m in altitude, and surrounded by ridges about 600-800 m. An ENE-WSW trending fault (not active) to the south of Koinami is the boundary between the Miocene Nirehara and Iwaine Formations to the north and the Tetori Group and the Funatsu Granite of Hida belt to the south. Many landslides are developed within the area underlain by the Iwaine Formation composed of volcanic and volcanoclastic rocks. One of the landslides, 500 m in width and 800 m in length, dammed the Besso River and the dammed lake was filled in to form the Koinami flat basin. The buried forest composed of many stumps, about 2-5 m in diameter, were recovered from the lake sediments during the land improvement of 1977-79, one of which yields the AMS 14C age of 2475±30 BP. It is between the Final Jomon and Early Yayoi Periods. Large-scale landslides are generally triggered by earthquake or heavy rainfall. Although we could't determine the inducing cause of this landslide, if the landslide was caused by an earthquake, the Atotsugawa fault is one of the most probable candidates on the basis of the recurrence interval and last event.