

Paleoseismology of the Sakaitoge fault in Nagawa Village, Nagano Prefecture, central Japan

Toshikazu Yoshioka[1]; Takashi Hosoya[2]; Tomoo Hashimoto[3]

[1] Active Fault Research Center, GSJ/AIST; [2] CKC; [3] Chuokaihatu Co

<http://staff.aist.go.jp/yoshioka-t/index.html>

The Sakaitoge fault is a left-lateral strike-slip active fault trending NNW-SSE to NW-SE direction in western Nagano Prefecture. Four trenches (named Yoriaido A, Yoriaido B, Sogura A, and Sogura B) were excavated at two site in Nagawa Village to reveal the paleoseismic activity of this fault. One or two fault planes cutting the terrace deposits and the surface soil layers were observed on both walls of each trenches. On the walls of Yoriaido B trench, two fault traces covered by different horizon of surface soil layer are observed. This means at least two faulting event occurred after the beginning of the deposition of the soil layer. The calibrated radiocarbon dates show that the age of the last event of the Sakaitoge fault is 2900 BC (possibly 1650 BC) to 220 AD, and the age of the penultimate event is 5720 BC (possibly 5660 BC) to 4710 BC.