

## The latest surface-faulting event of the Tachikawa fault in metropolitan Tokyo

# Yukari Miyashita[1]; Takenobu Tanaka[2]; Kiyoshi Ichikawa[3]

[1] Active Fault Research Center, AIST, GSJ; [2] Hanshin Co.; [3] Dep. Geog. lit, komazawa Univ

<http://unit.aist.go.jp/actfault/activef.html>

Three trenching surveys and twenty-four boring surveys at Hakonegasaki in northwestern part of Tokyo Metropolis identified the latest surface-faulting event of the Tachikawa fault about 14,120 -7,300 years ago. Silt layers of the paleo-Sayamagaike deposits from boring cores show no evidence for drastic environmental change caused by faulting event during their deposition.

The Tachikawa fault is a 22-km-long NW-SE-trending mainly reverse fault. We excavated three trenches in 2004 and 2005, in order to directly obtain the paleoseismological data from the fault.

The trenches were excavated across 1- to 3-m-high SW-facing fault scarps at the Hakonegasaki sites. Trench walls exposed predominantly gravel, loam and humic soil and fault planes showing vertical to 70E dip with a flower structure. The fault planes deform at least the bottom of loam and are covered by humic soil.

In 2005, we measured vertical and horizontal separations of a silt layer in gravel in order to obtain a lateral slip component of the fault movement. As a result, it revealed that the ratio of vertical: horizontal separations are 1 : ~1.

We will present a preliminary result of a trenching survey and boring surveys at the Tachikawa City conducted in 2006.