

Early Holocene landslide deposits found from Mount Honita, the upper Tama River basin, west of Tokyo

*Yoshihiko Kariya¹, Koichiro Sawabe²

1. Department of Environmental Geography, Senshu University, 2. Japan Conservation Engineers

Landslide features are common in the upper Tama River basin west of Tokyo Metropolis where sedimentary rocks derived from Mesozoic accretionary prisms are widespread. We obtained two wood fragments from landslide deposits on the northeast side of Mount Honita (710 m ASL). Radiocarbon ages of those fossils showed 10250-10189 cal BP and 10150-10057/10042-9987/9959-9704 cal BP (2sigma; OxCal4.3 with IntCal13). This result indicates that landslide occurred in the early Holocene when precipitation had increased and the elevation of riverbed had decreased in central Japan due to global changes. This situation would create morphogenetic environments prone to landslide occurrence. Although the Tachikawa Fault zone is close to Mount Honita, the age of latest paleoseismic event revealed by a trenching survey does not coincide with ages of the landslide event shown here.

Keywords: Upper Tama River basin, 14C ages, Mass movement, Landslide

