

## Active tectonics and landform development along the Biwako-seigan active fault zone, southwest Japan

# Yuya Kakiuchi[1]

[1] Dept. Geophysics, Kyoto Univ.

The Ohmi basin is located on the northern portion of the Kinki Triangle. It is bordered by the Ibuki and Suzuka mountains to the east and by the Nosaka, Hira and Hiei mountains to the west.

The Biwako-seigan fault zone is a 59-km-long, N10E-trending reverse fault zone (The headquarters for earthquake research promotion, 2003). Around the northern part of the Biwako-seigan fault zone (i.e., Aibano fault and Kamidera fault), fluvial terrace surfaces are well-developed along the Ado and Ishida rivers (Togo, 1971). These terraces serve as important indices to characterize the tectonic activities in the area. The purpose of this study is to evaluate the activity of this fault zone using correlation and chronology of fluvial terraces.

In this study, some well-known wide-spread volcanic ashes within loamy soil were extracted to estimate the age of formation of the fluvial terraces. Also, the 'dip angle', 'fault offset' and 'depth of leading edge' using the simple dislocation fault model were estimated (e.g., Mansinha and Smylie, 1971). From preliminary results, it is interpreted that surface deformation is well explained by the fault, which angle becomes lower at a depth of 1-2 km.