

## Three Features of Accumulative Dislocation along the Shinano River Fold and Thrust Zone

# Haeng Yoong Kim[1], Atsumasa Okada[2], Keiji Takemura[3]

[1] Earth and Planetary Sci, Kyoto Univ), [2] Earth and Planetary Sci., Kyoto Univ., [3] Beppu Geo. Res. Labo., Grad. Sci., Kyoto Univ.

This thesis points out about the several pattern on the characteristic behavior and structural segmentation of active faults as accumulative displacement from tectonic landform along the Shinano River fold and thrust fault zone, central Japan.

Tectonic topography with accumulative displacement along the fault and thrust zone is classified to three type based on the topographic character. 1. vertical displacement, 2. lateral accumulation, 3. lateral propagation.

Vertical displacement is the most important behavior of reverse fault for lateral accumulation and lateral propagation. Lateral accumulation has character that younger terrace is surrounded by older terrace. Lateral propagation has character that the tip of fault estimated from distribution of younger terrace is located outside of the fault tip estimated from older terrace.

The active faults system along the Shinano River Fold and Thrust Fault Zone was classified into two type of simple segment and multiple segments based on accumulation pattern of topography. Simple segment is characterized as symmetric convex type of landform. Multiple segments are characterized as landform chained asymmetrically.

The fault behavior is so individualistic at each segments based on the distributions of terrace surfaces and the age. In the symmetric convex type, the similar shape between older and younger terrace surfaces is recognizable. In the asymmetric multiple segment type, the fault behavior is characterized as a combination between lateral propagation and lateral accumulation of fault segments.