Mechanism and origin of active fold belts in Japan

Yasutaka Ikeda[1]

[1] Dept. Geography, Univ. Tokyo

Active fold belts in Japan are likely to be underlain by detachment faults with flat-ramp geometry. These fold belts fall into two categories: the tectonic inversion type and the foreland-fold-belt type. The former includes the Uetsu and the Northern Fossa Magna fold belts, which are located in Miocene rift basins. The normal faults have rejuvenated as thrust faults due to regional compression since the Pliocene, resulting in folding in rift sediments. The latter category includes the Teshio-Ishikari and the Southern Fossa Magna fold belts. They are located in foreland basins that have been formed since Neogene time up to the present associated with arc-arc collision. The master faults underlying these fold belts are likely to extend down-dip to the plate boundary faults.