

Trenching Surveys of Surface Ruptures Associated with 2000 Tottori-ken Seibu Earthquake

Yuichiro Fusejima[1], Hideki Kurosawa[2], Yuichi Sugiyama[1], Ryusuke Imura[3], Michio Morino[4], Kiyohide Mizuno[5], Yasuo Ichikawa[6]

[1] Active Fault Research Center, GSJ/AIST, [2] OYO corporation, [3] Earth and Environmental Sci., Kagoshima Univ., [4] OYO Corporation Present address:Active Fault Research Center,GSJ-AIST, [5] Active Fault Research Center,GSJ/AIST, [6] OYO co.

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

Fusejima et al.(2001) found fractures of the ground surface and destructions of artificial structures in the epicentral area of the 2000 Tottori-ken Seibu earthquake (MW = 6.7, MJMA = 7.3). In continuing, at the end of the last year, the trenching surveys were carried out for the surface fractures at Ryokusui-en and Mt. Kamakura. On the walls and floors of these trenches, fracture zones in granite were observed. At Ryokusui-en the fracture zones are accompanied by planar fabrics and fault gouges. The fracture zones have contacted with dikes, and a part of them are fractured. At Mt. Kamakura the sediments covering the fracture zones have been cut by large number of minor faults showing cumulative displacements. These structures can be understood as structures made by multiple left-lateral faulting.