Subsurface structure and active tectonics around the Uozu fault zone in Toyama Prefecture, Central Japan

Tabito Matsu'ura[1]; Haruo Horikawa[1]; Hidetaka Saomoto[1]; Toshikazu Yoshioka[1]; Riichiro Miyawaki[2]; Hiroshi Yokota[3]; Akira Furusawa[4]

[1] Active Fault Research Center, AIST, GSJ; [2] Hanshin Consultants Co., Ltd.; [3] none; [4] FURUSAWA Geo. Sur.

Subsurface structure across the central part of the Uozu fault zone is studied by the P-wave seismic reflection survey. Neogene sediments such as 1) Kurehayama gravel bed, 2) Yoko-o sandstone bed and Otogawa formation, and 3) Yatsuo group are distinguished in the seismic profile. These strata are interpreted to be deformed by a blind reverse fault system in front of 'Uozu fault zone'. An elastic deformation caused by the blind fault roughly reproduces the profile of these deformed strata. A simulated deformation pattern by DEM (Discrete Element Method) is also consistent with the geological section across the Uozu fault zone.