

Seismic reflection profiling across the Shimotsuburai fault, southern part of Itoigawa-Shizuoka Tectonic Line active fault system

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On the surface geology, the Shimotsuburai fault is west dipping reverse fault, and topographic lineament is straight. Although amount of works have been done about the surface geology of the Shimotsuburai fault, still we do not have sufficient information on its deep structure. So we carried out seismic reflection survey across the Shimotsuburai fault, southern part of Itoigawa-Sizuoka Tectonic Line.

The geological interpretation based on the primary stage of seismic reflection profile has revealed (1) the 20 - 30 degree west dipping reverse fault are recognized, the west block thrust over the east block, and (2) the granitic layer is acoustic basement of this profiles, the depth is 1000 m - 1300 m.