

Subsurface structure revealed by integrated seismic survey around Median Tectonic Line, eastern Shikoku, Japan.

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We carried out seismic survey in the eastern Shikoku, Japan. A major active fault system called the Median Tectonic Line (MTL), passes through the study area. The MTL composed of high-angle right lateral faults and low-angle reverse-slip faults. In the survey area, ChiChio fault corresponds to high-angle right lateral fault system, but low-angle fault does not emerged. We deployed an on-line seismic reflection line across the MTL and off-line recorders around the area to investigate inhomogeneous structure near the MTL. The 4-km-long seismic reflection line was deployed in north-south direction. The off-line recorders (MS-2000: JGI Inc.) were deployed in east-west direction with a spacing of from 15 m to 25 m along the surface trace of the Chichio fault. In this study, we assumed an isotropic scattering model, and followed Kurashimo(1998)'s method. We applied a semblance analysis to estimate the distribution of seismic scatterers. The cross-correlation coefficient at a particular point in the profile is related to the magnitude of scattering there. We will interpret these velocity profiles and scattered wave analysis result.