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Room:Convention Hall

Time:May 25 16:30-17:30

## Seismic reflection profiling survey across the Tengmori-Dedana Faults, the southern Kitakami lowland fault zone

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The Kitakami lowland fault zone (KLFZ) is an active thrust zone that extends for about 70 km along the Quaternary volcanic front of the northeast Japan arc. The activity of the thrust zone after Quaternary is mostly recognized as a fault reactivation of Miocene normal faults in the area. Tengmori fault group which comprise the southern portion of the KLFZ is composed by several active faults. These faults deform late Quaternary fluvial terraces and debris flow deposits in Kitakami lowland. We present seismic reflection data acquired along the Kitakami - Kanegasaki profile, 12.8 km-long, to define the geological structure of the Tengmori fault group. In seismic lines, the vibrator truck (IVI ENVIRO VIB) is used as the seismic source. Source and geophone spacing are 10-m. Seismic reflection data was processed by using the standard CMP stacking method. The seismic profiles correlated with surface geologic mapping clearly.

Keywords: Tengmori-Dedana Faults, Kitakami Lowland, seismic reflection profiling, subsurface structure