

## Shallow seismic reflection profiling across the western marginal faults of Kitakami Lowland, northeast Japan (Hanamaki Line)

# Shin Koshiya [1], Eiji Kurashimo [2], Hiroshi Sato [3], Sumiko Ogino [4], Tetsuya Takeda [3], Yoshimasa Arai [3], Masaru Noda [1], Takafumi Kato [1], Shin-ichi Hirano [5], Hajime Kato [6], Takeshi Ikawa [7], Yusuke Morishita Research Group for the western marginal faults of Kitakami Lowland

[1] Civil and Environmental Eng., Iwate Univ., [2] ERI, Univ. of Tokyo, [3] ERI, Univ. Tokyo, [4] EPRC, ERI, Tokyo Univ., [5] Geography, Sci., Tohoku Univ., [6] Education and Human Sci, Yamanashi Univ, [7] JGI

In 1998, the seismic survey of the reflection method and surface geological investigation have been carried out by the research group in order to clarify a slip rate, geologic history and geometrical relationship between the active faults system in the western margin of Kitakami Lowland, northeast Japan. The seismic survey was performed 5.4km in length along the Shittai River, west of Hanamaki City. Beneath active flexural structure in the east of the area, there is an active blind fault along the existed bedding plane of caldera fill deposit. This fault is a branch one from the main fault in the west of the area. The age when the flexural structure started to be active is ca. 2Ma.