Shallow seismic refraction profiling of the Tokachi Plain Active Fault System, Hokkaido Japan

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We investigated the Tokachi Plain Active Fault System, Hokkaido, Japan, to clarify its subsurface structure by shallow seismic reflection. The results are as follows.

- 1) Two distinct flexure zones exist. The western flexure is 2km wide and has the vertical displacement of at least 0.25sec. A local anticline bulge recognized in the flexure consides with geomorphologically identified "Tobethugawa fault". The eastern flexure has the deformation pattern resemble geomorphologically recognized "Itaira fault", probably suggesting a fault propagation fold.
- 2) The mean vertical slip late of both flexures range in 0.2-0.4 mm/yr. Their late Quaternary activity results in the differentiation of the hilly lands from the plain, and have released E-W horizontal compressional stress by crustal shortening in this area.

