High-Resolusion Seismic Profile across the Western Flank of the Umaoi Hills the Frontal part of Hidaka Thrust System, Hokkaido.

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NS trending fold-and-thrust belt was formed in the western part of Hokkaido axial zone. To reveal the slip rate of the fold-and-thrust belt, high resolution shallow seismic reflection profiling was performed across the western flank of Umaoi Hills. Near the summit of the Hills, west dipping active fault is cropping out. Seismic reflection profile shows that the fault is bedding fault. Pliocene to Late Quaternary growth strata on the western flank of the Hills is well demonstrated on the seismic section. Vertical displacement by growth folding of Umaoi hill is roughly estimated to be 1 Km for last 3.5 million years. Based on the industry data, such as deep drill and seismic sections, the Umaoi hill is considered to be overlapping ramp anticlines.