

## Long-term crustal movement in the Rikuzentakata area, southern Sanriku coast, based on geomorphological/geological feature

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In the northeast Japan forearc, strain rate estimated based on by geological feature is different from that by geodetic feature. Thus, marine terrace suggests that the Sanriku coast has uplifted at the rate of 1 mm/yr since the late Quaternary. On the other hand, this area has subsided at the maximum rate of 10 mm/yr during the past 100 years based on geodetic data. This discord indicates the possibility that the giant mega-thrust earthquake causes the Sanriku coast to uplift. However, the 2011 Tohoku-Oki Earthquake (Mw9.0) was accompanied by subsidence along the Sanriku coast. This fact led us to reexamine long-term crustal movement.

We conducted geomorphological/geological analyses in the Sanriku coast, especially the southern part of the coast, where long-term crustal movement is unknown because of lack of widely distributed Pleistocene marine terrace. In this presentation, we will report preliminary results of consideration of long-term crustal movement in the Rikuzentakata area, southern part of Sanriku coast.

Keywords: marine terrace, southern Sanriku coast, long-term crustal movement, alluvial plain