

## Prediction of earthquakes inferred from Giant earthquake tsunami traces and related regional crustal movements by recognized regression around the Kuril subduction zone, eastern Hokkaido, northern Japan

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According to the latest evaluation that Headquarters for Earthquake Research Promotion announced in December, 2017, the earthquake along Kuril subduction zone was named anew with the 17th-Century Giant Earthquake, and the magnitude of the earthquake was  $m_w 8.8$  or more, and the probability of occurrence of the next 30 years was 7 to 40% and is expected to be imminent. The tsunami caused by the earthquake may cause damage to all over of the Pacific coast of Hokkaido. Nanayama et al. (2003) Since the report of tsunami sediment research, the region repeats hundreds of years, in addition to the M8 class subduction-zone earthquake, the M8-9 class-linked Giant Earthquake (17th century type) is clear that it occurs at 500-year intervals.

The coastal geographical and tsunami deposits caused by subduction of the Pacific Plate can be clearly observed in the area of the Kuril subduction zone in the eastern Hokkaido. The reason for this is that the Japanese settlements in this area have been preserved in the area since the Edo period, and the region that has not yet undergone artificial modification.

We excursion of the Tsunami deposits estimated to have been generated by the 17th-Century Giant Earthquake in the Kuril subduction zone and related regional crustal movements caused by the earthquake which focuses on the history of the barrier system of the Nemuro Peninsula, which is regulated by the forced constrained marine regression.

Keywords: Kuril subduction zone, Subduction zone earthquake, 17th-Century Giant Earthquake, related regional crustal movements, Tsunami deposits, Barrier spits