

## Tsunami deposits and historical earthquakes along the Sanriku Coast, North East Japan

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Along the Sanriku rias coast line, facing the Japan Trench, many tsunamis are repeatedly recorded through historical time; the AD1896 Meiji Sanriku Tsunami, the AD1793 Kansei Tsunami, the AD1611 Keicho Tsunami and the AD869 Jogan Tsunami.

We have investigated historical and pre-historical tsunami deposits to clarify the timing and the recurrence interval of great earthquakes, by using geoslicer and drilling cores beneath the coastal bay and alluvial lowland including marshes and lagoons, in Miyako-Hanokohama, Otsuchi-Kikiri marsh, Ofunato-Goisihama, Rikuzen-takada, and Kesenuma. Major results are as follow:

1) During the past 2000-6000 years, seven layers of tsunami deposits are recognized from more than 3 areas. The timing of these seven events of tsunami deposits are as follow: 1900-2000 cal.y.BP, 2400-2500 cal.y.BP, 3100 cal.y.BP, 4200-4300 cal.y.BP, 3650-3800 cal.y.BP, 4200-4300 cal.y.BP, 4900-5000 cal.y.BP, 5350-5450 cal.y.BP. The recurrence interval of these events is estimated between 500 to 700 years.

2) The tsunami deposits in the last 2000 years are rarely distributed in local, because sediments beneath the surface have been artificially eroded. In the Rikuzen-takada coastal plain, four layers of tsunami deposits are recognized. The most recently deposit may correspond to the 1960 AD Chile tsunami, others examining based on dating.