

Tsunami deposits survey around Japan Sea coastal area, Hokkaido

Wataru Hirose^{1*}, Gentaro Kawakami¹, Jun Tajika¹, Satoshi Ishimaru¹, Hiroshi Fukami¹, Tatsuya Watanabe¹, Ryo Takahashi¹, Kenji Nishina¹, Tsumoru Sagayama¹, Kenichi Koshimizu¹

¹Geological Survey of Hokkaido

At the eastern margin of Japan Sea, many large-scale earthquakes, such as "The 1993 off the southwest coast of Hokkaido Earthquake" have occurred, and accompanied "Tsunami", that damaged around the Japan Sea shoreline of Hokkaido. However, because of the absence of reliable historical records in Hokkaido, high-density geological survey would be needed, especially the recognition of "Tsunami deposits".

Historical disaster This Tsunami deposits survey have conducted by our group and Hokkaido local government. We survey around whole shorelines from Wakkanai to Matsumae, and especially Okushiri Island. In the Okushiri island, we recognize several event deposits accompanied Tsunami. Event deposits, such as sand bed with gravel are intercalated in peat or silt. The ages estimated stratigraphic and radiocarbon age are 1741 (accompanied with the Oshima-oshima volcano eruption), 11-13 centuries, 6-7 centuries, 2.3ka, 2.6-2.7ka, 3.1-3.3ka respectively.

At the Japan Sea shoreline area of Hokkaido, sand and gravel beds could recognized at 7 sites in 2011 survey, 26 sites in 2012 survey, respectively. mainly southern area and northernmost area. Geological, geographical and geochemical detailed work would be needed.

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