

Surveys of paleo tsunami deposits in Kunashir Island, the Northern Territories: Results obtained in the 2015-2017 projects and future issues

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Surveys of paleo tsunami deposits in Kunashir Island, the Northern Territories, were carried out in 2015, 2016 and 2017, as parts of visa-free exchange programs of Japan and Russia. Each survey was conducted by 5-7 researchers from Japan and Russia for about 10 days. In 2015, the team made a reconnaissance survey at the central to southwestern part of the Pacific coast of the island including Furukammapu, Chikappunai, and Tofutsu. In 2016 and 2017, the research area was expanded to east along the coast of from Chikappunai to Kuraoi River, where the higher tsunami was suggested by tsunami calculations assuming a huge earthquake off the Northern Territories. Through the surveys, it was found that many coastal wetlands suitable for paleo tsunami investigation were left on the island. There, tephra originated from volcanoes of Hokkaido and Kunashiri Island and the sandy layers that are candidates to be tsunami deposits are preserved. At the estuary of the Kuraoi River, a sand layer that can be a tsunami deposit associated with the 1994 Hokkaido Toho-Oki Earthquake was distributed. Thus, it is expected that the Kunashiri is able to obtain important information about tsunamis in the south Kuril region that is used for disaster prevention. It will be one of the objectives to consider more practical and sustainable collaborative research strategies to use the results for disaster prevention.

Keywords: the Northern Territories, Kunashir Island, tsunami deposit