The luminescence dating of tsunami deposits and tephra layers in Nemuro coastal area, eastern Hokkaido

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Along the Pacific coastal zone of eastern Hokkaido, research tsunami deposits in marsh deposits during the late Holocene, have been increasingly conducted since 1998. It is thus believed that this growing academic interest contributed to the establishment of stratigraphy for the large tsunami traces extending. Meanwhile, the dating data of large tsunami deposits has not been reported sufficiently yet. We investigated tsunami trench survey in Gakkara beach, Fureshima marsh and Nanbutou, Nemuro, eastern Hokkaido in October, 2005. Then we collected the sample for the luminescence dating from Gakkara beach and Nanbutou. In generally, the luminescence dating is divided into two methods, the thermoluminescence (TL) and photoluminescence (OSL) method. And the sample with heat history like the volcanic products are measures by the TL method, also eolian and aqueous sediments are measured by the OSL method. These tsunami deposits intermingle with the tephra layers on both sites. In this case, we presumptively tried to apply of both methods. We would like to describe a part of our results on our poster.