

Formation process of Holocene terraces based on sedimentary facies analysis and its tectonic implication, northwestern Hokkaido

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We describe sedimentary facies, distribution and altitude of Holocene terraces deposits between Teshio and Shosanbetsu in northwestern Hokkaido, to define their geomorphic evolution and tectonic uplift of the Teshio fault zone during the Holocene. Drilling investigation by use of percussion sampler and detailed interpretation of the sedimentary facies of drilled cores and exposures indicate that Holocene terrace deposits are comprised by floodplain deposits, shallow marine-lagoon deposits and lacustrine-floodplain deposits in descending order. Based on previous ^{14}C dating data, sharp boundaries between shallow marine-lagoon and lacustrine-floodplain deposits is correlated with the ravinement surface as corresponding with the maximum Holocene marine transgression. New radiocarbon dating ages and analysis of diatom assemblages obtained from the Holocene terrace deposits will provide insights into relative sea-level change and thus the timing and amounts of tectonic uplift along this active fault zone in Holocene time.