

Description of terrace deposit in the Hokushin area of Horonobe, north Hokkaido

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We carry out the interpretation of data obtained aerial photograph, topographical and geological investigations, carbon-14 dating, borehole investigation, seismic reflection exploration in and around in the Hokushin area of Horonobe, and also consider the distribution, geological structure, and formation age of the terrace.

The river terrace deposit around the Shimizusawa River consists of many breccias of mudstone, and few pebbles of chert, sandstone, and mudstone. The carbon-14 age of peat on terrace deposit is about 14,000 years. The thickness of terrace deposit is about 20 m in the central part, and decreasing toward the edges of the terrace. The seismic reflection profiles around the terrace deposit show the patterns of buried basin. Judging from the above, the terrace is an accumulation terrace which is formed by the solifluction in the Last Glacial Stage. In the horizontal deposit distributed over a position higher than this terrace, the alternating beds of mud, silt, and sand involve freshwater diatoms, costal diatoms, and trace fossils. It is likely that the area is around the coast area.

We will increase the above data, and will clarify the geologic history and diastrophism for the past hundreds of thousands of years.