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## The cross section of the latest Pleistocene to Holocene incised valley fill along the Arakawa River

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The stratigraphy of the Tokyo Lowland is discussed in this study with detailed cross sections along the lower reach of the Arakawa river, from Toda City, Saitama Prefecture, to Koto-ku, Tokyo, based on boring data from KuniJiban and Arakawa-Karyu River Office.

The narrow valley topographies under the lowlands spreading from the coast of Tokyo Bay to the eastern part of Saitama Prefecture have been revealed in recent decades. These valleys were incised at the last glacial maximum, filled with marine and nonmarine sediments during the following sea-level rise from the latest Pleistocene to Holocene. The top surfaces of the valley fills are flat lowlands. The Arakawa Lowland to the west and the Nakagawa Lowland to the east in Saitama Prefecture with the Omiya Upland in between, and two lowlands join into the Tokyo Lowland in Tokyo City. In the Tokyo Lowland, the axis of a buried valley is roughly located along the Arakawa River. The Ministry of Land, Infrastructure and Transport has a large amount of subsurface data along the Arakawa River. Some of them have been already opened to the public at the web site named KuniJiban, which is administrated by PWRI. For example, as for the boring survey results of Arakawa-Karyu River Office, Kanto Regional Development Bureau, 502 boring data are available in KuniJiban site.

In this study we make cross sections of the latest Pleistocene to Holocene incised valley fill along the lower reach of Arakawa River based on those open data in addition to the data by courtesy of Arakawa-Karyu River Office, totally 1250 core data. At Komatsugawa area, Edogawa-ku, Tokyo, the axis of a buried valley coincides with the location of the Arakawa River, and in the north and south of Komatsugawa area it shifts east and west to the river respectively. Due to the position of the valley axis related to the river, stratigraphy on both buried terraces and the valley axis can be observed in cross sections along the Arakawa River.

**Keywords:** Arakawa River, Arakawa Lowland, Tokyo Lowland, Latest Pleistocene to Holocene incised valley fill, boring data