Sedimentological study of the subsurface strata of the Kushiro Plain, northern Japan

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To clarify the heterogeneity of the subsurface strata of the Kushiro Plain, the core samples were analyzed by sedimentological method (e.g. facies analysis, grain-size analysis, measurements of total sulfur, and measurements of electoric conductivities of stirred muddy sediments).

Kushiro Group was inferred to be mainly composed of bay and delta sediments. In particular, the seaward part, the bay sediment consists of thick silt layers. On the other hands, the landward was interpreted as a fluvial dominated delta body. It was considered that progradation of the delta into the bay from upstream rivers.

"Chuseki-so" deposits which is an incised valley fills during post last glacial maximum period, is divided into three parts: seaward part, central part, and landward part. The seaward part consists of braided fluvial, meandering fluvial, salt marsh, drowned valley, central basin, flood tidal delta, and beach-shoreface deposits, in ascending order. The central part is composed of braided fluvial, meandering fluvial, salt marsh, drowned valley, central basin, mud flat, minor river channel and back marsh deposits, in ascending order. The landward part consists of swamp, minor river channel, and back marsh.

Keywords: Chuseki-so, Kushiro Group, Incised valleys