

## Holocene Progradation of the Kiso River Delta, Central Japan, based on drilling core analysis and 14C dating

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Holocene progradation rate and its depositional processes are examined based on sediment core analysis and accumulation curves determined by AMS 14C dating at the Kiso river delta. Six cores drilled in the Nobi plain since 2003 contain Holocene shallow marine sediments.

Drilling cores are projected to the line along the modern channel of the Kiso River course. Now, four cores align down the stream; SB, KM1, KZ1, KZN accordingly. The distances of these cores from the present prodelta are 37km, 33km, 28km and 22km. Accumulation rates accelerate around the boundary of delta bottomset deposit and delta foreset &#8211; topset deposit. The inflection points of the curves enable us to identify the achievement of the delta. Those timings are ca. 6,600 cal yrs BP, 5,700 cal yrs BP, 4,100 cal yrs BP and 2,800 cal yrs BP for SB, KM1, KZ1 and KZN, respectively. Horizontal distances of these cores on the cross section are ca. 4km, 5km, and 6km. So, progradation rates of each section are ca. 4.5m/yr, 3.1m/yr and 4.6m/yr, while the average progradation rate during the last 2,800 yrs is estimated ca. 7.8 m/yr since the distance between KZN and present prodelta is ca. 22km, probably due to the decrease of the buried valley width in southern part of the Kiso river delta.