

Depositional Process of Holocene sediment based on boring core analysis at Nobi Plain, Central Japan

Takashi Ogami[1]; Toshihiko Sugai[2]; Osamu Fujiwara[3]

[1] Natural Environment Studies, Univ. of Tokyo; [2] Active Fault Lab., Geological Survey of JPN; [3] JNC

The Nobi plain is a typical 'Delta dominated Alluvial Plain'. High sediment input and rapid subsidence results in the very high accumulation rate in the Plain. The Nobi plain is type locality of the stratigraphy of alluviums in the coastal plains in Japan; the alluviums are divided into LS (Lower Sand), MM (Middle Mud), US (Upper Sand) and TM/TS (Top Mud / Top Sand). Nobi Plain is thus representative alluvium plain, but few all-core borings are drilled in this area especially central to northern region. We drilled five all-core boring in 2003 and 2004. Drilling sites (AN-1, Ogaki; KZN, Kaizu; SB, Bisai; KM-1, Sobue; NK-1, Kiyosu) are selected to cover the distribution of Holocene marine silty sediment (MM).

Facies, particle size distribution, TOC/TN, magnetic susceptibility, hue, density, and element contents are analyzed. Furthermore, based on intense and high accuracy calibrated ages, accumulation curves are constructed. Depositional process is examined quantitatively with accumulation curves and particle size distribution analyzed at 5cm interval.