

## The relationship between relative sea-level rise recorded in the Holocene sequence in the Nobi Plain and coseismic subsidence

# Yuichi Niwa[1]; Toshihiko Sugai[2]; Takashi Ogami[1]; Masayoshi Tajikara[3]; Ken-ichi Yasue[3]; Osamu Fujiwara[4]

[1] Environmental Studies, KFS, UT; [2] Natural Environmental Studies, KFS, UT; [3] JAEA; [4] Active Fault Research Center, AIST, GSJ

Analyses of eight drilling cores and  $74 \text{ }^{14}\text{C}$  ages from the western part of the Nobi plain revealed the activity of the Yoro fault system, fringing the western margin of the plain, during the late Holocene. The cores are represented by a prograding delta sequence that has formed in the foot wall side of the Yoro fault system. Top surface of the delta front deposits, indicating former sea-level, is now buried below present sea-level and suggests the accumulation of tectonic subsidence in study area. Vertical changes of sedimentary facies, grain size distribution and EC value of sediment samples suggest that rapid relative sea-level rise occurred during Holocene. These transgression events broadly correspond with the coseismic subsidence of the coastal area by the activities of the Yoro fault system.