Control of sea-level changes on deep-sea sedimentation in the Okinawa Trough and Kumano Trough

Ken Ikehara[1]; Kiichiro Kawamura[2]; Akiko Omura[3]

[1] IGG, AIST; [2] FGI; [3] ORI/Univ. Tokyo

Depositional pattern of terrigenous materials has been changed in relation with sea-level rising after the last glacial maximum. Sea-level rising allowed the shoreline retreat and formed the river mouth estuaries and shallow bays. According to their formation, terrigenous material supply to offshore decreased. In the southern Okinawa Trough, recurrence intervals of turbidite deposition became longer at around 8000 years ago. Hemipelagic mud in the central Okinawa Trough became finer almost the same horizon. Both facts suggest the decreasing of coarse terrigenous material supply. In the Kumano Trough, off Tokai, turbidite deposition in the basin floor finished just after the K-Ah deposition according to the formation of Ise Bay. Sea-level rising at around 7500-8000 years ago might not only form the river mouth estuaries and shallow bays but also influence to the offshore sedimentation.