

Surface sediments of deep-sea basin floor from the Kumano Trough: Preliminary Report of R/V Tansei-maru KT-08-30 cruise (Part 2)

Akiko Omura[1]; Masaaki Shirai[1]; Takuma Ito[2]; Toru Wakabayashi[3]; Masayuki Oishi[4]; Kiichiro Kawamura[5]; Naoko Nagumo[3]; Yuichi Niwa[3]; Katsura Kameo[1]

[1] ORI, Univ. Tokyo; [2] Mountain and Environmental Sci., Shinshu Univ.; [3] Environmental Studies, KFS, UT; [4] Dept. of Geography, Tokyo Metropolitan Univ.; [5] FGI

In the western part of Kumano Trough, turbidites are recognized in the deep-sea basin floor sediments during the last ca. 100 years (Shirai et al., 2008). The Kumano Trough, which lies off the Kii and Atsumi peninsulas of central Japan, is a forearc basin along the Nankai Trough. Great earthquakes have been occurred around this area. Whereas, the southern Kii Peninsula is a heavy precipitation area and heavy rain coursed frequent floods around the lower reaches of the Kumano River. The purpose of our study is to examine the origin of turbidites. To achieve this aim, sediment cores were taken from the Kumano Trough during KT-05-19, KT-06-7, KT-07-5, and KT-08-30 cruises of R/V Tansei-maru. Origin of turbidite in the upper part of sediment cores from western Kumano Trough was estimated as a flood disaster during the Meiji Era (Shirai et al., 2008).

Sedimentary structures were often deformed and destroyed due to drying because of high water contents at the top of sediment cores. We tried to make peel samples from surface sediment cores using polyurethane resin after halving. The method of peering and peel sediment samples will be shown in this poster. This method using polyurethane resin is very convenient and suitable for observation and preservation of deep-sea surface sediments cores.