

表層堆積物の再懸濁は地震起源混濁流発生により普遍的なメカニズムか？南海トラフ西端と日本海溝の海底コアの放射性炭素年代測定から  
Is surface sediment remobilization more popular mechanism for generating earthquake-induced turbidity current? Evidence of radiocarbon dates from the westernmost Nankai and Japan Trench subduction zones

\*池原 研<sup>1</sup>、金松 敏也<sup>3</sup>、Tobias Schwestermann<sup>2</sup>、喜岡 新<sup>2</sup>、Michael Strasser<sup>2</sup>

\*Ken Ikehara<sup>1</sup>, Toshiya Kanamatsu<sup>3</sup>, Tobias Schwestermann<sup>2</sup>, Arata Kioka<sup>2</sup>, Michael Strasser<sup>2</sup>

1. 産業技術総合研究所地質情報研究部門、2. インスブルック大学、3. 海洋研究開発機構

1. Institute of Geology and Geoinformation, National Institute of Advanced Industrial Science and Technology, 2. Universität Innsbruck, 3. Japan Agency for Marine-Earth Science and Technology

Deep-sea turbidite has been used for reconstructing past large earthquake history. Surface sediment remobilization is a relatively new idea for generating earthquake-induced turbidite, although submarine landslide has been considered as major mechanism for earthquake-induced turbidite deposition. Surface sediment remobilization has been reported from the Chilean lakes, forearc slopes along the Nankai and Japan Trench subduction zones. However, the detailed mechanism of surface sediment resuspension, remobilization and initiation of turbidity current is still unknown. For better understanding of the mechanism, it is important to understand the spatio-temporal occurrence of surface sediment remobilization. We obtained some cores from a small basin on the forearc slope in Hyuga-nada off Kyushu, and the Japan Trench floor. Fine-grained turbidites were found in the cores. Paired radiocarbon dates of the turbidite muds and hemipelagic muds between the turbidites show only small age differences. This indicates that it is unnecessary to occur bathymetry-scale (with >several meters bathymetric change) submarine landslides by earthquake ground shaking for generation of the turbidites. Large surface sediment resuspension by earthquake ground shaking at the sedimented slope near the depositional area (basin) is thought to be an important process for repeated deposition of earthquake-induced turbidites in the basin.

キーワード : surface sediment remobilization、turbidite、earthquake、radiocarbon dating

Keywords: surface sediment remobilization, turbidite, earthquake, radiocarbon dating