

Consideration on relationship between earthquake generation and regional difference of tectonic erosion at the Japan Trench region

Tetsuro Tsuru[1], Jin-Oh Park[2], Seiichi Miura[3], Shuichi Kodaira[3], Ayako Nakanishi[3], Narumi Takahashi[4], Toshihiko Higashikata[5], Yukari Kido[6], Yoshiyuki Kaneda[7]

[1] Frontier, Jamstec, [2] JAMSTEC, FRPSD, [3] FRPSD, JAMSTEC, [4] DSR, JAMSTEC, [5] JAMSTEC Frontier, [6] Frontier Res. Prog. Subduction Dynamics, JAMSTEC, [7] JAMSTEC, Frontier

Multi-channel seismic reflection surveys have been conducted at the Japan Trench region from off Sanriku to off Fukushima by Japan Marine Science and Technology Center between 1997 and 1999. The data suggest that a regional variation of tectonic feature at the top of the oceanic plate contributes to that of tectonic erosion (basal erosion) which occurs at the base of the continental plate. We report here a possibility of relevance between earthquake generation and the regional variation of the tectonic erosion at the study area.