

## High heat flow anomaly on the floor of the Nankai Trough off Muroto

# Makoto Yamano[1], Masataka Kinoshita[2], Shusaku Goto[3]

[1] ERI, Univ. Tokyo, [2] Sch. Mar. Sci. Tech., Tokai Univ., [3] Tokai Univ.

We conducted concentrated heat flow measurements in the Nankai Trough area off Muroto, Shikoku and the obtained data on the floor of the Nankai Trough are around 200 mW/m<sup>2</sup>, which are higher and less variable than the existing data. We examined the thermal conductivity value and the quality of the temperature gradient data for all the existing and new stations and found that reliable heat flow data are rather uniform and the average is about 200 mW/m<sup>2</sup>. It is much higher than the value expected from the age of the subducting Shikoku Basin. If this high heat flow results from the Shikoku Basin lithosphere, it should seriously affect estimation of the thermal structure of the Nankai subduction zone.