

## Heat flow measurements in the Japan Trench area

# Makoto Yamano [1], Masataka Kinoshita [2], Shusaku Goto [3], Yukihiro Nakano [4]

[1] ERI, Univ. Tokyo, [2] Sch. Mar. Sci. Tech., Tokai Univ., [3] Tokai Univ., [4] Graduate School of Marine Science and Technology, Tokai University

We conducted heat flow measurements on the seaward and landward slopes of the Japan Trench. On the seaward side of the trench axis, heat flow is higher than  $70 \text{ mWm}^{-2}$  in an about 50 km wide zone extending from the upper slope to the trench outer swell, with the highest values of  $90 \text{ mWm}^{-2}$ . This high heat flow anomaly may be related to development of normal faults due to bending of the subducting Pacific plate. On the landward side of the trench axis, it seems heat flow gradually increases landward, which is an important constraint on thermal models of this subduction zone.