

Manihiki II

Joint projekt: GEOMAR¹/AWI²

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Period: 2012-2015

Motivation:

We gained new insights into the dynamics and evolution of the W-Pacific Warm Water Pool during the last ~2.5 million years, as well as the possible oceanographic interactions between the Pacific and the Southern Ocean ("Ocean Tunnel Hypo-thesis") and their climatic consequences.



GEOMAR



Methods:

Based on sediment cores, which were obtained during the expedition SO225 with RV SONNE at the Manihiki Plateau in the tropical W-Pacific, geochemical analyses (coupled Mg/Ca and $\delta^{18}O$) on different foraminiferal species allowed to reconstruct upper ocean temperature and salinity. Plankton studies were carried out for proxy calibration studies.

