

The changes of past sea-bottom environment deduced from the recent benthic foraminifera Southern off Costa Rica

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IODP Exp.344 (Costa Rica Seismogenesis Project: CRISP 2) is designed to understand the processes that control nucleation and seismic rupture of large earthquakes at erosional subduction zones and drilled five sites off the western coast of Costa Rica around the southern end of the Middle America Trench, where the oceanic Cocos Plate is subsiding beneath the Caribbean Plate. In this cruise, the benthic foraminiferal data were strongly needed because the distribution of recent living benthic foraminifera is essential tool to estimate the past bottom-ocean environment and paleobathymetry. However, there are few data about the distribution of the recent foraminifera southern off Middle America.

In this study, we have recognized six assemblages out of samples of southern off Costa Rica.

And we identified the the shallower-water environment assemblages of U1413 using these recent data.

Keywords: the recent benthic foraminifera, Paleobathymetry, the erosional subduction zone, southern off Costa Rica