

Reconstruction of global deep ocean carbonate ion using benthic foraminiferal B/Ca

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Abstract

Deep ocean carbonate ion concentration provides important insights to mechanisms for glacial-interglacial atmospheric CO₂ changes. Core-top calibration and applications to the North Atlantic Ocean and Caribbean Basin demonstrate the promise of benthic B/Ca as a novel tool for deep ocean carbonate ion reconstructions. We request funds to extend our measurements to the Indian and Pacific Oceans. This will enable us to have a global picture of past deep ocean carbonate ion history.