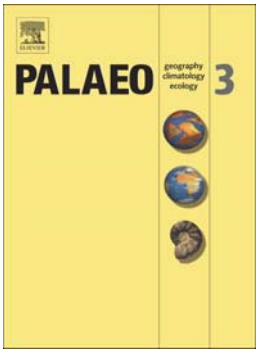

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Shallow-water carbonate responses to the Paleocene–Eocene Thermal Maximum in the Tethyan Himalaya (southern Tibet): tectonic and climatic implications

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Abstract

This study presents a detailed stratigraphic record of the Paleocene–Eocene Thermal Maximum (PETM) in the Gamba area of the Tethyan Himalaya, a carbonate-platform succession originally deposited along the southern margin of the eastern Tethys Ocean. The Paleocene-Eocene boundary interval is marked by a negative carbon isotope excursion at the boundary between members 3 and 4 of the Zongpu Formation. The succession is erosionally truncated at this surface, which is overlain by an intraformational carbonate conglomerate, and only the upper part of the PETM interval is preserved. Foraminiferal assemblages of Shallow Benthic Zone 4 are present below the conglomerate bed, but are replaced by assemblages of