Lower Tertiary Submarine Fan Deposits in Southern Belize

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ABSTRACT

Deposition of the Toledo formation represents a distinctive shift in regime from a carbonate-dominated basin to a clastic-dominated basin following the collision of the Maya and Chortis blocks of the North American and Caribbean plates, respectively, near the end of Late Cretaceous. We analyzed the sedimentologic and stratigraphic record of the Toledo's deepwater sequence along two major outcrop transects in southern Belize. These transects are dominated by marine deepwater facies successions, both indicating proximal provenance. Sedimentological characteristics of the Toledo are best described according to the submarine fan model facies discussed mainly in papers by E. Mutti and F. Ricci-Lucchi, specifically their facies A–G. Facies associations along the southern highway pertain to the mid-fan depositional environment and its associated subenvironments, particularly interchannel fringe areas encompassing channel, depositional lobe, and sheet architectural elements.

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