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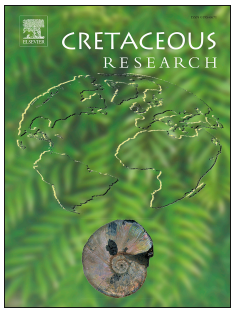

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An enigmatic crocodyliform from the Upper Cretaceous Quseir Formation, central Egypt

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Abstract—Non-marine vertebrates, including many crocodyliform clades, remain poorly documented from uppermost Cretaceous deposits of Africa. Recent exploratory fieldwork in the Upper Cretaceous (middle Campanian) Quseir Formation exposed around Dakhla Oasis (Western Desert of Egypt) has revealed new fossils from continental and marginal marine settings that include abundant crocodyliform remains. In particular, materials of an enigmatic crocodyliform, represented by both cranial and postcranial remains, suggest the presence of a novel southern Tethyan crocodyliform assemblage from northern Africa during the Late Cretaceous. Materials recovered of this taxon thus far include fragmentary portions of the skull and mandible, amphicoelous dorsal vertebrae, and fragmentary appendicular remains. This form is distinguished by a number of unique features including a domed platyrostral skull; a strongly festooned lateral margin of the maxilla with two waves of tooth enlargement; a deep, sculptured fossa at the base of the postorbital bar; a jugal with an anterior process that is at least three times broader than the posterior process; an orbital margin dorsally overlapping the lateral temporal