Dataset

3D model related to the publication: An enigmatic aquatic snake from the Cenomanian of northern South America

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Abstract
This contribution contains the 3D model described and figured in the following publication: Albino, A., Carrillo-Briceño, J. D. & Neenan, J. M. 2016. An enigmatic aquatic snake from the Cenomanian of northern South America. PeerJ 4:e2027 doi: 10.7717/peerj.2027

Keywords: Aquatic, Cretaceous, Snake, South America, vertebrae

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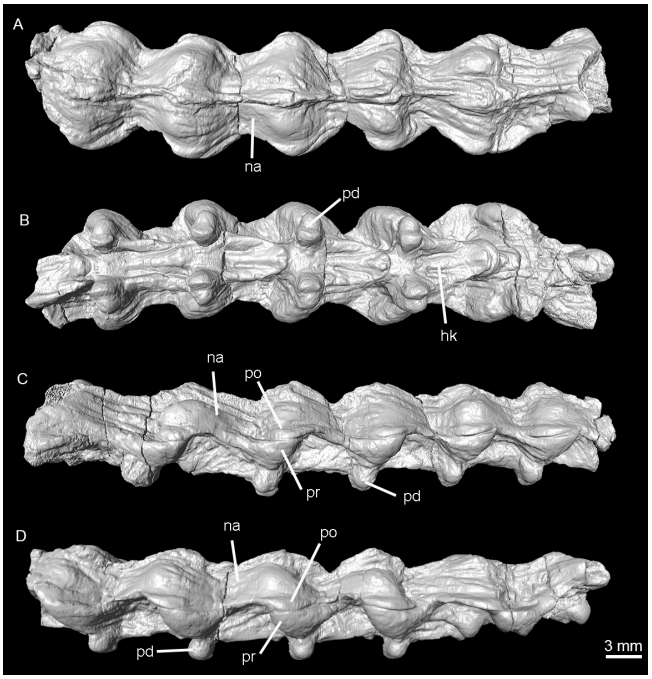

Figure 1. Articulated precloacal vertebrae of *Lunaophis aquaticus* MCNC-1827-F in dorsal (A), ventral (B), right lateral (C) and left lateral (D) views. Abbreviations: hk, haemal keel; na, neural arch; pd, paradiapophysis; po, postzygapophysis; pr, prezygapophyis. Modified from Albino et al. (2016)

INTRODUCTION

We present a surface model (see Table 1) of the articulated precloacal vertebrae of the aquatic snake *Lunaophis aquaticus*, published in the above manuscript (Albino et al., 2016, MCNC-1827-F). These remains come from the La Luna Formation of the La Aguada Member, 10 km northeast of Monay in the Candelaria Municipality of Trujillo State, Venezuela, and are Cenomanian in age (lowest Upper Cretaceous). Ventrally positioned ribs, pachyostosis and the depositional environment all support an aquatic mode of life for this snake (Fig. 1), making it the earliest aquatic snake from outside the African and European Tethyan and Boreal zones.

Model ID	Taxon	Short description
M3#116_MCNC-1827-F	*Lunaophis aquaticus*	Articulated precloacal vertebrae

Table 1. Associated model

METHODS

The 3D surface was extracted semi-automatically with Mimics 16 (Materialise) using the segmentation threshold selection tool. The 3D surface model is provided in .ply format, and can therefore be opened with a wide range of freeware.

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BIBLIOGRAPHY

Albino, A., Carrillo-Briceño, J. D. & Neenan, J. M. 2016. An enigmatic aquatic snake from the Cenomanian of northern South America. PeerJ 4:e2027 doi: 10.7717/peerj.2027