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3D models related to the publication: An assemblage of giant aquatic snakes (Serpentes, Palaeophiidae) from the Eocene of Togo

Georgios L. Georgalis^{1*}, Guillaume Guinot², Koffi Evenyon Kassegne³, Yawovi Zikpi Amoudji³, Ampah Kodjo Johnson³, Henri Cappetta², Lionel Hautier²

¹Palaeontological Institute and Museum, University of Zurich, Karl Schmid-Strasse 4, 8006 Zurich, Switzerland

²Institut des Sciences de l'Evolution de Montpellier, Université Montpellier, CNRS, IRD, Cc 064; place Eugène Bataillon, 34095 Montpellier Cedex 5, France

³Département de Géologie, Faculté des Sciences, Université de Lomé, B.P. 1515 Lomé, Togo

*Corresponding author: georgios.georgalis@pim.uzh.ch

Abstract

This contribution contains the 3D models described and figured in the following publication: Georgalis, G.L., G. Guinot, K.E. Kassegne, Y.Z. Amoudji, A.K.C. Johnson, H. Cappetta and L. Hautier. 2021. An assemblage of giant aquatic snakes (Serpentes, Palaeophiidae) from the Eocene of Togo. *Swiss Journal of Palaeontology* 140, 20, <https://doi.org/10.1186/s13358-021-00236-w>

Keywords: Africa, Eocene, *Palaeophis*, Serpentes, vertebral anatomy

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Inv nr.	Description
UMKPO21	Trunk vertebra
UMKPO22	Trunk vertebra
UMKPO23	Trunk vertebra
UMKPO24	Trunk vertebra
UMKPO25	Trunk vertebra
UMKPO26	Trunk vertebra
UMKPO27	Trunk vertebra
UMKPO28	Trunk vertebra
UMKPO29	Trunk vertebra
UMKPO30	Trunk vertebra
UMKPO31	Trunk vertebra
UMKPO32	Trunk vertebra
UMKPO33	Trunk vertebra
UMKPO34	Trunk vertebra
UMKPO35	Trunk vertebra
UMKPO36	Trunk vertebra
UMKPO37	Trunk vertebra

Table 1. List of models belonging to *Palaeophis africanus*. Collection: Institut des Sciences de l'Evolution, Université de Montpellier, France.

INTRODUCTION

We conducted micro-CT scanning in 17 vertebrae of the large aquatic snake *Palaeophis africanus* from the Eocene phosphate deposits of Kpogamé, Togo, and we here present their 3D surface models (Table 1 and Fig. 1).

METHODS

The vertebrae were imaged using high-resolution microtomography (μ CT) at the MRI platform of the *Institut des Sciences de l'Evolution de Montpellier* (ISEM). Image segmentation of the vertebral elements was performed on the μ CT images with Avizo.Lite 2019.4 (Visualization Sciences Group) software. The

3D virtual restoration was performed with MorphoDig software (v. 1.5.3; Lebrun 2018) and the virtually restored 3D models are provided in .stl and .vtp formats.

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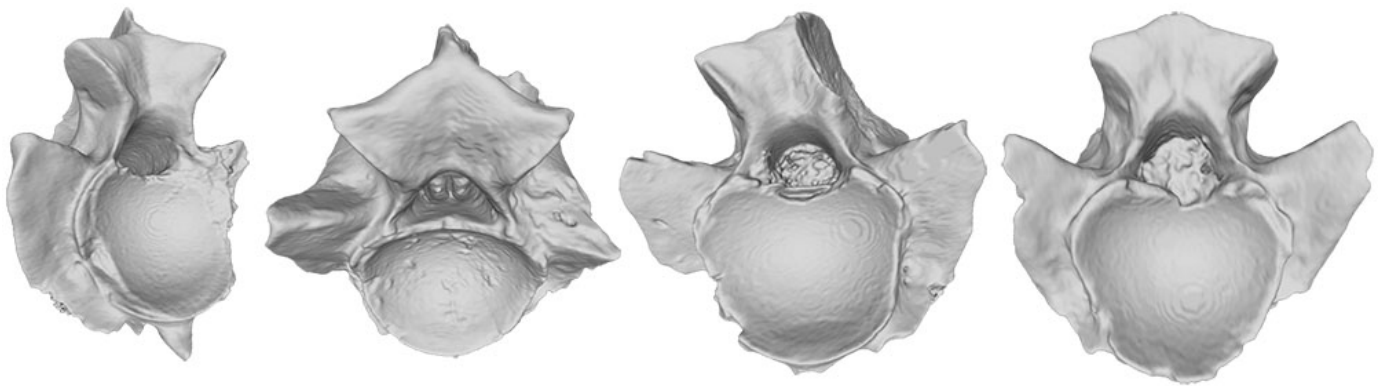


Figure 1. 3D models of four snake vertebrae of *Palaeophis africanus* from the Eocene of Togo (from left to right: UM KPO 22, UM KPO 32, UM KPO 21, and UM KPO 24; Université de Montpellier). From left to right, the first vertebra (UM KPO 22) is shown in right anterolateral view, the second one (UM KPO 32) in anterodorsal view, and the third (UM KPO 21) and fourth (UM KPO 24) vertebrae are shown in anterior view. Images are not to the same scale.