

3D models related to the publication: "The world's largest worm lizard: a new giant trogonophid (Squamata: Amphisbaenia) with extreme dental adaptations from the Eocene of Chambi, Tunisia"

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Abstract

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INTRODUCTION

We conducted micro-CT scanning in several maxillae, dentaries, and premaxillae (including the holotype and paratype specimens) of *Terastiodontosaurus marcelosanchezi* from the Eocene of Chambi, Tunisia, plus the holotype dentary of *Todrasaurus gheerbranti* from the Paleocene of Adrar-Mgorn 1, Morocco, and we here present their surface 3D models (Table 1 and Fig. 1)

METHODS

The specimens were imaged using high-resolution microtomography (μ CT) with a μ CT-scanning station EasyTom 150 / Rx Solutions (Montpellier RIO Imaging [MRI], ISE-M, Montpellier, France). Image segmentation and 3D virtual restoration of the fossil specimens was performed with MorphoDig software (v. 1.5.3; Lebrun 2018), Avizo.Lite 2019.4 (Visualization Sciences Group) software, 3D Slicer (Fedorov et al. 2012), and VG Studio MAX (v. 2023.1). All virtually restored 3D models are provided in .ply format.

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Lebrun, R. 2018. MorphoDig, an open-source 3D freeware dedicated to biology. IPC5, Paris.

Inv nr.	Taxon	Description	Collection
ONM CBI-1-645	<i>Terastiodontosaurus marcelosanchezi</i>	Holotype right maxilla	MONM, Tunis
ONM CBI-1-646	<i>Terastiodontosaurus marcelosanchezi</i>	Paratype left dentary	MONM, Tunis
ONM CBI-1-648	<i>Terastiodontosaurus marcelosanchezi</i>	Left maxilla	MONM, Tunis
ONM CBI-1-649	<i>Terastiodontosaurus marcelosanchezi</i>	Right maxilla	MONM, Tunis
ONM CBI-1-650	<i>Terastiodontosaurus marcelosanchezi</i>	Right maxilla	MONM, Tunis
ONM CBI-1-651	<i>Terastiodontosaurus marcelosanchezi</i>	Right maxilla	MONM, Tunis
ONM CBI-1-653	<i>Terastiodontosaurus marcelosanchezi</i>	Left maxilla	MONM, Tunis
ONM CBI-1-654	<i>Terastiodontosaurus marcelosanchezi</i>	Right maxilla	MONM, Tunis
ONM CBI-1-657	<i>Terastiodontosaurus marcelosanchezi</i>	Left dentary	MONM, Tunis
ONM CBI-1-658	<i>Terastiodontosaurus marcelosanchezi</i>	Premaxilla	MONM, Tunis
ONM CBI-1-659	<i>Terastiodontosaurus marcelosanchezi</i>	Left dentary	MONM, Tunis
ONM CBI-1-660	<i>Terastiodontosaurus marcelosanchezi</i>	Right dentary	MONM, Tunis
ONM CBI-1-661	<i>Terastiodontosaurus marcelosanchezi</i>	Left dentary	MONM, Tunis
ONM CBI-1-668	<i>Terastiodontosaurus marcelosanchezi</i>	Left dentary	MONM, Tunis
ONM CBI-1-670	<i>Terastiodontosaurus marcelosanchezi</i>	Left dentary	MONM, Tunis
ONM CBI-1-672	<i>Terastiodontosaurus marcelosanchezi</i>	Premaxilla	MONM, Tunis
ONM CBI-1-711	<i>Terastiodontosaurus marcelosanchezi</i>	Premaxilla	MONM, Tunis
UM THR 407	<i>Todrasaurus gheerbranti</i>	Holotype left dentary	University Montpellier, ISEM, Montpellier

Table 1. List of 3D models. Collections: MONM: Palaeontological collections of the Museum of the Office National des Mines, Tunis, Tunisia; University of Montpellier, Institut des Sciences de l'Évolution de Montpellier, France.

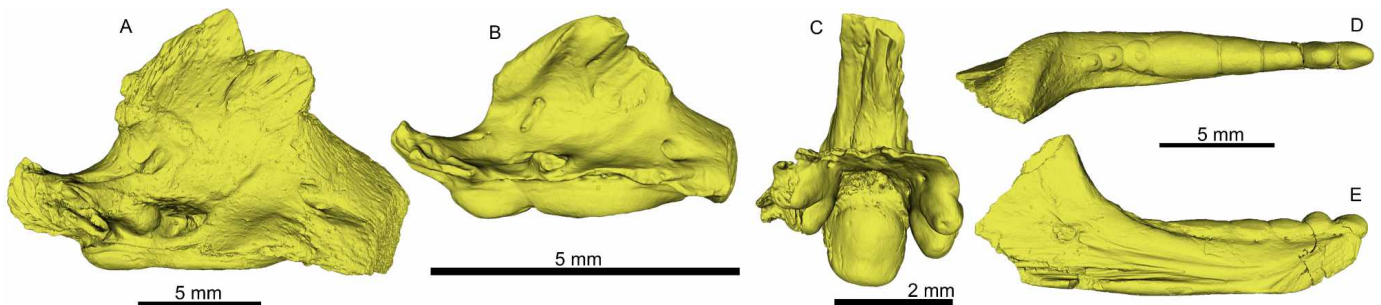


Figure 1. 3D model images of specimens of the trogonophid amphisbaenian *Terastiodontosaurus marcelosanchezi* from the Eocene of Chambi, Tunisia. A) holotype right maxilla (ONM CBI-1-645) in medial view; B) right maxilla (ONM CBI-1-649) in medial view; premaxilla (ONM CBI-1-711) in posterior view; D–E) paratype left dentary (ONM CBI-1-646) in dorsal (D) and medial (E) views. All these specimens pertain to the Palaeontological collections of the Museum of the Office National des Mines, Tunis, Tunisia.