

# 3D models related to the publication: Re-description of the braincase of the rebbachisaurid sauropod *Limaysaurus tessonei* and novel endocranial information based on CT scans

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## Abstract

This contribution contains the 3D models described and figured in the following publication: Paulina-Carabajal A and Calvo JO 2021. Re-description of the braincase of the rebbachisaurid sauropod *Limaysaurus tessonei* and novel endocranial information based on CT scans. Anais da Academia Brasileira de Ciências 93(Suppl. 2): e20200762 <https://doi.org/10.1590/0001-3765202120200762>

**Keywords:** Cranial endocast, Dinosauria, Inner ear, Paleoneurology

Submitted:2020-09-11, published online:2021-02-03. <https://doi.org/10.18563/journal.m3.130>

Inv nr.	Taxon	Description
MUCPv-205	<i>Limaysaurus tessonei</i>	Renderings of the virtually isolate braincase, brain, and right inner ear.

**Table 1.** Related model. MUCP: Museo de la Universidad Nacional del Comahue, Argentina.

## INTRODUCTION

Rebbachisaurids are sauropod dinosaurs that lived from the lower to the upper Cretaceous of South America, Europe and Africa (Bonaparte 1997; Upchurch et al. 2004; Apesteguía et al. 2010; Whitlock 2011, Mannion & Barret 2013). However, braincase remains of these sauropods are scarce, being known only for *Nigersaurus taqueti* from Africa (Serenó et al. 1999, 2007), and *Limaysaurus tessonei* (= *Rebbachisaurus* in Calvo & Salgado 1995) and an unnamed rebbachisaurid (Paulina-Carabajal et al. 2016) from Argentina. The cranial endocast and inner ear of *L. tessonei* is the most complete paleoneurological data for a rebbachisaurid sauropod so far (Table 1 and Fig. 1).

## METHODS

The 3D surfaces were extracted semi-automatically within MIMICS 18.0 using the segmentation threshold selection tool. The 3D surface models are provided in .ply format, and can therefore be opened with a wide range of freeware.

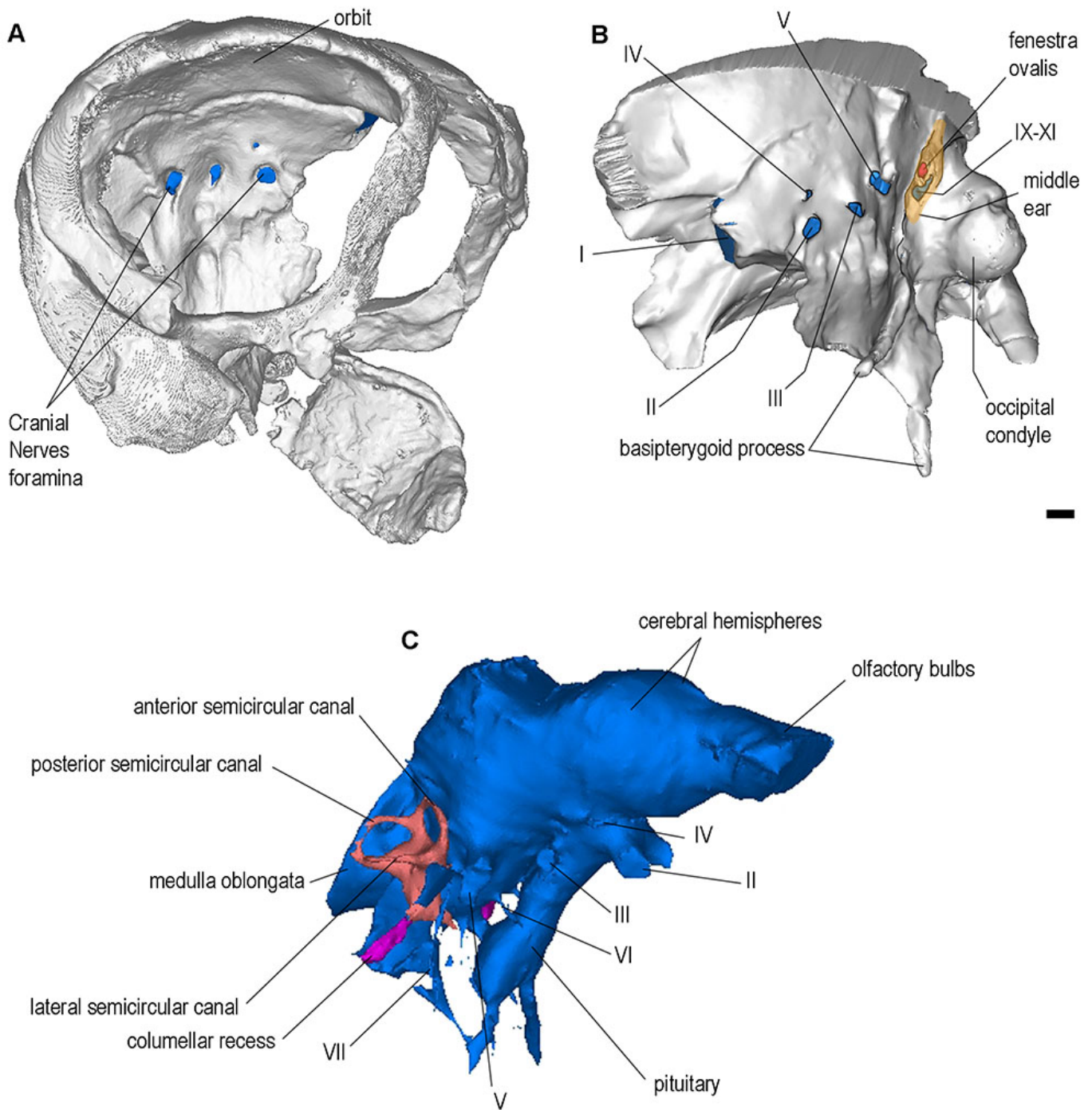
## ACKNOWLEDGEMENTS

Grant sponsors: 1. Agencia Nacional de Promoción Científica y Tecnológica, 2. Universidad Nacional del Comahue. Grant

numbers: 1. PICT-2016-0481 to AP-C, PICT 2911/2591 to JOC; 2. 04/I082 to JOC.

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**Figure 1.** Renderings of the braincase and other articulated bones of *Limaysaurus tessonei* MUCPv-205 in right lateral (slightly anterior) view (A); braincase (lateral margins of the orbit and other articulated skull bones were removed to allow observation of the complete lateral wall) in left lateroventral view; cranial endocast in right lateral (slightly anterior) view (C). In the right image, the bones are semitransparent to allow observation of the brain and inner ear. Scale bar in A and B equals 10 mm.

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