Dataset

3D models related to the publication: New Loricata remains from the Pinheiros-Chiniquá Sequence (Middle-Upper Triassic), southern Brazil.

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Abstract

The present 3D Dataset contains the 3D models of an ilium, a vertebra, and a partial scapula of *Prestosuchus* sp. that were analyzed in “New Loricata remains from the Pinheiros-Chiniquá Sequence (Middle-Upper Triassic), southern Brazil”.

Keywords: *Dinodontosaurus* AZ, Loricata, Middle Triassic, *Prestosuchus*

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Inv nr.	Taxon	Description
UFSM11603	*Prestosuchus sp.*	right ilium
UFSM11233	*Prestosuchus sp.*	partial right scapula
UFSM11602a	*Prestosuchus sp.*	anterior dorsal vertebra

Table 1. List of related models. Collection: Laboratório de Estratigrafia e Paleobiologia, Universidade Federal de Santa Maria (UFSM).

INTRODUCTION

Loricatans have an almost worldwide distribution, with taxa occurring in faunal assemblages spanning from the Triassic until the present. Concerning the Triassic period in southern Brazil, several specimens are reported from the Middle-Upper Triassic layers of Santa Maria Supersequence, including some of the largest predators from this timespan. This contribution presents elements from particularly large specimens that were assigned to the genus *Prestosuchus* by Rezende et al. (in press, see also table 1 and Fig. 1). The materials available here were digitalized to allow future studies and facilitate comparative studies by other researchers.

METHODS

The materials were submitted to laser surface scanning using a ZCorp ZScanner 700. Varying resolutions were applied, depending on the specimen. The trunk vertebra UFSM11602a was scanned with a resolution of 0.2 mm. A resolution of 0.4 mm was employed for the larger specimens UFSM11233 (partial scapula) and UFSM11603 (ilium). Several scans were conducted for each specimen, and the generated models of each element were aligned, combined and refined using the open access software Meshlab (Cignoni et al. 2008). Meshes were exported in full scale as .PLY files.

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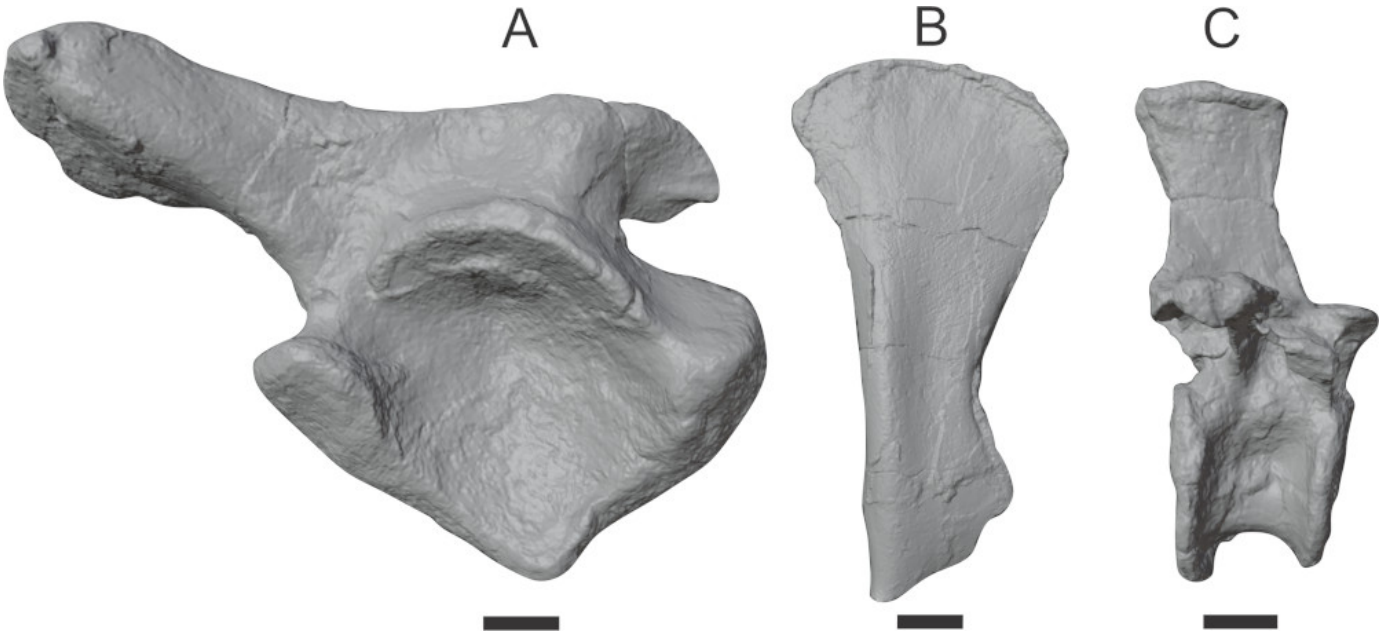

Figure 1. *Prestosuchus* sp. 3D models in lateral view. A) Right ilium (UFSM11603), B) Partial right scapula (UFSM11233), and C) Dorsal vertebra (UFSM11602a). Scale = 5 cm.

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