

3D models related to the skull of *Miocaperea pulchra*

Eli Amson^{1*}, Matthias Boller¹

¹Staatliches Museum für Naturkunde Stuttgart, Stuttgart, Germany, 70191

*Corresponding author: eli.amson@smns-bw.de

Abstract

The present 3D Dataset contains the 3D models of the skull of the holotype of *Miocaperea pulchra*.

Keywords: Cetotheriidae, Miocene, Neobalaeninae, Pisco Formation, Pygmy right whale

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Description

Blender file containing two models (the skull being preserved in two parts)

Table 1. 3D model of *Miocaperea pulchra*. Collection: State Museum of Natural History Stuttgart, Germany.

INTRODUCTION

Pygmy right whales, represented by one extant species, *Caperea marginata*, are highly idiosyncratic baleen whales. Only one fossil of undisputable affinity is known to date, which is also the most complete, the holotype of *Miocaperea pulchra* (Bisconti, 2012; Marx et al., 2016). This specimen was found in the Aguada de Lomas site (Pisco Formation, southern Peru) and is assumed to be upper Tortonian of age (Bianucci & Collareta, 2022; Bisconti, 2012). It has been brought to the State Museum of Natural History Stuttgart in the 80s (Bisconti, 2012), where it was mechanically prepared by one of us (MB). The holotype comprises a sub-complete skull (missing the tympanic bullae) in two parts (See Table 1 and Fig. 1), as well as associated fragments of the mandible and baleen rack. Indeed, this is one of the exceptional cases of preservation yielded by the Pisco Formation, since baleens do not usually fossilize (Bosio et al., 2021).

METHODS

Each of the two skull parts was surface scanned with a SHINING EinScan Pro HD and a textured model was produced with the associated software EXScan Pro 3.7.0.3. Both models were then combined in Blender 4.1 (2018), which was also used to render them in orthographic views. Blender's 'decimate geometry' was used to reduce the quality of the models.

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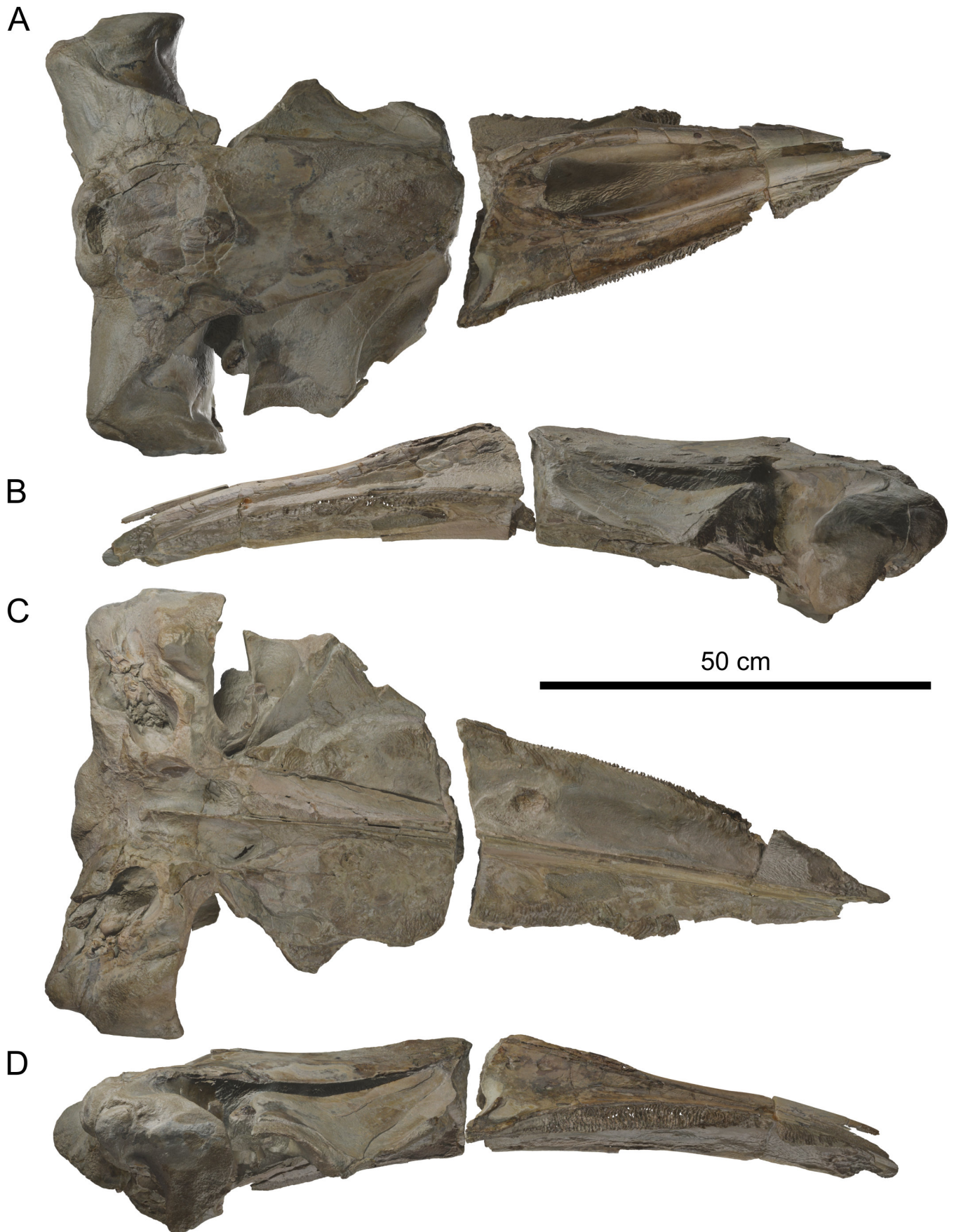


Figure 1. Skull of *Miocaperea pulchra* (holotype, SMNS-P-46978) in A, dorsal, B, left lateral, C, ventral, and D, right lateral (orthographic) views.