Dataset

3D model related to the publication: Sperm whales (Physeteroidea) from the Pisco Formation, Peru, and their trophic role as fat-sources for Late Miocene sharks

Aldo Benites-Palomino[1,2*], Jorge Velez-Juarbe[3,4], Ali Altamirano-Sierra[2], Alberto Collareta[5], Jorge D. Carrillo-Briceño[1], Mario Urbina[1]

[1] *Paläontologisches Institut und Museum, Universität Zürich, Karl-Schmid-Strasse 4, 8006 Zürich, Switzerland.*
[2] *Departamento de Paleontología de Vertebrados, Museo de Historia Natural-Universidad Nacional Mayor de San Marcos, Avenida Arenales 1256, Lima 11, Peru.*
[3] *Department of Mammalogy, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, California 90007, U.S.A.*
[4] *Department of Paleobiology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560, U.S.A.*
[5] *Dipartimento di Scienze della Terra, Università di Pisa, via Santa Maria 53, 56126, Pisa, Italy.*
***Corresponding author**: aldo.benitespalomino@uzh.ch

Abstract
The present 3D Dataset contains the 3D models analyzed in Benites-Palomino A., Velez-Juarbe J., Altamirano-Sierra A., Collareta A., Carrillo-Briceño J., and Urbina M. 2022. Sperm whales (Physeteroidea) from the Pisco Formation, Peru, and their Trophic role as fat-sources for Late Miocene sharks.

Keywords: bite marks, cetaceans, predation, sharks, sperm whales

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Inv nr.	Taxon	Description
MUSM978	*Scaphokogia cochlearis*	Cranium of a juvenile specimen

Table 1. Involved specimen. Collection: Departamento de Paleontologia de Vertebrados, Museo de Historia Natural UNMSM, Lima, Peru

INTRODUCTION

This dataset features the skull of a sub-adult specimen of the Miocene pygmy sperm whale (Kogiidae) *Scaphokogia cochlearis* featured in Benites-Palomino et al. (2022). The genus *Scaphokogia* described by de Muizon (1988), and Benites-Palomino et al. (2020) is one of the most conspicuous groups of cetaceans due to their highly derived cranial morphology. The specimen here referred preserved a series of shark bite-marks mostly located along the dorsolateral regions of the rostrum, thus suggesting the preference of sharks towards the soft tissue structures housed within it. This 3D model (see Table 1 and Fig. 1) was used as a complement to direct specimen observation to assess the distribution of the bite marks across the skull of this specimen.

METHODS

The surface scans were obtained using an Artec Eva structured-light scanner in combination with the software Artec Studio 12. The resulting 3D surface model is provided in .ply format, and can therefore be opened with a wide range of freeware. A texture file (.png) accompanies the 3D model for a better visualization of the results.

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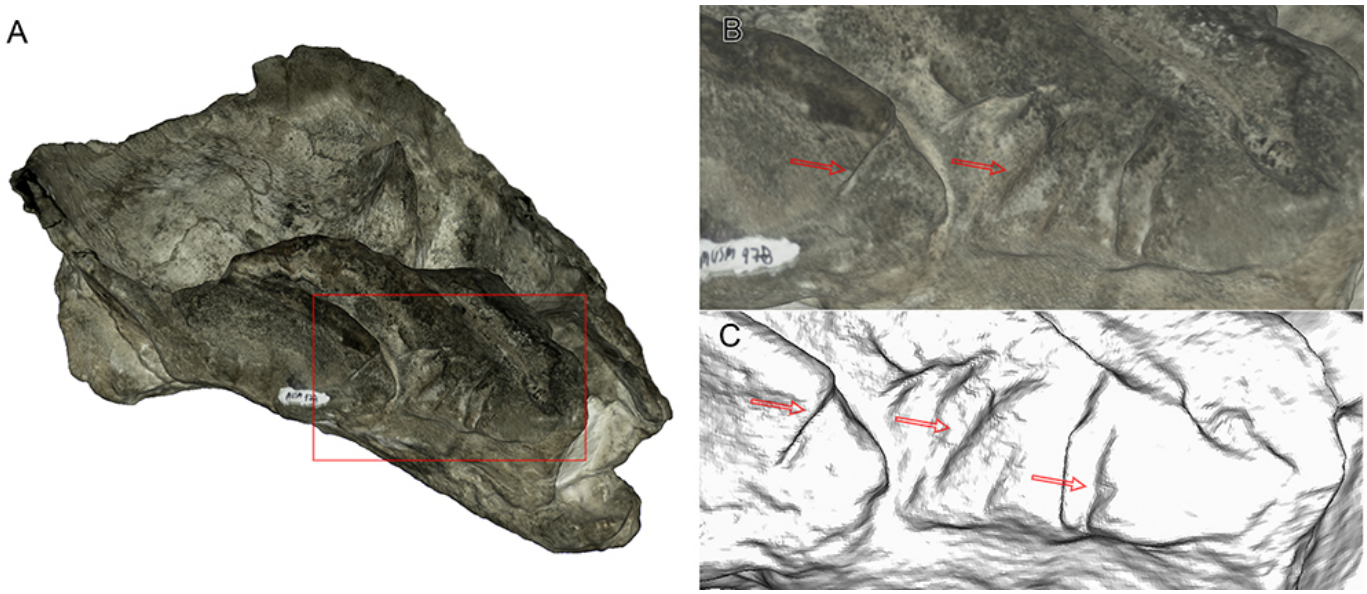

Figure 1. 3D surface scan of the skull of *Scaphokogia cochlearis* (MUSM 978) in right dorsolateral view (A) and detail of the lateral region of the rostrum highlighting the shark bite marks (B, C).

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