3D model related to the publication: Cranial morphology and phylogenetic relationships of Amynodontidae Scott & Osborn, 1883 (Perissodactyla, Rhinocerotoidea)

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Abstract

The present 3D Dataset contains the 3D model of a specimen of *Metamynodon planifrons* (UNISTRA.2015.0.1106) described and figured in: Veine-Tonizzo, L., Tissier, J., Bukhsianidze, M., Vasilyan, D., Becker, D. , 2023, Cranial morphology and phylogenetic relationships of Amynodontidae Scott & Osborn, 1883 (Perissodactyla, Rhinocerotoidea)

Keywords: Amynodontidae, Eocene, Oligocene, phylogeny, Rhinocerotoidea

Inv nr.	Taxon	Description
UNISTRA.2015.0.1106	*Metamynodon planifrons*	Textured 3D surface model of the skull with right C1 and both rows of P2-M3.

Table 1. Involved specimen. Collection: École et Observatoire des Sciences de la Terre de Strasbourg (UNISTRA), Strasbourg, France

INTRODUCTION

Amynodontidae are an extinct family of Rhinocerotoidea known from the middle Eocene to the latest Oligocene of Asia, North America, and Europe. The 3D model of the specimen UNISTRA.2015.0.1106 presented here has been described and figured in Veine-Tonizzo et al. (2023). UNISTRA.2015.0.1106 is attributed to *Metamynodon planifrons*, from the early Oligocene (early Orellan North America Land Mammal Age, NALMA) of the lower part of the Scenic Member (Oreodon zone) of the Brule Formation of the White River Group in the Big BadLands National Park, South Dakota, United States. In the associated manuscript (Veine-Tonizzo *et al.* in prep.), we computed a cladistic analysis including this newly described material and a large sample of Rhinocerotoidea. Also, we discuss both the cranial adaptations into a proboscis within one of the two tribes of the Amynodontidae: the Cadurcodontini and the biogeography of Amynodontidae.

METHODS

The specimen UNISTRA.2015.0.1106 (skull; Fig. 1 and table 1) is housed in the collections of the "École et Observatoire des Sciences de la Terre de Strasbourg", Université de Strasbourg, France. The specimen UNISTRA.2015.0.1106 was scanned with a structured-light surface scanner (Artec Space Spider) and the three-dimensional model was reconstructed using the Artec Studio 13 Professional software. The 3D surface model is provided in .ply format along with its texture in .png format, and can be opened with a wide range of freeware, such as MeshLab, either with or without texture.

ACKNOWLEDGEMENTS

BIBLIOGRAPHY

Veine-Tonizzo, L., Tissier, J., Bukhsianidze, M., Vasilyan, D., Becker, D., 2023. Cranial morphology and phylogenetic relationships of Amynodontidae Scott & Osborn, 1883 (Perissodactyla, Rhinocerotoidea). https://doi.org/10.5852/cr-palevol2023v22a8
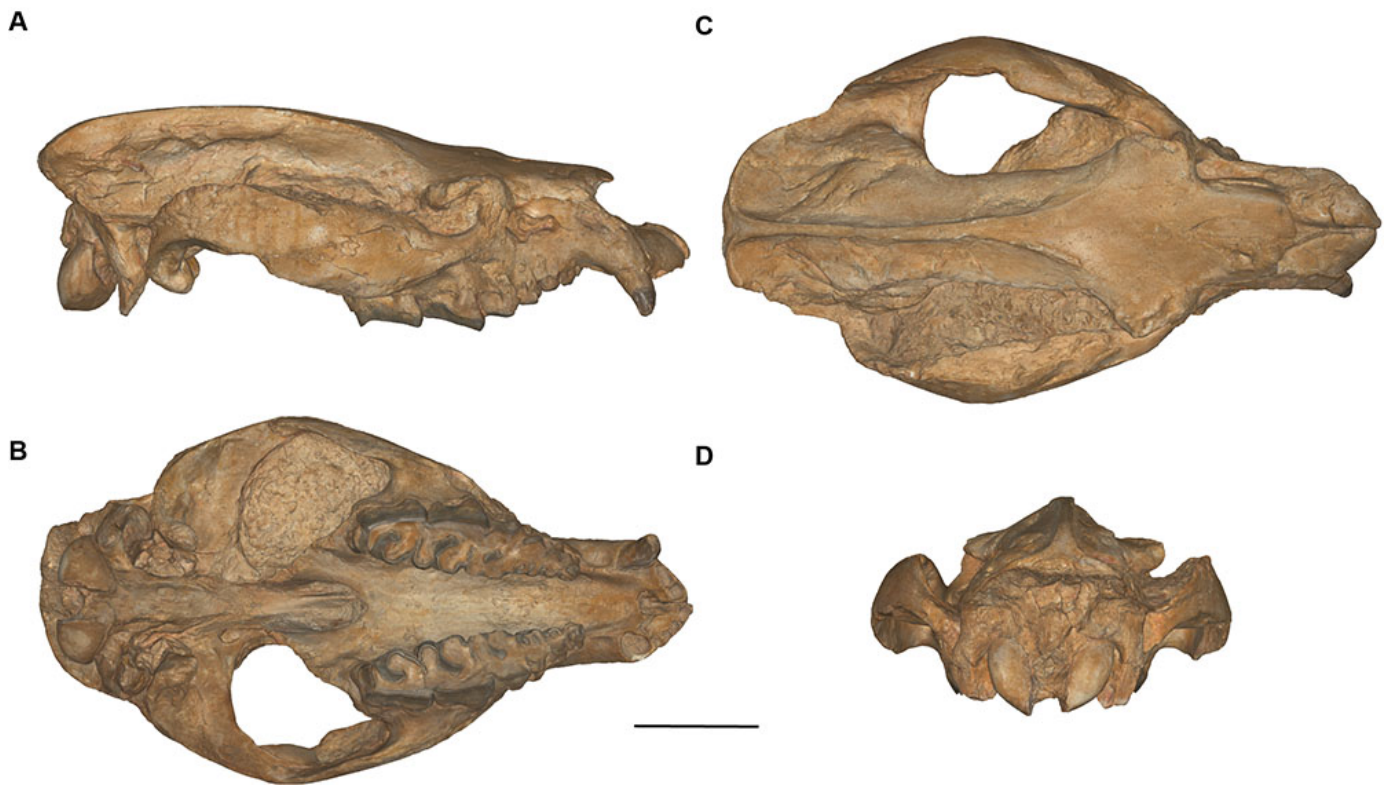
Figure 1. The three-dimensional model of the skull of *Metamynodon planifrons* UNISTRA.2015.0.1106, Big Badlands, South Dakota, United States, early Oligocene. Right lateral (A), ventral (B), dorsal (C) and occipital (D) views. Scale bar = 10 cm.