The endocranial cast of *Microchoerus erinaceus* (Euprimates, Tarsiiformes)

Maeva Orliac

► To cite this version:

Maeva Orliac. The endocranial cast of *Microchoerus erinaceus* (Euprimates, Tarsiiformes). *Morpho-Museum*, 2015, 01 (03), pp.e4. 10.18563/m3.1.3.e4 . hal-01906179

HAL Id: hal-01906179

<https://hal.science/hal-01906179>

Submitted on 26 Oct 2018

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

The endocranial cast of *Microchoerus erinaceus* (Euprimates, Tarsiiformes)

ORLIAC M.J.^a

^a Institut des Sciences de l'Evolution de Montpellier, Université de Montpellier, CNRS, IRD, Cc 064; place Eugène Bataillon, 34095 Montpellier Cedex 5, France

* corresponding author: maeva.orliac@univ-montp2.fr

Abstract: This contribution contains the labelled 3D model described and figured in the following publication: Ramdarshan A., Orliac M.J. 2015. Endocranial morphology of *Microchoerus erinaceus* (Euprimates, Tarsiiformes) and early evolution of the Euprimates brain. American Journal of Physical Anthropology. <http://dx.doi.org/10.1002/ajpa.22868>

Key words:

Submitted 10.09.2015, Accepted 17.09.2015 ; <http://dx.doi.org/10.18563/m3.1.3.e4>

© Copyright Orliac M.J. september 2015

TECHNICAL AND SPECIMEN-RELATED PARAMETERS

Specimen inventory number	UM-PRR1771
Species	<i>Microchoerus erinaceus</i>
Repository institution	Université de Montpellier, France
3D data acquisition institution	Anthropological Institute and Museum, Zürich
3D data acquisition method	X-ray μ CT
3D data acquisition facility model	Scanco UCT80
3D data acquisition operator	Renaud Lebrun
Voxel size of original dataset	0.050 mm
Author of derived 3D surface model	Orliac M.J., Ramdarshan A.
Model ID	M3#15 UM-PRR1771
Model short description	The 3D model corresponds to the endocranial cast and sinuse of <i>Microchoerus erinaceus</i> . Labels of the different features are available in .flg format.

METHODS

The three-dimensional reconstruction of the endocranial cast and sinuses of the Late Eocene tarsiiforme *Microchoerus erinaceus* was obtained by computerized microtomography reconstruction. The specimen UM-PRR1771 was collected during field excavation in the locality of Perrière (MP 17b, ca. 37 Ma, Biochrom'97), a fissure filling from the Quercy region in the South of France, by the paleontological team of the Institut des Sciences de l'Evolution, Montpellier. The 3D segmentation of the endocranial cast and sinuses was performed using the segmentation threshold selection tool of AVIZO 7.1 (Visualization Sciences Group). The different elements were separated in two labelfields. The 3D model is composed of two .vtk surface files, one .flg label file, and the whole model can be opened and visualized with ISE-MeshTools (Lebrun, 2014).

ACKNOWLEDGEMENTS

We want to acknowledge C. Zollikofer, of the Anthropological Institute and Museum, Zürich for access to CT scan facilities in

Zürich. We are also grateful to R. Lebrun for his help with 3D data post-treatment.

BIBLIOGRAPHY

- Biochrom'97 (collectif). 1997. Synthèses et Tableaux de corrélations. In: Aguilar, J.-P., Legendre, S., Michaux, J. (Eds.), Actes du Congrès Biochrom'97. Mémoires et Travaux de l'École Pratique des Hautes Études, Institut de Montpellier, Montpellier, pp. 769-805.
- Lebrun, R., 2014. ISE-MeshTools, a 3D interactive fossil reconstruction freeware. 12th Annual Meeting of EAVP, Torino, Italy.
- Ramdarshan, A., Orliac, M. J., 2015. Endocranial morphology of *Microchoerus erinaceus* (Euprimates, Tarsiiformes) and early evolution of the Euprimates brain. American Journal of Physical Anthropology. <http://dx.doi.org/10.1002/ajpa.22868>