3D data and models related to the publication: An updated description of the osteology of the pancake tortoise *Malacochersus tornieri* (Testudines: Testudinidae) with special focus on intraspecific variation

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Abstract


Keywords: brain endocast, chelonian shell, micro computed tomography, morphology, variability

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<table>
<thead>
<tr>
<th>Model IDs</th>
<th>Taxon</th>
<th>Description</th>
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<tr>
<td>M3#129_ZM</td>
<td><em>Malacochersus tornieri</em></td>
<td>Virtual brain and inner ear endocast.</td>
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<td>100.102</td>
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<tr>
<td>M3#130_ZM</td>
<td><em>Malacochersus tornieri</em></td>
<td>µCT data set (resolution: 36µm)</td>
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<td>100.102</td>
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Table 1. List of models

INTRODUCTION

The inner ear and brain endocast (Fig. 1) using micro CT scan data is part of a revised osteological analysis of the pancake tortoise *Malacochersus tornieri* (Mautner et al., 201X). This tortoise has a very flat shell, which allows the animal to hide in cracks and under rocks in its natural habitat, i.e. rocky arid shrub and thorny brush environments in Tanzania and adjacent countries in eastern Africa (e.g., Procter, 1922).

METHODS

The 3D surfaces were extracted by manually labeling cranial spaces within AVIZO (FEI). The 3D surface models are provided in .ply format that can be opened with a wide range of freeware viewers. In addition the 3D dataset that was used for the 3D modeling is provided as well.

ACKNOWLEDGEMENTS

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BIBLIOGRAPHY


![Image of a tortoise]

**Dataset**
Figure 1. Virtual brain and inner ear endocast of *Malacochersus tornieri* (ZM 100.102; Zoological Museum of the University of Zürich). Blue, endocranium; red, blood vessels; purple, semicircular canals; yellow, cranial nerves.