


Correction



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Correction to: 'Evolutionary biomechanics: hard tissues and soft evidence?'

Sarah Broyde, Matthew Dempsey, Linjie Wang, Philip G. Cox, Michael Fagan and Karl T. Bates

 LW, 0000-0003-2661-9533; PGC, 0000-0001-9782-2358; KTB, 0000-0002-0048-141X

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Further analysis of our finite element (FE) models, as part of ongoing work, has revealed a systematic error running through all 30 models in our original analysis. In all 30 FE models, the force magnitudes applied to represent maximum isometric contraction of the temporalis muscle were one-third the correct values. The forces for all other muscles in all 30 FE models were half the correct values. This mistake represents human error in the FE modelling stage rather than errors in the anatomical reconstructions or multi-body dynamics modelling. All other non-FE results (figs 2–4 in the original article) are thus unaffected. Here, we present corrected results to replace the absolute values presented in figure 5 and electronic supplementary material, figure S5 in the original article. As demonstrated below and in the electronic supplementary material, the systematic nature of the error running through all 30 FE models means that only the absolute stress values are affected. The relative values and therefore the comparisons across models and all conclusions drawn from them in our study are not impacted by the error.

Corrected versions of the FE models are available from <https://doi.org/10.17638/datacat.liverpool.ac.uk/1184>. This has also been corrected on the publisher's website.

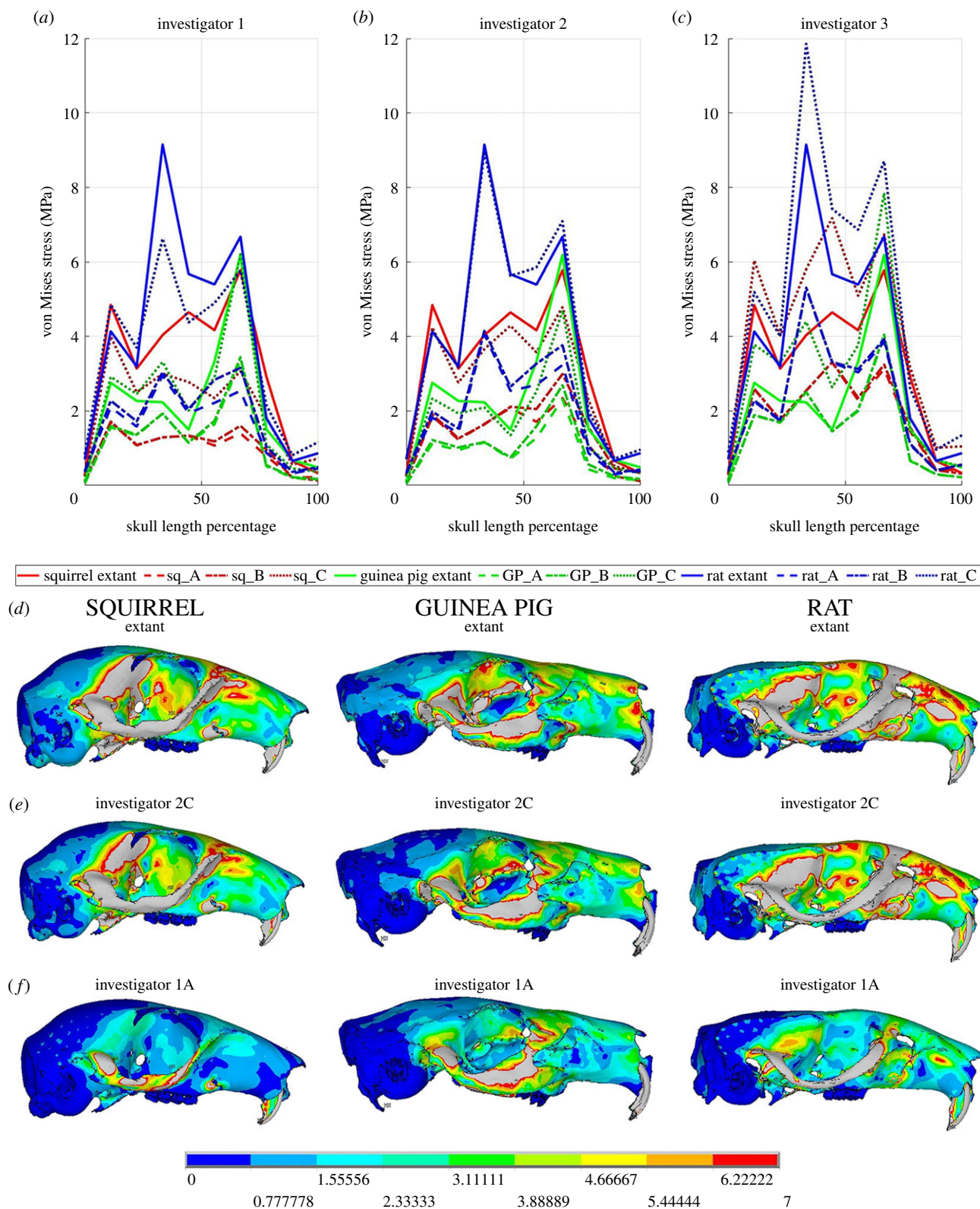


Figure 5. Stress magnitudes and distributions (represented by von Mises stress) in the FE models across the 30 model iterations. Stress magnitudes along the length of skull in the extant models are compared to those of (a) investigator 1, (b) investigator 2, and (c) investigator 3 and demonstrate significant quantitative and some qualitative error. Some reconstructions, such as (b,e) iteration C those by investigator 2, show a close quantitative match to (d) the extant models, while some reconstructions, such as (f) iteration A by investigator 1 contain both quantitative and qualitative error in relative stress magnitudes and distribution across the morphotypes. (Online version in colour.)