

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Raw data and declaration of external data sources. Organised by taxon, includes raw data values, locomotor mode, and body mass.

File Name: Supplementary Data 2

Description: Multivariate statistics underlying this study. Includes raw pPCA scores, results of k-means clustering, PAM of pPCA scores, and LDA classification.

File Name: Supplementary Data 3

Description: Data acquisition parameters for synchrotron μ CT. Scanning parameters as used on beamlines BM05 and ID19 of the European Synchrotron Radiation Facility.

File Name: Supplementary Data 4

Description: Motivation for topography and timing of chronogram. Organised by node, includes timing for both extinct and extant taxa and declares corresponding sources. Remarks provided where relevant.

File Name: Supplementary Data 5

Description: P-values for phylogenetic ANCOVA. Conducted using locomotory division as response variable, individual parameters as variates, and body mass as covariates. Non-phylogenetic p-values and f-values provided for reference.