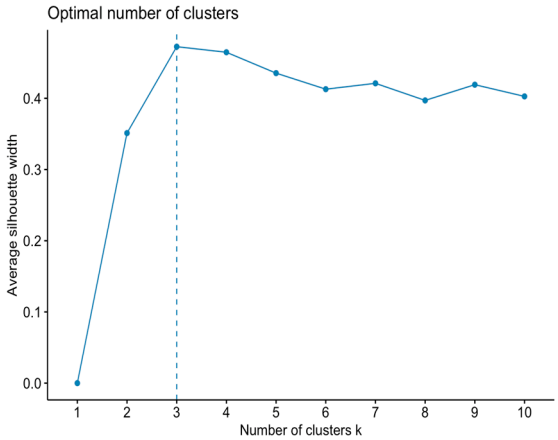


Figure S1. We applied the silhouette graph method to unit 5K, yielding k = 3.

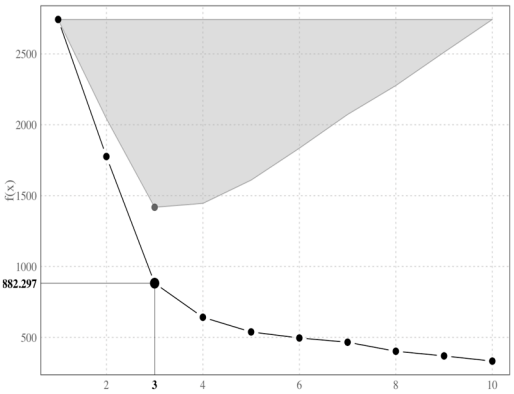


Figure S2. The elbow graph method was applied to unit 5K, resulting in k = 3.

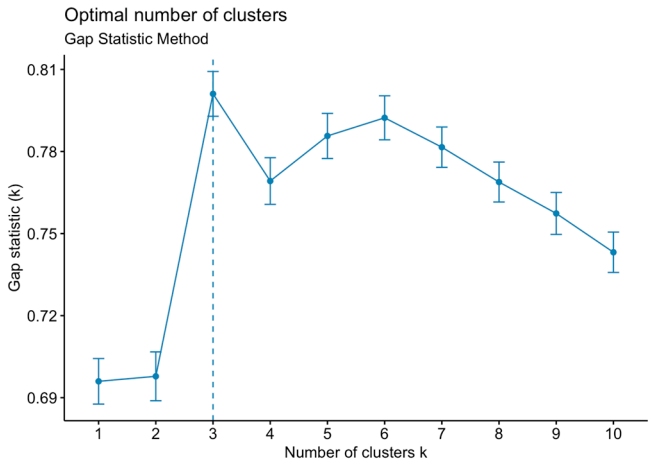
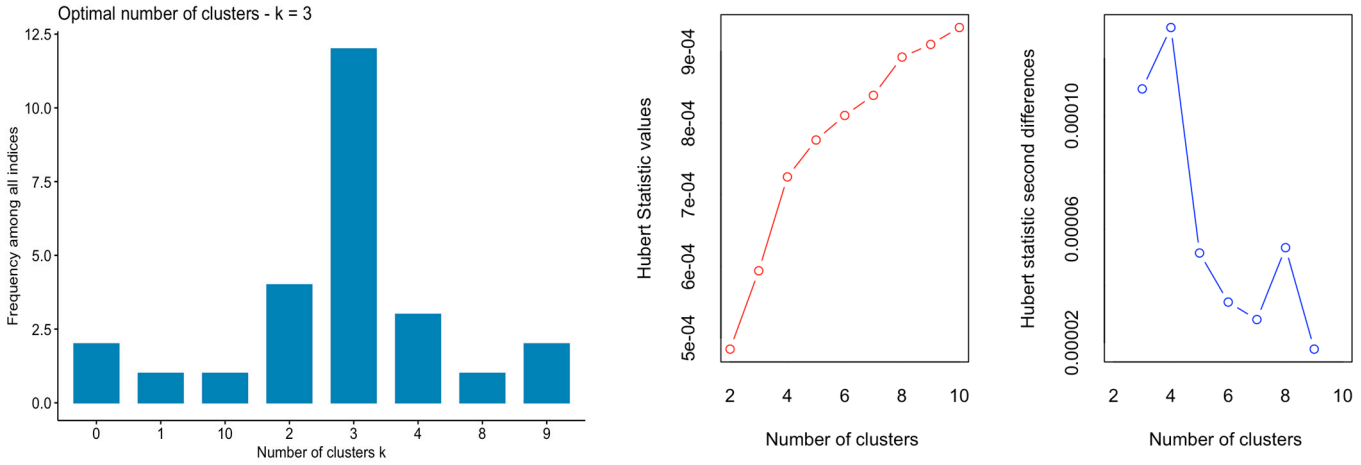


Figure S3. The GAP statistic method was implemented on unit 5K, yielding a value of k = 3.



(**a**) (**b**)

Figure S4. The Hubert index was applied to unit 5K, resulting in k = 3. (**a**) The Hubert index outcome is presented on a bar chart; (**b**) These diagrams illustrate the prominent inflexion point (k = 3).

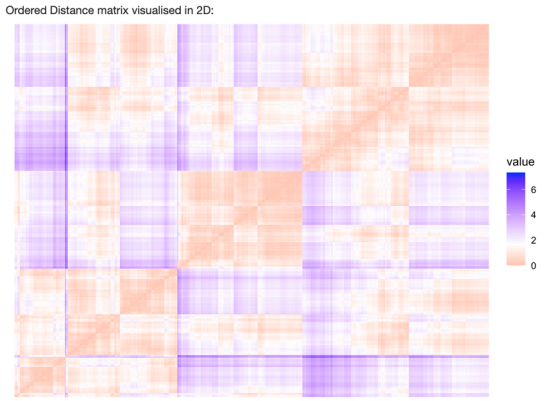


Figure S5. An ordered dissimilarity matrix (ODM) was generated for the visual assessment tendency (VAT) method for unit 5K.

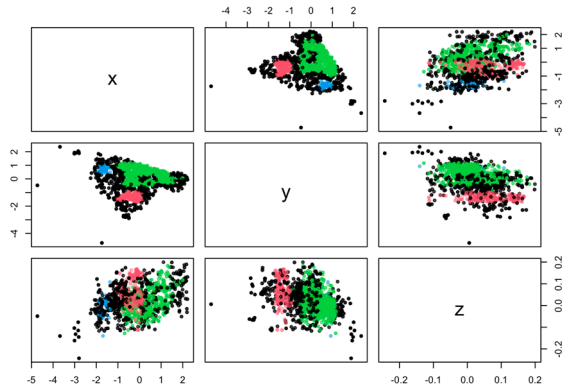


Figure S6. This figure shows different orthogonal projections concerning the OPTICS clusters of unit 5K; the black dots are outliers.

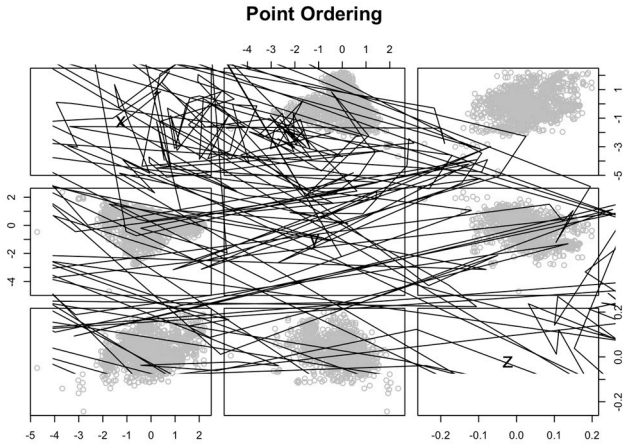


Figure S7. This figure illustrates the OPTICS point ordering applied on unit 5K.

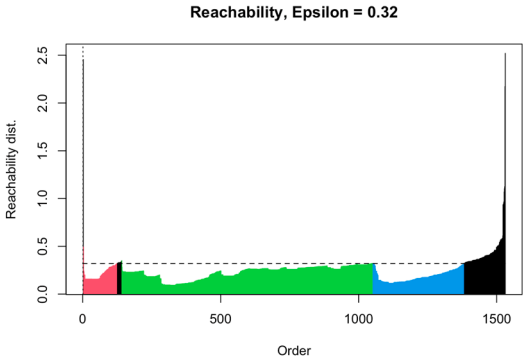


Figure S8. The OPTICS Reachability distances. We applied a threshold (0.32) to the previous point ordering. We found three (k = 3) clusters, as all the assessment methods suggested for unit 5K.

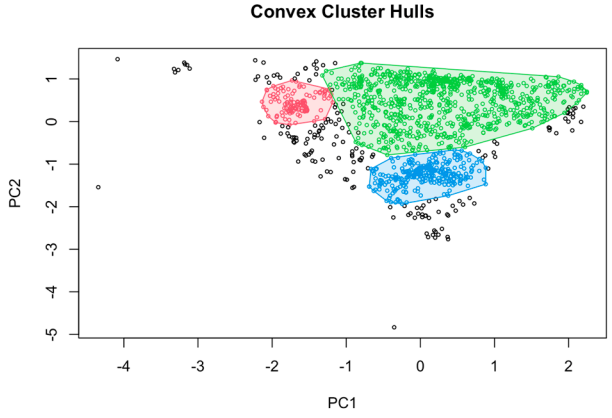


Figure S9. The figure shows convex cluster hulls on PC1 and PC2 in relation to unit 5K.

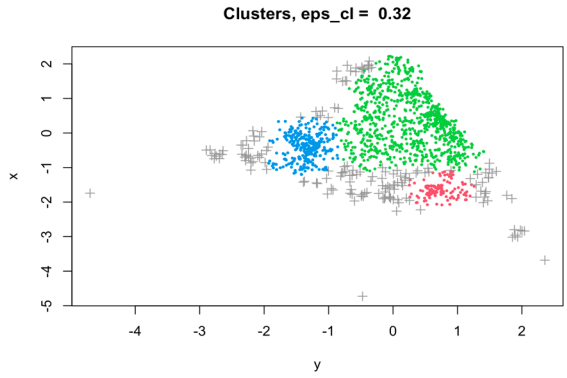


Figure S10. The figure depicts the resulting plane XY after the OPTICS analysis on unit 5K (k = 3).

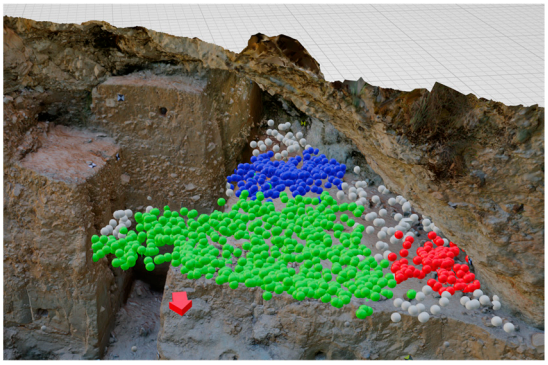


Figure S11. The figure illustrates the OPTICS clusters encountered for unit 5K (k = 3), placed in situ. The red arrow represents the north direction.

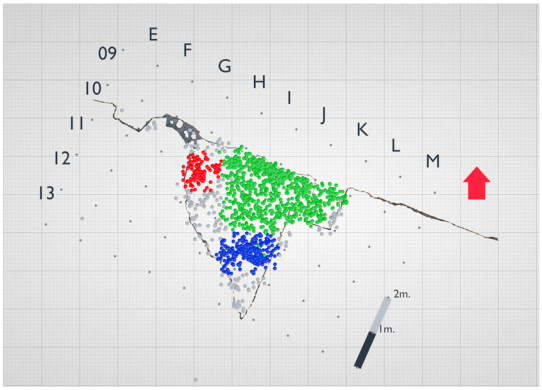


Figure S12. Top view of the OPTICS clusters we found for the unit 5K. The red arrow represents the north direction.

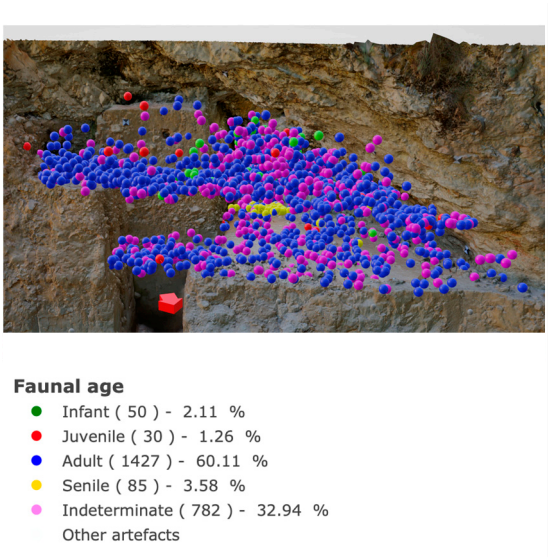


Figure S13. We placed faunal artefacts, categorised by age, in situ. The red arrow represents the north direction.

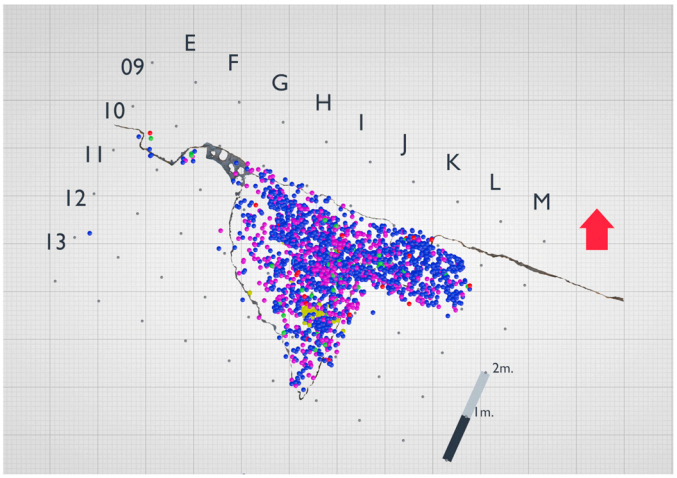


Figure S14. The top view shows the faunal artefacts, classified by age, in the cavity. The red arrow represents the north direction. The explanation of the colours is described in Figure S13.



Figure S15. The figure displays the OPTICS clusters connected to the adult age category in the cavity. The red arrow represents the north direction.

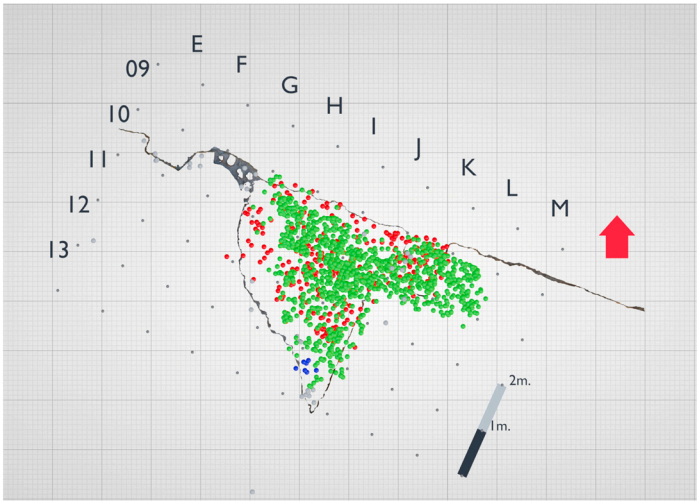


Figure S16. The top view shows the OPTICS clusters for the adult age category in the cavity. The red arrow represents the north direction.

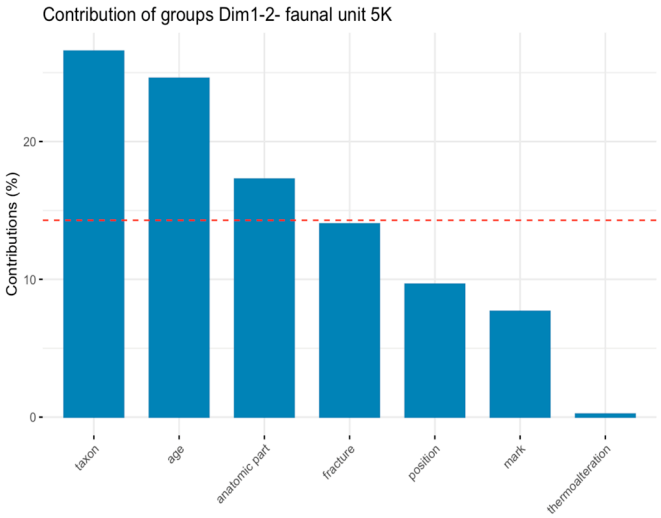


Figure S17. In unit 5K, the figure depicts the MFA contributions of variables concerning faunal artefacts on dimensions 1 and 2 together.

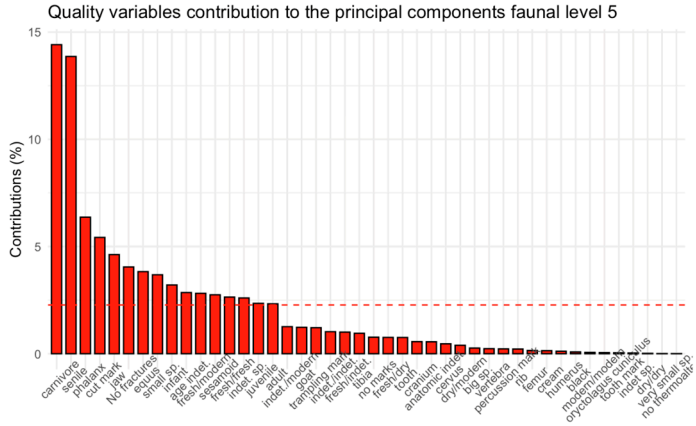


Figure S18. In unit 5K, a bar chart shows the MCA values of the quality variables contributing to the main components of the faunal artefacts.

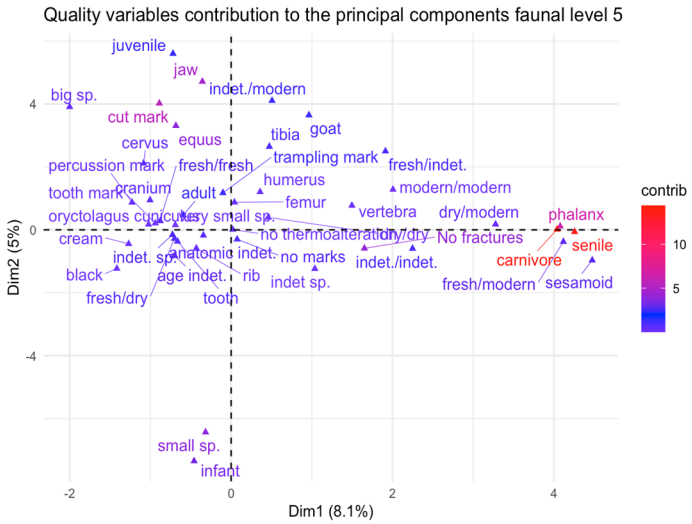


Figure S19. In unit 5K, a diagram (Dim1-2) shows the MCA values of the quality variables contributing to the main components of the faunal artefacts.

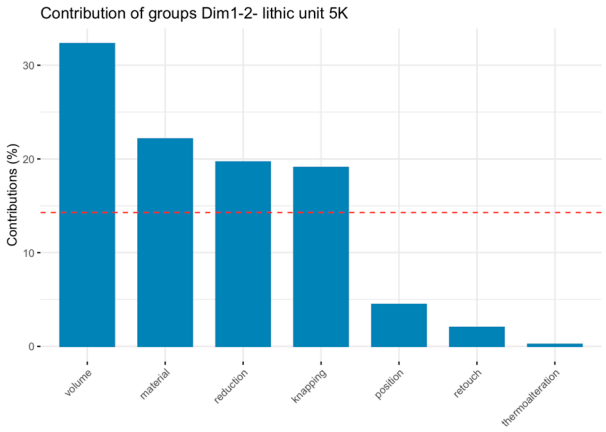


Figure S20. In unit 5K, the figure depicts the MFA contributions of variables concerning lithic artefacts on dimensions 1 and 2 together.

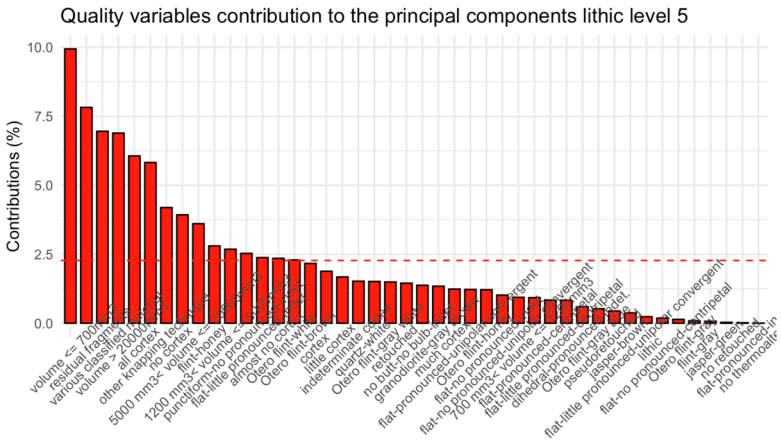


Figure S21. In unit 5K, a bar chart shows the MCA values of the quality variables contributing to the main components of the lithic artefacts.

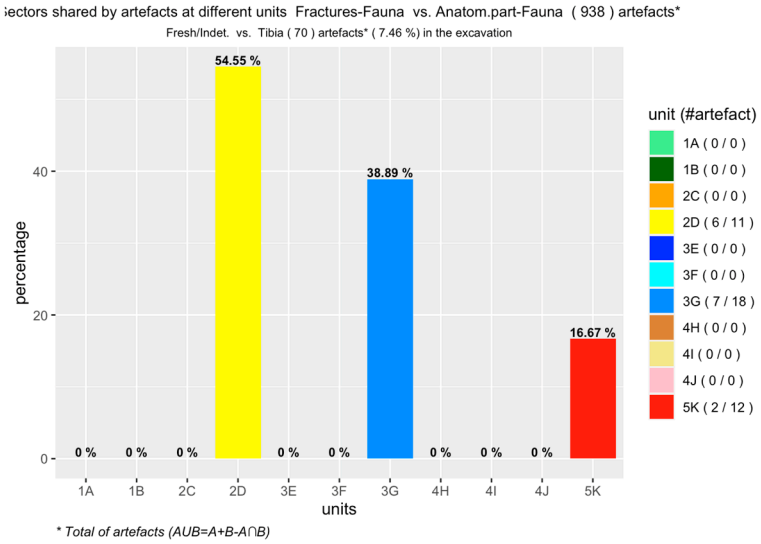


Figure S22. The bar chart that shows faunal fresh/indeterminate fractures vs. tibia anatomical part, number of artefacts (%) (*p*) shared in the same volumetric sectors at each unit in the excavation.

Unit [2D]. There are 938 artefacts representing the general categories Fractures-Fauna and Anatom.part-Fauna in the entire excavation. From such categories, we find 70 artefacts that present a union of specific groups (AuB) inside the site. These distinct groups are called **Fresh/Indet.** and **Tibia ; 6** artefacts from a total of **11** (**54.55%**) about both specific groups share the same sectors in this unit. They also share **3** artefact(s), which is/are the same.

Figure S23. The English interpretation of the previous bar chart, faunal fresh/indeterminate fractures vs. tibia anatomical part, number of artefacts (%) (p) shared in the same volumetric sectors at each unit in the excavation.

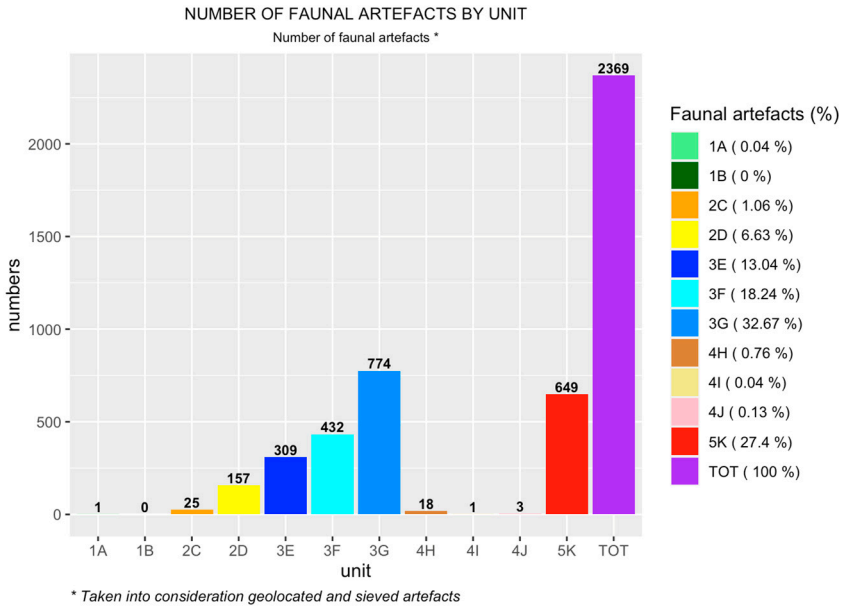


Figure S24. The figure displays the number and percentage of faunal artefacts in each excavation unit.

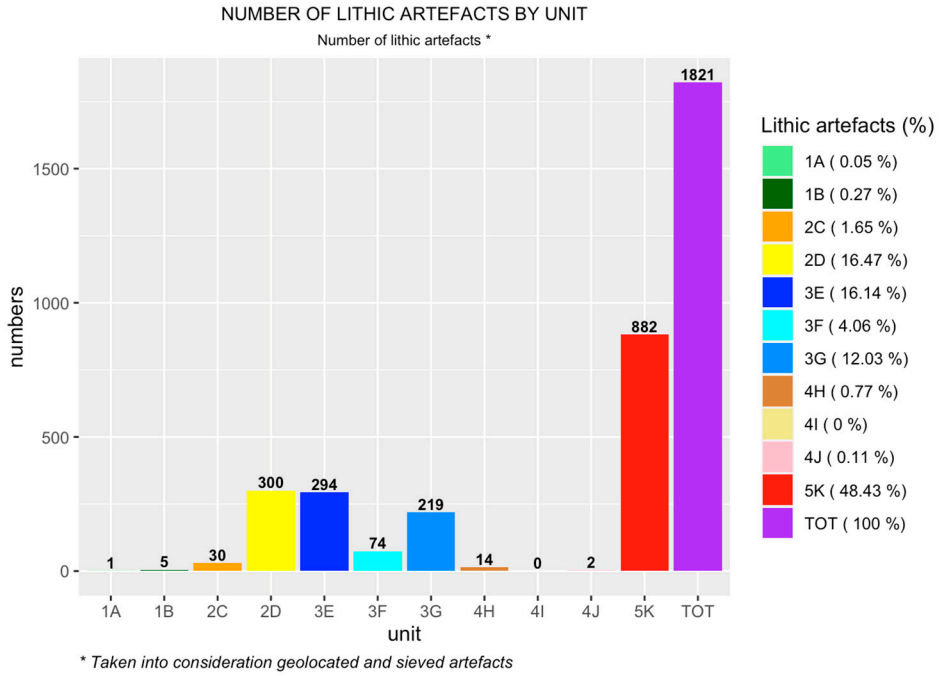


Figure S25. The figure displays the number and percentage of lithic artefacts in each excavation unit.

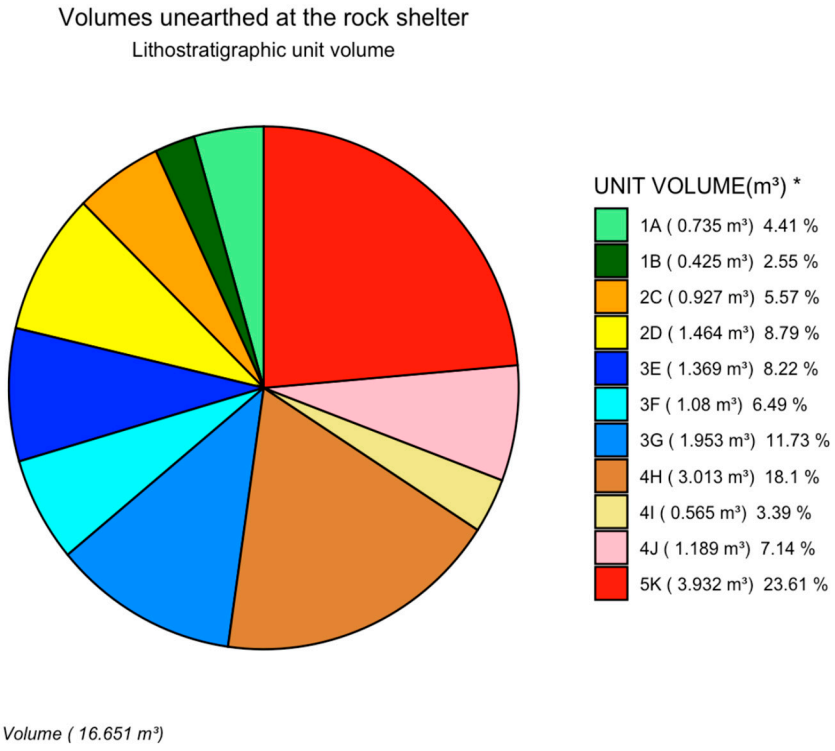


Figure S26. The figure shows the volume (m^3) and percentage excavated by unit in the rock shelter.