Supplementary material of the submission "Assessing the Quality of 3D Reconstruction in the Absence of Ground Truth: Application to a Multimodal Archaeological Dataset"

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This supplementary material presents additional illustrations of the proposed archaeological dataset, as well as the normal maps estimated by each of the proposed method.

For each object in the dataset (Biface, Fossil, Harpoon, Blade, Axe, Shard), a figure is provided which contains, row-wise:

- A selection of 3 representative PS images (out of 105 for all objects);
- A selection of 3 representative multi-view images (out of 80, 41, 88, 78, 53 and 75, respectively);
- A view of the meshes obtained using Scanner, MVS and Neus2;
- The estimated normal maps for each of the methods compared in the benchmark (with respect to the PS camera coordinate system). The result is directly provided by the PS methods SDM, UniMSPS, CPS and Ours, and by projecting in image space the meshes obtained by Scanner, MVS and Neus2.

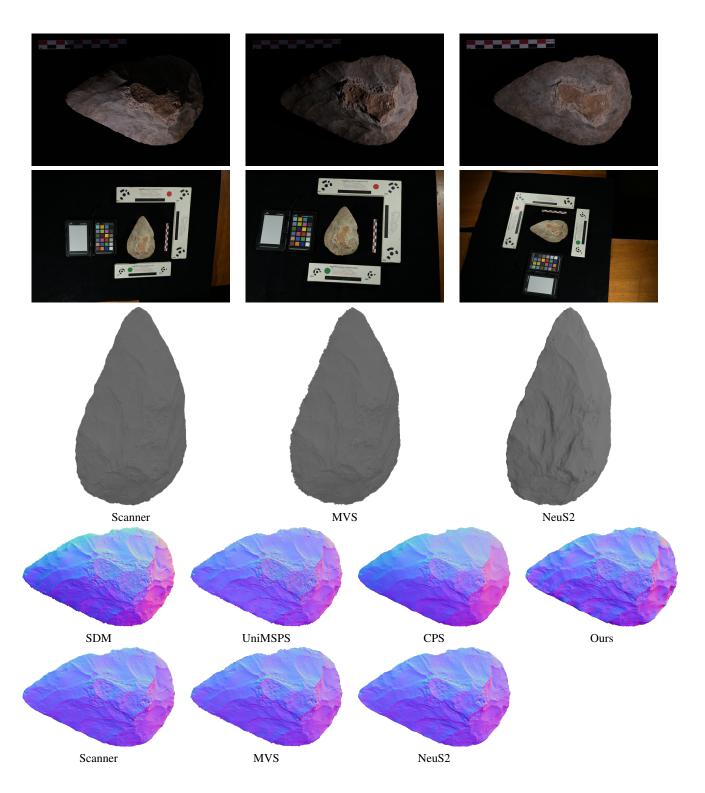


Figure 1. Biface object. From top to bottom: PS images, mulvi-view images, meshes, and reconstructed normal maps.

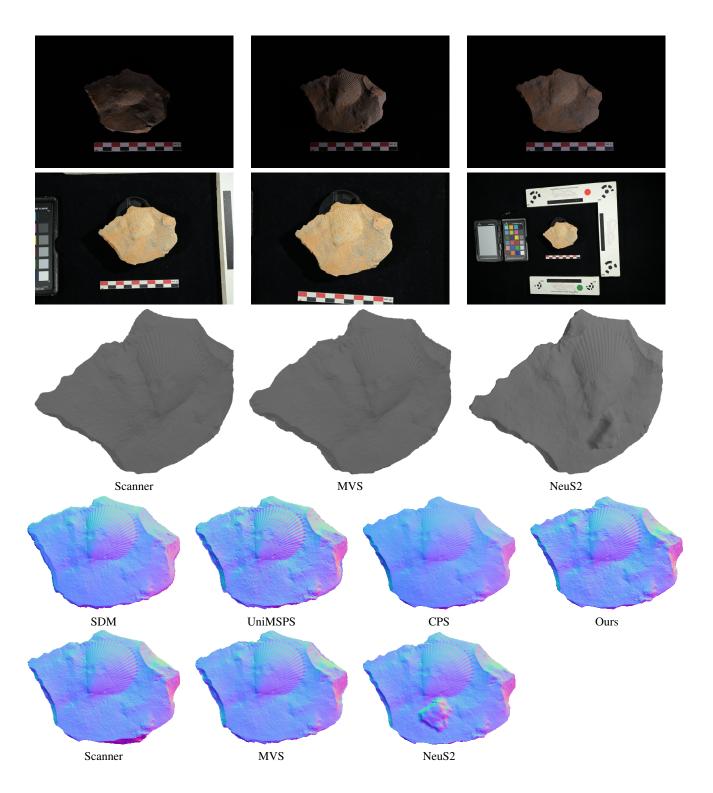


Figure 2. Fossil object. From top to bottom: PS images, mulvi-view images, meshes, and reconstructed normal maps.

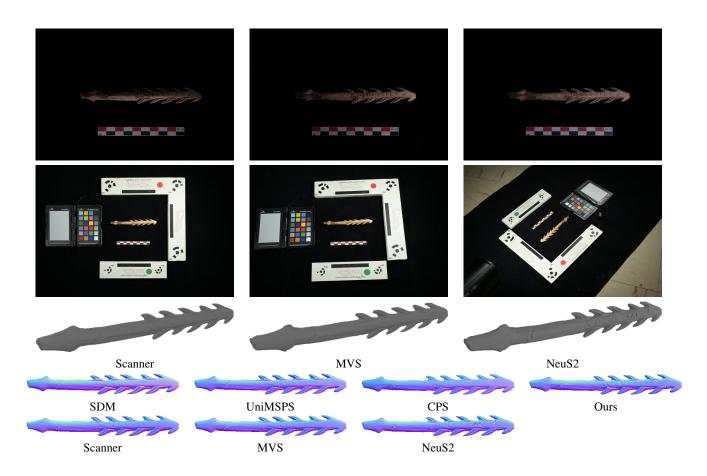


Figure 3. Harpoon object. From top to bottom: PS images, mulvi-view images, meshes, and reconstructed normal maps.

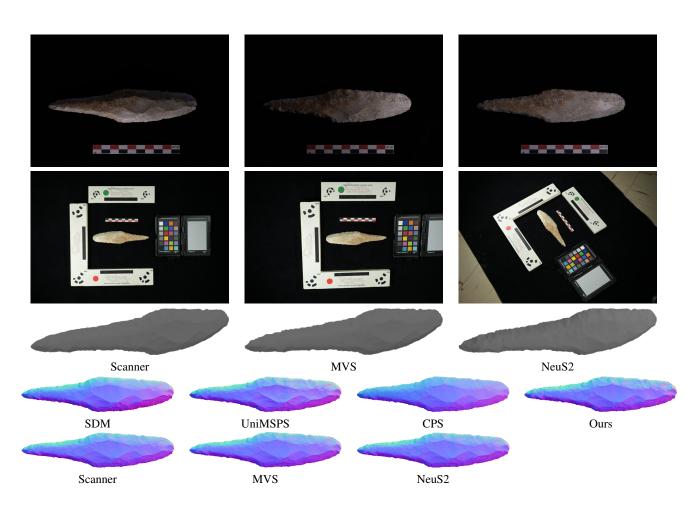


Figure 4. Blade object. From top to bottom: PS images, mulvi-view images, meshes, and reconstructed normal maps.

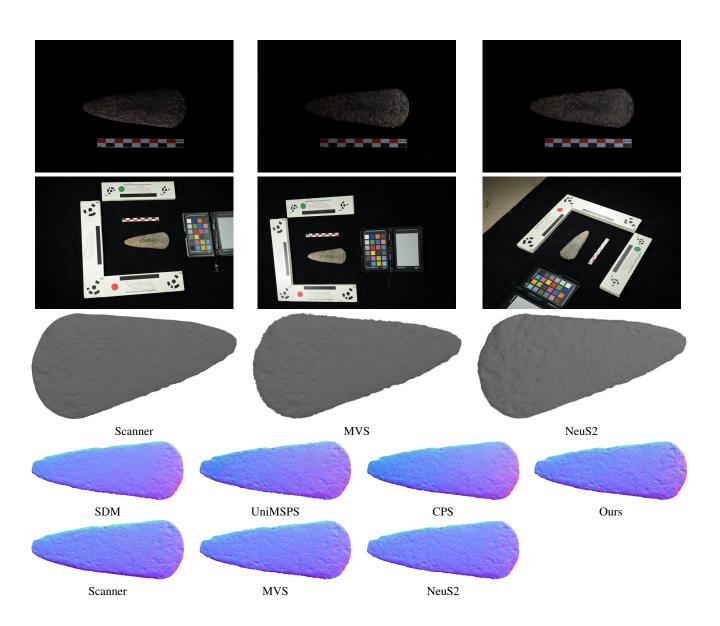


Figure 5. Axe object. From top to bottom: PS images, mulvi-view images, meshes, and reconstructed normal maps.

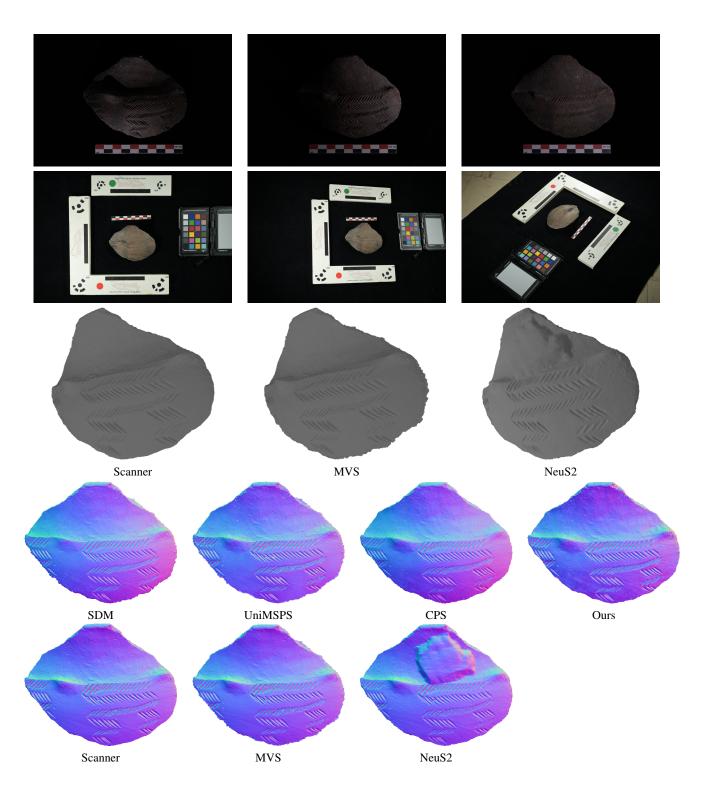


Figure 6. Shard object. From top to bottom: PS images, mulvi-view images, meshes, and reconstructed normal maps.