

Case 11 – Photogrammetry: Digital photograph or laser scanning

Photogrammetry is a cheaper and more accessible method of studying fossils. This technique stitches together multiple digital photographs or laser scans of an object to create a 3D image.

Photogrammetry only shows surface details, whereas micro-CT scanning can 'see' through a rock. Anyone with a digital camera and suitable software can use photogrammetry but producing digital 3D images requires time and expensive equipment.

Photographs are taken from different angles to produce an image that can be digitally rotated, allowing details to be highlighted. Sometimes features are difficult to see if they are viewed from a single, fixed point while photogrammetry overcomes this problem.

Laser scanning is a more advanced photogrammetry technique that creates a digital image using a specialised computer programme and a dedicated laser scanner. This gives much more detailed information but is generally only available to university or other research institutions. The advantage of digital data is that it can be adapted and presented in many different formats, dependant on the needs of the user.