

# Investigation of archaeological findings from the New Museum of Acropolis using innovative technologies

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## ABSTRACT

The investigation of archaeological findings often requires the precise recording of their solid geometry and internal structure. This paper presents innovative methods for modeling archaeological findings with complex geometry without any physical contact with the object of avoiding the risk of corruption of the object. More specific shows the recording of the solid geometry of seven archaeological objects from the Acropolis Museum (marble, ceramic, bronze, etc.) with the use of 3D-laser scanning, X-ray tomography and neutron tomography. The choice of the technology that is used each time depends on the size, material and complexity of the geometry of the object. After suitable processing of the files generated from these measurements, the fully solid geometry of the objects can be represented. With the investigation of the same files reveal significant information can be revealed, information which make it possible to find out the possible way of formatting them in antiquity. It is also possible using these data to produce exact copies of the findings using rapid prototyping techniques.

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