

BARI - Buildings ARcheology Inventory – documentation of two archaeological sites in Jordan

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Many archaeological sites are vulnerable to destruction (due to both natural forces and human activities). For this reason, one of the most important challenges facing modern archeology and cultural heritage protection is establishing efficient methods of documentation of archaeological sites. The article presents results of the research performed during BARI project (BARI - Buildings ARcheology Inventory). The main goal of this project was to document two South Jordan sites: Roman fort in Dajaniya and the remains of the city of Tuwaneh in the most effective, least destructive, most efficient and most economical way. The documentation works were pioneering in the archaeologically little-known region of Jordan. Polish archaeologists from the Institute of Archeology of the Jagiellonian University conduct unique research there in order not only to discover the history of this region, but also to protect cultural heritage.

During fieldwork, the measurements were carried out in order to obtain and develop three-dimensional data on archaeological objects. This data was used to build a spatial database enabling comprehensive data visualization and archaeological documentation. The research was carried out using modern measurement techniques such as: terrestrial laser scanning and short-range photogrammetry. In addition, the documentation was performed using spherical cameras.

As a result of the conducted research, methodology of archeological documentation was developed. It was based on advanced and developmental techniques of spatial data collection and ensured efficiency, completeness of results and safety of surveyed objects. Many of measurement methods were subjected to accuracy analyzes in unique field conditions. During the preparatory work, tests were also carried out in the Błędów Desert, Poland.