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## The archaeological site of chellah, new technologies for investigation, modeling, and mapping.

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archaeological sites have been always a subject of curiosity and search, the archaeologists and scientists from different specialties have been wondering about the origins of the man civilization, about the way our forefathers lived, how they nourished, dressed, and housed themselves, what techniques were used for the transport, the fishing, and the business, about the culture and the spiritual practices. in fact, the modern technologies, practices, and innovations are only a continuation of what was once; this is why the human being believes it is imperative to revive and understand the heritage and to discover its secrets. in the present work which pours in the same direction, we decided to revive and explore a wealthy site located in rabat, the Moroccan capital, this site is named chellah, which represents the summing up of historical eras from the antiquity to the Islamic period and which is marked by the presence of antique and Islamic constructions which reflect this continuity. our research aims to build a model for the detection of areas that are not yet excavated but are already mentioned by archaeologists, geographers, and historians to validate their hypothesis and to find out where exactly these areas are located. our methodology is based on the processing of unmanned aerial vehicle (**uav**) images to generate high-resolution photogrammetric products with low cost, those datasets will be analyzed with a technique that has been in use since the '80s and which is using crop, soil, and shadow marks visualized on images taken by aerial photography. this analysis gave us the vision to select the zones on which a geophysical investigation by electrical tomography was carried out to approve the presence of the archeological components that require future excavation. our study focused on the importance of non-invasive methodologies for the study, preservation, and valorization of archaeological sites.