

# *Archaeological Geophysics: To Australia and Beyond*

**Aaron Fogel**  
**Griffith University**

Geophysical investigations of archaeological sites are commonplace in many regions of the world though they remain infrequently applied in Australia until recently. Further, many Australian students have minimal exposure to such techniques as few Australian universities have trained archaeological geophysicists to teach courses in addition to limited instrument accessibility. This paper is designed to provide an introduction to geophysical methods and their widespread applicability to archaeological research. Following a brief introduction to a suite of geophysical methods, recent case studies from archaeological sites associated with University of Queensland researchers will be presented. Results from the sites of Alampra (Cyprus), Bonçuklu and Kültepe (Turkey), as well as several locations in Yangon, Myanmar have demonstrated the utility of these technologies for addressing both methodological and theoretical questions. Beyond these international projects, opportunities exist to test these methods domestically, including locally in Queensland. As such, results from recent independent research projects will also be presented demonstrating the applicability of geophysical instrumentation to both Aboriginal and European archaeology in Australia.

## ***About the Presenter***

*Aaron Fogel (MA, RPA) has spent the last fifteen years studying, researching and working in university, private and public sectors of archaeology using a range of geomatic techniques including near-surface geophysics (GPR, magnetometry, electromagnetic induction, resistivity and magnetic susceptibility), aerial and satellite remote sensing, RTK GNSS, LiDAR and 3D scanning. This has included geophysical projects at numerous World Heritage and nationally significant archaeological sites in Australia, North Africa, the Middle East, the Eastern Mediterranean, Southeast Asia, and North and South America. This work has resulted in numerous refereed journal publications, digital media presentations and comprehensive reports. Remote sensing and geographic information systems (GIS) applications in archaeology have been the focus of much of his research activities. He is currently a PhD candidate at Griffith University exploring the application of geophysical applications and predictive modelling to Australian archaeology.*