Issue 37: November 2013

ISAP NEWS

The newsletter of the **I**nternational **S**ociety for **A**rchaeological **P**rospection

Contents

Archaeological Prospection Journal
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Editors' Note

Robert Fry & Hannah Brown

Welcome to the 37th issue of ISAP News! As always, a very big thank you to those who have found time to contribute to it - we hope you find it an interesting read.

This edition includes geophysical results from the Aegean island of Therasia, collected as part of a project investigating patterns of settlement (page 2); and a virtual reconstruction of the medieval monastery of Schlehdorf, Bavaria, based on a combination of radar data and historical sources (page 5). There is also information relating to the use of the Geonics EM38B (page 9), and coverage of the final workshop of the DART Project, which includes details of access to the audio-visual and transcript archives of the day for those who couldn't make it (page 10).

We also have details of a new venture being set up by commercial geophysicists in the UK: a 2 day seminar will be held in March 2014, which will provide an opportunity to discuss problems and possibilities that relate directly to the commercial sector, and establish dialogue between those involved in various aspects of the world of commercial archaeological geophysics. The seminar will focus on commercial issues, but attendance is not confined to commercial field geophysicists! (page 8).

As usual, we would love to hear about your projects - preferably in about 700 words, with a couple of images! Please send any contributions, comments or queries for the next newsletter (ISAP News 38) to editor@archprospection.org by the 28th February 2014. All entries are gratefully received!

In the meantime, we'd like to wish everyone a merry Christmas and a happy and healthy 2014!

editor@archprospection.org

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http://www.bradford.ac.uk/acad/archsci/archprospection/renew.php

Geophysical Prospection on the Volcanic Environs of Therasia Island, Cyclades, Greece

therasiaproject.web.auth.gr/index%20english.htm
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Therasia is a small island near Thera (Santorini) that lies in the middle of the Aegean and its past has been tied with the rest of the volcanic island of Santorini. Therasia is located at at the NW fringe of the caldera and it wasn't left unaffected by the Minoan eruption of Santorini that spread large quantities of volcanic ash all over the Mediterranean (Druitt & Francaviglia 1992; Bond & Sparks 1976; Heiken & McCoy 1984). Nowadays, the only remnants of the pre-Minoan period are Thera, Therasia and Aspronisi, all of which contain large quantities of pumice (Bonde *et al*. 2001).

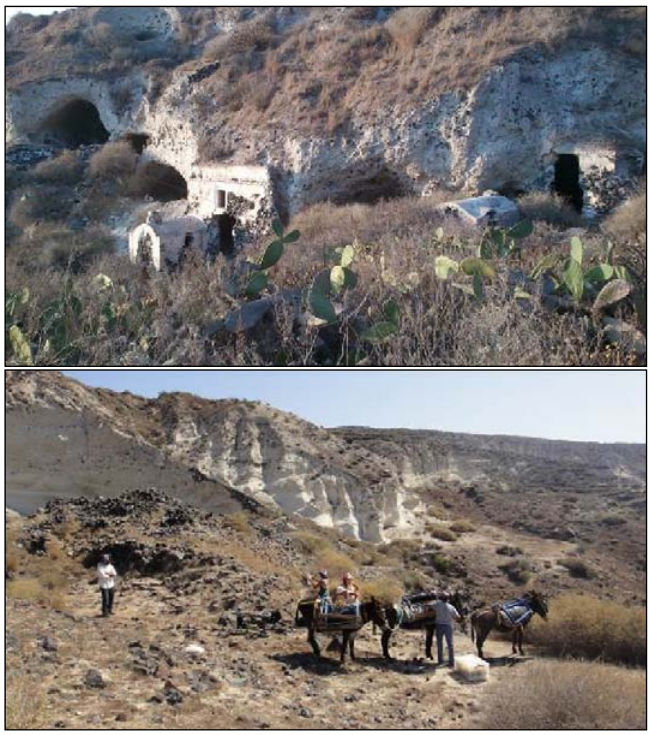

Figure 1 Above: The deserted village of Volia located to the central west side of the island. Below: The donkey group carrying the geophysical instruments to the site of the quarries of Alafouzos.

The earliest excavations in the islands (1866/67 and 1870) of Therasia and Thera were responsible for revealing the traces of the Late Cycladic habitation in both islands, even though later investigations proved that the settlement continued further in various chronological periods afterwards (Tzachili 2005). The first excavations in Therasia were carried out at the location of the S. Alafouzos quarry by S. Alafouzos and N. Nomikos. The excavations revealed a building complex consisting of different rooms that were preserved to a certain height. The French geologist F. A. Fouqué concluded that the building was standing before the volcanic eruption based on both archaeological evidence and the study of geological strata (Fouqué 1867: 13-14; 1869: 928). However the particular building seems to have been destroyed due to the continuous work at the quarry (Burnouf 1879: 119; Radet 1901: 343).

A joint expedition consisting of architects, archaeologists, anthropologists and geophysicists from the Aristotle University of Thessaloniki, the University of Crete, the Ionian University and Foundation for Research and Technology Hellas (FO.R.T.H) has been initiated under the Thales program (Island Cultures in a Diachronic Perspective: The Case of Therasia) aiming towards the study of the diachronic settlement patterns of the island and the impact of human intervention on the landscape. Being in a more or less insulated environment (with all the consequences of depopulation and desertion), in contrast to the mass tourism that is flooding Santorini, Therasia Island offers an ideal case for studying the residues of the past habitation and examine the settlement trends from the prehistoric to the more recent historical times: therasiaproject.web.auth.gr/index%20english.htm

Surface survey campaigns indicated a continuation of the habitation of the island by a number of architectural relics and pottery densities that have been dated from late antiquity to the Early Middle Ages. The numerous deserted villages, with the most impressive one at Volia (**Fig. 1**), the water management systems and the residues of the recent quarrying activity indicate the prosperous times of the island.

In order to investigate further the particular evidence that resulted from the surface surveys, a series of geophysical surveys have

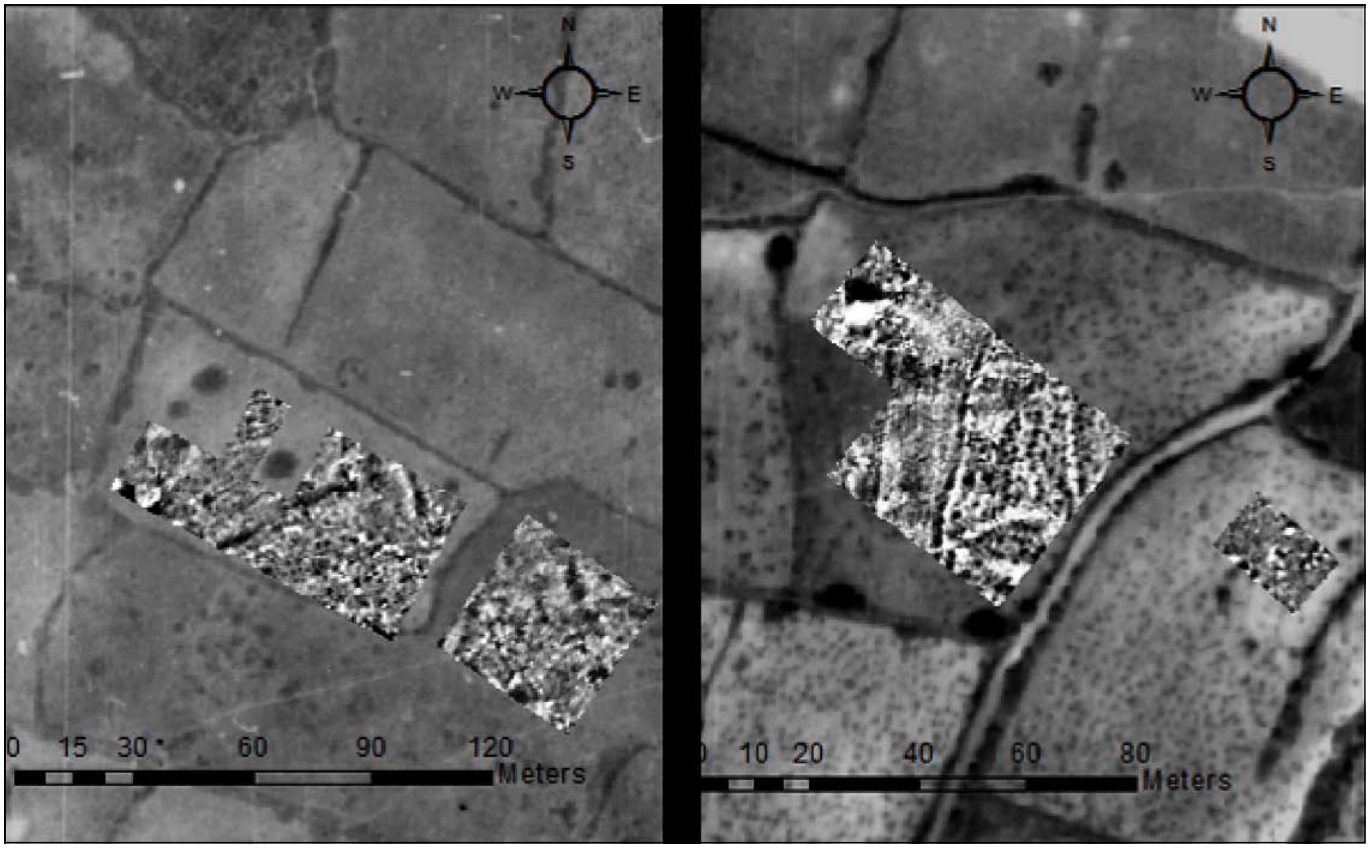

Figure 2 *Results of the magnetic survey at Potamos (**left**) and Riva (**right**), overlaid on the aerial images of 1986. Linear anomalies may be related to older field divisions or irrigation works.*

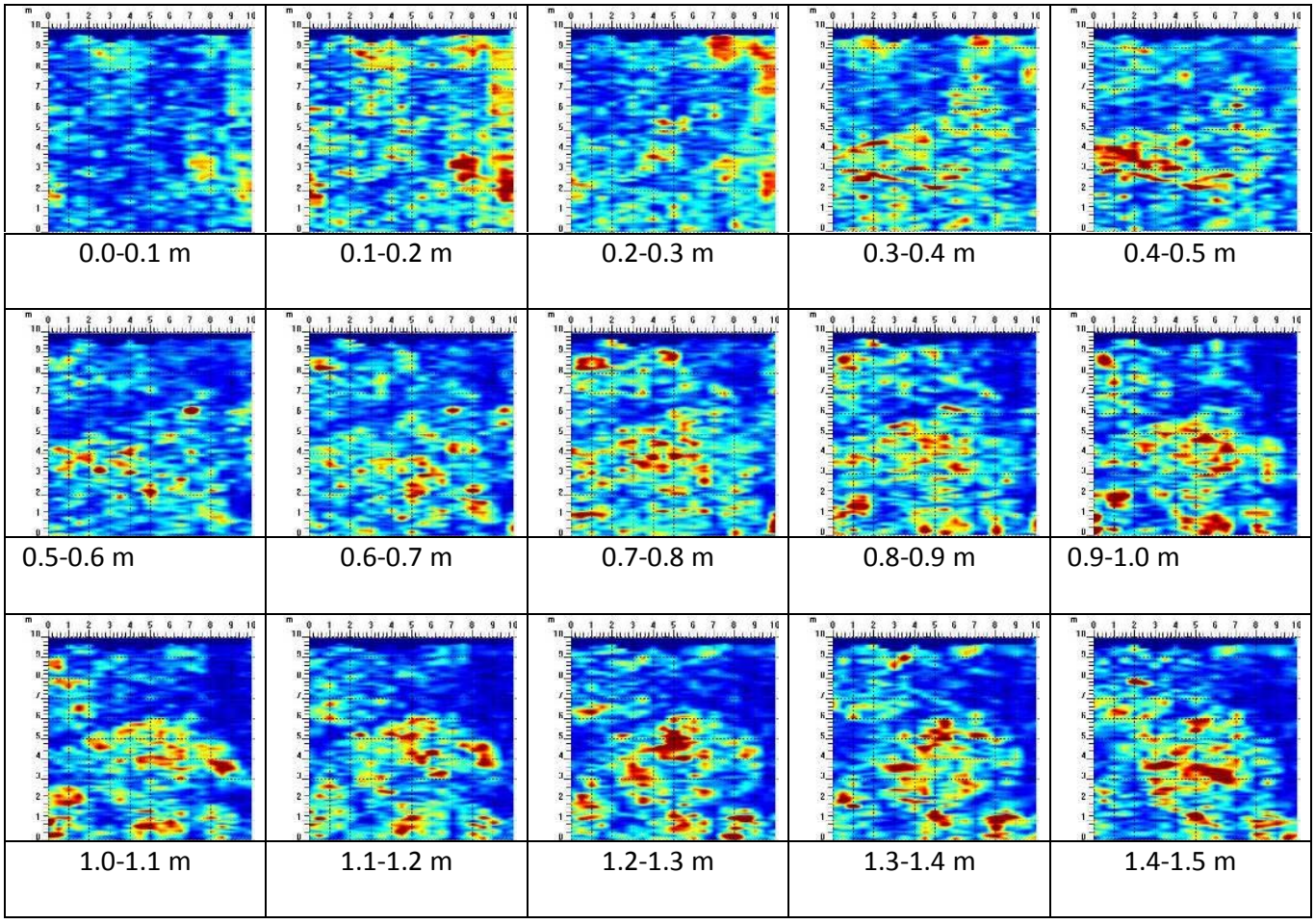

Figure 3 *Time slices with increasing depth created from the GPR survey at the yard of the church of Koimisi. Measurements were obtained at 2.5cm along transects 0.5m apart. The particular survey was carried out in both directions that resulted in compatible images. It is suspected that a classical temple was built in the particular area.*

been carried out in the late summer of 2012 and 2013. Fieldwork has been carried out using Geoscan FM256 and Bartington G601 fluxgate gradiometers and Noggin Plus ground penetrating radar (GPR) with 250MHz antennas. Geophysical surveys were conducted at areas where previous archaeological surveys reported high concentrations of pottery distributions, based on the assumption that the highest sherd densities are related to built environments. A total number of 35 grids (20m by 20m) were laid on the rugged Mediterranean terrain at the sites of Potamos, Christos, Koimisi, Riva and Agios Georgios. Moreover the help from donkeys for transporting the survey equipment was more than necessary in one of the survey sections at the Alafouzos quarry (**Fig. 1**).

Initial results suggest no apparent direct relation between pottery distributions and the built environment. Most of the features detected in the rural landscape don't necessarily form a complete evidence for substantial architecture (**Fig. 2**). This is a significant observation since it violates the normative view in archaeological surveys while providing some evidence for Roman agricultural land-use strategies.

On the other hand, the GPR survey at the internal yard of the church of Koimisi has indicated relics of an older subsurface structure in close correlation to the architectural blocks that seem to be in situ at various parts of the church (**Fig. 3**). Similar evidence comes from both the GPR and magnetic measurements in the area of Alafouzos querry, where obvious traces of past architecture are registered by both methods.

The geophysical investigations will continue in 2014.

Acknowledgements
The Programme is co-financed by the European Union (European Social Fund - ESF) and Greek national funds through the Operational Program "Education and Lifelong Learning" of the National Strategic Reference Framework (NSRF).

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Virtual reconstruction of a medieval monastery in Bavaria based on geophysical prospection and old copper engravings

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The high-resolution and three-dimensional results of ground-penetrating radar (GPR) surveys enable the reconstruction of historical buildings without archaeological excavations. Such attempts were made, especially in the last few years, by e.g. Sarris *et al*. (2009), Löcker *et al*. (2011) and Neubauer *et al*. (2013). Together with historical sources and old maps, it is possible to get a quite realistic reconstruction of these monuments. One example of a medieval monastery in southern Bavaria is presented below.

Results

From historical sources and a copper engraving of Michael Wening (around 1700) (**Fig. 1**), it was only known that the medieval monastery of Schlehdorf (Lkr. Bad Tölz-Wolfratshausen) was not located in the same place as the later one. But the exact place could not be identified until our radar prospection. The survey was carried out with a GSSI SIR-3000® and a 400 MHz antenna. As a result of the very shallow ground-water table, the soil moisture in the area of potential concern was 50 vol% (measured by time-domain-reflectometry) at the time of the geophysical prospection. Nevertheless, we conducted a GPR survey there and got astonishingly good results. The medieval remains are situated in a depth range between 40 and 140 cm (**Fig. 2**). Because one of the rooms of the monastery shows a floor in 80 – 100 cm depth, the walls are still preserved up to a height of 40 cm. The deeper lying remains belong therefore to the foundations, although those of a huge building like a monastery should have reached much deeper than 40 cm. A greater penetration depth of the signal however was not possible because of the high soil moisture, which also blurs the uppermost depth slices (Linck & Becker 2013; Linck & Pietsch 2013).

The results (**Fig. 2**) show in detail the three-aisled church with a rectangular entrance building in the west. Unfortunately, the apse could not be covered by the survey grid as it is overbuilt by a modern garden house. In the north of the nave the squarish church spire can be identified. In the

Figure 1 *Copper engraving of the monastery in Schlehdorf. Artist: Michael Wening (around 1700) (© Bayerische Vermessungsverwaltung, 2013).*

south, the buildings of the monastery appear in the depth slices. In particular, the southern and the western wings show a multitude of walls and enable the reconstruction of the medieval internal layout. In the west, two oriels, one semicircular and one rectangular, can even be identified. Outside the buildings two linear walls separating the courts are visible. In one of them a former well is identifiable as a circular anomaly (Linck & Becker 2013; Linck & Pietsch 2013). Most of these architectural structures can also be found in Wening's copper engraving (**Fig. 1).** But some details have to be corrected prior to a combined reconstruction of the monument: one of the oriels is mapped as octagonal, but the results show that it should have been semicircular. Furthermore, the pavilion in the garden never existed and has only been added by Wening for artistic reasons. Moreover, the GPR depth slices show that a small building existed inside the central court of the monastery that is attached to the western wing.

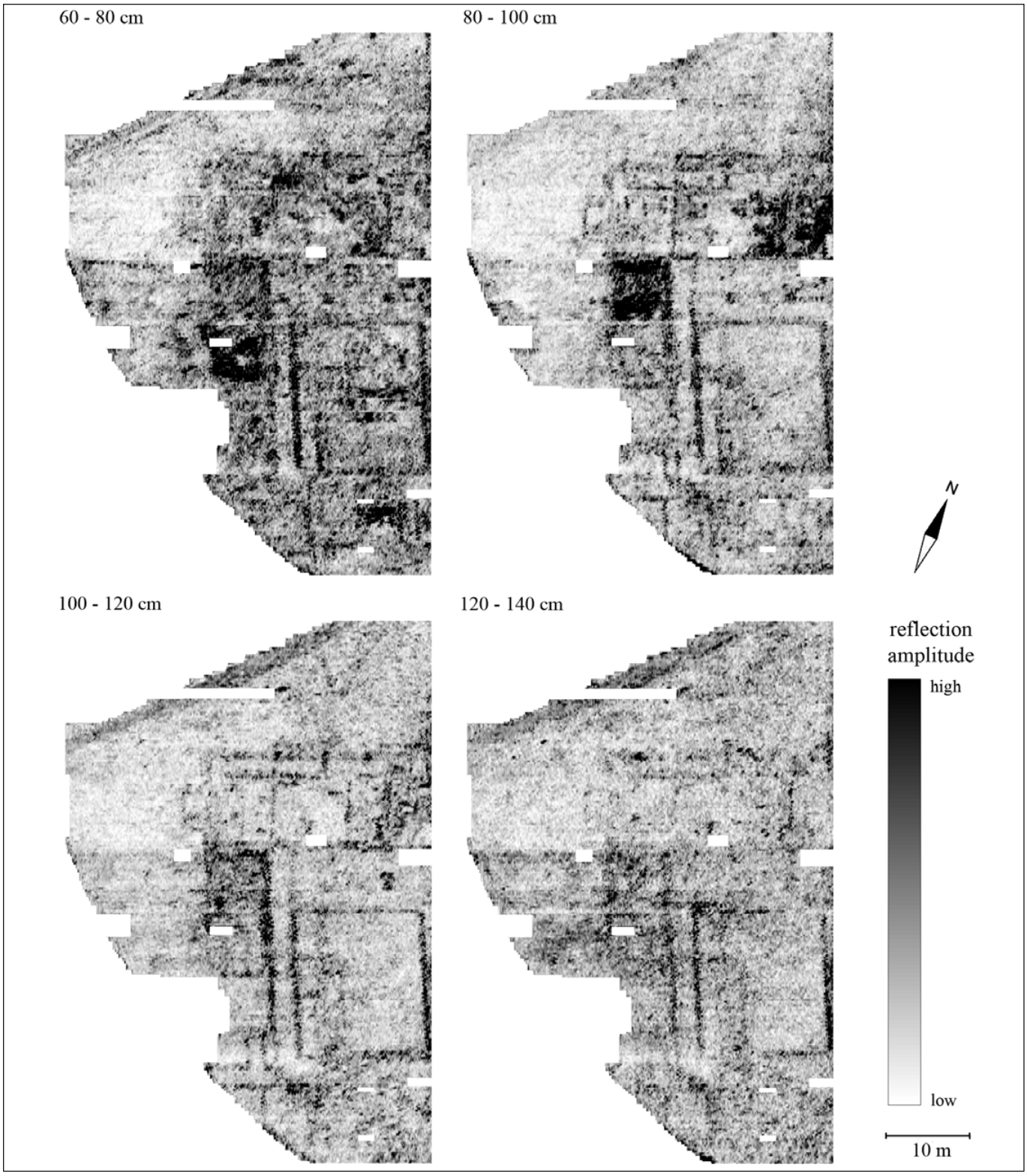
Based on the exact layout of the ground-plan taken from the depth-slices and the appearance of the upstanding parts taken from the copper engraving, it is possible to do a virtual reconstruction of the medieval architecture with Trimble SketchUp®. The model in **Fig. 3** shows several views of the reconstruction of the Gothic church, with a size

of 13 x 45m, and the adjacent monastery that covered an area of 40 x 40m. Only the layout of the church's apse is based on typical architecture of the time, as it is neither located inside the survey grid, nor visible on the copper plate.

Figure 2 *Selection of depth slices of the GPR survey. GSSI SIR-3000 with 400 MHz antenna, sample density: 2 x 25 cm, grid size: 67 x 46 m. The other parts of the monastery could not be surveyed because of modern constructions. The gaps in the depth slices are caused by trees (© Roland Linck, BLfD, 2012).*

Conclusion

Despite of the high soil moisture the GPR results at Schlehdorf are quite good. This is, therefore, an example that theoretically nearly impossible conditions can nevertheless provide a positive output in practice. By complementing these results with old illustrations like the copper engraving used here, it is furthermore possible to reconstruct the historical buildings in a refined way, to provide the non-scientific community with results that are easier to interpret than the pure geophysical data.



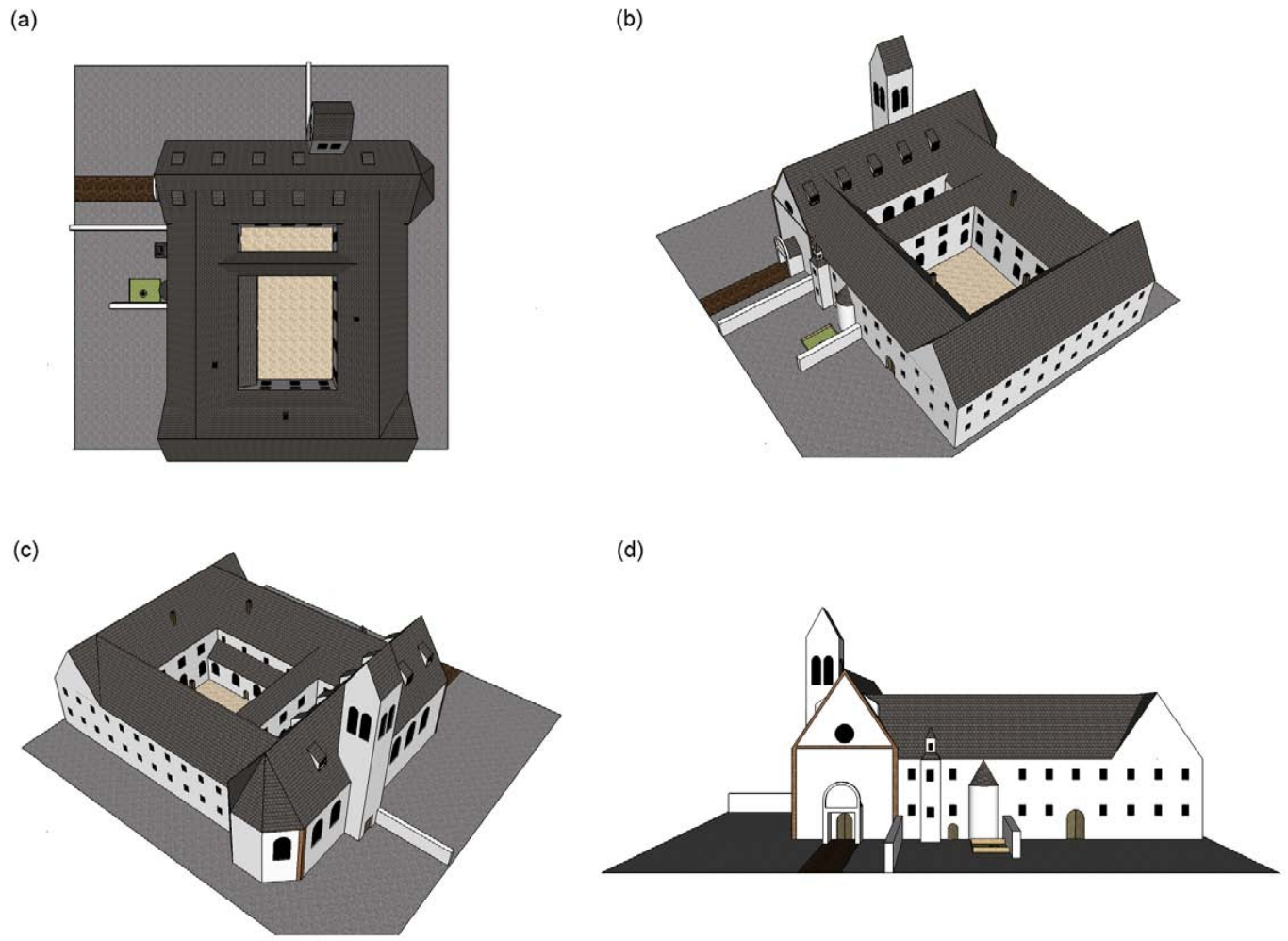


Figure 3 *Virtual reconstruction of the medieval monastery of Schlehdorf based on the radar results and the copper engraving.* ***(a)*** *View from above,* ***(b)*** *from the south,* ***(c)*** *from northeast,* ***(d)*** *from the west (© Roland Linck, BLfD, 2013).*

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A new forum for commercial archaeological geophysics in the UK...

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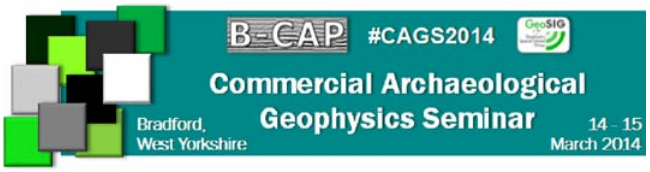

A two day seminar will take place in Bradford (14th-15th March 2014) based around themes generated from commercial style geophysics. We have created this forum to provide a suitable space to discuss pressing issues being dealt with (to a greater or lesser extent) by those working in the commercial arena. While the existing conferences, such as ISAP or NSGG, provide a platform for similar discussions, there is a *c*. 80/20 split between research projects and commercial work in the presentations. Inevitably, for the majority of companies operating in the UK, the division of work is quite the opposite and our seminar will provide a venue to debate the kind of topics that tend to get discussed between sessions at other meetings.

Recurring topics include: difficulties with specifications; sampling strategies; magnetometer survey being almost a default answer to a request for "geophysical survey"; the diminishing links between commercial and academic sectors; staff competency and training opportunities; the use of cart systems; GPS versus gridded data; variability in interpretation categories; the ongoing archiving debate (why do so few commercial groups use the ADS guidelines?); and the fact that some curators remain unimpressed by geophysics, whilst others swear by it. These are all issues that we hear about directly from geophysical contractors, archaeological consultants (from individuals to those in large multinational engineering firms) and even local government archaeologists. Traditionally, the latter groups (*i.e*. people who pay for surveys, write specifications, and use the results) are not represented in any great numbers at geophysics conferences but we believe that they need to be a part of these discussions.

This inaugural meeting aims to examine in detail the status quo of UK commercial geophysics in archaeology. Submissions are invited on any aspect of the sector: specifications, sampling strategies, equipment, staffing, reporting, monitoring, tendering, the accuracy of interpretations vs. excavation results, the relationship between contractors and consultants/ archaeologists/curators. The Friday will be divided into three sessions with presentations firstly from contractors, then consultants and archaeologists, finishing up with curatorial views. The emphasis will be on discourse with an opportunity for informal debate over the content of each session immediately afterwards. This will hopefully highlight common concerns amongst the various groups, forming a starting point from which to work towards resolving these issues. The meeting intends to improve dialogue between those providing and those using geophysical services in archaeology.

We found it difficult to define a theme that would be inclusive to all the groups we would like to contribute to this first meeting. As such, we have gone out on a limb, leaving it up to the individuals to write about what they feel is most pressing - we would prefer to discover the breadth of issues without bias or second-guessing, before we start working towards ways of resolving them.

Hopefully, the seminar can become a recurrent event maintaining an open forum for discussing UK commercial geophysics which, ideally, helps keep everyone working to a mutually acceptable framework throughout the life-cycle of a project, from the drafting of a specification to the point when the findings of the geophysical report are put to use. A Debriefing Session will be held on the Saturday to gauge the success of the event and define the format of future meetings.

The closing date for abstracts is the 23rd of December and details of how to make a submission can be found on the B-CAP website: www.B-CAP.co.uk

Application of the Geonics EM38B to Archaeological Mapping

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Geonics.com/html/technicalnotes.html

Since retiring from Geonics Limited many years ago the author has been exploring the use of the dipole-dipole EM38B for archaeological mapping. Early results showed that the inphase channel (magnetic susceptibility) provided the most useful information, although as will be seen below the quadrature phase channel (conductivity) also provides useful supplementary information.

The results of these investigations have been incorporated into four Geonics Limited Technical Notes, available online at Geonics.com/html/technicalnotes.html. It should be noted that these Technical Notes have not been subjected to peer-review. Summaries are as follows:

TN-34. Application of Geophysical Surveys Measuring Soil Magnetic Susceptibility to Locate the Site of the 18th Century Parish Church of Saint-Charles-des-Mines

Discusses the results of many surveys with the EM38B over the Grand Pré National Historic Site (geophysically, a very noisy site). Most surveys produced no significant anomalies (other than responses from many buried pipes) however a few surveys showed presence of structures, one of which was a buried stone wall, and another, on excavation, proved to be an 18th century foundation. Finally a large, low amplitude rectangular anomaly of the order of 20 by 30 metres, located adjacent to the more recent Memorial Church, is the only anomaly that corresponds to the estimated size of the original Parish Church, and therefore it is proposed that if the church was indeed located in the GPNHS, it was located on this anomaly. The inphase survey profiles in this region are accompanied by mirror-image negative quadrature phase profiles, indicating that the susceptibility is in fact complex (i.e. shows relaxation effects). It is proposed that these are the consequence of the burning of the original church.

TN-35. Archaeological Mapping Using the Geonics EM38B to Map Terrain Susceptibility (With Selected Case Histories)

Discusses in detail the possible advantages of susceptibility mapping for archaeology, presents the various factors controlling the response to a variety of target types, and shows actual survey profiles and contour maps over many different targets. Provides further details of the negative quadrature phase profiles over various targets including the Parish Church of TN-34.

TN-36. The Magnetic Susceptibility of Soils is Definitely Complex

This TN is definitely a 'flier'. It discusses in detail the Neél theory of 'viscous remanent magnetization' with the objective of a greater understanding of the negative quadrature component profiles referred to above and how these responses might be related to the magnetite or maghemite grain sizes. Specifically the Neél theory proposes an infinite distribution of relaxation time-constants whereas here we look at the effect of a finite distribution of time-constants. Comparison of our calculations with published measurements of complex susceptibility shows good agreement. We cautiously suggest that measurement of the (negative) quadrature phase/inphase ratio may allow determination of the smallest grain width in the grain size distribution.

TN-37. Time-Domain Response of a Magnetically Susceptible Soil

The Neél theory shows that the normal EM time-domain response of ferrimagnetic soil materials should decay with time t as (1/t) and many published measurements show that this is approximately, but not exactly, the case. In this TN we suggest that the discrepancy might result from a finite distribution rather than an infinite distribution of grain sizes and thus relaxation time-constants.

DART Heritage Remote Sensing Workshop Summary

Anthony Beck
University of Leeds

#DART_Project
#AntArch
www.comp.leeds.ac.uk/dart

On Tuesday the 17th September DART held its final workshop in Leeds. Nearly 50 people attended with delegates from universities, industry, community groups, national heritage agencies and other national agencies both from the UK and abroad. The whole event was captured on video and audio and was summarised in a full transcription (below).

The morning consisted of presentations about the DART project which included analysis of the data by Dr David Jordan - an external re-user of the open data.

The afternoon comprised of group discussions covering the implications of the issues raised by DART for the different stakeholder groups. A number of important issues were aired (which are detailed in the transcript).

Many thanks to all who attended for their active and open participation.
There is much to reflect on.

Video:
Morning: http://www.youtube.com/watch?v=fvwgLQFjWKQ&feature=youtu.be
Afternoon: http://www.youtube.com/watch?v=Phewia5WP2w&feature=youtu.be

Audio: (taken from microphones distributed around the room)
Morning: http://www.youtube.com/watch?v=G0uNYKujT-s
Afternoon: http://www.youtube.com/watch?v=XPkMwo94JLQ

Transcript: (many thanks to Elaine Duffin)
http://www.scribd.com/doc/170221902/DART-DOC-20130927-20130927-Transcription

The presentations are up on:
slideshare: http://www.slideshare.net/DARTProject
prezi: http://prezi.com/tkzzp_90tn0d/dart_170911_workshopintroduction/my
and youtube: http://www.youtube.com/watch?v=NQeU0BfNew4&feature=youtu.be
(apologies about the sound dropping out)

The tweets have been archived here:
https://docs.google.com/spreadsheet/ccc?key=0AoWPeu0ZtgUIdEJQTnNyMS1McEVSR1JHSko0cHR2aVE&usp=sharing

US National Park Service's 2014 Archaeological Prospection Workshop

The National Park Service's 2014 workshop on archaeological prospection techniques entitled Current Archaeological Prospection Advances for Non-Destructive Investigations in the 21st Century will be held May 19-23 2014 at Aztalan State Park in Jefferson County, Wisconsin.

Lodging and lectures will be at the Comfort Suites in Johnson Creek, Wisconsin. The field exercises will take place at Aztalan State Park. Aztalan State Park is a National Historic Landmark and contains one of Wisconsin's most important archaeological sites. It showcases an ancient Middle-Mississippian village that thrived between A.D. 1000 and 1300. The people who settled Aztalan built large, flat-topped pyramidal mounds and a stockade around their village. Portions of the stockade and two mounds have been reconstructed in the park. Co-sponsors for the workshop include the National Park Service's Midwest Archeological Center, the Aztalan State Park and the Wisconsin Department of Natural Resources. This will be the 24th year of the workshop dedicated to the use of geophysical, aerial photography and other remote sensing methods as they apply to the identification, evaluation, conservation and protection of archaeological resources across this Nation. The workshop will present lectures on the theory of operation, methodology, processing and interpretation, with on-hands use of the equipment in the field. There is a registration charge of $475.00. Application forms are available on the Midwest Archeological Center's web page at http://www.cr.nps.gov/mwac

For further information, please contact:
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2013 Archeological Prospection Workshop at Ogallala, Nebraska.

Please send details to editor@archprospection.org

Commercial Archaeological Geophysics Seminar

University of Bradford — 14 - 15 March 2014

AIMS OF THE SEMINAR:

- Bring together Contractors, Consultants, Archaeologists & Curators
- Discuss the *status quo* of the geophysical sector in commercial archaeology
- Identify the current issues, concerns & points of conflict
- Define the format of future CAGS meetings
- Discuss potential for updating IfA Technical Paper No.6

CAGS 2014 Call for Papers

Discussion across a number of platforms, largely post-ISAP 2013 (International Society for Archaeological Prospection conference), paint a picture of a disenfranchised geophysical sector in commercial archaeology, suffering from - for various reasons - a slow-down in technological development, deflation and a degree of complacency amongst providers & procurers of geophysical services.

This seminar aims to fulfil a desire for a meeting concerned with the practicalities of geophysical specifications, survey and reporting in the UK, rather than showcasing "pretty" surveys or innovative but uncommercial research. It requires input from those on both sides of the "shop counter" - inviting consultants, archaeologists and curators, as well as geophysicists, to contribute. It will hopefully compliment the biennial *Recent Work in Archaeological Geophysics* conference held by NSGG (Near Surface Geophysics Group of the Geological Society of London). The main part of the conference will be held on a Friday (with workshops on the Saturday) and registration fees kept to a bare minimum to encourage as widespread attendance as possible.

This inaugural meeting aims to examine in detail the status quo of UK commercial geophysics. Submissions are invited on any aspect of the sector: specifications, survey strategies, equipment, staffing, reporting, monitoring, tendering, the accuracy of interpretations vs. excavation results, the relationship between contractors and consultants/archaeologists/curators. The Friday will be divided into three with presentations from contractors, then consultants and archaeologists, finishing up with curatorial views. The emphasis will be on discourse with an opportunity for informal debate over the content of each session immediately afterwards. This will hopefully highlight common concerns amongst the various groups, forming a starting point from which to work towards resolving these issues. At the very least the meeting hopes to improve dialogue between those providing and those using geophysical services.

Hopefully, the seminar can become a recurrent event maintaining an open forum for discussing UK commercial geophysics. A *Debriefing Session* will be held on the Saturday to gauge the success of the event and define the format of future meetings.

More details, including pricing and workshop outlines, will be released soon but suffice to say B-CAP and GeoSIG look forward to welcoming you to Bradford next Spring.

Proposed Structure

- **Friday 14th March**
  - **Registration & Welcome**
  - *- Session 1a: Contractors*
  - - Tea & Coffee Discussion Forum 1
  - *- Session 1b: Contractors (cont.)*
  - - Tea & Coffee Discussion Forum 2
  - **Lunch**
  - *- Session 2: Consultants/Archaeologists*
  - - Tea & Coffee Discussion Forum 3
  - *- Session 3: Curators*
  - - Tea & Coffee Discussion Forum 4
  - **Thanks, Closing Remarks & Drinks Reception**
  - **Conference Curry**
- **Saturday 15th March**
  - **Conference Debrief Session**
  - *- Workshops Session 1*
  - **Lunch**
  - *- Workshop Session 2*
  - **Close**

Submission Details

Submissions are welcomed in the form of a short abstract (max. 250 words) in DOC format and can be for either a 15 minute oral presentation or an A1 poster (portrait format). The abstract can include figures.

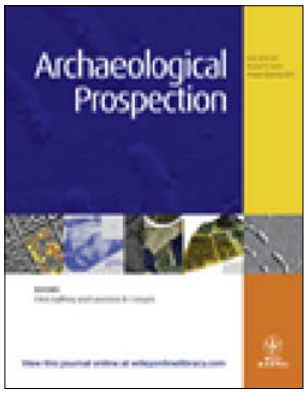
Suggestions for workshop themes you would like to see, or proposals to run a 90-minute workshop are also invited.

Please send abstracts and enquiries/suggestions to: **cags2014@b-cap.co.uk**

Closing date for submissions is **23rd December 2013**

B-CAP is the Bradford Centre for Archaeological Prospection, a commercial/academic joint research group formed of staff from the University of Bradford, GSB Prospection and Geoscan Instruments.
GeoSIG is the Institute for Archaeologists Geophysics Special Interest Group.

Journal Notification:
Archaeological Prospection 21 (1)



Volume 21, No. 1 of *Archaeological Prospection* was put together by Professor Victor D. Thompson, Department of Anthropology, University of Georgia, USA.

These papers were part of a session at the Southeast Archaeological Conference in 2012. The papers to be published are all related to how geophysics was used to test ideas about prehistoric people in the southeast portion of the USA. The topics generally relate to broad landscape types of analysis and how research questions can be addressed in ways not possible using any other archaeological method. They address a variety of anthropological questions and pose hypotheses that can be addressed scientifically using primarily magnetics and GPR, but also taking into account EM and earth resistance, incorporated with excavations and core data. **Prof Larry Conyers and Dr Chris Gaffney**

The issue contains the following papers:

Victor D. Thompson, William H. Marquardt and Karen J. Walker: A Remote Sensing Perspective on Shoreline Modification, Canal Construction, and Household Trajectories at Pineland along Florida's Southwestern Gulf Coast

Timothy Horsley, Alice Wright and Casey Barrier: Prospecting for new questions: Integrating geophysics to define anthropological research objectives and inform excavation strategies at monumental sites

Jarrod Burks: Geophysical Survey at Ohio Earthworks: Updating 19th Century Maps and Filling the "Empty" Spaces

Edward Henry: Incorporating multi-staged geophysical data into regional-scale models: A case study from an Adena burial mound in Central Kentucky

Bryan Haley: The Big Picture at Hollywood: Geophysical and Archaeological Investigations at a Mississippian Mound Center

Erin Stevens Nelson: Intimate Landscapes: The Social Nature of the Spaces Between

Megan Kassabaum, Edward Henry, Vincas Steponaitis and John O'Hear: Between Surface and Summit: The Process of Mound Construction at Feltus

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Cover image: Magnetometer survey on the West Bank of Thebes, Egypt (photo: Angus Graham)