

ISAP NEWS

The newsletter of the International Society for Archaeological Prospection

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Editor's Note

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Welcome to the 24th issue of ISAP News. This summer seems to have been a quiet time in terms of the reporting of work, so I do hope you are all managing to get out and about collecting data in the field – if so, please do consider sharing your news with other ISAP members later in the year.

The next opportunity to contribute to this newsletter will be in October. Please email your articles, course announcements or advertisements by 20th October.

The First National Conference for Archaeological Geophysics in Warsaw

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The first national conference for archaeological geophysics, organized under the auspices of ISAP, was held at the seat of the Institute of Archaeology and Ethnology, Polish Academy of Sciences (IAE), in Warsaw on 9 June 2010. The organizers were Tomasz Herbich on behalf of IAE and Łukasz Pospieszny for the Institute of Prehistory of the Adam Mickiewicz University in Poznań (IP UAM).

The objective of the conference was to test interest in the subject in Poland, on the part of both specialists in the field and those commissioning geophysical research. Archaeological geophysics have been present in Polish archaeology for years (see below), but to date specialist meetings have been either part of larger conferences or else were dedicated to a very narrow aspect (like the conference on geophysical prospection of prehistoric sites located in a loess environment, organized by IAE at Igołomia in 2006). With the present conference the organizers set themselves the task of having all Polish academic and research institutions involved in any way in archaeological geophysics represented. Private companies providing services in the field of geophysical prospection were also invited to participate. Since companies of this kind are not geared to publishing their results as a rule, the conference provided them with an excellent opportunity to present their work. Invitations were also extended to Polish researchers working for non-Polish research institutes. The poster session was open to all participants in the conference, while the oral session was dedicated to the reading of mainly invited papers.

The conference proved to be a surprise in several areas. Firstly, the number of participants reached near to 70 instead of the expected 30-40. Secondly, the representation of georadar users was surprisingly large, considering the prevalent opinion that the method is weakly represented in Poland owing to the costs of apparatus and software. Thirdly, the response of official institutions commissioning geophysical prospection, that is, provincial (voivodship)

archaeological conservation officers, was extremely satisfactory.

The date of the conference was no mere accident: it was specifically intended to coincide with the first application of geophysical methods on a Polish archaeological site - which took place exactly fifty years earlier, in the spring of 1960. The site was the early medieval hill fort in Kalisz (central Poland), the method was vertical electrical soundings, the author of this pioneer work, Dr. Wojciech Stopiński, now 89, but still active professionally. That first prospection helped to trace the fortifications and identify their structure, as well as supplied data on shallow geology for a reconstruction of the site's paleoenvironment. Dr Stopiński was present to share memories of that work carried out half a century ago. Also attending the conference was Prof. Jerzy Kowalczyk, a pioneer of the magnetic method in Poland, who applied it for the first time in 1961 to trace the extent of a complex of iron-smelting furnaces in Nowa Słupia in the Holy Cross Mountains.



Figure 1: Dr Wojciech Stopiński giving his lecture entitled "Fifty years ago"

Nine papers were read during the oral sessions: Wojciech Nawrocki and Monika Łój from the Academy of Mining and Metallurgy in Kraków (AGH) presented the results of GPR, resistivity and gravimetric prospection on different kinds of sites; Tomasz Herbich (IAE) spoke of geophysical

prospection on archaeological sites in the Nile Delta in Egypt; Jacek Nowakowski from the Great Poland Heritage Protection Office spoke of Airborne Laser Scanning which led to the discovery of a group of kurgans (burial mounds) in forested areas of northwestern Poland; Adam Szykiewicz from the University of Wrocław presented the effects of using GPR for locating different kinds of tombs; Tomasz Gorka from the Bavarian Conservation office in Munich reported on his work carried out in association with Jörg Fassbinder on different sites in Germany, Peru, Kazakhstan and Turkey; Jerzy Ziętek and Kamila Wawrzyniak from the AGH in Kraków spoke of GPR prospection of crypts and underground structures; Marcin Michalski, Mateusz Jaeger and Łukasz Pospieszny (IP UAM) went into aspects of interpretation of geophysical results and the limitations of the different methods: electrical resistivity and magnetic survey in particular.

Posters by Artur Buszek (Jagiellonian University), Mirosław Furmanek (University of Wrocław),

Krzysztof Gediga, Urszula Piszcz (both Natural Sciences University in Wrocław), Artur Rapiński (Provincial Heritage Protection Office in Opole), Jakub Ordutowski, Robert Ryndziewicz (both Maria Skłodowska Curie University in Lublin), Łukasz Sławik (MGGP Aero in Warsaw), and Rafał Zapłata (Cardinal Stefan Wyszyński University in Warsaw) were devoted for the most part to presentations of results achieved with magnetic prospection, but there were also posters on the application of LIDAR and geochemical research.

A round-table discussion at the close of the conference brought up issues of integrating different prospection methods, research standards and cooperation between geophysicists and institutions charged with the protection of archaeological features.

A biennial cycle for such meetings was adopted by the participants. The date and place was set for the next conference to be held in Poznań in 2012.

A Geophysical Quandary

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We located a site by chance when showing someone we were lending our kit to how it worked so he could do a survey in Wales.

It was located with a Bartington Grad 601/2 fluxgate gradiometer with 4 readings per metre on lines 1 metre apart.

The site appears to have the following points of interest:-

- 1 Possible wall trenches of a hall-type building.
- 2 Possible post holes of a smaller building.
- 3 Possible ridge and furrow cultivation.
- 4 Possible small kiln.

If this is as it appears then it could be of interest to those who study the Anglo-Saxon period. The apparent cutting of the ridge and furrow by one of the buildings could, if the hall is 6th Century, lead to a reconsideration of the date of ridge and furrow.

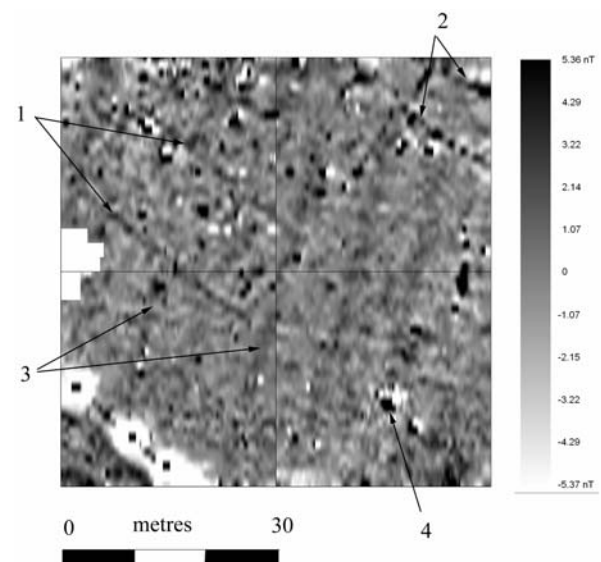


Figure 1: magnetometer plot with anomalies annotated

The problem is that it is in an area where metal detectorists are active including unauthorised night hawks. Once its location is known it can be expected to have its metal finds removed within a

year as the soil is shallow. This will make the dating of the remains even more difficult.

If the authorities are told then they may be forced to reveal the location via the Freedom of Information Act or it may just leak out.

The Institute for Archaeologists requires its members both to conserve the historic environment and also are proposing in their Guidance for Geophysical Survey that the results of archaeological work are made available with

reasonable dispatch. It is unclear whether geophysical results on unthreatened sites are also to be subject to this as, unlike archaeologists, we do not destroy sites and our results can be repeated in years to come, and probably bettered as equipment improves.

As it is we have agreed with the landowner that he will not plough the site and have left it at that. It would be nice to be able to tell the Anglo-Saxons about it but in the absence of funds to mount a 24 hour guard on the site, we can see little alternative.

Conference, Seminar and Course Announcements

AARG 2010

Bucharest, Romania, 16-18 September 2010

AARG 2010 Bucuresti

16 - 18 September 2010

Organised by the
Institutul de Memorie Culturala (CIMEC)
and the Aerial Archaeology Research Group

15 September: One Day Pre-conference Workshop

“Remote-sensing mapping programmes in archaeology: planning, organisation, results” Please see <http://aarg2010.cimec.ro/Pre-conference.html> for more details.

16 – 17 September: Conference Papers

Sessions will include: Aerial Archaeology in Romania and SE Europe; Lidar in context; Interpretation; Postgraduate research; New Projects; Presenting aerial data.

A programme is now available: <http://aarg2010.cimec.ro/program.html>

18 September: Field Trip

Southern Romania Archaeological Landscape towards the Danube

Registration

To register for this conference, please see details at <http://aarg2010.cimec.ro/registration.html>

Conference Organising Committee

Professor Dr hab. Wlodek Rączkowski (AARG, University of Poznań)
Dr Irina Oberlander-Tarnoveanu (CIMEC), Dave Cowley (AARG, RCAHMS)
Carmen Bem (CIMEC), Lidka Žuk (AARG, University of Poznań)

Conference website - <http://aarg2010.cimec.ro/>

Recent Work in Archaeological Geophysics and Environmental Forensics

Burlington House, Piccadilly, London, UK, 15-16 December 2010



Forensic
Geoscience
Group

15 DECEMBER 2010: RECENT WORK IN ARCHAEOLOGICAL GEOPHYSICS

Shallow geophysical techniques are now a well established tool for the evaluation of archaeological sites, from their initial discovery to subsequent interpretation and management. This will be the ninth in a succession of biennial meetings in which contributors present and debate the results of recent research and case studies. Suppliers of equipment and software also attend and the meeting therefore represents an invaluable opportunity for both archaeological and geophysical practitioners and those in academia to take advantage of recent research and developments.

For more information or to submit an abstract, please contact: Paul Linford (Paul.Linford@english-heritage.org.uk)

16 DECEMBER 2010: ENVIRONMENTAL FORENSICS This multidisciplinary meeting will capture shared interests between the geological, environmental science, engineering, geotechnical, mining and archaeological communities in assessing the impact of changes to the environment that may result in legal proceedings. Sessions will include geophysics, remote sensing, geology, hydrogeology, geochemistry, isotope geochemistry.

For more information or to submit an abstract, please contact: Dr Duncan Pirrie (dpirrie@helfordgeoscience.co.uk) or Dr Alastair Ruffell (a.ruffell@qub.ac.uk)

It is anticipated that each meeting will attract 100 or more participants. As well as oral presentations, there will be space for commercial and poster displays. Those interested in contributing to either meeting are warmly encouraged to contact the respective convenors, and to submit abstracts of up to 1000 words in length, accompanied by suitable greyscale illustrative material, no later than the 31st August 2010.

Attendance will be free to members of the Geological Society. Non-members will be asked to pay £25 to attend a single day or £40 for both days. Registered students can attend for £15 or £20, respectively. A further charge will be made for commercial exhibitors. Pre-registration is possible up until 30th November 2010. Please contact Louise Martin (Louise.Martin@english-heritage.org.uk) or for more information and a registration form go to: <http://www.geolsoc.org.uk/page7381.html>.

Journal Notification

Archaeological Prospection 17:3

The third issue of volume 17 has gone to press. The issue has two guest editors, Christophe Benech and Alain Tabbagh, and the papers relate to the 8th Archaeological Prospection Conference in Paris (2009). The line up is as follows:

Fassbinder. *Geophysical prospection of the Frontiers of the Roman Empire in Southern Germany, UNESCO World Heritage Site*

Petronille et al. *Magnetic signal prospecting using multi parameter measurements: the case study of the Gallic site of Levroux*

Valois et al. *Karstic morphologies identified with geophysics around Saulges's caves (Mayenne, France)*

Parkyn. *A Survey in the Park: methodological and practical problems associated with geophysical investigation in a late Victorian municipal park*

Trinks et al. *Efficient, large-scale archaeological prospection using a true 3-D GPR array system.*

Linford et al. *Stepped frequency GPR survey with a multi-element array antenna: results from field application on archaeological sites*

Commercial Advertisements

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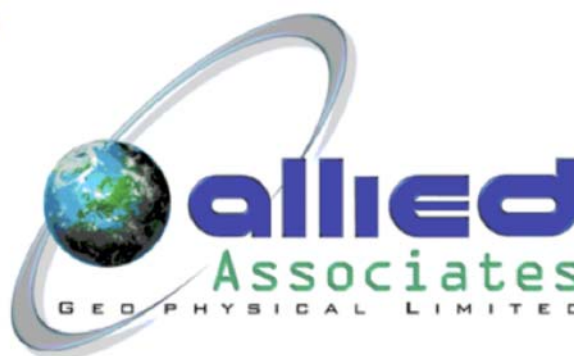
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- Geometrics seismographs



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Bradford Centre for Archaeological Prospection

Research in Archaeological Geophysics

A unique research cluster for archaeological geophysics has been established in Bradford, UK by three leading local organisations: the University of Bradford, GSB Prospection and Geoscan Research. The aim of the Centre is to combine academic and commercial expertise to advance developments of geophysical techniques applied to archaeology and the near-surface.

- *Large commercial projects that require a strong research component*
- *Archaeological research with extensive geophysical surveys*
- *Geophysical solutions requiring additional instrument development.*

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