

ISAP NEWS

The Newsletter of the International Society for Archaeological Prospection

Issue 73, December 2024



Editorial – Issue 73

Welcome to Issue 73 of ISAPNews!

We start this issue with a potential world first... read on for details of what is believed to be the first archaeological geophysical project undertaken in Liberia, where investigators were looking for evidence of Indigenous populations and early 19th-century Black American settlers.

We also have an update from what sounds like a very productive seminar (how often are events billed as discussions of ‘success’ and ‘failures’?!) designed to build collaboration and technical skills in Spanish geophysics. And, for anyone unable to attend the recent Near Surface Geophysics Group Meeting in London, there is a quick round up of what you missed.

Plus, we have the latest ‘ISAPinacotheca’ and another instalment of our ‘Born to Survey’ feature: we’re delighted to introduce one of our ISAP Co-opted Ordinary Members, Marion Scheiblecker.

Happy surveying!

Hannah Brown & Michal Pisz

editor@archprospection.org

Cover: Spot the difference! Kris Lockyear’s wife is responsible for this fantastic cake made for Kris’s 60th birthday! (Photo: K. Lockyear). (This can’t be the only geophysics-themed birthday cake that ISAP members have enjoyed recently - feel free to share any other creations - eds.)

Table of Contents

First archaeological geophysics in Liberia: a look beneath the surface of Providence Island, Monrovia3

Geofisic-Arq: cross experiences in the application of geophysical survey techniques in archaeology. Success and failures11

Recent Advances in Archaeological Geophysics 2024: A one-day meeting by the Near Surface Geophysics Group (NSGG)17

Born to Survey22

Journal Notification26

ISAPinacotheca: The ISAPNews Gallery.....29

Membership renewal

Membership fees are £10 or €11 for the whole calendar year 2025. Online payments are possible through our web site at

<https://www.archprospection.org/renew/>

Archaeological Prospection journal

Take advantage of the deal offered to ISAP members by Wiley-Blackwell for this journal.

Disclaimer

The views expressed in all articles are of the authors. By publishing the article in ISAP News, the ISAP Management Committee does not endorse them either positively or negatively. Members are encouraged to contact authors directly or to use the isap-all email list to air their views, should they have comments about any particular article. Where not specified differently, the copyright for images and data lies with the authors.

First archaeological geophysics in Liberia: a look beneath the surface of Providence Island, Monrovia

Brian Whiting¹, Matthew Reilly¹, Joseph Durrant² & Gayflor Wesley³

¹Dept of Anthropology & Interdisciplinary Programs, City College of New York, USA

²Independent Researcher, UK

³National Disaster Management Agency, Government of Liberia

bwhiting@ccny.cuny.edu

Introduction and Purpose

In 1822, free Black Americans arrived along West African shores to establish a new colony, which, in 1847, would become the independent nation of Liberia. Dozoa Island (now called Providence Island) (Figure 1), surrounded by the large city of Monrovia, was the initial landing place for these intrepid settlers. The site is now one of the nation's most cherished heritage sites, representing the meeting of arriving migrants and Indigenous Liberians, giving rise to Africa's first Republic.

Prior to the arrival of settlers, the island long served as a trading hub for Indigenous populations and passing European merchants, including for enslaved peoples. Because of this double significance, and its heritage preservation, Providence Island has been nominated to be a UNESCO World Heritage site (Ministry of Information 2017). Some surface remnants of foundations are visible on the site, but there is otherwise little obvious sign of the material culture of early settlers or Indigenous inhabitation (BAHA Liberia 2022). The archaeological significance of the island was determined following the falling of a sacred cotton tree in 2019 (see Allen *et al.* 2023), though intensive and systematic archaeological study of the island required thorough geophysical surveys to target deposits and features (see Reilly *et al.* in press).

The two senior authors planned, and Reilly obtained funding for, a reconnaissance geophysical survey aimed at evaluating human vs. natural impacts on the island, with particular reference to the arrival of Black American settlers in the 1800s. To our knowledge, archaeological geophysics

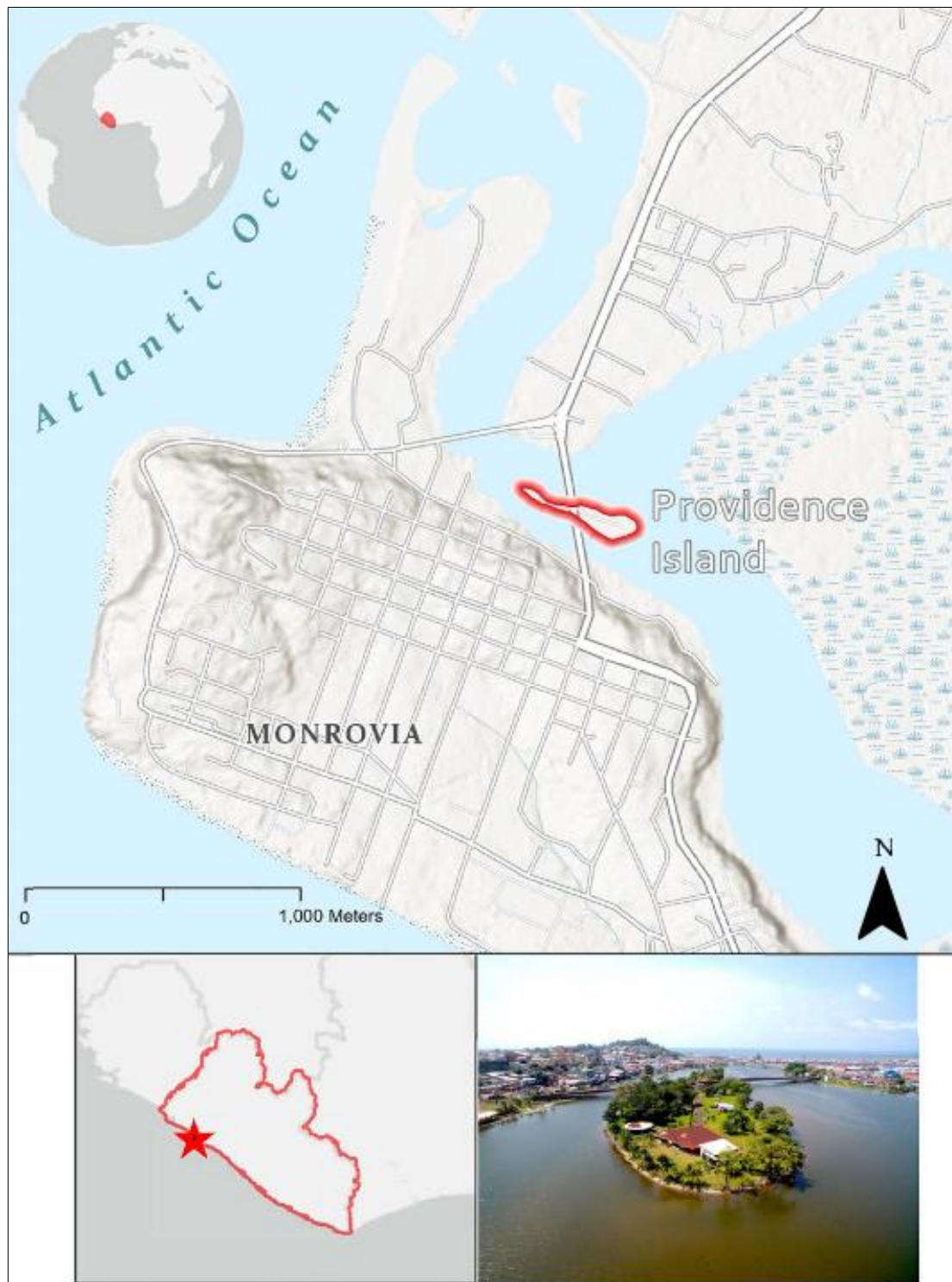


Figure 1: Location of study area and oblique aerial view, looking from the east. Map credits: ESRI, TomTom, Garmin, FAO, NOAA, NASA, USGS, OpenStreetMap contributors and the GIS User Community.

has never been attempted in Liberia. Co-authors Reilly, Durrant and Wesley, along with other team members from the Back-to-Africa Heritage and Archaeology (BAHA) project, deployed to Providence Island in December 2022 for the survey, which took place over an eight-day field campaign.

Methods

The primary instrument used was a GF Instruments CMD Mini Explorer electromagnetic conductivity (EM) profiler (Figure 2) with three coil pairs, allowing for measurements at 0.5 m, 1.0 m and 1.8 m depth in 'hi' mode and 0.25 m, 0.5 m and 0.9 m depth using 'lo' mode. RTK GNSS was used for position keeping and a UAV facilitated creation of a photogrammetric basemap.



Figure 2: Co-authors Durrant (left) and Wesley (right) on site.

Initially, 11 reconnaissance datasets were collected in zig-zag mode at 1 m - 2 m transect spacing, with measurement frequency of 2 Hz. Based on these results, targeted areas of interest were investigated using 0.5 m transect spacing and 5 Hz measurement interval. In areas of dense tree canopy, manual grid-corner locations were taken using GNSS. Otherwise, the RTK rover provided good positional accuracy. For RTK-logged datasets, only the CMD Mini 'hi' mode measurements were collected. Manual and high-resolution grids were collected using both 'hi' and 'lo' modes for greatest vertical resolution.

In order to evaluate bedrock, individual transects were collected over the outcrop area, located beneath dense tree canopy in the southeastern part of the island. Although not shown here due to space limitations, these profiles informed interpretations discussed below.

Processing

In addition to conductivity and in-phase, CMD download software allows for conversion to resistivity. This was done in order to assess soil and rock type by matching observed resistivity values with published values. After download and import into Surfer, data were first filtered for positional errors by deleting points collected with 'Float' or worse GNSS accuracy. Conductivity, resistivity and in-phase measurements were then de-spiked to remove extreme values beyond ± 2 standard deviations. Reconnaissance datasets were gridded (krigged) at 0.5 m resolution using a search radius of 3 m x 3 m. Typically, the shallowest datasets displayed higher noise levels due to significant surficial metallic objects; these were filtered by use of a Gaussian low-pass filter. Not all results can be presented in this short article format. Instead, we present selected highlights and an overall interpretation.

Results and Discussion

Conductivity and in-phase results were used together to assess cultural overprints affecting the subsurface. That is, the high sensitivity of in-phase (Figure 3; see overleaf) to metallic debris and features was used to understand whether shorter-wavelength conductivity results (Figure 4) were culturally or naturally caused.

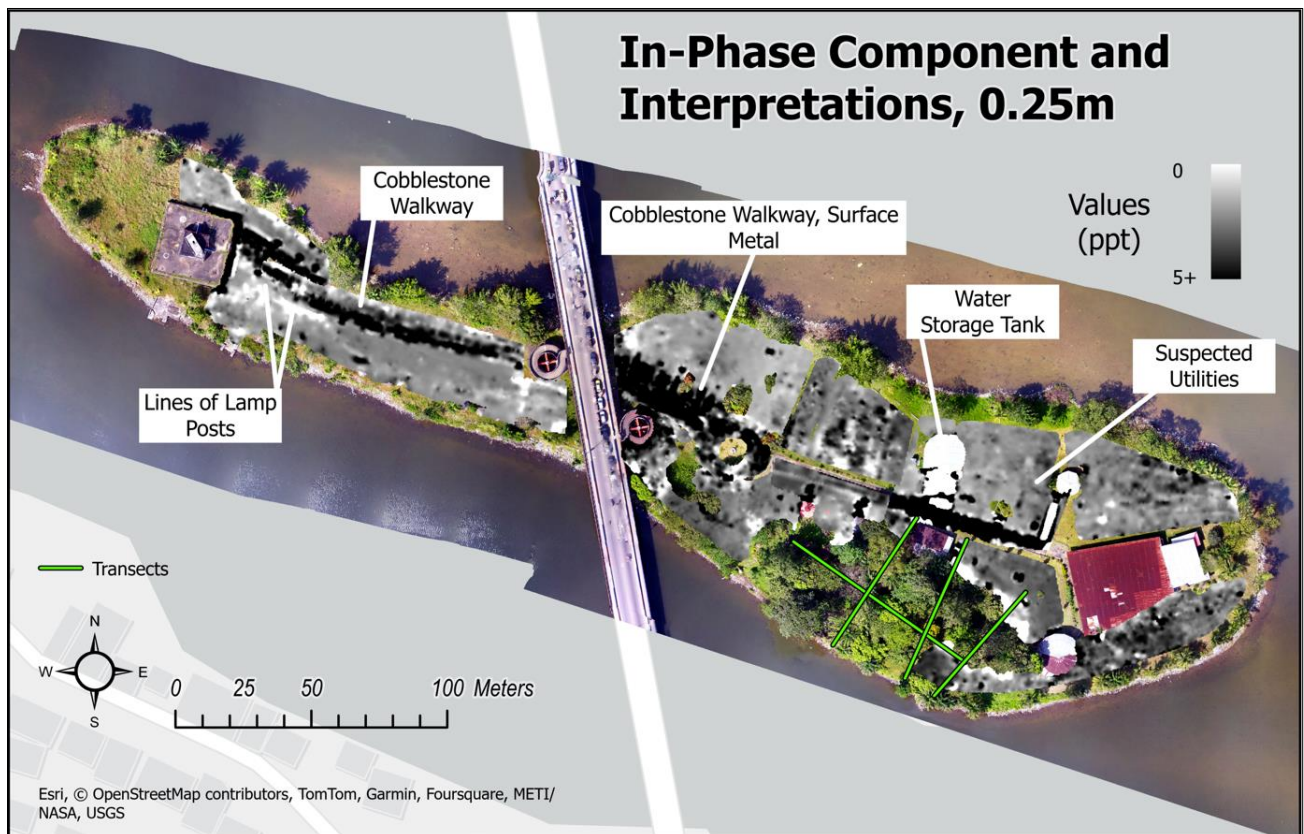


Figure 3: Shaded-relief view of in-phase data at 0.25 m depth.

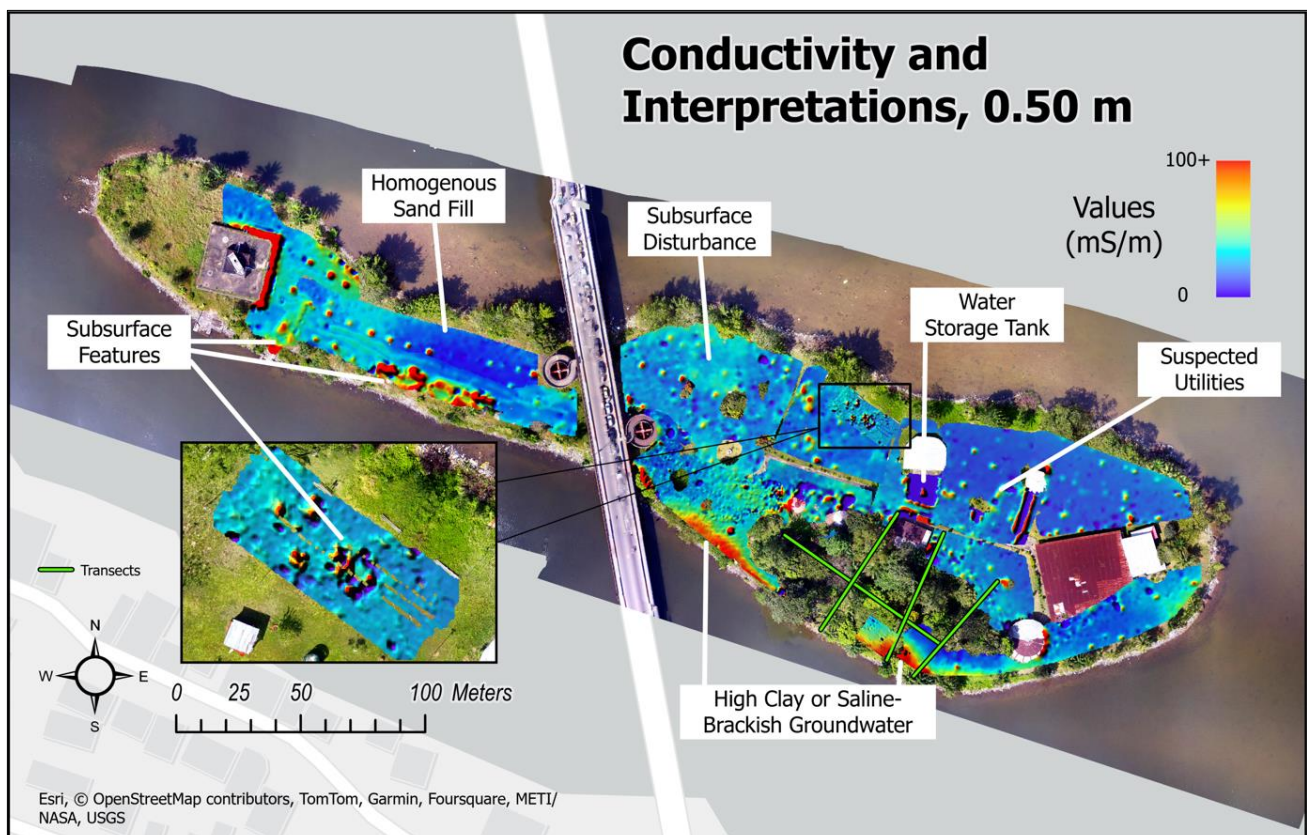


Figure 4: Conductivity results at 0.5 m depth. Note high resolution inset, which shows evidence of historic building foundations. Localised high-conductivity areas probably represent near-surface brackish groundwater.

Rock- and soil-type interpretations indicate three main concentric zones (Figure 5):

1. An innermost, small, bedrock zone showing moderate conductivity and a 'dimpled' or 'stippled' pattern in the results.
2. A larger, NW-SE trending zone surrounding the bedrock zone, characterised by 'blotchy' patterns and low-moderate conductivity with local, short-wavelength 'dimples'. This is interpreted as being caused by somewhat consolidated sedimentary deposits overlain by potential archaeological features.
3. West of the bridge and in the easternmost portion of the island, relatively homogenous areas of low conductivity with clear overlying cultural activity. Indications here are of sand in the subsurface.

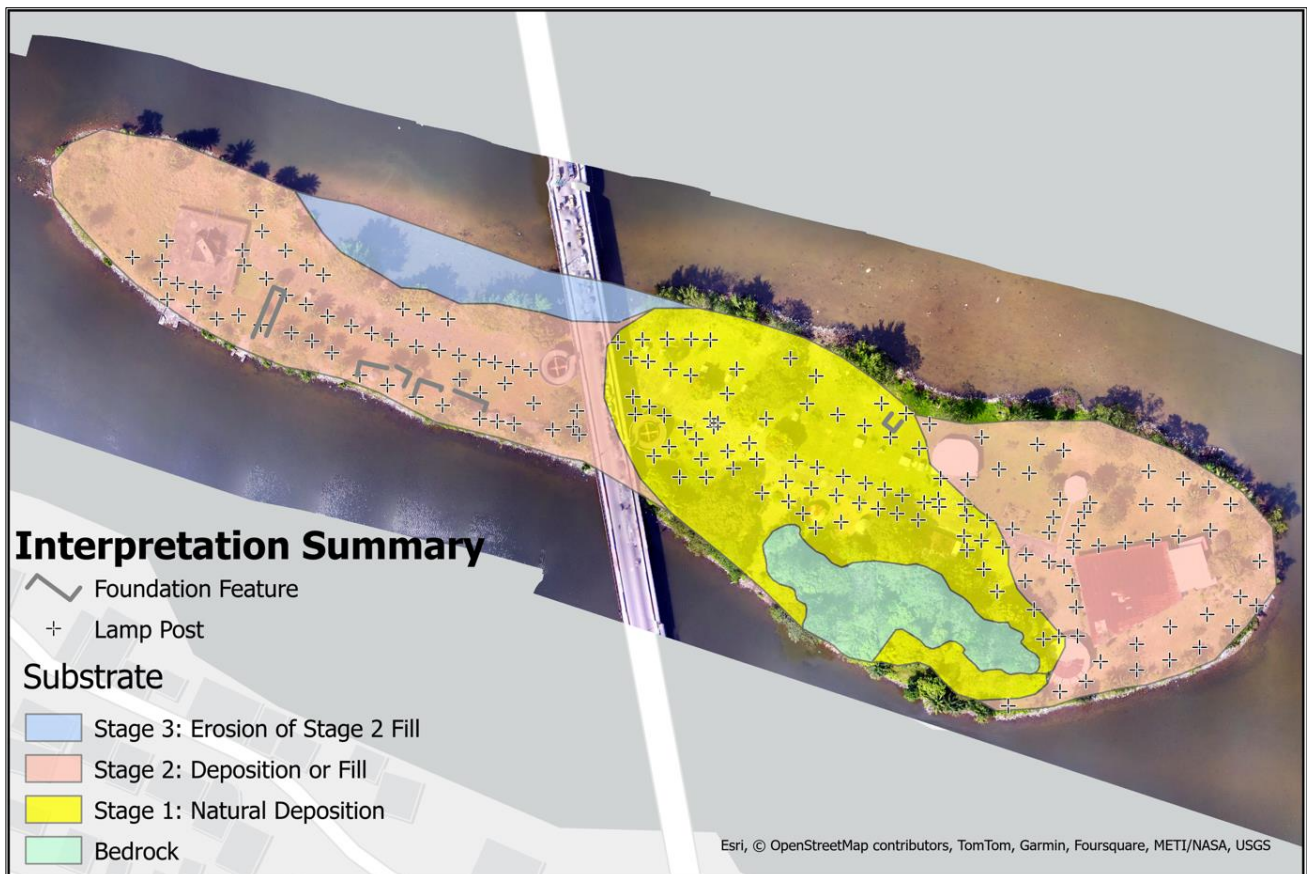


Figure 5: Interpretation of substrate. Bedrock and Stage 1 deposition zones are likely locations for early settlement (see Figure 4). North to top.

The overall interpretation is that a bedrock outcrop and immediately surrounding sediment form the core of the island and likely represent the living surface available to Indigenous Liberians and, later, arriving settlers. The site was eventually protected due to its heritage significance, leading to an in-

filling process in the 1960s connecting the island to neighbouring Gomez Island. Shovel test pits in the northeastern portion of the island in the summer of 2022 confirmed sandy and sterile deposits, though the full extent of the infilling process wasn't made clear until the collection of reliable geophysical data.

Capacity Development

This project was designed in part to build technical skills and experience among Liberian university students and management. Co-author Wesley (then at University of Liberia) and other Liberian members of the BAHA team gained valuable exposure to drone photogrammetry, field GNSS and GIS methods and to geophysical survey; all of these are challenging to acquire in Liberia. As this work and others like it continue, plans are to grow capacity at the local level in order to build a sustainable core of technical and scientific competence within Liberia. More details of this and subsequent work are available online (Wesley 2023).

References

- Allen, W. E., Banton, C. E. & M. C. Reilly. 2023. 'With the Fall of a Tree, Archaeology Returns to Liberia'. *Sapiens*.
<https://www.sapiens.org/archaeology/archaeology-liberia/>
[Accessed 30.08.24]
- BAHA Liberia. 2022. *The Back-to-Africa Heritage & Archaeology Research Project*. <https://www.bahaliberia.com/> [Accessed 25.07.24]
- Ministry of Information. 2017. *Providence Island*. UNESCO.
<https://whc.unesco.org/en/tentativelists/6247/> [Accessed 18.07.24]
- Reilly, M. C., Banton, C. E., Stevens, C. & C. L. Laureore. In press. 'The Archaeology of Providence Island: Liberian Heritage beyond Settlement'. *American Antiquity Quarterly*.
- Wesley, G. 2023. *Geophysical surveys of Providence Island with Gayflor Wesley*. The Back-to-Africa Heritage & Archaeology Research Project.
<https://www.bahaliberia.com/post/providenceisland-geophys-with-gayflor>
[Accessed 25.07.24]



**ACQUIRE
ASSEMBLE
PROCESS
VISUALISE
PUBLISH
GEOPHYSICAL DATA**

ALL NEW!!

TERRASURVEYOR64

64 bit architecture for large GPS datasets,
redesigned interface combining disparate functions into one unified whole,
modern docking panel interface, light & dark themes, superfast interpolation,
new self-documenting file format, data & functions fully compatible with existing data.

www.dwconsulting.nl

info@dwconsulting.nl



PA20 last chance buy!

Designers and Manufacturers of User-Friendly Geophysical Instrumentation

Geoplot 4.0

For processing of geophysical data, including import, export, download, uniform, non-uniform, processing macros, interactive interpretation, image thresholding, analysis. A further update coming in January 2024.

Instrumentation Spares, Repairs

Our aim is to support users in maintaining and repairing their own instruments by using our extensive component purchasing guide. **Visit our website for a copy of the guide or contact us for further advice about repairs.** We have very limited stocks of PA20 Probe Arrays and PA20 upgrades so please place your orders whilst still available.

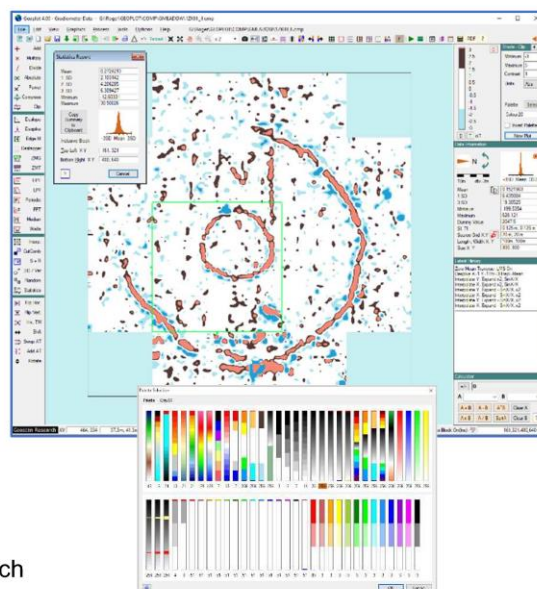
Tel: +44 (0) 1274 880568

info@geoscan-research.co.uk

www.geoscan-research.co.uk



@GeoscanResearch



V4

Geofisic-Arq: cross experiences in the application of geophysical survey techniques in archaeology. Success and failures

Jesús García Sánchez¹, David González-Álvarez² & Jesús Ignacio-Jiménez-Chaparro³

¹Spanish School of Archaeology and History in Rome (EEHAR-CSIC), Italy

²Institute of Heritage Sciences (INCIPIT-CSIC), Spain

³University of Cantabria, Spain

jesus.garcia@eehar.csic.es

At the beginning of October 2024, a two-day seminar was held at the University of Cantabria (Santander, Spain) under the main coordination of Jesús Ignacio Jiménez-Chaparro, David González-Álvarez and Jesús García Sánchez, to foster discussion about the application of geophysics in Spanish archaeology from an academic and professional perspective. The use of these techniques in the Iberian Peninsula has rocketed during the last few years, despite its late development compared to other European areas, such as the British Isles, Northern Europe or the Benelux countries.

It is not possible here to discuss all the papers presented at the seminar, but some themes, such as internationalisation, the need to train archaeology students with technical skills, and the role of archaeological services provided by public research centres, were the most prominent. The main objective of this seminar was to discuss the successes and failures of archaeological prospection, highlighting the possibilities of failure in learning the methods used or the general application of geophysical prospection in Spanish archaeology. We aimed to bring together practitioners of geophysical prospection, both from the academic context and private companies; advanced consumers of geophysical data without the skills or experience to carry out prospections themselves; and other researchers interested in the benefits of archaeo-geophysics. The first topic for discussion was to analyse why archaeo-geophysics was introduced so late in Spanish archaeology, and to assess its current use and integration with other techniques, always considering what is happening in Europe and beyond. The recent work of Carmen Cuenca-García, discussed below, gave us some clues.

Santander, 1-2 de octubre de 2024 **UC** | Universidad de Cantabria

GEOFISIC-ARQ

EXPERIENCIAS CRUZADAS EN LA APLICACIÓN DE TÉCNICAS DE PROSPECCIÓN GEOFÍSICA EN ARQUEOLOGÍA. ÉXITOS Y FRACASOS

<https://geofisic-arq.unican.es>

Lugar de celebración: Campus de Las LLamas
Sala de conferencias, Torre A, Edificio Tres Torres
Modalidades presencial y online

Organiza **AHIR** **G'EA** **CSIC** **incipit** **instituto arqueología mérida** **TRAPHIC** **HINTERLAND** **RUP ARQ**

Colaboran

Figure 1: Further details of the seminar, including the programme, are available from the website: <https://geofisic-arq.unican.es>.

The celebration of this seminar was a great opportunity to bring together a diverse group of people interested in geophysics in the broadest sense and to create a sense of community to encourage collaboration. This also includes Spanish researchers and technicians working outside of Spain but with a strong presence via international fora.

Beyond the scientific discussion, one of the main goals was to bring together all those interested in creating an informal community that could eventually establish links with European or worldwide communities such as ISAP, AARG, or the geoprospection community within the EAA. This would increase the awareness within our small community of funds, workshops, seminars, training schools and international projects, such as the recently developed COST Action SAGA, that could strengthen the use of such methods in Spanish archaeology.

Carmen Cuenca-García, recently settled at the University of Valencia, provided an excellent approach in terms of the international scope of her previous career from the UK to Greece and then to Norway, and the many possibilities we should consider when entering the complex world of archaeo-geophysics. The COST Action SAGA, in which she was involved, and the recently published book resulting from this project (Cuenca-Garcia *et al.* 2024) are two benchmarks against which to consider the progress of the discipline in Spain. Indeed, we may wonder about the absence of Spain in the above-mentioned book and how we should better integrate our activities in international frameworks.

Another aim of this meeting was to bring together companies and service units from universities and research centres. Only SOT Archaeological Prospection, the most experienced private company in the sector, registered for the meeting. For future editions, we need to be proactive in attracting other companies to broaden the discussions and address their specific challenges. From the academic research centres, we had some of the most experienced researchers in archaeo-geophysics in Spain, such as Lázaro Lagóstena-Barrios (IVAGRO-University of Cadiz), Victorino Mayoral-Herrera (IAM-CSIC), Jesús Ignacio Jiménez-Chaparro (University of Cantabria), and Javier Vallés (CAI-UCM), and Italy, with Stephan Kay from the British School in Rome as a guest speaker, who elaborated on the intertwined research into the Caelian Hill in Rome. The programme consisted of 10 papers and 12 short communications, mostly with case studies from different geographical and chronological contexts. The case studies presented were all of a high-standard, dealing mainly with the comparison of methods, the integration of geophysics with other non-invasive methods, and some problem-oriented approaches.



Figure 2: Seminar discussions underway.

Interaction and collaboration between the groups attending the seminar was another topic of discussion, given the growing demand for archaeogeophysical prospections in Spain, both from research projects and development-led archaeology. This raised many points as the need for a consolidated network of experts and technicians in Spanish archaeogeophysics was recognised, as well as the need for more fluid communication with heritage management bodies. This led us to consider the possibility of setting up specific training courses, in addition to a better (and urgent!) integration of archaeological prospection in university curricula, both at undergraduate and master's level, as the main opportunity to include this type of knowledge in the professional skill set of those students who will eventually pursue a career in the discipline.

These were the main conclusions of the two pleasant (and intense!) days of presentations and debates in Santander. The links within our research groups should be strengthened, the same as our integration in European specialised

forums. We also agreed to create new opportunities for collaboration within the Spanish context, especially for students and young professionals. To this end, some promising ideas were put on the table, such as the creation of an informal mailing list dedicated to archaeo-geophysics in the Spanish context, the better dissemination of our prospection projects among colleagues, and the promotion of training activities for the next generation of Iberian archaeo-geophysicists.

Acknowledgements

The seminar was hosted by the University of Cantabria thanks to the Archaeology and History of the Roman Empire Research Group (AHIR). Three I+D research projects collaborated with the scientific planning of the event: HINTERLAND (funded by the AEI: PID2021-122434NB-I00); RURARQ (funded by GAIN-Galician Innovation Agency), and TRAPHIC (funded by the AEI: PID2022-141425NA-I00), in addition to the support of the MINARQLAB within the IAM-CSIC.

References

Cuenca-Garcia, C., A. Asăndulesei & K.M. Lowe (eds.). 2024. *World Archaeo-Geophysics. Integrated minimally invasive approaches using country-based examples*. New York: Springer.



SENSYS®

Magnetometers & Survey Solutions

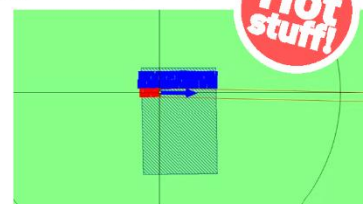
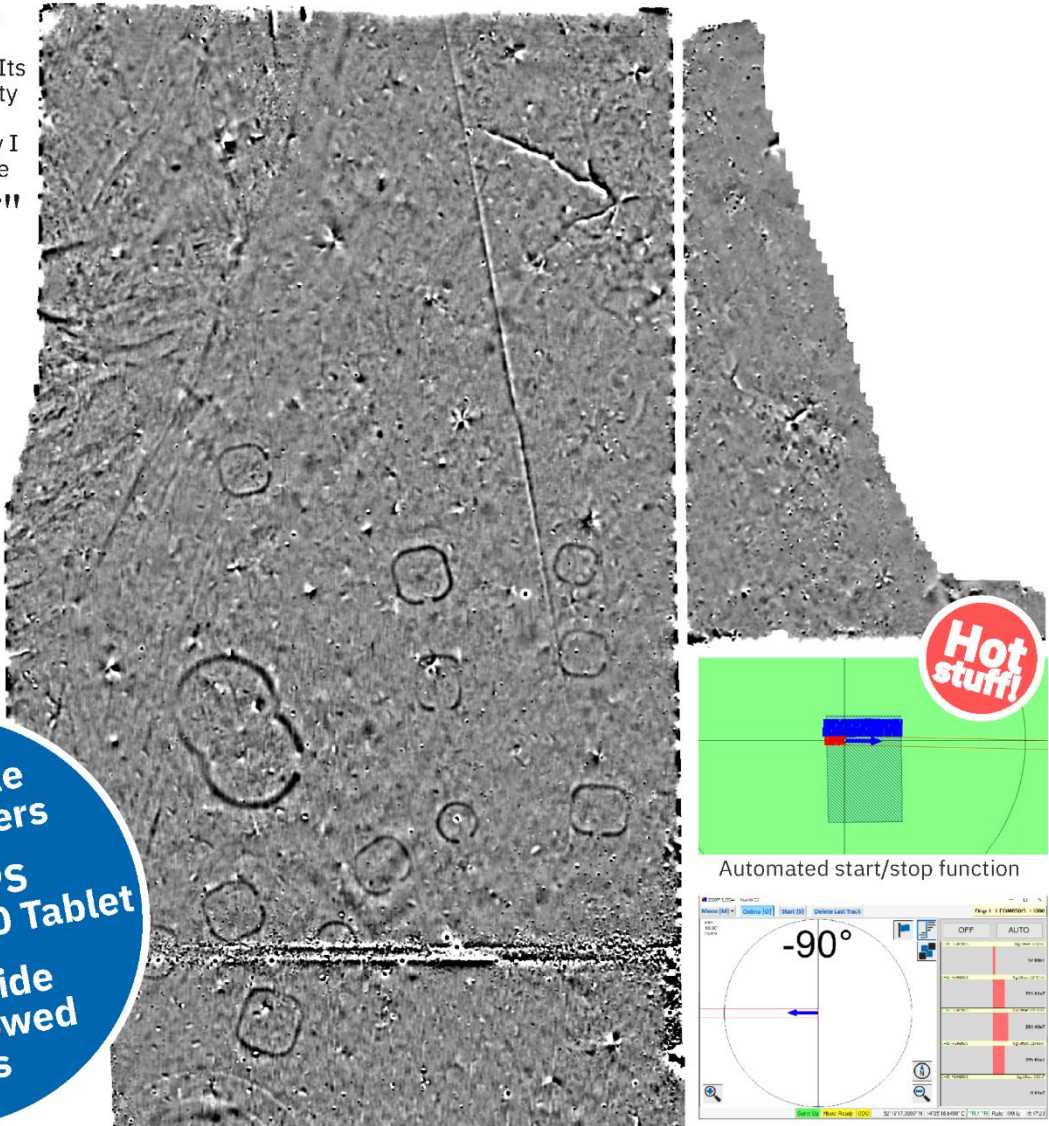
"I'm very impressed with my SENSYS MXPDA magnetometer system. Its ease of use and durability have transformed the scale of the archaeology I do - giving me more time to be an archaeologist."

JARROD BURKS, PhD
DIRECTOR OF ARCHAEOLOGICAL
GEOPHYSICS, OHIO VALLEY

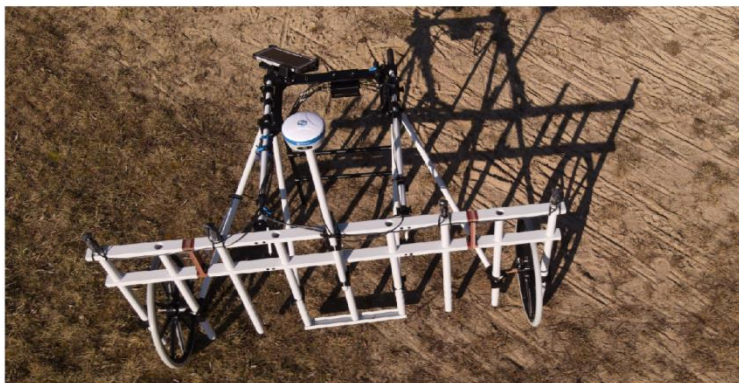
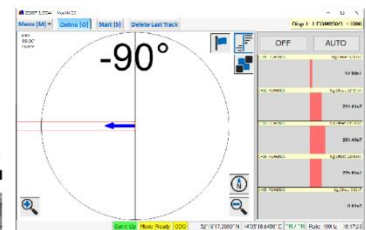


Watch me!

Up to
**16 Fluxgate
Gradiometers**
**RTK DGPS
Rugged Win10 Tablet**
**1-4 m wide
push / towed
carts**



Automated start/stop function



sensysmagnetometer.com | [#sensysmag](https://twitter.com/sensysmag)

UK: **GNSS Solutions (UK) Limited**
Supply and hire of high accuracy positioning & survey systems

V2

Recent Advances in Archaeological Geophysics 2024: A one-day meeting by the Near Surface Geophysics Group (NSGG)

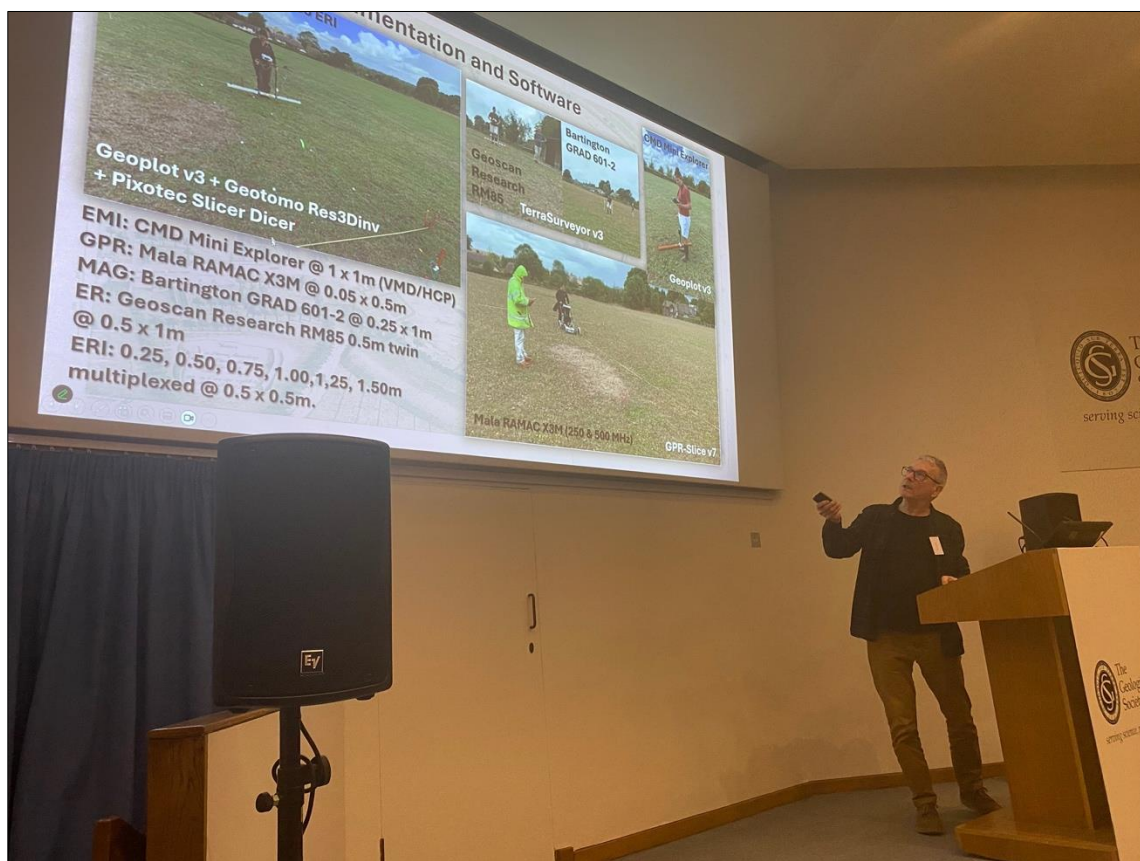
Armin Schmidt¹

¹Armin Schmidt – GeodataWIZ, Germany

a.schmidt@geodatawiz.com

The Near Surface Geophysics Group of the Geological Society of London (NSGG) organised the sixteenth in a succession of biennial day meetings devoted to archaeological geophysics. This in-person day meeting at Burlington House took place on 3rd December 2024. As with previous meetings it offered a forum where contributors from the UK and further afield were able to present and discuss the results of recent research and case studies. The meeting was well attended and 17 interesting presentations (see list below), as well as posters, showcased various projects.

The full abstract book is available from the [NSGG](#) and from the [ISAP](#) web sites.



Paul Cheetham: looking for buried stones and serpents at Avebury.



Anna Chmielowska (AOC Archaeology): casually finding (and scheduling) a previously unknown Romano-British settlement.



Jörg Fassbinder: back in Assur, Iraq, to finish a survey started 34 years ago.

Presentations

- *From an empty field to the scheduled monument – The role of modern geophysics in the planning system* by A Chmielewska, V Oleksy and J Lawton
- *Wroxeter Roman City and the Attingham Estate: expanding geophysical horizons in a Romano-British landscape* by P Johnson and C Harris
- *The role of geophysical survey as an archaeological evaluation technique on large scale solar schemes* by A James
- *High Resolution UXO Magnetometry over the Dogger Bank* by B Urmston, V Gaffney and C Gaffney
- *Multi-disciplinary site investigations of WW2 'British Resistance' operational bases (OBs) in the UK* by J Pringle, K Wisniewski, P Doyle, W Ward, I Stimpson, L Hobson, S Carr, C Kyriakou, R Green and N Hannaford
- *I see dead people: 3D ground penetrating radar survey for imaging unmarked graves, clandestine and mass burials* by M Pisz, C Gaffney, D Taylor, J Moore, S Różycki, A Hegyi, R Mieszkowski and S Kowalczyk
- *Archaeological geophysics and the Shubenacadie Indian Residential School search* by J Fowler, R Knockwood and R Lewis
- *The ghostly features of Odberg: Studying post-depositional changes in GPR data* by P Schneidhofer, R Cannell, E Nau and C Tønning
- *Small change, big consequence: Extended landing gear provides high-quality drone-based magnetic data* by A Steele, C Seisenbacher, L Kaub, G Häußler and R Linck
- *Validating broadband multispectral vegetation indices to remotely detect shallow subsurface anomalies in temperate, vegetated terrain* by A Morley, T Mather, D Pyle and J M Kendall
- *A pilgrim's journey: Gradiometer and LiDAR surveys of two islands of ecclesiastical significance on Lower Lough Erne, Enniskillen, County Fermanagh Northern Ireland* by K Colman, P Edwards, L Jones and A Russell
- *New geophysical surveys along the course of the Dorchester Roman Aqueduct* by H Manley and N Crabb

- *Revival of geophysical measurements in Ashur (Iraq)* by J Fassbinder and M Wolf
- *Interactive, shallow machine learning-based semantic segmentation of geophysical data from archaeological sites* by L Verdonck, M Dabas and M Bui
- *GPR survey provides evidence for a bricked cellar underneath a Baroque garden pavilion at Memmingen (Bavaria)* by R Linck & A Steele
- *Getting under the skin of the serpent's tail: Imaging the buried stones and stone holes/pits of the Beckhampton Avenue, Avebury* by P Cheetham, M Gillings and J Lewis
- *Heading West from Vester Vandet? Interpreting the traces of a Viking-age and high-medieval site in North-Western Denmark* by A Stamnes, A Møller, T Christiansen and M Jessen



Lunch in the library at Burlington House.



Geophysical Equipment on Hire

- RM85
- Grad-601-2 Fluxgate Gradiometer
- CV Magnetometers and Gradiometers
- G-882 Magnetometer
- Seismographs
- EM Conductivity Meters
- ERT Systems
- Ground Penetrating Radar Systems

UK Address:

20 Eden Way
Pages Industrial Park
Leighton Buzzard
Bedfordshire
LU7 4TZ, UK

E: sales@geomatrix.co.uk

T: +44 (0)1525 383438

W: www.geomatrix.co.uk/

Netherlands Address:

Weena-zuid 130
3012NC Rotterdam

E: sales@geomatrixsales.eu

T: +31 (0)1079 97356

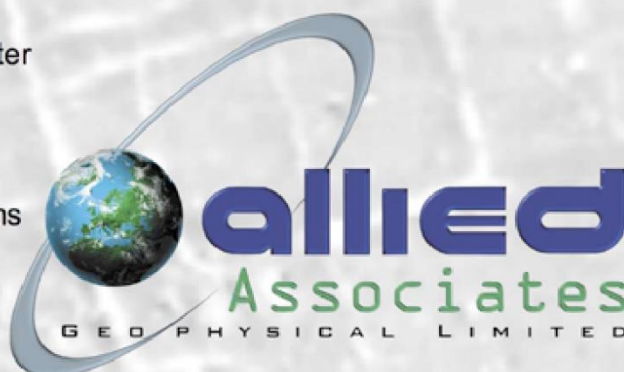
W: www.geomatrixsales.eu/



V4

Instruments for Archaeological & Geophysical Surveying

- GF Instruments Mini explorer
- Bartington GRAD-601 Dual Magnetometer
- Geoscan Research RM15 Advanced
- Allied Tigre resistivity Imaging Systems
- GSSI Ground Penetrating Radar Systems
- Geonics EM Conductivity meters
- ArcheoSurveyor Software
- Geometrics Seismographs



UK Head Office:

Concept House, 8 The Townsend Centre
Blackburn Road, Dunstable
Bedfordshire, LU5 5BQ
United Kingdom

Tel: +44 (0) 1582 606 999

Fax: +44 (0) 1582 606 991

Email: info@allied-associates.co.uk

Web: www.allied-associates.co.uk

German Office:

Allied Associates Geophysical Ltd.
Büro Deutschland
Butenwall 56
D - 46325 Borken

Tel: +49-2861-8085648

Fax: +49-2861-9026955

Email: susanne@allied-germany.de

Web: www.allied-germany.de

Belgian Office:

Avenue Bel Heid, 6,
B - 4900 Spa,
Belgium

Tel: +32 478336815

Email: mayzeimet@sky.be

V1

BORN TO SURVEY

You know their name, may have seen their faces – but how, you wonder, have they got into archaeological prospection? And why? And do they have any tips for the rest of us?

ISAPNews is here to answer these questions. And for that the editorial team approached various members of ISAP, starting with the Management Committee. It's not the Spanish Inquisition, but a set of questions with light-hearted responses and funny stories. This time, we're delighted to introduce one of our Ordinary Members: Marion Scheiblecker.

MARION SCHEIBLECKER

BORN: in a tiny village on the outskirts of the Altmühltal, Bavaria, Germany.

LIVES: Munich, Germany.

AFFILIATION: Ludwig-Maximilians-University Munich, Institute of Near Eastern Archaeology.

EDUCATIONAL BACKGROUND: After my BA in Archaeological Sciences at FAU Erlangen-Nürnberg, focusing on Classical Archaeology, I did my MA in Near Eastern Archaeology at LMU Munich. Currently, I am a doctoral candidate in Near Eastern Archaeology with focus on Geophysics, while working for several projects at our Institute.

FIELD OF EXPERTISE: Geophysical Prospection in Archaeology, especially Magnetometry.

HOW WOULD YOU NAME / DESCRIBE WHAT YOU DO: Archaeological geophysics.

YOUR FIRST SURVEY (OF AN ARCHAEOLOGICAL TARGET): My first survey was actually at the same time as my first fieldwork in Western Asia during my Master's



programme. In the Kurdistan Region of Northern Iraq, we conducted magnetic prospection at several sites around the city of Soran to support the excavation as well as to find a lost city. So far, we haven't found it, although I am sure we were on the right track, but the farmer didn't give us access to the relevant mounds.

WHY ARCHAEOLOGICAL PROSPECTION: As I am not the most patient person it's amazing to see the first results of your work already in the evening. I like the interplay of archaeology and geophysics, two completely different sciences, and to improve the methods for both sides. There's still a lot to discover!



**FAVOURITE
GEOPHYSICAL
METHOD:**

Magnetometry.

**FAVOURITE
GEOPHYSICAL
INSTRUMENT:**

Although the handheld and adjusted Geometrics G-858 in duo-sensor configuration is my favourite magnetometer, I also like to carry the Foerster Ferex 4.032.

BEST SURVEY/ PROFESSIONAL EXPERIENCE: It's not one specific experience, but I love working in Mesopotamia (nowadays, Southern Iraq) and joined several campaigns at the archaeological sites of Ur, Uruk and Fara. Not only are the people, food, landscape and atmosphere amazing, but also the sites belong to the most impressive places. To work there is the dream of every Near Eastern Archaeologist!

Aside from the working places, I appreciate the community of Archaeo-Geophysicists and especially ISAP, which feels like a big family - someone always has a friendly ear and a helping hand!

WORST SURVEY/PROFESSIONAL EXPERIENCE: Getting stuck with the instrument is an ongoing risk (from prickly shrubs to excavation trenches, irrigation ditches and collapsing Wadis...) so colleagues have to pull you out of the disaster.

MOST SATISFYING RESULT: One of the most satisfying and surprising discoveries was finding the city wall of Fara (ancient Shuruppak) on the first survey day! There was

the general assumption that the city didn't have one, because the archaeologists stopped excavation just a few meters in front of it during their widespread excavations. The city wall and its construction can be described in detail just because of the magnetogram.

MOST SURPRISING RESULT: Walking on an exposed ancient baked brick floor during the magnetic survey and not recognising it in the magnetogram. I am still trying to find the reasons and an explanation!

LEAST SATISFYING RESULT: Dozens and dozens of irrigation canals on several fields causing strong anomalies so that we couldn't see any archaeological traces, although it was in the vicinity of an Achaemenid palace.

FAVOURITE ARCHAEOLOGICAL PROSPECTION-RELATED ANECDOTE:

Immediately after my first measurement with the Geometrics G-858 I was looking for my Gameboy with Super Mario to check if the sound is really the same ;-)

YOUR BIGGEST DREAM FOR THE FUTURE: I hope to be able to do more fieldwork in Western Asia and to find out more about the hidden secrets of their huge cities to give people an understanding of the rich and amazing history and culture.

BEST CAREER ADVICE: Do what you like and never give up! Communication is key, especially in our field, where two completely different sciences are working hand in hand.



RM Frobisher

email: contact@rmfrobisher.co.uk

TAR-3 Resistance Meter



RM Pro Cart with four sensors



TAR-3 with 5 + 2 multiplexing

DFG-1 Magnetic Gradiometer



You can buy our products online. For more information please visit our website or contact us. Our equipment is supplied with all the components needed to complete your geophysical survey.

If you would like a quotation for your budget or funding application please contact us. We can supply quotations in the currency of your choice, valid for ninety days.

www.rmfrobisher.co.uk

N° 09467149

RM Frobisher (1986) Ltd. BBIC, Snyderdale Road, Cudworth, BARNSELY, S72 8RP

V3

Journal Notification

Archaeological Prospection 2024: 31(4)

editor@archprospection.org

[Archaeological Prospection 2024: 31\(4\)](#)

Considering Present-Day Communities in Archaeological Remote Sensing of Burial Spaces: Introduction to Special Issue

by Jennie O Sturm & Jason T Herrmann

Combined use of drones and geophysics in enhancing cemetery studies: Two case studies in Northern Ireland, UK ([Open Access](#))

by Ruffell Alastair & Rocke Benjamin

Saying what we mean, meaning what we say: Managing miscommunication in archaeological prospection ([Open Access](#))

by William T. D. Wadsworth, Stephanie Halmhofer & Kisha Supernant

Collaborative multimethod geophysics at the Prewitt Slave Cemetery, Northport, Alabama

by Claiborne D. Sea, Patricia Kemp, Rachel Cajigas & Elliot H. Blair

The challenges of signal interpretation of burials in ground-penetrating radar ([Open Access](#))

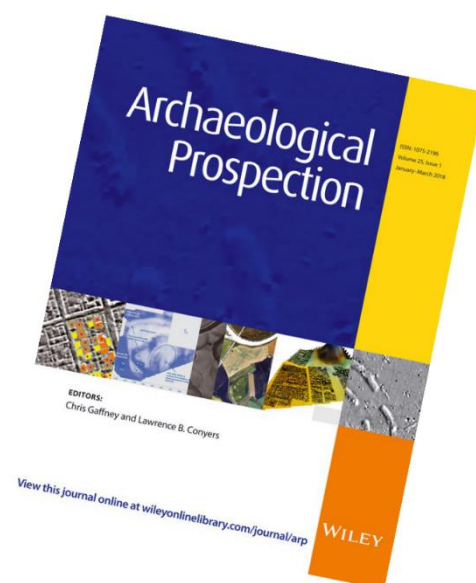
by Andrew Martindale, William T. D. Wadsworth, Eric Simons, Brian Whiting & Colin Grier

On Cemetery Hill: The legacy of burials at Clemson University, a public university in the southern USA ([Open Access](#))

by Keith C. Seramur, Kyle B. Campbell, Joseph B. Anderson & Ellen A. Cowan

Challenging collaborative archaeology: Remote sensing of African American burials in a majority-White, rural town

by Edward González-Tennant & Diana González-Tennant



A geospatial and archaeological investigation of an African–American cemetery in Raleigh, North Carolina, USA ([Open Access](#))

by John Wall, DelWayne R. Bohnenstiehl, Norman S. Levine, John K. Millhauser, Dru E. McGill, Karl W. Wegmann & Vincent Melomo

Community-led investigations of unmarked graves at Indian residential schools in Western Canada—overview, status report and best practices ([Open Access](#))

by Brian Whiting

An ethical framework for geophysical survey in historic Black cemeteries

by Sarah Lowry

Don't forget: a selection of ISAP branded items (including T-shirts, hoodies, bags, mugs and more) are still available. Purchases support the ISAP Anniversary Fund and can be made here: www.archprospection.org/merchandise/



ISAPinacotheca: The ISAPNews Gallery

Michał Pisz¹

¹ISAP & ISAPinacotheca Editor

editor@archprospection.org

Please remember – the ISAP Gallery needs you! We would love to see similar insights into your projects! Please send us your pictures!



Kris Lockyear in cake form! Picture by Kris Lockyear.



*Arne Anderson Stamnes is clearly not afraid of weather extremes, be it blizzards or sandstorms!
Picture by Arne Anderson Stamnes.*



*Philippe De Smedt carrying out a motorized EMI survey in short sleeves. Picture by Layla Aerts,
provided by Jeroen Verhegge.*



Ms. Kleyman taking pXRF soil readings as a part of Archaeobiogeochemical survey in the US and Mexico in 2007-2018. Picture and description by Richard Lundin.



"A picture of a survey I undertook for Antony Harding at Sobiejuchy, Poland, in the summer of 1987. We were using an RM4. Of course, at the time, we had to wait until we got back to the UK to process the data on the mainframe at Durham (once it had been input by the ladies of the "Data Preparation Service"). The results provided us with an excellent plan of where the hay was lying in the field to dry. Many years later I managed to import the data into TerraSurveyor and reprocess it". Picture and description by Kris Lockyear.



Ibrahim Haj Hassan describes his resistivity survey to a visitor: Abu Mousa, the landowner and sheikh of the Abu-Orabi family. As everyone knows, it is always a delight to find other people who are curious enough to ask what is going on with a geophysical survey. Picture and description of an electrical survey in Jordan are from MASCA 1970s report, shared by Rinita Dalan.



Crazy GPR survey of a 45° steep hill in search of a possible Roman theatre in Southern Bavaria. The standard GPR equipment was modified to fit the special requirements of the survey area. The kit was pulled with a rope and a tackle from above. Picture and description by Roland Linck.

Your Newsletter Needs You!!

Please send:

- survey reports (c. 700-1000 words plus several images)
- interesting or entertaining images (don't forget the caption)
- opinion pieces
- cover photographs
- notifications
- the bits and pieces "that can't be published elsewhere"

to the editors at:



editor@archprospection.org

or through our Facebook profile:

<https://www.facebook.com/archprospection>



(we will even do the formatting for you!)