

# Portfolio

Archaeology | Scientific Illustration | Web Development

## Jona Schlegel





# Hello! I'm *Jona*.

Archaeologist, Illustrator, Web Developer  
based in Vienna, Austria

I am a landscape archaeologist and scientific illustrator, combining my skills in fieldwork, geophysical prospection, and web development.

My focus is on creating accessible archaeological content through technical illustrations, digital reconstructions, and interactive web platforms. Thereby ensuring good science and scientific communication.

## About me

## Recent experience and education



website portfolio  
available at  
[jonaschlegel.com](http://jonaschlegel.com)



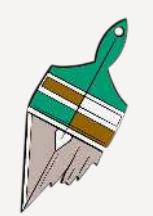
Landscape Archaeology at University of Applied Science, Berlin

Master of Science · 2016–2018



Field Archaeology/Conservation and Restoration at University of Applied Science Berlin

Bachelor of Arts · 2012–2016



### Freelancer at archaeoINK

Combining archaeological data with digital tools for public engagement. Projects include illustrations, web platforms, and interactive databases aimed at making complex archaeological data accessible to a broad audience.

Since 2023



### Researcher at Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology

Focus: Geophysical surveys (GPR, geomagnetic), database creation (OpenAtlas, CIDOC CRM), and publication of research findings. Notable projects include INDIGO (modern graffiti documentation), Tieschen (Bronze Age settlement), and Müstair (geophysical prospection around the Abbey of Müstair).

2018–2023

## About me

## Skills

**Programming & Web Development** – These skills help create and maintain websites, databases, and interactive platforms that enhance archaeological research, communication, and public engagement.

### Languages & Frameworks



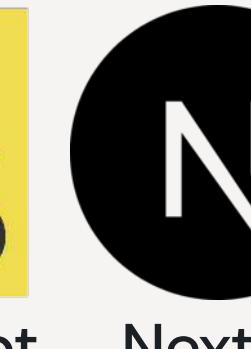
HTML



CSS



JavaScript



Next.js

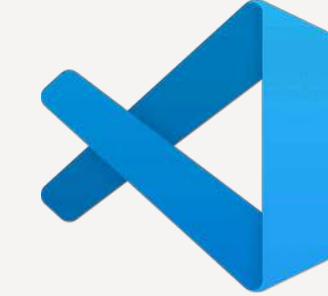


TypeScript



Tailwind

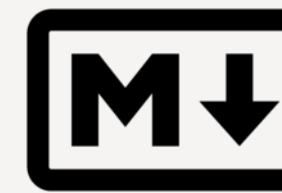
### Tools



VS Code



GitHub



markdown

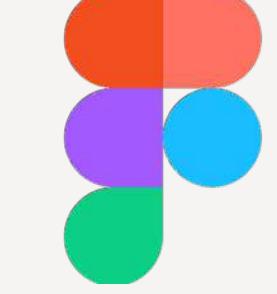
**Scientific Communication & Visualisation (Design & Illustration)** – These tools are essential for visualising archaeological research, communicating findings effectively, and illustrating both technical and interpretative work.



Inkscape



Procreate



figma



miro

**Spatial Analysis & Mapping (Geospatial Skills)** – These skills support archaeological research through mapping, spatial analysis, and visualising complex site data.



ArcGIS



QGIS

SERVICE

# ARCHAEOLOGY

Reliable data interpretation, structured documentation, and  
accessible mapping for archaeological sites and data

## The challenge

Accessing and interpreting meaningful archaeological data can be complex. Delivering accurate and comprehensive results requires synthesising multiple data sources and presenting them in an accessible format.

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### Specific goals

Provide detailed and accurate interpretations of archaeological sites by integrating data from geophysical surveys, historical maps, and excavation reports. These results are then structured in a consistent and reliable manner.

### Key services

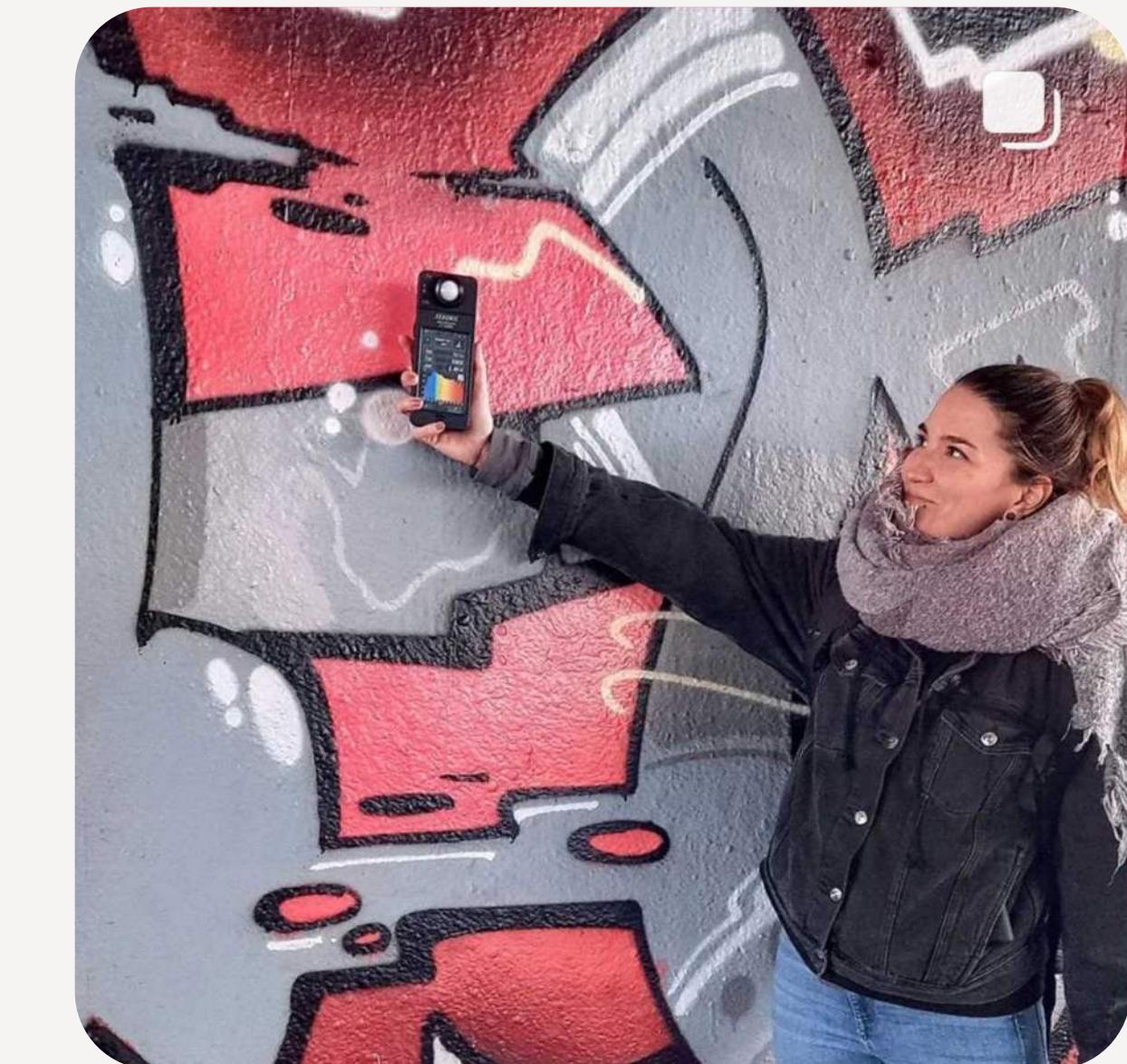
- **Accurate Mapping and Visualisation:** Synthesising data from multiple sources into printer-friendly, accessible maps.
- **Thesaurus Creation:** Developing controlled vocabularies to ensure consistency in categorising and interpreting data.
- **Database Modelling (CIDOC CRM):** Organising all findings into structured, research-ready databases using the CIDOC CRM standard.



# INDIGO (Austria)

The INDIGO project aimed to document, analyse, and disseminate graffiti along Vienna's Danube Canal. Spanning 13 km, this project collected detailed imagery and spatial data, creating a systematic record of graffiti as short-lived cultural heritage.

Institute	Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology (Geert Verhoeven)
Role	Thesaurus development, data management, image-based modelling, symposium co-organisation, co-editor, web development
Length	24 months
Tools	ArcGIS Pro and Field Map, SKOS/Skosmos, CIDOC CRM, figma, JavaScript, React, Next.js, Leaflet.js, CesiumJS
Year	2021-2023



## INDIGO (Austria)

### Excerpts of the results I participated in

#### Screenshot of the INDIGO Graffiti Thesaurus – available on Vocab

The screenshot shows the Vocab website interface. At the top, there is a navigation bar with links for 'Vocabularies', 'About', 'Editor', and 'API'. Below this, a teal header bar displays 'INDIGO Graffiti Thesaurus'. The main content area has tabs for 'Alphabetical' (selected), 'Hierarchy', and 'Groups'. A sidebar lists terms starting with 'A' through 'R', such as 'abstract' and 'anti style'. To the right, there is a form titled 'Vocabulary information' with fields for 'TITLE', 'SUBJECT', and 'DESCRIPTION', all currently empty.

#### Talk at the goINDIGO 2022 symposium



#### cover of the goINDIGO 2022 proceedings – co-editor



# Convent Saint John in Müstair (Switzerland)

The project aimed to document the surrounding landscape of the UNESCO World Heritage Site at the Benedictine Convent Saint John. This project employed non-invasive techniques, including ground-penetrating radar (GPR) and magnetometry, to map archaeological structures. The project contributed to the ongoing study of Müstair's continuous settlement history.

Institute	Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology (Wolfgang Neubauer)
Role	Fieldwork assistance, geophysical data processing and interpretation (GPR, magnetometry), report writing, scientific paper writing
Length	2019 (2 Days), 2020 (2 month)
Tools	MIRA GPR system, Foerster FEREX magnetometer, ArcGIS, ApSoft
Year	2019–2020



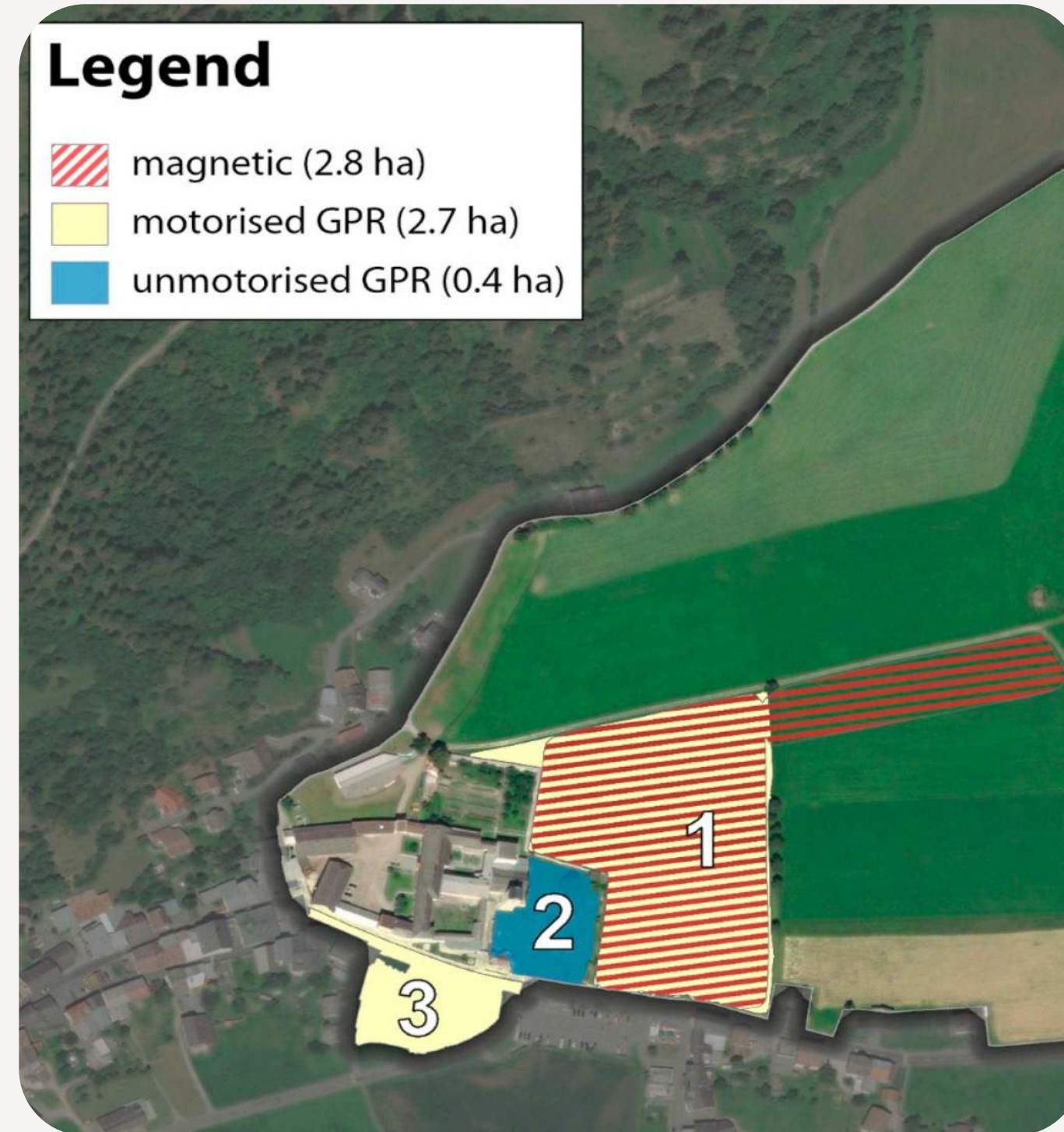
## Convent Saint John in Müstair (Switzerland)

### Excerpts of the results I participated in

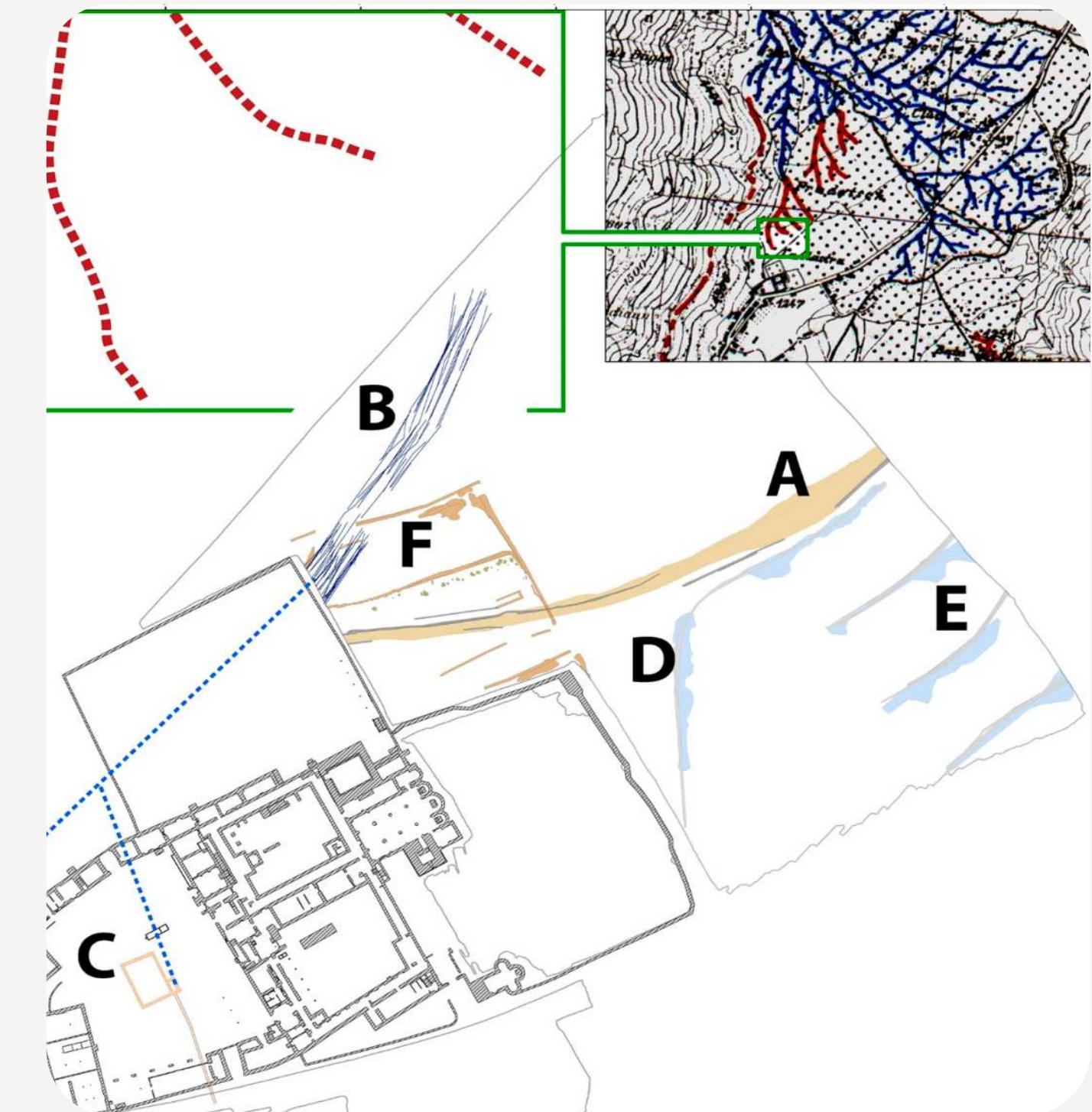
#### Surveying with the man-powered GPR system



#### Map showing the geophysical surveyed areas



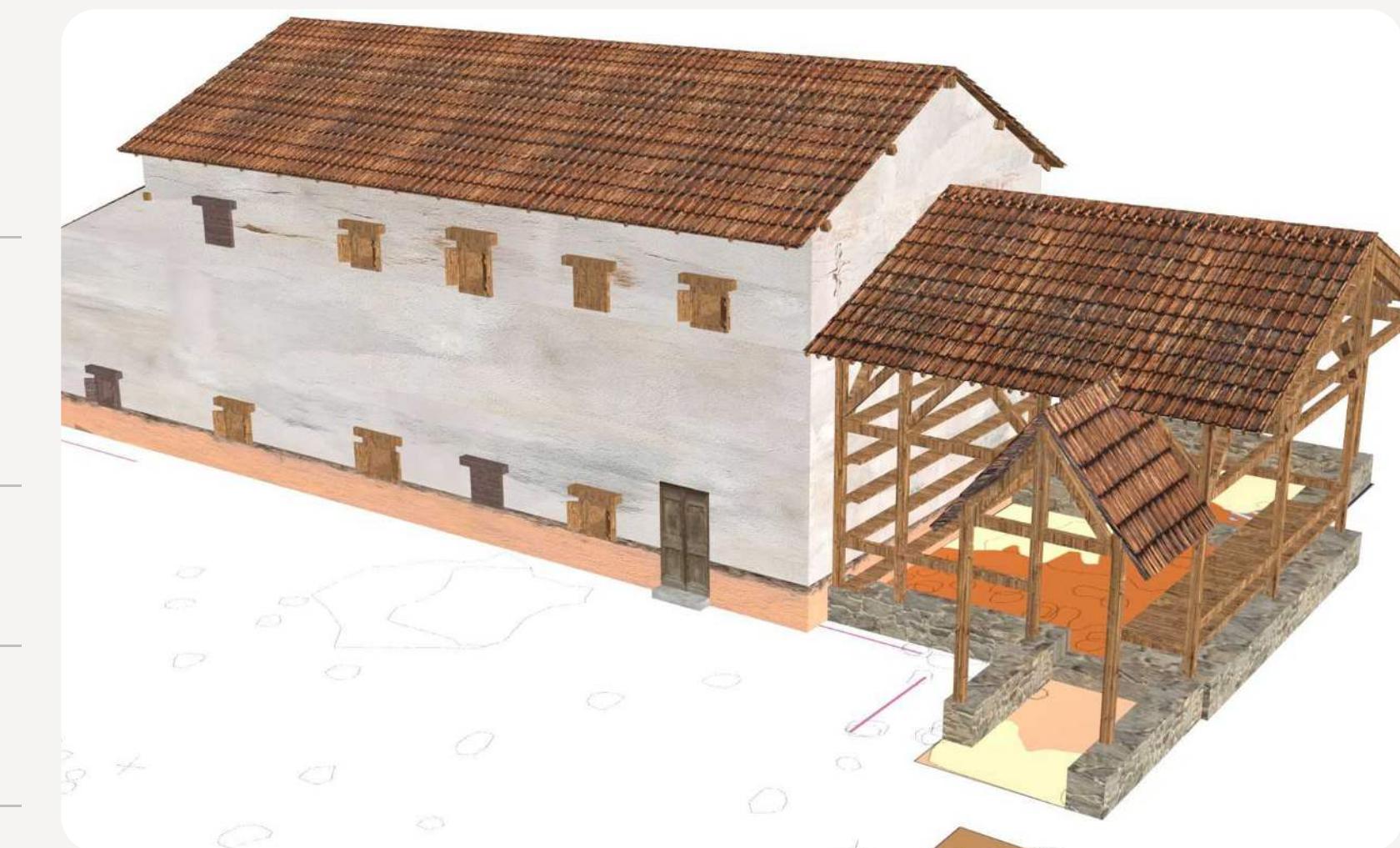
#### Map showing old water streams and irrigation systems



# Herforst Roman pottery centre (Germany)

The Herforst project focused on the geophysical survey of a Roman pottery production centre near Trier, Germany. By employing magnetic prospection and ground-penetrating radar (GPR), subsurface evidence of multiple kilns and workshops were located. The digital reconstruction of one of the pottery workshops helped enhance the understanding of its structure and operation.

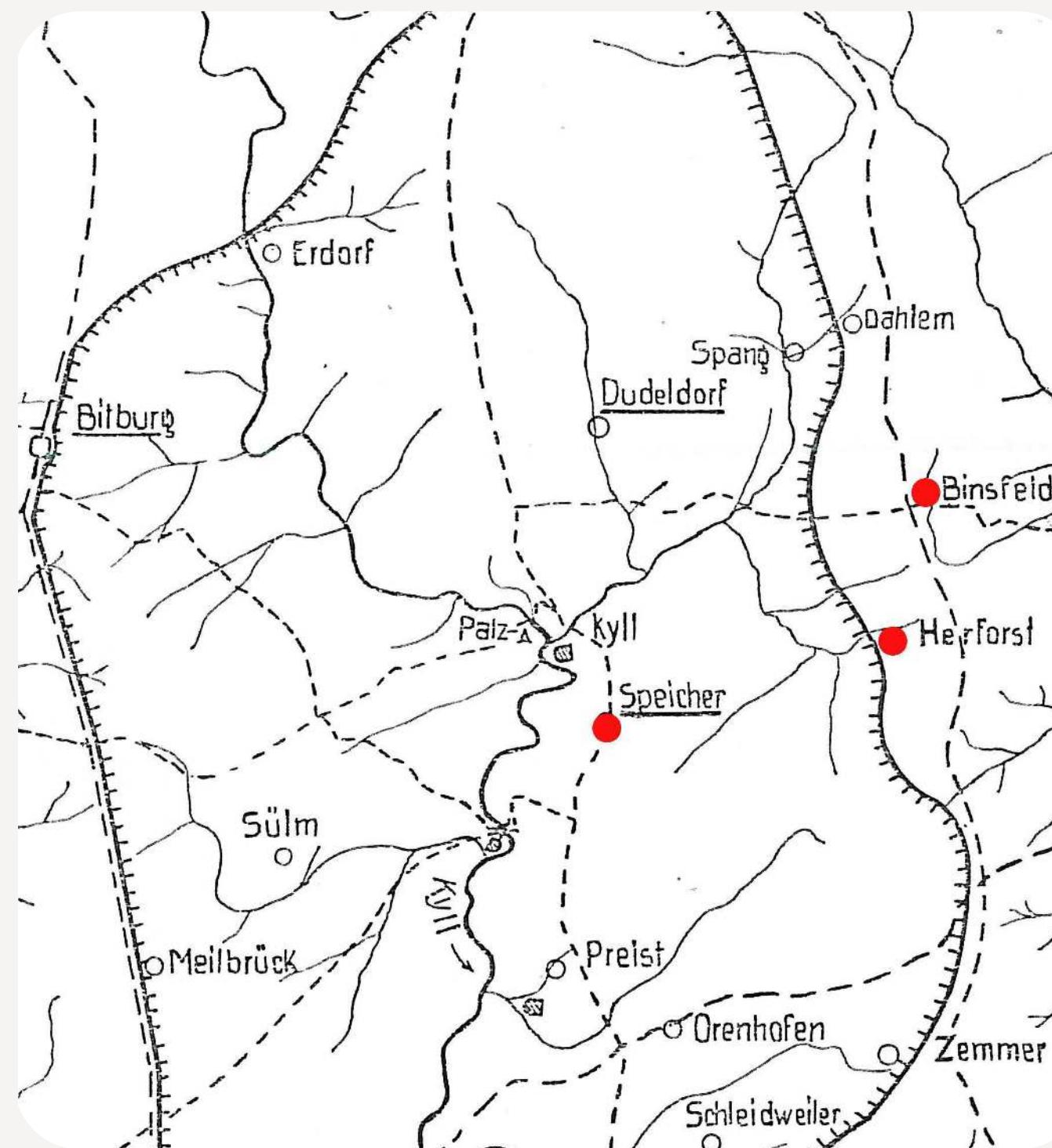
Institute	Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology (Wolfgang Neubauer)
Role	Geophysical interpretation (magnetometry, GPR), 3D reconstruction of a Roman pottery workshop
Length	2017 (6 weeks)
Tools	ApSoft, ArcMap, QGIS, Maya 3D
Year	2017



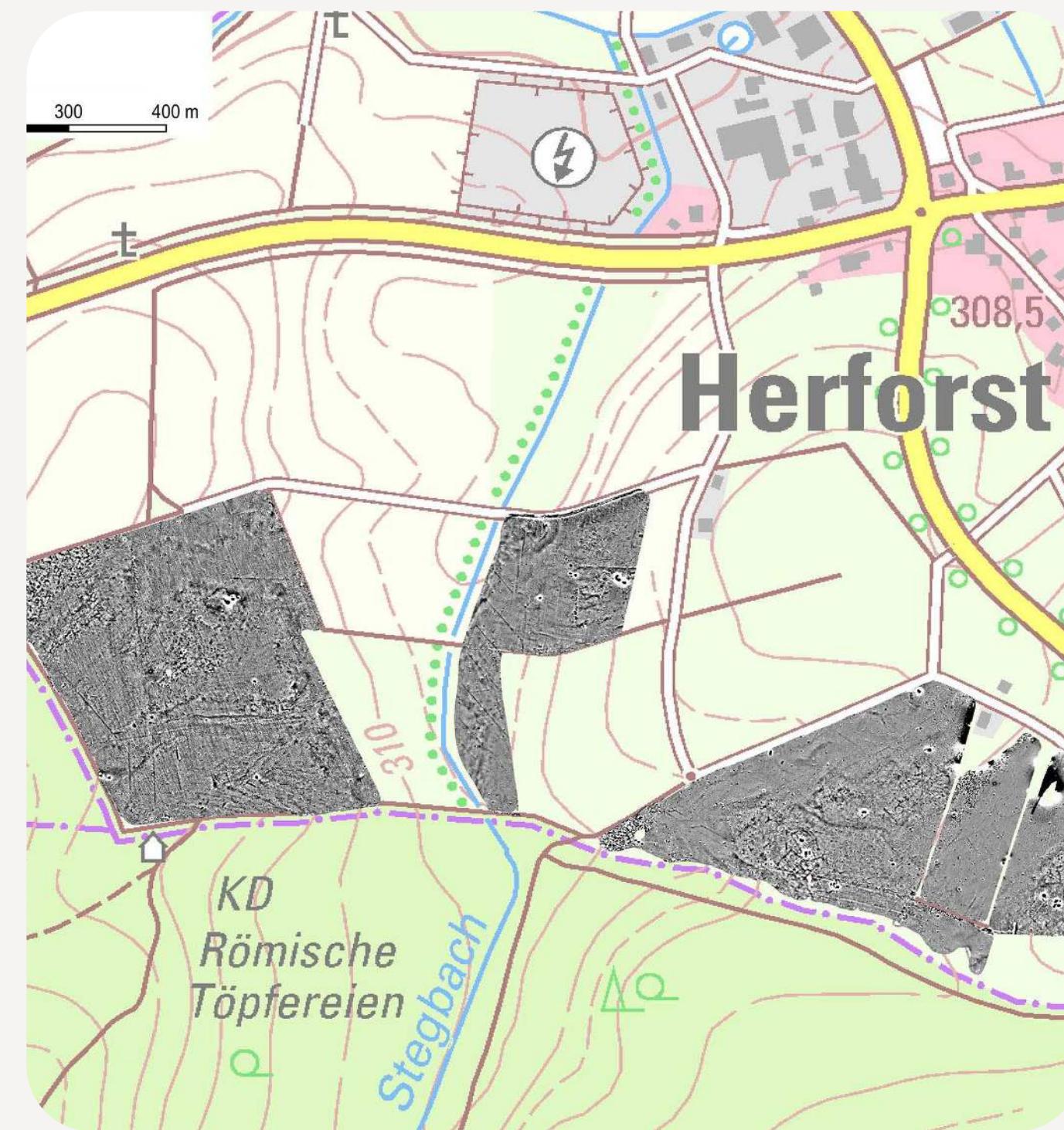
## Herforst Roman pottery centre (Germany)

### Excerpts of the results I participated in

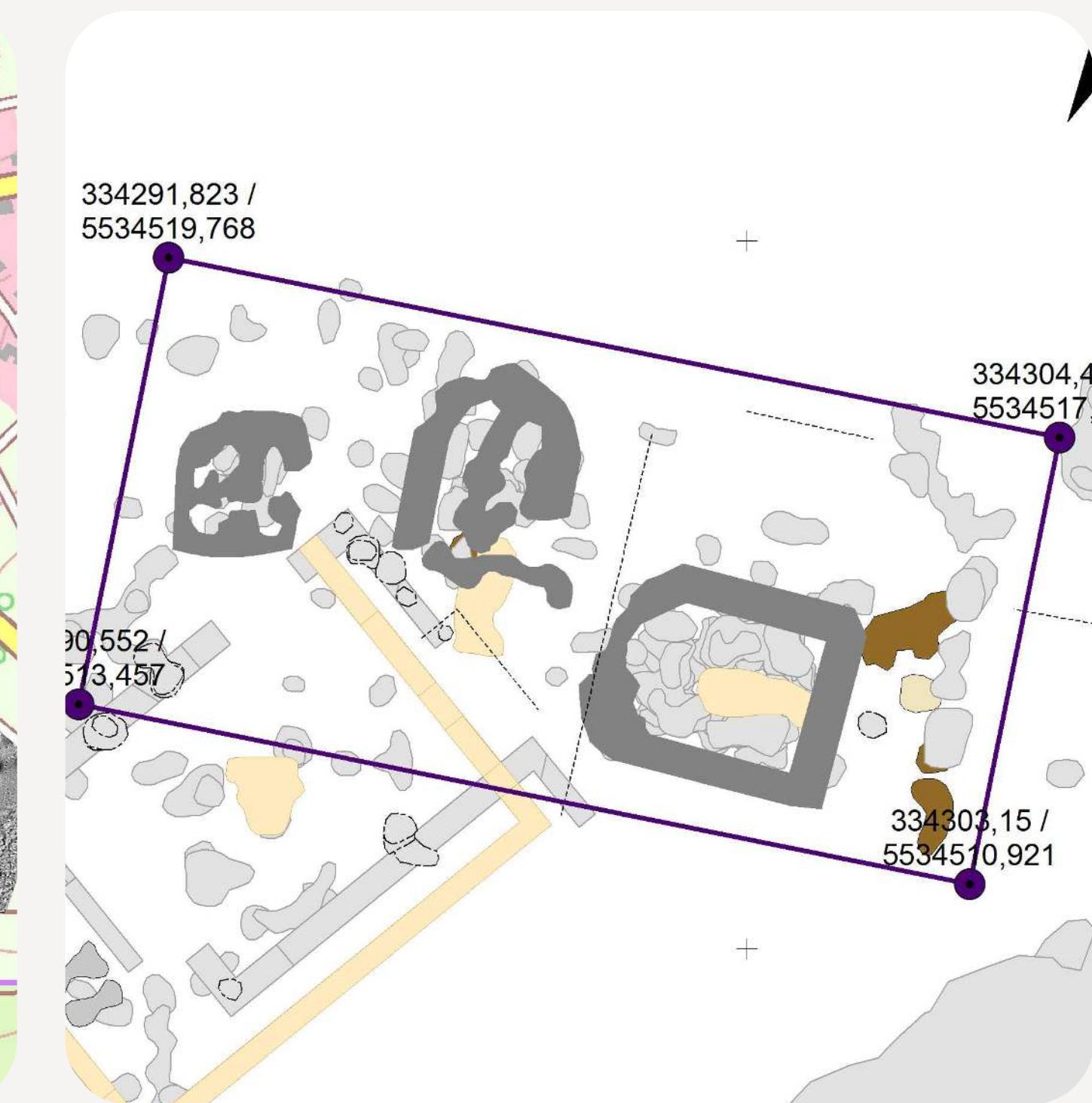
Map showing the villages Herforst and Speicher in Germany



Map showing the magnetic surveyed data



Map showing three ovens interpreted based on GPR



# Seleukia Sidera (Turkey)

The Seleukia Sidera project aimed to map and analyse the ancient city's urban layout using non-invasive geophysical methods, including magnetic prospection and ground-penetrating radar (GPR). The project uncovered several urban structures, such as streets, fortifications, and public buildings, allowing for a deeper understanding of the city's development from the Hellenistic through to the Byzantine periods.

Institute      University of Isparta (Bilge Hörmüzlü), HTW Berlin (Thomas Schenk)

Role            Geophysical data collection and interpretation (magnetic survey, GPR),  
                3D scanning, geophysical prospection lead (2017)

Length         2016 (4 weeks), 2017 (4 weeks)

Tools           Leica SmartScanstation 2 (3D scanning), magnetometer, GPR,  
                MAGNETO, QGIS

Year           2016–2017



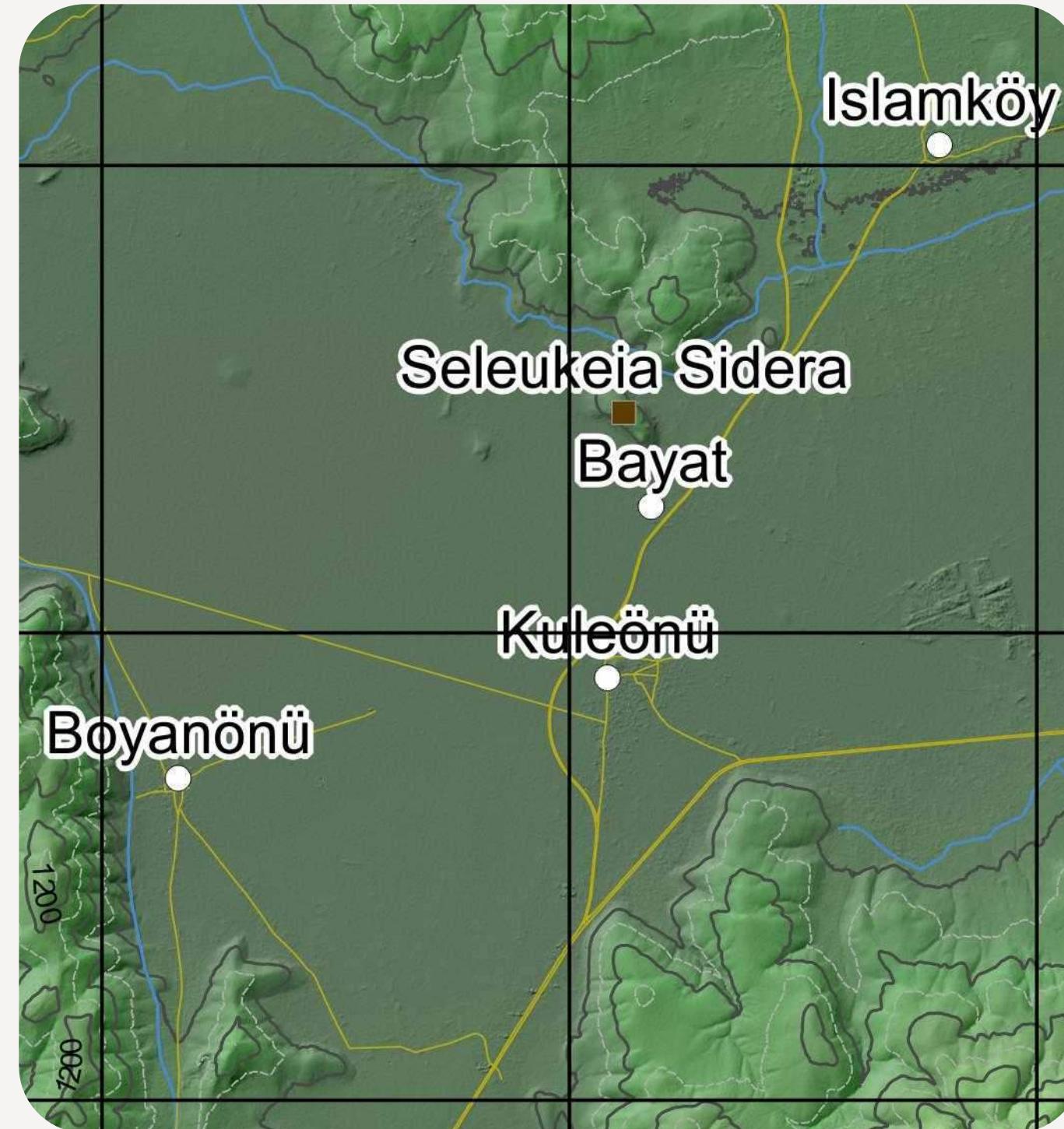
## Seleukia Sidera (Turkey)

### Excerpts of the results I participated in

Magnetic hand-held survey



Map showing position of the archaeological site



Interpretation of the magnetic and GPR data



My focus is on enabling archaeologists to communicate their research more effectively, using visual tools to support better science and broader public engagement.

I enjoy exploring the diverse methods and technologies we use in archaeology and sharing that knowledge in a clear and accessible way.

I am always looking to collaborate on scientific projects, either as an illustrator or a web designer/developer, with a particular interest in research related to science communication. I'm also keen to explore 3D web development, integrating maps and 3D artefacts to make archaeology more interactive and explorable. Adding a storytelling aspect to these tools is important to me, ensuring that they serve both the public and other researchers.

— Jona Schlegel —



**Thank you  
Get in touch:**

[archaeoINK@jonaschlegel.com](mailto:archaeoINK@jonaschlegel.com)