



Ancient irrigation detection and analysis using advanced remote sensing methods

Fact Sheet

Project Information

UnderTheSands

Grant agreement ID: 101062705

DOI
[10.3030/101062705](https://doi.org/10.3030/101062705)

Project closed

EC signature date
18 July 2022

Start date	End date
5 September 2022	4 September 2024

Funded under
Marie Skłodowska-Curie Actions (MSCA)

Total cost
No data

EU contribution
€ 181 152,96

Investment in EU policy priorities

- | | | | |
|-------------------------|-----------------------|----------------|-----------------------|
| Digital agenda | ☐ | Clean air | ☐ |
| Artificial Intelligence | ☐ | Climate action | ☐ |
| Biodiversity | ☐ | | |

Coordinated by
Institut Català d'Arqueologia Clàssica
 Spain

Project description

What lay beneath: the case of ancient irrigation networks

Remote sensing is one of the many methods for studying ancient irrigation and water management systems. The challenge of using such a method is that it usually only

focuses on a specific region, detecting mostly isolated channels. This can constrain our understanding of ancient irrigation systems. The EU-funded UnderTheSands project aims to overcome this limitation. It will produce a workflow for the detection and analysis of ancient irrigation networks in diverse environments. To do this, UnderTheSands will use a combination of novel remote-sensing techniques such as the multi-scale relief model and archaeomorphology, as well as sources like synthetic aperture radar.

Fields of science (EuroSciVoc)

[engineering and technology](#) > [civil engineering](#) > [water engineering](#) > [irrigation](#)

[humanities](#) > [history and archaeology](#) > [history](#)

[engineering and technology](#) > [electrical engineering, electronic engineering, information engineering](#) > [information engineering](#) > [telecommunications](#) > [radio technology](#) > [radar](#)

[humanities](#) > [history and archaeology](#) > [archaeology](#)



Keywords

[Machine learning](#)

[deep learning](#)

[remote sensing](#)

[landscape archaeology](#)

[ancient irrigation](#)

[Near East](#)

Programme(s)

[HORIZON.1.2 - Marie Skłodowska-Curie Actions \(MSCA\)](#)

MAIN PROGRAMME

Topic(s)

[HORIZON-MSCA-2021-PF-01-01 - MSCA Postdoctoral Fellowships 2021](#)

Call for proposal

[HORIZON-MSCA-2021-PF-01](#)

[See other projects for this call](#)

Funding Scheme

[HORIZON-TMA-MSCA-PF-EF - HORIZON TMA MSCA Postdoctoral Fellowships - European Fellowships](#)

Coordinator



Institut Català d'Arqueologia Clàssica

Net EU contribution

€ 181 152,96

Total cost

No data

Address

**Plaça Rovellat s/n
43003 Tarragona**

 **Spain** 

Region

Este > Catalunya > Tarragona

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Last update: 4 September 2022

Permalink: <https://cordis.europa.eu/project/id/101062705>

European Union, 2025