



Archaeology
Data Service

Taking care of your digital data:

The importance of long-term data management for
archaeology, the social sciences and humanities

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British Institute in Eastern Africa Graduate Forum

Nairobi, 9 March, 2023



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of York



Intro to the Archaeology Data Service

**Domain Specific Digital Archive
Set up in 1996
Based within the University of York**

Mission: Support research, learning and teaching with free, high quality and dependable digital resources.

- Digital preservation
- Free online access to data
- Guidance and support for data creators
- Research



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**The digital repository
for archaeology and
heritage** *Supporting
access, innovation, and
research*

Screenshot

Excavation during the A1 Leeming to Barton Motorway Upgrade Scheme © Northern Archaeological Associates →

[🔍 Search the database →](#)

Search our freely available data rich project collections, reports, publications and metadata records.

[📄 Deposit data with ADS-easy →](#)

Depositing your data with us ensures that they will be professionally curated in the long term and easily accessible for future reuse.

<https://archaeologydataservice.ac.uk>

Intro to the Archaeology Data Service

What do we hold?

ArchSearch: Online catalogue

indexing over 1.3 million
metadata records including:

- ADS collections
 - 1000+ Project Archives
 - 77,000+ Unpublished Fieldwork Reports

Metadata aggregated from over
30 UK national and regional
historic environment inventories.

The screenshot displays the ADS ArchSearch interface. At the top, the ADS logo and 'ARCHAEOLOGY DATA SERVICE' are visible. Below the header, there's a navigation bar with 'ADS Main Website' and 'Help'. The main content area shows search results for a query. On the left, a vertical sidebar labeled 'BROWSER BASIC' lists various filters under categories like 'WHAT', 'WHERE', 'WHEN', and 'RESOURCE'. The search results are displayed in a table-like format with columns for title, description, and location. The first result is 'A LOOK IN THE REAR VIEW MIRROR' with a description about road construction and archaeology in Wiltshire. The second result is 'ABBEE FIELDS ABBEYMEAD' with a description about an excavation in Gloucestershire. The third result is 'AINSBROOK SITE' with a description about a Viking period hoard in North Yorkshire. A 'RESET QUERY' button is located at the top right of the results area.

Intro to the Archaeology Data Service

What do we disseminate?

- Disseminate data we hold
- Provide integrated resource discovery across data we aggregate
- Also disseminate to other aggregators
 - OAI-PMH
 - Linked Data
 - Via Export


Back to Archives Search | Help

ADS Main Website

Tracing the Past: analysing the design and construction of English medieval vaults using digital techniques

Nicholas Webb, Alexandrina Buchanan, Sarah Duffy, James Hillson, JR Peterson, 2021. <https://doi.org/10.5284/1084971>. [How to cite using this DOI](#)

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[Archives](#)

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Arts & Humanities
Research Council

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University of Liverpool











[Send e-mail enquiry](#)

Resource identifiers

ADS Collection: 4000
DOI: <https://doi.org/10.5284/1084971>

Available archives:

A total of 13 archives have been added to the Tracing the Past: analysing the design and construction of English medieval vaults using digital techniques. These can be accessed below.

	<p>Laser Scan Data from Gloucester Cathedral, Gloucestershire 2017.</p> <p>Released: 12 April 2022 Collection doi: 10.5284/1091254</p>	
	<p>Laser Scan Data from Exeter Cathedral, Exeter, Devon 2016.</p> <p>Released: 12 April 2022 Collection doi: 10.5284/1091407</p>	
	<p>Laser Scan Data from Ely Cathedral, Ely, Cambridgeshire 2016.</p> <p>Released: 12 April 2022 Collection doi: 10.5284/1091405</p>	
	<p>Laser Scan Data from Chester Cathedral, Chester, Cheshire 2015-2019.</p> <p>Released: 12 April 2022 Collection doi: 10.5284/1091404</p>	
	<p>Laser Scan Data from Lincoln Cathedral, Lincoln, Lincolnshire 2019.</p> <p>Released: 12 April 2022</p>	

Why do we need a Data Service for archaeology?

- Archaeological research is often non-repeatable (e.g. excavation destroys the archaeological site) so the data becomes primary data.
- Digital data is also fragile and requires long-term stewardship.
 - **This is why people who work with archaeological data are obsessed with preservation and data persistence.**
- Archaeological data is typically very heterogeneous and difficult.
- Archaeologists will use any kind of research tool or methodology if it helps to answer their research questions, so they are digital early adopters of a huge range of data types, including scientific data (so a good SSH case study).

Lessons from ARIADNE

- EU FP7 project under the 'Infrastructures' theme, including 23 European partners across 16 countries
- Four-year project: ended January 2017
- 17 Workpackages – primary deliverable: collection level metadata aggregation portal
- Coordinator: PIN Scri – Polo Universitario "Città di Prato" at the University of Florence
- Deputy Coordinator: ADS

Lessons from ARIADNE

- 9 ICT organisations
- 14 archaeological organisations
- 15 Associate partners
- External community building
 - Transnational access
 - Training events
 - Special interest groups



Internal Capacity Building

- Paper given in 2015 by partners in Slovenia and Ireland about “haves and have nots” for having an acceptable place for their archaeological data in the long term
- Even funded partners struggled to participate due to their own lack of infrastructure, and we were creating a gap between who could and couldn't participate in projects like ARIADNE
- Plans were made to offer data management workshops to partners in their own countries – Austria and Slovenia both accepted

Data management workshops

Local ARIADNE partners worked hard to make sure governmental and institutional stakeholders attended, and took on understanding and presenting the state of play in their country.



Data management workshops

- Level of interest was much higher than expected:
 - Pressure from funders to deposit data in an open repository
 - Pressure from institutions to deposit data in an open repository
 - Funding available; but no guidance
 - No appropriate options for archaeological data
 - Conversations continued about how to take expertise within ARIADNE and collaborate beyond current network
 - Working together was going to be critical to moving forward

Challenges for Archaeology

- Archaeological data often derived from non-repeatable interventions
- Digital data more fragile and subject to obsolescence
- Risk losing a generation of archaeological research – Urgency!



COST Action SEADDA

Saving European Archaeology from the Digital Dark Age

- Funding (four years) for networking: meetings, training sessions, scientific missions, open access publications
- Members representing 35 countries (now 38) but also including Turkey, Pakistan, Israel, Japan, Argentina, USA, Canada

Objectives

- Coordinate information collection to understand the current state-of-the-art regarding the preservation, dissemination and re-use of archaeological data.
- Develop a common understanding of international best practice for preservation, dissemination and re-use of archaeological data
- Foster knowledge exchange around international best practice for preservation, dissemination and re-use of archaeological data

SEADDA WG1: *Stewardship of archaeological data*

Objective: To bring together members with varying levels of experience to share their successes and challenges around the stewardship of archaeological data to create a sub-network. Practical and ethical considerations will be explored:

- Encouragements and resistances to sharing data and making it openly accessible within archaeology
- Who should be responsible in short and long-term for preservation
- The starting point for those who wish to begin or progress dialogue in their region or country.

National workshops!

SEADDA WG2: Planning for Archiving

Objective: To identify the practical and technical issues surrounding the creation of an appropriate repository for archaeological data

- Understanding hardware and software options
- Management structures
- Training of archivists
- The WG identifies existing best practice, changing future needs, and pragmatic technical and structural solutions.

SEADDA WG3: Preservation and Dissemination Best Practice

Objective: Understand current international best practice for archiving and dissemination, and implementation by existing repositories.

- Open Archival Information System (OAIS) model
- The FAIR Principles
- Repository accreditation
- Cost modelling
- Dealing with data types
- Will bring together archaeological digital archivists to share current practice, and survey future trends to understand the changing archaeological and digital landscapes (domain and technology watch).

SEADDA WG4: Use and Re-Use of Archaeological Data

Objective: To understand how to optimise archives and interfaces to maximise the use and re-use of archaeological data. To explore how archaeological archives can better respond to user needs, and ways to document and understand both quantitative and qualitative re-use.

- Explore barriers to re-use, such as IPR and licencing
- Explore design of underlying data structures and their interfaces
- Will focus on initiatives like the FAIR Principles and technologies that improve and optimise searching, issues around how data is created, organised and disseminated, different options for interface design, and developing best practice around qualitative re-use.

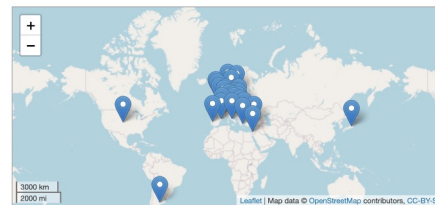
Open Access Publications

- **Internet Archaeology**
SEADDA themed issue Digital Archiving in Archaeology: The state of the art
- 28 papers representing the current state of archiving in 28 nations and states.
- Also just published: Data Management Policies and Practices of Digital Archaeological Repositories

Digital Archiving in Archaeology: The State of the Art. Introduction

Julian D. Richards, Ulf Jakobsson, David Novák, Benjamin Štular and Holly Wright

Cite this as: Richards, J.D., Jakobsson, U., Novák, D., Štular, B. and Wright, H. 2021 Digital Archiving in Archaeology: The State of the Art. Introduction, *Internet Archaeology* 58. <https://doi.org/10.11141/ia.58.23>



The advent of ubiquitous computing has created a golden age for archaeological researchers and participating publics, but the price is a digital resource that is now in jeopardy. The archaeological record, in digital form, is at risk not simply from obsolescence and media failure, but the danger is also unable to fully participate in Open Data. Without profit and informed

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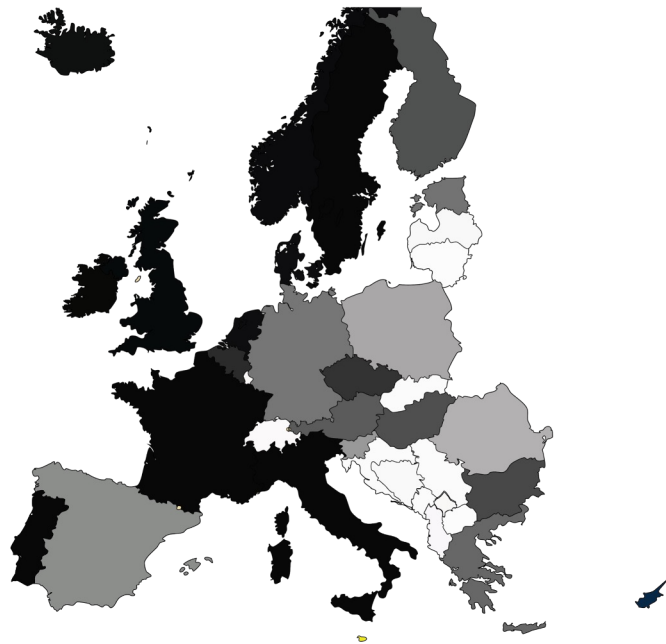
Screen

<https://intarch.ac.uk/journal/issue59/2/index.html>

ARIADNEplus

- 41 partners
- 28 countries
- Majority are archaeological partners
- Extending thematic coverage
- Expanding participation

<https://ariadne-infrastructure.eu/>





3,184,058 resources in the current view

Display as search result

Filters

All fields Search 3,490,163 resources.

Clear All Filters

Filter By Year

Filter By Time Periods

Year (from)

Year (to)

Apply

Resource type

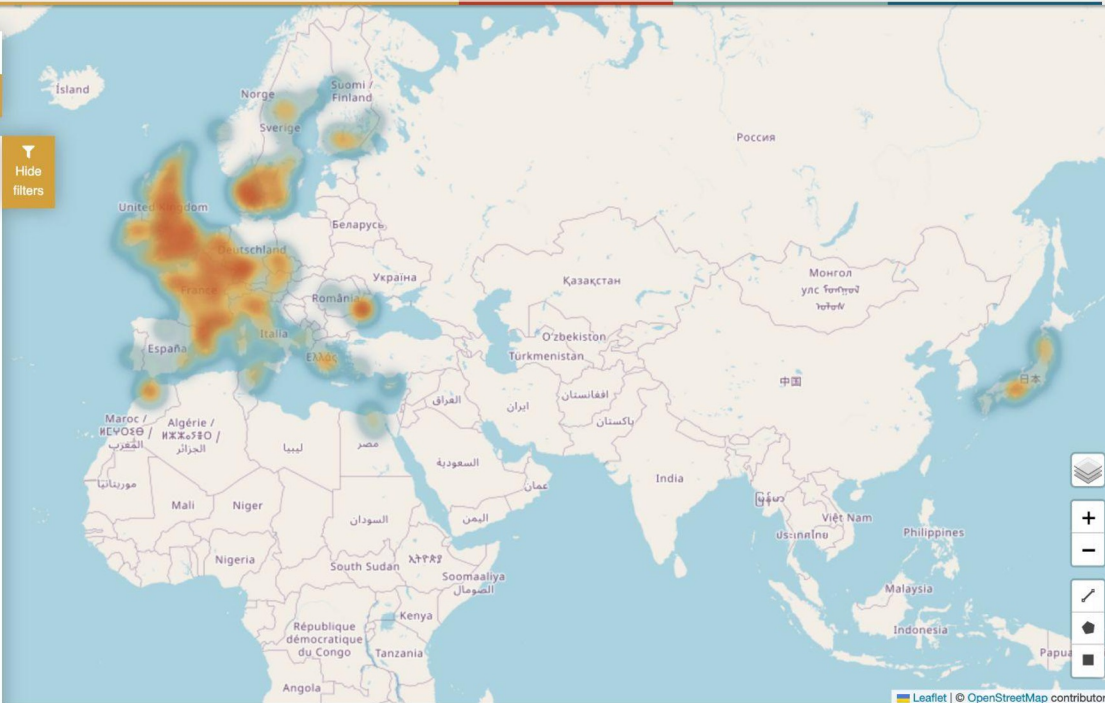
Getty AAT Subjects

Publisher

Contributor

Original subject

Hide filters



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ARIADNEplus is funded by the European Commission Horizon2020 programme under under Grant Agreement n. 823914.

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2,375 resources in the current view

Display as search result

City and Subjects

Publisher

Enter text to filter on Publishers.

Name

Hits

1 Heidelberg Academy of Sciences and Humanities	2059
1 Institut national de recherches archéologiques préventives (Inrap)	209
1 CENIEH	62
1 Archaeology Data Service	17
1 Laboratório Nacional de Engenharia Civil (LNEC)	12
1 International Association for Classical Archaeology	9
1 Data Archiving and Networked Services (DANS)	4
1 THANADOS	1
1 Swedish National Data Service	1
1 CEIPAC - Universitat de Barcelona	1

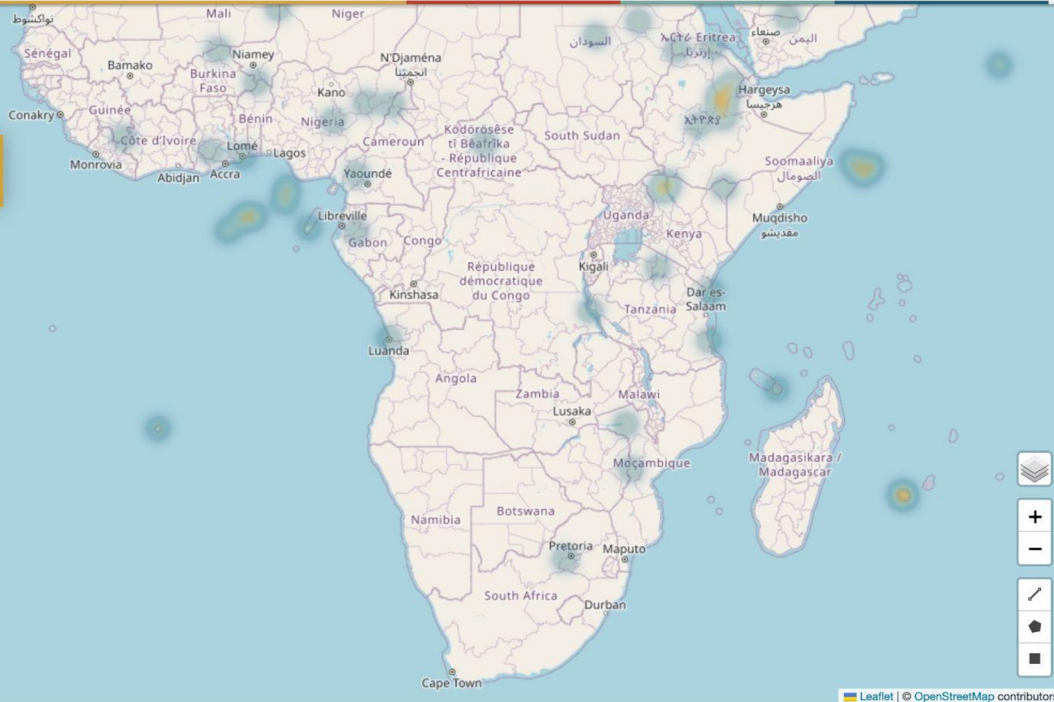
Contributor

Enter text to filter on Contributors.

Name

Hits

Hide filters



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Relationship between BIEA and ADS

Started working with together in 2015 to archive primarily photographic collections from two sites:

- **Aksum in Ethiopia**
- **Kilwa Kisiwani in Tanzania**

Available Collections:

A total of **2** collections in the British Institute in Eastern Africa Image Archive are available from the ADS. These are listed below.



British Institute in Eastern Africa Digital Archives: Aksum

Creators: Neville Chittick

The Digital versions of images and slides from the excavations directed by Neville Chittick in northern Ethiopia from 1972-74 as well as David W. Phillipson's research from the excavations he directed at the ancient Ethiopian capital in 1993-97, and a 1902 Deutsche Aksum Expedition. This collection is part of the British Institute in Eastern Africa's Digital Archive Series.

Collection doi: <https://dx.doi.org/10.5284/1090372>



British Institute in Eastern Africa Digital Archives: Kilwa Kisiwani

Creators: Neville Chittick

The Digital versions of images and slides from excavations at Kilwa Kisiwani. This collection is part of the British Institute in Eastern Africa's Digital Archive Series.

Collection doi: <https://dx.doi.org/10.5284/1090373>

Now expanding to become the *British Institute in Eastern Africa Image Archive*

British Institute in Eastern Africa Image Archive

British Institute in Eastern Africa, 2016. <https://doi.org/10.5284/1038987>. How to cite using this DOI

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[Send e-mail enquiry](#)

Resource identifiers

ADS Collection: 1965
DOI: <https://doi.org/10.5284/1038987>
How to cite using this DOI



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Collection doi: <https://dx.doi.org/10.5284/1090372>



British Institute in Eastern Africa Digital Archives: Kiwa Kisiwani

Creators: Neville Chittick

The Digital versions of images and slides from excavations at Kiwa Kisiwani. This collection is part of the British Institute in Eastern Africa's Digital Archive Series.

Collection doi: <https://dx.doi.org/10.5284/1090373>

Forthcoming Collections:

A total of 5 collections in the British Institute in Eastern Africa Image Archive have been deposited with the ADS and will be made available in due course. These are listed below.

British Institute in Eastern Africa Digital Archives: Hamo Sassoon Collection

Creators: Hamo Sassoon

Digitised photographs, letters, notes and drawings donated to the BIEA by Hamo Sassoon's wife following his death. This collection is part of the British Institute in Eastern Africa's Digital Archive Series.

British Institute in Eastern Africa Digital Archives: John Sutton Collection

Creators: John E G Sutton

The Digital versions of images and slides from donated by John Sutton to the BIEA. This collection is part of the British Institute in Eastern Africa's Digital Archive Series.

British Institute in Eastern Africa Digital Archives: Somalia

Creators: Neville Chittick

British Institute in Eastern Africa Digital Archives: Engaruka

Creators: Peter Robertshaw, Hamo Sassoon, Vesa Laulumaa, John E G Sutton, Ari Siiräinen

The Digital versions of photographs, drawings, and fieldwork notes from the numerous archaeological surveys conducted by the Institutes former Director, J. E. G. Sutton, and from the excavation undertaken in 1989 by Peter Robertshaw in 1984 and 1986. Three further seasons of archaeological survey and excavation were undertaken between 2001 and 2003 by a team from University College, London (UCL) and the BIEA in collaboration with a project led by Ari Siiräinen and Vesa Laulumaa from the University of Helsinki and the BIEA collection contains material from this work as well, including some photographs of excavations made by the Finnish team. This collection is part of the British Institute in Eastern Africa's Digital Archive Series.

British Institute in Eastern Africa Digital Archives: Konso

The Digital versions of images and slides from excavations at Konso. This collection is part of the British Institute in Eastern Africa's Digital Archive Series.

Ongoing Work

- **Five collections now being archived and available soon**
- **Working with a student to digitise the Sassoon Collection**
- **Creating a resources for the BIEA to manage their digital collection**
- **Working with the BIEA Librarian in Nairobi on developing data management strategy (visit in March)**

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BIEA data within BIRI

- ADS consulting with BIRI about how best to make the BIEA resources available
- Primed for BIRI sharing, but specifics to be worked out



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British Institute in Eastern Africa Digital Archives: Aksum


British Institute in Eastern Africa, Neville Chittick, 2021. <https://doi.org/10.5284/1090372>. [How to cite using this DOI](#)


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Primary contact
British Institute in Eastern Africa

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Aksum Images (1970s)
Records 1 - 25 of 2199

Pages: [1](#) | [2](#) | [3](#) | [4](#) | [5](#) | [6](#) | [7](#) | [8](#) | [9](#) | [10](#) | [>](#) | [>>](#)

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PREVIEW				
	<p>General area life: People praying in early morning at Enda Yesus (Filename: bieaaks00558.jpg)</p>	JPG	5 Mb	Info
PREVIEW				



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Thank You!

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