Using the ARIADNE Catalogue

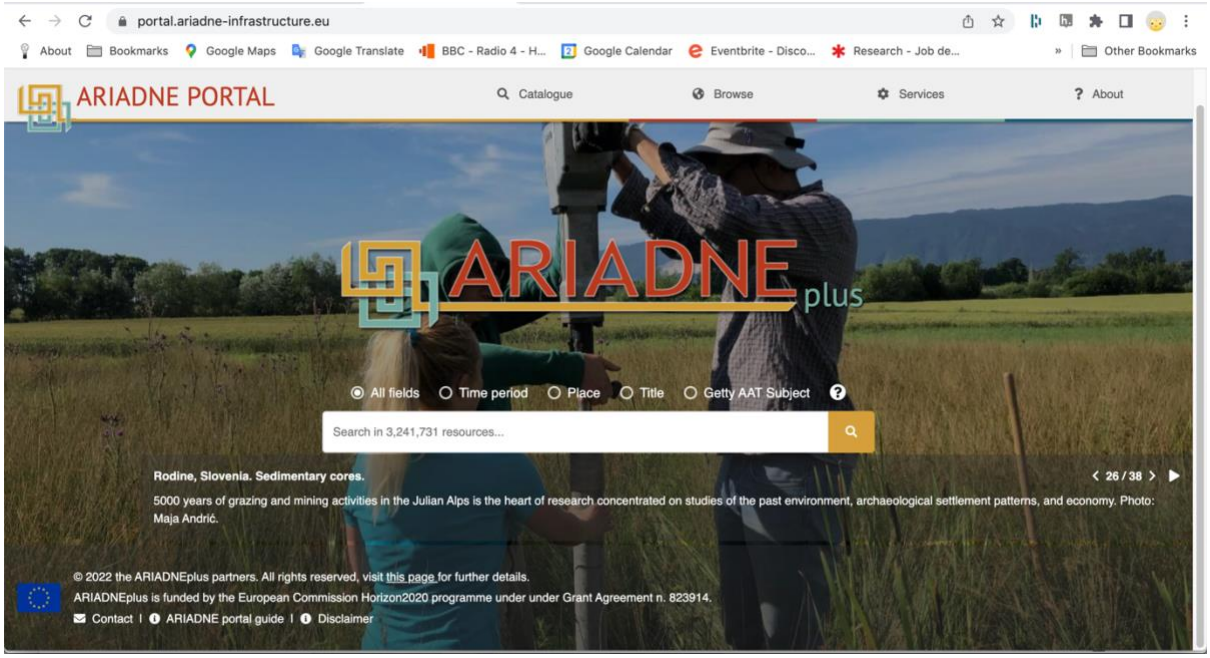
The ARIADNE Portal consists of a Catalogue providing access to over 3.5 million archaeological resources which can be searched and filtered according to a number of criteria. The returned results from the search facilities provided with the Catalogue are listed individually and also as aggregated results on a map and as a timeline. This Guide aims at helping all end users to get the maximum benefit from using the Catalogue.

A separate section of the Portal provides several services to assist archaeologists with their research, from planning data management, exploration and analysis to display of all types of data (including from the ARIADNE Knowledgebase, where applicable). Each of these services has its own information on their use and application, so are not covered by this Guide.

For further information about the Project and the Portal, see the **? About** page: https://portal.ariadne-infrastructure.eu/about.

Searching the catalogue

Entry to the catalogue consists of a text entry search box with the option to apply one of four filters.



The search is designed to start with one or more key words where logical “AND” is applied. For example, a search for “gold coin” will return only records where both these words are to be found in the metadata record. The default setting is “All fields”, i.e. the whole record is searched for matching terms. Omitting a key word defaults to the entire Catalogue, the returned results depending on the filters selected.

There are four filters available for a more targeted search:

- **Time period** - name of time period(s) e.g. Iron age, medieval...
- **Place** - place name which can be anything from a specific location to a continent.
- **Title** - only the title fields are searched for matching terms.
- **Getty AAT Subject** - the subject(s) defined by the data provider are matched to the Getty Arts and Architecture Thesaurus which enables the end user to see and search for data with matching translations and also related terms.

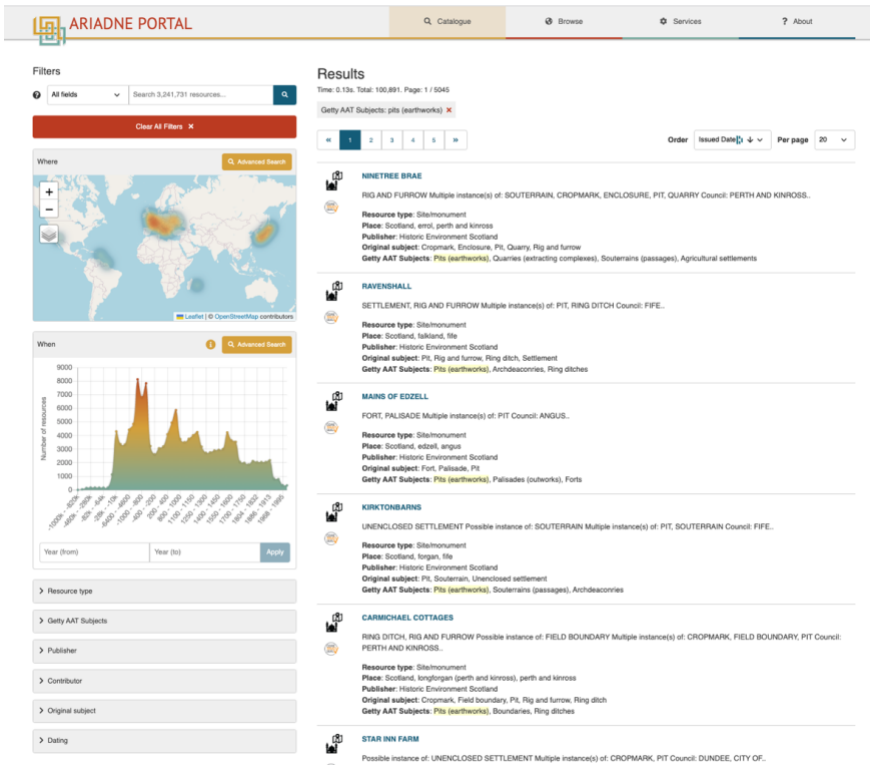
For the **Time Period**, **Place** and **Title** filters, only exact matches in the language used are returned. E.g. if Time Period is selected, the Swedish term for Bronze Age, “bronsålder”, will return all records with the text “bronsålder” in the Dating field.

The **Getty AAT Subject** option enables a multi-lingual search to be performed by returning all records that contain a native language match (in the **Original subject** field) to the English Getty AAT subject as well as that specified in the **Getty AAT Subjects** field when this is present. Furthermore, since the search is hierarchical, any broad term such as “weapons” will also include all sub-categories such as swords, axes, daggers, etc. The search will return records that contain these subjects as well as those with matching terms in other languages.

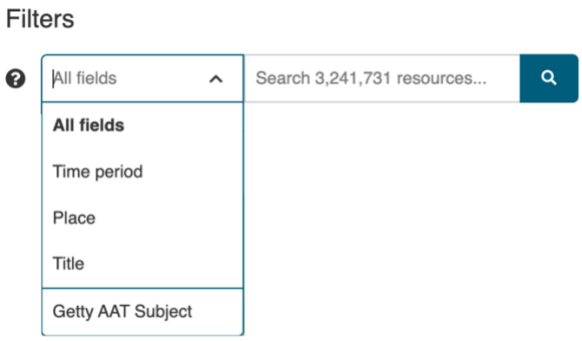
More on the Getty AAT: https://www.getty.edu/research/tools/vocabularies/aat/about.html.

The Search Results page

The search results are displayed along with a wider range of filters which can be used to further refine the results.

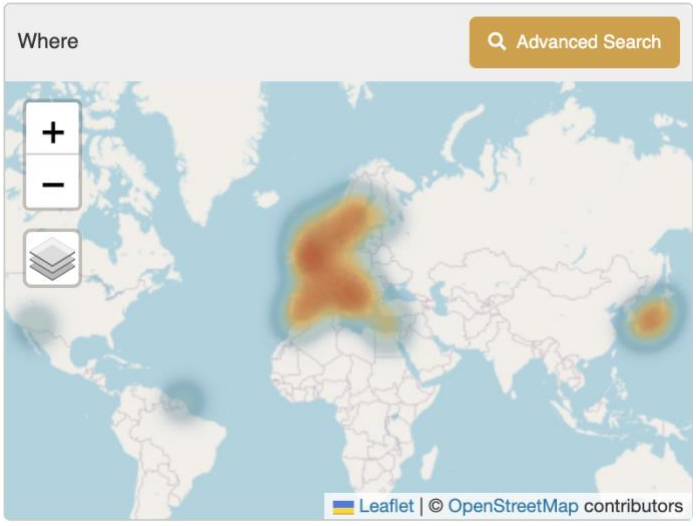


The filters in detail

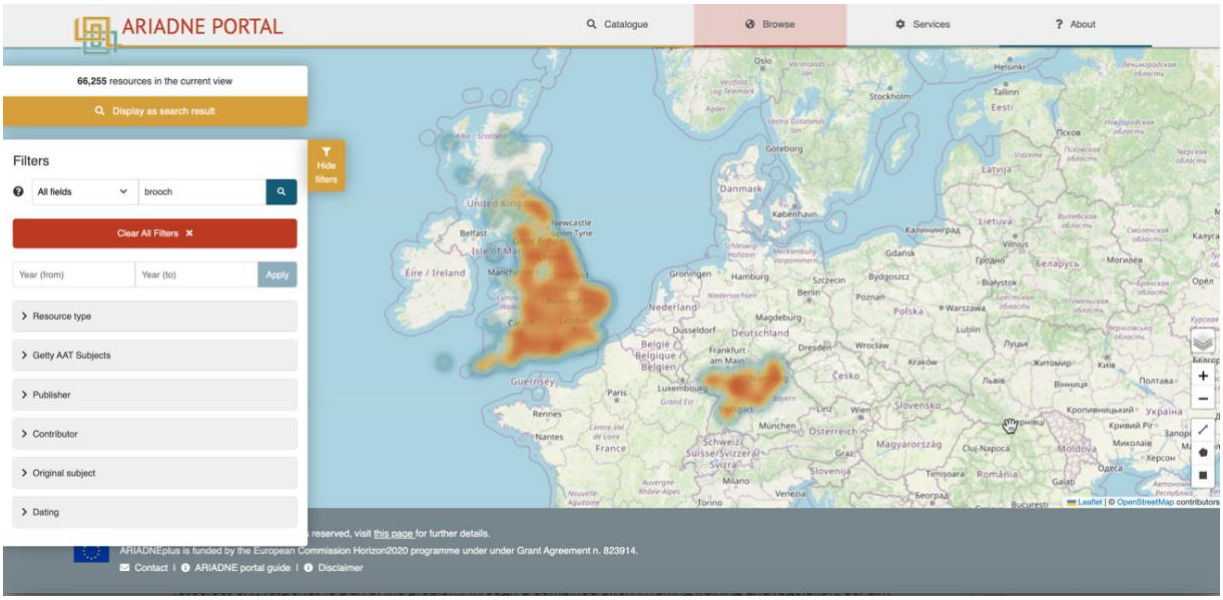


The first set of filters are a repeat of those to be found on the Catalogue start page as described previously.

The Map (Where)



The map on the Results page displays the location of the records returned in the search results (where co-ordinates have been provided). These are shown as ‘heat spots’ at this macro level. Clicking on ‘Advanced Search’ will open the Map filter page where the search results can be refined geographically by selecting an area on the map.



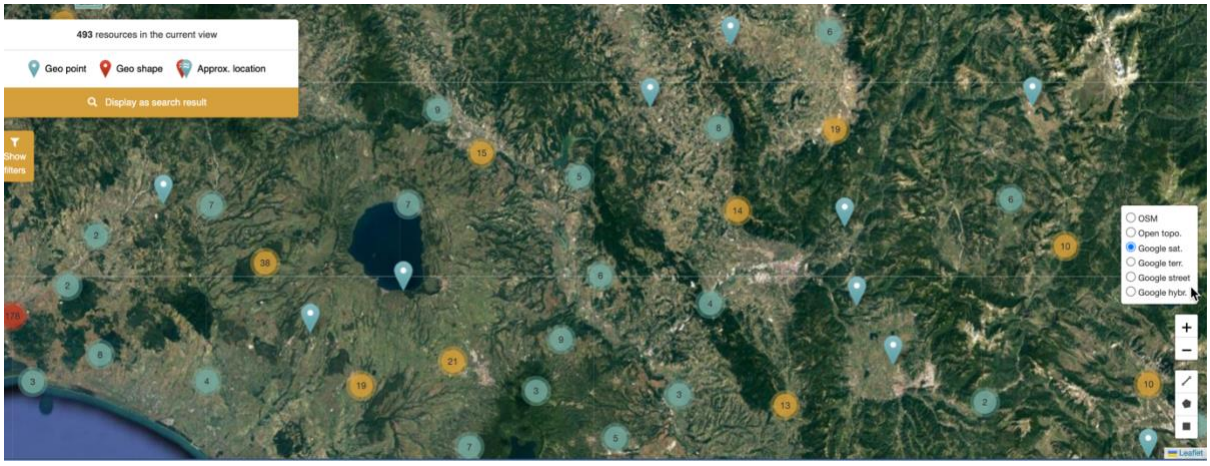
As the map can be user inter-changeably with the other filters, these are displayed on the left side of the screen. They can be hidden by clicking on the yellow tab to the right of this column (Hide filters).

The default view is a geographic Open Street Map (OSM) showing national borders. Note that native language place names are used on this map.

There are a number of options for use with the map filter, the icons for which are shown in a column in the bottom right hand corner.

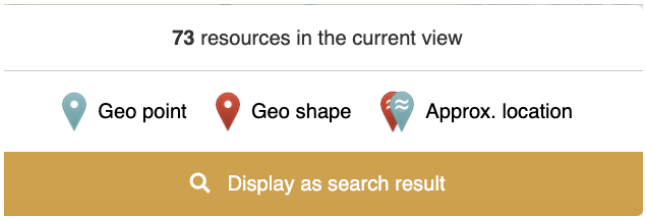
Icon	Description
	The Layers icon displays a sub-menu with six different options for the display of the map, four of which are from Google including a satellite and a street map version (granularity will depend on level of survey) and where English is used for all place names.
	The Zoom (in and out) icons for panning in and out of geographic regions. This can also be achieved with a touchpad (and mouse where enabled).
	The Drawing tools icons: The Line tool will display the distance covered as each point is drawn. The Polygon tool defines a multi-sided area on the map. The Rectangle tool defines a rectangular area between two opposite corners. The results are updated to show only the records located within the defined areas.

Once an area of interest has been defined, all the related resources can be displayed on the Results page by clicking on the ‘Display as search result’ part of the information box displayed in the top left corner of the screen.



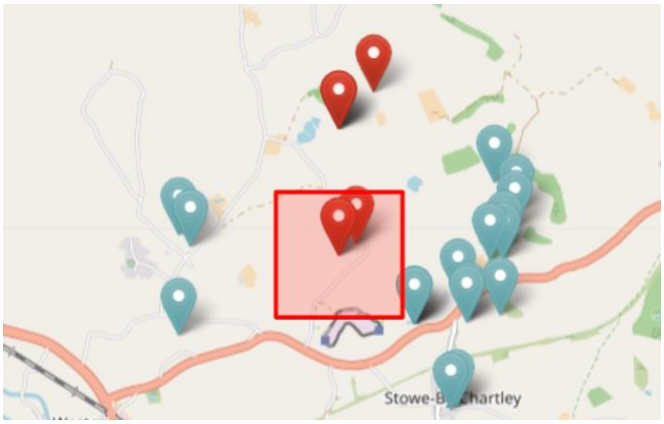
Map shown in Google Satellite mode showing both individual and clusters of resources

Representation of resources on the Map

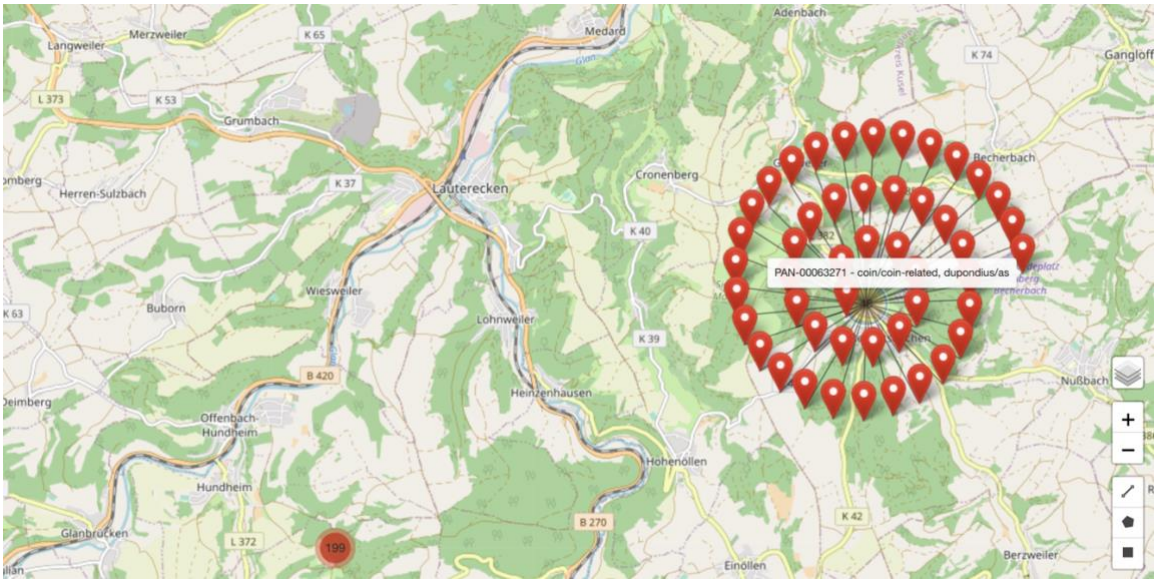


Different modes are used to represent how resources are shown on the map.

- A **Geo point** shows a single resource with exact co-ordinates. If there are more than one Geo point on the Map, then the one for the current resource is denoted by an inner red ring.
- A **Geo shape** indicates a resource where the location is not precise. This may be due to the location being given as a geographical area (e.g. a town or region) for a resource or, for example, reports which cover large and/or multiple locations.
- **Approx. location** icons are shown where the location of the resource is considered to be sensitive, for example, ship wrecks or sites where valuable metal artefacts have been found. Blue 'pins' indicate an approximate point and red 'pins' an area. The individual record for red 'pin' sites will display a defined (often rectangular) area for the resource where the actual location will be a random point within the shown area.



In this example, the red outline defines the area in which a gold finger ring was found and contains two other resources with nearby, imprecise locations. Other resources, both with exact and imprecise locations can also be seen within the larger area.

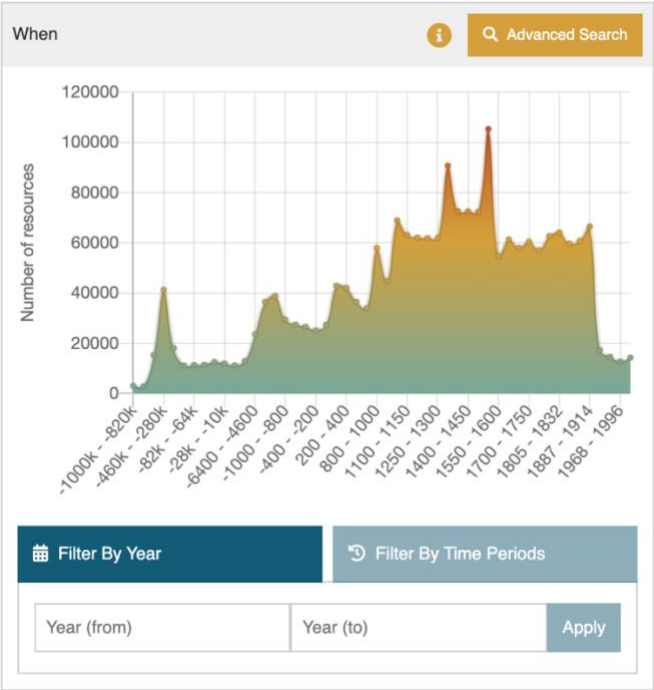


Mouseover can be used on each individual Geo point and Geo shape to display the title of the associated Resource. In this example, the circular pattern of Geo shapes refers to a cluster of resources which have all been allocated the same approximate location (i.e. the centroid point) and which can be clicked on to go to the related resource record.

Note that the Map functions in the same way in the Browse options as for the Results page, i.e. the same icons are used. There are some minor differences for the Map on the individual Resource page which are mainly to do with the display of an imprecise or approximate location for a resource.

Time period filter (When)

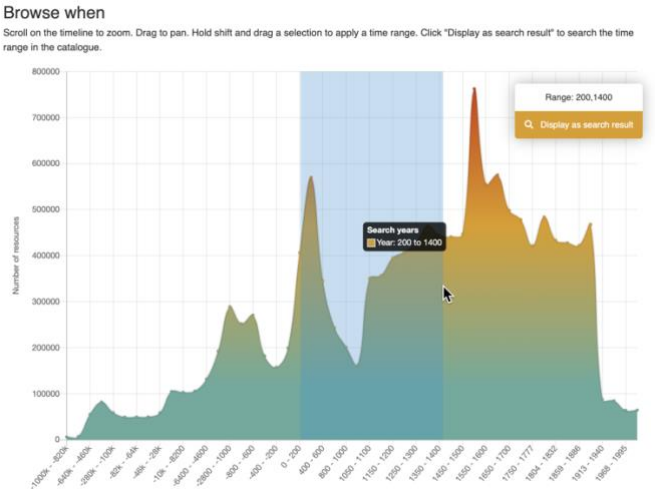
The When filter consists of three different ways of selecting a time period of interest: a graphic where the mouse is used to select the date range, a text entry box where the start and end year can be specified and a separate filter that uses named time periods as defined in PeriodO.



The Time Period graphic displays the resources returned in the search results by date distribution.

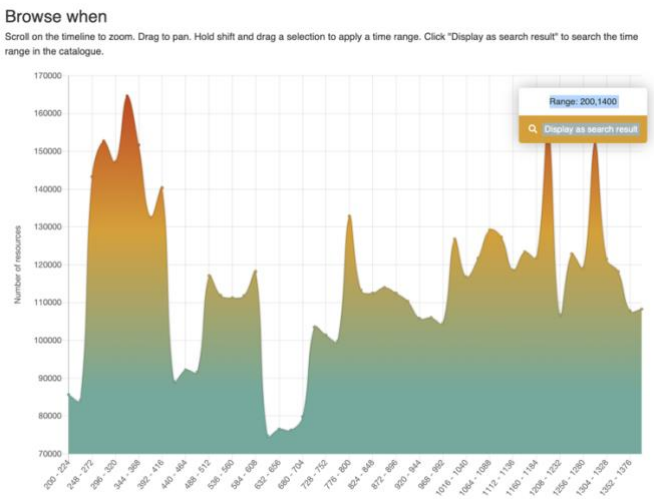
The search results can be refined by Clicking on ‘Advanced Search’ to display the Time period filter page (Browse when).

If no search term is used or the filter is accessed via the ‘Browse when’ option, then the graph shows the date distribution for the entire catalogue.



Using the mouse with the Shift key directly on the graphic can used to define a shorter time period -200-1400 C.E. in this case.

Scrolling with the mouse will cause the time period graphic to expand. If the mouse is placed closer to the left side, the x-axis will ‘stretch’ from the left (reducing the end date), placed to the right the start date increases (‘stretch’ from the right).



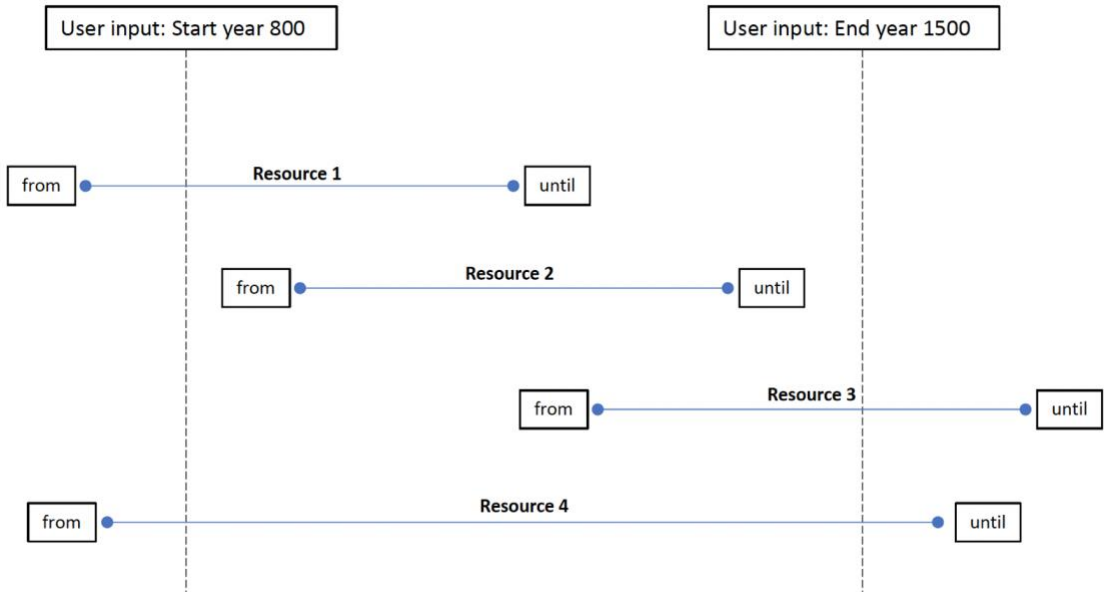
Each time the time period graphic is changed, the range updates to show the selected time span. The distribution of the resources by date is recalculated, shown in greater detail as the period range reduces.

Clicking on ‘Display as search result’ returns to the Search Results page with the refined record set.

Filter by Year

An alternative method for selecting a time period is to enter the start and end years in the text box below the graph.

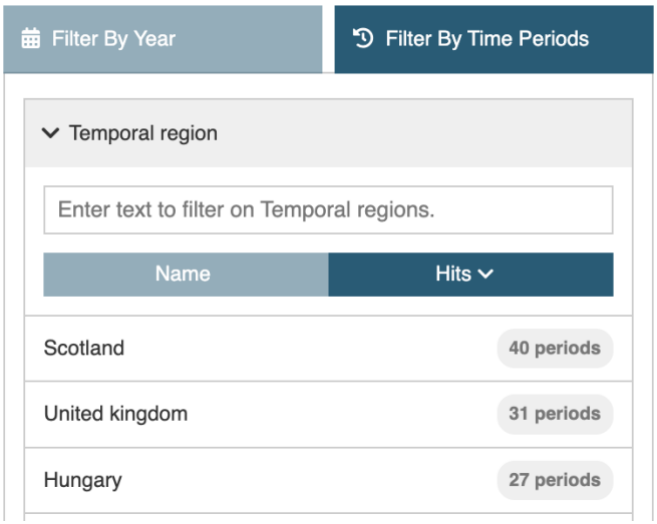
In both methods, (graph and direct year entry), all records that specify a time period that either falls within and/or overlaps the specified time period will be returned in the results – as shown in the following illustration.



Filter by Time Periods

The third option enables filtering of the results by named time periods as defined in PeriodO. There are two stages for this filter: Temporal region and Cultural period. The Cultural period can be used standalone or in conjunction with the Temporal region. These work as follows.

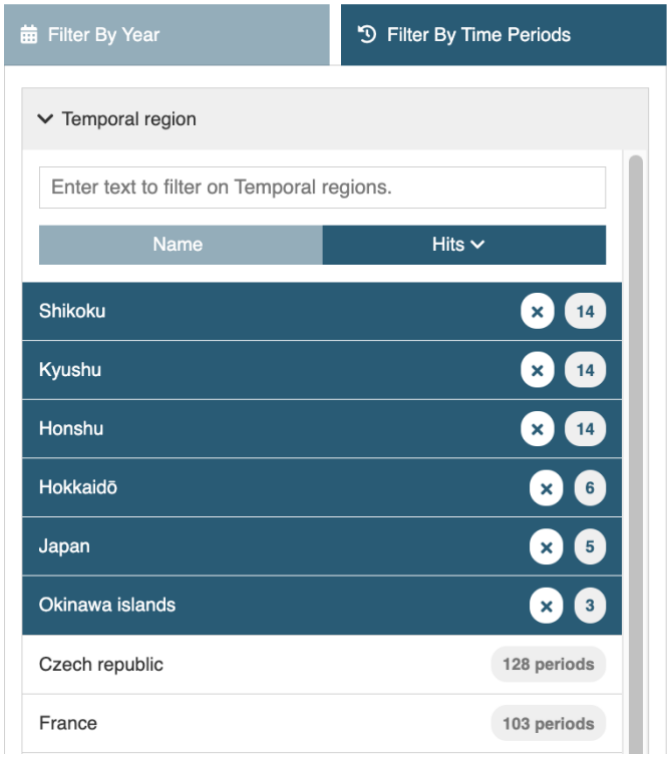
Temporal region



This option is used to select one or more (mostly modern day) regions of interest. The majority are at the country level, although Japan is also represented by regions such as Shikoku, Kyushu and Honshu and there are also some larger (historical) areas such as the Byzantium Empire.

Next to each of the region names is the number of defined periods in PeriodO.

Clicking on the Temporal region box will display the first 20 regions in order of the highest number of defined periods onwards. Alternatively, the text input box (*Enter text to filter on Temporal regions*.) which is displayed above the list can be used to find a region – all matching options are shown as each letter is input. One or more regions can be selected from the list.

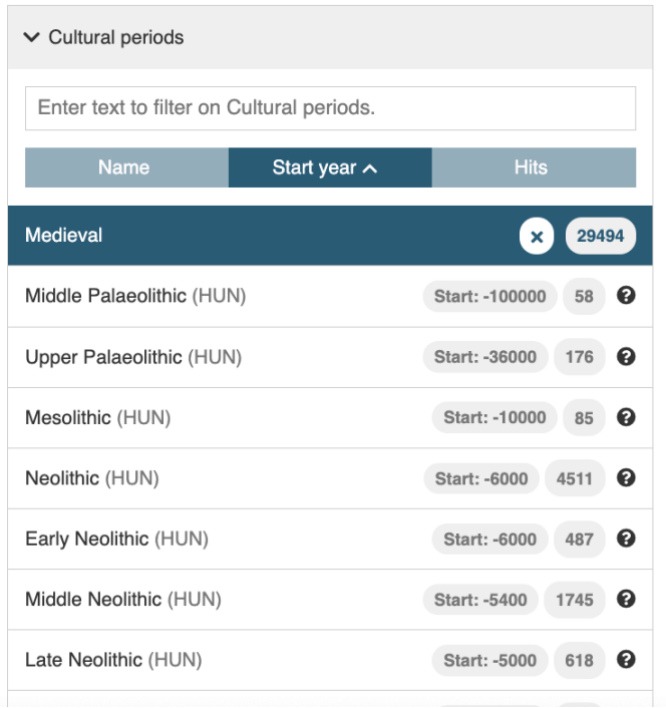


Each selected region automatically moves up to the top part of the list. Regions can be removed and added as required.

Once selection of the regions is completed, click on the *Cultural period* Option to display the list of periods associated with each region. These are listed in date order, starting with the earliest start date.

Note that the time period graph, map or results page do not update as the filter is not complete until one or more Cultural periods have been applied.

Cultural periods



Cultural periods displays all the named periods in date order (from earliest start date) along with the number of hits (matching resources). For each named period, the matching territory is indicated (with ISO 3 letter country code, if available) along with the start year, the number of resources and a Help icon.

Once both at least one *Temporal region* and one *Cultural period* have been selected, the Results page is updated along with the When time graph. The map is also disabled for use as an additional filter.

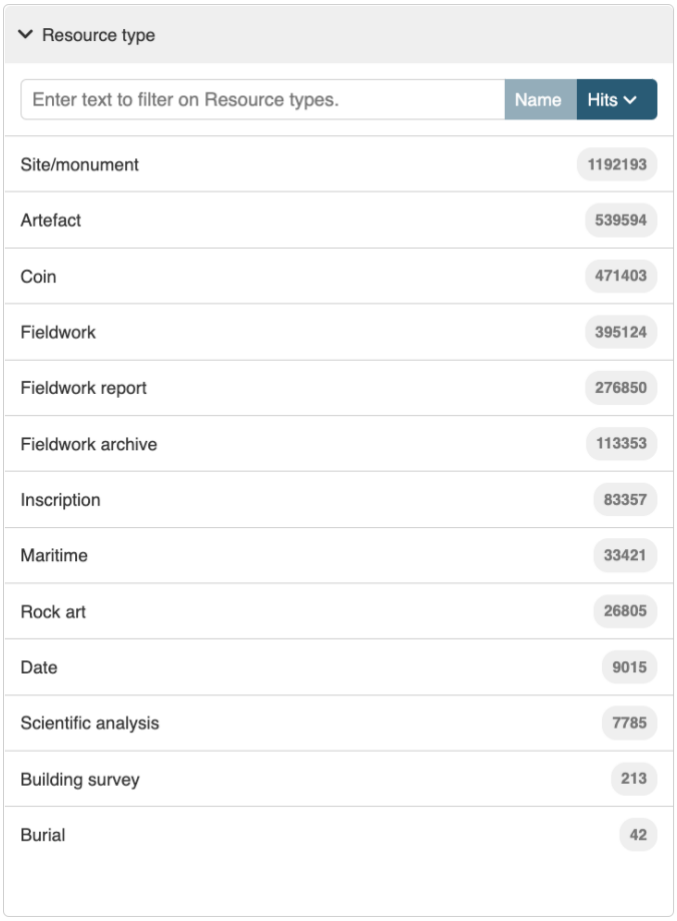
Using mouseover on the Help icon reveals further information about the period (Medieval (HUN) in this case).

The Cultural period box will display up to the first 20 periods, more, where these exist, can be shown by clicking on the *Get 20 more results*... option at the bottom of the list . Alternatively, the text input box (*Enter text to filter on Cultural periods*.) which is displayed above the list can be used to find periods – all matching options are shown as each letter is input.

The Cultural period filter can also be used independently of the Temporal region, especially when a specific period is of interest (regardless of different start and end dates according to region). For example, entering ‘Roman’ in the *Cultural period* text box will result in several matches from countries across Europe.

Resource type

The Resource type is an ARIADNE concept designed to categorise the resources into general areas of interest to archaeologists and the names are mostly self-explanatory.

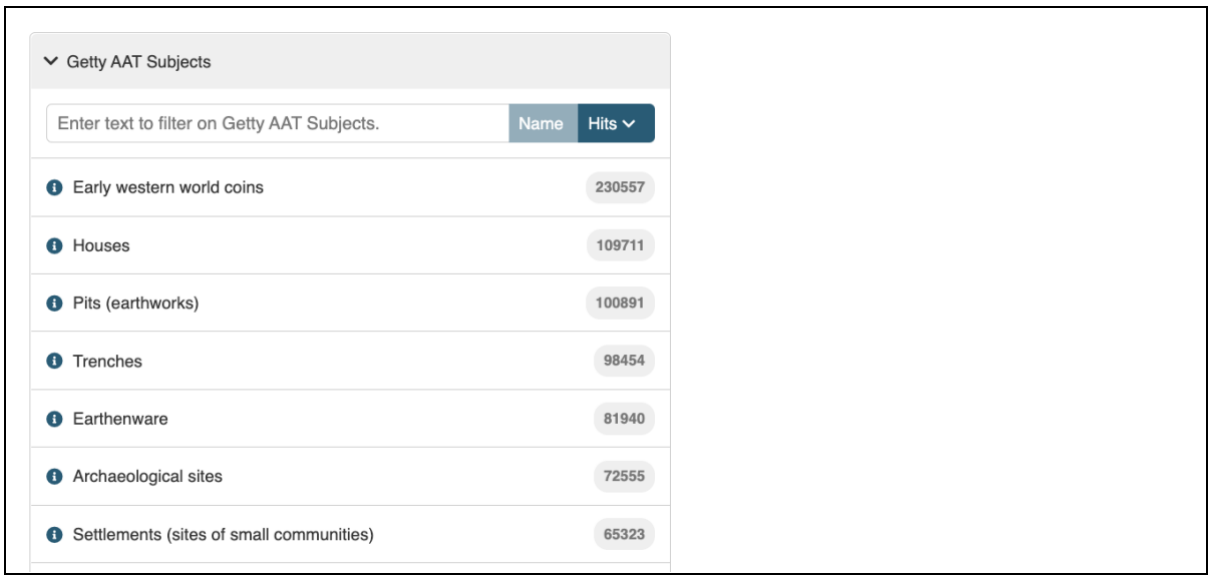


Those Resource types that may need clarification are:

- Fieldwork – normally a record relating to specific fieldwork e.g. evaluations, interventions, etc.
- Fieldwork report – these always have a link (URL or DOI) to the actual document.
- Fieldwork archive – the record refers to a collection of documents, images etc. relating to a site (accessible from the DOI supplied).
- Dating – datasets using for dating materials e.g. radio carbon and dendrology.

More than one Resource type can be selected but as ‘AND’ is used with each term, this will only result in records where all the terms have been used. For example, all “Maritime” resources are also classified as Resource type “Site/monument” so combining both Resource types has the same result as selecting just ”Maritime” (this is logical as currently the maritime records relate to ship wrecks). Conversely, Resource type “Artefacts” and “Coins” have been applied separately and the only record that is returned matching both Resource types is the Collection record for the Portable Antiquities Scheme. In most cases, this filter is useful for excluding records that do not match the specified Resource type.

Getty AAT Subjects



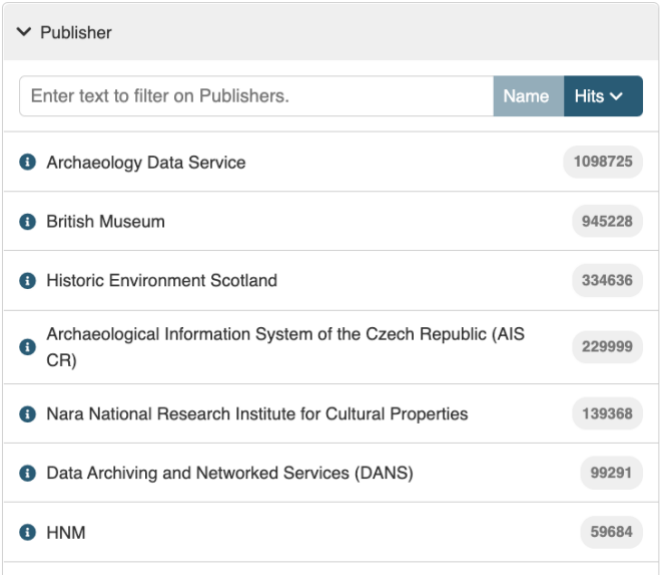
The Getty Arts and Architecture Thesaurus (AAT) has been used to classify each resource, mapping the original subject(s) to those found in this extensive ontology. Over one thousand terms have been used and each resource usually has more than one term assigned to it.

The Getty AAT is hierarchical in structure and when a (single) higher level term is specified in this filter, the search results will also include all the sub-categories. So, the general term “weapons” will also include resources with terms such as “knives”, “spears” and “daggers” as these are sub0-categories of “weapons”.

When multiple terms are used as a filter, logical ‘AND’ is applied so only resources matching all the terms will be returned in the search results. Hierarchical sub-categories are not used with multiple terms, only the term specified. Hence, if a search was made for “Weapons” and “Warships”, there are no results but if “Cannons (artillery)” is used instead of weapons, then there are results as both the exact terms have been used for the matching resources.

When a set of search results is displayed, the Getty AAT filter will only show the first 20 terms found within the current set of resources, starting with the most numerous matches ordered by size. More terms can be displayed by clicking on the “Get 20 more results..” box at the end of the displayed list which extends the list with a scroll bar. This can be repeated until all the matching terms may be viewed.

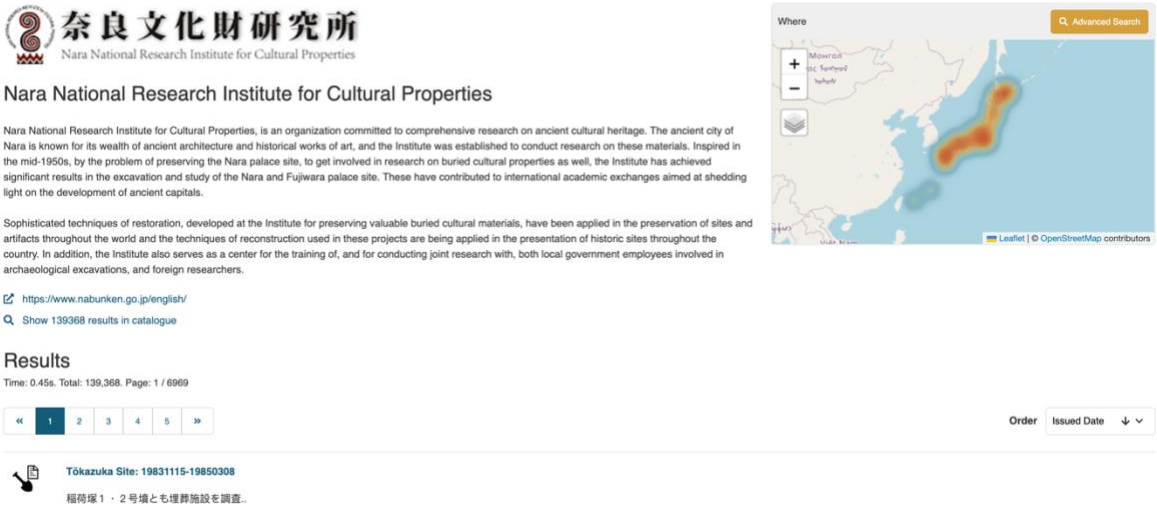
Publisher



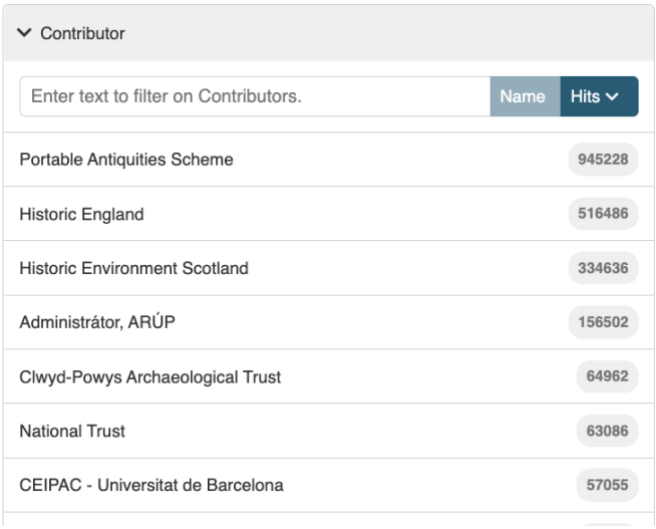
The Publisher is the organisation which has supplied the metadata to the Catalogue and is responsible for the maintenance and updating of this metadata.

The Publisher may also own the original data or be responsible for its maintenance as in the case of regional and national repositories.

Note that the “i” icon next to each name provides a short summary about the Publisher in a new page which also shows the geographic distribution of their records on the map and the first 20 of these below a link to the Publisher’s website. The second link will display the results in the standard ‘Results’ page.

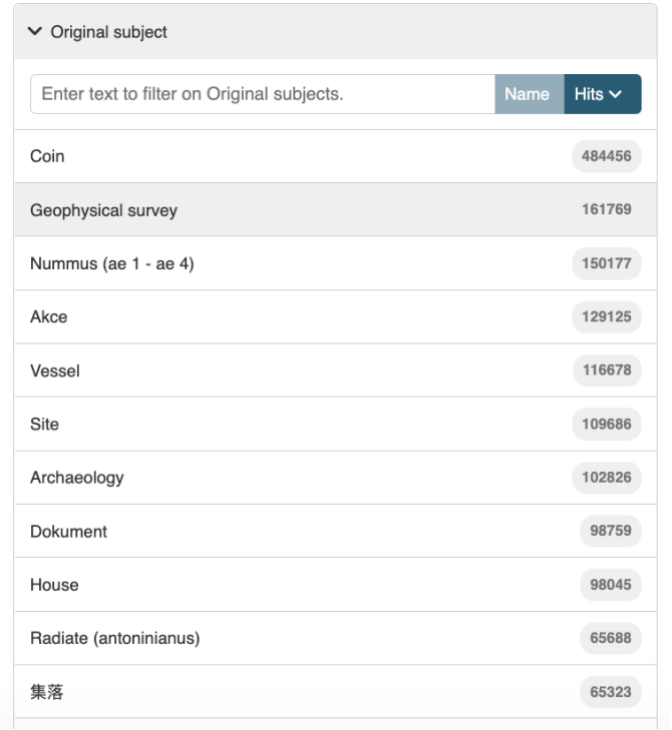


Contributor



The Contributor is usually (but not always) the original owner of the data but not the Publisher who will have created and mapped the metadata in the Catalogue on behalf of the Contributor.

Original subject

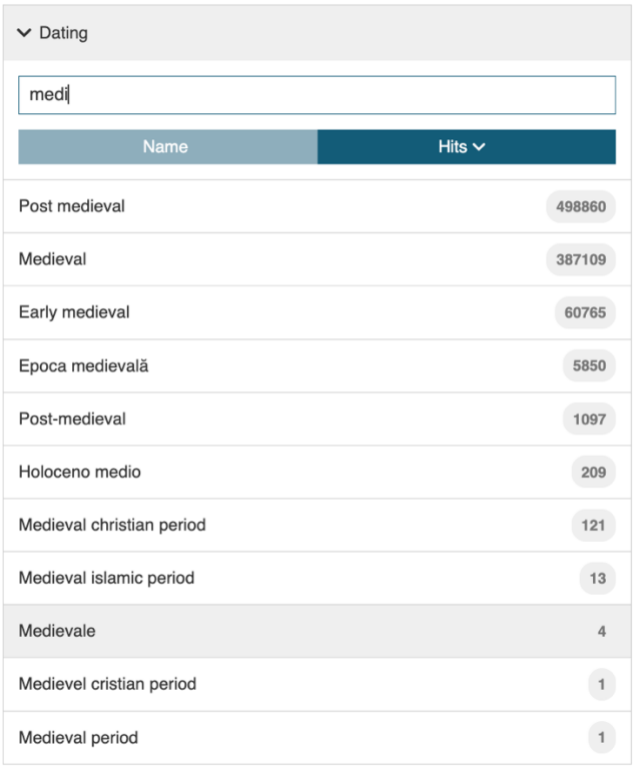


The original subject is the term from the ontology used by the Contributor and/or Publisher and which is then mapped to the Getty AAT.

The Original subject will, in most cases, be in the native language of the provider. The option to filter using alternative, localised terms facilitates both multi-lingual searches (i.e. in languages other than English) and terminology specific to a Publisher (country).

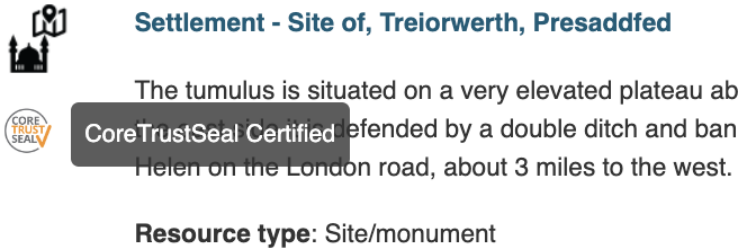
Dating

The dating filter can be viewed as a ‘catch all’ filter which works solely on the information in the ‘Dating’ field of the metadata. This is a broad category which includes named periods as well as date numerals, general terms such as ‘16th century’ and localised terms specific to regions. Rather than lose this information and make resources less findable, the Dating filter is intended to cover all the resources, some of which may not have both start and end dates or PeriodO definitions.



In the example here, all matches to the first four characters “medi” entered in the text box are listed. As can be seen, there are several matches to the (intended) term of “medieval” and also a few others where different spellings or languages have been used in the original metadata. One term, Holoceno medio (Mid-Holocene) is an unintended match.

Icons associated with individual resources



Icons are also used to denote the type of resource, there is a different one for each Resource type (as found in the filters).

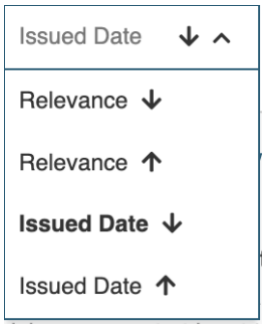
If a resource such as a Collection or a Fieldwork archive, for example, contains more than one Resource type, then the icon will be displayed for first Resource type listed in the metadata regardless of the actual one selected. This is evident for the Resource type ‘Scientific analysis’ as these datasets may be part of a larger collection or Fieldwork archive.

Resources that are to be found in a CoreTrustSeal certified repository will also have this icon displayed next to them.

Options for displaying the results

At the top on the right hand side of the Results page are two options for controlling the display of the results, Order and Per page.

Order



(Current setting)

Most relevant results

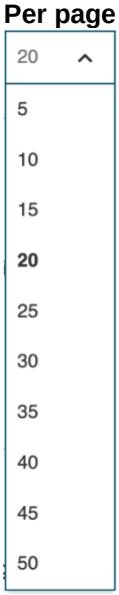
Least relevant results

Most recent records

Least recent records

Relevance is the best match to the text search criteria. If the filters are used without a text term, the resources are shown in the same order they appear in the Catalogue. The Issued date refers to when the resource was uploaded into the Catalogue (and appears in the individual resource metadata).

Per page



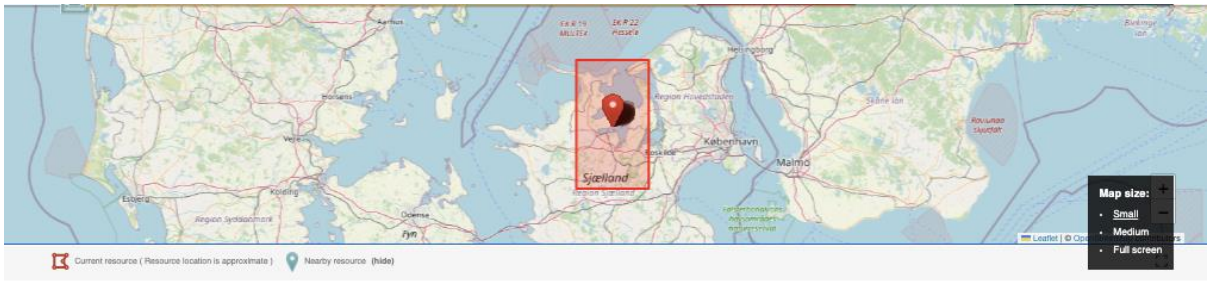
The default number of resources shown on the Results page is 20. The Order option enables this to be changed from between 5 to 50 per page.

Further information for 'Relevance'

Relevance is basically a score allocated to resources which match the current search criteria based on the metadata fields. This score determines the order in which the resources are listed (i.e. from highest score to lowest or vice versa). The algorithm used gives the highest score to matches to the Title, followed by the Description and then the Subject fields (i.e. nativeSubject and derivedSubject) after that with other fields such as location and time etc. also adding to the score (as and where relevant).

The Individual Resource page

Clicking on the title of a resource from the Results page will display the metadata record and all associated information for that resource. At the top of the page, the resource's location is shown on a map where zoom in and out can be done using the '+'and '-' icons on the right hand side. This example is from the DIME database and since it is a find, the location is shown as an approximate area where this particular coin was found. The Geo shape indicates that there is at least one other find nearby and clicking on it will display the relevant record. Multiple finds are displayed in sequence (i.e. click through one at a time) to avoid displaying multiple bounding boxes.



Mønt

Description

Meget velbevaret Gros Tournois, Phillip III-IV, 1280-1305, Frankrig. , Materiale: Sølv, Vægt: 3.77g, Længde: 258mm

Metadata

Original ID: 122852

Language: Danish

Resource type: Artefact

Subject - AAT: coins (money) (en) **Subject - Original:** Dime.find.coin

Dating: Middelalder: 1067 to 1535

Place: Halsnæs municipality

Type: Dataset (Provided record)

Publisher: Aarhus University

Issued: 2021-05-25

Last updated: 2021-05-25

Responsible person and organisations

Creator: Museum Nordsjælland

Contributor: Museum Nordsjælland

Owner: Aarhus University

Responsible: Aarhus University

Licence information

Access Rights: CC BY-NC-SA

Images

Resource links

Json Xml Rdf Report an issue

Resource is part of

DIME (digital metal detector finds)

Thematically similar

Thematically similar resources based on terms in common of:

Subject & Time period

Dansk borgerkrigsmønt (1242-1380)
Dansk borgerkrigsmønt (1242-1380)
Dansk middelaldermønt
Hulpenning
Dansk borgerkrigsmønt (1242-1380)
Klipping
Armring

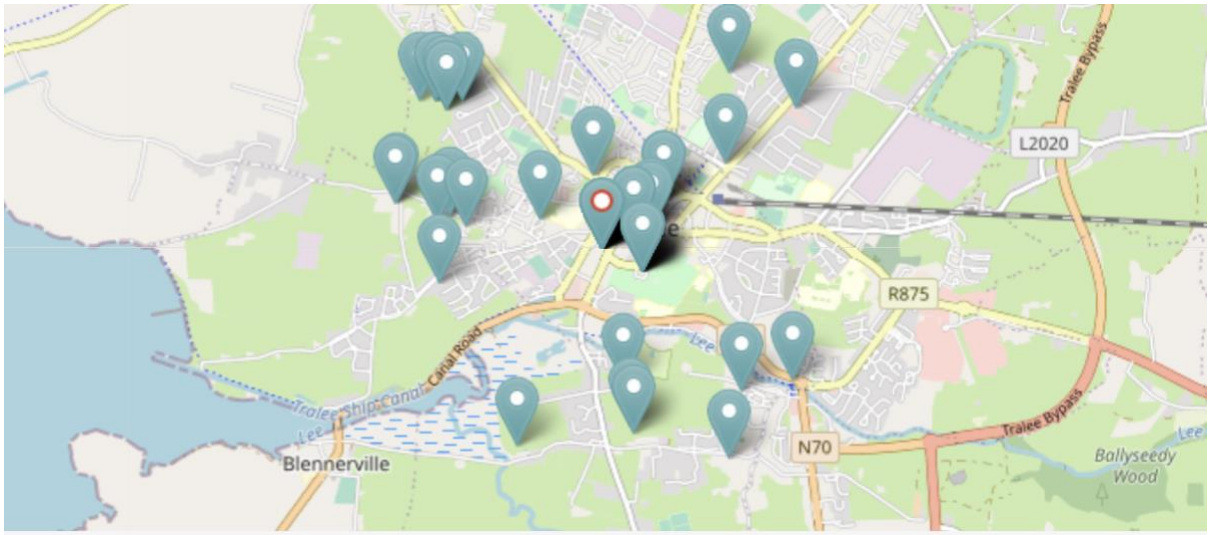
Tags

Coins (money)
Middelalder
Halsnæs municipality

The map can be enlarged by clicking on the frame icon below the Zoom icons to display the Map size menu as shown here. The size of the map on the resource page can be increased (and reduced) using the Medium and Full Screen options, the default setting being Small.

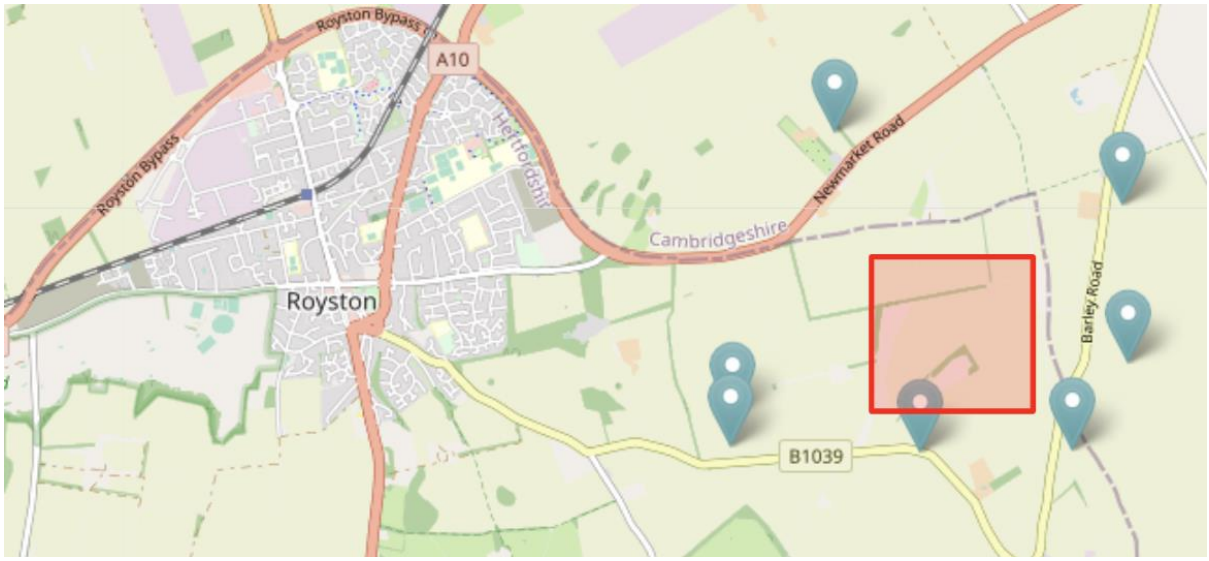
Display of near-by resources on the map

For each record for an individual resource, the map may also display Geo points or shapes for other resources located close by which are included in the returned search results. In the example below, the search term 'Sword' was used and this record (published by the National Monuments Service, Republic of Ireland) includes this word in the description of the Chest tomb panel that this record refers to (denoted by Geo shape with the red circle inset). Note that this resource would not be included in the search results if the Getty AAT term filter was used. There are several other sites and monuments of interest in this area, each denoted by a separate Geo shape. Clicking on any of the Geo shapes will display the associated resource.

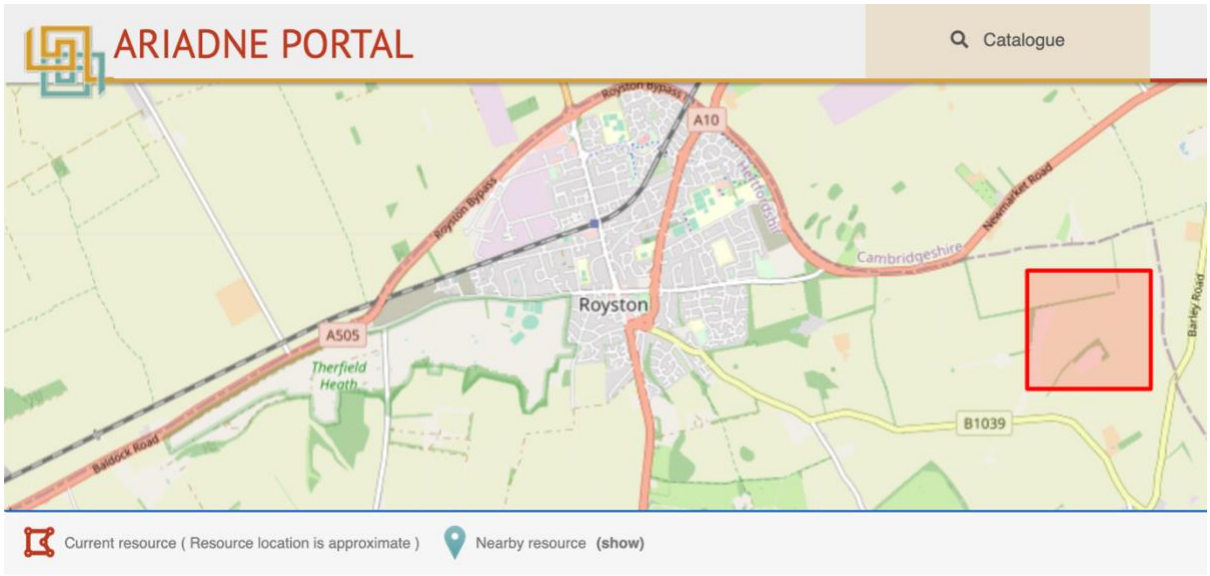


URL: https://portal.ariadne-infrastructure.eu/resource/7c2db68bc992937c2c71040f9da411c0a6f75bb56d139b1570bdce84412502e4

The display of nearby resources can result in an approximate location shape for the current resource containing one or more icons (as well as close by) which refer to different nearby resources. In the following example, the resource map shown is for a Gold Quarter stater (resulting from a search for gold coins). There is no Geo shape for the coin as an approximate location is used as indicated by the red bounding box. However, seven other nearby resources are shown as separate Geo shapes and each record can be displayed by clicking on the Geo shape associated with it.



URL: https://portal.ariadne-infrastructure.eu/resource/e4650c3fd5cb8ed3180df20ea5da170b738a7525bd96c9edf5ad9c7c9389f1e2

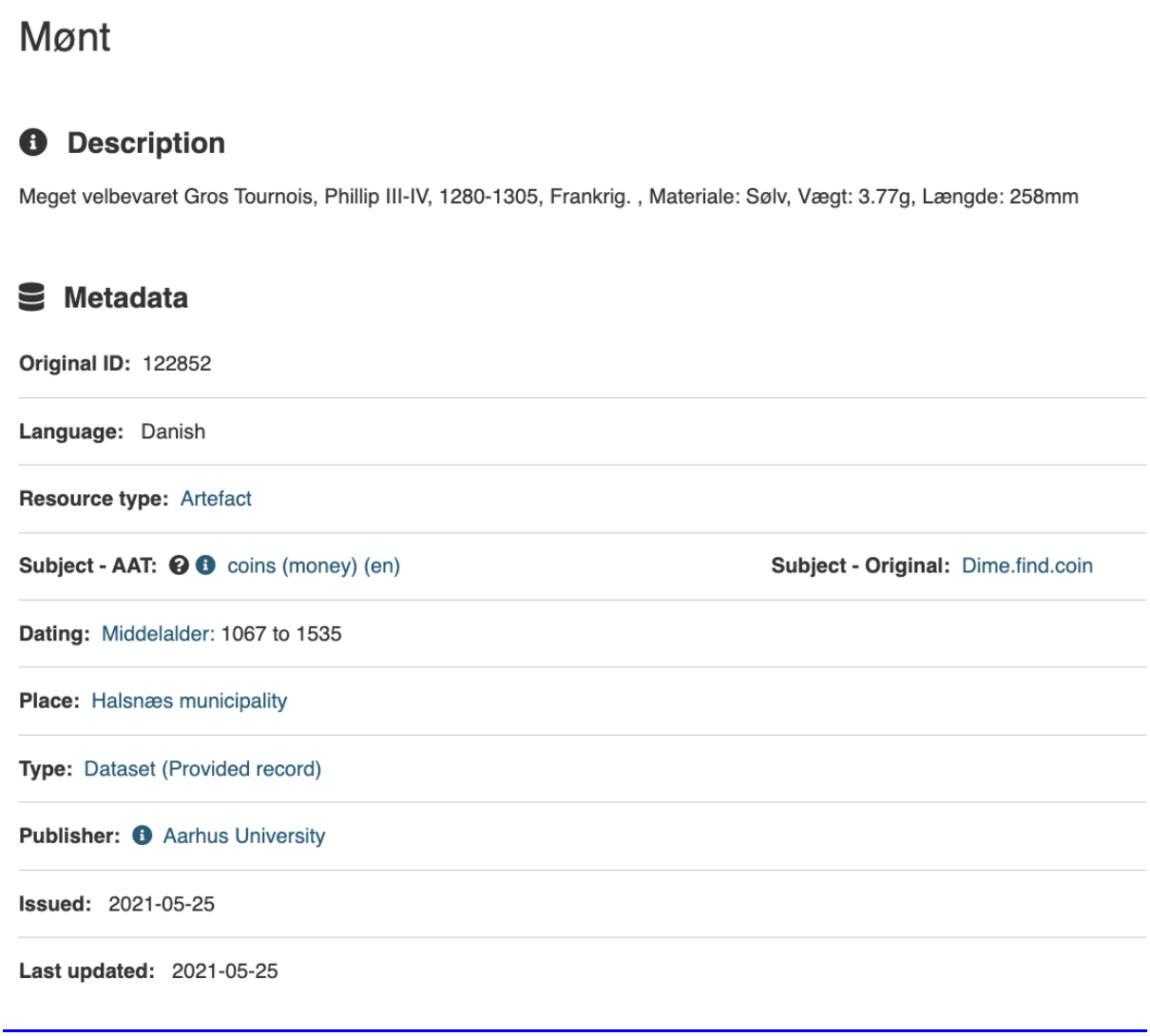


Nearby resources can be hidden and shown by clicking on the toggle Geo shape icon “Nearby resources” on the left below the map. In the above example, only the approximate location of the resource is now shown after hiding the nearby resources.

Note that where the location of a nearby resource is also defined by an approximate location, this is shown as a Geo point as displaying overlapping shapes would get messy. If there is more than one resource with an overlapping bounding box, only the next resource in the sequence is shown. Each (overlapping) resource may be displayed in turn by clicking through the sequence.

The metadata

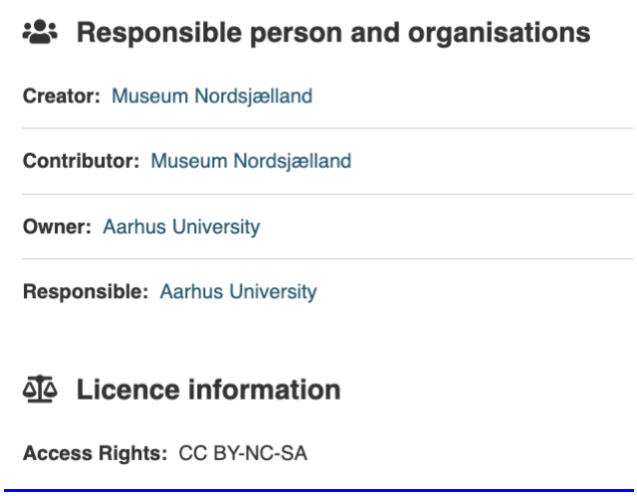
The Title of the resource (Mønt) is shown followed by the Description (in Danish) and several self-explanatory Metadata fields.



Note that the Google translation for the Description is: *Very well preserved Gros Tournois, Phillip III-IV, 1280-1305, France. , Material: Silver, Weight: 3.77g, Length: 258mm*

In addition, the Resource type is ‘Artefact’ rather than ‘Coin’ as all DIME database resources are classified using this broader term. The Getty AAT subject is used to provide a more accurate description.

Responsible person and organisations, Licence information



The **Creator** is the original author of the resource information.
The **Contributor** is the organisation (or person) who has supplied the metadata about the resource.
The **Owner** is the organisation (or person) who owns the licence.
The **Responsible** is the organisation (or person) legally responsible for the maintenance of the resource data.
The **Licence** is Creative Commons and indicates the permitted access and reuse of the metadata.

Images

Some of the resources in the Catalogue also have images which are shown at the bottom of the page.

The first image is also shown as a thumbnail with the summary information on the Results page.

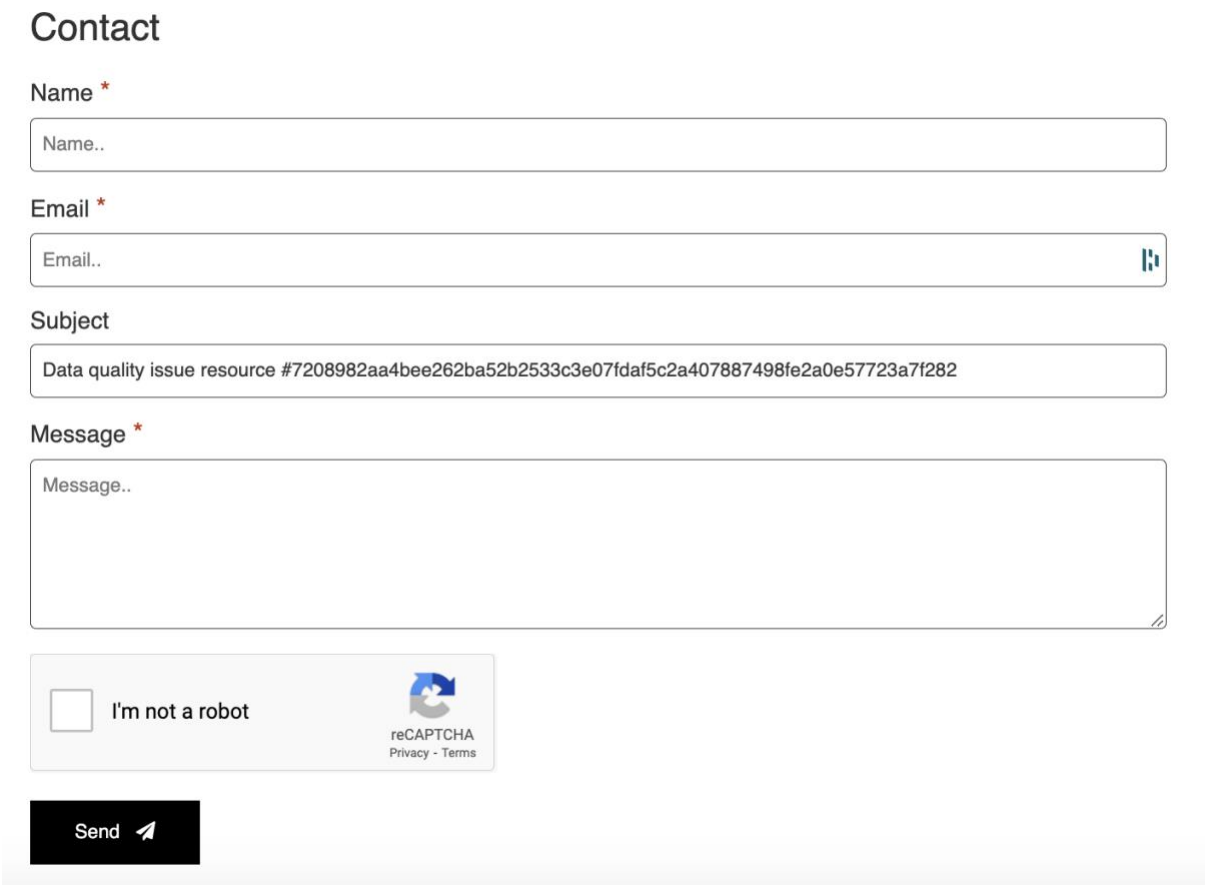
Resource links

The Resource links are for technical applications apart from Report an issue.

Json – displays the resource data formatted in JSON. This is all the data (and combinations of data) available for that specific resource. (This data is very close to how the data is formatted and looks in the OpenSearch source).

Xml – displays the resource data formatted in XML (as for JSON).

Report an issue – this option generates a form containing the resource id (Subject) in which end users can report any issues they encounter with the Catalogue.

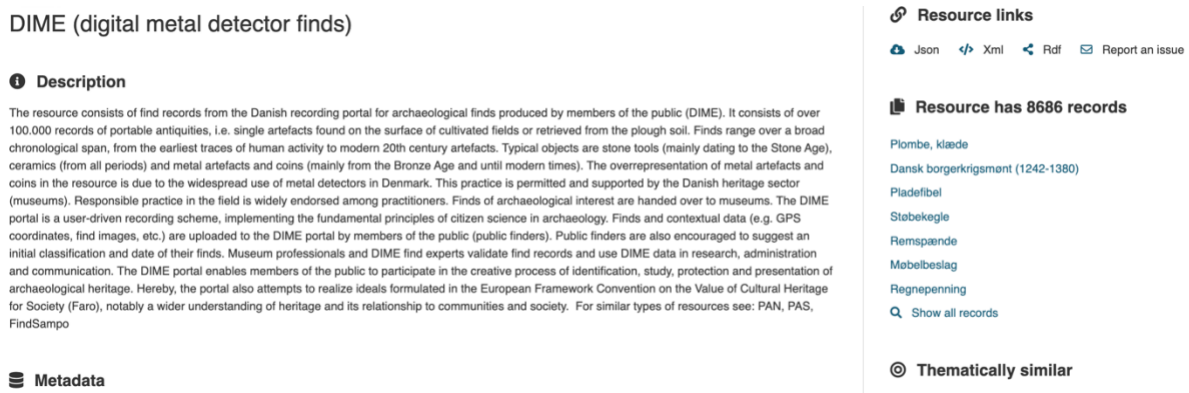


The Contact form

Resource is a part of

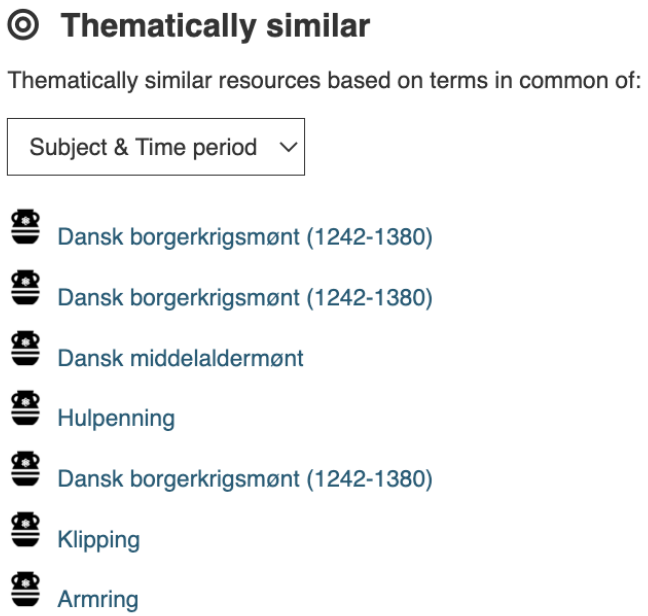
This section indicates the Collection or dataset that the resource belongs to. It provides a link to a new page with further information and access to the other resources within the Collection.

The Collection record for DIME is shown here:



The remainder of the page follows the same format as the individual Resource page.

Thematically similar

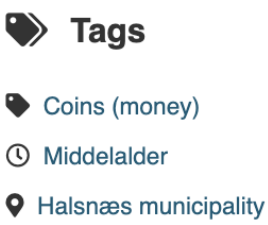


Thematically similar lists up to seven similar resources from the whole Catalogue. The default setting is 'Subject & Time period". In this case, records with similar (Original) subjects and in a similar time period will be searched for and the first 7 listed.

In addition to the default term of "Subject & Time period", there are four other criteria that can be used to find similar resources:

- Title – title of resource (matches all or some words used in the title)
- Location – other resources found within 2km of the centroid of the original resource location.
- Subject – resources with the same Original subject classification?
- Time period – resources falling within the same time period (start and end dates).

Tags



The Tags provide a quick method of finding all similar resources in the Catalogue regardless of the language.

Tag – this is the derived subject, i.e. all native language terms that are mapped to the Getty AAT Subject (Coins in this example) will be included in the results returned by clicking on the current tag.
Time period – this uses the Period.o name to find all resources from the matching time period.
Location – this matches the place name(s) of the current resource to return resources with the same place name.

The Horizontal Menu options

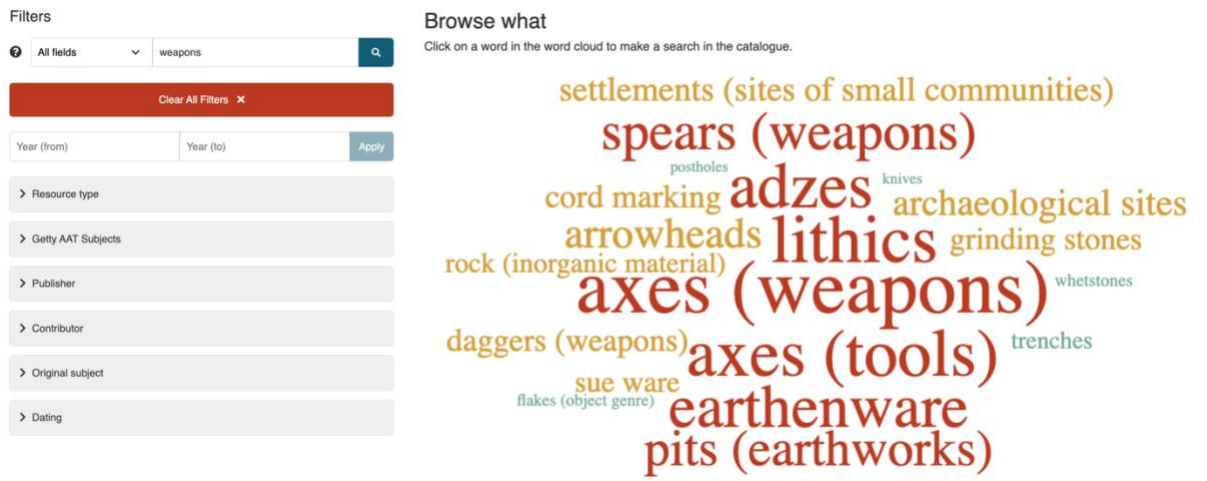
There are four options in the horizontal menu across the top of the page:

- Catalogue – this returns the user to the initial Results page with the default search showing all the records. As all the filters are available on this page, this page is considered to be more useful than the landing page displayed upon initial entry to the Catalogue.
- Browse – this contains three options for searching the catalogue/knowledgebase based on Where, When and What.
    - Where – displays the map filter. This is a stand-alone version which works in exactly the same way as described previously.
    - When – displays the time line filter. This is a stand-alone version which works in exactly the same way as described previously.
    - What – this displays an interactive Wordle representing the distribution of the Getty AAT subject terms in the current selection by the relative size of each term to each of the others.

  Note that selecting a Browse option will automatically clear all previously set filters so, in the case of ***Where*** and ***When***, these should be used from the Results page to refine the results.
- Services - <brief summary of the services>
- About – a brief overview of the project.

The Browse "What" filter

The "What" filter displays an interactive Wordle based upon the first twenty most common Getty AAT Subject(s) recorded for the current selection, the default on entry being the entire Catalogue. In the example shown, the term "weapons" has been used. The results show all the sub-classes of this term (since the Getty AAT Subject is hierarchical) such as axes, spears, arrowheads and knives as well as the other terms (most of which describe the context) which were recorded with the weapons.



To explore further, click on any of the terms to display the corresponding resources on the Results page. From here, filters can be applied as described previously.

Tips and Guidance when searching the Catalogue

The metadata in the Catalogue has originated from many different sources with varying levels of information and data models. In the first instance, these have been mapped to the AO-CAT which caters for most archaeological domains. However, there are some specialist domains which require additional concepts and terminology to be successfully mapped (otherwise a lot of relevant information would be lost) and two approaches have been used to address this issue. The first is the development of the Application Profile which is an extension of the (CIDOC CRM based) AO-CAT data model which enables additional data fields to be added and mapped to the Catalogue. Examples of specialist Application Profiles developed during the ARIADNEplus project are for the domains of "heritage science" (which covers scientific datasets such as aDNA and radio carbon dating), "inscriptions, marks and graffiti" and "burials and mortuary data". An alternative approach, which is more appropriate when a domain can basically map to the AO-CAT but also has its own distinct terminology is to adopt an additional Ontology to extend the vocabulary used for metadata descriptions. In many cases, it is also possible to map the subject matter to the Getty AAT but as this was developed as a more general thesaurus, it doesn't always contain the level of detail used in archaeology. To mitigate this, the original subject is also included in the search on all fields in the Catalogue and when the Getty AAT filter is used, the results are hierarchical i.e. they match the specified term(s) and all sub-terms. Consequently, it may be better to start with general terms and then narrow these down rather than starting with a very specific search term.

The other major consideration is the supplied metadata which may vary from publisher to publisher depending on how their original source data is structured, the meaning attributed to the terminology used, how much metadata is available for mapping to the AO-CAT data model (and the extent to which the metadata can be cleaned and enhanced), etc. To give some examples of how this can affect the data in the Catalogue (and ways of mitigating the differences):

1) A text search will result in the most resources since a match may be found in one of several metadata fields. These may not all be relevant since a description can include the search term as a feature found on an object or on a site. Filters such as the Resource type and Getty AAT Subjects should be used for more targeted searches.

2) The British Museum has supplied over 900,000 resources from the Portable Antiquities Scheme Database of which around half relate to coins and the other half to other types of artefacts which commonly make up 'finds'. The coins all have Resource type "Coin" and the artefacts "Artefacts". On the other hand, the DIME database (published by Aarhus University), which also records finds by the public in Denmark, has allocated Resource type "Artefacts" to all its resources, including coins. This is not wrong, it's just another way of representing the data. To select all the resources from DIME that are coins, it is necessary to use "coins" as an initial search term and then filter by Publisher, Aarhus University, as the original subject (usually dime.find.coin) will indicate the type of artefact. The Getty AAT Subject has also been used, some granularity has been applied so five terms are listed of which the most common is "Later western world coins" (a sub-term of Coins (money)).

3) Be aware that not all the resources (approx. 8%) have geographical co-ordinates supplied in their metadata and, where the location of the resource is considered sensitive, a bounding box will be shown containing a random ‘pin’ to indicate the approximate area. If there is a nearby resource, one pin will be shown – this can be clicked on to show the corresponding record. Where there are more than one resources nearby, these are shown in series, i.e. one at a time with each successive resource in the same location. This also means that in most cases, when the map filter is applied, the number of resources found will automatically reduce as all those missing location co-ordinates will be excluded.

4) The Catalogue does not provide searching by (modern-day) country as this is fairly meaningless in the context of archaeology (even more so for marine archaeology!). Recorded place names are included in the metadata. More usefully, the Map allows the selection of areas of interest, including defining an area by drawing a polygon thus enabling borders to be ignored or otherwise. However, it can be useful to define a country, particularly islands or where national boundaries have remained fairly unchanged. One way to do this is through the Publisher filter as many of these providers are the national repository for their archaeological outputs. In many cases, Publishers have provided a Collection record which summarises provided datasets. Alternatively, the When filter can also include regions (within the PeriodO definitions) which may be used for defining areas of interest.

Two approaches have been used to denote time periods – absolute start and end dates and period names. There are some obvious issues with both methods:

a) If absolute dates are used across more than one country, it is likely that resources will be found that are not of interest as the dates can overlap from other periods or they may be approximate.
b) PeriodO terms are used to describe archaeological time periods; it is well known that a defined period (e.g. “Bronze age”) in one country may cover a different time span in another country. However, the filter has been designed so that one or more defined periods may be used with the further option of restricting the named period to s specific region.

Some examples of using the Catalogue to answer research questions

How to find all resources relating to a specific site or monument

This example illustrates the usefulness of the map and georeferencing resources, showing how:

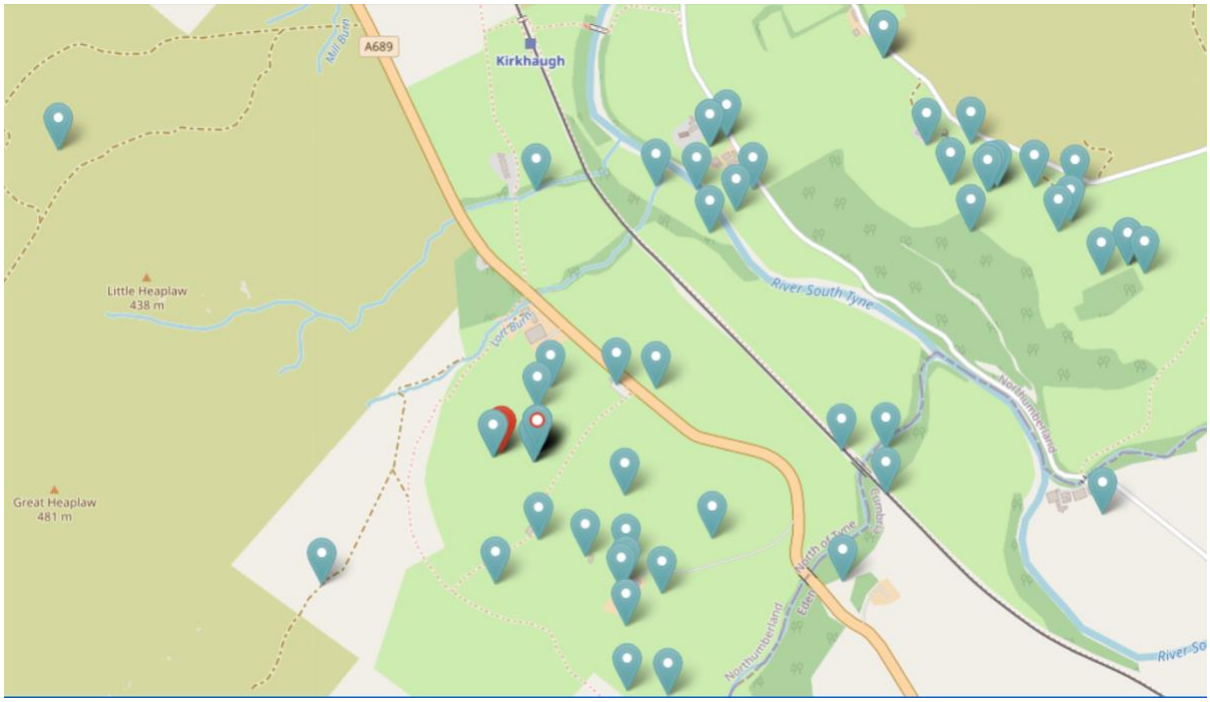
- artefacts can be linked to archaeological sites,
- geo-refencing helps overcome the use of different names for sites and also the many different ways resource locations can be recorded (from individual site to church parish name),
- alternative and misspellings.

Epiacum is a Roman Fort located near the town of Alston, Cumbria on the border with Northumbria. It is unusual, being lozenge shaped and with impressive earthworks of banks and ditches and is relatively unexcavated. The fort is also known as Whitley Castle, this name being derived from the nearby Manor of Whitlaw.

Starting with a search for “Epiacum”, five resources are found. These are all Historic England records which refer to fieldwork on the ramparts dated 1957, two excavations dated 1810 and 1828, and one which links to a Historic England Research Record entitled “Whitley Castle Roman Fort” with useful references. Three of the resources are usefully entitled Whitley Castle (Epiacum?) indicating the alternative name.

Using “Whitley Castle” as a search term finds 22 results, including those mentioned previously. These include several additional Historic England records, one referencing the 2007-08 survey, another a report on a geomagnetic survey carried out by Durham University in 2009 and an archaeological investigation by English Heritage as well as a palaeoenvironmental investigation from 2010.

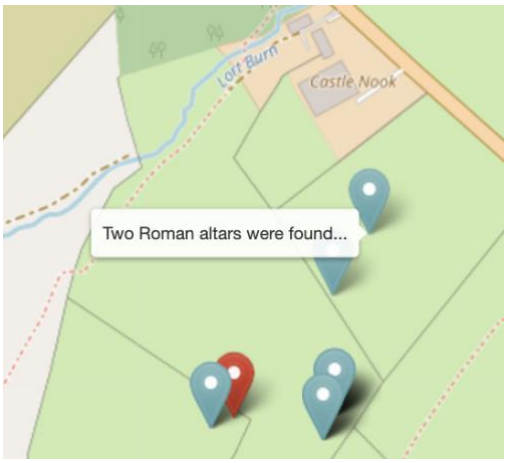
Each of the results are displayed on the map with quite a few nearby resources shown:



Using mouse-over to reveal the titles of these neighbouring resources reveals some new ones:

This Archaeological Evaluation (2018) resource could have been missed as the name in the title is misspelt and the location referred to is the name of the farm on whose land the Roman fort is located.

Included in the 22 results for “Whitley Castle” is the resource "Altar, Knaresdale with Kirkhaugh” which refers to two stone altars found around 100m NE of the fort.



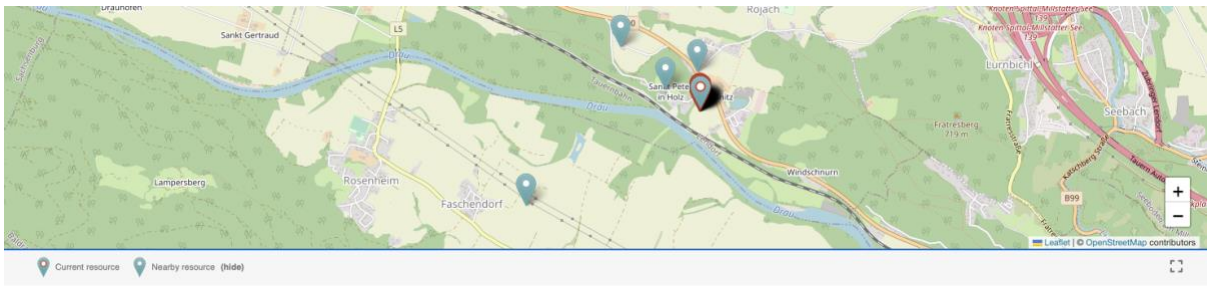
Next to this resource is a second one entitled “Two roman altars were found…” which was not included in the results as the Parish name of “Knaresdale with Kirkhaugh” was used as the location and not “Whitley Castle” nor “Epiacum”. This record also mentions a (lost) third altar and that some coins were also found which is additional information.

Navigating hierarchical datasets (THANADOS)

THANADOS is a web portal (https://thanados.net), hosted at the Natural History Museum Vienna, for archaeologically and anthropologically investigated burials from Austria and the Czech Republic during the Early Middle Ages. It is possible to explore the THANADOS datasets from any one of four levels, i.e. the site, the grave, the burials and finally the grave goods by using the properties 'Resource is a part of'…' and/or 'Resource has…' as appropriate. Starting a search using THANADOS from the Publisher filter finds over 23,000 resources. These consist of three Resource types:

- Artefacts – items found in graves
- Burials – graves and burials (a grave may contain more than one burial)
- Sites/monument – cemeteries and grave sites.

Starting with the resource for **Teurnia St. Peter in Holz,** a burial ground which has records for 32 graves and one for the stray finds. Note that the finds for each site are amalgamated into one record at this top level but exist as separate records for each artefact associated with an individual burial.



Teurnia St. Peter in Holz

Description

According to the evidence presented, the burial ground of Teurnia can be dated to about the last six decades of the 6th century AD, a period which corresponds to about three generations of the population. The occupation of the cemetery thus falls into the historically very varied period of Late Antiquity in Carinthia, during which this land, as the last remaining area of the former Roman province of Noricum mediterraneum, was administratively connected to the Italic motherland even after the end of the Western Roman Empire and continued to participate in its historical development. The burial ground of the 6th century that has now been uncovered contains burials from about three generations of the population of Teurnia, which settled in the castrum on the Holzerberg during the period indicated, mainly in the simple Late Antique buildings found there by R. Egger. This population belonged for the most part to the down-to-earth ethnicity of the country, which had been Romanised over the centuries, and, as the grave inventories show, also possessed the jewellery and costume accessories characteristic of this stratum. The fact that in the men's graves no typical equipment was found, such as weapons and the like, also speaks for this population and its characteristics, as do the way the graves were prepared and the form in which they were laid. The different types of jewellery and dress accessories of the women, which are comparable with the grave sites of the same period, are in some cases distinguished by a simpler method of manufacture and decoration, which can probably be explained by the existence and production of local workshops. This assumption is corroborated by the metal analysis of a basket earring fragment made of bronze, which is owed to E. Plöckinger, which showed that the high proportion of zinc with low tin content as well as the impurities of lead and antimony indicate that local, probably Carinthian ores were used for the production of the metal of the jewellery. This also means that the mines used in the region during the imperial period continued to operate despite the unfavourable economic conditions of late antiquity; in this context, the calamine mine on the Gurina in the Gail valley is particularly worthy of consideration. With regard to the various types of jewellery found in the graves, it can be assumed that, contrary to the custom of Christian burial, retarded cult ideas within the Romanised population led to the occasional addition of jewellery to the dead or to the burial of the dead in their traditional costume and with their jewellery. Another important statement of the cemetery of Teurnia lies in the fact that it is the first cemetery of this period that could be investigated in the inner south-eastern Alpine region. The comparison with the cemeteries of the same period in the southern Alpine foothills shows that relatively similar ethnic and cultural conditions prevailed in the entire circumscribed area during this epoch.

Resource links

View resource at provider

Json Xml Rdf Cite Report an issue

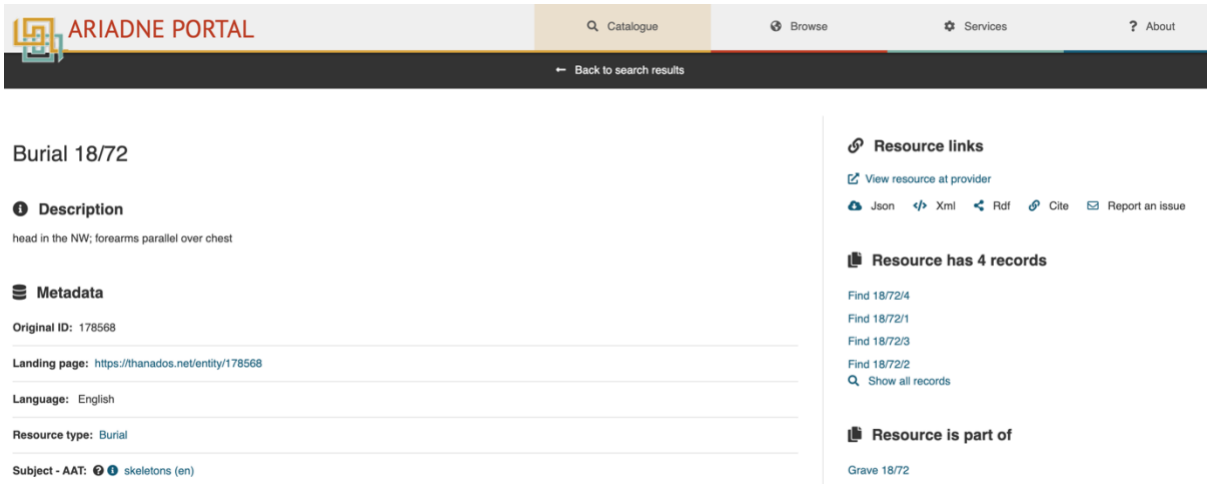
Resource has 33 records

Strayfinds
Grave 01/75
Grave 11/72
Grave 17/73
Grave 22/73
Grave 18/72
Grave 22/75
Show all records

Resource is part of

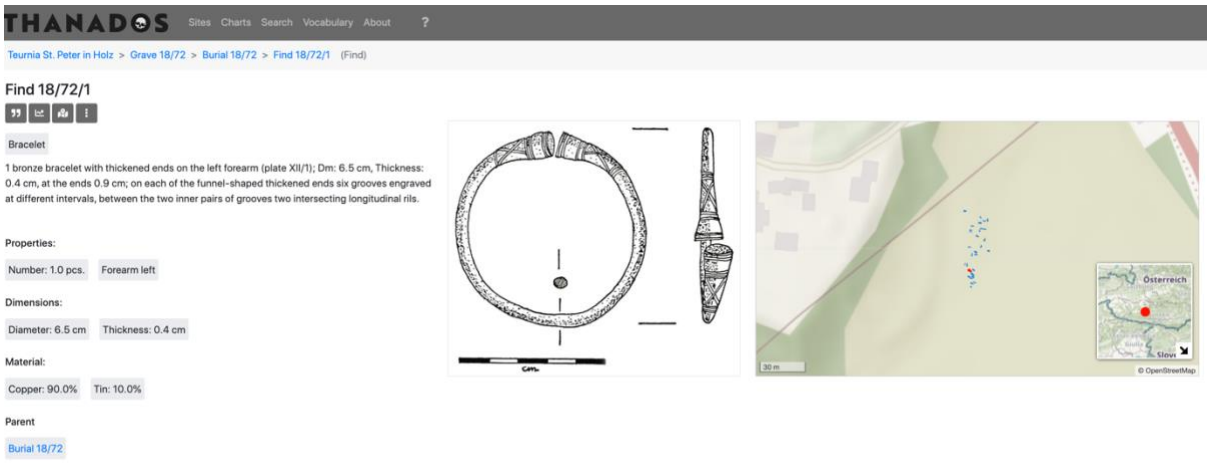
The Anthropological and Archaeological Database of Sepultures

Each grave can be accessed by clicking on the resource title shown under the **Resource has**… on the right hand side of the page or via the resources listed on the results page if the 'Show all records' option at the end of the list of records is used instead. Grave 18/72 from this site contains one burial (Burial 18/72) which has four finds associated with it (18/72/1 - /4).



As the resources are hierarchical, the **Resource is a part of** shows that the Finds belong to Grave 18/72 so the relationship between the four levels can be explored in both directions.

Clicking on the Landing page link in the Resource metadata for the Find 18/72/1 goes to the THANADOS Portal and reveals that this is a bronze bracelet.



Services for use with the Catalogue Data

The ARIADNE Lab VRE is another way of accessing the data in the ARIADNE Catalogue for users with the technical skills for using tools such as Jupyter Notebooks, R and GraphDB. Further information along with how to access the Lab VRE is to be found here: https://ariadne-infrastructure.eu/the-ariadneplus-lab-vre/.