



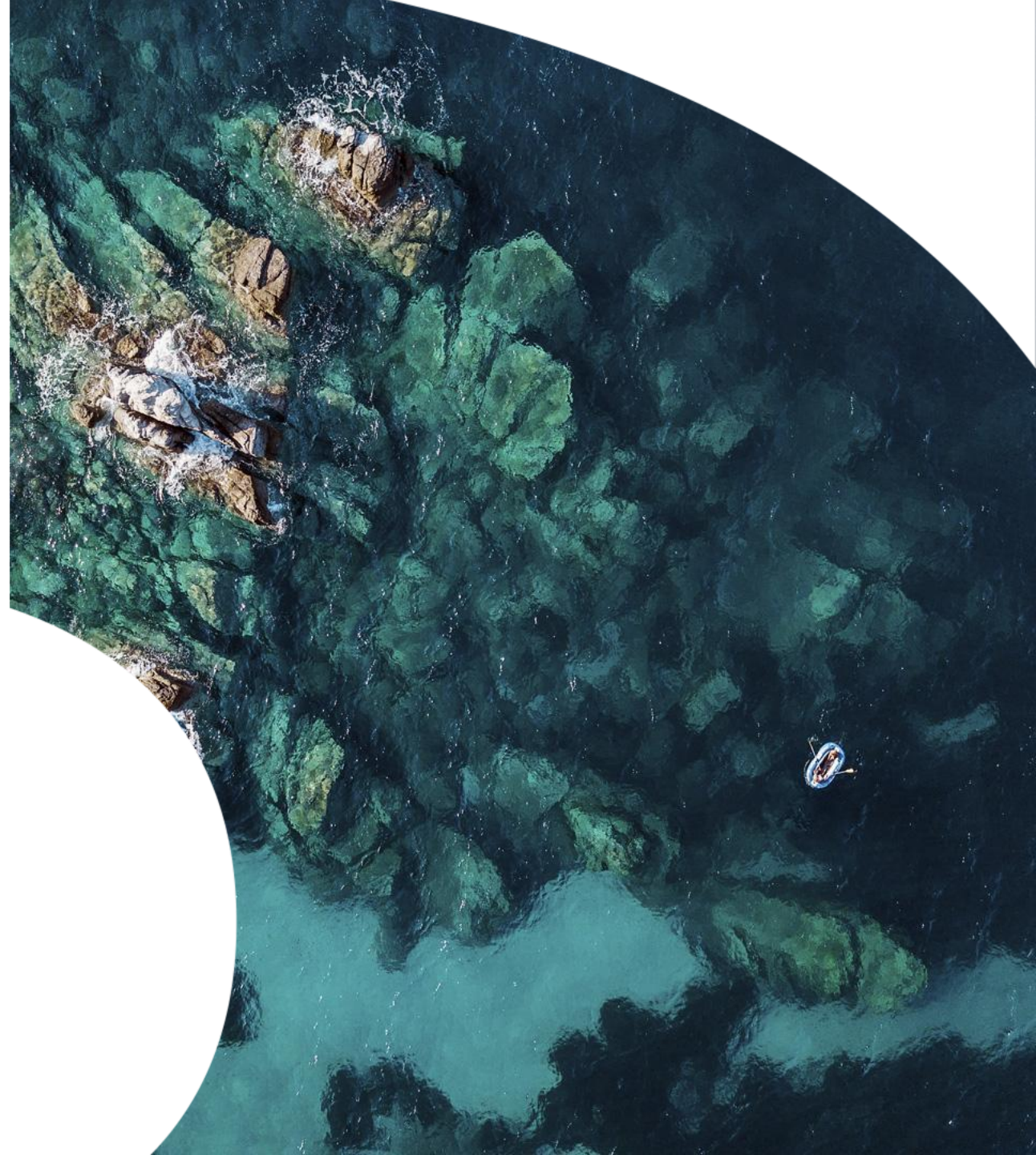
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Data Service

# NERC EDS: Research Data Management Best Practice

With thanks to the EDS Training  
Activity Working Group

# Content

- Introduction to NERC Environmental Data Service (EDS)
- Data Policy
- FAIR and CARE principles
- Open science
- Data Life Cycle
- Data Management Plan
- Data Collection
- Organising files and folders
- Storage and back-up
- Metadata
- Publication







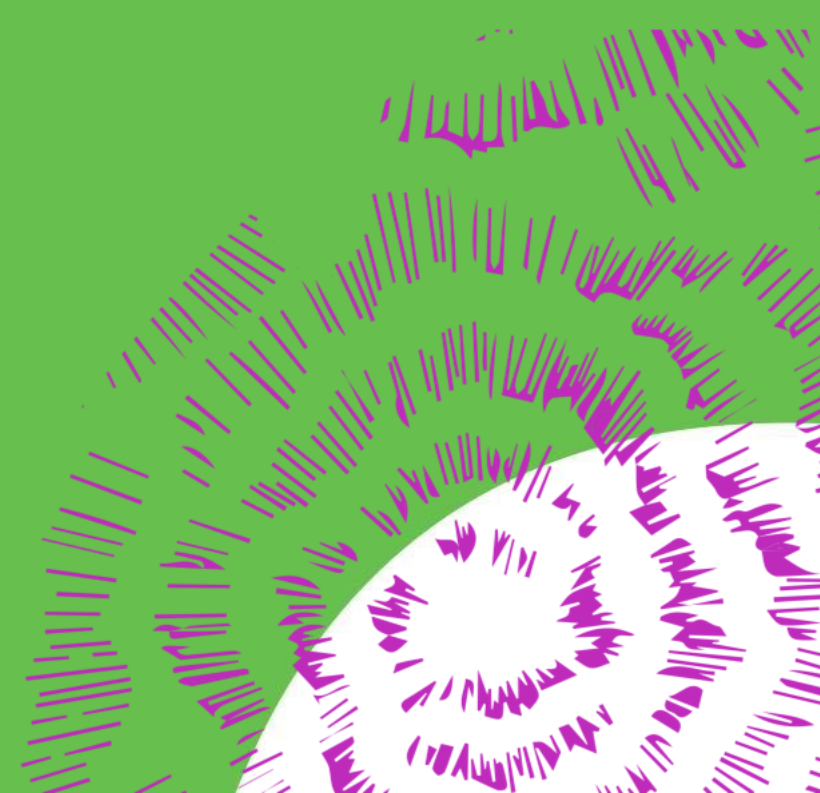
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# The Data Life Cycle

In this section, you will learn how to organise your data through planning, collection, analysis, publication and beyond



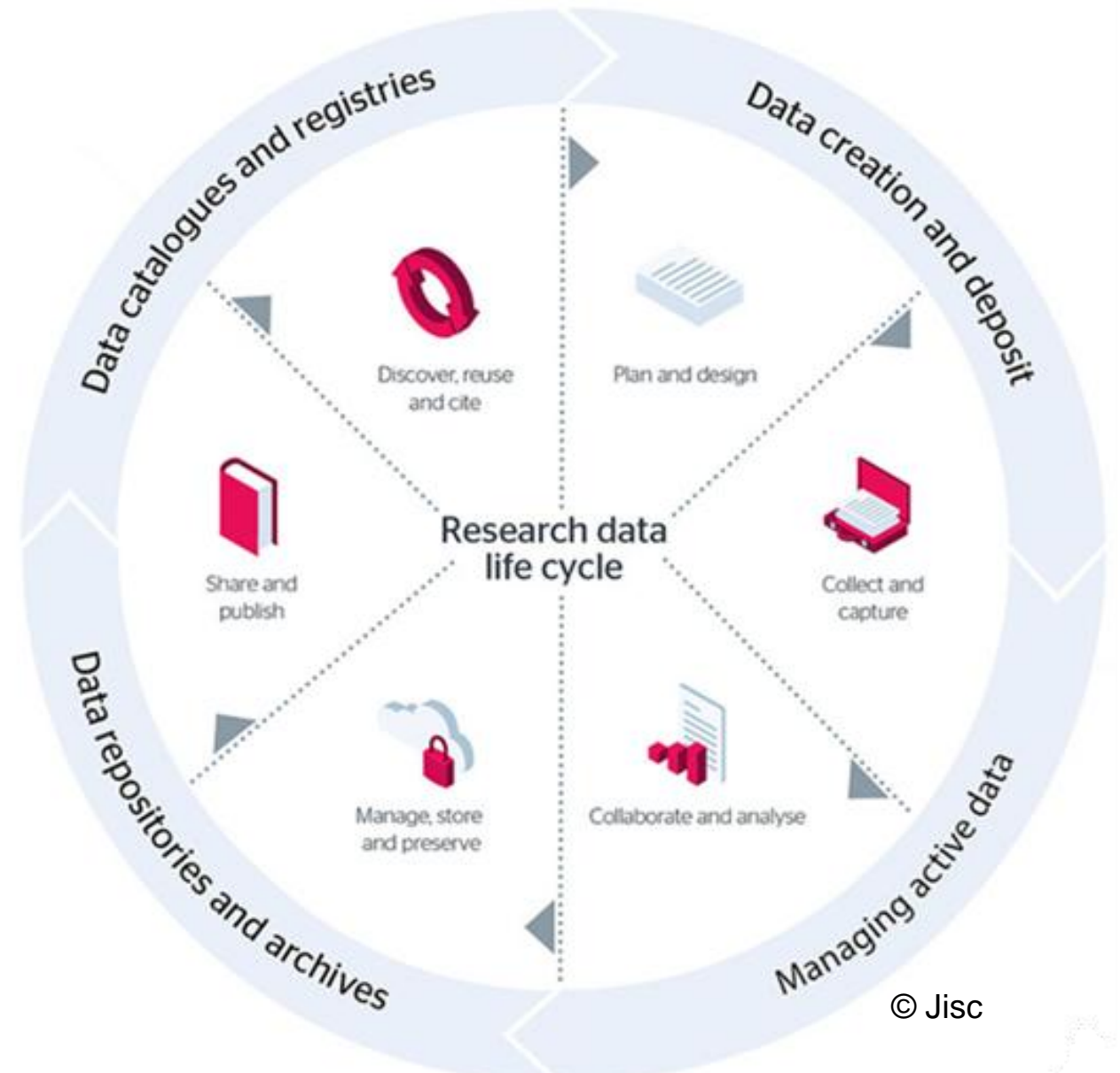
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# Research Data Management Lifecycle

The data life cycle is the sequence of stages that a particular unit of data goes through from its initial generation or capture to its eventual archival and/or deletion at the end of its useful life.

- 1) Data Management planning
- 2) Data collection and capture, collection and analysis
- 3) Data storage and archiving, sharing and publishing
- 4) Data cataloguing, discovery and reuse





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# Finding data

- In this section, you will learn where to find data, data catalogues and searching for data efficiently



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<https://help.eds.ukri.org/article/5036-finding-data>

# RDM lifecycle

- Data discovery and reuse

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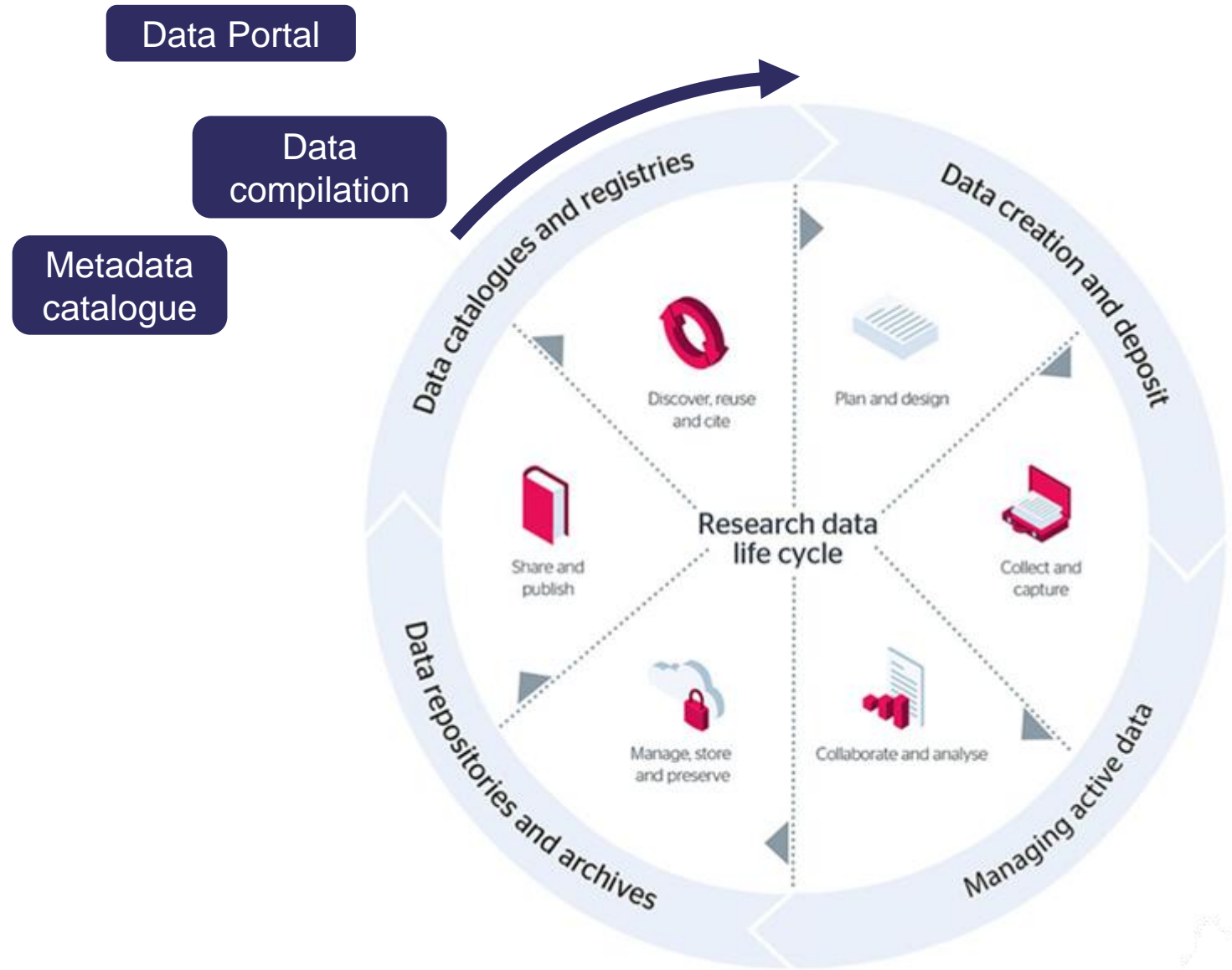
International  
repositories

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Data portals

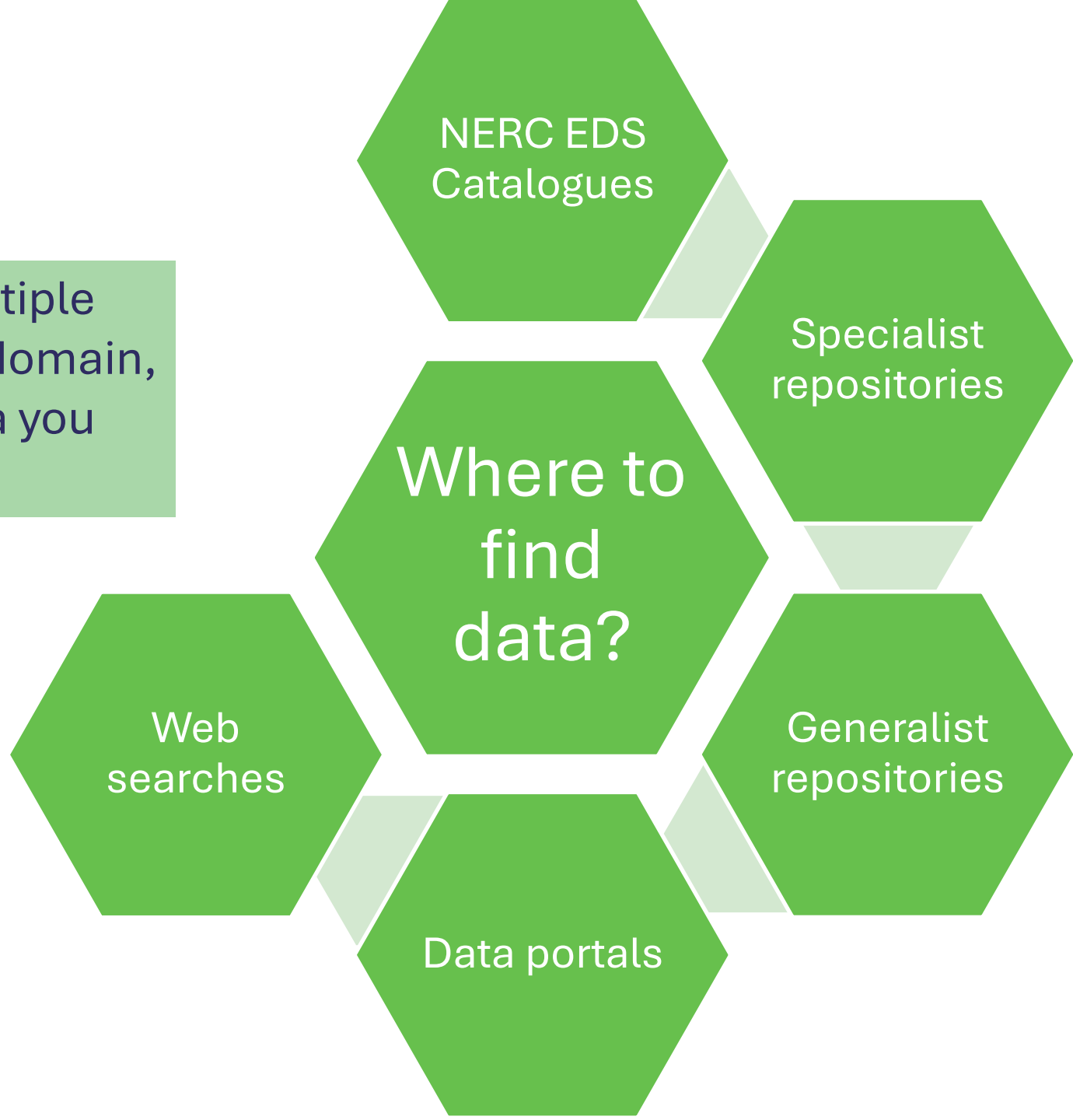
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Interoperability



# Finding Data

Data can be found in multiple ways, depending on the domain, type, and quantity of data you are looking for

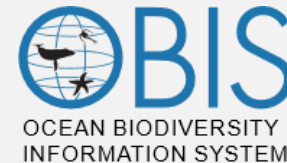
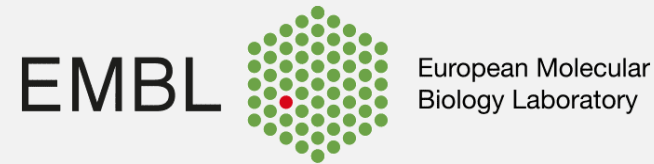


# Other Repositories

## International repositories



## Specialist repositories



## Generalist Repositories





# Data Portals

There are many data portals for specific environmental topics and datatypes.

Data portals are useful for accessing large volumes of data from multiple sources at once

Some examples:

- Airborne Geophysics data portal: <https://www.bas.ac.uk/project/nagdp/>
- Antarctic Plant Database: [BAS Antarctic Plant Database - specimen query \(nerc-bas.ac.uk\)](http://nerc-bas.ac.uk/antarctic-plant-database-specimen-query)
- Krillbase: [Krillbase \(nerc-bas.ac.uk\)](http://nerc-bas.ac.uk/krillbase)
- South Georgia data portal: [SG MPA dataportal - Log In \(nerc-bas.ac.uk\)](http://nerc-bas.ac.uk/sgmpa-dataportal-log-in)
- Tristan data portal: [Tristan da Cunha Environmental Data Portal - Sign In \(bas.ac.uk\)](http://bas.ac.uk/tristan-da-cunha-environmental-data-portal-sign-in)




# Search Engines

*You can search for data using broad cross-website searches, or through specialist data portals*


- [NERC catalogue service](#)
- [Data.gov.uk](#)
- [DataCite](#)
- [Google](#)




**DataCite Commons**

Type to search... 

[Works](#) [People](#) [Organizations](#)


Search works by keyword(s) and/or identifier. Documentation is available in [DataCite Support](#).



GEAR met data   


[All](#) [Shopping](#) [Images](#) [News](#) [Videos](#) [More](#) [Tools](#)

About 103,000,000 results (0.88 seconds)

<https://catalogue.ceh.ac.uk> > ... 

**Gridded estimates of daily and monthly areal rainfall for the ...**

16 May 2019 — The rainfall estimates are derived from the **Met** Office national ... The CEH-GEAR dataset has been developed according to the guidance ...

<https://catalogue.ceh.ac.uk> > ... 

**Gridded estimates of daily and monthly areal rainfall for the ...**

1 May 2014 — The CEH-GEAR dataset has been developed according to the guidance ... quality control step (**data** already quality controlled by the **Met** ...

# Searching efficiently

## Boolean Search Modifiers

### 1. Quotation Marks (")

Help find exact phrase matches in search.

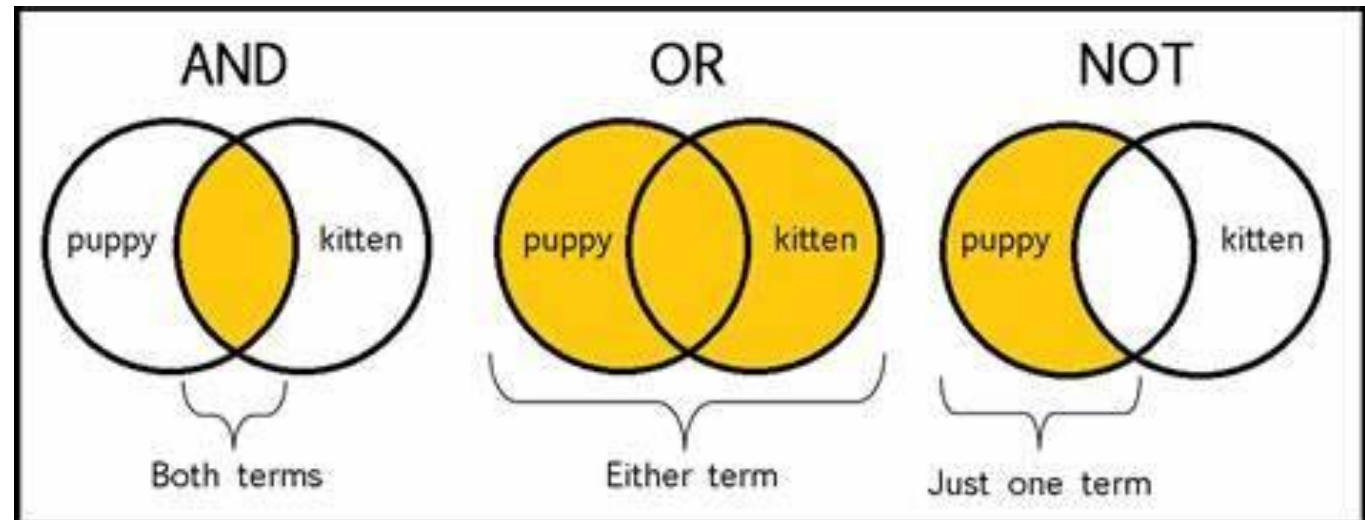
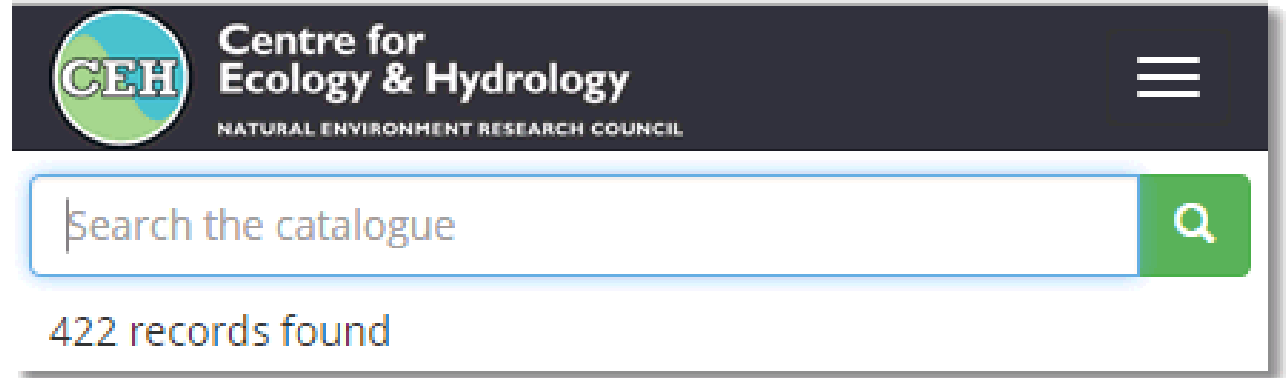
### 2. Asterisk (\*) or Wild Card

The asterisk is useful when looking for variants of the keyword.

### 3. Parentheses ()

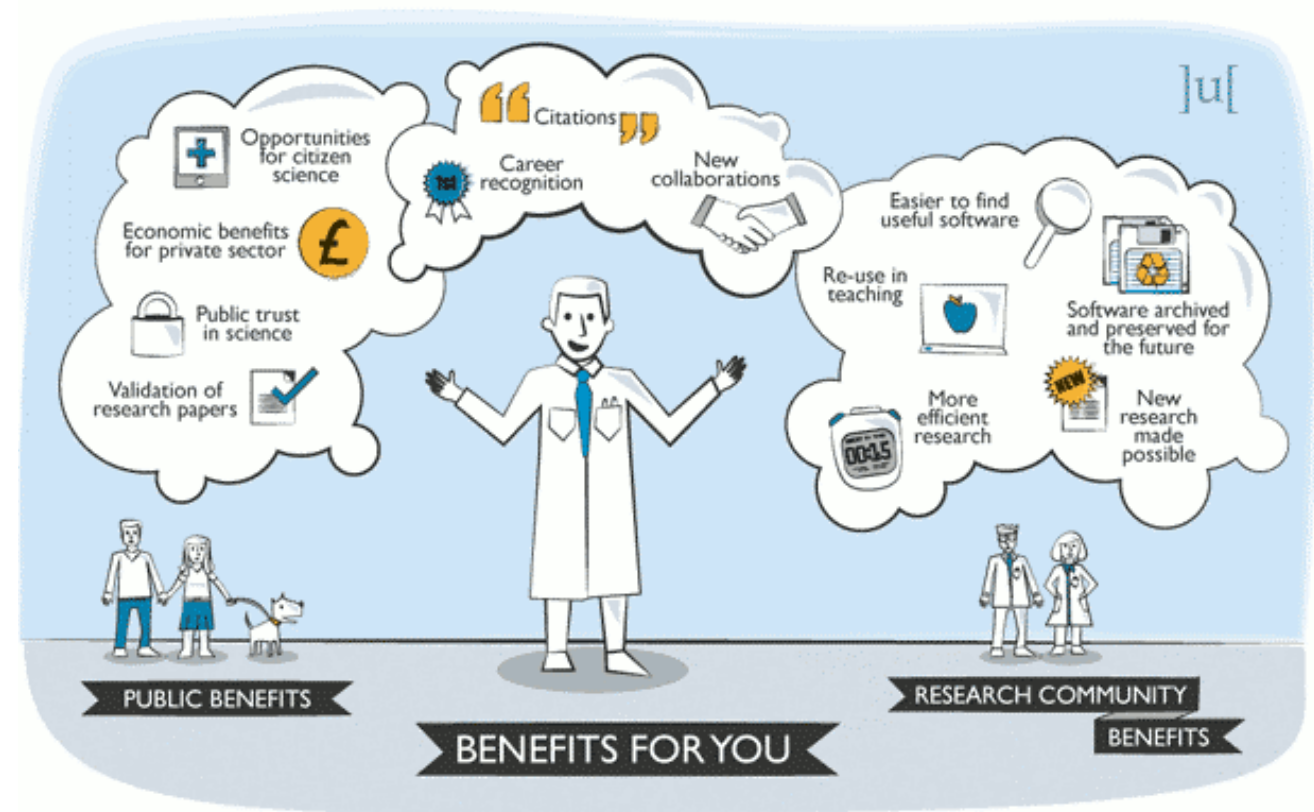
Parentheses give priority to the text written within them.

[www.omnesgroup.com](http://www.omnesgroup.com)



# Summary

- The Environmental Data Service (EDS) provide a focal point for scientific data and information spanning all environmental science domains.
- EDS support and advise you on all aspects of Data Management.
- The environmental data produced by the activities funded by NERC are considered a public good and they will be made openly available for others in one of the 5 EDS data centres. This needs to be done within 2 years after data collection.

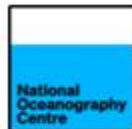


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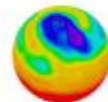


British  
Antarctic Survey

UK Polar Data Centre



British  
Oceanographic  
Data Centre



Centre for Environmental  
Data Analysis  
SCIENCE AND TECHNOLOGY FACILITIES COUNCIL  
NATURAL ENVIRONMENT RESEARCH COUNCIL



Environmental  
Information  
Data Centre



NGDC  
National Geoscience  
Data Centre



# Summary

- The Research Data Management lifecycle describes the different steps for a research dataset to be published from its planification to reuse

