



Research data Repositories

Overview of the properties, functions, and types of repositories

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What are repositories?

DEFINITION: A repository (pl. repositories), is:

- ... a **managed directory** for storing and describing digital objects for a digital archive.
- ... a **document server with an online interface** that allows data creators to upload their data to the repository.

What are repositories?

- Repositories (**usually**) **provide free access** to the data stored on their document servers
- **Mostly public** (open access) **or** at least accessible to a **limited group of users**

What can a repository do for me?

- Store my research data
 - Versioning
- Make my research accessible
 - Search functions
 - Metadata
 - Persistent Identifier (DOI, ORCID)
 - Download
- Import and export from/to other systems

The Research Data Repositories Landscape



funders



research data
repositories



journals



scientists



universities and
research labs

[RRZE Icon Set \(CC: BY-SA\)](#)

Online storage and backup services – advantages

Accessibility

Sharing and
Collaboration

Cost

Backup and
Recovery

Automation

Space

Online storage and backup services – disadvantages

Sensitive or
confidential
information

Data access
speed

Dependence on
service
providers

Copyright & Co.

To which repository would you upload your research data?

Disciplinary

Institutional

Project-specific

Multidisciplinary

Types of Repositories

community-specific



PANGAEA.
Data Publisher for Earth & Environmental Science

GenBank



institutional



<https://researchdata.hhu.de>

multidisciplinary



Open Science Framework
Links



Checklist: is it the right repository for your data?

The checklist that follows addresses the five key questions for selecting a repository:

1. Is the repository reputable?
2. Will it take the data you want to deposit?
3. Will it be safe in legal terms?
4. Will the repository sustain the data value?
5. Will it support analysis and track data usage?

cf.: <http://www.dcc.ac.uk/resources/how-guides-checklists/where-keep-research-data/where-keep-research-data#5>

Data Policies of Funding Organizations (DFG, 2010)

“If [...] systematically (measurement) data are collected that are suitable for subsequent use, please describe which measures have been taken or are taken during the project's duration in order to secure the data sustainably and, if necessary, the reuse. **When doing so, please also take into account the existing standards in your discipline and the offers of existing data repositories.** “

Deutsche Forschungsgemeinschaft. (2012). Leitfaden für die Antragstellung. DFG-Vordruck 54.01 - 1/12. Retrieved from http://www.dfg.de/formulare/54_01/54_01_de.pdf

Deutsche Forschungsgemeinschaft. (2012). Merkblatt Sonderforschungsbereiche. DFG-Vordruck 50.06 – 6/12. Retrieved from http://www.dfg.de/formulare/50_06/50_06_de.pdf

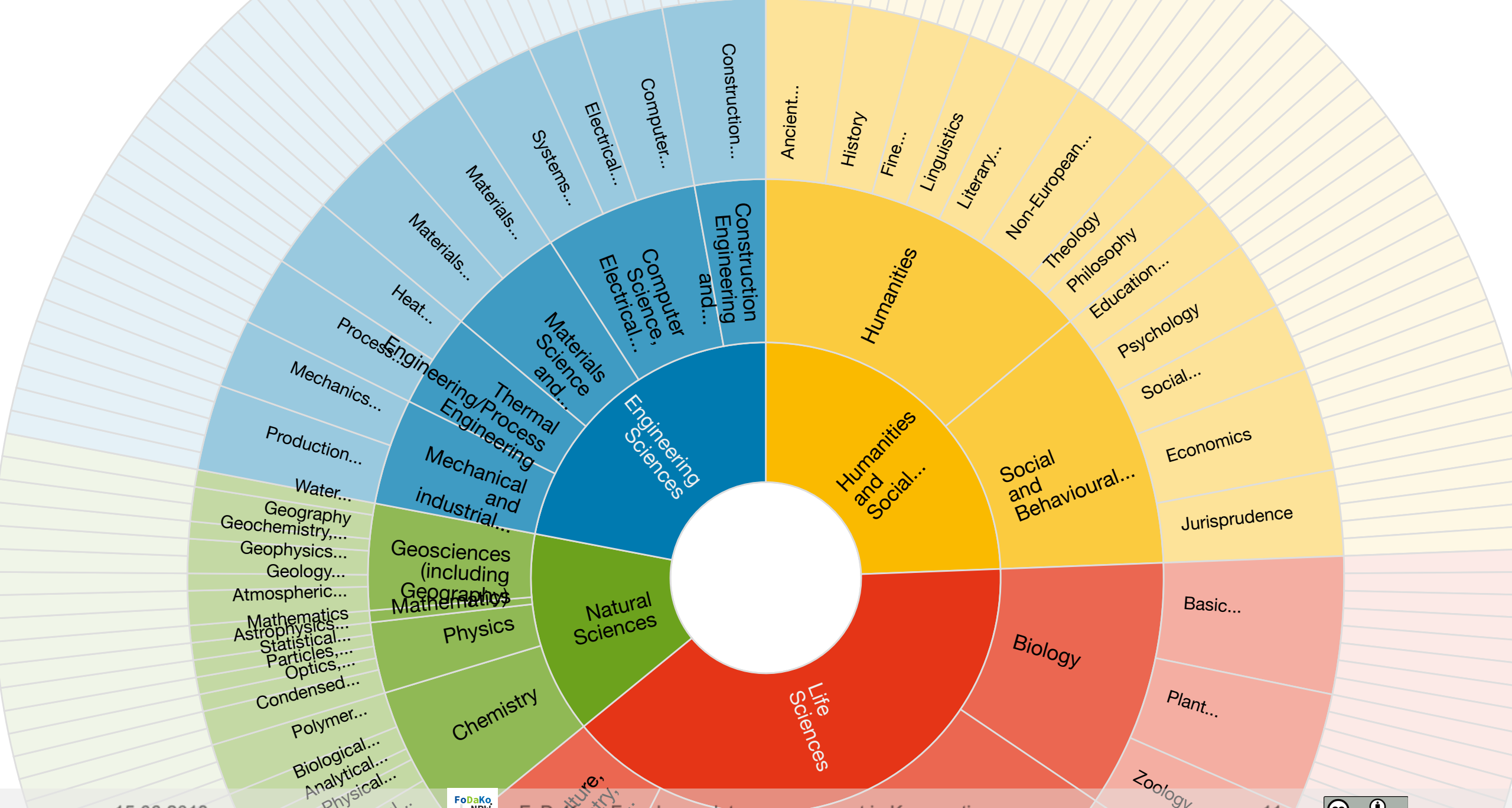
Re3data.org



Development of a directory for the description of research data repositories

Project partners:

- German Research Center for Geosciences GFZ
- Library and Information Services (LIS)
- Humboldt University Berlin, Institute for Library and Information Science (IBI)
- Institute of Technology (KIT), KIT Library



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UniProtKB/Swiss-Prot

UniProt Knowledgebase



Subject(s)

Basic Biological and Medical Research General Genetics Biology Life Sciences

Content type(s)

Networkbased data Structured graphics Plain text other

Country

Switzerland United Kingdom

UniProtKB/Swiss-Prot is the manually annotated and reviewed section of the UniProt Knowledgebase (UniProtKB). It is a high quality annotated and non-redundant protein sequence database, which brings together experimental results, computed features and scientific conclusions. Since 2002, it is maintained by the UniProt consortium and is accessible via the UniProt website.

Khazar University Institutional Repository

KUIR



Subject(s)

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Content type(s)

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Azerbaijan

Re3Data Criteria

The research data repository was reviewed by the re3data.org Team.



The research data repository provides additional information on its service.

The research data repository is either certified or supports a repository standard.



The research data repository provides a policy.



The research data repository provides open/restricted/closed access to its data.



The research data repository uses a persistent identifier system to make its provided data persistent, unique and citable.



The terms of use and licenses of the data are provided by the research data repository.

Repository details

UniProtKB/Swiss-Prot

The research data repository provides additional information on its service.



General

Institutions

Terms

Standards

Name of repository

UniProtKB/Swiss-Prot

The research data repository provides additional information on its service.



website.

Content type(s)



1885 Open Research Data Repositories

Outlook

- the **demand** for a **research data infrastructure** is increasing
- **(Networked)** research data repositories form the core of this infrastructure
- The existing landscape of data repositories is **very heterogeneous** and characterized by **disciplinary** approaches

References

- <https://www.forschungsdaten.info/themen/bewahren-und-nachnutzen/repositorien/> . retrieved 04.06.2018
- <https://de.wikipedia.org/wiki/Repository>
- [accessed 06.06.2018](#) (translated)
- <http://www.forschungsdaten.org/index.php/Repository> retrieved 01.10.2018
- <https://de.wikipedia.org/wiki/Repository> retrieved 04.06.2018



Thank you for your attention!

If you have questions pertaining to FDM, you can contact the
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