Research data management at the University of Kassel
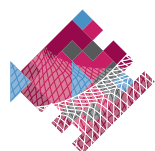## Offers, tools, and support

Forschungsdaten-Service

UNIKASSEL
VERSITÄT

What are research data?

Research data encompasses all data generated, processed, or utilized throughout the course of a scientific process or that result from it. Depending on the scientific discipline, research data can exist in various formats and may also include software developed as part of the research activities.

↗ **uni-kassel.de/go/fdm/policy_en**

Who can be contacted?

Your contact point for all topics relating to research data is the Research Data Service. It is operated by the University Library and the IT Service Centre (IT-S). Together, we offer comprehensive consultation, training and tools for research data management. Wherever possible and necessary, we promote your networking with subject-specific and/or cross-regional experts, such as the NFDI consortia (nfdi.de). On a national level, we are involved in the Hessian state project HeFDI (hefdi.de) which coordinates local initiatives and brings them together in an overall strategy.

💬 **University library**
Dr. Sabrina Jordan
+49 561 804-4371

💬 **IT Service Centre**
Dr. Edith Pfitzner
+49 561 804-2224

We are pleased to work with you to develop a suitable solution for managing the research data of your project. In addition, we offer support - in cooperation with the Research Support of the University of Kassel - in presenting your research data management in the context of funding applications.

✎ **forschungsdaten@uni-kassel.de**
↗ **uni-kassel.de/go/research-services**

We keep you informed about current events, developments and services via our website. Furthermore, you will find our online training courses there, which allow you to independently familiarize yourself with the topic at your own pace and convenience.

↗ **uni-kassel.dego/research-data**
↗ **uni-kassel.de/go/fdm-kurse [German]**

Data management during the research process

1. Planning

Planning of your research data management ideally takes place before the start of the project and is documented in a Data Management Plan (DMP). At the University of Kassel, you have access to KaDMO, a web application for creating and maintaining a DMP. Questionnaires facilitate the structured collection of key elements. The content can be stored, customized, shared, collaboratively edited, and exported, allowing the DMP to be maintained as a living document in individual projects as well as collaborative projects.

↗ **rdmo.uni-kassel.de**

Both data protection and the handling of personal data are of great importance, especially in the social sciences, but also in many other disciplines.

↗ **uni-kassel.de/go/datenschutz [German]**

Therefore, involve the data protection officers and, if applicable, the central ethics commission from the beginning to avoid conflicts.

↗ **uni-kassel.de/go/ethikkommission [German]**
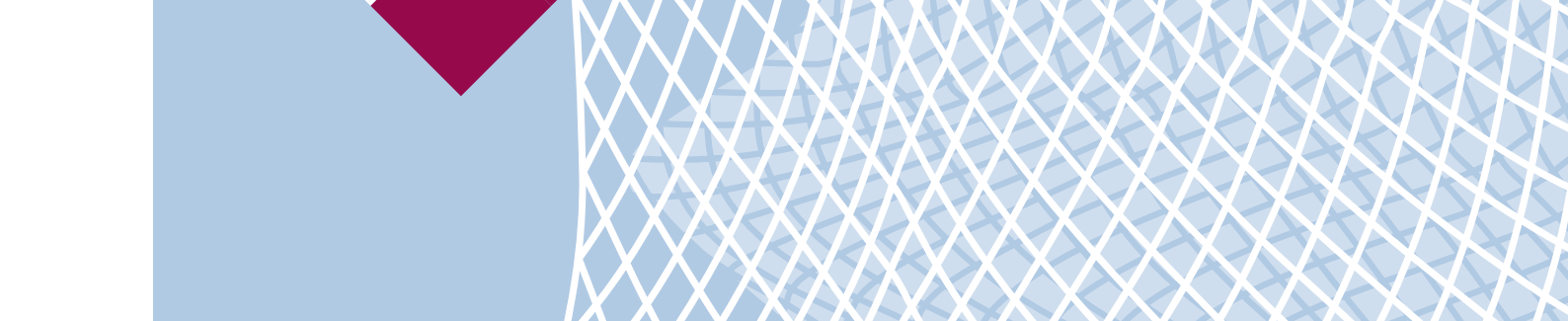
2. Collect, process, and document

During active work with data, a well-structured and comprehensive documentation is crucial. Choosing appropriate metadata schemas or controlled vocabularies can be of great assistance. On our website, you can find helpful (suject-specific) suggestions and guidelines regarding this.

↗ **uni-kassel.de/go/documentation**

To support your active work, the University of Kassel acquires campus licenses, allowing you to use software such as Microsoft, Matlab, or ArcGIS free of charge. You can also create and conduct online surveys, and the data collected can be analyzed with other programs like SPSS.

↗ **uni-kassel.de/go/campuslizenzen [German]**
↗ **uni-kassel.de/go/limesurvey [German]**

The IT-S GitLab online repository enables the organized and secure management, particularly versioning of source code and other files. You are not obliged to make your projects public. The code remains internal to the university but can be shared and collaboratively edited with selected individuals. GitLab also provides an online code editor.

↗ **gitlab.uni-kassel.de**

For scientific data processing with high CPU and memory requirements, the IT Service Center (IT-S) operates a Linux cluster. This network of interconnected computers running on a Linux operating system includes an access server and processing servers where application programs are executed.

↗**uni-kassel.de/go/linuxcluster** **[German]**

For specific tasks, you can rent virtual servers (hosting) or house and operate your own server hardware (housing) through the IT-S. Please contact the IT ServiceDesk for further information.

↘ **it-servicedesk@uni-kassel.de**

3. Save and share
The regular backup of research data plays a central role in research data management and is the responsibility of each researcher.

↗ **uni-kassel.de/go/saving**

In general, the 3-2-1 rule has proven to be effective: Create three copies of your data on two different storage media and keep one copy at a separate location. The following offerings support you in this regard.
The IT Service Center (IT-S) provides central storage services with professional backup capabilities. Typically, these services can be easily accessed by mapping them as network drives within the structure of your own computer. A personal „home directory" is automatically created for you, linked to your university account.

↗ **uni-kassel.de/go/home-verzeichnis** **[German]**

If you need to collaborate on data with multiple members of the university, a shared network drive, also known as a group resource, enables this. The data stored in these locations is regularly backed up using the backup system IBM Spectrum Protect, operated by the IT-S.

↗ **uni-kassel.de/go/gruppenressourcen** **[German]**

The Hessenbox serves as a Sync&Share service, providing not only file exchange and collaboration but also an expanded range of features. Among other capabilities, it allows you to access data online across different platforms, enables automatic synchronization and versioning, facilitates sharing with external parties, and ensures that data is stored in compliance with data protection and copyright regulations.

↗ **hessenbox.uni-kassel.de**

The web application SharePoint offers numerous possibilities for collaboration within your research project, including with external project members. It provides various functionalities that primarily support administration, such as groupware, document management, and project management features. The data remains on servers hosted by the University of Kassel.
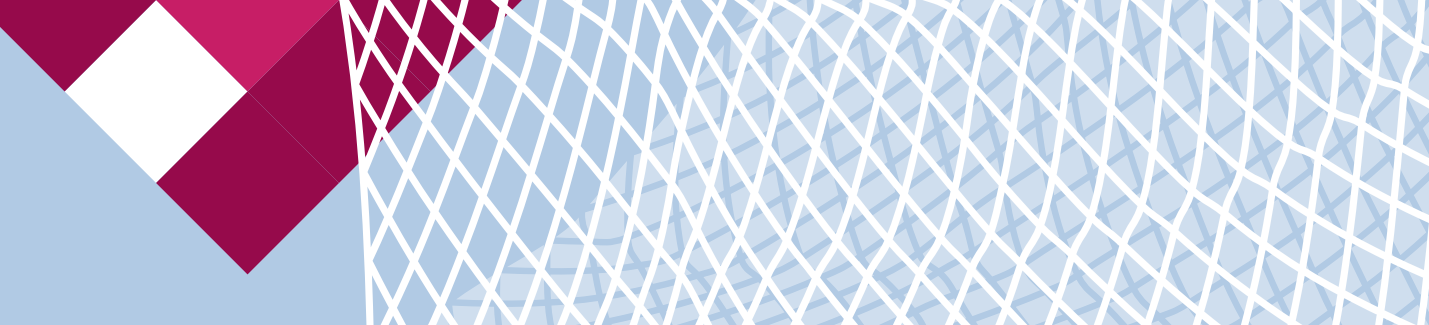
↗ **sharepoint.uni-kassel.de**

4. Archive and publish
Data should not only be stored during the (active) research process, but should also be archived at an appropriate time, in accordance with good scientific practice. Both the German Research Foundation (DFG) and the University of Kassel require the retention of research data for a minimum of 10 years. Repositories, often including the option to publish data, play a crucial role in meeting this requirement.

↗ **wissenschaftliche-integritaet.de/en**

We recommend storing and, if applicable, publishing the data in a subject-specific repository. The advantage of using such repositories is that they capture discipline-specific metadata and generate increased visibility within the research community. A targeted search for subject repositories can be conducted using tools like the Repository Finder. This tool filters the repositories listed in the re3data.org database based on additional criteria and identifies repositories that are used by the

community, provide open access to data, and apply persistent identifiers.

↗ **repositoryfinder.datacite.org**

The University of Kassel provides an institutional repository (DaKS) to all members who either cannot use a subject-specific repository due to its absence or prefer to use an institutional repository. DaKS allows for both archiving and publication, and by assigning a DOI (Digital Object Identifier) your dataset becomes permanently addressable and discoverable. DaKS can also be utilized for student projects and final theses.

↗ **daks.uni-kassel.de**

5. Find and use

Data reuse refers to the utilization of previously collected research data for additional projects and/or research questions. The potential for data reuse exists within institutes and research groups, where, unfortunately, data and/or essential information for their use are often lost after project completion or when staff members leave. To enable unrestricted data reuse, data must be understandable and interpretable. Important guidelines for achieving this goal can be found on our website. There, you will also find information on data exploration, data citation, data quality assessment, and much more.

↗ **uni-kassel.de/go/find**

digitale Version (de):
uni-kassel.de/go/fd-info

digital version (en):
uni-kassel.de/go/rd-info