

## Research Data Management (RDM) & Data Management Plans (DMP)

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There is an increased emphasis by research funding agencies and scientific journals to manage and share research data. They demand that research data should be **F.A.I.R.**, *f*indable, *a*ccessible, *i*nteroperable, and *r*eusable with as few restrictions attached as possible. The TRR 170 webinar data series will guide you through various aspects of planning and managing research data to meet F.A.I.R. requirements. The TRR170-DB team supports researchers through the [research data lifecycle](#) to ensure that all steps are taken to a successful data curation and preservation. By depositing research data to the TRR170-DB repository, researchers meet their funding agencies' and journals' requirements for data management planning.

### RDM Presentation

#### Abstract

Data collected in the TRR170-DB repository represent a significant effort in research and provide new data and resources to the planetary science community. Most data stored result from the TRR 170 subprojects, an increasing number of research data originate from other research groups in the planetary community. In accordance with guidelines of German and European funding agencies on the [handling of research data](#), TRR 170 has established a [research management plan](#) and adopted a [data policy](#) how to manage long-term archiving and accessibility of research data. TRR 170's research data management follows a concept that supports processes to create data that are F.A.I.R. and of peer-reviewed quality.

After introducing general aspects of RDM, this lecture covers five topics, (1) describing the variety of research data, (2) the benefits of managing your data, (3) steps across the entire research data lifecycle, (4), various options for data sharing, and (5) training opportunities for TRR 170 members. In the afternoon, a hands-on exercise follows on how to deposit data to the TRR170-DB repository.

#### Outline

- Introduction into research data management (RDM)
- What are research data ?
- Why manage research data ?
- Data lifecycle: how to manage your data
  - Planning
  - Data collection
  - Storage, analysis & security
- Share your data & what to share
  - Make your data F.A.I.R.
- TRR 170 data services
  - TRR170-DB repository
  - Tutorials, webinars
- RDM exercise

### DMP Presentation

#### Abstract

Data management plans (DMP) are documents that detail how data created or collected in the context of a research project or research institution is to be managed. It is a support tool

for the planning of research data management (RDM) activities that will apply to the data. Specifically, it should detail methods and policies pertaining creation or collection, analysis, access, preservation, and reuse of data. This knowledge can be critical to ensure that there is adequate resource (human, financial or material) allocation to RDM activities. With many funding bodies now requiring or encouraging the submission of DMP documents with all funding applications, understanding and knowing how to navigate the creation of a DMP are fundamental skills that researchers in all domains should have.

This lecture covers four main topics: (1) The definition of the DMP concept; (2) The motivation behind the usage of DMPs by funding bodies, research institutions and researchers; (3) The structure of a typical DMP, following the RDA's DMP Common Standard core concepts; and (4) The day-to-day application and reality of DMPs.

## Outline

- What is a DMP?
  - Canonical definition of what is a DMP.
- Why do we need DMPs?
  - The research institution perspective
  - The researcher perspective
- What should be in a DMP?
  - Administrative data
  - Project and funding
  - Dataset characterization
  - Preservation and publication
  - Costs
- The reality of DMPs
  - DMP templates
  - The issues with DMPs
  - Machine-Actionable DMPs
- DMP exercise