



TRR 170
LATE ACCRETION
ONTO TERRESTRIAL PLANETS



Scientific Data Management in the TRR 170

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What are Data?

Research data are

- Samples
- Observational
- Experimental
- Simulation data
- Derived or compiled data

... stored in various formats

... to produce original research results

What is Scientific Data Management?

- Data management is how you care for your scientific data:
 - Organization and structuring of long-term archiving
 - Preservation and curation
 - Accessibility

Why Should You Manage Your Data?

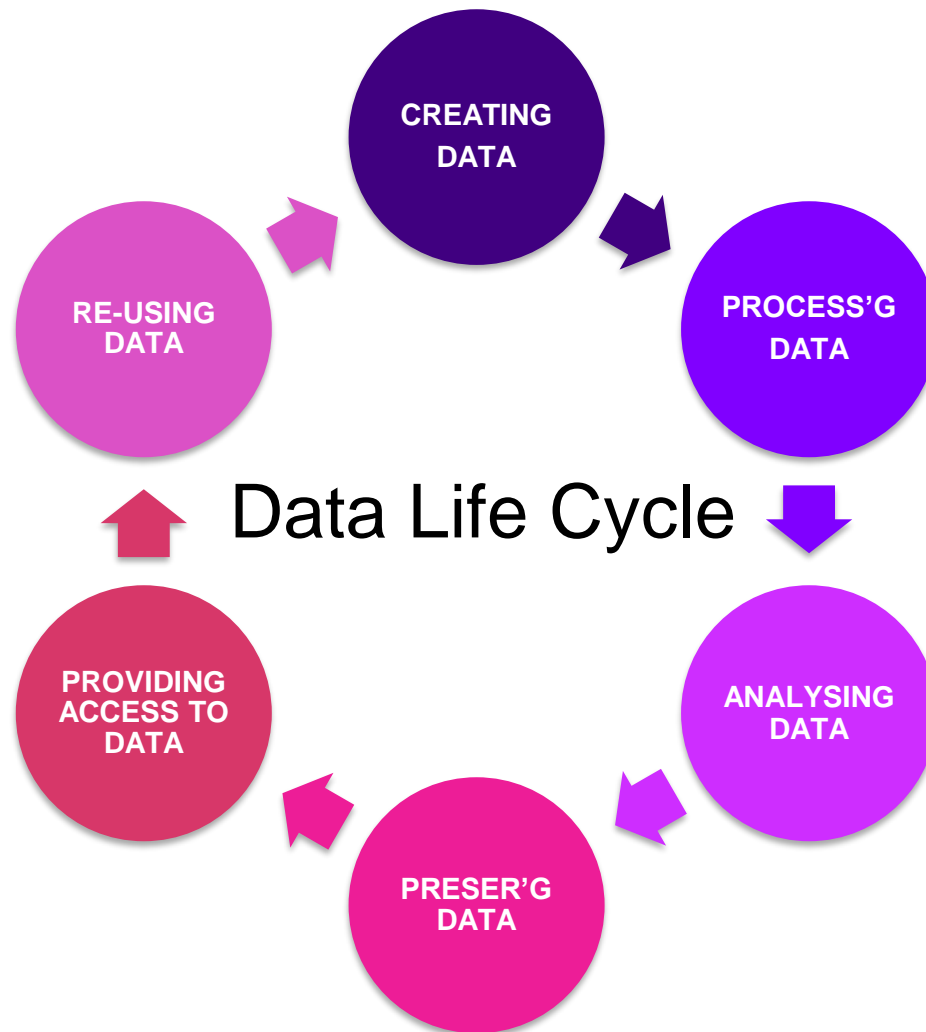
- Scientific data are the cornerstone of research
- 2010: Funding bodies of Alliance of Science Organisations
- 10/2015: DFG

Requirements:

- Transparency & Integrity
- Compliance
- Availability



Data Management Plan & Policy



Creating a Data Management Plan

- Types of data
- Standards to be used for data formats
- Where will data, samples, and other research products be stored during TRR170
- How to preserve and curate after?

Metadata

- ... considers future use of data
- ... protocol needed for structured information on data:
 - Reliability of data
 - Makes data use easier
- ... good documentation of the data:
 - Where did it come from? Who created it?
 - History of changes documented ?
 - Restrictions on how it can be used?

Creating a Data Policy

- Access and sharing of these data
 - Protection of privacy, confidentiality, intellectual property, etc.
 - When to share data: after 2 years ... ?

Tools to Store & Trace Data

- CMS: Content management system (Typo 3, Drupal)
- Web portal for accessing data storage environment
 - Hub for data exchange between TRR170 projects and others
 - Data transfer through interface (wiki)
 - Depositing data in a repository or archive
 - Safe way of ensuring long-term preservation & curation
 - Preservation & curation services are offered by libraries of research institutions and universities
- Traceability of data
 - Assignment of digital object identifier (DOIs) to published data

Benefits of traceable scientific data

- Data used by planetary or other scientific communities
 - data re-analysis by others => evaluating its quality
 - improve relevance of your research by confirming findings
 - initiate new research
 - enable researcher to follow up on older research questions

Benefits of following through a data management & policy plan

- Increase your citation rate

The screenshot shows the PLOS ONE website interface. At the top, there is a navigation bar with the PLOS ONE logo, links for 'Subject Areas', 'For Authors', and 'About Us', a search bar, and links for 'plos.org', 'create account', and 'sign in'. Below the navigation bar, there are icons for 'OPEN ACCESS' and 'PEER-REVIEWED', and the text 'RESEARCH ARTICLE'. To the right, a table displays citation metrics: 36,856 VIEWS, 117 CITATIONS, 401 SAVES, and 87 SHARES. The main title of the article is 'Sharing Detailed Research Data Is Associated with Increased Citation Rate', followed by the authors 'Heather A. Piwowar', 'Roger S. Day', and 'Douglas B. Fridsma'. Below the authors, it says 'Published: March 21, 2007 • DOI: 10.1371/journal.pone.0000308 • Featured in PLOS Collections'. At the bottom, there is a navigation menu with 'Article' (highlighted), 'About the Authors', 'Metrics', 'Comments', and 'Related Content'. To the right of the menu are buttons for 'Download PDF', 'Print', and 'Share'.

36,856	117	401	87
VIEWS	CITATIONS	SAVES	SHARES

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Next steps

- Create a data management plan
- Establish a data policy
- Create a download area at

www.trr170-lateaccretion.de