TXST Dataverse Repository: Preserve, Publish, and Share Your Research Data

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Research Data Service
University Libraries

Texas Data Repository

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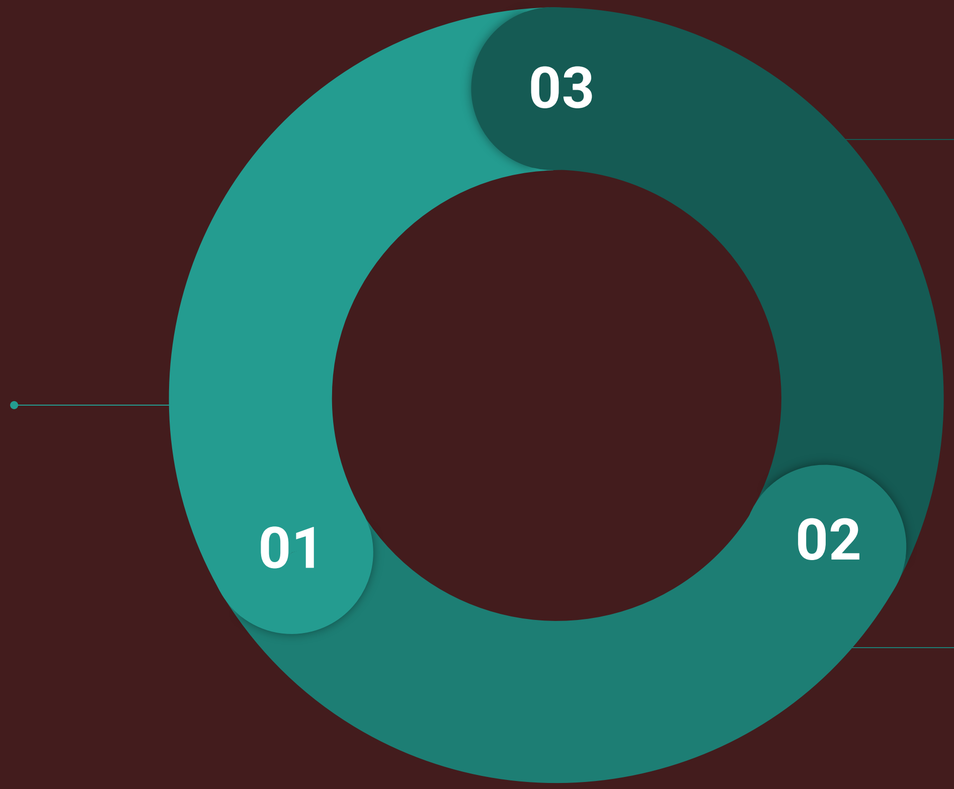
Overview

Why is data management and sharing important?



How to use TXST Dataverse Repository

What is the TXST Dataverse Repository ?

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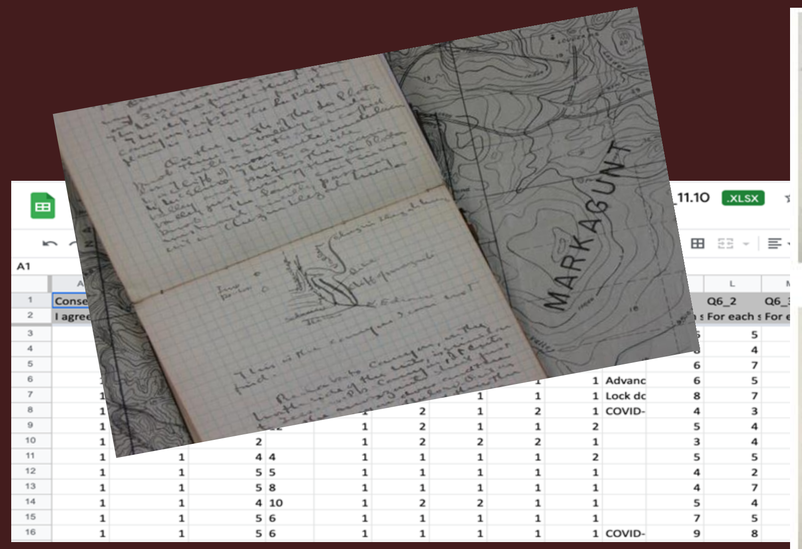
What do we mean when we talk about research data?

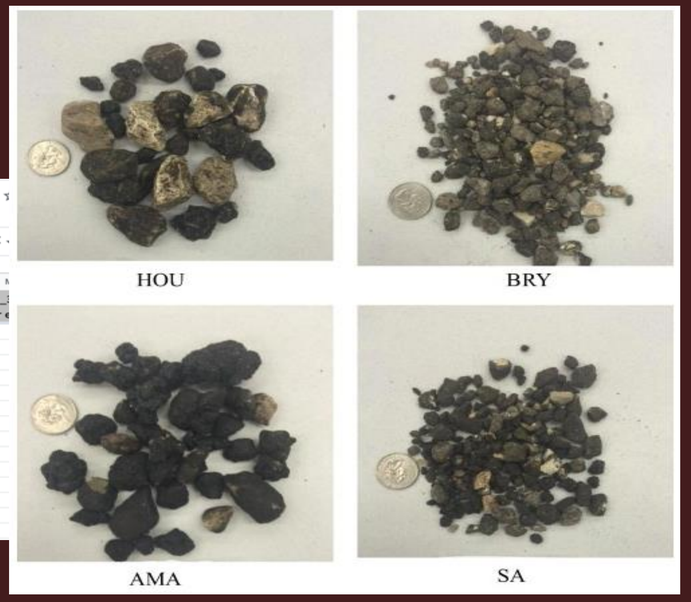
Research data has many different definitions depending on the discipline:

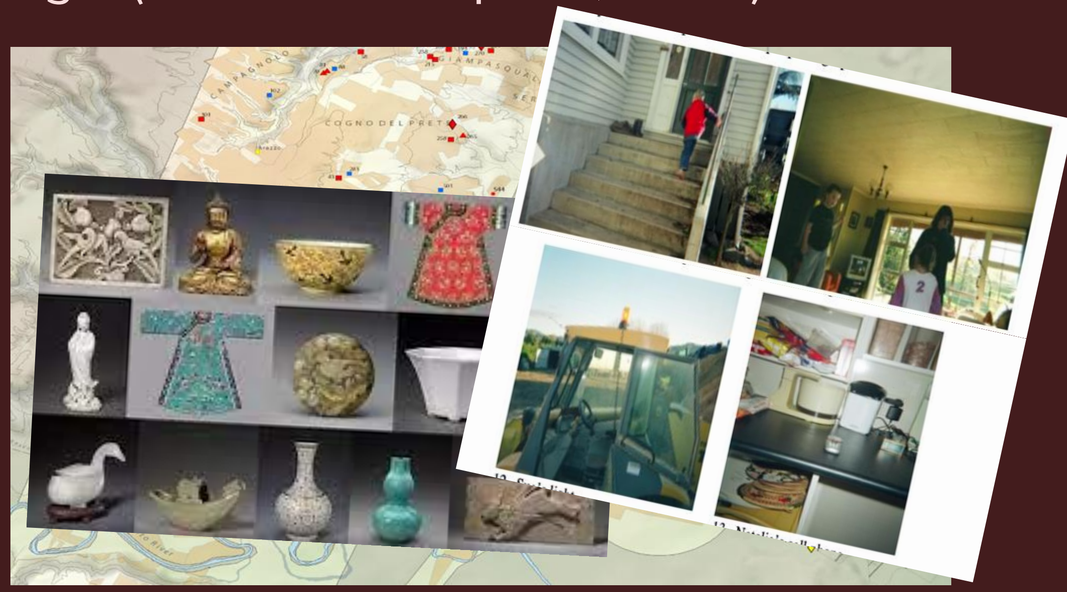
- It can include both physical and digital material
- They do not only refers to numerical information or scientific information

What is research data?

Research Data is recorded, factual material commonly accepted in the scientific community as necessary to validate research findings. (Awasthi & Tripathi, 2019)







(sources: Google İmages; Shi et al., 2017; Moreland & Cowie, 2005; Zhou, 2022USGS, 2009)

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Data Management & Sharing Mandates

- Data management is a set of practices across the research lifecycle that ensures:
  - Compliance for grant requirements
  - Research integrity and reproducibility
  - Research efficiency and accuracy

- Sharing and Publishing Mandates
  - Funders – NSF, NIH…
  - Journals – PLOS, Nature, JDAP partners
  - The White House OSTP memo (2003) – Federal agencies with over $100 million/year in R&D must develop a plan to support public access to research

- **Beneficial to you and your research in a long run! -** increase impact & potential collaborator

FAIR Principles

Data should be Findable, Accessible, Interoperable, Reusable

Created by Diego Naive from Noun Project

To be **Findable**:

- Others can discover your data
  - Persistent ID

Created by Daniel Shoreman from Noun Project

To be **Interoperable**:

- Your data can be integrated with other data
  - Easily used by machines

Created by Gregor Cresnar from Noun Project

To be **Accessible**:

- Data can be made available to others
  - Open format files

To be **Reusable**:

- Reusable for new research
  - Good provenance

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Texas Data Repository (TDR)

- A research data management system for Texas Digital Library member institutions.
- Add, share, publish, and manage your data or work on a project, through your local institutional repository.
- Find datasets from across Texas institutional Dataverse collections.

https://dataverse.tdl.org/

Texas Data Repository

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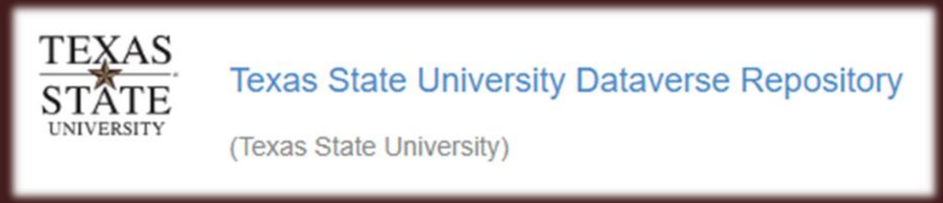
TXST Dataverse Repository



- Provides a platform for archiving and publishing the data developed or used in support of research at Texas State University
- Makes your research data more visible, increases its impact, and meets federal sponsor requirements for funded research
- Promotes the reproducibility of your research, and to facilitate sharing and collaboration

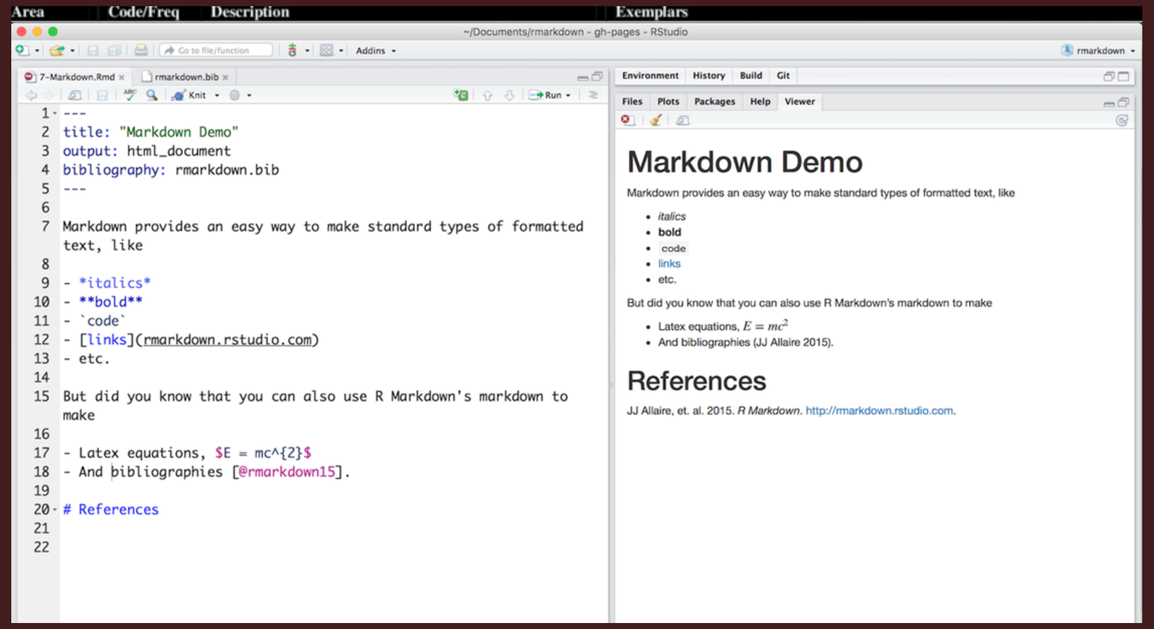
Deposite

Share

Publish

What to include?

Data



Data dictionary

README text

Code books

Markdown

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What to include?

Not Proprietary Formats

- Excel (.xls, .xlsx)
- Word (.doc, .docx)
- PowerPoint (.ppt, .pptx)
- Photoshop (.psd)
- Quicktime (.mov)
- MPEG 4 Protected Audio (.m4p)

Open Format Equivalents

- Comma Separated Value (.csv)
- Plain Text (.txt)
- PDF/A (.pdf)
- TIFF (.tif, .tiff) or PNG (.png)
- MPEG-4 (.mp4)
- MP3 (.mp3)

*Open formats also help preserve documents for the long term

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TXST Dataverse Repository is Appropriate for:

- Data in any file type
- Data from any field of research
- Static or evolving datasets
- Data without confidential or sensitive information.
- Individual files up to 4GB (Small- Medium size, prefer less than 2 GB)
  ➔Large file: consult RDS/IT service department

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Features of TXST Dataverse Repository

- Version control helps track progress and keep collaborators up-to-date
- Published datasets are assigned a DOI (digital object identifier) to allow citation
- Flexible access controls let users decide when, with whom, and how much data to share
- Customizable metadata fields, permissions
- Long term preservation of uploaded data

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Texas Data Repository Demo

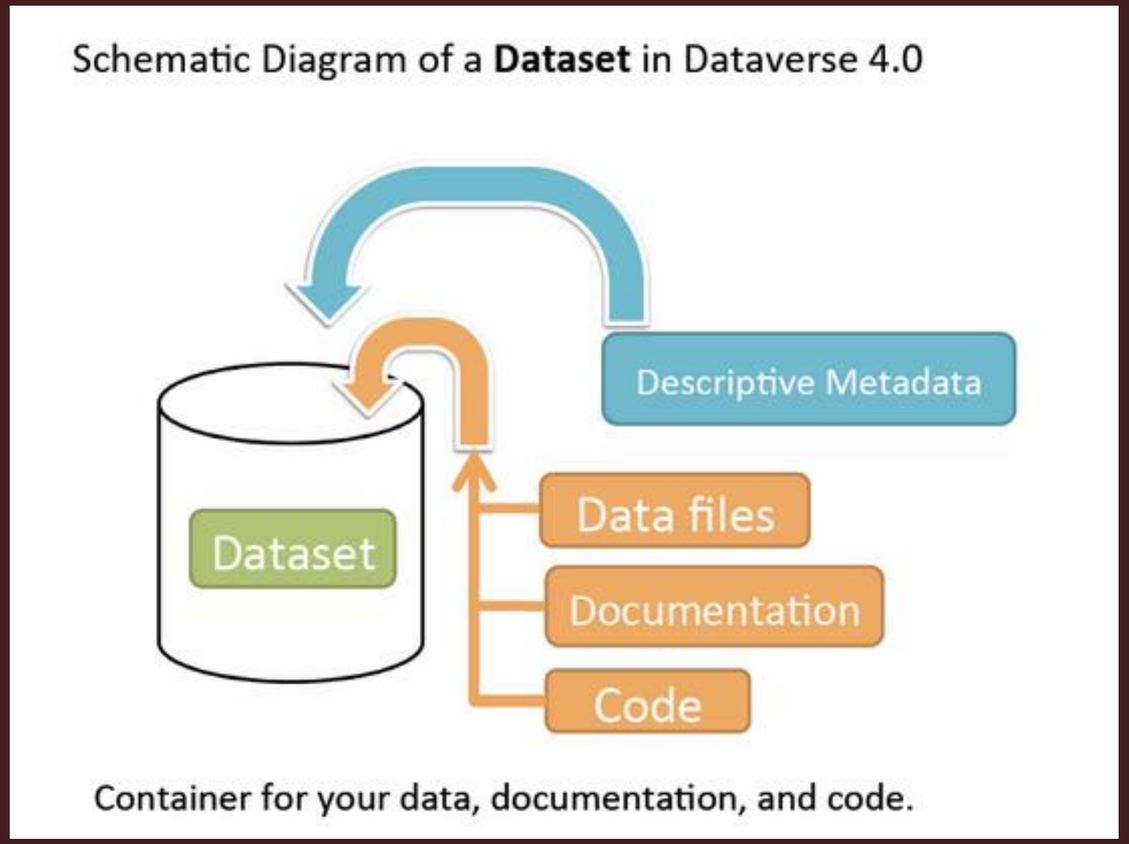

Image from: Dataverse http://guides.dataverse.org/en/latest/user/dataset-management.html

https://dataverse.tdl.org/

https://dataverse-training.tdl.org/dataverse/root

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Benefits of TXST Dataverse Repository

- Supported by University Libraries
- An open access data repository for researchers affiliated with TXST
- Available for public access and re-use
- Served by RDS team: help with DMP and preparing data to deposit & publish
- University libraries offer advice on appropriate file formats, metadata, and licensing options
- Provide training materials or workshops for users to upload and manage their own data collections

https://www.library.txst.edu/services/research-services/research-data-management.html

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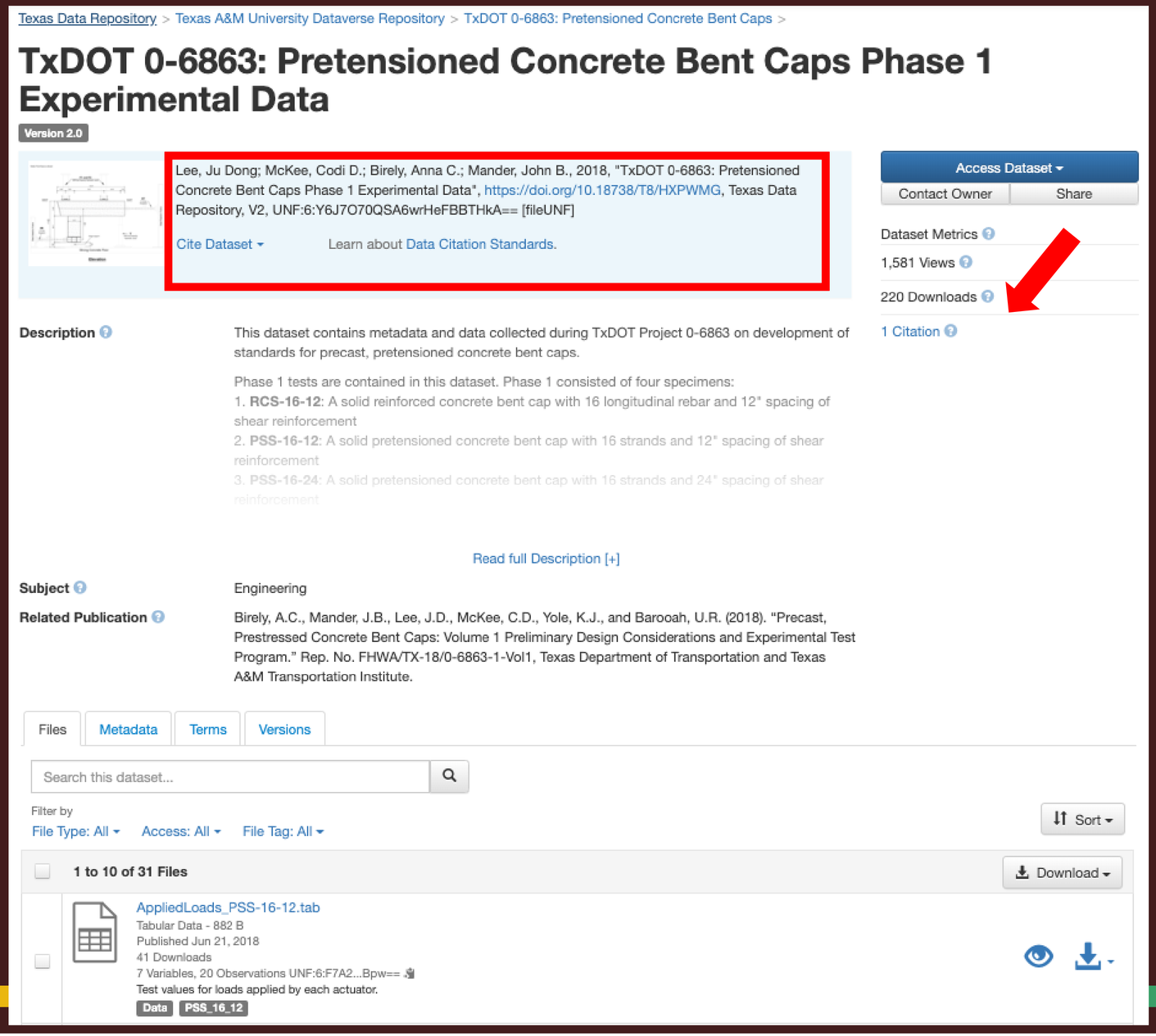
- Increase scholar impact



Texas Data Repository Example 1

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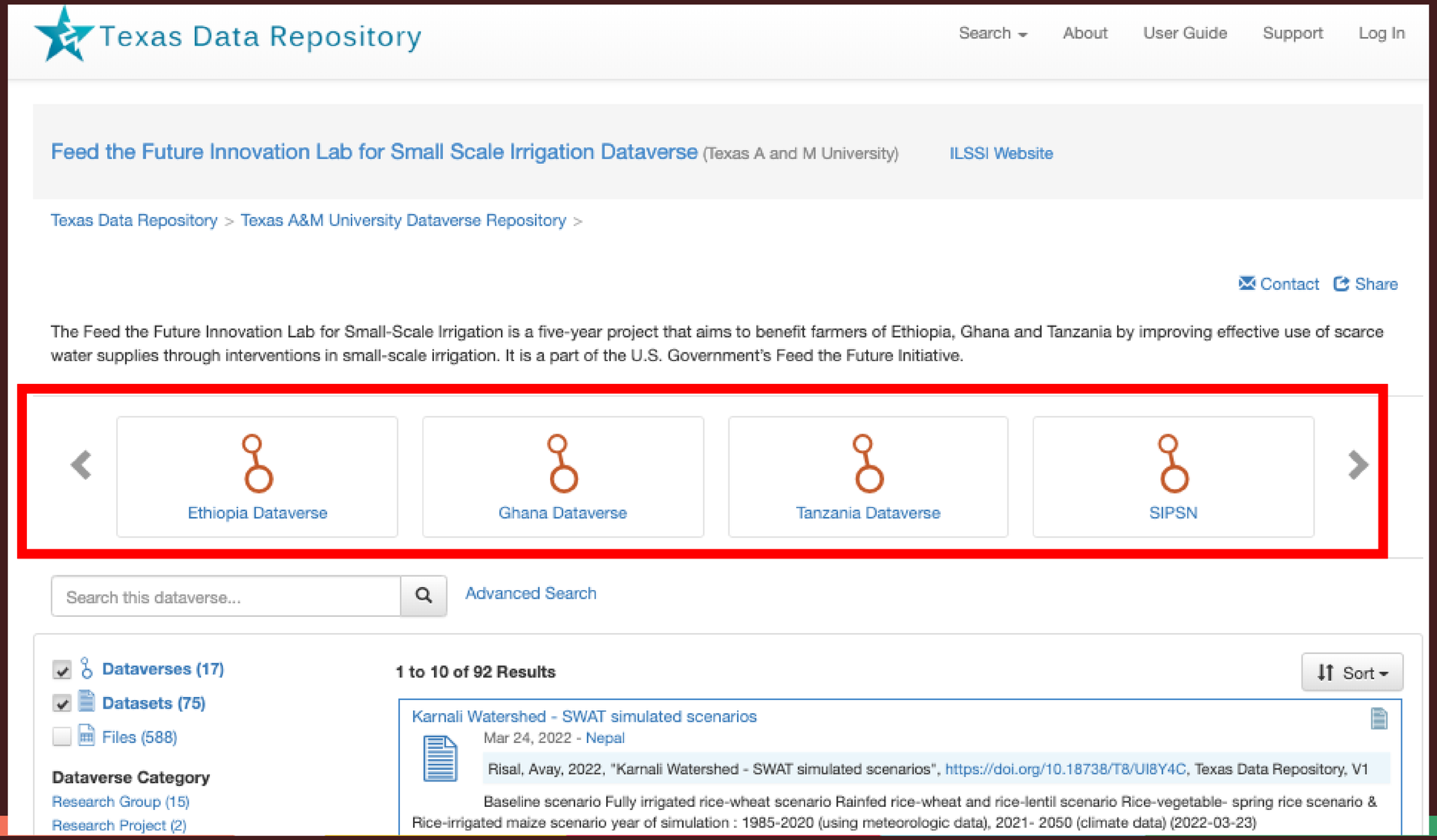
- **Facilitate Collaboration – share the piece of dataset with your collabrators worldwide**



Texas Data Repository Example 2

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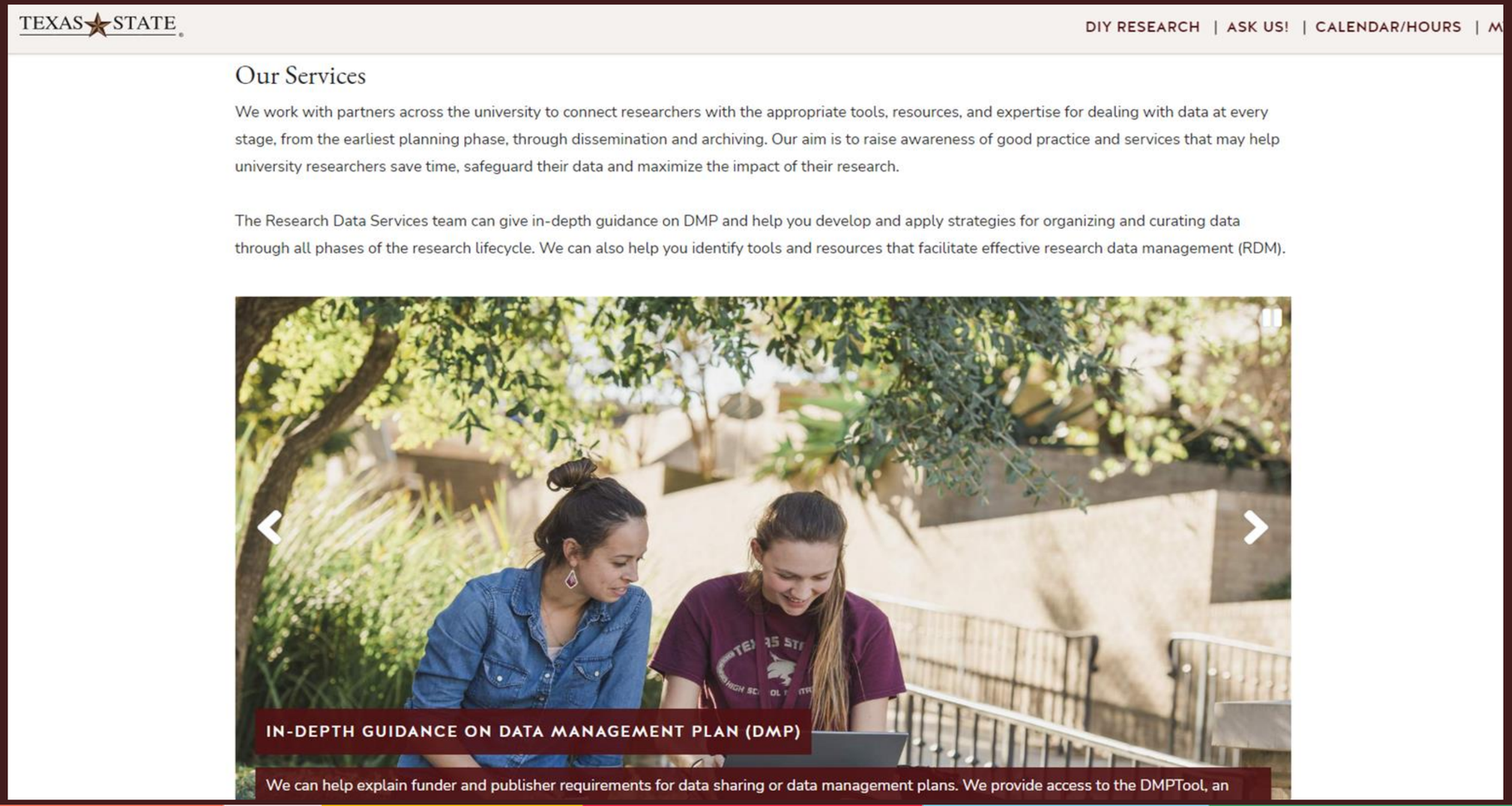
RDM Services at University Libraries



https://www.library.txst.edu/services/research-services/research-data-management.html

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Final Tips and Reminders

- Decide which data you want to share
- Choose file formats that last
- Remember the documentation
- Consider ownership and privacy
- Follow metadata standards, look at repository metadata fields to use during documentation

https://guides.library.txstate.edu/datarepository

LibGuide

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- Data Analysis and Visualization
- Data Security and Backup
- Data Preservation and Sharing
- Additional Resources

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Research Data Sharing and Management Support

The Texas State University Libraries supports **data management planning**, **data preserving and publishing, and open data sharing,** which foster reproducibility and responsible research.

Research Data Management practices cover the entire lifecycle of the data, from planning the investigation to conducting it, and from backing up data as it is created and used to long-term preservation of data deliverables after the research investigation has concluded.

All faculty, staff, and students at Texas State University have the responsibility for effectively managing and protecting University Information in their care, in accordance with university policies. This is so that we:

- Protect University Information from theft, security breaches, or data losses
- Ensure continuity of university operations
- Meet requirements of federal and provincial regulations and policies

https://guides.library.txstate.edu/research-data/dataverse-guide

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Questions?

Research Data Services
Texas State University Libraries
UL-RDS@TXSTAE.EDU

https://www.library.txstate.edu/
https://www.library.txst.edu/services/research-services/research-data-management.html

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