Enabling FAIR Data
in the Earth, Space, and Environmental Sciences

AGU 100
ADVANCING EARTH AND SPACE SCIENCE

ESIP

RDA
RESEARCH DATA ALLIANCE

AGU's position statement on data affirms that

"Earth and space sciences data are a world heritage. Properly documented, credited, and preserved, they will help future scientists understand the Earth, planetary, and heliophysics systems."

https://sciencepolicy.agu.org/files/2013/07/AGU-Data-Position-Statement-Final-2015.pdf

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New Grant from Laura and John Arnold Foundations (LJAF)

Align publishers and repositories in following best practices to enable FAIR and open data and to create workflows so that researchers will have a simplified, common experience when submitting their paper to any leading Earth and space science journal.

This will accelerate scientific discovery and enhance the integrity, transparency, and reproducibility of this data.

Enabling FAIR Data Project - Objectives

- **FAIR-compliant data repositories** will add value to research data, provide metadata and landing pages for discoverability, and support researchers with documentation guidance, citation support, and data curation.

- **FAIR-compliant Earth and space science publishers** will align their policies to establish a similar experience for researchers. Data will be available through citations that resolve to repository landing pages. Data are not placed in the supplement.

Community-Driven Project – Partnership Includes:

- **Science Data Communities**
  - AGU
  - Earth Science Information Partners (ESIP)
  - Research Data Alliance (RDA)
  - EarthCube / Council for Data Facilities
  - Coalition of Publishers and Data Repositories in the Earth Sciences
- **Publishers**
  - AGU
  - Proceedings of the National Academy of Sciences (PNAS)
  - Nature
  - Science/AAAS
  - Elsevier
  - PLOS

- **International Repositories (300+)**
- National Computational Infrastructure (NCI)
- AuScope
- Australian National Data Service (ANDS)
- Center for Open Science
- DataCite
- ORCID
- CrossRef
- CHORUS
- Scholix

And Growing!!

Targeted Action Groups

- Repository Guidance for Researchers
- Common Policy across Publishers in the Earth and Space Science
- Implementing a Consistent Workflow Between Publishers and Data Repositories
- Coordinating Educational Resources on Enabling FAIR Data
- Enabling Culture Change through Credit
- Actionable Data Management Plans Liaison

RDA Outputs being adopted

- Core Trust Seal!
- Scholarly Link Exchange, aka Scholix
- Dynamic Data Citation (at least parts)
- Data Publishing Workflows
- Summer Schools in Data Science
- Legal Interoperability Guidelines

Other groups of interest

- IG Earth and Space and Environmental Sciences
- WG DMP Common Standards
- Metadata Standards Catalog
- IG Data Policy Standardisation and Implementation
- WG WDS/RDA Assessment of Data Fitness for Use
- IG Data Discovery Paradigms
- Data Fabric
- Research Data Collections
- IG Repository Platforms for Research Data
- IG Sharing Rewards and Credit (SHARC)
- WG Exposing Data Management Plans
- IG PID
- WG Data Versioning
- WG PID Kernel Information
- IG Archives and Records Professionals for Research Data
- IG Libraries for Research Data
- WG Data Description Registry Interoperability (DDRI)

- **http://alturl.com/dh5kv**

Enabling FAIR Data – Project Orientation Material

Article describing the Enabling FAIR Data Project:
https://eos.org/editors-vox/enabling-findable-accessible-interoperable-and-reusable-data

Outcome of the initial Stakeholder Meeting from Nov 16-17, 2017:
https://eos.org/agu-news/enabling-fair-data-across-the-earth-and-space-sciences

DataONE webinar recording:
https://www.dataone.org/webinars/enabling-fair-data

Enabling FAIR Data (high-level) Project Site:
http://www.copdess.org/home/enabling-fair-data-project/