

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

Origins and AMS's Participation and Experience

Mike Friedman
AMS Senior Manager for Publishing Operations
mfriedman@ametsoc.org



In the beginning...

- **COPDESS, 2014** <https://copdess.org/>
 - Provides an organizational framework for Earth and space science publishers and data facilities to jointly implement and promote common policies and procedures for the publication and citation of data across Earth Science journals.
 - **Statement of Commitment** affirming the value of a system where data are open, accessible, and easily shared, with a common infrastructure and standards for storing, referencing, and curating open data between researchers, repositories, publishers, and funders.

Organizers:

Kerstin Lehnert, Director of Integrated Earth Data Applications (IEDA)

Brooks Hanson, Director, Publications, American Geophysical Union

supported by National Science Foundation, AGU, Earth Science Information Partners (ESIP)

Enabling FAIR Data Project <https://copdess.org/enabling-fair-data-project/>

- In 2017 the [Laura and John Arnold Foundation](#) (now Arnold Ventures) awarded a grant to a coalition of groups representing the international Earth and space science community, convened by the AGU, to develop standards that will connect researchers, publishers, and data repositories in the Earth and space sciences to enable [FAIR](#) (findable, accessible, interoperable, and reusable) data on a large scale.
- Builds on the work of COPDESS, ESIP, RDA, scientific journals, and domain repositories to ensure that well-documented data, preserved in a repository with community agreed-upon metadata, and supporting persistent identifiers, becomes part of the expected research products submitted in support of each publication.
- New [Commitment Statement](#) and common set of [Author Guidelines](#)

Enabling FAIR Data Project Objectives

- **FAIR-aligned data repositories** add value to research data, provide metadata and landing pages for discoverability, and support researchers with documentation guidance, citation support, and curation.
- **FAIR-aligned Earth, space, and environmental science publishers** align their policies to establish a similar experience for researchers. Data, software, technology will be available through citations that resolve to repository landing pages. Availability statements are provided. **Data are not placed in the supplemental information.**

FAIR and AMS

- Active participant in project workshops and meetings
- Advocated for flexible approach
 - Smaller society publishers cannot move towards implementation as quickly
- Revised our [data policy](#) in parallel with FAIR participation
- Continuing to align our policies with FAIR guidelines

FAIR and AMS

- Areas of discomfort
 - Software and model output (what exactly should be preserved?)
 - Separate subcommittee to draft parallel policy to newly revised data policy
 - Extremely large datasets
 - Datasets that don't seem to fit with domain or funder repositories
 - Quantifying author contributions (CRediT categories way too granular)
- AMS has not yet signed the commitment statement but is moving towards that goal (next task: updating our Author Guidelines to align with FAIR objectives)
 - Repository finder tool will help a lot to assist authors in complying

Thank you...



And thanks to Shelley Stall (AGU) for sharing her FAIR-related presentations

