Center for International Earth Science Information Network
EARTH INSTITUTE | COLUMBIA UNIVERSITY

Collaboration on Data Management within the Geosciences

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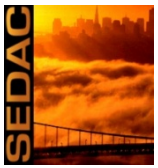
Trustworthy Data Repositories Workshop
National Institutes of Health

Session: Examples of Collaborations from Different Disciplines
Monday, April 9, 2019; 9:00 a.m. - 10:30 a.m.



Collaborative Geoscience Communities: Selected Examples

Group on Earth Observations (GEO)

Earth Science Information Partners (ESIP)

Enabling FAIR Data, CoreTrustSeal Cohort

NASA Earth Science Data System Working Groups (ESDSWG)

NASA Earth Science Data and Information System (ESDIS)

Group on Earth Observations (GEO)

- International intergovernmental Earth science community
  - Represented by countries and member organizations
- Focus on Earth observations for sustainable development
  - UN 2030 Agenda for SD, public health surveillance, disaster resilience, biodiversity and ecosystem sustainability, …
- Group on Earth Observations System of Systems (GEOSS)
  - GEOSS Data Management Principles
  - GEOSS Data Sharing Principles
- http://earthobservations.org/

Source: United Nations, https://www.un.org/development/desa/dspd/2030agenda-sdgs.html

Earth Science Information Partners (ESIP)

- Over 150 partnering organizations
  1. Data distributors
  2. Data product and service producers
  3. Tool developers (commercial and non-commercial)
  4. Sponsors
  5. Non-voting supporters
- Committees, working groups, clusters
  – Data stewardship, education, disaster planning, …
- https://www.esipfed.org/

Enabling FAIR Data: CoreTrustSeal Certification Cohort

- Enabling FAIR Data Collaboration
  - American Geophysical Union (AGU)
  - Earth Science Information Partners (ESIP)
  - Research Data Alliance (RDA)
- Support for CoreTrustSeal Certification
  - Providing training on repository trustworthiness
- Cohort of data repositories
  - Seeking CoreTrustSeal certification as a cohort
  - Requesting collaborative application fee discount

Earth Science Data System Working Groups (ESDSWG)

- NASA community
  - Distributed Active Archive Centers (DAACs)
  - Science Information Processing Systems (SIPS)
  - Other NASA funded projects
- Improving data management and distribution
  - Capabilities to develop, curate, and share NASA data
- WGs proposed each year to meet goals in one year
  - WGs report on completed work at annual meeting
  - https://earthdata.nasa.gov/community/earth-science-data-system-working-groups-esdswg

Value of WDS Certification to NASA ESDIS DAACs

- WDS objectives are to preserve and share data openly, consistent with long-held NASA data and information policy and with ICSU Principle of Universality of Science
  - WDS membership recommended by NASA Advisory Committee
  - WDS provides persistent international framework for unrestricted scientific data sharing and exchange in coordination with broad scientific community
- WDS continually improves membership criteria and process
- Sharing expertise in data stewardship and networking with peer scientific data centers outside DAACs' primary disciplines
- Opportunities for DAACs to learn from and contribute to evolving WDS
  - Shared Values: Increased consistency and quality of services across WDS data centers, e.g., in metadata, documentation, preservation, and access
- Coordinated data repository certification efforts and recognition for trustworthy data curation practices
- Enhanced visibility of ESDIS and DAACs as WDS Members

Source: Downs et al., 2018.