

# Taking Steps Towards Developing Data Management Strategies for a Research-Intensive Science Department

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Grant Agencies, Disciplinary Information Services Communities, Academic Libraries, and Local Resources

Best practices, expertise, tips, & tools



Data Services Librarian & Science Librarian

Inform faculty, suggest strategies, train graduate students

Science Department

### Academic Libraries - Data Services

- Academic libraries' data management training materials

Gather general resources about data management best practices

### Funding Agencies' DMP Requirement

- NSF Directorate for Geosciences - Data Policies

Note data policies - especially data requirements of grant funding agencies

### Disciplinary information services

- DataOne data management best practices & tools database
- Federation of Earth Science Information Partners (ESIP)'s data mgmt. short courses

Compile list of disciplinary data repository options and existing metadata structure and terminology standards

### Disciplinary data infrastructure/community

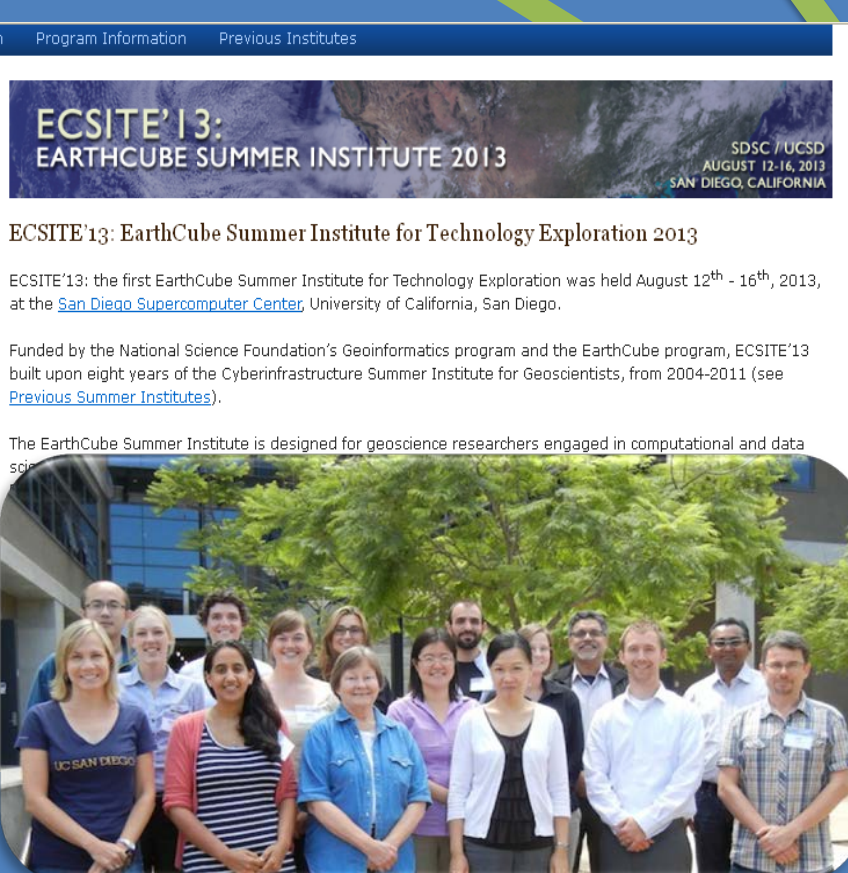
- EarthCube
- Integrated Earth Data Applications (IEDA)
- National Critical Zone Observatories (CZO)

Attend EarthCube Summer Institute to learn of current developments in geosciences data infrastructure

### Local Campus Computing Services

- Rutgers-Newark campus computing services

Discuss options for data storage and backup facilities on campus



Present seminar/workshop to graduate students about general data management best practices (file directory organization, documentation, and metadata)

Adapt "Data Curation Profile" to collect information about individual graduate students' current data management practices & data support needs

Create LibGuide emphasizing department-relevant resources

Suggest strategies for better data management, including improved project file directory organization, documentation, and preservation

Inform faculty about campus computing resources

### Department of Earth and Environmental Sciences

- Small department
- Diverse research fields:
  - atmospheric chemistry
  - soil geochemistry
  - near surface geophysics
  - ocean biogeochemistry
  - structural geology

### Data Management Concerns

- File directory organization
- Data documentation
- Data storage and backup
- Preservation & archiving
- Sharing data
- Accessing data (one's own and another's)

Librarians as Middleware, Bridges, Facilitators, and Relationship Builders