

ACADIS Project Status Update

The following is an update on activities in Advanced Cooperative Arctic Data Information Service (ACADIS) since our last report submitted in October 2013.

ACADIS continues to assist NSF funded principal investigators with the input of new datasets and the access to all Arctic data coming from Division of Polar Programs (PLR) Arctic Science (ARC) grantees and projects. The ACADIS team is working hard to improve the infrastructure and support of the system taking into account the recommendations of the review committee. We have increased our efforts regarding outreach of the ACADIS portal to national and international fora.

We are happy to address any specific questions as you or others in PLR might request.

The following summary describes project updates since the last report and how they are mapped to the Year 3 ACADIS Consolidated Work Plan and Review Panel recommendations (in parentheses).

- Eight new releases of the main ACADIS gateway over the last three months to reflect changes, improvements and fixes to the Gateway system include: upgraded contact management to the International Organization for Standards (ISO) model, upgraded award and PI search, improved screening to reduce spam registrations, put the new file upload web service into full production; began development to highlight GCMD scientific discipline browse and search; extended tool capabilities for managing projects, datasets and contacts, expanded metadata harvesting. (1. Data Services-improved and new technologies)
- As part of improving the search within ACADIS we are using the top 2 layers of the GCMD keyword identification related to discipline. It is instructive to see the diversity of disciplines held in the archive. The figure shows a cloud type presentation of all 2600+ ACADIS dataset disciplines as defined by the providers as listed in the first 2 layers of the GCMD discipline keywords. There are 68 discrete discipline identifiers for ACADIS holdings. (1. Data Services, 3. Metadata, 4. Interoperability)
- Began work on phased implementation plan to better link the data discovery capabilities (metadata harvesting) of the Gateway and Arctic Data Explorer (ADE) (1. Data Services—seamless link between gateway and ADE)
- Recent Arctic Data Explorer work includes: Sorting of search results by relevance, last update date, and temporal duration; facets have been added for temporal duration and data center; updated metadata harvest process for efficiency; added metadata feed for the Research Data Archive; published web services for automated use of facet and sorting features. (1. Data Services-improved and new technologies)
- User Support improvements including: Improved workflows, tags, and activity reporting in Zendesk communication management tool, began task of refining Community Support metrics capture and reporting. (5. Science support)

- Metadata cleanup Round 1 complete. Round 1 included cleanup of EOL Arctic datasets (15 projects/>1800 datasets), and 107 Gateway projects including 769 datasets from 188 PIs. Planning for Round 2 underway. (3. Metadata Clean up)
- Rosetta tool upgrades and bug fixes including testing format conversion by EOL (ASCII-to-NetCDF). Software and documentation available via the Unidata 'github' account. (1. Data Services – Rosetta Development)
- Regular meeting schedule for sub-teams including workflows, metadata and community support. (1. Data Services (all tasks) and 3. Metadata documentation, sharing and usability (all tasks), project management and coordination)
- Community outreach in several venues including: ACADIS leadership attended the NSF EarthCube Data Facilities Workshop in DC, January 2014, and presented ACADIS material in the plenary session, and ACADIS came up several times in breakout sessions; a Fall 2013 Witness the Arctic article, International Polar Data Forum presentation and discussion, American Geophysical Union (AGU) presentations and posters, an educational YouTube video showcasing the Arctic Data Explorer and Earthcube partnership. (Other Activities—Community Outreach)
- Additional canvassing of ACADIS users to get their input on their experiences (good or bad) with the Gateway system and other project areas that can be improved. 76 total surveys have been sent with 26 responses to date. Responses will continue to be synthesized and responded to with a report to be provided at the May 2014 NSF Review. 3. (Science Support—PI opinions about ACADIS support)
- The new ACADIS Project Manager, Karen Andersen, started at the National Center for Atmospheric Research / Earth Observing Laboratory (NCAR/EOL) on 27 January 2014. Karen brings a wealth of experience in private and public sector project management to further assist ACADIS in meeting its goals. (Project Management and coordination- Project Manager Hire)

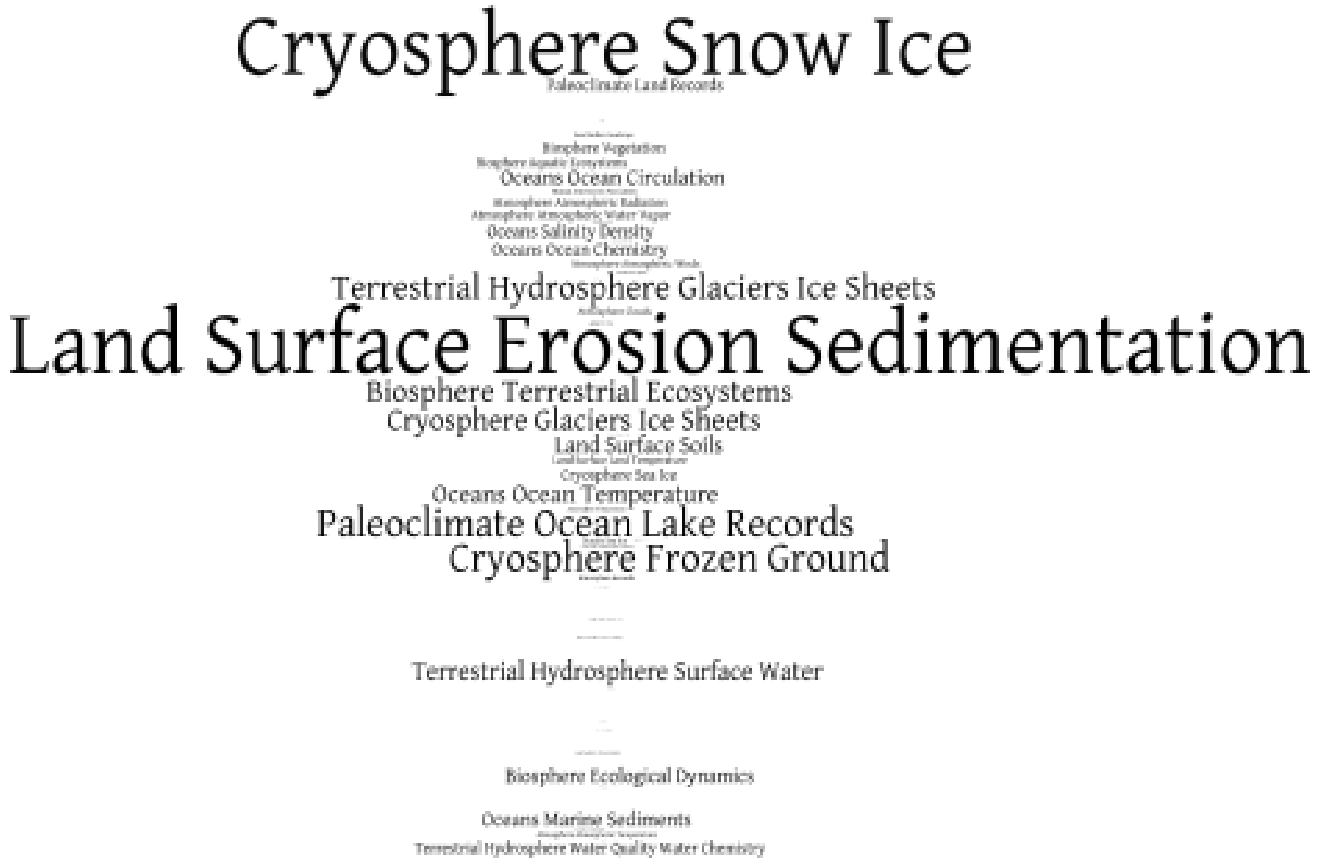


Figure showing cloud visualization (linear top to bottom) of ACADIS disciplinary text word search using only top two layers of the GCMD discipline key word template. There are 2600+ datasets used for the inventory and 68 discrete disciplines are shown. The two largest categories shown have 300+ datasets each.