

Greetings AON PIs;

Over the past year the Cooperative Arctic and Data Information (CADIS) Team have been working to develop a data management support structure worthy of the large investment that NSF and all of you are putting into this diverse project. We have provided a lot of information at the following web site to keep you informed about our activities and how we are going to support you. <http://www.eol.ucar.edu/projects/aon-cadis/>

We would encourage you to bookmark the site as it will be the major source of data management support activities for AON now and in the future.

Overview of the CADIS Metadata and Data Portal

A major focus of CADIS activities during the past year has been to develop the CADIS metadata and data entry portal. The portal web site can be found off of the main CADIS web page above or directly at the following url:

<http://cdp.ucar.edu/cadis>

The portal will lead the PI through the process of uploading AON metadata and data. We have pre-loaded information that you provided on the data management questionnaire at last years PI meetings. Since some of this information has changed, you will be able to change any of this during the upload process. We have also prepared a CADIS Users Guide (it is attached here). Please note the revision date as this will change in the future as capabilities and explanations are added.

With few exceptions, this will be the only way to upload your data and metadata into the CADIS archive to meet NSF data policy requirements. It is important for you to learn how to use the system and it is important for the CADIS team to help you in the process.

CADIS Overview and Training at the AON PI Meeting (18 March 2008)

There will be an overview of CADIS activities on Monday afternoon 17 March. At that time we will provide more information about the portal, why we have organized it in the way we have and some samples of the visualization possibilities for using data from the archive. Some specific objectives include:

- CADIS team is focusing at the meeting on getting paths established for PI who need to start archiving data with CADIS soon. We've set time aside at the meeting for one on one help with this. This period of time will be from 1400-1730 on Tuesday 18 March after the conclusion of the formal AON PI meeting. **We will have a room set up with full wireless connectivity and PIs are encouraged to bring their computer and metadata/data information for loading onto CADIS. See the Users Guide for the information you will need.**

- The CADIS database is pre-populated with some metadata for all NSF AON PIs. At the meeting, you can get help with completing metadata for individual data sets or collections of data*** (see brief description below for a description of data sets and/or collections of data).
- You will be able to upload metadata/data at the meeting, or you can do this later. As noted above, we would like you to use the CADIS Portal at the meeting to upload information. The system allows for partial submissions of data or metadata, although key metadata is required (and highlighted on the portal) that must be completed before an entry is saved for later editing.
- We strongly encourage you to submit data in netCDF. We have created a brief page on "how to" create netCDF format files from ASCII data. <http://www.unidata.ucar.edu/data/CADIS/ascii2netcdf.html> This page includes links to sites that are already doing netCDF to ASCII conversions and shows how to do the conversion on windows or Unix/Linux platforms. As more data formatting tools are discovered we will add them to this page.
- We will have CADIS data visualization demonstrations planned using tools that utilize metadata and netCDF input for perusal and display.
- We would also like the PIs to consider use cases for AON that we might focus on as the CADIS development continues.

***What is a data set?

It is up to the project PI to decide what constitutes a data set that will be described by data set metadata. This can be somewhat arbitrary. For example, consider a mooring array that is part of a large AON field project. All the data collected by the array over the entire course of the experiment could be a data set, or all data collected in Year 1, or all data collected at one mooring, or all current velocity data, or all current data collected by a particular current meter could be a data set, etc. There are no hard and fast rules, but some guidelines follow.

For geophysical data, it is useful to describe data for a particular parameter, general location, and date range as being a data set. So in the mooring example, all the current velocity data from the mooring array for the entire length of the experiment would be one data set. CTD data from the same array would be another data set. They will be linked together in the data base as belonging to the same project.

One could make all the data from a single mooring a data set, and if all the data from a mooring are in the same well-described file this makes the most sense. The metadata includes the data set location, which in this case would be the mooring location (a point) rather than the array location (a bounding box).

The CADIS metadata entry tool works in the following way:

Project: Project level information is fixed, and pre-populated in the CADIS metadata database. Project level information reflects NSF program grant information like the project title and PI name. Please contact CADIS (Don Stott) if there are errors in the project level information.

Data set: Under each project you can create one or more data sets by entering metadata and uploading data. There is a one to one relationship between a metadata record and a data set. PIs (or others who have permission by virtue of having a CADIS account that is linked to a project or projects) can create and edit data set metadata.

Data files: Under each data set there can be a single data file, several data files, or a directory structure. The data files, and the directory structure, should be described in a readme.txt (that is, a documentation) file if they are not described in the metadata Summary field. The Users Guide will tell data contributors to provide a readme file that includes this and other information needed to use the data.