

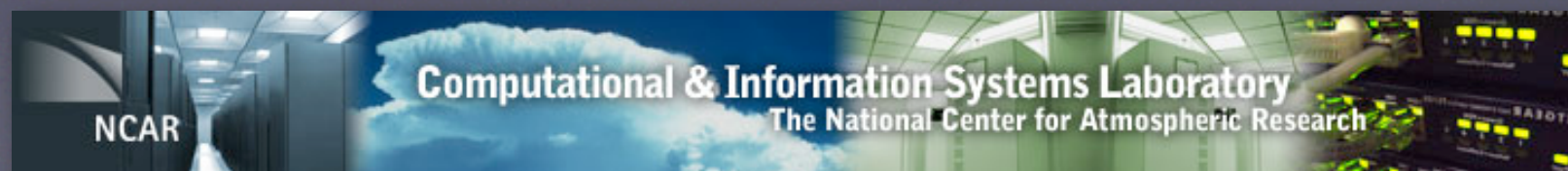
NCAR DCPC Update for WMO ICG-WIS

ECMWF Meeting - September 4-7, 2007

Don Middleton & Al Kellie, NCAR/CISL



NCAR





The Community Data Portal (CDP) is a collection of earth science datasets from NCAR, UCAR, UOP, and participating organizations.

Statistics:
8000+ collections
1,095,974 files
7.8TB total size
2.23TB Downloaded
1068 Registrations

The Community Data Portal is led by NCAR's Computational Science and Information Systems Laboratory (CISL). Support is provided through NCAR's Cyberinfrastructure Strategic Initiative (CSI) and is a collaboration among NCAR, UCAR, UOP, and the National Science Foundation. The technology base for this effort is also a collaborative effort, combining contributions from Unidata, NOAA/PMEL, DLESE, OPeNDAP, OAI, and NASA. [Privacy Policy](#) | [Terms of Use](#)

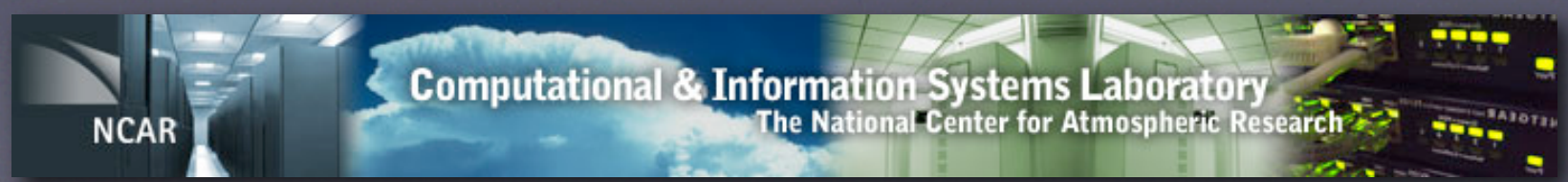
Search: Search Advanced Search

- Browse Themes Browse by Organization
- ACD : Atmospheric Chemistry Models, Data Sets and Visualization Tools
 - MILAGRO : Milagro field campaign
Requires CDP login and Milagro membership ([Click here to request access](#))
 - WACCM Model : Whole Atmosphere Community Climate Model
 - CGD : Climate and Global Dynamics Division
 - CME : Carbon in the Mountains Experiment
 - COLA : Center for Ocean-Land-Atmosphere studies
 - CU/CIRES/ENLIL : Heliospheric Model
 - ECMWF : ERA40 Datasets
Requires ECMWF membership
 - EOL : Earth Observing Laboratory - Access To EOL Public Data Holdings
 - ESMF : Earth System Modeling Framework Software
 - GB/NCAS/BADC : British Atmospheric Data Centre, OAI Harvested Datasets
 - GIS : Climate Change Scenario Project
 - HAO/CISM : Center for Integrated Space Weather Modeling
 - IHOPE : Integrated History of People on Earth
This Dataset is currently locked
 - IPCC AR4 : Chapter 3 of the IPCC Fourth Assessment Report
 - SCD/DSS : Data Support Section top level catalog
 - SCD/VETS : Visualization Gallery
 - TIGGE : NCAR THORPEX Interactive Grand Global Ensemble (TIGGE) Data Archive Portal
 - Unidata : Realtime data from IDD
 - VEMAP : Vegetation/Ecosystem Modeling and Analysis Project
 - WRF Model : The Weather Research and Forecasting Model
Requires CDP login and WRF membership

Display a menu



NCAR





The Community Data Portal (CDP) is a collection of earth science datasets from NCAR, UCAR, UOP, and participating organizations.

Statistics:
 8000+ collections
 1,095,974 files
 7.8TB total size
 2.23TB Downloaded
 1068 Registrations

The Community Data Portal is led by NCAR's Computational Science and Information Systems Laboratory (CISEL). Support is provided through NCAR's Cyberinfrastructure Strategic Initiative (CSI) and is a collaboration among NCAR, UCAR, UOP, and the National Science Foundation. The technology base for this effort is also a collaborative effort, combining contributions from Unidata, NOAA/PMEL, DLESE, OPeNDAP, OAI, and NASA. [Privacy Policy](#) | [Terms of Use](#)

Search: [Advanced Search](#)

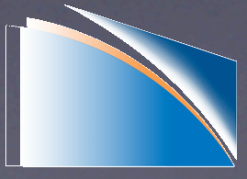
Browse Themes | Browse by Organization

	Climate Climate Change, Models, Data	Weather Weather Data, Events, Models	
	Models Climate, Atmospheric Chemistry, Weather Prediction Models	Sun-Earth and Space Weather Data about the Ionosphere, Solar Data	
	Polar Data from the Arctic and Antarctica	Field Campaigns and Observations Campaigns to Collect Measurements of Atmospheric Parameters	
	Human Dimensions, Environmental Impacts Interactions of Climate, and Weather and Human Activity	IPCC International Panel on Climate Change, Data, Reports	
	Software and Tools Model software, Visualization software	Visualizations 2D and 3D Visualizations of Scientific Data and Models	

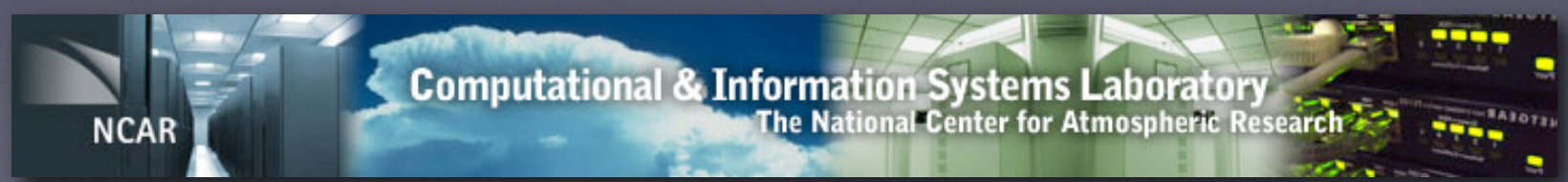
User: don | [CDP Home](#) | [Help Page](#) | [Contact Us](#) | [My Data Cart](#) | [My Data Requests](#)

Portal Software version 4.1.3 © UCAR, all rights reserved.

NCAR Community Data Portal, sponsored by National Science Foundation

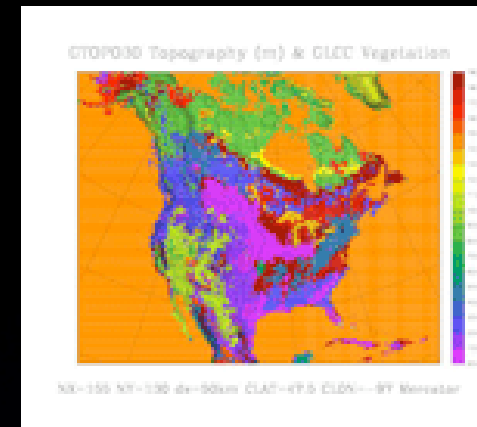


NCAR

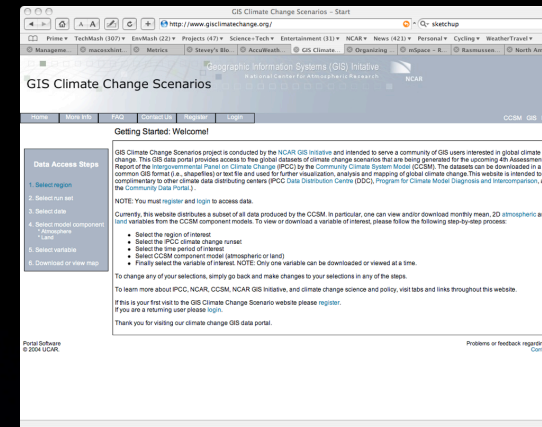




The Earth System Grid
(Climate/IPCC,
DOE+NSF)



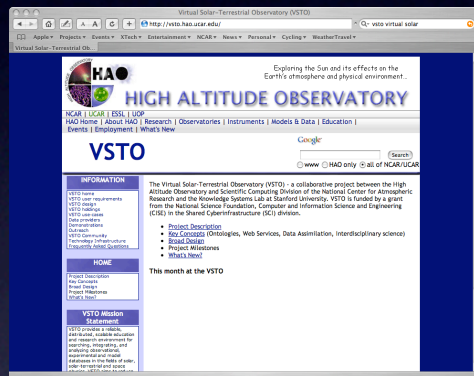
NARCCAP
(Regional Climate:
NSF, DOE, NOAA)



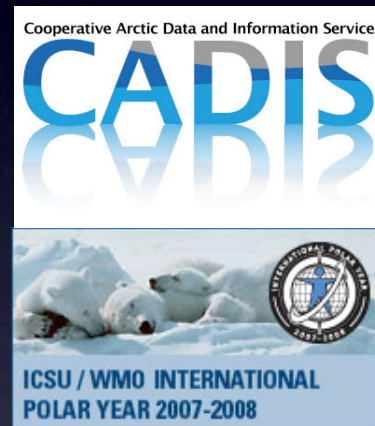
GIS IPCC
Portal



ESMF & Earth System
Curator (Models+Data,
NASA, NSF)



VSTO
(Solar-terrestrial,
semantic, NSF)



Cooperative Arctic Data
and Information Service
(Polar, NSF)



WMO-WIS
(Global Federation)



TIGGE
(Ensemble weather)



CDP + GE
(Oppfund)

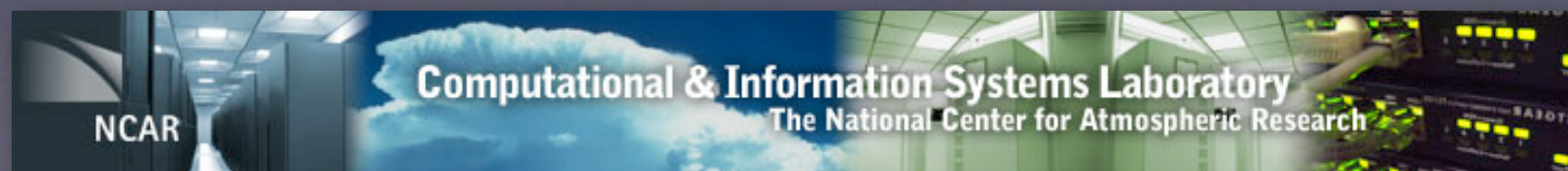


NSF
TeraGrid

NCAR Cyberinfrastructure Strategic Initiative (CSI, CDP) Technology Base and Hosted Scientific Projects/ Portals



NCAR



Cooperative Arctic Data and Information Service

CADIS

Arctic Observing Network



NCAR



AON-CADIS: Arctic Observing Network Cooperative Arctic Data and Information Service

http://www.eol.ucar.edu/projects/aon-cadis/

Prime TechMash (488) EnvMash (42) Projects (141) Science+Tech Entertainment (417) NCAR News (4761) Personal Cycling WeatherTravel

AON-CADIS: Arctic Observi...

Cooperative Arctic Data and Information Service
of the ARCTIC OBSERVING NETWORK

Welcome to CADIS

CADIS - The Cooperative Arctic Data and Information Service - supports the Arctic Observing Network (AON). It will be a portal for data discovery, and provide near-real-time data delivery, a repository for data storage, and tools to manipulate data.

AON is an NSF initiative for the [International Polar Year \(IPY\)](#) to improve observational capabilities in the Arctic and leave a long-term legacy for the benefit of science and society. AON data will contribute to scientific research leading to (1) increased knowledge and understanding of the regional and global causes and consequences of present-day environmental Arctic Change, (2) scenarios for and prediction of the course of future Arctic Change and its regional and global consequences, and (3) the development of adaptive responses to Arctic Change.

AON is integral to the [Study of Environmental Arctic Change \(SEARCH\)](#). AON currently consists of [28 projects](#) funded by the NSF Office of Polar Programs. The AON projects fall into the following [SEARCH Implementation Plan](#) categories: Atmosphere; Ocean and Sea Ice; Hydrology/Cryosphere; Terrestrial Ecosystems; and Human Dimensions. CADIS will support all these projects, as well as the [IASOA \(International Arctic Systems for Observing the Atmosphere\)](#) program.

[NSF AON Fact Sheet](#)

More information about CADIS is available in the recent presentation given at the [AON PI Meeting](#) and via the links to the left.

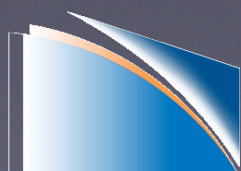
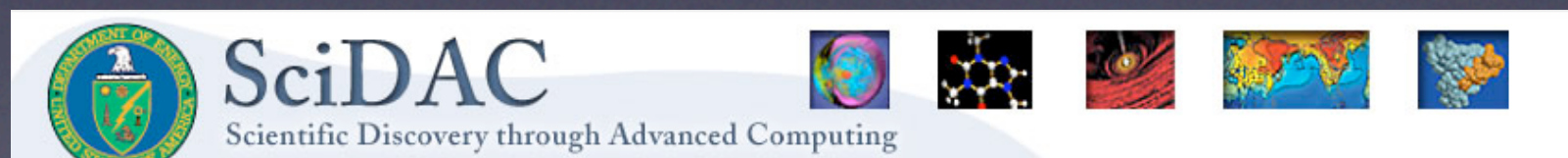
NCAR Earth Observing Laboratory
Last Update: 27 April 2007

NCAR/Earth Observing Laboratory (NCAR/EOL)
National Snow and Ice Data Center (NSIDC)

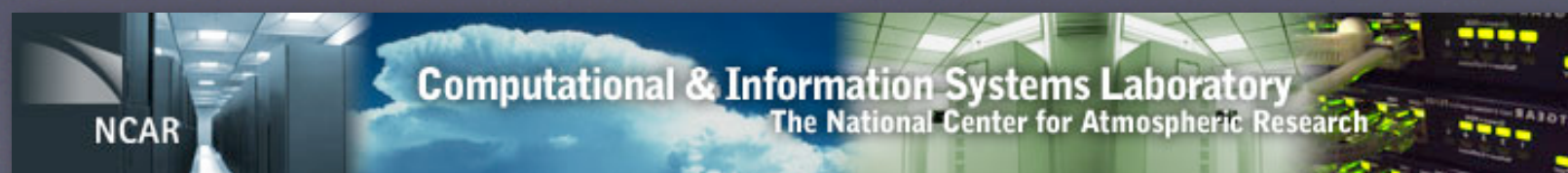
The Earth System Grid (ESG)



Distributed
Climate Simulation
and IPCC Data,
Models, and Tools

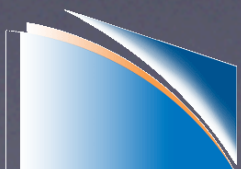


NCAR

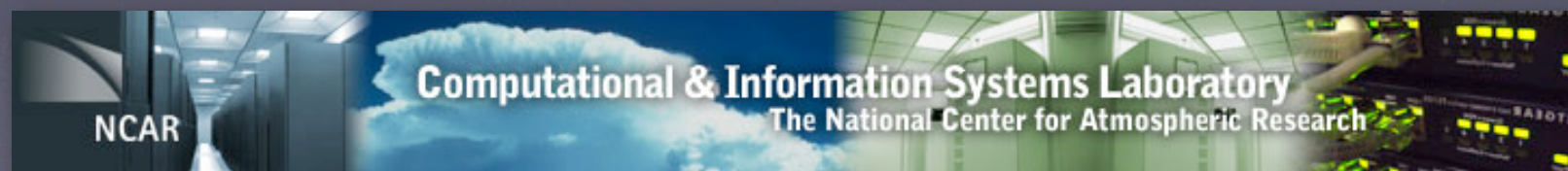


Earth System Grid Update

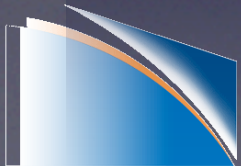
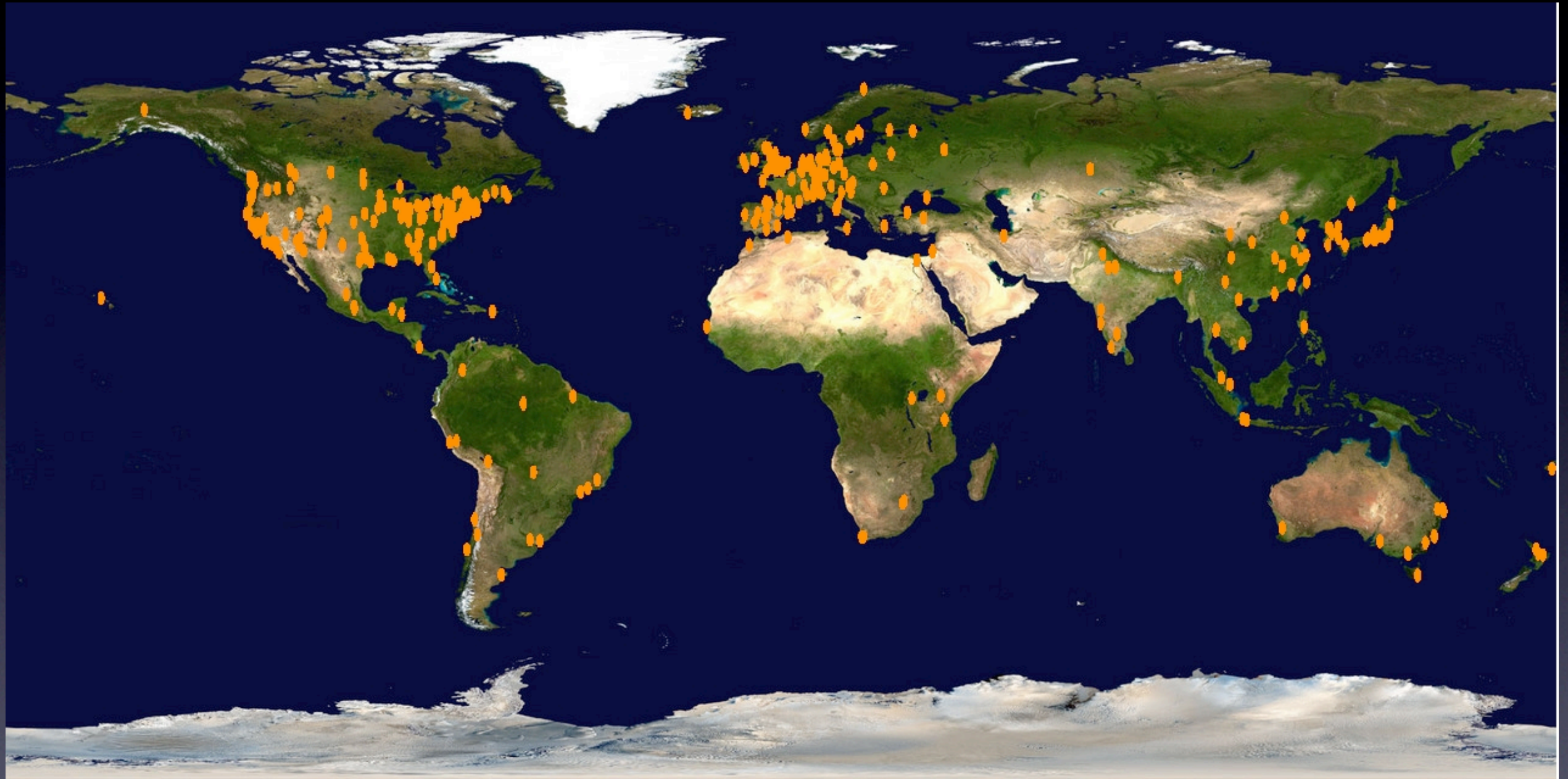
- Over 300 scientific papers authored for IPCC, via analyses of ESG data hosted at DOE/PCMDI
- Across our Grid: 6000+ users, 250TB of data available plus models & tools, 290+TB downloaded



NCAR



Earth System Grid Update



NCAR

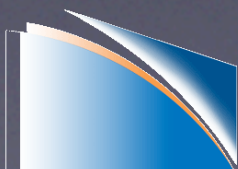
NCAR

Computational & Information Systems Laboratory
The National Center for Atmospheric Research

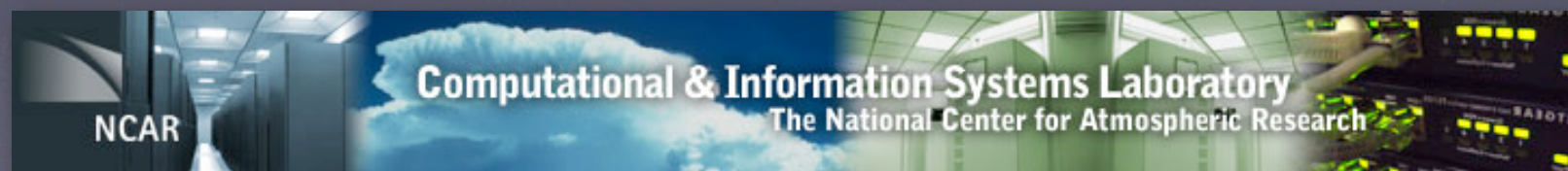
A horizontal banner image showing a server room with rows of server racks and a person working at a computer workstation.

Earth System Grid Update

- Earth System Grid Center for Enabling Technologies (ESG-CET) funded for 5 years (DOE, NSF, NOAA, USC/ISI)
- Planning and design underway for CMIP-4 and IPCC Assessment Report AR-5
- U.S. (ESG: DOE, NSF, NOAA), U.K. (BADDC), EU (MPI/DKRZ), and other partners beginning initial discussions of federation strategies, design considerations, and IPCC Working Groups 1-3 cross-requirements

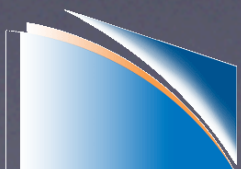


NCAR

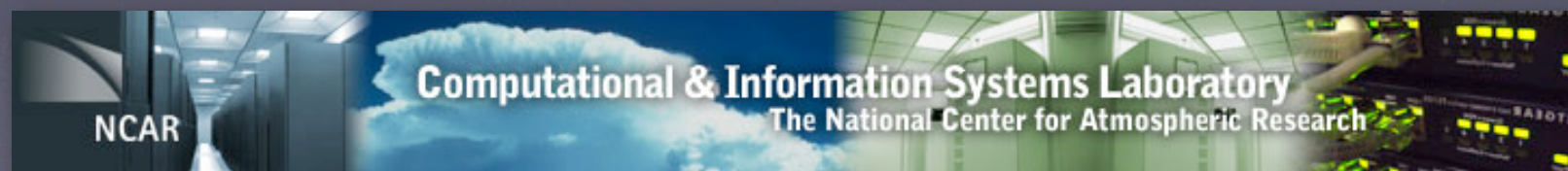


ESG/CDP and WMO-WIS

- Potential connection points and learning opportunities relative to WMO-WIS
- Metadata for climate and models
- Federation architecture
- Virtual Organization (VO) management
- Data access policies

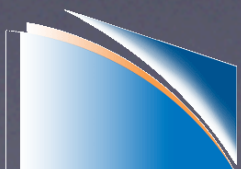


NCAR

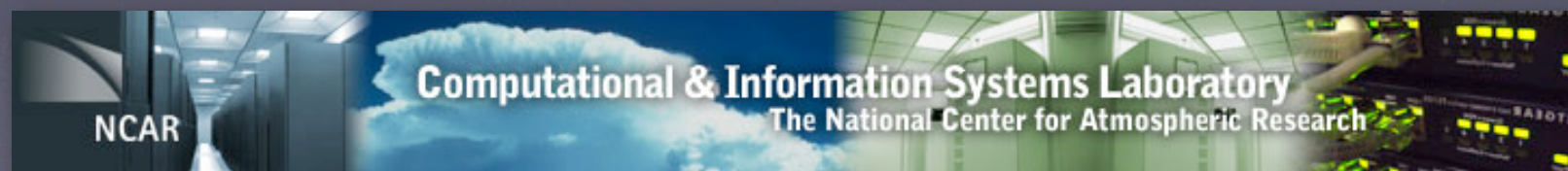


Thoughts on DCPC's

- We want many data providers, and expect 100's of DCPC's
- Concerns expressed on integration costs
- Thus, ease of deployment is important
- Consider articulating resource requirements for deployment and support
- Open Source Reference Implementation?

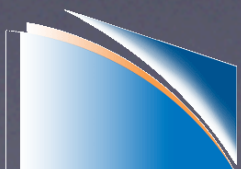


NCAR

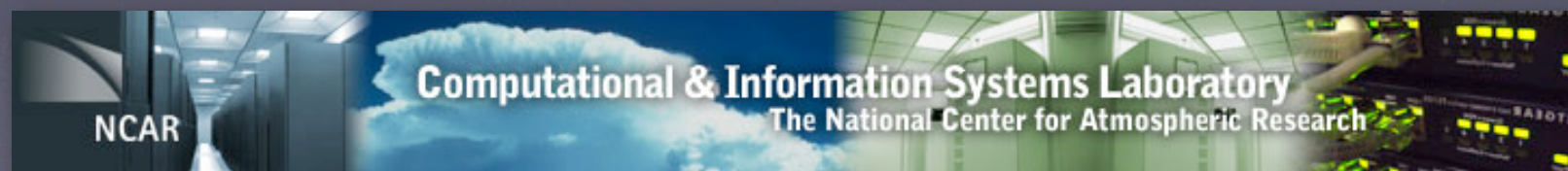


Thoughts on Virtual Organizations (VO's)

- Data policy is a significant, pervasive issue
- A large meta-catalog will be useful, but fluid access across WIS data resources will much more strongly realize the potential of WIS
- High level VO capabilities (e.g. WMO, GEO) could facilitate multi-disciplinary data integration
- This is a very difficult area, but potentially one with a high payoff



NCAR



End