## Report to Unidata Policy Committee July 16, 2007

Clifford Jacobs Division of Atmospheric Sciences National Science Foundation

### **Main Topics**

- Update on FY 2008 Budget
- Changes in GEO staffing
- \*CDI for FY 2008 and beyond

#### Update on FY 2008 Appropriation Bills



#### House bill provides 10+% increase over FY 2007 level

Above President's request



Senate bill provides almost 11% increase over FY 2007 level

Above President's request



#### Point of tension

- Appropriations (all discretionary spending) is \$30 B over President's request
- White House threatens a veto, but science funding bills support President's API
- Possible veto override ---- test case the bill that contains NSF appropriation

# Changing GEO Staff

Change at the top

## Dr. Mark Abbott has been selected as the next Assistant Director for Geosciences

- Dr. Abbott is currently serving as Dean of the College of Oceanic and Atmospheric Sciences at Oregon State University.
  - Professor of Biological Oceanography at OSU.
  - Abbott, who joined OSU in 1988, became Dean in 2001.
- He will begin his tenure on October 1, 2007
- Currently member of NSB
  - Will resign in August
- Additional information on NSF website
  - http://www.nsf.gov/news/news\_summ.jsp?cntn\_id=109688&org= olpa&from=news

## **CYBER-ENABLED DISCOVERY AND INNOVATION (CDI)**

#### • Objective:

• Broaden the Nation's capability for innovation by developing a new generation of computationally based discovery concepts and tools to deal with complex, data-rich, and interacting systems.

#### • Description:

- Scientists and engineers are faced with research problems that often have **many complex internal feedback processes** that defy simple analysis, or that must be studied at scales that are much different than processes occurring in nature.
- Some research problems require **extensive complex networked observations**.
- These challenges often need **massive datasets for simulation**, have heterogeneous data sources that must be linked, or generate massive, high-dimensional datasets from experiment or observation, and will soon be beyond today's capabilities.

## **CYBER-ENABLED DISCOVERY AND INNOVATION (CDI) - 2**

- Five distinct themes of CDI
  - knowledge extraction,
  - interacting elements,
  - computational experimentation,
  - Virtual environments, and
  - education for computational discovery
- For additional information see
  - http://www.nsf.gov/about/budget/fy2008/pdf/39\_fy2008.pdf

## **Proposed Funding for CDI**

#### Long-term Funding for Cyber-enabled Discovery and Innovation

(Dollars in Millions)

FY 2008				
Request	FY 2009	FY 2010	FY 2011	FY 2012
\$51.98	\$100.00	\$150.00	\$200.00	\$250.00

# Questions and Discussion