

### **Director's Report**

#### Policy Committee Meeting 9 October 2003

Mohan Ramamurthy Unidata Program Center UCAR Office of Programs Boulder, CO



### Staffing

- Ed Hartnett, Software Engineer, has been hired to work on the NASA-AIST project to merge NetCDF and HDF5.
- Our Administrative Assistant and Travel/Meetings Coordinator, left Unidata on October 6 to go work for GLOBE, a new sister program in UOP. We plan to hire a replacement ASAP.
- We also plan to add two new staff (Software Engineers) for LEAD
- Total count when fully staffed: 30





#### **UPC** Staff Retreat

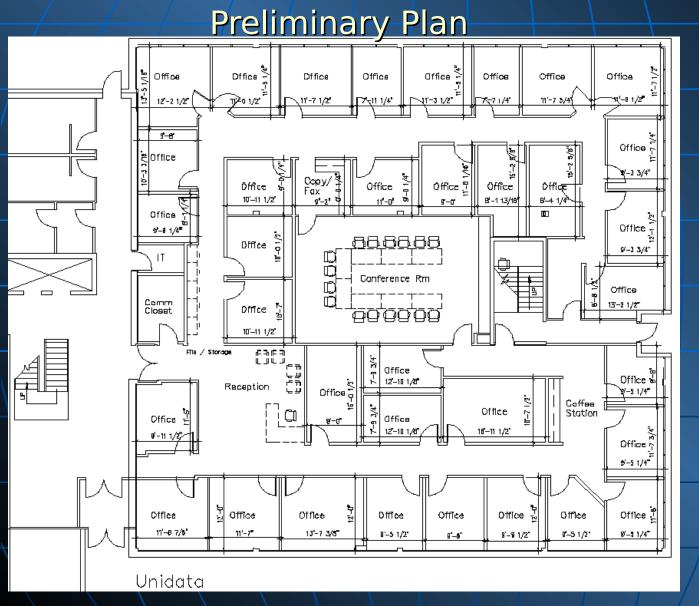
- The all UPC Staff Retreat was held on September 9-10, 2003 in Vail, CO.
- The retreat addressed many important questions concerning the UPC:
  - How do we deal with change brought about by all the successful proposals?
  - How do we improve the Unidata enterprise?
    - Held brainstorming sessions on work environment, software development, community support, communication, organization structure, committee interaction, etc.
- The retreat was highly successful and has already resulted in concrete steps:
  - The idea of new member orientation is a direct outcome
  - Ditto for status reports tying items to Unidata 2008 endeavors
- But it is a work in progress.







### **FL4 Remodeling**



#### UPC Will:

- Expand into the south wing
- Have more space
- Have all staff in one suite
- Some additional areas (e.g., demo area, coffee station)
- Move to CG On Nov. 13-14
- Return to FL4 by end of April 2004



#### **Users** Committee

- The Users Committee has a new chair: Jim Steenburgh, University of Utah
- Also, added three new members:
  - Elen Cutrim
    Western Michigan University
    Geography Department
  - Thomas L. Mote
    University of Georgia
    Department of Geography
  - Michael Voss
    San Jose State University
    Meteorology Department



Thanks to Departing Members: Rich Clark, Chair Bill Fingerhut Tony Rockwood



#### **Equipment Awards**

- 16 proposals were received, one from Argentina.
- The total pool (including overhead) in FY03 \$203,000 vs. total requests of \$328,425.
- 14 proposals were awarded for a total of \$164K including overhead (Range of awards: \$4,500 to \$15,834)
- Some proposals were of sub-par quality. Need community education and means to improve the overall quality in future years.
- Equipment award program will again be available in FY 04.
- The schedule is being moved up to accommodate academic calendar.
- Announcement will likely be made in January 2004.
  - Policy Committee will be discussing our policy towards and prioritization of international awards next week.



# Unidata

#### Summer Workshop: 23-27 June 2003

- Expanding Horizons Using Environmental Data for Education, Research, and Decision Making.
  - Despite the the lower total attendance (~70) compared to previous workshops, the meeting was quite successful in bringing new participants to the workshop and in addressing important issues surrounding the theme.
  - The UPC is moving forward with many GIS activities

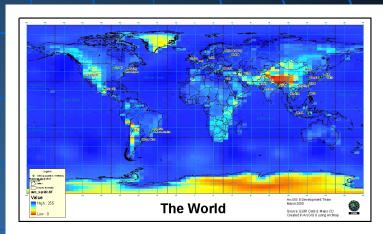


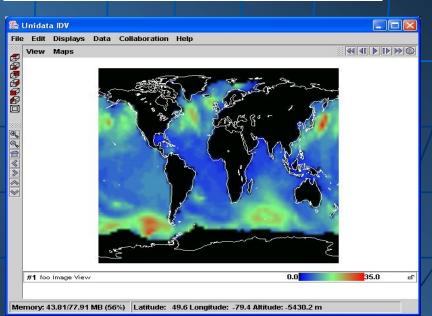
In addition, Unidata hosted the Eleventh ESIP Federation Meeting in July and the CONDUIT Working Group Meeting in late May.



### **Unidata and GIS**

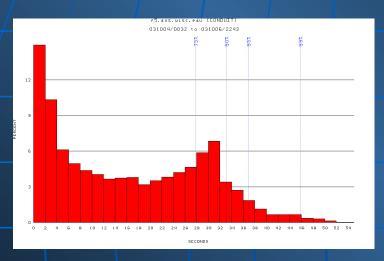
- Actively involved in UCAR GIS Initiative; UCAR now a member of the Open GIS Consortium
  - Taking initial steps toward integration of Unidata tools with GIS
    - Display of Digital Elevation Model data, ArcInfo ASCII Grid files, GeoTIFF, shape files, etc. in the IDV
    - WCS interface for THREDDS (gateway service between GIS and SIS)
    - Specification of a GIS extension for NcML
    - Radar mosaics for GIS (GEMPAK-GIS work)
    - Re-formatting GRIB products into GeoTIFF format







#### Advances enabled by LDM-6

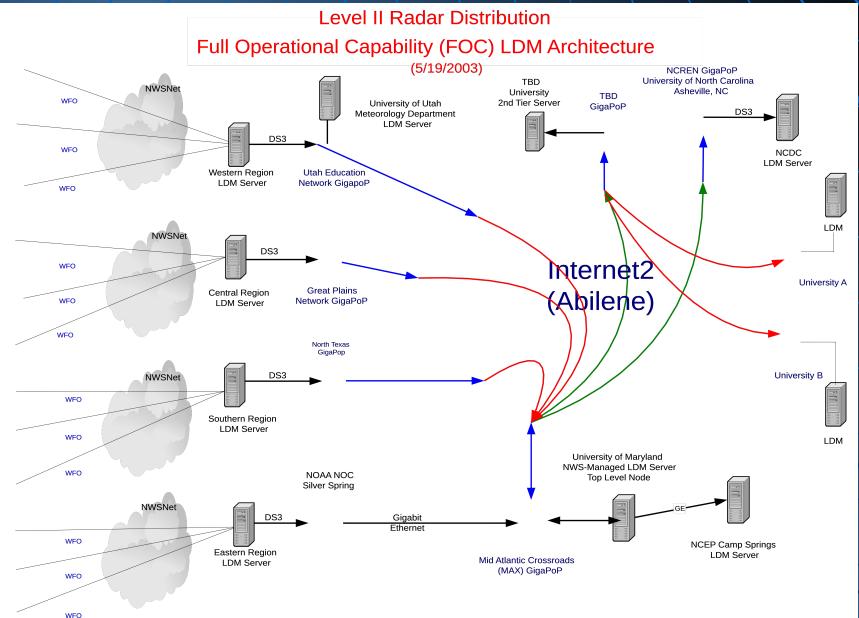


- About 144 sites in 93 domains running LDM-6 on the IDD
- LDM-6 has greatly improved the timeliness and reliability of CONDUIT and other data streams
- 23 sites participating in CONDUIT
- NWS will use LDM-6 to distribute WSR-88D Level II data

 Unidata Real-time data distribution via IDD/LDM6

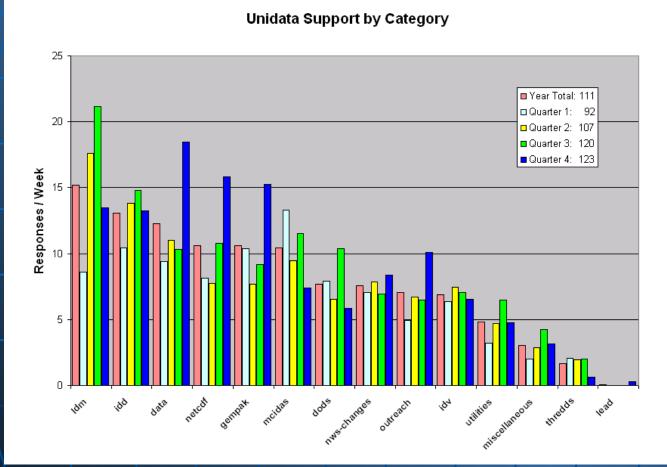
#### LDM Use by the National Weather Service

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## **Email Support Load**



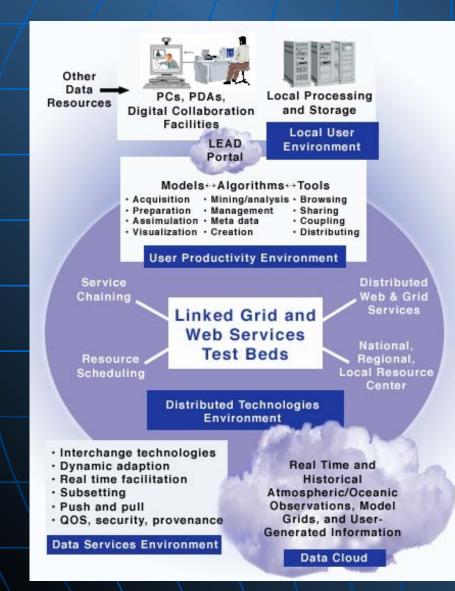
Total email queries per week continue to increase from 92 in Q1 to 123 in Q4 – a 33% increase, which is unsustainable



### Successful Proposals

Unidata 2008 – core funding for next 5 years THREDDS – 2nd Generation (NSF-EHR/NSDL) NetCDF-HDF5 Merger (NASA-AIST) LEAD (NSF-ITR) **DLESE Data Services** Thematic portal for Ocean data (NASA-REASON) Enhancing metadata interoperability (NSF-SGER)

## LEAD: A Large-ITR Effort

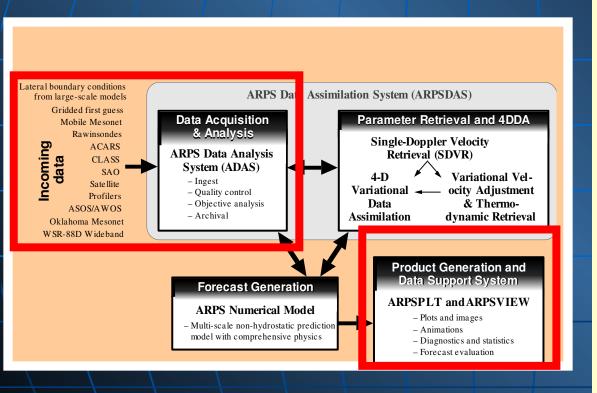


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#### Linked Environments for <u>A</u>tmospheric <u>D</u>iscovery

- Identify, Access, Assimilate, Predict, Manage, Mine, and Visualize a broad array of meteorological data and model output, independent of format and physical location
- A range of Grid and Web Services will be developed for dynamic, on-demand computing
- Institutions: U. Oklahoma, Unidata, U. Alabama, U. Illinois, U. Indiana, Millersville U., Howard U. and Colorado State U.

## **LEAD & Prediction Process**



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#### Will use the WRF model

End-to-end prediction system using Grid and Web services

Capability for real-time, on-demand, and retrospective prediction and case studies

Many Unidata tools and technologies will be used (IDD, LDM/NLDM, IDV, THREDDS, NetCDF and VGEE)



### Unidata 2008: First Year Budget Target

- Received word from NSF that the first year budget (coincides with FY04) target is \$3.4M (the actual amount may be higher or lower)
- Several funded proposals (e.g., THREDDS2G, LEAD, NetCDF-HDF, DLESE Data Services) provide "relief" to the amount of \$403K for SBO (salary, benefits and overhead) to offset the reduced target.
- Additional cuts will come from the elimination of <u>new</u> staff and visitor positions in Unidata 2008. Also, other areas (travel, equipment, purchased services, etc.) will be cut to meet the target.
  - More details in Joanne's budget presentation



### State of the Program: A Snapshot

- Community relations
- Data sources
- IDD
- Software Development
- Collaborations
- Staffing
- Support Load
- Space
- Finances (Core)
- Non-core funding
- Case Studies

- : Green
- : Green
- : Green
- : Yellow (due to support load)
- : Green
- : Green
- : Yellow (a 33% increase in one year)
- : Yellow (Move to temporary space)
- : Yellow (More in budget report)
- : Green (More in budget report)
- : Yellow