

Director's Report

Unidata Users Committee Meeting

3 October 2013

Boulder, CO

Mohan Ramamurthy
Unidata Program Center
UCAR Community Programs
Boulder, CO



SHUTDOWN

Head Start Closes... Grand Canyon Closed...
85,000 M... Fire Management
Unit C... Staffers... 500 Furloughed At
... Preparations Put On Hold... 3,100
... Search Stalled... Search For Missing
... Employees At Naval Station Turn Over
... Campgrounds... Reduced Staff At Federal
... Education Historic Site Closed... 1,300 National
... Signed... NASA Work Halted... Local OSHA Office
... 4,000 Unemployment Benefit Applications Due To
... Employee Union Official: 95 Percent Of Staff Members In
... State's \$18 Million Per Day Cost... Air Force Reserve
... 500 Workers... Social Security, Medicare Card Snags... Glacier,
... Stone Parks Close... Supplemental Food Program Shut Down... 1,100
... Employees At Base Sent Home... 1,000 Shipyard Employees Forced Off The
... More Than Half Of Base's Employees Furloughed... Widow Of Firefighter
... Killed On The Job Temporarily Denied Survivor Benefits... Lady Liberty
... Closed... 337 Told Not To Show Up For Work... Superintendent Writes Furlough
... Notice For Self... Thousands Of Air Force, National Guard Employees On
... Unpaid Leave... 2,900 Employees At Air Force Base Furloughed... City Federal
... Offices Close... VA Halts Vocational Rehabilitation Services... Naval College
... Instructors Stay Home... 1,200 National Guard Technicians Furloughed... Tribal
... Funds For Foster Care Halted... Can't Pay Taxes At IRS Office... Delays In
... Financial Aid... Hundreds Of Workers Sent Home... Supplemental Nutrition
... Program Could Be Halted For 65,000... 3,600 Furloughed At Navy Shipyard...
... School Trip To DC Upended... 1150 National Guard Employees Furloughed...
... 217,000 Pounds Of Food For Hungry Jeopardized Oil And Gas Leases Halted...

But UCAR is Open for Business
and so are Unidata Operations –
For NOW

Policy Committee:

- Steven Businger, Chair
- Kevin Kloesel
- Kerstin Lehnert

Users Committee:

- Anne Case Hanks
- Stefan Cecelski

I wish to thank all of them for their generous participation, active engagement, thoughtful guidance, and contributions to the Unidata.

New & Returning Committee Members

Policy Committee:

- Bill Gallus, Iowa State U., Incoming Chair
- George Young, Penn State U.
- Sepideh Yalda, Millersville U.
- Brian Mapes, U. Miami
- Chris Lynnes, NASA Representative



Users Committee:

- Sen Chiao, San Jose State U.
- Steven Lazarus, Florida Institute of Technology
- Kimberly Hoogewind, Student Member



Welcome and Thank you!

Unidata 5-Year Proposal

- Proposal submitted on 28 May 2013;
- It is a bold and forward-looking proposal;
 - Provides a vision for transitioning Unidata's data services to a "cloud" environment.
 - Most of the ongoing activities and projects will be continued
- NSF sent us 10 questions from the reviewers to address on 20 September;
- Unidata provided a written response to those questions on 25 September;
- The NSF panel met on 30 September (and the meeting on 1 October was cancelled due to government shutdown);
- Received 8 more questions from the panel – I responded to those questions verbally by phone

Staffing

- Sheri Ruscetta, Administrative Assistant, joined Unidata in June.
- Shawn Cheeks was hired as an intern this summer. Shawn worked with the UPC developers on a prototype mobile application to display data from the TDS NetCDF Subset Service.
- Jack Swope, System Administrator, left in early September.
- Marcos Hermida, Software Engineer, left on 23 September to take a position at ECMWF.



Other Transitions

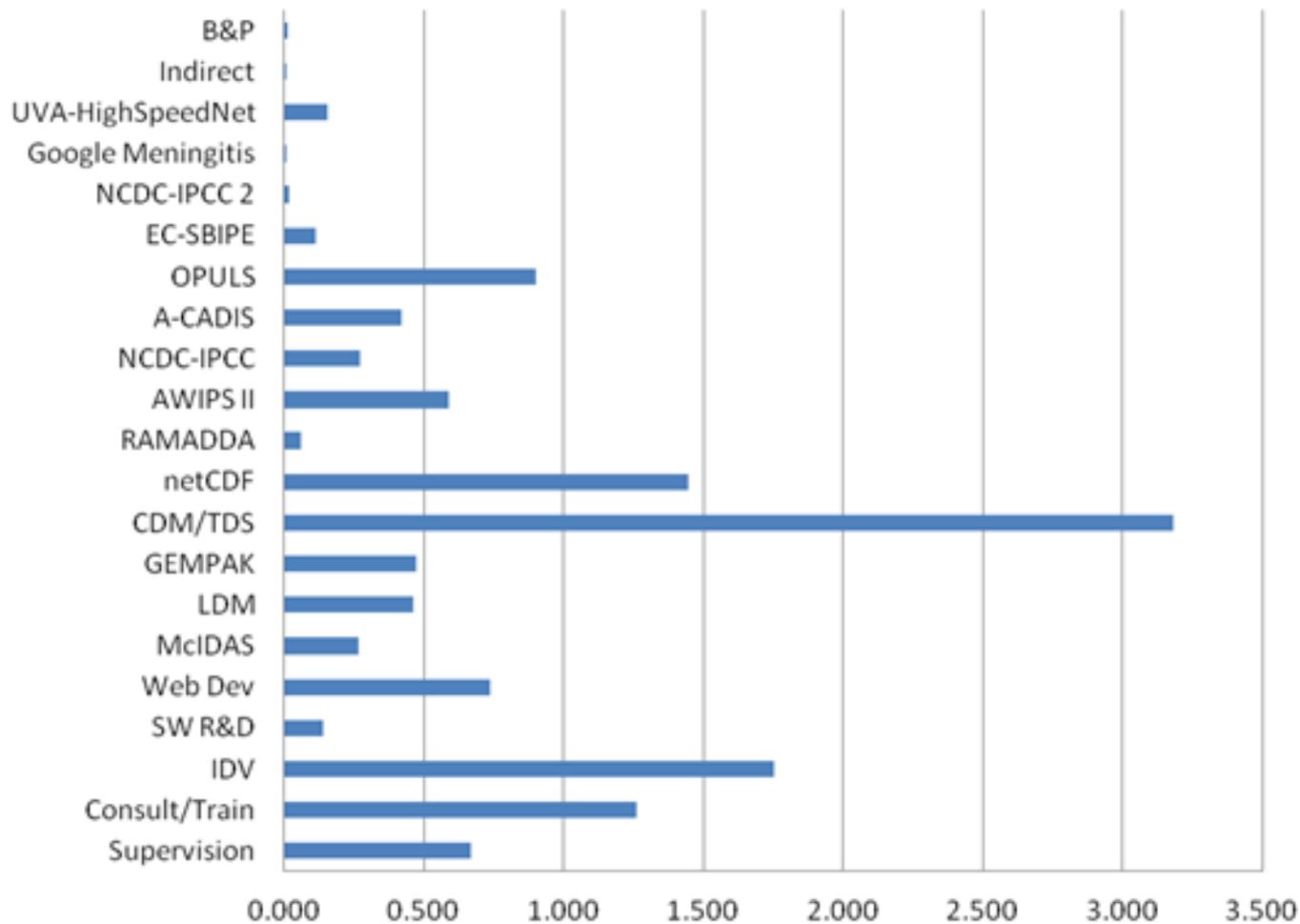
- Russ Rew began his phased retirement on 1 October; He will be working at 50% for up to two more years and then retire.
- Linda Miller is retiring as of 30 November.
- Ben Domenico will be going to quarter time in January 2014.

Ongoing Searches

- **Two software engineers, an SE II and an SE III.**
- **A System Administrator.**
- **Soon: A Community Services Manager.**
- **There will likely be additional hires depending on the funding-level for Unidata 2018.**

Staff Allocation by Project

Software Engineer FTE per Unidata Project

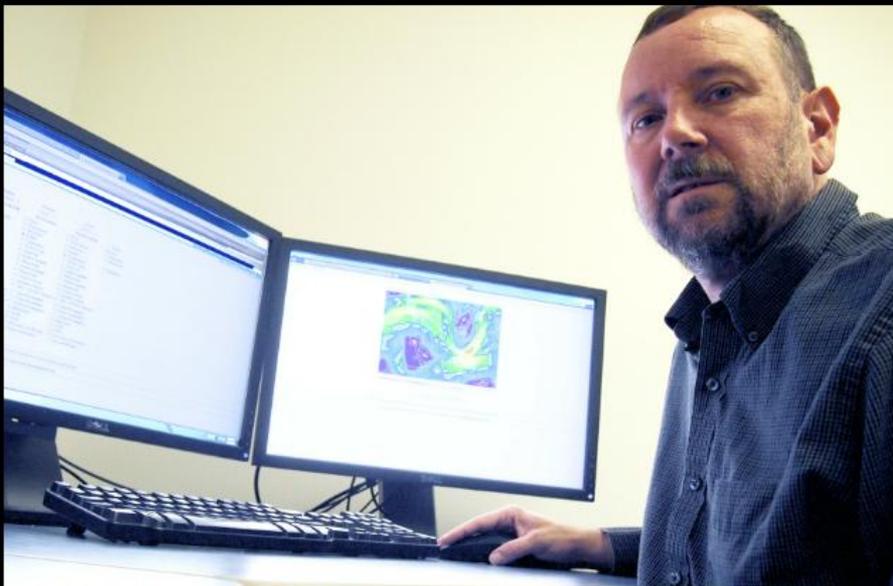


Russell L. DeSouza Award

National Organization Honors UW's Oolman

By Laramie Live Staff March 25, 2013 10:55

PM

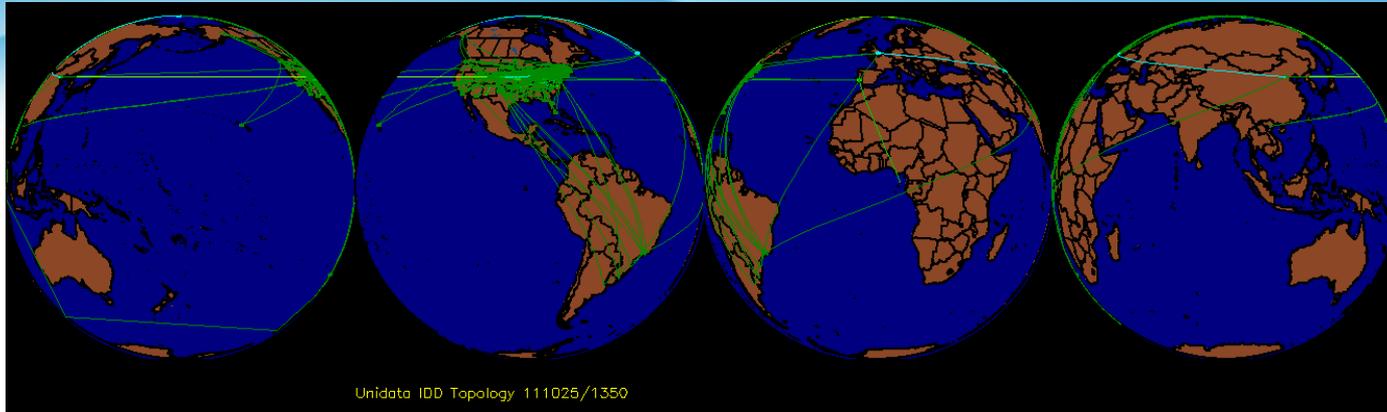


University of Wyoming researcher Larry Oolman developed a website that is an international source for weather information. (UW Photo)

Larry Oolman, a University of Wyoming researcher who single-handedly developed a website that has become a popular weather information source for meteorologists worldwide, has received an award from a national data-sharing research and educational organization.

He received the University Corporation for Atmospheric Research (UCAR) Unidata community's Russell L. DeSouza Award. The award "honors individuals whose energy, expertise and active involvement enable the Unidata Program to better serve geoscience. Honorees personify Unidata's ideal of a community that shares data, software and ideas through computing and networking technologies."

"Among your many contributions is the weather data site, <http://weather.uwyo.edu>, which has grown to 130,000 requests serving 2 to 4 TB of data to over 2,500 unique computers are provided daily. Over a month, requests originate from nearly 100 countries. Your service to the community through active participation on Unidata's Users Committee and the summer triennial workshops has also been notable, for sure."

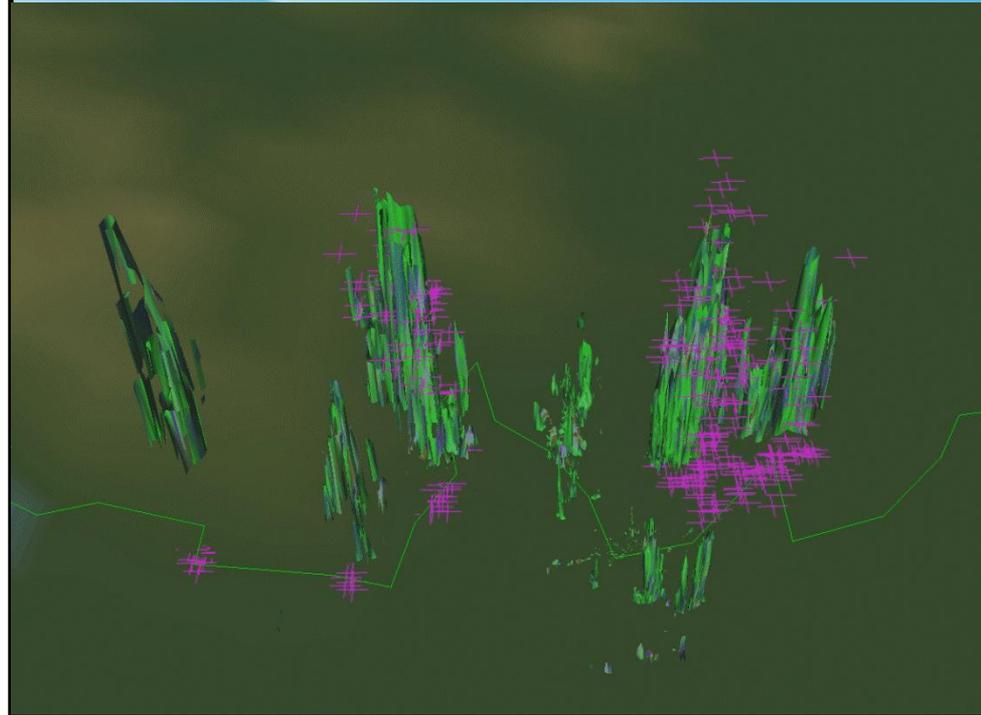


- ❖ About 530 machines at ~230 sites are running LDM-6 and reporting real time statistics. These numbers have not changed much in the past 4-5 years, but the volume data ingested keeps growing. Many organizations are using the LDM but not reporting stats.
- ❖ UPC's IDD Cluster relays data to about 680 downstream connections. **Average data output: ~13 TB/day or 1.1 Gbps! Peak rate exceeds 2.2 Gbps!**
- ❖ Data input to the cluster is ~14.7 GB/hr because of WSR 88-D Dual-polarization upgrades and the addition of more model output to CONDUIT.
- ❖ WSR 88-D Level II and CONDUIT remain the top two data streams based on volume.

Integrated Data Viewer

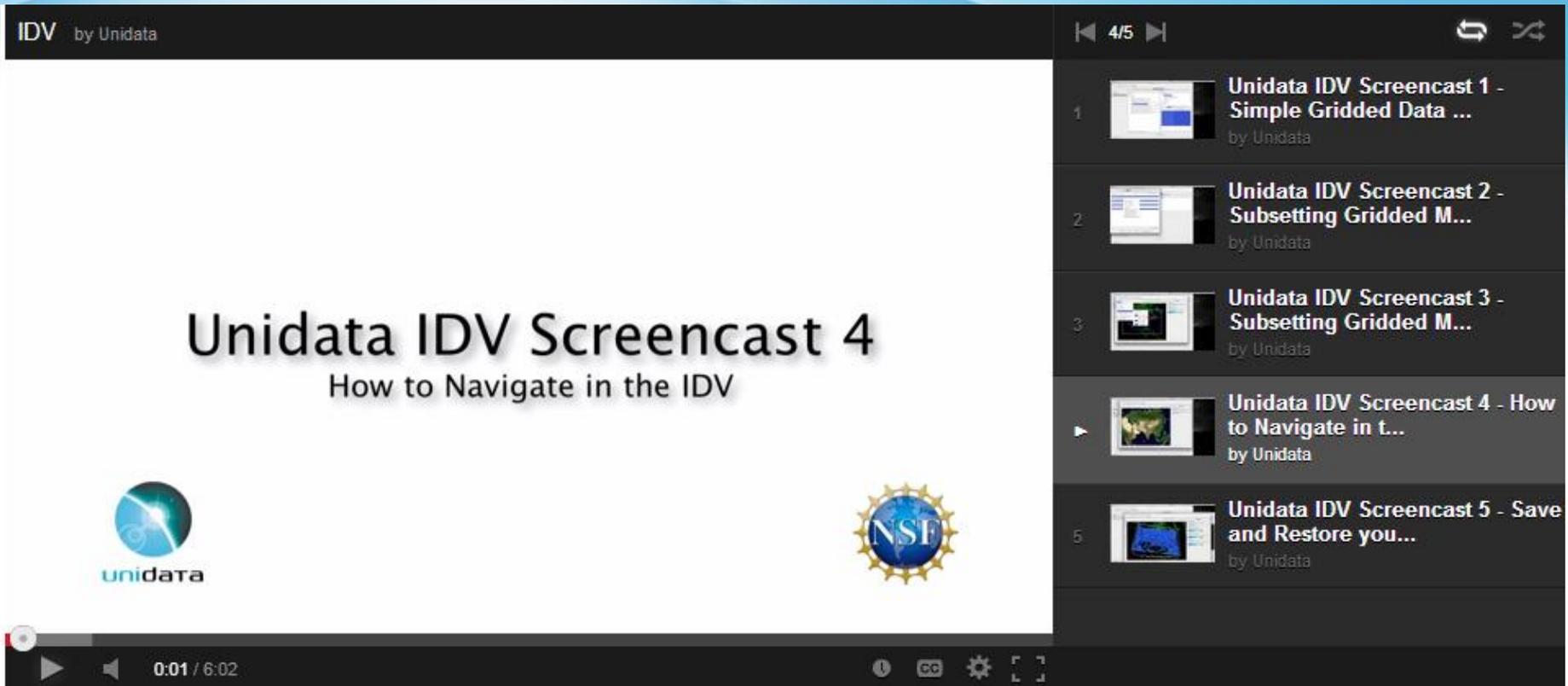
❖ IDV version 4.1 was released in early August.

- A new version of the netCDF-Java library (4.3.18) is included in this release.
- The IDV now has a mechanism to alert users of a new available version of the IDV.
- There is now a quicker way to save zidv bundles with the "Save All Displayed Data" option.



IDV use by the community has remained nearly constant over the past year, averaging about 550 sites using it at least 5 times a month, and 90 sites using it 30 times a month.

Unidata Channel on YouTube



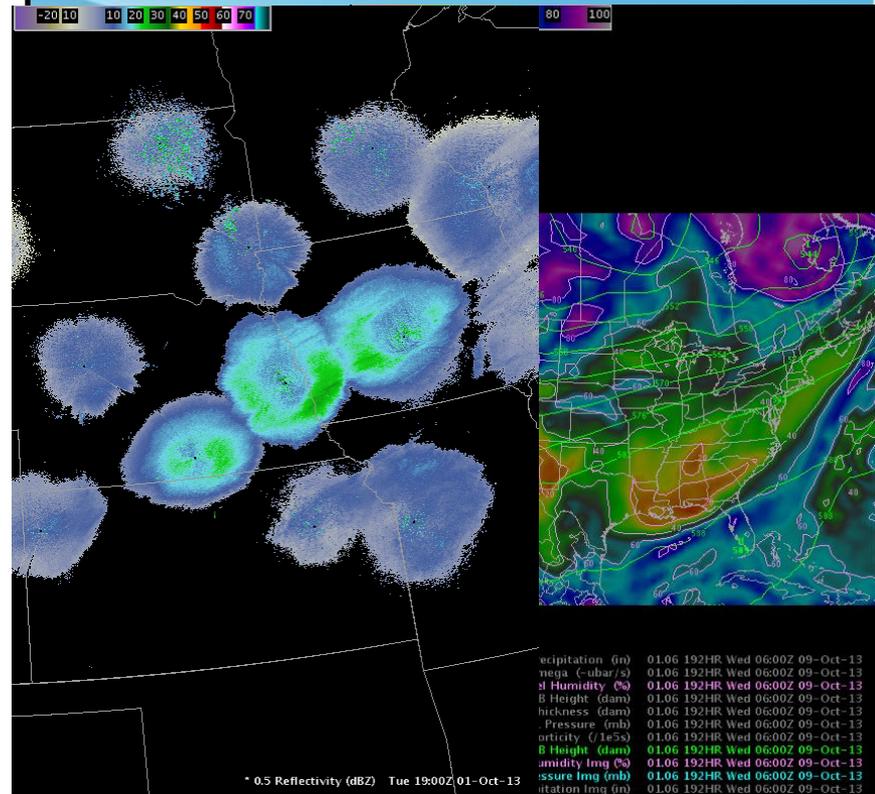
The image shows a YouTube video player interface. The main video area displays the title "Unidata IDV Screencast 4" with the subtitle "How to Navigate in the IDV". Below the title are the Unidata logo on the left and the NSF logo on the right. The video player controls at the bottom show a progress bar at 0:01 / 6:02. To the right of the video is a playlist with five items, all by Unidata:

- 1 Unidata IDV Screencast 1 - Simple Gridded Data ...
- 2 Unidata IDV Screencast 2 - Subsetting Gridded M...
- 3 Unidata IDV Screencast 3 - Subsetting Gridded M...
- 4 Unidata IDV Screencast 4 - How to Navigate in t...
- 5 Unidata IDV Screencast 5 - Save and Restore you...

Following suggestions from our Users and the IDV Steering committees, Unidata has begun creating short video tutorials designed to introduce viewers to different aspects of our software.

We plan to create more videos (and update existing ones) as time and resources allow.

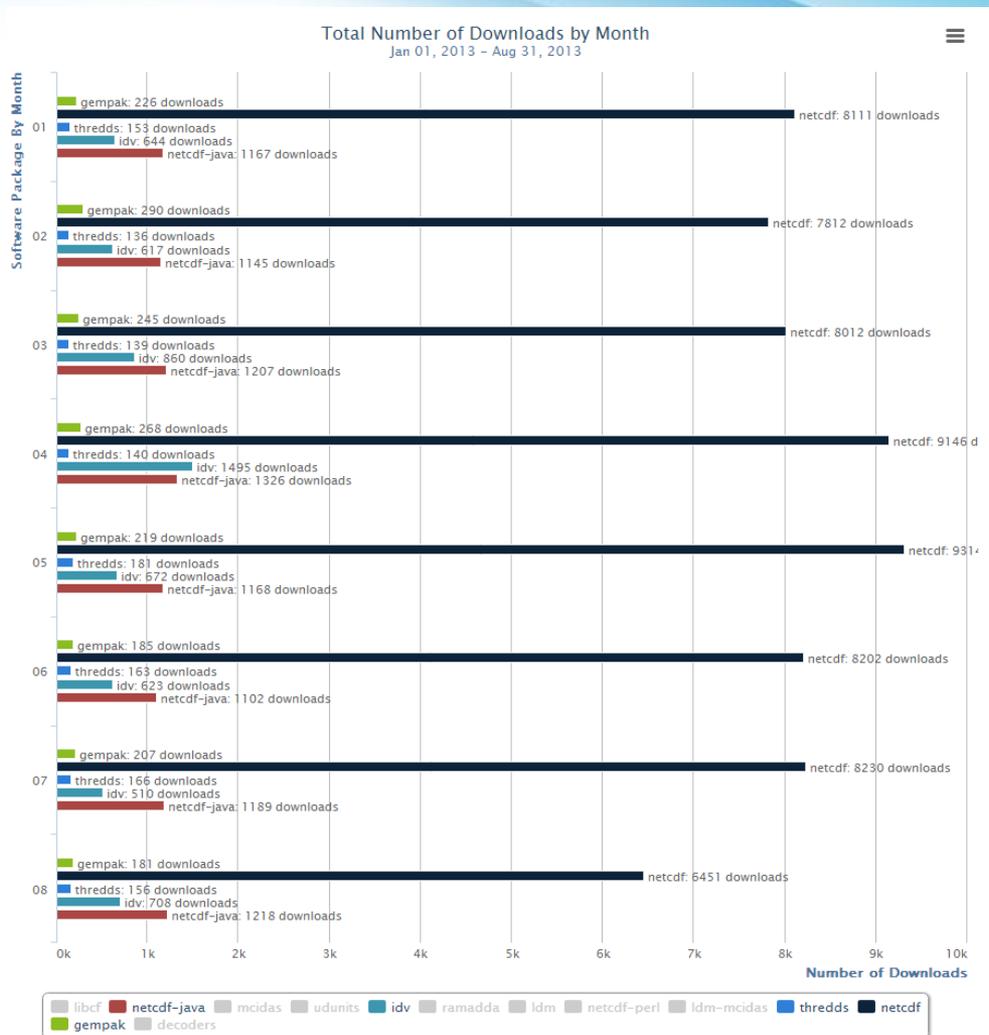
- Unidata is continuing to receive major releases of AWIPS II, including source code and Eclipse development environment, from the National Weather Service. Current version is 13.2.1.
- Work is continuing to port and test AWIPS II software on computers that will be typically available in university departments.
- **The UPC has successfully increased the number of threads available for each decoder (threads run in parallel with each other) for high-volume feeds.**
- We have begun the Thin-client investigation; Currently running CAVE 13.5 Windows thin client.
- **The UPC has expanded the beta testing program to all U. S. universities.**
- Source code is now available via a github repository.



Unidata Community Composition

Affiliation Type	Number of Sites
EDUs, COMC, UCAR Institutions	2625
GOV Institutions	302
ORG Institutions	984
MIL Institutions	43
RLAB Institutions	82
COM domains ⁺	5535
NET domains ⁺	2205
Miscellaneous domains I was unable to determine an affiliation type ⁺	5048
Unresolved IP address networks	13066
Total # of separate entities:	29890

Downloads – Top 5 Software





EarthCube

[main](#) [my page](#) [members](#) [groups](#) [blogs](#) [background reading](#) [charrette](#)

- Unidata is continuing to be actively involved in EarthCube.
- Unidata, in partnership with other organizations, was involved in the submission of five EarthCube Building Block proposals.
- Three of those proposals have been funded.

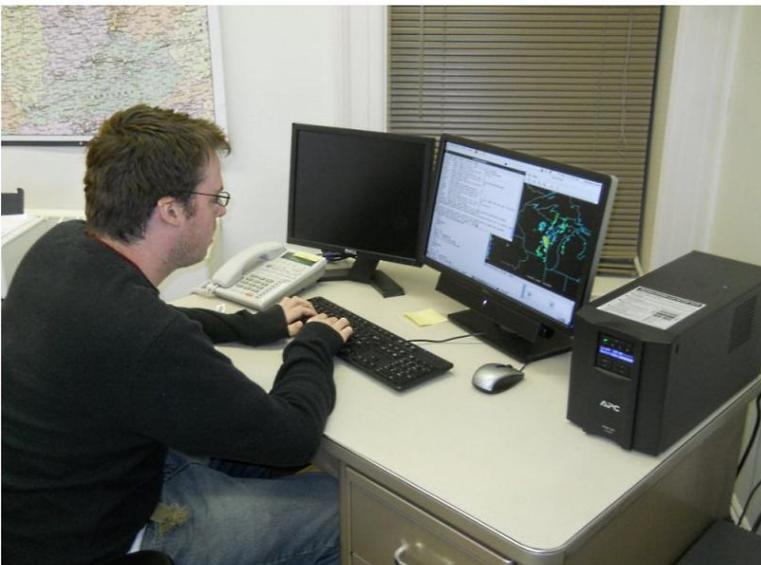
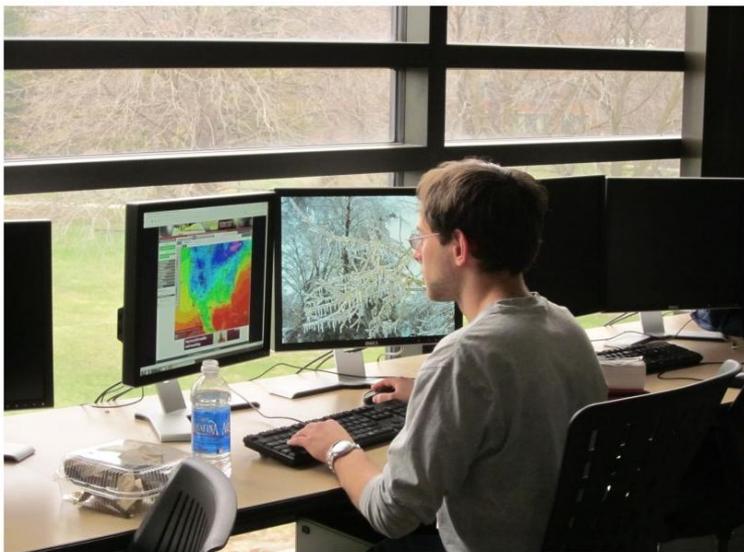
- The ACADIS project had a site visit by an NSF-appointed panel to review the progress of the project.
- Following the site visit, there was some restructuring of roles, but project received continuing funding for another year.
- ACADIS now holds metadata and data, or metadata alone (with link to external data), for about 30 AON projects
 - ~30,000 files
 - ~125 Gigabytes of data

- A proposal to develop a multicast version of the LDM, using virtual circuits, has been funded by NSF/CISE- ACI. Steve Emmerson and Prof. Veeraraghavan, Virginia Tech, are collaborating on the proposed effort.
- In addition to UCAR, it will be deployed at several universities, including U of Virginia, U of Wisconsin, Rutgers U, Boston U, U of New Hampshire, Colorado State U, RENCi, and Texas Tech U. to assess its performance and usefulness.

2013 Community Equipment Awards

- This year special consideration was given to proposals that:
 - **Plan to share their data by installing THREDDS and RAMADDA servers.**
 - **Install, test , and provide feedback on *prototype* AWIPS II/EDEX servers.**
- **Unidata received 12 proposals this year.**
 - **There was a great deal of interest in AWIPS II deployment;**
 - **We funded five/six proposals**
 - Colorado State University
 - Stony Brook University
 - Texas A&M International University
 - University of Miami
 - University of Wisconsin at Madison (Funded two separate proposals but they were asked to combine their efforts)
- **Over the past 10 years, Unidata has funded a total of 70 proposals.**

2012 Equipment Award Examples




UWM Atmospheric Science Program Data Repository

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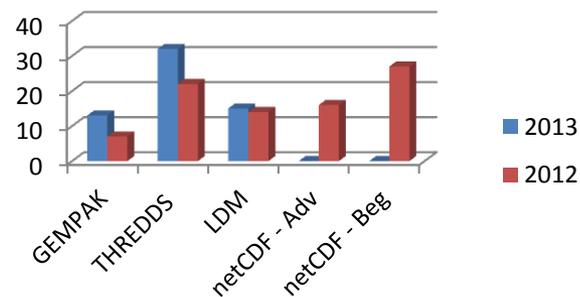
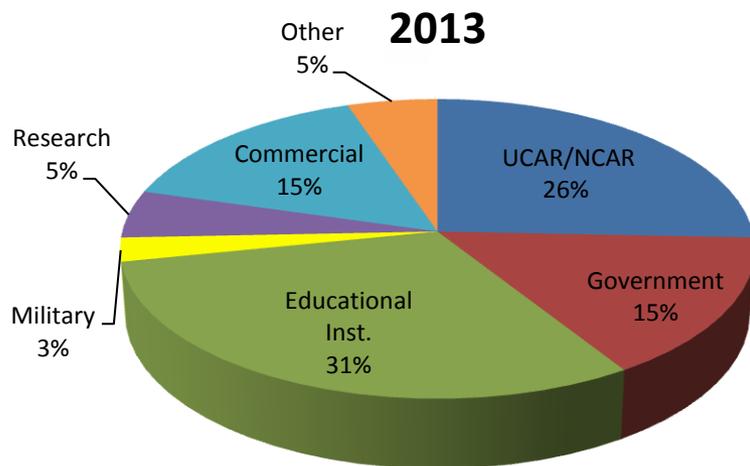
[UWM Data Repository](#)
Layout:    

[File](#) | [Connect](#) | [View](#)
 

Entries ▾

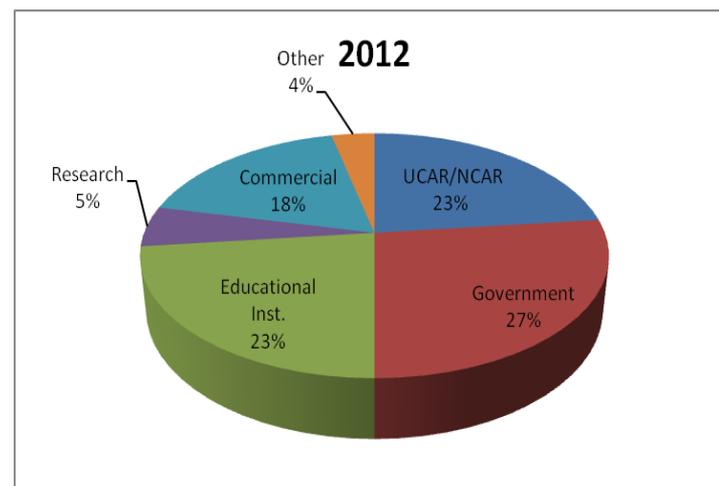
- ▶ [Local WRF Ensemble](#)
- ▶ [LDM Feed](#)
- ▶ [Archived Operational Analyses](#)
- ▶ [Reanalysis Data](#)

2012/11/19 19:33 UTC
 2012/11/17 07:37 UTC
 2012/11/17 07:36 UTC
 2012/11/17 07:35 UTC



We had 39 participants this year, the fewest number in more than five years.

Many of the participants attended multiple workshops. The inaugural Python workshop was the most popular one.



WunderMap® | Interactiv... Regional Workshop at Mill... 2013 Unidata Equipment / ...

www.unidata.ucar.edu/blogs/news/entry/regional_workshop_at_millersville_university

« Unidata is looking... | Main | After the Flood »

Regional Workshop at Millersville University

16 September 2013

Millersville University is pleased to sponsor and host a Unidata Regional Workshop on **October 21-22, 2013**. The purpose of this workshop is to provide introductory and advanced training in the use of Unidata's Integrated Data Viewer (IDV), and to present use cases of IDV and other Unidata services (data and tools) in the classroom.

The workshop will also include a presentation and hands-on session showcasing the GEOScience Probe of Discovery (GEOPOD), a National Science Foundation funded project that leverages Unidata's IDV to create an interactive 3-D learning environment where students can navigate a virtual probe through real geophysical data and actuate devices to explore and discover the atmosphere. More information on GEOPOD can be found at <http://millersvillees.github.io/geopod/>.

In addition to the training opportunity, Dr. Mohan Ramamurthy (Unidata Program Director) will open the workshop with a discussion of the Unidata Strategic Plan. Dr Ramamurthy will be here to gather community input. There will be both formal and informal opportunities to participate in the discussions concerning the Unidata Strategic Plan at the workshop.

Registration is free and limited funding to help defray travel expenses will be available to the workshop participants. Lunches, coffee breaks and a reception on the evening of Sunday, October 20, will be covered by Millersville University. We would greatly appreciate if you would please share this with your colleagues. We encourage those interested to register by **October 11** since space is limited.

Unidata Regional Workshop Agenda

Sunday, October 20
6:00 - 8:00 Reception and presentation by Unidata Director, Dr. Mohan Ramamurthy

Monday, October 21
9:00 - 10:30 Unidata Strategic Plan - input from the community
IDV overview (IDV portion of the workshop will be presented by Unidata's Sean Arms and Yuan Ho)
11:00 - 11:30 General IDV workflow with model output as demo
12:00 - 1:00 Lunch
1:00 - 2:00 Working with Gridded Data (2D/3D displays)
2:00 - 2:30 Saving Images/Movies and Sharing with Bundles
2:30 - 2:45 Break
2:45 - 4:00 Working with Observational Data (Surface Data, Upper Air)
Time Matching, Example Forecast Error Analysis by Integrating Model Output and Observations
4:00 - 5:00

News@Unidata
News and information from the Unidata Program Center
Welcome
FAQs
Developers' blog

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- Community (121)
- Unidata (46)
- Software (135)
- Data (14)

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training unidata topic workshop wrap-up

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« OCTOBER 2013

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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Today

Login



Please get the word out.

2014 AMS Annual Meeting



- Unidata will be conducting a UPC-sponsored short course on the IDV at the 2014 AMS Annual Meeting in Atlanta.
- Please encourage your colleagues in the university community to register and attend the short course.
- Seats are limited, but priority will be given to attendees from academia.

We will also have a booth at the meeting

State of the Program: A Snapshot

- Community relations : Green
- Data flows : Green
- Software development : Yellow
- Support : Green
- Collaborations & Outreach : Green
- Staffing : Yellow
- Finances : Green

Questions?