



Unidata

*Providing data services, tools, & cyberinfrastructure leadership
that advance Earth system science, enhance educational opportunities, & broaden participation*

CommunitE-Letter

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Outstanding Achievement Award for the IDV

Please join us in congratulating Unidata's Integrated Data Viewer development team! The IDV team received UCAR's Outstanding Achievement Award in Education and Outreach for 2008. According to the award citation, it was given to:

Don Murray, Jeff McWhirter and Yuan Ho (Unidata) for the design, development, support and advancement of the Integrated Data Viewer (IDV) to foster education and outreach in the geosciences. The IDV has revolutionized the way educators visualize and analyze geoscience data and has transformed the learning environment by allowing students to easily access the same databases used by scientists and forecasters inside and outside the classroom

We are extraordinarily proud of the team.

First released in 2003, the IDV grew out of the work started in 1998 under the "MetApps" project. Since that earlier phase to the present, IDV development has been community driven. The original MetApps Task Force provided use cases for developing prototype applications. The subsequent [IDV Steering Committee](#) continues to guide development by prioritizing development efforts, testing implementations and providing feedback to the developers.

As the IDV evolved, a primary goal was lowering the barriers to using geoscience tools and services. This was accomplished by developing platform-independent data systems and analysis and visualization tools that run on a range of desktop systems. The IDV has democratized access to geosciences data at all levels of undergraduate and graduate education and facilitated outreach to audiences beyond academic institutions. The software is now used in over 200 institutions worldwide in both undergraduate and graduate courses. Outside UCAR, IDV use ranges from international centers like EUMETSAT (European Organisation for the Exploitation of Meteorological Satellites) and CMA (China Meteorological Administration) for training, research and forecasting to members of the general public who want to follow the weather using real data instead of web based images.

The software framework underlying the IDV is highly customizable and allows the creation of new applications tailored to specific datasets or to provide customized user interfaces for different learner tasks. The [GEON-IDV](#) is an extension of the framework supporting geophysical visualizations. The robustness of the IDV's framework led the University of Wisconsin/SSEC to use it as the basis for the next version of [McIDAS](#),

which will provide tools for hyperspectral image visualization and analysis in education and research.

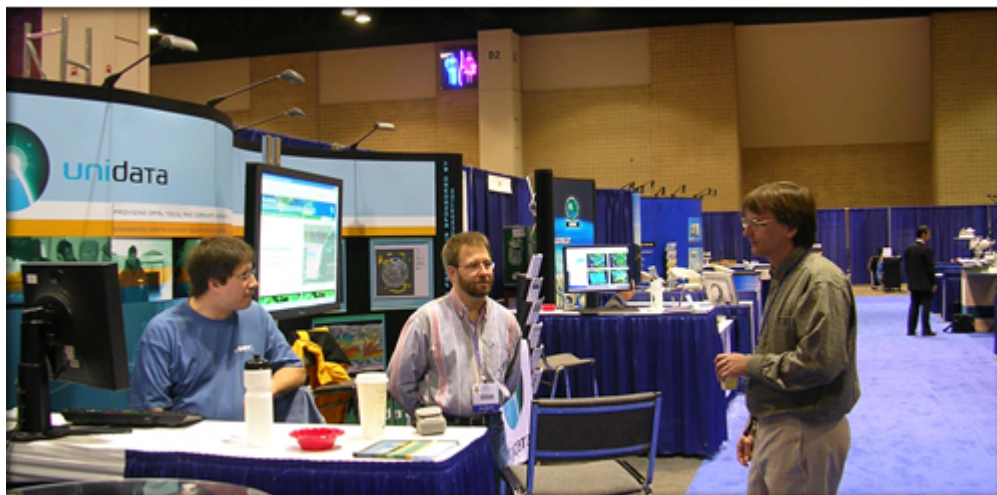
The latest IDV release, Version 2.6, was announced December 24, 2008. To support the needs of the GEMPAK community several new features were implemented that include PDF/PS output of displays, objective analysis of point data, and access to weather text bulletins. Other new features include remote access to NEXRAD Level II and III and TDWR radar data and historical hurricane track (ATCF) data. Future IDV releases will contain more GEMPAK capabilities that are important to the community. The Unidata User's committee is prioritizing the list of capabilities based on input from the community.

Phoenix bound: Unidata staff head for the Annual Meeting

You'll find a number of Unidata staff members at the American Meteorological Society annual meeting in Phoenix where they will participate in about 21 different events that include presentations and posters. Here is [the schedule](#) of Unidata-related events.

In addition to these, Unidata's booth, number 616, will be up and running from the opening of the exhibit hall at 5:30 PM Monday the 12th of January. Unidata staff members will rotate through the booth during all of the exhibit's opening hours and will look forward to meeting and greeting old friends while making the acquaintance of new ones. We like hearing about your concerns, and helping you solve problems that may have arisen--in short, to assist you in any way we can.

Our booth is a participant in the Conference on Satellite Meteorology and Oceanography's game for student attendees whose objectives are to get students to visit the exhibits, and to give them the opportunity to collaborate in solving a "challenge." Students will receive a number from staff members in the Unidata booth to help them solve the puzzle.



European Geosciences Meeting

The European Geosciences Union General Assembly is 19-24 April 2009 in Vienna, Austria. You will find more information by opening [this link](#), and, the left navigation column provides links to the [Call for Papers](#).

A newly-established EGU Program "[Earth and Space Science Informatics](#)" includes the sessions noted below that may be of particular interest to our community of users.

ESSI1: International Informatics Collaborations and Projects Convener: M.

Ramamurthy | Co-Conveners: L. Miller , S. Nativi

ESSI12 Collaboration Technologies, Social Networking and Web 2.0 Convener: R. B.

Husar | Co-Conveners: P. Fox , M. Ramamurthy

ESSI8: Data Preservation and Long Term Access Convener: W. Som de Cerff | Co-Conveners: C. Jacobs , S. Nativi, and,

ESSI9: Data and Metadata Models & Mark-up Languages Convener: A. Woolf | Co-Conveners: B.Domenico, S. Nativi

ESSI15 Virtual Globes and Visualization Tools Convener: M. Ramamurthy

Submit your abstracts by Tuesday 13 January 2009. These [guidelines](#) will assist you.

Data: Unidata does data

The last issue of the [CommunitE-letter](#) suggested some content and format changes for it. Although we received limited input on the suggestions, we are forging ahead to implement one of them (and we quote): "A datastream column in which we would feature one or more datastreams per issue that would include information about, perhaps, the number and type of data products in a specific datastream."

Let's do some stage setting for this new feature. Unidata does [data](#). Big surprise, right? Well, not really of course since Unidata, as a concept, was initiated to help researchers and educators acquire and use weather data. With modest beginnings as a project dedicated to providing real-time weather data to, by and large, synoptic meteorologists in U.S. universities nearly 25 years ago, the variety, the ways, and the number of datastreams available through Unidata has expanded dramatically. Most of the data is provided in "real-time" or "near real-time" which means that the data is sent to participants almost as soon as the observations are made and arrive within seconds.

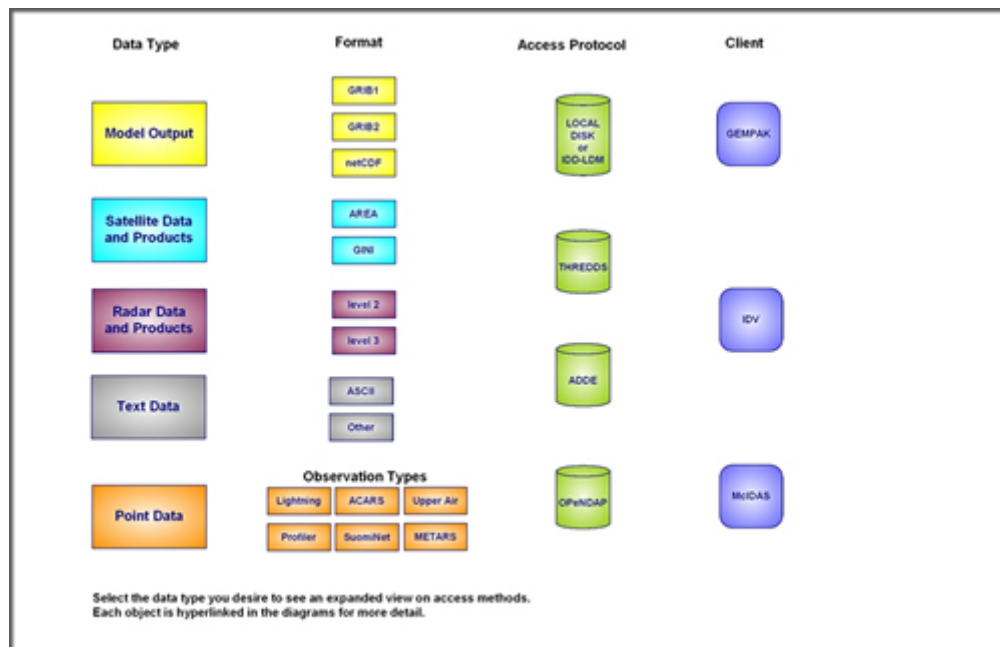
The primary mechanism whereby educators and researchers receive data from Unidata is through participation in the [Local Data Manager \(LDM\)](#)/ [Internet Data Distribution \(IDD\)](#) system. Users may subscribe to streams of current data that interest them. Other means for accessing data provided by Unidata are:

[THREDDS](#) (Thematic Realtime Environmental Distributed Data Services) [TDS](#) is a web server that provides metadata and data access for scientific datasets, building on existing technologies and protocols.

OPeNDAP (Open-source Project for a Network Data Access Protocol) is a framework that simplifies all aspects of scientific data networking.

ADDE OpenADDE is a free software package used to make satellite and NEXRAD data (in the supported formats) available to users at remote sites using visualization packages that support the ADDE client/server protocol, e.g., McIDAS-X, McIDAS-Lite, VisAD, IDV, MATLAB and IDL.

RAMADDA (Repository for Archiving, Managing and Accessing Diverse DATA) is an open data management framework in the early stages of development that enables a data provider or a community of users to upload, manage and share large data holdings. It is designed to run in multiple contexts, ranging from local desktop use to real time and case-study data archives. Here is a link to a description of **RAMADDA** that appeared in the April 2008 CommunitE-letter. RAMADDA is an integrating framework that provides a range of functionalities.



Future articles of the data series will describe specific data sets: what they contain and how information they contain might be used. It is our hope that end users will be empowered to use the data in new and possibly innovative ways to enrich their teaching and research activities. We are hoping that this will be a stimulating and dynamic series, and we will do all we can to make that happen.

News Briefs

Users Workshop

Unidata's Triennial Users Workshop will take place this summer in Boulder. The theme will be Using Operational and Experimental Observations in Geoscience Education. Workshop dates are 8-12 June 2009, and six focus areas have been identified at this time: Remote Sensing, Data Assimilation, Instrumentation, Climate Observations, Field

Experiments, and Research and Operational Networks. As more information becomes available we will post it on our [home page](#). We prepared a [flyer](#) that will give you additional information, and we urge you to post those dates to your calendars. We're looking forward to welcoming you to Boulder in June.

Equipment Awards

Under sponsorship from the National Science Foundation, the Unidata Program Center (UPC) announces the 2009 Unidata Community Equipment Awards solicitation, described below, along with the proposal submission requirements. A total of \$100,000, including UCAR overhead, is available for awards this year. Proposals for amounts up to \$20,000 will be considered. The deadline date for submitting proposals is March 16, 2009. Notification of award status will be made by mid May, 2009. This year special consideration will be given to proposals that enhance participation and advancement of underrepresented populations, and to those that will provide useful datasets to the Unidata community to support education and research. You will find [the RFP here](#).

Spring 2009 AGU Joint Assembly

Unidata is seeking your participation in spring 2009 AGU Joint Assembly session titled: "Data, Tools, Distribution and Forecast Systems for International Collaboration" that will be held in on 24-27 May 2009 in the Toronto Convention Centre, 255 Front Street, West Toronto, Ontario, Canada. The session, jointly convened by Dr. Glenn Rutledge (NOAA/NOMADS), Dr. Elen Cutrim (Western Michigan University) Dr. Luis Farfan (CICESE/Baja Mexico) and Tom Yoksas (UCAR/Unidata), is intended to foster development of international research and education collaborations focused on Earth and Space Science Informatics (ESSI) in the Americas, and to set the stage for future interactions.