



The Data Series: IDS|DDPLUS

It's a (data) jungle out there

Welcome to the world of the collection of data products known fondly to the National Weather Service (NWS) as FOS, Family of Services, and, known to Unidata IDD participants by four descriptors: DDS or Domestic Data Service, IDS, the International Data Service, and PPS or Public Products Service. All of these are included in a single IDD datastream known as IDS|DDPLUS.

| Service | Data Rate (Bits Per Second) |
|--|-----------------------------|
| NAFAX | Analog |
| DIFAX | 2400 |
| Watches & Warnings | 1200 |
| U.S. Surface/Upper-Air | 4800 |
| NMC & ECMWF Grids | 4800 |
| Wisconsin Channel | 9600 |
| International (GTS) Data | 1800 |
| FAA 604 | 1200 |
| Lightning Data & Others at Non-Discounted Prices | |

To put it in perspective, let's review Unidata's historic connection with the data. Beginning as early as, probably, 1987, Unidata began to explore ways to provide the FOS data to its existing community, a request that originated in the 1983 Madison workshop. The *UNIDATA* (see note) Implementation Strategy Committee draft report to the Madison Workshop contained the statement:

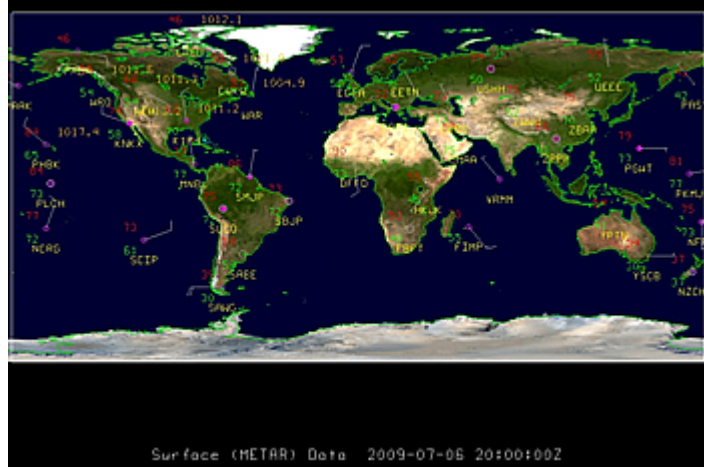
"In the beginning..."

The UNIDATA effort will not neglect the need to supply weather data to universities but neither will significant effort be put into merely interim solutions. . . . In Phase II of the UNIDATA program, the focus will be on the more complex problem of developing a community capability for interactive processing, in which will be embedded the transmission of the needed weather data...

Thus, four years later, following the receipt of funding from the National Science Foundation, development of the LDM-1 signaled the beginning of the effort to meet the request of the emerging Unidata community :

One of Unidata's primary goals is to enable the acquisition of meteorological data on a single computer and to allow access to these data by possibly dissimilar workstations within the same facility.

We have evolved from a period where "a dizzying volume of information on the order of 100 MB/day, aggregate" (Davis and Rew, 1994) to the present where IDD|DDPLUS contains 26K+ products per hour. Even though this data feed comprises only a small fraction of the data volumes being transmitted in the IDD, it is a significant fraction of the number of products being transmitted. IDS|DDPLUS contains global observational data (surface, ship, radiosondes, profiler, etc. watches, warnings among others.).



Daryl Hertzman, Iowa State University, among many others, is an active user of the IDS|DDPLUS data feed. He writes: besides the standard archiving and local display use within GEMPAK, the Iowa Environmental Mesonet (IEM) provides an interactive web display of these text [products in an ajax interface](#). The IEM also processes many components of the FOS feedtype in realtime to a Jabber Instant Messaging bot named [bot named 'IEMBot'](#). EMBot produces quick one line summaries of FOS products with can be subscribed to via RSS feeds, updated interactively online, or even followed on Twitter!

Editor's note: the all caps styling of the Unidata name continued to 1986.

Using Operational and Experimental Observations in Education

To stage the triennial Users Workshop, the Unidata Users Committee and Program Center work collaboratively for many months to plan it. Stated succinctly, this is a non-trivial effort! You could say that practice makes perfect, and this is Unidata's eighth Users Workshop, but each one presents its own set of challenges. When that effort results in a stellar 5-day long workshop for the user community, all of the hard work pays off handsomely.

Access the agenda and other workshop detail on [RAMADDA](#) and drill down to the [workshop materials](#).

With few exceptions the exit interviews were exceptionally positive. At the workshop's conclusion Janel Hanrahan, a student at the University of Wisconsin-Milwaukee commented that she had arrived at the workshop not knowing what to expect or any of the other participants. By the time the workshop ended Janel stated that she had made new friends, gained a new network and gained new insights as well. In addition to attendance, Janel also presented a poster (with four others) entitled "Connecting climate

variability to the water levels of Lakes Michigan and Huron. The poster session, held on the evening of day one of the workshop, was enthusiastically received. There were seven other poster presentations.

Anne Case Hanks, assistant professor at the University of Louisiana-Monroe wrote:

I can say that it was very insightful -- between the demonstrations and ways to incorporate data into the classroom, I now have a cache of creative ways to engage students and get them thinking about data, its importance, and its role in atmospheric sciences (Students sometimes forget this!). I also feel that IDV will become a key player in our atmospheric science program. Its 3D ability gives the student a new perspective and allows them to view atmospheric processes in a new way. I was also very grateful to meet some wonderful people and they were gracious enough to share ideas and knowledge with me.

Special thanks to co-chairs, Sean Arms, Brian Etherton, and Larry Oolman, and to the Users Committee chair, Gary Lackmann, each of whom spent many hours contacting potential speakers and ironing out scheduling details. Unidata staff, Linda Miller, Tina Campbell, and Ginger Emery, Brian Kelly also contributed mightily to the workshop's success.

This year's participants, 81 in number, arrived from four foreign institutions, 32 universities (foreign and domestic), and 3 US government labs. While not exceptional in itself, these data are exceptional for a year in which negative budgets are the norm.

News Briefs

Governance Committee Nominations

Two calls for nominations to Unidata's governing committees have recently been sent to Unidata's all-community e-mail list. We have received a fair number of excellent nominations. However, we'd like to call your attention to the fact that the deadline for nominations remains open until **July 17**. The Users Committee [membership](#) reflects the range of large and small colleges and universities with undergraduate and graduate emphases where *Unidata systems are in use*. The Policy Committee and its [membership](#) hold the primary responsibility for guiding the Unidata Program. The eight voting members of the committee are drawn from universities and appointed by the president of UCAR. If you've been meaning to submit a nomination for membership on either of these committees please consider this your last call.

Software Updates

TDS 4.0.20 is now available, with various bug fixes, including one for WMS when using with Tomcat 6.0.20. If you are using 4.0, Developers, John Caron and Ethan Davis recommend that you upgrade to version 4.0.20. More information on changes is available

at: <ftp://ftp.unidata.ucar.edu/pub/thredds/4.0/CHANGES.txt> or
<http://www.unidata.ucar.edu/software/netcdf-java/v4.0/CHANGES>.

LDM

LDM version 6.7.1 is now available for [download](#). The release contains some changes from earlier versions. See: <http://www.unidata.ucar.edu/software/lDM/lDM-6.7.1/release-notes.html> for details.

IDV

June 25, 2009 IDV developers released version 2.7 for [download](#) and testing. This new version includes support for multi-processor systems, netCDF data export, UF radar data reading and some new displays for radar and sounding data. Please see the [release notes](#) for a complete list of new features.

Training Workshops

Unidata's 2009 Training Workshops are fully subscribed and set to begin July 29. We look forward to welcoming all attendees to the UPC. If you find you have to cancel, please send e-mail to support-workshop@unidata.ucar.edu or contact Gingery Emery at 303-497-8643. We have a number of wait-listed registrants who would be glad to have your spot.

