Data *Fact Sheet*

What Data are Available from Unidata?

The Unidata Program Center provides geoscience data from a variety of sources to researchers and educators at no cost. A sampling of the data available:

- GOES satellite imagery
- Model output
- Lightning observations
- Level II and Level III radar imagery
- WMO observations
- Profilers

Data can be accessed by either "push" (event driven) or "pull" (select what you want when you want it) technologies. The "push" system uses Unidata's Local Data Manager (LDM) and the Internet Data Distribution (IDD) system to deliver data as it becomes available. The "pull" system uses the THREDDS Data Server (TDS), ADDE servers, and RAMADDA servers, and allows the end user of the data to select the data they desire when they want it.

Local Data Manager

The Unidata Local Data Manager (LDM) is a collection of cooperating programs that select, capture, manage, and distribute arbitrary data products. The system is designed for event-driven data distribution, and is currently used in the Unidata Internet Data Distribution (IDD) project. The LDM system includes network client and server programs and their shared protocols. An important characteristic of the LDM is its support for flexible, site-specific configuration.

Internet Data Distribution

The Unidata community includes hundreds of universities who cooperate to create a system for disseminating near real-time earth observations via the Internet. Unlike other systems, which are based on data centers where the information can be accessed, the Unidata IDD is designed so a university can request that certain data sets be delivered to computers at their site as soon as they are available from the observing system. The IDD system also allows any site with access to specialized observations to inject the dataset into the IDD for delivery to other interested sites, facilitating collaborative activities within the community.

THREDDS and TDS

The THREDDS (Thematic Realtime Environmental Distributed Data Services) project is developing middleware to bridge the gap between data providers and data users. The goal is to simplify the discovery and use of scientific data and to allow scientific publications and educational materials to reference scientific data.

The THREDDS Data Server (TDS) provides catalog and data access services for scientific data using OPeNDAP, OGC WCS and WMS, HTTP, and other remote data access protocols. Just as the World Wide Web and digital-library technologies have simplified the process of publishing and accessing multimedia documents, TDS aims to create infrastructure needed for publishing and accessing scientific data.

Useful Links

unidata

Data: http://www.unidata.ucar.edu/data/

LDM: http://www.unidata.ucar.edu/software/ldm/

IDD: http://www.unidata.ucar.edu/software/idd/

THREDDS: http://www.unidata.ucar.edu/software/tds

WWW.UNIDATA.UCAR.EDU