

Data

Fact Sheet

What data is available from Unidata?

The Unidata Program Center, a division of the University Corporation for Atmospheric Research, provides atmospheric data from a variety of sources to researchers and educators at no cost. These data consists primarily of GOES satellite imagery, radar imagery (level II and level III), model output from the National Centers for Environmental Prediction the Canadian Meteorological Centre and Fleet Numerical Meteorology and Oceanography Center. Other data available are: WMO observations, a variety of land based observations such as profilers, lightning observations, and GPS derived precipitable water content.

These data can be accessed by either push (event driven) or pull (select what you want when you want it) technologies. The “push” system utilizes the Local Data Manager (LDM) and the Internet Data Distribution (IDD) system to deliver data as it becomes available. The “pull” system utilizes the THREDDS catalogs, and allows the end user of the data to select the data they desire when they want it.

The Local Data Manager (LDM)

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 (IDD)

The Unidata community of over 150 universities is building 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, this facilitates collaborative activities within the community.

THREDDS Catalogs and Data Servers

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 mission of THREDDS is for students, educators and researchers to publish, contribute, find, and interact with data relating to the Earth system in a convenient, effective, and integrated fashion. Just as the World Wide Web and digital-library technologies have simplified the process of publishing and accessing multimedia documents, THREDDS is building infrastructure needed for publishing and accessing



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Useful Links:

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/projects/THREDDS/>



WWW.UNIDATA.UCAR.EDU

