

Panel 1: Collection and Distribution of Weather Information—Part 2

Moderator: Ms. Linda Miller, *External Liaison, UCAR/UNIDATA*

Rapporteurs: Mr. Donald Carver, *Assistant Federal Coordinator for Department of Transportation/Federal Aviation Administration Meteorological Affairs, Office of the Federal Coordinator for Meteorology*

Mr. Thomas Cuff, *Deputy Technical Director, Office of the Oceanographer of the Navy*

Synopsis

The Panel moderator, Linda Miller, opened the session by emphasizing the urgent need for coordination and collaboration of the atmospheric sciences. She cited the UNIDATA Program Center at the University Corporation for Atmospheric Research (UCAR) and described it as a program that enables universities to acquire and use meteorological and related data. UNIDATA is sponsored by the National Science Foundation and operated by UCAR. The heart of the program is to facilitate data access to a broad spectrum of observations and forecasts, most of it in real time. She described two related distributed collaborative activities, Internet Data Distribution (IDD) and Thematic Real-time Earth Data Distribution System (THREDDS).

IDD is comprised of many local data managers (LDMs) who collect data from all possible sources on their own equipment where it is made available for access from the Internet. This typifies the collaboration and coordination of many segments of the community. The LDM is a 24/7 operation where local data is collected, decoded if necessary, and stored for free access.

The THREDDS is comprised of many data bases, each of which has a particular type of data such as satellite, radar, lightning, etc. Servers are used as entry points for users to access these individual data bases. THREDDS can also push data to specified users when software and appropriate arrangements have been established. With THREDDS and IDD data is made available to a myriad of users with either the push or pull initiatives.

Ms. Miller then introduced the panelists. Abstracts of the panelists' presentations follow this synopsis. Following presentations by the panelists, Ms. Miller invited questions and comments from the floor. Much of the discussion centered on dealing with data formats. One suggestion was the use of a flexible format, which could accommodate many types of data regardless of whether that data was standard. An alternative solution was offered—the use of "middleware" to transform non-standard data into compatible formats. Also suggested was the use of geographic information systems as a common format. In the context of determining the value of data, it was noted that data sensitivity simulations are very expensive and computationally intense, which makes it difficult to evaluate the value of bringing in data from a specific mesonet.

During one of the panelist's presentations, a suggestion was put forth to make one minute ASOS data available. During the discussion it was noted that it would be difficult to establish sufficient communication capability to make this possible. However, it might be feasible to have regional servers collect the data so that users could pull out what they need. The session ended with a reaffirmation of the need for public and private entities to work together to present a united message of the benefits that would be derived from the increased funding necessary to gather and disseminate the additional data that is not readily available to all users.