AWIPS II in the University Community: Unidata's efforts and capabilities of the software

Mohan Ramamurthy and Michael James

University Corporation for Atmospheric Research, Unidata, Boulder, United States (mohan@ucar.edu)

The Advanced Weather Interactive Processing System, version II (AWIPS II) is a weather forecasting, display and analysis tool that is used by the National Oceanic and Atmospheric Administration/National Weather Service (NOAA/NWS) and the National Centers for Environmental Prediction (NCEP) to ingest analyze and disseminate operational weather data. The AWIPS II software is built on a Service Oriented Architecture, takes advantage of open source software, and its design affords expandability, flexibility, and portability.

Since many university meteorology programs are eager to use the same tools used by NWS forecasters, Unidata community interest in AWIPS II is high. The Unidata Program Center (UPC) has worked closely with NCEP staff during AWIPS II development in order to devise a way to make it available to the university.

The Unidata AWIPS II software was released in beta form in 2014, and it incorporates a number of key changes to the baseline U. S. National Weather Service release to process and display additional data formats and run all components in a single-server standalone configuration. In addition to making available open-source instances of the software libraries that can be downloaded and run at any university, Unidata has also deployed the data-server side of AWIPS II, known as EDEX, in the Amazon Web Service and Microsoft Azure cloud environments. In this set up, universities receive all of the data from remote cloud instances, while they only have to run the AWIPS II client, known as CAVE, to analyze and visualize the data.

In this presentation, we will describe Unidata's AWIPS II efforts, including the capabilities of the software in visualizing many different types of real-time meteorological data and its myriad uses in university and other settings.