

# Final Report on "A Prototype AWIPS II EDEX Server System for the Department of Geography and Meteorology at Valparaiso University"

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The Valparaiso University Meteorology program attempts to keep up with current meteorological technologies to allow our students to maximize their educational opportunities. Over the past seven years the development of a new software package, AWIPS2, has been underway for the National Weather Service. This new software program will be made available to universities through the hard work and cooperation between Unidata and the company developing the code base. Over the past two years Unidata has been working on developing a methodology for deploying this versatile tool to campuses across the country and has encouraged universities to apply for grants to aid in the development process. Valparaiso Universities Meteorology program was awarded an equipment grant to be another test school for the deployment of AWIPS2. Our program provides a "small school" test case for the deployment of AWIPS2, with our limited resources and infrastructure support. Specifically, the Unidata Equipment grant allowed our program to purchase the main server that will run the data ingest for AWIPS2 (Fig. 1; bottom server in the picture). The server is a HP ProLiant DL360p Gen8 Server, with plenty of storage for all of the data.

The meteorology program at Valparaiso University is a long time user of the many and wonderful software packages maintained by Unidata. Our twenty-station weather center has recently been updated to a dual-monitor Linux lab that will support many different software programs. The Unidata Equipment award has allowed our program to realize even more functionality of our weather center and other computing resources that are regularly used for coursework and research. This new server will allow the program to better prepare students for work in any meteorological job, especially those seeking National Weather Service employment, by view meteorological data through a program widely used by government meteorologists across the country.



Currently we use a combination of other Unidata software programs (e.g., GEMPAK, IDV) and Internet sources, which also utilize some of Unidata's software packages. Once full implementation is achieved, the Valparaiso University Weather Center will be upgraded to

include the Common AWIPS Visualization Environment (CAVE), which will be heavily utilized in junior and senior coursework as students gain experience interpreting weather maps and making forecasts for the local region. By using the AWIPS2 and the associated viewer CAVE, this will present a one-stop shop for all weather related data available through the LDM, which can then be only supplemented by other outside sources.

Additionally, as AWIPS2 has been developed we have tested the installation procedures and provide feedback to Unidata. As of this time, we have not yet had successful implementation of the new software package, but it will get done and provide a great benefit to the students. As a result of this process we will also be able to share our expertise to other universities to help with their implement of AWIPS2.