Millersville Meteorology Hosts Three-Day Unidata Python & AWIPS CAVE Workshop

Millersville hosted a three-day Unidata Python and AWIPS CAVE Training Workshop in April 2017. The workshop was presented by Ryan May, John Leeman, and Michael James, software developers from Unidata. Millersville alum Scott Jacobs (BS Meteorology, ’88), a software engineer for NOAA/NWS, provided an overview of the AWIPS II system.

Python is an open source programming language that has been rapidly adopted by many atmospheric and ocean scientists as an alternative to proprietary packages such as MATLAB and IDL. Millersville has been on the leading edge in bringing Python into the undergraduate meteorology curriculum, with Alex DeCaria (professor of meteorology) developing and annually teaching a course titled ‘Scientific Programming, Analysis and Visualization with Python’ since 2012. His book, Python Programming and Visualization for Scientists (www.sundogpublishing.com) is preparing for its second printing.

AWIPS stands for Advanced Weather Interactive Processing System, and is used by all National Weather Service offices for the display and analysis of meteorological data (CAVE stands for Common AWIPS Visualization Environment). Students in our curriculum now have access to AWIPS II, and can use the same software and functionality for visualizing and analyzing data as do the forecasters in the National Weather Service forecast offices.

The workshop brought in 19 attendees, including faculty, staff, and students from UNC Asheville, Stockton University, Rutgers University, Penn State, SUNY Brockport, and the University of Maryland. Millersville was well represented by 6 undergraduate and graduate students.

MU Alum Scott Jacobs, BS Meteorology (’08) provides an overview of the National Weather Service’s AWIPS analysis and visualization software system.
Unidata’s John Leeman describes how to ingest and display satellite imagery using Unidata-developed Python packages.

Attendees at the Unidata Regional Python and AWIPS CAVE Training Workshop held at Millersville University in April.