Geophysical Research Abstracts, Vol. 7, 03692, 2005 SRef-ID: 1607-7962/gra/EGU05-A-03692 © European Geosciences Union 2005



Integration of Learning Objects with Real-time Data Analysis Tools

Timothy Spangler, Ben Domenico, Jeff Weber

1) Cooperative Program for Operational Meteorology Education and Training (COMET®), (2) Unidata Program, Boulder, Colorado, USA,

tspang@ucar.edu, fax 303-497-8491, tel 303-497-8473

The UCAR-COMET program develops and distributes on-line interactive multimedia modules for weather forecaster training. These modules recently have included the development of learning objects that provide concise information about meteorological topics which can be accessed by a learner when they are needed or desired. The UCAR-Unidata Program provides a broad array of geosciences data and tools for data analysis and visualization to the academic community. Unidata supports over 150 universities as well as other institutions with their data and analysis tools.

These two programs are merging their efforts in an experiment to improve the use and understanding of geosciences data. Unidata products will be distributed with appropriate learning objects imbedded that can enhance the understanding of the learner in a "just in time" delivery of training. For example, when a sounding is displayed, learning objects can be available that explain the use of CAPE or the calculation of stability indices. Satellite Imagery can be displayed with a learning object available that explains the physical basis of the channel being displayed. Model output could include learning objects that explain the differences between models, or the specific physics packages being used.

The presentation will include examples of Unidata Products and COMET learning objects and a discussion of how this experiment can be used to enhance undergraduate education.