



Engaging College Students in Space Physics with a Layered Multimedia Approach

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The Cooperative Program for Operational Meteorology, Education and Training (COMET[?]), and the National Center for Atmospheric Research (NCAR) High Altitude Observatory (HAO) have teamed up to develop a Web-based learning module called “*Physics of the Aurora: Earth Systems*”. This module introduces undergraduate science students to the physics of the sun-earth system with an emphasis on the earth but touches on space weather and related prominent effects on human activities. The two primary audiences for this module are undergraduate science students, and professors who teach space weather-related classes (astronomy, physics, meteorology, etc.).

The uniqueness of this module lies in the three levels of learning - overview, details, and in-depth topics. This structure supports multiple uses of the material such as in-class lecture support, out of class assignments and survey course use. Tailoring the module for these purposes proved to be challenging to textually and visually explain complex and theoretical systems in a condensed format.

Applications of COMET modules are appropriate for undergraduate and graduate level university classes, in addition to professional development for satellite data users. COMET Web modules are accessed by over 15,000 users per month worldwide.