

SATELLITE METEOROLOGY EDUCATION RESOURCES: MULTIMEDIA MODULES AND INITIATIVES

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The COMET[®] Program (<http://www.comet.ucar.edu>) receives funding from NOAA NESDIS and the NPOESS Integrated Program Office (IPO), with additional contributions from the GOES-R Program Office, EUMETSAT, and Environment Canada (Meteorological Service of Canada), to directly support education and training efforts in the area of satellite meteorology. This partnership enables COMET to create multimedia web-based materials primarily for the continuing education of geoscience professionals. These materials are often relevant to a diverse audience and cover the products and applications from both geostationary and low-earth orbiting remote sensing platforms. Nearly 50 satellite-specific training modules are accessible from the satellite topics page of the MetEd website (http://www.meted.ucar.edu/topics_satellite.php) and the NPOESS relevant modules and information are also made available through the NPOESS Userport (<http://www.meted.ucar.edu/npoess.php>). Simple, free registration is required to access individual training modules. As of fall 2009, there were over 100,000 registered users of our MetEd site from over 200 countries who are taking advantage of the nearly 600 hours of self-paced education and training available on demand. While many module titles are available in English only, quite a few also available in Spanish, French, and other languages as well.

We currently have multiple satellite education initiatives, including an ongoing focus on the capabilities and applications of both the upcoming NPP/NPOESS system and the GOES-R series and their relevance to operational forecasters and other user communities. In addition, we continue to develop materials on various aspects of the EUMETSAT Polar-orbiting System (EPS) and Meteosat geostationary satellites, as Meteosat Second Generation (MSG) imaging capabilities provide an important proving ground for the next-generation GOES-R imager. Another initiative includes our partnership with the Meteorological Service of Canada to add new titles to the operationally-focused satellite training series called “Dynamic Feature Identification: The Satellite Palette” (http://www.meted.ucar.edu/norlat/sat_features/). Topics included in this interpretation-focused series are vorticity maxima and minima, deformation zones, the ring of fire and blocking patterns, with several new titles being added each year.

This presentation provides an overview of the broad scope of COMET's satellite education efforts and publications, highlighting recently published materials relevant to both polar-orbiting and geostationary satellites. In addition to being available via the MetEd Website (<http://www.meted.ucar.edu>), access to COMET's satellite modules and key learning objects from each whole lesson can also be found within a growing body of satellite information and training resources within another major focus area, the Environmental Satellite Resource Center (ESRC) Website (<http://www.meted.ucar.edu/esrc>) (Fig. 1.).



Figure 1. Home page for the Web-based Environmental Satellite Resource Center.

Launched in 2008, this community requested, searchable, database-driven Web portal provides easy access to a wide range of useful and trusted information and training material on polar-orbiting and geostationary satellites. The ESRC is intended to be a community site where organizations and individuals around the globe can both search for and easily submit their resources via online forms by providing a small set of metadata. The ESRC is not a repository of materials rather it is a portal to the wide range of useful materials that exist at many sites. The ESRC site is sponsored by the NPOESS IPO, NOAA, and NESDIS. In addition to filling a U.S. need, the ESRC is also becoming an important resource for the World Meteorological Organization's Virtual Laboratory Centres of Excellence.

Finally, The COMET Program is also incrementally publishing new chapters in a free online, peer-reviewed Textbook, “Introduction to Tropical Meteorology” (<http://www.meted.ucar.edu/tropical/textbook/>). The chapter of particular interest to the satellite community is “Chapter 3, Tropical Remote Sensing Applications”. This multimedia textbook is intended for undergraduate and early graduate students in Tropical Meteorology courses, forecasters, and others interested in the impacts of tropical weather and climate.

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