

## Highlights of CIMSS GOES-R AWG Proxy Data Activities

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This poster summarizes AWG Proxy Data activities at the Cooperative Institute for Meteorological Satellite Studies (CIMSS) over the past year. Three areas of work are covered: software development, land surface property developments, and simulated proxy ABI data sets. Enhancements were made to a Fortran-90 interface (dubbed WCRTM) developed in our earlier work to allow Weather Research & Forecasting (WRF) and WRF-Chem model output to be easily used as input for the CRTM. Future plans are to use WCRTM to produce simulated ABI imagery in near-real-time. Developments in land surface properties have included explorations into extending the University of Wisconsin (UW) Global Land Surface IR emissivity database into the visible and near-IR parts of the spectrum. Other work included producing a proxy 4km-resolution land surface emissivity dataset of ABI IR bands over the southwestern US and investigating the zenith angle dependence of land surface IR emissivities. Finally, new proxy ABI visible (band 2) and IR (bands 8-16) imagery was produced every 5 minutes from a 4-km WRF model run over CONUS from 1700 UTC 21 May to 0155 UTC 22 May in 2011. These data were used in testing atmospheric motion vector algorithms developed by the AWG Winds team.