The Electronic Weather Map and Meteorological Visualization Wall

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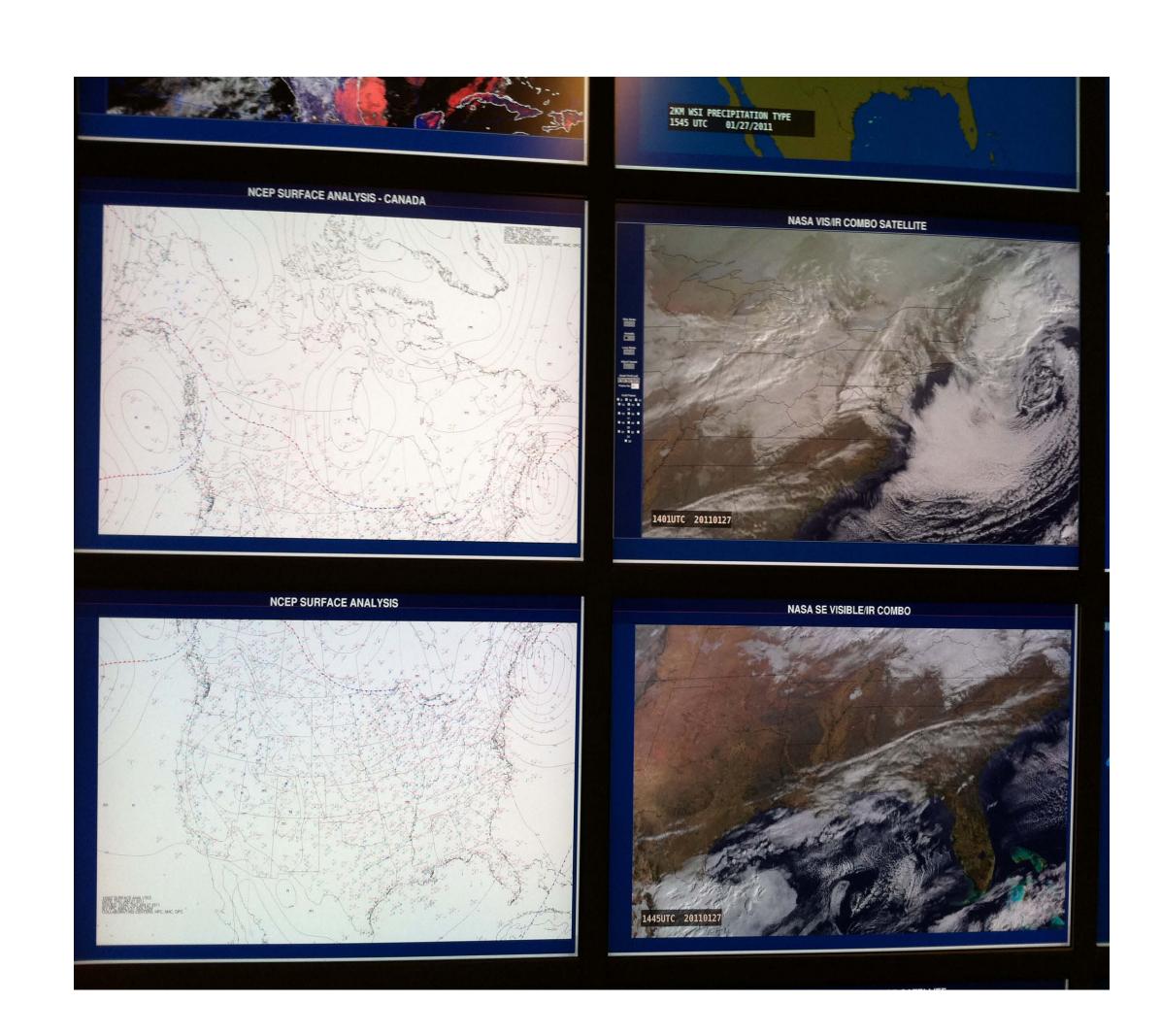
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The Pennsylvania State University, Department of Meteorology, Electronic Map and Visualization Wall is a cutting edge tool with a primary purpose to replace and enhance the traditional paper map wall used by forecasters in the field. The full potential of the wall as an instructional and forecasting tool is just beginning to be explored.

Version one of the wall provided ultra-high resolution graphics for map discussion along with a map configuration tool to allow the user to quickly save and retrieve various realizations of the wall for different meteorological cases.

Version two of the wall included multi-tile displays and rotating wall visualizations that presents a 7 to 10 minute synopsis of the current world weather conditions, regional conditions and weather model output to a maximum forecast time of 240 hours.

Future enhancements of the wall will include full mouse interactivity, imported video and the capability to show images with resolutions in the tens of millions of pixels, such as those from the weather or geographical satellites.







Total Number of Tiles = 36

Tile Display Density = 2560 x 1600 pixels per Dell 30" 3008 Series Monitor

Total Wall Display Size = 147,456,000 pixels

World's fifth largest contiguous display in terms of pixel density as of March 2009

Wall graphics system developed in house to provide real-time weather data

Interactive map control display via Web console and soon by remote, wireless mouse and iPad

System runs on ten, Dell Precision 5400 Rack Mounted workstations using ROCKS and CGLX visualization software

Multi-tile and Video display capabilities under development, including Google Earth







More information on our e-Wall and the Department of Meteorology is available via the web at:

http://www.met.psu.edu

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