Utilization of a Web Map Service and Smart Phone technology by SSEC

Developed and presented by:

Dave Parker, Sam Batzli, Russ Dengel, Nick Bearson, Bill Bellon, Dave Santek, Tim Olander

SSEC WMS Capability –
Statement of Concept

- **Why do this?**

  – **Upgrade or augment existing project web pages to be more "mobile friendly"**

  – **Allow for easier setup of new web pages and easier collaboration between projects**

SSEC WMS Capability –
Background Information

- **Provide scientists and programmers an <u>*EASY*</u> method of presenting imagery and data that is *powerful*, *easy to use*, and *compatible with* modern browsers and platforms**

- **Information can be presented on *geo-located displays* (Google Earth/Maps), with capability to animate, overlay, and interrogate various data types (imagery, grid, and/or point data) *simultaneously***

SSEC WMS Capability – *Background Information*

- **Current public SSEC webpage users have requested certain information to be presented in more "mobile friendly" displays**

- **Improvements to existing mobile phone aimed products (e.g. PAW) need to be upgraded to improve resolutions and capabilities on latest smart phones**

- **SSEC displays and products can be optimized for in-house users (i.e. project collaborations or at conferences/meetings), and public users (i.e. aviation community, state/local government, private businesses, etc)**

SSEC WMS Capability – *Background Information*

- **What is the Web Map Service (WMS)?**
  - **User submitted geo-located imagery (e.g. GeoTIFF) or data field products (point or gridded data)**

  - **WMS will tile image as necessary for optimized display on phones, Google Maps (minimizes download size/rate)**

  - **The use of Javascript on the client (phone, desktop browser, etc.) allows for animation of images and any number of overlay products**

SSEC WMS Capability –
Background Information

- **What is the Web Map Service (WMS)?**
  - **Data viewable on WMS-capable software: ArcGIS, Matlab, IDL, McIDAS-V (future)**

  - **Output Google Earth-ready products**

SSEC WMS Capability –
Future Direction and Needs

- **Continue to develop new tools to augment and enhance current WMS capabilities**

- **Develop directory structure to WMS to allow for better organization of products**

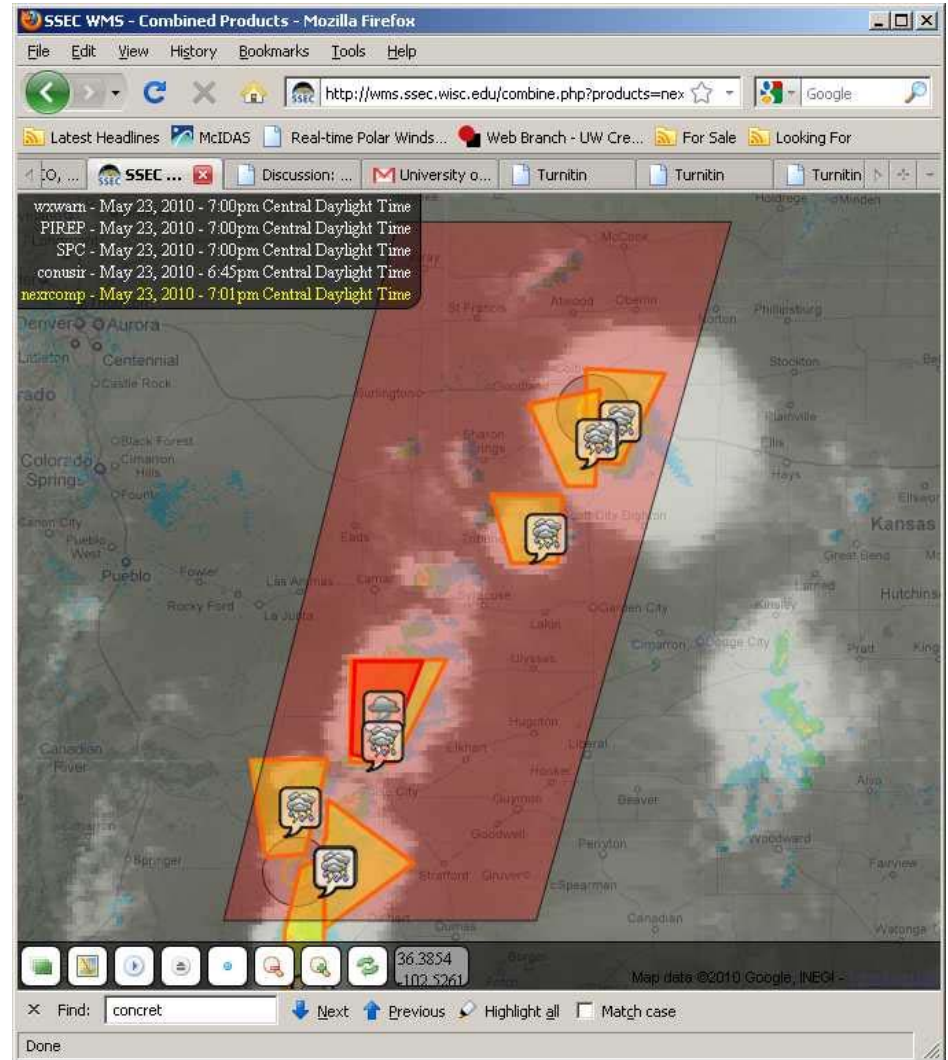- **Provide documentation describing configuration and administration of the WMS.**

SSEC Smart Phone Capability –
Prototypes

- **Smart Phone apps**
  - Notification system developed to send an email or iPhone notification for real-time events. Implemented for severe weather events.

  - iPhone app developed to receive notification of severe weather. This triggers a request to the WMS to display the latest radar with severe weather location, area coverage, etc.

SSEC Smart Phone Capability –
Prototypes

SSEC WMS Capability –
Demonstration

- ## Demonstration of the WMS

…a picture is worth a thousand words!!!