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

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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 **EASY** 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**.
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
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!!!