AWIPS II: R2O – O2R

Space Weather Workshop
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Advanced Weather Interactive Processing System (AWIPS)

- Collection software, hardware, networks, and support services for a variety of users within NOAA and the NWS
- Allows for collaboration across multiple National Centers and Forecast Offices
- Creates a seamless mechanism for data display and manipulation, product creation, and dissemination
AWIPS II at SWPC

• Positioned to take advantage of 25+ years of software development

• Capitalize on an enterprise solution for data visualization and product generation

• Create efficiencies in application development and maintenance

• Ability to focus efforts on R2O activities

• Solar imagery has already been ported in a test environment
AWIPS II at SWPC: Next Steps

Migration of current display/forecast tools during FY12 and FY13

- SWPC high-frequency data decoder
- SWPC high-frequency time line / time series
- Enlil model
- Product Generation
- Enhanced web graphics depicting solar event impacts on Earth
AWIPS II for the Space Weather Community

• An exciting opportunity exists for the space weather research community

• Through agreements with Raytheon and UCAR/Unidata this software system will be made available to researchers
  – Allows access to the operational system forecasters use
  – Fosters more beneficial applied research activities
  – Improves collaboration between the research and operational community
  – Modern development and environment platform to enhance faster implementations

• Exploring space weather data delivery through Unidata as well
Partnerships & Collaboration

- Once fully deployed, AWIPS II will have open software policies for distribution
  - government vs. non-government version

- Since 2005, Raytheon has been NOAA’s partner for the operations, maintenance and evolution of AWIPS
  - Provide software support for the private sector

- For over 15 years NCEP has partnered with Unidata to be a conduit for the NCEP software and data to the terrestrial weather research community
  - Unidata is a diverse community of over 250 institutions vested in the common goal of sharing data, and tools to access and visualize that data.

- In our current economic climate, AWIPS II provides the bridge between research and operations
Demonstrations of the Software

Today, Wednesday, and Thursday from 1-3pm during the poster session

AWIPS II is coming to SWPC and the opportunity exists to extend this R2O/O2R capability to the Space Weather Community!