# **AWIPS II: R20 – 02R**

Space Weather Workshop

Michelle Mainelli – NCEP Central Operations April 23, 2012



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 Space Weather Workshop – April 2012







# 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



- 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



NOAA

RTMENT OF

### 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







SPACE WEAT





unidata





### 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!