

NWS Pilot Projects

6 Pilot Projects testing key NWS Roadmap concepts:

- NWS Operations Center: NWS HQ Silver Spring MD
- Regional Operations Center: Southern Region HQ Fort Worth TX
- IDSS in a Coastal Environment: WFO Slidell LA
- IDSS in an Urban Environment: WFO Sterling VA
- Integrated Environmental Services, WFO Tampa FL
- Mesoscale Meteorology Science to Operations: WFO Charleston WV

AWIPS II Extended Thin Client

- Allows remote access to AWIPS
 - Runs on Windows and Linux
 - Workstation and laptop compatible
 - Full AWIPS II visualization (CAVE) on client
- Improved Impact-Decision Support Service
- Testing at Slidell Pilot in SWERV mobile vehicle
- Running operationally at Houston CWSU
- Charleston WV and Sterling VA Pilots: will test from remote locations later this year.
- NWS Regions can serve as hosts.

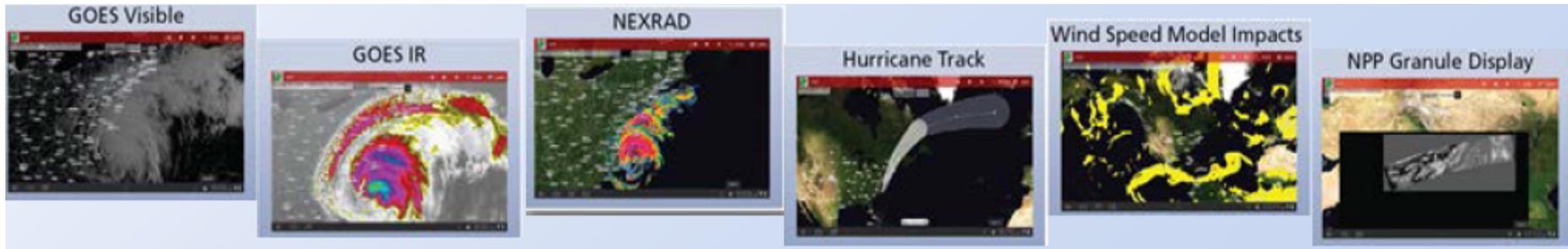


AWIPS II R&D in the Cloud

- Objectives:
 - Cloud environment can run and replicate any operational system
 - Reduce resources and improve system optimization
 - Seamless O2R and R2O transition from existing environments
- Benefits:
 - Significantly reduce forecaster testing TDY
 - Minimize time to implement AWIPS updates and releases
 - Increase productivity for developers by creating multiple development and testing environments
 - Support “Virtual Lab” prototype
- Demo this summer with Slidell and Houston offices

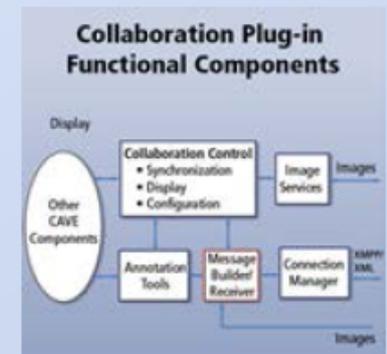
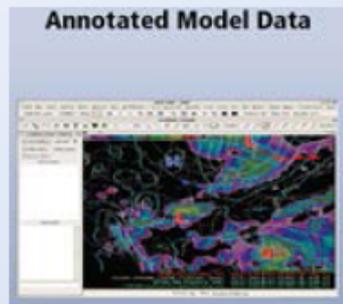
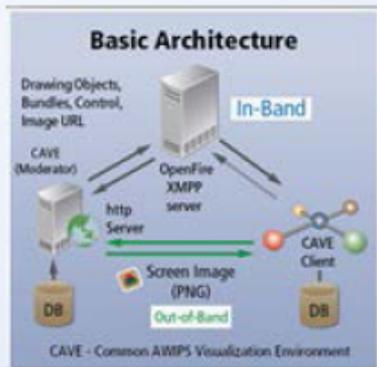
AWIPS II on a Tablet

- Layered Environmental Analysis & Forecast (LEAF)
- Tablet application
- Prototype effort under development by Raytheon
- 8 Initial environmental and base data layers from an array of weather sensors and satellites
- Deliver advanced functionality to forecasters in the field



AWIPS II Extended Collaboration

- Objective: To allow forecasters to collaborate between Centers, WFO's, and RFC's
- Promotes more coordinated and seamless set of products and services
- Leverages Plug-In capability especially for drawing and sharing of underlying data
- Target: Testing at Pilots in Slidell and Sterling



NWS OST Pilots Engagement

- Improved storm surge forecasts and warning services: Slidell, Tampa, and Sterling Pilots will be testing storm surge warnings using the SLOSH and PSURGE models from MDL
- Tampa Pilot will be establishing a marine route forecasting service, incorporating water level and weather forecast data. This involves collaboration with OST, along with NOS and NCEP to determine the best model solutions.
- Slidell and Tampa Pilots will be working with OST to implement enhanced local plume modeling with software such as HYSPLIT to provide smoke plume/fog visibility hazard forecasts.

CASA and BASC Option 7

- NWS/OST have been in discussions with CASA for more than one year as CASA has developed a 5-year plan/proposal for the Urban Demo in the DFW metroplex
- CASA has forged strong partnerships and relationships with TX governments at many levels (e.g., NTCOG), the EM community, WFO FWD, and NWS SRHQ
- CASA has recently secured significant funding from TX sources, DHS/FEMA, and NSF
- The foundation of CASA is radar-based nowcasting with NWP components limited to radar-based initialization of “after first echo”
- However, OST has worked with CASA/Umass-CSU and CASA/OU to develop year one tasks that have a decidedly more “NoN” flavor than originally proposed and is providing significant funding for these tasks
- Key to this is deployment of NoN-type vertical TPT technology (principally LIDAR and radiometer) for testing and pseudo-operational evaluation by WFO FWD and others