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