



WRN and Aviation

- WRN is a combination of improved business, science and technology, workforce, and service improvements needed for impact-based decision support services
 - 4-D Weather Cube drive infrastructure improvements
 - SAS drives Common Operating Picture concept
 - Build on our decision support services
 - CWSUs, Meteorologists at the ATCSCC
- Continue working with partners and stakeholders to understand impacts and needs
 - Traffic Flow Management Weather Requirements Working Group/Aviation Weather Requirements Working Group
 - Determine user needs to reduce impact of weather
 - Develop user-relevant performance measures for meaningful
 - Transition from generating scheduled products to providing impact-based services
- Aviation Services already embraces WRN





WRN and NextGen Weather

What is needed

- Nationally consistent weather information
- Weather data readily available and in proper format
- Interoperable weather information through common data formats and net-centric operations
- Weather information distributed to decision makers in seconds
- Higher resolution and higher refresh rate
- Integrated weather information into aviation decision-making processes





Building a WRN/NextGen Partnership

NOAA NextGen Weather Program

IT Services Project

- Aviation weather data discoverability, translation and dissemination services
- Discoverable single access point for weather information in common formats

Single Authoritative Source Project

- Primary source of "Official" weather information for aviation decisions
- Dynamically determined set of most accurate weather information sources

Verification Project

- Network-Enabled system for determination of quality of weather information

Forecast Applications Project

- Forecaster Applications allowing manipulation of high res, rapidly updated data sources
- Enables forecaster intervention to correct for poor performance of automated forecasts

Model Project

- High resolution, rapidly updated models
- Probabilistic models for forecasting uncertainty

Aviation Weather Elements Projects

- Scientific improvements to weather information critical to aviation operations





NOAA/NWS Evolves Service Operations

Build a little, Test a little, Field a little

- NWS Pilot Projects
 - Impact-based Decision Support Services (IDSS)
 - Urban Region – Sterling, VA
 - Coastal Region – New Orleans
 - Regional Level – Fort Worth
 - National Level – Silver Spring
 - Aviation – San Francisco (unfunded)
 - Integrated environmental services – Tampa, FL
 - Mesoscale Science – Charleston, WV





Continue a National Conversation



- Improve understanding of increasing vulnerability to extreme weather
- Stimulate discussion with public, partners, and stakeholders on solutions for reducing impacts
- Evaluate opportunities for improving:
 - User-driven impact-based forecasts/warnings
 - Integration of social and natural sciences into services
 - Service delivery across the weather enterprise
 - Community planning and impacts mitigation

