

**NWS Charleston, WV Pilot Project: Combining New Science and Forecasting Techniques
in an Operational Environment**

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As part of the National Weather Service's (NWS) Weather-Ready Nation Roadmap, a Mesoscale Science to Operations Pilot Project has been launched at the NWS office in Charleston, West Virginia. The main two objectives of this project are: (1) to investigate the integration of high-resolution storm-based convective forecasting and analysis techniques into forecast operations; and (2) to provide these forecasts and other weather information to partners in an innovative and user-friendly fashion. In addition the project will investigate methods of bringing new science and forecast techniques into both remote and on-site Impact-based Decision Support Services (IDSS), with the ultimate goal of providing our partners and users with timely, accurate weather information.

New data sets and forecast techniques are constantly under development within the NWS and by partners in the research and academic communities. Deciding which are most ready for application, developing methods for use in operations, and communicating the new information to partners can be a daunting task for the operational NWS forecaster. The Charleston Pilot Project aims to streamline this process by helping identify projects that are most ready and appropriate for a Weather Forecast Office to integrate into operations. The pilot project meteorologists will aim to bridge the research to operations gap that can often slow down the forecast improvement process through real-time testing and refinement of applications. Many of these activities will be in collaboration with other testbeds such as the Hazardous Weather Testbed and the GOES-R Proving Ground. Best practices and training will be developed to support the operational use of the new science and forecast techniques. The Pilot Project also aims to combine existing tools in unique and synergistic ways to further support forecast operations and situational awareness. Finally, the Charleston Pilot Project is developing a new Enhanced Data Display (EDD) that will communicate new information as well as legacy products in a way that is useful to groups both internal and external to the NWS.

This poster will illustrate the operational concept of the Charleston Pilot Project. Examples of data sets and forecasts techniques being evaluated and integrated into operations will be provided, along with a summary of future plans and collaborations with other Weather Ready Nation Pilot Projects. Sample displays from EDD will also be presented.