

## 9.8 Developmental Testbed Center: Engaging the community in operationally relevant research and development.

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The primary mission of the Developmental Testbed Center (DTC) is to facilitate the transition of research related to Numerical Weather Prediction (NWP) into operations. To fulfill this mission, the DTC (i) provides user and developer support for community NWP systems in close collaboration with the system developers, (ii) performs testing and evaluation of promising new NWP techniques, as well as the operational systems, to inform the operational implementation process, and (iii) brings together the research and operational NWP communities through workshops, tutorials and the DTC Visitor Program. Currently, the DTC focuses its activities in five task areas: regional ensembles, data assimilation, hurricanes, verification and physics for global applications through its newly established Global Model Test Bed (GMTB). In 2012, NCEP's Environmental Modeling Center (EMC) established a Model Evaluation Group (MEG) tasked with verifying and evaluating daily performance of EMC's forecast/analysis systems from a synoptic and mesoscale perspective to complement the statistical perspective. This group meets weekly to discuss key model performance issues. In this presentation, we will discuss how the research community can engage in key areas of research directed at helping EMC address model performance issues high-lighted by the MEG. We will also present examples of how the DTC has engaged the research community in its testing and evaluation activities such that they have the potential to make valuable contributions towards advancing the skill of the U.S. operational NWP systems. At the center of these interactions is the DTC Visitor Program that provides support for researchers or graduate students to engage in research projects directed at advancing the skill of operational NWS models.