P73 Streamlining transition of new developments to the Hurricane Weather Research and Forecasting model.

Bernardet, Ligia, C. Holt, National Oceanic and Atmospheric Administration/Earth System Research Laboratory/Global Systems Division (NOAA/ESRL/GSD) and University of Colorado/Cooperative Institute for Research in Environmental Sciences, J. Frimel NOAA/ESRL/GSD and Colorado State University/Cooperative Institute for Research in the Atmosphere, L. Carson, K. Newman, M., Biswas, and J. Halley-Gotway, National Center for Atmospheric Research

The Hurricane Weather Research and Forecasting model (HWRF) is a coupled atmosphere-ocean numerical weather prediction forecast system run operationally by the NOAA National Centers for Environmental Prediction (NCEP) in all worldwide basins. In order to improve the HWRF numerical guidance, the model goes through a yearly cycle of development, testing, and operational implementation.

HWRF development is conducted in a distributed manner. Innovations are contributed by the NOAA NCEP Environmental Modeling Center (EMC), by other NOAA research laboratories, and by scientists from universities and other academic institutions.

This poster describes the role of the Developmental Testbed Center (DTC) in the HWRF developmental process. The DTC hosts the unified HWRF code repository, and supports HWRF developers in contributing and testing their innovations. Examples to be presented include the work done or fostered by DTC in the transition of the HWRF multistorm capability, the development of alternate ways of initializing and outputting information from the Princeton Ocean Model for Tropical Cyclones by the University of Rhode Island, and the creation of tools for verifying HWRF synthetic satellite images by Coastal Carolina University.