Advancement of Hurricane Analysis and Forecast System: 2021 Real-Time Experiments

Zhan Zhang (NOAA/NWS/NCEP/EMC, College Park, MD)

Hurricane Analysis and Forecast System (HAFS) is a community-based ocean-coupled high resolution earth modeling system, promoting research to operation to research (R2O2R) transitions for cutting-edge research on hurricane dynamics and physics, advanced data assimilation techniques, and air-sea interaction processes. HAFS aims to become the next generation of NOAA's operational hurricane forecast system, replacing HWRF and HMON in 2023. Four configurations of real-time HAFS experiments were conducted in the 2021 Atlantic hurricane season to compare the track and intensity forecast guidance with the current operational HWRF. This talk will describe the configurations used in 2021 real time experiments, and persent verification comparisons between HAFS experiments and HWRF, and the plan for operational implementation.