P45 Running WRF operationally at AWS using OBSGRID.

Carpenter Jr., Richard L., Weather Decision Tech

We describe our experience running WRF operationally in a commercial environment. We run WRF at a traditional data center and at AWS. The AWS implementation is built with CfnCluster and uses the Slurm job scheduling system. We examine performance and cost saving options, including I/O quilting and compressing the WRF netCDF input and history files. Our preprocessing system ingests MADIS observations and uses OBSGRID for both quality control of the observations for FDDA and for gridded initial conditions. Our workflow management system, WRFControl, handles all aspects of forecast execution, including data ingest, job scheduling and submission, post-processing, plotting, dissemination, monitoring, and alerting.