

Discussion on Stream 1.0

NHC & EMC



Focus areas

- Align HFIP Research with EMC/NHC Operational Implementation timeline
- Prioritization of research transitionable to operations
- Use of community modeling framework, resources and support enabled by HFIP
- Two-year rule: one-year development and one year demo before EMC can work on operationalizing model upgrades
- Computational resources

EMC Priorities

- Dependency of regional models on parent global model
- Assure that global model upgrades/implementations do not degrade regional hurricane models
- Work closely with NHC throughout the development and implementation cycle of both regional and global systems (including GEFS)
- Agree on a sufficiently large sample of cases for testing.
- Comprehensive and well designed test plan as done with HWRF since 2010
- Continuous engagement with NHC in evaluating individual components and at every stage of critical decision making process

HFIP Supported Research Priorities

- Must align with near to long term strategies of operational hurricane modeling plans
- Have a well defined path for operational transitions
- Make use of established R2O framework supported by DTC and HFIP
- Take advantage of training on operational HWRF (including Python scripts) to work in the same functional environment as operations

Choice of model upgrade components

- Only limited additions can be done to operational HWRF upgrades each year
- Physics and DA dominate the priorities
- Use of HFIP provided resources (Jet) is critical for T&E – help us make wise choices.....