HFIP Overall Strategy

- Use global models at as high a resolution as possible to forecast track out to 7 days
- Use regional models at 1-3 km resolution to predict inner core structure to meet intensity goals out to 5 days including rapid intensification
- Hybrid DA (NCEP version) for both regional and global using as much satellite and aircraft data as possible
- Both regional and global models run as an ensemble
- Statistical post processing of model output to further increase forecast skill

HFIP 5-year Target Numerical Forecast System

- Global model ensemble with Hybrid Data Assimilation
  - 20 members at 20 km
  - Multi Model
- Regional model ensemble
  - 20 members at 3 km
  - Multi model (at least two—eg: HWRF, AHW, TC-COAMPS)
  - Using all available aircraft and satellite data in core and near environment of hurricane-Hybrid DA
- Statistical Post processing
  - Bias correction, CBC,LGEM, SHIPS…

2012 HFIP Priorities

- Computing
  - Continued development of the Experimental Numerical Forecast System (Real-Time) during hurricane season on T-jet
    - New paradigm for NWS transitioning research to operations
- Operational Commitments
  - Work with NCEP to make the global hybrid DA operational
  - Continue the coordinated community effort to improve HWRF
- Development
  - Development of the hybrid system (the NCEP system) for regional models
    - Develop methods to include more satellite data near hurricane core
  - Develop a physics package suitable for 3 KM models