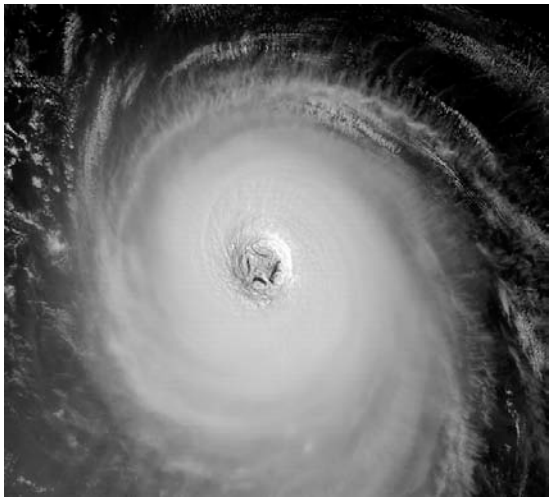
Partnerships – The Key to Tackling Critical Challenges in Tropical Cyclone Operations and Research

66th Interdepartmental Hurricane Conference

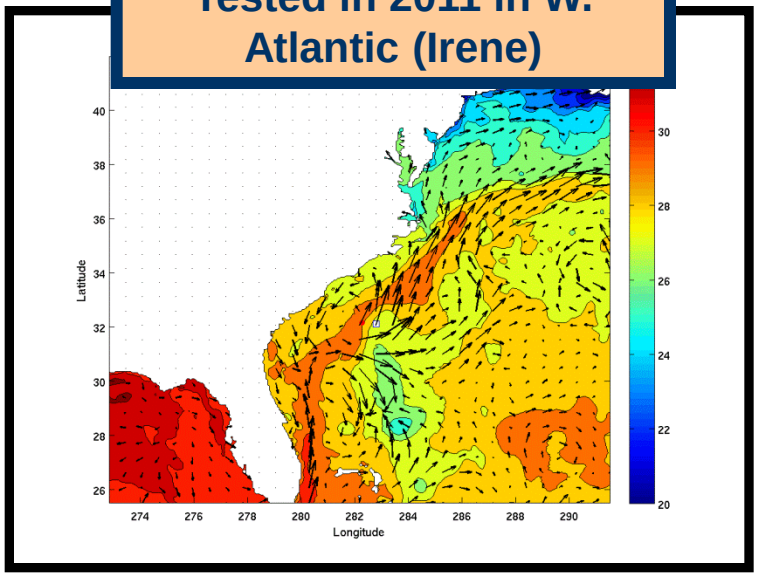


RADM David Titley
Assistant Deputy CNO for Information Dominance
Naval Deputy to NOAA

Successful Partnerships

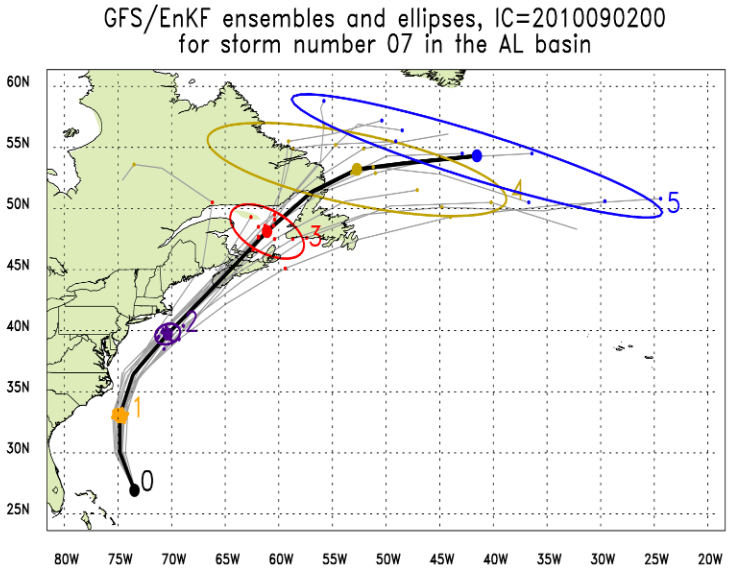
- **JTWC – Historically successful operational partnership - now including the NHC**
- **National / Naval Ice Center – Not TC related, but a significant federal partnership**
- **Numerical Models**

Coupled COAMPS-TC Tested in 2011 in W. Atlantic (Irene)



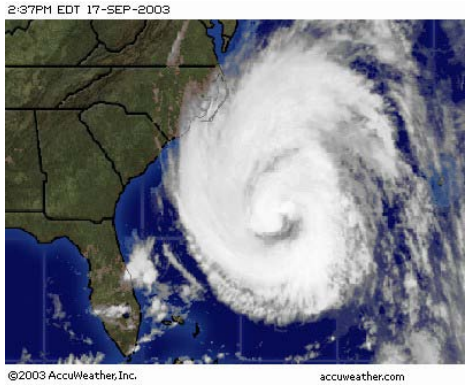
NUOPC

- Air Force, Navy, NOAA partnership
- A managed National multi-model ensemble prediction system.
- A common modeling framework linking operations and research.
- Draw on individual partner modeling strengths.



ESPC

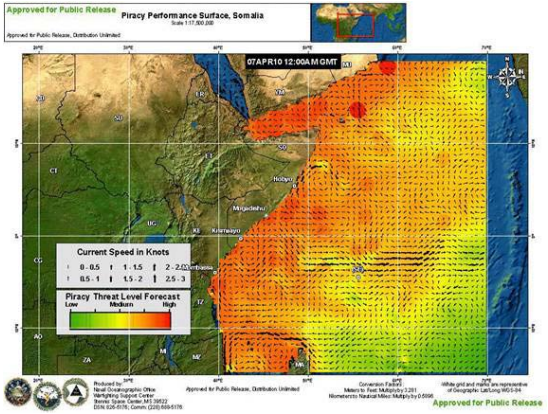
- **ESPC is a coherent, national effort to extend atmospheric, oceanic and Arctic predictions from days to months, years and decades to meet current and future Naval warfighting and force readiness requirements.**



- **An interagency initiative, leverages partnerships to create a national capability across Defense, Commerce, Energy, National Science Foundation and NASA.**

ESPC Challenges / Opportunities

- **Challenges:**
  - Modeling complex interactions on monthly, seasonal, annual and decadal time scales
  - Advancing the global observation network to improve predictions
  - Advancing computational efficiency and capability
  - Identifying and quantifying uncertainty associated with environmental prediction



- **Opportunities:**
  - Build on existing multi-agency partnerships and successes
  - Recapitalize aging (ca. 1970s) forecast models
  - Collaborative development and resourcing effort
  - Direct support to the nation's future readiness

Initiatives and Responsibilities

- **ESPC will:**
  - **Expand partnerships to better leverage federal assets**
  - **Build upon existing DoD, DoC, DOE, NSF and NASA initiatives**
  - **Foster innovation in federal laboratories and academia**

to ensure:

- **The best available environmental predictive support**
- **Current generation scientific technologies are applied to mission requirements**
- **The most cost efficient use of national resources including manpower and computational assets**

National Advancement – National Benefits

Questions?