

60th INTERDEPARTMENTAL HURRICANE CONFERENCE



***“Hurricane Season 2006: Building on the
Historic 2005 Season”***
March 20 - 24, 2006

CLOSING / WRAPUP REMARKS

60th INTERDEPARTMENTAL HURRICANE CONFERENCE

**Mr. Samuel P. Williamson
Federal Coordinator for Meteorology**

Overview

- **OBJECTIVE RESULTS**
- **EXPECTED OUTCOME RESULTS**
- **CHALLENGES AND THE WAY AHEAD**
- **ACTION ITEMS**
- **FEEDBACK**
- **SPECIAL RECOGNITION**
- **LOCATION FOR FUTURE IHCs**
- **THANK YOU**

Conference Objectives



- Review the Nation's tropical cyclone forecast and warning program from end-to-end and update the *National Hurricane Operations Plan* for 2006



- Evaluate lessons learned from the 2005 hurricane season, with a focus on Hurricanes Dennis, Katrina, Rita, and Wilma



- Examine the results of the Joint Hurricane Test bed (JHT) as a model for transitioning successful research results into operations



- Review the federal priorities for tropical cyclone research and development for the next decade, to include relevant social science issues



- Examine the needs and requirements for future tropical cyclone surveillance and reconnaissance observations



- Evaluate changes in forecast and warning messages needed to improve public awareness, preparedness, and response

Expected Outcomes



- **Specific changes/updates to the 2005 *National Hurricane Operations Plan* (NHOP)**
 - **Leading to publication of the 2006 NHOP**



- **Additional inputs into the draft OFCM-sponsored *Interagency Strategic Research Plan for Tropical Cyclones***
 - **Aiding in completion of a plan which will set the Federal goals and priorities for tropical cyclone research for the next 10 years**

Expected Outcomes



- **Specific immediate actions that can be taken to bridge the gap between the hurricane forecast and warning message preparer and the message receiver to improve public awareness, preparedness, and response**
 - **Goal: get people out of harm's way to save lives and reduce injuries; protect property and resources**



- **A list of current and promising surveillance and reconnaissance capabilities that will serve as an initial framework for the development of future tropical cyclone observational needs and requirements**

Challenges and the Way Ahead

- **Modeling / data assimilation / computing power**
- **Reconnaissance and observing**
- **Improved forecast accuracy for:**
 - § **Storm intensity / structure**
 - § **Storm track**
 - § **Storm surge**
 - § **Inland flooding**
 - § **Information dissemination (technology, message)**
 - **Incorporating results of social science research into operations**

Action Items / Next Steps

- **58TH IHC Action Item: Develop an interagency strategic plan for tropical cyclone research**
 - **Joint Action Group for Tropical Cyclone Research (JAG/TCR) will further refine draft Strategic R&D plan**
 - **Publish by September 30, 2006**
- **59TH IHC Action Items**
 - **Develop a Strategic Plan for Improved Tropical Cyclone Reconnaissance Systems (ITCRS) (manned, unmanned, spaced-based, etc.)**
 - **Publish by March 31, 2007**
 - **Complete the study entitled, “Warning Messages: Exploring Customer Understanding” by 06/05 and then develop a path ahead to implement recommendations from the study to improve understanding and use of tropical cyclone forecasts and warnings**
 - **Completed June 2005**



Action Items / Next Steps

- **59TH IHC Action Items**

- **Facilitate bringing together the web site owners from NOAA (e.g., HRD, NHC), Navy, etc. to improve linkages for supporting R&D**
 - **Complete by October 31, 2006**
- **Facilitate bringing together the representatives from the provider, user, and communications communities to develop a plan to exploit current and developing technologies to improve tropical cyclone and hurricane forecasts and warning information dissemination**
 - **Completed (1st Workgroup Session at 60th IHC)**



Action Items / Next Steps

- **60th IHC Action Items:**
 - **Revise NHOP and published by May 15, 2006**
 - **Additional funding should be solicited to allow inclusion of social science research into the activities of the Joint Hurricane Testbed without compromising current projects**
 - **NWS should work with diverse user groups to develop and test message format modifications**
 - **It is recommended that, rather than try to modify the current system, researchers start from scratch and develop new formats and products based on the latest communication techniques**
 - **Two types of messages should be considered: technical and actionable**

Action Items / Next Steps

- **60th IHC Action Items:**
 - **Empirical research should be encouraged and supported to develop and test modifications to current terminology used to define levels of hurricane threat (e.g., watch, warning, CAT 1-5, etc.)**
 - **NHC should review its timing cycle for better coordination with end-users, especially for media news cycles**
 - **The OFCM will coordinate bringing together the appropriate federal agencies to begin the process of reviewing and improving the National hurricane warning “system”**
 - **All elements of the full end-to-end “system” (e.g., protocols, responsibilities, NGOs, communications, etc.)**

Presentation Availability



Presentations and other material will be available on the OFCM web site shortly after the IHC.

Click on “Special Projects” and navigate to the 60th IHC.

<http://www.ofcm.gov/>

FEEDBACK IS WELCOME

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SPECIAL RECOGNITION

Participants

**Session Leaders / Moderators /
Chairpersons / Panelists / Rapporteurs**

OFCM / STC Staff

Riverview Plaza Hotel, Mobile

Mayor Jones' Office, City of Mobile, AL

Media Support

Location of Future IHCs

- **61st IHC is tentatively slated for Tampa, FL, in March 2007. Cohosted by NOAA/AOC and 53rd WRS.**
- **62st IHC is tentatively slated for New Orleans, in March 2007. Cohosted by U.S. Navy.**

Thank You!

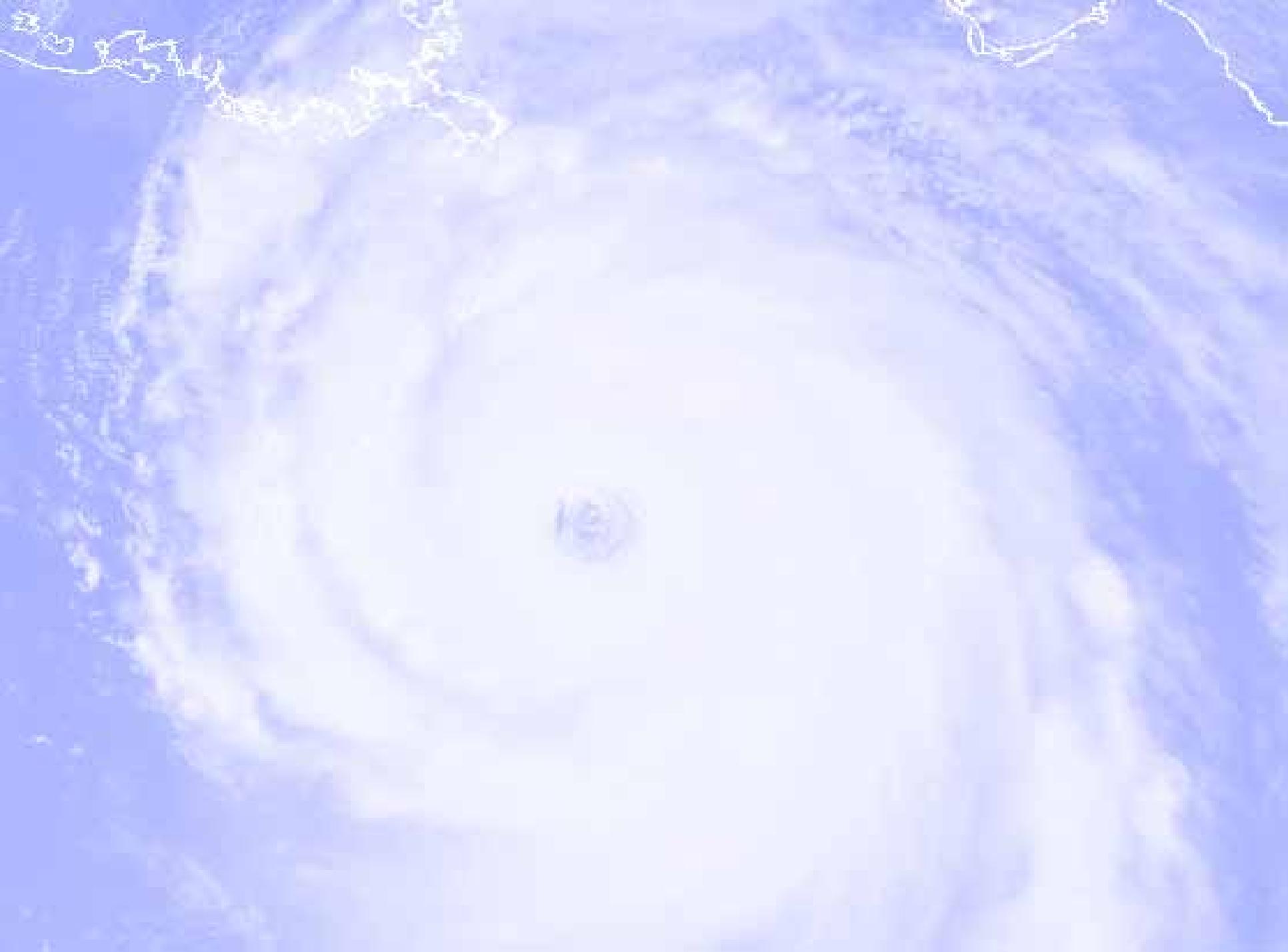
**Thank you for attending and
participating in this conference!**

**On behalf of the Office of the Federal Coordinator for
Meteorology**

**Have a safe trip
home...**

And Thanks Again!







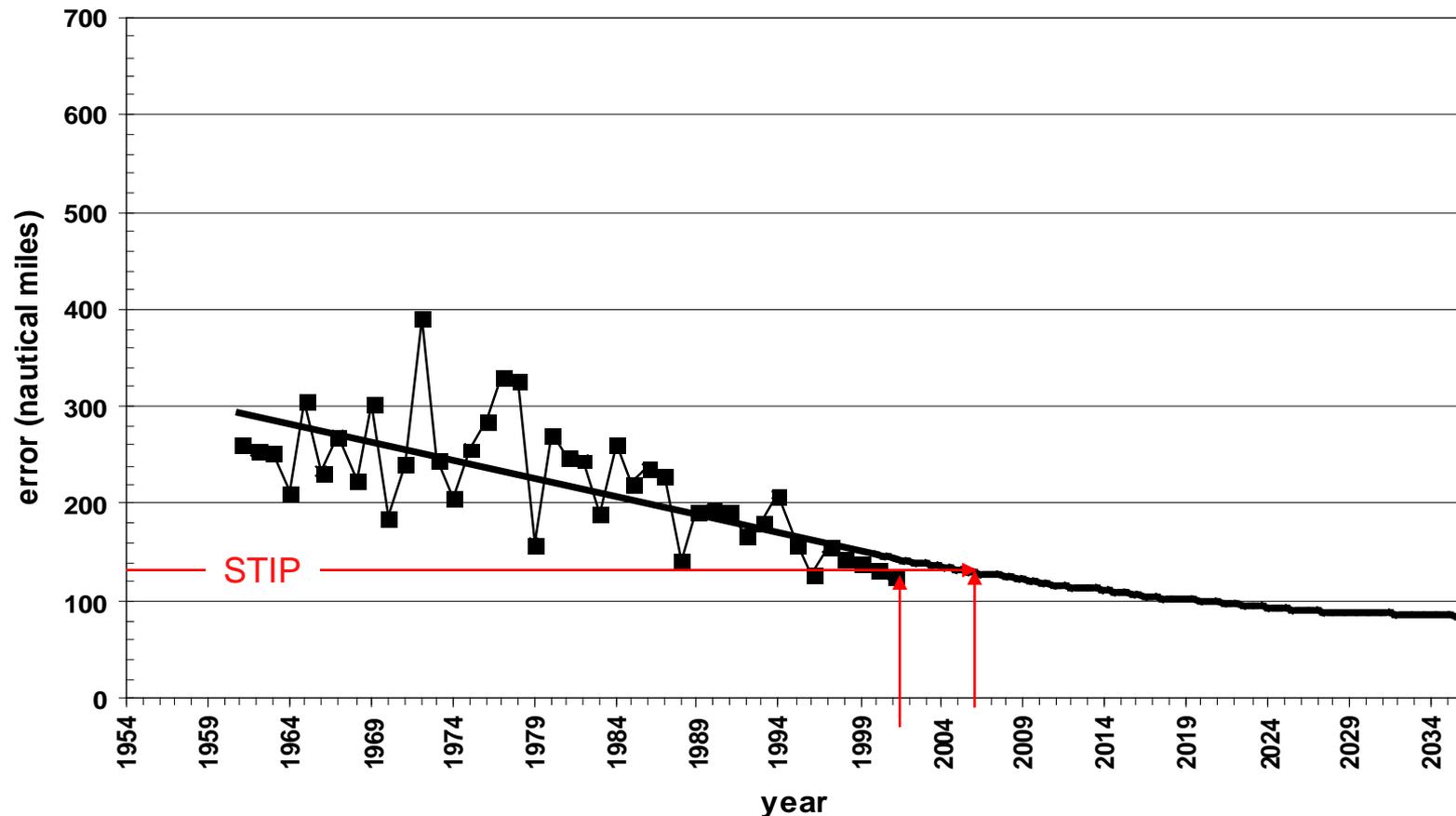
BACKUPS

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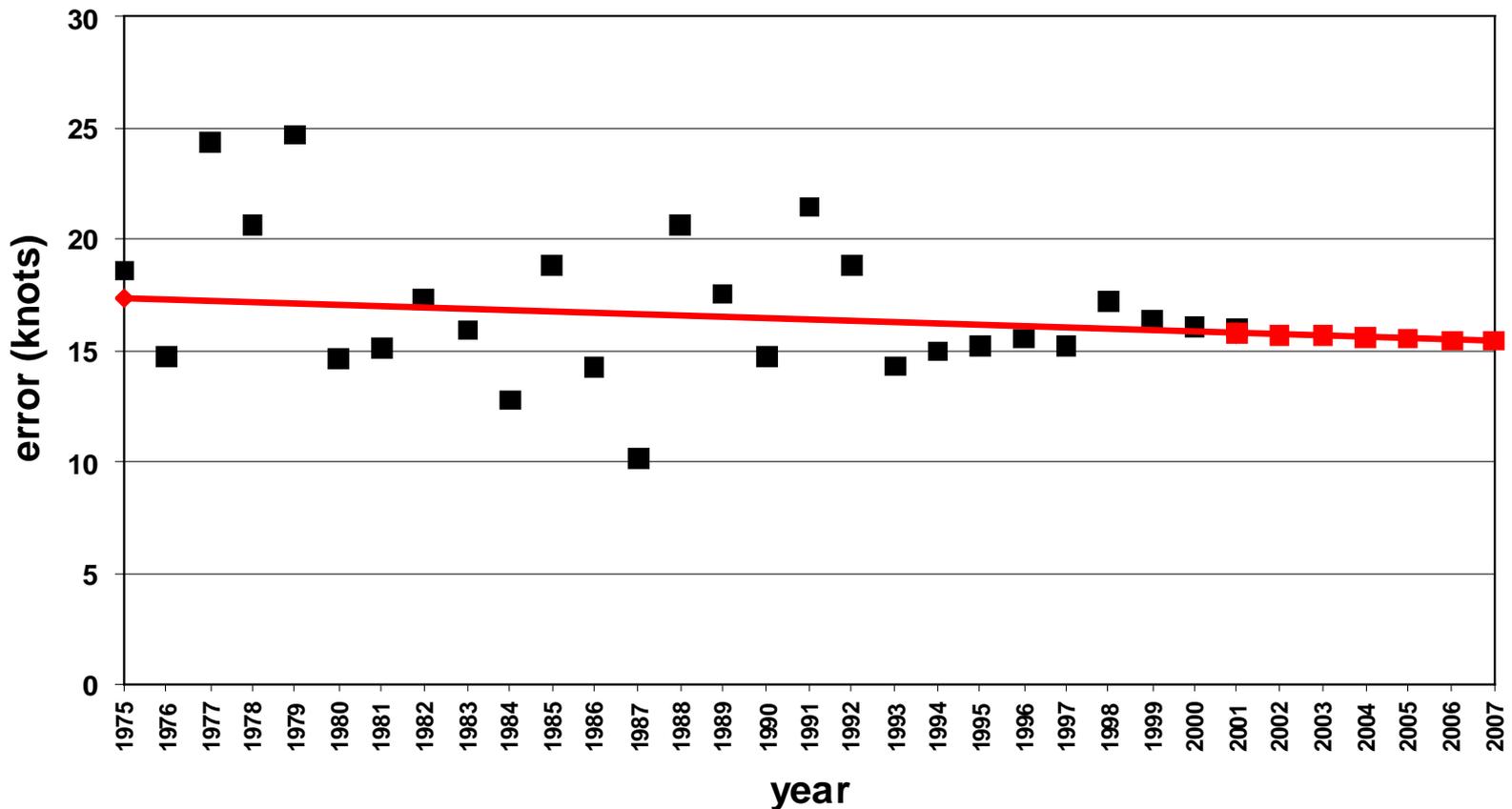
Tropical Cyclone Track

Tropical Prediction Center Performance Measures
yearly-average official 48 hour track forecast error, Atlantic basin



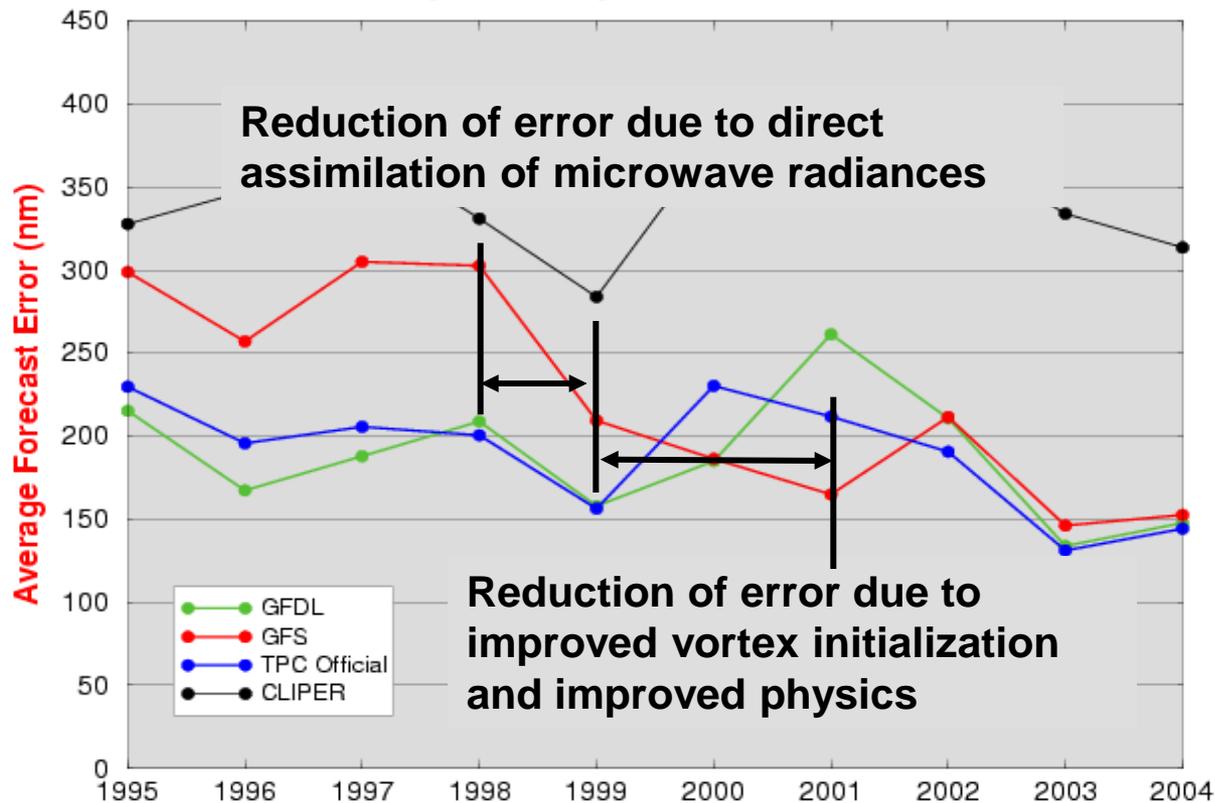
Tropical Cyclone Intensity

Tropical Prediction Center Performance Measure
yearly-average official 48-hour intensity forecast error, Atlantic basin



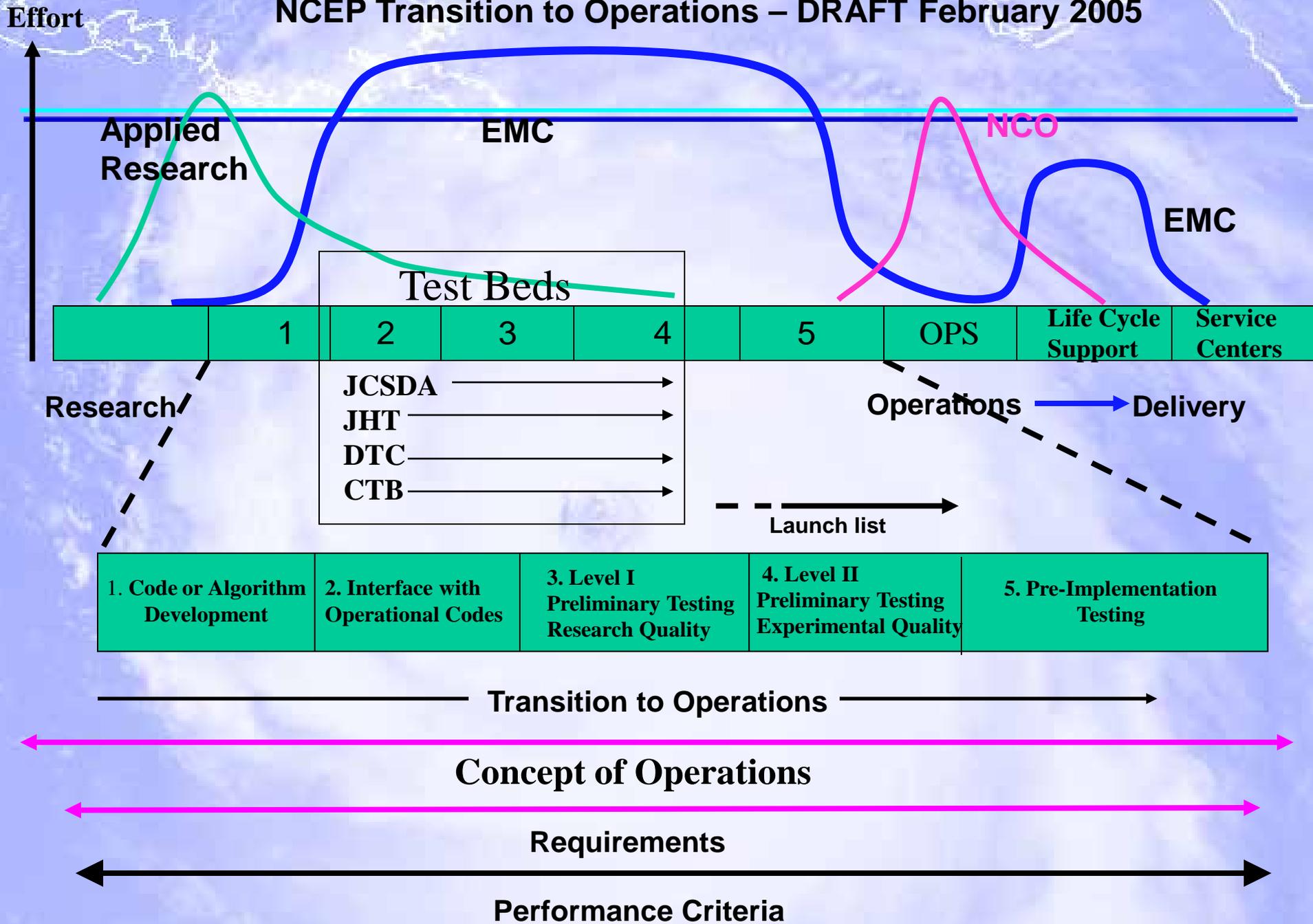
Example: Using Satellite Data

72h Track Forecast Errors for Atlantic Storms
Comparison by Year for 1995–2004



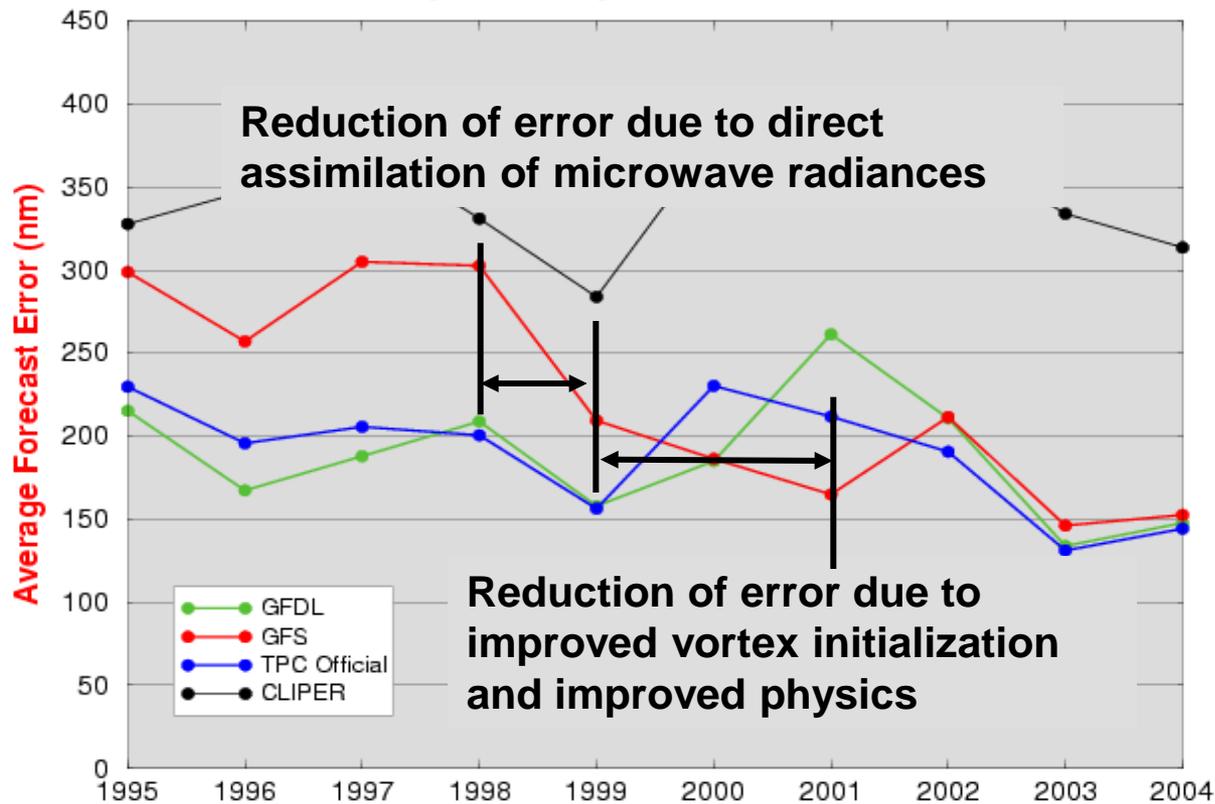
#CASES 127 95 22 133 88 142 132 141 155 243

NCEP Transition to Operations – DRAFT February 2005



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72h Track Forecast Errors for Atlantic Storms
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