



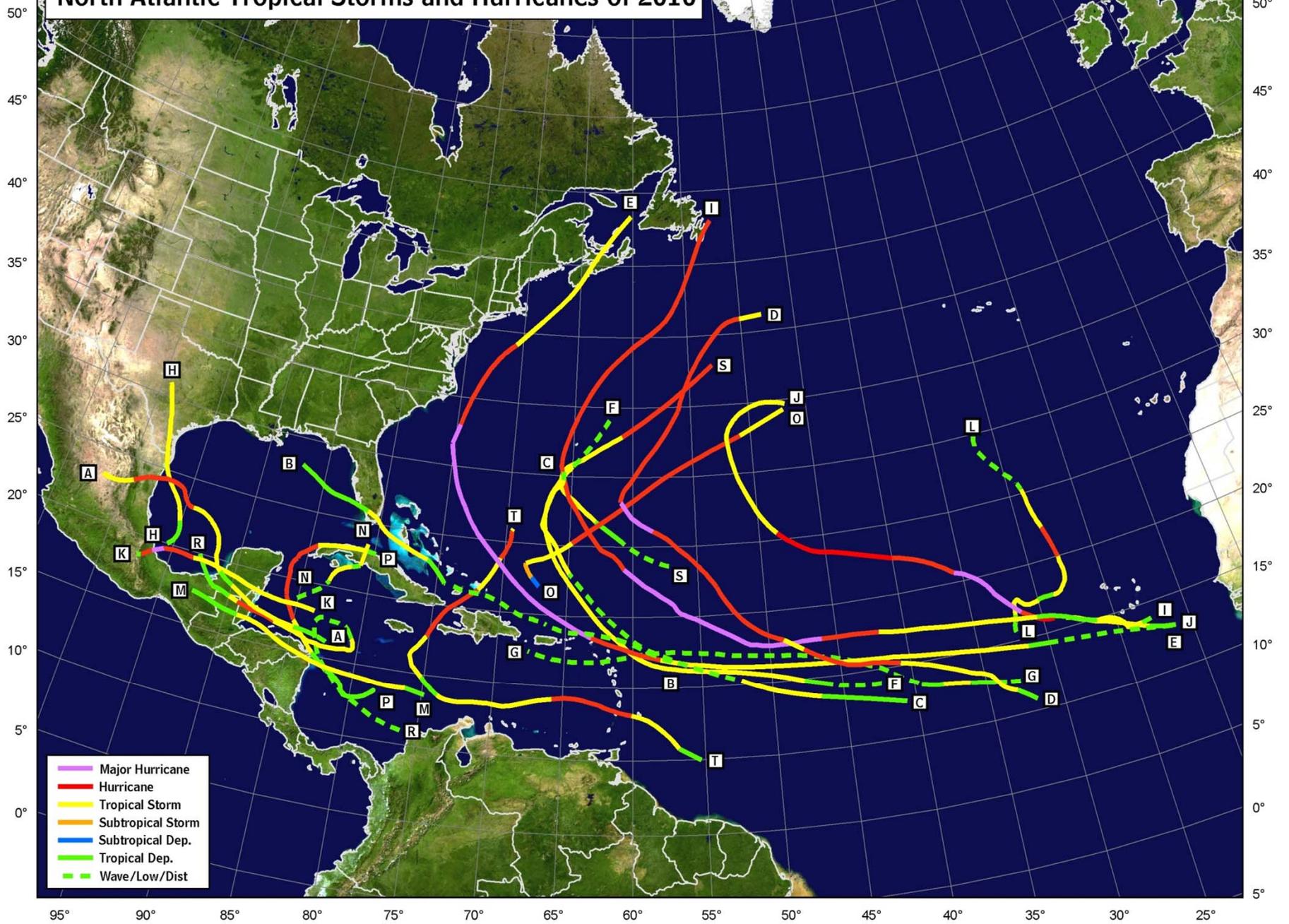
Recent Forecast Challenges

Eric Blake
National Hurricane Center

2011 National Hurricane Conference
Atlanta, Georgia
21 April 2011

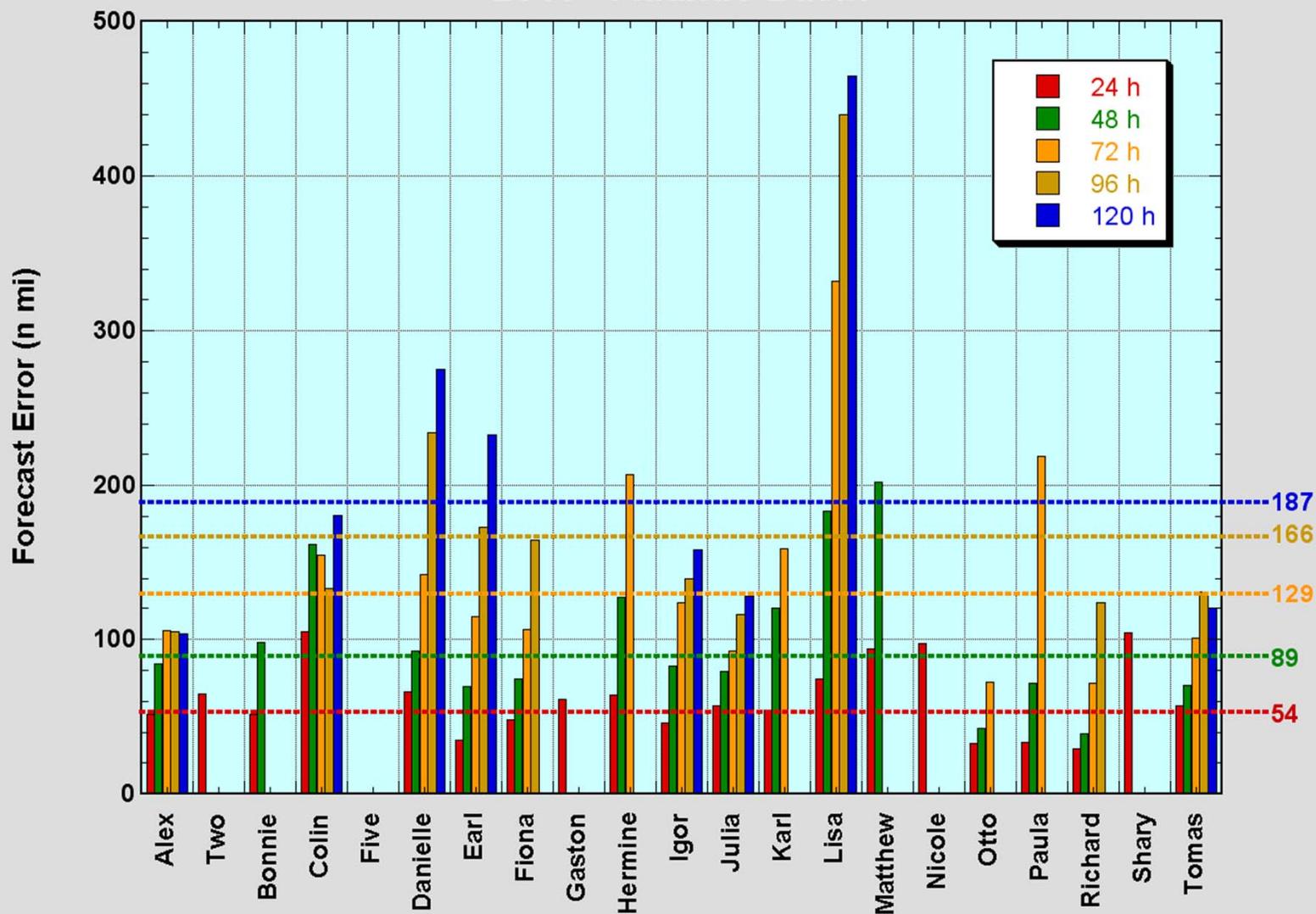
125° 120° 115° 110° 105° 100° 95° 90° 85° 80° 75° 70° 65° 60° 55° 50° 45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10°

North Atlantic Tropical Storms and Hurricanes of 2010



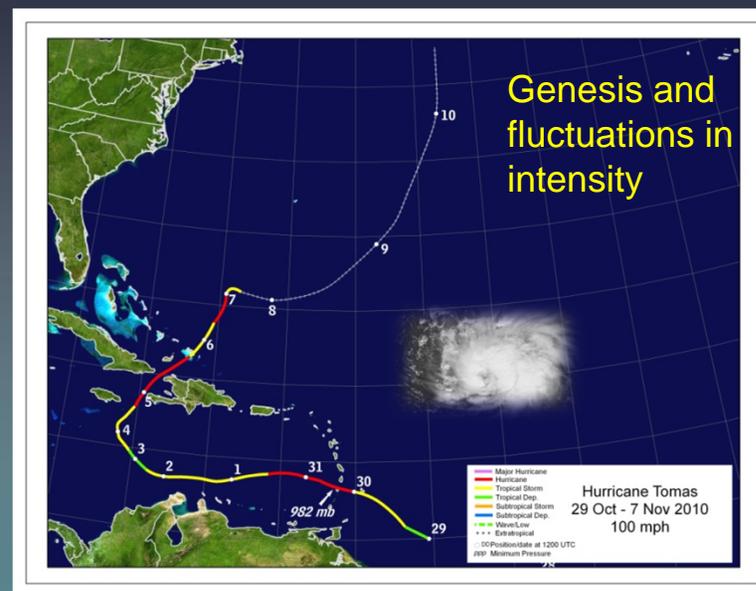
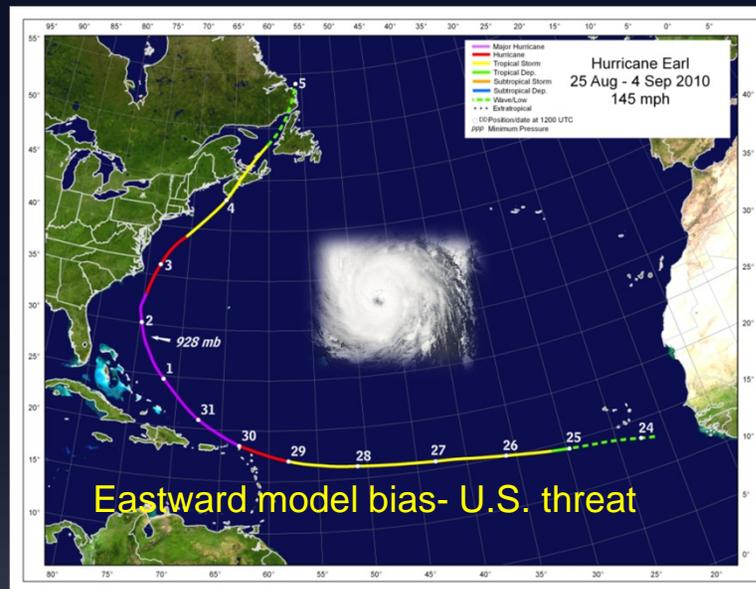
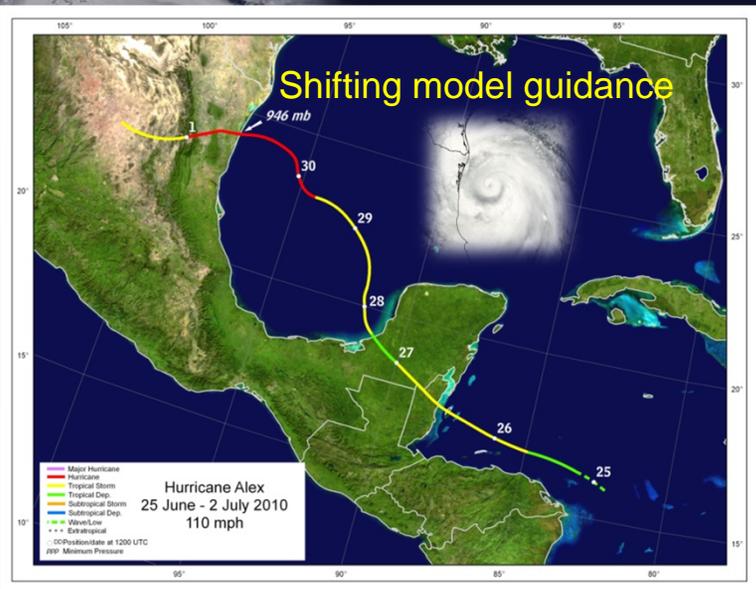
Atlantic Track Errors by Storm

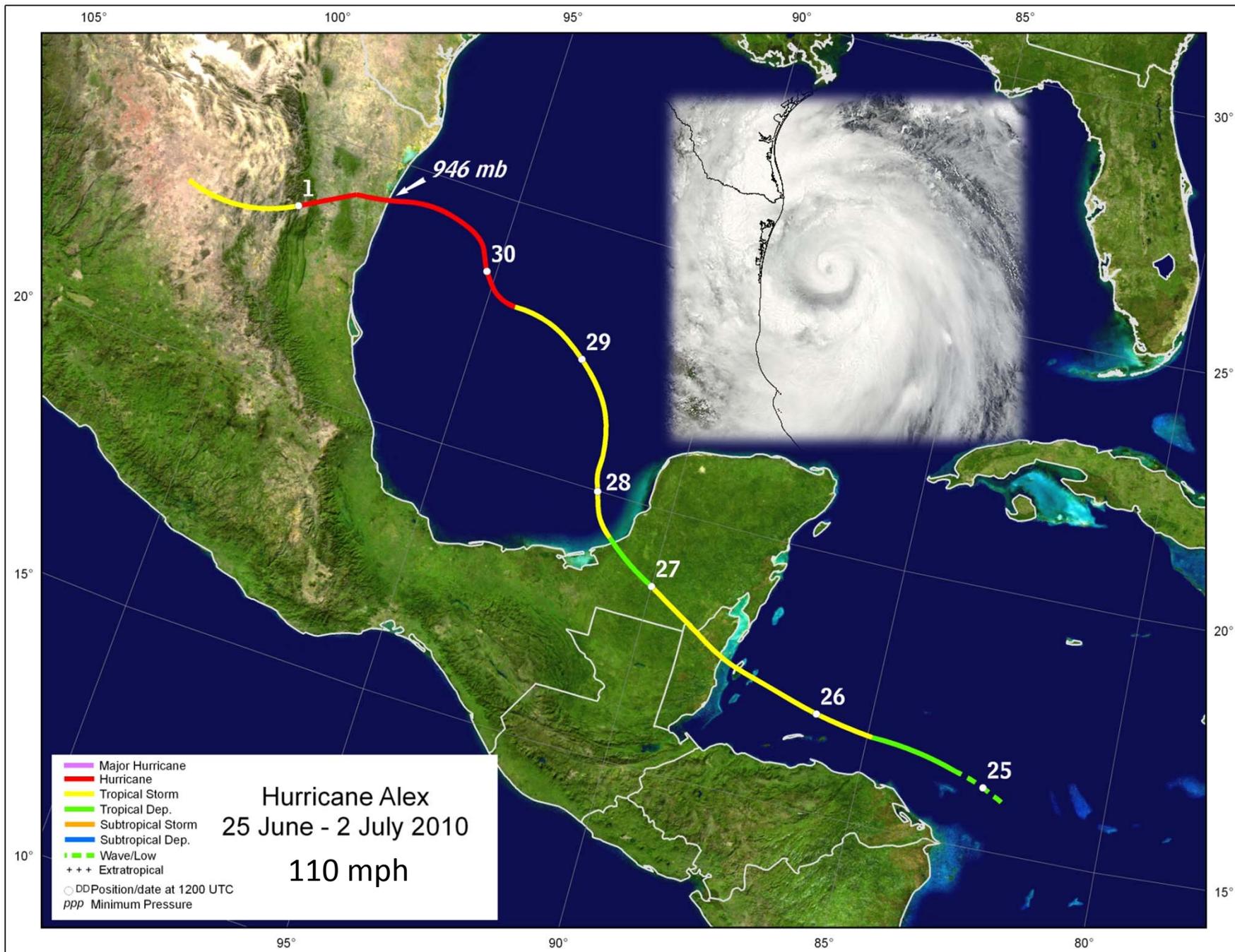
NHC Official Track Forecast Error by Storm
2010 - Atlantic Basin

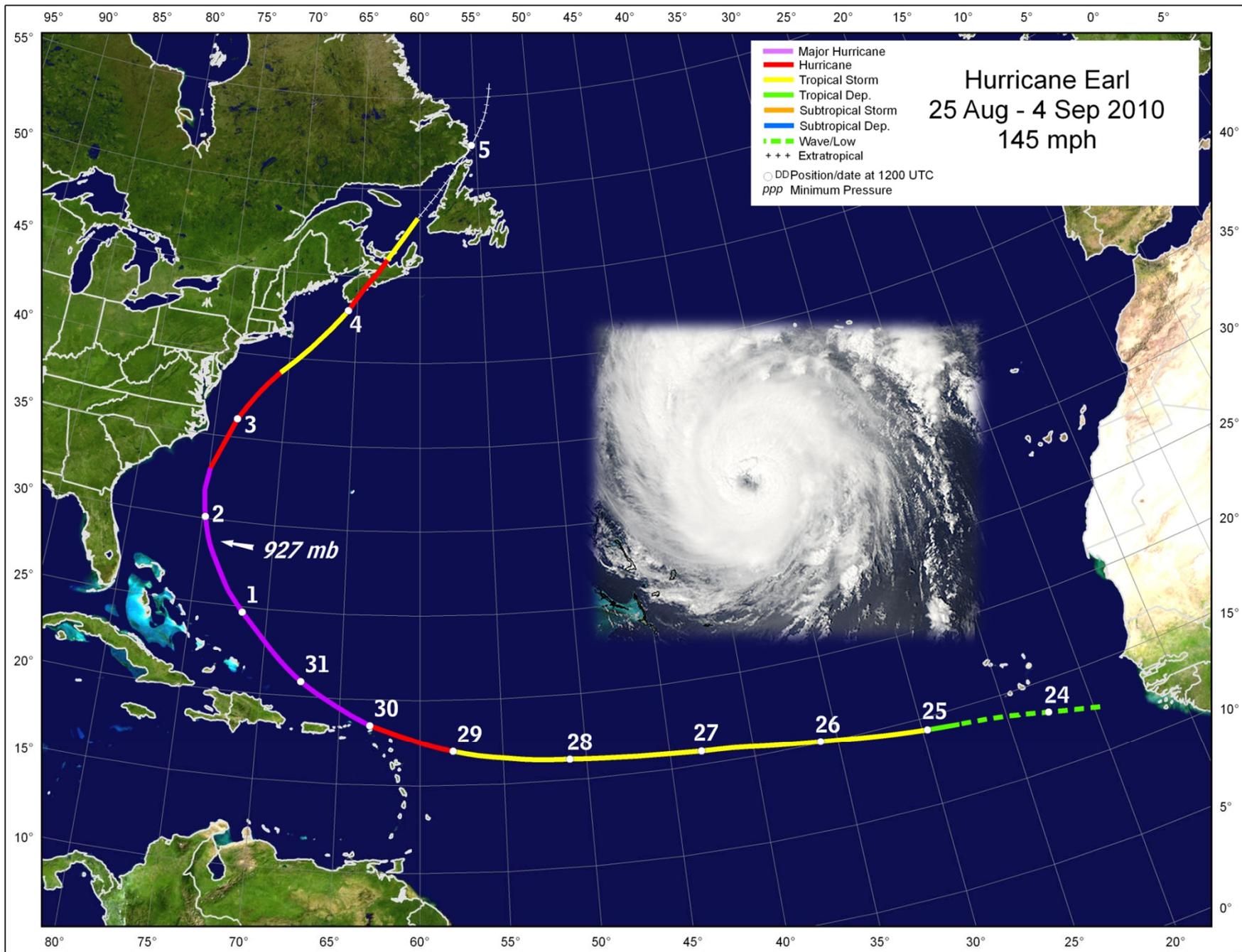




Forecast Challenges 2010

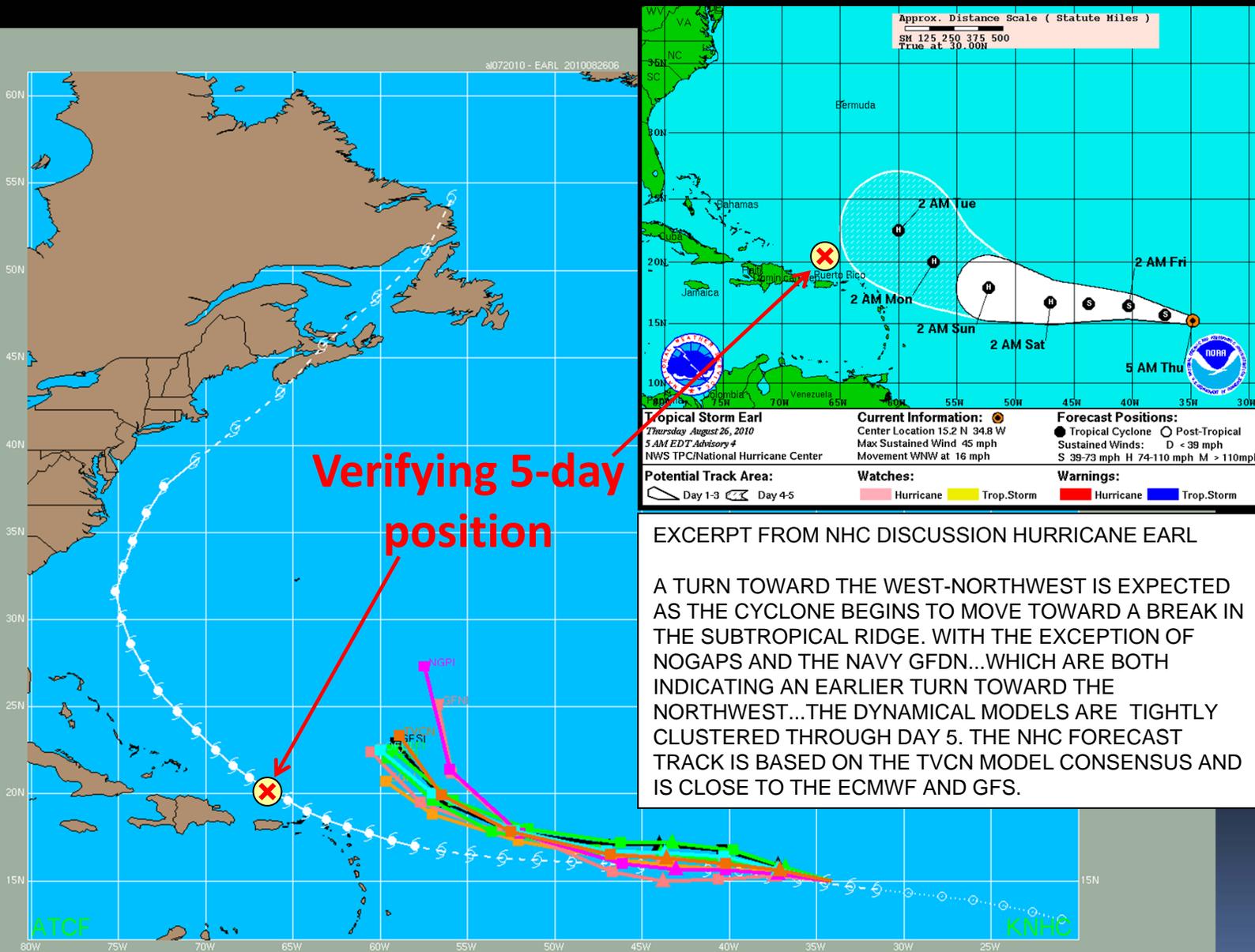








Earl Guidance 5 am Aug 26 - Advisory #4



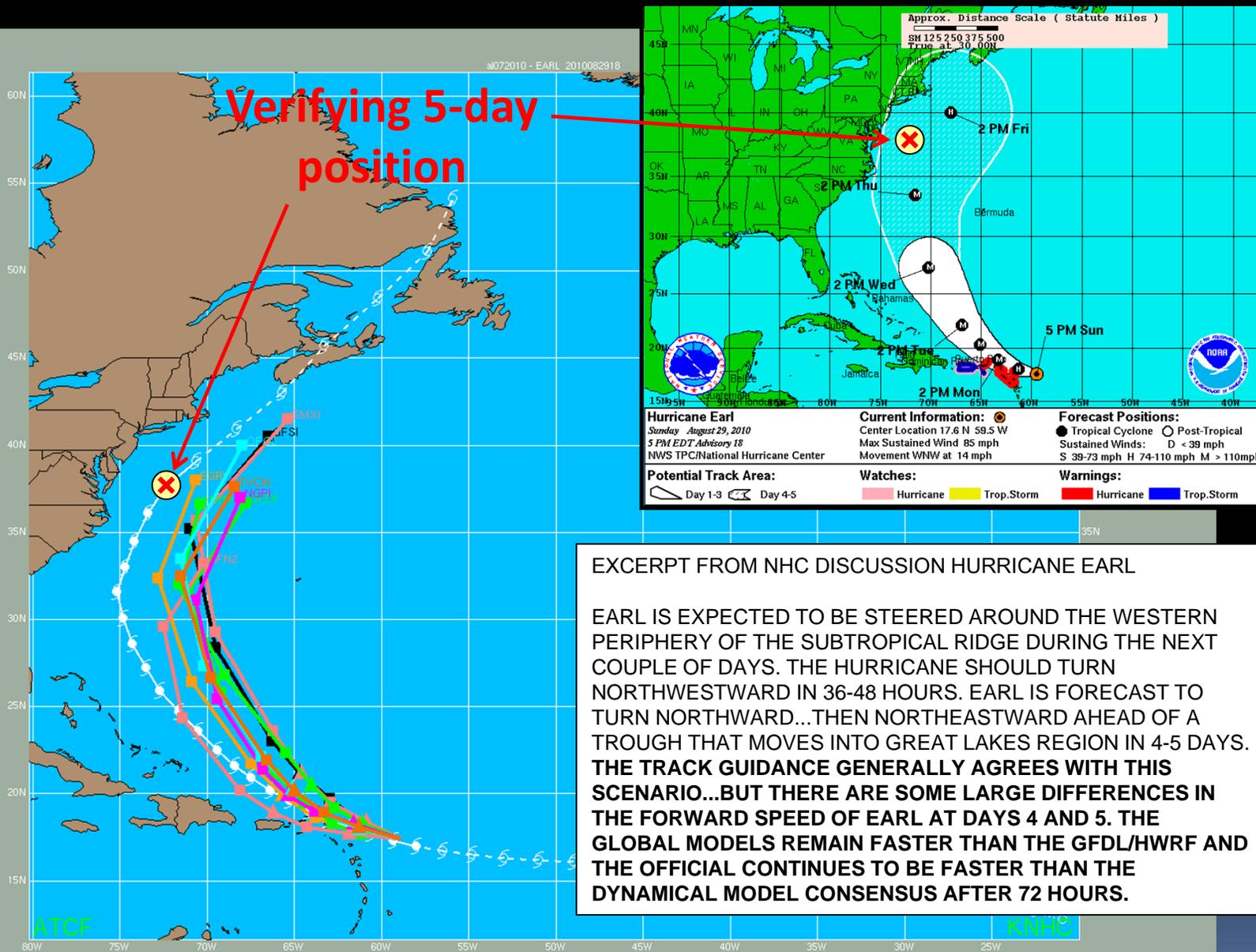


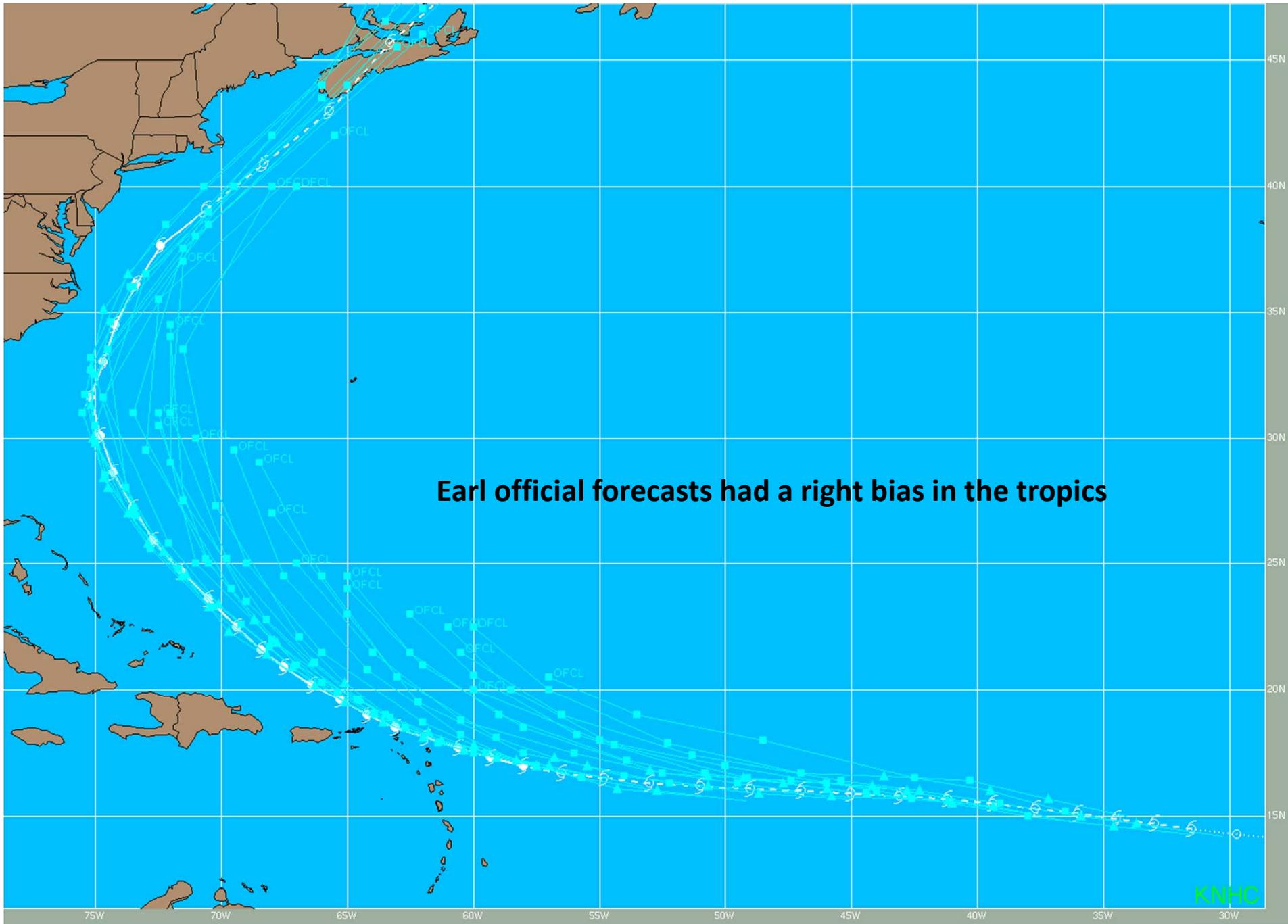
NHC Forecasts and Model Guidance for Hurricane Earl...

A Few Days Later

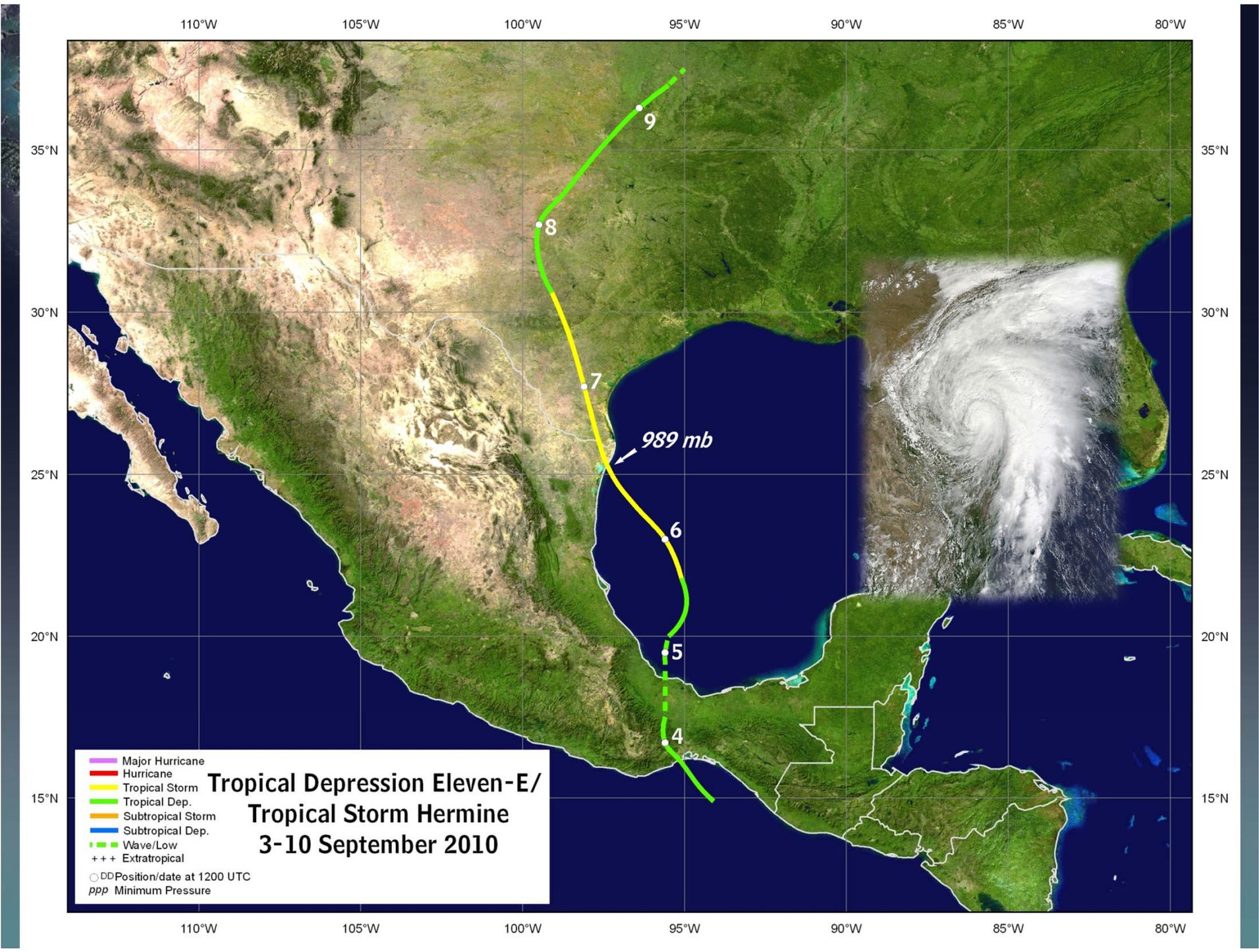


Earl Guidance 5 pm Aug 29 - Advisory #18





Earl official forecasts had a right bias in the tropics



110°W 105°W 100°W 95°W 90°W 85°W 80°W

35°N
30°N
25°N
20°N
15°N

35°N
30°N
25°N
20°N
15°N

**Tropical Depression Eleven-E/
Tropical Storm Hermine
3-10 September 2010**

- Major Hurricane
- Hurricane
- Tropical Storm
- Tropical Dep.
- Subtropical Storm
- Subtropical Dep.
- - - Wave/Low
- +++ Extratropical
- DD Position/date at 1200 UTC
- ppp Minimum Pressure

110°W 105°W 100°W 95°W 90°W 85°W 80°W

989 mb

9

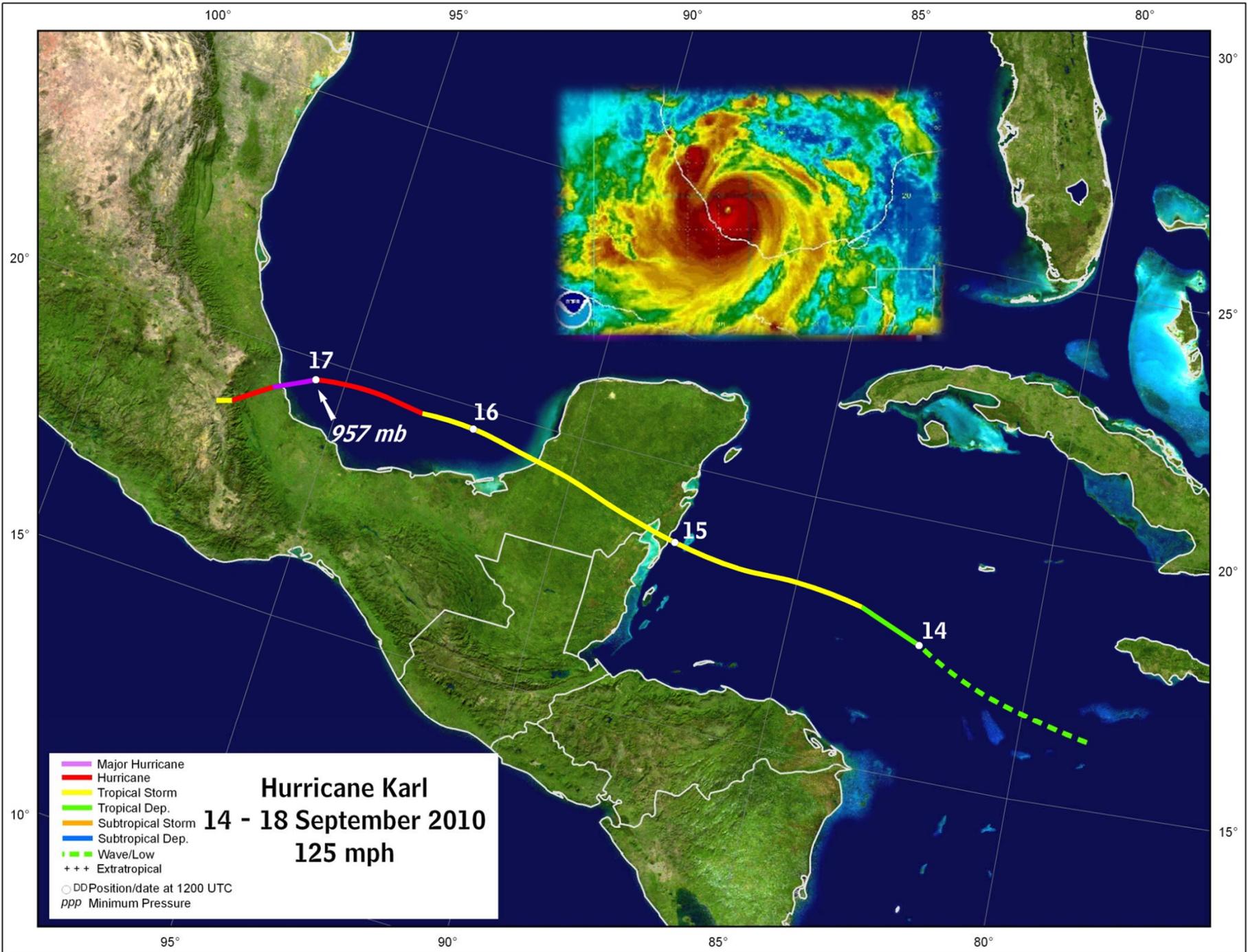
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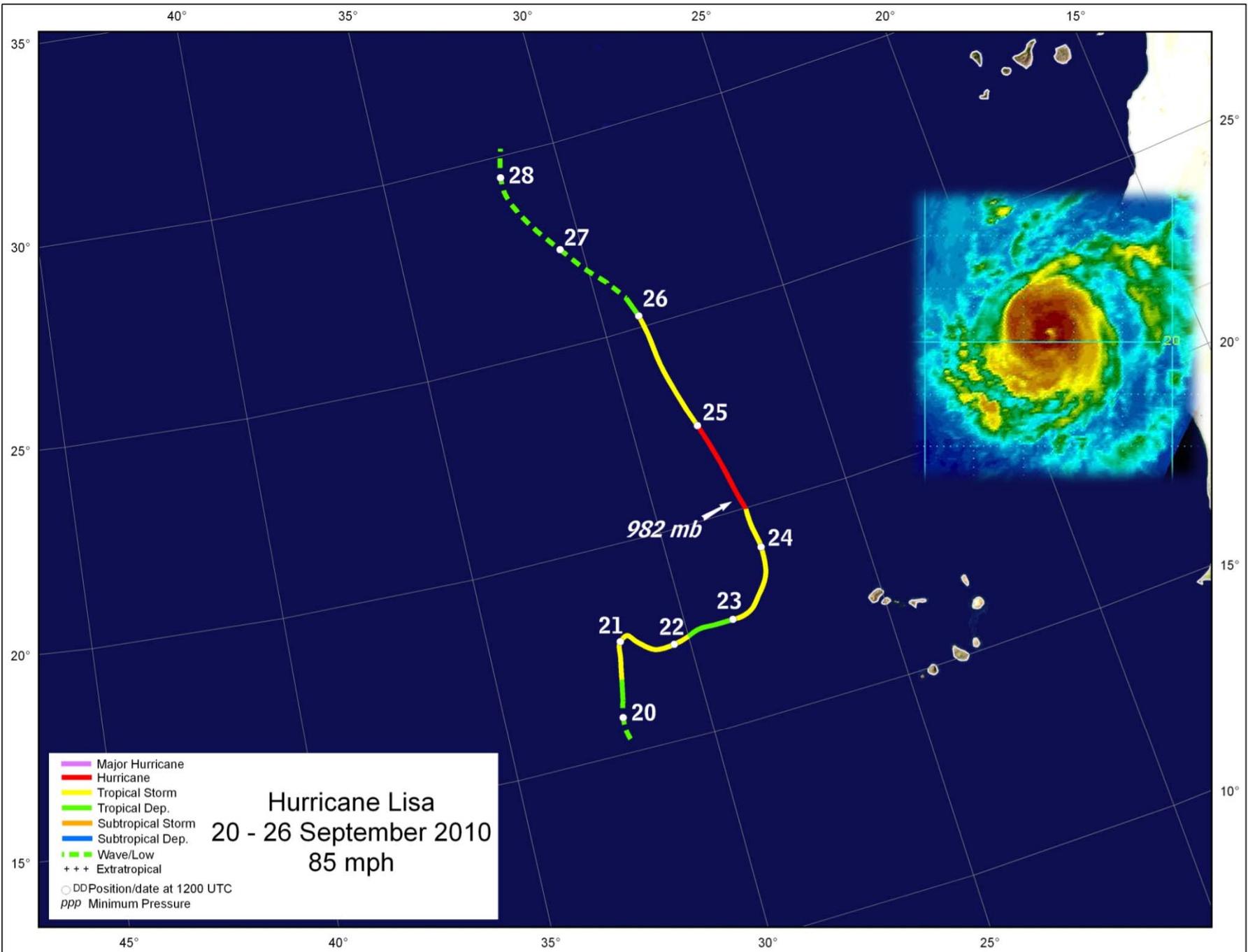
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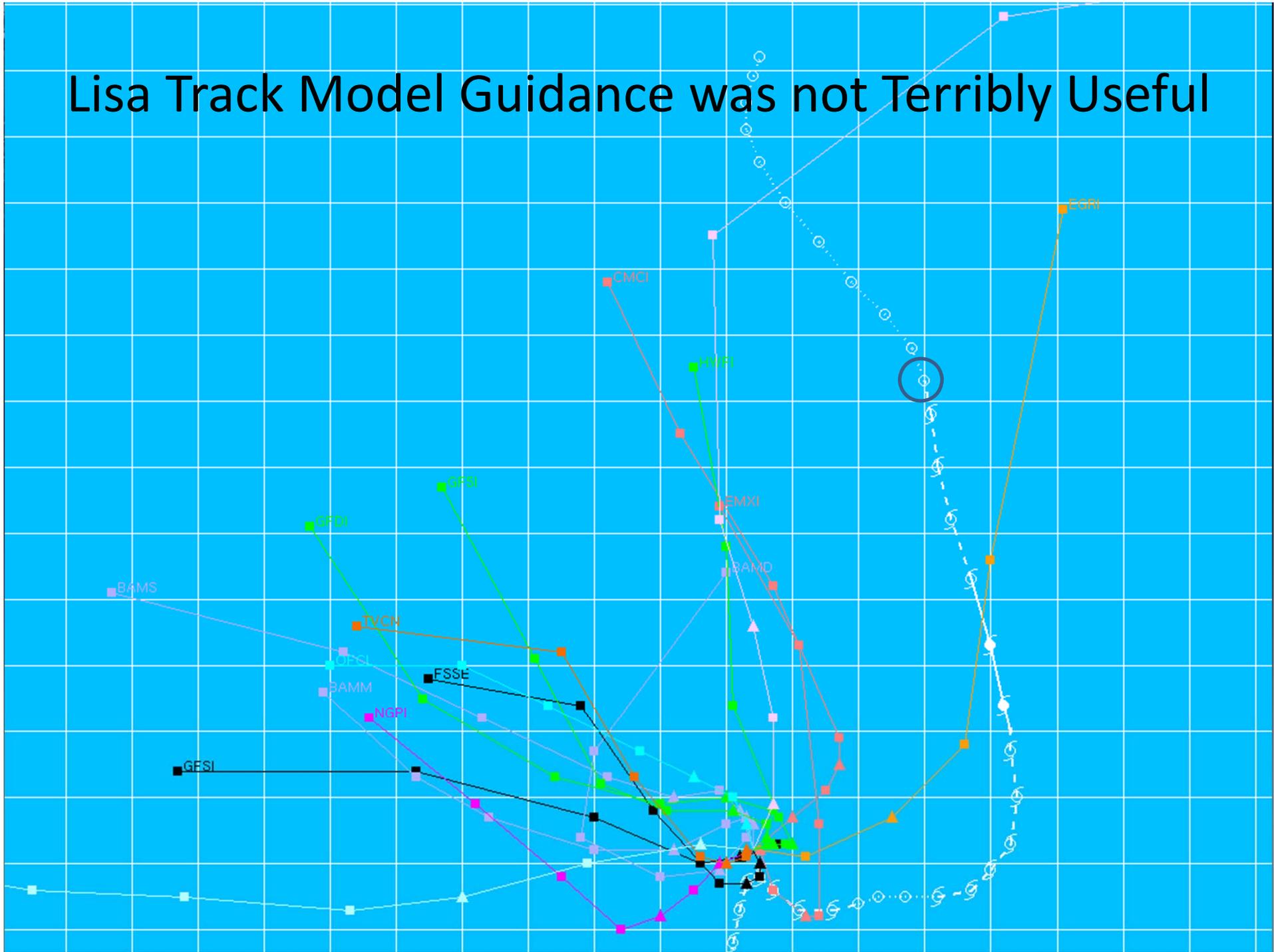
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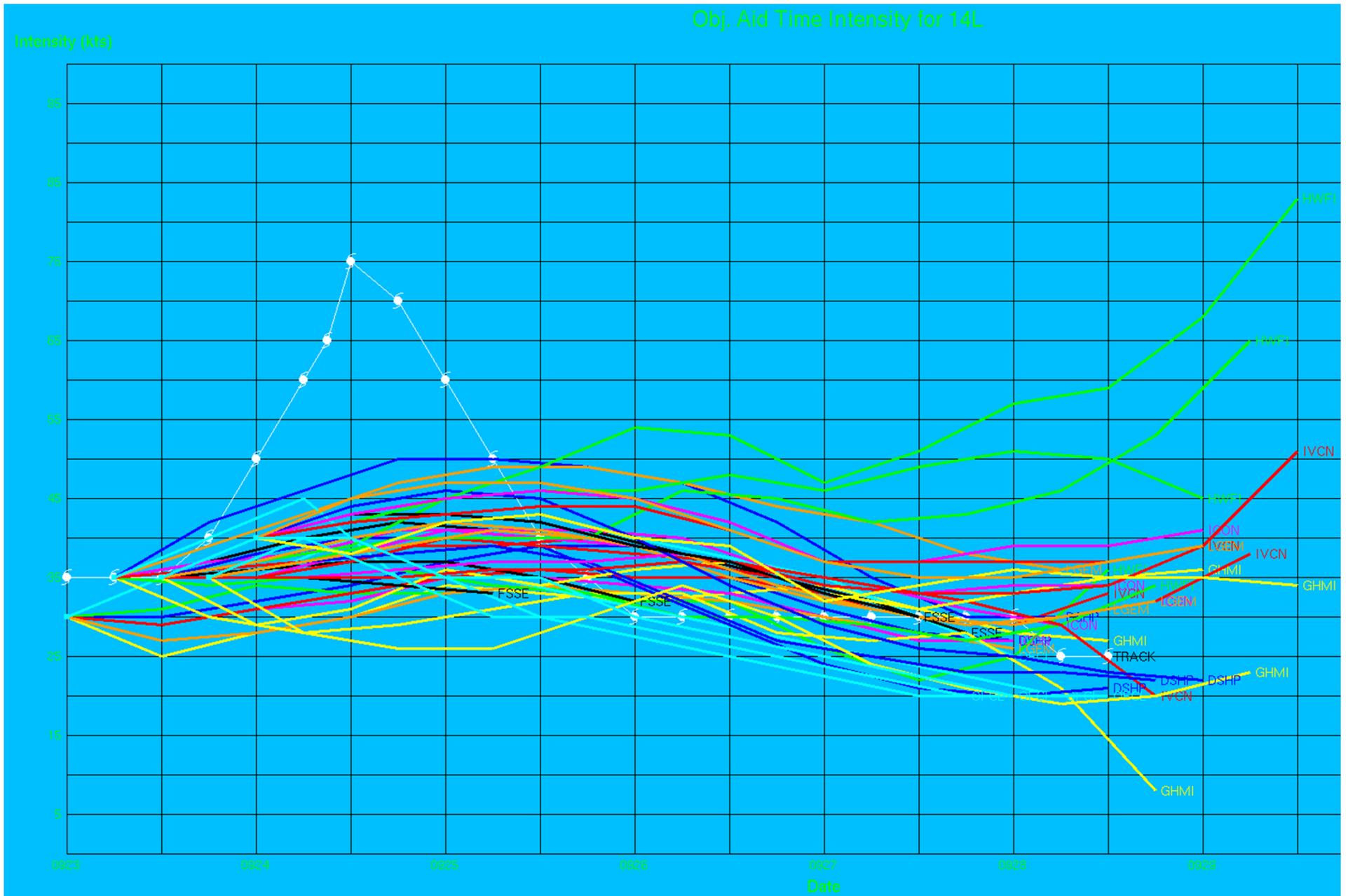


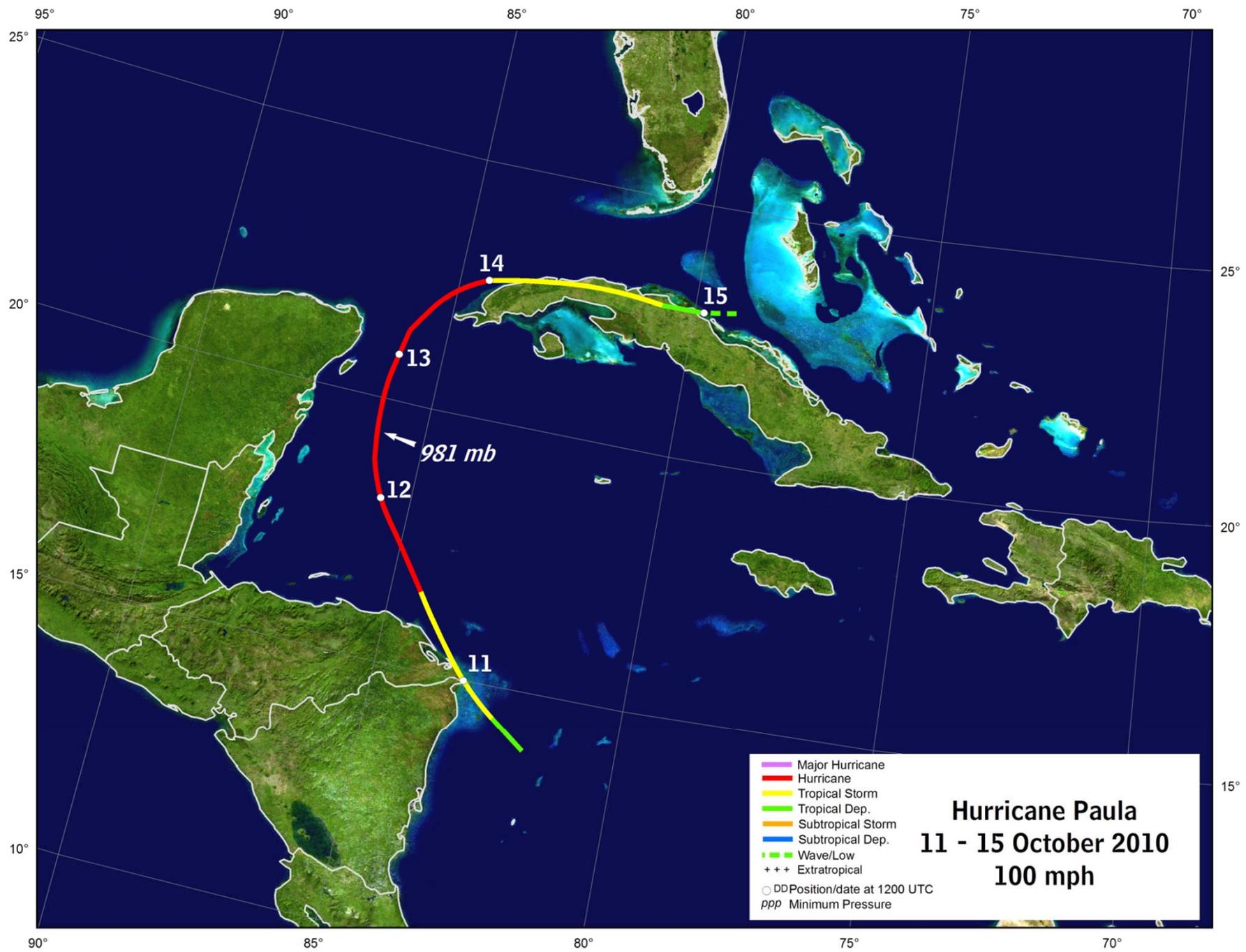


Lisa Track Model Guidance was not Terribly Useful



Ditto for Hurricane Lisa Intensity Guidance

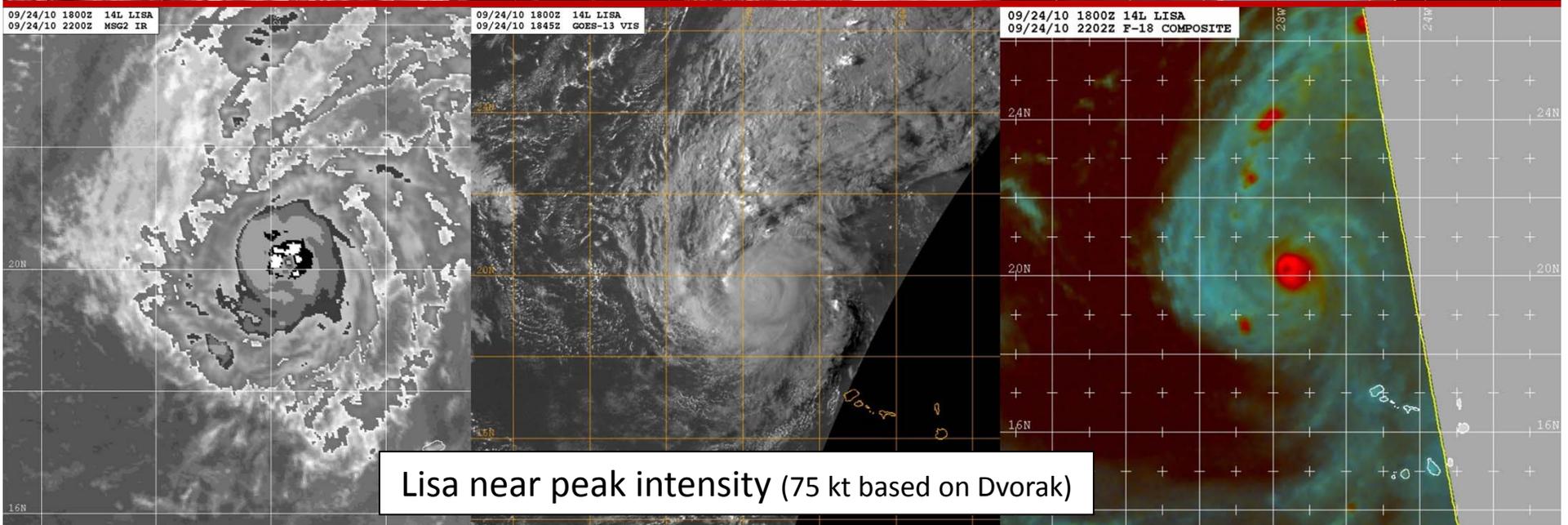
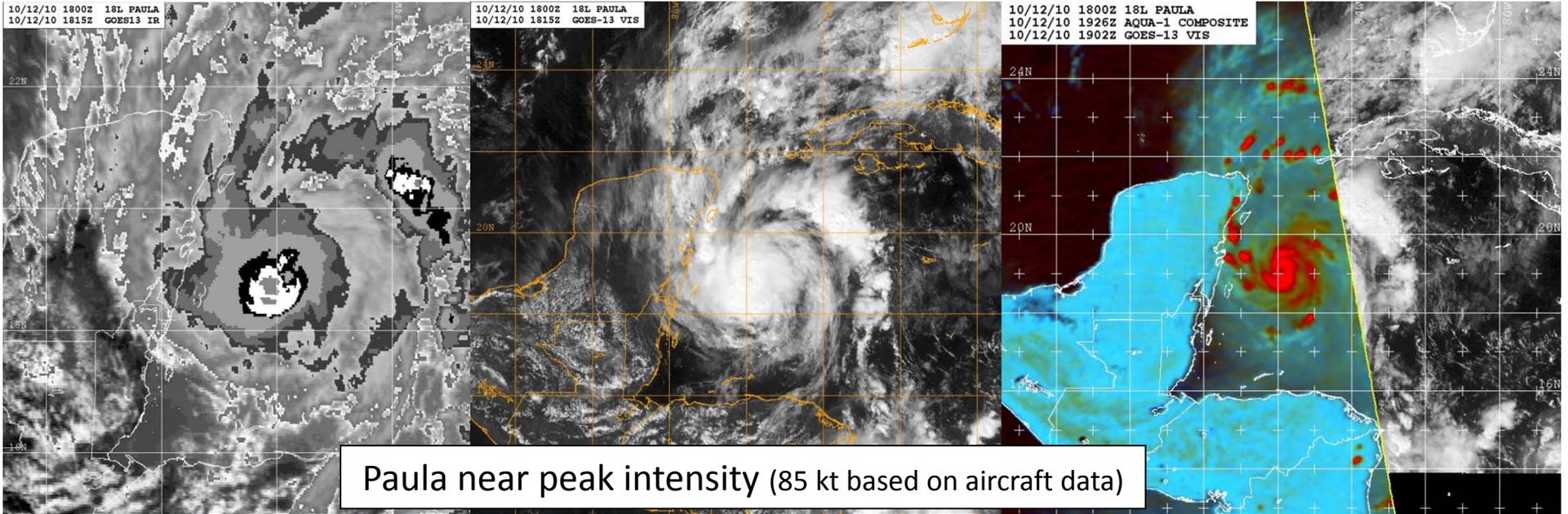


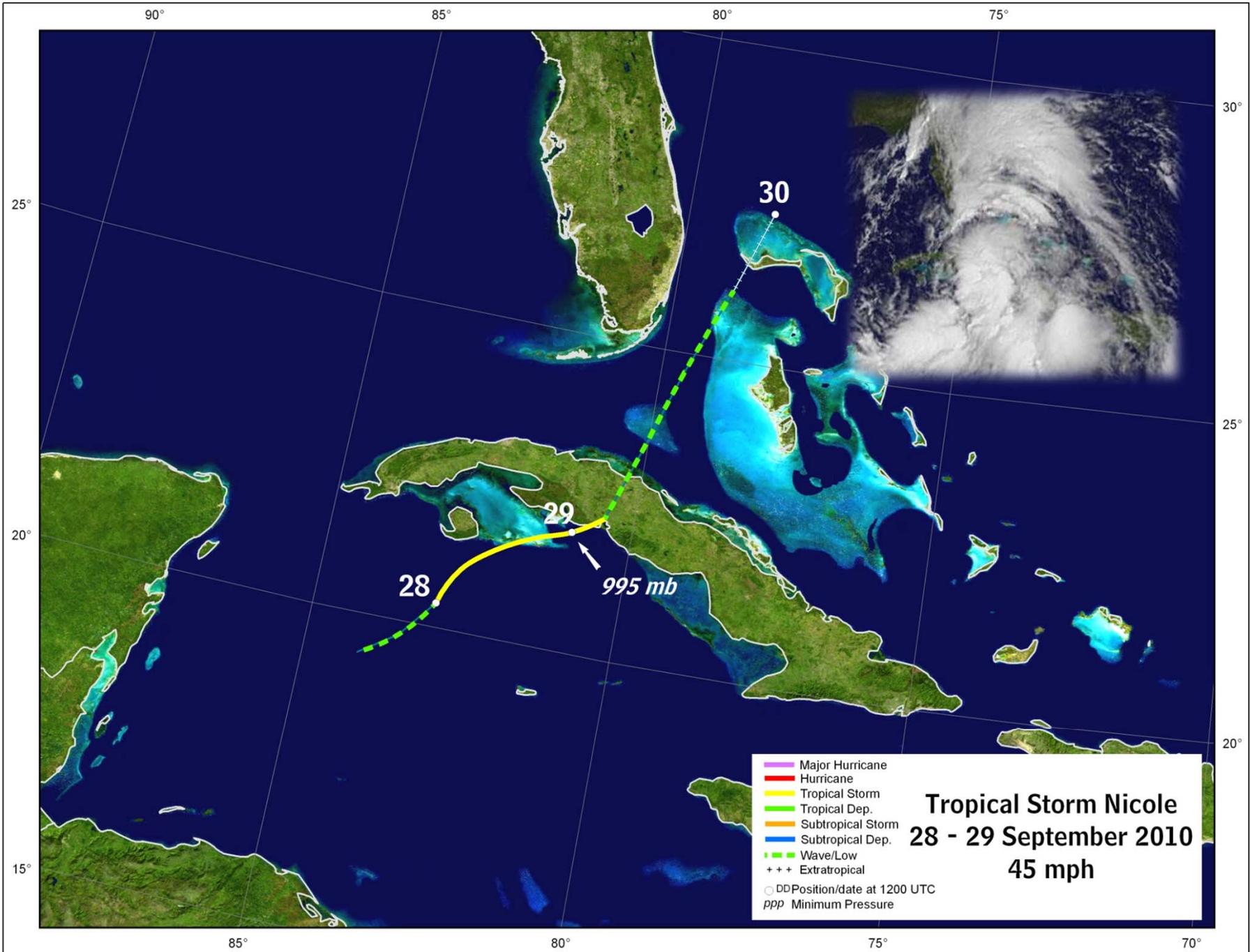


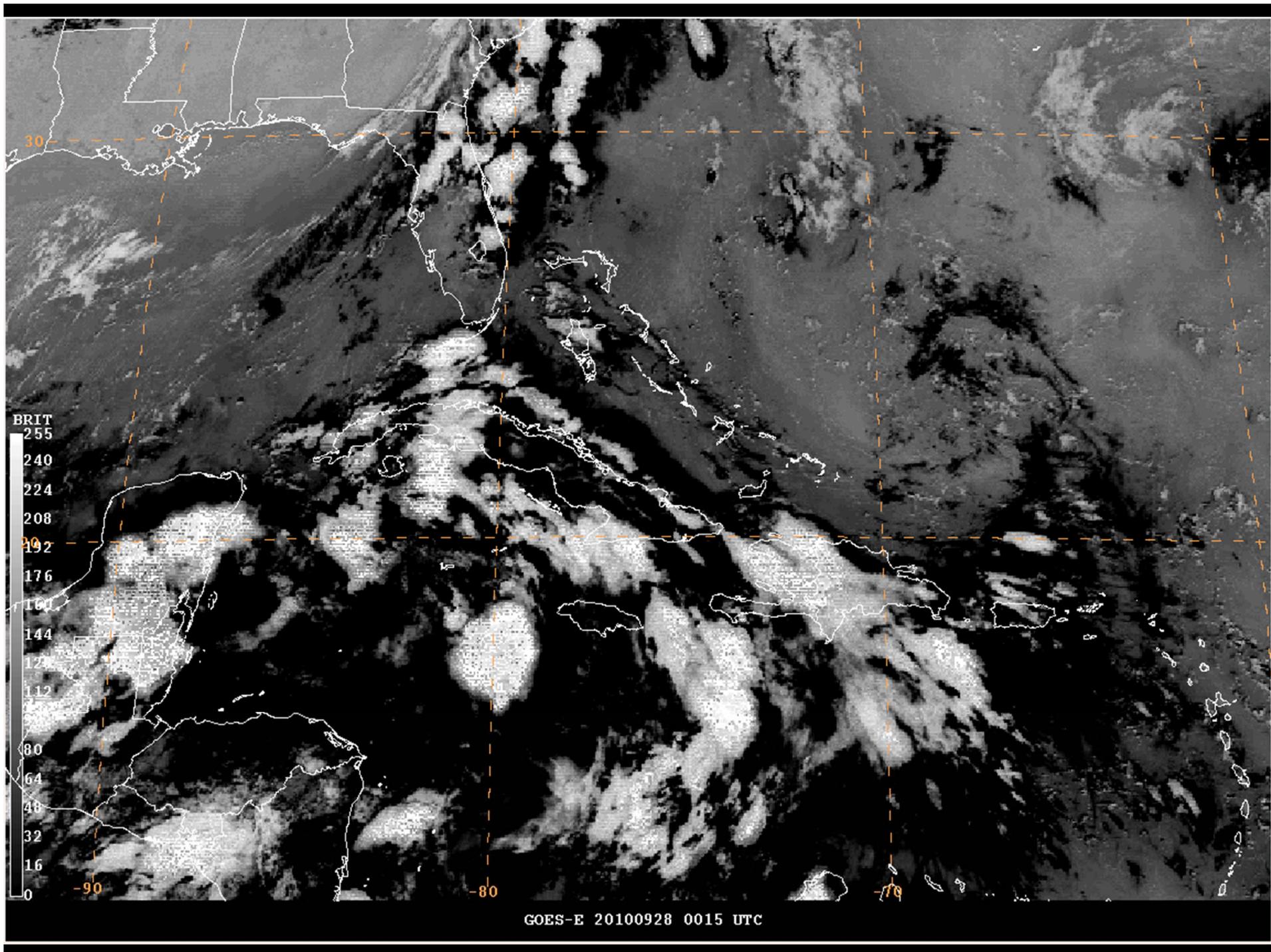
Hurricane Paula
11 - 15 October 2010
100 mph

- Major Hurricane
- Hurricane
- Tropical Storm
- Tropical Dep.
- Subtropical Storm
- Subtropical Dep.
- Wave/Low
- +++ Extratropical
- DD Position/date at 1200 UTC
- ppp Minimum Pressure

Tale of Two Small Hurricanes: Paula vs. Lisa



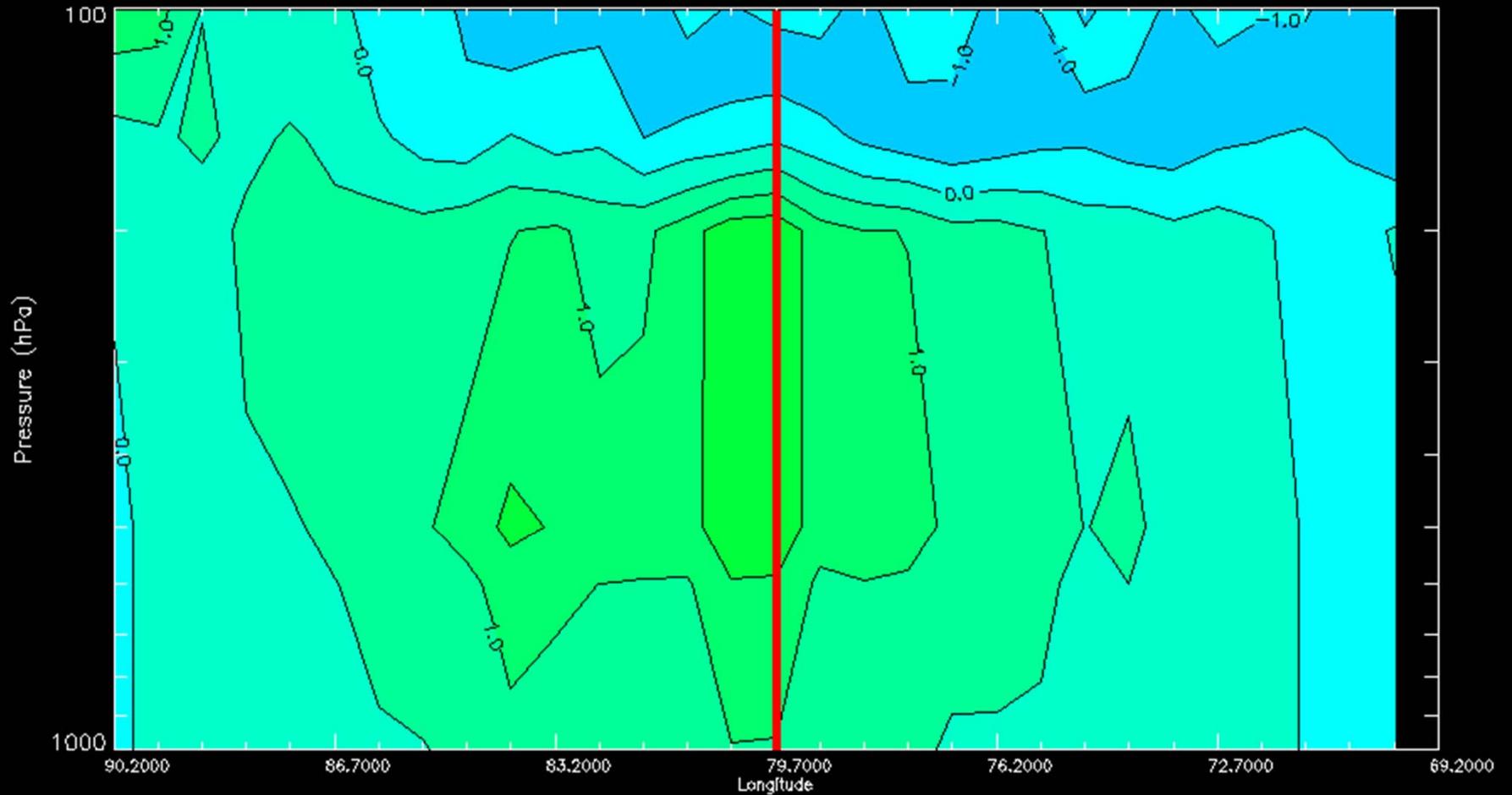




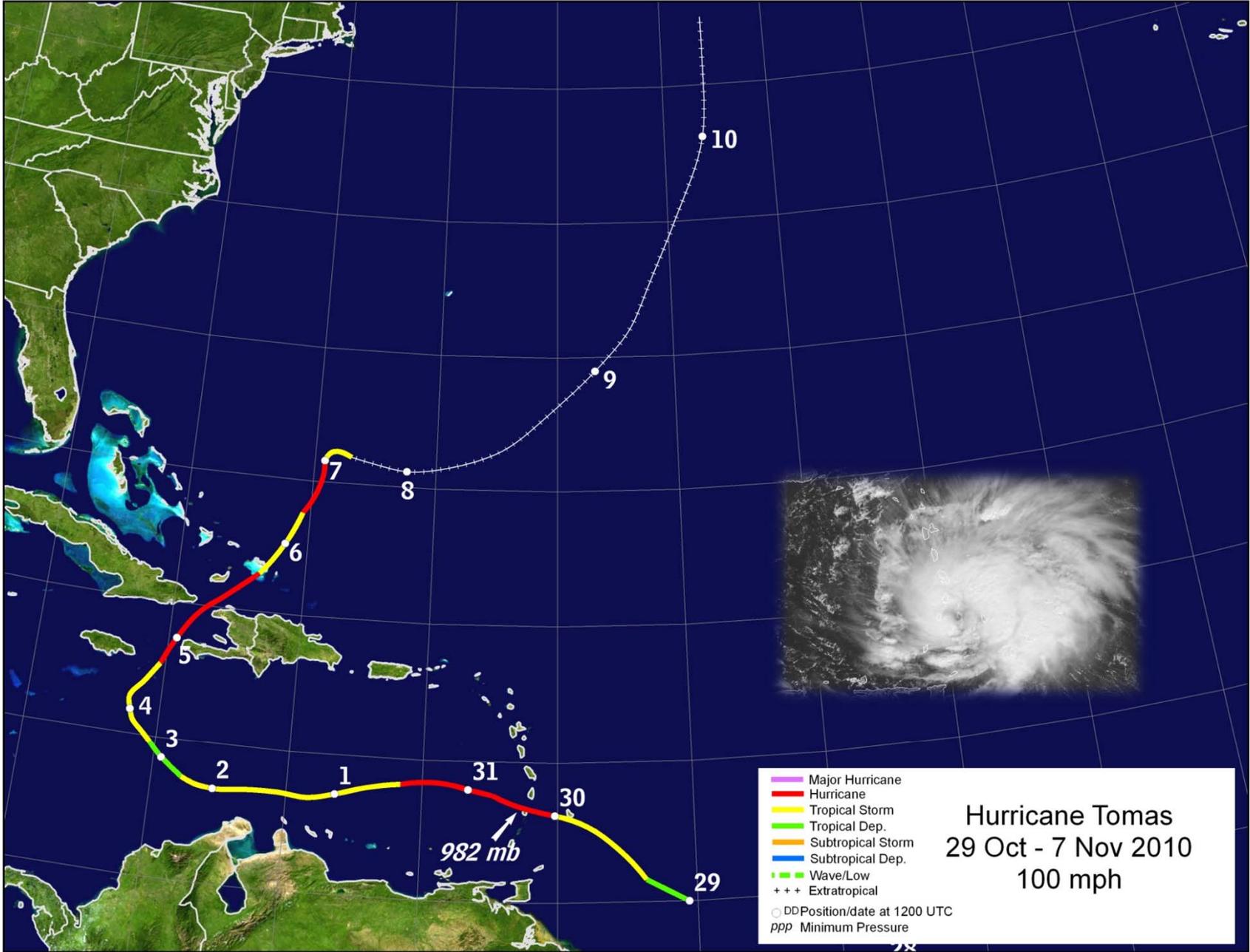
Nicole AMSU data

201016L MMDD: 0929 YEAR: 2010 Time(UTC): 1230 NOAA-16
AMSU-A Brightness Temperature Anomaly (Storm Center-Environment)

Vertical red line indicates aprox location of TC/Invest
Aprox latitude of cross section is 21.45



Contour Interval = 0.5K





Thank You, any Questions?

