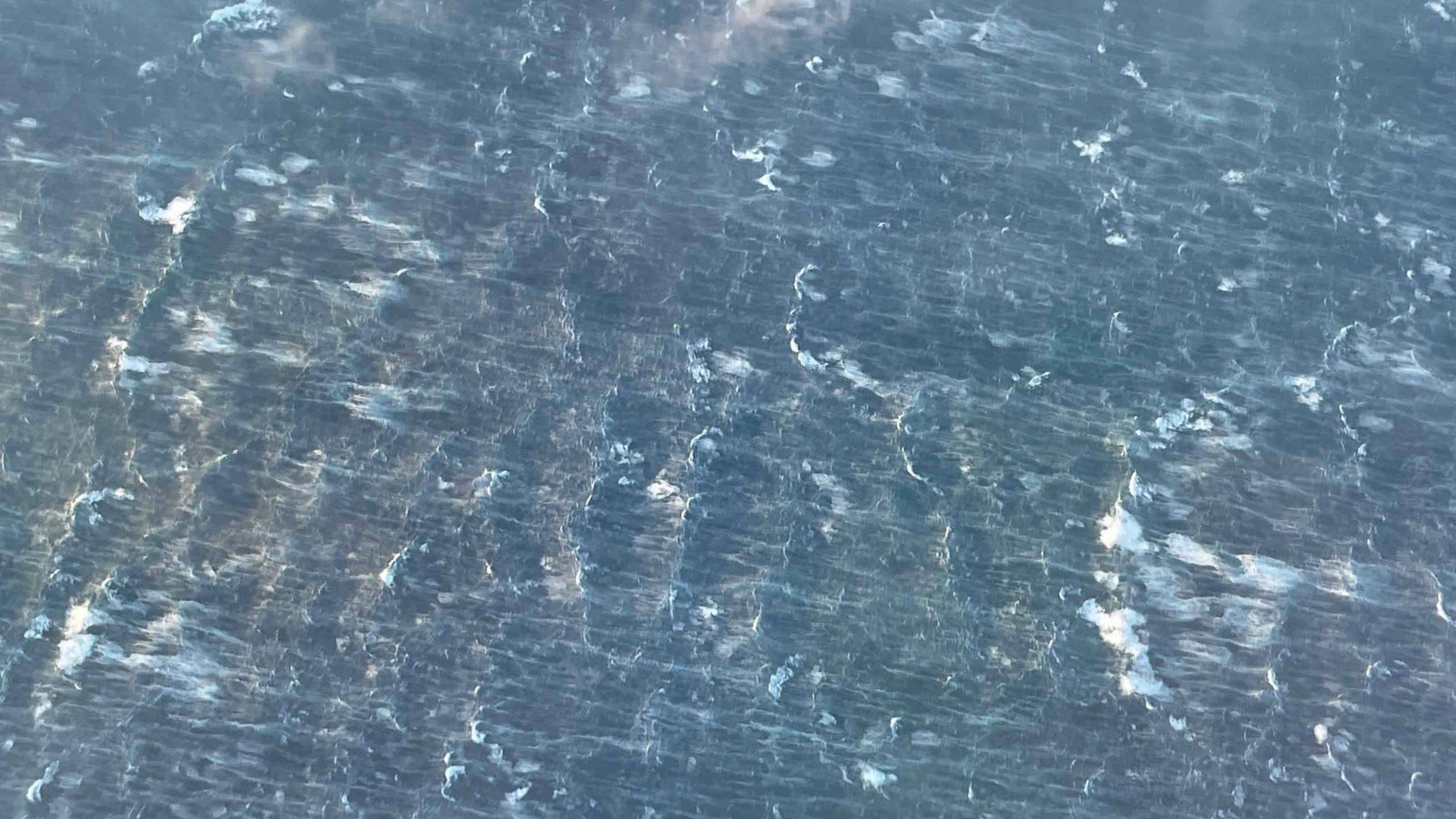


Extreme Maritime Weather

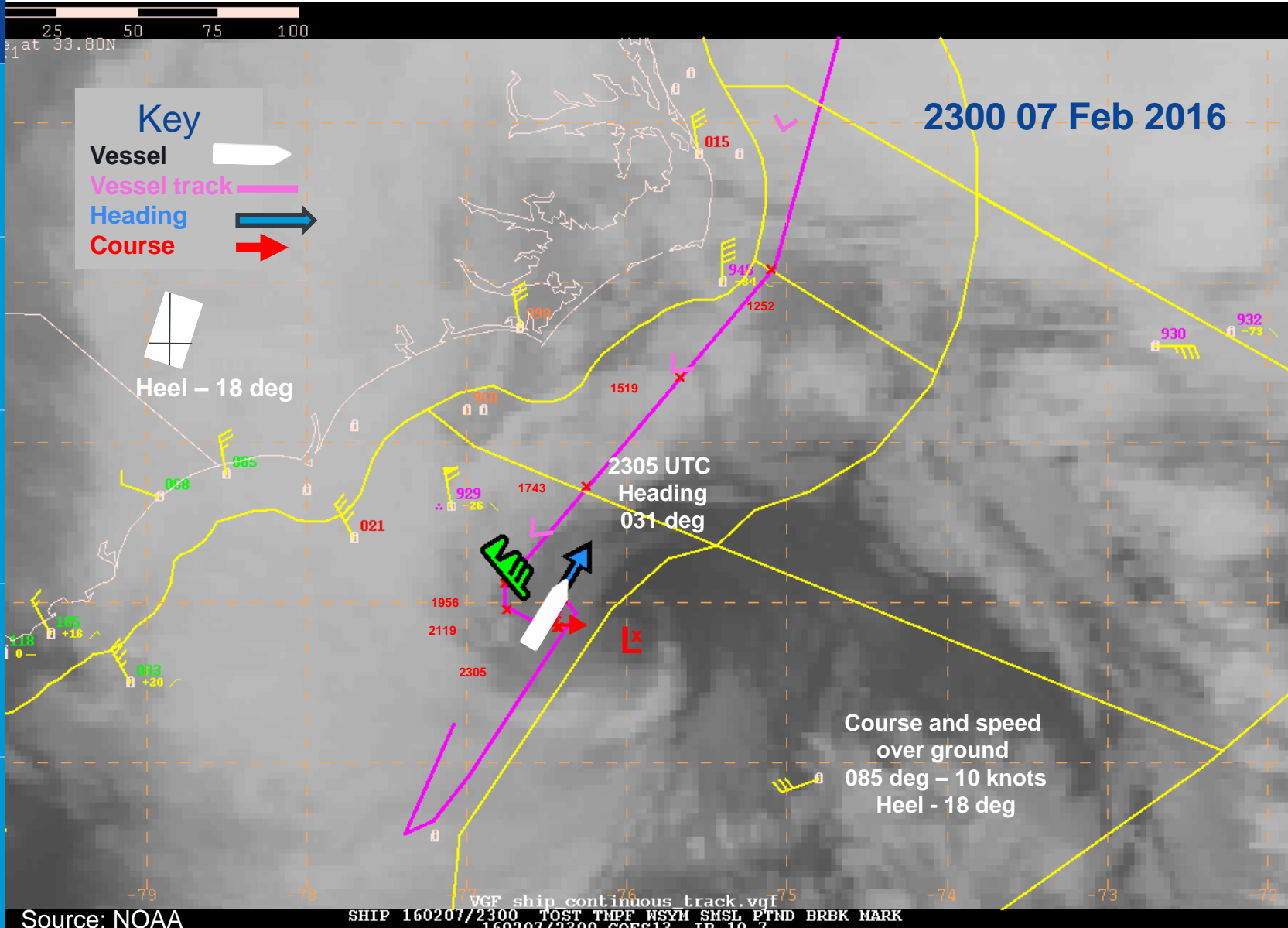
Met-Ocean Science, Observations, and Services to Enhance Decision Making

Joe Sienkiewicz, OPC
Logan Dawson, OPC
Michael Folmer, OPC
Daniel Brown, NHC





Explosive Deepening Cyclone - Impacts



Source: NOAA



THE COMMONWEALTH OF THE BAHAMAS

ANTHEM OF THE SEAS

IMO Number: 9656101

Official Number: 7000686



Report of the marine safety investigation into a heavy weather incident on 7th & 8th February 2016

BMA Investigation

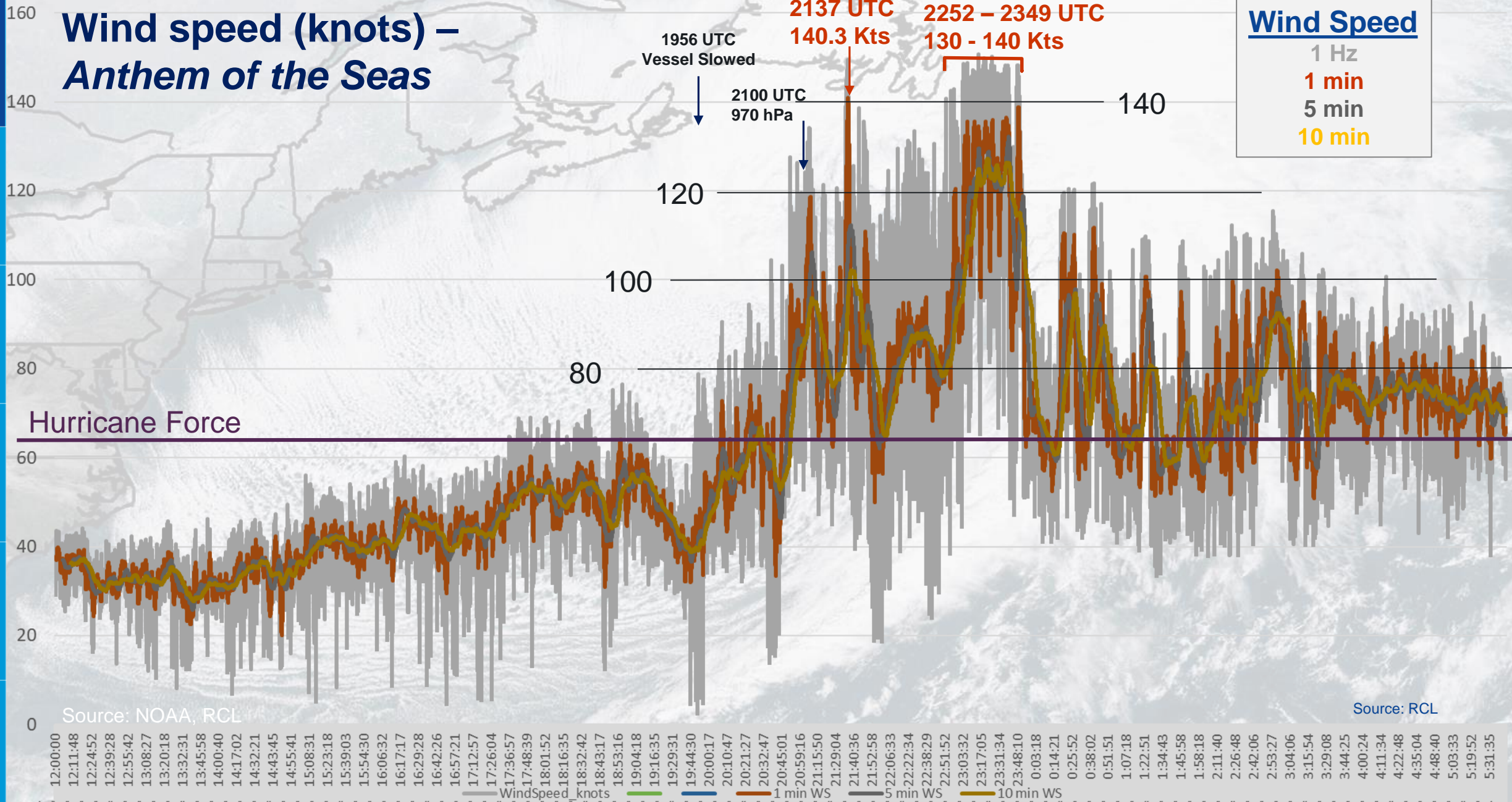
BMA - "Due to the significant weather and restricted maneuverability experienced the vessel was at times unable to maintain a heading which would place the seas and wind in a more favorable relative position to minimize vessel exposure to the prevailing weather."

"At 1755 (2255 UTC) hours...The wind speed was recorded to be 135 knots at this point and the vessel had recorded a heel angle of 18 degrees."

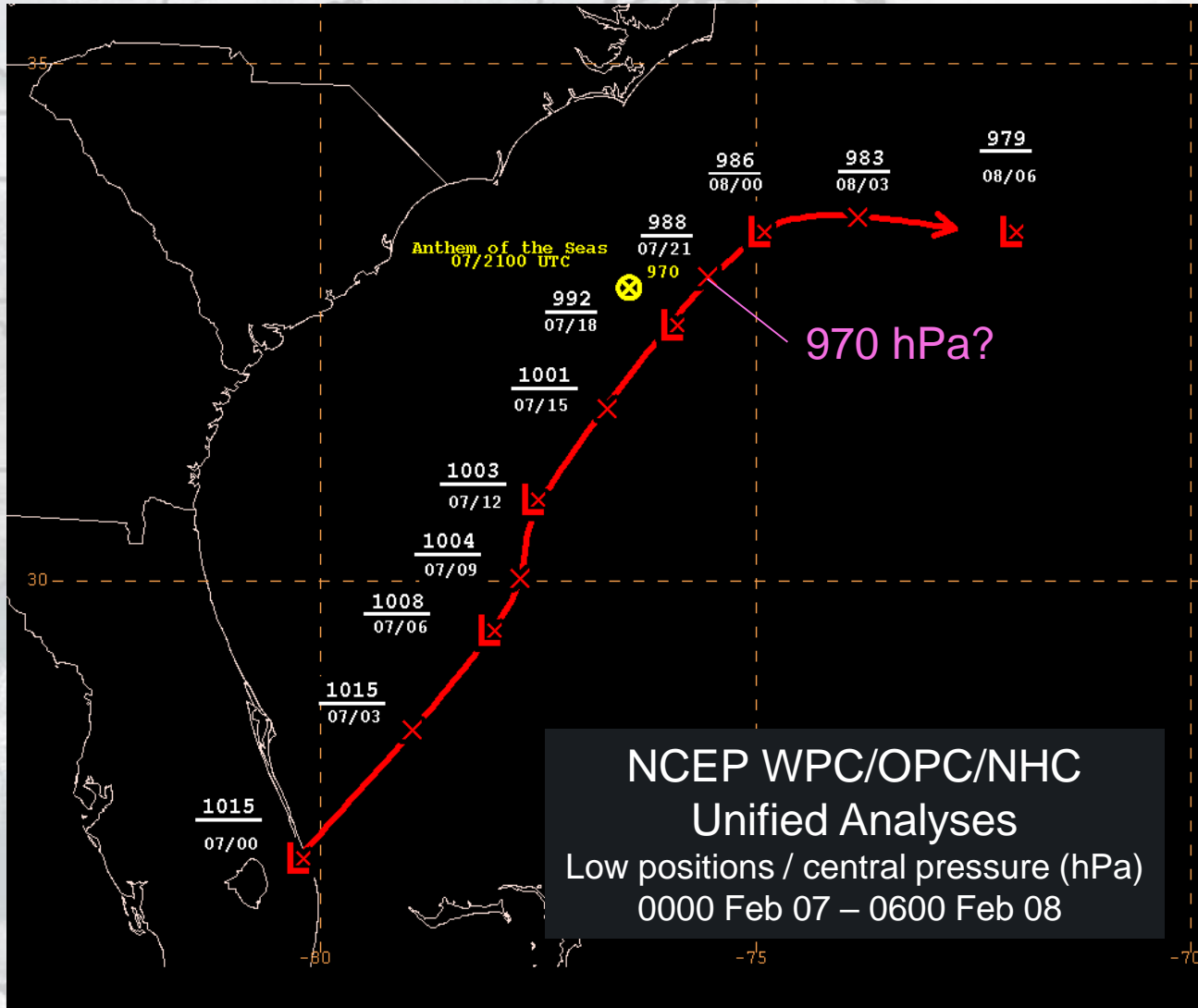




Wind speed (knots) – Anthem of the Seas



Explosive Development – Super Bomb?



- Vessel observed 970 hPa pressure at 2100 UTC
 - not available in real time or for post analysis
 - Likely + 5 hPa correction required
- Possible – low intensified ~ 45 hPa in 18 hours - ~ 4.2 Bergeron
 - 1015 hPa to ~970 hPa

SLP – Anthem of the Seas

