



Ocean Exploration  
and Research

# Marshaling Agency Resources to Investigate Submarine Canyons: The Past and Future

John McDonough

Deputy Director,

NOAA Office of Ocean Exploration &  
Research

# 2011-2015: Three Complementary Federal Initiatives:

- Norfolk & Baltimore Canyons:  
BOEM-USGS-NOAA
- Northeast Regional Initiative: NOAA  
National Marine Fisheries Service
- NOAA Ship *Okeanos Explorer*

Academic scientists critical to success  
of every mission

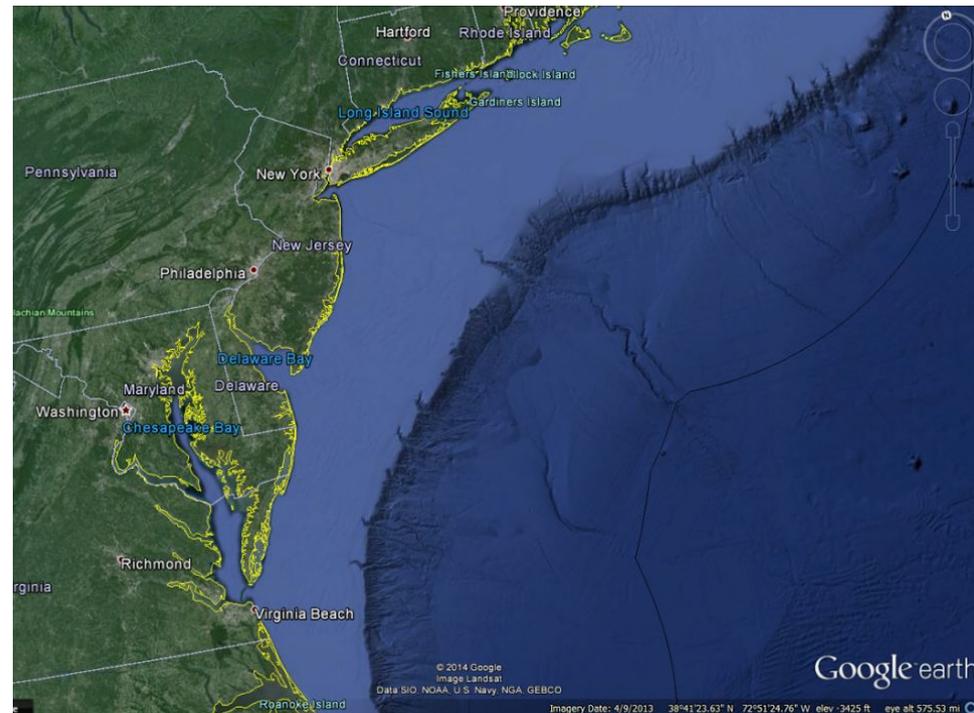


# Western Atlantic Canyons

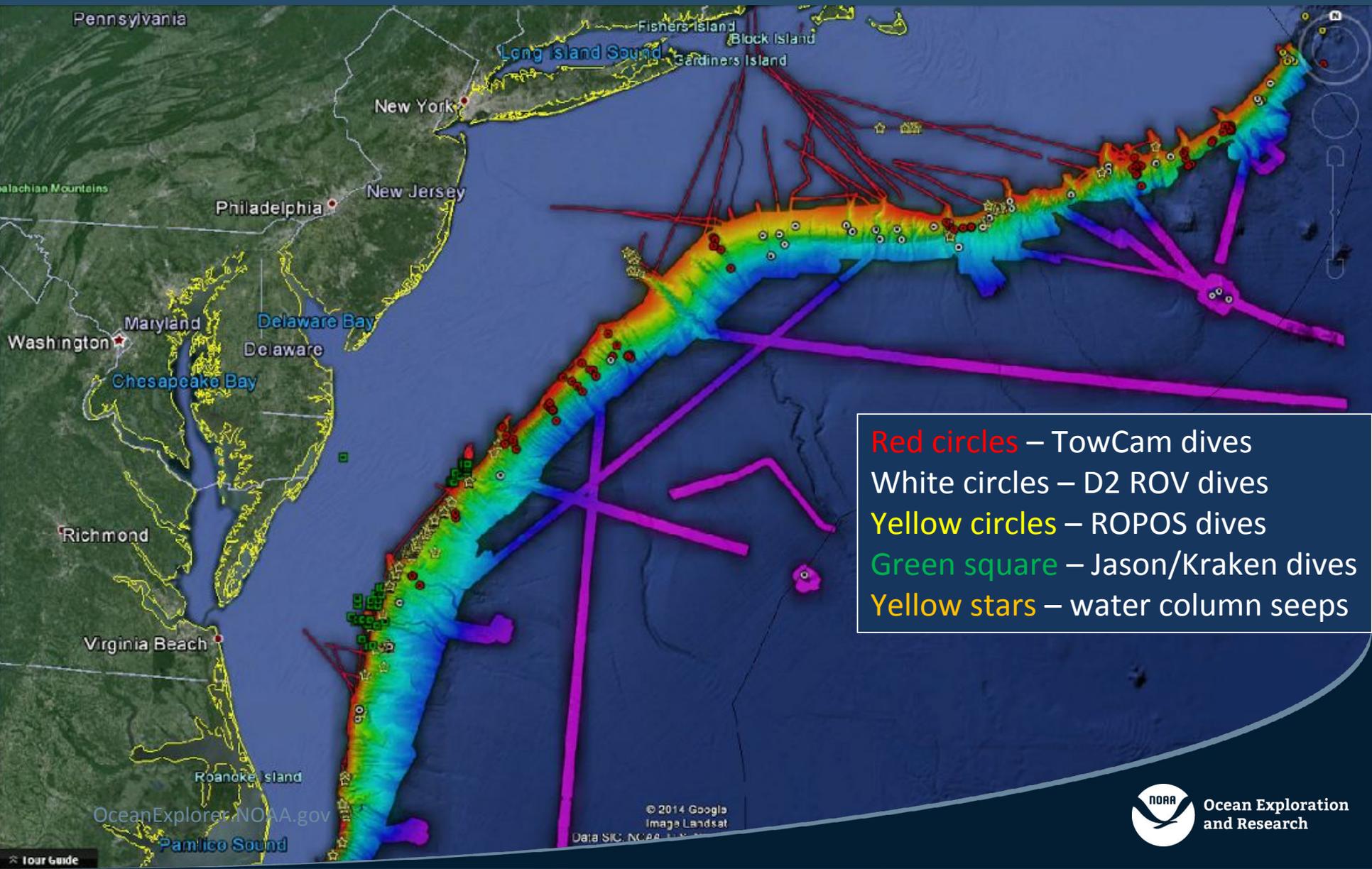
Context: Way back in 2010...

Shelf break and slope off the northeastern US supports a diversity of habitats including more than 70 canyons ranging from ~100m to ~3500m depth:

- Substantive work in area during '70s and '80s. Very limited work in '90s and '00s.
- Habitats threatened by fishing activities. Interest in potential oil and gas resources.
- Managers relying on outdated and imprecise data:
  - Early work funded by BLM and MMS from 1970s and 1980s
  - Museum records from early exploratory trawling
  - Not all relevant data publicly available



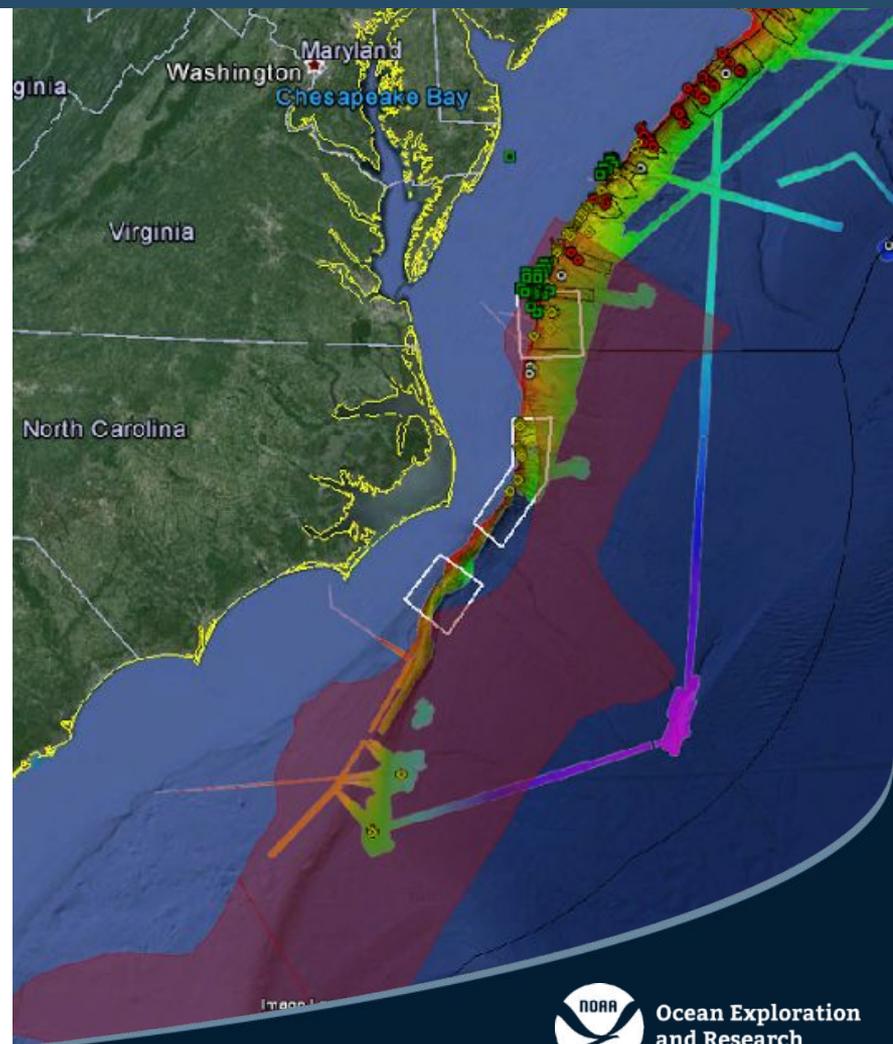
# 2011-14 Field Operations Summary



Red circles – TowCam dives  
White circles – D2 ROV dives  
Yellow circles – ROPOS dives  
Green square – Jason/Kraken dives  
Yellow stars – water column seeps

# Evolving 2016-20 U.S. Interagency Effort: Offshore U.S. Mid and South Atlantic

- Complement 2011-2015 effort
- Federal partners – NOAA, USGS, BOEM\*
- Focus on offshore areas between Virginia and Georgia/Florida border
- Integrated science priorities:
  - Defining connectivity of vulnerable ecological communities
  - Tsunami prediction and coastal hazards
  - Science-based decision-making associated with living marine and energy resources
- Potential expansion into international TransAtlantic Campaign:



\* Pending BOEM study development and contract procurement



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