



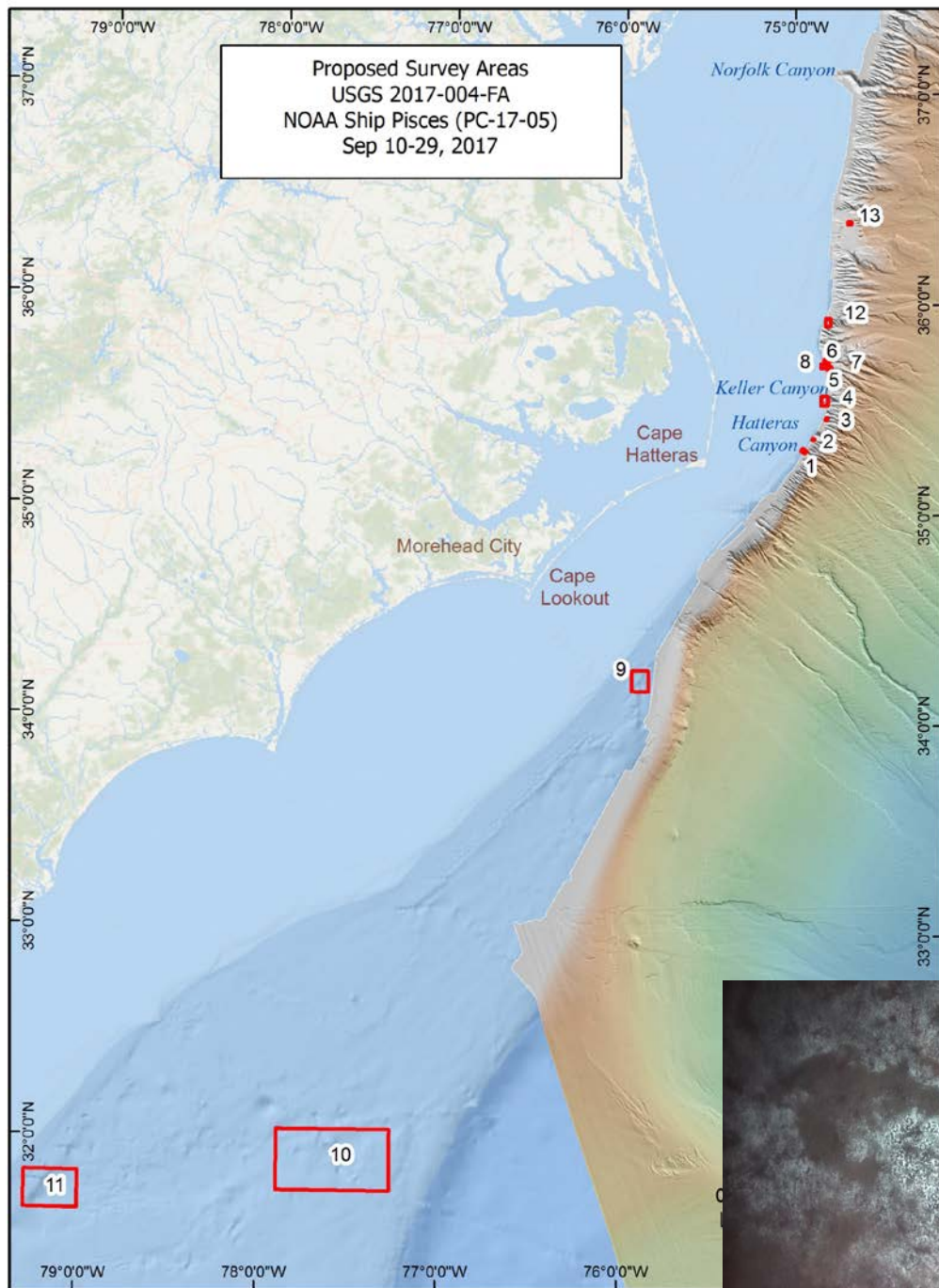
# DEEP SEARCH Report



DEEP Sea Exploration to Advance Research on  
Coral/Canyon/Cold Seep Habitats

# DEEP SEARCH

- Multiagency project (BOEM/USGS/NOAA-OER) with contracted scientists from TDI Brooks led by Erik Cordes – Temple University, Amanda Demopoulos (USGS Lead)
- Goal: understand the ecology and distribution of sensitive deep-sea habitats within the mid and south Atlantic planning area to inform future management and conservation of natural resources
- Broader partnerships: under the ASPIRE\* campaign

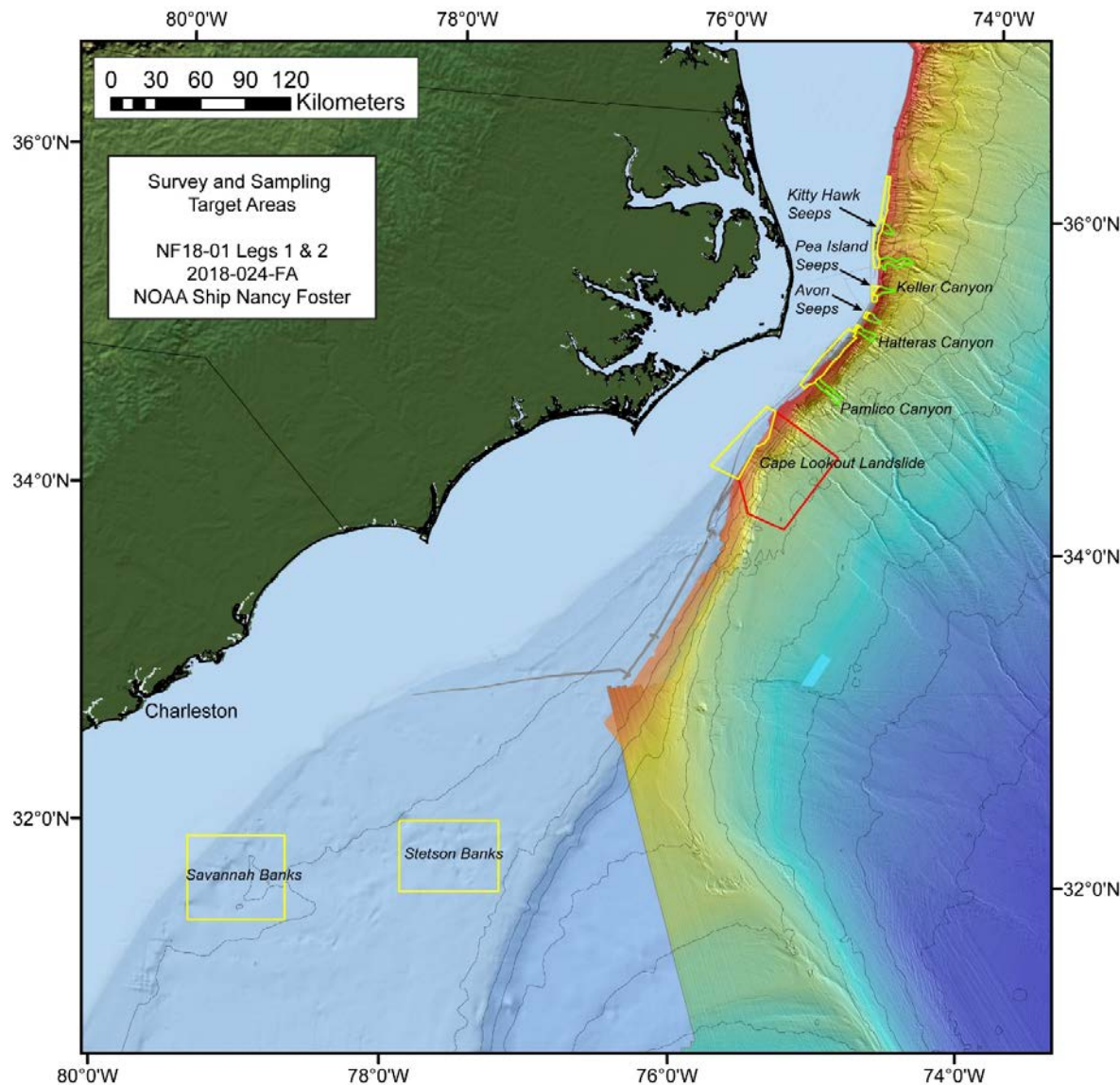


## 2017 Field events:

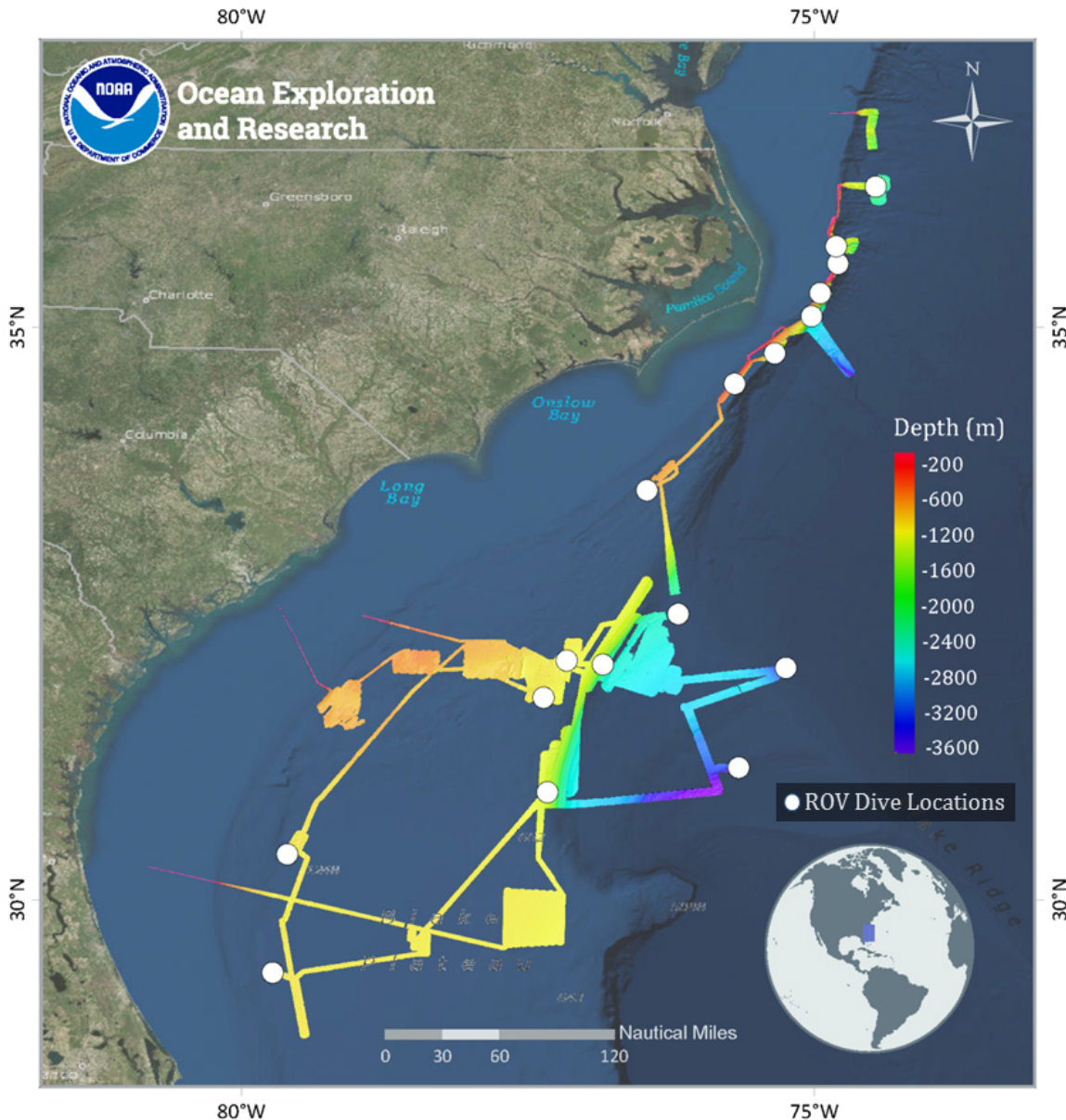
- NOAA ship Pisces/Sentry AUV
- ~11 days, 3 dives (seeps and coral habitats), 3 hurricanes



# 2018 Field events

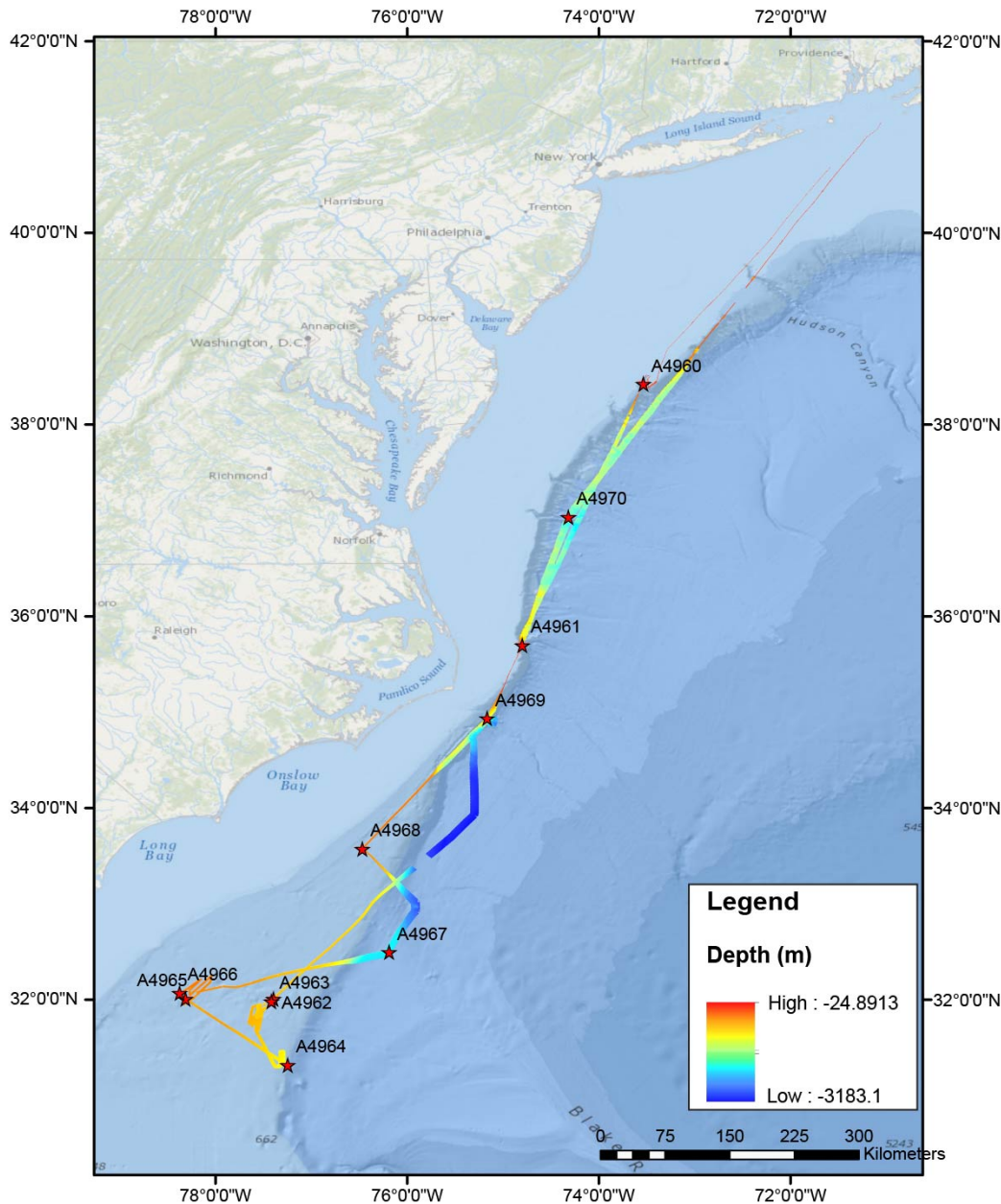


- March-April - 26 DAS – Nancy Foster
  - Leg 1: March 27-April 5
  - Leg 2: April 10-24
  - Ship hit buoy following dry dock
  - Canceled March 16 by OMAO**
- August 19-Sept. 2 -15 DAS – R/V Atlantis HOV Alvin
  - 13 DAS- NOAA-OER
  - 2 DAS –NOAA DSCRTP
- October 1-13–16 DAS-R/V Brooks McCall
  - includes transit from TX homeport
  - shipboard ops (mid-water trawls, megacoring, piston coring, CTD casts)
  - OER chartered vessel



# NOAA-OER/OMAO support DEEP SEARCH on EX

- Windows to the Deep 2018 1805/1806: May 22-July 2
  - OMAO and OER dedicated 8 days to mapping DEEP SEARCH targets
  - OER dedicated a few dives at targeted areas of interest for the project.

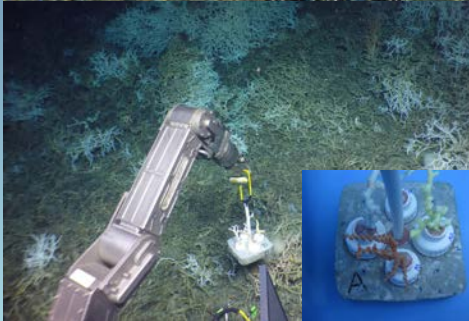
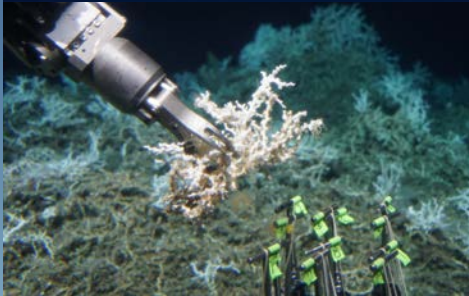
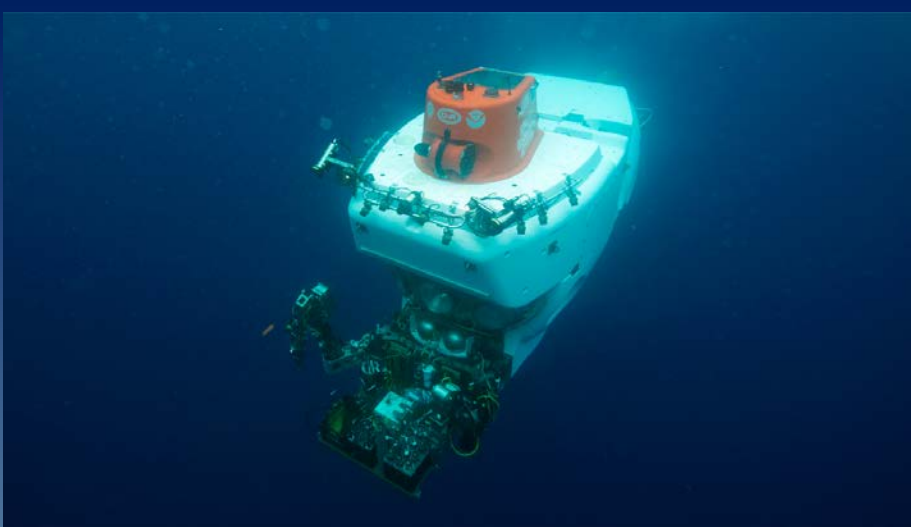


# Highlights from AT41-Atlantis/Alvin cruise

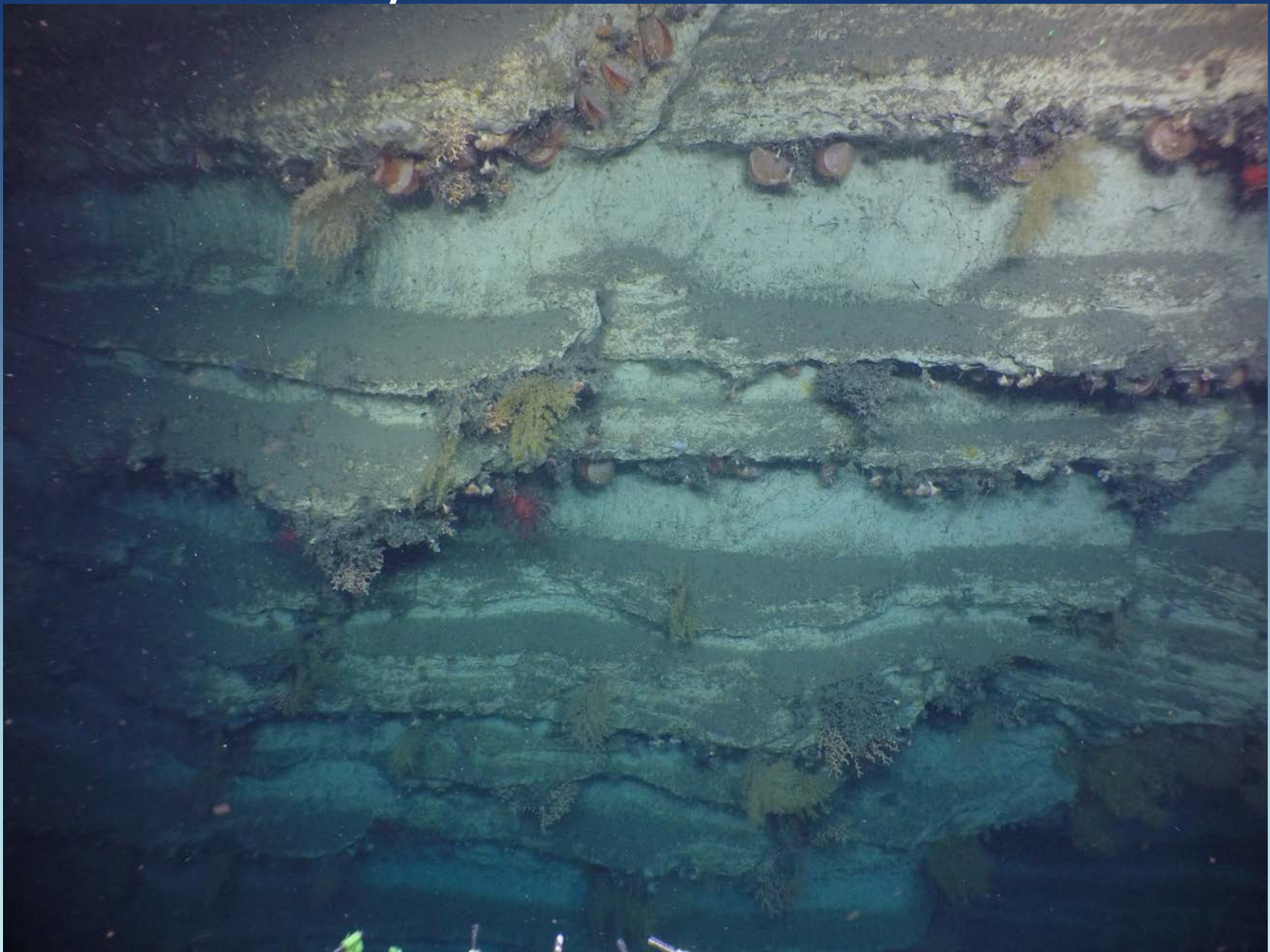
- Map of cruise track showing multibeam acquired (~8200 km<sup>2</sup> new multibeam bathymetry)
- 11 dives
  - 2 canyons
  - 2 seeps
  - 6 coral sites

# Highlights from AT41- Atlantis/Alvin cruise

- Timelapse, still, video imagery
- ~ 1000 samples
  - Corals
  - Sediments
  - Water
  - Rocks

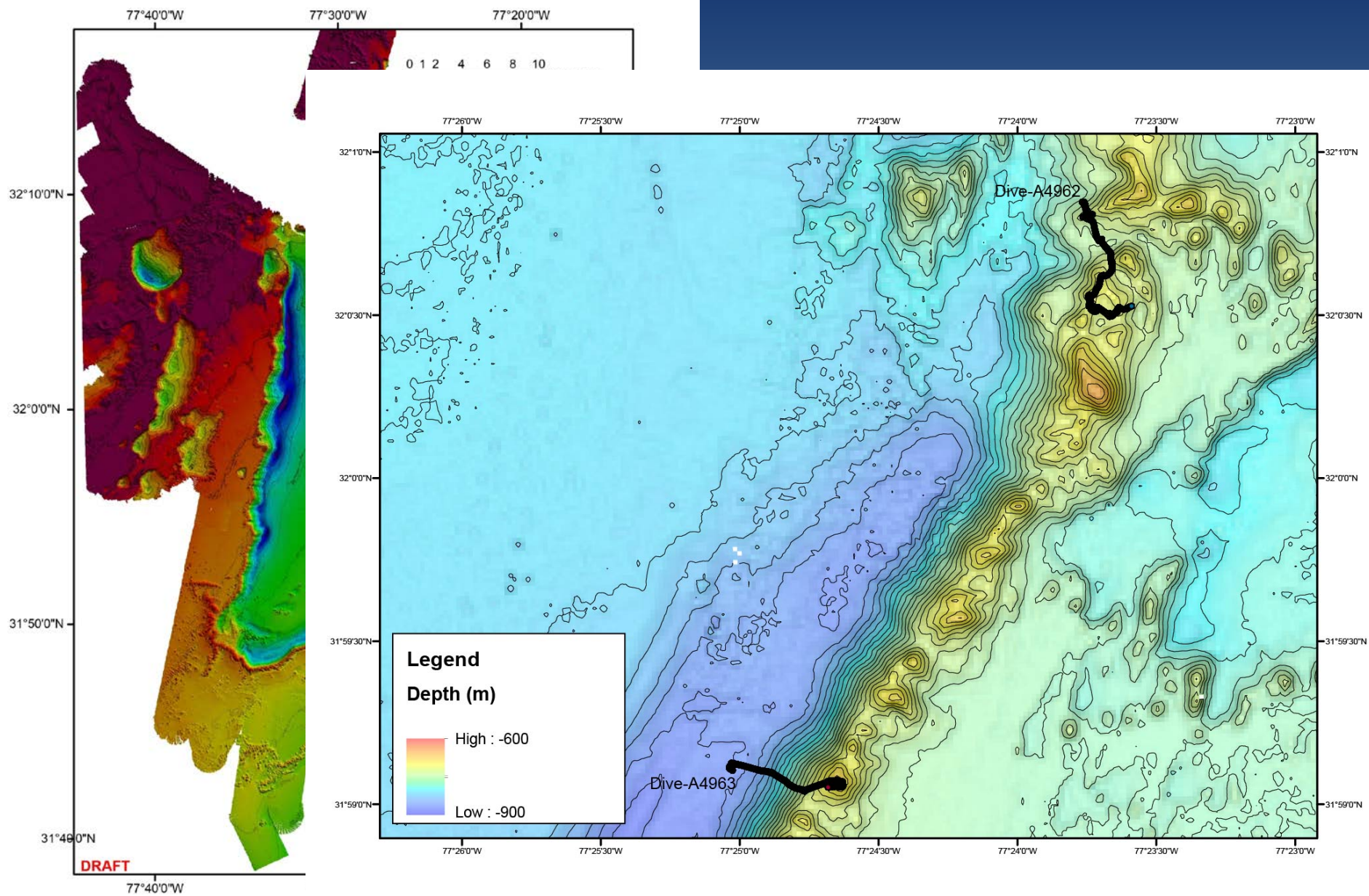


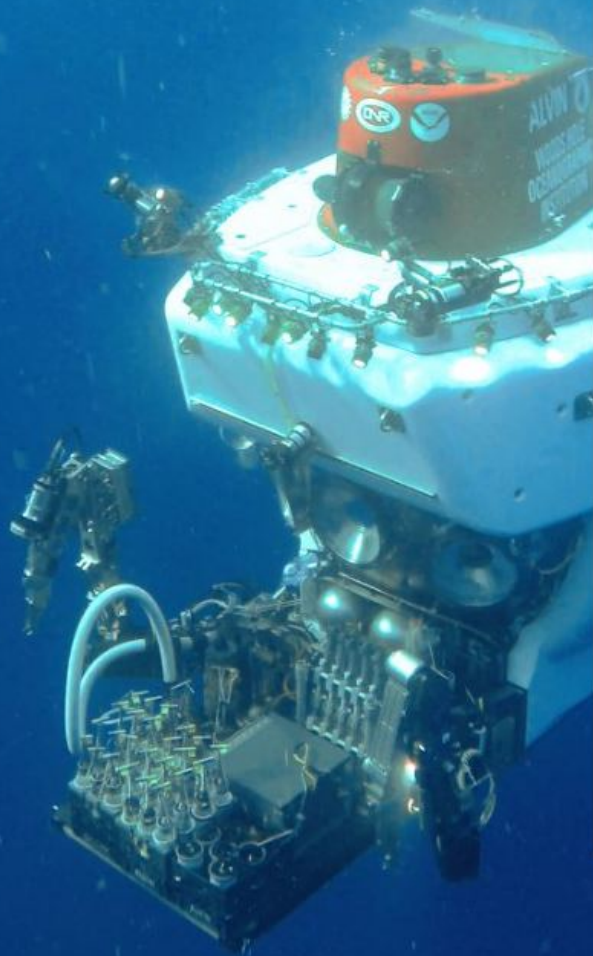
# Pamlico Canyon





# Richardson Region





## Scientists discover hidden deep-sea coral reef off South Carolina Coast

By Lauren Landrum, CNN  
Updated 12:37 PM ET, Tue August 28, 2018



CNN

Speaking of Science

## Scientists discovered a coral reef – almost as long as Delaware – hidden off the coast of Charleston

Washington Post

6,708 views | Aug 30, 2018, 06:00am

## Scientists Discovered A Massive Deep Sea Coral Reef Near South Carolina

Forbes

ENVIRONMENT 08/25/2018 09:40 pm ET | Updated Aug 26, 2018

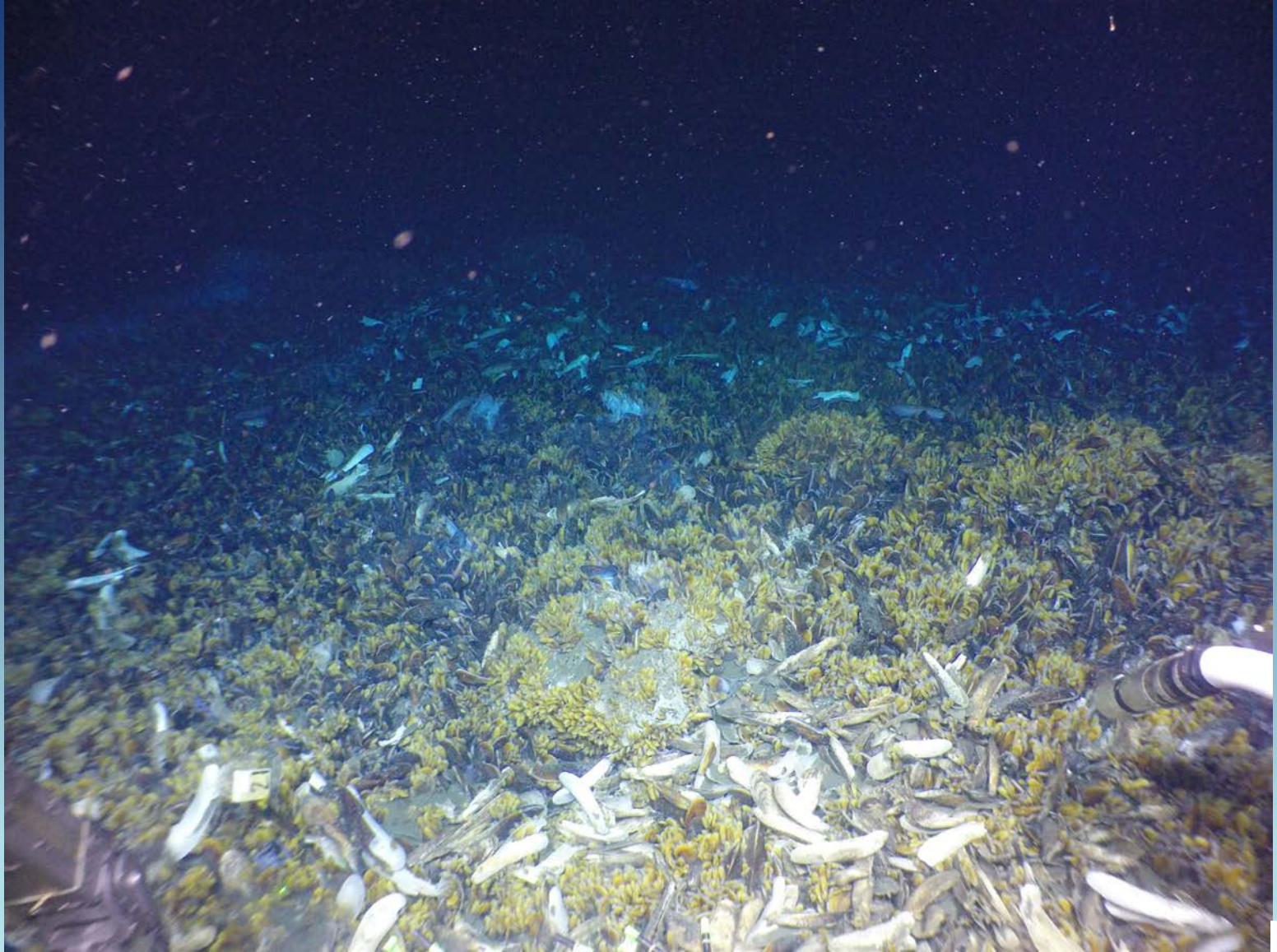
## Scientists Discover Giant Deep-Sea Coral Reef Off Atlantic Coast

The chief scientist on the expedition said it was like nothing he'd seen before.

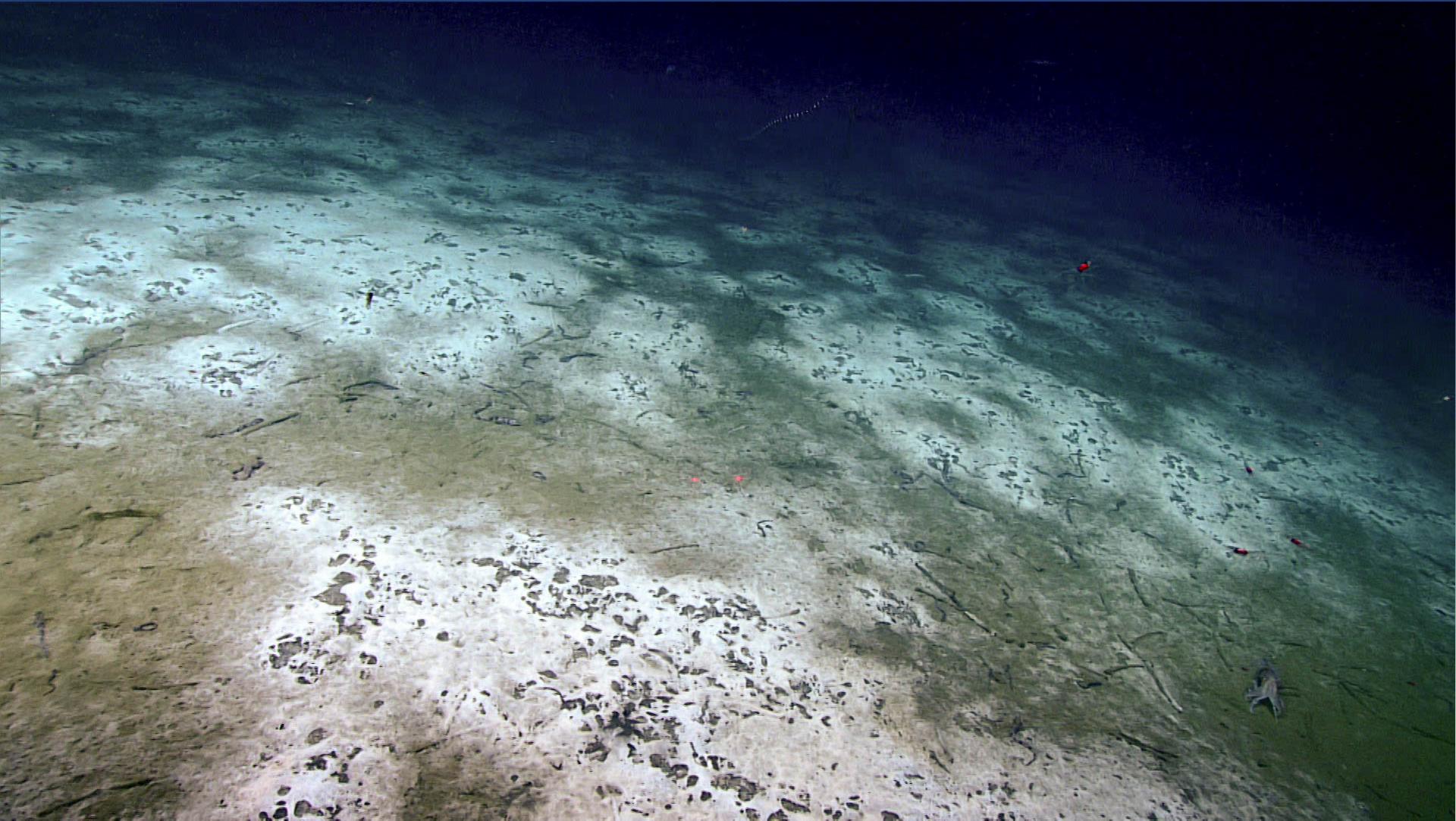
By Chris D'Angelo

Huffington Post

# Blake Ridge Seep



# Pea Island Seep



# Upcoming fieldwork

October 2018: R/V Brooks McCall

April 2019: NOAA Ron Brown/Jason

