

The Ocean Exploration Trust (OET), owns and operates the E/V NAUTILUS and serves as one of two ships of exploration for NOAA OER. We just completed a six and half month long field season returning a few weeks ago to its home base at AltaSea in San Pedro, California.

AltSea Marine Campus

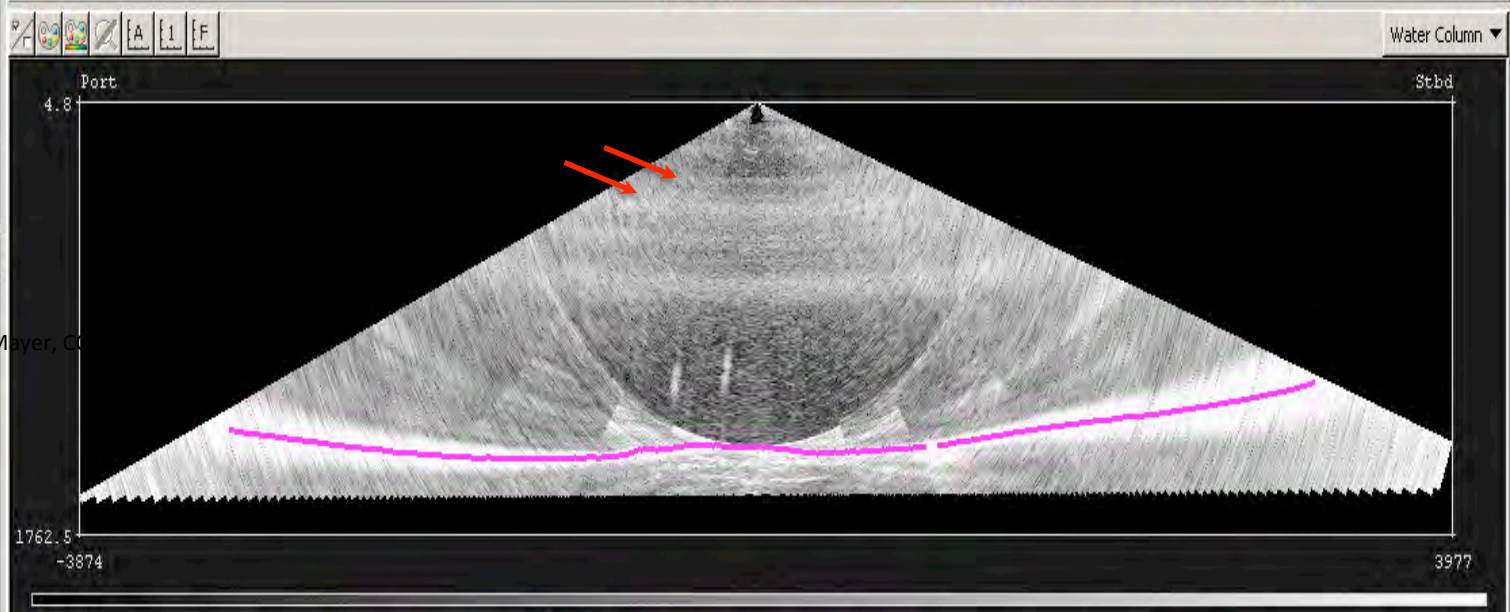
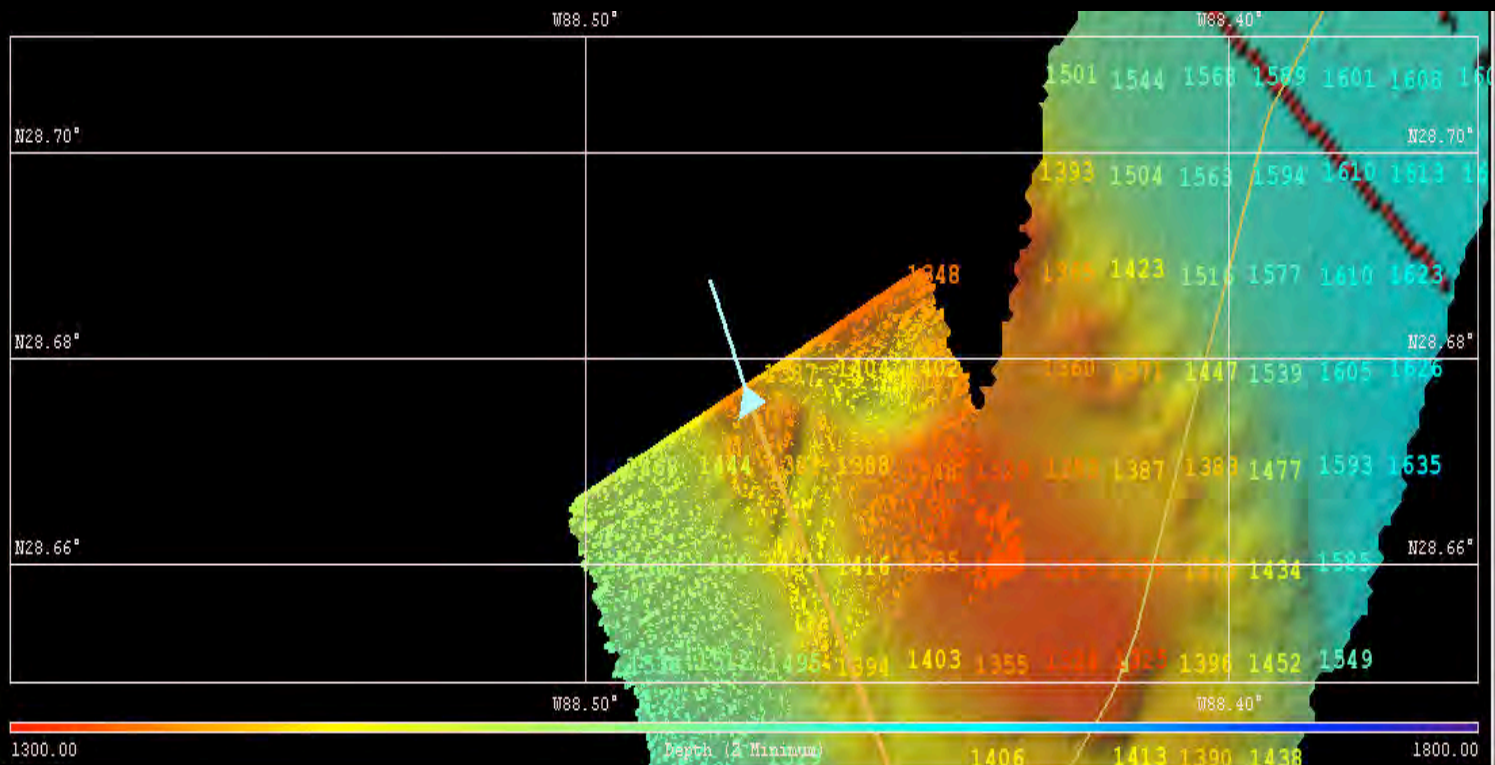
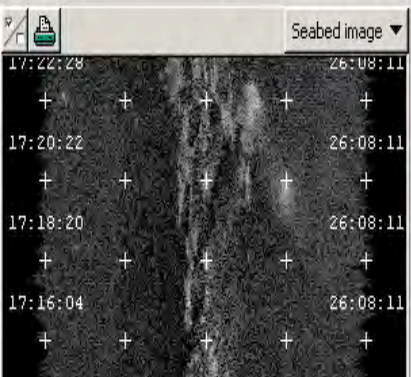
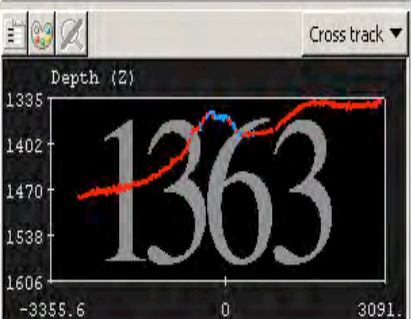
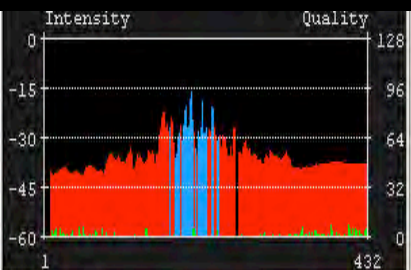


2017 Stats

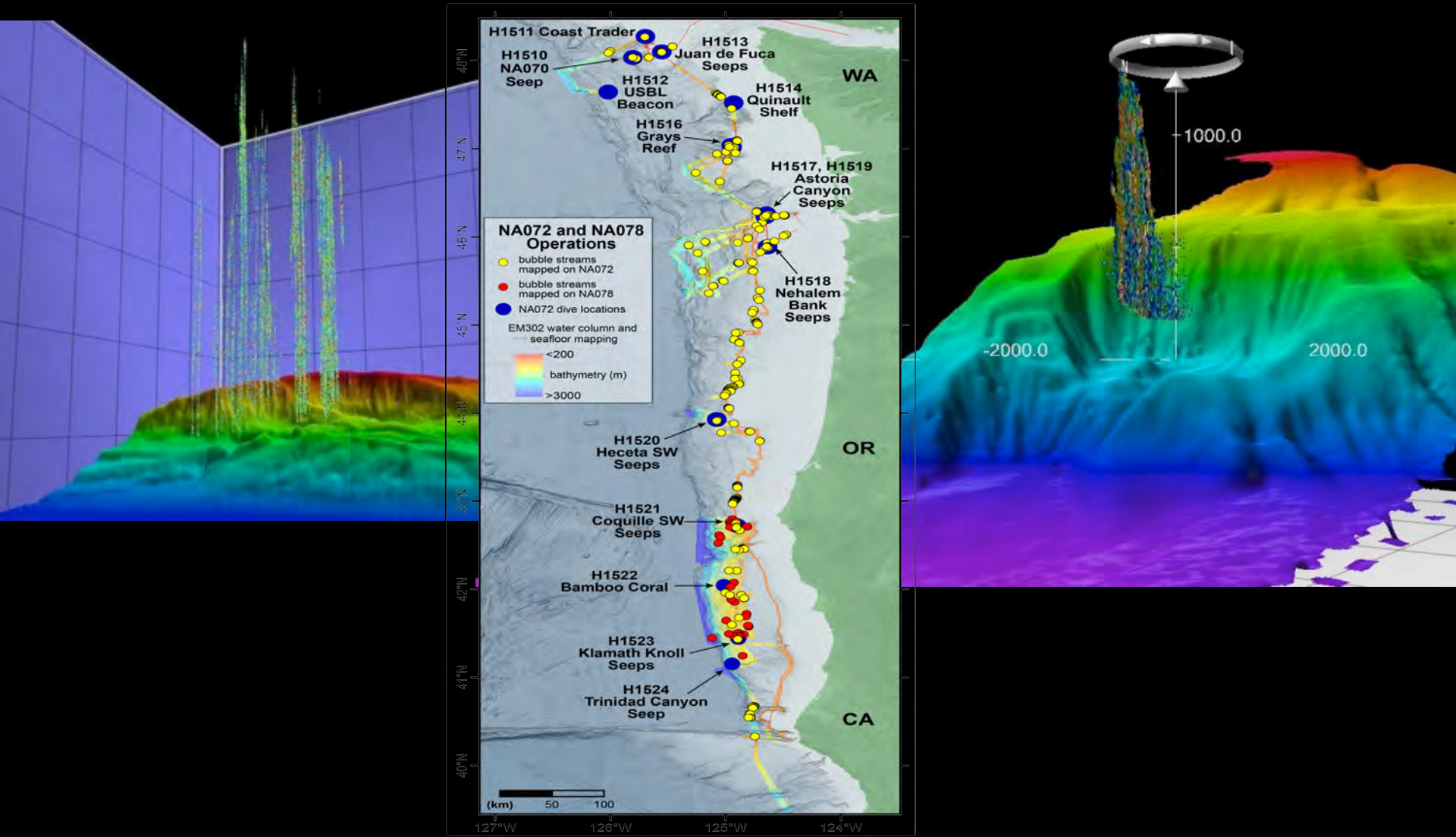
- 204 days at sea
- 98 Dives up to 3 days in length
- 935 Hours on the bottom (all time high)
- 768 samples (1,724 sub-samples) – rock, marine life, gas and water samples – Harvard MCZ and NSF Rock repository at URI/GSO
- 72,983 square kilometers of multi-beam mapping
- 195 Scientists-Ashore participated in expeditions via tele-presence
- 150 members of science party rotating on and off NAUTILUS during 6.5 month field season

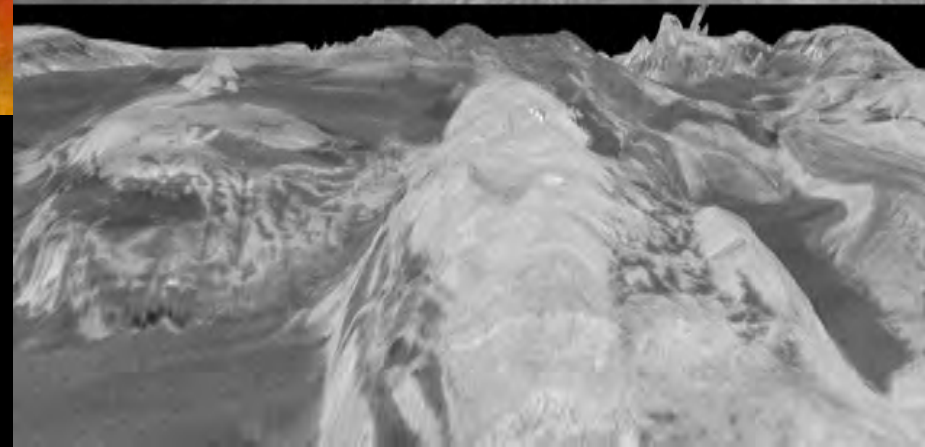
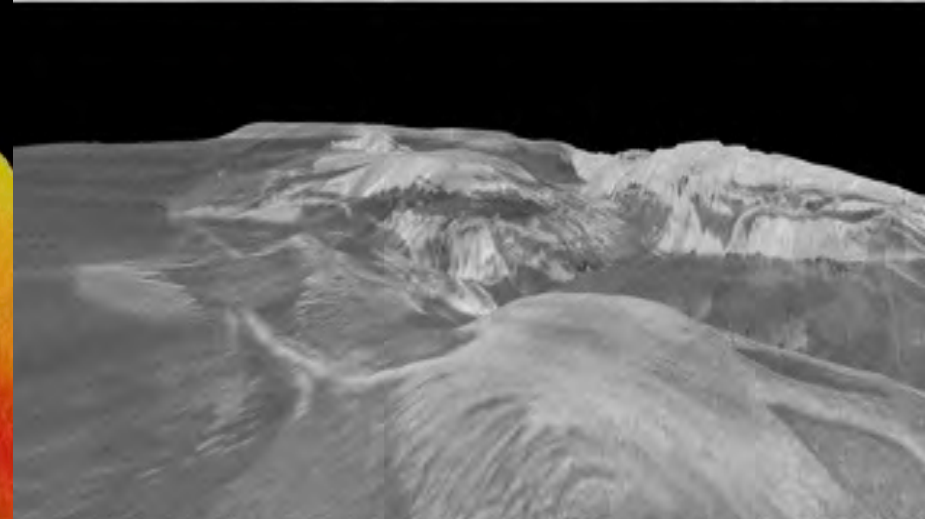
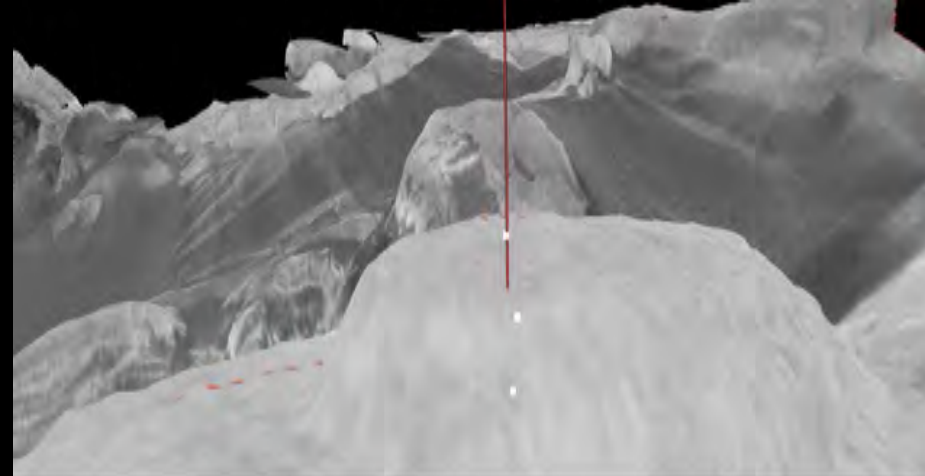
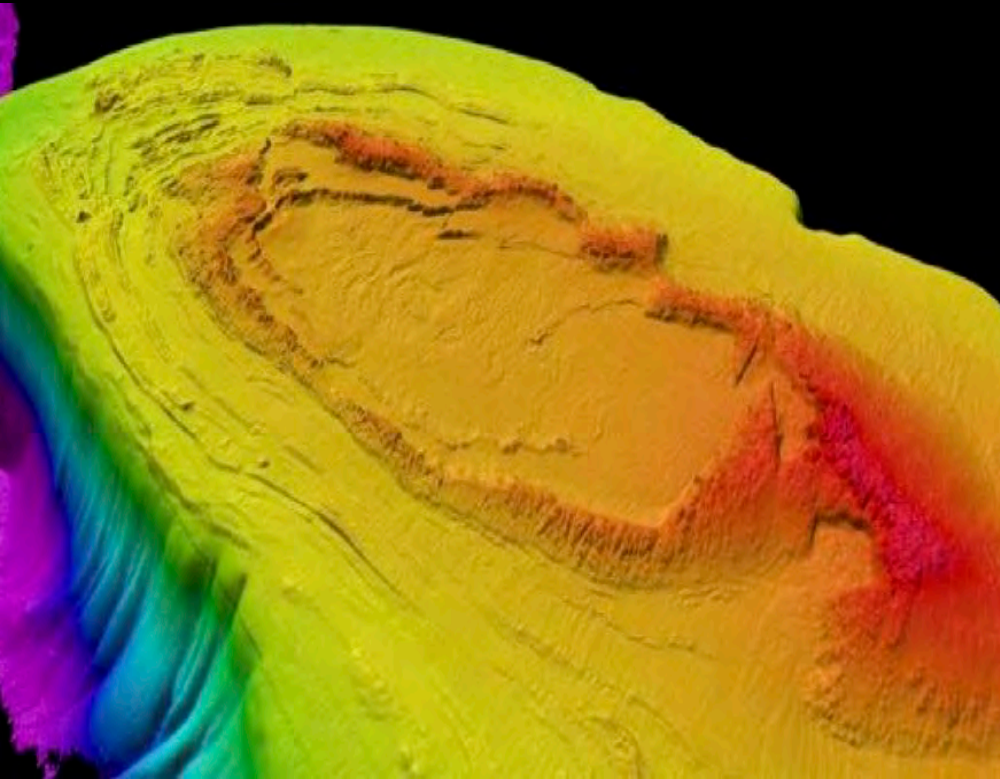
The E/V NAUTILUS is outfitted with a Kongsberg EM-302 Multi-beam sonar



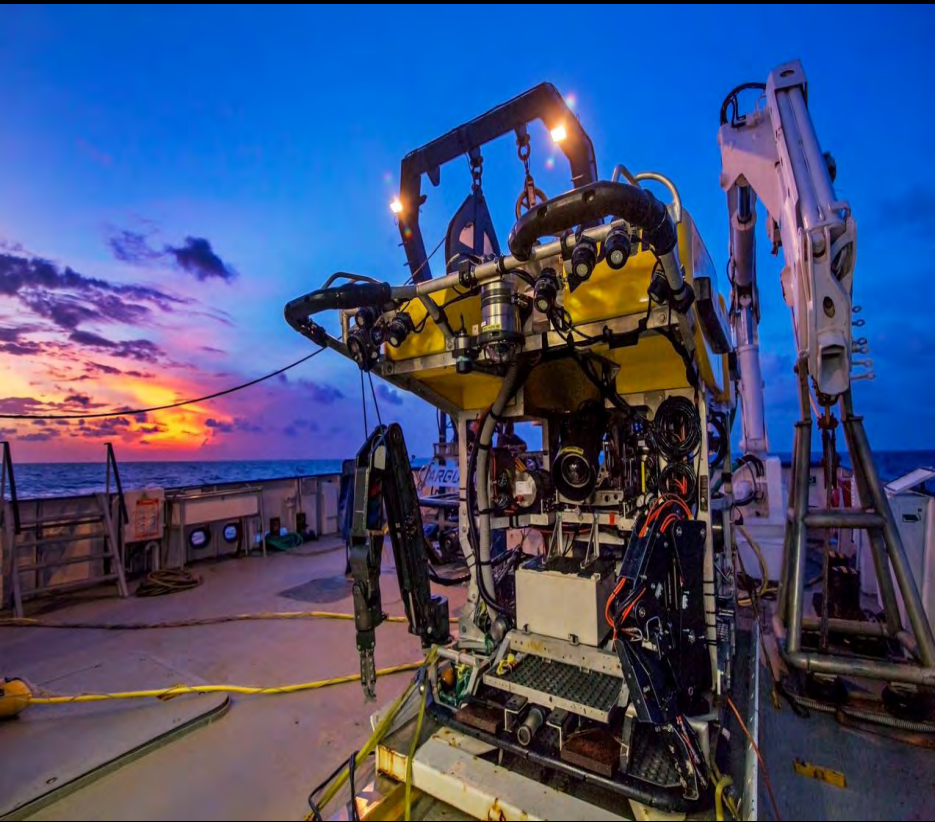


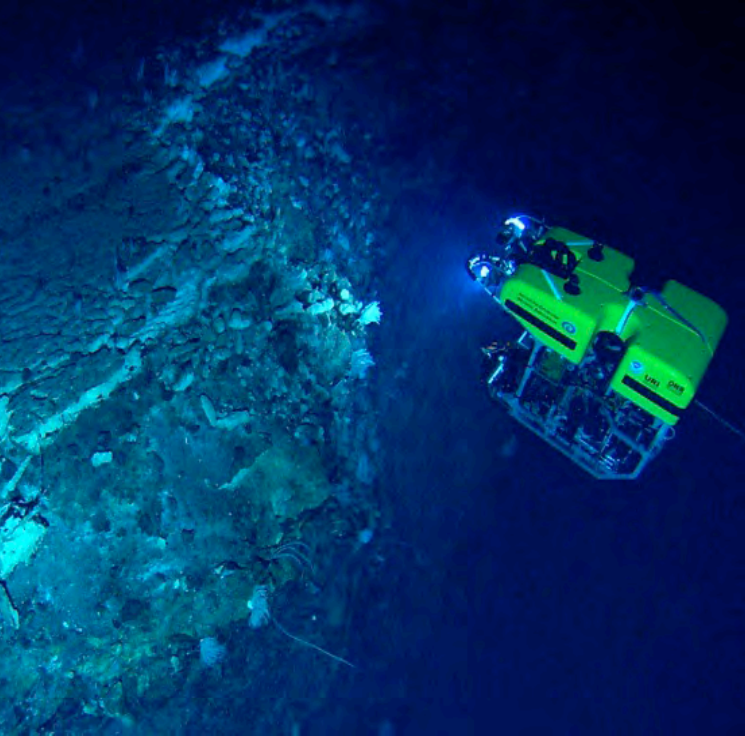
Over the last three field seasons we have used our multi-beam sonar system to locate over 1,000 methane seeps running along the entire west coast of the United States – Wed. Afternoon Session





ARGUS I (6,000 meters) HERCULES I (4,000 meters)





27/7
Ops w/
20 mb
link to
shore



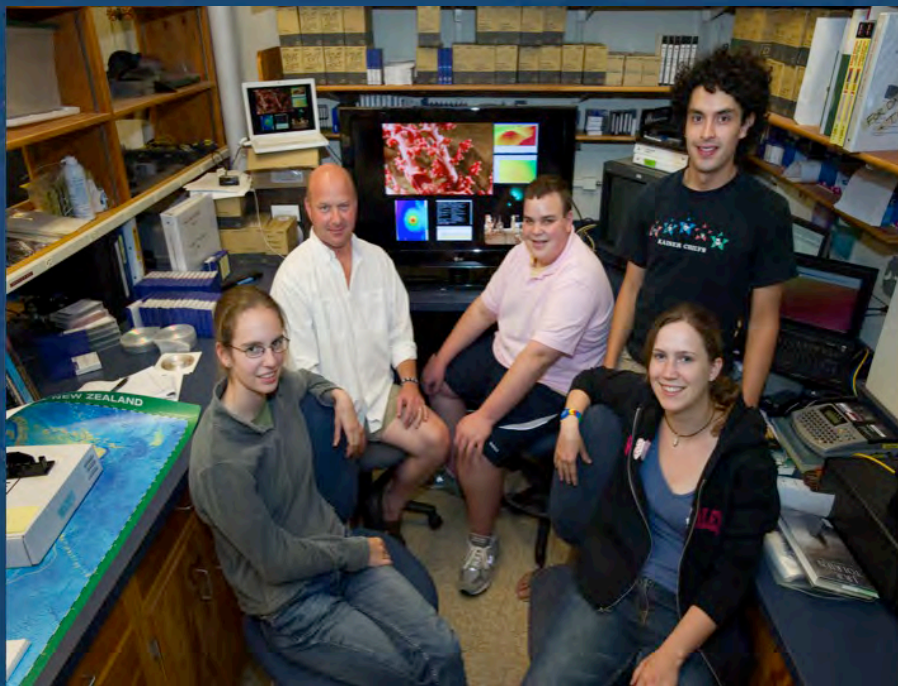
NAUTILUS is linked to the Center for Ocean Exploration and its Inner Space Center at URI's Graduate School of Oceanography





A network of
Scientists-
Ashore remote
console sites
support our
live interactive
Basic
Exploration
program





We also have Live
interactive studios linked
to ships at sea to support
OET's growing E&O
programming



INNER SPACE CENTER PRODUCTION STUDIO





Additional remote sites continue to grow to support our educational outreach

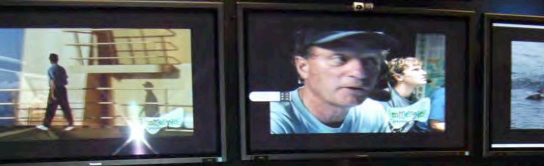


Scottsdale, AZ
Boys and Girls Club





**Smithfield, RI
Public Schools**



**Scottsdale, AZ
Boys and Girls Club**







2016 SHIP-TO-SHORE BROADCASTS



In 2016...

368 broadcasts

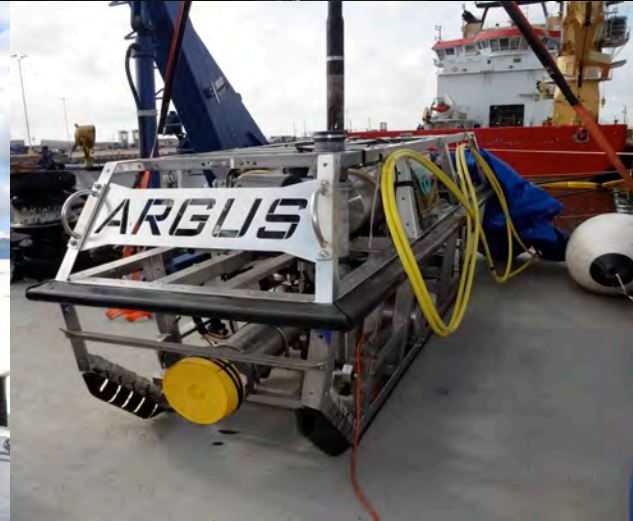
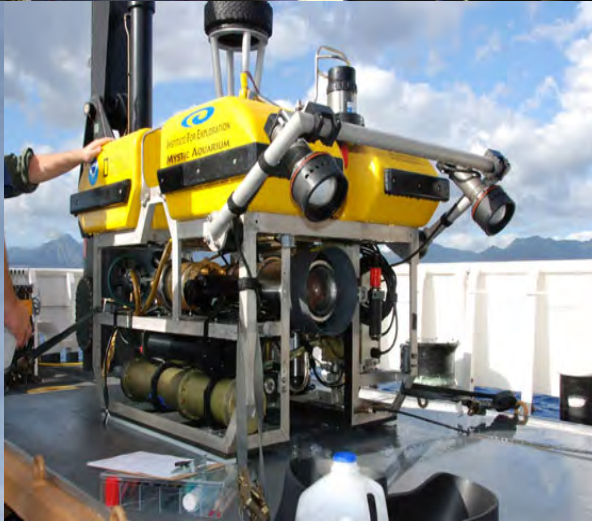
were conducted from *Nautilus* to
students and the broader public in

20 US states,

4 countries, and

112 schools & public venues.

In late 2019 a fully independent mobile system is scheduled to come on line that will have a 6,000-meter ARGUS II, LITTLE HERC and HERCULES II vehicle system and 2-van command control center similar to the one just acquired by DSL/NDSF but capable of supporting “live” interactivity between ship and shore and will be jointly operated by DSL/NDSF and OET with funding from NOAA OER and NSF.



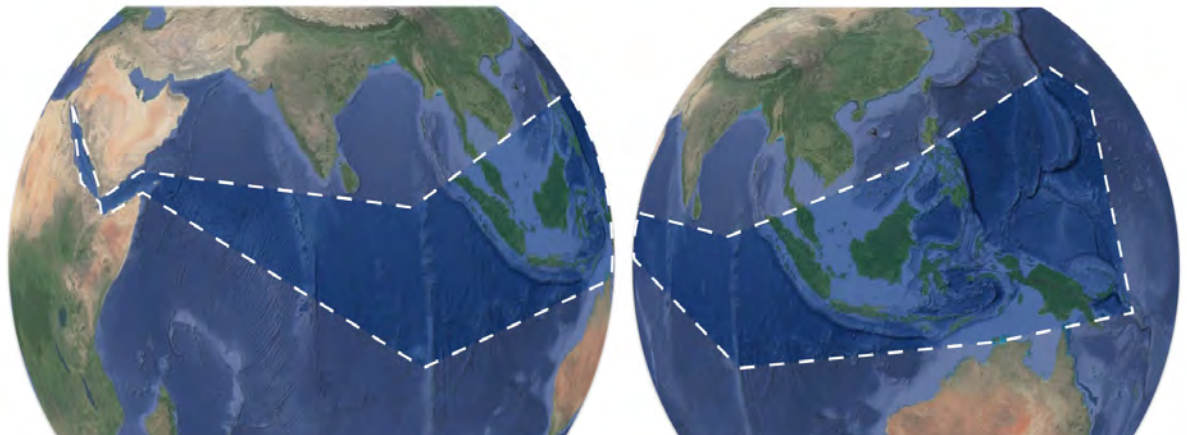
This new mobile capability will have various configurations to deploy from different classes of research and private platforms



Both systems will be supported by a Joint NOAA OER and NSF Program beginning in FY-19 **but this effort is dependent upon scientists submitting exploratory proposals to NSF.** OET plans to operate both the E/V NAUTILUS and the new 6,000-meter mobile system in the follow regions with DSL also operating the mobile system in conjunction with the NDSF.



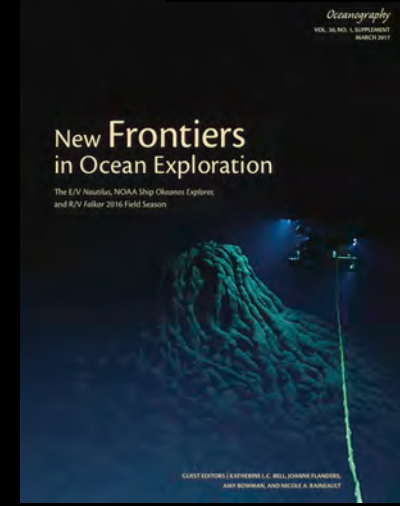
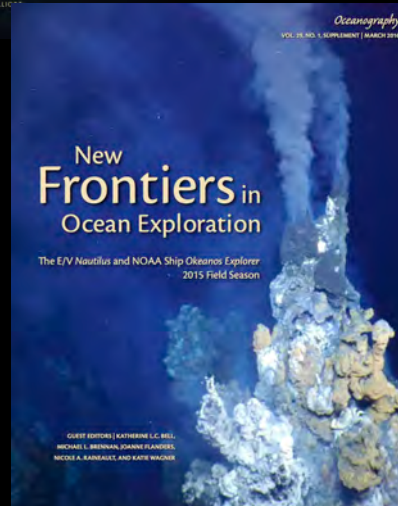
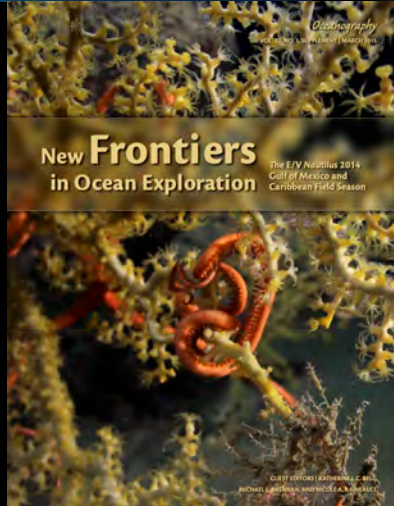
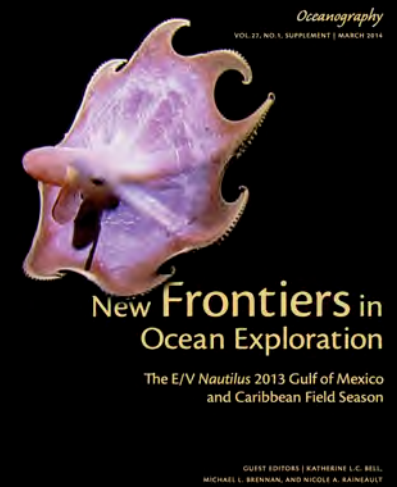
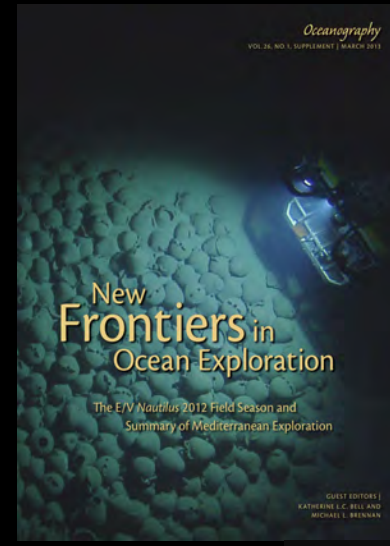
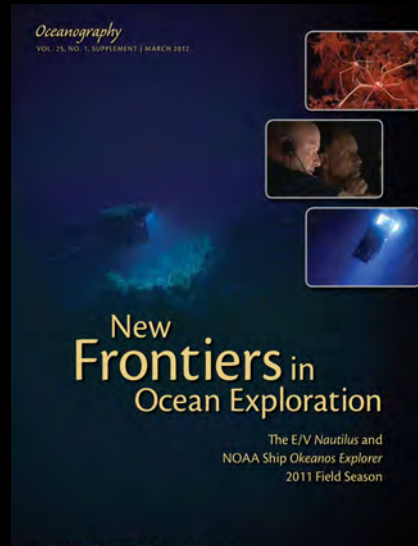
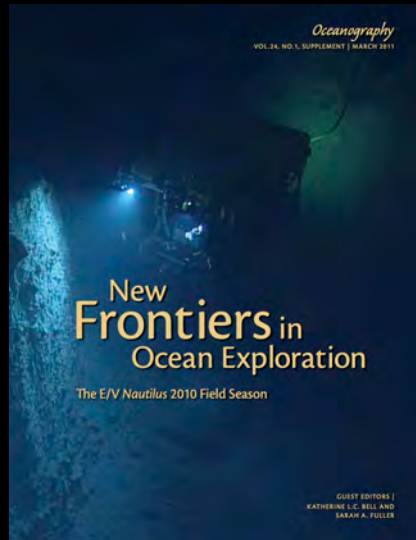
MOBILE SYSTEM OPERATING AREA 2019+



E/V NAUTILUS OPERATING AREAS



To learn more about our total capabilities go to www.tos.org and download (free) any or all of the seven issues of the March Supplements “New Frontiers in Ocean Exploration” with the eighth version coming out in March, 2018 covering our 2017 Field Season. Also contact Dr. Nicole Raineault at nicole@oet.org



Ways to Become Involved

www.oceanexplorationtrust.org

- **BASIC EXPLORATION PROGRAM VIA WORKSHOPS AND SCIENTISTS ASHORE PROGRAM**
- **INSTALL REMOTE CONSOLE AT COST OF ABOUT \$10K**
- **INTERN PROGRAMS (OCEAN SCIENCE, SEAFLOOR MAPPING, ROV ENGINEERING, VIDEO ENGINEERING, COMMUNICATION FELLOWS)**
- **EXPLORATORY RESEARCH PROGRAM SPONSORED BY NSF AND NOAA OER USING E/V NAUTILUS OR NEW MOBILE SYSTEM STARTING IN 2019 WITH REGULAR PROPOSAL SUBMISSION TO NSF (DR. RICK MURRAY and NSF's various program managers many of whom are here today)**