# **2014 Field Season Activities**





#### **Telepresence-Enabled Exploration**

OER systematically explores the world's ocean and advances the telepresence science paradigm using NOAA Ship *Okeanos Explorer* and the Ocean Exploration Trust's E/V *Nautilus*.

In 2014, America's Ship for Exploration **Okeanos Explorer** explored the deep-sea environments of the Gulf of Mexico and along the U.S. east coast.

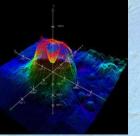
**2** This year the **E/V** *Nautilus* focused operations in the Gulf of Mexico and in the Caribbean.

NOAA Okeanos Explorer, Gulf of Mexico 2014 Expedition

## Extended Continental Shelf Mapping

OER is a critical partner in the interagency U.S. Extended Continental Shelf Project. Since 2007, NOAA and the 12 other U.S. agencies that make up the ECS Project Task Force, have gathered and analyzed survey, seafloor, subseafloor and legal data to establish the full extent

of the continental shelf of the U.S. consistent with international law. This year, OER supported two bathymetric mapping expeditions targeting Mendocino Ridge and Johnston Atoll.



UNH/JHC/CCOM

## **Developing Technology & Demonstrations**

OER pushes the boundaries of existing technology and supports many efforts to advance technology. In 2014, OER supported development of the first-ever in situ, real-time chemical and stable isotopic ROV sensor. Also, in conjunction with NOAA's Southwest Fisheries

Science Center and Boeing, OER supported testing the use of an AUV to monitor rockfish populations in untrawlable habitats.



Keith Wood/Ocean Exploration Trust 2014



## **Partnering & Collaboration**

Because it is expensive and challenging to explore the deep ocean, the success of ocean exploration relies on partnerships and collaborations that leverage planning, objectives, funding, expertise, sensors, systems and information delivery. OER partners with NOAA offices; regional, state, federal

and international agencies; academic and oceanographic institutions; industry and nonprofits to maximize return on investment for the U.S. taxpayer. Locations of OER's 2014 partnership missions are shown on the map.



**Ocean Exploration Trust**