



Okeanos Explorer ROV Dive Summary

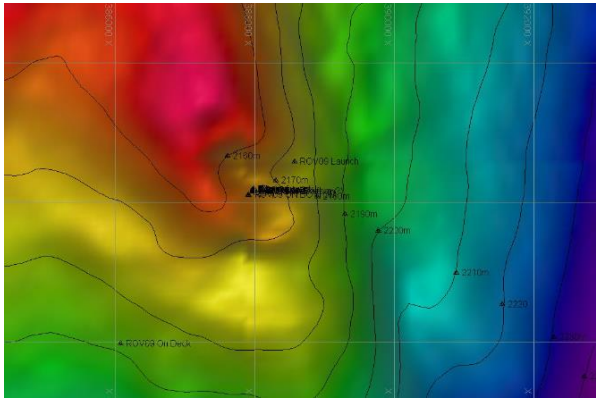
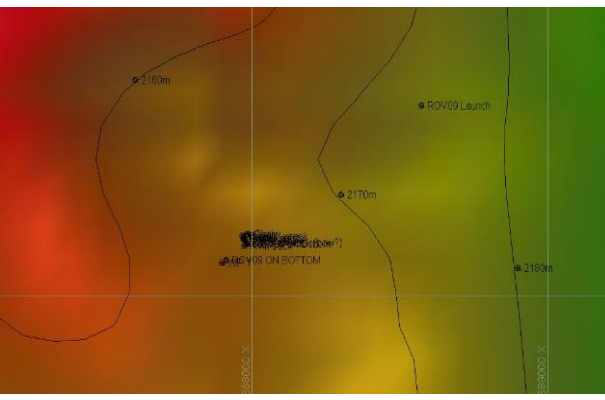
Dive Information	
General Location	<p>South Carolina Georgia</p> <p>Data SIO, NOAA, U.S. Navy, NGA, GEBCO © 2018 Google Image Landsat / Copernicus</p>
General Area Descriptor	North of the Blake Ridge, SE US Continental Margin
Site Name	Blake Ridge Wreck
Science Team Leads	Leslie Sautter / Cheryl Morrison
Expedition Coordinator	Kasey Cantwell
ROV Dive Supervisor	Bobby Mohr
Mapping Lead	Derek Sowers
ROV Dive Name	
Cruise	EX1806
Leg	-
Dive Number	DIVE09
Equipment Deployed	
ROV	Deep Discoverer
Camera Platform	Seirios
ROV Measurements	<input checked="" type="checkbox"/> CTD <input checked="" type="checkbox"/> Depth <input checked="" type="checkbox"/> Altitude <input checked="" type="checkbox"/> Scanning Sonar <input checked="" type="checkbox"/> USBL Position <input checked="" type="checkbox"/> Heading <input checked="" type="checkbox"/> Pitch <input checked="" type="checkbox"/> Roll <input checked="" type="checkbox"/> HD Camera 1

	<input checked="" type="checkbox"/> HD Camera 2	<input checked="" type="checkbox"/> Low Res Cam 1	<input checked="" type="checkbox"/> Low Res Cam 2
	<input checked="" type="checkbox"/> Low Res Cam 3	<input checked="" type="checkbox"/> Low Res Cam 4	<input checked="" type="checkbox"/> Low Res Cam 5
Equipment Malfunctions			
ROV Dive Summary (from processed ROV data)			
Special Notes	The majority of the dive was spent collecting data for a 3D photogrammetry rendering of the wreck. The results can be found here (courtesy of BOEM): https://sketchfab.com/models/eea2f59719934994bc238bf4689b1e32		
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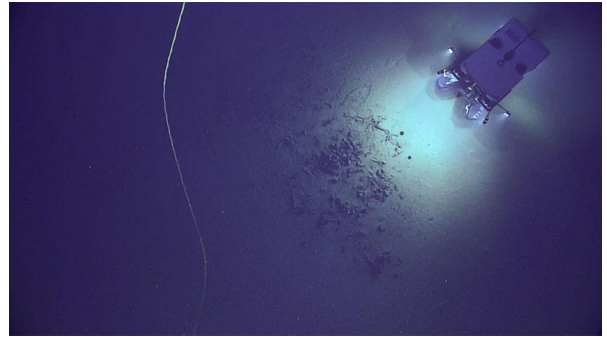
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Purpose of the Dive	<p>A chance discovery by a Duke University and Woods Hole Oceanographic Institution mission in the submersible Alvin in 2015, revealed a wooden shipwreck. Named after its location on Blake Ridge, the wreck was briefly inspected, with the team in Alvin discovering scattered bottles, a ship's navigational octant, ceramics, and a pile of bricks.</p> <p>NOAA Ship Okeanos Explorer returned to better understand the site and to create a detailed, three-dimensional "map" of the wreck in collaboration with colleagues from the Bureau of Ocean Energy Management, other agencies, universities, the private sector, and the interested public.</p>		



Description of the Dive	<p>After approaching the site slowly, the ROV conducted a reconnaissance around the perimeter so the ROV and science team could become familiar with the overall layout before moving in for closer inspection. The dive plan included video transects over the site to capture complete imagery to create a 3D visual model of the wreck as well as a photomosaic. Observations made during the transects helped identify specific areas containing diagnostic artifacts and features. The time remaining after completing the video transects was spent investigating these high priority areas. Near the bow the anchor chain streams out across the bottom away from the wreck. The last few minutes of the dive, after examining priority areas, were spent following the chain but the dive was terminated before the ROV reached the end.</p>	
Notable Observations	<p>While much of the wooden hull including portions of the vessel that were above the waterline have been consumed by marine organisms, we observed traces of the lower hull in the bottom sediment, including the outline of frames (ribs) and planks, iron fasteners, and the chainplates that helped hold the ship's masts in place. It is a small site, no more than 66 feet long, and it was likely a small vessel with a crew of some three to five persons.</p> <p>Two mounds of rounded cobbles inside the hull indicate the use of stone ballast, and a pile of red bricks marks the location of the ship's galley, where meals were prepared. Lying close by, in an area where the ship's cabin would have been, a pile of conch shells suggests a stop in the Bahamas or Florida, where these conch would have been harvested or bought as food for the crew. Many personal items were concentrated in the vicinity of the brick pile including wine bottles, ceramic jugs and containers for food and other liquids; a small sewing kit with a pile of brass buttons; a slate; a tobacco pipe; and a comb; as well as the octant.</p> <p>The artifacts are indicative of a vessel sailing in the first half of the 19th century, possibly 1830s or 1840s.</p>	
Community Presence/ Absence (<i>community is defined as more than two species</i>)	<input checked="" type="checkbox"/> Corals and Sponges Present <input type="checkbox"/> Chemosynthetic Community Present <input type="checkbox"/> High biodiversity Community Present	<input type="checkbox"/> Active Seep or Vent <input type="checkbox"/> Extinct Seep or Vent <input type="checkbox"/> Hydrates Present
Overall Map of the ROV Dive Area		Close-up Map of Main Dive Site
		
Representative Photos of the Dive		



An octant and ceramic jug found near the brick pile.



ROV Deep Discoverer investigates a small pile of bricks on the Blake Ridge Shipwreck, a feature that was probably the galley area where food was prepared.

Samples Collected

No samples collect today

Please direct inquiries to:

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