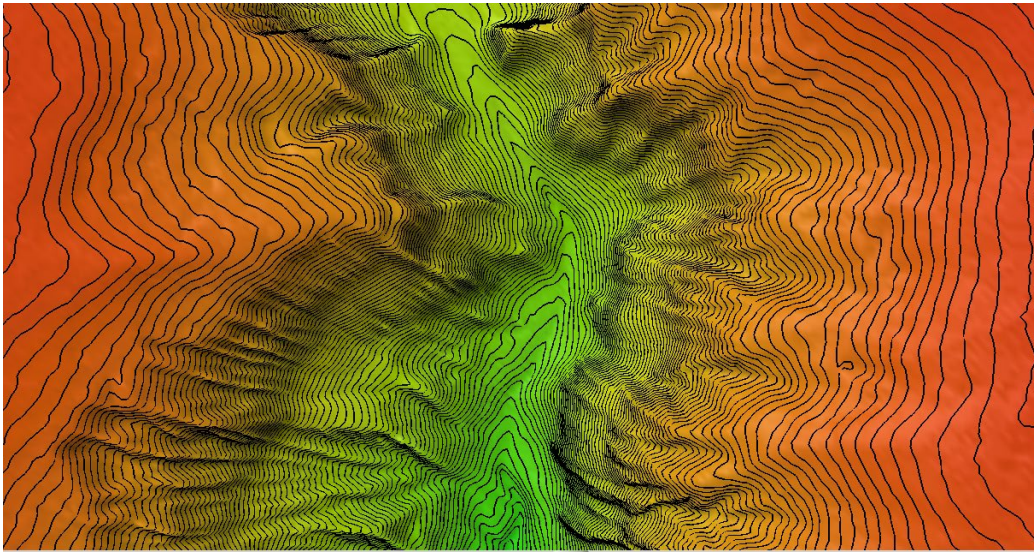


Okeanos Explorer ROV Dive Summary: EX-19-04, Dive 03, July 28, 2019

Dive Information

General Location Map	
General Area Descriptor	U.S. Northeast
Site Name	Hydrographer Canyon
Science Team Leads	Jan Albiez (Kraken Robotics)
Expedition Coordinator	Michael P. White (NOAA-OER)
ROV Dive Supervisor	Daniel Rogers (GFOE)
Mapping Lead	Michael P. White (NOAA-OER)

ROV Dive Name

Cruise	EX1904
Dive Number	DIVE03

Equipment Deployed

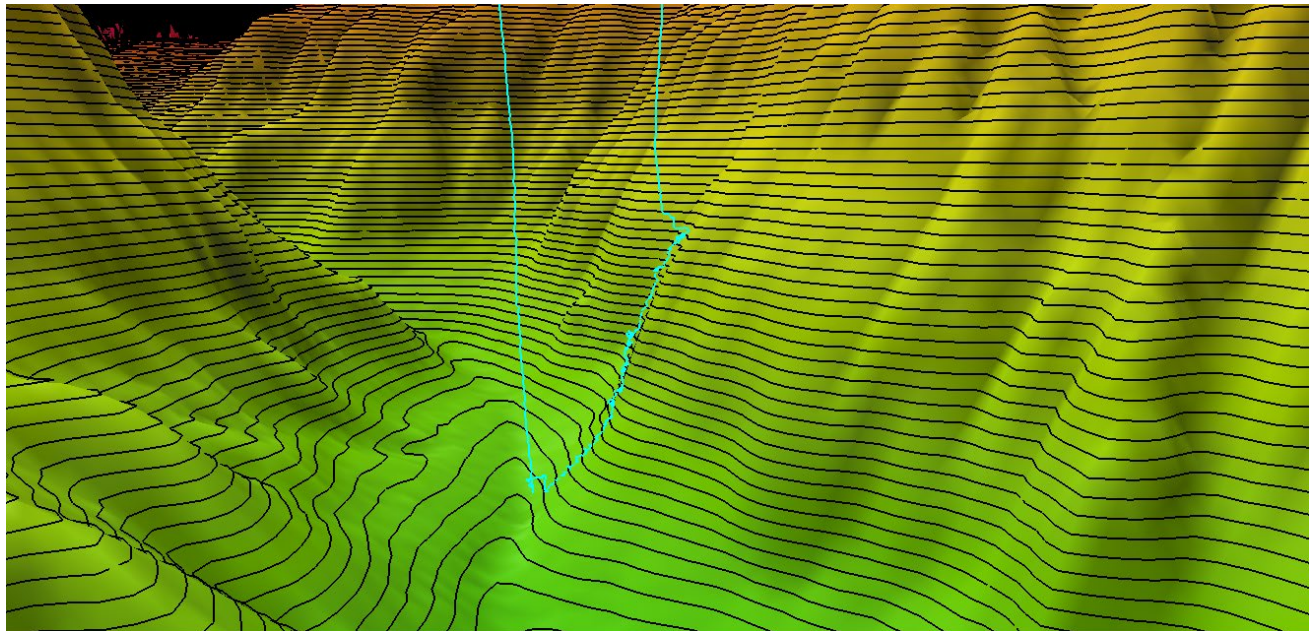
ROV	<i>Deep Discoverer</i>
Camera Platform	<i>Seirios</i>

Dive Purpose	Test and demonstrate integration of Kraken SeaVision® System
Dive Description	<p>Dive 03 was about 1 kilometer south of a previous OER ROV dive in Hydrographer Canyon. The site was chosen since the previous dive confirmed the presence of deepwater corals in the proximity. The dive track targeted a steep slope further down canyon. During the dive, varying size of bubblegum coral (<i>paragorgia</i> sp.) were observed on exposed rock outcrops. The science team used the SeaVision laser scanner to create high resolution 3D point clouds of these corals.</p>
Notable Observations	



Community Presence/Absence (community is defined as more than two species)	Corals and Sponges - Yes Chemosynthetic Community - No High biodiversity Community - No Active Seep or Vent - No Extinct Seep or Vent - No Hydrates - No
Feature Type	Canyon

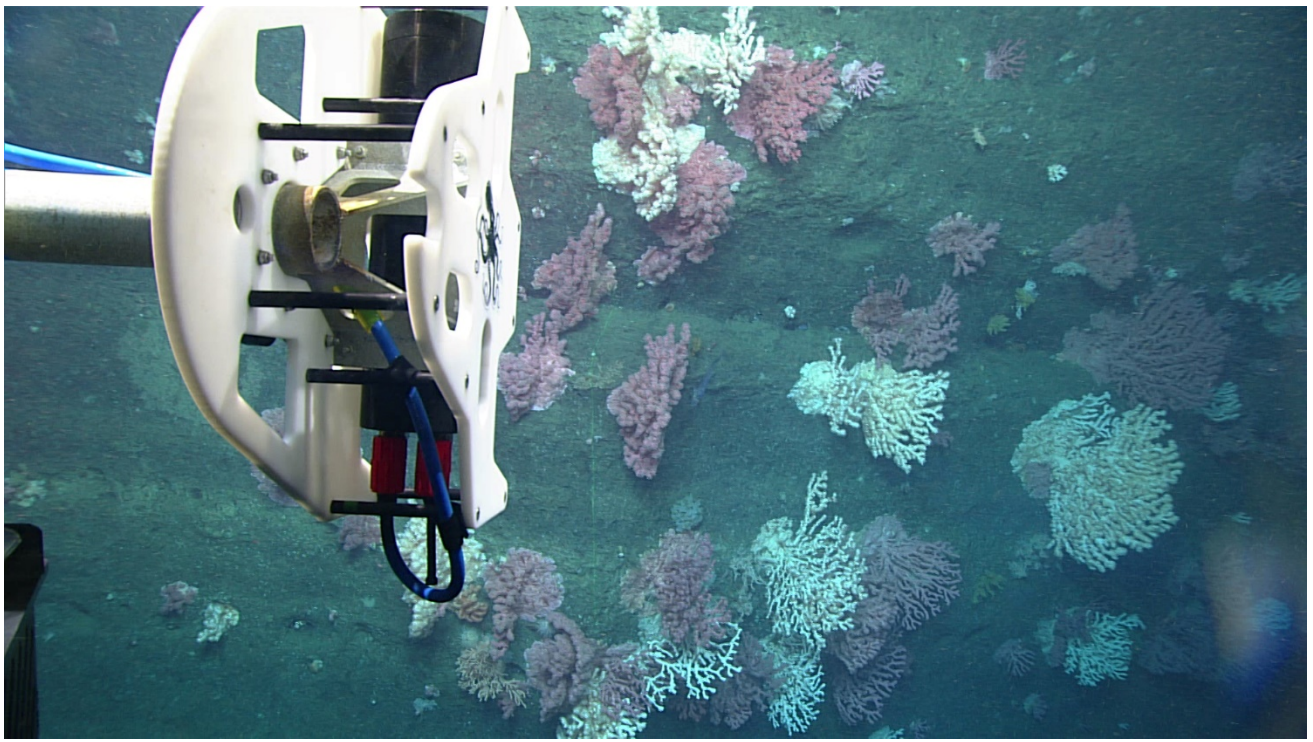
Close-up Map of Main Dive Site



EM302 Bathymetry with 1 Hz ROV Dive track in cyan. Vertical exaggeration 3x, 10 meter depth contours in black, 30 meter cell size.



Representative Photos of the Dive

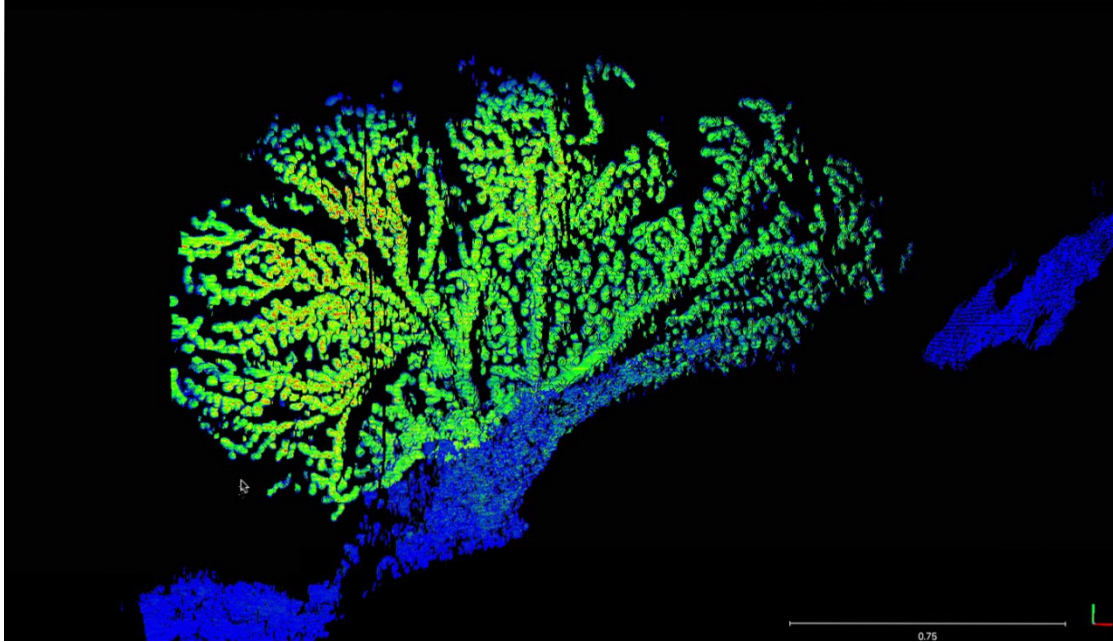


SeaVision laser scanner mounted on ROV *Deep Discoverer* about to scan colonies of bubblegum coral (*paragorgia sp.*) on an exposed rock outcrop.

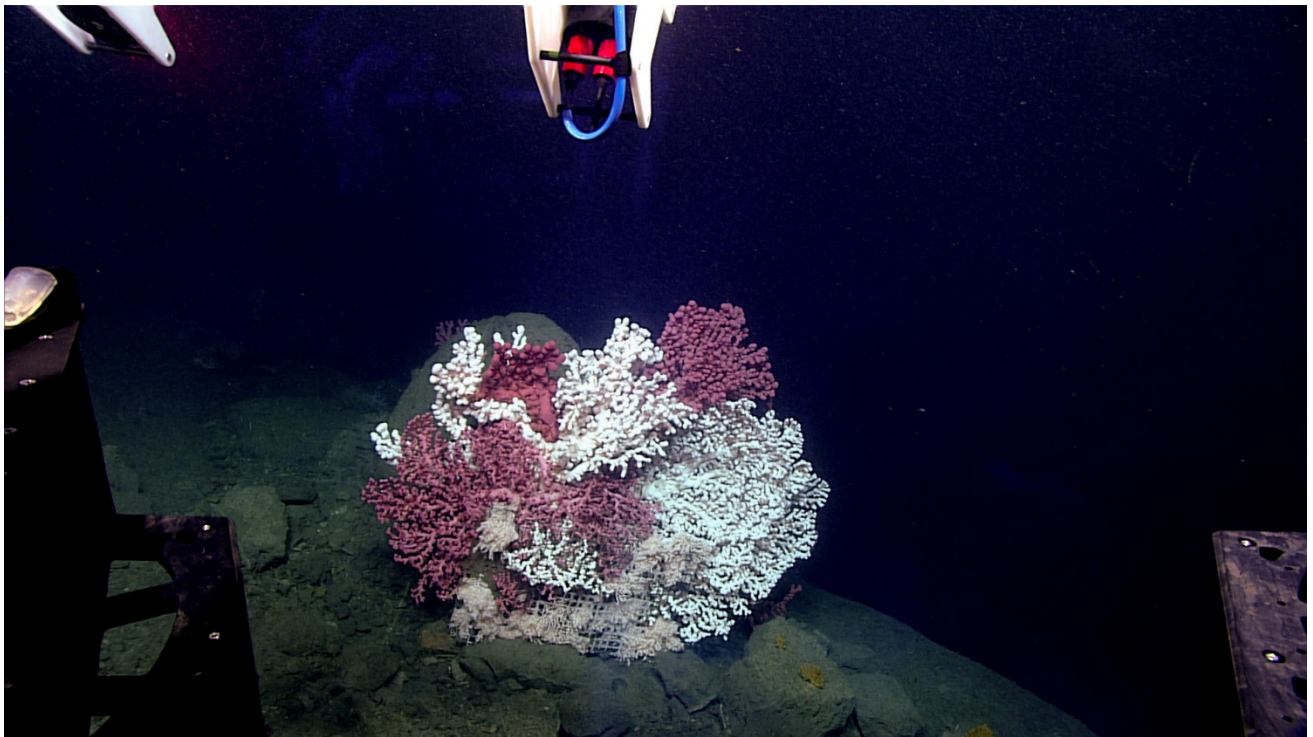


Active scanning of a large *paragorgia sp.*





3D point cloud of scanned *paragorgia sp.*



Additional example of deep water coral colonies observed on Dive 03.

Samples Collected - No samples were collected on EX1904

Please direct inquiries to:

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Silver Spring, MD 20910



**Ocean Exploration
and Research**

