



Okeanos Explorer ROV Dive Summary

Dive Information	
Dive Map	
Site Name	Unnamed Seamount West of Winslow Reef PIPA
Expedition Coordinator(s)	Brian RC Kennedy, Nick Pawlenko
ROV Lead(s)	Karl McLetchie
Science Team Lead(s)	Amanda Demopoulos and Steven Auscavitch
General Area Descriptor	Phoenix Islands Protected Area
ROV Dive Name	
Cruise	EX-17-03

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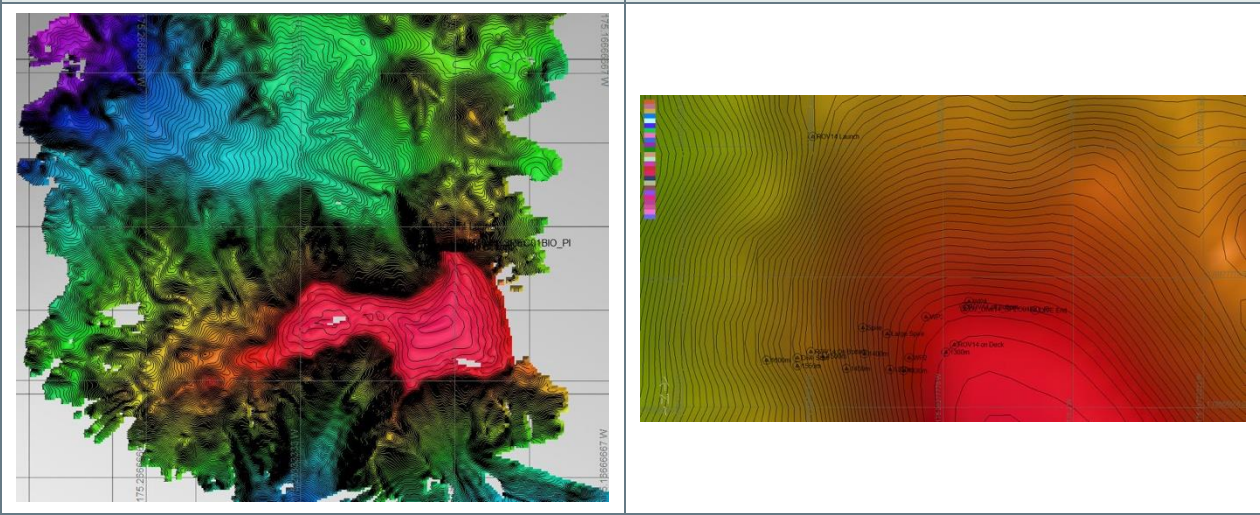
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Purpose of the Dive	<p>The general goal of this dive is to acquire baseline information on deep sea habitats, seafloor geology, and biological communities on features around Winslow Reef in the Phoenix Islands Protected Area (PIPA). Deep-sea environments around Winslow Reef are virtually unexplored leading to poor knowledge of biological resources protected by the reserves. This dive will provide some perspective on biological resources (e.g. fishes, biogenic habitat) as well as geological resources (crust precipitates) of the seamount. Understanding deep-sea coral distribution as well as bathyal fish communities is of great importance to inform management in the Phoenix Islands Protected Area and a nearby seamount in the US EEZ. The age of this seamount is not known.</p>		
Description of the Dive	<p>EX1703 dive #14 was on an unnamed seamount within the Winslow Reef Area, Phoenix Islands Protected Area. The dive track started on a sedimented seafloor at 1535m and progressed up a steep slope. Throughout the dive, we observed several live and dead <i>Walteria</i>-like glass sponges, loaded with associates, including ophiuroids, crinoids, barnacles, shrimp, ctenophores, and sometimes a goniasterid sea star. Other sponges included cf. <i>Tretopleura</i> and encrusting sponges. <i>Iridogorgia</i> cf. <i>magnispiralis</i> was the dominant octocoral present and several colonies were very large (~3.7 m). Other corals observed included chrysogorgiids (cf. <i>Chrysogorgia</i>, <i>Metallogorgia</i>, and an unknown planar form), sea pens (3 species: <i>Umbellula</i>, <i>Pennatulidae</i>, and unknown), primnoids (cf. <i>Narella</i>, <i>Callogorgia</i>), <i>Anthomastus</i>, bamboo (whip and a yellow nodal branching type), yellow plexaurid,</p>		

stoloniferans, acanthogorgiids, pink coralliid (*Hemicorallium* sp.), black coral (*Bathypathes*), and stony corals (cf. *Enallopsammia*, *Madrepora*, and unknown cup corals). Additional associates included chirostyliid squat lobsters (e.g., *Gastroptychus* sp.) and *Glyptelasma* barnacles on dead coral skeleton.

Fish included cusk eels (Ophediidae: *Bassozetus*, *Spectrunculus*, *Monomitopus*?), rattails (Macrouridae: cf. *Nezumia* and unknown), codling (Moridae: *Lepidion*), deep-sea spiny eels (Halosauridae: unknown), cutthroat eels (Synaphobranchidae: *Synaphobranchus affinis*), and an unknown black fish, possibly a whalefish (Cetomimidae).

Other invertebrates observed included a blind lobster (Polychelidae), stalked crinoids (*Proisocrinus ruberrimus*), holothurians (Synallactidae?), sea stars (*Pythonaster*, *Hymenaster*, *Henricia*, Zoroasteridae, unknown Goniasteridae, Benthoplectinidae), sea urchins (echinothuriids with paddle-shaped spines and aspidodiadematids), homolid crab with anemone associate, and xenophyophores. One of the highlights of the dive was observing a dumbo octopus (*Grimpoteuthis*) take flight during the first part of the dive. The octopus had a damaged arm and fin. In addition, we observed some examples of carnivory, including pycnogonids (*Colossendeis* sp.) feeding on an anemone, goniasterid sea stars feeding on sponges, and gastropods on a crinoid and corals.

Overall Map of the ROV Dive Area	Close-up Map of Main Dive Site
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Representative Photos of the Dive
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A Dumbo octopus encountered during the dive



A stalked crinoid

Samples Collected

Sample

Sample ID	EX1703_20170322T013359_D2_DIVE14_SPEC01BIO	
Date (UTC)	20170322	
Time (UTC)	01:33:59	
Depth (m)	1304.41	
Temperature (°C)	3.4	
Field ID(s)	Iridogorgia sp.	
Comments		

Please direct inquiries to:

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