

Purpose of the Dive

This dive was the first ever conducted on McCall Seamount in the group of topographic features referred to as the Geologist Seamounts. The dive surveyed the crest of a sharp ridge that extended north of the seamount at a depth of 2700 m. The survey employed the standard methodology of the D2 with the objectives of 1) making observations and collecting video and 2) collecting rock and biological samples.

Description of the Dive:

All of the dive objectives were completed. Nearly the full planned distance of the dive track was achieved. The ridge crest was covered with loose talus and was almost completely barren of animals, which was unexpected. This type of substrate continued throughout the dive except for a couple of small ledges consisting primarily of pillow lavas. Two basalt rocks were collected specifically for geology and one additional rock was collected as part of a coral sample. In total 4 coral samples (a stoloniferous hydrozoan, *Stauropathes* sp., a primnoid, and a *Schizopathes* sp? were collected.

Animals observed during the dive are listed below.

Cnidarians:

Chrysogorgia pinnata
Primnoid
Isididae unbranched
Keratoisis sp
Hydrozoan stoloniferous
Stauropathes sp.
Narella dichotoma
Keratoisis sp.
Schizopathes sp?
Actinostolidae
Bathypathes sp

Sponges

Hexactinellida various unidentified
Farrea nr occa erecta?
Semperella sp.
Caulophacus (oxydiscus) sp
Caulophacus (Caulodiscus) sp
Rossellidae?
Corbitellinae?

Echinoderms

Holothuroidean
Deimatidae
Unidentified sea star
Stalked crinoid Hyacinridae
Comatulina crinoid
Hymenaster sp
Glyptometra lateralis?

Arthropods

Nematocarcinus tenuirostris
Balanoid or verricid barnacles
Unidentified shrimp

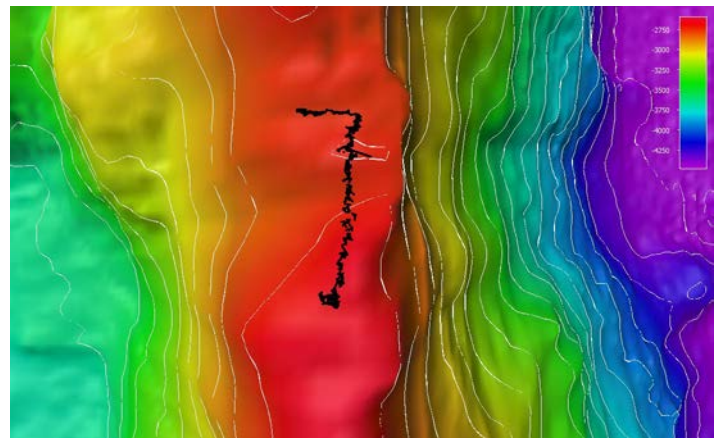
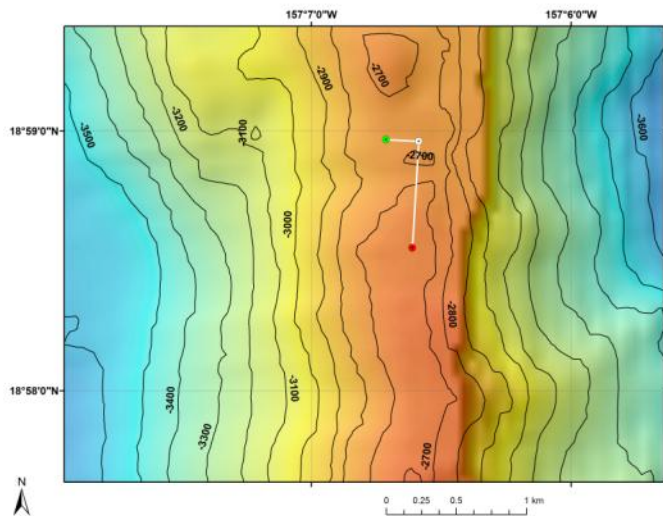
Fishes

Ophidiidae

Other

Overall Map of ROV Dive Area

Close-up Map of Main Dive Site



Bathymetry data for the dive site. Planned dive start and end points are shown as green and red dots, respectively.

Close-up showing actual ROV dive track as executed.

Representative Photos of the Dive



Collection of a vespicular basalt sample from the crest of the ridge at the beginning of the dive. The expected thick Mn crusting was not observed at this site.



Collecting of a potential Schizopathes sp at the end of the dive. If the field identification is correct, this is either a new record or new species for Hawaii.

Samples Collected

Sample ID	D2_DIVE04_SPEC01GEO
Date (UTC)	August 31, 2015
Time (UTC)	20:27:16
Depth (m)	2699
Temperature (°F)	1.67
Field ID(s)	Vespicular basalt



Comments		
Sample ID	D2_DIVE04_SPEC02BIO	
Date (UTC)	August 31, 2015	
Time (UTC)	23:40:32	
Depth (m)	2646	
Temperature (°F)	1.58	
Field ID(s)	Stauropathes sp.	
Comments		
Sample ID	D2_DIVE04_SPEC03GEO	
Date (UTC)	September 1, 2015	
Time (UTC)	0:05:04	
Depth (m)	2643	
Temperature (°F)	1.57	
Field ID(s)	Mn encrusted Basalt sample	
Comments		



Sample ID	D2_DIVE04_SPEC04GEO D2_DIVE04_SPEC04GEO_C01 D2_DIVE04_SPEC04GEO_C02	
Date (UTC)	September 1, 2015	
Time (UTC)	0:23:16	
Depth (m)	2634	
Temperature (°F)	1.57	
Field ID(s)	Mn encrusted Basalt sample Hydrozoan Polychaete Worm	
Comments		

Samples Collected

Sample ID	D2_DIVE04_SPEC05BIO	
Date (UTC)	September 1, 2015	
Time (UTC)	0:47:21	
Depth (m)	2638	
Temperature (°F)	1.58	
Field ID(s)	Primnoid Ophiuroid	
Comments		

Sample ID	D2_DIVE04_SPEC06BIO	
Date (UTC)	September 1, 2015	
Time (UTC)	0:57:03	
Depth (m)	2638	
Temperature (°F)	1.58	
Field ID(s)	Schizopathes sp	

Comments	
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