

Purpose of the Dive

This dive targeted the middle of the Keahole precious coral bed off the Kona Coast of the Big Island of Hawaii. The objectives were to (1) recover an acoustic current meter and three flow meters placed throughout the bed, (2) to make observations on nearby previously marked colonies, and (3) to spend the remaining time exploring the surrounding environment. Most of the Keahole bed is carbonate ledge habitat and this dive was intended to spend much of the dive time working the top edge of the drop off.

Description of the Dive:

All of the dive objectives were completed. The acoustic Doppler current meter and three flow meters were all found and recovered. Colonies of gold coral near these instruments or marked by flower pots at other locations were located and close-up imagery was acquired for comparison to photographs of the colonies taken over 3 years ago. In addition, time remained during the dive to collect two biological specimens, a black coral and a bamboo coral, as well as fossil coral branches.

Animals observed during the dive are listed below.

Cnidarians:

Acanthogorgia sp.
Corallium sp.
Hemicorallium cf. lauense
Isidella trichotoma?
Keratoisis sp. (collected)
Lepidisis olapa
Acanella dispar?
Paracis sp?
Plexauridae sp.
Callogorgia gilberti
Kulamanamana haumeae
Leiopathes annosa
Trissopathes pseudotristicha?
Chrysopathes sp (collected)
Calibelemnon symmetricum
Pennatula pearceyi
Hydrodendron gorgonoide
Stylobates aeneus
Single polyp scleractinian

Sponges

Regadrella sp

Echinoderms

Stereocidaris hawaiiensis
Sphaerocidaris ammophilis

Arthropods

Paromola sp
Squat lobster
Gooseneck barnacles
Plesionika sp
Sympagurus dofleini

Fishes

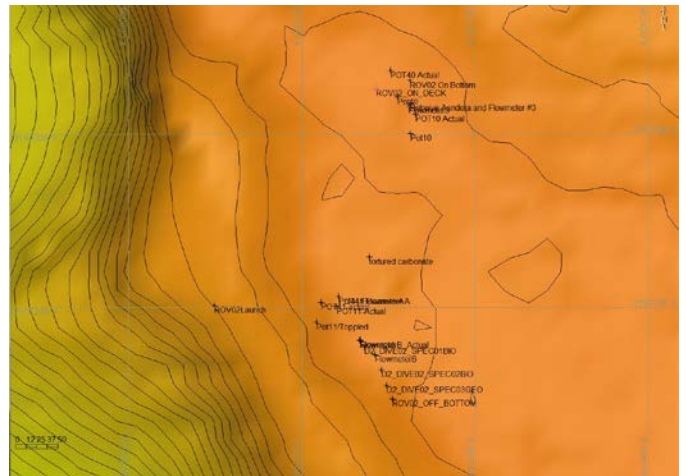
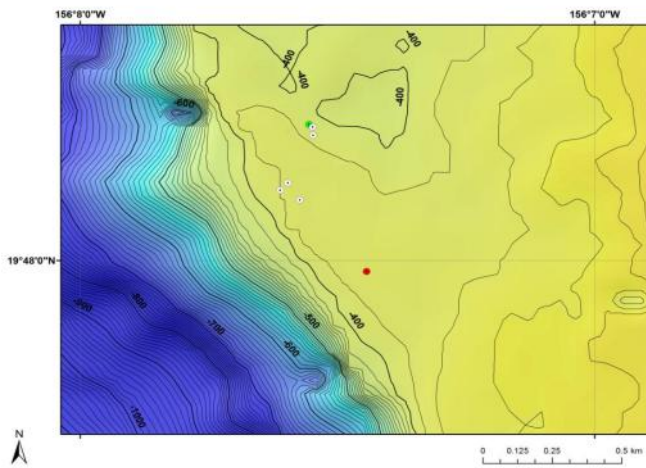
Chrionema chryseres
Chlorophthalmus prouidens
Hollardia goslinei
Ophichthid eel
Lophioides miacanthus
Epigonus glossodontus
Hoplostethus crassispinus
Scorpaenid
Satyrichthys engyceros
Sphenanthias sp

Other

Lyrocteis sp (benthic ctenophore)

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.

Hypack screen grab showing waypoints dropped during the actual ROV dive.

Representative Photos of the Dive




Recovery of the Andara ADCP that was placed on the site in 2012.

Gold coral (*Kulamanamana haumeae*) (yellow) in the early stages of colonizing and overgrowing a bamboo coral.


Samples Collected

Sample ID EX1504L3_D2_DIVE02_SPEC01BIO


Date (UTC) August 30, 2015

Time (UTC)	0:50:43	
Depth (m)	389	
Temperature (°F)	8.11	
Field ID(s)	Chrysopathes sp	

Comments	
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Sample ID	EX1504L3_D2_Dive02_SPEC02BIO	
Date (UTC)	August 30, 2015	
Time (UTC)	1:43:45	
Depth (m)	393	
Temperature (°F)	8.11	
Field ID(s)	Keratoisis sp	

Comments	
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Sample ID	EX1504L3_D2_Dive02_SPEC03GEO	
Date (UTC)	August 30, 2015	
Time (UTC)	1:56:56	
Depth (m)	389	
Temperature (°F)	8.18	
Field ID(s)	Fossil Coral	

Comments	
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Please direct inquiries to:

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