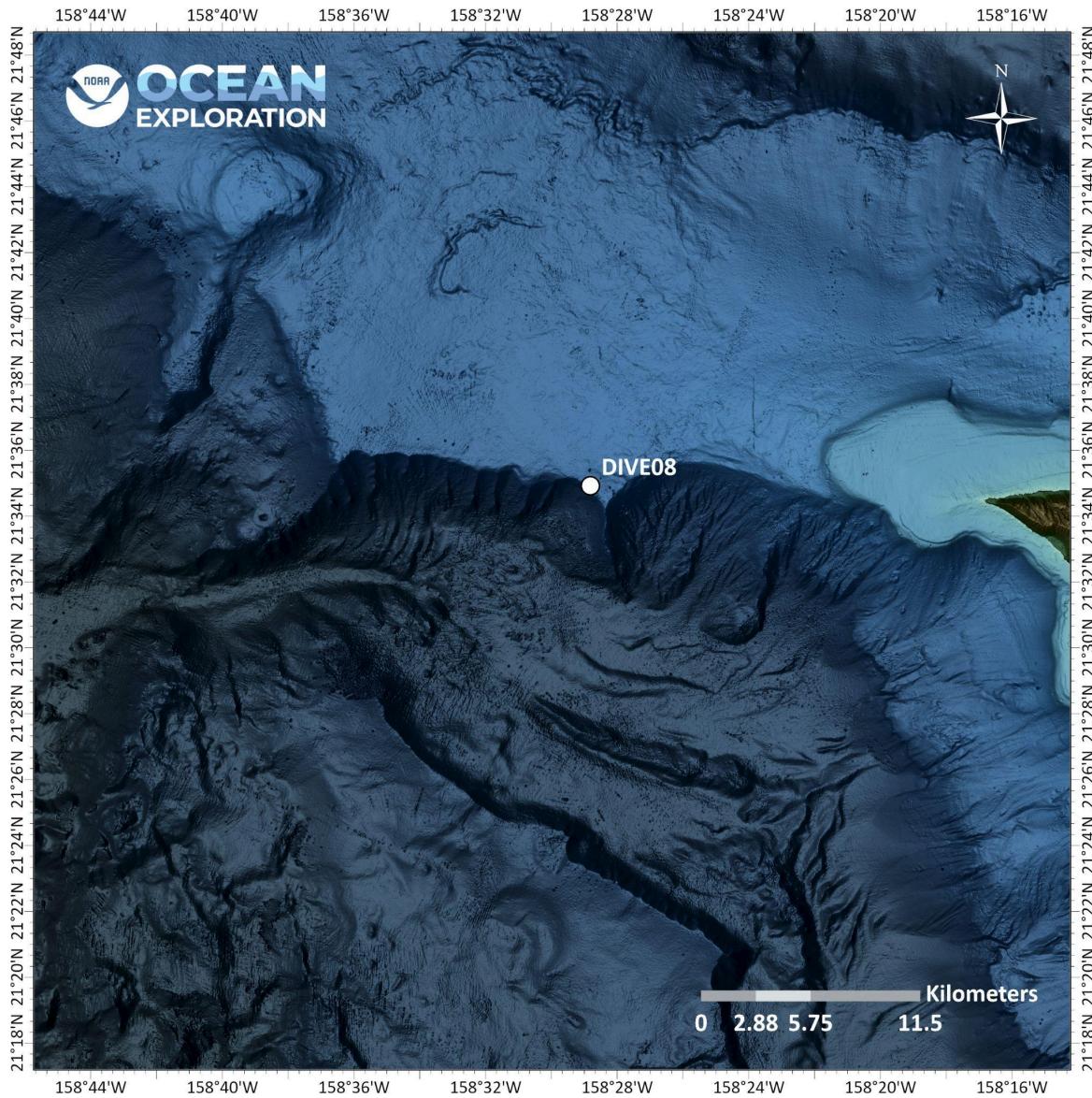


ROV Dive Summary

EX2502, Dive 08, March 26, 2025

General Location Map



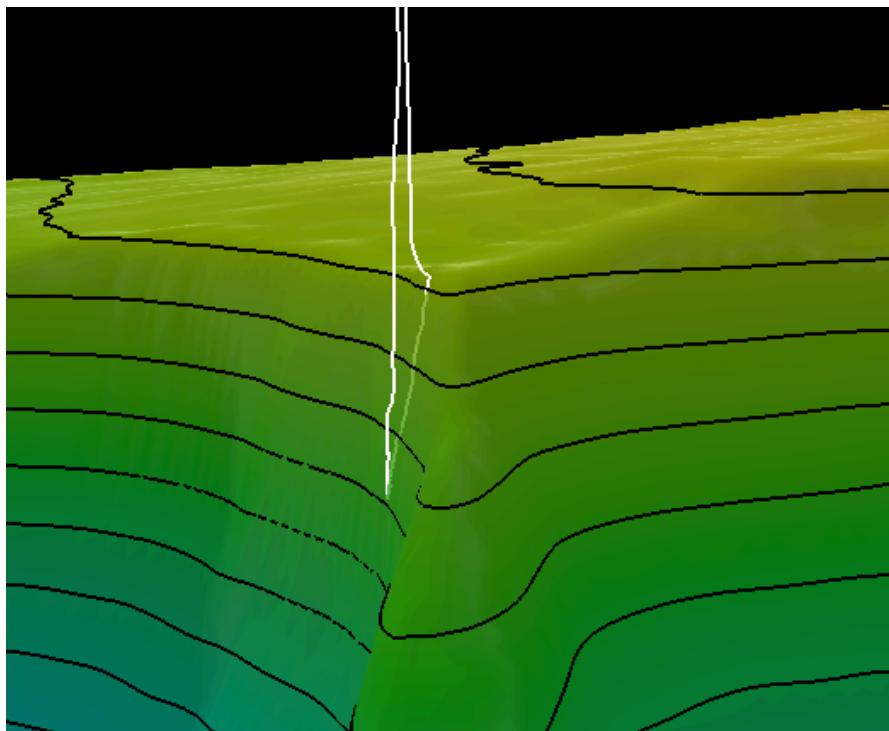
Dive Information

Site Name	Ka'ena Slope
General Area Descriptor	Hawaiian Islands
Science Team Leads	Trish Albano, Caitlin Ruby, Jennifer Green, Sahara Rios-Bonilla
Expedition Coordinator	Shannon Hoy
ROV Dive Supervisor	Chris Ritter
Dive Purpose	Conduct shakedown engineering objectives
Maritime Heritage Restrictions	No
ROV Dive Summary Data	<p>Dive Type: Normal</p> <p>In Water: 2025-03-26T18:29:06.817968 21.56747764906697 ; -158.47685171546362</p> <p>On Bottom: 2025-03-26T19:51:49.952514 21.57044570428664 ; -158.47510044357003</p> <p>Off Bottom: 2025-03-27T00:29:09.085219 21.570851832338423 ; -158.4740209273632</p> <p>Out Water: 2025-03-27T01:02:32.626349 21.572184 ; -158.472927</p> <p>Dive Duration: 6:33:25</p> <p>Bottom Time: 4:37:19</p> <p>Max Vehicle Depth: 1205.1 m</p> <p>Min Seafloor Depth: 889.0 m</p> <p>Distance Travelled: 168.0 m</p>
Dive Description	This engineering shakedown dive was focused on testing the ROV's camera and updated lighting systems. The ROV ascended up a Basalt wall that terraced with the occasional flat areas. Coral density appeared to increase as the ROV moved upslope into shallower waters until reaching a coral garden at the top. One glass sponge was collected; three water samples were collected and processed for eDNA.
Notable Observations	Numerous deep sea coral and sponge species, including: Acanthogorgiidae, Chrysogorgiidae, Keratoisididae, Paragorgiidae, and Hexactinillidae.
Community and Habitat Observations	<p>Corals and Sponges — Present</p> <p>Chemosynthetic Community — Absent</p> <p>High biodiversity Community — Present</p> <p>Active Seep or Vent — Absent</p> <p>Extinct Seep or Vent — Absent</p> <p>Hydrates — Absent</p>
CMECS Feature Type(s)	Scarp / Wall

Equipment Deployed

ROV	<i>Deep Discoverer</i>
Camera Platform	<i>Seirios</i>
ROV Measurements	The following ROV measurements, data streams and equipment are used on each ROV deployment: CTD, depth, scanning sonar, USBL position, altitude, heading, attitude, high-resolution cameras, low resolution cameras, manipulator arms, suction sampler, sample drawers and thrusters.
Equipment Malfunctions	

Close-Up Map of Main Dive Site



Smoothed ROV dive track in white on 61x61 cell size bathymetry, 3x vertical exaggeration, depth in meters, 100 meter contours.

Representative Photos of the Dive



Anemone on steep slope of scarp feature.

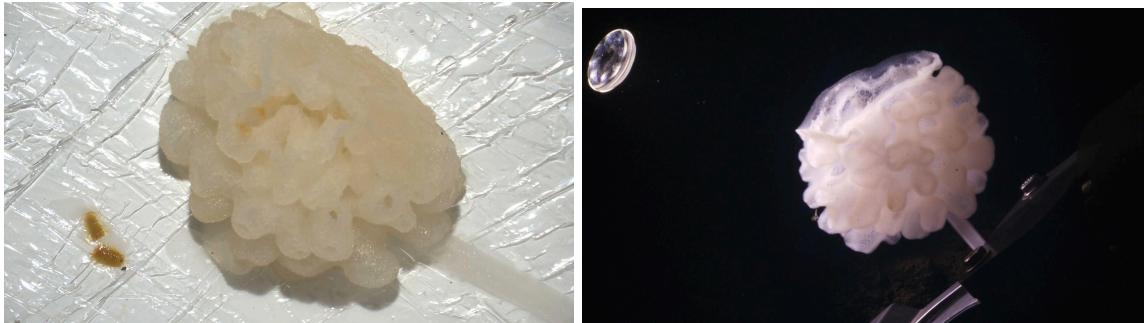


Holothuria in water column with Schilling arm light beam.



Coral garden at the top of scarp feature.

Samples Collected



Sample ID	EX2502_D08_01B
Date (UTC)	20250326
Time (UTC)	202247
Depth (m)	1183.0400390625
Latitude (decimal degrees)	21.5704727172852
Longitude (decimal degrees)	-158.474945068359

Temp. (°C)	3.46399998664856
Field ID(s)	Hexactinella
Comments	firm, cream white in color, audibly crunchy, 16 cm long including stalk, top sponge is approximately 6cm tall and 8 cm diameter

Associates Sample ID:	EX2502_D08_01B_A01B
Field Identification:	Polychaeta
Count:	1

Niskin Sampling Summary

Sample ID	EX2502_D08_02W
Date (UTC)	20250326
Time (UTC)	202548
Depth (m)	1183.68200683594
Latitude (decimal degrees)	21.5704708099365
Longitude (decimal degrees)	-158.474945068359
Bottle Number	Niskin Bottle 1
Temperature	3.47300004959106
Dissolved Oxygen (mg/L)	1.86099994182587
Treatment	DNA/RNA Shield

Sample ID	EX2502_D08_03W
Date (UTC)	20250326
Time (UTC)	235147

Depth (m)	949.713012695313
Latitude (decimal degrees)	21.5707950592041
Longitude (decimal degrees)	-158.473785400391
Bottle Number	Niskin Bottle 2
Temperature	4.48400020599365
Dissolved Oxygen (mg/L)	1.557000041008
Treatment	DNA/RNA Shield

Sample ID	EX2502_D08_04W
Date (UTC)	20250327
Time (UTC)	002318
Depth (m)	896.810974121094
Latitude (decimal degrees)	21.5708827972412
Longitude (decimal degrees)	-158.473663330078
Bottle Number	Niskin Bottle 3
Temperature	4.7189998626709
Dissolved Oxygen (mg/L)	1.45299994945526
Treatment	DNA/RNA Shield

Direct inquiries to:

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