

ROV Dive Summary, EX-2201, Dive 01, February 24, 2022

General Location Map



Dive Information

Site Name	Mississippi Mud
General Area Descriptor	Northern area of Gulf of Mexico
Science Team Leads	Karl McLetchie
Expedition Coordinator	Kimberly Galvez
ROV Dive Supervisor	Karl McLetchie
Sample Data Manager	Anna Lienesch
Mapping Lead	Sam Candio/Thomas Morrow

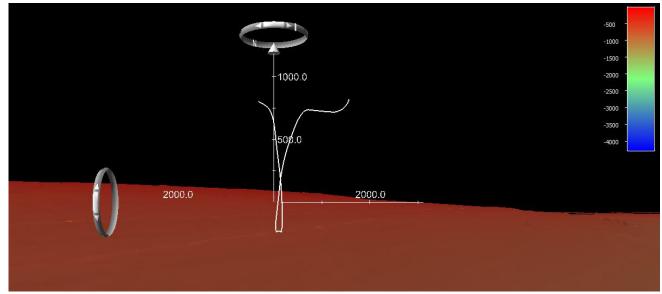
Dive Purpose	The first engineering dive of the ROV Shakedown. Primary objectives include testing new	
	motors, motor controllers, lights, cameras, and hydraulic systems on the ROVs.	
Was the dive	No	
restricted for Underwater		
Cultural Heritage?		
ROV Dive	Dive Summary: EX2201_DIVE01	
Summary Data	ллллллллллллллллллллллллллллллл	
	Dive Type: Normal	
	In Water: 2022-02-24T18:48:07.415071	
	29.213335534241725 ; -87.87549864109008	
	On Bottom: 2022-02-24T19:12:44.393630	
	29.21250737978952 ; -87.87263141810566	
	Off Bottom: 2022-02-24T22:04:14.494317	
	29.212415962099733 ; -87.87316173469813	
	Out Water: 2022-02-24T22:46:05.022642	
29.21065621703257 ; -87.86512828215713		
	Dive Duration: 3:57:57	
	Bottom Time: 2:51:30	
	Max Vehicle Depth: 489.7 m	
	Min Seafloor Depth: 488.6 m	
	Distance Traveled: 79.7 m	
Dive Description	Dive 01 was delayed due to ROV software issues. Bottom was reached at approximately 13:20 CST. The ROV approached a muddy bottom with some coarser-grain material scattered on top. Copepods and pelagic shrimp were present. A fuzzy-like arms white with a pink tone lobster was observed coming out of a burrow and retreated when faced with D2. A purple-white sea anemone was observed. A lance fish. Numerous viperfish. Some benthic holuthorians observed from Seirios.	
Notable Observations	A hairy-armed white with a pink tone lobster was observed coming out of a burrow and retreated when faced with D2.	
Community and	Corals and Sponges - Absent	
habitat	Chemosynthetic Community - Absent	
observations	High biodiversity Community - Absent	
	Active Seep or Vent - Absent	
	Extinct Seep or Vent - Absent	
	Hydrates – Absent	
CMECS Feature Type(s)	Fine grain unconsolidated sediment substrate	
SeaTube Link	https://data.oceannetworks.ca/SeaTubeV3?resourceTypeId=600&resourceId=5860	
(science		
annotation		
system)		



Equipment Deployed

ROV	Deep Discoverer
Camera Platform	Seirios
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. The section below notes if any of these sensors were malfunctioning or not operational
Equipment Malfunctions	Software issue caused delay. Starboard rail camera cut out.

Close-up Map of Main Dive Site



Smoothed ROV dive track in white on 3x vertical exaggeration, depth in meters.

Representative Photos of the Dive





A fuzzy-like arms white with a pink tone lobster was observed coming out of a burrow and retreated when faced with D2 with a shrimp in the foreground (blurry).



A purple-white sea anemone was observed with a long foot dug into the sediment.

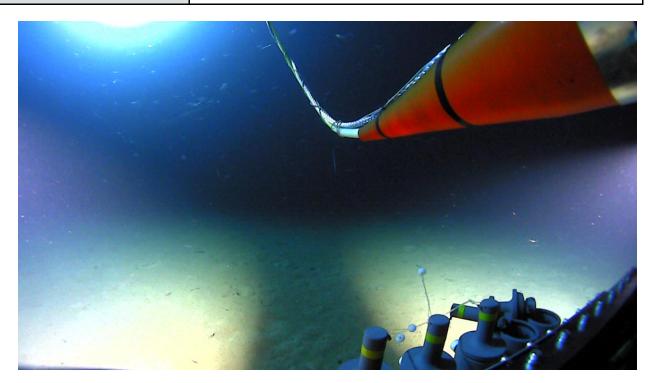
Samples Collected -

None.



Niskin Sampling Summary

Sample ID	EX2201_D01_01W
Date (UTC)	20220224
Time (UTC)	20:43:41
Depth (m)	489.5453
Latitude (decimal degrees)	29.212418
Longitude (decimal degrees)	-87.873304
Bottle number	NISKIN 1
Temperature (°C)	7.93663
Dissolved Oxygen (ml/L)	2.597469
Treatment	eDNA collection



Scientists Involved (provide name, email, affiliation)

Name	Email	Affiliation
None		

Please direct inquiries to:

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