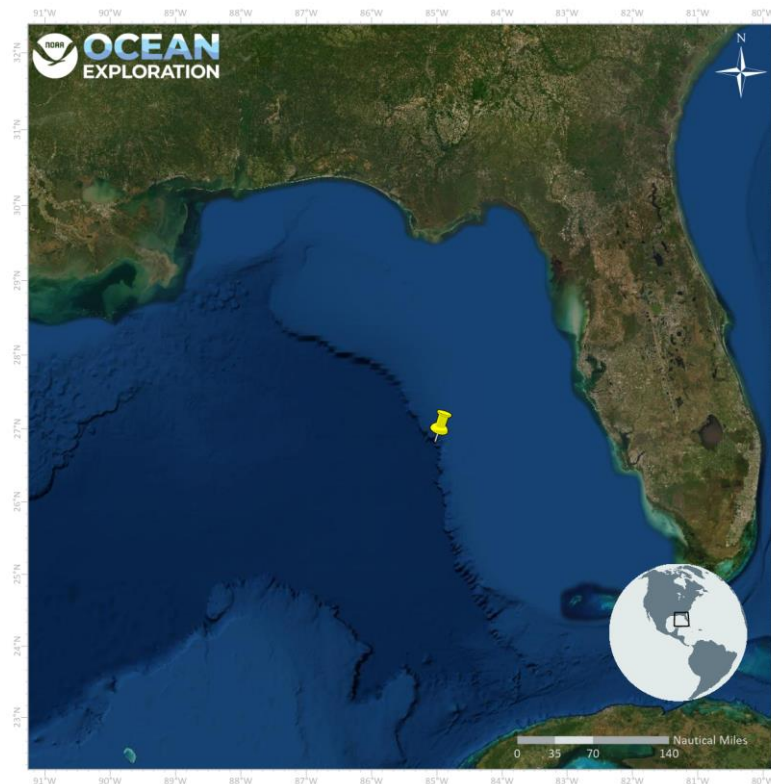


ROV Dive Summary, EX-22-01, Dive 04, February 27, 2022

General Location Map



Dive Information

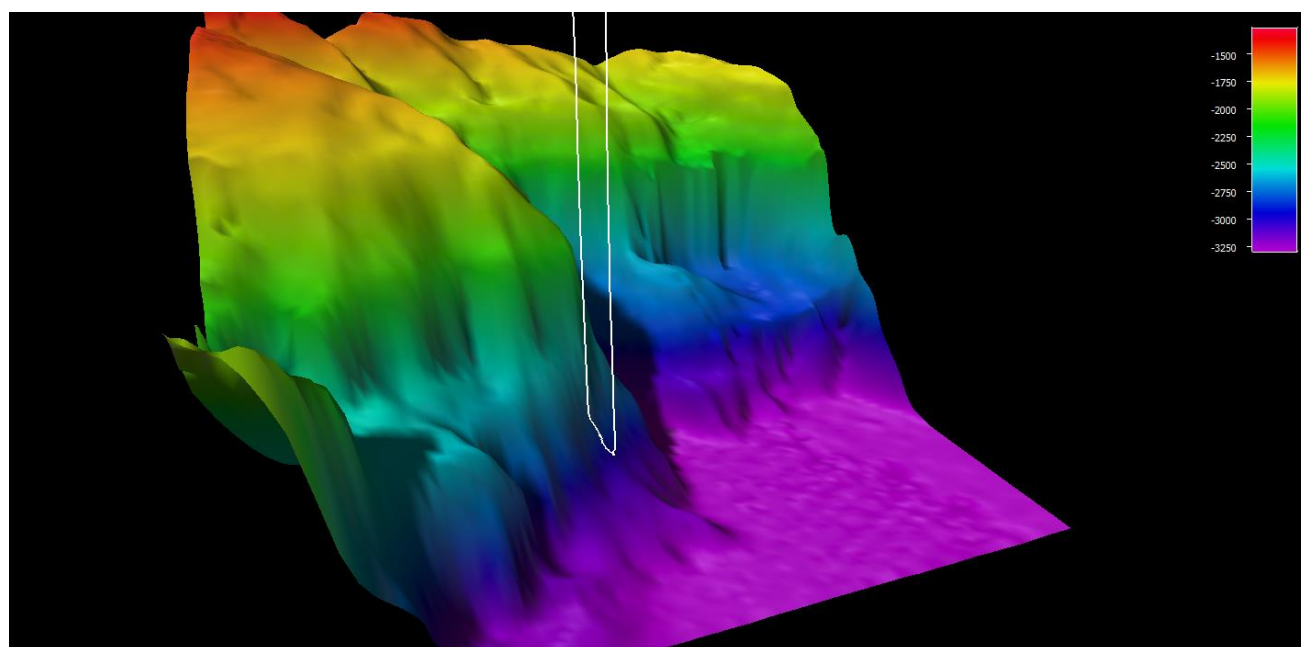
Site Name	"Canyon Step"
General Area Descriptor	West Florida Shelf
Science Team Leads	Karl McLetchie, Thomas Morrow, Anna Lienesch
Expedition Coordinator	Kimberly Galvez
ROV Dive Supervisor	Karl McLetchie
Sample Data Manager	Anna Lienesch
Mapping Lead	Sam Candio
Dive Purpose	Engineering focus

CMECS Feature Type(s)	Unconsolidated sediments with large boulders and a cliff face.
SeaTube Link (science annotation system)	https://data.oceannetworks.ca/SeaTubeV3?resourceTypeId=600&resourceId=5890

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. The section below notes if any of these sensors were malfunctioning or not operational
Equipment Malfunctions	None.

Close-up Map of Main Dive Site

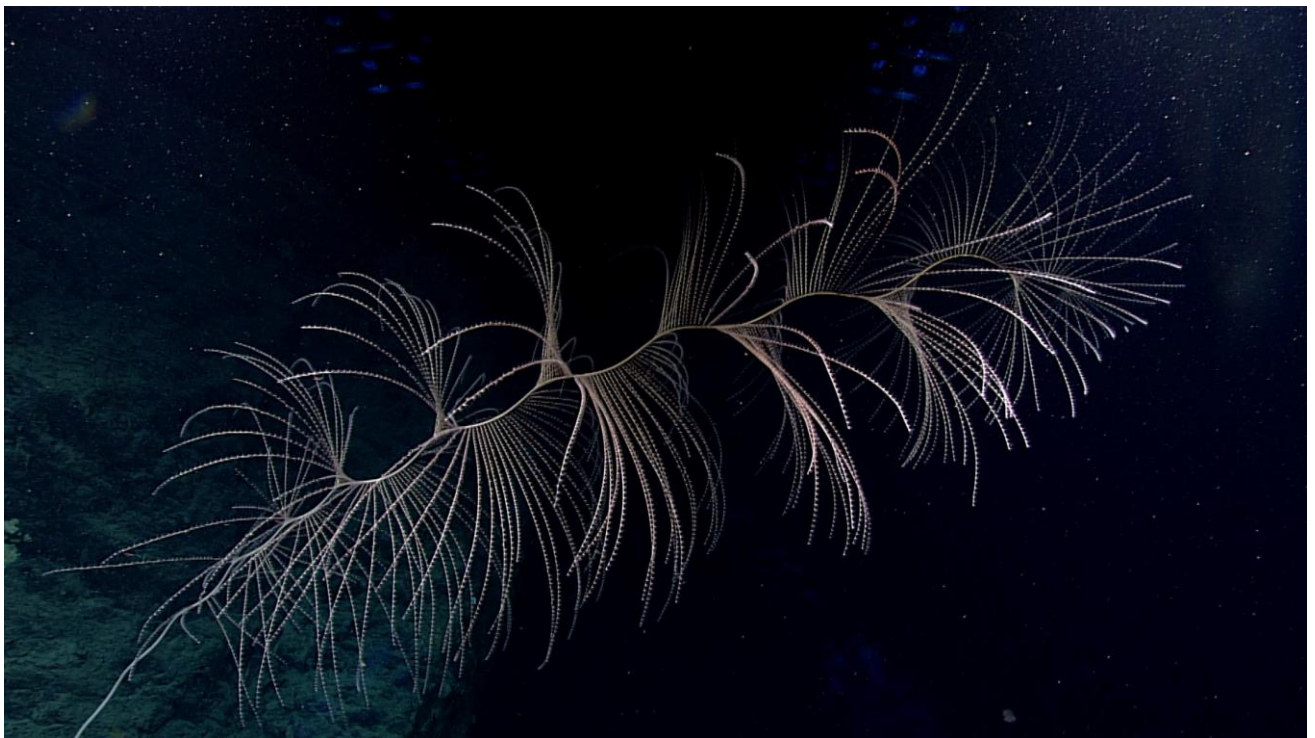


Smoothed ROV dive track in white with 3x vertical exaggeration bathymetry, depth in meters.

Representative Photos of the Dive



A purple slime star observed during the dive on fine to medium grained carbonate sediment.

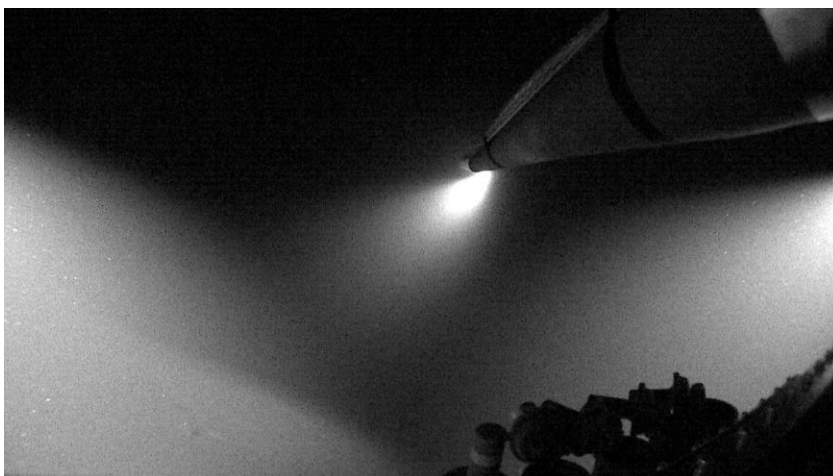


An at least 2 meter long *Iridigorgia megaspiralis* coral observed in the middle of the dive on a hard substrate surface (likely fallen blocks from the canyon wall).

Samples Collected -

None.

Niskin Sampling Summary



Sample ID	EX2201_D04_01W
Date (UTC)	20220227
Time (UTC)	19:55:10
Depth (m)	2912.5242
Latitude (decimal degrees)	26.834471
Longitude (decimal degrees)	-85.052906
Bottle number	NISKIN 1
Temperature (°C)	4.36254
Dissolved Oxygen (ml/L)	4.642421
Treatment	Longmire's Buffer Solution



Sample ID	EX2201_D04_02W
Date (UTC)	20220227
Time (UTC)	20:53:58
Depth (m)	2864.5712
Latitude (decimal degrees)	26.835061
Longitude (decimal degrees)	-85.052325
Bottle number	NISKIN 2
Temperature (°C)	4.3734
Dissolved Oxygen (ml/L)	4.634231
Treatment	Longmire's Buffer Solution



Sample ID	EX2201_D04_03W
Date (UTC)	20220227
Time (UTC)	20:58:39
Depth (m)	2864.9429

Latitude (decimal degrees)	26.835073
Longitude (decimal degrees)	-85.052334
Bottle number	NISKIN 3
Temperature (°C)	4.43426
Dissolved Oxygen (ml/L)	4.630864
Treatment	Longmire's Buffer Solution

Scientists Involved (provide name, email, affiliation)

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