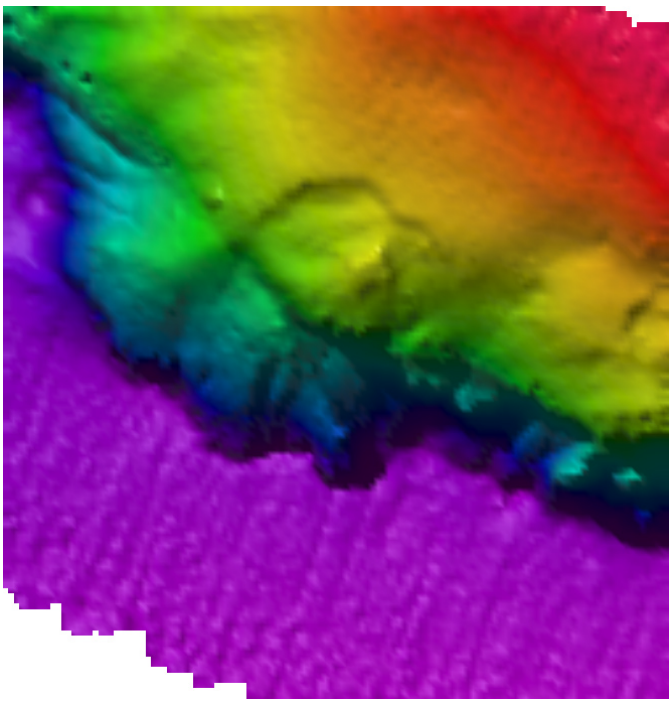
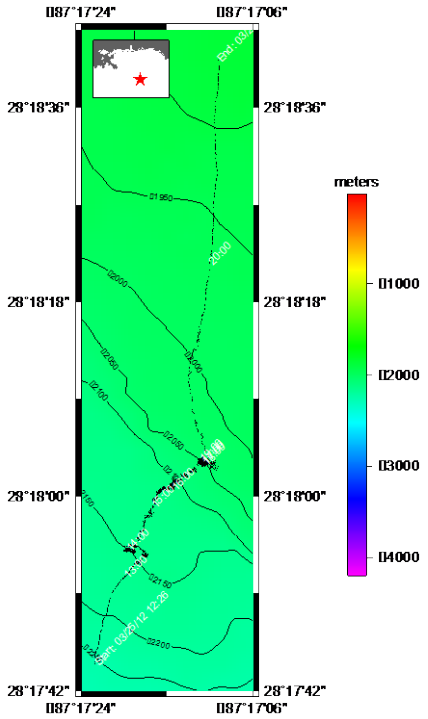
OKEANOS EXPLORER ROV DIVE FORM

Site Name	DeSoto Canyon (DC) #673							
ROV Lead/Expedition Coordinator	Dave Lovalvo/Jeremy Potter							
General Area Descriptor	~260nm west of Tampa, Florida							
UTC Date & Time	Deployment	3/25/2012 12:12 PM						
	Recovery	3/25/2012 18:58 PM						
Bottom Time [HH:MM]	4:58							
Landing Time & Location	UTC Time	14:00			Depth [m]	2145		
	Latitude	28	º	17.925	'	N		
	Longitude	87	º	17.322	'	W		
Off Bottom Time & Location	UTC Time	18:58			Depth [m]	2020		
	Latitude	28	º	30098	'	N		
	Longitude	87	º	28644	'	W		
ROV Dive Name	Cruise Season	Leg	Dive Number					
	EX1202	LEG02	ROV5					
Equipment Deployed	ROV:	Little Hercules						
	Camera Platfom:	Seirios Camera Platform						
ROV Measurements	☒ CTD	☒ Depth	☒ Altitude					
	☒ Scanning Sonar	☒ USBL Position	☒ Heading					
	☒ Pitch	☒ Roll	☒ HD Camera					
	☒ Low Res Cam 1	☒ Low Res Cam 2						
Equipment Malfunctions	None							
Special Notes	Click here to enter text.							
Scientists Involved *(please provide name / location / affiliation / email)*	Tim Shank (on-board Science Lead), EX, WHOI, tshank@whoi.edu Pen-Yuan Hsing, PSU, penyuan.hsing@psu.edu Santiago Herrera, WHOI, sherrera@mit.edu Taylor Heyl, WHOI, theyl@whoi.edu Eleanor Bors, WHOI, ekbors@gmail.com Catriona Munro, WHOI, cmunro@whoi.edu Bob Carney, LSU, rcarne1@lsu.edu Erik Cordes, Temple, ecordes@temple.edu Andrea Quattrini, Temple, andrea.quattrini@temple.edu Peter Etnoyer, NOAA, Peter.Etnoyer@noaa.gov Mike Vecchione, Smithsonian, VecchioneM@si.edu							

Purpose of the Dive: To explore a position south of the DeSoto Canyon (DC) in the lease block #673. Seep and coral communities have been reported in the region, based on two previous dives. We will explore the lithology or physical character of the seafloor starting on what we think is an apparent breakout of sediment or a slump over the escarpment, and then as we proceed upslope encounter the escarpment proper. We will explore the potential differences in fauna associated with these different substrates

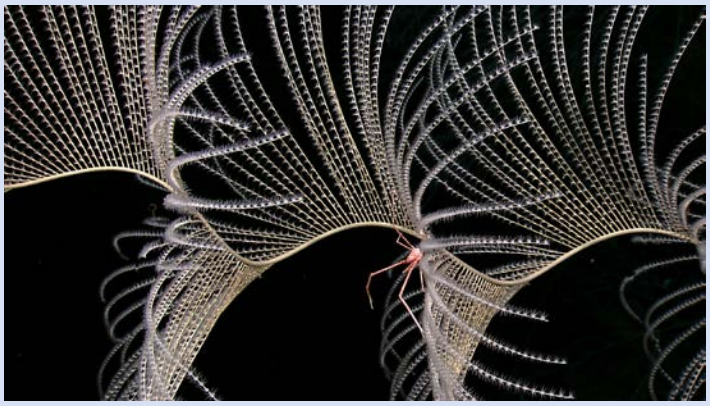
Description of the Dive:

On bottom at 28 17.925N 87 17.322W, depth 2145m, LH landed on soft sediment covered with pteropod shells before transiting at heading 035 toward the scarp. Synaphobranchid eels and holosaur fish were visible and we stopped to image a Halosaur at 1409, 2146m depth. At 1412 we encountered a coral not seen before, thought to be a pennatulid octocoral. Looking East/NE, bottom temp 4.28C on the northern end of slump, we then made a move toward the scarp over mottled sediments with fewer pteropod shells and some holothurians, including benthothuria, Peniagone/Scotoannas and pseudostichopus. At 1429, LH began moving moving NE over rippled sediment at a heading of 030, seeing hermit crabs, squat lobsters, some sargassum and a few small octocorals (one new sea pen at 1436). A dark/light sediment contact became apparent, 28 17.961 87 17.287W, thought to be a surface expression of a buried fault. As LH followed this contact, we encountered a tripod fish and pycnogonid, small cup corals and crab carapaces as we continued maneuvering over sediment with pteropod shells. At a small isolated rock with hermit crabs, anemones and worm tubes, 28.30004N -87.28774W, we found a paramuricid coral with an ophiuroid associate and stopped to image. While there, we also imaged a notacanthid fish and Bathylotes holothurian before traversing upslope over sediment. At 1536, 28.30026N, -87.28735W we encountered the first substantial rocky area of this dive with multiple corals and dropped a virtual target "DC005 rocky wall" as we stopped to survey and image this area. This area appeared to have a higher diversity of corals than previously seen, including Paramuricea, two different morphs of Irridogorgia with shrimp and amphipod associates and Chrysogorgia. At 1638, we placed a virtual target DC –06 along this coral wall. At 1657, while still surveying and imaging the wall, we found abundant bamboo and whip corals, bathypathes, shrimp, multiple other corals, sponges and crinoids. At 1713, we stopped to image a Lepidisis coral and crinoid before coming down 6 meters to image zoanthids covering bamboo with 3 chirostylid crabs. At 1748 we imaged a stoloniferan octocoral colonizing bare skeleton between zoanthid parasite and isidid and then observed Paragorgia growing out of a bamboo coral skeleton. We continued close up imaging of this coral wall until the end of the dive at 1852, 28.30080N -87.28637W.

Overall Map of ROV Dive Area	Close-up Map of Main Dive Site
	

Representative Photos of the Dive

EX1202L2_IMG_20120325T165502Z_ROVHD_COR_SQA_00
On this dive we discovered two morphs of Iridogorgia coral. This one, with its spiral pattern was host to several squat lobsters.



EX1202L2_IMG_20120325T175320Z_ROVHD_COR_SQA_00
Close up of squat lobster living in association with Iridogorgia.

Please direct inquiries to:

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