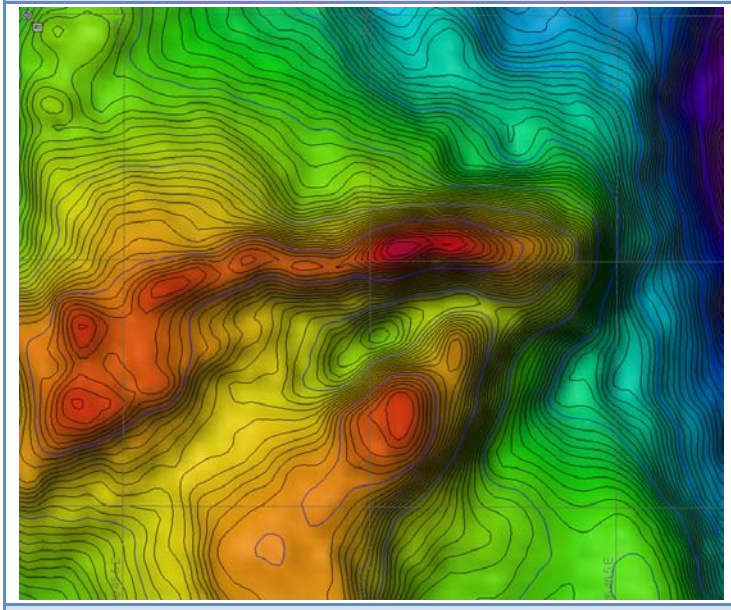
OKEANOS EXPLORER ROV DIVE FORM

Site Name	Paradise Valley							
ROV Lead	Dave Lovalvo							
General Area Descriptor	490 km NNE of Bitung, Indonesia							
UTC Date & Time	Deployment	7/5/2010 12:28 AM						
	Recovery	7/5/2010 12:28 AM						
Bottom Time [HH:MM]	[03:20]							
Landing Time & Location	UTC Time	03:13			Depth [m]	2700		
	Latitude	5	º	22.606	′	N		
	Longitude	126	º	46.017	′	E		
Off Bottom Time & Location	UTC Time	06:33			Depth [m]	2640		
	Latitude	5	º	22.478	′	N		
	Longitude	126	º	45.943	′	E		
ROV Dive Name	Cruise Season	Leg	Dive Number					
	EX1004	LEG02	ROV06					
Equipment Deployed	ROV:	Little Hercules						
	Camera Platfom:	Phoenix 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	During the descent a fuse blew on the lateral thruster. Movement during the dive was hampered but by no means compromised operations.							
Special Notes	Click here to enter text.							
Scientists Involved *(please provide name / location / affiliation / email)*	David Butterfield/Seattle ECC/PMEL Verena Tunnicliffe/Seattle ECC/UVIC Tim Shank/WHOI/WHOI Santiago Herrera (student)/WHOI/WOI Jill McDermott (student)/WHOI/WOI Catriona Munro (student)/WHOI/WOI Elizabeth Silbert (student)/WHOI/WOI Ellie Bors (student)/Seattle ECC/WHOI Jim Holden/Jakarta ECC/UMASS Xerandy – EX Control Room/Indonesia John Sherrin (Student) – EX Control Room/Indonesia							

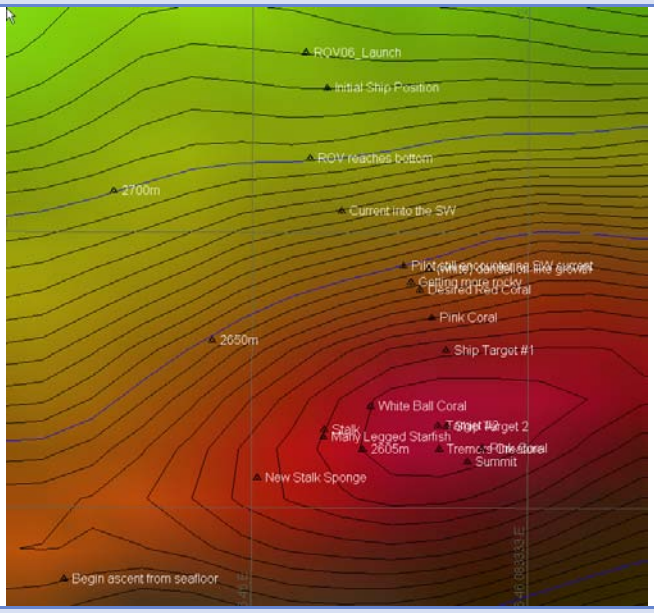
Purpose of the Dive: To explore Click here to enter text.

Description of the Dive:

We completed our first ROV dive in the northeast portion of the INDEX-SATAL 2010 area of operations. Our launch location was 5° 22.638'N 126° 46.016'E. During the descent a fuse blew on a lateral thruster. Movement during the dive was hampered but it by no means compromised operations. The ROV reached the seafloor at 2725m and proceeded to climb the slope of a ridge-like feature that peaked at approximately 2600m. The seafloor was covered mostly with fine-grained pelagic sediment. The bottom ranged between mostly sediment with sparse rocky outcrops to steep slopes of broken pillows and talus. Epifauna were generally sparse but we imaged a number of hexactinellid sponges, sea whips, sea stars, some fish, and a variety of corals and sea lillies. We also encountered what appeared to be a very long sea cucumber that was making some interesting tracks in the sediment in search of food. In comparison to previous dives, we noticed fewer crabs and shrimp, but many more sponges. The top of the summit ridge did not yield much different from what we saw during our ridge ascent. The crew replaced the fuse following the dive. No one is quite sure why it blew. Lovalvo believes it was likely due to some of the shock experience during launch in rough seas.



Overall Map of ROV Dive Area at Paradise Valley



Close-up Map of Main Dive Site

Representative Photos of the Dive

20100705_04h34m13s19_ROVHD_CORAL
The seafloor was covered mostly with fine-grained pelagic sediment. The bottom ranged between mostly sediment with sparse rocky outcrops to steep slopes of broken pillows and talus.

20100705_04h56m15s24_ROVHD_LONG_CUCUMBER
Epifauna were generally sparse but we imaged a number of hexactinellid sponges, sea whips, sea stars, some fish, and a variety of corals and sea lillies. We noticed many more sponges compared to previous dives.

Please direct inquiries to:	NOAA Office of Ocean Exploration & Research 1315 East-West Highway (SSMC3 10th Floor) Silver Spring, MD 20910 (301) 734-1014