OKEANOS EXPLORER ROV DIVE FORM

Site Name	Paradise Valley							and a second	<u>)</u>	
ROV Lead	Dave Lovalvo								P	
General Area Descriptor	490 km NNE of Bitung, Indonesia					KÇ		Okeano Explore	is Ar	
UTC Date & Time	Deployment	7/5/2	2010 12:28 AM				C. W. C.	29	R.	
	Recovery	7/5/2	2010 1	12:	28 AM				8	
Bottom Time [HH:MM]	[03:20]						CTOLOCTATION COLOCTATION Delicitation Delici	ng ati agher MOA OEBCO Alte 02050	Google Eye #1 405555 mi O	
	UTC Time	03:13				Depth [m]		2700		
Landing Time & Location	Latitude	5	2			22.606		1	N	
	Longitude	126		⁰	46.017			'	E	
Off Bottom Time & Location	UTC Time		06:33			Depth [m]			2640	
	Latitude	5	<u>0</u>			22.478		'	N	
	Longitude	126		⁰	45.943			(E	
ROV Dive Name	Cruise	Cruise Season		Leg			Dive Number			
	EX1004		LEGU2							
Equipment Deployed	Camera Platfom		Phoenix Camera Platform							
ROV Measurements				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									

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 10 th Floor) Silver Spring, MD 20910 (301) 734-1014
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