OKEANOS EXPLORER ROV DIVE FORM

Site Name	Site K						8		
ROV Lead	Dave Lovalvo							1	
General Area Descriptor	152km N of Bitung, Indonesia							ano	
UTC Date & Time	Deployment	7/27/2	2010 12:15 AM				10000000000000000000000000000000000000		
	Recovery	7/27/2010 8:50 AM							
Bottom Time [HH:MM]	03:38					COOSTRUCTO COOSTRUCTO COOSTRUCTO CONTROL THE COOSTRUCTO CONTROL OF NAME OF COOSTRUCTO THE SO NOTAL US NAME OF COOSTRUCTO THE SO NAME OF COOST			
Landing Time & Location	UTC Time		02:40			Depth [m]	5	3193	
	Latitude	2		ō		49.81552		N	
	Longitude	124		ō	5	8.871422		(E
Off Bottom Time & Location	UTC Time	06:18				Depth [m]	3113		3
	Latitude	2	0		4	19.922993		(N
	Longitude	124		ō	5		(E	
ROV Dive Name	Cruise Season EX1004		Leg LEG03			Dive Number ROV05 (18)			
Equipment Deployed	ROV:			Little Hercules					
	Camera Platfom:			Phoenix Camera Platform					
ROV Measurements Equipment					pth	Altitude			
	Scanning Sonar		USBL Position				Heading Heading		
	Pitch		Roll				✓ HD Camera		
	Low Res Cam 1								
Malfunctions	None								
Special Notes	Click here to enter text.								
Scientists Involved (please provide name / location / affiliation / email)	Santiago Herrera (on-board Science Lead), EX, WHOI, sherrera@whoi.edu Tim Shank (on-shore Science Lead), USA, WHOI, tshank@whoi.edu Eleanor Bors, ECC Seattle, WHOI, ekbors@gmail.com Catriona Munro, WHOI, WHOI, c.munro@ucl.ac.uk Elizabeth Sibert, WHOI, WHOI, esibert@ucsd.edu Verena Tunnicliffe, U. Victoria, U. Victoria verenat@uvic.ca Rainer Troa, EX, renertroa@gmail.com								

Purpose of the Dive: To examine deep depths in the region (~3000+m); with parallel exploration of the "same/adjacent" feature in shallower depth 800- 1000m. The choice of waypoints is being made to both reach this depth as well as attempt to explore the deep faults on this feature.

The approach was to start on the SW flank and proceed upslope, along expected faults (with potential debris from above) that cut through the western flank. Good exposures of the interior of the volcano (for stratigraphy) should exist there. Currents here may well get channeled preferentially through the fault valley, so it might be location of high diversity of filter feeders.

Description of the Dive:

Due to a miscommunication, the dive began at the "old WPI" (2.8304, 124.98100; 3200m) instead of the "revised WPI" (2.8304, 124.98100; 3000m). After discussion with Seattle ECC, Jakarta ECC, U. Victoria and WHOI it was decided that the best alternative was to explore the area between "old WPI" and "revised WPI". The substrate was completely covered in soft sediment. Few exposed rocks were observed. Fauna colonizing these rocks included one morphotype of primnoid coral, one of black coral, a couple of crinoids and glass sponges. Sediment fauna was dominated by holothurians, particularly of a translucent benthopelagic species, which seem to be producing significant amounts of bioturbation. At least 5 different species of holothurians were observed. Ophiuroids were observed but were not nearly as abundant as at shallower depths (dive 17). Other conspicuous fauna included rattail fish, acorn worms and shrimp. Despite being a deep site on soft bottom, the abundance of epibenthic fauna appeared relatively high to sites visited thus far in the cruise. The predominant current had a direction of 330deg and a speed of 0.15 knots.

Overall Map of ROV Dive Area

Overview of Site K, Western Slope

Close-up Map of Main Dive Site

Hypack screen grab of dive Targets

Representative Photos of the Dive



20100727_03h28m12s17_ROVHD_PELAGIC_HOLOTHURIA Translucent benthopelagic holothurian, likely *Peniagone diaphana*. Found in abundance and observed producing significant amounts of bioturbation at the sediments' surface.



20100727_03h15m57s22_ROVHD_CORAL_COCONUT
A primnoid coral and a stalked crinoid colonize one of the few hard-substrates available in this area. A coconut can also be seen in this picture.

Please direct inquiries to:

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