OKEANOS EXPLORER ROV DIVE FORM

Site Name	Landak							
ROV Lead	Dave Lovalvo							
General Area Descriptor	309km N of Bitung, Indonesia							
UTC Date & Time	Deployment	7/28/2010 12:29 AM						
	Recovery	7/28/2010 8:55 AM						
Bottom Time [HH:MM]	06:10							
Landing Time & Location	UTC Time	01:35			Depth [m]	1339		
	Latitude	4	º	14.893672	′	N		
	Longitude	125	º	15.879136	′	E		
Off Bottom Time & Location	UTC Time	07:45			Depth [m]	1070		
	Latitude	4	º	15.014222	′	N		
	Longitude	125	º	16.188976	′	E		
ROV Dive Name	Cruise Season	Leg	Dive Number					
	EX1004	LEG03	ROV06 (19)					
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	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), ECC Jakarta, 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							

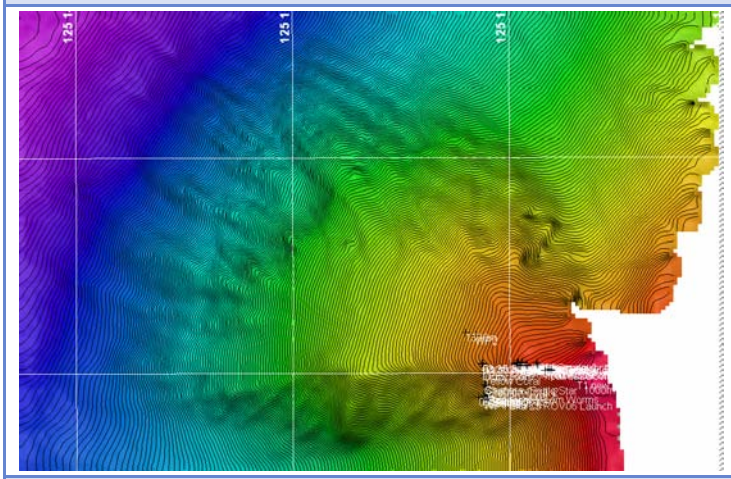
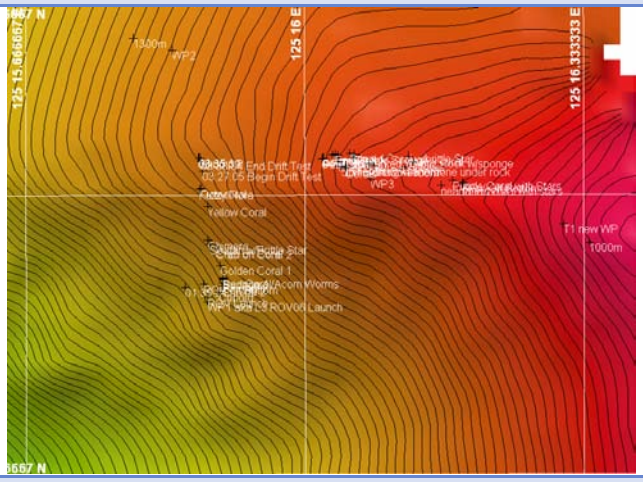
Purpose of the Dive: To examine Landat for exploratory comparison to the Nuang Sites (e.g., 1004-Leg2-ROV4), which was the same type of constructional shoulder at about the same depth, as well as comparisons to other features explored to date.

Description of the Dive:

We started at the southern slope and proceeded upslope to the top of the feature. It was a very steep rocky slope with a good northward current (0.25 knots) however the abundance of fauna was low. Very low diversity as well. Fauna was dominated by isidid whips, large crinoids, stylasterids, a couple of chysogorgiids and Paramuricids with their galatheid and ophiuroid associates. Also some sponges and shrimp. As we reached the sandy top the abundances of epibenthic megafauna dropped drastically.

Due to a repositioning maneuver of the ship the ROV was pulled ~200m off course to the east between WP1 and WP2. The consensus was to continue eastward, directly to WP3 at this point. We moved east along the summit edge toward WP3 and kept doing it for the remainder of the dive.

There was a dominant northward current with heading of 335-350d and speed of 0.2-0.25 knots. The abundances and diversity of fauna slowly increased as we moved shallower. Primnoid and isidid corals, sponges and actinarians are dominant. The abundance of crinoids has decreased significantly from what we observd at the beginging of the dive in the deeper region of the southern slope of the feature. Other observed fauna included chrysogorgiid corals, stalked tunicates, shrimp, paguridcrabs, fish, and squat lobsters and brittle stars associated with the corals. The most abundant fauna were benthipelagic holothurians (different from the ones we observed yesterday at K). The seafloor on top of the feature had a flat morphology with dominance of reworked iron rocks. Near the end of the dive, glass sponges and primnoid corals became more conspicuous and abundant.

Overall Map of ROV Dive Area	Close-up Map of Main Dive Site
	
Overview of Site Landak	**Hypack screen grab of dive Targets**

Representative Photos of the Dive

	
20100728_02h11m31s15_ROVHD_VERTICLE_ROCK_SEAM Southern slope of feature Landak. Very low abundances of fauna were observed.	20100728_05h57m44s08_ROVHD_SEA_SQUIRT_W_CRAB Image showing some of the sessile fauna found at the shallowest explored area of the top. Corals, glass sponges and stalked tunicates were some of the most conspicuous organisms.

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