


OKEANOS EXPLORER ROV DIVE FORM

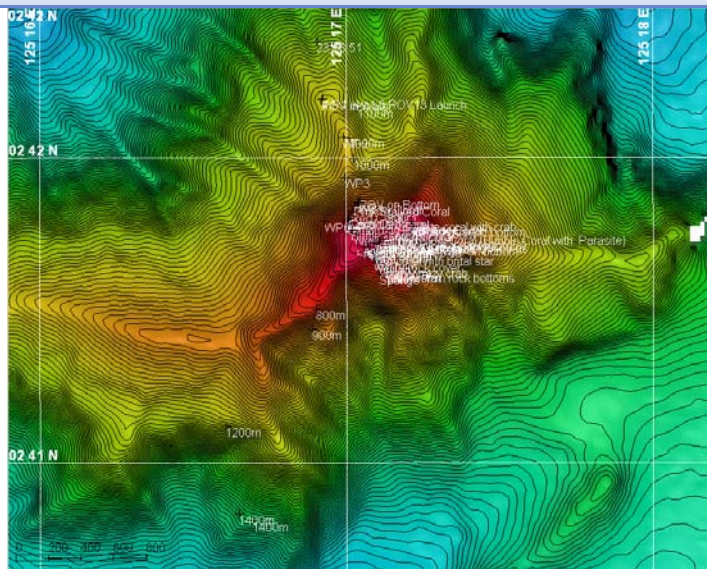
Site Name	Gelembung					
ROV Lead	Dave Lovalvo					
General Area Descriptor	138 km N of Bitung, Indonesia					
UTC Date & Time	Deployment	8/5/2010 12:16 AM				
	Recovery	8/5/2008 8:49 AM				
Bottom Time [HH:MM]	06:23					
Landing Time & Location	UTC Time	01:41		Depth [m]	845	
	Latitude	2	°	41.864862	N	
	Longitude	125	°	17.0447	E	
Off Bottom Time & Location	UTC Time	08:04		Depth [m]	706	
	Latitude	2	°	41.774395	N	
	Longitude	125	°	17.217766	E	
ROV Dive Name	Cruise Season	EX1004		Leg	LEG03	
				Dive Number	ROV13 (26)	
Equipment Deployed	ROV:	Little Hercules				
	Camera Platform:	Phoenix Camera Platform				
ROV Measurements	<input checked="" type="checkbox"/> CTD	<input checked="" type="checkbox"/> Depth		<input checked="" type="checkbox"/> Altitude		
	<input checked="" type="checkbox"/> Scanning Sonar	<input checked="" type="checkbox"/> USBL Position		<input checked="" type="checkbox"/> Heading		
	<input checked="" type="checkbox"/> Pitch	<input checked="" type="checkbox"/> Roll		<input checked="" type="checkbox"/> HD Camera		
	<input checked="" type="checkbox"/> Low Res Cam 1	<input checked="" type="checkbox"/> Low Res Cam 2				
Equipment Malfunctions	None					
Special Notes	Click here to enter text.					
Scientists Involved <i>(please provide name / location / affiliation / email)</i>	<p>Santiago Herrera (on-board Science Lead), EX, WHOI, sherrera@whoi.edu Tim Shank (on-shore Science Lead), ECC Jakarta, WHOI, tshank@whoi.edu Rainer Troa, EX, renertroa@gmail.com Eleanor Bors, ECC Seattle, WHOI, ekbors@gmail.com Catriona Munro, WHOI, WHOI, c.munro@ucl.ac.uk Elizabeth Sibert, WHOI, WHOI, esibert@ucsd.edu John Sherrin, U. Victoria, U. Victoria, jsherrin@uvic.calick Tryono, ECC Seattle Jonathan Rose, U. Victoria, U. Victoria, jonmrose@uvic.ca</p>					

Purpose of the Dive: The goal is to explore this seamount ("Gelembung") for evidence of hydrothermal, volcanic, and biological activity, investigating the detected presence of potential hydrothermal activity discovered by the BJ IV mapping and CTD operations. The dive plan is to start deep (~1050m) on a limb and line on which the BJ IV data implicated "bubbles at the surface", and traverse upslope following this limb to waypoints 2, 3, and 4. At waypoint 5, a decision will be made as to whether to continue upslope to the seamount's summit, or continue on to waypoint 6, a less steep climb to the NE that seeks to go around the seamount to the northern side to connect to uplifted features at waypoint 7.

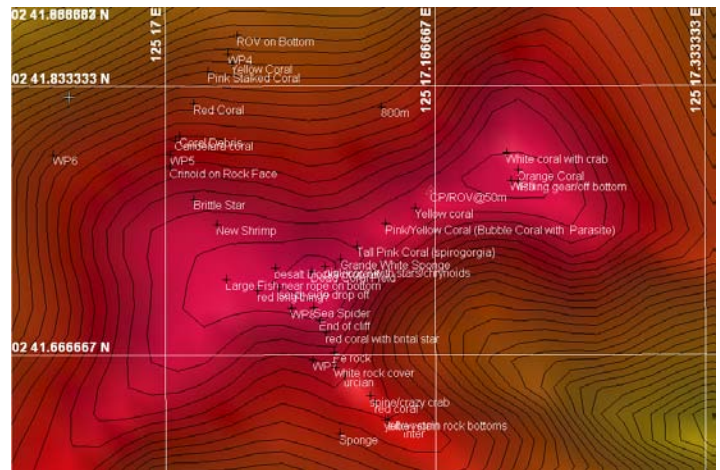
Description of the Dive:

We started the dive at WWP4, on the northern end of the summit of this feature at the eastern extreme. This was a shallow dive between 700 and 850m. Relatively high biomass and diversity of organisms was observed on exposed basaltic outcrops throughout the dive. No evidence of chemosynthesis was detected. Highly-sedimented rock terraces and flat areas were seen at this place. Brecciated basalts were also observed. Relatively high abundances of benthic organisms were found on the flanks of the summit. Dominant fauna included chrysogorgiid, paramuricid, paragorgiid, primnoid, isidid and antipatharian corals, large barrel sponges and stalked crinoids. Sizes of organisms were moderate in general. Relatively abundant large-sized fish were observed. Oreos were among the most common. One conspicuous pattern was the high proportion of dead isidid whip corals covered with elongated hydroid polyps. Much lower biomass was observed as we ascended towards the summit. High amounts of coral rubble were seen here. Rubble appeared to be composed of dead scleractinian corals of *Enallopsamia* and suggested different times of death according to their coloration, which ranged from dark brown to white. No live scleractinian corals were observed at the summit but two small yellow colonies, which were identified as *Enallopsamia*, were seen at the flanks of the summit. A long and tense fishing line, as well as fishing gear (nylon strings, lures and hooks) was observed at the summit.

Overall Map of ROV Dive Area



Close-up Map of Main Dive Site



Representative Photos of the Dive



20100805_07h10m56s06_ROVHD_CORALS_ROCK_FACE
Relatively high biomass and diversity of organisms was observed on exposed basaltic outcrops throughout the dive.

20100805_06h13m12s04_ROVHD_CORAL_DEBRIS
Much lower biomass was observed as we ascended towards the summit. High amounts of coral rubble were seen here.

Please direct inquiries to:

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