OKEANOS EXPLORER ROV DIVE FORM

Site Name	BJIV_1						
ROV Lead	Dave Lovalvo						
General Area Descriptor	403 km N of Bitung, Indonesia						
UTC Date & Time	Deployment	8/1/2010 12:17 AM					
	Recovery	8/1/2008 8:44 AM					
Bottom Time [HH:MM]	05:55						
Landing Time & Location	UTC Time	01:35		Depth [m]	1613		
	Latitude	4	º	41.771846	′	N	
	Longitude	126	º	50.807863	′	E	
Off Bottom Time & Location	UTC Time	07:30		Depth [m]	1513		
	Latitude	4	º	41.225621	′	N	
	Longitude	126	º	50.9575	′	E	

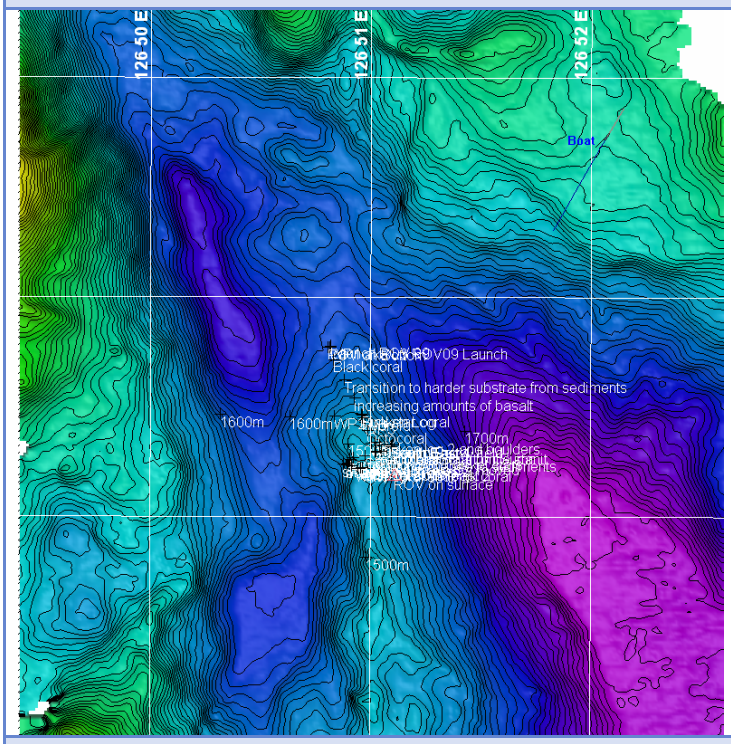
ROV Dive Name	Cruise Season	Leg	Dive Number
	EX1004	LEG03	ROV09 (22)
Equipment Deployed	ROV:	Little Hercules	
	Camera Platfom:	Phoenix Camera Platform	
ROV Measurements	☒ CTD	☒ Depth	☒ Altitude
	☒ Scanning Sonar	☒ USBL Position	☒ Heading
	☒ Pitch	☒ Roll	☒ HD Camera
	☒ Low Res Cam 1	☒ Low Res Cam 2	
Equipment 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** Rainer Troa, EX, renertroa@gmail.com Noorsalam, ECC Jakarta Eleanor Bors, ECC Seattle, WHOI, ekbors@gmail.com Catriona Munro, WHOI, WHOI, c.munro@ucl.ac.uk Elizabeth Sibert , WHOI, WHOI, esibert@ucsd.edu Sam Zelin, ECC Seattle, UMass Amherst Ed Baker, ECC Seattle, NOAA, Edward.Baker@noaa.gov Yusuf Surachman Djajadihardja, ECC Seattle Tryono, ECC Seattle Jonathan Rose, U. Victoria, U. Victoria, jonmrose@uvic.ca Rachel Brown, U. Victoria, U. Victoria		

Purpose of the Dive: Mapping results from the BJIV were provided of the Talaud Ridge area. There are several features of interest in this region, but in the rift valley, there appears to be a rift that extends from the west margin of the western wall to the northeast and out into the valley. At the NE end of this 4km-long rift, is what appears to be a circular feature. The rift could represent active tectonism and therefore locations where fluid expulsion may be occurring. The goal of this dive was to explore the NE extension of this Rift by starting near the base of the nose of the rift and coming upslope to the SW to follow along the top or the ridge crest.

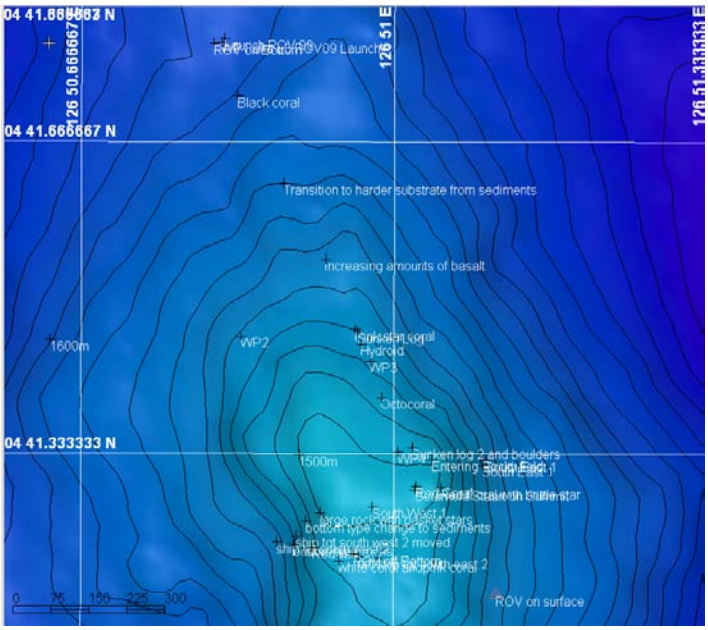
Description of the Dive:

The dive started near the base of the nose of the rift after which we came upslope to the SW moving along the top of the ridge crest. The bottom was heavily covered with soft sediments on top of this feature, but rocky outcrops were present on the margins- just a few meters, both on the eastern and western sides, below the summit. In general, there was a relatively low abundance of epibenthic megafauna. Burrows of various sizes were observed but we were not able to relate any biota to them. As we moved upslope, the bottom became a mix of pelagic sediment and small pieces of basalt, which became larger at ~1595m. Few corals, sponges and basket stars were observed on these large partially-exposed hard substrates. One morphotype of sedentary crinoid dominated observations during the dive. A few wood falls were observed. Fauna associated with these included squat lobsters, urchins and serpulid worms. There was a high quantity of suspended particles in the water and marine snow throughout the dive.

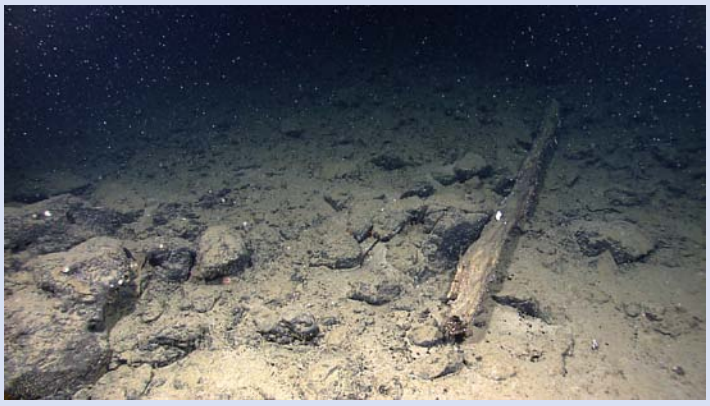
Overall Map of ROV Dive Area



Close-up Map of Main Dive Site



Representative Photos of the Dive



20100801_01h59m57s22_ROVHD_MOUND_BURROW The bottom at this site was heavily covered with soft sediments. In general there was a very low abundance of epibenthic megafauna. Burrows of various sizes were observed but we were not able to relate any biota to them.	20100801_03h45m35s22_ROVHD_LOG As we moved upslope the bottom became a mix of pelagic sediment and small pieces of basalt, which became larger at ~1595m. A few wood falls were observed.
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