Okeanos Explorer ROV Dive Form

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| Site Name | The Eye AKA Mother Ship | | | | | globe.png | | | | | | |
| ROV Lead | Dave Lovalvo | | | | |  | | | | | | |
| General Area Descriptor | 400 km N-NE of Bitung | | | | |  | | | | | | |
| UTC Date & Time | Deployment | 7/9/2010 12:30 AM | | | |  | | | | | | |
|  | Recovery | 7/9/2010 7:41 AM | | | |  | | | | | | |
| Bottom Time  [HH:MM] | 06:00 | | | | |  | | | | | | |
| Planned Launch Depth [m] | 645 | | | | |  | | | | | | |
| Planned Launch Location | Latitude | | 4 | | | | º | 56.96 | | ‘ | N | |
|  | Longitude | | 125 | | | | º | 46.70 | | ‘ | E | |
| ROV Dive Name | **Cruise Season** | | | **Leg** | | | | | **Dive Number** | | | |
|  | EX1004 | | | LEG02 | | | | | ROV09 | | | |
| 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 | Camera Platform High Definition camera image problem – Will switch out camera after dive | | | | | | | | | | | |
| Special Notes | Click here to enter text. | | | | | | | | | | | |
| Scientists Involved | Jim Holden – Jakarta ECC/UMASS  Dave Butterfield – PMEL ECC/NOAA PMEL  John Sherrin – EX Control Room/U of Victoria  Xerandy – EX Control Room/Indonesia | | | | | | | | | | | |
| Description of the Dive: | | | | | | | | | | | | |
| We descended upon an oddly shaped feature that rose to a depth of approximately 500m and had an almost square shaped and flat plateau. The plateau measured roughly 4000 by 3500 meters. It dropped off steeply on all sides to a depth of 1100m below. The top surface was composed almost entirely of eroded carbonate rock with fine-grained pelagic sediment on top. We ascended up a steep slope that contained a high biomass of corals, crinoids, shrimp and galatheid crabs (i.e. squat lobsters). Two of the galatheid crabs were holding a cylindrical shaped purple object that appeared to be some type of egg case or plankton which we could not immediately identify. We saw many of these objects float by the camera throughout the dive. The top of the plateau was fairly deserted in terms of biomass. We did however come across two animals that appeared to be either octopi or squid. Later we discovered a meter long sting ray which struck a defensive pose. We also found several urchins that appeared to have the ability to climb up corals and sponge stalks, perhaps aided by spines that are specially adapted for climbing. After canvassing the plateau for a couple of hours we descended back down the slope in a different location. The slope included a number of interesting geological features and high biomass. We also found a school of fish and a sandy area beneath a cliff, which perhaps had been a sandy beach long ago. Scientists suggested the possibility that the large flat plateau had once been an island above the ocean surface. In the end, the dive left us with several fascinating questions which will hopefully lead to exciting new discoveries about the seafloor and the sea life in this part of the ocean. | | | | | | | | | | | | |
| Overall Map of ROV Dive Area | | | | | Close-up Map of Main Dive Site | | | | | | |
| Z:\ForHypack\MotherShip_070910\capture3.jpg | | | | |  | | | | | | |
| Fledermaus view of Mother ship site | | | | | Hypack screen grab of dive site | | | | | | |
| Representative Photos of the Dive | | | | | | | | | | | |
| 20100709_04h24m48s09_ROVHD_FISH.jpg | | | | | 20100709_06h07m43s05_ROVHD_CLIFF_CRAWL.jpg | | | | | | |
| 20100709\_04h24m48s09\_ROVHD\_FISH – The top of the plateau was quite flat, composed largely of eroded carbonate rock, and covered with fine-grained pelagic sediment. Biomass was fairly low. | | | | | **20100709\_06h07m43s05\_ROVHD\_CLIFF\_CRAWL – The sides of the large platform dropped off steeply. They contained a high biomass of coral, crinoids, shrimp, and galatheid crabs.** | | | | | | |