Okeanos Explorer ROV Dive Form

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Site Name | SouthMount | | | | | | | globe.png | | | | | | |
| ROV Lead | Dave Lovalvo | | | | | | |  | | | | | | |
| General Area Descriptor | 150 km N of Bitung, Indonesia | | | | | | |  | | | | | | |
| UTC Date & Time | Deployment | | 7/11/2010 1:30 AM | | | | |  | | | | | | |
|  | Recovery | | 7/11/2010 12:00 AM | | | | |  | | | | | | |
| Bottom Time  [HH:MM] | [7:10] | | | | | | |  | | | | | | |
| Landing Time & Location | UTC Time | 01:10 | | | | | | | Depth [m] | | 490 | | | |
|  | Latitude | 2 | | | º | 50.832 | | | | | | ‘ | | N |
|  | Longitude | 125 | | | º | 03.424 | | | | | | ‘ | | E |
| Off Bottom Time & Location | UTC Time | 08:20 | | | | | | | Depth [m] | | 461 | | | |
|  | Latitude | 2 | | | º | 50.812 | | | | | | | ‘ | N |
|  | Longitude | 125 | | | º | 03.690 | | | | | | | ‘ | E |
| ROV Dive Name | Cruise Season | | | Leg | | | | | | Dive Number | | | | |
|  | EX1004 | | | LEG02 | | | | | | ROV11 | | | | |
| 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 | Click here to enter text. | | | | | | | | | | | | | |
| Special Notes | Click here to enter text. | | | | | | | | | | | | | |
| Scientists Involved  *(please provide name / location / affiliation / email)* | Jim Holden – Jakarta ECC/UMASS  Dave Butterfield – PMEL ECC/NOAA PMEL  John Sherrin – EX Control Room/U of Victoria  Xerandy – EX Control Room/Indonesia | | | | | | | | | | | | | |
| Purpose of the Dive: To explore Click here to enter text. | | | | | | | | | | | | | | |
| Description of the Dive: | | | | | | | | | | | | | | |
| The crew launch the ROV for Dive 11 at 2º 51.76'N 125º 02.06’E around 0815. The ROV descended to a volcanic cone shaped seamount hoping to find new vents and their associated critters. Instead we were astonished by the diversity of corals, sponges, crinoids, and countless fascinating invertebrates. Personnel were immediately struck by the incredible diversity of colors and species on display as we rose up along the steep WSW slope toward the summit. Some of the organisms imaged included a 30cm wide, 20cm tall sea spider (pycnogonid) whose bright orange spindly legs and specially modified arms were quite a sight to see; a colorful octopus who danced around frantically in search of a place to hide; a large flat fish with big protruding eyes; a striped crinoid; and a wide array of fish of different types and colors including one species that had little feeler fins beneath its pectoral fins. We also saw some large white venus flytrap anemones, many colorful corals of many different species and morphologies, a huge brittle star filter feeding on a rock, large tubular sponges with striped fish feeding inside them, and fluorescent blue mucous nets that stretched up to a meter long from rock to rock. Overall this site contained the greatest diversity of any site we have found thus far. | | | | | | | | | | | | | | |
| Overall Map of ROV Dive Area | | | | | | | Close-up Map of Main Dive Site | | | | | | | |
|  | | | | | | |  | | | | | | | |
| Overview of “SouthMount” | | | | | | | Hypack area map of dive site | | | | | | | |
| Representative Photos of the Dive | | | | | | | | | | | | | | |
|  | | | | | | |  | | | | | | | |
| 20100711\_01h31m03s09\_ROVHD\_CORAL-01340323  We were astonished by the diversity of corals, sponges, crinoids, and countless fascinating invertebrates encountered on today’s dive site. | | | | | | | 20100711\_05h43m50s13\_ROVHD\_SNAIL  Personnel were immediately struck by the incredible diversity of colors and species on display as we rose up along the steep WSW sslope toward the summit. | | | | | | | |
| Please direct inquiries to: | | NOAA Office of Ocean Exploration & Research 1315 East-West Highway (SSMC3 10th Floor)  Silver Spring, MD 20910  (301) 734-1014 | | | | | | | | | | | | |