Okeanos Explorer ROV Dive Summary

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| **Site Name** | Engineering Dive | | | |  | |
| **ROV Lead/Expedition Coordinator** | Brian Bingham/  Brian Kennedy | | | |  | |
| **Science Team Leads** | Andrea Quattrini and Mike Cheadle | | | |  | |
| **General Area Descriptor** | Puerto Rico and US Virgin Islands | | | |  | |
| **ROV Dive Name** | Cruise Season | | Leg | | | Dive Number |
|  | EX1502 | | 3 | | | DIVE08 |
| **Equipment Deployed** | ROV: | | Deep Discoverer | | | |
|  | Camera Platform: | | Seirios | | | |
| **ROV Measurements** | D2 CTD | | Depth | | | Altitude |
|  | Scanning Sonar | | USBL Position | | | Heading |
|  | Pitch | | Roll | | | HD Camera 1 |
|  | HD Camera 2 | | ROV HD 2 | | | Seirios CTD |
|  | Temperature Probe | | D2 DO Sensor | | | Seirios DO sensor |
| **Equipment Malfunctions** | Operating with a secondary DO sensor that was last calibrated in 2013. Error in Depth sensor in SCS for both vehicles during descent. ROV team rebooted system which fixed the problem. | | | | | |
| **ROV Dive Summary**  **(From processed ROV data)** | Dive Summary: EX1502L3\_DIVE08  ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^  In Water at: 2015-04-25T17:06:35.984000  18°, 41.436' N ; 066°, 15.950' W  Out Water at: 2015-04-25T22:38:06.546000  18°, 41.603' N ; 066°, 15.405' W  Off Bottom at: 2015-04-25T21:41:53.921000  18°, 41.530' N ; 066°, 15.826' W  On Bottom at: 2015-04-25T18:01:04.656000  18°, 41.535' N ; 066°, 15.804' W  Dive duration: 5:31:30  Bottom Time: 3:40:49  Max. depth: 1678.1 m | | | | | |
| **Special Notes** |  | | | | | |
| **Scientists Involved**  ***(please provide name / location / affiliation / email)*** | |  |  |  | | --- | --- | --- | | Mike Cheadle | University of Wyoming | cheadle@uwyo.edu | | Mike Ford | NOAA Fisheries | michael.ford@noaa.gov | | Andrea Quanttrini | USGS | aquattrini@usgs.gov | | Christopher Kelley | University of Hawaii | ckelley@hawaii.edu | | | | | | |
| **Purpose of the Dive**  The purpose of this engineering dive was to give ROV pilots time to train on the manipulators and to check white balance control had been restored to one of the Zeus Plus cameras that had failed during Dive 01. | | | | | | |
| **Description of the Dive:** | | | | | | |
| ROV *Deep Discoverer* landed on a soft sedimented bottom at a depth of 1678 m. ROV pilots spent time training with the manipulator arms, practicing with the SeaPoke, weights with different handles, the temperature probe, and setting up a remote GoPro camera stand. During the dive fauna observed included a few holothurians, shrimp, and a few fish. About half way through the dive, the manipulator was able to bring a “handful” of sediment to the camera for close inspection. | | | | | | |
| **Overall Map of ROV Dive Area** | | | | **Close-up Map of Main Dive Site** | | |
| **\\192.168.4.200\CruiseData\EX1502L3\Products\ROV\EX1502L3_DIVE08_20150425\EX1502L3_DIVE08_HypackOverview.JPG** | | | | \\192.168.4.200\CruiseData\EX1502L3\Products\ROV\EX1502L3_DIVE08_20150425\EX1502L3_DIVE08_HypackCloseup.JPG | | |
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| **Representative Photos of the Dive** | | | | | | |
| **\\192.168.4.200\PublicData\cruises\EX1502L3\Imagery\GoProGrabs\vlcsnap-2015-04-26-09h15m51s66.png** | | | | \\192.168.4.200\CruiseData\EX1502L3\Imagery\EX1502L3_DIVE08_20150425\EX1502L3_IMG_20150425T185159Z_ROVMPT_SEAPOKE2.jpg | | |
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| **Please direct inquiries to:** | | NOAA Office of Ocean Exploration & Research 1315 East-West Highway (SSMC3 10th Floor)  Silver Spring, MD 20910  (301) 734-1014 | | | | |