

# OKEANOS EXPLORER ROV DIVE FORM

|   |   |   |   |        |  |      |
|---|---|---|---|--------|--|------|
| <b>Site Name</b>  | TestSite  |   |   |        |  |      |
| <b>ROV Lead</b>   | Dave Lovalvo  |   |   |        |  |      |
| <b>General Area Descriptor</b>  | 9 km South of Santa Cruz Island, Channel Islands, CA                                    |   |   |        |  |      |
| <b>UTC Date &amp; Time</b>  | Deployment  | 4/27/2011 14:48h                                  |   |        |  |      |
|   | Recovery  | 4/27/2011 20:40h                                  |   |        |  |      |
| <b>Bottom Time [HH:MM]</b>  | 3:46  |   |   |        |  |      |
| <b>Landing Time &amp; Location</b>  | UTC Time  | 15:47   |   |        | Depth [m]                                      | 1014 |
|   | Latitude  | 33  | ° | 54.026 | '  | N    |
|   | Longitude   | 119   | ° | 38.954 | '  | w    |
| <b>Off Bottom Time &amp; Location</b>   | UTC Time  | 19:33   |   |        | Depth [m]                                      | 910  |
|   | Latitude  | 33  | ° | 54.137 | '  | N    |
|   | Longitude   | 119   | ° | 38.967 | '  | w    |
| <b>ROV Dive Name</b>  | Cruise Season   | EX1102  |   |        | Leg  | -    |
|   | Dive Number   | ROV07   |   |        |  |      |
| <b>Equipment Deployed</b>   | ROV:  | Little Hercules                                   |   |        |  |      |
|   | Camera Platform:  | Seirios   |   |        |  |      |
| <b>ROV Measurements</b>   | <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 |   |        |  |      |
| <b>Equipment Malfunctions</b>   | None  |   |   |        |  |      |
| <b>Special Notes</b>  | Click here to enter text.   |   |   |        |  |      |
| <b>Scientists Involved</b><br><i>(please provide name / location / affiliation / email)</i> | Dr. Steve Katz, EX, CINMS, <a href="mailto:Steve.Katz@noaa.gov">Steve.Katz@noaa.gov</a> |   |   |        |  |      |
| <b>Purpose of the Dive:</b> ROV Shakedown – this was an engineering dive.                   |   |   |   |        |  |      |

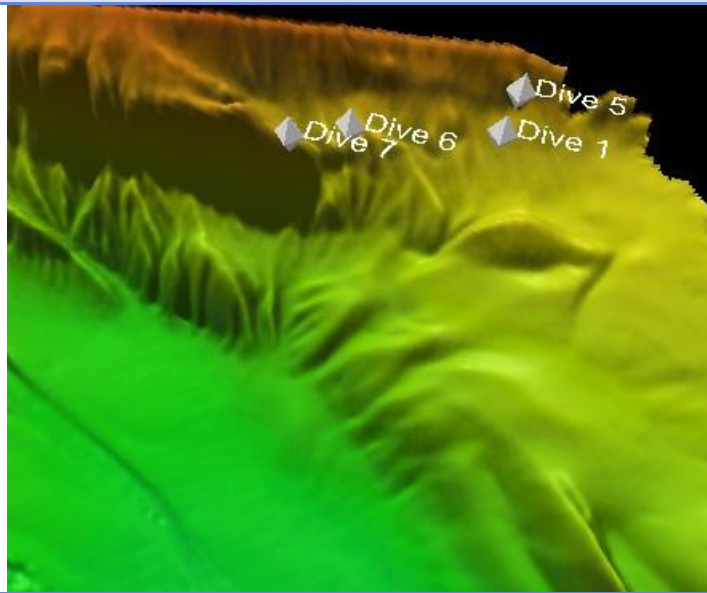
### Description of the Dive:

This was the last dive of the leg and occurred on a moderate gradient slope on the escarpment south of Santa Cruz Island. The entire dive was relatively deep for this area at approximately 900-1000m deep. This is in a similar location to the previous dive and the bottom conditions, and animals encountered are also similar. As mentioned previously, these islands are an area of high productivity in the shallow water, and consequently high sediment input rates to the deeper habitats down slope.

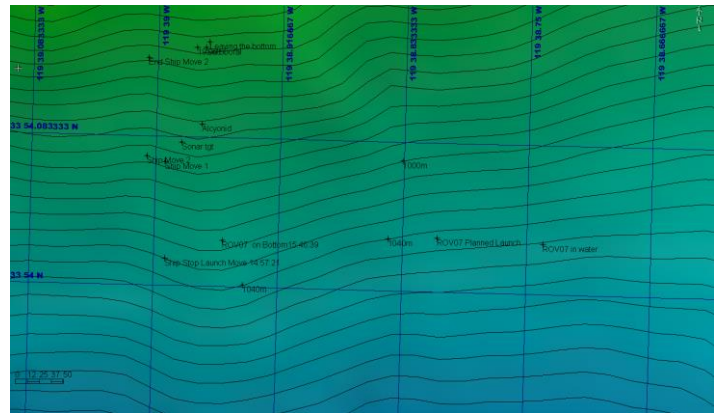
Approximately four and a half hours into the dive, the ROV arrived a small rock reef with a very large (~2m across) goiter sponge (*Heterochone calyx*) with a large King Crab in its spongocoel and numerous Pandalid shrimps housed in the surface of the sponge. While impressive on its own, the reef was particularly productive with numerous other sponges, tunicates, anemones, scallops, soft corals, bryozoans, hydroids and even a dorid nudibranch. The reef demonstrated productivity similar to near-by reefs in the photic zone.

This dive was also noteworthy in sighting a predatory tunicate (likely *Megalodicopia*). These poorly known tunicates have been seen frequently in the Monterey Canyon, but their presence in the Channel Islands was unknown previously.

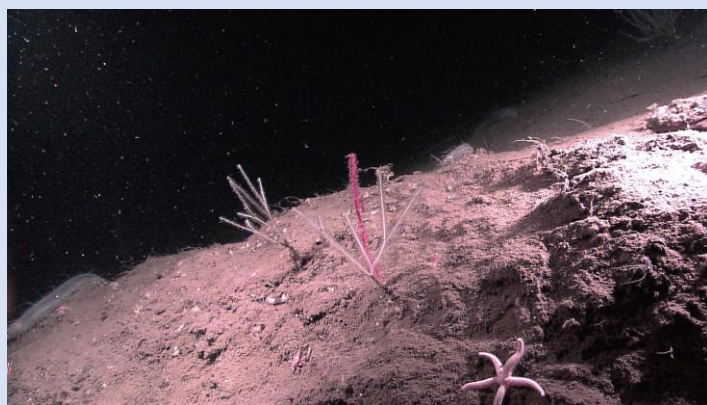
Overall Map of ROV Dive Area



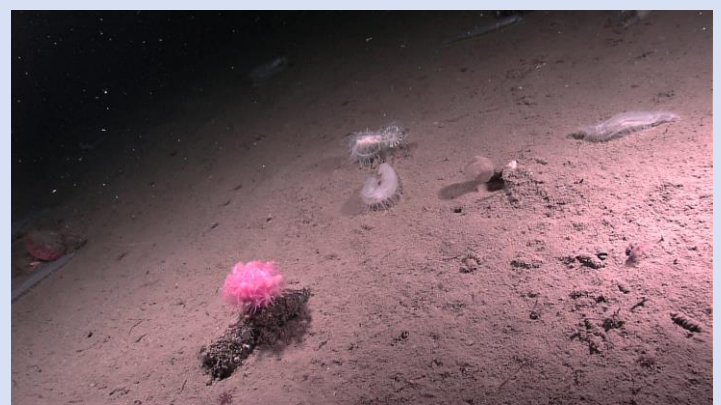
Close-up Map of Main Dive Site



### Representative Photos of the Dive



**EX1102\_IMG\_20110427T172200Z\_ROVHD\_SHRIMP\_ON\_CORA**  
Here is a small hard-bottom ridge with light layer of sediment upon which are several temperate, deep water corals. The white corals were host to numerous, associated polychaetes that were grazing detritus.



**EX1102\_IMG\_20110427T185406Z\_ROVHD\_CORAL**  
This figure shows the gradient of this soft sediment bottom. In the left foreground is the mushroom coral, *Anathomastus retteri* and on the right, mid-frame is a predatory tunicate.

**Please direct inquiries to:**

NOAA Office of Ocean Exploration & Research  
1315 East-West Highway (SSMC3 10<sup>th</sup> Floor)  
Silver Spring, MD 20910  
(301) 734-1014