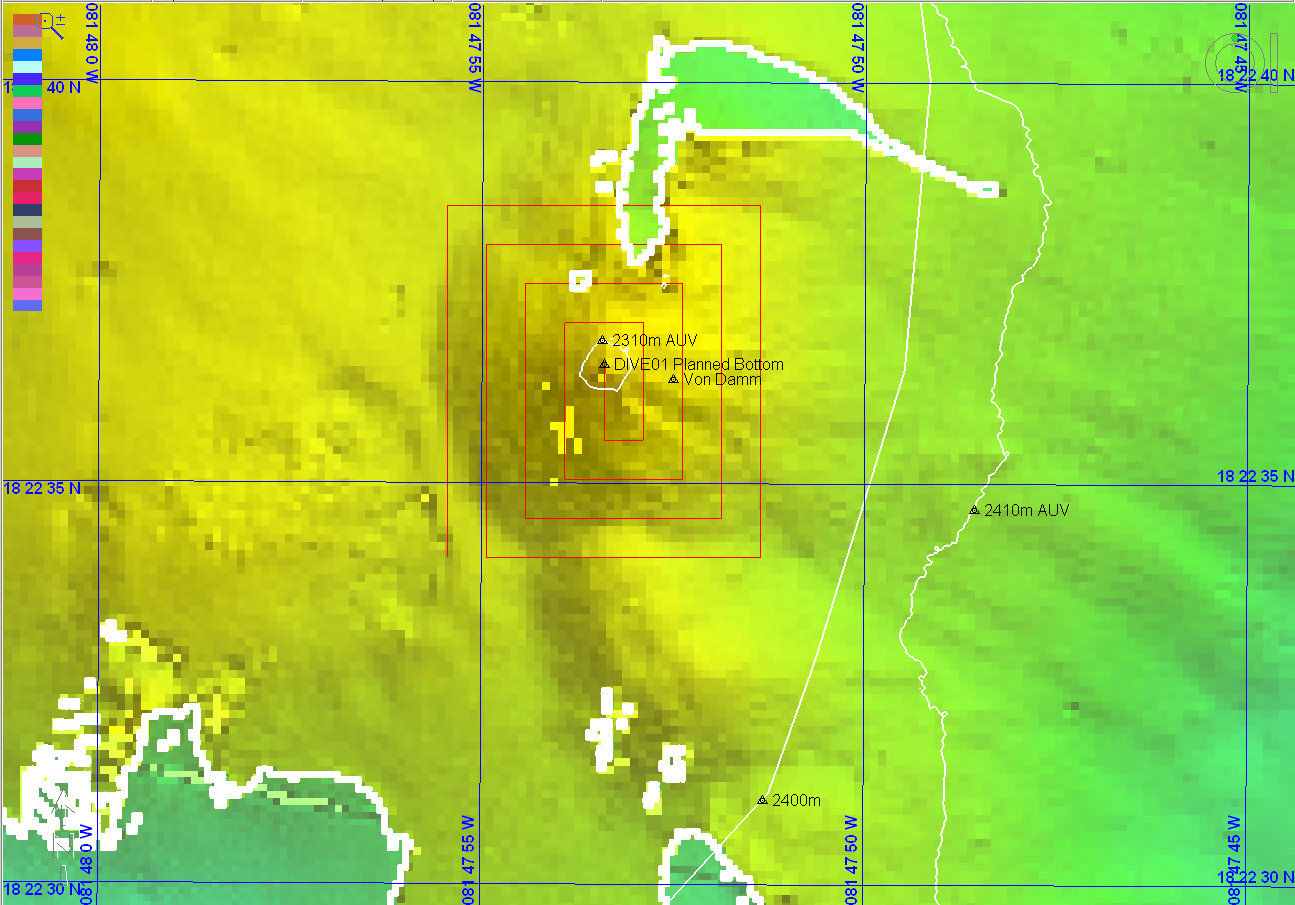
*Science Team develops draft dive track two days before a planned dive. Expedition Leader responds overnight based on ship capabilities, programmatic considerations, and constraints. Plan is finalized the day before a dive*

**Site Name:** Von Damm Field

**Approximate Location:** 18° 22.608’N, 81° 47.890’W; 2300m

**Dive Date (local):** August 7th, 2011



**Brief Explanation of Exploration Objectives and Rational for the Desired Dive Track:**

Science Rationale:

The plans for Dive 04 are to conduct detailed biological characterization of hotspot areas identified at the Von Damm site and also aim to include an experiment of opportunity for fluid flow:

1. Start at central spire for orientation
2. Drive East toward markers 19 and 20 to study live tube worm site
3. Aim to region of UK marker (bucket lid) to study patches of shrimp there and assess feasibility of fluid flow experiment (Jill McDermott request).
4. Head to main spire for detailed biological study.
5. If time permits, conduct single transect South and East away from Central Spire along SE trending ridge in Connelly et al map.

Operations Response/Rationale:

The ship plans to launch the ROV at approximately 0800. The time from the start of launch to the bottom is approximately 2 hours. On bottom dive time is approximately 6.5 hours. The time to return to the surface and secure the ROV on deck is approximately 2 hours. The ROV needs to be secured on deck at 6:30pm.

**ROV Track Waypoints Table:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *DESIRED WAYPOINTS TO EXPLORE -*  *(COMPLETED BY SHORE-SIDE LEAD SCIENTIST)*  *(not including launch)* | | | | *ACTUAL WAYPOINTS TO EXPLORE-*  *(COMPLETED BY SHIPBOARD EXPEDITION LEADER)* | | | |
| **WAYPOINT NAME** | **LATITUDE** | **LONGITUDE** | **APPROX DEPTH** | **WAYPOINT NAME/SEQUENCE** | **LATITUDE** | **LONGITUDE** | **APPROX**  **DEPTH** |
| Launch |  |  |  | Launch |  |  |  |
| MCR001 | 18o 22.608’ | 81 o 47.890’ | 2310m |  |  |  |  |
|  |  |  |  |  |  |  |  |
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