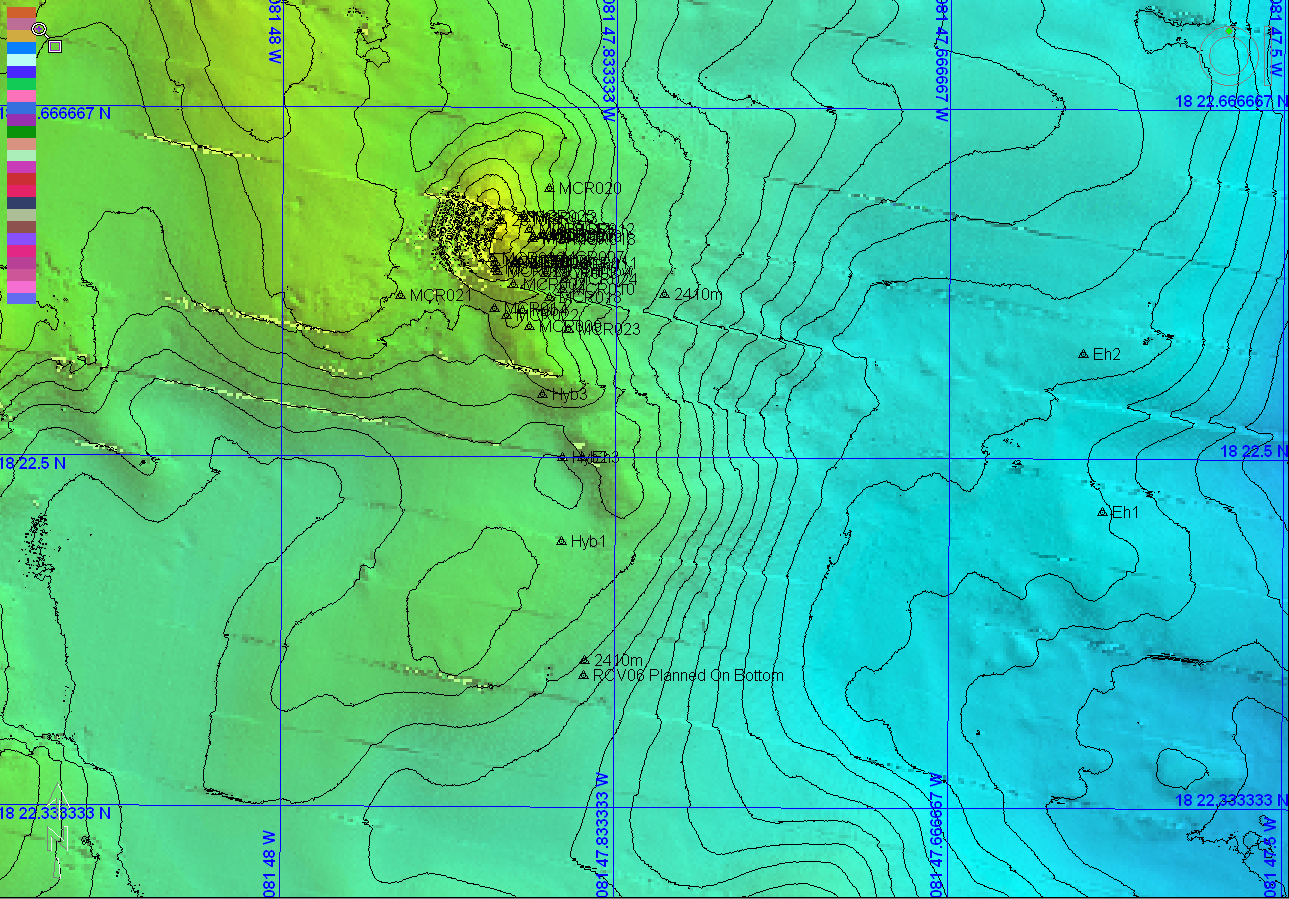
*Science Team develops draft dive track two days before a planned dive. Expedition Leader responds overnight based on ship capabilities, programmatic considerations, and constraints. Plan is finalized the day before a dive*

**Site Name:** SE Spur of Von Damm

**Approximate Location:** 18° 22.396’N, 81°47.849’W

**Dive Date (local):** August 9th, 2011



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

Science Rationale:

The plan for Dive 06 is to traverse from SSE of Von Damm toward the base of the mound, to conduct a VIP event including broadcasting from the seafllor at the central Von Damm spire and then to continue exploration onward to the West of that vent site as time allows.

Specifically:-

10:30-12:30 (approx) we will dive at the launch poimt which coincides with a locale at which the HYBIS camera system recorded images of worm tubes in Spring 2010, approximately 400m SSE of the central Von Damm spire (Connelly et al., in review). We will then proceed north of there along the spur that extends SE away from the central southern limit of the Von Damm mound and where both high backscatter signals and Eh anomalies in the overlying water column were detected from the AUTOSUB 6000m vehicle during the same cruise (RRS James Cook 44).

12:30-14:00 VIP event preparation and broadcast, central Von Damm spire

14:00-16:00 continue exploration to West of Von Damm field.

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 20 minutes. The time from the starting location of the dive on the seafloor to the spire (400m) at 0.1 knots is approximately 2 hours 10 minutes. The ROV will arrive on site at the spire and begin setting up for the event at 1230. The remaining on bottom dive time will be spent visiting previously seen corals – MCR021, WP1 and WP2 (see associated .kml file). The ROV will need to leave the bottom by 4:20pm from an approximate depth of 2310m. Ascent to 50m is expected to take 1 hour 40 minutes. The ROV is expected to be secured on deck at 6:30pm ship time.

**ROV Track Waypoints Table:**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| *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 |  |  |  |
| Start |  |  |  |  |  |  |  |
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