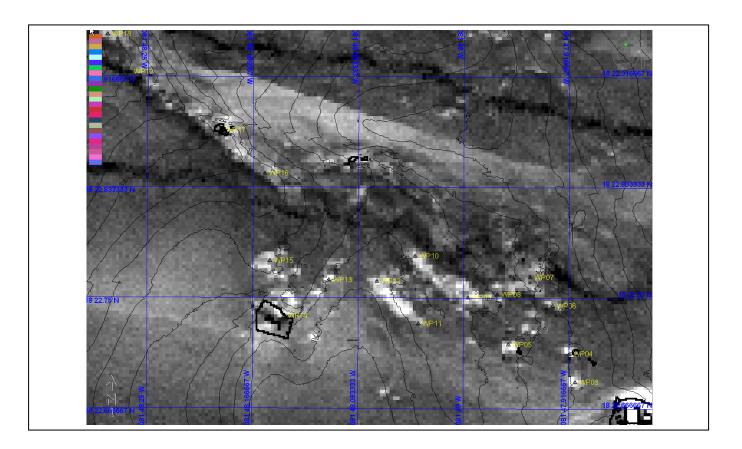


Science Team develops draft dive track two days before a planned dive. Expedition Leader responds overnight based on ship capabilities, programmatic considerations, and constraints. Plan is finalized the day before a dive

Site Name: West of Von Damm

**Approximate Location:** <u>18° 22.687′N, 81°47.912′W</u>

Dive Date (local): August 10<sup>th</sup>, 2011



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

## Science Rationale:

We will dive to the north of the Von Damm site and work progressively uphill, to the West, visiting a series of up to 20 waypoints selected from an AUTOSUB sonar survey that has revealed multiple "hard-grounds" within soft (low back-scatter) sediment. The adopted SOP is one that was tested on Dive 06 and in all cases revealed rocky outcrops with at least some measure of fluid flow and "enhanced" chemosynthetic and/or coral communities. Hopefully we will meet similar success with this dive as well.

## Operations Response/Rationale:

The ship plans to launch the ROV at approximately 0800. The time from the start of launch to the NW base of the Von Damm spire at a depth of 2360m is approximately 2 hours 20 minutes. The dive will start from the spire, and go from WP03 to WP18 (800m), covering the hard returns from the AUV backscatter. The desire is to make it as far as WP14 – where there is a hole in the AUV multibeam data that could be caused by hydrothermal fluid. The on bottom time for the dive is 6 hours 10 minutes. Time from the bottom to 50m is 1 hour 50m, and time for ROV recovering is 30 minutes, with the ROV secured on deck at 1630 ship time.

## **ROV Track Waypoints Table:**

DESIRED WAYPOINTS TO EXPLORE -				ACTUAL WAYPOINTS TO EXPLORE-			
(COMPLETED BY SHORE-SIDE LEAD SCIENTIST)				(COMPLETED BY SHIPBOARD EXPEDITION LEADER)			
(not including launch)							
WAYPOINT	LATITUDE	LONGITUDE	APPROX	WAYPOINT	LATITUDE	LONGITUDE	APPROX
NAME			DEPTH	NAME/SEQUENCE			DEPTH
Launch				Launch			
Start	18° 22.687′	81°47.912′	2360m				