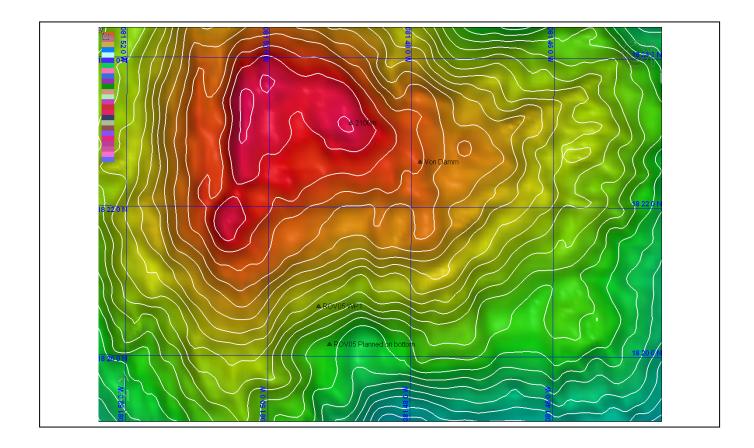


Science Team develops draft dive track two days before a planned dive. Expedition Leader responds overnight based on ship capabilities, programmatic considerations, and constraints. Plan is finalized the day before a dive

Site Name: Mt Dent South Flank

Approximate Location: <u>18° 20.155'N, 81° 49.138'W, 3450m</u>

Dive Date (local): <u>August 8<sup>th</sup>, 2011</u>





NOAA Okeanos Explorer Program

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

Science Rationale:

The plan for Dive 05 is to conduct a Geo-Transect from South to North up the South Flank of Mt Dent

Start: 18° 20.155'N, 81° 49.138'W, 3450m WP: 18° 20.666'N, 81° 49.296'W, 3040m Continue uphill from there

Overall plan – start deep, head uphill all day. Exact distance to be traversed will understandably depend on steepness of terrain encountered at the seafloor. Overview is to proceed as far upslope as possible in a reasonably straight line with ship and Seirios and take advantage of sonar to identify any particularly bright targets along with the freedom of the tether between *Little Herc* and *Seirios* to deviate to port and starboard (West and East, across track) as we move uphill to investigate any specific targets encountered. In the event that we only encounter sediment at any locale with no sonar targets nearby we will just proceed uphill as swiftly as possible.

## **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 3 hours 5 minutes. The time from the starting location of the dive on the seafloor to waypoint 2 (980m) at 0.12 knots is approximately 4 hours 25 minutes. The time to ascend to 50 meters from 3040m is 2.5 hours, and time to recover and secure the ROV on deck is 30 minutes. The ROV is expected to be secured on deck at 6:30pm ship time.

ROV	Track	Wavp	oints	Table:
			•••••	

DESIRED WAYPOINTS TO EXPLORE - (COMPLETED BY SHORE-SIDE LEAD SCIENTIST) (not including launch)				ACTUAL WAYPOINTS TO EXPLORE- (COMPLETED BY SHIPBOARD EXPEDITION LEADER)				
WAYPOINT	LATITUDE	LONGITUDE	APPROX	WAYPOINT	LATITUDE	LONGITUDE	APPROX	
NAME			DEPTH	NAME/SEQUENCE			DEPTH	
Launch				Launch				
Start	18° 20.155'	81° 49.138'	3450m					
	18° 20.666'N	81° 49.296'	3040m					