



NOAA Okeanos Explorer Program

ROV Dive Planning Form

Please use this as a template for documenting your recommendations for high-priority dive targets. Be sure to include a rationale for the dive as well as specific protocols (if applicable), and any known previous work or potential hazards at the site. Please include only generalized location information for any marine archaeology sites.

The form also includes fields for mapping targets and CTD cast locations as well.

Please send the completed form to Kelley.Elliott@noaa.gov and Brian.Kennedy@noaa.gov.

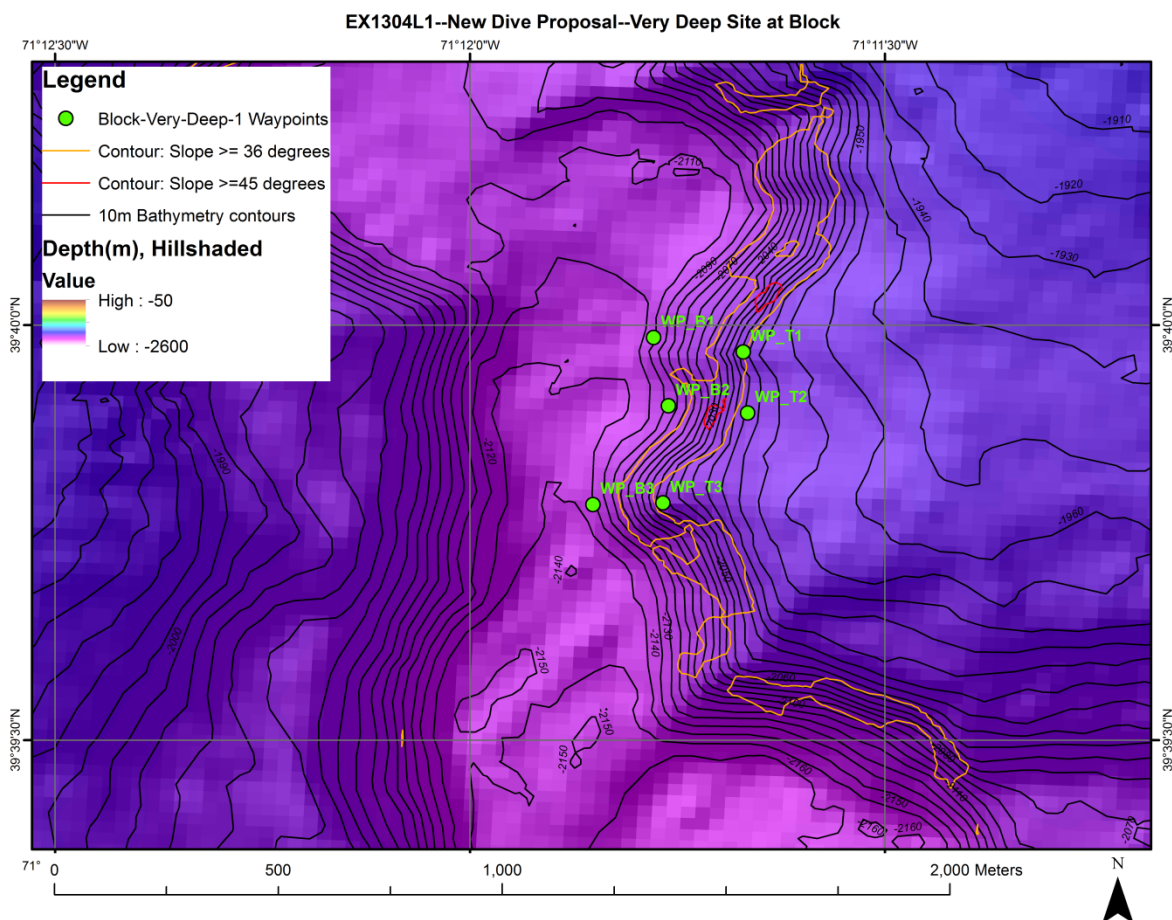
Site Name: BLOCK VERY DEEP 1

Approximate Location: Longitude, Latitude, Depth = -71.1963115, 39.66641403, 2112m (Waypoint 1)

Dive Date (local): DATE (2013/07/22)

Site map:

Waypoints (labeled GREEN dots) overlaid on hillshaded bathymetric relief (from 25m mosaic of EX Atlantic Canyons multibeam bathymetry), with black contours showing depth at 10m intervals. Orange and red contours show regions of high slope. Past experience in Atlantic canyon systems indicates consolidated substrate is likely where slope exceeds 36° [orange contours] and almost certain where slope exceeds 45° [red contours].

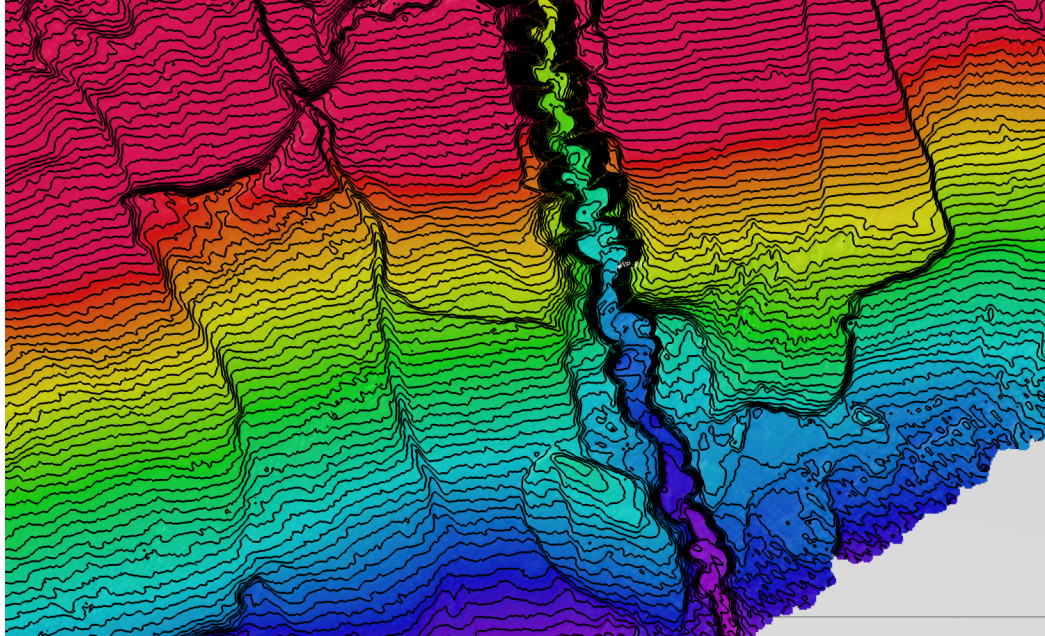




NOAA *Okeanos Explorer* Program

ROV Dive Planning Form

REGIONAL CONTEXT – AREA MAP:



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

The objectives of this dive are to characterize the geomorphology and benthic fauna, including deep-sea coral and sponge communities, along the east wall of a very deep area of Block Canyon (~2100-1950m). We are focusing on three upslope transects that are situated on and around a promontory feature that slightly protrudes from the east wall into the canyon axis. This was similar to the dive conducted 07/19/2013 on the east wall of Block at ~1300m depth. The dive track was chosen based on habitat prediction models for corals, often found in the canyons in areas with slopes >36 degrees. Proposed by Brian Kinlan.

Has previous work been conducted here? Are there potential hazards in the area?

No known previous work in this area. No known hazards.

UPDATED: July 21, 2013



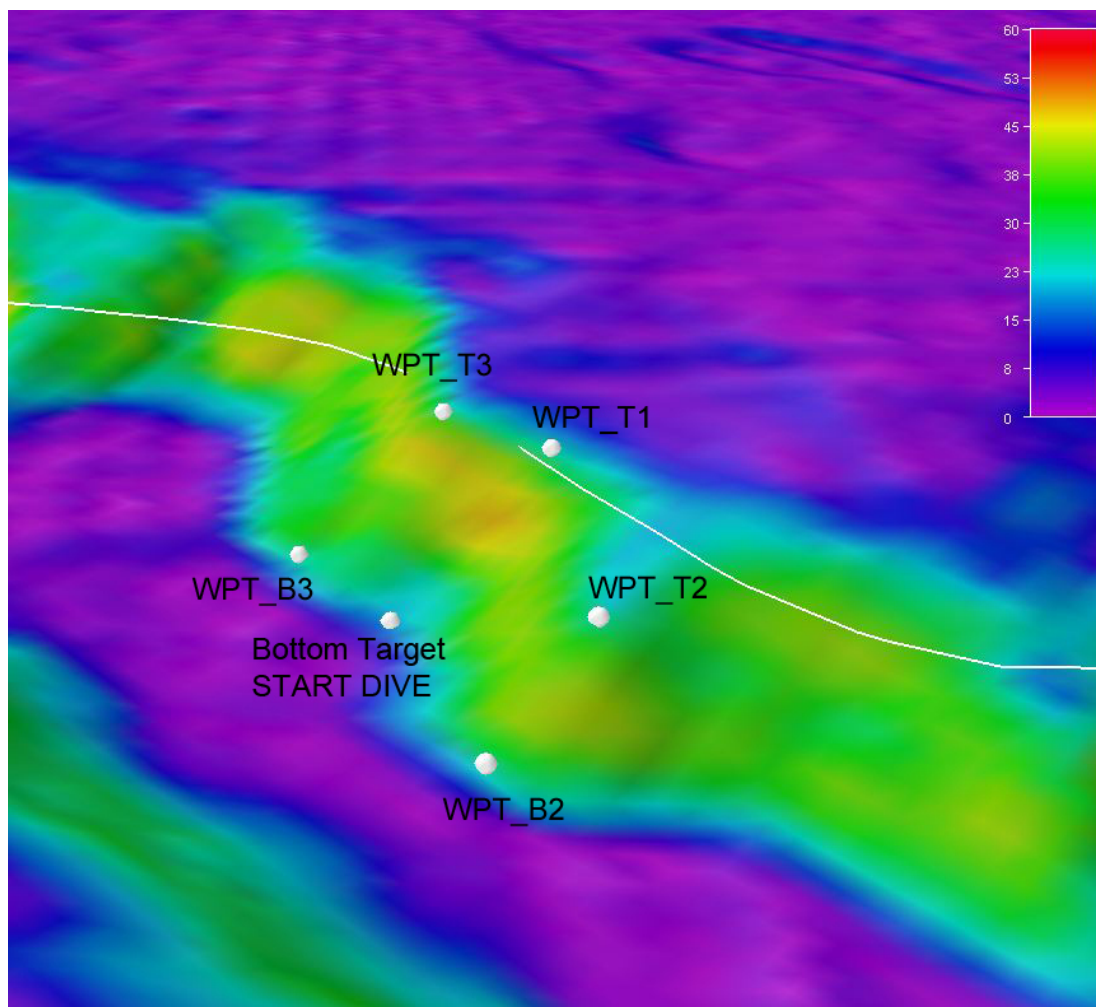
NOAA *Okeanos Explorer* Program

ROV Dive Planning Form

DIVE PLAN OVERVIEW (UPDATED 21 JULY 2013)

The general dive plan is to start in the middle of the three proposed upslope transects, moving up to WPT_T1. We will then likely move along the rim or come off the cliff and move to the base of the slope to transit up the promontory for the second upslope transect (WPT_B2 to T2). However, we will assess which upslope transect to take during this dive (B2 to T2 or B3 to T3, SEE MAP BELOW). The dive will target a depth range of ~2100-1980 m.

IMAGE: SLOPE TOPOGRAPHY WITH WAYPOINTS (UPDATED 21 JULY 2013)



UPDATED: July 21, 2013



NOAA Okeanos Explorer Program

ROV Dive Planning Form

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/SEQUENCE	LATITUDE	LONGITUDE	APPROX DEPTH	WAYPOINT NAME/SEQUENCE	LATITUDE	LONGITUDE	APPROX DEPTH
Launch				Bottom Target	39.66501094	-71.196563	-2122.48
WP_B1	-71.1963115	39.66641403	-2111.74	WP_T1	39.66486617	-71.19441265	-1989.68
WP_T1	-71.19450899	39.66612651	-1985.87	WP_B2	39.66307042	-71.19760727	-2128.39
WP_B2	-71.19601292	39.66504279	-2105.02	WP_T2	39.66308018	-71.1961531	-2034.99
WP_T2	-71.19442055	39.66489904	-1989.88	WP_B3	39.66639517	-71.19637432	-2114.71
WP_B3	-71.19752793	39.66306058	-2124.99	WP_T3	39.66611051	-71.19456555	-1987.7
WP_T3	-71.1961235	39.66309376	-2033.63	WP6			

ANCILLARY INFORMATION:

A CTD cast will be conducted after the dive to a depth of ~2200 m.

RECOMMENDED OPERATIONS IN THE TARGET AREA PRIOR TO OR AFTER ROV DIVE

Please include requests for in situ sensors (LSS, DO, ORP) to be added to the CTD cast here, and specifics on the type of mapping operation requested (multibeam, subbottom, single beam).

	LATITUDE	LONGITUDE	APPROX DEPTH
CTD CASTS			
1			
2			
3			
4			
MAPPING AREA BOUNDING COORDINATES			
North			
East			
South			
West			