

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.

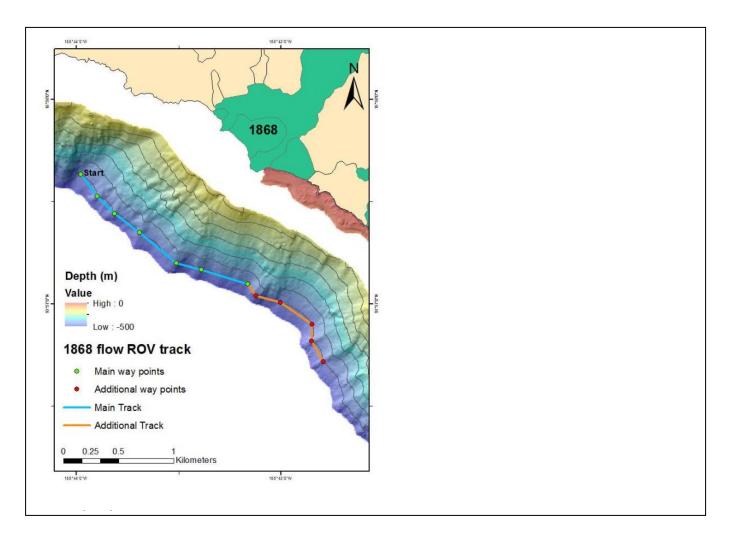
The form also includes fields for mapping targets and CTD cast locations as well.

Please send the completed form to <u>Kelley.Elliott@noaa.gov</u> and <u>ckelley@hawaii.edu</u>

Site Name: SITE B-1868 Mauna Loa Lava Flow

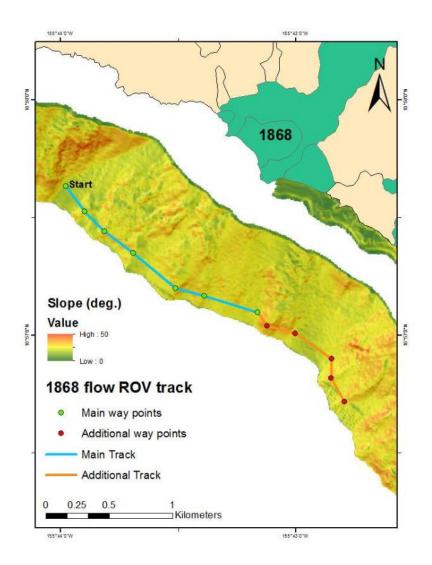
Approximate Location: <u>18.9453 / -155.71323</u>

Dive Date (local): 2015/08/30



UPDATED: November 3, 2015





Last updated: May 21, 2015

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

The dive is located on the 1868 lava flow from Mauna Loa which was a high volume flow that extended to depths greater than 500 m off the southwest coast of Hawaii. The purpose of this study is to investigate the deep-water precious coral community that has developed since its formation 147 years ago. The data will supplement data collected on other Mauna Loa flows at this depth using the Pisces V submersible in 2011. This dive will focus on the western branch. The ROV track is intended to transect at mean depth of 450 m from west to east. In the event that more time is available for transecting additional way points have been included in the dive plan (orange).



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

There are no known hazards. There has been previous mapping, submersible and ROV dives at the target depth this location. In 2002 there was a Pisces IV dive to the east of the western branch of the 1868 flow. Both the Pisces V and ROV transected across the eastern branch of the 1868 flow in 2011.

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/SEQUENCE			DEPTH	NAME/SEQUENCE			DEPTH
Launch/WP1	18.945307150	155.713230499	450m	Launch/WP1			
WP2	18.9469525480	155.714168006	450m	WP2			
WP3	18.9483064613	155.714138263	450m	WP3			
WP4	18.9501172312	155.716702132	450m	WP4			
WP5	18.9506585585	155.718700880	450m	WP5			
WP6	18.9515924970	155.719379026	450m	WP6			
WP7	18.9527524842	155.723168318	450m	WP7			
WP8	18.9533057089	155.725196808	450m	WP8			
WP9	18.9557981943	155.728183032	450m	WP9			
WP10	18.9573448440	155.730229368	450m	WP10			
Recovery /WP11	18.9587487260	155.731627302	450m	Recovery /WP11			

ANCILLARY INFORMATION:

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							

UPDATED: November 3, 2015

