

Purpose of the Dive

Explore the biology and geomorphology of Washington Canyon

Description of the Dive:

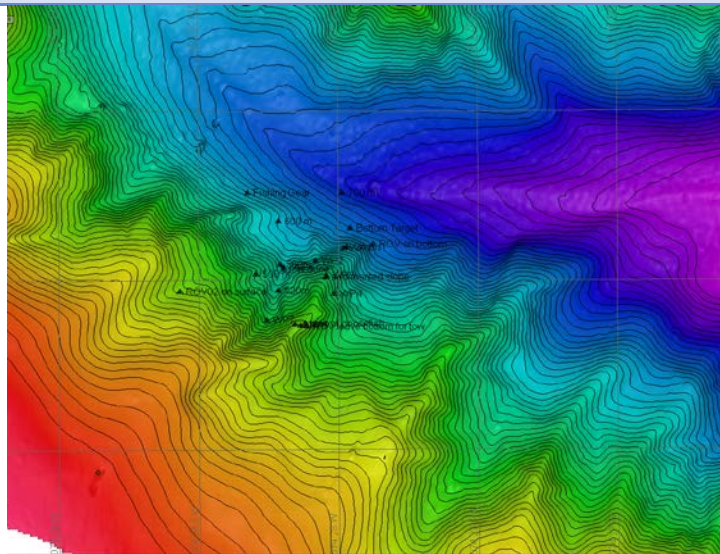
Dive 2 took place up the south flank of Washington Canyon. Seirios and D2 were both in the water by ~0820 hrs. The vehicles landed on a gentle, sedimented seafloor at 0900 hrs. Water depth at the landing site was 644 m.

The first part of the dive was spent angling up a slope to the SW. Step-like outcrops, some benches with near vertical walls facing the canyon axis, characterized this lower slope. Occasional fresh fractures with plumose textures were observed, but most of these outcrops were covered with soft sediment and heavily encrusted with sponges, antipatharians and anemones. Burrows in these steep exposures were common. In one cavern (created by spring sapping?) at 602 m, a small number of octocorals ("bubble gum" corals, both pink and white varieties) were observed; 6 colonies in total. Symbionts associated with these colonies were not apparent. A waypoint was dropped at this location. At 560 m, another amphitheater created by erosion was observed.

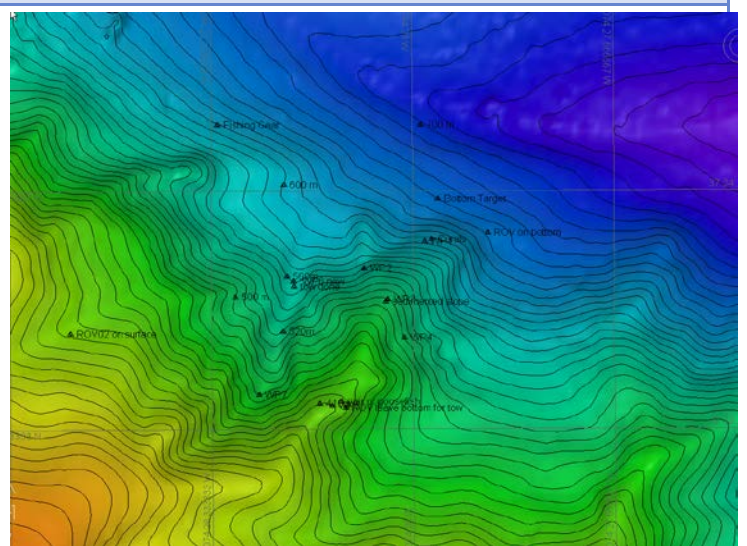
Life, both in the water column and on the sediment surface, was abundant from the start of the dive. At times, swarms of amphipods/euphausiids (krill) and small fish were drawn to the D2 lights in sufficient quantities that illumination of the seafloor was significantly reduced. Siphonophores and a variety of other soft-bodied organisms including salps and medusas were abundant as well. Hake were often observed, as were long-nosed eels, eel pouts and halosaurs. A pair of large goose fish/monk fish were found well camouflaged in the mud, as well as some rays or skates and rosefish. Squid also occurred in large numbers, sometimes flying in schools, particularly higher on the slope. Quill worms littered the surface in some areas. On the seafloor, red crabs were common; Jonah crabs were also observed as well as squat lobsters (galatheids, probably several species) and hermit crabs. Anemones, stalked and unstalked, were common. A number of small octopods were also observed. Behaviors included mating of crabs and predation (of a squid by a trio of red crabs).

The first transect, involving 5 waypoints, ended at 1400 hrs. at a water depth of ~440 m. Above the lower slope, no steep rock exposures were observed. Sedimented seafloor characterized the majority of this first transect. A mid-water transit brought the vehicles back down the slope ~700 m to a water depth of ~560 m, slightly up-canyon of the first transect. This second up-slope transect was terminated at 1450 hrs. a depth of ~520 m by a fire emergency on the vessel. Both vehicles were brought to a depth of 100 m until the emergency was contained, at 1535 hrs. Both vehicles were back on deck by 1620 hrs.

Overall Map of ROV Dive Area

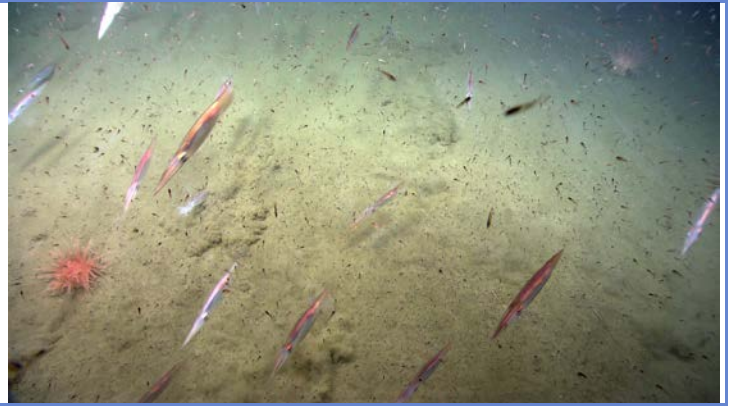


Close-up Map of Main Dive Site



Representative Photos of the Dive





Please direct inquiries to:

NOAA Office of Ocean Exploration & Research
1315 East-West Highway (SSMC3 10th Floor)
Silver Spring, MD 20910
(301) 734-1014