

Summary

Cruise: AT-41

Pilot: Jefferson Grau

Dive: A4969

Stbd Observer: Zach Proux

Date: 08/30/2018

Site: Pamlico Canyon

Port Observer: Jason Chaytor

Upon landing on-bottom, we observed a sedimented seafloor. We moved towards our first target, saw some sea pens along the way, and arrived at the base of a large, vertical wall – here we took our first set of push cores and observed a lithodid crab and a very large pycnogonid. We began climbing the wall towards our second target and collected rock samples where possible. The majority of the dive was on sheer cliffs – we climbed a total of 550 vertical meters. We collected priority sample specimens, including what we thought were *Desmophyllum*, *Paramuricea*, clams, *Solensmilia*, and *Paragorgia*. We also collected some bright purple stoloniferans, an *Anthomastus* and a couple *Acanthogorgia*. There was a very dense community of *Acanthogorgia* on one of the sheer walls. There was sporadic, small patches of *Solensmilia*, often under small lips protruding from the wall. Throughout the dive, we observed large Red Crabs – some of which were scaling the vertical walls. There was very interesting geology throughout the dive; at one point, we observed what appeared to be a large fissure running down the length of a wall as well as many large slabs of rock that appeared to have calved off the wall further back in geologic history. We also observed black manganese iron oxide on the wall faces in a banded pattern. After climbing the 550 meters out of Pamlico Canyon, we reached sedimented surface again. We took 4 sets of push cores, filled 3 bio boxes, a slurp, a rock box, and 10 quivers.