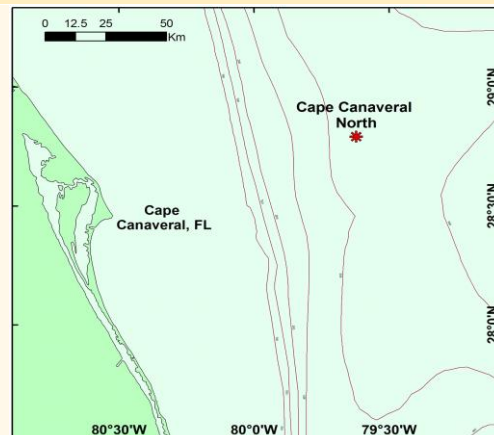
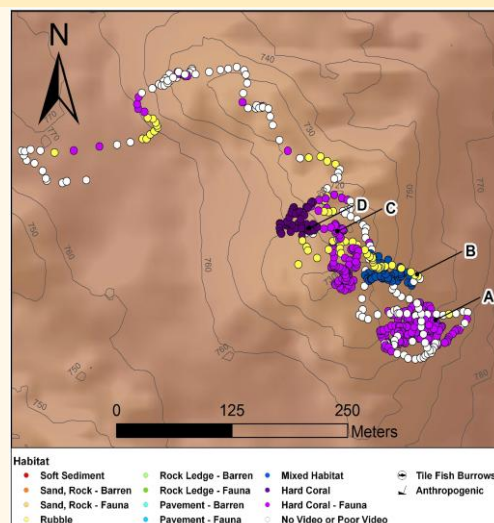


DIVE NUMBER: JSLII-3702**STUDY AREA: Cape Canaveral North****STATION OVERVIEW**

Project	Deep-sea Coral Research
Principal investigators	SW Ross ¹
PI Contact Info¹	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
Purpose	Exploration of Deep-water Coral Ecosystems off Cape Canaveral, Florida
Vessel	R/V Seward Johnson, Johnson Sea Link II Submersible
Science Divers	J Roberts (bow), M Nizinski (stern)
External Video Tapes	External Hard Drive
Internal Video Tapes	3 mini DVs
Digital Still Photos	Yes
Positioning System	dGPS
CTD File	<input checked="" type="checkbox"/>
Specimens Collected	<input checked="" type="checkbox"/>
Other	
Acknowledgements	NOAA, USGS, SAFMC, OIMB, NC Museum of Natural Sciences
SEADESC Analyst	M Watts
Date Compiled	12/14/2011
PI Station Number	JSLII-2009-Atl-3702

GENERAL LOCATION**Dive Track:****DIVE DATA**

Date	07-Aug-09
Minimum Bottom Depth (m)	712
Maximum Bottom Depth (m)	754
Start Bottom Time (EDT)	19:21
End Bottom End (EDT)	20:57
Starting Latitude (N)	28° 47.579'
Starting Longitude (W)	79° 37.281'
Ending Latitude (N)	28° 47.570'
Ending Longitude (W)	79° 37.366'
Surface Current (Kts)	
Bottom Current (Kts)	

Image A: Hard Coral - with Attached Fauna
28° 47.528' N, 79° 37.272' W



DIVE NUMBER: JSLII-3702

STUDY AREA: Cape Canaveral North

IMAGE GALLERY

* indicates image position is approximated

Image B: Rubble

28° 47.544' N, 79° 37.284' W



Image C: Hard Corals - with Attached Fauna

28° 47.562' N, 79° 37.338' W

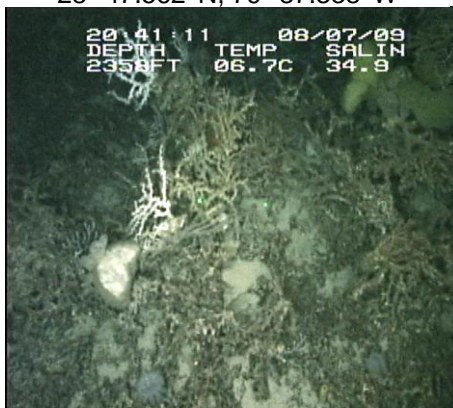
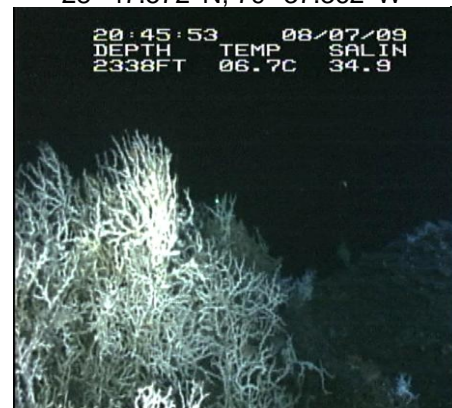


Image D: Hard Corals - without Attached Fauna

28° 47.572' N, 79° 37.362' W



RELEVANT WORK AND/OR LITERATURE CITED

- Ayers and Pilkey (1981)
EEZ-SCAN 87 Scientific Staff (1991)
Reed (2002)
Reed and Ross (2005)
Reed et al. (2006)
Ross and Nizinski (2007)
Ross and Quattrini (2007, 2009)
Ross et al. (2012)

BIOLOGICAL ENVIRONMENT

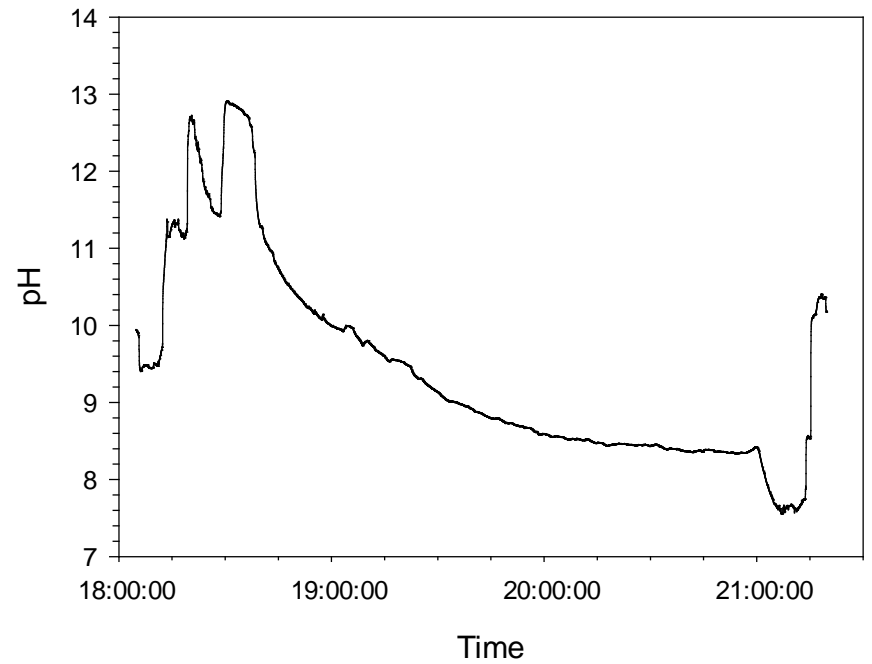
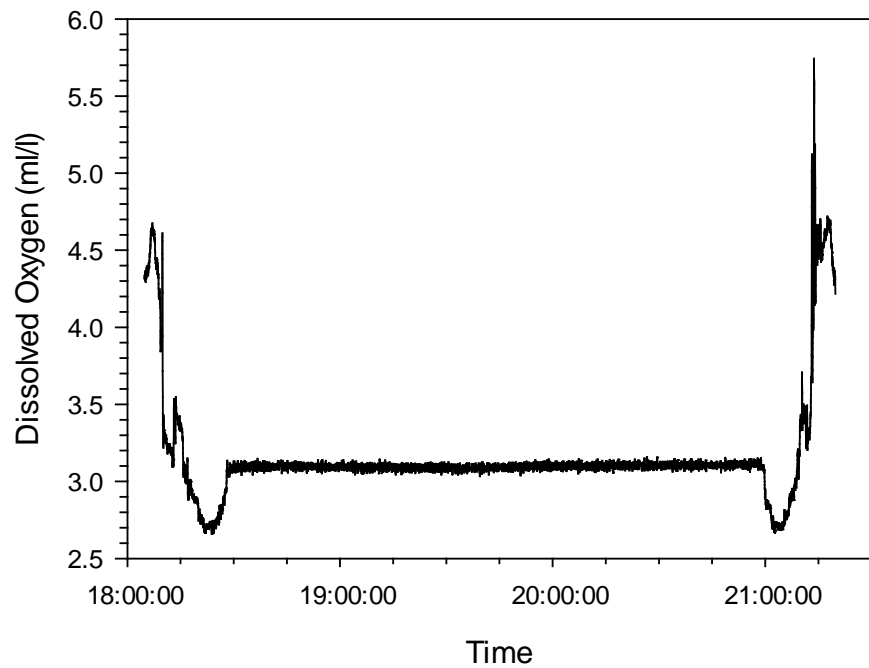
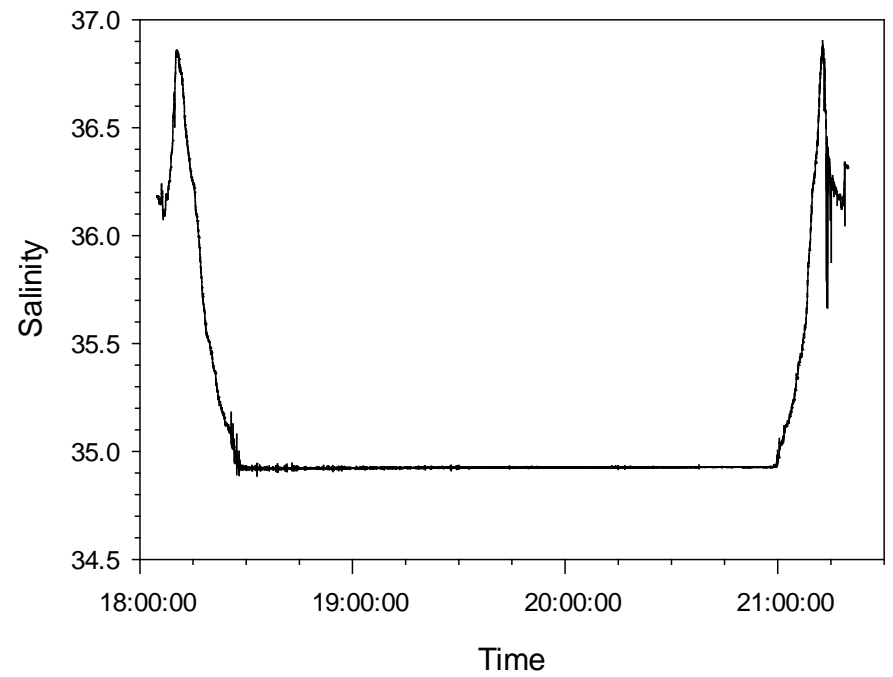
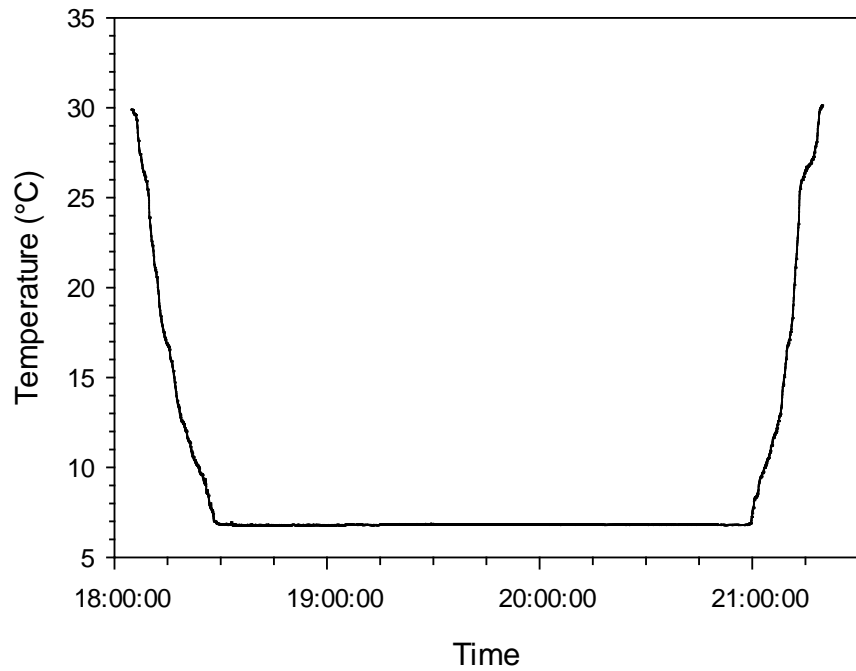
This dive explored a large *Lophelia pertusa* bioherm off Cape Canaveral. Coral rubble leading up to the bioherm supported fauna such as hexactinellid sponges, *Plumerella* sp., and bamboo coral. The bioherm was comprised of dense dead and live *L. pertusa* on a dead coral matrix. The hard coral rubble and matrix habitats supported abundant attached fauna such as the alcyonacea *Anthomastus* sp., gorgonians (e.g. *Plumarella* sp.), bamboo corals (e.g. *Keratoisis* sp.), anemones, hydroids, a diversity of hexactinellid sponges (e.g. *Aphrocallistes* sp. and *Hertwigia* sp.), and the hard coral *Madrepora oculata*. Mobile fauna included cidaroid urchins, a hagfish, eels, a chimaera, and a goosfish.

PHYSICAL ENVIRONMENT

This dive began northwest of a *L. pertusa* bioherm, requiring a southeasterly traverse over coral rubble habitat and sporadic patches of standing dead coral. At the base of the bioherm the slope increased and was dominated by dense rubble with abundant attached fauna. The abundance of standing dead coral with live patches and attached fauna increased with elevation up the bioherm. The percentage of live *L. pertusa* increased (0 to 80%) with elevation.

ADDITIONAL COMMENTS

Original dives are on mini DVs that were transferred to digital and stored on an external hard drive. Video quality was too dark to discern the habitat for the first 40 min. of the dive as the submersible was too far off the bottom and one of the external lights was pointed off to the side of the submersible to prevent the light from reflecting off the lander and blinding the pilot. A lander was deployed and collections taken of live and dead *L. pertusa*, *M. oculata*, cidaroid urchins, bamboo coral, an *E. lopheliae*, and a *Hertwigia* sp..



Plots of CTD data recorded during submersible dive JSL-2009-Atl-3702 (7 Aug 2009) off Cape Canaveral, FL.