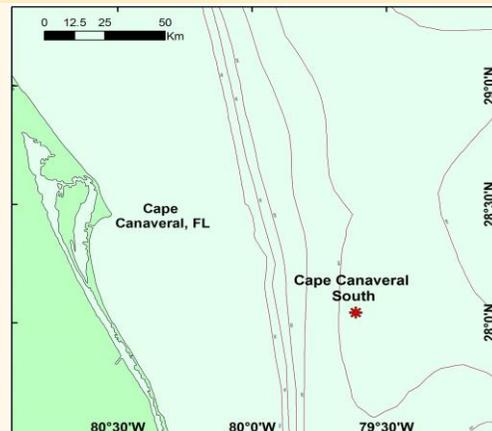
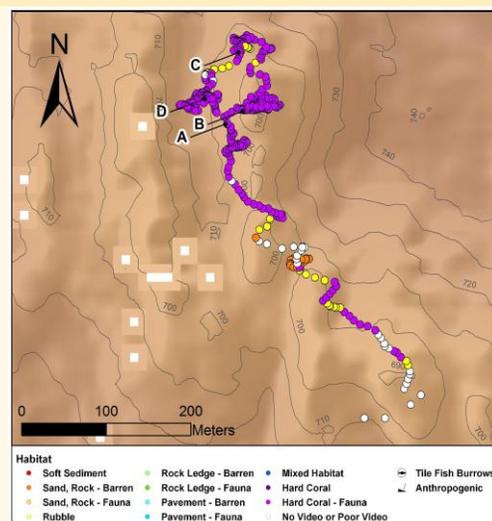


DIVE NUMBER: JSLII-3721**STUDY AREA: Cape Canaveral South****STATION OVERVIEW**

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	C Morrison (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
SEDESC Analyst	M Watts
Date Compiled	2/8/2012
PI Station Number	JSLII-09-Atl-3721

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

Date	17-Aug-09
Minimum Bottom Depth (m)	684
Maximum Bottom Depth (m)	709
Start Bottom Time (EDT)	8:42
End Bottom End (EDT)	11:12
Starting Latitude (N)	28° 02.303'
Starting Longitude (W)	79° 36.759'
Ending Latitude (N)	28° 02.469'
Ending Longitude (W)	79° 36.887'
Surface Current (Kts)	
Bottom Current (Kts)	

Image A: Hard Coral - with Attached Fauna
28° 02.469' N, 79° 36.882' W



DIVE NUMBER: JSLII-3721

STUDY AREA: Cape Canaveral South

IMAGE GALLERY

* indicates image position is approximated

**Image B: Hard Coral -
with Attached Fauna**
28° 02.476' N, 79° 36.858' W

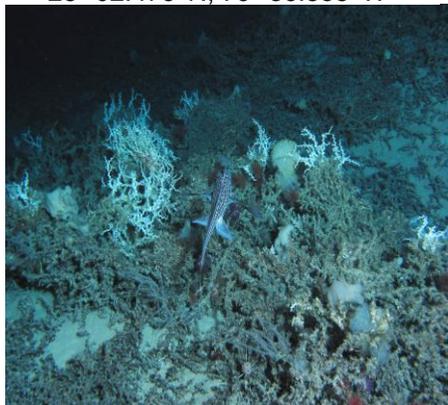


Image C: Rubble
28° 02.511' N, 79° 36.888' W



**Image D: Hard Coral -
with Attached Fauna**
28° 02.484' N, 79° 36.894' 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

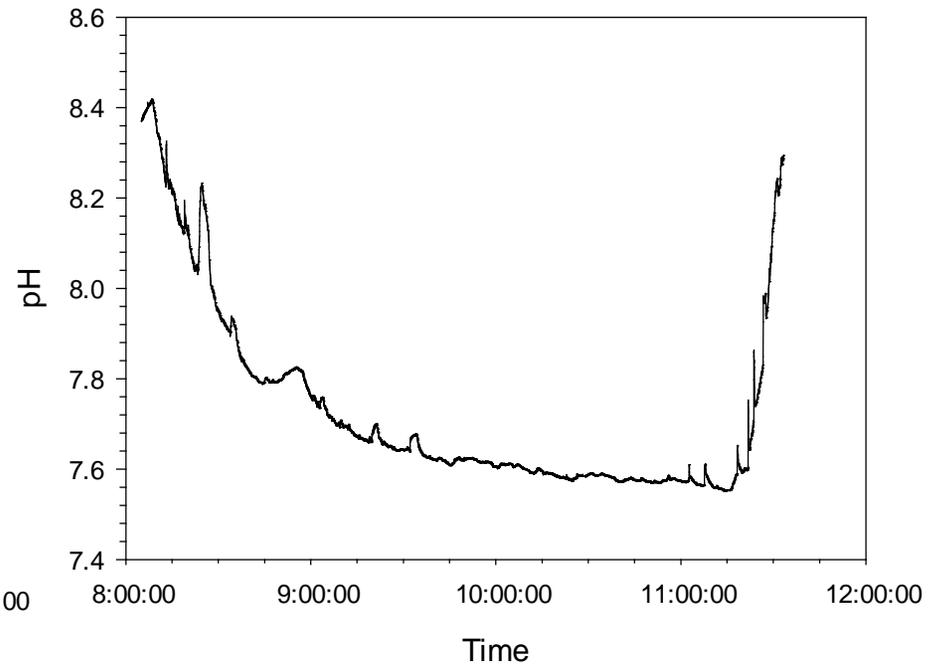
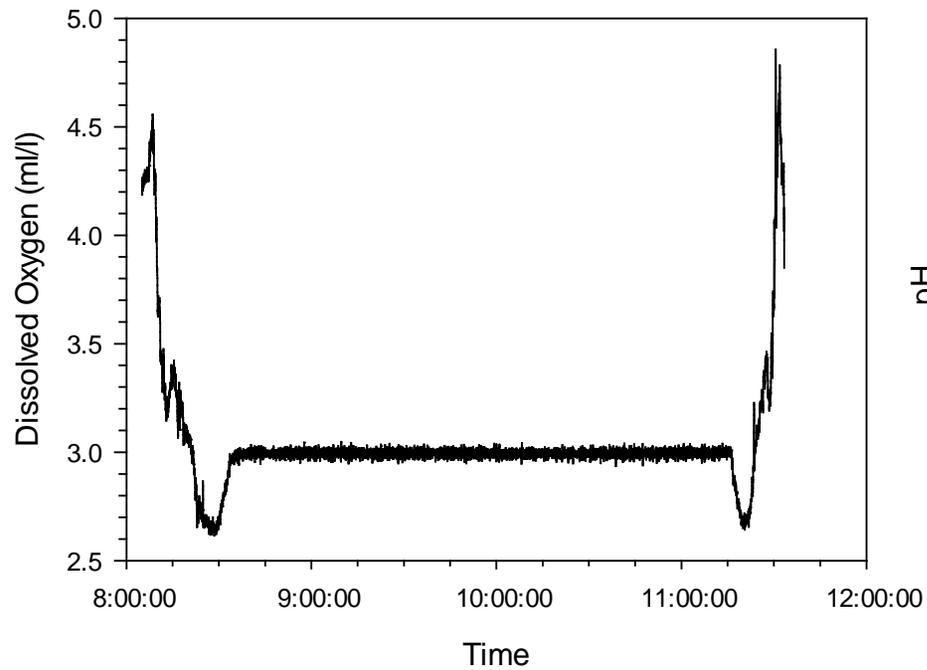
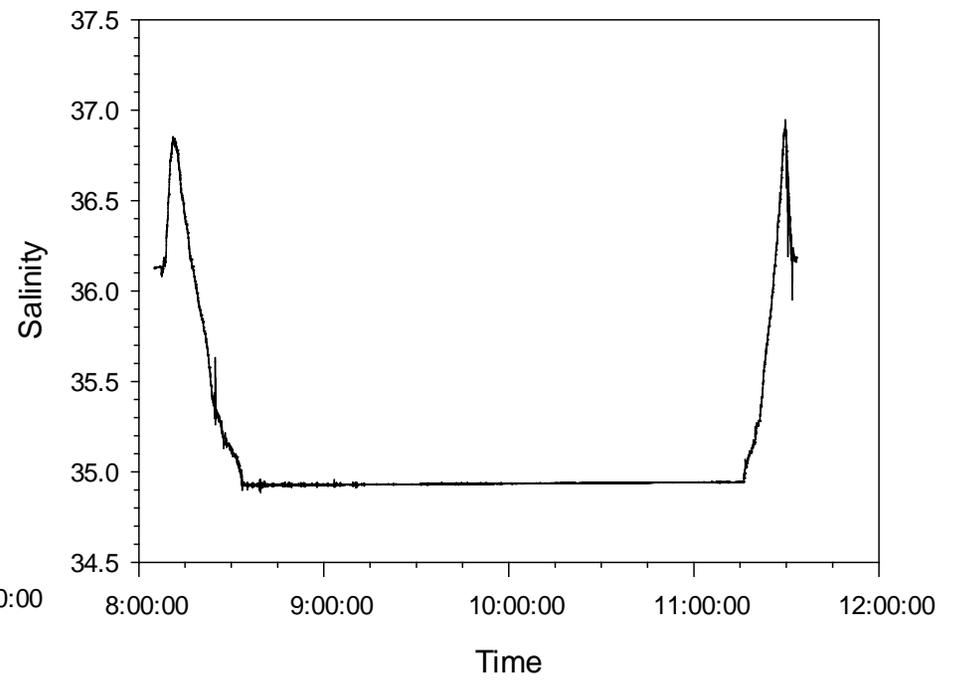
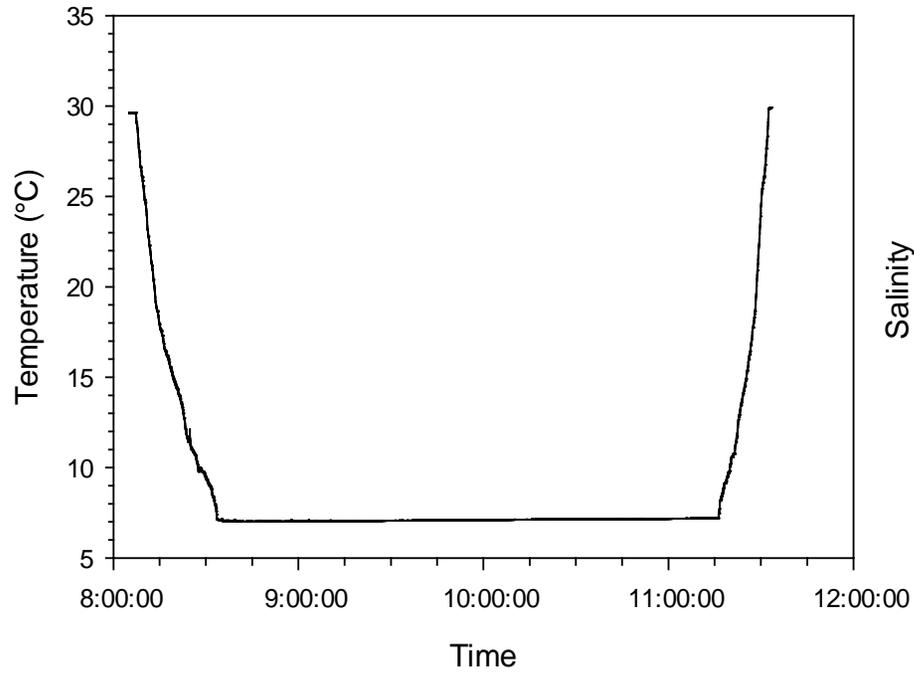
This dive traversed a few *Lophelia pertusa* bioherms off Cape Canaveral. The hard coral habitat was comprised of 60-99% dead, variable relief *L. pertusa*. The hard coral and rubble habitats supported abundant attached fauna such as the alcyonacea *Anthomastus* sp., gorgonians (e.g. *Plumarella* sp.), bamboo coral (e.g. *Keratoisis* sp. and an orange bamboo coral), *Paramuricea* sp., hydroids, a huge diversity of demospongia (e.g. *Phakellia* sp.) and hexactinellid sponges (e.g. *Aphrocallistes* sp., *Hertwigia* sp., and *Hyalonema* sp.), a few large patches of the hard coral *Madrepora oculata* and a small patch of *Enallopsammia profunda*. Mobile fauna included echinoid and cidaroid urchins, crinoids, galatheid crabs, synphobranchid eels, a chimaera, scorpionfish, rattail fish, coral hakes, hagfish, a goosefish, and a hatchetfish.

PHYSICAL ENVIRONMENT

This dive began to the southeast of a few *L. pertusa* bioherms off Cape Canaveral. The submersible reached bottom near the base of the southern bioherm and conducted a northwesterly transect upslope through coral rubble and hard coral habitat with attached fauna. Coral cover increased from 50% to 100% with elevation up the bioherms. Hard coral habitat on both bioherms ranged from 60-99% dead, low to high relief *L. pertusa* with abundant attached fauna. Each bioherm consisted of a series of coral ridges alternating with small valleys of rubble and soft sediment. There was a huge diversity of sponges attached to both the hard coral and rubble habitats.

ADDITIONAL COMMENTS

Original dives are on mini DVs that were transferred to digital and stored on an external hard drive. Video quality was generally clear except for the first 45 min. of the dive due to condensation on the external camera lens. Suction samples and punch cores for sediment were taken at the base of corals along with collections of live *L. pertusa*, *M. oculata*, *E. profunda*, *Keratoisis* sp. and an orange bamboo coral, a cidaroid urchin, a hexactinellid sponge, a galatheid crab, a goosefish, and a hatchetfish.



Plots of CTD data recorded during submersible dive JSL-2009-Atl-3721 (17 Aug 2009) off Cape Canaveral, FL.