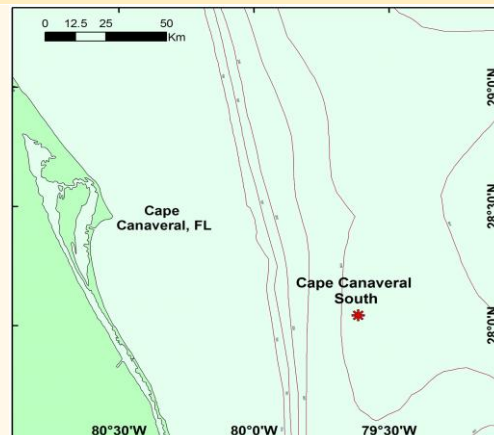
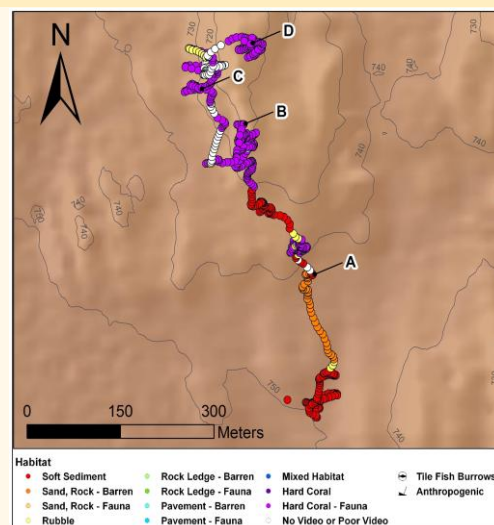


**DIVE NUMBER: JSLII-3710****STUDY AREA: Cape Canaveral South****STATION OVERVIEW**

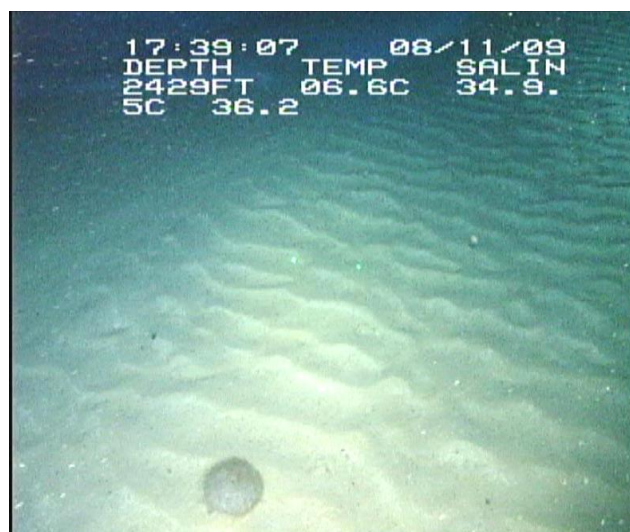
<b>Project</b>	Deep-sea Coral Research
<b>Principal investigators</b>	SW Ross <sup>1</sup>
<b>PI Contact Info<sup>1</sup></b>	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
<b>Purpose</b>	Exploration of Deep-water Coral Ecosystems off Cape Canaveral, Florida
<b>Vessel</b>	R/V Seward Johnson, Johnson Sea Link II Submersible
<b>Science Divers</b>	S Harter (bow), L Wickes (stern)
<b>External Video Tapes</b>	External Hard Drive
<b>Internal Video Tapes</b>	3 mini DVs
<b>Digital Still Photos</b>	Yes
<b>Positioning System</b>	dGPS
<b>CTD File</b>	<input checked="" type="checkbox"/>
<b>Specimens Collected</b>	<input checked="" type="checkbox"/>
<b>Other</b>	
<b>Acknowledgements</b>	NOAA, USGS, SAFMC, OIMB, NC Museum of Natural Sciences
<b>SEADESC Analyst</b>	M Watts
<b>Date Compiled</b>	1/16/2012
<b>PI Station Number</b>	JSLII-09-Atl-3710

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

Date	11-Aug-09
Minimum Bottom Depth (m)	711
Maximum Bottom Depth (m)	746
Start Bottom Time (EDT)	17:16
End Bottom End (EDT)	19:16
Starting Latitude (N)	28° 16.271'
Starting Longitude (W)	79° 37.002'
Ending Latitude (N)	28° 16.555'
Ending Longitude (W)	79° 37.059'
Surface Current (Kts)	
Bottom Current (Kts)	

**Image A: Soft Substrate**

28° 16.376' N, 79° 36.996' W



## DIVE NUMBER: JSLII-3710

## STUDY AREA: Cape Canaveral South

### IMAGE GALLERY

\* indicates image position is approximated

Image B: Hard Coral -  
with Attached Fauna

28° 16.496' N, 79° 37.050' W



Image C: Hard Coral -  
with Attached Fauna

28° 16.527' N, 79° 37.092' W



Image D: Hard Coral -  
with Attached Fauna

28° 16.562' N, 79° 37.050' 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

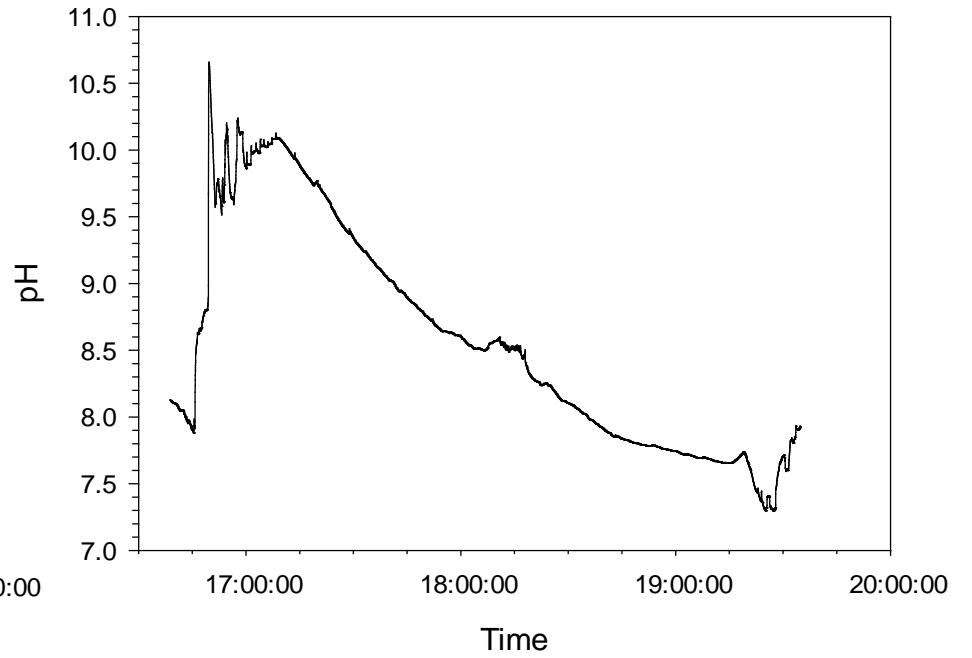
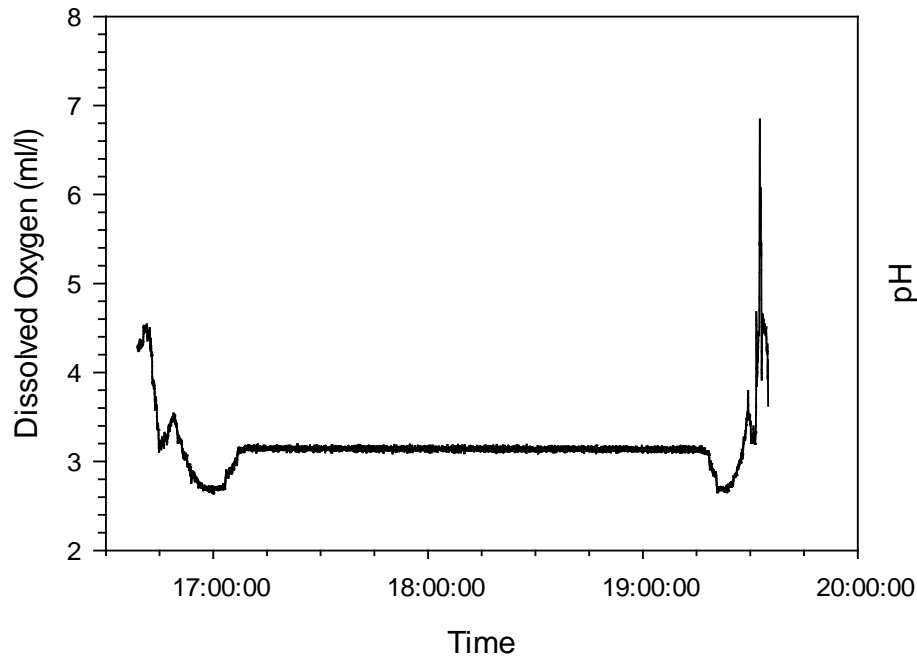
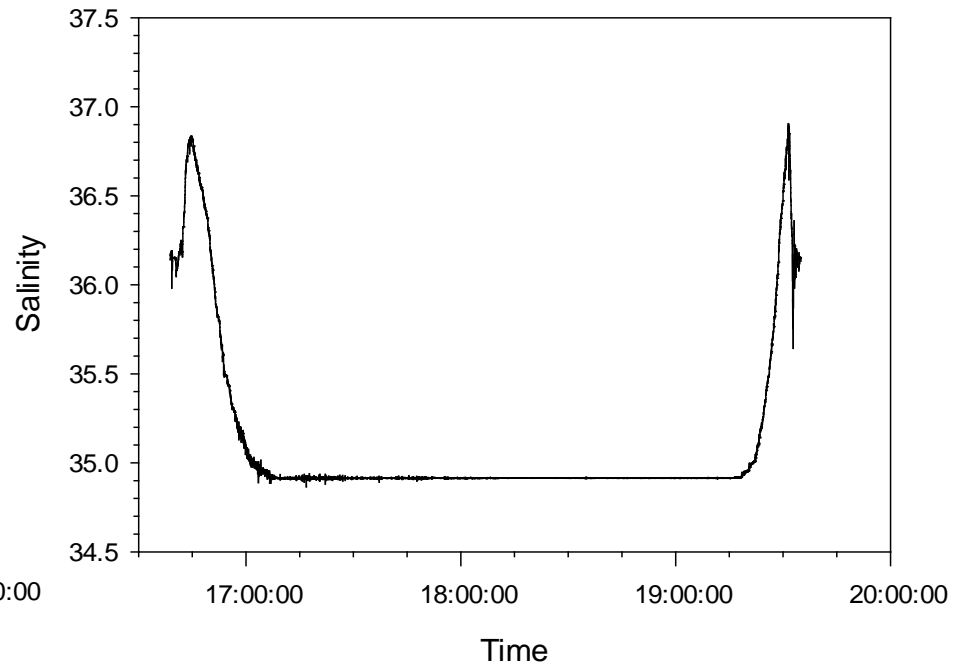
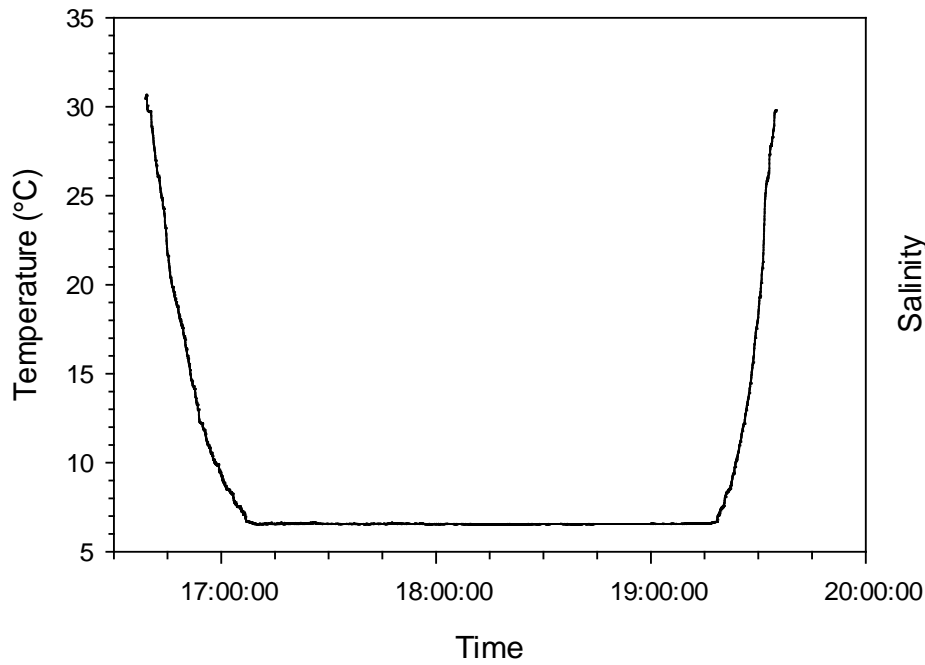
This dive traversed a *Lophelia pertusa* bioherm off Cape Canaveral. The hard coral habitat was comprised of 95-100% dead, low to high relief *L. pertusa*. The hard coral and soft sediment habitats supported abundant attached fauna such as the alcyonacea *Anthomastus* sp., bamboo coral (e.g. *Keratoisis* sp.), hydroids, a large diversity of hexactinellid sponges (e.g. *Aphrocallistes* sp., *Hertwigia* sp., and an euplectellid species) and demospongia sponges. Mobile fauna included cidaroid and echinoid urchins, a seastar, a rattail fish, an offshore hake, synphobranchid eels, and skates.

### PHYSICAL ENVIRONMENT

This dive began 300 meters south of the base of a *L. pertusa* bioherm off Cape Canaveral. The submersible conducted a northwesterly traverse over soft sediment, barren soft sediment with small rocks and brief sections of coral rubble before reaching hard coral habitat with attached fauna. The first coral ridge was a steep wall with low relief, 100% dead *L. pertusa*. Two subsequent coral ridges began as low relief, 100% dead coral and transitioned into medium to high relief coral stands with 5% live *L. pertusa* with increasing elevation up the bioherm.

### ADDITIONAL COMMENTS

Original dives are on mini DVs that were transferred to digital and stored on an external hard drive. Video quality was clear with brief sections of video too dark to discern habitat type. Suction samples for sediment as well as a single bushmaster collection of a patch of live *L. pertusa* were taken along with collections of live and dead *L. pertusa*, a yellow octocoral, *Keratoisis* sp., *Anthomastus* sp., an euplectellid sponge, *Hertwigia* sp., a white hexactinellid sponge, a cidaroid and an echinoid urchin, a seastar, a galatheid crab, and a skate.



Plots of CTD data recorded during submersible dive JSL-2009-Atl-3710 (11 Aug 2009) off Cape Canaveral, FL.