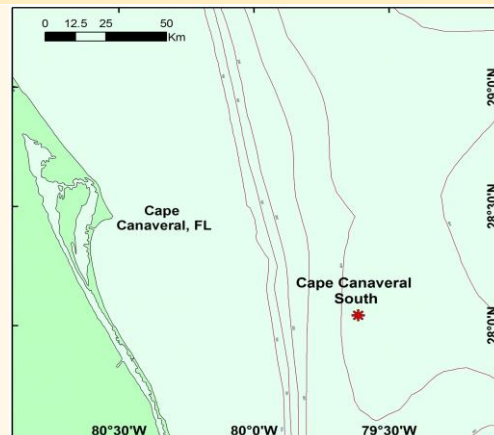
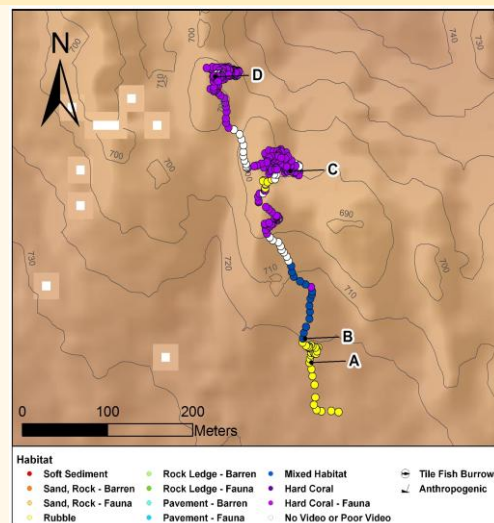


**DIVE NUMBER: JSLII-3720****STUDY AREA: Cape Canaveral South****STATION OVERVIEW**

<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 Ross (bow), S Brooke (stern)
<b>External Video Tapes</b>	External Hard Drives
<b>Internal Video Tapes</b>	3 mini DVs
<b>Digital Still Photos</b>	No
<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>	2/7/2012
<b>PI Station Number</b>	JSLII-09-Atl-3720

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

Date	16-Aug-09
Minimum Bottom Depth (m)	690
Maximum Bottom Depth (m)	725
Start Bottom Time (EDT)	17:28
End Bottom End (EDT)	19:41
Starting Latitude (N)	28° 02.204'
Starting Longitude (W)	79° 36.780'
Ending Latitude (N)	28° 02.326'
Ending Longitude (W)	79° 36.991'
Surface Current (Kts)	
Bottom Current (Kts)	

**Image A: Rubble**

28° 02.236' N, 79° 36.798' W



**DIVE NUMBER: JSLII-3720**

**STUDY AREA: Cape Canaveral South**

**IMAGE GALLERY**

\* indicates image position is approximated

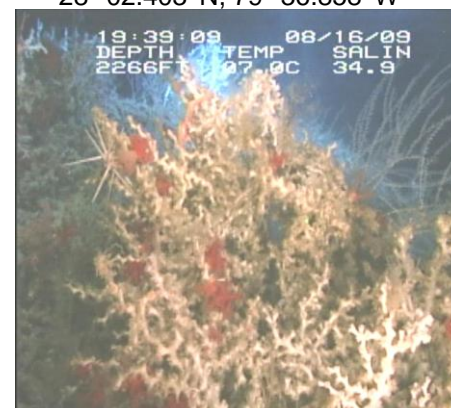
**Image B: Mixed Habitat**  
28° 02.240' N, 79° 36.798' W



**Image C: Hard Coral -  
with Attached Fauna**  
28° 02.339' N, 79° 36.804' W



**Image D: Hard Coral -  
with Attached Fauna**  
28° 02.403' N, 79° 36.858' 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**

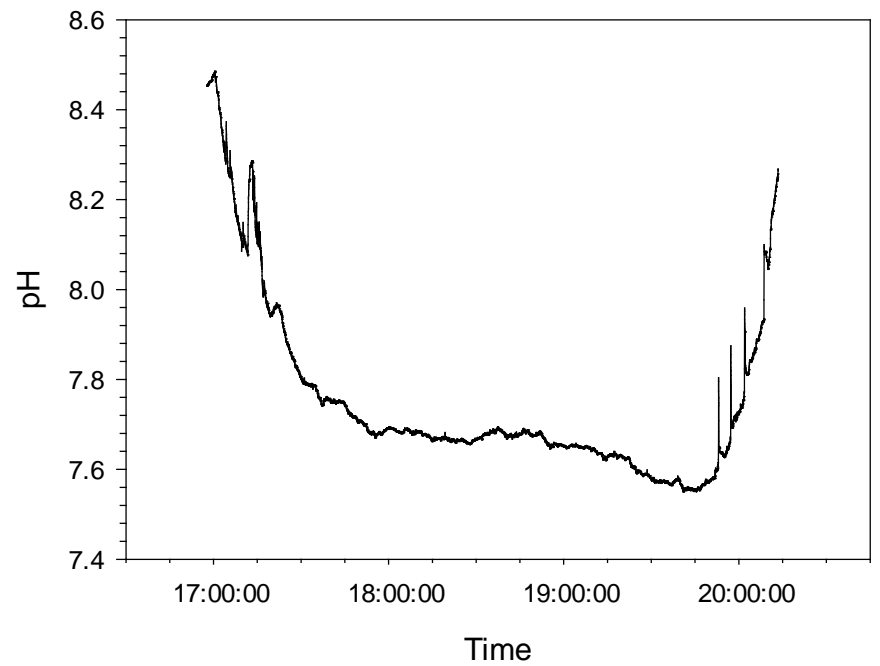
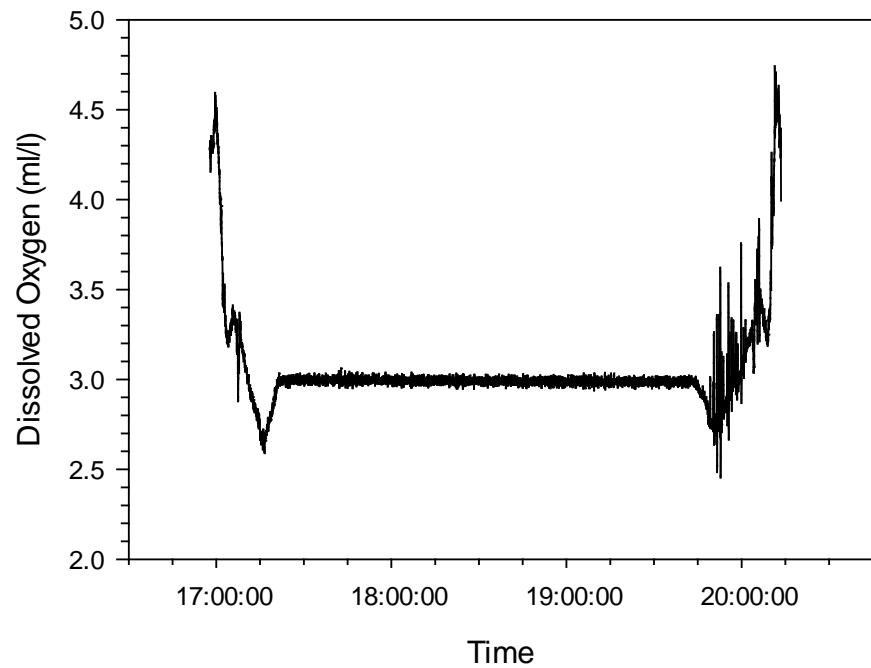
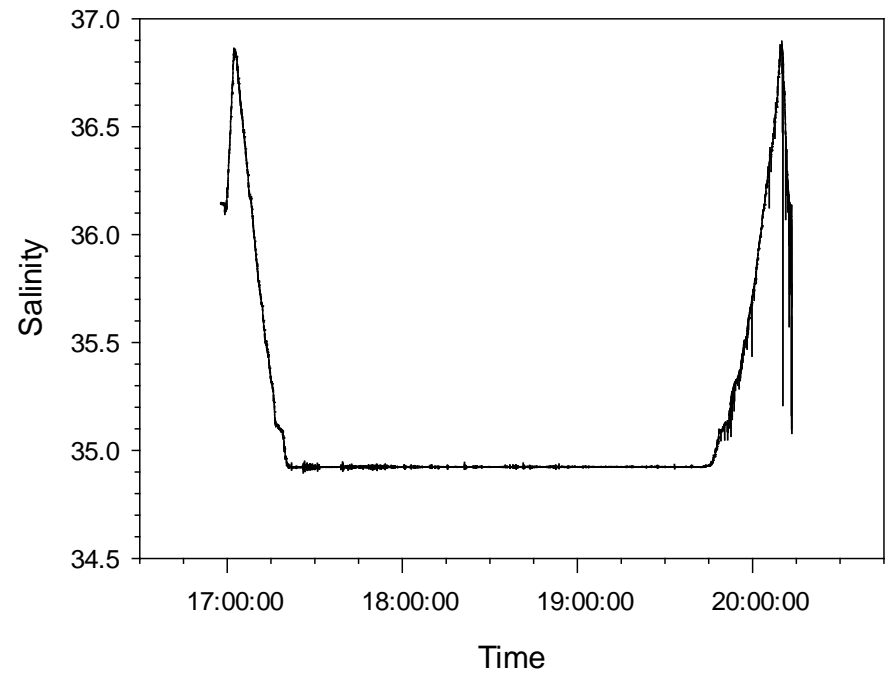
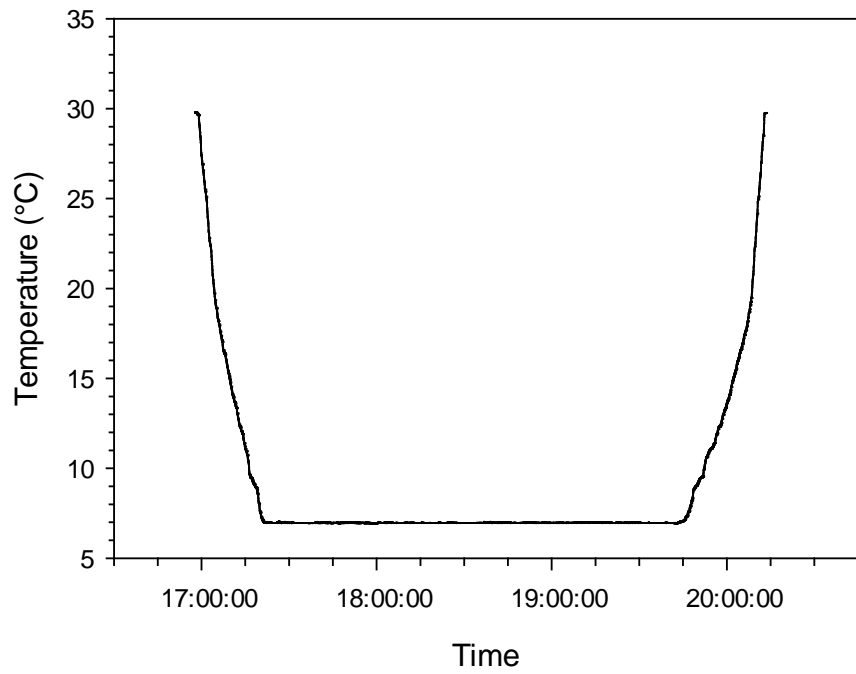
This dive traversed two *Lophelia pertusa* bioherms off Cape Canaveral. The hard coral habitat was comprised of 80-99% dead, variable relief *L. pertusa*. The hard coral and rubble habitats supported abundant attached fauna such as the alcyonacea *Anthomastus* sp., bamboo coral (e.g. *Keratoisis* sp.), *Paramuricea* sp., hydroids, a huge diversity of demospongia (e.g. *Phakellia* sp.) and hexactinellid sponges (e.g. *Aphrocallistes* sp., *Farrea* sp., and *Hyalonema* sp.) and a few large patches of the hard coral *Madrepora oculata*. Mobile fauna included cidaroid urchins, crinoids, brittle stars, galatheid and golden crabs, a skate, synphobranchid eels, chimaeras, a scorpionfish, rattail fish, coral hakes, hagfish, and a gosefish.

**PHYSICAL ENVIRONMENT**

This dive began to the south of two *L. pertusa* bioherms off Cape Canaveral. The submersible conducted a northerly transect through coral rubble habitat before reaching the base of the first bioherm. The base of the southern bioherm was characterized by mixed habitat with abundant sponge and soft coral communities attached to a dense coral rubble substrate. Coral cover increased from 50% to 100% with elevation up the bioherms. Hard coral habitat on both bioherms ranged from 80-99% 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 clear with only brief sections of unusable footage as the submersible passed over deep areas. Suction samples and punch cores for sediment were taken at the base of corals along with collections of live *L. pertusa*, *Keratoisis* sp. and an unidentified bamboo coral, galatheid crabs, a gosefish, and a hagfish.



Plots of CTD data recorded during submersible dive JSL-2009-Atl-3720 (16 Aug 2009) off Cape Canaveral, FL.