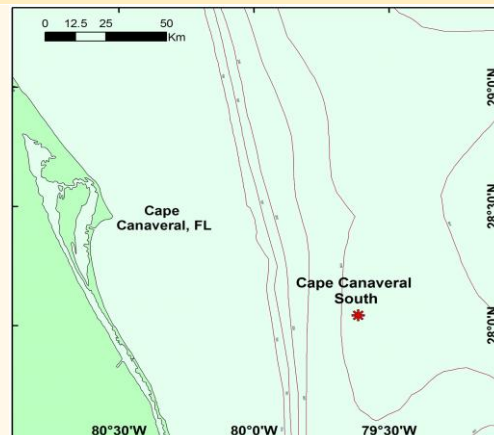
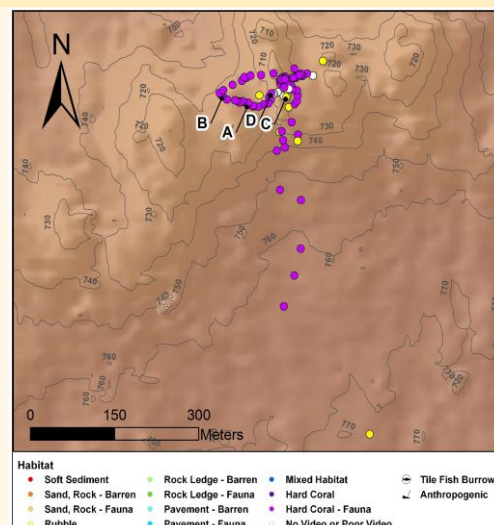


**DIVE NUMBER: JSLII-3703****STUDY AREA: Cape Canaveral South****STATION OVERVIEW**

<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>	J Reed (bow), A Demopoulos (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>SEDESC Analyst</b>	M Watts
<b>Date Compiled</b>	12/5/2011
<b>PI Station Number</b>	JSLII-09-Atl-3703

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

Date	08-Aug-09
Minimum Bottom Depth (m)	700
Maximum Bottom Depth (m)	703
Start Bottom Time (EDT)	8:33
End Bottom End (EDT)	10:47
Starting Latitude (N)	28° 27.819'
Starting Longitude (W)	79° 37.598'
Ending Latitude (N)	28° 27.802'
Ending Longitude (W)	79° 37.657'
Surface Current (Kts)	
Bottom Current (Kts)	

**Image A: Hard Coral - with Attached Fauna**  
28° 27.781' N, 79° 37.698' W



**DIVE NUMBER: JSLII-3703**

**STUDY AREA: Cape Canaveral South**

**IMAGE GALLERY**

\* indicates image position is approximated

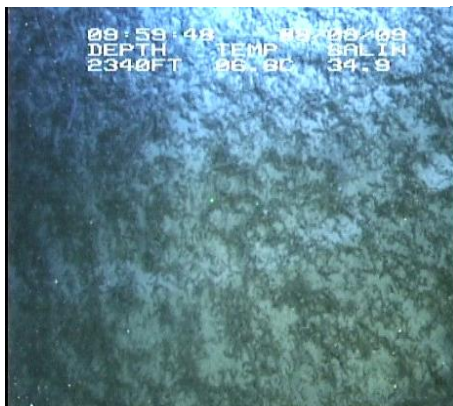
**Image B: Hard Corals -  
with Attached Fauna**

28° 27.804' N, 79° 37.716' W



**Image C: Rubble**

28° 27.822' N, 79° 37.632' W



**Image D: Hard Corals -  
with Attached Fauna**

28° 27.792' N, 79° 37.692' 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**

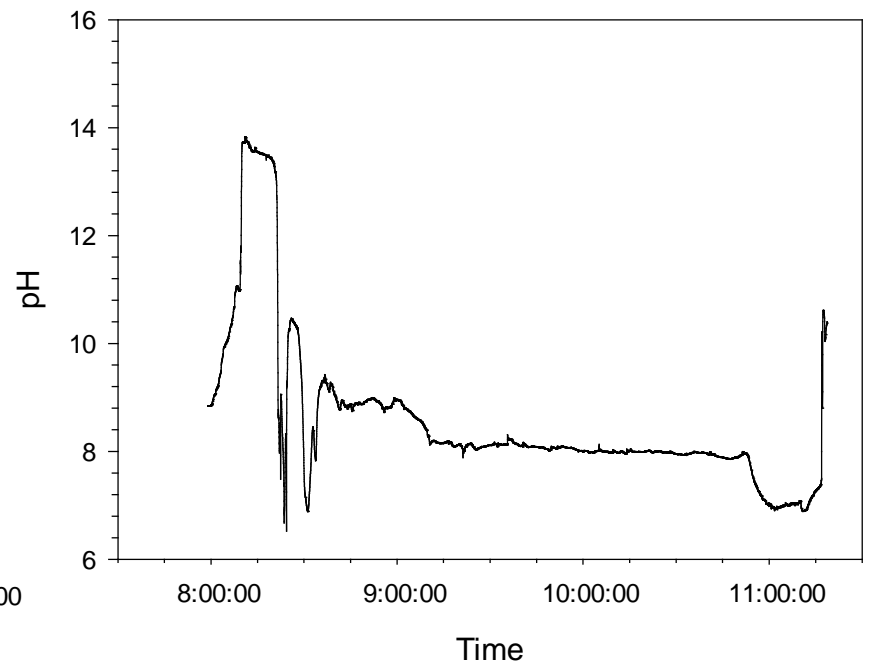
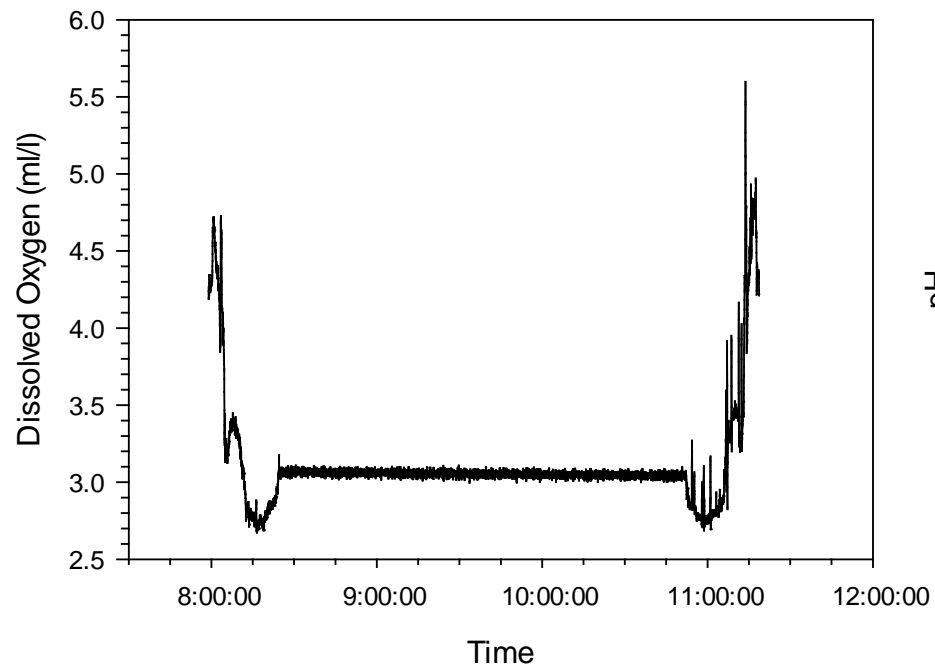
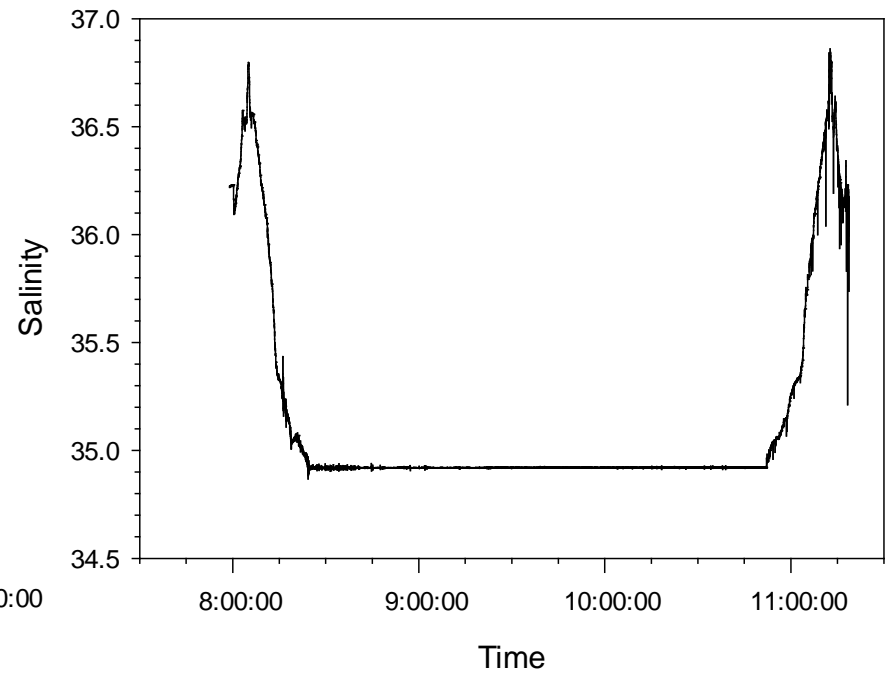
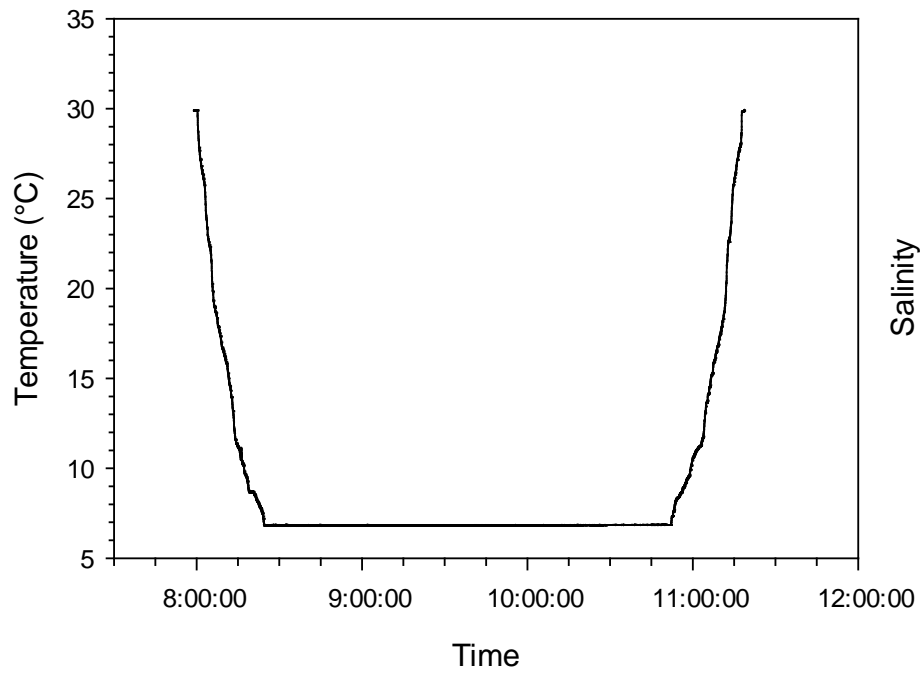
This dive explored a large *Lophelia pertusa* bioherm off Cape Canaveral to the north. Coral rubble leading up to the bioherm supported fauna such as hexactinellid sponges and small white bamboo coral. The bioherm was comprised of dense dead and live *L. pertusa* on a dead coral matrix. The hard coral rubble and matrix habitats supported abundant attached fauna such as the alcyonacea *Anthomastus* sp. and *Clavularia* sp., gorgonians (e.g. *Plumarella* sp.), bamboo coral (e.g. *Keratoisis* sp. and *Acanella* sp.), hydroids, a diversity of hexactinellid sponges (e.g. *Aphrocallistes* sp. and *Hertwigia* sp.) and demospongia sponges (e.g. *Phakellia* sp.), and rare patches of the hard coral *Madrepora oculata*. Mobile fauna included cidaroid urchins, crinoids, galatheid crabs, rattail fish, a codling, chimaeras and synphobranchid eels.

**PHYSICAL ENVIRONMENT**

This dive began at the northeast of the *L. pertusa* bioherm over hard coral habitat with attached fauna. The bioherm consisted of a series of high relief coral ridges separated by narrow valleys of rubble with attached fauna. Rubble habitat comprised the steep slopes of the bioherm, with standing coral and the percentage of live *L. pertusa* increasing (0 to 50%) with elevation, as did the number of attached invertebrates such as hexactinellid sponges.

**ADDITIONAL COMMENTS**

Original dives are on mini DVs that were transferred to digital and stored on an external hard drive. Video quality was mostly clear. Collections and transects were somewhat limited by the strong current's influence on the submersible as it moved up the bioherm. Sediment cores and suction for sediment at the base of corals were taken along with collections of live and dead *L. pertusa*, a galatheid crab, bamboo coral, a *Hertwigia* sp. and an *Aphrocallistes* sp.



Plots of CTD data recorded during submersible dive JSL-2009-Atl-3703 (8 Aug 2009) off Cape Canaveral, FL.