

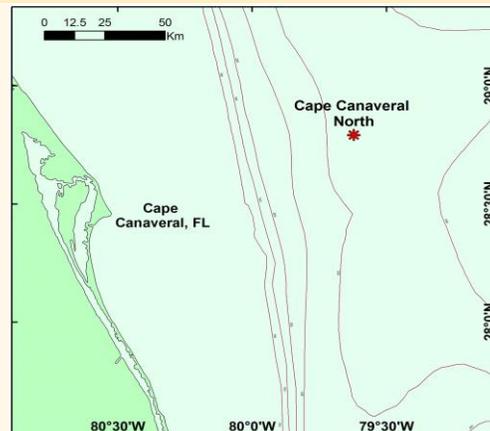
**DIVE NUMBER: JSLII-3701**

**STUDY AREA: Cape Canaveral North**

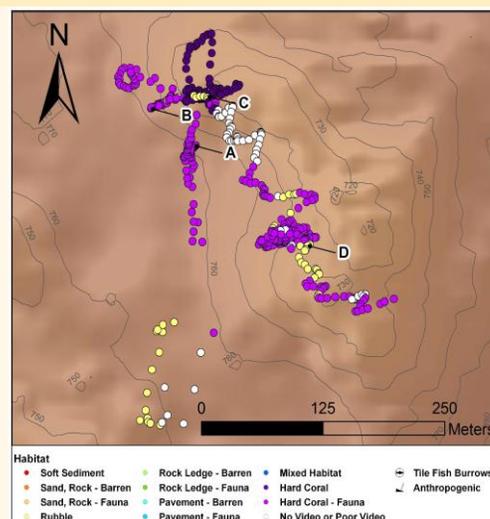
**STATION OVERVIEW**

<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), J Roberts (stern)
<b>External Video Tapes</b>	External Hard Drive
<b>Internal Video Tapes</b>	2 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>	12/27/2011
<b>PI Station Number</b>	JSLII-09-Atl-3701

**GENERAL LOCATION**



**Dive Track:**



**DIVE DATA**

Date	07-Aug-09
Minimum Bottom Depth (m)	732
Maximum Bottom Depth (m)	759
Start Bottom Time (EDT)	9:25
End Bottom End (EDT)	11:43
Starting Latitude (N)	28° 47.518'
Starting Longitude (W)	79° 37.458'
Ending Latitude (N)	28° 47.534'
Ending Longitude (W)	79° 37.311'
Surface Current (Kts)	
Bottom Current (Kts)	

**Image A: Hard Coral - with Attached Fauna**  
28° 47.617' N, 79° 37.440' W



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**IMAGE GALLERY**

\* indicates image position is approximated

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

28° 47.633' N, 79° 37.464' W



**Image C: Hard Corals -  
without Attached Fauna**

28° 47.635' N, 79° 37.428' W



**Image D: Rubble**

28° 47.570' N, 79° 37.356' 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**

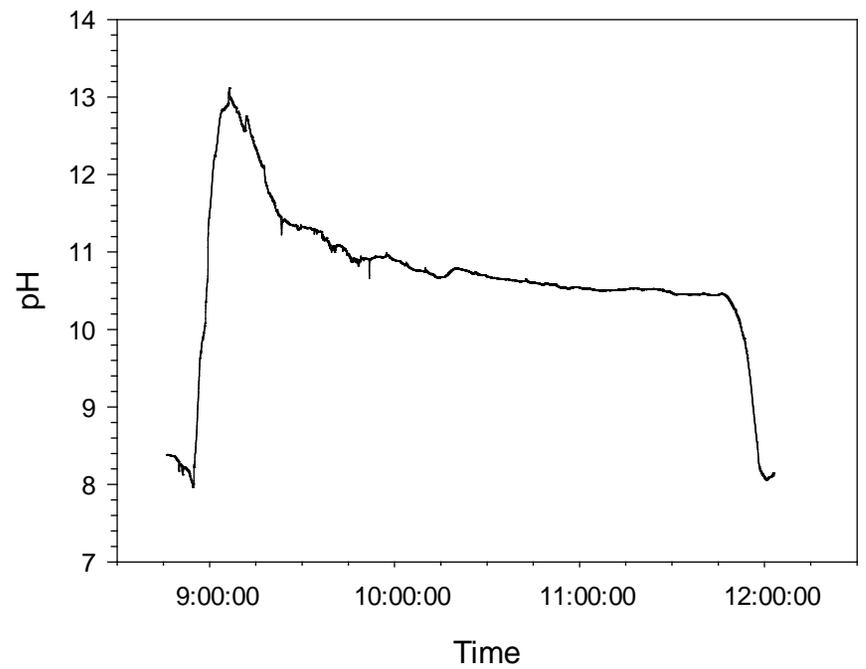
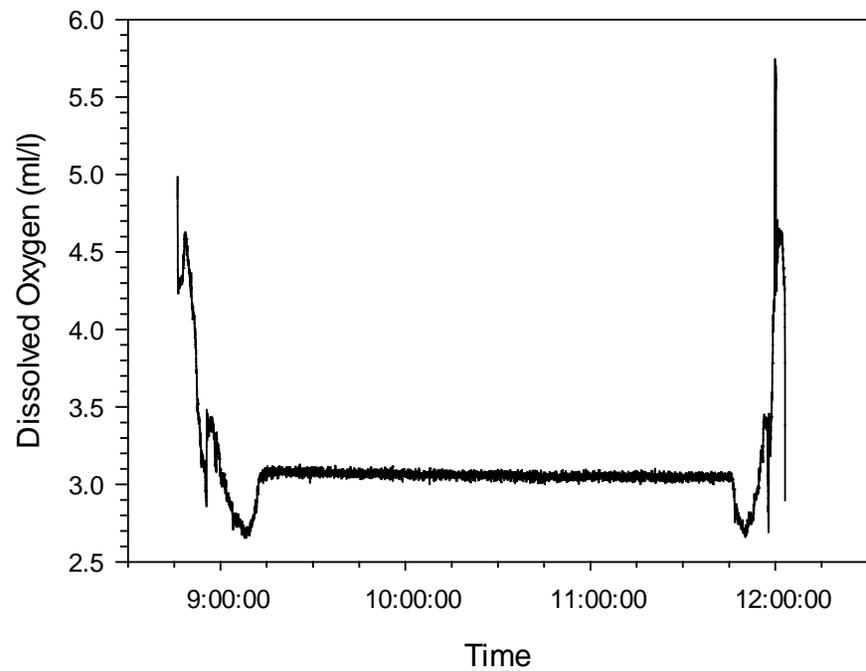
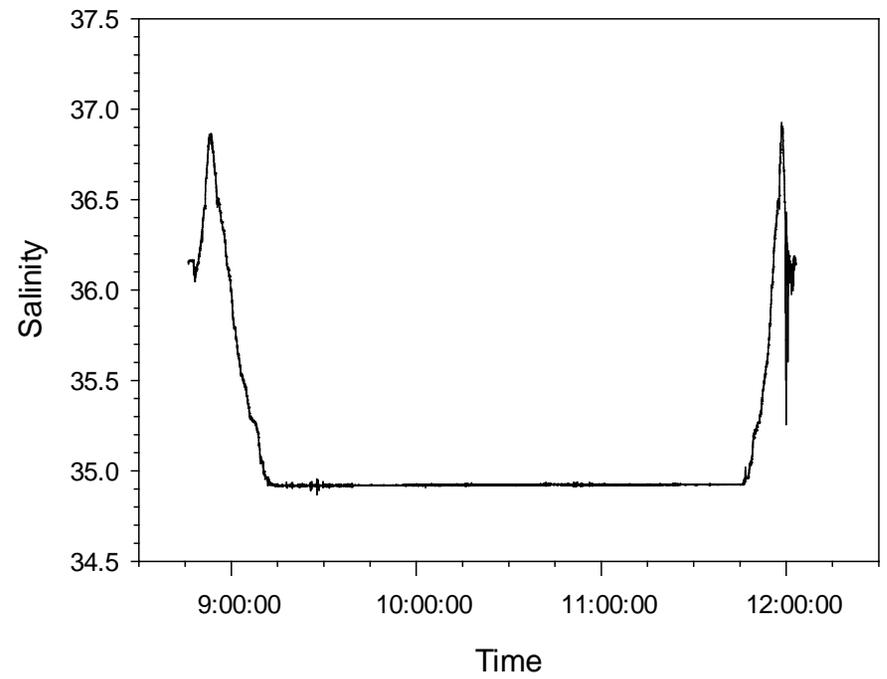
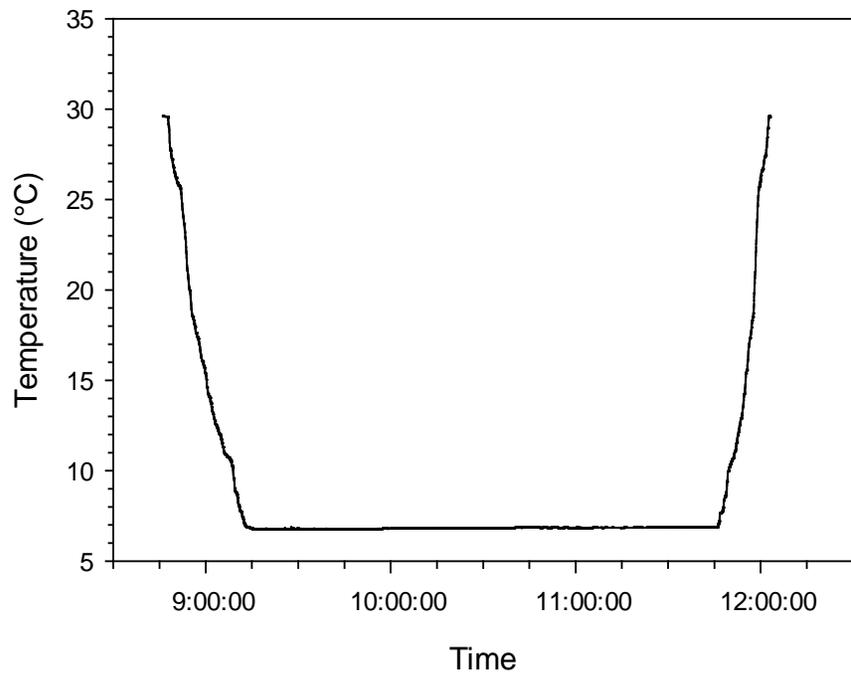
This dive explored a large *Lophelia pertusa* bioherm off Cape Canaveral. Coral rubble leading up to the bioherm supported fauna such as hexactinellid sponges and small white bamboo coral. The bioherm was comprised of dense dead and live *L. pertusa* on a dead coral matrix. The hard coral rubble and matrix habitats supported abundant attached fauna such as the alcyonacea *Anthomastus* sp., gorgonians (e.g. *Plumarella* sp.), bamboo coral (e.g. *Keratoisis* sp.), anemones, hydroids, a diversity of hexactinellid sponges (e.g. *Aphrocallistes* sp., *Hertwigia* sp., and *Vazella* sp.) and demospongia sponges (e.g. *Phakellia* sp.), and a patch of the hard coral *Madrepora oculata*. Mobile fauna included an echinoid urchin, a scorpionfish, rattail fish, a codling, a hagfish, and numerous chimaeras and synphobranchid eels.

**PHYSICAL ENVIRONMENT**

This dive began south of the *L. pertusa* bioherm, requiring a northerly traverse over coral rubble habitat. At the base of the bioherm the slope increased and was dominated by hard coral habitat with abundant attached fauna. The bioherm consisted of a series of high relief coral thickets 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 70%) with elevation of 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 mostly clear though large portions of transects were dark and too far from the substrate to identify the invertebrate fauna. Collections were taken of live and dead *L. pertusa*, bamboo coral, and a *Hertwigia* sp.



Plots of CTD data recorded during submersible dive JSL-2009-Atl-3701 (7 Aug 2009) off Cape Canaveral, FL.