

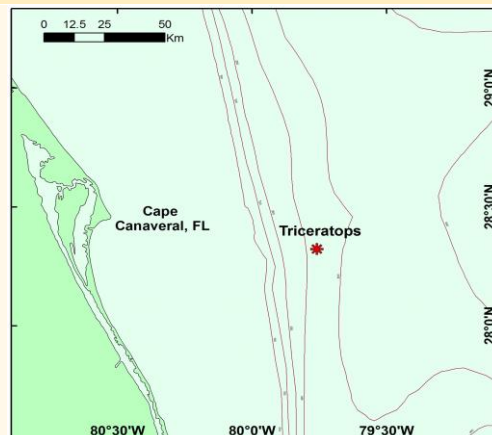
**DIVE NUMBER: JSLII-3711**

**STUDY AREA: *Triceratops***

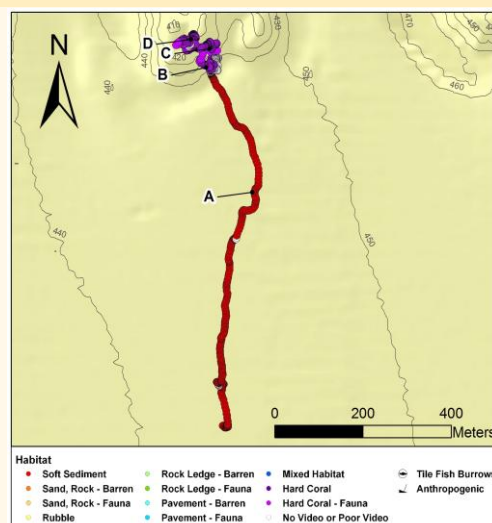
**STATION OVERVIEW**

<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>	A Demopoulos (bow), J McClain (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>	1/18/2012
<b>PI Station Number</b>	JSLII-09-Atl-3711

**GENERAL LOCATION**



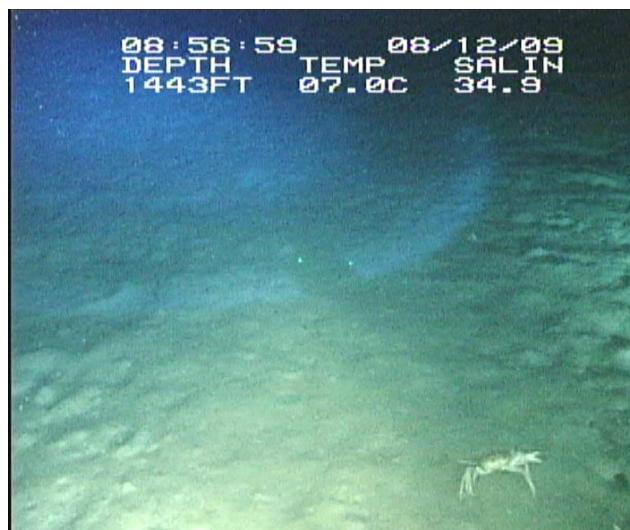
**Dive Track:**



**DIVE DATA**

Date	12-Aug-09
Minimum Bottom Depth (m)	411
Maximum Bottom Depth (m)	439
Start Bottom Time (EDT)	8:23
End Bottom End (EDT)	10:52
Starting Latitude (N)	28° 18.767'
Starting Longitude (W)	79° 45.508'
Ending Latitude (N)	28° 19.226'
Ending Longitude (W)	79° 45.554'
Surface Current (Kts)	
Bottom Current (Kts)	

**Image A: Soft Substrate**  
28° 19.042' N, 79° 45.462' W



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### IMAGE GALLERY

\* indicates image position is approximated

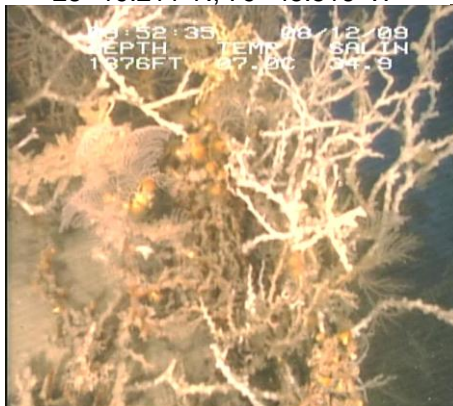
**Image B: Hard Coral -  
with Attached Fauna**

28° 19.192' N, 79° 45.522' W



**Image C: Hard Coral -  
with Attached Fauna**

28° 19.211' N, 79° 45.516' W



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

28° 19.223' N, 79° 45.540' 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

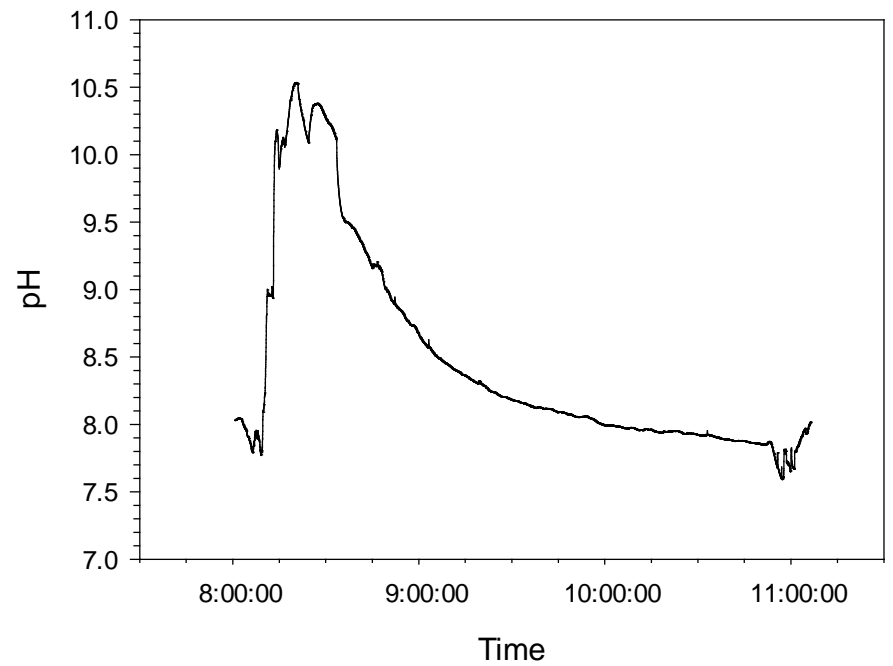
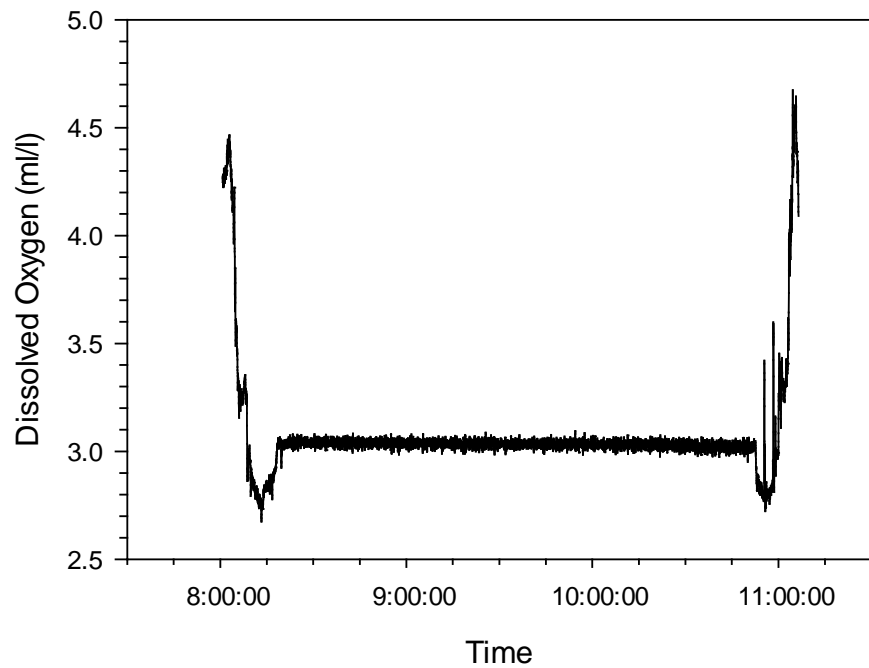
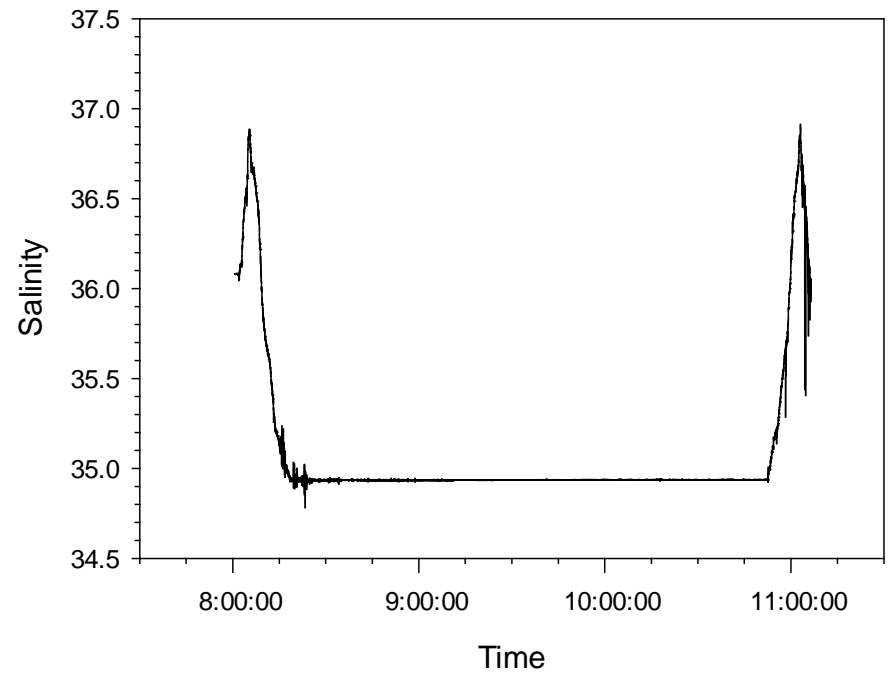
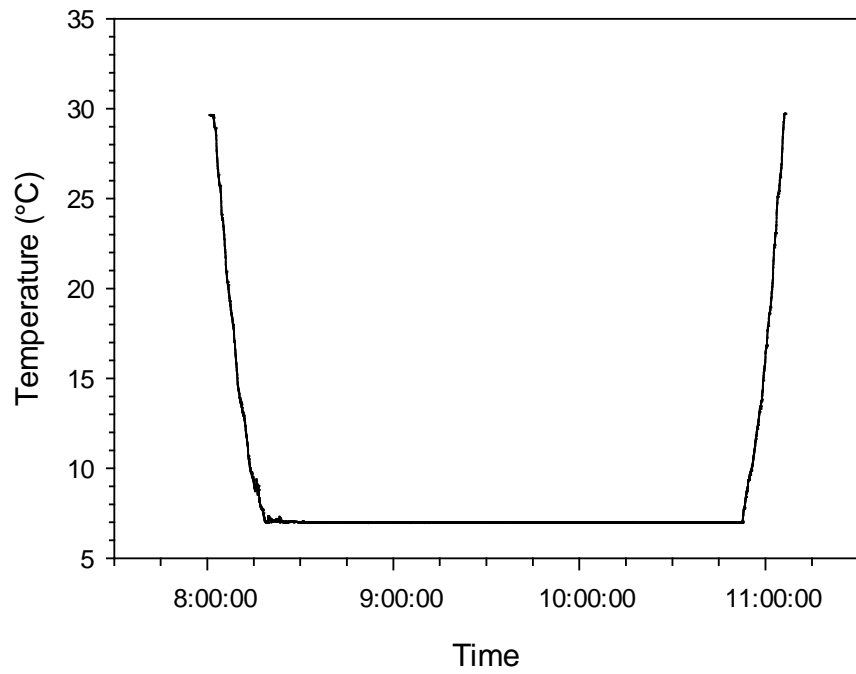
This dive traversed the western *Lophelia pertusa* bioherm of "Triceratops" off Cape Canaveral. The bioherm was comprised of dense, high relief live *L. pertusa* on a dead coral matrix. The hard coral rubble and matrix habitats supported abundant attached fauna such as cup corals, anemones, gorgonians (e.g. *Plumarella* sp.), *Paramuricea* sp., hydroids, hexactinellid sponges (e.g. *Aphrocallistes* sp. with and without yellow zooanthids), and patches of the hard corals *Madrepora oculata* and *Enallopsammia profunda*. Mobile fauna included echinoid and cidaroid urchins, crinoids, golden and galatheid crabs, blackbelly rosefish, coral hakes, hatchetfish, and an offshore hake.

### PHYSICAL ENVIRONMENT

This dive began south of the western *L. pertusa* bioherm, requiring a northerly traverse over soft sediment before reaching a small area of coral rubble at the base of the bioherm. At the base of the bioherm the slope increased and was dominated by low to medium relief, 50% cover of 60% live hard coral habitat with abundant attached fauna. Moving upslope, coral cover increased to 95% and consisted of high relief, 70% live *L. pertusa* with occasional patches of *M. oculata* and *E. profunda*. The submersible traversed only a few of the southernmost ridges 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 clear with only brief sections of unusable footage when the submersible was too far off the bottom. Suction samples and punch cores for sediment were taken at the base of corals along with collections of live and dead *L. pertusa*, *E. profunda*, a hatchetfish, cup corals, a golden crab, a cidaroid and an echinoid urchin, and an *Aphrocallistes* sp.



Plots of CTD data recorded during submersible dive JSL-2009-Atl-3711 (12 Aug 2009) off Cape Canaveral, FL.