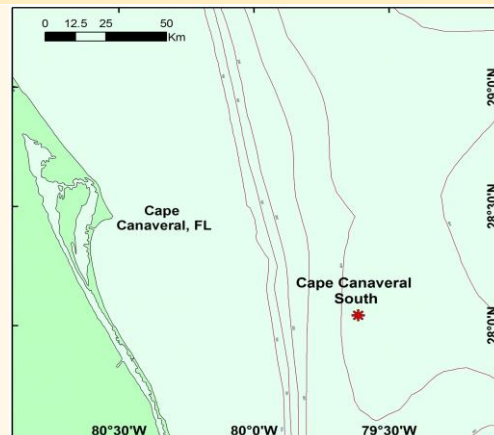
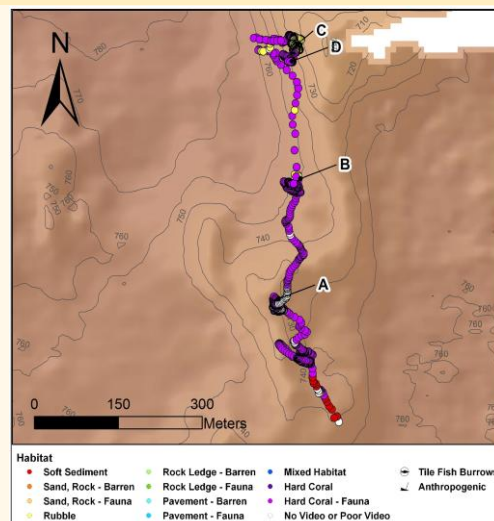


DIVE NUMBER: JSLII-3707**STUDY AREA: Cape Canaveral South****STATION OVERVIEW**

Project	Deep-sea Coral Research
Principal investigators	SW Ross ¹
PI Contact Info¹	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
Purpose	Exploration of Deep-water Coral Ecosystems off Cape Canaveral, Florida
Vessel	R/V Seward Johnson, Johnson Sea Link II Submersible
Science Divers	S Brooke (bow), C Morrison (stern)
External Video Tapes	External Hard Drive
Internal Video Tapes	1 mini DV
Digital Still Photos	Yes
Positioning System	dGPS
CTD File	<input checked="" type="checkbox"/>
Specimens Collected	<input checked="" type="checkbox"/>
Other	
Acknowledgements	NOAA, USGS, SAFMC, OIMB, NC Museum of Natural Sciences
SEDESC Analyst	M Watts
Date Compiled	1/11/2012
PI Station Number	JSLII-09-Atl-3707

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

Date	10-Aug-09
Minimum Bottom Depth (m)	713
Maximum Bottom Depth (m)	734
Start Bottom Time (EDT)	8:36
End Bottom End (EDT)	10:46
Starting Latitude (N)	28° 19.092'
Starting Longitude (W)	79° 36.886'
Ending Latitude (N)	28° 19.426'
Ending Longitude (W)	79° 36.926'
Surface Current (Kts)	
Bottom Current (Kts)	

Image A: Hard Coral - with Attached Fauna
28° 19.208' N, 79° 36.948' W



DIVE NUMBER: JSLII-3707

STUDY AREA: Cape Canaveral South

IMAGE GALLERY

* indicates image position is approximated

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

28° 19.338' N, 79° 36.924' W

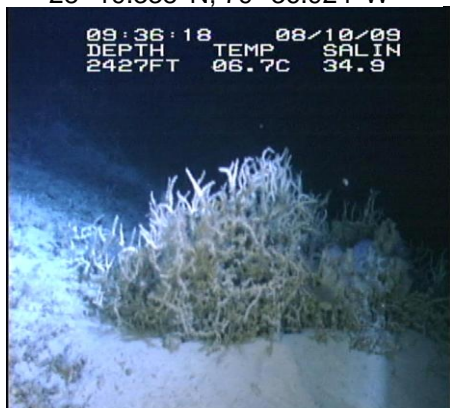
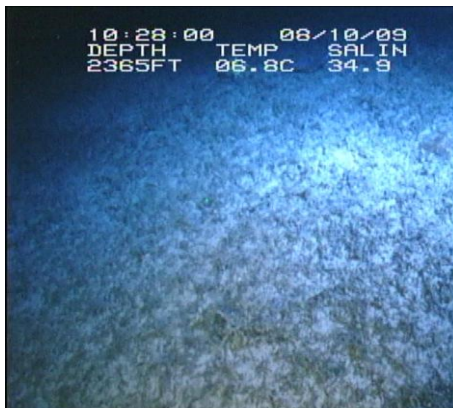


Image C: Rubble

28° 19.440' N, 79° 36.924' W



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

28° 19.426' N, 79° 36.936' 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

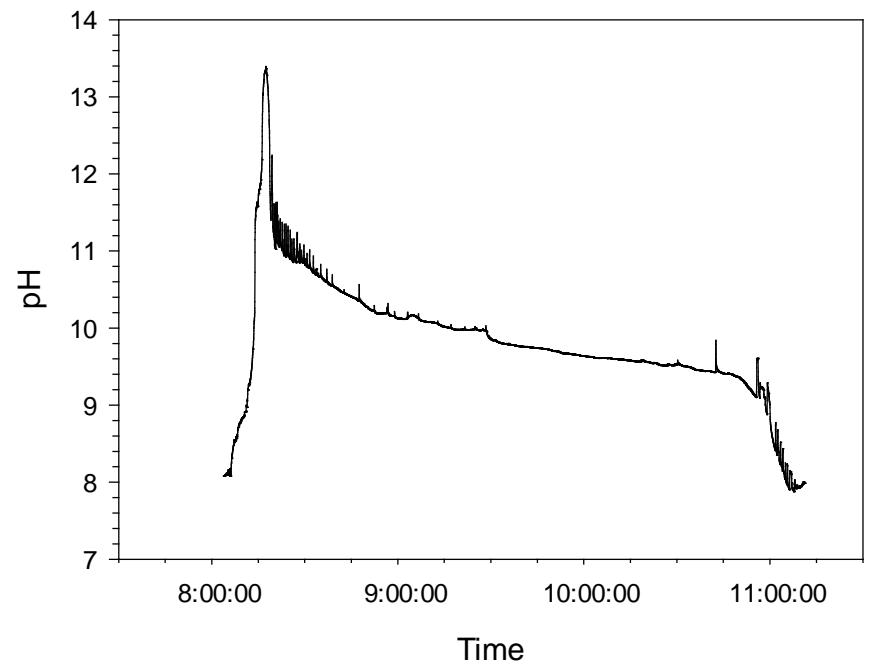
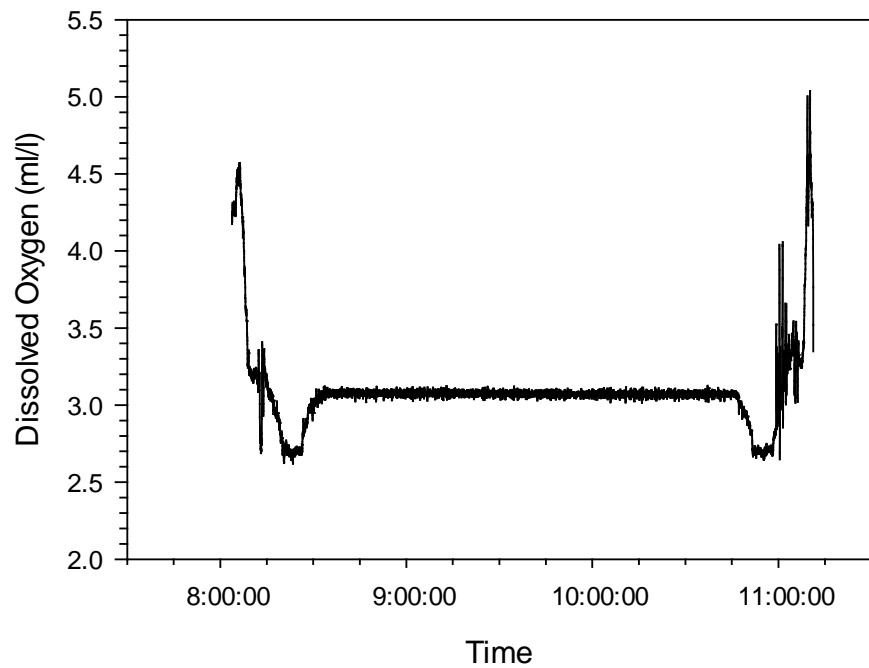
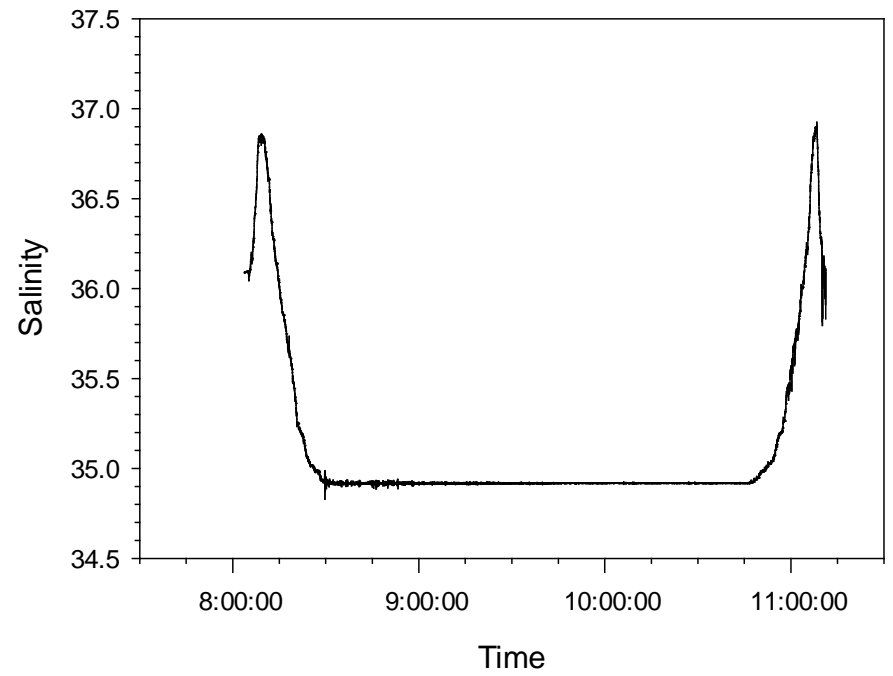
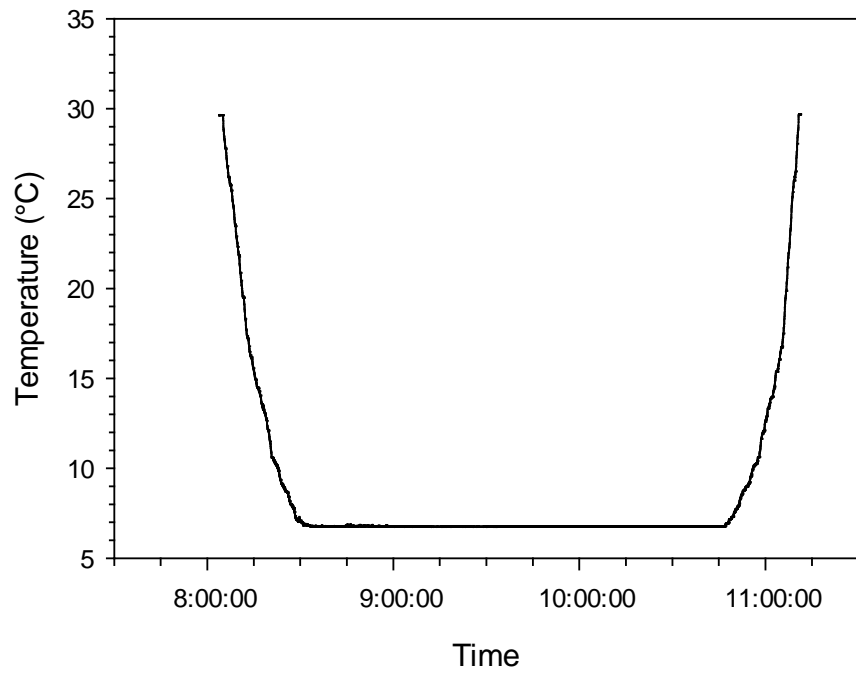
This dive traversed a *Lophelia pertusa* bioherm off Cape Canaveral. The hard coral habitat was comprised of 50-100% dead, variable relief *L. pertusa* and *Enallopsammia profunda*. The hard coral and rubble habitats supported abundant attached fauna such as the alcyonacea *Anthomastus* sp. and *Clavularia* sp., gorgonians, bamboo coral (e.g. *Keratoisis* sp.), hydroids, hydrozoan corals (e.g. Stylasteridae), a huge diversity of demospongia and hexactinellid sponges (e.g. *Aphrocallistes* sp. and euplectellids) including an abundance of *Hertwigia* sp. Mobile fauna included cidaroid and echinoid urchins, galatheid crabs, and synphobranchid eels.

PHYSICAL ENVIRONMENT

This dive began at the southern base of a *L. pertusa* bioherm off Cape Canaveral. The submersible conducted a northerly transect over soft sediment before moving upslope into hard coral habitat with abundant attached fauna. At the base of the bioherm hard coral habitat consisted of 60-70% coral cover interrupted by soft sediment. Coral cover was 99% dead, low relief *L. pertusa* and *E. profunda* with occasional tips of live coral. With greater elevation up the bioherm, there was higher relief, 5-50% live *L. pertusa* and *E. profunda* with 90-100% percent cover. Additionally, these standing coral regions were often adjacent to areas that rapidly flattened out into rubble habitat. There was a large 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 throughout the dive except for the first 20 min. of the dive due to condensation on the external camera lens. Suction samples and punch cores for sediment were taken at the base of corals along with collections of live and dead *L. pertusa* and *E. profunda*, *Anthomastus* sp., two galatheid crabs, *Echinus* sp. and cidaroid urchins, four different white hexactinellid sponges including one stalked sponge with zooanthids on its stalk, and a *Hertwigia* sp.



Plots of CTD data recorded during submersible dive JSL-2009-Atl-3707 (10 Aug 2009) off Cape Canaveral, FL.