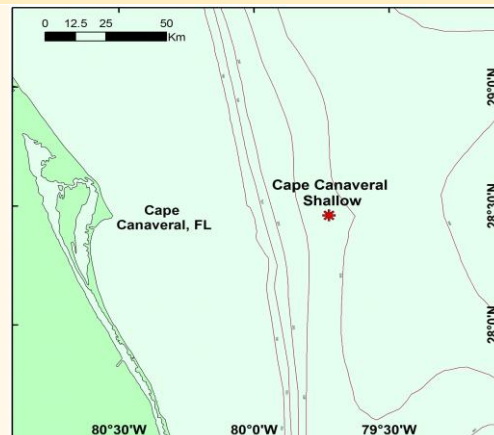
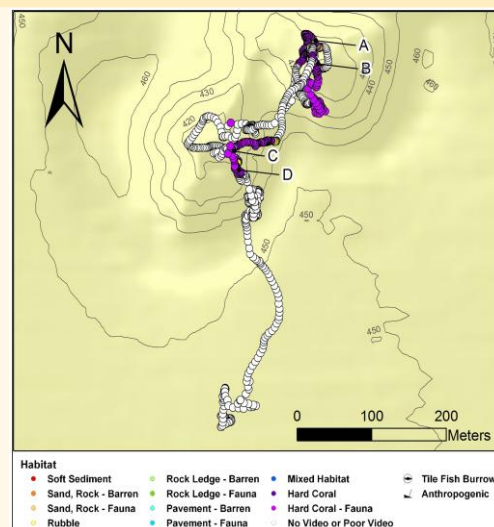


DIVE NUMBER: JSLII-3714**STUDY AREA: Cape Canaveral Shallow****STATION OVERVIEW**

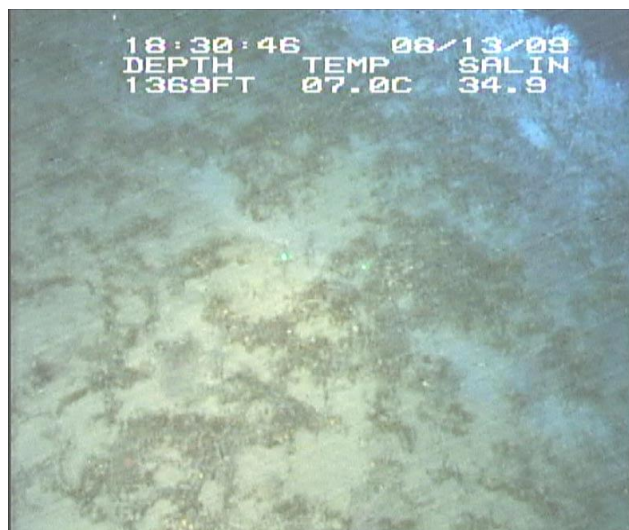
Project	Deep-sea Coral Research
Principal investigators	SW Ross ¹
PI Contact Info¹	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
Purpose	Exploration of Deep-water Coral Ecosystems off Cape Canaveral, Florida
Vessel	R/V Seward Johnson, Johnson Sea Link II Submersible
Science Divers	S Brooke (bow), T Casazza (stern)
External Video Tapes	External Hard Drive
Internal Video Tapes	2 mini DVs
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
SEADESC Analyst	M Watts
Date Compiled	1/24/2012
PI Station Number	JSLII-09-Atl-3714

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

Date	13-Aug-09
Minimum Bottom Depth (m)	408
Maximum Bottom Depth (m)	446
Start Bottom Time (EDT)	16:57
End Bottom End (EDT)	19:43
Starting Latitude (N)	28° 23.152'
Starting Longitude (W)	79° 45.989'
Ending Latitude (N)	28° 23.345'
Ending Longitude (W)	79° 45.991'
Surface Current (Kts)	
Bottom Current (Kts)	

Image A: Rubble

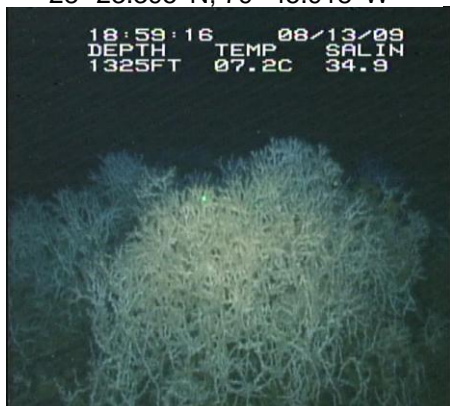
28° 23.413' N, 79° 45.918' W



DIVE NUMBER: JSLII-3714**STUDY AREA: Cape Canaveral Shallow****IMAGE GALLERY**

* indicates image position is approximated

**Image B: Hard Coral -
without Attached Fauna**
28° 23.395' N, 79° 45.918' W



**Image C: Hard Coral -
with Attached Fauna**
28° 23.337' N, 79° 45.990' W



**Image D: Hard Coral -
with Attached Fauna**
28° 23.323' N, 79° 45.978' W

**RELEVANT WORK AND/OR LITERATURE CITED**

- | | |
|-------------------------------------|---------------------------------|
| Ayers and Pilkey (1981) | Ross and Nizinski (2007) |
| EEZ-SCAN 87 Scientific Staff (1991) | Ross and Quattrini (2007, 2009) |
| Reed (2002) | Ross et al. (2012) |
| Reed and Ross (2005) | |
| Reed et al. (2006) | |

BIOLOGICAL ENVIRONMENT

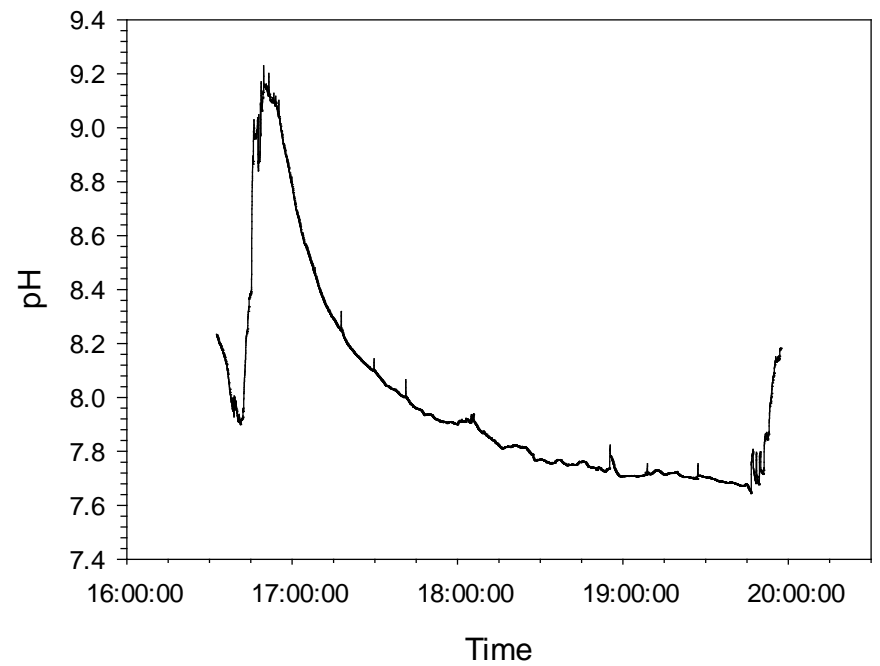
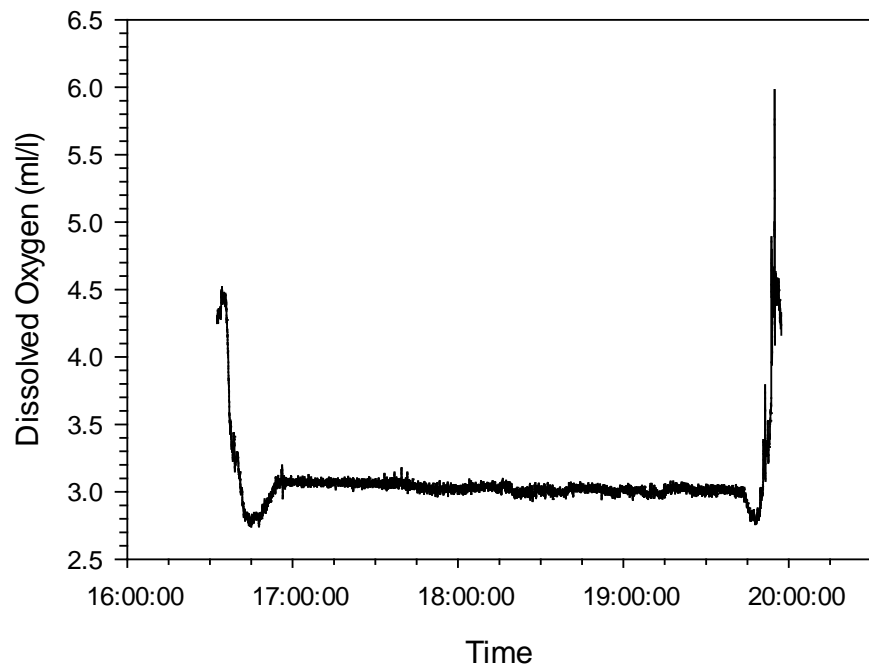
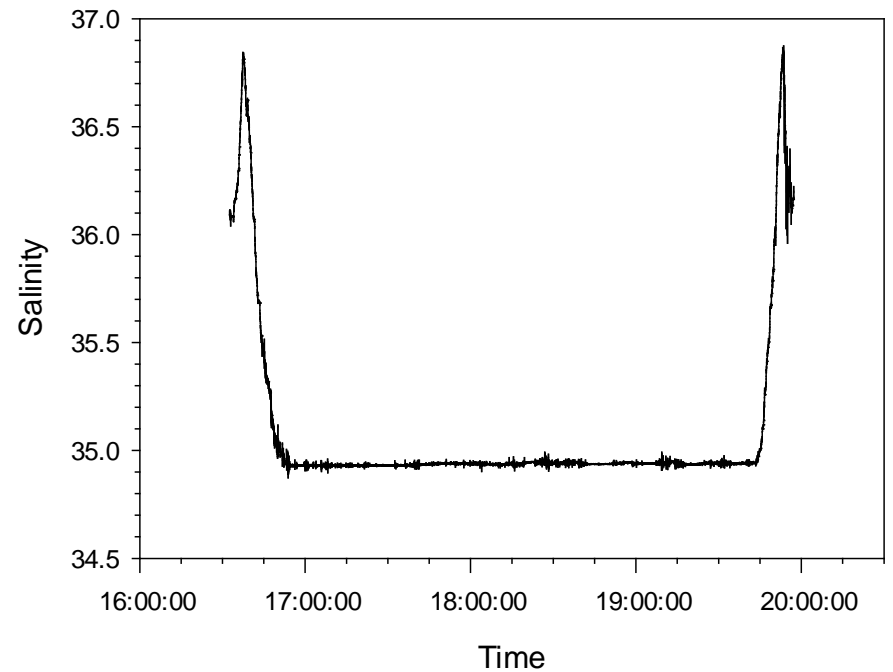
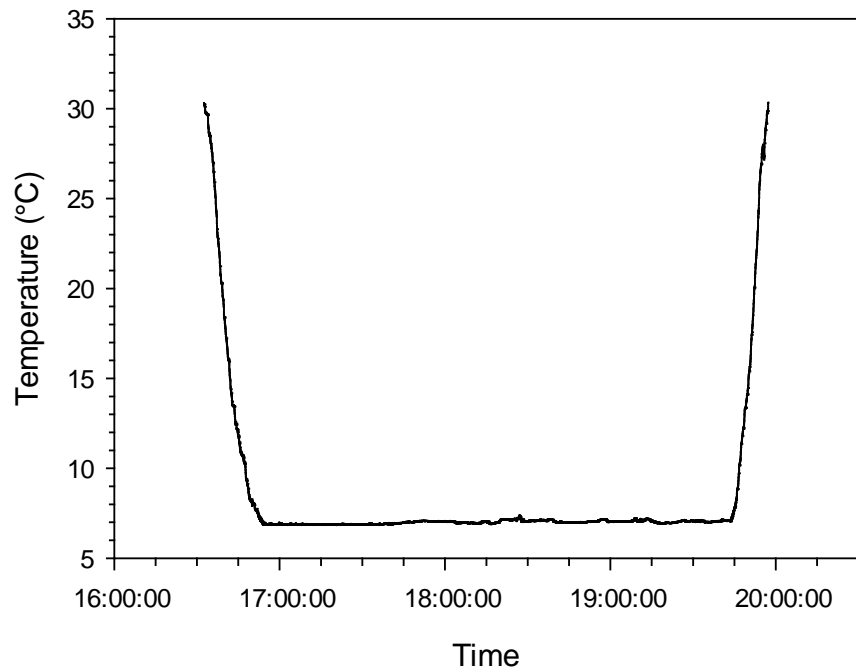
This dive traversed a *Lophelia pertusa* bioherm off Cape Canaveral. The coral bioherm was comprised of very dense, high relief, live *L. pertusa* on a dead coral matrix. The hard coral often supported abundant attached fauna such as cup corals, anemones, gorgonians (e.g. *Plumarella* sp.), *Paramuricea* sp., hydroids, hexactinellid sponges (e.g. *Aphrocallistes* sp. with and without yellow zooanthids) and frequent, large patches of the hard corals *Enallopsammia profunda* and *Madrepora oculata*. Mobile fauna included echinoid and cidaroid urchins, crinoids, golden and galatheid crabs, an octopus, an armored searobin, a red bream, scorpionfish, coral hakes, and a chain catshark.

PHYSICAL ENVIRONMENT

This dive began south of a *L. pertusa* bioherm, requiring a northerly traverse to reach the bioherm. The habitat on the bioherm turned quickly from sparse rubble and standing coral mixed with soft sediment into dense (60-90% cover) hard coral habitat with and without attached fauna as the submersible moved up the slope. Hard coral habitat consisted of extensive, very high relief, 60-80% live, densely packed hard coral thickets that were oriented in several ridges along the bioherm. This site contained some of the healthiest and most extensive *L. pertusa* habitat off the Cape Canaveral area.

ADDITIONAL COMMENTS

Original dives are on mini DVs that were transferred to digital and stored on an external hard drive. The first hour of the dive was not recorded. Video quality was clear except for sections of dark footage as the submersible passed over deep areas between ridges. Suction samples for sediment were taken at the base of corals and a clump of *L. pertusa* was retrieved with the Bushmaster along with collections of *E. profunda*, cup corals, a black coral, galatheid crabs, and a scorpionfish.



Plots of CTD data recorded during submersible dive JSL-2009-Atl-3714 (13 Aug 2009) off Cape Canaveral, FL.