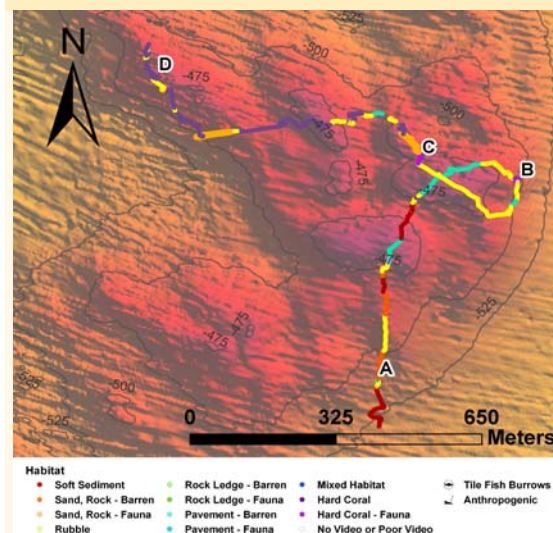


**DIVE NUMBER: J2-546****STUDY AREA: Jacksonville****STATION OVERVIEW**

<b>Project</b>	Extreme Corals 2010
<b>Principal investigators</b>	SW Ross <sup>1</sup> , SD Brooke
<b>PI Contact Info<sup>1</sup></b>	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
<b>Purpose</b>	Mapping of deep coral banks, ecological studies of macroinvertebrates and fishes, paleoclimate studies, coral genetics and education outreach
<b>Vessel</b>	NOAA Ship Ronald H. Brown, Jason 2 ROV
<b>Science Divers</b>	S Ross, M Nizinski, J Thoma
<b>External Video Tapes</b>	External Hard Drive
<b>Internal Video Tapes</b>	
<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>	Hard copy of observation log. Virtual van logs.
<b>Acknowledgements</b>	NOAA- DSCRT, NOAA-OER, NOAA Fisheries, USGS, UNCW, NC Museum of Natural Sciences
<b>SEADESC Analyst</b>	A Zilg, M Wolf
<b>Date Compiled</b>	5/24/2011
<b>PI Station Number</b>	ROV-2010-RB-546

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

<b>Date</b>	17-Nov-10
<b>Minimum Bottom Depth (m)</b>	455
<b>Maximum Bottom Depth (m)</b>	518
<b>Start Bottom Time (EDT)</b>	9:22
<b>End Bottom End (EDT)</b>	19:32
<b>Starting Latitude (N)</b>	30° 07.009'
<b>Starting Longitude (W)</b>	79° 56.260'
<b>Ending Latitude (N)</b>	30° 05.029'
<b>Ending Longitude (W)</b>	79° 57.404'
<b>Surface Current (Kts)</b>	
<b>Bottom Current (Kts)</b>	

**Image A: Pavement - Barren**  
30° 04.607' N, 79° 57.132' W



**DIVE NUMBER: J2-546**

**STUDY AREA: Jacksonville**

**IMAGE GALLERY**

\* indicates image position is approximated

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

30° 04.853' N, 79° 56.964' W



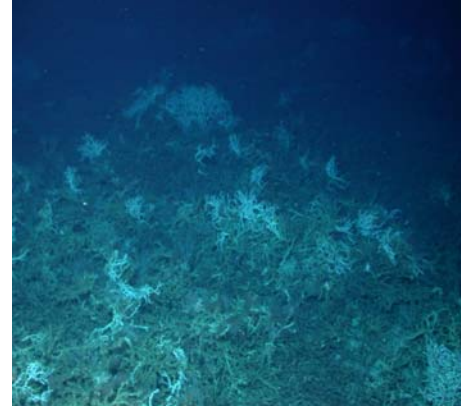
**Image C: Hard Corals -  
with Attached Fauna**

30° 04.882' N, 79° 57.084' W



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

30° 04.985' N, 79° 57.402' 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)   |
| Paull et al. (2000)                 | Ross et al. (unpubl. cruise data) |
| Reed (2002)                         |                                   |
| Reed and Ross (2005)                |                                   |
| Williams et al. (2007)              |                                   |
| Reed et al. (2006)                  |                                   |

**BIOLOGICAL ENVIRONMENT**

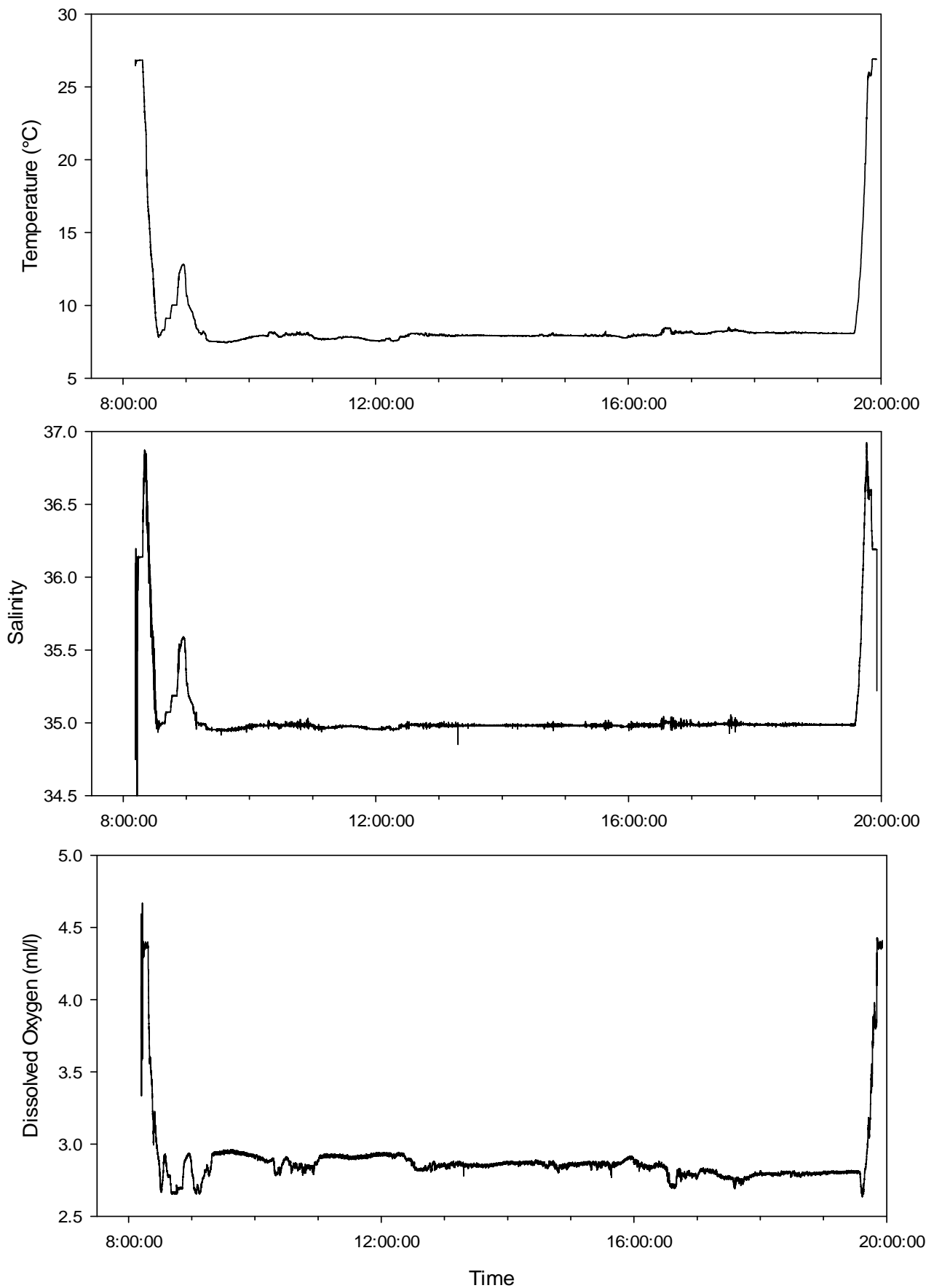
Few fishes were observed during this dive. Those seen included *Laemonema melanurum*, *Chlorophthalmus* spp., and a few Scorpaenids. Mobile invertebrates were common, including urchins, brittle stars, and crinoids; crabs included golden crabs, *Bathynectes* sp., and galatheids. The sessile invertebrate community was both diverse and dense. Hard and soft corals, such as *Keratoisis* sp., *Madrepora oculata*, cup corals, and various gorgonians were observed on the mound. *Stylaster* spp. was observed adjacent to the mound on rubble habitat. A variety of hexactinellid sponges and anemones were abundant. Two large *Lophelia pertusa* matrices had one side with 100% coverage of anemones.

**PHYSICAL ENVIRONMENT**

Due to the length of this dive, numerous habitat types were encountered. This dive began on soft substrate and transitioned into a soft rubble mix with sparse attached fauna. As rubble increased, the bottom was observed to be a hard pavement leading up to the first mound. Subsequent areas with live *L. pertusa* were not surrounded by pavement bottom. The main habitat types observed were a soft rubble bottom with attached fauna, barren pavement with some rubble, coral rubble with attached fauna, and hard corals with or without attached fauna. Areas with live *L. pertusa* were generally high profile. The slope was mild to moderate in transition from soft substrate to the coral mound.

**ADDITIONAL COMMENTS**

Video is stored on a Mac-formatted external hard drive. Video time in GMT. Quality was extremely clear, with very few sections of unusable footage. This dive video has footage of the abundant anemones that covered sides of *L. pertusa* boulders. Most common collections were of *L. pertusa*, *M. oculata*, and *Aphrocallistes* sp.



Plots of CTD data recorded during ROV dive ROV-2010-RB-546 (17 Nov 2010) off Jacksonville, FL.