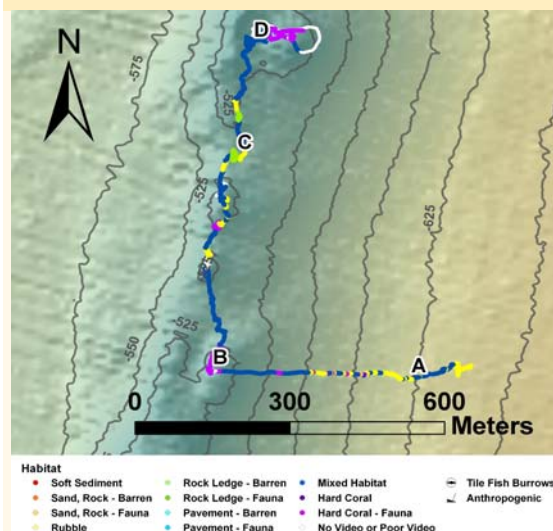


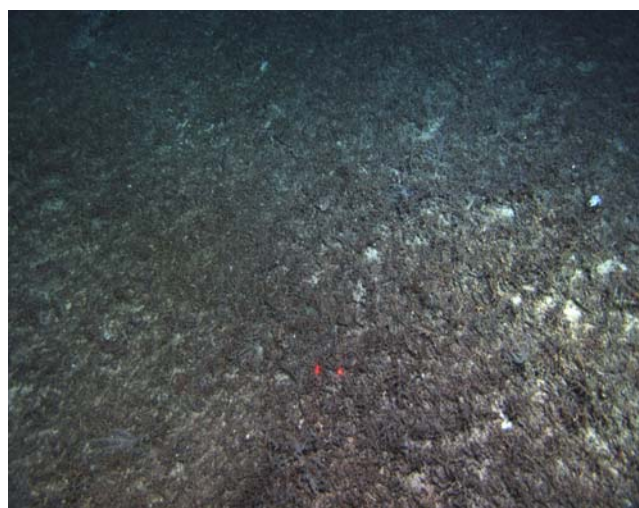
DIVE NUMBER: J2-545**STUDY AREA: Jacksonville****STATION OVERVIEW**

Project	Extreme Corals 2010
Principal investigators	SW Ross ¹ , SD Brooke
PI Contact Info¹	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
Purpose	Mapping of deep coral banks, ecological studies of macroinvertebrates and fishes, paleoclimate studies, coral genetics and education outreach
Vessel	NOAA Ship Ronald H. Brown, Jason 2 ROV
Science Divers	M Nizinski, A David, K Coykendall
External Video Tapes	External Hard Drive
Internal Video Tapes	
Digital Still Photos	Yes
Positioning System	dGPS
CTD File	<input checked="" type="checkbox"/>
Specimens Collected	<input checked="" type="checkbox"/>
Other	Hard copy of observation log. Virtual van logs.
Acknowledgements	NOAA- DSCRT, NOAA-OER, NOAA Fisheries, USGS, UNCW, NC Museum of Natural Sciences
SEADESC Analyst	A Zilg
Date Compiled	7/21/2011
PI Station Number	ROV-2010-RB-545

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

Date	15-Nov-10
Minimum Bottom Depth (m)	471
Maximum Bottom Depth (m)	633
Start Bottom Time (EDT)	9:39
End Bottom End (EDT)	19:37
Starting Latitude (N)	30° 41.850'
Starting Longitude (W)	79° 40.677'
Ending Latitude (N)	30° 43.826'
Ending Longitude (W)	79° 39.679'
Surface Current (Kts)	
Bottom Current (Kts)	

Image A: Rubble
30° 43.445' N, 79° 39.558' W



DIVE NUMBER: J2-545

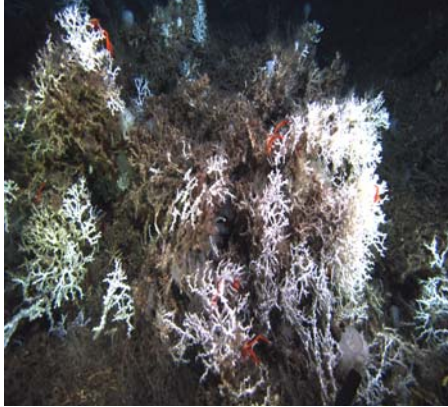
STUDY AREA: Jacksonville

IMAGE GALLERY

* indicates image position is approximated

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

30° 43.457' N, 79° 39.798' W



**Image C: Rock Ledge -
with Attached Fauna**

30° 43.689' N, 79° 39.768' W

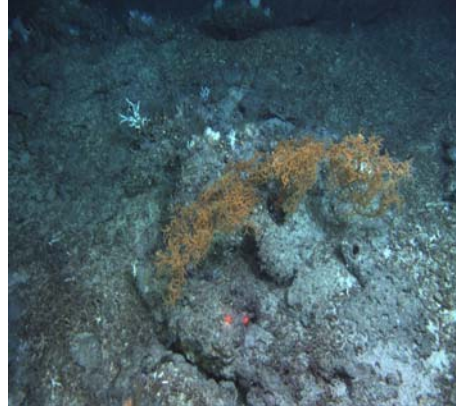


Image D: Mixed Habitat

30° 43.811' N, 79° 39.744' W



RELEVANT WORK AND/OR LITERATURE CITED

Ayers and Pilkey (1981)
EEZ-SCAN 87 Scientific Staff (1991)
Paull et al. (2000)
Reed (2002)
Reed and Ross (2005)
Williams et al. (2007)
Reed et al. (2006)

Ross and Nizinski (2007)
Ross and Quattrini (2007, 2009)
Ross et al. (unpubl. cruise data)

BIOLOGICAL ENVIRONMENT

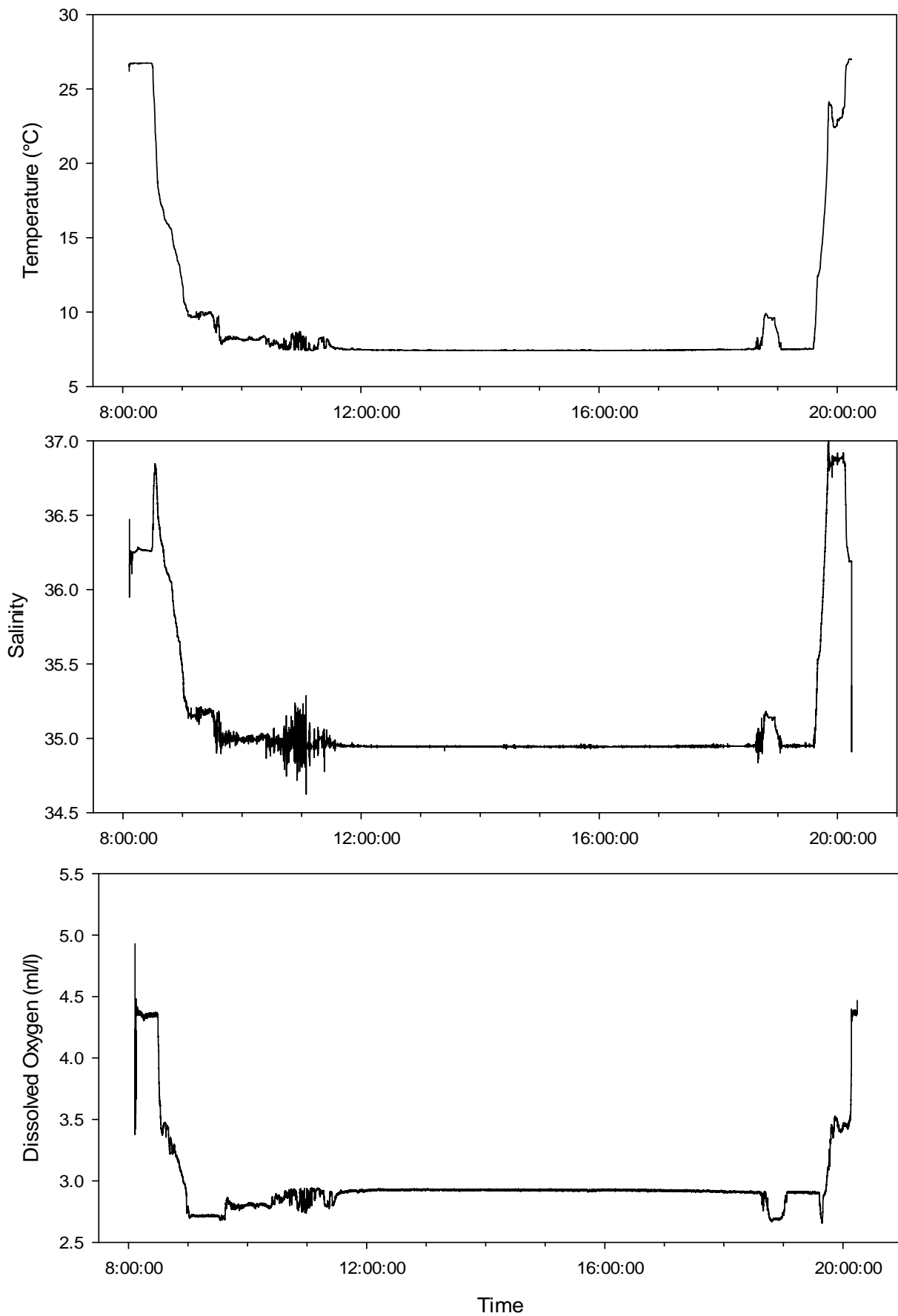
Fishes observed on this dive were infrequent for the amount of time and distance covered. The two most common fishes were *Laemonema melanurum* and *Nezumia* sp. Other individuals observed were *Beryx decadactylus*, *Eptatretus lopheliae*, *Trachyscorpia cristulata*, and *Scyliorhinus retifer*. Rubble habitat had sparse fauna including isidids, gorgonians, *Bathynectes* crabs, sponges, and comatulids. All other habitat types had abundant attached fauna. Both hexactinellid sponges and dermosponges were abundant. Individual corals were also abundant and included *Chrysogorgia* sp., *Plumarella* sp., *Bathypathes* sp., *Leiopathes* sp., *Stylaster* sp., *Lophelia*, *pertusa*, *Madrepora oculata*, *Enallopsammia profunda*, *Anthomastus* sp., isidids, cup corals, and other octocorals. Hard coral areas were dominated by *L. pertusa*; colonies of *M. oculata* and *E. profunda* were common as well as numerous *Aphrocallistes* spp. sponges. Few motile invertebrates were observed such as *Rochinia* sp., galatheids, pancake urchins, octopus, and a holothurian.

PHYSICAL ENVIRONMENT

Four habitat types were observed during this dive: 1) rubble, 2) mixed habitat, 3) hard corals with attached fauna, and 4) rock ledge with attached fauna. Leading up to the ridge, very fine rubble was encountered with sparse attached fauna. Some areas under the rubble appeared to be rock or pavement bottom. Mixed habitat varied in composition, but occurred mostly on rubble bottom (high coverage ~ 90%), and was low profile. Hard coral habitat was patchy and of moderate to high profile with *L. pertusa* matrices, live coral varied from 10-50%. Hard coral areas had 100% bottom coverage. Rock ledges were infrequently encountered, were low to moderate profile, and had attached fauna.

ADDITIONAL COMMENTS

Video is stored on a Mac-formatted external hard drive. Video time in GMT. Video quality was extremely clear, with very few sections of unusable footage. Good footage of *Emunida picta* catching and eating a *Nezumia* sp. At times, currents made collections difficult.



Plots of CTD data recorded during ROV dive ROV-2010-RB-545 (15 Nov 2010) off Jacksonville, FL.