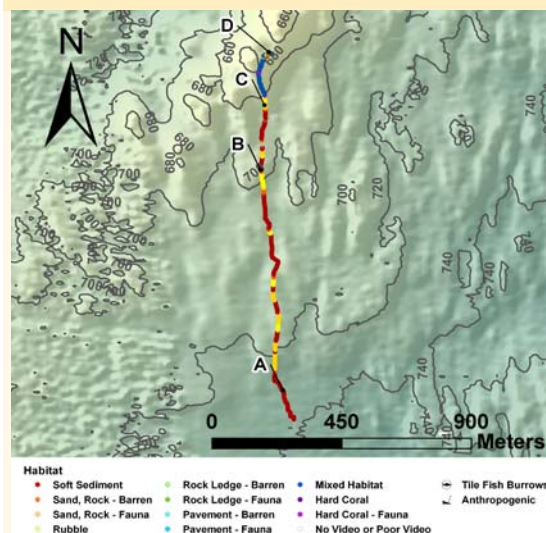


DIVE NUMBER: J2-548**STUDY AREA: Cape Canaveral South****STATION OVERVIEW**

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	S Brooke, J Reed, 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	7/20/2011
PI Station Number	ROV-2010-RB-548

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

Date	20-Nov-10
Minimum Bottom Depth (m)	634
Maximum Bottom Depth (m)	731
Start Bottom Time (EDT)	10:34
End Bottom End (EDT)	13:09
Starting Latitude (N)	27° 53.245'
Starting Longitude (W)	79° 36.933'
Ending Latitude (N)	27° 53.935'
Ending Longitude (W)	79° 36.982'
Surface Current (Kts)	2.8
Bottom Current (Kts)	0.25

Image A: Soft Substrate

27° 53.284' N, 79° 36.957' W



DIVE NUMBER: J2-548

STUDY AREA: Cape Canaveral South

IMAGE GALLERY

* indicates image position is approximated

Image B: Rubble

28° 53.709' N, 79° 36.999' W

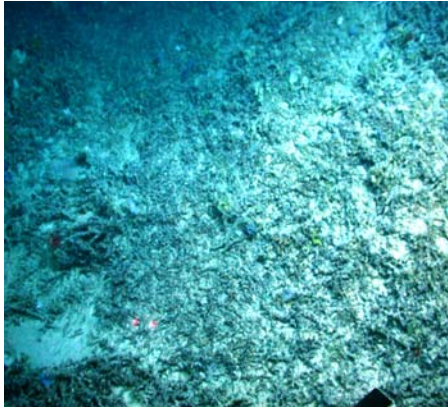


Image C: Sand/Rubble/Rock- with Attached Fauna

27° 53.835' N, 79° 36.992' W

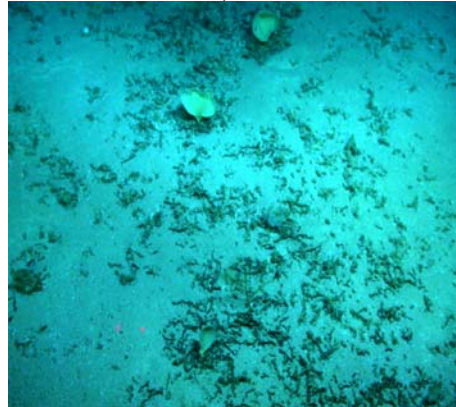
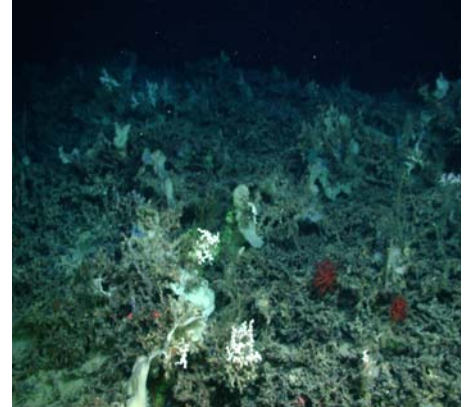


Image D: Mixed Habitat

27° 53.939' N, 79° 36.982' 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. (unpubl. cruise data) |
| Reed and Ross (2005) | |
| Reed et al. (2006) | |

BIOLOGICAL ENVIRONMENT

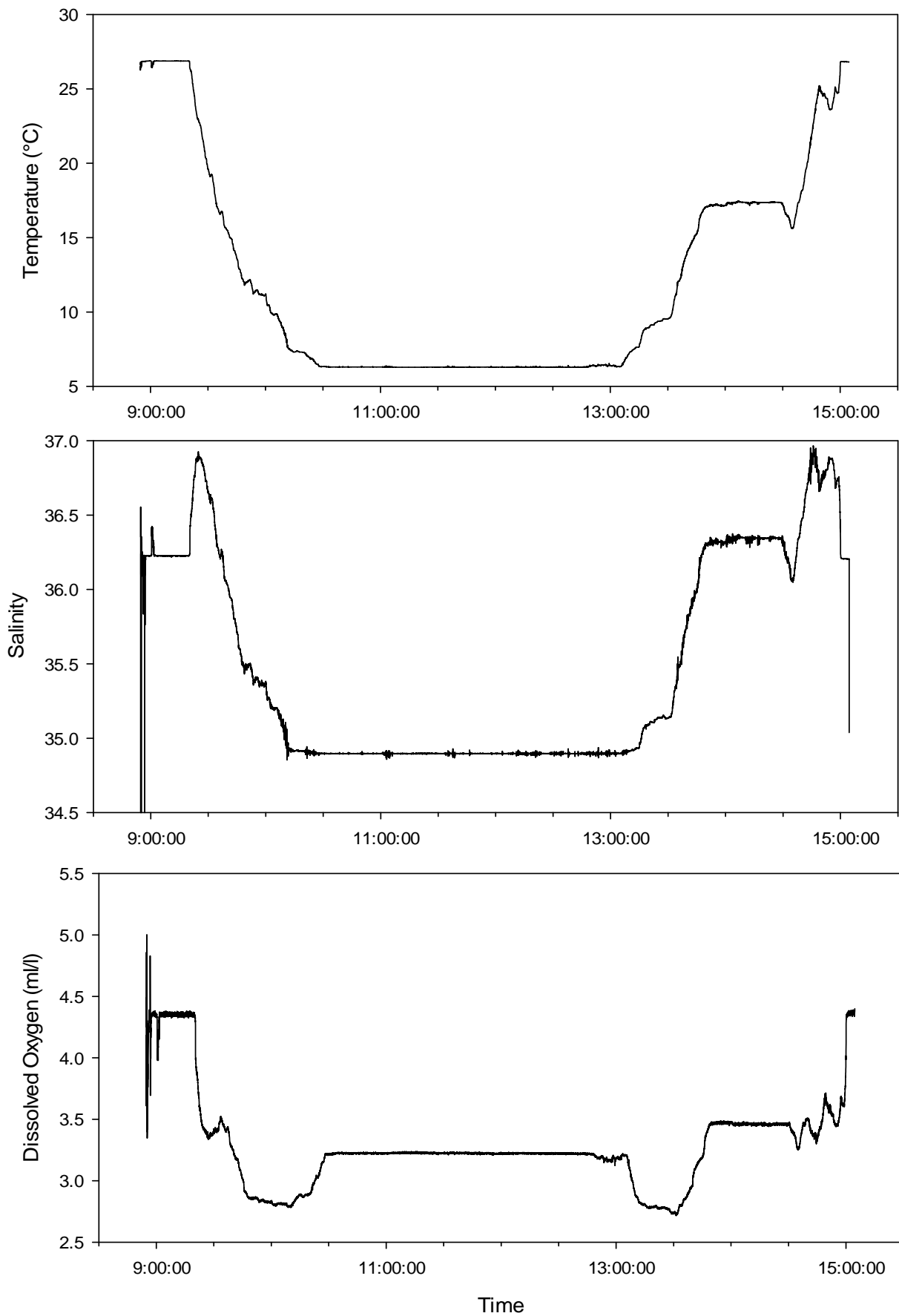
Few species were observed on this dive. In the soft substrate a skate and a few urchins were observed. The entire dive was characterized by abundant dermosponges in all habitat types except for soft substrate. Soft substrate with rubble and rubble habitats also had sparse stylasterids, isidids, and octocorals. Hard coral habitats were characterized by >90% dead *Enallopsammia profunda* or *Lophelia pertusa*. Attached fauna in mixed and hard coral habitats included species seen in rubble habitats plus *Anthomastus* sp., *Chrysogorgia* sp. and a blue encrusting sponge. Fishes included *Laemonema melanurum*, *L. barbatulum*, *Nezumia* sp., small eels (unidentified), and a squalid shark. Other motile invertebrates included an octopus and pencil urchins.

PHYSICAL ENVIRONMENT

This dive traversed large areas of soft sediment with some rubble mixed. Areas with rubble mix often had attached fauna. Areas of rubble (>50% rubble coverage) had abundant attached sponges. Few areas were classified as mixed habitat with sponges, soft corals, and hard corals; these areas had a rubble base. Few hard coral areas were encountered but were mostly dead (>90%). Rubble, mixed, and hard corals were all low profile with moderate coverage. Dead coral matrices and rubble were covered with a light dusting of sediment in all areas. Garbage was also observed on bottom.

ADDITIONAL COMMENTS

Video is stored on a Mac-formatted external hard drive. Video time in GMT. Video quality was extremely clear. Areas of this dive were very dark or too far from the bottom for proper identification of species.



Plots of CTD data recorded during ROV dive ROV-2010-RB-548 (20 Nov 2010) off Cape Canaveral, FL.