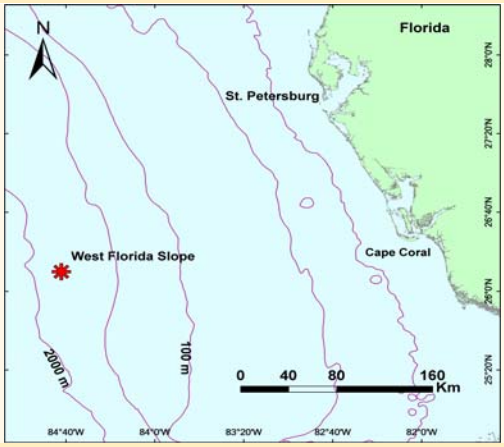
DIVE NUMBER: J2-542 *STUDY AREA: West Florida Slope*

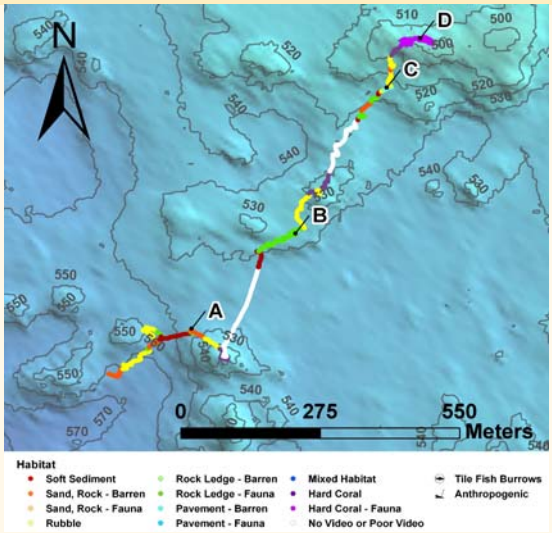
STATION OVERVIEW

Project	Extreme Corals 2010
Principal investigators	SW Ross[1], SD Brooke
PI Contact Info[1]	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 Ross, S Brooke, J Thoma
External Video Tapes	External Hard Drive
Internal Video Tapes	
Digital Still Photos	Yes
Positioning System	dGPS
CTD File	☑
Specimens Collected	☑
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	S Ross
Date Compiled	7/18/2011
PI Station Number	ROV-2010-RB-542

GENERAL LOCATION



Dive Track:



DIVE DATA

Date	10-Nov-10
Minimum Bottom Depth (m)	495
Maximum Bottom Depth (m)	734
Start Bottom Time (EDT)	20:08
End Bottom End (EDT)	1:31
Starting Latitude (N)	26° 12.228'
Starting Longitude (W)	84° 45.295'
Ending Latitude (N)	26° 12.312'
Ending Longitude (W)	84° 43.712'
Surface Current (Kts)	
Bottom Current (Kts)	

Image A: Rock Ledge - with Attached Fauna
26º 11.971' N, 84º 43.964' W

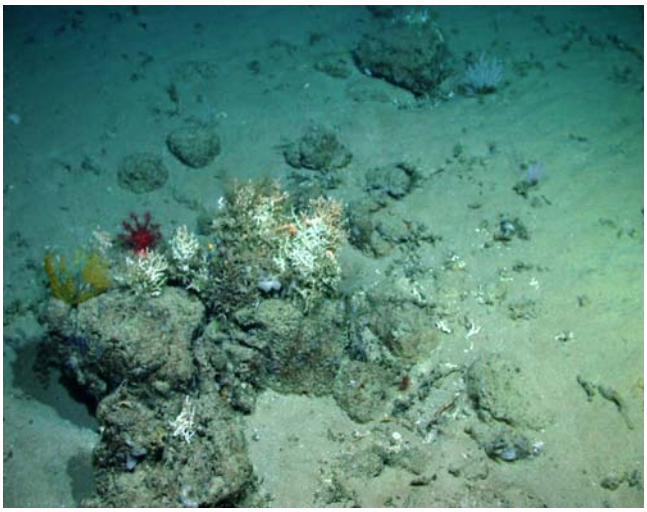


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IMAGE GALLERY

*** indicates image position is approximated**

Image B: Rock Ledge - with Attached Fauna
26º 12.076' N, 84º 43.854' W

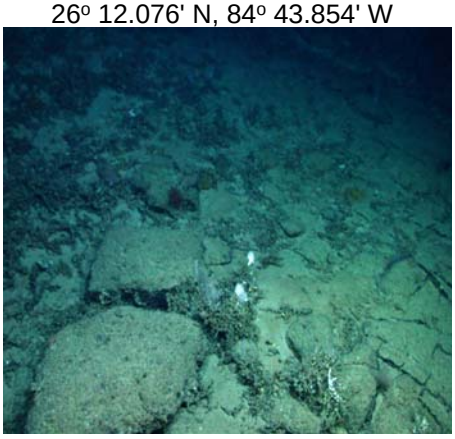


Image C: Pavement - Barren
26º 12.236' N, 84º 43.756' W

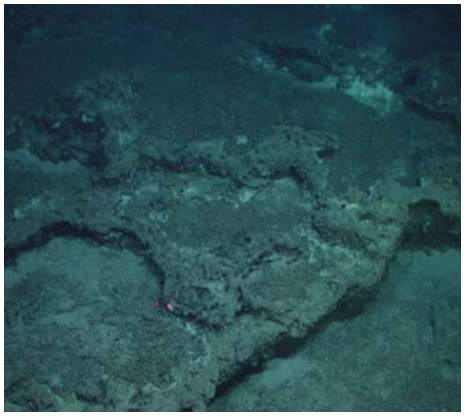
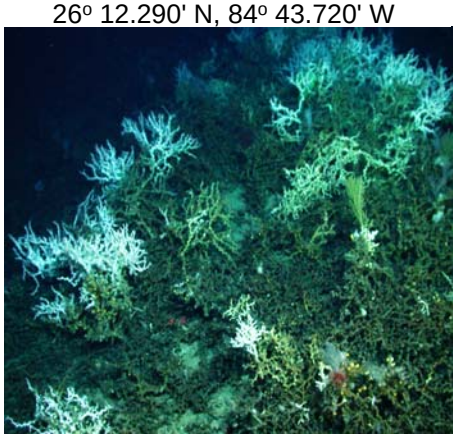


Image D: Hard Corals - with Attached Fauna
26º 12.290' N, 84º 43.720' W



RELEVANT WORK AND/OR LITERATURE CITED

Newton et al. (1987)
Reed et al. (2006)
Brooke and Schroeder (2007)
Hubscher et al. (2010)
Ross et al. (unpubl. cruise data)

BIOLOGICAL ENVIRONMENT

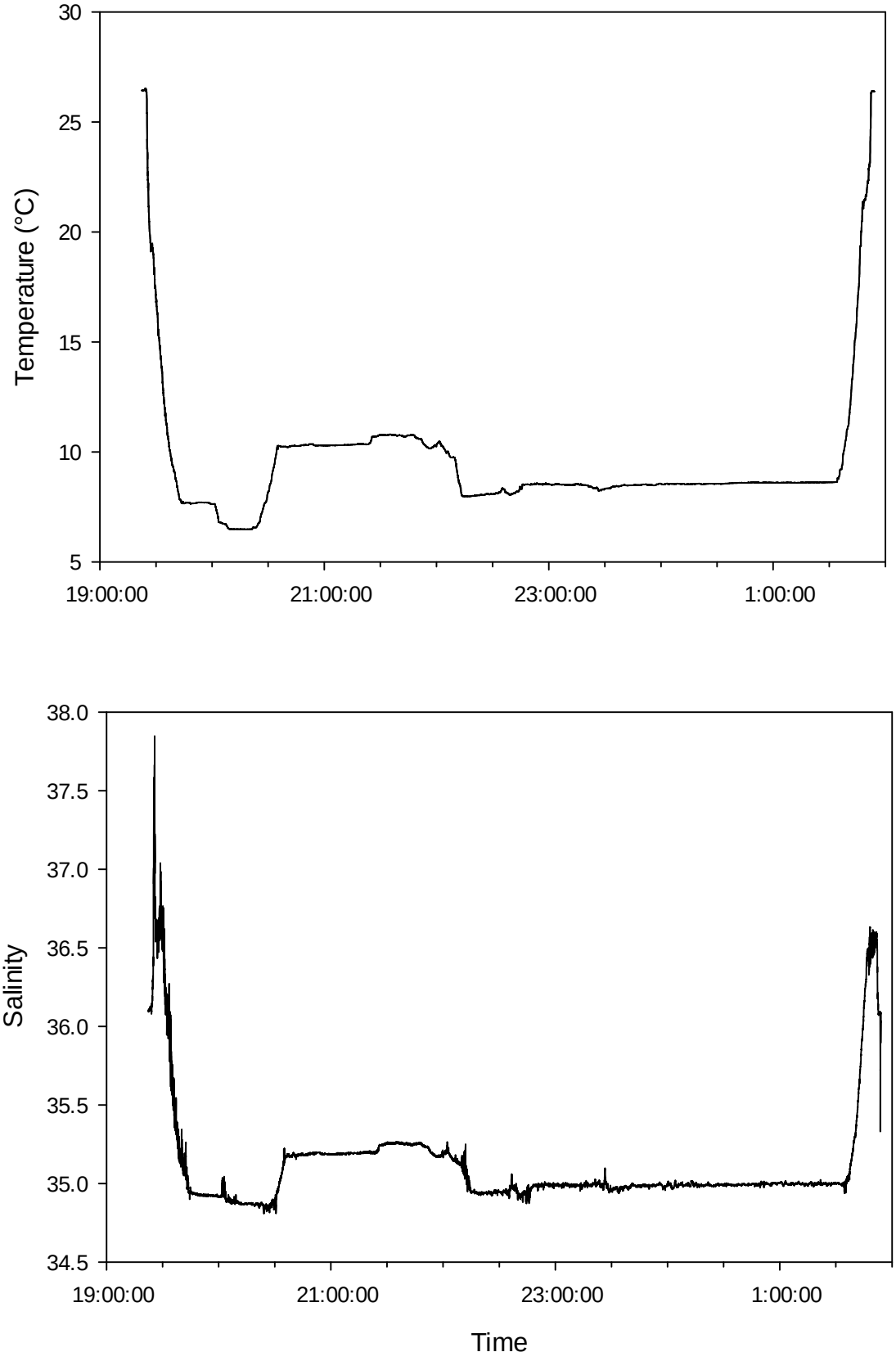
Of all the dives in this area, this particular dive encountered generally fewer fishes and invertebrates even though there was well developed habitat. *Nezumia* spp., and *Laemonema* spp. were the most common fishes, while golden crabs, crinoids, and squid were the most abundant mobile invertebrates. This dive covered a diversity of habitats ranging from soft substrate to rocks to high *Lophelia pertusa* cover areas. *Lophelia pertusa* was the dominant sessile invertebrate, but other corals (*Madrepora oculata*, cup corals, alcyonaceans) also occurred frequently. In places there was a high percentage of living coral (tops of mounds or ridges), but overall most of the coral cover was dead.

PHYSICAL ENVIRONMENT

Soft substrates surrounded rocky areas with varying profiles of < 0.5 m to over 2 m. In places there appeared to be bioherm formation (by *L. pertusa*) which often overlapped the rocky areas. There were some areas of dense living *L. pertusa* development. Currents did not appear to be strong. The overall appearance was a patchwork of sand, rocks, and coral.

ADDITIONAL COMMENTS

Video is stored on a Mac-formatted external hard drive. Video time in GMT. Video quality during this dive was poor, with segments missing and with poor lighting. Color balance was also not properly set.



Plots of CTD data recorded during ROV dive ROV-2010-RB-542 (10 Nov 2010) off West Florida Slope.