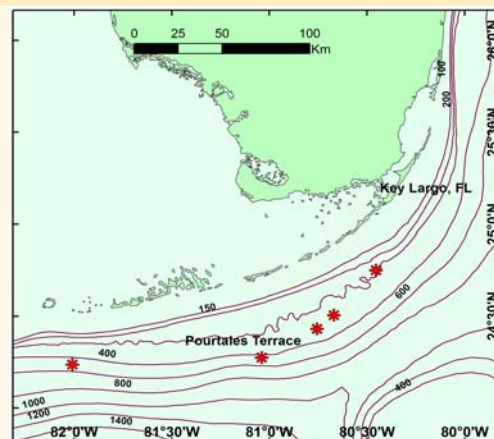
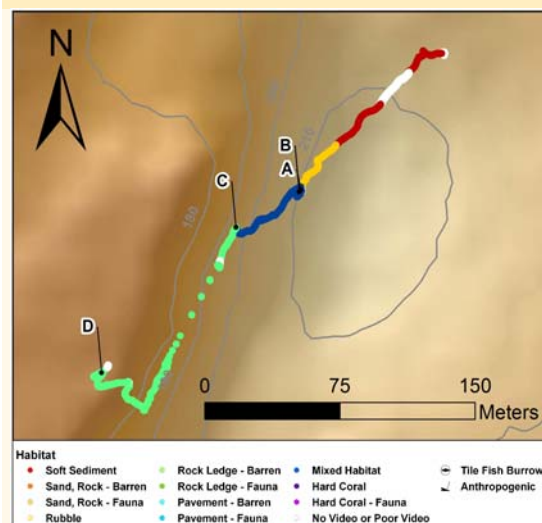


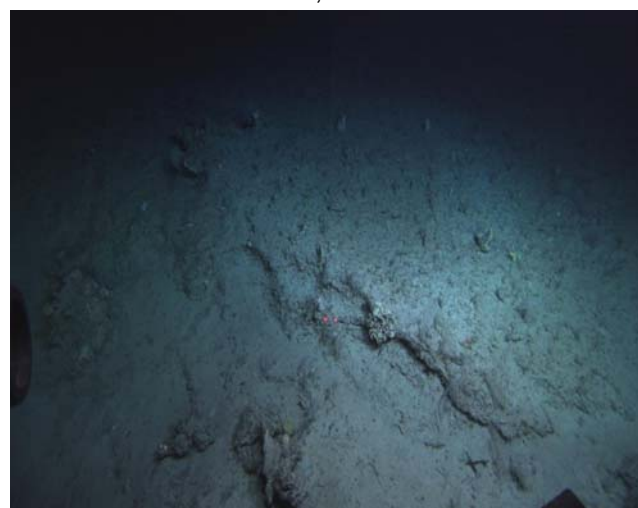
**DIVE NUMBER: J2-543****STUDY AREA: Pourtales Terrace****STATION OVERVIEW**

<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 Brooke, J Reed, M Dunn
<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 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>	M Wolf
<b>Date Compiled</b>	8/3/2011
<b>PI Station Number</b>	ROV-2010-RB-543

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

<b>Date</b>	12-Nov-10
<b>Minimum Bottom Depth (m)</b>	169
<b>Maximum Bottom Depth (m)</b>	212
<b>Start Bottom Time (EDT)</b>	17:58
<b>End Bottom End (EDT)</b>	19:41
<b>Starting Latitude (N)</b>	24° 45.028'
<b>Starting Longitude (W)</b>	80° 27.196'
<b>Ending Latitude (N)</b>	24° 44.948'
<b>Ending Longitude (W)</b>	80° 27.298'
<b>Surface Current (Kts)</b>	2.5
<b>Bottom Current (Kts)</b>	2.3

**Image A: Sand/Rubble/Rock - with Attached Fauna**  
24° 44.989' N, 80° 27.240' W

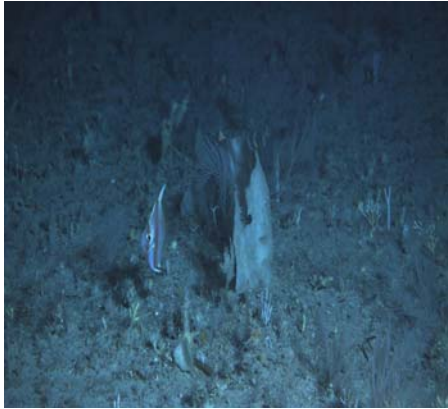


**DIVE NUMBER: J2-543****STUDY AREA: Pourtales Terrace****IMAGE GALLERY**

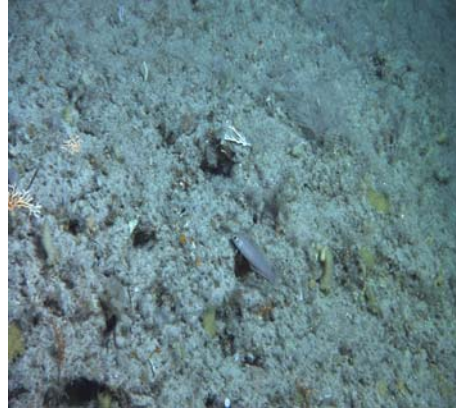
\* indicates image position is approximated

**Image B: Mixed Habitat**

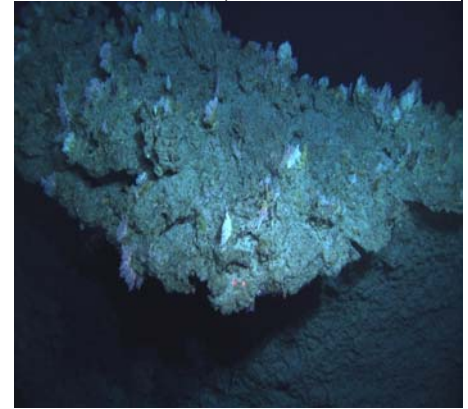
24° 44.988' N, 80° 27.240' W

**Image C: Mixed Habitat**

24° 44.978' N, 80° 27.264' W

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

24° 44.936' N, 80° 27.306' W

**RELEVANT WORK AND/OR LITERATURE CITED**

EEZ-SCAN 87 Scientific Staff (1991)  
Reed (2002)  
Reed and Ross (2005)  
Reed et al. (2005)  
Reed et al. (2006)  
Ross and Nizinski (2007)

**BIOLOGICAL ENVIRONMENT**

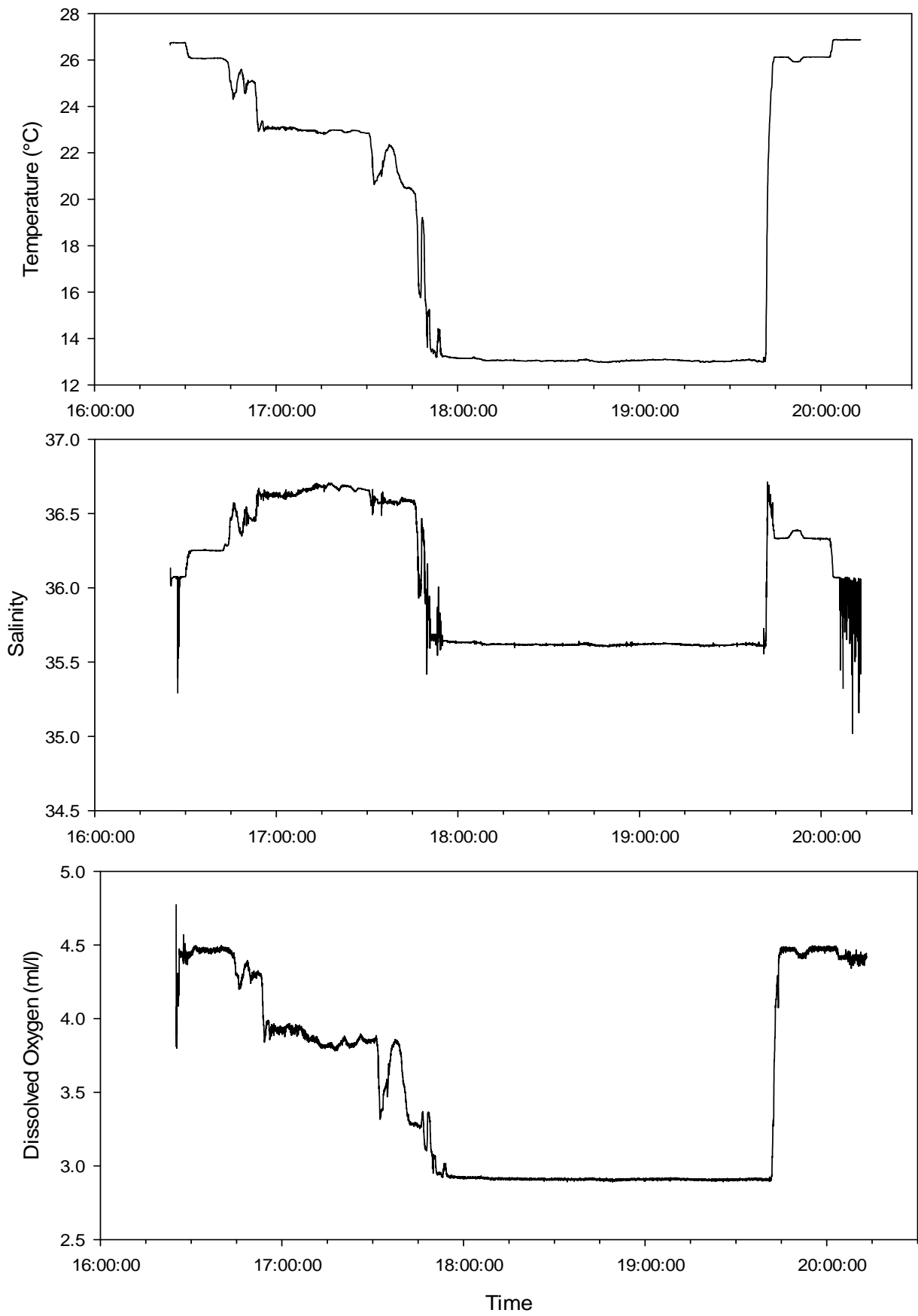
At the northeast corner of the dive track, soft sediment with little fauna was replaced with small rocks that support small attached invertebrates such as gorgonians, small hard corals and hexactinellid sponges. Abundant sessile fauna attached to the low relief rock and ledge habitats were highly diverse, including numerous species of hexactinellid and demospongia sponges ranging from small vase, ball and large plate forms, orange and white stylasterid hydrocorals, soft corals such as *Plumerella* sp. and *Acanella* sp. and hard corals such as *Enallopsammia profunda*, *Cladocora* sp. and cup corals. No *Lophelia pertusa* were evident. Mobile fauna included blackbelly rosefish, codling and a boarfish.

**PHYSICAL ENVIRONMENT**

This dive began to the northeast of rock ridges beginning over soft substrate and traversing through a mix of soft substrate and rock with attached fauna over a gradual decline in elevation. In a low flat valley there was primarily low profile rock slabs and small ledges of eroded rock with abundant attached fauna interspersed with low relief areas of mixed hard and soft coral and sponge habitat. The western edge of the valley met an abrupt vertical rock face with attached fauna. The sub moved laterally along the rock face before increasing in elevation up the rock face to a flattened area with numerous small rocks and ledges and ending with a large undercut rock ledge covered in sessile fauna.

**ADDITIONAL COMMENTS**

Video is stored on a Mac-formatted external hard drive. Quality was extremely clear, with very few sections of unusable footage. Video time in GMT. However, there was no audio recorded. Collections were taken of hexactinellid and demospongia sponges, stylasterid hydrocorals, *Plumerella* sp., and a blackbelly rosefish.



Plots of CTD data recorded during ROV dive ROV-2010-RB-543 (12 Nov 2010) off Pourtales Terrace.