
September 13th | 2010

Ryan Chouest daily data transmission and report

Period covered: 1442 hrs 09/12/2010 – 1325 hrs 09/13/2010

44.792 - Nautical miles covered

Vessel science party:

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Contact details:

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Cruise notes:

The Ryan Chouest continued along the planned Cruise 15 route transiting Southeast to Site 9 (USCG-404) and South to Site 10 (DCS-025) where Cast #5 was performed. The Ryan Chouest then travelled overnight on a revised route plan NorthWest to Site 11 (Weatherbird site DSH08) where cast #6 was performed the following morning before transiting Northeast to Site 12 (Weatherbird site DSH-07). Echosounder surveys were conducted at all sites using a rough grid or 'cloverleaf' pattern to try and identify the exact location of suspected seeps. Collection of underway flurometer data was continuous with the exception of the overnight transit between Sites 10 and 11.

Science results and preliminary interpretation:

Fluorometry results

The Chelsea and Trios sensors generally indicate low levels of inferred hydrocarbons concentrations through the reporting period (Figures 2 and 3).

Surface Observations

No surface observations were made.

EK-60 Echosounder results

No echosounder contacts were observed at any of the sites.

CTD Casts

Three CTD casts were performed during this reporting period Cast #5 at Site 10 (DCS-025, N28 28.078 W87 27.518), Cast #6 at Site 11 (Weatherbird site DSH-08, N29 07.364 W87 52.119) and Cast#7 at Site 12 (Weatherbird site DSH-07, N29 15.213 W087 44.069). In Cast #5 a minor drop in the dissolved oxygen and a gradual increase in the output of the Chelsea fluorometers co occurred at ~1100m. The same feature also displayed in the vertical profiles of Cast # 6 at 980m water depth.

Wave Glider operations

Wave Glider's #1 and #2 have deviated from their planned circular courses 10NM and 20NM from the Macondo well site respectively. Further information along with Instrument data and operational notes is provided in a separate daily report.

It is intended to inspect the Wave Glider systems in approximately four weeks. This will be scheduled for a future sailing of the Ryan Chouest.

Planned route for cruise 15:

Ryan Chouest Planned Cruise 15 Route

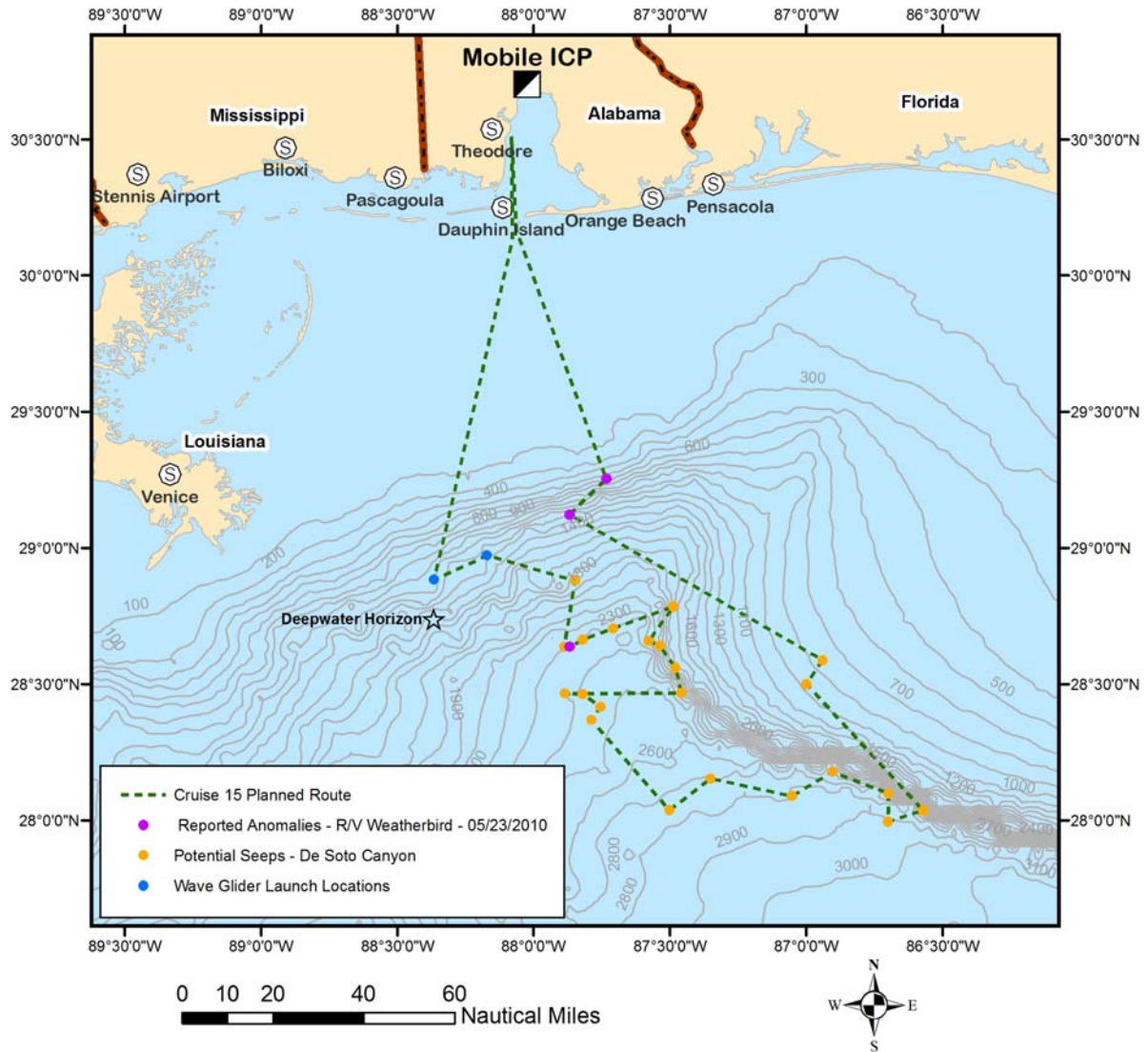


Figure 1: Planned route for cruise 15 from 09/09/2010 – 09/015/2010.

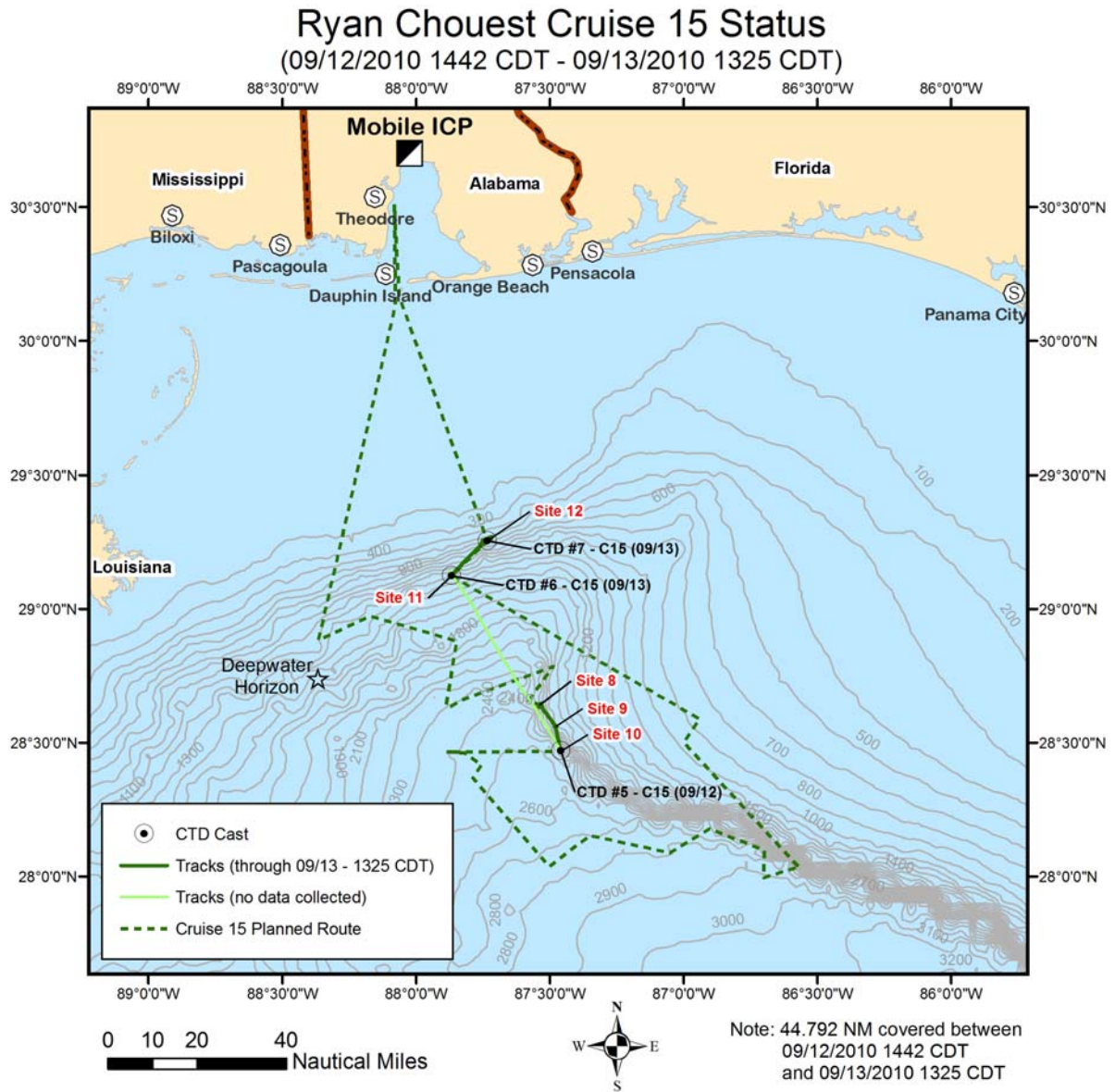


Figure 2: Actual route for cruise 15 from 09/12/2010 – 09/13/2010.

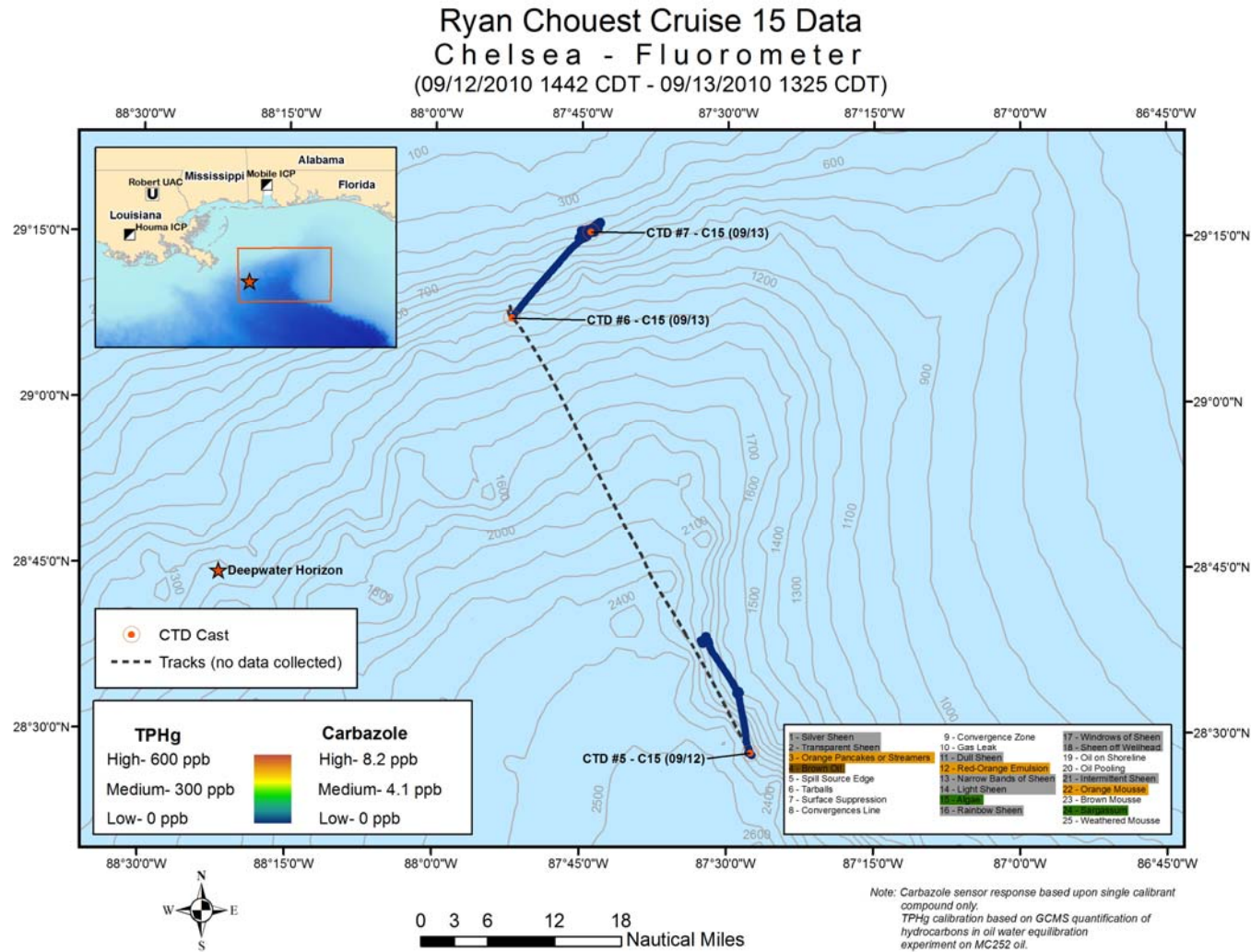


Figure 3. Chelsea fluorometer results plotted with location on cruise track 15. Breaks in data occur when either data quality is poor or the systems were turned off due to pump problems. Purple lines represent depth contours of 100 m intervals.

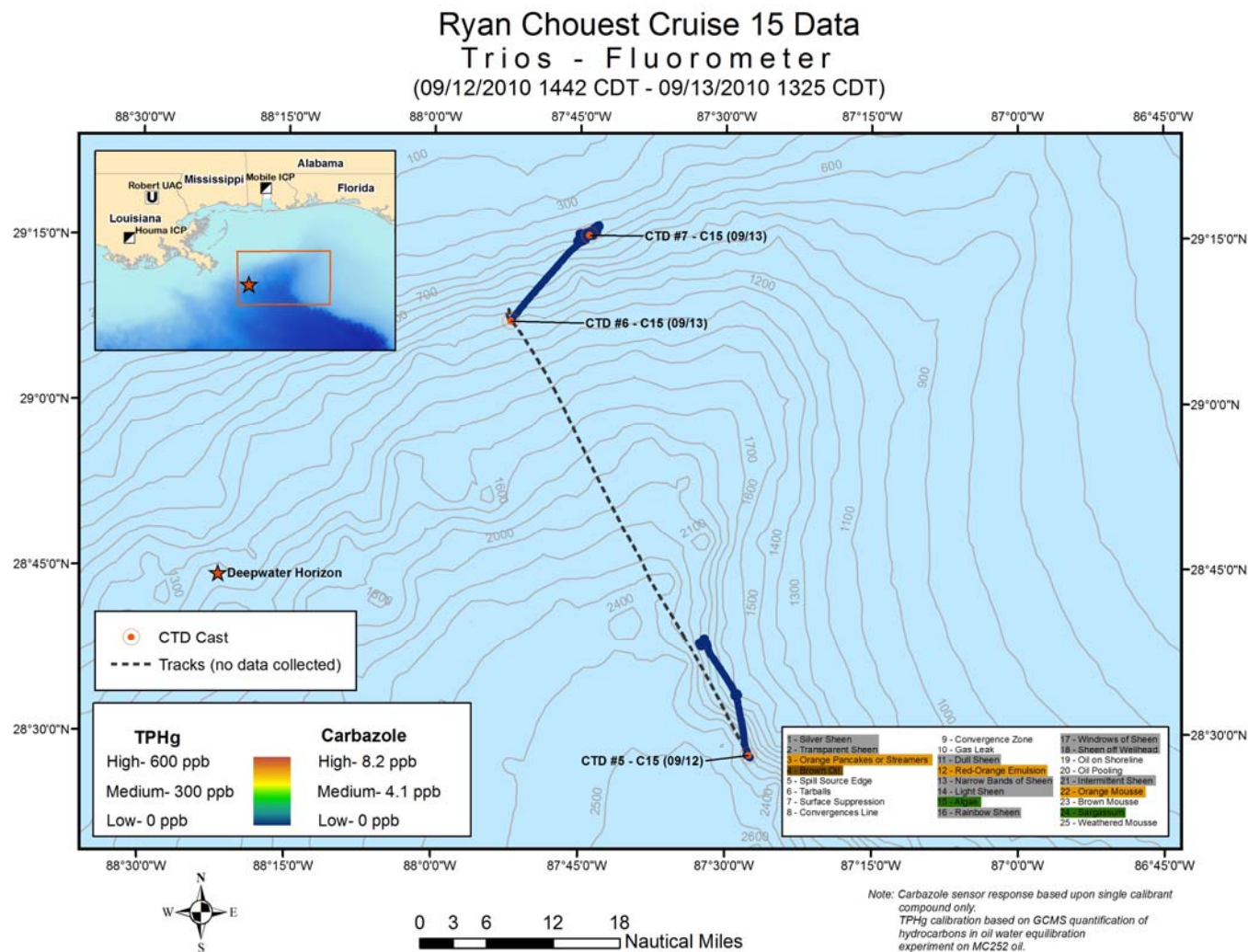


Figure 4. Trios fluorometer results plotted with location on cruise track 15. Breaks in data occur when either data quality is poor or the systems were turned off due to pump problems. Purple lines represent depth contours of 100 m intervals.

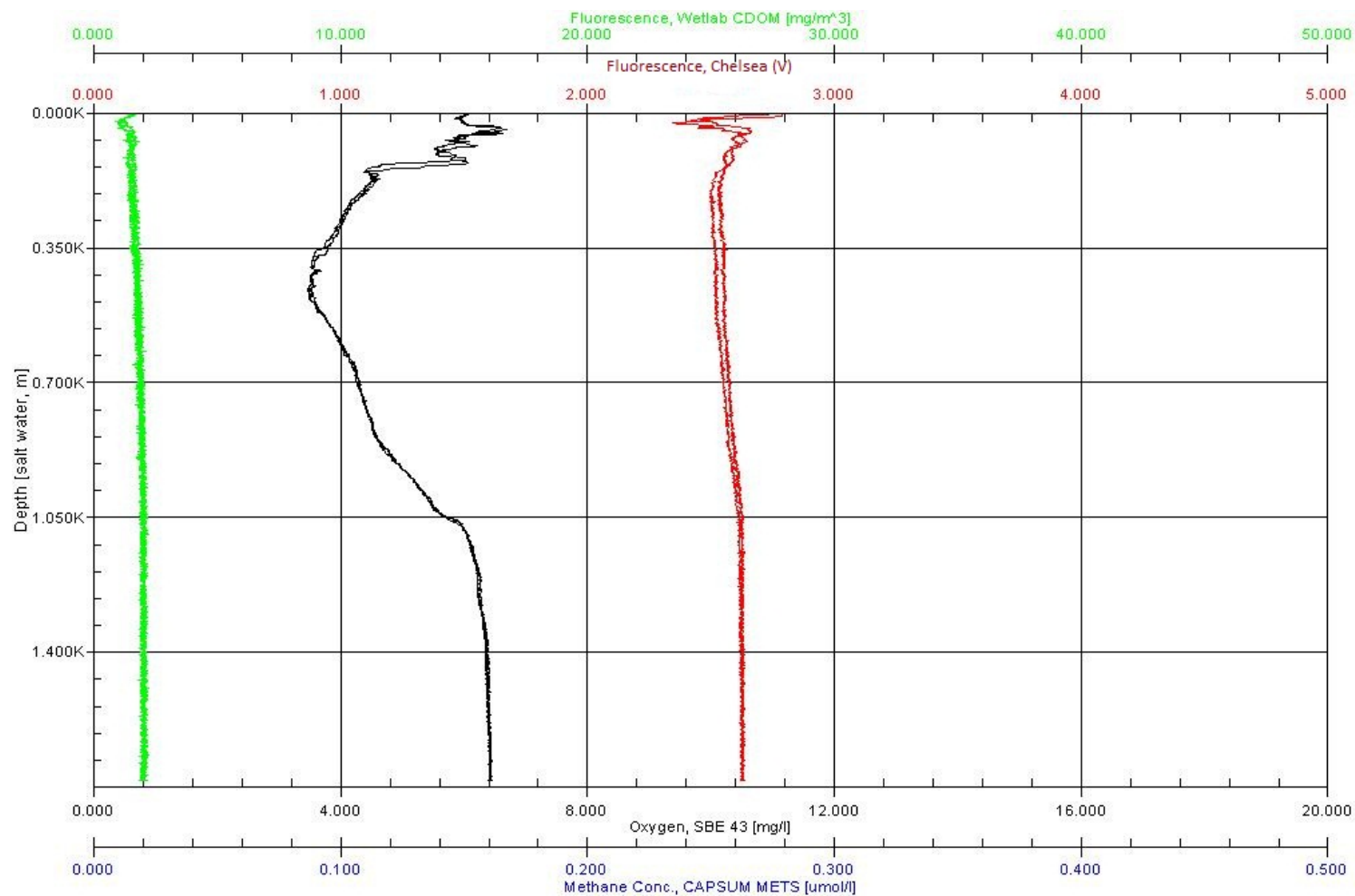


Figure 5 CDOM fluorescence, PAH fluorescence, dissolved oxygen, and methane concentration profiles. The results were obtained for Cruise 15 CTD cast 5 down to 1700 m. Water samples were collected at 1730m, 1100m, 850m and 630m. Temperature, conductivity and water depth measurements were also recorded from a SBE 19+ system.

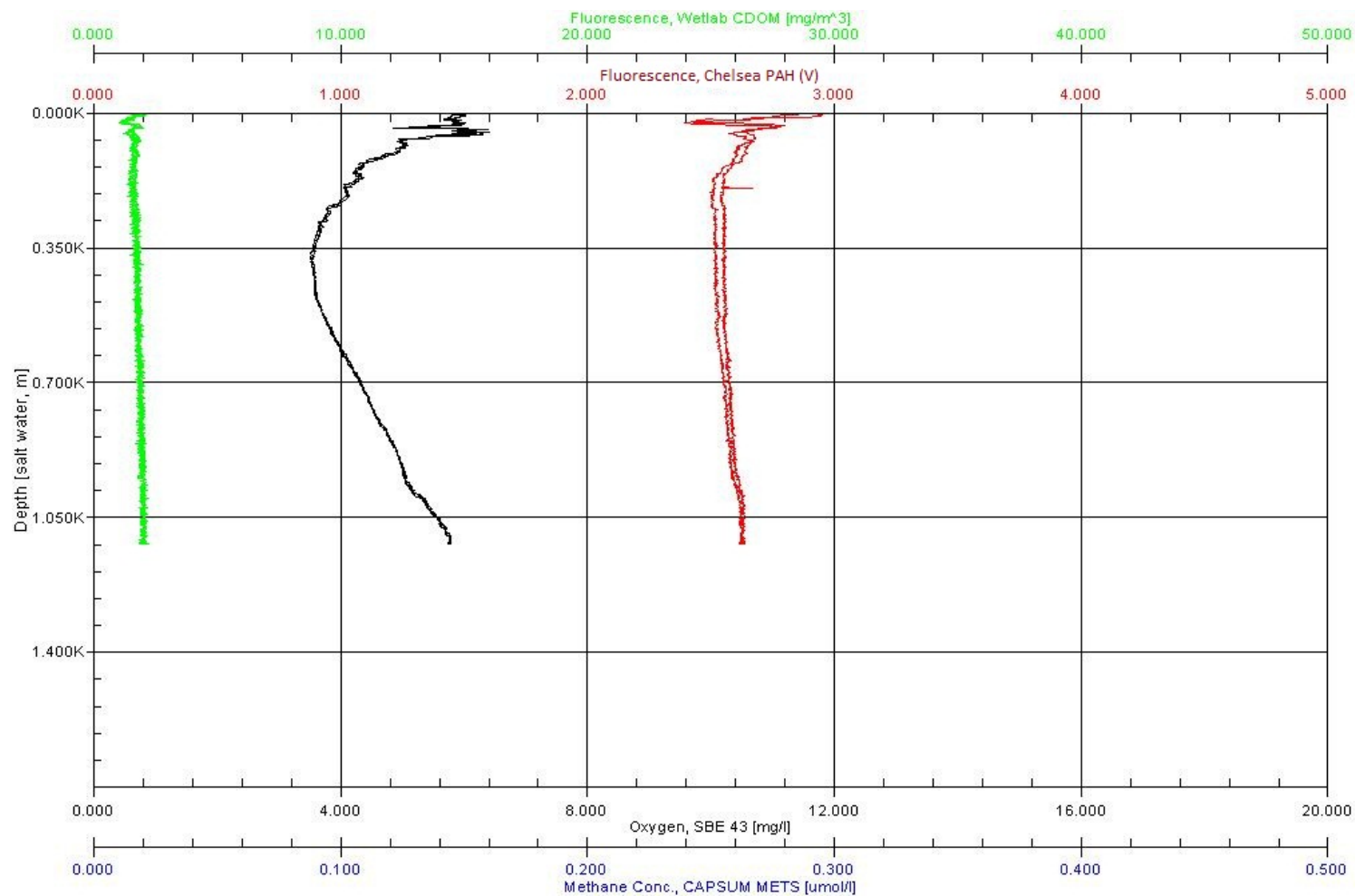


Figure 6 CDOM fluorescence, PAH fluorescence, dissolved oxygen, and methane concentration profiles. The results were obtained for Cruise 15 CTD cast 6 down to 1100 m. Water samples were collected at 1117m, 980m, 850m. Temperature, conductivity and water depth measurements were also recorded from a SBE 19+ system.

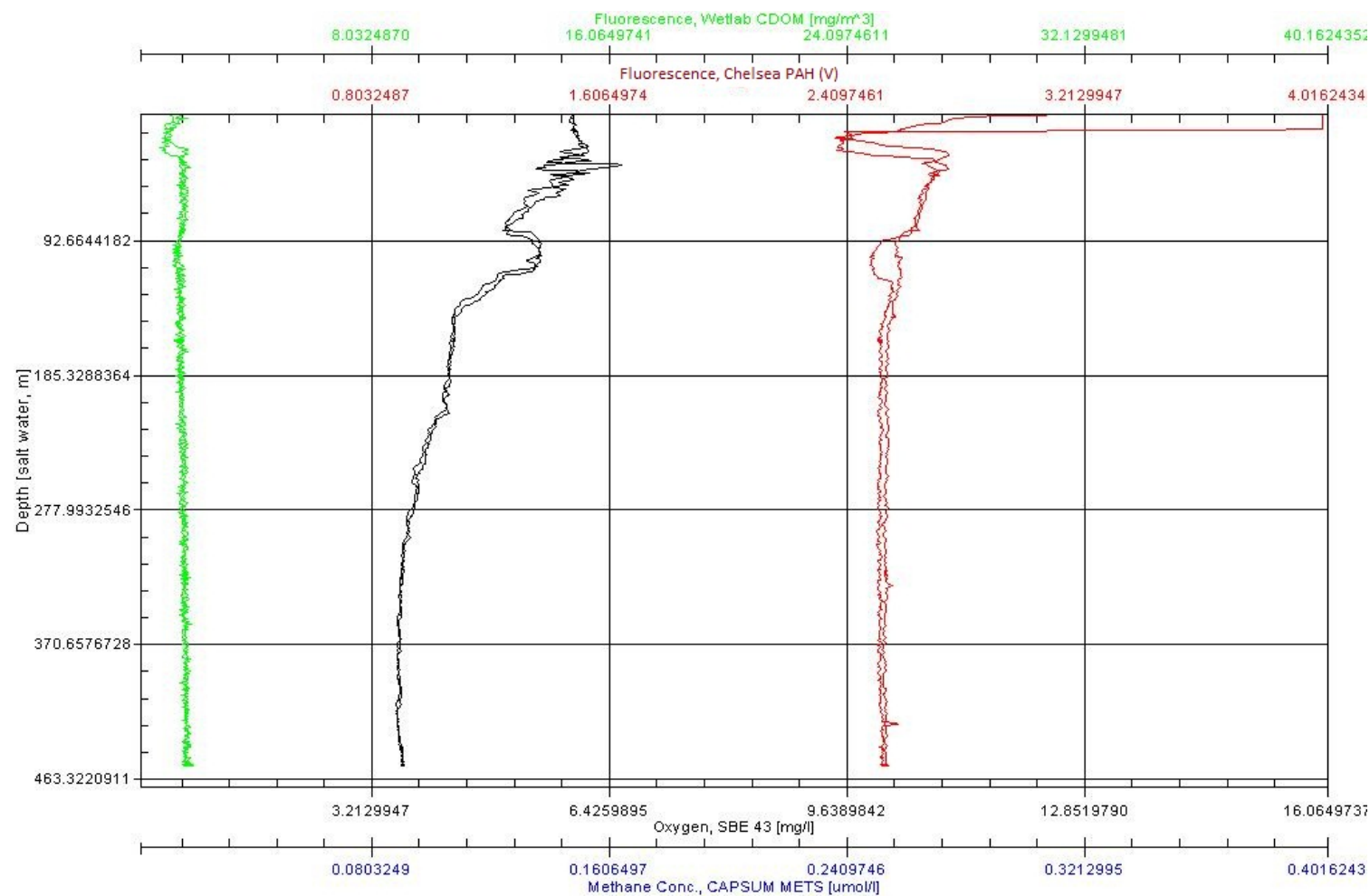


Figure 7 CDOM fluorescence, PAH fluorescence, dissolved oxygen, and methane concentration profiles. The results were obtained for Cruise 15 CTD cast 7 down to 450 m. Water samples were collected at 452m, 145m, 85m and 103m. Temperature, conductivity and water depth measurements were also recorded from a SBE 19+ system.

Science Operations:

Observations of sea-surface conditions were made throughout. Three CTD casts were completed. The EK-60 echo sounder continuously collects data to evaluate the seabed and water column for possible seeps and to relocate seeps for further investigation and potential additional casting sites. We continue to analyse water samples using the GCMS.

Problems/operational issues:

No problems or operational issues are reported.

Selected Photographs:

No photographs were taken during the reporting period.

Planned activities for next 24 hours:

The Ryan Chouest will continue on its amended cruise 15 track investigating sites at the head of the De Sota Canyon. CTD casts will also be performed at locations to the Northeast, including additional sites surveyed during the Weather bird II Cruise (August 6-16, 2010). The echosounder will be continually monitored to identify the presence of possible natural seeps.

Full Crew List:

Eric Houston	BP	William Smith	MASTER
Brett Bundick	C&C	Brian Corley	Mate
Mathew Baham	C&C	Mark Harmon	A/B
Quinn Guidry	C&C	Ricky Matherne	A/B/Cook
Tim MacEwen	C&C	Lance Broussard	ENG
Craig Smith	C&C	Patric Cousin	A/B
Jen Carlsen	C&C	Trever Dorics	A/B
Xiubin Qi	CSIRO	Patric Anderson	Qmed
Charlotte Staivies	CSIRO	Jason Bednarski	A/B/Cook
Andy Revill	CSIRO	Eiljah Benjamin	O/S
Stephane Armand	CSIRO	Larry Luke	Crane Op
Gui de Almeida	Entrix		
Carleton Edmunds	Shaw		
Brad Woolhiser	LR		
Dustin Boettcher	LR		

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