
September 10th | 2010

Ryan Chouest daily data transmission and report

Period covered: 2033 hrs 09/09/2010 – 1230 hrs 09/10/2010

89.694 - Nautical miles covered

Vessel science party:

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Contact details:

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Cruise notes:

The *Ryan Chouest* followed the planned cruise 15 route leaving Port Theodore and heading Southwest towards MC252 to the first wave glider deployment site and then onward to the second wave glider site. (Figures 1 and 2). The underway pump was deployed after passing Sea Buoy. Collection of the echo sounder survey data was continuous.

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

Clear waters throughout distance covered.

EK-60 Echosounder results

One echosounder contact was observed during this report period. (Figure 2, Figure5).

CTD Casts

There were no CTD casts performed during this reporting period.

Wave Glider operations

Wave Glider 1 was launched at 0650hrs at (28.88284 N, 88.36595W) on the circular course with a radius of 10 NM from the Macondo well site. The glider is programmed to proceed on a counterclockwise course.

The Ryan Chouest remained within ½ NM of glider #1 for approximately 30 minutes after launch while telemetry and navigation were verified. The path taken by Glider #1 was then followed by the Ryan Chouest running the underway pump for 1 hour before leaving the Glider and continuing on a heading towards Glider #2 launch site. During this period and subsequent transit to the next launch location, the Ryan Chouest monitored the RADAR return from the active RADAR reflector on board the Wave Glider.

Wave Glider 2 was launched at 1112hrs at (28.88284 N, 88.36595W) on the circular course with a radius of 20 NM from the Macondo well site. The glider is programmed to proceed on a counterclockwise course.

The Ryan Chouest remained within ½ NM of the glider #2 for approximately 30 minutes after launch while telemetry and navigation were verified. The path taken by Glider 1 was then followed by the Ryan Chouest running the underway fluorometry pump for 1 hour before leaving the Glider and continuing on the Cruise 15 planned route towards the DeSota Canyon area.

The Ryan Chouest will return to the wave gliders at regular intervals during Cruise 15 as necessary to take updated comparative measurements with the ship's sensors and underway fluorometry system. We will attempt to time this when the gliders are passing on the closest part of their circular path to the ship's location on Cruise 15.

The Wave Gliders are equipped with a suite of nine fluorometers and a weather station. They also have an active radar reflector as an aid to collision avoidance. The data is being sent to shore in near real-time increments of 10 minutes. The instrument data and operational information is published in a separate daily report. The instrument data, as well as operational notes will be reported daily Monday through Friday. The Monday report will cover the previous weekend.

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

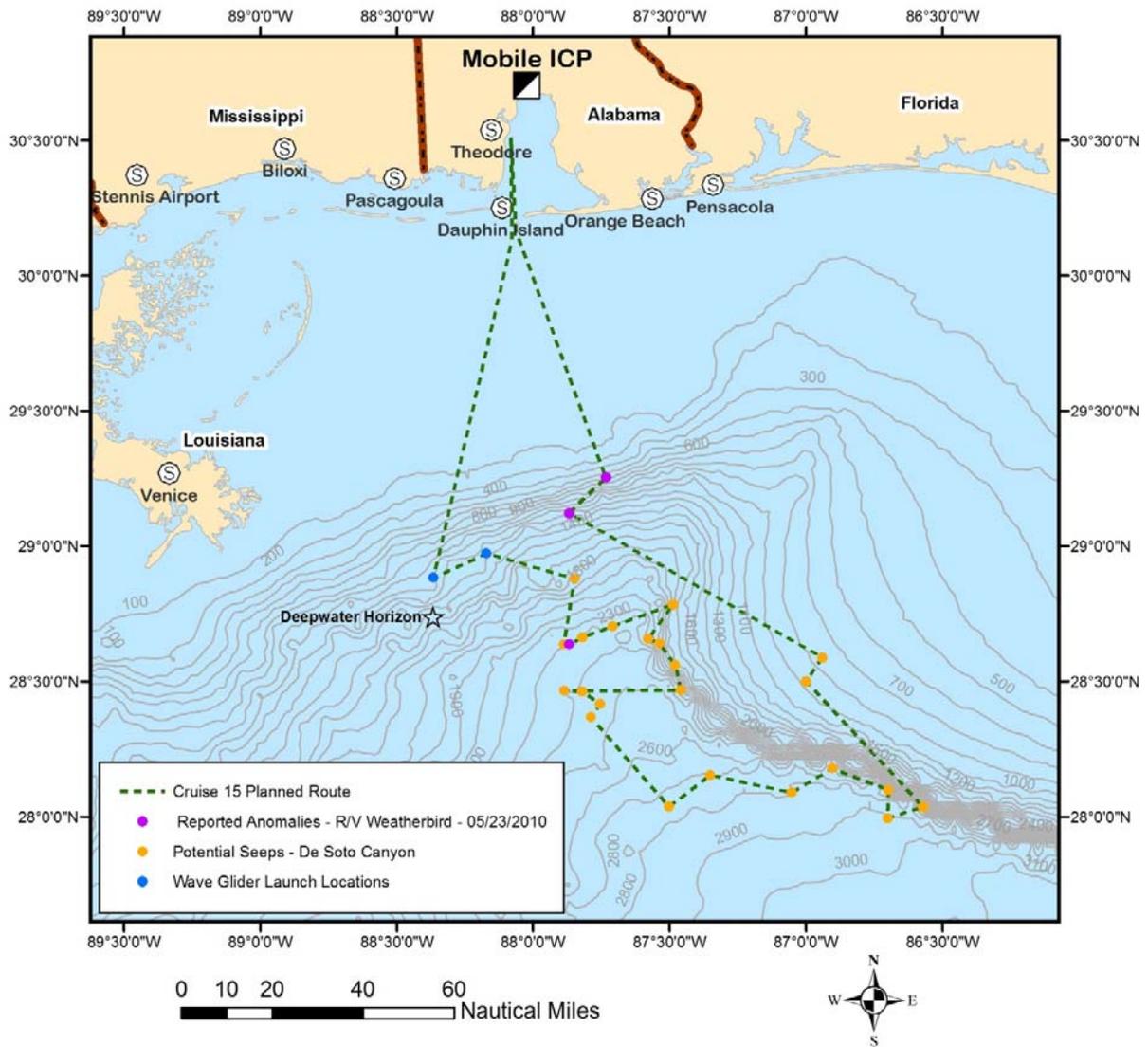


Figure 1: Planned route for cruise 15 from 09/09/2010 – 09/015/2010.

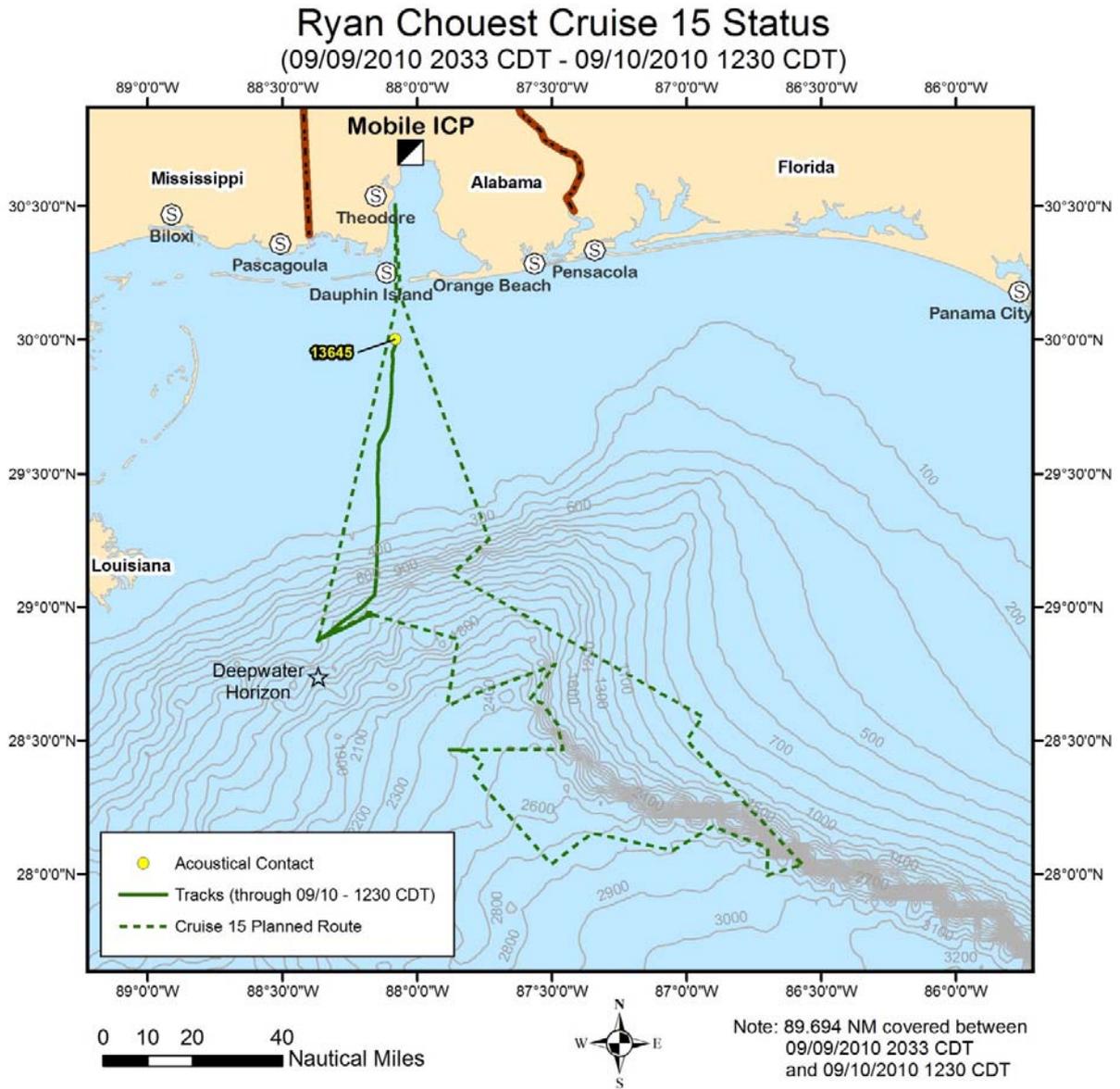


Figure 2: Actual route for cruise 15 from 09/09/2010 – 09/10/2010.

Ryan Chouest Cruise 15 Data
 Chelsea - Fluorometer
 (09/09/2010 2033 CDT - 09/10/2010 1230 CDT)

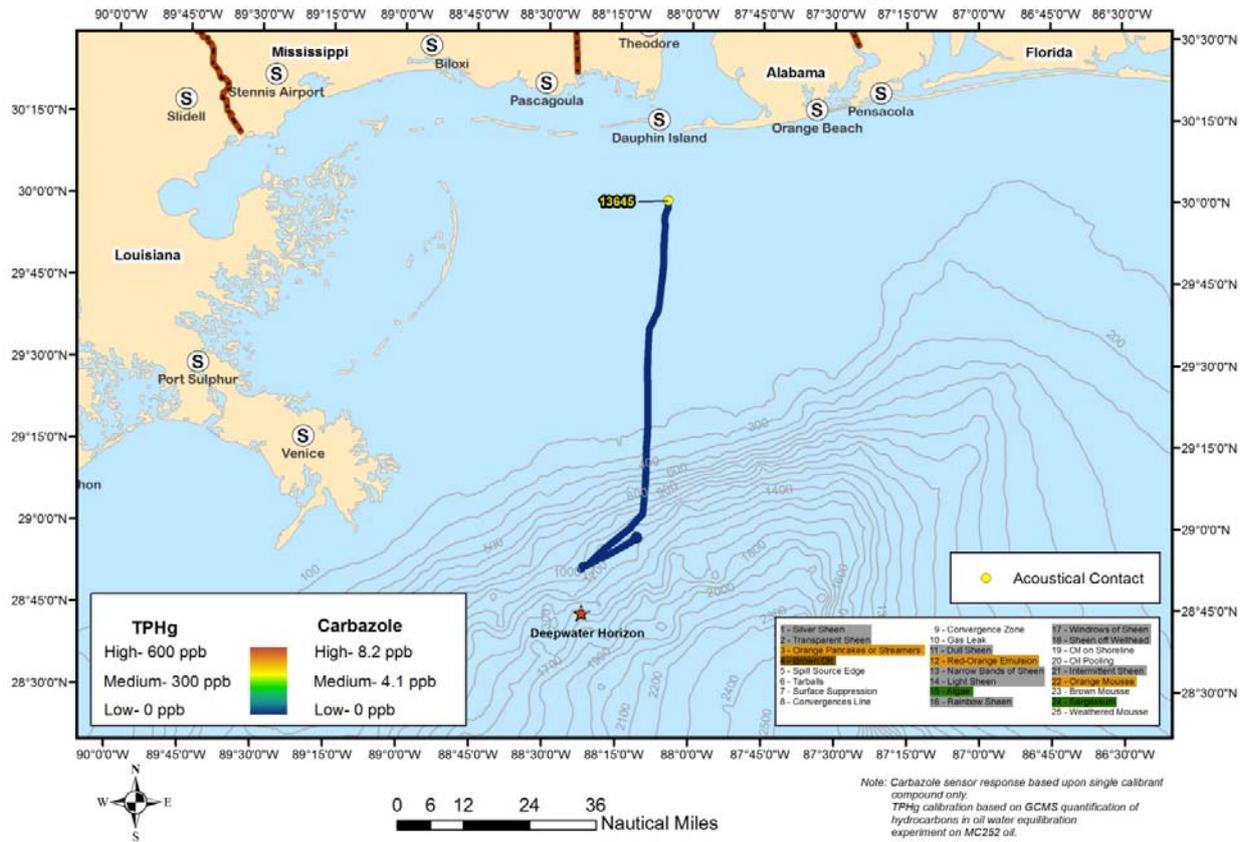


Figure 3. Chelsea fluorometer results plotted with location on cruise track 15. Breaks in data occur when either data quality is poor or the systems were turned off due to pump problems. Purple lines represent depth contours of 100 m intervals.

Ryan Chouest Cruise 15 Data
 Trios - Fluorometer
 (09/09/2010 2033 CDT - 09/10/2010 1230 CDT)

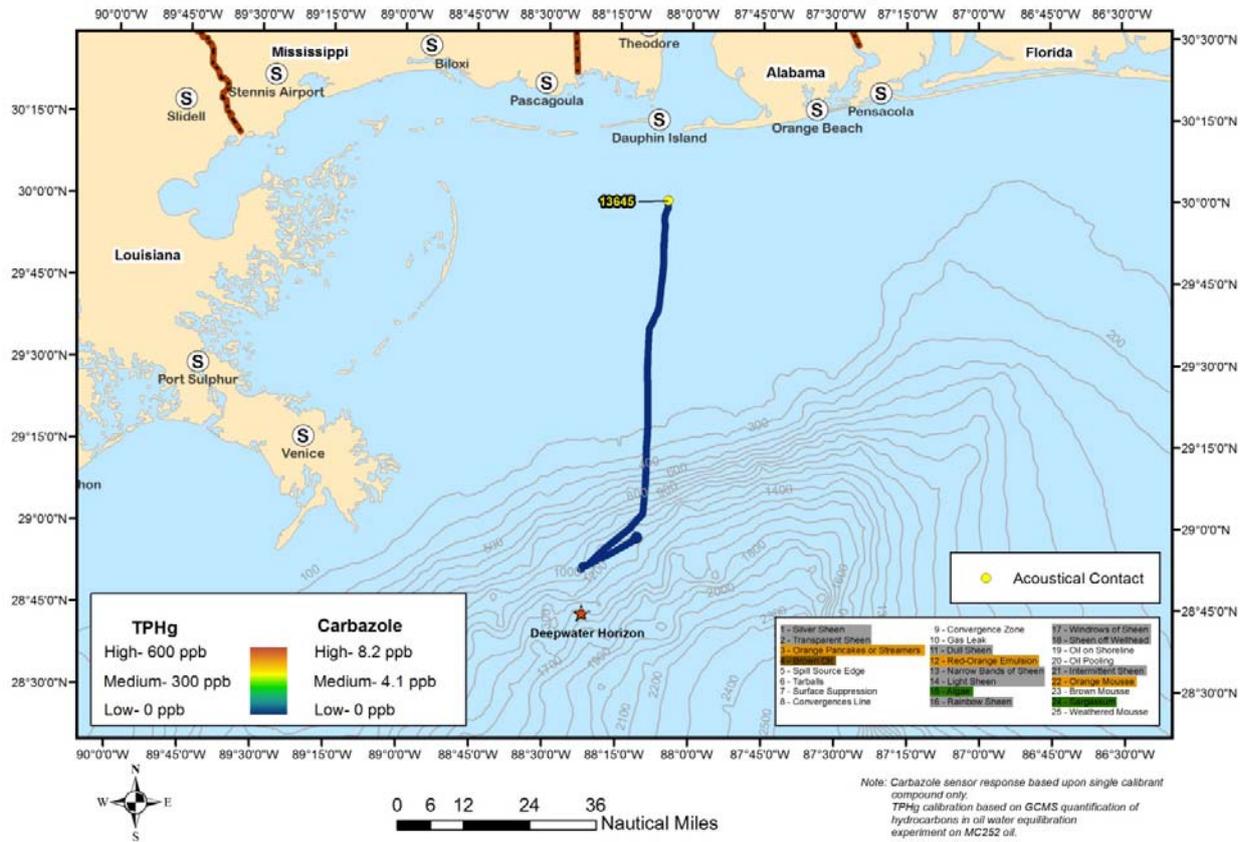


Figure 4. Trios fluorometer results plotted with location on cruise track 15. Breaks in data occur when either data quality is poor or the systems were turned off due to pump problems. Purple lines represent depth contours of 100 m intervals.

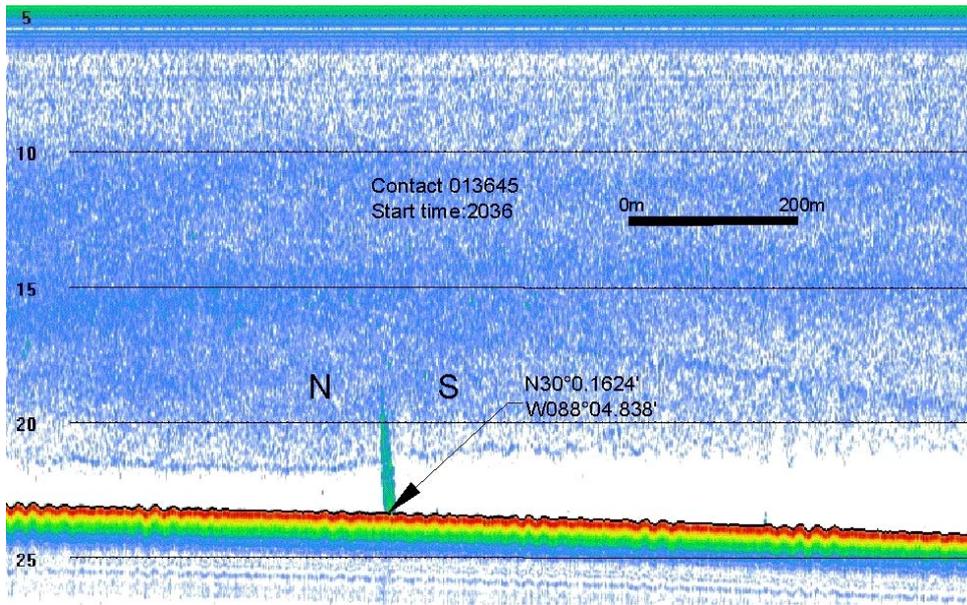


Figure 5. This line is oriented initially from North on the left to South. a) Contact_09062010_045205. Description: Bottom contact. Time (CST): 09/09/2010 2036. Location: 30° 0.1624N, 88° 04.838W. Depth: 18.65m to 23.33m.

Science Operations:

Observations of sea-surface conditions were made throughout. The EK-60 echo sounder is continuously collecting data to evaluate the seabed and water column for possible seeps. We continue to collect underway fluorometry pump data and to analyse water samples using the GCMS.

Problems/operational issues:

No problems or operational issues are reported.

Selected Photographs:



Photo 1. Wave Gliders 1 & 2 on the deck of the Ryan Chouest



Photo 2. Launch of wave glider #2



Photo 3. Wave glider# 2 fully deployed

Planned activities for next 24 hours:

The Ryan Chouest will continue Northeast on its cruise 15 track towards the head of the DeSota Canyon to investigate possible natural seeps in this area.

Full Crew List:

Eric Houston	BP	William Smith	MASTER
Brett Bundick	C&C	Brian Corley	Mate
Mathew Baham	C&C	Mark Harmon	A/B
Bobby Patrick	C&C	Ricky Matherne	A/B
Tim MacEwen	C&C	Robert Thompson	ENG
Craig Smith	C&C	Patric Cousin	A/B
Emily Burke	C&C	Trever Dorics	A/B
Xiubin Qi	CSIRO	Kevin Hartley	Qmed
Charlotte Staivies	CSIRO	Jason Bednarski	A/B/Cook
Andy Revill	CSIRO	Steve Morgan	O/S
Stephane Armand	CSIRO	Josh Chauffe	Crane Op
Curtis Walker	Entrix	Larry Luke	Crane Op

Important Disclaimer

The information contained in this report comprises general statements based on scientific research. The reader is advised and needs to be aware that such information may be incomplete and represents interim results only, which require further analysis. No reliance or actions must therefore be made on that information without seeking further expert professional and technical advice.