

August 10th | 2010

Ryan Chouest daily data transmission and report

**Period covered: 1017hrs 08/09/2010 - 2144hrs 08/09/2010**

**80.571 - Nautical miles covered**

**Vessel science party:**

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**Cruise notes:**

The *Ryan Chouest* continued north towards the port of Theodore (Figure 1), arriving at 0100 hrs of 08/10. Earlier, the issue surrounding the fridge malfunction was resolved after the system defrost reset.

**Science results and preliminary interpretation:**

**Fluorometry results**

The Chelsea and Trios sensors indicate minimal inferred hydrocarbons levels through the in the last leg of the travelled route displayed in figures 2 and 3. The Contros sensor indicates mid-high levels. A segment of relatively lower levels occurs at the elbow of the track leading north (Figure 4). As stated previously there is a low signal to noise which is becoming more pronounced with time which we attribute to the xenon flash lamp needing replacement. Therefore the Contros results should be interpreted with caution.

**Surface Observations**

Hammerhead sharks and a group of dolphins were later spotted as the *Ryan Chouest* made the final leg of the travelled route (Figure 1).

**EK-60 Echosounder results**

No echo sounder results for the period covered.

**Science Operations:**

Fluorometer measurements were logged for the majority of the period and 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.

Planned route for cruise 11:

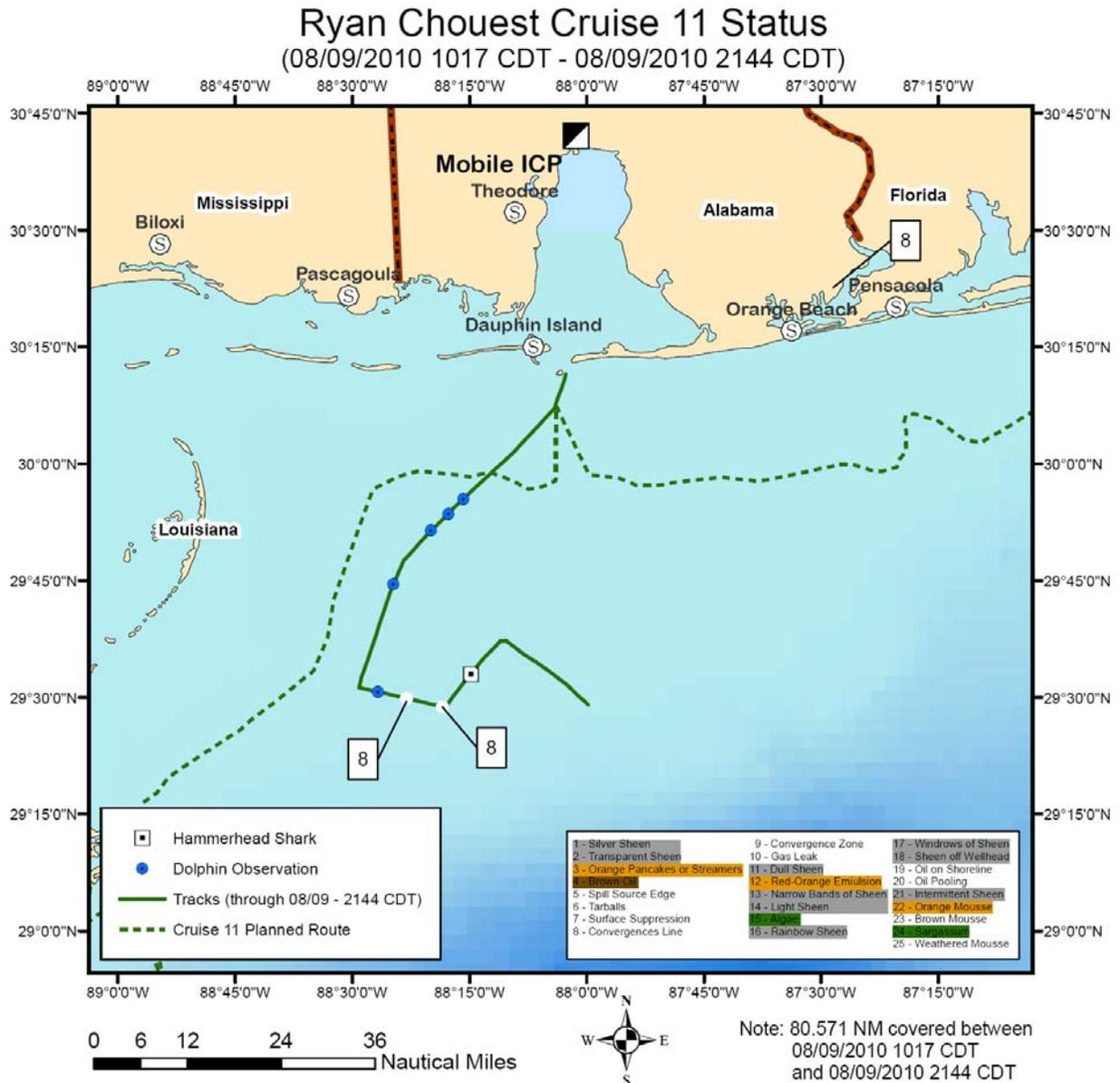
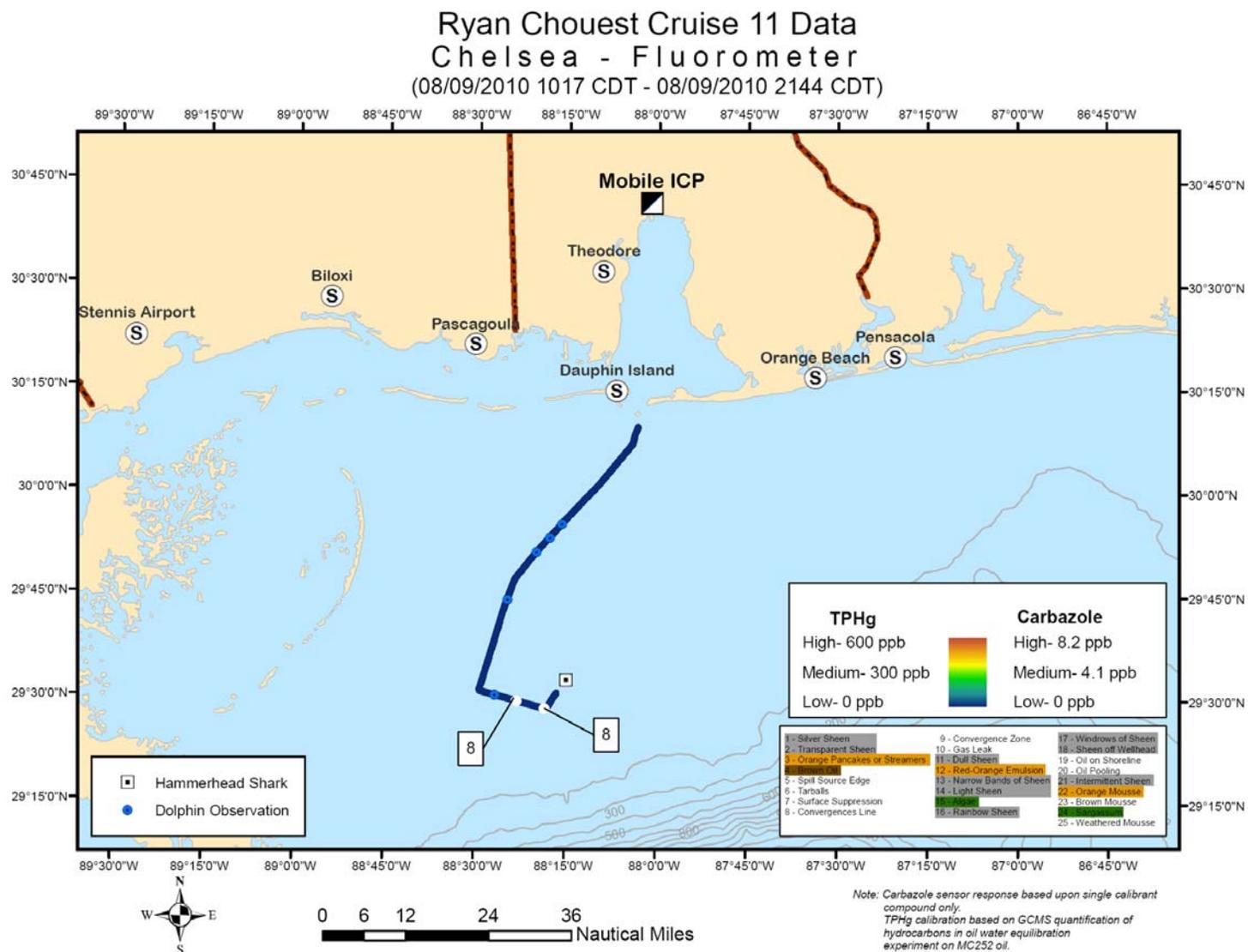
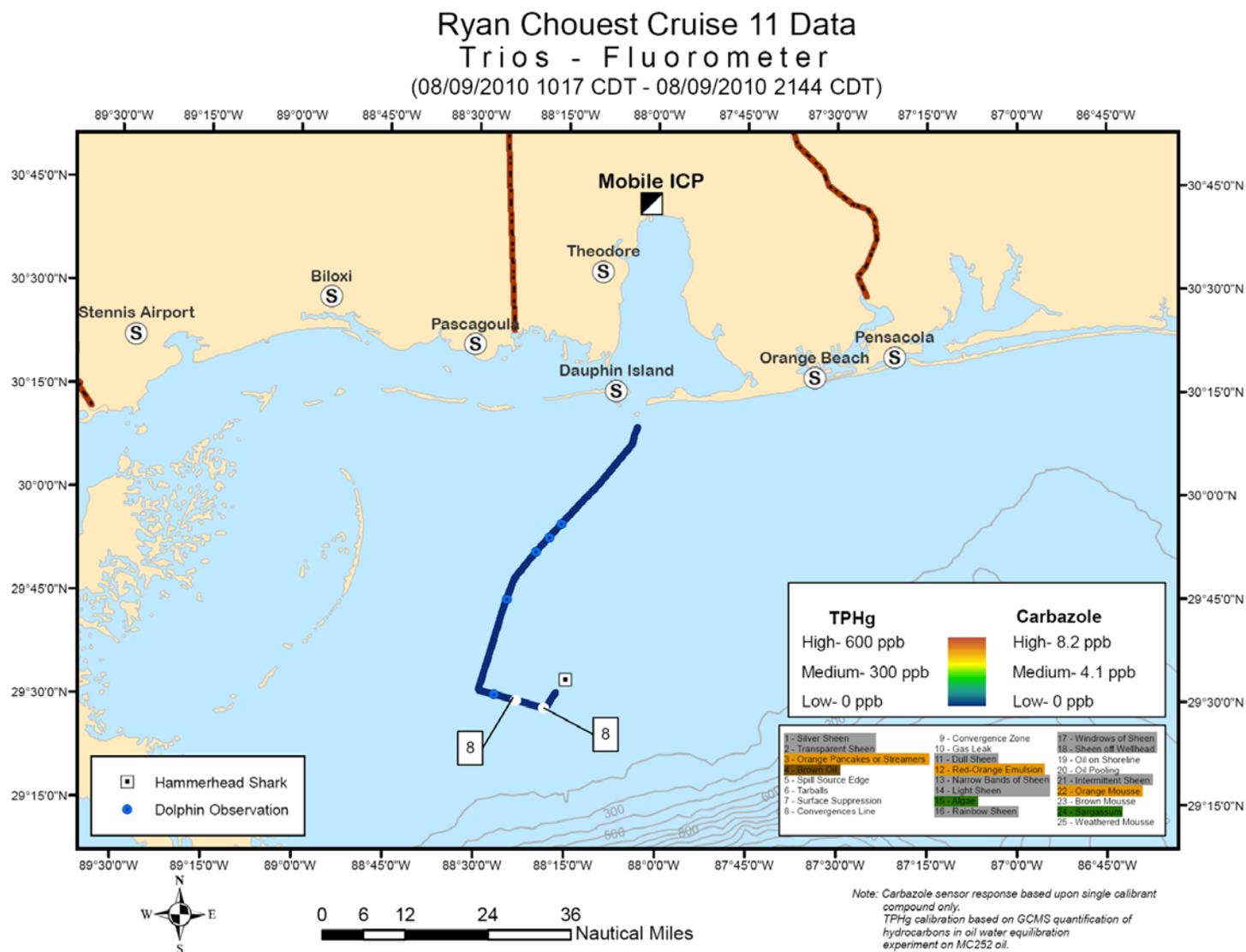


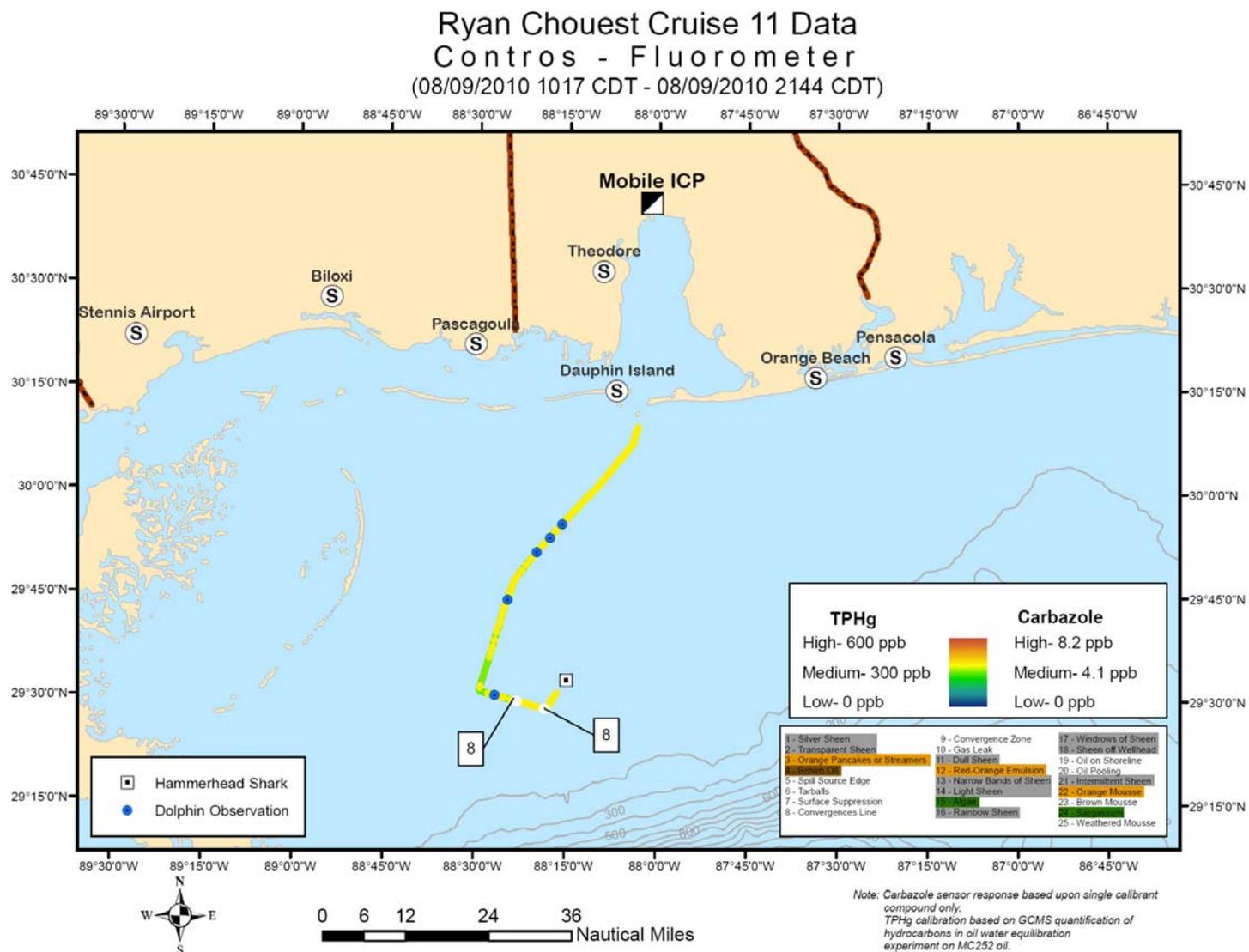
Figure 1: Planned route for cruise 11 versus the actual route plotted between 08/09/2010 – 08/09/2010.



**Figure 2.** Chelsea fluorometer results plotted with location on cruise track 11. 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 3.** Trios fluorometer results plotted with location on cruise track 11. 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.** Contros fluorometer results plotted with location on cruise track 11. 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.

**Problems/operational issues:**

No problems reported for the period covered.

**Selected Photographs:**

No photographs taken during the reporting period.

**Planned activities for next 24 hours:**

The *Ryan Chouest* will stay in Port Theodore for crew change. The anticipated departure time of the vessel on Wednesday afternoon (12/10) dependant on prevailing weather conditions. No daily report will be submitted tomorrow as the Ryan Chouest is in port, however it is intended that the final cruise 11 summary will be submitted.

**Full Crew List:**

William A. Smith	MASTER	Brian Corley	Mate
Craig Lyons	ENG	Patrick Cousin	A/B
Mark Harmon	A/B	Arthur Triggs	O/S
Elijah Benjamin	O/S	Patrick Anderson	QMED
Kile Blunt	OS/Cook	Roderick Baker	OS/Cook
Tosin Majekodunmi	BP	Curtis Walker	Entrix
Andrew Ross	CSIRO	David Fuentes	CSIRO
Emma Crooke	CSIRO	Asrar Talukder	CSIRO
Quinn Guidrey	C&C	Kelly Bates	C&C
Jen Carlsen	C&C	Mathew Baham	C&C
Joseph Watson	C&C	Jay Ridgeway	C&C
Josh Chauffe	C-Port	Larry Luke	C-Port