

Ryan Chouest daily data transmission and report

Period covered: 10.30 06/12/2010-12.52 06/13/2010

77.7 - Nautical miles covered

Vessel science party:

Andrew Ross (Andrew.Ross@csiro.au)

Emma Crooke (Emma.Crooke@csiro.au)

David Fuentes (David.Fuentes@csiro.au)

William Winner (William.Winner@noaa.gov)

Sara Gersbach (Sara.Gersbach@BP.com)

Contact details:

+ 1 337 761 9830 – Sat phone

+ 1 337-761-9830 – Broadband phone ship office

+ 1 337-761-9826 - Broadband phone ship bridge

Cruise notes:

Since 20:00 hrs 06/12/2010 we have taken a parallel route along the coastline of both Alabama and Florida. The first track was run 1 mile from the shore line with the second return line run 3 miles out from the shore line. The route has been characterized by heavy sheens and in places large accumulations of brown mounds.

Science results and preliminary interpretation:

Generally the fluorometer results recorded in the period show medium values of inferred concentration of hydrocarbons in the water column. The system were towed at a slightly deeper depth 3-4 m versus 1-2 m to avoid fouling and this may also be the reason we are not seeing as high values as previously observed when encountering other slicks. We have observed in several datasets that when the vessel is brought to a halt and the pump assembly drops deeper in the water there is a reduced response from the sensors which we interpret as a lower concentration of hydrocarbons deeper in the water column. The data set collected over the period shows an almost constant reading across the survey area for the Contros and Trios sensors with only the Chelsea fluorometer showing minor differences in fluorescence response indicating that whilst the surface slicks change in character the dissolved hydrocarbons under the slick generally exhibit a similar fluorescence response.

Planned versus actual route taken cruise 2:

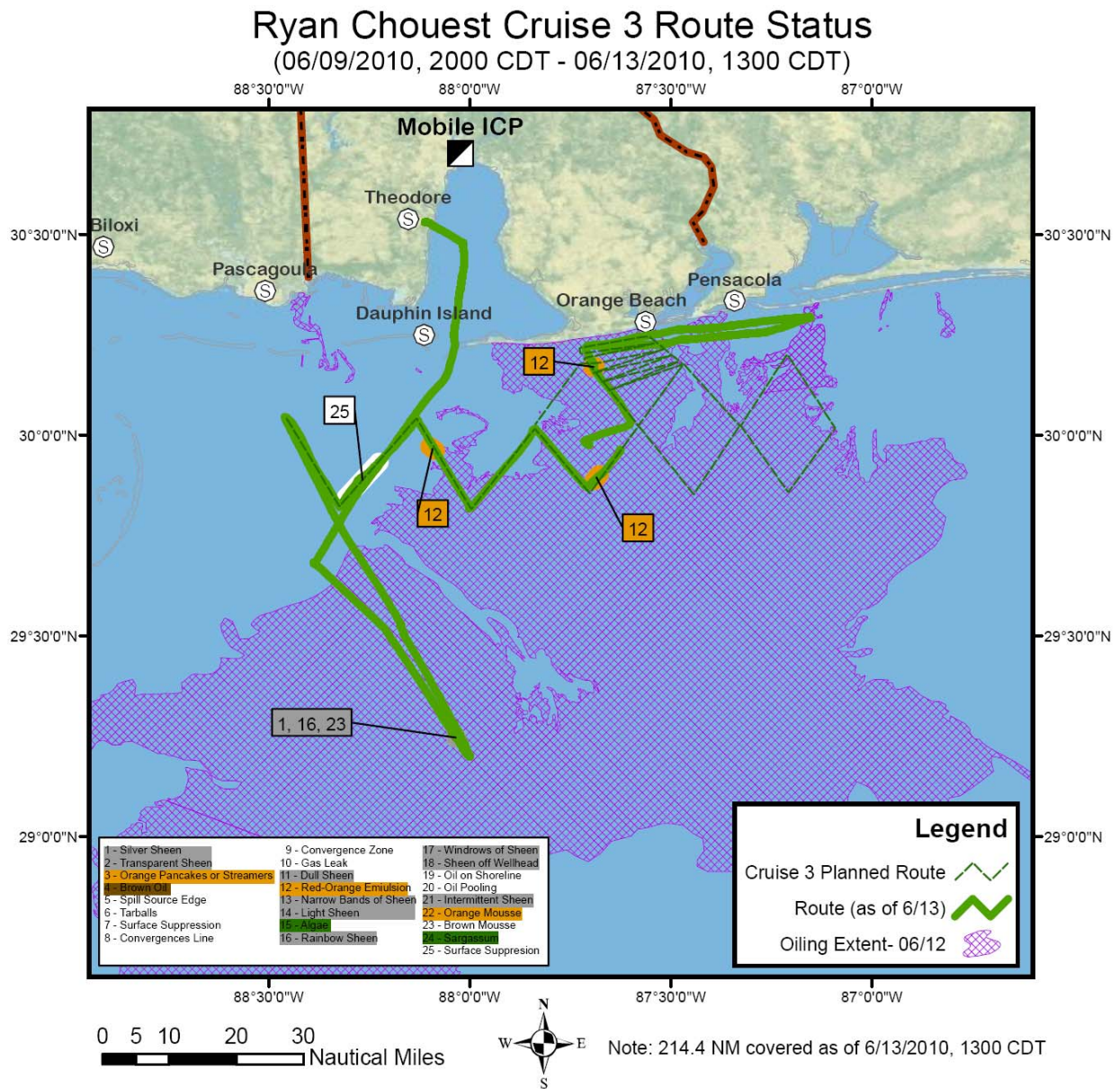


Figure 1: Planned versus actual route course plotted between 2000 06/10 – 1300 06/13. Purple shaded area represents outline extent of the slick from 06/12 ERMA composite.

Vessel science operations:

Further final testing of the SPE method.

Ryan Chouest Cruise 3 Data
 Chelsea- Fluorometer
 (06/12/2010 2000 CDT - 06/13/2010 1300 CDT)

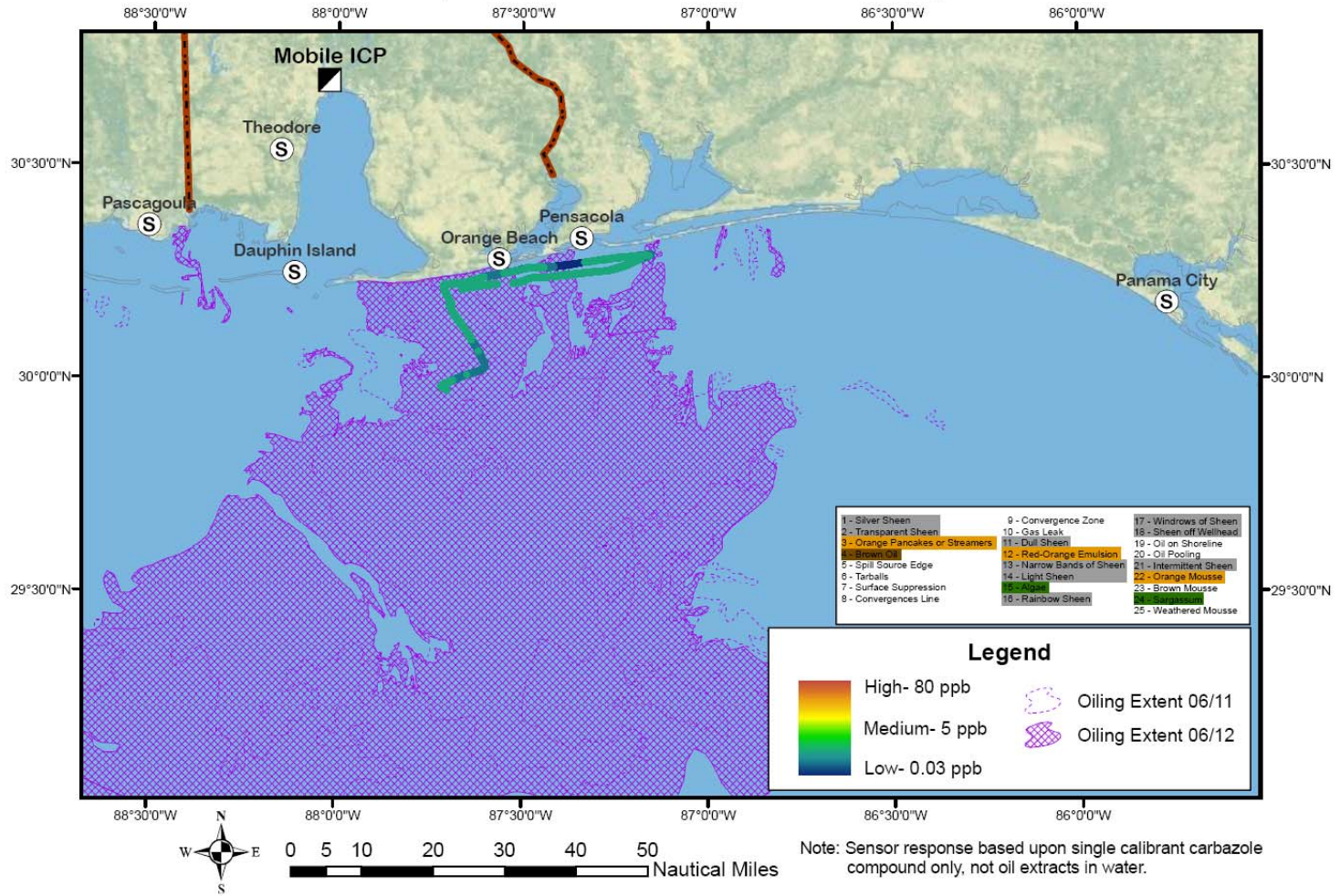


Figure 2. Chelsea fluorometer results plotted with location on cruise 3 track. Breaks in data occur when either data quality is poor or the systems were turned off due to pump problems.

Ryan Chouest Cruise 3 Data
 Trios- Fluorometer
 (06/12/2010, 2000 CDT - 06/13/2010 1300 CDT)

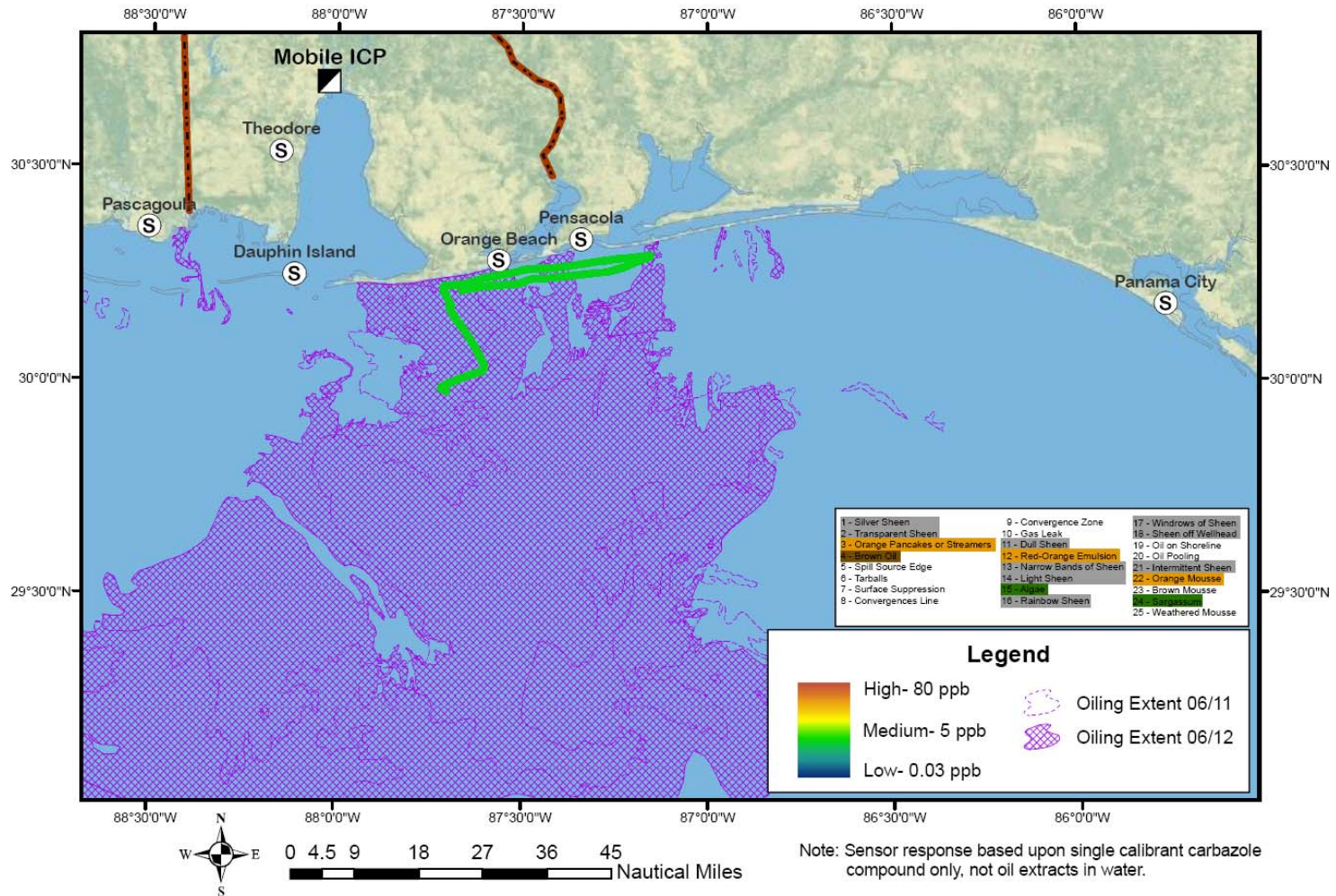


Figure 3. Trios fluorometer results plotted with location on cruise 3 track. Breaks in data occur when either data quality is poor or the systems were turned off due to pump problems.

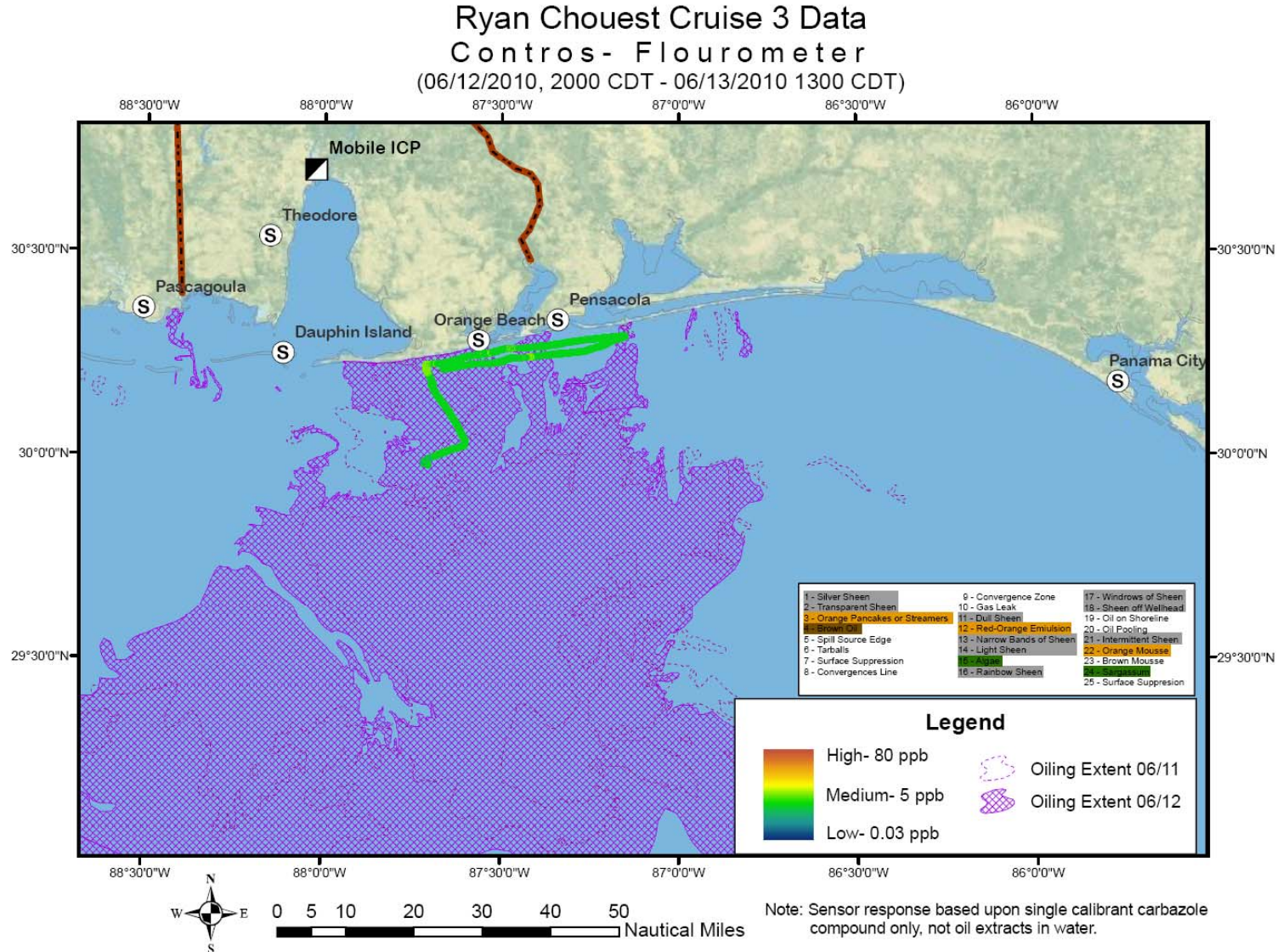


Figure 4. Contros fluorometer results plotted with location on cruise 3 track. Breaks in data occur when either data quality is poor or the systems were turned off due to pump problems.

Problems/operational issues:

No operation issues encountered

Planned activities for next 24 hours:

Continue on our planned route with the underway sensor system deployed parallel to the coast of Florida and Alabama. In the afternoon it is anticipated that additional personnel will join us on the vessel, and the route plan will be changed as the situation in the area develops.