## Cruise Report (20/01/2015 - 18/02/2015)

#### AX080115 – Maersk Visby

**Technical rider: Chris Jacobs** 

From Leaving Cape Town, the cruise was generally fine with good favorable conditions up and until the 15 February 2015 (See below for more details). Going at an average speed of 13-14 knots, XBTs were deployed every 62mins so as to provide a drop every 25 km. This provides a high density, high resolution section of the AX08. Some minor glitches were experienced and are provided in detail below.

#### Auto Launcher – Pin 4 (05 February 2015)

Tube number 4 stopped working as the pin became unresponsive to the commands sent in the diagnostics (this involved attempts at retracting and extending the pin). As a result of the pin not being able to retract and extend, and the tube being unresponsive, it was removed from the Auto Launch sequence and so only seven tubes were used for the continuation of the cruise.

## Switching to NMEA transmission (06 February 2015)

On advice from Pedro Pena (see email), it was suggested that the Iridium transmission be turned off and that the NMEA transmission be selected as the primary source of transmission. This was done in the hope that the files would transmit more regularly and without any problems.

This switch-over was done at 20h30 GMT and at 03h30 GMT, it was observed that all the files had been queued up but none sent. It was thus decided to revert back to the original conformation, transmitting through iridium and not NMEA.

#### Severe Weather Conditions (15 - 17 February 2015)

Due to severe weather conditions (6m swells; +35knot winds), and intense pitching and rolling of the ship, the captain suspended all outdoor operations from 22h00 GMT, 15 February 2015 until 12h00 GMT, 16 February 2015 or until the conditions subside. As a result of this, several XBT drops were not done as the AL could not be reloaded. The AL was then reloaded at 16h00 GMT and again at 20h00, 16 February 2015 under supervision of one of the crew. It was decided (under advice from Zach Barton) to stagger the deployments so as to still obtain a continuous transect. The last leg of the transect (from 30 38 09N; 070 12 83W to Newark) thus became a low density, low resolution section with XBTs being deployed every 50 km as opposed to every 25 km.

Other than these issues, the new SEAS system (with new format and configuration) worked well with minor issues being experienced. Suggestions to the new layout include, including a map showing the deployments, being able to manually reset the pre-deployment alarm (turning off the alarm) and being able to view the times of the forthcoming deployments. These are minor issues and are suggested as personal preference.

# **General Comments**

The Maersk Visby is an ideal vessel for all types of deployments with the captain and crew being more than willing to assist even during the early hours of the morning. Thank you to the captain, Wan Ting, officers and crew of the Maersk Visby for all the effort and assistance especially during the severe - conditions and for the great hospitality aboard the cruise.