***Cruise Summary (08/16/2018 – 09/05/2018)***

***AX080818 – Maersk Vilnius***

***Technical rider: Albert Buhr***

The NOAA equipment was set up on board the Maersk Vilnius by Gus McKay while in Durban harbor, South Africa, and new rider Albert Buhr joined the ship in Cape Town harbor on 16 August, with two days for training before starting the transect to Newark on 18 August. From the time of boarding, Tube 1 was out of operation on the ALR03, and by the second day of the transect Tube 5 ceased functioning (it registered probes, but it seemed the motor was malfunctioning). The rest of the cruise operated on only 6 tubes, without incident. On 26 August an MK 21 connection error notification sounded, but the problem was quickly fixed by simply restarting the computer. (This occurred again on 31 August and on 2 September; on both occasions the problem was easily fixed by restarting the computer.)

A high density mode of one drop every 25km was used, which was completed between 33.5°S – 39.4°N.

Traveling at an average speed ranging between 16 and 17 knots, XBTs were deployed every 48-51 minutes, with deployments ending on 4 September at 39.4°N after reaching a depth of 200m.

On the last day of launches a few unusual profiles suggested that the ship could be crossing the Gulf Stream, but at the very point of the first unusual profile the ship had started to test its rudder, and then came to a stop to continue the testing. For a novice rider it was hard to distinguish whether these profiles were a result of the Gulf Stream or the concurrent ship operations.

A total of 487 XBTs were deployed (508 launches). Generally a good voyage with calm weather, with very few bad profiles. There were 10 manual redrops in response to bad profiles or MK 21 connection errors.

***General Comments***

The captain, officers and crew of the Maersk *Vilnius* were very helpful and accommodating, and the ship’s steady speed and point of release so close to the water make it an ideal ship for scientific cruises.