***Cruise Summary (07/26/2019 – 08/14/2019)***

***AX080819 – Maersk Vilnius***

***Technical rider: Albert Buhr***

Alistair Blair had confirmed he would do the transect, but decided against it a few days before the ship’s arrival in Cape Town, South Africa. Albert’s US visa had expired, but he was able to procure an emergency visa renewal from the US Consulate in Cape Town within 48 hours and so was able to commit in Alistair’s stead.

The NOAA equipment was set up on board the Maersk *Vilnius* by the rider Albert Buhr, as well as Alistair Blair, while in Cape Town harbor. The ship had a high volume of cargo to load, so departure kept being delayed, until departure happened on the afternoon of the 28th.

Drops proceeded without incident until August 4, when the ship stopped from 1.30pm to 4.45pm GMT to effect repairs on the ship’s engine. The next day, on August 5, pin 5 on the ALR03 failed to extend again after retracting. Pin 5 remained completely retracted despite all efforts to extend it with diagnostic commands. It remains retracted and needs attention. A few days thereafter, pins 4 and 8 became temperamental – pin 4 would often not retract, while pin 8 would almost never extend completely after a drop and would require manual manipulation. The rider recommends that the ALR03 be serviced to fix these problems.

On 8 August there was a loss of MK21 connection, as well as some unusual software anomalies, but the rider was able to resolve these by reconnecting some of the wires in the cabin.

The rest of the voyage proceeded without incident.

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 of 17 knots, XBTs were deployed every 48-50 minutes, with deployments ending on 14 August after reaching a depth of 200m.

Generally a good voyage with very few bad profiles.

***General Comments***

The captain, officers and crew of the Maersk *Vilnius* showed great hospitality as usual, and the ship’s steady speed and point of release so close to the water make it an ideal ship for scientific cruises.