***Cruise Summary (11/25/2019 – 12/15/2019)***

***AX081219 – Maersk Vilnius***

***Technical rider: Albert Buhr***

The NOAA equipment was set up on board the Maersk *Vilnius* by the rider Albert Buhr in Cape Town harbor on 25 Nov 2019, and after some cargo-loading delays the ship set sail on the morning of 27 Nov. However, the ship then proceeded to anchor just off Robben Island within sight of Cape Town for a surprise drug and alcohol inspection, which eventually resulted in several crew members and officers, as well as the captain, having to be replaced. This caused a couple days of delay, but the ship finally set sail on the afternoon of 29 Nov.

Drops proceeded without incident, except that on 1 Dec pin 4 on the ALR07 retracted irreversibly despite command prompts, so it was exchanged for the ALR01, which then worked smoothly for the rest of the transect.

Occasionally the GPS data from the antenna would stop changing (this occurred about 4 times on the transect), but a simple reboot of the laptop always easily resolved this.

The rest of the voyage proceeded without incident, until the second-last evening (13 Dec) at 22:00 GMT when the captain prohibited all crew from going out on deck again for the remainder of the voyage due to rough seas and severe swell. The rider calculated how long it would take to reach a depth of 200m and end the drops, and accordingly spaced the final 8 drops at 2.5-hour intervals, with the final drop on the afternoon of 14 Dec registering a depth of 100m.

A high density mode of one drop every 25km was used. Traveling at an average speed of 17.5 knots, XBTs were deployed every 47 minutes. Generally a good voyage with very few bad profiles.

***General Comments***

The rider was very grateful for the autolaunchers that replaced the ALR04 and ALR05 at the end of the last cruise in October, as they worked very well. As always, the captain, officers and crew of the Maersk *Vilnius* showed great hospitality, and the ship’s steady speed and point of release so close to the water make it an ideal ship for scientific cruises.