



Daily cruise report (07 February 2020)

Sabrina Speich, Chief Scientist

1. Objective

We completed the sampling of Ring 3 (CTD, uCTD and VMP) and, actually, our course choice revealed to be the good one. Ring 3 shifted northwestward along the continental slope. Yet, the (upper nor deep) velocity field we measured are not consistent with the satellite altimetry field.

We then veered southwest to sample the cyclone in between Ring3 and Ring2 before (tomorrow night) starting the crossing of Ring2 to complete the partial survey we carried at the beginning of our cruise before joining the Maria S Merian in Suriname and French Guyana waters.

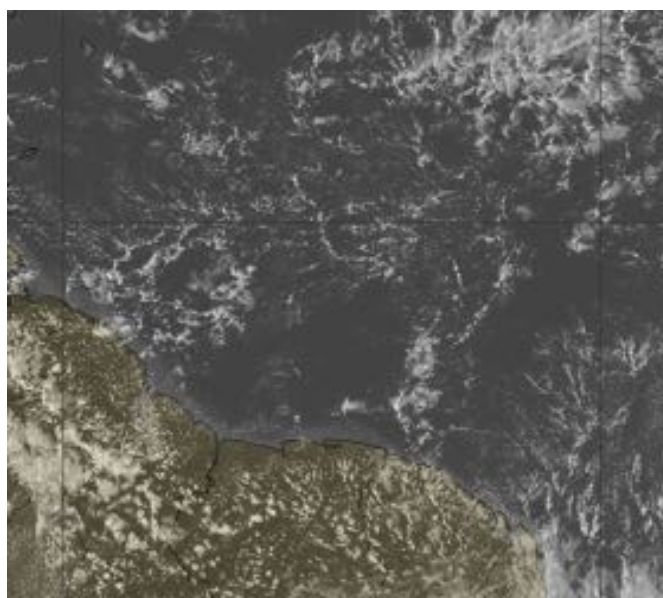
2. Synoptic Situation

Quite strong trade winds, lightly decreasing.

Some short showers overnight then the sky became less cloudy during the morning. More cloudy at the end of the afternoon.

Northeasterly wind 20kt, decreasing 15-20kt on the afternoon. The waves are about 5 feet.

Mesoscale cloud patterns (18utc): sugar to gravel



Time (local)	Coverage	Types	remarks
0800	0/8 High	-	
	4/8 Mid	Ac	
	3/8 Low	Cu, TCU	
1200	0/8 High	-	
	0/8 Mid	-	
	2/8 Low	Cu	
1600	0/8 High	-	
	0/8 Mid	-	
	5/8 Low	Cu, TCU	

Inter-calibration: No intercalibration.

Autonomous systems deployed: None

Overflights: No overflights. We are too far south.

3. Stations

Date	Approx Local Time	Operation	Lat	Lon	NM
Revisiting the deep & surface Ring2 and cyclones					
07/02	+ 15h	From WP1 (9°37'N 53°53.3'W) to WP2 (8°34'4"N 56°W) 9 kts during transit, 6 kts during uCTD Alternate 1 uCTD every 30', 1 VMP every 2h	8°34.4'N	56°W	119
08/02	+0.5h	VMP (400 m)	8°34.4'N	56°W	
08/02	+2h	CTD 2000m	8°34.4'N	56°W	
08/02	+ 15h	From WP2 (8°34'4"N 56°W) to WP3 (9°21'N 57°22,4'W) 9 kts during transit, 6 kts during uCTD Alternate 1 uCTD every 30', 1 VMP every 2h	9°21'N	57°22,4' W	90
08/02	+0.5h	VMP 400 m	9°21'N	57°22,4' W	
08/02	+2h	CTD 2000m	9°21'N	57°22,4' W	
08+0 9/02	+ 44h (20 transit, 24h operations)	From WP3 (9°21'N 57°22,4'W) to WP4 (10°28.7'N 59°21'W) 9 kts during transit, 6 kts during uCTD Alternate 1 uCTD, 1 VMP+CTD every 12 NM i.e. uCTD -6NM-VMP-6NM- uCTD-6NM-VMP-etc	10°28.7'N	59°21'W	140

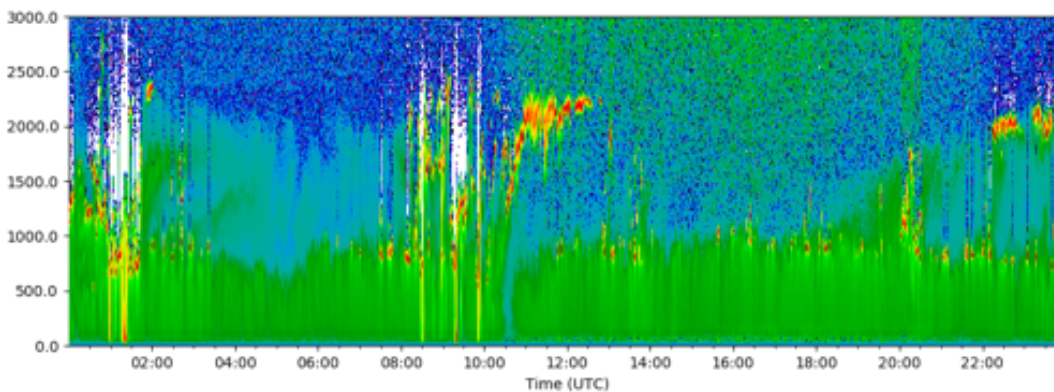
4. Instrument Status

All instruments seem to work well. Today Vaisala radiosounding reception was more stable.

5. Outlook

We will continue to sail according to our workplan..

6. Figures



Celiometer R/V Atalante 6 February 2020



