RV Atalante EUREC4A-OA



Daily cruise report (13 February 2020)

Sabrina Speich, Chief Scientist

1. Objective

We have recovered our Kraken, the glider early this morning close to the center of the "pizza" Ring2. We headed back in Barbados waters to achieve the sampling of two mushroom-like submesoscale structures and a filament. After a uCTD and a VMP used to check, together with the SADCP, that these submesoscale structures are limited to the upper-water layers, we started a MVP series of three sections this afternoon (see Figure). Radiosounding continues every 4 hours.

2. Synoptic Situation

Moderate trade winds relatively wet. Mostly high clouds today. East-northeasterly wind 20kt. The waves are about 8-10 feet with a northeasterly swell. Mesoscale cloud patterns (18utc): ifficult to determinate with the high clouds Sargassum increases and starts to appear as structured lines.



Time (local)	Coverage	Types	remarks
0800	0/8 High	-	
	4/8 Mid	Ac	
	3/8 Low	Cu	
1200	3/8 High	Ci	
	6/8 Mid	Ac	
	1/8 Low	Cu	
1600	3/8 High	Ci	
	5/8 Mid	Ac	
	1/8 Low	Cu	

Inter-calibration: None.

Autonomous systems deployed: None

Overflights: No overflights. We are too far south.

3. Stations

Date	Approx Local Time	Operation	Lat	Lon	NM		
Recovering Kraken the Glider							
13/02	From 05 :30	Recovery of glider	10° 18′ 32″ N	57° 45′ 34″ W			
13/02	From 09 :00 + 7h	From the Kraken recovery position to WP1 (11°23.22'N 57°13.55'W)	11°23.22'N	57°13.55'W			
13/02 & 14/02	From 15:30 +17h	From WP1 (11°23.22'N 57°13.55'W) to WP2 (12°23.23' 58°36.77'W) 1 uCTD +VMP puis MVP 6 kts	12°23.23'	58°36.77'W	101		
14/02	From 8:30	Deployment of the 3 French drifters	12°23.23'	58°36.77'W			
14/02	From 08:30 +7h	From WP2 (12°23.23' 58°36.77'W) to WP3 (12°N 59°10'W) MVP 6 kts	12°N	59°10'W	40		
14/02	From 15:30 to 20:30	Saildrone dance	12°N	59°10'W			
14/02	From 20:30 +9h	From WP3 (12°N 59°10'W) to WP4 (11°9.7'N 59°10'W) MVP 6 kts	11°9.7'N	59°10'W	50		
15/02	From 5:30						

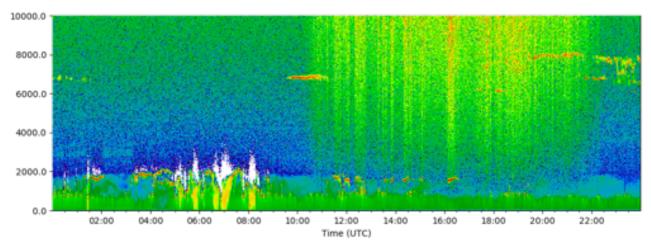
4. Instrument Status

With the exception of the rosette/CTD winch and the glider who lose its ballast, all other instruments seem to work well.

5. Outlook

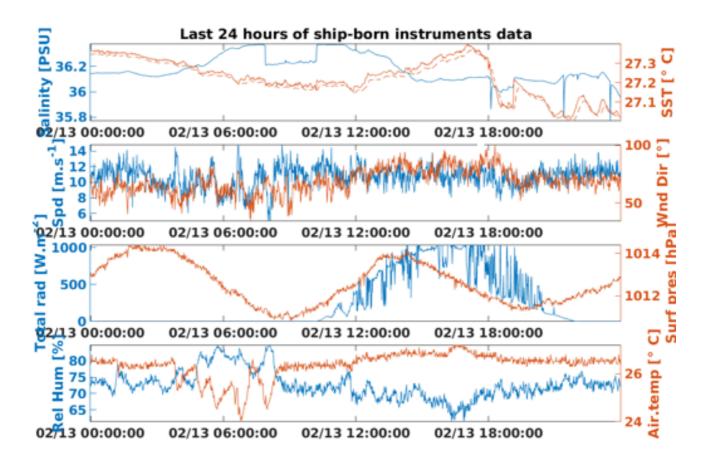
We will continue to sail according to our workplan.

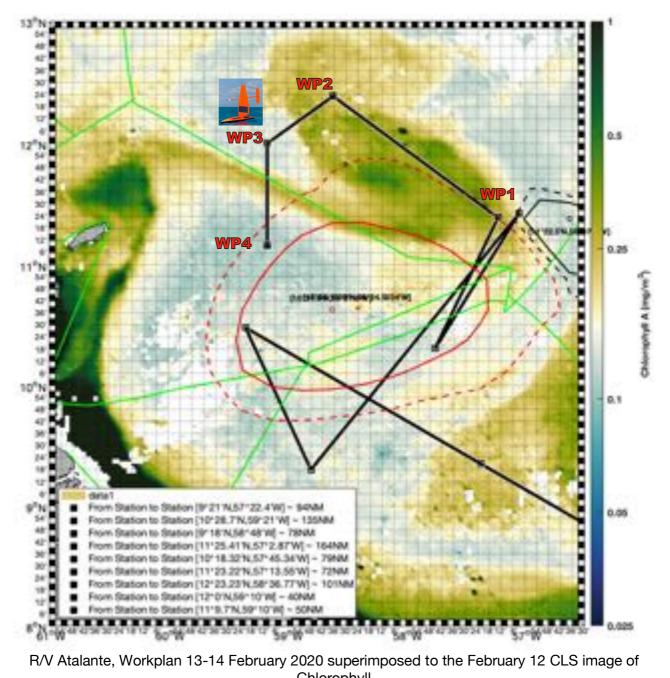
6. Figures



Celiometer R/V Atalante 13 February 2020

[–]R 0–7 8–7 6–7 4–7 7–7 0–6 8–6 6–6 4–6 2–6 0–5 8–5 6–5 4–5 2–5 0–4 8–4 6–4 4–4 7–4 0–3 8–3 6–3 4–3 7





R/V Atalante, Workplan 13-14 February 2020 superimposed to the February 12 CLS image of Chlorophyll