



**Daily cruise report (14 February 2020)**

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**1. Objective**

*Today, we have achieved the sampling of two mushroom-like submesoscale structures. At 4:00pm LT we have met for an Ocean Valentine Day with the 4 (3 NASA and 1 NOAA funded) ATOMIC Sairdrones who have danced around our ship in a very coordinated ballet (see figure). We are now leaving them and heading for the submesoscale filament located 30 miles south of us. Tomorrow we will be heading back to the norther mushroom-like structure to complete the submesoscale sampling. Radiosounding continues every 4 hours.*

**2. Synoptic Situation**

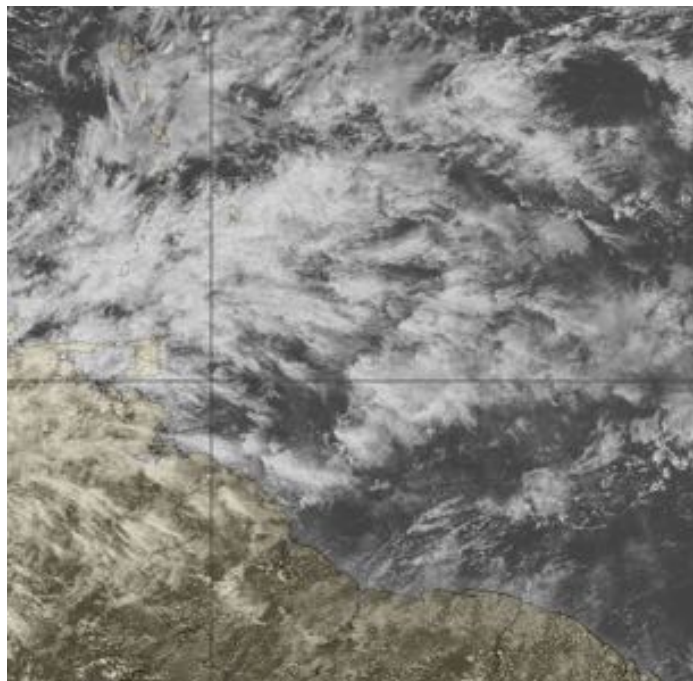
*Moderate trade winds.*

*Mostly high clouds today with some showers at midtime.*

*East-northeasterly wind 15-20kt. The waves are about 6-7 feet with a northeasterly swell.*

*Mesoscale cloud patterns (18utc): difficult to determinate with the high clouds.*

*Sargassum increases and starts to appear as structured lines and patches.*



Time (local)	Coverage	Types	remarks
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0800	0/8 High	-	
	7/8 Mid	Ac	
	1/8 Low	Cu	
1200	0/8 High	Ci	
	7/8 Mid	Ac	
	3/8 Low	Cu	Shower
1600	-/8 High	-	
	8/8 Mid	Ac	
	1/8 Low	Cu	Saildrones

**Inter-calibration:** None.

**Autonomous systems deployed:** 3 French drifters

**Overflights:** No overflights. We are too far south.

### 3. Stations

Date	Approx Local Time	Operation	Lat	Lon	NM
13/02 & 14/02	From 15:30 +17h	<b>From WP1 (11°23.22'N 57°13.55'W) to WP2 (12°23.23' 58°36.77'W)</b> 1 uCTD +VMP puis MVP 6 kts	12°23.23'	58°36.77'W	101
14/02	From 8:30	<b>Deployment of the 3 French drifters</b>	12°23.23'	58°36.77'W	
14/02	From 08:30 +7h30	<b>From WP2 (12°23.23' 58°36.77'W) to WP3 (12°N 59°10'W)</b> MVP 6 kts	12°N	59°10'W	40
14/02	From 16:00 to 20:30	<i>Saildrone dance</i>	12°N	59°10'W	
14/02	From 22:00 +9h	<b>From WP3 (12°N 59°10'W) to WP4 (11°9.7'N 59°10'W)</b> MVP 6 kts	11°9.7'N	59°10'W	50

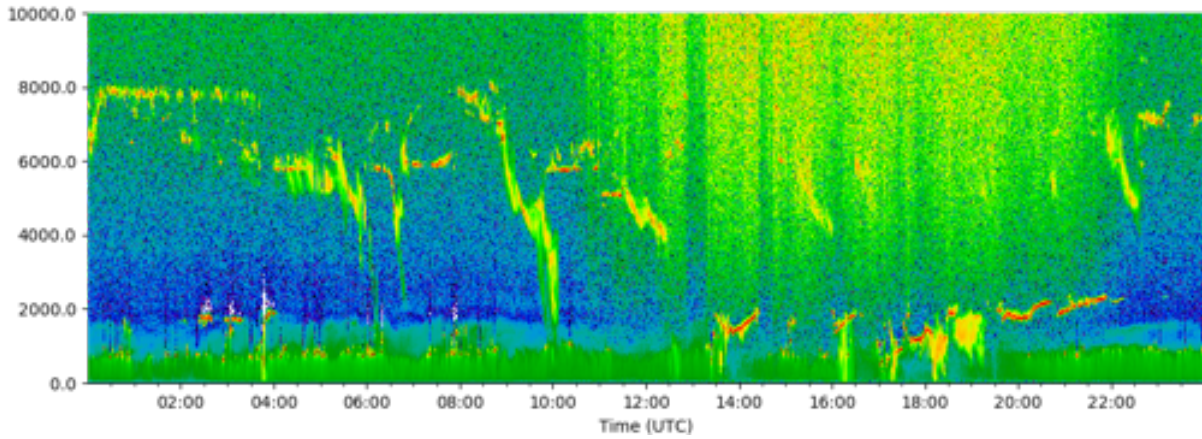
### 4. Instrument Status

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

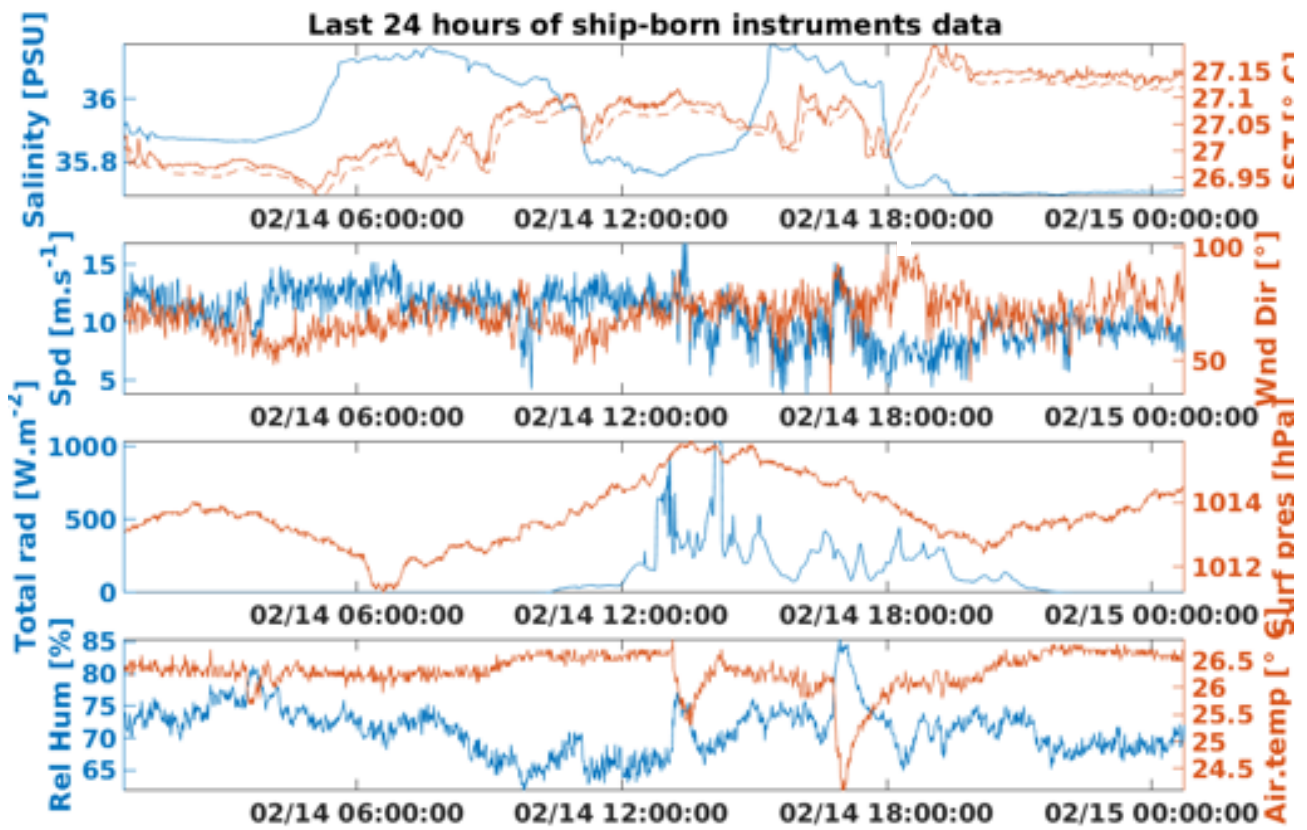
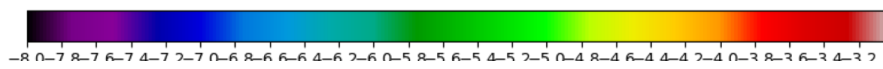
### 5. Outlook

*We will continue to sail according to our workplan.*

## 6. Figures



Celiometer R/V Atalante 14 February 2020





The Sairdrone amazing piloting feat around the R/V Atalante during the last 6 hours