



Daily cruise report (27 January 2020)

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1. Objective

Today began the Ring2 journey. We started to cross its boundary last night and we just visited its center which is, as expected and shown by the satellite SST CLS maps, warmer than the waters closer to the Guyana continental slope. We started to look at atmospheric time series from different instruments (the ceilometer, the atmospheric mast, OCARINA and PICCOLO deployment) as it is shown in a sample of figures below.

We also sampled by chance and with different transects a very intense subsurface anticyclonic eddy lying westward of Ring2.

2. Synoptic Situation

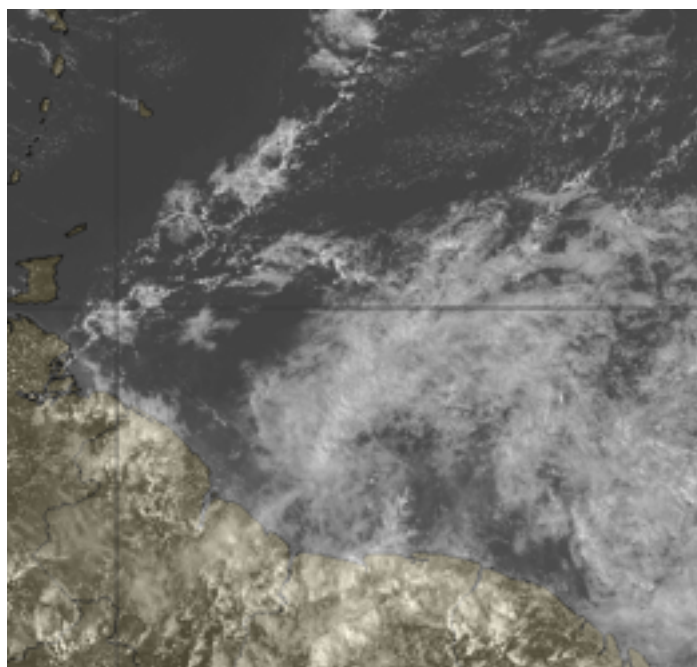
Moderate trade winds becoming wetter.

Quite cloudy on the morning, becoming dryer with mostly high clouds on the afternoon.

Easterly wind 15-20kt. The waves are about 4-5 feet.

Mesoscale cloud patterns (18utc): seems to be « fish » near Barbados, and more « sugar » south of 10N under the high clouds.

Isolated sargassums.



Cloud observations : 01/27/20

Time (local)	Coverage	Types	remarks
0800	4/8 High	Ci	
	0/8 Mid	-	
	4/8 Low	Cu, TCU	
1200	7/8 High	Ci	
	1/8 Mid	Ac	
	1/8 Low	Cu	
1600	6/8 High	Ci	
	3/8 Mid	Ac	
	3/8 Low	Cu	

Inter-calibration: No intercalibration today.

Stations:

Date	Approx Local Time	Operation	Lat	Lon	Operations
27/01	From 08:00	From 9°24'N 57°40'W go eastward to waypoint 9°24'N 56°54'W : speed 8 kts during transit, 6 kts during uCTD	9°24'N	56°10' W	Cycle of 1 uCTD and 1 CTD 2000 m distant 6 NM from each other CTD-6NM-uCTD-6NM-CTD-6NM-uCTD ...
27/01	18:00	1 deep (till the bottom) CTD cast	9°24'N	57°10' W	1 CTD bottom
27/01	20:00	Deployment of 2 (DO) Argo floats	9°24'N	57°10' W	
27/01	From 20:00 27/01 to approx. 18:00 28/01	From 9°24'N 56°55'W go eastward to waypoint 9°24'N 56°55'W : speed 8 kts during transit, 6 kts during uCTD	9°24'N	55°50' W	Cycle of 1 uCTD and 1 CTD 2000 m distant 6 NM from each other CTD-6NM-uCTD-6NM-CTD-6NM-uCTD ...

Autonomous systems deployed: We have deployed 2 Deep Oxygen Argo floats.

Overflights: No overflights. We are too far south.

4. Instrument Status

All instruments seem to work well. We have hoped that using the new GPS antenna provided by the board solved the instable Vaisala radiosounding reception, but today we had again some problems.

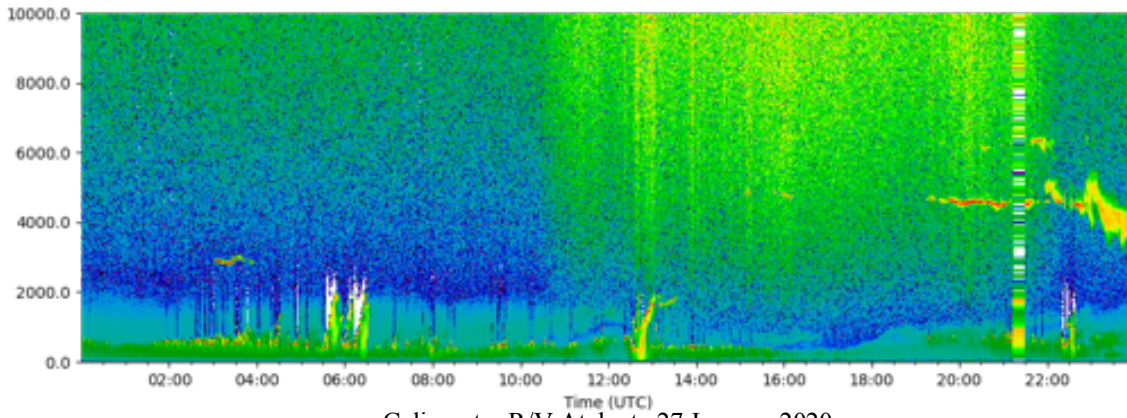
5. Outlook

Tonight we are sailing estward to samle the other half of Ring2.

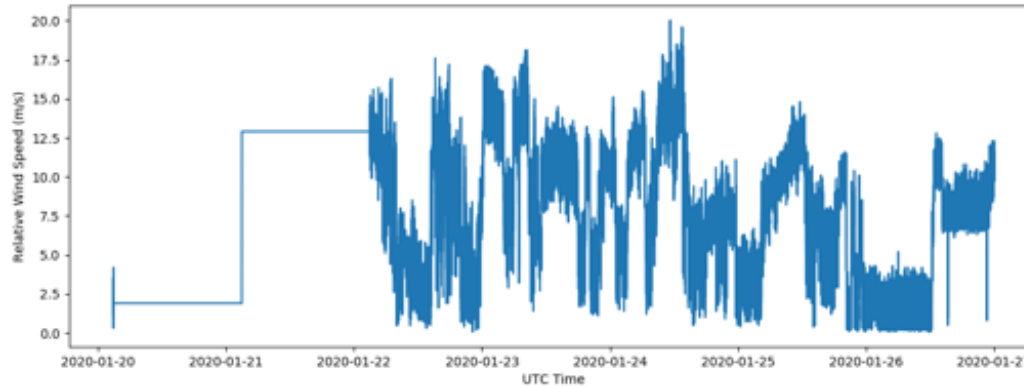
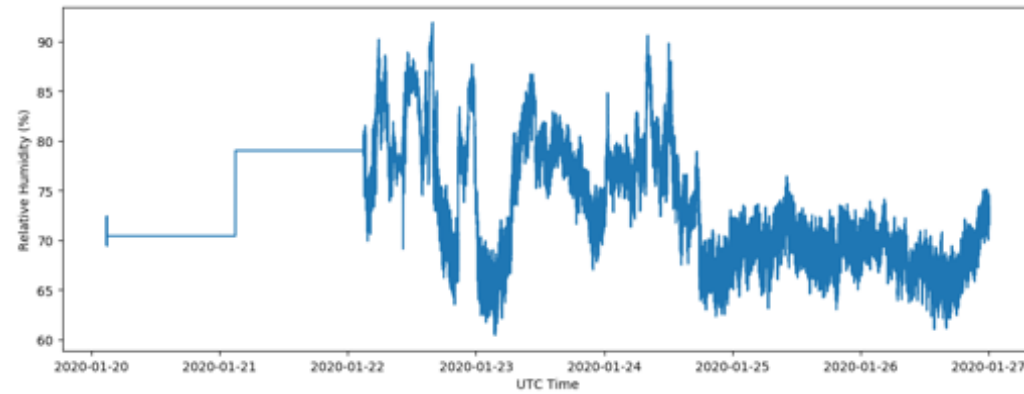
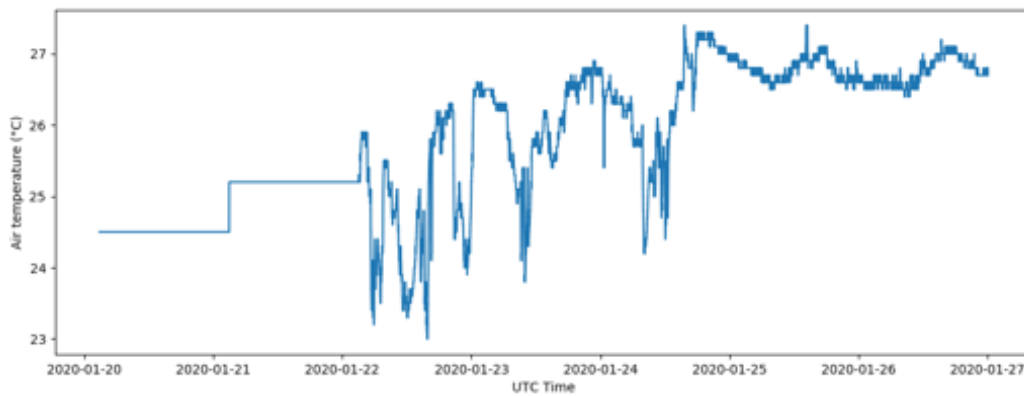
6. Figures

EUREC4A-OA ATALANTE OCARINA





Celiometer R/V Atalante 27 January 2020



Atmospheric Mast Observations R/V Atalante, 27 January 2020