



## Daily cruise report (31 January 2020)

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### 1. Objective

Since yesterday afternoon the Maria S Merian and the Atalante are sailing together, half mile distant, crossing the deep blue in search of its turbulent secrets. We live in synchrony, deploying instruments into the water and into the sky. This afternoon, we saw the cloudkite leaving the Maria S Merian to his rendezvous with the clouds (see picture below). In the meanwhile, we continue to analyze the large inflow of data that reveals an ocean and atmosphere, certainly different, but somewhat linked together. While we hunt the hiding groundhog eddies and the secret of clouds, we continue to discover new ocean dynamical structures (see the figure below) that suddenly appear at depth.

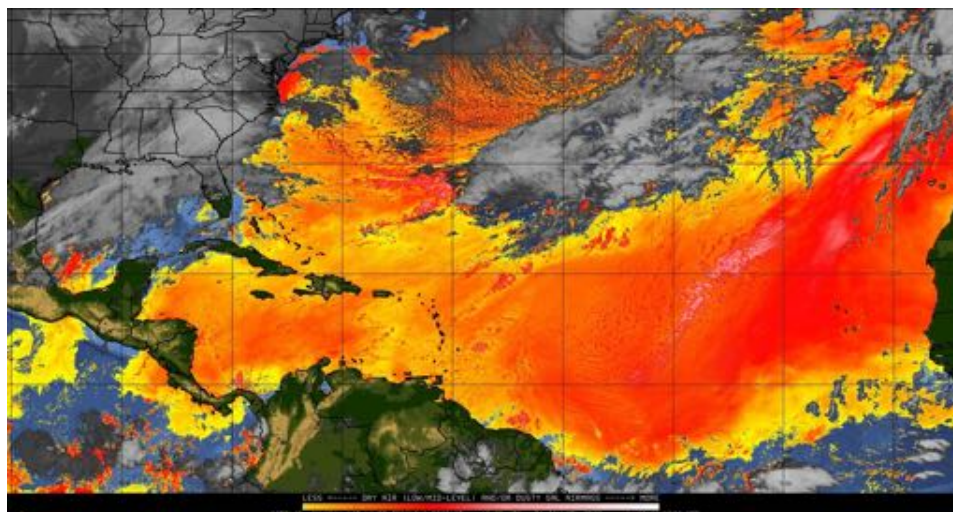
### 2. Synoptic Situation

Moderate to quite strong trade winds. Sand dust.

Easterly wind 15-20kt. The waves are about 5-6 feet.

Mesoscale cloud patterns (18utc): in transition between gravel and flower.

### Cloud observations : 01/31/20



Sand dust satellite observations at 12UTC

Time (local)	Coverage	Types	remarks
1200	0/8 High	-	
	0/8 Mid	-	
	2/8 Low	Cu	Sand dust
1600	5/8 High	Ci	
	0/8 Mid	-	
	1/8 Low	Cu	Sand dust. Clouds kite of the S Merian

**Inter-calibration:** We are now sailing with the Maria S. Merian. This gives possibility to intercalibrate instruments.

**Stations:**

Date	Approx Local Time	Operation	Lat	Lon	Operations
30/01	From 15:30 30/01 to approx. 20:00	From 8°12'N 53°12'W go west to waypoint WP1: 8°12'N 54°00'W:	8°12'N	54°00'W	MVP
30/01 & 31/01	From 10:00 to approx. 13:00	From 8°12'N 54°00'W go southwestward to waypoint WP2: 7°45'N 52°20'W	7°45'N	52°20'	MVP

**Autonomous systems deployed:** None

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

**4. Instrument Status**

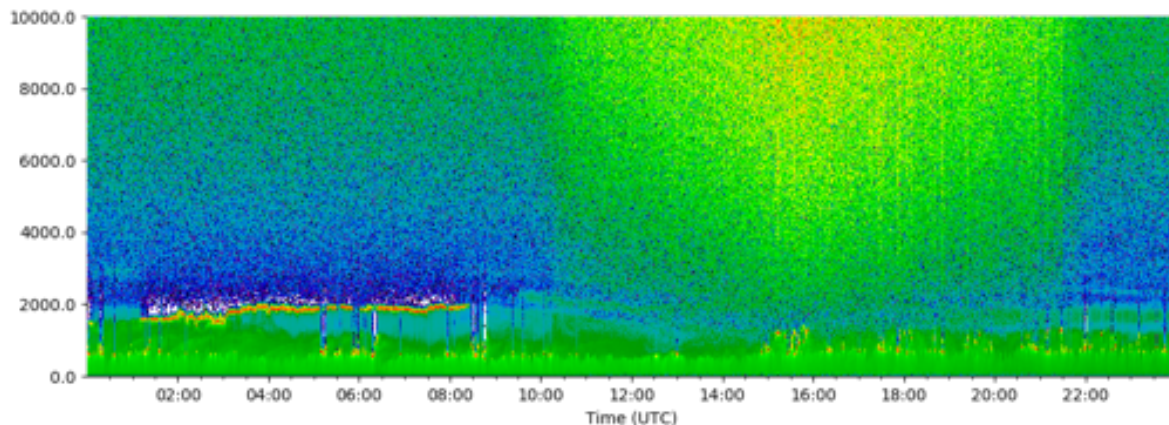
*All instruments seem to work well. Today Vaisala radiosounding reception was more stable.*

**5. Outlook**

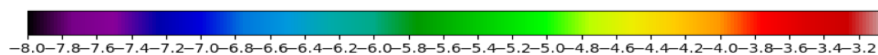
*We will continue to sail in parallel with Maria S. Merian alternating MVP, uCTD, VMP deployments and radiosoundings.*

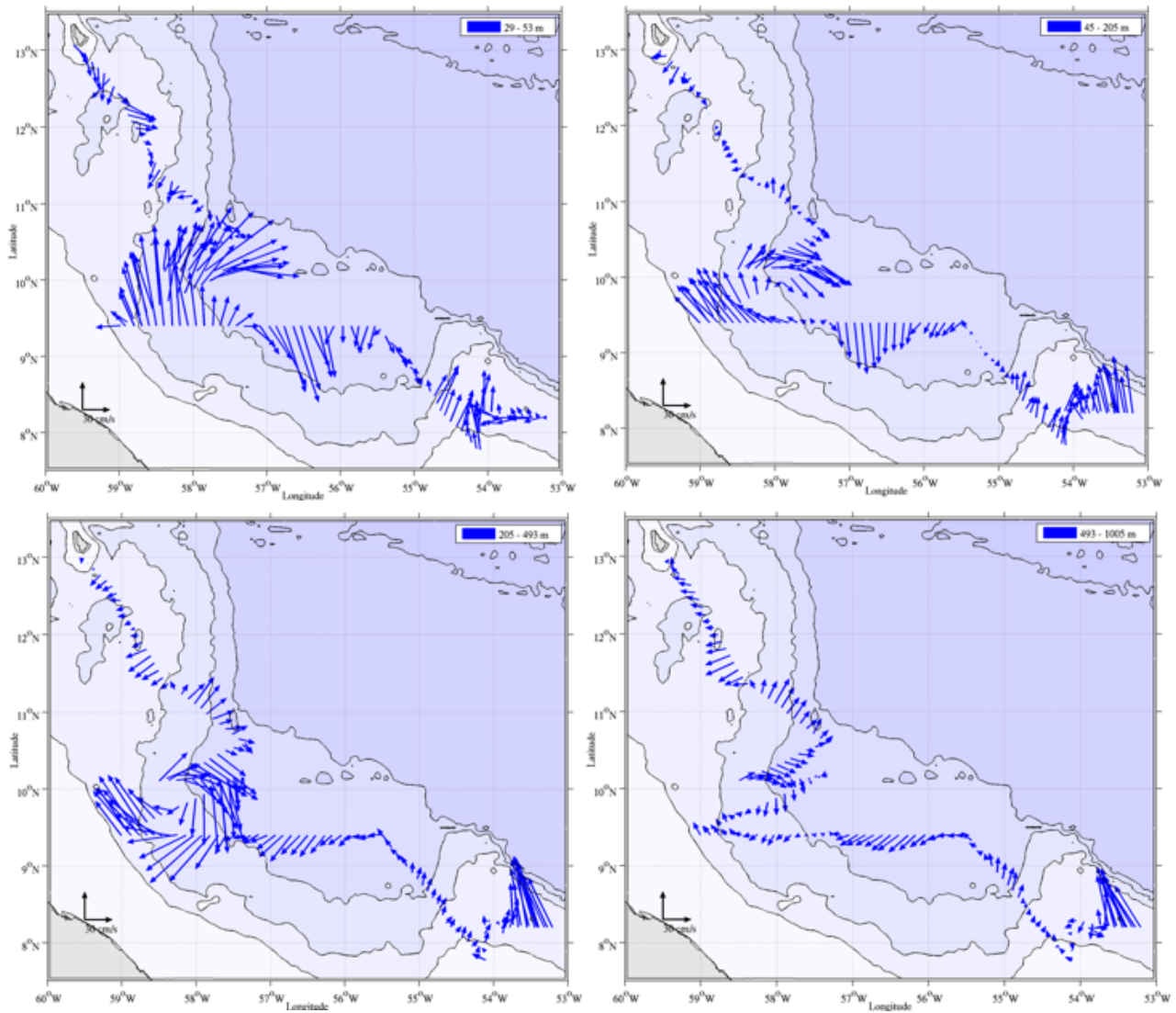


*The R/V Maria S Merian deploying the CloudKite, a precious moment seized from the R/V L'Atalante.*



Celiometer R/V Atalante 28 January 2020





*Ocean currents revealed from the L'Atalante Vessel mounted ADCPs*

