RV Atalante EUREC4A-OA



Daily cruise report (30 January 2020)

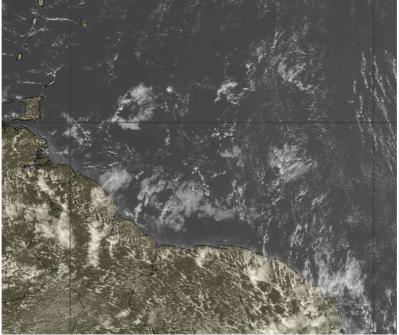
Sabrina Speich, Chief Scientist

1. Objective

Today we completed the sampling of the cyclone lying in the Suriname EEZ. Then we headed to our "rendezvous" with the Maria S. Merian with the plan to sail in parallel, half mile away to calibrate observations, but more importantly, to look at very small scale ocean and atmospheric dynamics. We will sail together for more than 30 hours.

2. Synoptic Situation

Moderate to quite strong trade winds. Isolated cumulus with 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 : 01/30/20

Time (local)	Coverage	Types	remarks
0800	0/8 High	-	
	0/8 Mid	-	
-	2/8 Low	Cu	Sand dust
1200	0/8 High	-	
	0/8 Mid	-	
	2/8 Low	Cu	Sand dust
1600	0/8 High	-	
	2/8 Mid	Ac	
	3/8 Low	Cu, TCU	Sand dust. Shower on the area.

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	23:00	1 CTD	7°45'N	54°7'W	1 CTD 2000 m
30/01	From 0:00 to approx. 04:30	From 7°45'N 54°07'W go northward to waypoint WP3: 8°15'N 54°7'W speed 8 kts during transit, 6 kts during uCTD	8°15'N	54°7'W	Cycle of 1 uCTD every 6 NM
30/01	04:30	1 CTD	8°15'N	54°7'W	1 CTD 1300 m
30/01	06:00	1 VMP	8°15'N	54°7'W	600 m
30/01	From 6:00 to approx. 13:00	From 8°15'N 54°07'W go northward to waypoint WP3: 8°12'N 53°12'W speed 8 kts during transit, 6 kts during uCTD	8°12'N	53°12'	Cycle of 1 uCTD every 6 NM
30/01	13:00	Meeting with the R/V Maria S Merian	8°12'N	53°12'	
30/01	13:00	1 CTD	8°12'N	53°12W'	1 CTD 2000 m
30/01	15:00	1 VMP	8°12'N	53°12'W	600 m
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: speed 4 kts, MVP	8°12'N	54°00'W	MVP
30/01	From 6:00 to approx. 13:00	From 8°12'N 54°00'W go soutwestward to waypoint WP2: 7°45'N 52°20'W speed 4 kts, MVP	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 and VMP deployments.