



Daily cruise report (26 January 2020)

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1. Objective

Today we went southwest, near the continental slope of Guyana to be able to sample a filament of fresh and (relatively) cold water ejected from the coast by the NB Ring 2, and this with a particular emphasis on the atmosphere. We crossed this front a second time, at low speed to launch 13 radiosondes and acquire information on the 2D structure of the atmosphere above the front. By the way, CLS satellite SST match extraordinarily well with surface temperatures measured by the underway system of the ship (see figure below), especially at night. All instruments seem to work well. We have fixed the problem of the Vaisala radiosonde system by using a new GPS antenna provided by the board.

2. Synoptic Situation

Dry air with moderate trade winds.

Fair weather with mostly high clouds.

Easterly wind 10kt. The waves are about 2-3 feet.

Mesoscale cloud patterns (18utc):

Cloud observations : 01/25/20

| Time (local) | Coverage | Types | remarks |
|--------------|----------|-------|---------|
| 0800 | 7/8 High | Ci | |
| | 0/8 Mid | - | |
| | 1/8 Low | Cu | |
| 1200 | 7/8 High | Ci | |
| | 0/8 Mid | - | |
| | 1/8 Low | Cu | |
| 1600 | 7/8 High | Ci | |
| | 5/8 Mid | Ac | |
| | 1/8 Low | Cu | |

Inter-calibration: No intercalibration today.

Stations:

| Date | Approx Local Time | Operation | Lat | Lon |
|---|-------------------|--|---------|---------|
| 26/01 | 00:00 | Southwestward leg to waypoint, speed: 8 kts | 9° 24'N | 59°W |
| 25601 | | Continuous uCTD at 8 kts | | |
| 26/01 | 02:45 | Radiosounding | | |
| 26/01 | 06:45 | Radiosounding | | |
| INTENSE ATMOSPHERE RADIOSOUNDING SECTION | | | | |
| 26/01 | 08:30 | Take a eastern leg to waypoint speed 8 kts | 9°24'N | 58°48'W |
| 26/01 | | Continuous MVP (Michel) at 8 kts | | |
| 26/01 | 10:30 | Take a eastern leg to waypoint speed 2.6 kts | 9°24'N | 58°24'W |
| | | Intensive Atmospheric Radiosounding (1 every 40 min) | | |

Autonomous systems deployed: We have deployed and recovered after 7 hours OCARINA & PICCOLO, we have deployed our SeaExplorer Glider and one NOAA drifter.

Overflights: No overflights. We are too far south.

4. Instrument Status

Everything works well.

5. Outlook

Tonight we are sailing eastward, till 9° 24' N 56°55' W to cross (and sample) Ring2. We will be in its center tomorrow evening.

6. Figures

