

# OPS-0201 (01 February 2020)

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(compiled 01.02. 12:30 LT)

## 1. Facility updates

- **Local logistics:**
- **ATR-42:** Yesterday successful coordinated flight with take-off at 10:55 LT. All instruments up, smaller issues with RASTA radar and turbulence measurements. No flight today. Tomorrow two flights, first take-off 7:30, second take-off approx. 12:30. Planned pattern: race-track pattern and turbulence leg.
- **RAAVEN, BOREAL and Skywalkers:** Boreal: Friday 31 January: take-off at 12:30LT but flight interrupted due to a problem in the generator. The problem was fixed in the evening after 4 hours. Tests in afternoon and the Boreal should be ready for the Sunday flight (take-off 08:00LT)  
Skywalker: Friday 31 January: Flew in clouds and test of adaptive sampling but still some modifications to carry before working. Raaven: Will always do the same pattern: one vertical profile up to 1000m and then legs of approx. 2km at different levels in the boundary layer.
- **HALO:** Yesterday coordinated flight with ATR and Twin Otter, take-off 11:00 LT. Pattern: 2 times 3.5 dropsonde circles with excursion towards NTAS buoy. Radar calibration maneuver at the turning point. Radar failed for 20 min, after calibration maneuver. Ground-Day on Saturday. Next flight on Sunday. Take-off 7:30, 9 hours flight-time. Pattern planned: 3.5 dropsonde circles, GPM underflight, clover leaf pattern, 3.5 dropsonde circles.
- **Twin Otter:** Yesterday two successful flights. First take-off today 09:30. Refueling around noon. Second flight thereafter. Will fly tomorrow. Double flight. First takeoff at 8:00 and second no earlier than 12:40 as agreed with the HALO team. Planned pattern: cloud-hunting.
- **WP-3D:** Successful flight yesterday. Next flights planned for Monday, Tuesday, Wednesday next week.
- **BCO:** All systems are up and running. Construction work for PoldiRad finished, waiting for power. Hoping to get started by today. Measurements at Ragged point are all running as well.
- **L'Atalante:** Since Thursday afternoon the Maria S Merian and the Atalante are sailing together, half mile distant, crossing the deep blue in search of its turbulent secrets, living in synchrony, deploying instruments into the water and into the sky. This Friday, saw the cloudkite leaving the Maria S Merian to his rendezvous with the clouds. Meanwhile, continued to analyze the large inflow of data that reveals an ocean and atmosphere, certainly different, but somewhat linked together. While hunting the hiding groundhog eddies and the secret of clouds, continued to discover new ocean dynamical structures that suddenly appear at depth. Will continue to sail in parallel with Maria S. Merian alternating MVP, uCTD, VMP deployments and radiosoundings.
- **S. Merian:** Continued frontal survey with L'ATALANTE. Launched cloud kite with sensor package. Continue MSS, uCTD, MVP. Every 4 h radiosounding (likewise on L'ATALANTE but 2h shifted). Glider ifm03 has a leak and is drifting. No emergency recovery (too far off) but recovery when steaming north for the tradewind alley survey period (6.2.-12.2). Stopped negotiation process for entering Guyana EEZ. Will continue to survey with L'ATALANTE. Plan to recover Cloudkite at 8am. Will steam southwest to a near coastal cold anomaly and do zig zag two ship survey over the front. Need to check if cloudkite operations are allowed close to land.
- **Meteor:** After the nighttime cloud-kite just collect data for regional statistic by continuing 3 hourly CTDs and radiosonde launches all the way to the northern track point (14d 28.5m N, north of L1). Seven radiosondes launched. In the early morning heavy rain almost brought the balloon down. Dust was still in the air. The mid-visible AOD was about 0.25 (that is ca 0.15 above background) over the entire day. NAAPS forecasts indicate a mix of dust (from the Sahara) and biomass/wildfire burning (from west Africa). This mixture is also a possible reason why the volume depolarization signal (indicating non-sphericity of particles) was not so strong.
- **Ron Brown:** The Brown will remain on station at the P3Point (P3P - 13° 54' / 54° 30') to obtain continuous measurements of the aerosol, BL, clouds, and ocean properties. Good dust event continues for aerosol observing. Next P3 flight anticipated on Feb 3rd. Regularly deployed balloons, rosette CTD to 400 m at 0900 AST and uCTD to be lowered at odd-hour times throughout the 24 hour period will continue.
- **Autonaut:** AutoNaut Caravela was launched Wednesday and was heading east, south of the island. PLANET shows position East of Barbados.
- **CloudKite:** see METEOR and Maria S. Merian reports.

## 2. Plans

The outreach activities for presentations at schools in week 3 and 4 on Mondays, Tuesdays and Thursdays continue.

„From BOMEX to EUREC4A“ starting today 09:00 LT at CIMH.

Additional outreach activity with site visits (BCO, Ragged Point and PoldiRad) is planned for Sunday 14-17 LT. Boreal site from 09-12 LT (possibility to see the start at 08:00 LT)

**(Site crews, please make sure the sites can be visited or please report if not possible!)**

Plans for Movie Night for February 4th, location tbd.

Barbecue planned for Wednesday February 5th.

## 3. Issues

no issues

## 4. Flight Alert

### **Saturday 01 February 2020**

- no flights planned up to now

### **Sunday 02 February 2020**

- coordinated flights with HALO and ATR, take-off 7:30 LT
- Flight of Twin Otter, take-off 08:00 LT
- no plans of P3 known
- Planes will be in the Alley between 07:00 LT and 17:00 LT!
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