

## OPS-0126 (26 January 2020)

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(compiled 01.26. 12:00 LT)

### 1. Facility updates

- **Local logistics:** Additional meeting room in the CA office area up to now only available on work days. The fast internet connection to OPS center is stable now. The coffee machine was moved to the kitchen 2 doors from server room.
- **ATR-42:** 1st scientific flights today. Take-off 07:55 LT. 9 flight hours planned in two flight refueling around noon. RASTA (radar) still has problems with 2 of 4 antennas, tests continue during flights. PICCARO also has some issues remaining, tests also during flights.
- **RAAVEN, BOREAL and Skywalkers:** All three UAS teams have conducted successful flights over the past two days. This includes the NOAA/CU RAAVEN team and the CNRM BOREAL and X6 Skywalker teams. Over the next few days will look to ramp up the frequency of flights as all of the teams continue to work together and with ATC to get as much flight time as possible..
- **HALO:** Take-off today 08:00 LT for coordinated flight with TwinOtter and ATR. All system up finally, initially no 183 GHZ radiometer. Starting with super curtain, followed by dropsonde circles overpassing METEOR. Day-off tomorrow. Next coordinated flight planned for Tuesday.
- **Twin Otter:** Two coordinated flights with HALO and TwinOtter today. First take-off today at 07:50. Refueling around noon. Most instruments are working now, just smaller issues remain.
- **WP-3D:** P3 needs to go to Floria for maintenance. Planned to be back on Tuesday. Next scientific flights on Thursday and Friday. 4 day flights (take-off 09:30 LT), followed by 3 night flight (take-off 20:00 LT) remain. Day flights will focus on cloud micro physic, with patten around Ron Brown. Coordinated flights also with inner HALO circle possible.
- **BCO:** All systems are up and running. Construction work for PoldiRad continues. Barn raising great success yesterday. Measurements at Ragged point are all running as well.
- **L'Atalante:** Yesterday reentered the northern edge of NB Ring 2 and deployed various autonomous instruments. In particular the OCARINA & PICCOLO platforms that measure parameters to assess air-sea fluxes of heat and momentum while drifting autonomously. Also deployed SeaExplorer glider that will be swimming for a 18 days long mission across eddies. Tested the Vertical MicroProfiler (VMP). All instruments work well. Continued regular atmospheric radiosounding, some problems with Vaisala system. Tonight sailing southwestward, till 9° 24'N 59°W to cross an intense filament with a strong SST signal. On the way out will sample the crossfrontal structure with intense MeteorModem radiosounding in parallel to high-resolution ocean observations.
- **Maria S. Merian:** Continued eddy survey – crossing southwest to northeast through the determined centre. Radiosounding every 4h. Launch of Cloudkite with advanced sensor package (MPCK+). Deployment of SVP drifter in Vmax region. Three biology casts at 3:30am. Waiting for Guyana clearance to enter EEZ. Compare records of rain from different devices (Radar; Lidar, cloudkite).
- **Meteor:** CTD survey on all directions around the L2 point. 7 radiosondes were launched. Had reached the L2 point in the morning. Cloud kite instrumentation needed weight reduction. Started regional survey of the upper ocean with CTD casts around L2 location. Polish group deployed a light under-water sensor on a rod to sample temperature profile near the ocean surface. Today, after attaching a now lighter instrument load to the cloudkitre, will steam into the wind-direction off L2 in an easterly direction awaiting 4 HALO overpasses. Plan to deploy an ARGO float just outside the BB EEZ and then return to L2 with regular CTD stops.
- **Ron Brown:** Sampled at station 20 nm upwind of BCO (13.15N, 59.083W) since 14:20 local Jan, 24. Had several ships cross upwind based on sharp spikes in CN and absorption and titration of ozone. Continued to see sporadic simultaneous increases in particle number concentration and ozone indicating entrainment from the upper atmosphere. Radiosonde operations were suspended at 56W knowing that the Meteor was launching balloons in the region. UCTDs were conducted every few hours at this station to assess diurnal variations in the mixed layer. Left this station at midnight today headed to Bridgetown port. Leaving Bridgetown for Leg 2 at 16:00 local on Tuesday, Jan. 28.
- **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. Input suitable for age group 10-12 and 13-15 is still needed.

Next seminar Wednesday @ 15:00 LT @ CIMH

Next weekend a symposium is planned with the title:

„From BOMEX to EUREC4A“ from Friday afternoon to Saturday in a tent at CIMH.

**(!Attention location changed!)**

An additional outreach activity with site visits is planned for Sunday.

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

## 3. Issues