

OPS-0125 (25 January 2020)

Lutz Hirsch

(compiled 01.25. 12:00 LT)

1. Facility updates

- **Local logistics:** An additional meeting room for groups up to 10 persons is now available in the CA office area. Larger groups please use the downstairs room. The fast internet connection to OPS center had problem yesterday, we work on it being stable. A coffee machine is available office area of CA.
- **ATR-42:** Still working to solve instrument problems (RASTA, micro physics and turbulence probes.) . Test flight today Take Off 9:30. Still working to make 1st scientific flight possible on Sunday.
- **BOREAL and Skywalkers:** Getting ready for the first scientific flight on Sunday.
- **HALO:** Successful flight yesterday. Coordinated with Twin Otter and P3. 6 dropsonde circles over a cold pool moving into the circle. Lag towards NTAS at the end of the flight. Groud-Day today. Flight planned for Sunday (TO: 08:00LT). Plans for super curtain (HALO climbing to FL320) with TO(FL50) and ATR(FL80). Followed by flights parallel to METEOR track, followed by dropsonde circles.
- **Twin Otter:** Performed 2 successful flights yesterday. (1st take off: 7:17 3h; 2nd TO: 12:17 3:15h) Some instruments had smaller problems. 3 flybys over BCO at 100 and 200 ft.
- **WP-3D:** *(no update, details based on yesterdays plans):* Take Off yesterday around 09:30 LT. Plans were for 1.5 dropsonde circles around the Ron Brown (16 dropsondes) and a HALO circle with 90km radius. No dropsondes to be dropped in the HALO circle. Further race track patter for cloud profiling is planned East of METEOR. Display of aircraft at GAIA today. Then P3 needs to go to Floria for maintenance for approximately a week.
- **BCO:** All systems are up and running. Construction work for PoldiRad continues. Barn raising today in the afternoon. Measurements at Ragged point are all running now.
- **L'Atalante:** Yesterday crossed the junction between the rings R1 and R2, and the subsurface cyclonic eddy completing the observations of the Maria S Merian. Crossed Trinidad and Tobago waters sampling only with XBTs and SADCPs as not having obtained the EEZ permission from this country. Continued in Guyana waters and started a section crossing the eddy junction perpendicularly with a southeast direction. Crossed surface thermohaline fronts and very intense jets layered at different depth. Continued the regular radiosounding every four hours, however we had to change the reception frequency as the one previously used (401MHZ) seemed to be used by someone else (not identified). At Midnight local time, our position was 17°23.03'N 58° 24.69' not too far from the RV Maria S Merian.
- **Maria S. Merian:** Continue eddy survey – crossing west to east through the determined centre (vertical structure 0- 2000m depth with CTD; and MSS dissipation 0-150m for flux estimate). Radiosounding every 4h. Deployment of two underwater drones (glider) at northeastern side of eddy (expected survey time 4 weeks). First launch of Cloudkite with advanced sensor package (MPCK+). Deployment of SVP drifter in Vmax region. Waiting for Guyana clearance to enter EEZ.
- **Meteor:** First cloud-kite launch first without and then with instruments. P3 ground support/ reference. 7 radiosondes launched. For the P3 support moved on a P3 track position, but were asked to move 5km away to minimize radar interference. During the morning the small cloud-kite was launched. The cloud-kite instrument assembly attached to the cloud-kite, too little lift called to reduce weight for a relaunch in two days. Tomorrow will head to the southern position of the METEOR track and turn around to go back to Halo track crossing at P2. Preparing for HALO overflights on Jan 26. The cloud kite extended measurements planned during Jan 26.
- **Ron Brown:** Transited to our station 20 nm upwind of BCO. Arrived on station (13.15N, 59.083W) at 14:20 local. Turned the bow into the wind for atmospheric sampling. Radiosonde operations were suspended at 56W knowing that the Meteor was launching balloons in the region. Sitting 20 nm upwind of BCO until midnight (local) tomorrow then heading into Bridgetown for our in port.
- **Autonaut:** AutoNaut Caravela was launched Wednesday and was heading east, south of the island. No update today.
- **CloudKite:** see METEOR and Maria S.Merian reports

2. Plans

Yesterdays seminar at CIMH was very successful. There were 4 great presentation and the room was well filled.

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 weekend a symposium is planned with the title: "From BOMEX to EUREC4A" from Friday afternoon to Saturday at the University of the West Indies. An additional outreach activity with site visits is planned for Sunday.

3. Issues