

# OPS-0123 (23 January 2020)

Lutz Hirsch

(compiled 01.23. 16:00 LT)

## 1. Facility updates

- **Local logistics:** We are still working on making an additional meeting room for groups up to 10 persons available in the OPS center. Larger groups please use the downstairs room. The fast internet connection to OPS center available now. We work on a screen and a projector and a coffee machine in the OPS center.
- **ATR-42:** Integration of the instruments finished yesterday afternoon. The EMC ground test was not possible yesterday. Plans are to have EMC-ground test and EMC-flight today. If successful a first coordinated scientific flight with HALO and Twin Otter is still possible on Friday with TO at 05:00 for the first flight.
- **BOREAL and Skywalkers:** still issues with customs. Due to this the test-flights scheduled for Friday and/or Saturday and the first scientific flight on Sunday are in question. No data of the planned simulation on PLANET was received.
- **HALO:** yesterdays flight was successful, but with some instrument failures. The meteorological situation was complicated, but exciting. Due to problems with the HAMP radar the calibration patten were left out. The 183 GHZ radiometer didn't work as well. Six hours of circle flights were conducted. 73 sondes were dropped, 69 of them successfully. Next flight is planned for Friday coordinated with TwinOtter and ATR-42, the ATR will take-off with HALO at 05:00 LT, the Twin Otter two hours later. The WP-3D also plans coordinated flights with 9:30 takeoff. Plans are for dropsonde circles and a super curtain.
- **Twin Otter:** EMI ground test and EMI flight today. Still problems with 2DS cloud probe. Plans are for the first coordinated scientific flight with ATR and HALO on Friday with the first take-off at 07:00 LT, a refueling and a second flight thereafter.
- **WP-3D:** The team is still waiting for a computer spare part for the cloud physics instrument. Take-off today 09:30 LT. Plans are for two dropsonde circles around the Ron Brown are planned together with a HALO circle of 90 km at 10.000 ft with 12 sondes each and an AXBT pattern in between.
- **RSS:** flew yesterday. The camera provided very detailed pictures of the ocean surface and seems very useful for photogrammetric studies involving other research aircraft
- **BCO:** All systems are up and running. Construction work for PoldiRad continues. Measurement at Ragged point are all running now.
- **L'Atalante:** Yesterday launched a sounding in Carlisle Bay at 10:45 AM and another one East of BCO (about 15 nm away) at 14:45 LT. Made tests with their rosette of CTDs. Tomorrow, plan to head South toward a cyclonic eddy (centered around 12.5N, 59.2W) and to use CTDs in the center, then to launch a drifter. The day after will head even further South toward a bigger eddy close to a flow of fresh water coming from Orinoque. Will navigate very slowly for intensive ocean measurements on the edge of this eddy. Plan to meet the Merian around this eddy then.
- **Maria S. Merian:** Continue eddy survey – crossing west to east across the determined centre (vertical structure 0-2000m depth; and dissipation 0-250m). Radiosounding every 4h. Drone flight with met package; Microstructure casts; Cloudkite instruments preparation for first science deployment maybe Thursday (23 Jan)
- **Meteor:** CTD survey of daily cycles of upper ocean properties at (new) L1 (14.182N/57.345W) location and METEOR serving as surface reference site for HALO. UAV quadcopters were launched and could be retrieved several times. Cloud-kite instruments are still being prepared and 7 radiosondes were launched. Deployment of the gliders was shifted to the next morning. METEOR plans to head in a southern direction (along 57.245W) with regular CTDs every 3 hours
- **Ron Brown:** Yesterday left station at 14°21'44" N and 53°W at 3:30 local to recover SWIFTS. All six were recovered on an ENE line between 14.89N, 53.27W and 15.06N, 52W. A UCTD was conducted at each SWIFT recovery site. Continuous atmospheric sampling with bow into the wind during the recoveries. At 16:25 LT turned to head southwest to 14.383N and 55W to be in the center of the P3 dropsonde circle at 11:40 local tomorrow. Radiosondes every 4 hours. Transiting overnight to 14.383N and 55W to be in place at the center of the P3 dropsonde circle at 11:40 local. By Friday at local noon plan to be 20 nm upwind of BCO for an intercomparison.
- **Autonaut:** AutoNaut Caravela was launched yesterday and is now heading east, south of the island!
- **CloudKite:** Maria S Merian is planning for a first scientific launch today. Meteor first test today.

## **2. Plans**

Outreach group is planning a first set of talks on Friday at 15:00 LT at CIMH. There will be 4 presentation of 15 min. Plans are for a post-seminar at Oistins or similar.

There are also outreach activities planned at schools in week 3 and 4 on Mondays, Tuesdays and Thursdays. Input suitable for age group 10-12 and 13-15 is needed.

Next weekend (31 Jan) 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**

Status of BOREAL and Skywalker drones needs to be clarified. Need to keep pushing on Poldirad construction. With Radar raising now planned tentatively for Saturday or Sunday.