

OPS-0202 (02 February 2020)

Lutz Hirsch

(compiled 02.02. 12:30 LT)

1. Facility updates

- **Local logistics:** Please donate if you drink coffee in large box next to the coffee machine. If entering the OPS center late or early, please say hello to the MetService personell, so they know someone is around. We will be working for additional key-card for the building tomorrow.
- **ATR-42:** Today plans for two coordinated flights, first take-off 7:35 LT, second take-off approx. 12:30 LT. Planned patter: race-track pattern and turbulence leg. Monday Day-off. Possibly single early morning flight on Tuesday. Plans for two coordinated flights on Wednesday.
- **RAAVEN, BOREAL and Skywalkers:** Boreal: Yesterday made some tests on the ground. Everything is ready for tomorrow flight. Take-off at 08:30 LT for a 6 hour flight. Skywalker: Saturday 1st February: Flew two missions with one UAV. The adaptative sampling worked when we were able to enter 8 times in the same cloud in the second flight. Tomorrow operations starting after Boreal launch. Open house from 08:00 to 12:00 LT at Morgan Lewis site. 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:** Today take-off 7:35, 9 hours flight-time. Pattern planned: 3.5 dropsonde circles, GPM underflight, clover leaf pattern, 3.5 dropsonde circles. Monday Day-off. Ground-Day of Tuesday. Next scientific flight on Wednesday with take-off 05:00 LT.
- **Twin Otter:** Today double flight. First takeoff at 8:00 and second no earlier than 12:40 as agreed with the HALO team. Planned patter: cloud-hunting. Monday Day-off. Tuesday coordinated flight with RSS aircraft under discussion. All Instrumen
- **WP-3D:** Next flights planned for Monday, Tuesday and Wednesday (all take-off 09:30 LT, nominal duration 8h), consisting of i) Outbound leg to drop sonde circle, ii) Drop sonde circle, iii) Water vapor isotope profile and approach to AXBT module or cloud module, iv) AXBT module: v) Cloud module x 2, vi) Inbound leg to Barbados. No sondes on out- and inbound leg. Tuesday and Wednesday perhaps with minor tweaks. Deconflict with other a/c by performing all activities east of 56.6. All transits through HALO circle should be performed at or above 16,000ft, unless cleared by other a/c.
- **BCO:** All systems are up and running. Construction work for PoldiRad finished, power by generator available, working on computer problems. Measurements at Ragged point are all running as well.
- **L'Atalante:** Yesterday has completed the long promenade with the Maria S Merian and its CloudKite. Left the Maria S Merian to undertake a bottom CTD cast, a microstructure profile and deploy two Deep-Oxygen Argo floats in the core of the "groundhog eddy" Ring3 to follow its curse during the coming months. Now have veered southwest to our second rendezvous with the Maria S Merian, near the coast of Suriname, where they will intensively sampling together an intense filament and associated temperature front. Will meet again with Maria S. Merian to sail in parallel across a filament of cold (and possibly fresh) water near the Suriname coast.
- **S. Merian:** no update today, see L' Atalante.
- **Meteor:** Collecting CTD profiles around the glider box. Following the METEOR track from L1 southward with CTD at the common stops ca every 3 hours. Seven radiosondes were launched. Cloud-kite night session on a west to east leg near 12.7N. The sunrise indicated continued dust in the atmosphere. Continued to follow the METEOR track from L1 southward and well above the L2 point started the early night cloud-kite run. CTD stops during the day always include 2 UAV flights for profiling the lower 300m and an upper ocean layer probing. Microbiology group again took their late night / early morning water samples. Early this morning will circle the glider area with CTD profile and then head south towards L2. Just northerly of L2 plan a late evening (20LT) easterly (west to east) track into the wind for the cloud-kite instrument.
- **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.

Site visits (BCO, Ragged Point and PoldiRad) today 14-17 LT. Boreal site from 09-12 LT (possibility to see the start at 08:00 LT)

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

Barbecue planned for Wednesday February 5th.

3. Issues

no issues

4. Flight Alert

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!
- Contact Point: Marc Prange <marc.prange@uni-hamburg.de>

Monday 03 February 2020

- no flights of HALO, ATR and TwinOtter
- P3 flight scheduled, take-off 09:30, nominal duration 8h
- Planes will be in the Alley between 09:30 LT and 17:30 LT!
- Contact Point: tbd.

Tuesday 02 February 2020

- no flights of HALO and ATR
- possible flight of TwinOtter and RSS, take-off early morning.
- P3 flight scheduled, take-off 09:30, nominal duration 8h
- Planes will potentially be in the Alley between sunrise and 17:30 LT!
- Contact Point: tbd.