OPS-0131 (31 January 2020)

Lutz Hirsch (compiled 01.31. 15:30 LT)

1. Facility updates

- Local logistics:
- ATR-42: Yesterday successful short (4h) coordinated flight with take-off at 07:13 LT. All instruments up, except RASTA nadir antenna. Today coordinated flights planned with with HALO take-off at 10:55 LT, refueling and a second flight in the afternoon.
- RAAVEN, BOREAL and Skywalkers: Today Raven we will start flying at 10LT for a 2 hours flight. They always do the same pattern: one vertical profile up to 1000m and then legs of ~ 2km at different levels in the boundary layer. Boreal will take off at 1230LT for a 5 hour flight and Skywalker should start soon with at least 2 aircraft at the same time (maybe 3).
- HALO: Yesterday coordinated flight Thursday (4h) with 1.5 race-track pattern over ATR pattern, GPM underflight and leg towards area with Saharan dust. No radar calibration pattern. Take-off 07:19 LT. 4 dropsondes. Today take-off 11:00 LT for coordinated flight with TwinOtter and ATR. Pattern: 2 times 3.5 dropsonde circles with excursion towards NTAS buoy. No radar calibration maneuver at the turning point. Ground-Day on Saturday.
- Twin Otter: Yesterday successful flight take-off 07:55 LT for coordinated flight (4h) with HALO and ATR. Today plans for two coordinated flights with HALO and ATR. First take-off today at 09:30. Refueling around noon. Second flight thereafter.
- WP-3D: Today take-off planned for 11:30 LT for 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. 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. 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 a generator by today. Measurements at Ragged point are all running as well.
- L'Atalante: no update for today
- S. Merian: no update for last 2 days
- Meteor: Yesterday Cloud-kite operation at full speed (6m/s) into the wind (10m/s) with full cloud-kite instrumentation. No CTDs and stops during the cloud-kite leg, though regular radiosonde launches With the wind at 10m/s from east, a ship leg towards the east was used to give the cloud-kite maximum lift. During the day two 4 hour cloud- kite instrument legs at 10-14LT and 22-02LT.CTD casts were reduced to samples at the beginning and at the end of the legs. Early morning will reach the main track near the CC latitude (13.3N) and then head to the northern point of the METEOR track. No cloud-kite operations are planned. In the evening (after the aircraft flights) CTD casts will be taken around the glider region (for data comparisons).
- Ron Brown: Yesterday the Ron Brown recovered one of the Wave Gliders in the morning at 0830 AST to assess and replace the malfunctioning RH sensor. Then moved north to deploy 6 drifters (6 nm apart) and then headed back to the P3Point (P3P 13° 54′ / 54° 30′). The underway-CTD was lowered at each drifter deployment location and where the Wave Glider was redeployed at 1800 AST. The Brown arrived at P3P (13° 54′ / 54° 30′) on Thursday evening at 1900 AST and oriented into the wind. Good dust event developing for aerosol observing. P3 flight anticipated on Friday Jan 31. Rosette CTD to 200 m at 0900 (now scheduled daily) and underway CTD to be lowered at odd-hour times throughout the 24 hour period (now scheduled daily).
- **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" from today afternoon (starting 14:00 LT) to Saturday (starting 09:00 LT) at CIMH.

An 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 for today canceled. New attempt next week.

3. Issues

no issues

4. Flight Alert

Friday 31 January 2020

- coordinated flights with HALO and ATR, take-off 11:00 LT
- Flight of Twin Otter, take-off 09:30 LT
- Flight of P3, operating outside of 56.6W, take-off 11:30 LT
- Planes will be in the Alley between 09:30 LT and 20:00 LT!
- Contact Point: Marc Prange <marc.prange@uni-hamburg.de>

Saturday 01 February 2020

- no flights planned up to now--