

OPS-0204 (04 February 2020)

Lutz Hirsch

(compiled 04.02. 18:30 LT)

1. Facility updates

- **Local logistics:** Please, if you drink coffee donate into 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-cards for the building.
- **ATR-42:** Yesterday day-off. Plans for two coordinated flights on Wednesday with early take-off (05:00) together with HALO. Both flights planned with 4.5 h flight-time.
- **RAAVEN, BOREAL and Skywalkers:**
- Boreal: Next flight planned for Wednesday at 06:30LT.
- Skywalker: Ready for flights today as Monday was a day-off
- 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:** Yesterday day-off. Ground-Day of Tuesday. Next scientific flight on Wednesday with take-off 05:00 LT. Pattern: no super curtain, 3.5 dropsonde circles, direction NTAS 200 miles out and back, 150 miles satellite track out and back, 3.5 ds-circles.
- **Otter:** Yesterday day-off. Tuesday coordinated flight with RSS aircraft (take-off 13:30 LT) under discussion. Wednesday 2 flights are planned with take-off time 7:30 LT.
- **WP-3D:** Flies today with take-off at 09:30 LT nominal duration 8h. Pattern 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 v) Cloud module x 4, vi) Inbound leg to Barbados. No sondes on out- and inbound leg. Wednesday same, perhaps with minor tweaks. Followed by 3 night flights (Sat., Sun, Mon.) with take-off at 22:00 LT.
- **BCO:** All systems are up and running. Permission to operate PoldiRad given by Telecoms, ready to be operational during tomorrow's flights. Measurements at Ragged point are all running as well.
- **L'Atalante:** Yesterday deployed the OCARINA and PICCOLO automated platforms and completed the multiple frontal crossing on the Suriname shelf. Sailing in parallel to the Maria S Merian, initially separated by 0.5 NM, and, for the last leg, 5 NM. During transect launched radiosondes every 45 min while the Maria S Merian was sampling the atmospheric with its Lidars and Radar. At 2 pm the two ships split for their own successive destination. Rejoined OCARINA and PICCOLO and successfully recovered them. After recovering 4 French drifters will head back to the Ring3 to complete its survey and perhaps meet with the 3 NASA saildrones.
- **S. Merian:** Survey the cold/freshwater filament with a focus on air/sea interaction jointly with L'ATALANTE/ MERIAN. CTD casts on both sides of the front and in the filament for biogeochemical analysis. Many operations have been done in rather shallower water (<50m WD). Glider ifm03 with leak was successfully recovered by RV Meteor (great thanks to them). The cold filament was also fresh (<33.5). In the Moving Vessel Profiler data we observed plenty of ocean fine structure and gradient zones. Not many clouds and water vapor. Water color changed abruptly due to the fronts that spin off from the filament. Stop zig zag sampling of the front by noon and steam to 9N (Piarco) for launch of MPCK. Hope to find clouds.
- **Meteor:** Rescuing the MERIAN glider at 11.6N, 59.2W. An extended (12 hour!) continuous cloud-kite operation into the wind (back to METEOR track). Radiosonde launches at 2.45, 6.45, 14.45, 16.33 (DWD), 18.45 and 22.45 UTC. Had entered the Trinidad EEZ, so all instruments (except for the ceilometer) had to be turned off or disabled between late night and noon. Once back in the Notem zone used the 12 hour ride back to the METEOR track to give the cloud-kite group an opportunity for a long time sampling period. Dust was still in the air (dust AOD estimated at 0.1), as we had followed the dust plume on the excursion to the glider rescue region. During the night the L2 point will be reached and the METEOR will head northward on its track to L1 with regular CTD casts.
- **Ron Brown:** Returned to port due an emergency on board. Possibly leave port again on Friday. Possibly back on station Saturday.
- **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. Please check white-board in OPS for details.

Barbecue on Wednesday February 5th at Miami Beach at 16:00 - 16:30 LT.

Plan for a hike next Monday between 07:00 and 10:00 LT, contact Sandrine if interested.

3. Issues

no issues

4. Flight Alert

Wednesday 05 February 2020

- coordinated flights with HALO, ATR and TwinOtter, first take-off 05:00 LT.
- P3 flight scheduled, take-off 09:30, nominal duration 8h.
- Planes will be in the Alley between 05:00 and 17:30 LT!
- Contact Point: George, Geet <geet.george@mpimet.mpg.de>