EUREC⁴A

29 August 2019 Coordination Call

Participants:

Alan Blyth, Sandrine Bony, Chris Fairall, David Farrell; Johannes Karstensen, Sabrina Speich, Bjorn Stevens (responsible for notes)

Agenda:

- 1. Fix agenda/topics
- 2. Status of different facilities
- 3. Customs and shipping to Barbados
- 4. Hotel & lodging
- 5. Contact person for P3 flight plans
- 6. Next telecon (bring your calendars)

Update on status of facilities:

Aircraft: HALO and P3 appear to have space at airport, but where is uncertain, and likely won't be decided until the Fall/Winter schedule is set; Some issues in the certification of the dropsonde antenna for HALO, which could have implications for the downward looking SMART; ATR is on track, after some uncertainty due to a scheduled maintenance, there is a slight hope that it can be certified and tested in September in Toulouse, the back-up plan is to do this after the avionics upgrade, but on Barbados. The Boreal Drone is on track, and Greg Roberts has been in contact with David Farrell. Twin-Otter is being certified, hope is to certify a cruciform PMS mount for each wing mount, if not then only four PMS instruments can fly at once. Currently Team UK are working through their ideas for flight segments and will coordinate with main planning group. Daniel Beeden of the BAS has been identified as the air-unit operations coordinator. For Team-US, a P3 instrumentation is roughly set, presently no plans for aerosol measurements on P3, as these will be covered by other platforms. 110 flight hours are planned, of which roughly 10 hrs will be used for Ferry, hence 11-12 eight hour flights are anticipated. Emphasis is on sondes (also XBTs), radar remote sensing, in-situ cloud probes and isotopic measurements are planned. Preliminary flight plans have the P3 exploring the line between BCO and NTAS, with circle flight patterns and XBT lawnmower drops near or at the NTAS.

Heike Konow and Julien Delanoë are coordinating an overview of flight plans, and need contact information for counterparts for BAS-TO and NOAA-P3 to include the planning.

An additional wild-card is the airport renewal. There was interest and a discussion of possible P3 night flights, but this depends on runway work which will make it unaccessible between 22:00 and 06:00. This work may (depending on which days it takes place) also influence the our planned rotation. One option was to work with a backup airport, but further discussion of these issues may need to await more definite information from airport.

Research Vessels: The schedules are coming into place, with the present idea for the German ships to be in Bridgetown for picking up crews and instruments between 12 and 17 January. The main port for L'Atalante will be Guadaloupe and a stop at Bridgetown is desired, but still under discussion. Preliminary idea floated of the Ron Brown first working the area where more eddy activity is expected before the other vessels are in place, and then move to the BCO-NTAS line. Presently Ron Brown only has permission to work in Barbadian EZZs (EEZ - exclusive economic zone - ends 200nm off coastline) which may preclude work to the south, which may also be okay as it gives a balanced ship deployment, and sub-mesoscale phenomena are different than eddies. Attached is a Figure with exclusion zones. US sail drones will/can be deployed from L'Atalante, which is cleared to work in many EZZs. Ongoing discussion for a scanning Raman water-vapor lidar for deployment on the Ron Brown or the Maria S Merian, this could add nice capacity to look at air-sea interaction on the meso, or sub-meso, scale.

Some open issues are tightness of berths on the Maria S Merian and the L'Atalante (MPI, asked for a position on the L'Atalante, and this seems possible). Final lists for observers and Barbadian participation will also be sent around in September.



Map showing overall area of operations with economic exclusion zones indicated. Presently the Ron Brown is only authorized to measure in blue waters, and the EEC of Barbados.

There is a need to try to become more specific on the ship planning, in particular if, when, and why ships plan to be in the central experimental area, what the rough spacing of the ships is anticipated to be when and if they both work eddies out of this central area, and the exact times the ship measurements will be conducted. This information is important for fixing flight patterns, sounding arrays and calibration and contextualization of upward looking measurements. The ship PIs were encouraged to form a group, with one spokesperson (Johannes has volunteered), who can speak to the current planning of the ship deployment, i.e., akin to what Heike Konow is doing for the aircraft. Having a draft plan to discuss at the workshop will be more constructive than working out this plan at the workshop.

Sounding Array: The working group (Claudia Stephan, MPI; Hugo Bellenger, LMD; Simon deSzoeke, Oregon) formed around this seems to have a good overview of the situation and the different needs, and how they propose to deploy the sondes will depend on both how many sondes there are, needs of instruments for calibration on different ships, and how many sondes end up being available. Sounding practice session being organized outside of Hamburg on 15 October. Helium has been seemingly secured and ordered.

Miscellaneous: There was a meeting of the modelling and data products working group earlier this week, the meeting seemed to go well and there was no further information as to the need for input from this group.

Team-FR (AERIS) is coordinating the real-time data provision, for questions about real-time data products for mission planning, or for ideas as to what is desired please contact Sabrina Speich and/or Sandrine Bony.

Customs & Shipping:

Items being shipped to Barbados and which require customs clearance should be coordinated with and shipped to CIMH. Contact points are David Farrell or Marvin Forde. Experience suggests that items can take 3-5 weeks to clear customs. Hence items which can be shipped early should be shipped in mid-october so they clear customs before Christmas. Items that cannot be shipped that early should be flagged, and we/ David will work with the authorities at Customs to see if procedures can be established to help expedite late shipments. Important to identify which items one will not be ready to ship by mid-late October so that we can follow up with Barbadian officials. May need a discussion point on this item at the workshop

Accommodation:

Barbados is expecting a boom tourist season and accommodations are very difficult to secure, so groups should not delay in booking. Better to overbook and cancel as most hotels won't mind a timely cancellation. David Farrell can work with Barbados Hotel and Tourism Association to help identify solutions, as some rooms may be being held that eventually will not be used, but unmet needs must be identified and summarized asap.

Lodging for Paris workshop is also difficult to attain due to Paris fashion week. Groups should not delay booking accommodation.

Future Telecons:

There is not a strong overlap in availability in the weeks leading up to the Paris workshop. Planned Telecon late in the week before the workshop to clarify open workshop issues.

Action Items:

Flag possible late shipments for communication at time of workshop. Develop a draft ship deployment plan. Establish list of planned Barbadian participation Follow up with Airport on aircraft parking positions and possible constraints on runway access.

Follow up with customs concerning possible expedited processing.