

EUREC⁴A

23 July 2019 Coordination Call

Participants:

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

Agenda:

1. Brief status update
2. How to organize our coordination calls (times/participants)
3. Status and needs of Barbadian participation
4. Issues with Ship Berths and Scheduling
5. Open 'fires' that need immediate attention
6. Next telecon

Status update:

The different participants introduced themselves and their ability to represent different communities and platforms. In this regard different granularities of the groupings were discussed. Roughly speaking a grouping can be made in terms of major objectives and platforms:

1. **EUREC⁴A** proposal (BCO/Polidrad, ATR, HALO, Twin Otter, R/V Meteor, Boreal Drone, Barbadian ships gliders) covered by AB, SB, DF and BS.
2. **EUREC⁴A-OA** (R/V L'Atalante, R/V Maria S Merian, cloud kite, gliders/drifters) covered by JK and SS.
3. **ATOMIC** (R/V Ron Brown, NOAA P3, gliders, drones, etc) covered by CF and TQ.

We received some first details about ATOMIC from Chris and Trish: the P3 expects 110 flight hours for 12 flights of eight hours each, between 15 Jan and 15 Feb. The Ron Brown expects a complement of drones for cloud, aerosol and boundary layer profiling, and will be on station from Jan 7 to Feb 13. It will service the NTAS buoy (50W) at the beginning of its deployment. It is a two-day cruise from Bridgetown to Barbados, and some time will be spent at the buoy. Work has been going on to update the <http://eurec4a.eu> particularly to serve as a platform for exchanging information about the campaign planning and facilities. The US is working on its own to get air-space, airport access. Lodging is tight, the main facility will be at Diwi Southwinds, but additional hotels are being sought to handle the planned number of participants. Sandrine updated us on planning for the September workshop and announced the science day focusing on newer investigators, see the <https://eurec4a.sciencesconf.org> for further info. Some gliders have been granted for the L'Atalante. There has been considerable activity on Barbados to scope out Barbadian contribution to the Campaign, including access to ships of the Barbados defense forces, and possible overflights from the Regional Security service. The Twin-Otter will emphasize in situ measurements of clouds and aerosols. Discussions are

Coordination:

Bjorn proposed that we try to manage with the present group as it provides continuity and clarity of communication which will help everyone. All calls would be announced, with their agenda and minutes posted, and people with specific issues or concerns who are not part of the regular coordination community would be free to join in as necessary. We hope that this will prove acceptable to the broader community; input is welcome and this decision can be reconsidered if there are good arguments for doing so. There was agreement that this is a good approach to try and the participants indicated a willingness to act as representatives for their broader communities. The point was made that perhaps the East Anglia group has the greatest distance to one of the coordinating community, but we hope this arrangement will work for them and they will speak up if they need something.

Status of Barbadian Contributions:

David mentioned that there is considerable interest in the campaign both within Barbados and more broadly (he recently got input from the Guyanans who may participate). There are plans to use the campaign to develop the scientific potential of the Barbados Defense Forces (who also have large civilian component to their work) and they are exploring the provision of ships to complement the international flotilla. There is strong interest in contributing to measurements from EU (for now the UK is still part of the EU) and US platforms. To facilitate this we will maintain open capacity on all major platforms (possibility of joining flights, cruise participants) and use the <http://eurec4a.eu> web-page to identify the type of measurements being made to guide interest and eventual staffing of platforms. These contributions could include observers as is normal for ship campaigns.

Ship Coordination:

Space is tight at the port, and the Barbados Defense Force port is unlikely to be able to accommodate the research ships. The port authority is aware of *EUREC⁴A* and David will be meeting with them again in the coming days to see if there is flexibility for berths, for instance to accommodate two ships for some days. The German ships, as a rule, like 48 hrs of Port time, and there is some anticipated dependencies between the Meteor and other ships due to exchange of instrumentation. We agreed to revisit the scientific requirements for the port-call and reduce these to the minimum possible, i.e., using ship-freight instead of the research vessels to transport materials when this is possible, and perhaps testing instrument readiness in Carlisle Bay to free the berth. The minimum scientific requirements would be shared with the ship-coordination offices and it would be left to them to work out the port-calls in coordination with the Barbados Port Authority.

Issues requiring immediate attention:

Upcoming ATOMIC meeting: Chris indicated that he could free 30 min for the *EUREC⁴A* teams to share the status of their planning. Bjorn and Alan will represent *EUREC⁴A*, and Johannes will represent *EUREC⁴A*-OA. Here the hope would be to inform others of measurements that are being planned, so that we can get the most out of all the platforms.

Soundings: There are many open issues with the radio-sonde (not dropsonde) sounding array. These include open issues with regard to sounding types, stations, helium access and simply the number and timing of the sondes. A group was identified (Claudia Stephan, MPI; Hugo Bellenger LMD; Simon deSzoek Oregon; Lawrence Pologne, CIMH) who has indicated a willingness to coordinate this activity, we will confirm with them their interest in working on this together.

Sail Drones: There are communication issues with the sail drones and their use might need to be coordinated through a working group similar to that of the Soundings

Paris Workshop: For this workshop we flagged the need for detailed straw-man proposals for flight plans (Heike Konow is coordinating a working group) will be presented; staffing plans for Barbadian participation will be discussed; as well as plans for the sounding array.

Inter-platform communication. The ATR and HALO use the Planet software, the US platforms use x-chat. Not sure if the Twin-Otter can communicate by means other than Radio. We agreed to check with the platforms regarding this and discuss at next telecon. This also relates to ship-board communication and data exchange.

GPS: Sabrina indicated interest in distributing GPS receivers across ships. Contact her if there is a possibility for doing so

Next Meeting:

We would begin looking for a date for a next meeting, which will be tight due to vacations. At this meeting agenda items will include: Feedback from ATOMIC Workshop; Planning for Paris Workshop; Follow up on Inter-platform Communication; Looming logistical issues and deadlines for shipping.

Action Items:

Review website (<http://eurec4a.eu>) and provide platform information even if incomplete.

Check on communication modalities for different platforms.

Outline specific and minimal scientific requirements for ship berths.

Follow up on interests with regard to GPS and Saildrone coordination.

Answer doodle for forthcoming Telecon.