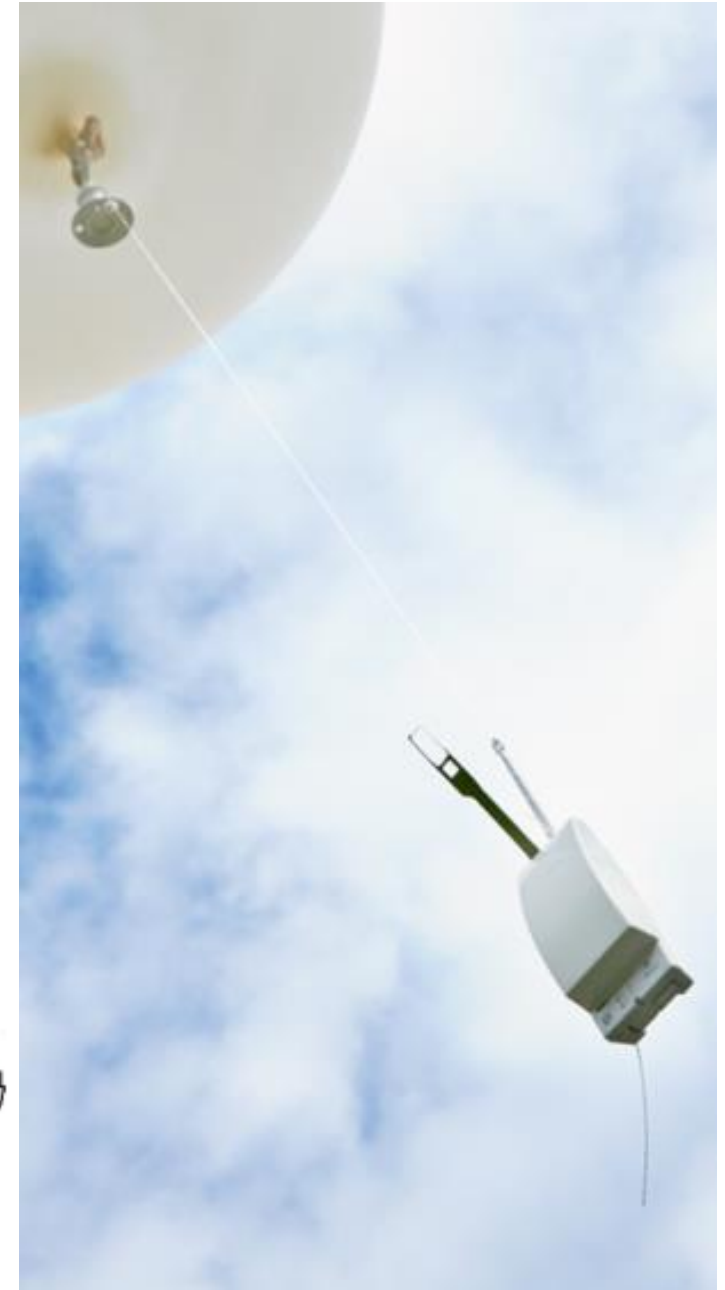
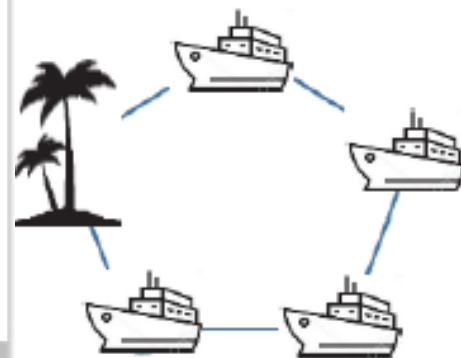
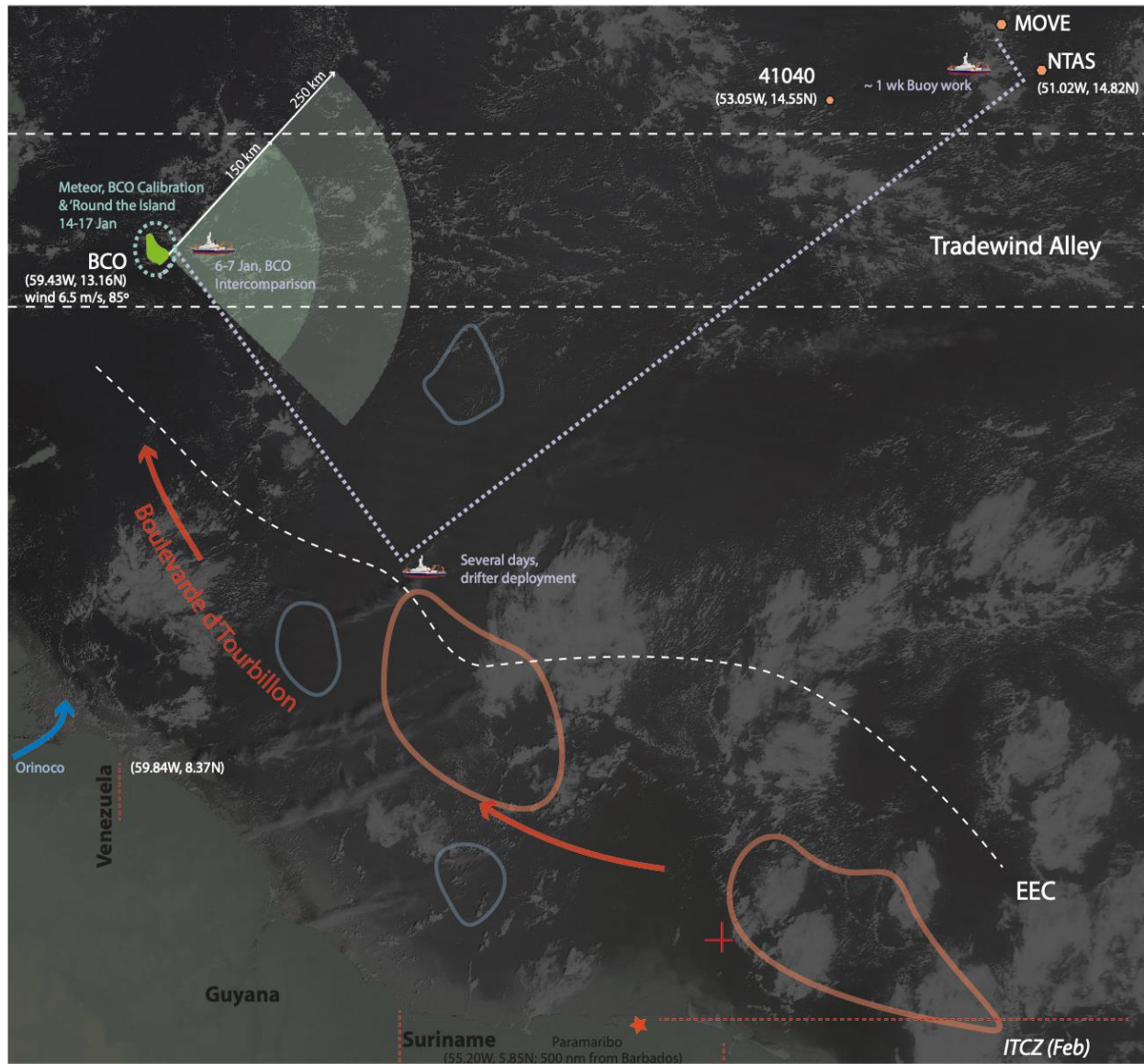


Breakout group - Soundings



Scientific Objectives

Infer large-scale divergence

- Platforms should be well separated
- But not too far separated (not south of 9°)

Analyze waves

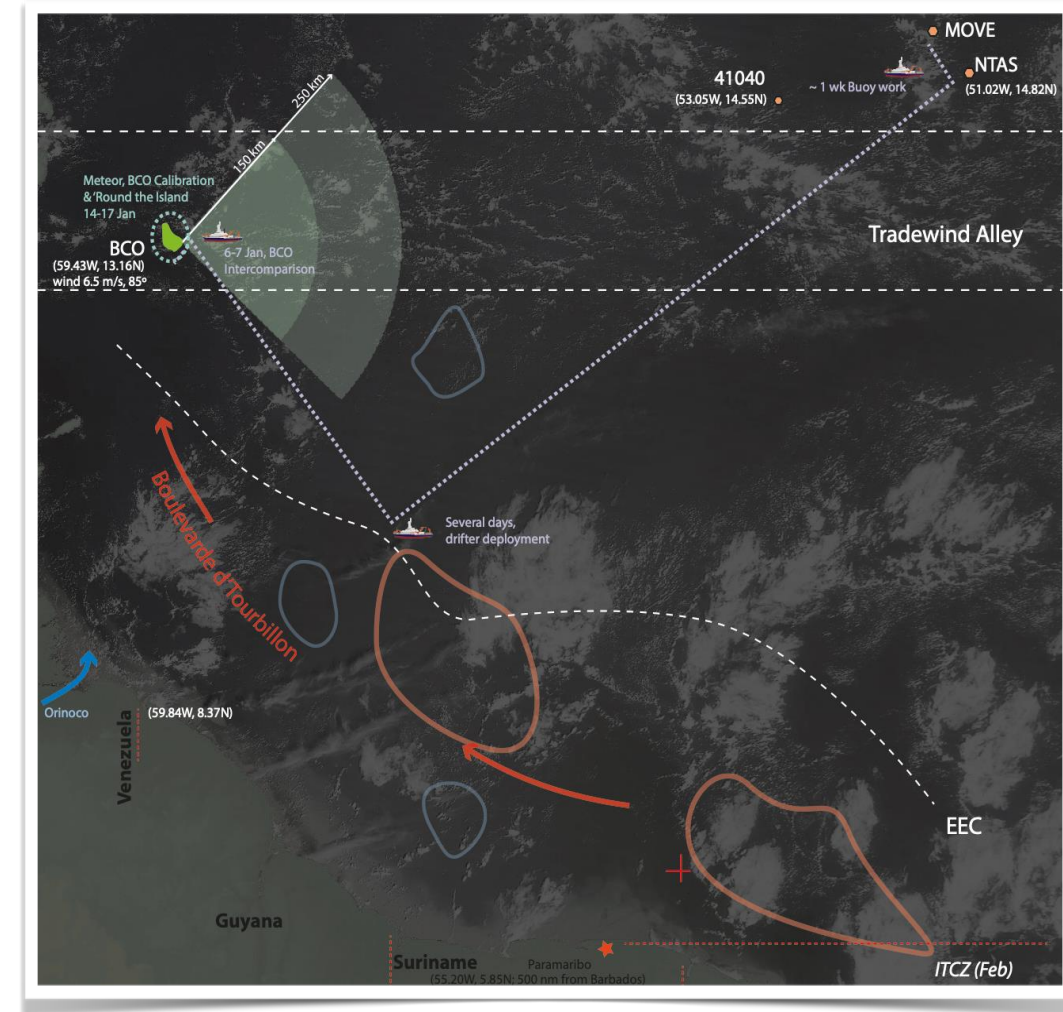
- Simultaneous soundings
- 10 days of high-frequency soundings (2-hourly) on Meteor

Examine sensitivity to ocean fronts

- Experimental, requires a little bit of flexibility

Supplement other measurements

- All platforms need a sufficient amount of sondes



Distribution of Sondes

240 Ron Brown

228 are needed to cover their 4-hourly measurements (36 days)
(independent of MPI-M purchase)

240 Meteor

30 days of 4-hourly soundings
+ 10 days of 2-hourly soundings

180 BCO

30 days of 4-hourly soundings

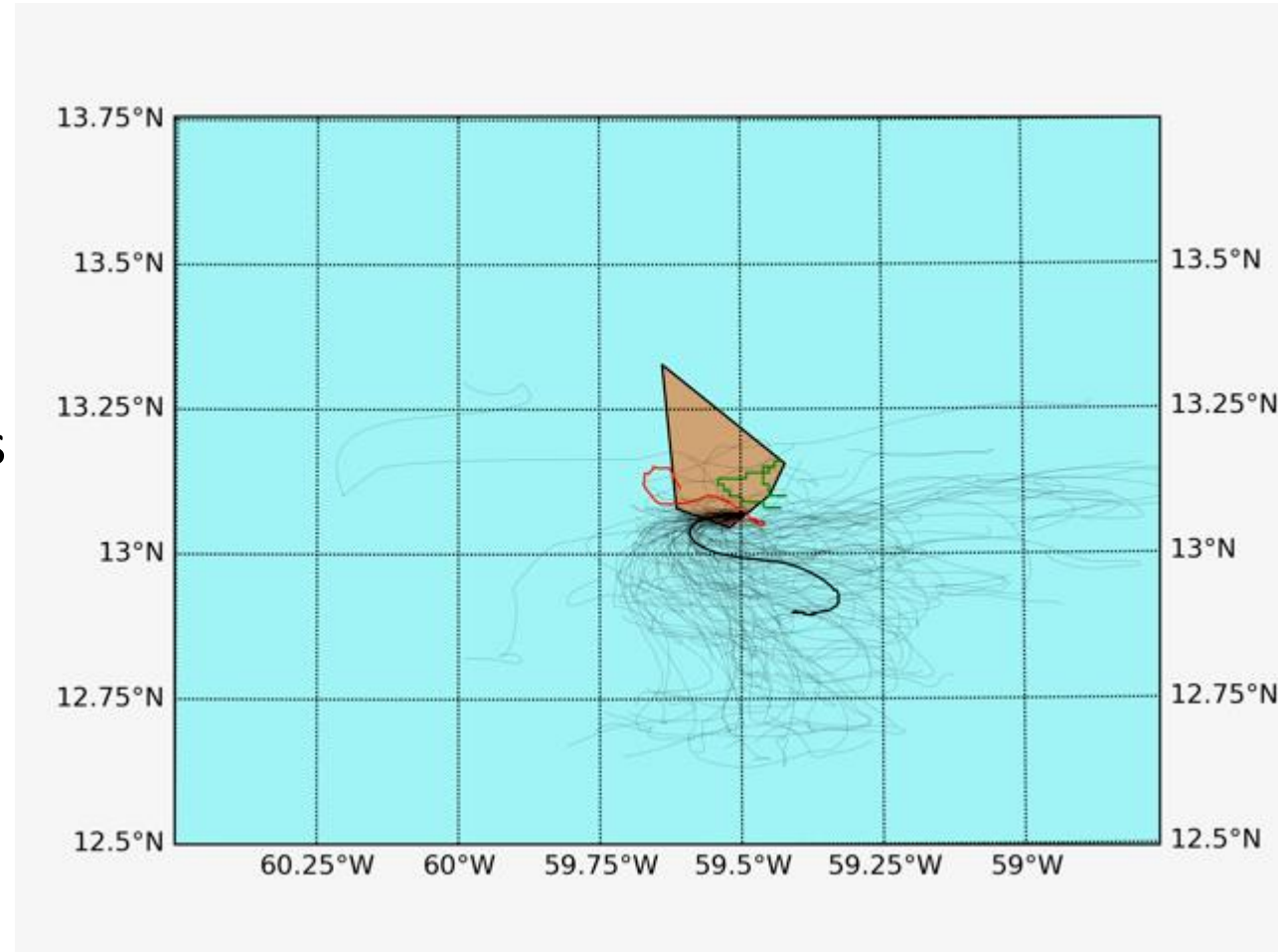
146 Maria S Merian and 146 L'Atalante

21 days of 4-hourly soundings while they are well separated and north of 9°
Else: 10 days of 12-hourly soundings depending on location

Mon	Tue	Wed	Thr	Fri	Sat	Sun
Jan 6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	Feb 1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20			

Measurements

- We will measure ascent and descent
- We will use parachutes
 - Of course the sondes will drift
 - The descent will not be simultaneous
 - But it doubles the amount of soundings
- *Communication* is required between at least L'Atalante and Maria S Merian



Status

Hardware

- Technicians at Guadeloupe can perform the installation of antennas etc. on L'Atalante
- The L'Atalante has a launcher
- Other vessels are fine in terms of hardware

Logistics

- DHL express for shipping sondes is no longer possible (lithium batteries)
- Transportation takes longer & will be more expensive
- Helium order needs to be adjusted to new numbers of sondes for Atalante & Merian
- This is urgent
- Organizing the transport to Brest (early December) is also urgent.

Status

Software

- Will be tested on Oct 15th (training day): PLEASE JOIN
- Agreement and good progress on data format and software (Level-1 and Level-2)
- Nearly-live upload of data to EUREC⁴A portal (Aeris) and to GTS

Workload

- Appropriate training will be done on October 15th (launching, software, data format)
- Number of people on different platforms seems appropriate

Additional thought

Put Uni HH sonde-like instruments onto the cloud kite line of Merian (measure p, T, RH)