

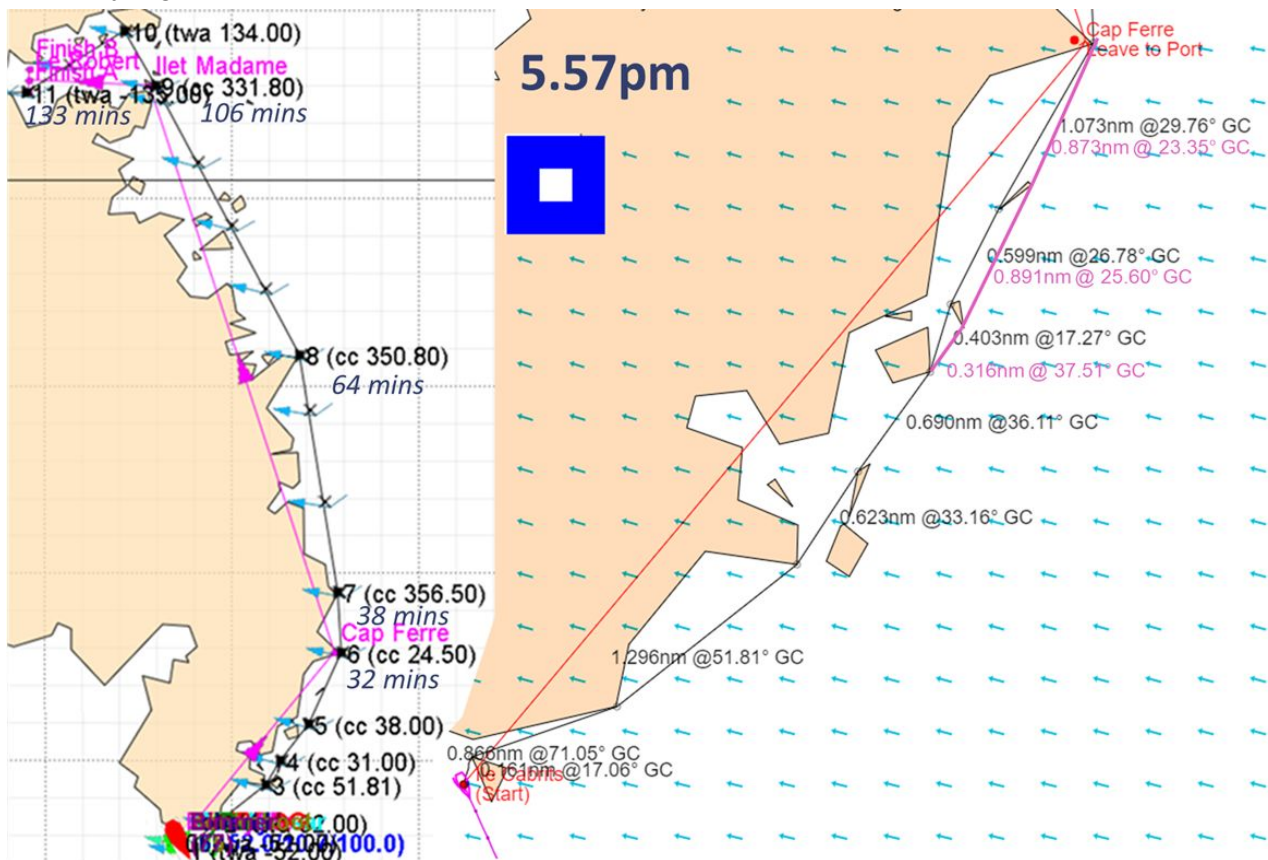
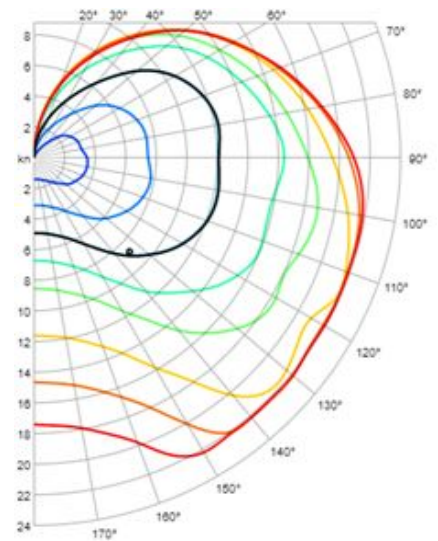
This race was quite exciting, especially near the end!

The boat given to us was the F18, which is a rather fast boat topping at 22 knots. However, it's also difficult to use; not only could it not sail particularly close to the wind, but there was an additional notch in its polar for many wind speeds. With 8-10 knots of wind (similar to what we raced in), the optimal TWA angle ranges were 52-81° and 101-134.5°.

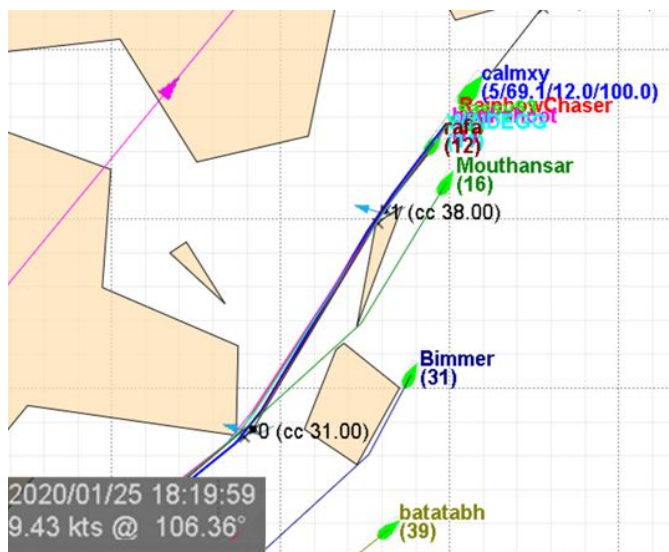
The southern part of Martinique, specifically southwest of the unavoidable mark of Cap Ferre, had a number of islands. Not as many as, say, Mistli's BBQ, but still quite a few of them. One of those SLIs (Îlet Cabrit) was right next to Start and I first found out about that one when I BBQ'd barely 20 seconds after registering my boat! Depending on the wind conditions, we may need to weave between these islands, with a distinct possibility of polar hopping and/or doing so at up to 22 knots. A few more islands near Îlet Madame could potentially pose a similar challenge there.

Thus, this boat/course combination was probably going to be a tricky one to sail, regardless of the wind conditions.

Race start brought 8-10 knots of wind from the east. Thankfully, this race wasn't as difficult as I had feared. Apart from Îlet Cabrit, the rest of the run all the way to Îlet Madame was simply a geometric race up Martinique's east coast.

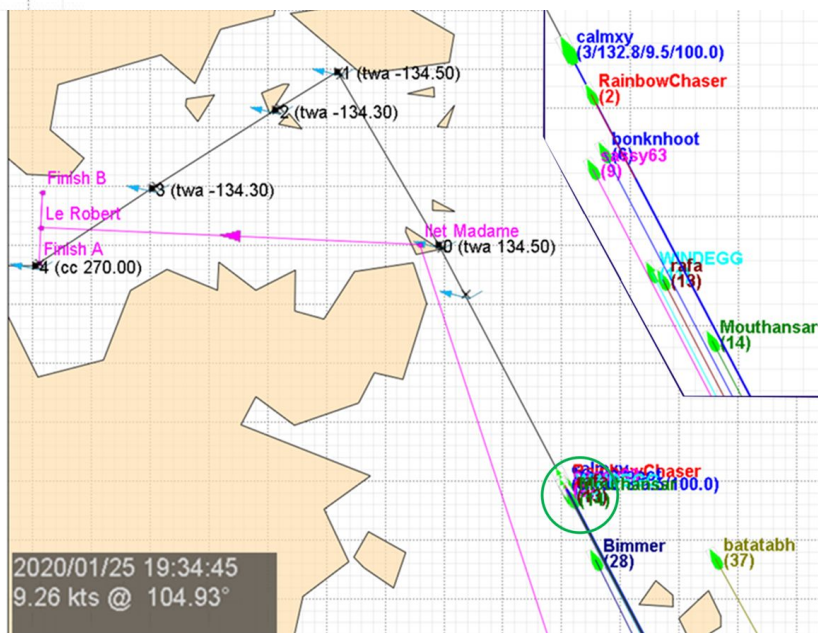


During Towback, I set the indicative DCs for the run and also drew the geometric legs between the islands with the ruler. Given that the notch in the polar corresponded to a COG of between 4° and 24° at Cap Ferre, it was possible to avoid it without deviating from the geometric path if the eastern (lavender) path was taken. Of course, the exact COG commands were dependent on when the server first jumped the boat past each waypoint.

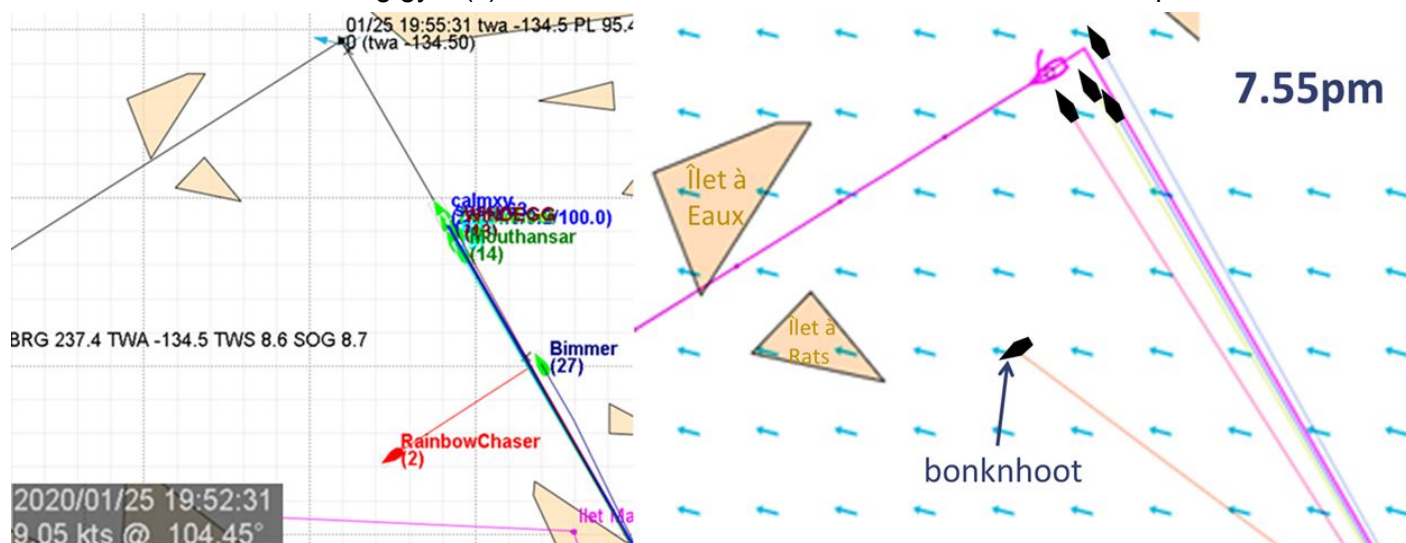


For each leg, I would set the COG command as equal to what the ruler indicated, then adjust it in 0.2° steps incrementally until it would round the next waypoint optimally. Interestingly, nobody took the western (black) geometric path as indicated, even though it would have been equally fast given the appropriate polar hop. Some, however, did keep further offshore and took different geometric paths, but the increased wind wasn't enough to offset the additional distance travelled.

The run from Cap Ferre to Îlet Madame was straightforward, with only three geometric COG commands for this 74-minute stretch; there was no time to be gained from curving these paths. Even rounding Îlet Madame on the wrong side was unlikely since doing so would require gybes and/or sailing too close to the tailwind. Arguably the greatest challenge here was if you decided to do other things (the two longest COG stretches were 26 and 42 mins respectively, in a 133-min sprint), then you risked overshooting or BBQing and hence falling behind if you failed to return in time. I decided to test other DCs and watch my rank in this time. My rank fluctuated between 2 to 10, but strangely enough, never a rank 1. Maybe that's because this was finally the race in which RainbowChaser would win?



Soon enough, we were at Îlet Madame. 106 minutes into the race, an estimated 27 more to go. The obvious first move from Îlet Madame would be TWA -134.5° approx., but when to execute the remaining gybe(s) to reach the finish? This is where the fleet would spread out.



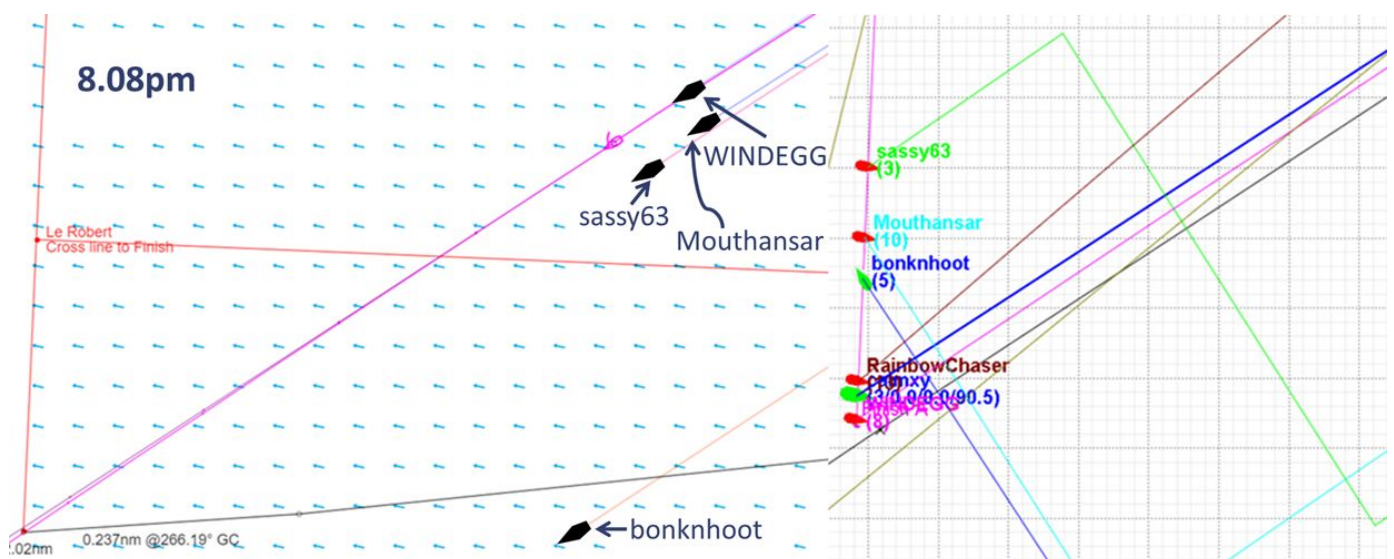
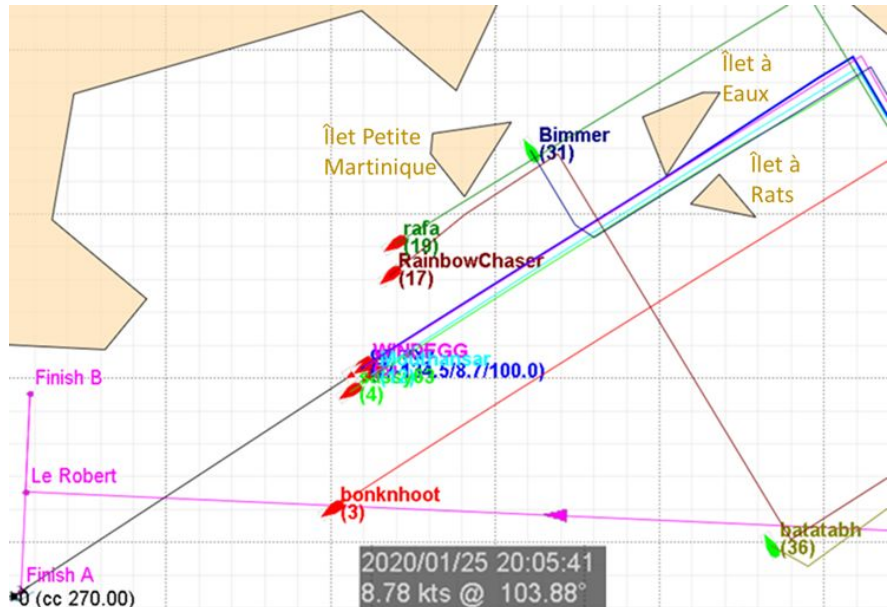


RainbowChaser and LittleSkua were among the first to gybe and opted for two additional gybes to reach the finish. It also came with the benefit of not needing to gybe closely between more islands. This did not work, as performance loss from the extra gybes meant that this route was slower overall. Very unfortunate, as I was hoping for a LittleSkua/RainbowChaser/me podium (in any order); looks like it won't be happening this race.

rafa gybed latest and unlike the others, wasn't aiming for the south end of the finish. This would have kept easily within the ideal TWA angles while keeping the performance loss to that of the single gybe. It did however mean that VMC to the finish line was lower for an additional 1-2 mins and hence was slower.

bonknhoot gybed later than RainbowChaser but still kept south of Îlet à Rats. This would have required a second gybe to enjoy more favourable winds towards the south of the channel. However, due to the short distance between the second gybe and the finish, the performance loss effect would only be partially realised. This strategy may well have won, if it weren't for an unfavourable server jump and a correspondingly short time to react.

Performing the gybe between Îlet à Rats and Îlet à Eaux proved to be the winning strategy. Indeed, all top 10 finishers other than bonknhoot (5th) and LittleSkua (9th) made this gybe. The exact location of this gybe mattered: if gybing at precisely the correct point (specifically a TWA  $-134.5^\circ$  command that would join the southern tips of Îlet à Eaux and the finish line), it would be just about possible to avoid sailing too close to the tailwind. sassy63 and a few others gybed earlier than me and were then forced to decide between a TWA of  $-135^\circ$  to  $-137^\circ$  or gybing one server jump before the finish.







I tried to keep to that precise TWA command, but the server decided to let my boat jump one more time before the gybe. Oops. At least I have some leeway in reaction time here, so I changed to TWA -133° until Îlet à Eaux was rounded, then reverted to TWA -134.5°. The boat trace then indicated that I was spot-on for the very southern tip of the finish line. I followed it until around 0.2nm from the finish, then switched to COG to avoid any unpleasant surprises from a near miss of finishing.

Given the close finish (12 boats in the first 30 seconds), it took a while for the server to finish updating, but the final rank that it gave my boat was 1! After the Visingsö and Seychelles sprints last year (both finished 2nd), I have finally won a sprint! Allez RainbowChaser for what could have been.

## Leaderboard for Martinique Sprint 2020

*Martinique Sprint 2020, racing with 106 boats.*

Rank	Boat Name	Boat Type	DTG	DBL	Finish Time (UTC)
1	 calmxy	F18	0	0	2020-01-25 20:12:42
2	 Rundo	F18	0	0	2020-01-25 20:12:43
3	 sassy63	F18	0	0	2020-01-25 20:12:46
4	Smo	F18	0	0	2020-01-25 20:12:49
5	 bonknhoot	F18	0	0	2020-01-25 20:12:51
6	 bmd	F18	0	0	2020-01-25 20:12:53
7	Outsider_VI	F18	0	0	2020-01-25 20:12:55
8	 WINDEGG	F18	0	0	2020-01-25 20:12:55
9	Littlekua	F18	0	0	2020-01-25 20:13:05
10	 Mouthansar	F18	0	0	2020-01-25 20:13:10
11	 CollegeFund	F18	0	0	2020-01-25 20:13:10
12	 Chipspitter	F18	0	0	2020-01-25 20:13:11
13	 RainbowChaser	F18	0	0	2020-01-25 20:13:16
14	 rafa	F18	0	0	2020-01-25 20:13:18