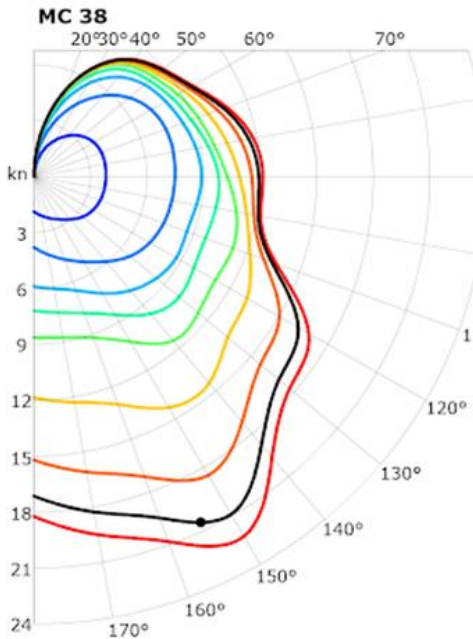


Upon completion of the Auckland to Russell timed race, I found that I made the TRQ3 podium! Well, technically I did, but that was because Frangipani's SYC membership lapsed for a bit, and very unfortunate that it just happened to be right when Hormuz closed, thus causing that rank 11 to turn into a DNC for ranking purposes. I felt kinda bad about that, as I would rather do it by SOLing skill alone than take advantage of a mistake like that.

TRQ3 results	R1	R2	Total
rafa	1	4	5
goddess	5	2	7
StingFI	2	7	9
Frangipani	11	3	14
calmxy	10	9	19

*grey rank = non-SYC (officially DNC)

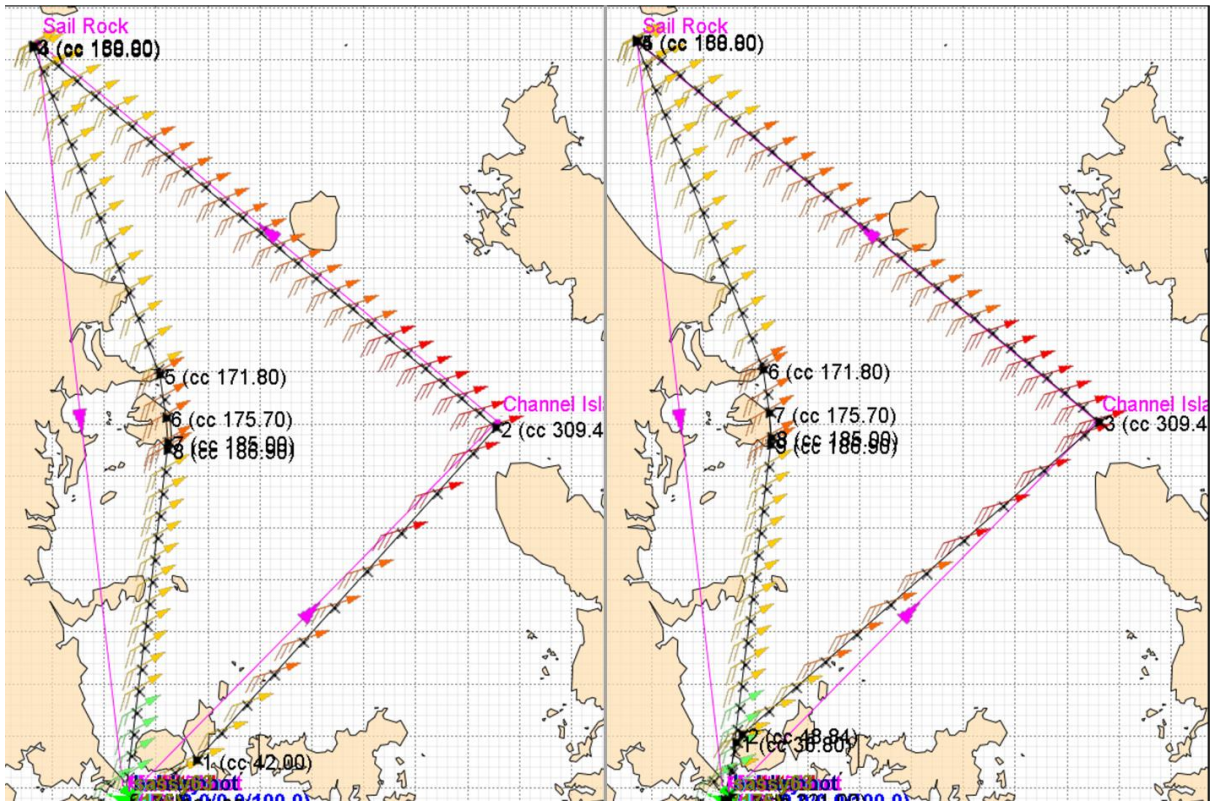
TRQ4 comprised Cape Horn Record and this race (Yates Timed). Cape Horn Record went [exceptionally well](#) for me, netting me my first SOL win and a lovely gold medal. Thus I shifted my focus to winning the plaque from TRQ4, rather than simply being on the TRQ4 podium.



For this race, we were racing the MC38 for what was apparently the first time. Nothing too tricky about the polar... at low to mid wind speeds. But once the wind speed exceeded 15 knots, the boat speed in the tailwind (TWA>120°) would dramatically increase. The increase in boat speed at the other TWAs was comparatively modest. It was obvious that this part of the polar needed to be used wisely in order to win. Ideally, we would have 30+ knots of wind coming from the south, then a wind shift to the east as we approached Sail Rock and finally northeast soon after rounding Sail Rock (all the while remaining at 30+ knots).

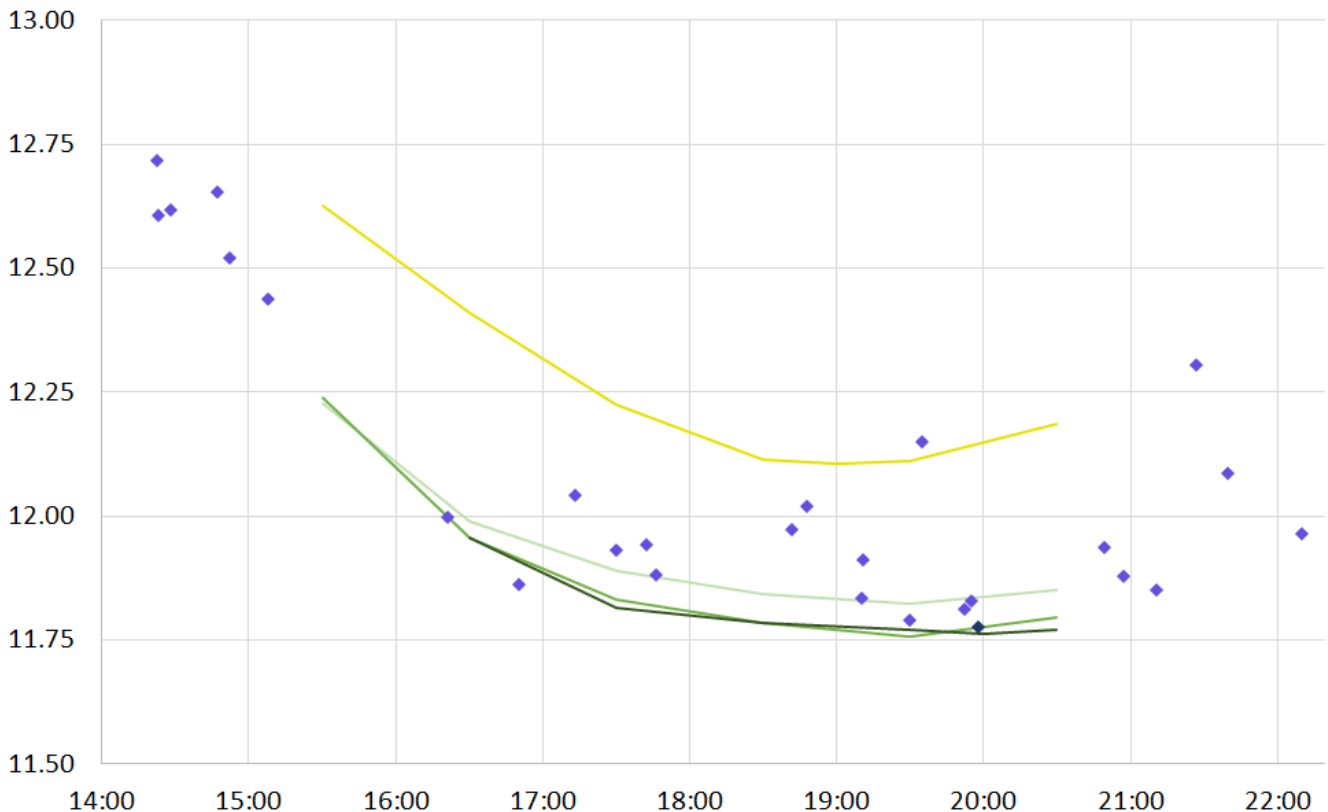
Of course, such expectations were unrealistic. In fact, there were only two opportunities within the Yates Timed race where 25+ knot winds were to be found within the race area at all: 16 December, afternoon UTC (mainly between Channel Island and Sail Rock) and 17-18 December, nighttime UTC (considerably more widespread). The former opportunity had those winds coming from the north, thus limiting its usefulness in setting fast times.

The winds of 17-18 December, nighttime UTC had more favourable winds, as depicted here:



The fastest attempts would have boat traces similar to these. Essentially, the choices to be made were: which side to round Rangitoto and Motatapu Islands, whether (and how) to curve one or more of those long “straights” and, perhaps most importantly, when to start.

For a simplified approach, I made no attempt to curve any of the “straights”. Based on my observations, I found that rounding Rangitoto/Motatapu to starboard was consistently a couple of minutes faster. I tried setting the full set of COG commands needed to get from start to finish under different Wx, varying only the timing of those commands based on start times between 3.30pm and 8.30pm UTC. The graph below depicts my findings:



The x-axis represents the starting time (in UTC, on 17 December)

The y-axis represents the attempt time in hours

The yellow line is predicted finishing time on 10.30am, 16 Dec Wx basis

The lighter green line is predicted finishing time on 4.30am, 17 Dec Wx basis

The green line is predicted finishing time on 10.30am, 17 Dec Wx basis

The darker green line is predicted finishing time on 4.30pm, 17 Dec Wx basis

The scatter dots are the **actual** times taken by boats in this Timed race

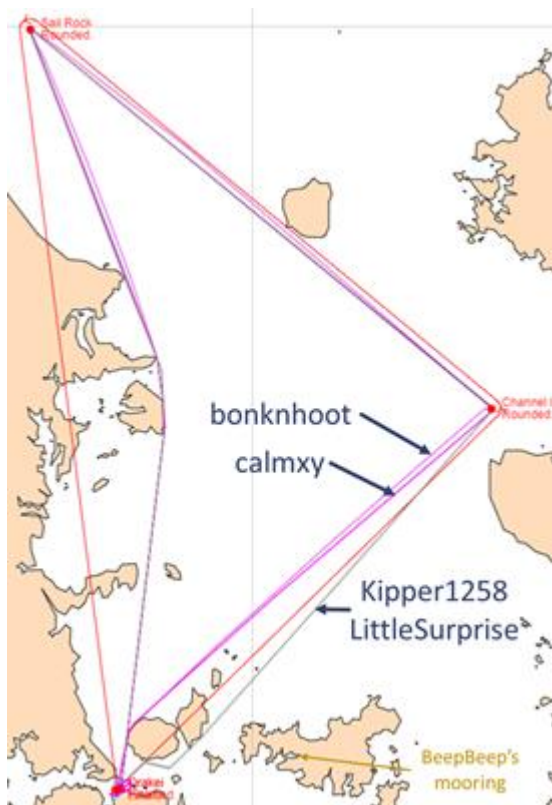
One thing to note is that those starting after ~7pm UTC would be sailing too close to the tailwind should they opt to complete Motatapu-Channel Island as a straight line. However, the boat polar combined with the changing wind conditions meant that even sailing too much into the tailwind could still save time as the increase in boat speed was just that great!

Another thing to note is that those predicted finishing times were based on a particular Wx; in reality, the Wx would change mid-attempt and can shift the optimal starting time.

Essentially, this Timed race boiled down to getting this attempt done properly. An attempt on 16 December or earlier may be useful for some in case this attempt were somehow skipped or messed up (since only the best attempt counts), but it would be >13 hours long and finish ~30th at best. However, it would certainly miss out on the plaque and the TRQ4 podium. While a 1st place for this race would guarantee the plaque, every position lower would increase the risk of losing the plaque to someone else.

I originally intended to start around 7.45pm UTC but shifted that forward to 7.30pm UTC after noticing that Bimmer and rafa had started. They both had good finishes in Cape Horn Record (Bimmer in particular also finishing on that podium) and I could not afford to finish more than a couple places behind them to keep the plaque. It was possible that they predicted the next Wx could shift the optimal start time forward, so I decided to cover them.

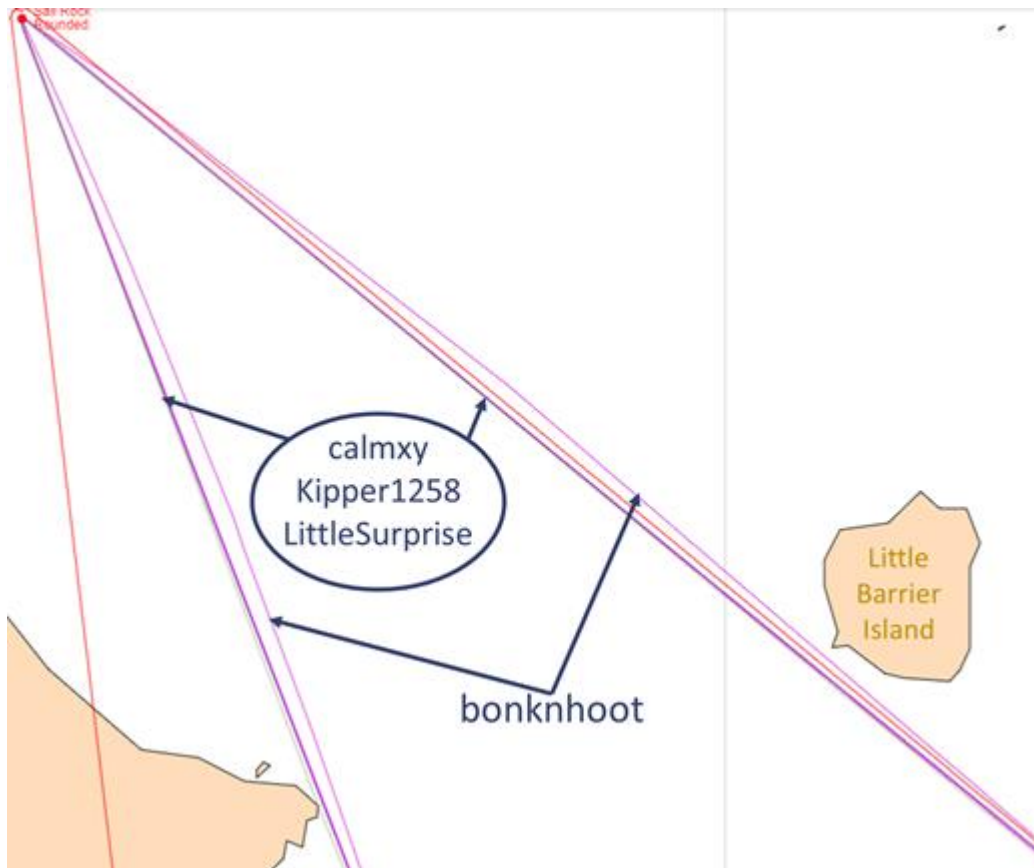
The attempt itself went pretty well, with me finishing 2nd behind bonknhoot and ahead of Kipper1258 (3rd) and LittleSurprise (4th). Thankfully, bonknhoot did not participate in Cape Horn Record so my plaque was safe. But given that the three of them started almost simultaneously, I was curious to see their choice of strategy.



It seemed like Kipper1258 and LittleSurprise both opted for the same strategy to round Rangitoto and Motatapu to port, otherwise using the same strategy as me. What they did was somewhat different from what I predicted, as they both gybed south of Rangitoto Island. Perhaps this saved them time compared to my prediction, but both of them were slower than bonknhoot and me.

bonknhoot on the other hand rounded Rangitoto to starboard much like I did and gybed just before Channel Island. This was something that I considered in my run, but decided not to do it as an inaccurate timing for the extra command to reduce performance loss on the gybe could backfire if incorrectly set. As I normally rely on Kipper's tool to do this, gybing one server jump off could easily wipe out any potential time savings. bonknhoot did a crash gybe here, due to the short distance, then shed performance loss at Channel Island. Aside from

that, he added a few curves that probably saved a few seconds. Well done, bonknhoot!



Now that I have gotten the medal and the plaque, there's one more goal to achieve: the Cup (or at least the TRCH podium)!

2019 TRCH results for calmxy

Used races (top 7 of last 8 races)

Race	Date	Final place	Points
Cape Horn Record 2019	2019-10-01	1	1
Yates Cup TIMED Race 2019	2019-12-10	2	2
Auckland to Russell 2019	2019-08-07	9	9
Hormuz TIMED Race 2019	2019-07-08	10	10
Tristan TIMED Race 2019	2019-05-02	27	124
Kumage TIMED Race 2019	2019-04-01	70	108
Hook Island TIMED Race 2019	2019-03-17	104	135

Other races

Race	Date	Final place	Points
Sea Lion TIMED Race 2019	2019-01-12	DNS	159

Note: where final place and points differ, is due to the DNC effect.

Since I have participated in 7 Timed races this year, it would be possible to use all of those (and discard the one that ended before I joined SOL) to see how I would fare. Unfortunately, even if the DNC effect were ignored, it would still be unlikely to be good enough for even an award certificate, let alone the Cup as my first two Timed races were pretty bad. For instance, in Kumage I believed that I could round the island in just four commands and call it a day (not to mention missing the finish line), but now I've come to learn the different skills needed to competitively SOL, at least in shorter races.

One of my new year's resolutions for 2020 is to try and win the Timed Race Cup (probably alongside more medals and/or plaques), which of course starts with renewing my SYC membership so that I can make the best of every Timed race! Fair winds, Merry Christmas and looking forward to the new year!