

Race 1374: Round White Island 2020

The local weather forecast was rather calm for the whole weekend. Therefore I decided not to go sailing but to stay home and devote some time to SOLing instead. Hardly 300 miles in a fast boat with the breeze up all the time looked promising to me.

For the first leg from Auckland to Channel Island there is a choice between the more direct course through the Motukorea Channel or the northern exit through the Rangitoto Channel. That allowed to reach the stronger wind in the northern part of the Hauraki Gulf earlier and was faster by 7 minutes, according to my routing. Most competitors seemed to have come to the same conclusion.

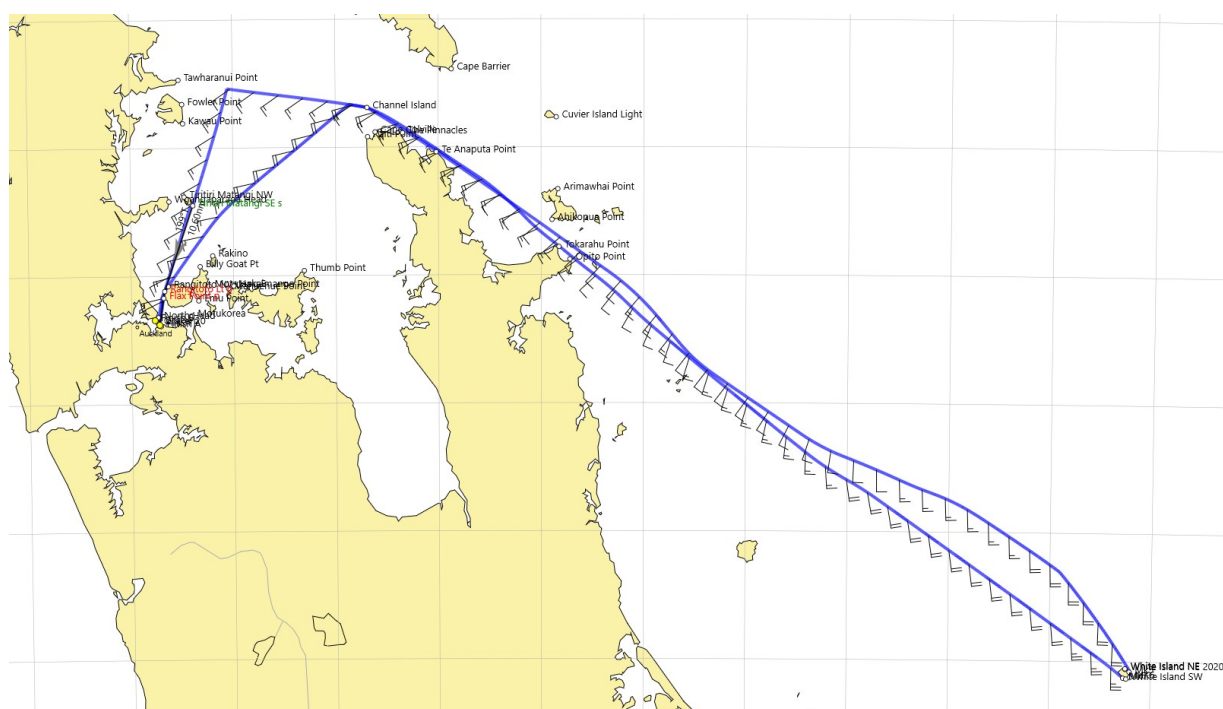
The wind was one point (not sure if this is the correct nautical term in English for a thirty-second part of a full circle) to the South of West, with the speed increasing from 12-13 knots at the start to almost 19 knots near Channel Island.

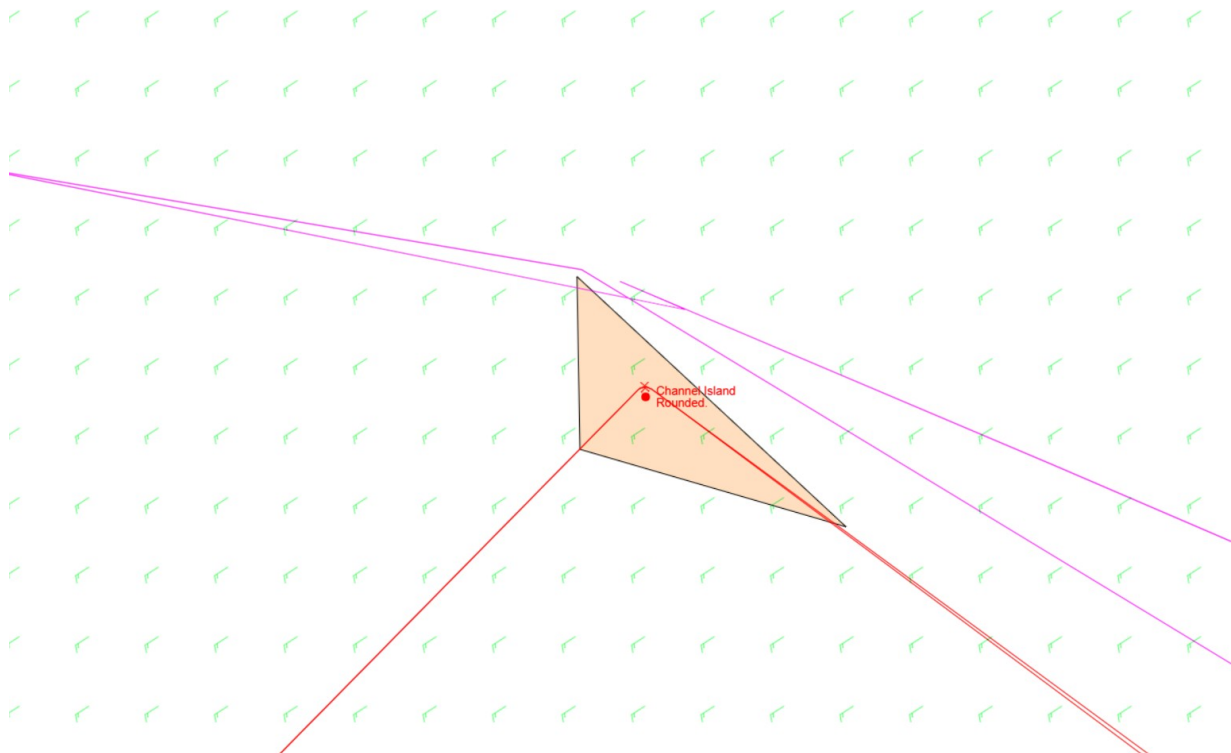
I had raced this course a few times in previous years, but the RC 44 was new to me. Therefore I didn't have my spreadsheet to calculate VMC angles and such. And unfortunately I wasn't able to connect kroppyer's spinnaker tool to the server for some unknown reason. Because the direct initial course from the start past Rangitoto Island happened to be in a dent in the RC44 polar, I used the new SOL client to steer. I started on the high side at about -113° TWA and bore away to -129° TWA once I could clear the island. From there I set a course for max. VMC at around -140° TWA until I reached 175° E.

The grid points in the SOL weather data are aligned along latitude circles and meridians, and 175° E is one of those lines for this race. Experience shows that the wind changes more rapidly at these grid lines. I have a theory that this is due to the fact that the SOL weather is actually distributed as an XML file, that is, as a text file. And this incurs a loss of numerical precision. Some day I may find the time to investigate this in more detail.

Anyway, once past 175° E my boat was in stronger wind speed and I assumed a maximum downwind VMG course. This can be seen (maybe with the help of a magnifying glass) in the figure below that shows my boat's track and wind arrows at regular intervals. On the outbound track to the South there are one and a half barbs to the West of 175° E and two full barbs (or are they called feathers?) further East.

After the 1800UT WX came in I prepared the gybe to starboard for the final $2\frac{1}{2}$ mile leg to Channel Island. The target boat speed was 13.9 knots, slightly above the 13 knots threshold that warrants a two step gybe in order to reduce the performance penalty. However, at the time my guts feeling was

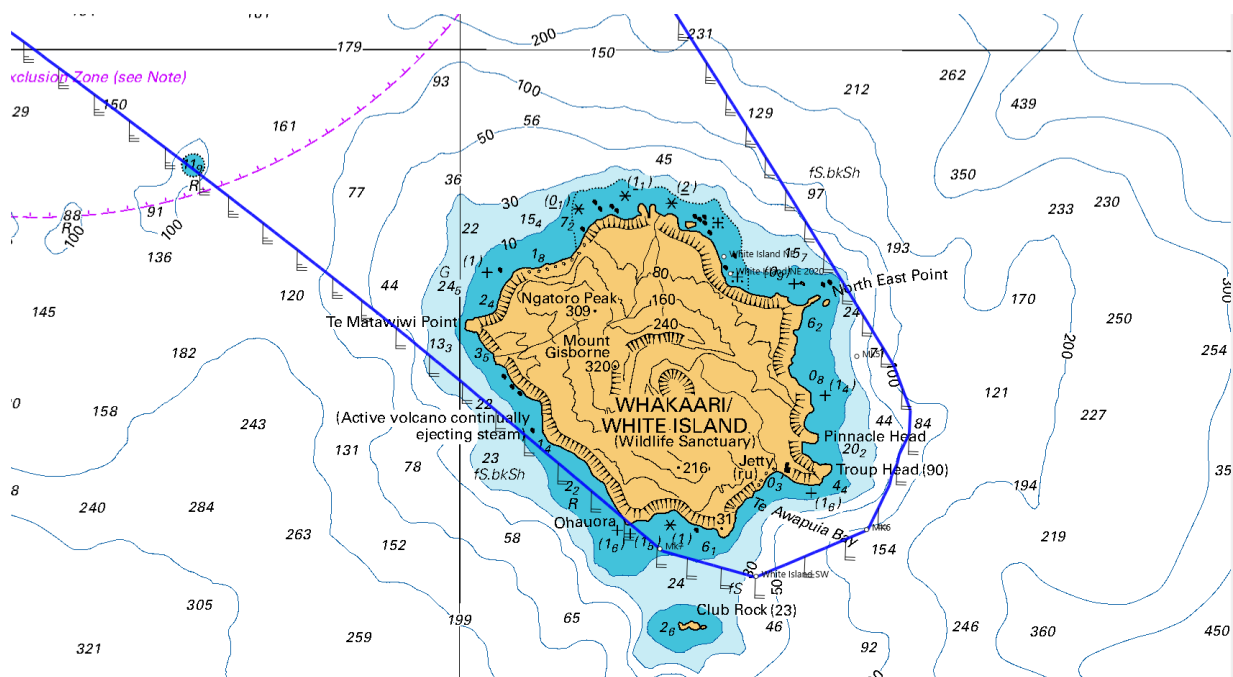




that there was not enough to be gained. Instead, I concentrated on hitting the layline with the help of the DC checker. That is shown in the next figure above. The spike in the outbound track must be an artifact, or the client could not keep up with the server updates. I did not jump the island. Having arrived at the first mark in first place, some may be wondering how I have done that. Well, that is what I have just outlined above. No hidden secrets. I had made a plan, and this time it worked well.

In my real life sailing I have been known to propose the tactic that, once in the lead, the boat must be positioned between the competition and the finish. In SOL it is different. I do most of my racing in complete solitude. I try to find the fastest course to the finish, and if I can find it, the position of the other boats don't matter. Therefore I can not comment on what others have done. I was not paying attention.

After the rounding it was time to prepare some DCs for the (010° E) night. I set a course towards White Island that kept the boat a little offshore initially. That allowed me to keep clear of the Coro-

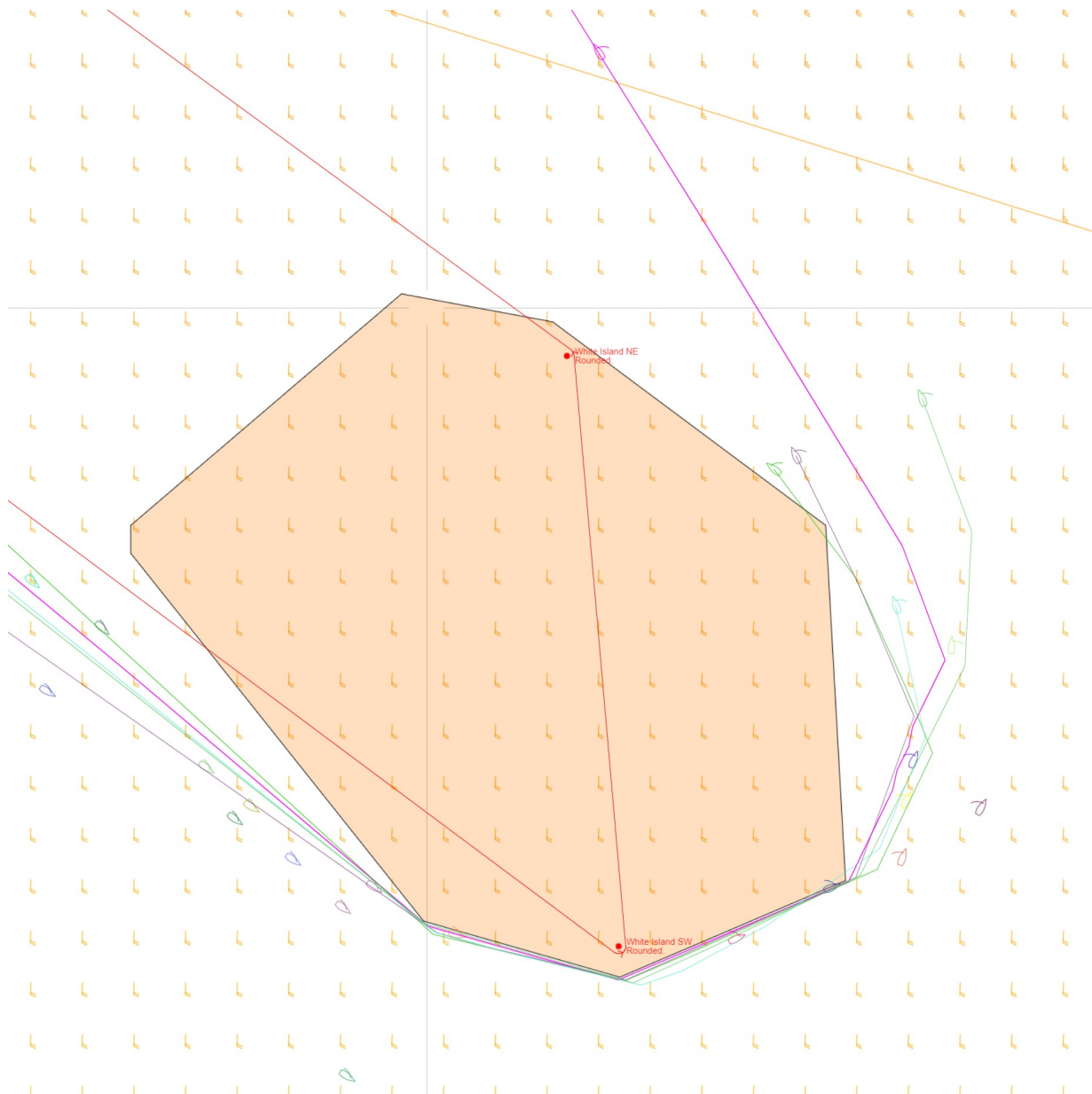


mandel Peninsula later when the wind began to back and it became necessary to head up from a broad reach to a beam reach in order to avoid falling into yet another dent of the RC44 polar. These are just annoying.

When the 0000UT WX arrived the next morning, the wind was from the South and continued to back until 170° . I kept the boat roughly on a rhumb line course slightly deeper than White Island, taking advantage of the wind that was beginning to veer at 0600UT. In the last hour before reaching the Island I used the wind shift to lift the boat to the first headland where I arrived shortly before 1000UT on Saturday.

Rounding White Island should be straightforward. First change course parallel to the shoreline at the first three headlands, then gybe off the east coast towards the fourth headland and finally assume a proper course back towards Channel Island. This is depicted on the figure above that shows the boat's track and associated wind arrows on a nautical chart, together with some marks at the vertices of the SOL coastline.

The performance of the boat suffers with each change of course, and with the wind speed around 22 knots at the time and a correspondingly high boat speed, the distance between the headlands was too short for the performance to recover. Instead the performance loss accumulates. In conditions like this, where the boat's performance is substantially less than 100%, I find it difficult to properly execute a two step gybe. Instead I tried something different. Past the third headland I continued with



some more course changes, this time between max VMG and dead downwind, until the performance dropped below 93%. Then I gybed without a further loss (See the pink track above).

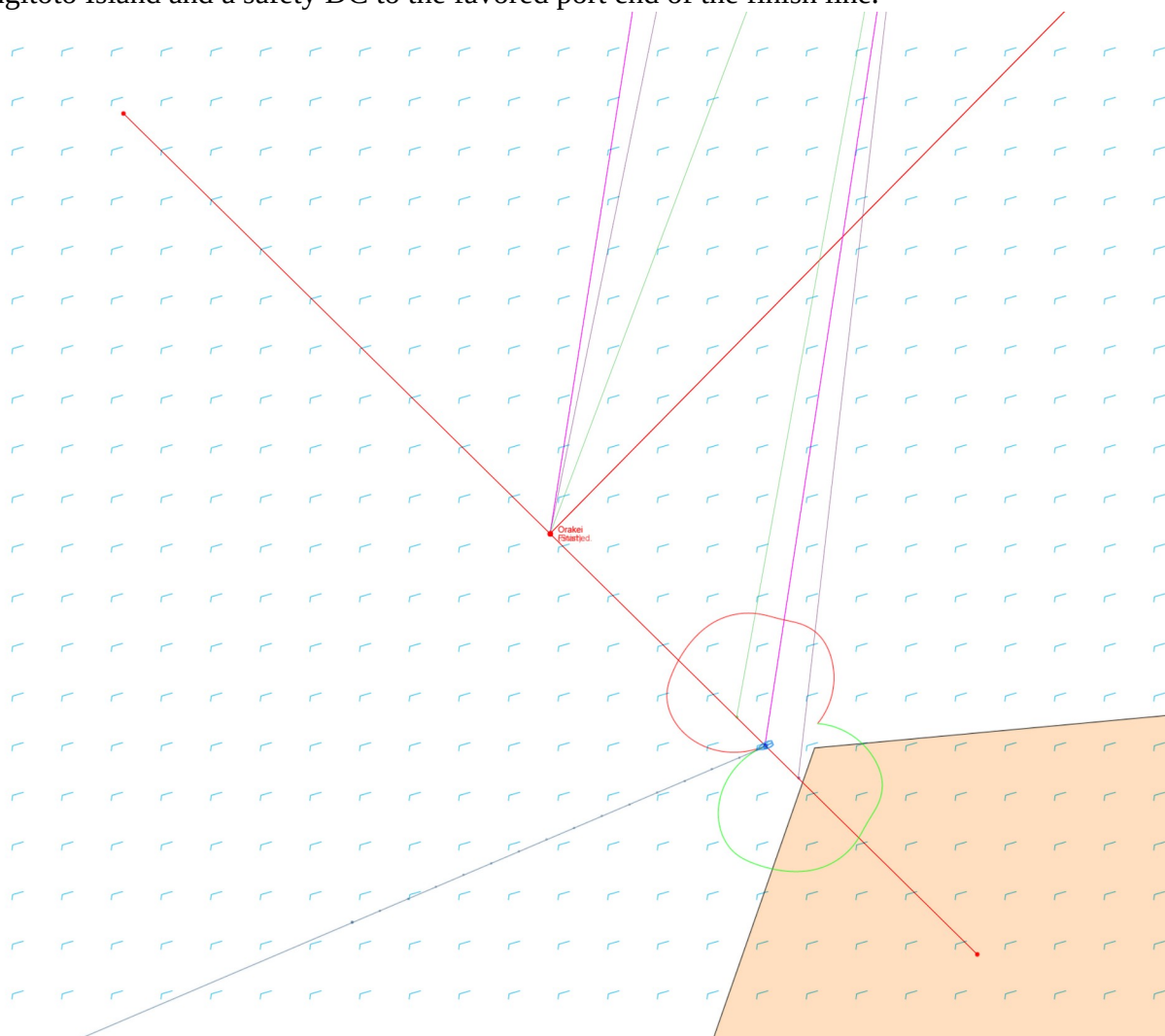
I had planned this with the DC checker, but in the end decided to improve it by hand steering. Because of that the timing of the last maneuvers was not perfect. I missed North East Point by a tenth of a mile. But overall it was a good rounding, because when the boat was on course back towards Channel Island, the performance was 93.0%. That is as good as it gets.

The section immediately past White Island was the fastest of the whole course with reaching boat speeds in excess of 15 knots. But it didn't last long and after an hour it was time for another polar hop. I kept following my routers advice and continued on a reach towards Channel Island, this time keeping a little further offshore from the Coromandel Peninsula in order to clear some of the small outlying islands.

I arrived at the mark at a quarter past 8 pm, still in the lead. The finishing leg was a beat, and the best course was to continue close hauled on port tack until 2215UT in a SW-erly increasing from 14 to 16 knots and approaching the finish again through the Rangitoto Channel. The timing of the tack was the only tactical challenge.

I decided to leave the small Tititiri Matangi Island on the way South to starboard, but when the last WX arrived 10 minutes after the tack it became apparent that I would have to sail closer to the wind than anticipated.

Pinching in a diminishing breeze is something I really hate. That must have been the reason why I tacked to port for a very short time behind the island (hardly to be seen in the first picture). Or it was one Gin Tonic too many (it had been a warm day in Germany), because tacking back before the performance loss from the first tack has recovered completely is something I really try to avoid as much as possible. Anyway, that gave me enough of a windward advantage so I could set course to Rangitoto Island and a safety DC to the favored port end of the finish line.



Then I took a nap that unintentionally lasted until the next morning and finished the race sound asleep.

There is one more thought that I'd like to share concerning the finish line, which is shown in the last figure, together with the tracks of my fellow podium finishers knockando60 to the North-West and Bimmer to the South-East.

I have no intention of spreading fake news and I think what I will tell is actually true. But I can not prove it without looking at the server code. All standard disclaimers apply and everyone is invited do only believe as much as they feel comfortable with.

The SOL game server updates a boat's position by tentatively calculating a new position from the current position and the current course and speed. Then it checks whether that position is at sea or on land. In the latter case, the boat remains at its current position and is turned head to wind. It has beached. The server proceeds to check whether the boat has crossed the finish line between old and new position only if the new position is wet, so to speak.

That means, it is entirely possible that a boat on a course that clearly crosses the finish line before it crosses the shoreline will not be scored as finished. Instead it will be parked less than one hop before the finish line.

This is from memory, but I seem to recall that it has happened in one of the birthday BBQ races South of Stockholm where the end points of the finish line have been on land too. That is the reason why I left a little extra distance to the favored intersection of the finish line and the shore. And, looking at the tracks above, I must say: Finn, you are a brave man (or an experience practice racer who knows how close to shore he can sail).

rumskib