RACE SCREEN PRINTS AND COMMENTS

SATORI SYC

FOR THE

THE VINEYARD RACE 2020 (231 nm)

(Partnered with the Stamford Yacht Club who are tracking their boats using Kattack Live)

STARTING AT 1705 UTC SEPTEMBER 4, 2020

FINISHING AT 05:16:40 UTC SEPTEMBER 6, 2020

SKIPPER - JOHN GAMBLES RCYC

(Satori finished 13th of 119 boats racing of the 144 boats registered)

(Satori now ranked 71st of 240 in SYC World Rankings after 7 races)

Vineyard Race 2020

Chart and Info: The Vineyard Race 2020 (231nm)

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Start time: Sep 04 2020 17:05:00 UTC

Start by The Cows at position: 41N00.4525 073W31.5167

Marks:

BRG is the bearing from ship to mark at scoring position.

 1: Buzzards Bay Light - Leave 41N23.8000 071W01.9900 to Starboard - BRG 248
 2: Block Island       - Leave 41N09.3000 071W33.3600 to Starboard - BRG 341
 3: The Cows           - Leave 41N00.4525 073W31.5167 to Starboard - BRG 014

Finish line:

Line by Vineyard Finish between marks A and B at positions:

 A: 41N00.5444 073W32.8877
 B: 41N01.3756 073W32.1522
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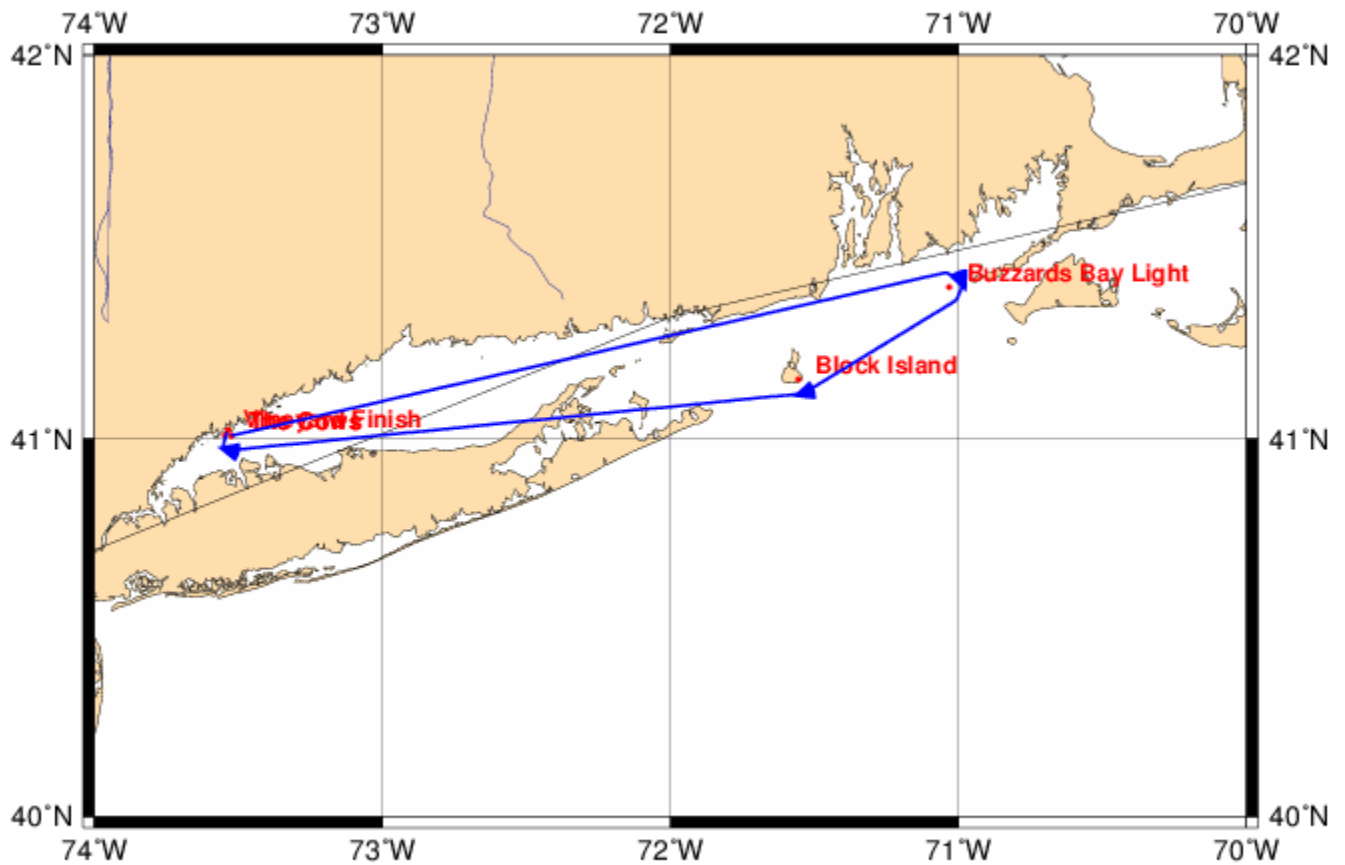
This is somewhat of a nostalgic location for me. Gordon Crowe and Margaret Whitfield of RCYC bought from its Newport based 2nd owner the 45 ft Roger Martin modified and extended yacht "Quadrille" custom built by the marine division of Goetz Composites for Nicolas Brown of the New York Yacht Club.

https://www.rodgermartindesign.com/portfolio/quadrille/

I went to Newport to help recommission it in Long Island Sound and ended up staying on to assist Gordon and Margaret in her navigation of Quadrille's delivery up to Lake Ontario and RCYC. The delivery route was Newport/Long Island Sound/East River/North on the Hudson to the Erie Canal exiting at Oswego to Lake Ontario/Rochester Yacht Club and across to Toronto and RCYC. The trip involved navigation through the converging tides of the aptly named Hell's Gate of the East River.

https://www.youtube.com/watch?v=58jLwiBYI20

We stopped at the Stamford Yacht Club which hosts this Vineyard Race and for 10 years partnered with SOL. It was there that I met an "old salt" who was exhausted from just having completed a single-handed delivery from Antigua. Up until this point all the local sailors repeated second-hand versions of "Oh god don't try and go through Hell's Gate!" The old salt said "Well they must cross the street against red lights!" "I have been through it many times. Get out your Tide Tables and plan to enter Hell's Gate at exactly the moment of the slack tide of each of the converging tides. You will not know you are in Hell's Gate!" That is exactly what we did and he was right!

The day before the actual Race SYC had a two part Practice Race that followed this course down the East River, through Hell's Gate and to the Hudson and out into the Atlantic around to Perth Amboy. The first part of the PR ended in 2 hours in Long Island Sound. I finished 4th of the 7 boats participating in this first part (who was farthest West?). Unfortunately, I could not take the time to continue overnight to Perth Amboy as I wanted to take the time to further experiment with my use of QtVLM routing software for the Race itself. My first use of QtVLM (Qt) was in the Tall Ships Asia 2020 – Race 2. I still have a lot to learn about this routing software and I must improve my 'mark-roundings' by participating in the Practice Races. Timing of mark-roundings involves properly anticipating the 'cranks'/moves of Satori by the SOL server – every 10/11 seconds but the screen distance of the move varies and is totally dependent on the screen zoom resolution! I am too cautious and lose seconds and metres on each rounding. Trying to improve I hit the Mark in the previous day's Practice Race. The importance of this skill is exemplified in this Race. I finished 13th. The boat ahead of me beat me by one second, yes, one second! The difference between 9th and 13th place was just under a minute! These races are extremely close but I was up there with the highly ranked SOLers. The 14th placed boat finished 4 minutes behind Satori, so this group of leaders was just that! Only 3 minutes separated the first 8 boats! bonknhoot, 2nd in the World Rankings, was 9th and only 49 seconds ahead of Satori. knockando60, 3rd in the World, was 8th. So while, throughout the Race, I had unrealistic hopes that there might be a chance of finishing in the Top 10, I cannot say that I did badly in my second use of the QtVLM (Qt) routing software. I do realize that many of the top-ranked SOLers, including those participating in this Race, are giving priority to their participation in the 4,000 nm Melbourne, Australia to Osaka, Japan Race which is going on simultaneously. Absent their preoccupation I might not have been able to stay in the top twenty.

Qt does not know that you do not really care when you get to the Finish Line, providing it is ahead of everyone else! It is like IRL. Should you follow the instructions of your Qt navigator or listen to your internal tactician and cover the competition? You have to do both! This resulted in me creating over 30

routes during the Race due to manual helm changes to cover the competition, as well as at every one of the 6 hour weather updates (UTC 0230, 0830, 1430, 2030). In this Race SOL was using NOAA's nam awip grib files with a grid density of 0.25 degrees. You will definitely not do well if you miss a Routing revision to incorporate a weather update. The EST 4:30 am WX was particularly tough. As sailors often say "long-distance races are won and lost at night!"

As I write this I see that as a result of my preoccupation with the Qt routing that I did not produce very many screen prints during the race.

As I am learning how to use Qt I am documenting my learning with hope of producing Introductory Manuals on the use of this French software. What exists in English is a 171 page Manual that tells you what it does but not how to actually how to use it! I have found that you actually have to have used Qt to understand the Manual! The first part of my Introductory Manual has already been uploaded to the SOL Technical Forum. I could not have done this without the mentoring generosity and patience of the top-ranked SOLers, particularly bonknhoot and Dingo, as well as local Canadian SOLer freeNeasy (Richard Kropman of the Bronte Yacht Club).

The Polars being used in this Race are those of a J-122 the on-the-water boat of bonknhoot who is ranked 2nd in the SYC World Rankings.

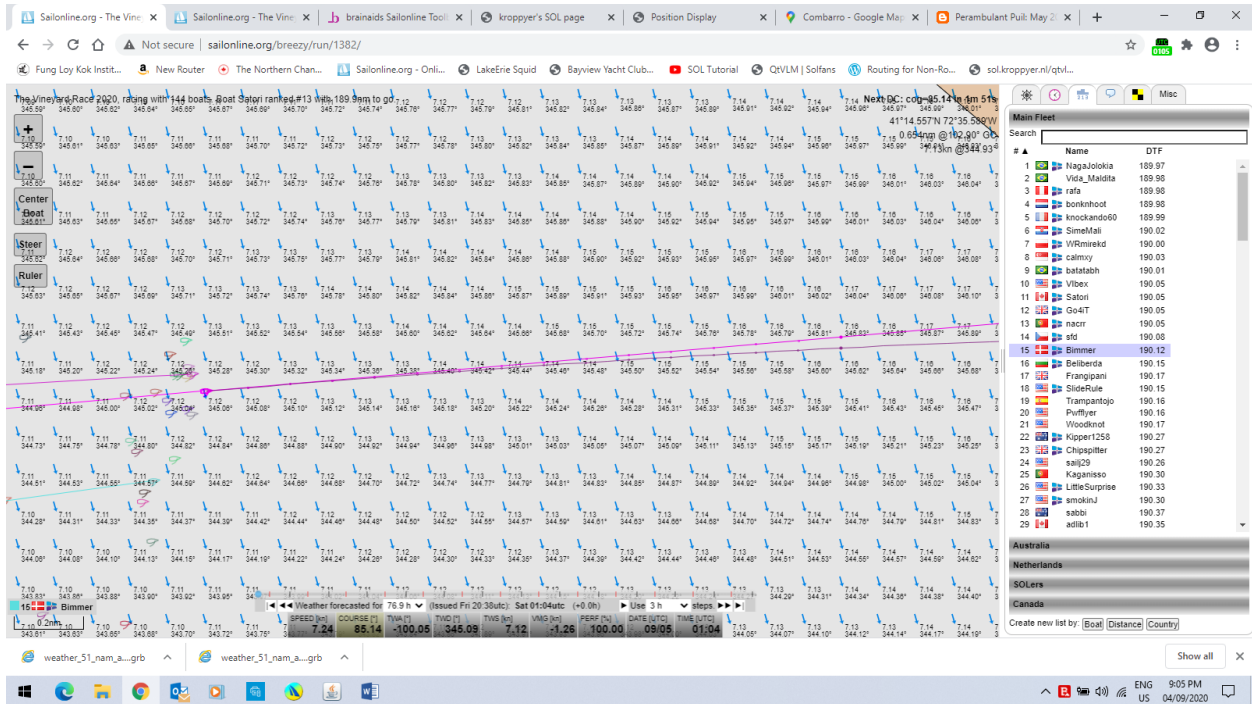http://sailonline.org/static/var/sphene/sphwiki/attachment/2020/08/19/J-122_Particulars.pdf

The Stamford Yacht Club and SailOnLIne 231 nm Vineyard Race 2020 in Long Island Sound

This screen print at UTC 0058 or 5 hours and 23 minutes into the Race of 233.40 nms with 190.7 nms to go shows that Satori, at this server crank, appears to be leading the fleet! On the next server crank they will all be ahead of Satori! The alternation goes on with each server crank. Judged by the DTF based on the rhumbline course Satori is 13th. The dashboard shows the boat speed to be 7.22 knts on a COG course of 85.13° with a TWA of -100.50. On the lower left you can see that at this point I am watching Bimmer of Denmark who is a high-ranked SOLer and an acknowledged expert on the use of QtVLM routing software. Unfortunately Bimmer, who was also preoccupied in participating in a 4,000 nm race from Melbourne, Australia to Osaka, Japan was ultimately put aground for a BBQ by his router and never finished this Race. One top-ranked competitor gone!!

This screen print is minutes later in higher resolution. Yes, I only take the screen prints when the server crank shows Satori in the lead!!

Here is another 12 minutes later.
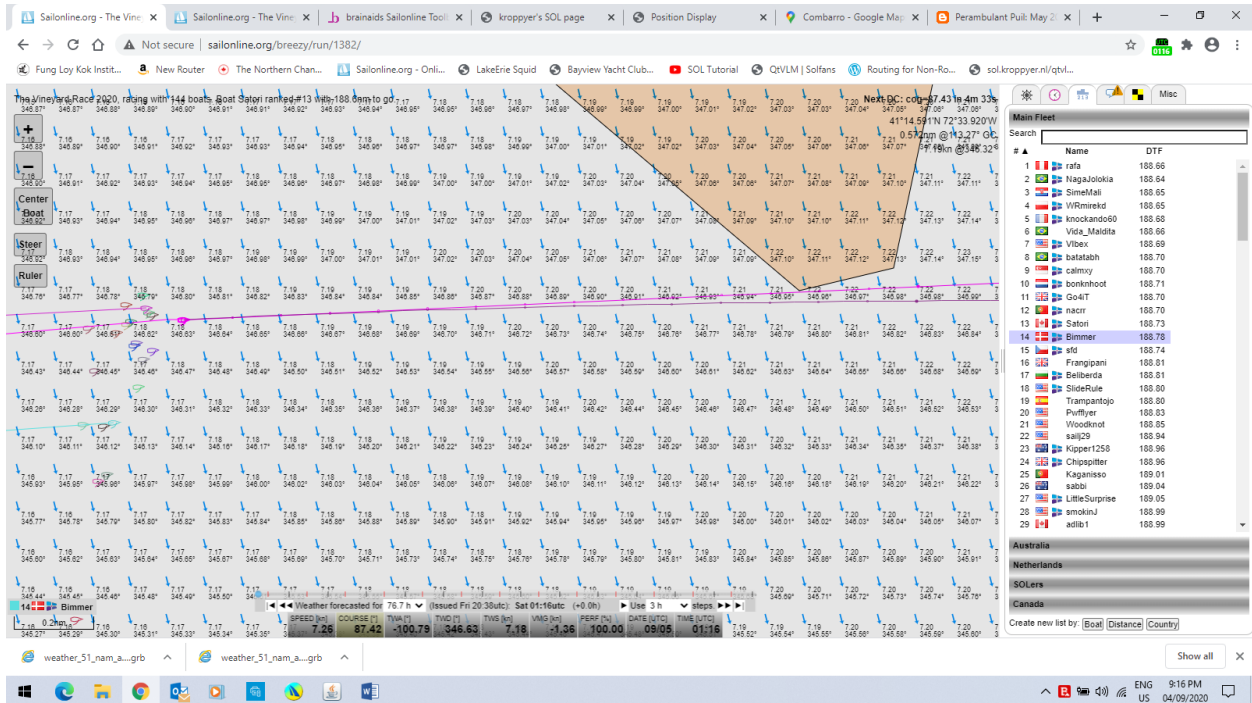
Here we are another 13 minutes later.
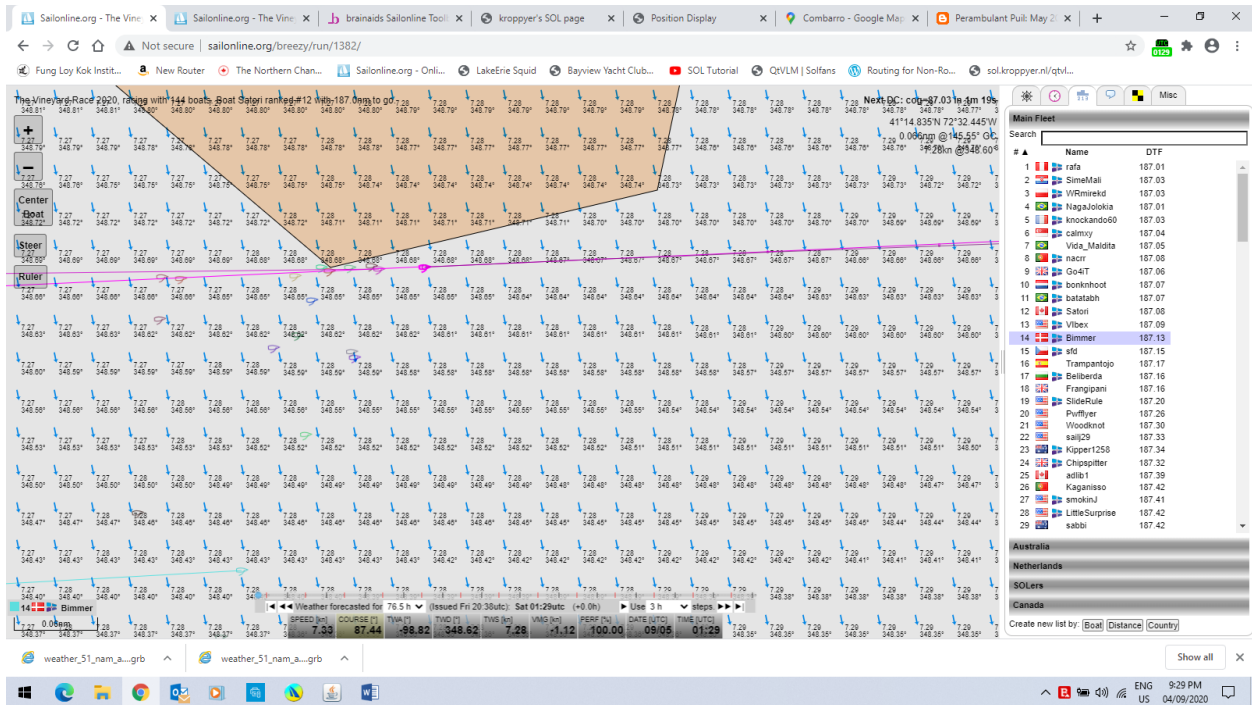
Here we are at UTC 0213 into the Race of 233.40 nm after 7 hours and 8 minutes with 181 nms to go. Satori at this server crank/move is shown in front of the leaders with a boat speed of 7.47 knts on a COG course of 87.57° and TWA of -98.48°. On the right it can be seen that this TWA is close to optimum for this J-122. The course trail of the Leader according to DTF ranking is shown north of Satori.

This screen print at 2nm resolution taken at 0532 UTC 75 nm into the Race with 159 nm to go shows how the fleet got separated by routings north and south of the island. The rhumbline is in Red.
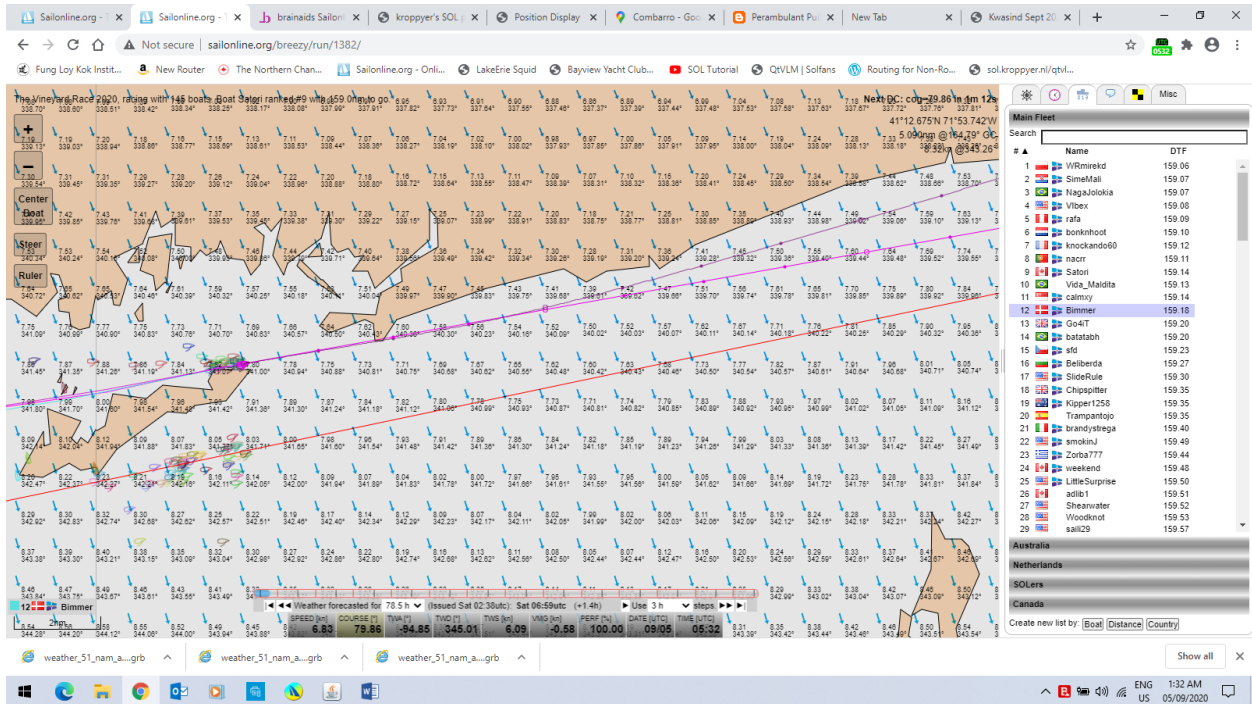
In this screen print at 1nm resolution Satori's routed course will be curving into the lift to the Buzzards Bay Light and should be a TWA advantage over the boats to Port. Note the trail of Kipper1258 (number one in World Rankings) to starboard, the Leader in the DTF Ranking shown on the right.
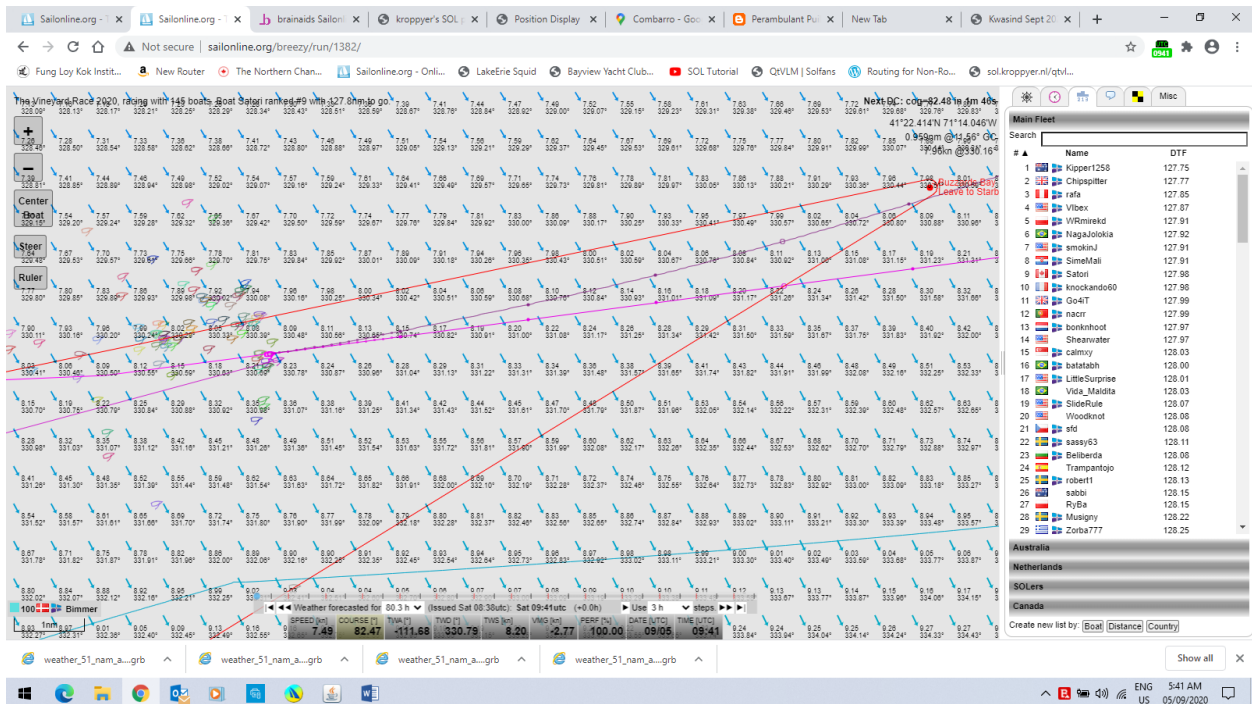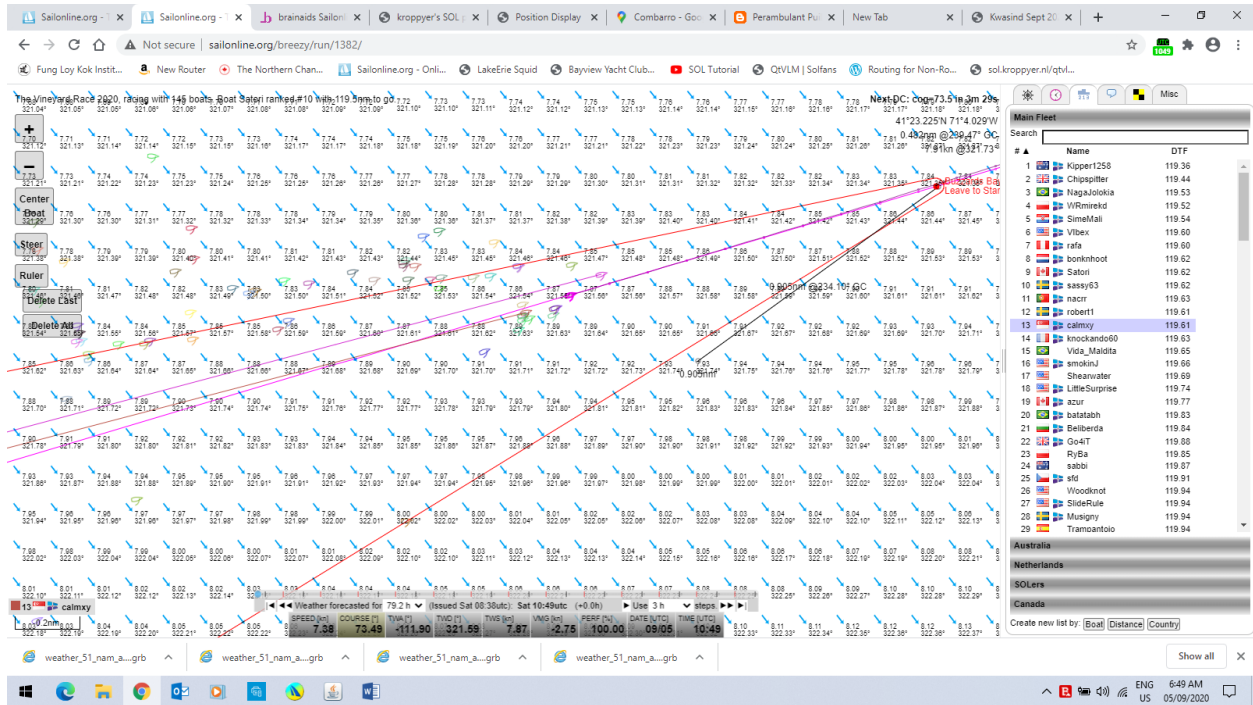
The Stamford Yacht Club and SailOnLIne 231 nm Vineyard Race 2020 in Long Island Sound

Here is the same screen print in higher resolution.
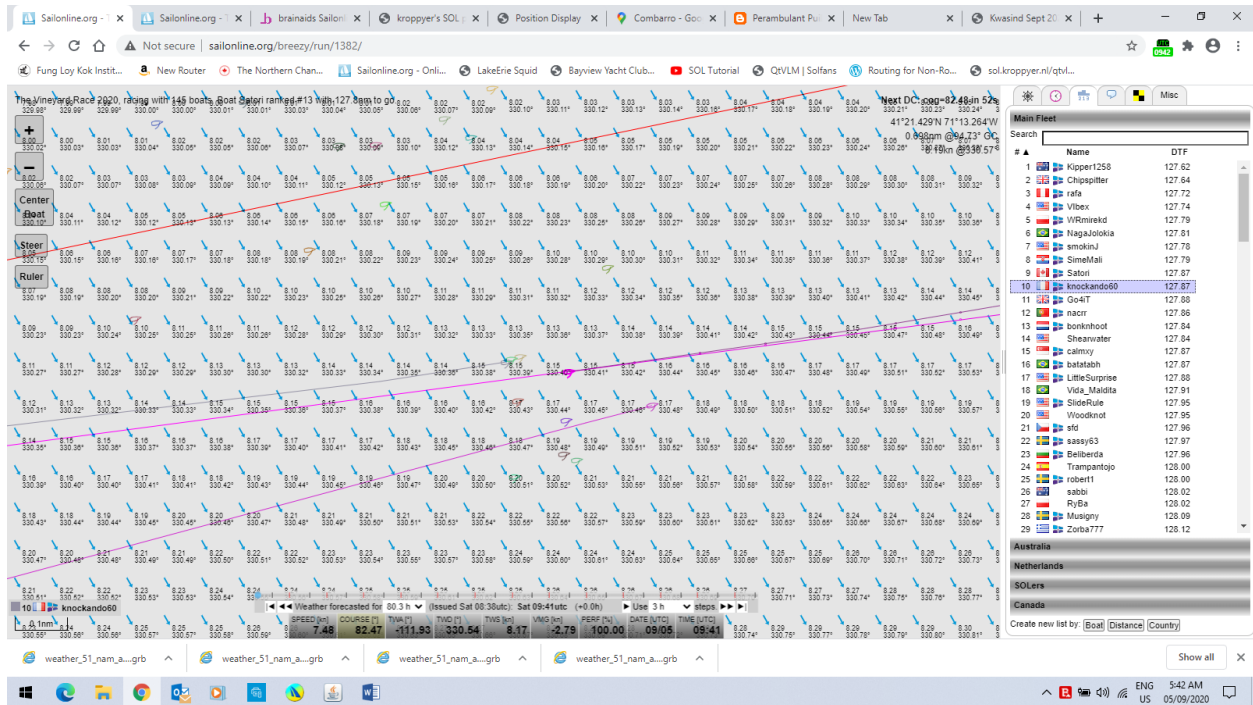
Here we are 68 minutes later approaching the Buzzard's Bay Light for rounding to starboard. I have used the ruler to draw in a black line showing the COG heading of 234° after rounding.
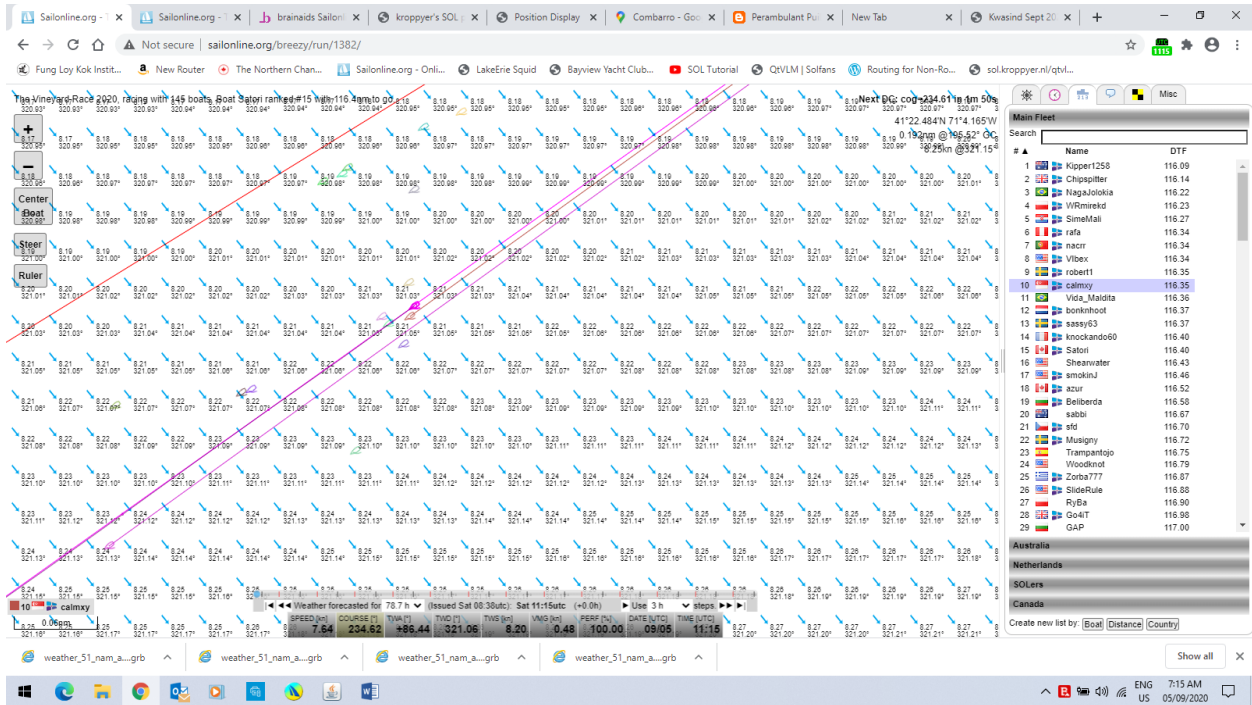
The Stamford Yacht Club and SailOnLIne 231 nm Vineyard Race 2020 in Long Island Sound

Here we are 16 minutes later after my less than perfect confirmed rounding of Buzzards Bay Light having lost 6 places in the process. At this point the DTF Ranking of 13 is likely close to actual! No kidding!!
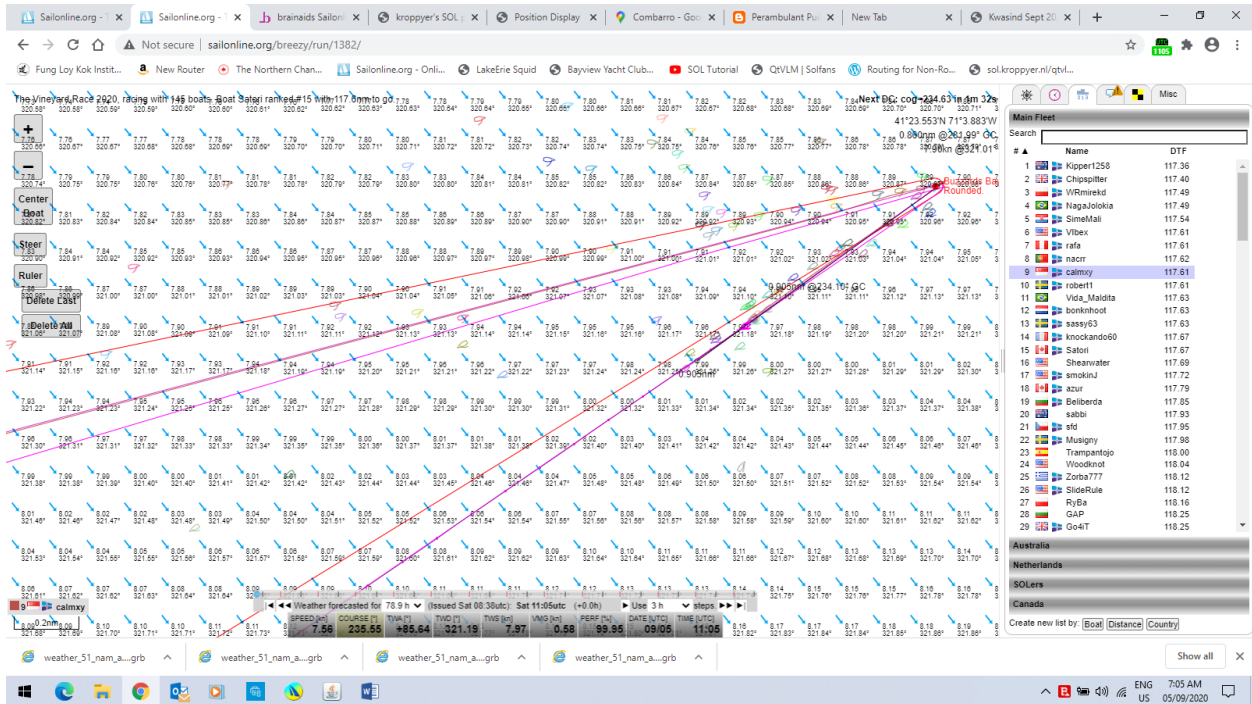

Lost 6 places in the rounding according to DTF but following screen shows that only 8 are ahead

9 hours and 36 minutes later just north of Marion NY having rounded Orient Point NY with Plum Island to starboard. Take the DTF 5th place with a grain of salt as we are just closer to the rhumbline. Note the unfavourable weather ahead, a big hit. Sorry about the lack of screen prints in the last 9 hours.
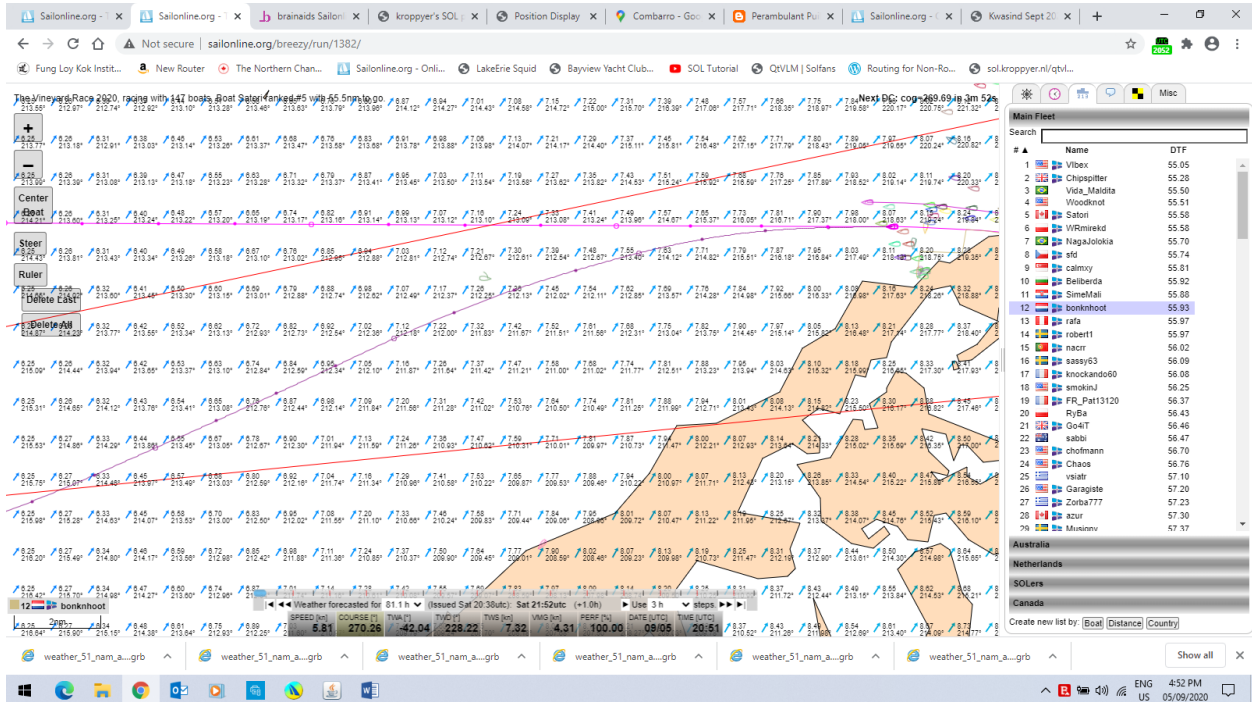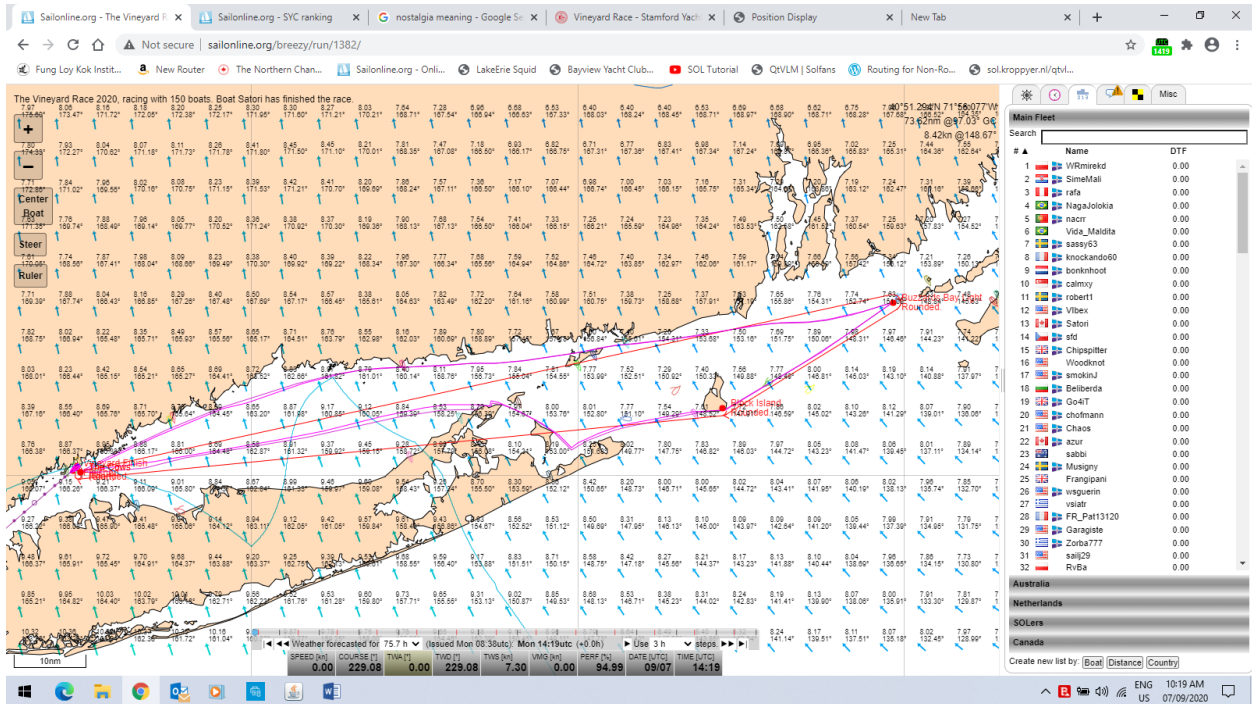

6 hours and 48 minutes later and an unfavourable header ahead. The boats to port are advantaged. Should I abandon my Qt route and join them! Yes, I ultimately do so.
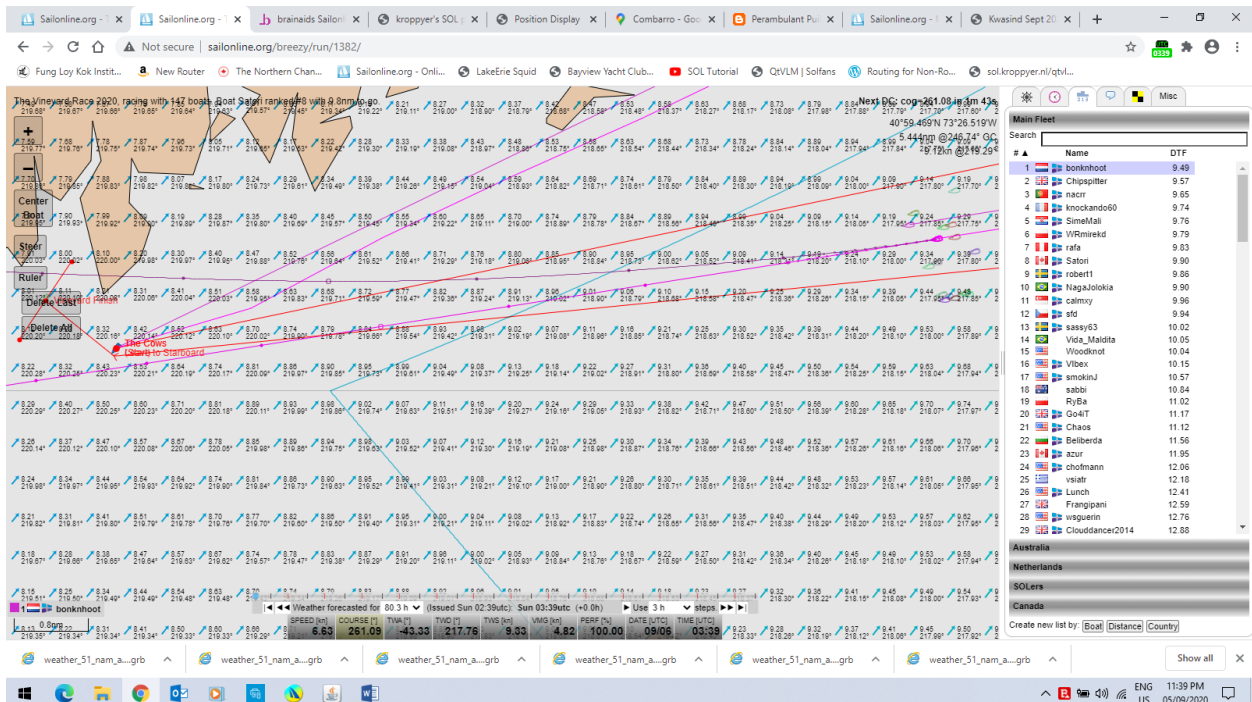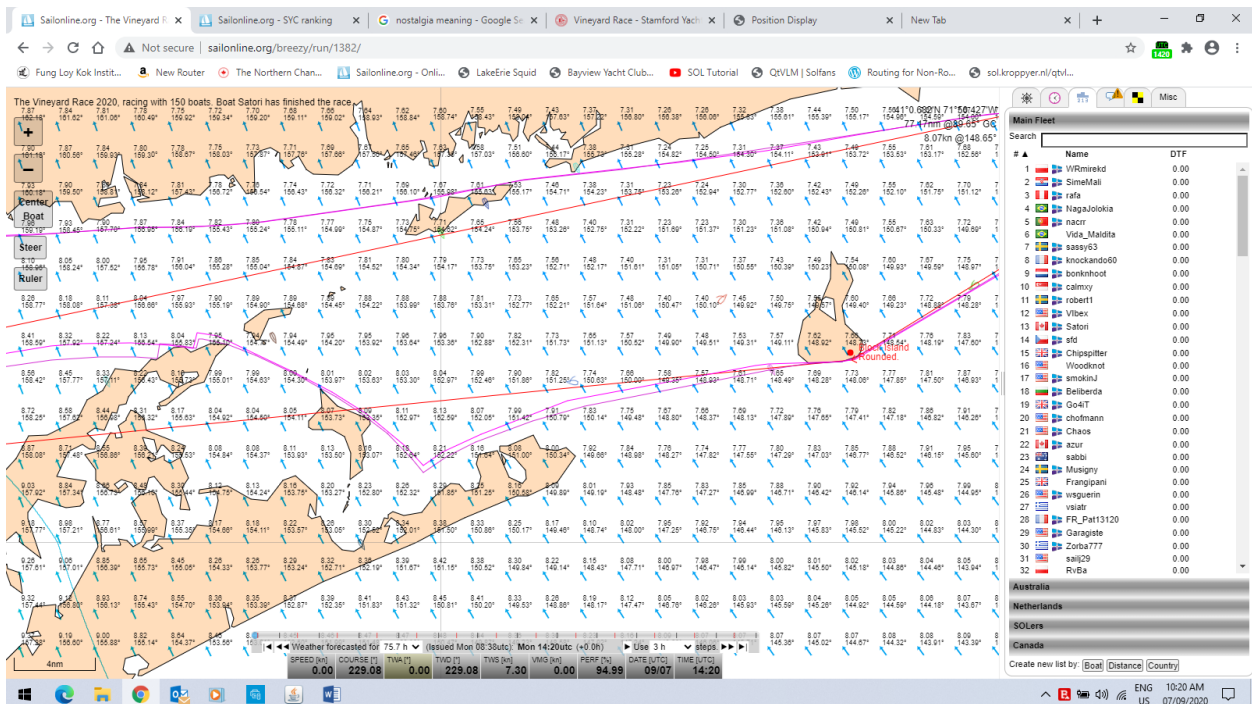
This post-race screen print shows the course sailed by Satori in purple almost indistinguishable at this resolution from the trail of the winning boat.
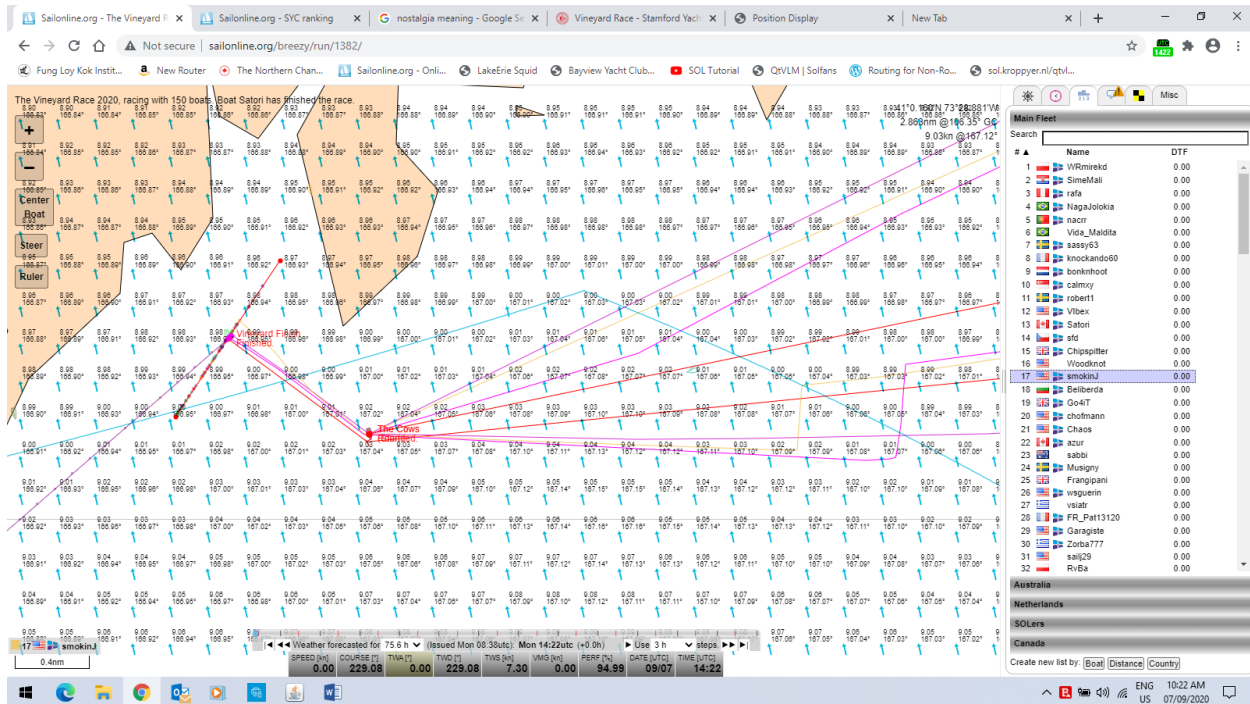

Again post-race at a higher screen print resolution is the course sailed by Satori and winner WRmirekd after rounding Block Island.
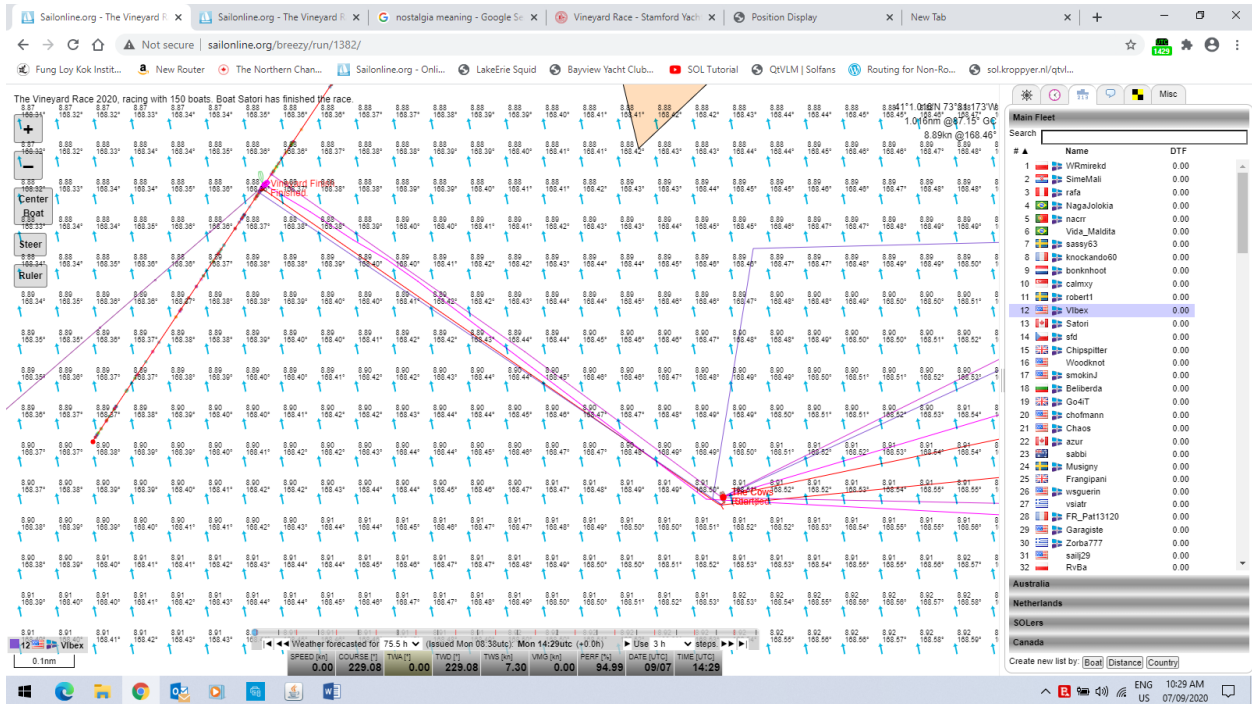
Again post-race you can see from Satori's trail that I abandoned my Qt route and tacked south to join the weather advantaged boats that were to the south of Satori with a better TWA to the Cows Mark that had to be rounded to starboard

Again post-race you can see four trail lines starting on the right, the winner, Satori in purple, the red rhumbline and the blue trail of Vibrex who finished one second ahead of Satori. Although the trail of Vibrex, who came down from the north to round the Cows Mark in this screen print makes it look like Vibrex did not round the Mark but the server would have verified the confirmed rounding. Seeing the rounding offset does let us see just how smooth the rounding actually was. I have to learn how to do this. You can see from Satori's purple trail how as Vibrex came up from behind with a better TWA resulting in a slightly higher boat speed. I moved to port to cover on a slightly shorter course to the Finish Line. This may have been a mistake of one second!

Screen print of the Leadership Board immediately after Satori's finish. You can see that at this point there are two groups of leaders. The first eight boats finished within 3 minutes and 28 seconds of one another. The ninth place boat, bonknhoot, finished 4 minutes and 4 seconds later. bonknhoot and the next 4 boats, including Satori, all finished within 49 seconds of one another. And, yes, Vibrex was just one second ahead of Satori! The fourteenth placed boat arrived 3 minutes and 25 seconds after Satori. This is unbelievably close racing after 233.4 rhumbline nms and 36 hours, 11 minutes and 40 seconds. All it takes is to miss a WX update, lose seconds on roundings, stick with your Qt routing when instincts tell you that you should have been covering the competition or worse still have your routing take you aground to a BBQ because it was not updated. Having said that I am sure that I saw calmxy (number 7 in the World Rankings) have two BBQ's and yet still beat Satori by 3 places and 38 seconds! Excellent sailing I would have to say! That shows me quite clearly that I could/should have done better!

Using QtVLM in this Race:-

Have a good look at this screen print of the Course and I will then explain how I used Qt, either rightly or wrongly, in this early stage of my learning.
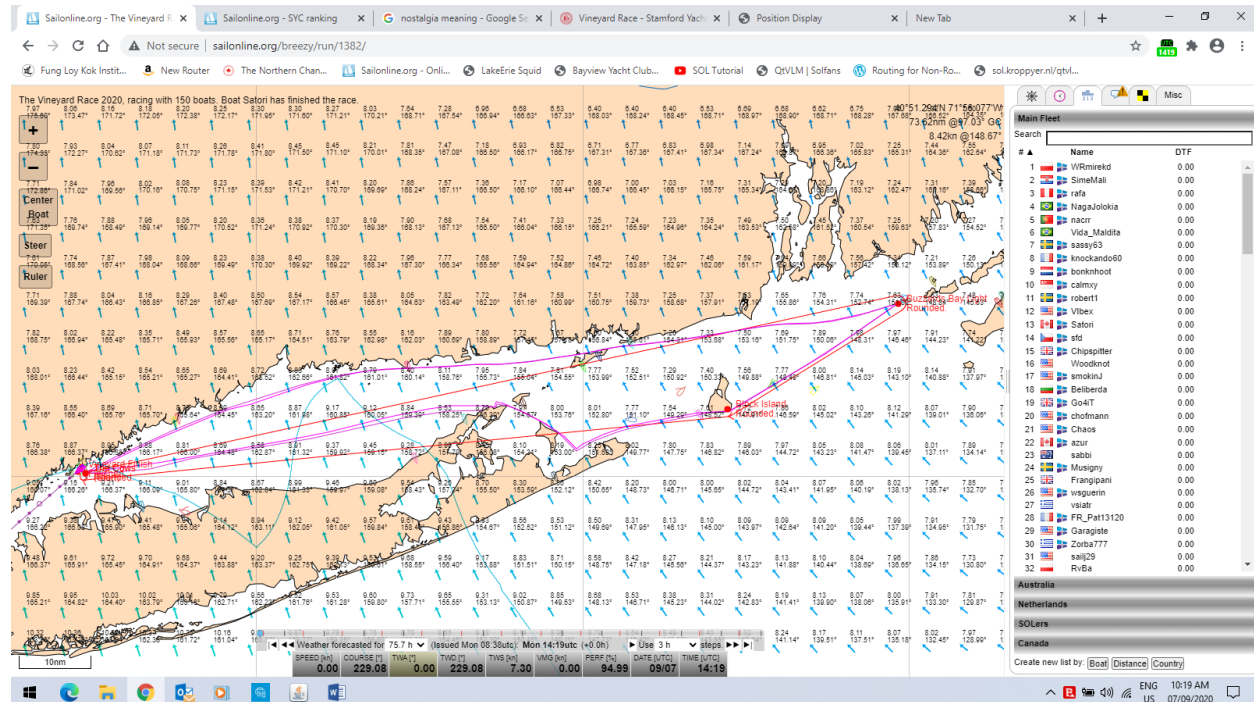
The First Leg - I did not know if it was possible to create a routing for the whole course perhaps incorporating the use of Qt Pathways tool. I created a Mark to starboard of the Buzzard's Bay Light Mark in order to make sure my route passed to starboard. I then created a route from the Start to this Buzzard's Bay Light Starboard Mark starting at the race start time of UTC 17:05. I uploaded the converted Route DC's for this route to BrainAid but did not upload them to SOL. I noted the first COG course and put it in the SOL Command Box with a Delayed Command to automatically fire at "Start". I then applied these DC's to SOL leaving out the 17:05 DC command. Immediately after the Start I recreated the Route from the Boat to the Buzzard's Bay Light Starboard Mark and uploaded the Route DC's to BrainAid Converter and then SOL, replacing the initial DC's. I wanted the Route being used to be starting at the moving boat since I would be revising it several times particularly with each WX grib download to Qt. During the first Leg I created many other routings from the boat (over 30 in the whole race), sometimes changing the percentage setting for tacks and gybes in the Qt Configuration/Boat/Tacks and Gybes from 83% for both to 98% for tacks and 93% for gybes. I then used Route Comparator to compare the ETA and the number of tacks and gybes involved and decide on the best Qt Route. I found that using 83% setting for tacks and gybes generally produced the most favourable Route and ETA. However do not ask me why!

Additional Marks Required – I created a Port Mark at Buzzard's Bay Light as well as two Marks south of Block Island, one to the West and one to the East, having not figured out how to create a route directly from Buzzard's Bay Light Port Mark to a Mark I created Starboard of Cows. Without the East and West Block Island Marks Qt always objected to the land at either the end or start of the Route creation.

Rounding Buzzard's Bay Light – I rounded manually, and I must say not that efficiently, to the Buzzard's Bay Light Port Mark. I overlaid the rounding and in the process lost a number of seconds. I do have to improve my roundings with more Practice Races. I also have in my mind the outline of an Excel program design for Mark Rounding DC's that I will be working on!! It kept me awake most of last night!

Second Leg from Buzzard's Bay Light Port Mark to Block Island East Mark – Before rounding I had created a Route from the two Marks starting at the approximate time of rounding. Noting the first COG of this course I drew in a blackline for me to follow to Block Island after rounding. Immediately after rounding I created a route from the boat to the Block Island East Mark and uploaded the BrianAid converted route DC's to SOL.

Third Leg South of Block Island – I manually helmed Satori between the East and West Block Island Marks.

Fourth Leg from the Block Island West Mark to Cows – Here is where, for convenience, I made a big mistake. I decided that I would wait to create the route until after I rounded the Block Island West Mark and while I was doing that I would just follow the course of the then Leader. Little did I know that when I had created this route and returned from the Qt screen to the SOL screen I had picked the wrong boat to follow! This Leader appeared not have uploaded the last WX in the route being sailed. In getting Satori onto this new Route I believe I lost several minutes. You will see how this course dips south because of the header being faced before going north to Orient Point. Difficult to see at this screen resolution but my Route included a tack south just at Marion NY. I abandoned the Route three times to tack south for better TWA and to cover boats to the south that had a more favourable TWA. The first two times I created several new routes from the boat to Cows for comparison using the Qt Route Comparator Tool. The third time I was within sight of the Cows Mark and took over the helm manually from this point to the Finish Line paying particular attention to cover but I was already behind them.

Rounding Cows to Starboard to the Finish Line – This was not a tight rounding and the question was the better TWA of the rhumbline or the shortest route which was to south end of the Finish Line. I initially took the better TWA along the rhumbline, like those ahead of me. Unfortunately I had not been watching Vibex who had been quite a ways north of the rhumbline before rounding Cows. IRL would AIS alerted his presence to my navigator? His course trail indicates that he executed an excellent rounding of Cows. When I did see him coming up over my port shoulder I tried to shorten my course to the Finish Line but it was too late. Vibex had the boat speed and beat Satori by that one second!

There remains a lot to be learned in the use of Qt. Needless to say again but I must improve my Mark Rounding's!