

Introduction to Sailonline and Using QtVlm

Part I – Registering for a Sailonline (SOL) Race and Linking With Routing Platform QtVlm
Via a Java Proxy Downloaded From SOL's Home Page Link to Brainaid Tools

Point Form List followed by Screen Prints and detailed instructions:-

1. Download QtVlm (Page 2)
2. Watch the N2B 30 minute tutorial and follow instructions to register (Page 2)
3. Go to the SOL Home Page (Page 2)
 - a. Register your boat and password and country
 - b. Click on Info to see Race Marks and Race Chart (Pages 2&3)
 - c. Click on Particulars to see boat being used (Pages 4&5)
 - d. Select Race by clicking on GO TO RACE (Page 6)
4. Register for Race by selecting boat (usually only one choice!) (Page 6)
5. Read the Notices posted and collapse them (Page 7&8)
6. Open a 2nd version of SOL on a separate Screen Page and keep on its Home Page
7. From 6 open Brainaid Tools on its own page and leave open
 - a. Register your boat and password, select Race and Login (Page 9)
 - b. Select Navigation Page and open and download NMEA Proxy not TCP Proxy (Page 10)
 - c. Allow Java Proxy to open by accepting Risk (due to http vs https) (Page 11)
8. Complete Proxy – enter Password, click AIS, Login and Start (Page 12)
9. Open QtVlm
 - a. QtVlm tab – Open dropdown selection “Real or Vlm Mode” and select Real (Page 12)
 - b. QtVlm tab – Open dropdown selection NMEA Connections – see Page 13 for settings
 - c. QtVlm tab – Open dropdown selection Advanced – see Page 13 for settings
10. Go back to Brainaid Tools select Polar Page and download and save Polar for boat (Page 14&15)
11. Go back to QtVlm select Boat tab and Boat Settings and Import Polar from where it was saved (Page 16)
12. On QtVlm click Start NMEA under boat image on the right of screen (Pages 16&17)
13. On QtVlm select Boat tab and click Centre on Active Boat (Page 17)
14. Go to SOL screen for the Race and under Misc tab download Race GPX File (Page 18)
15. Go back to QtVlm select Marks tab and import downloaded GPX file (Pages 18-20)

You should now have SOL and QtVlm linked with your boat and its NMEA dashboard evident on the QtVlm screen as well as the Race Marks. You are ready for the instructions for downloading a weather Grib file from Brainaid to QtVlm and preparing a QtVlm Routing, converting it to a Route for the Race, exporting and saving the Log File and uploading the Route Log Delayed Commands to SOL using Kroppyer's Conversion Tool and Brainaid's DC Editor Tool.

*This Introduction to SOL and QtVlm by **Satori** is only possible because of the generous assistance given to **Satori** by SOLers, **RainbowChaser**, **bonknhoot**, **Dingo**, **Bimmer**, **Zorba777**, **Calmx**, **ij**, **Vibex** and my collaborating SOLers, **FreeNeasy**, **wsguerin**, **FreyjaUSA**. If I have forgotten anyone I apologize because all the SOLers quickly came to my aid in the Chatroom and the Forum contains all of the answers if you have the right question. Philippe Lelong of Qt Support is there just when are in need. Keep in mind that I am a relative beginner but this will get you started. The mistakes are mine and hopefully any misdirection is minor. From here the experimenting is yours. Hoping to see you in the TOP 20 in the not too distant future. The engagement and thrill is just like IRL on-the-water. You are about to improve your long-distance racer and navigator skills that will lead you to the Podium on-the-water!*

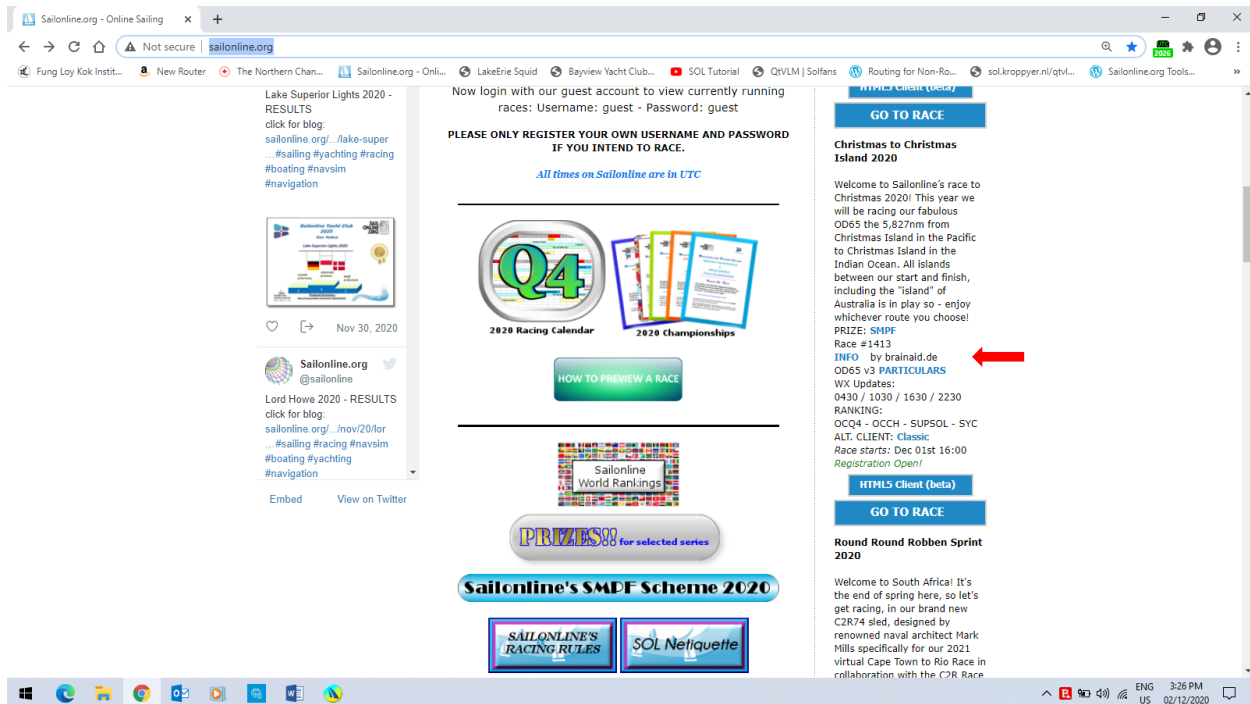
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Download QtVlm <https://www.meltemus.com/index.php/en/download> - Open QtVlm on your computer or notebook. If there is a choice do not select Virtual Racing since this is referring to QtVlm's own virtual racing platform not SOL. Select the choice for a Real on-the-water boat however it is worded.

Watch the 30 minute tutorial produced by **bonknhoot** for the Newport to Bermuda Race that provides an overview of SOL and will get your boat and country registered on SOL
<https://www.youtube.com/watch?v=PnIW03vMPKE>.

Go to the SOL Home Page <http://www.Sailonline.org/> after having registered your boat and country on SOL and select the Race that you wish to register for (I am using Christmas to Christmas Island 2020 for these instructions.)



The screenshot shows the Sailonline.org website interface. The main content area displays the 'Christmas to Christmas Island 2020' race details. A red arrow points to the 'PARTICULARS' link in the 'INFO' section. The website includes a navigation menu on the left, a central content area with various links and images, and a right sidebar with race details and a 'GO TO RACE' button. The bottom of the page shows the Windows taskbar and system tray.

Navigation menu (left):

- Lake Superior Lights 2020 - RESULTS
- click for blog: [sailonline.org/...lake-super](#)
- [#sailing](#) [#yachting](#) [#racing](#) [#boating](#) [#navsim](#) [#navigation](#)
- Nov 30, 2020
- Sailonline.org @sailonline
- Lord Howe 2020 - RESULTS
- click for blog: [sailonline.org/...nov201or](#)
- [#sailing](#) [#racing](#) [#navsim](#) [#boating](#) [#yachting](#) [#navigation](#)
- Embed View on Twitter

Main Content Area:

- Now login with our guest account to view currently running races: Username: guest - Password: guest
- PLEASE ONLY REGISTER YOUR OWN USERNAME AND PASSWORD IF YOU INTEND TO RACE.
- All times on Sailonline are in UTC
- 2020 Racing Calendar
- 2020 Championships
- HOW TO PREVIEW A RACE
- Sailonline World Rankings
- PRIZES800 for selected series
- Sailonline's SADF Scheme 2020
- SAILONLINE'S RACING RULES
- SOL Netiquette

Right Sidebar:

- HTML5 Client (beta)
- GO TO RACE
- Christmas to Christmas Island 2020
- Welcome to Sailonline's race to Christmas 2020! This year we will be racing our fabulous OD65 the 5,827nm from Christmas Island in the Pacific to Christmas Island in the Indian Ocean. All islands between our start and finish, including the "island" of Australia is in play so - enjoy whichever route you choose!
- PRIZE: SHMP
- Race #1413
- INFO by brainaid.de
- OD65 v3 PARTICULARS
- WX Updates: 0430 / 1030 / 1630 / 2230
- RANKING: OCQ4 - OCCH - SUPSOL - SYC
- ALT. CLIENT: Classic
- Race starts: Dec 01st 16:00
- Registration Open!
- HTML5 Client (beta)
- GO TO RACE
- Round Round Robben Sprint 2020
- Welcome to South Africa! It's the end of spring here, so let's get racing, in our brand new C2R74 sled, designed by renowned naval architect Mark Mills specifically for our 2021 Virtual Cape Town to Rio Race in collaboration with the C2R Race

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Click on [Info](#) to bring up the Race Marks and Chart and print it out for reference.

The screenshot shows a web browser window with the following content:

Chart and Info: Christmas to Christmas Island 2020 (5836nm)

Start time: Dec 01 2020 16:00:00 UTC

Start by Christmas Pacific at position: 01N56.8030 157W32.0033

No Marks

Finish line:

Line by Christmas Indian between marks A and B at positions:

A: 10524.2491 105E36.0322
B: 10523.7509 105E35.9678

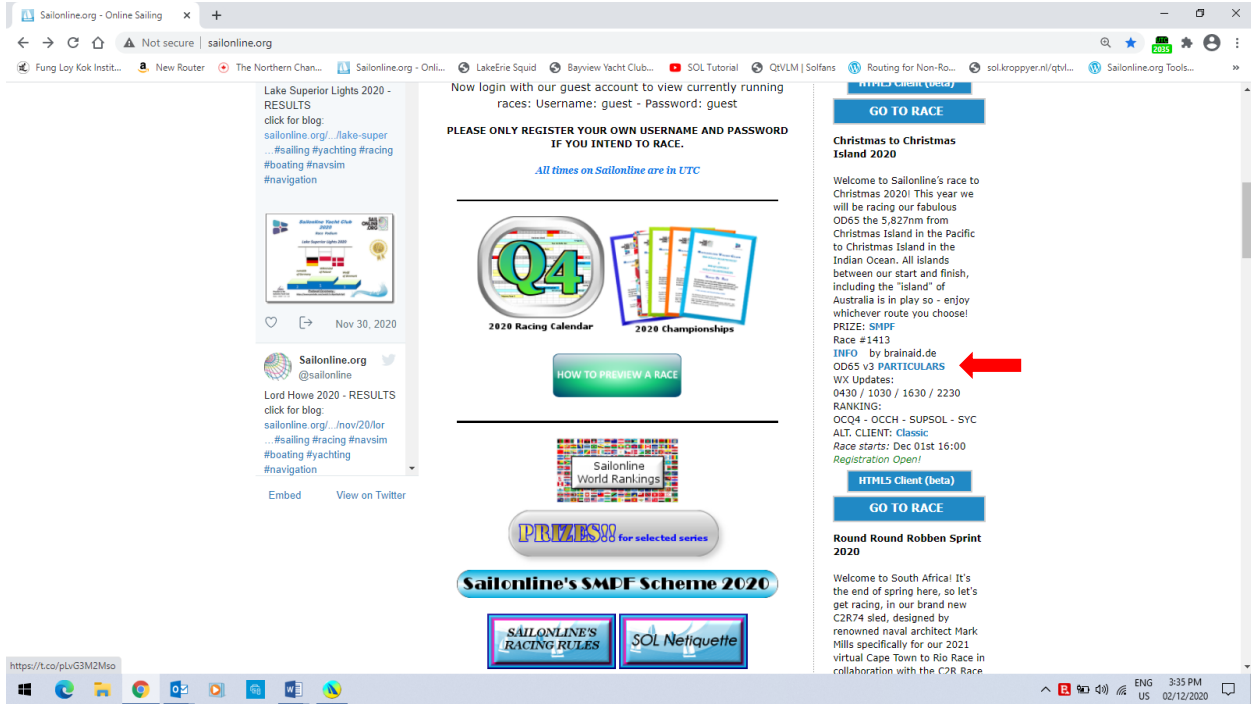
The chart below shows a map of the Pacific Ocean with a grid. The x-axis is labeled with 120'E, 150'E, and 180'. The y-axis is labeled with 0. A blue line represents the race route, starting at the 'Christmas Pacific' position and ending at the 'Christmas Indian' position. The text 'Christmas Pacific' is written in red on the map.

The browser's address bar shows the URL: sol.brainaid.de/notice/notice_1413.html. The taskbar at the bottom shows the Windows logo, several application icons, and system tray information including 'ENG US', '3:32 PM', and '02/12/2020'.

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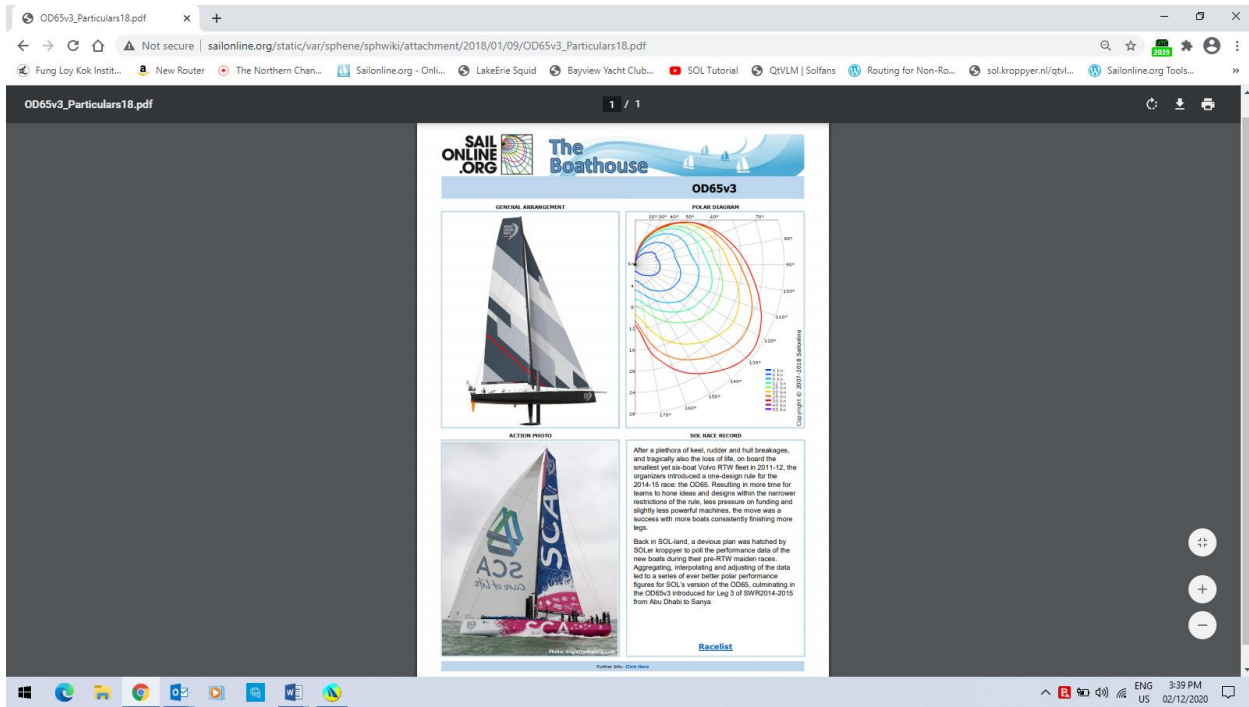
Click on [Particulars](#) to bring up the of the boat being sailed in this Race, an OD65 v3



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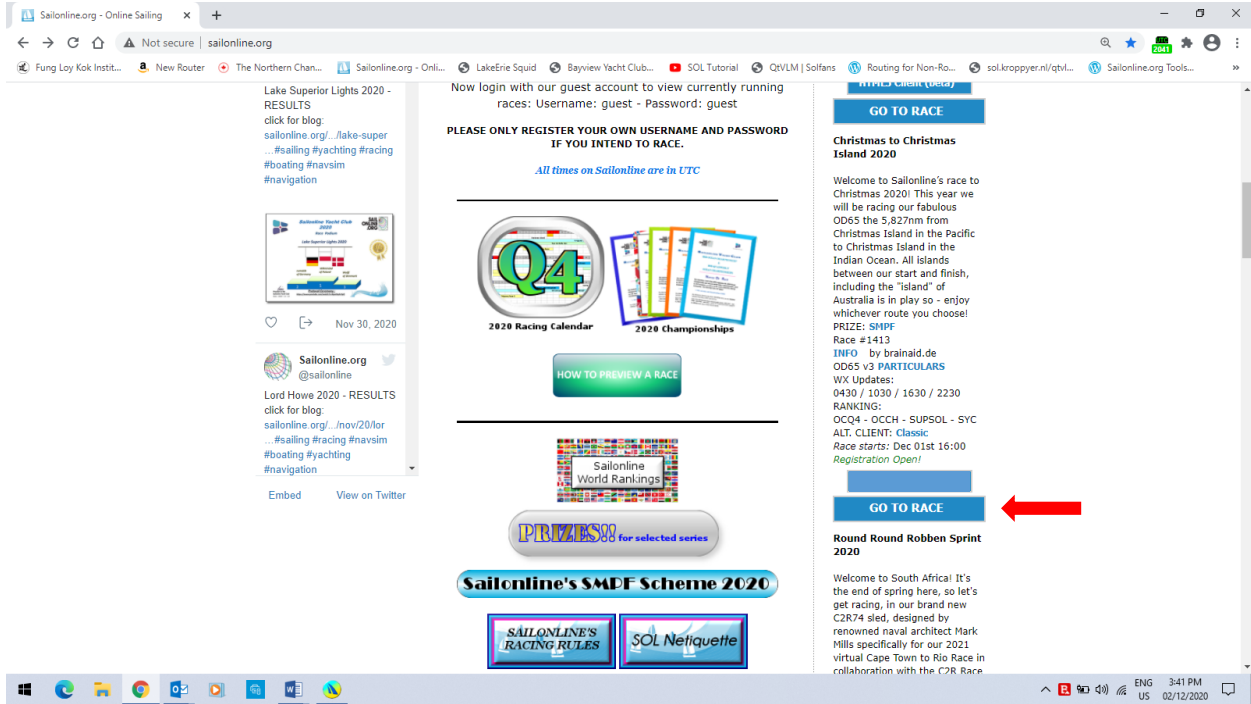
Familiarize yourself with the OD65 v3



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Register for the Race by clicking on [GO TO RACE](#)



Choose your boat and register in the race. (Normally you are only given one choice!)



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Read the Notices and collapse them

The screenshot shows the Sailonline website interface. At the top, the browser address bar displays 'sailonline.org/breezy/run/1413/'. Below the browser, a map of the Christmas Islands is visible, with a race boundary highlighted in pink. A 'Notice' dialog box is open in the center, containing the following information:

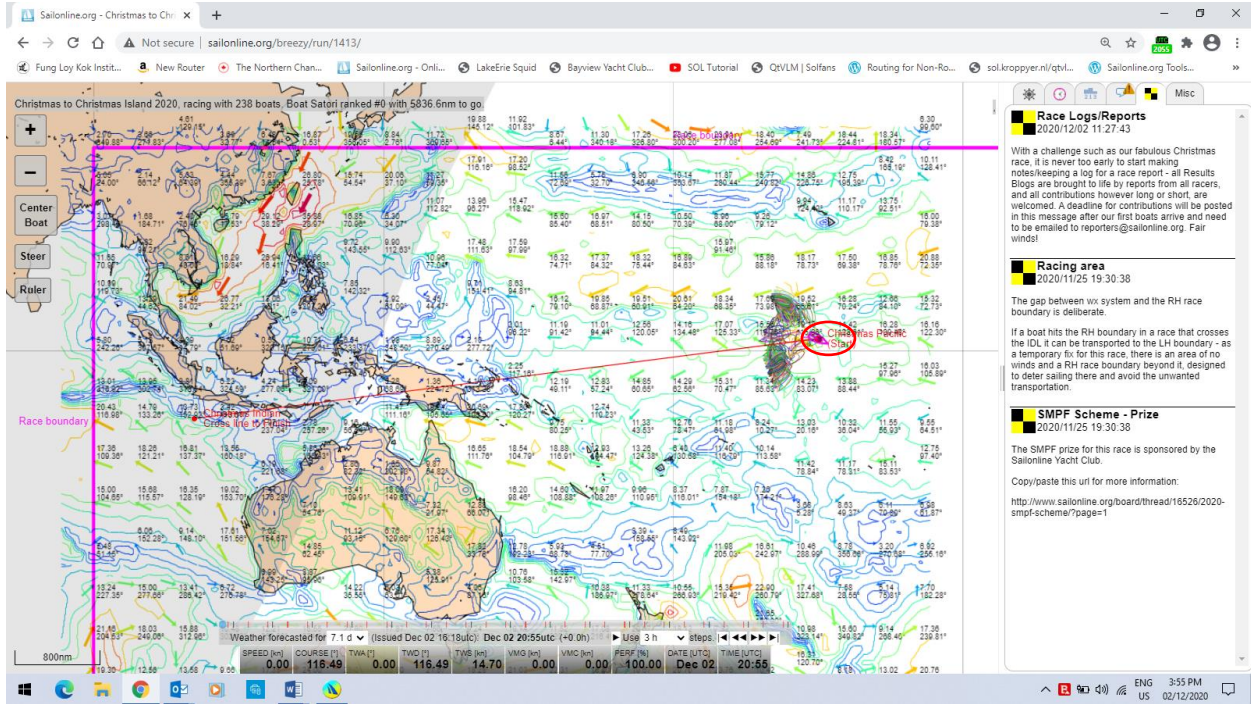
- Race Logs/Reports**
2020/12/02 11:27:43
With a challenge such as our fabulous Christmas race it is never too early to start making notes/keeping a log for a race report - all Results Blogs are brought to life by reports from all racers, and all contributions however long or short, are welcomed. A deadline for contributions will be posted in this message after our first boats arrive and need to be emailed to reporters@sailonline.org. Fair winds!
- Racing area**
2020/11/25 19:30:38
The gap between wx system and the RH race boundary is deliberate.
If a boat hits the RH boundary in a race that crosses the IDL it can be transported to the LH boundary - as a temporary fix for this race, there is an area of no winds and a RH race boundary beyond it, designed to deter sailing there and avoid the unwanted transportation.
- SMPF Scheme - Prize**
2020/11/25 19:30:38
The SMPF prize for this race is sponsored by the Sailonline Yacht Club.
Copy/paste this url for more information:
<http://www.sailonline.org/board/thread/16526/2020-smfp-scheme/?page=1>

At the bottom of the dialog box is an 'OK' button. To the right of the dialog box, a sidebar contains a 'Misc' section with a 'Race Logs/Reports' link and a 'Racing area' link, both with the same date and time as the notice. Below these links is a 'SMPF Scheme - Prize' link with the same date and time. The bottom of the screenshot shows a Windows taskbar with various application icons and a system tray displaying 'ENG 3:52 PM US 02/12/2020'.

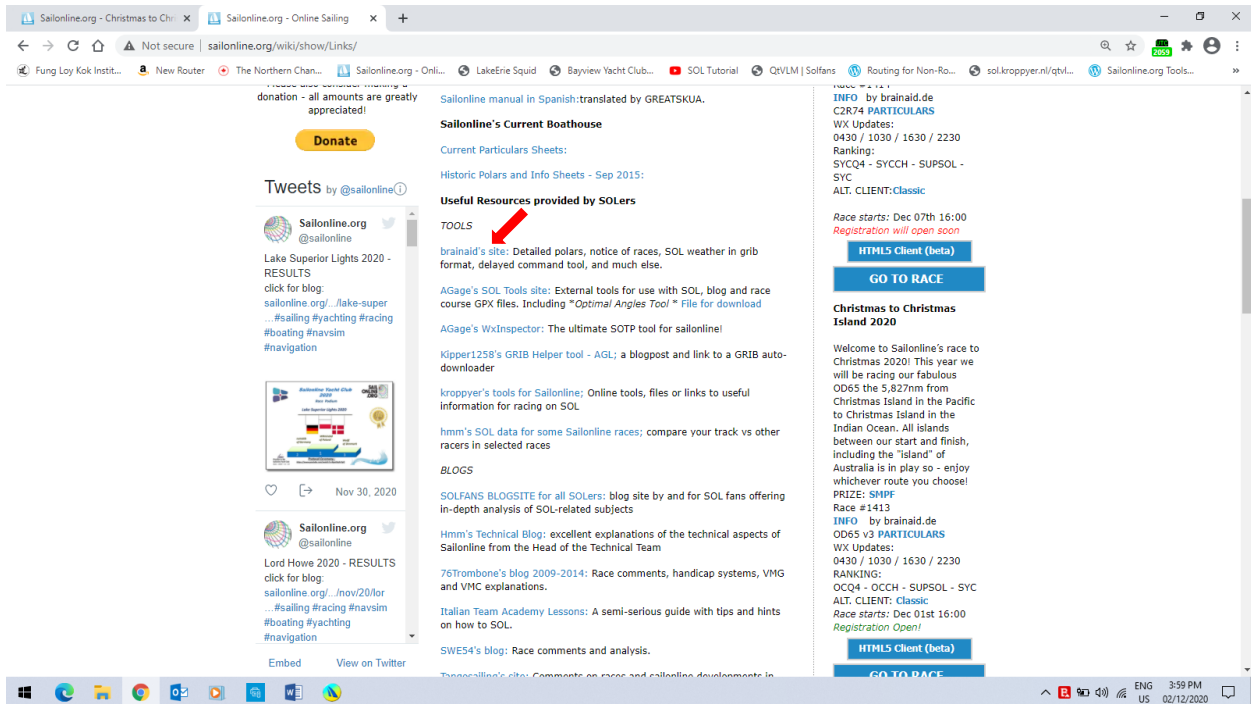
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Satori is not racing in this Race which has already started and Satori remains on the Starting Line



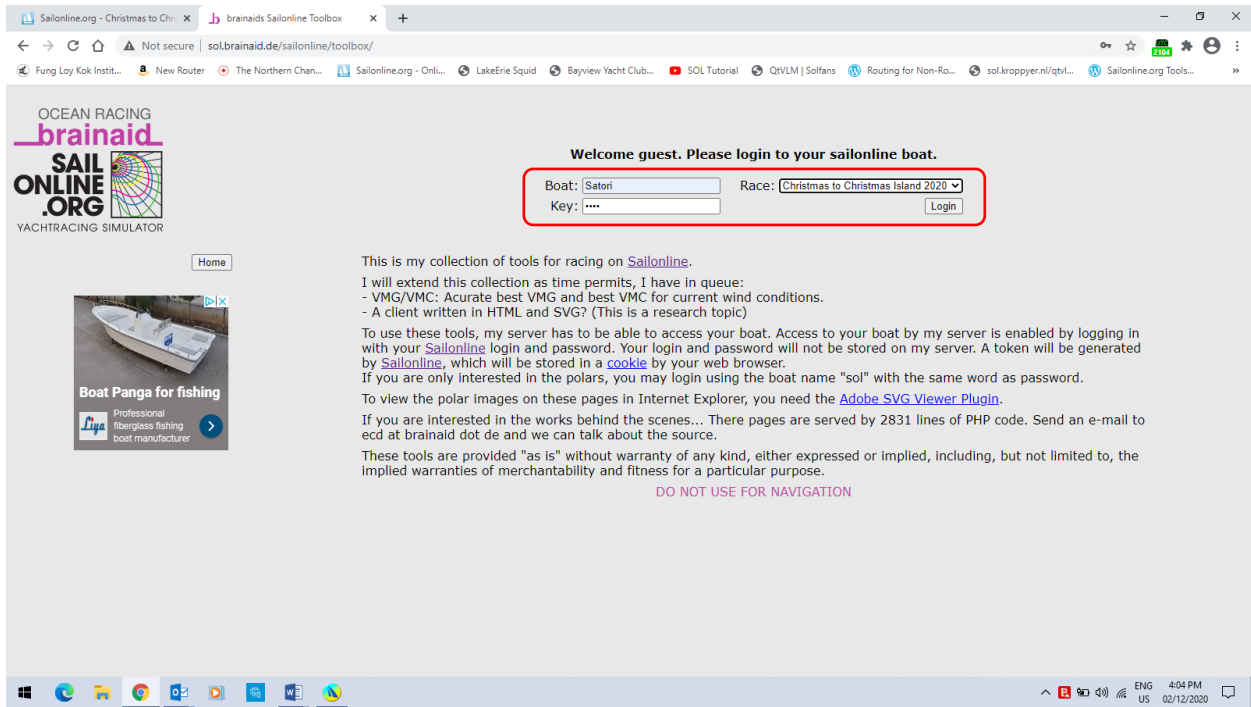
Now open a 2nd version of SOL on a separate screen page and click on to [Links](#) on the Home Page and scroll down to [Tools](#) and click and open [Brainaid’s](#) site.



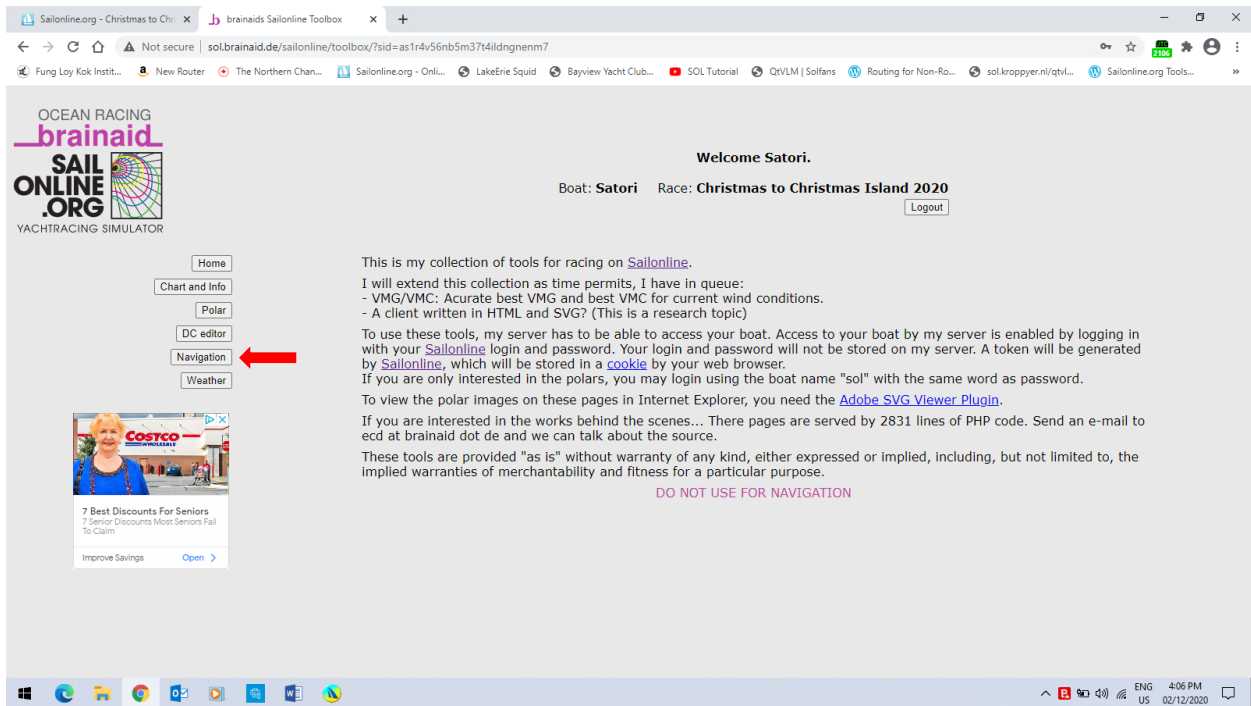
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Type in your boat name and password. Select the Race from the dropdown menu and Login



Select **Navigation** on the Brainaid Home Page



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You are now on the **Navigation** Page. Select the line marked by the red arrow NOT the box marked **X**

OCEAN RACING
brainaid
SAIL ONLINE .ORG
YACHTRACING SIMULATOR

Welcome Satori.
Boat: Satori Race: Christmas to Christmas Island 2020 [Logout](#)

LAT	N 01°56.8030'	TWD	116.54°	COG	116.54°	SOG	0.00KT
LON	W 157°32.0033'	TWS	14.72KT	TWA	000.00°	PERF	100.00%
DATE	2020-12-02	DTG	5836.63NM	WPT	0	VMG	0.00KT
TIME	21:10:34	DBL	440.31NM	RANK	220		

The brainaid NMEA proxy will connect your boat on Sailonline to any application capable of receiving NMEA data over TCP/IP.
If there is no fancy NMEA proxy button below, please try this link to start the proxy:
<http://sol.brainaid.de/sailonline/toolbox/NMEAproxy.jnlp?race=1413&boat=Satori>

Version: 2020/06/04 15:34:16

These NMEA sentences are generated from your Sailonline boat data:

- GGA - Global positioning system fix data
- GSA - GNSS DOP and active satellites⁽¹⁾
- GSV - GNSS satellites in view⁽¹⁾
- HDT - True heading
- MWD - Wind direction and speed
- RMB - Recommended minimum navigation information
- RMC - Recommended minimum specific GNSS data
- RTE - Routes
- VHW - Water speed and heading
- VWR - Relative wind speed and angle
- VWT - True wind speed and angle

Download this site and you will first get a warning which you have to ignore and keep the site

OCEAN RACING
brainaid
SAIL ONLINE .ORG
YACHTRACING SIMULATOR

Welcome Satori.
Boat: Satori Race: Christmas to Christmas Island 2020 [Logout](#)

LAT	N 01°56.8030'	TWD	116.60°	COG	116.60°	SOG	-0.00KT
LON	W 157°32.0033'	TWS	14.77KT	TWA	000.00°	PERF	100.00%
DATE	2020-12-02	DTG	5836.63NM	WPT	0	VMG	-0.00KT
TIME	21:18:33	DBL	442.47NM	RANK	220		

The brainaid NMEA proxy will connect your boat on Sailonline to any application capable of receiving NMEA data over TCP/IP.
If there is no fancy NMEA proxy button below, please try this link to start the proxy:
<http://sol.brainaid.de/sailonline/toolbox/NMEAproxy.jnlp?race=1413&boat=Satori>

Version: 2020/06/04 15:34:16

These NMEA sentences are generated from your Sailonline boat data:

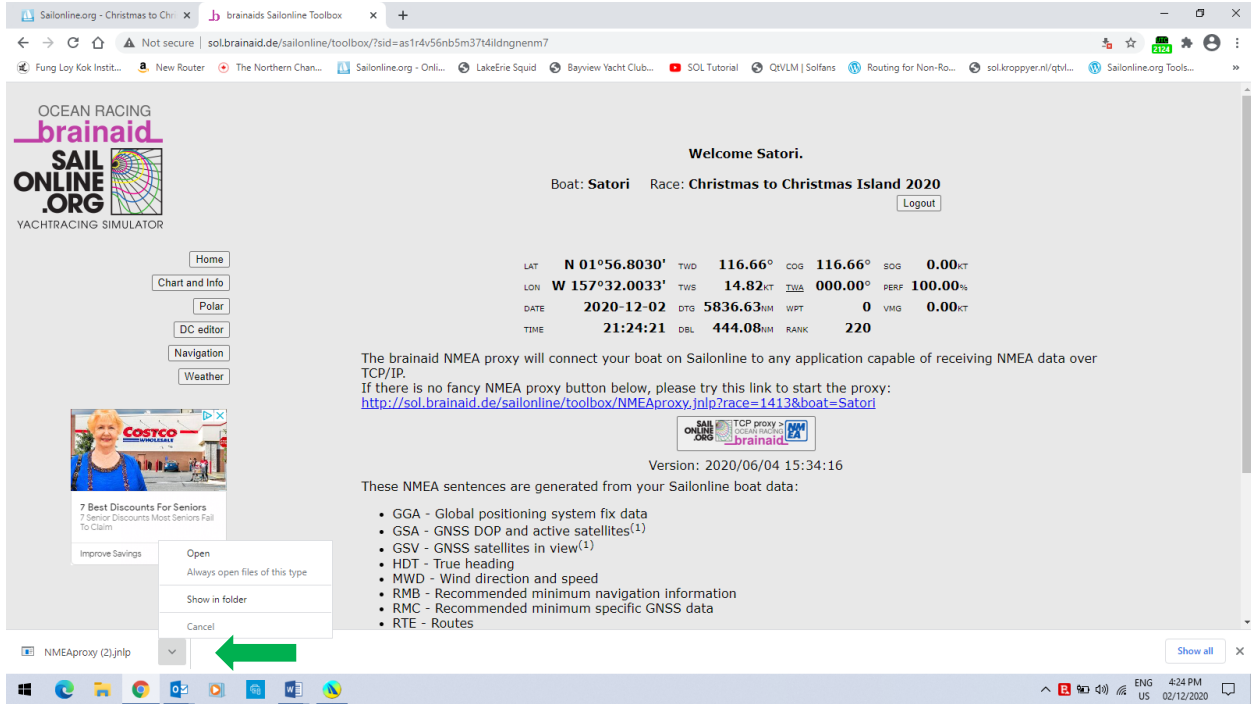
- GGA - Global positioning system fix data
- GSA - GNSS DOP and active satellites⁽¹⁾
- GSV - GNSS satellites in view⁽¹⁾
- HDT - True heading
- MWD - Wind direction and speed
- RMB - Recommended minimum navigation information
- RMC - Recommended minimum specific GNSS data
- RTE - Routes

This type of file can harm your computer. Do you want to keep NMEAproxy (2).jnlp anyway?

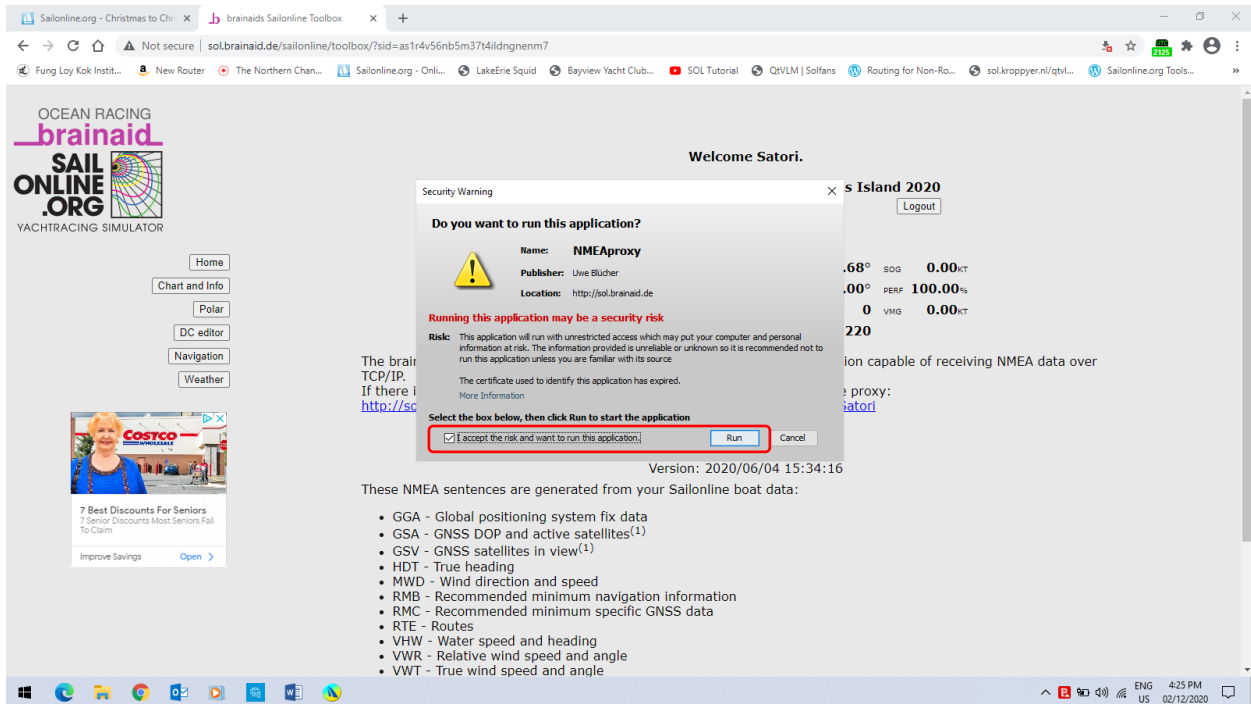
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Open the NMEA Proxy



You will get this warning from Java. Accept the risk and click Run



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The Java Proxy screen opens. Put in your SOL password. Click Login which should activate the screen. Note IP address and Port for information purposes and reference when you are in QtVlm settings. See that AIS instrument port is clicked and Press Start. Leave Proxy open.

brainaid NMEA proxy 2020/06/04 15:34:16

Satori Christmas to Christmas Island 2020 inb5m374ildngnm7

Password: [masked] Login

Instruments
IP: John-PC/192.168.4.26
Port: 5010

AIS
 Use Instruments Port Filter
Port: 5010

Start Quit

Chart and Info
Polar
DC editor
Navigation
Weather

Costco
7 Best Discounts For Seniors
7 Senior Discounts Most Seniors Fall To Claim
Improve Savings Open

Welcome Satori.
Boat: Satori Race: Christmas to Christmas Island 2020 Logout

LAT	N 01°56.8030'	TWD	116.75°	COG	116.75°	SOG	-0.00KT
LON	W 157°32.0033'	TWS	14.88KT	TWA	000.00°	PERF	100.00%
DATE	2020-12-02	DTG	5836.63NM	WPT	0	VMG	-0.00KT
TIME	21:30:36	DBL	445.69NM	RANK	220		

The brainaid NMEA proxy will connect your boat to Sailonline to any application capable of receiving NMEA data over TCP/IP.
If there is no fancy NMEA proxy button below, please try this link to start the proxy:
<http://sol.brainaid.de/sailonline/toolbox/NMEAproxy.jsp?race=14138&boat=Satori>

Version: 2020/06/04 15:34:16

These NMEA sentences are generated from your Sailonline boat data:

- GGA - Global positioning system fix data
- GSA - GNSS DOP and active satellites⁽¹⁾
- GSV - GNSS satellites in view⁽¹⁾
- HDT - True heading
- MWD - Wind direction and speed
- RMB - Recommended minimum navigation information
- RMC - Recommended minimum specific GNSS data
- RTE - Routes
- VHW - Water speed and heading
- VWR - Relative wind speed and angle
- VWT - True wind speed and angle

Now open QtVlm and select the dropdown under QtVlm and select Real or Vlm mode and click on REAL when it opens for selection and while there go to Configuration

qtVlm 64 bits 5.9-14-p1 (meltexus) slot1: weather_150_vrfems_20201130_1628.grb slot2: GFS20201201030100309.grb (from 11/30/2020 16:00 to 12/16/2020 18:00)

QtVlm View Grid Boat Routings Routes Pathways Barriers Marks Contribute Help

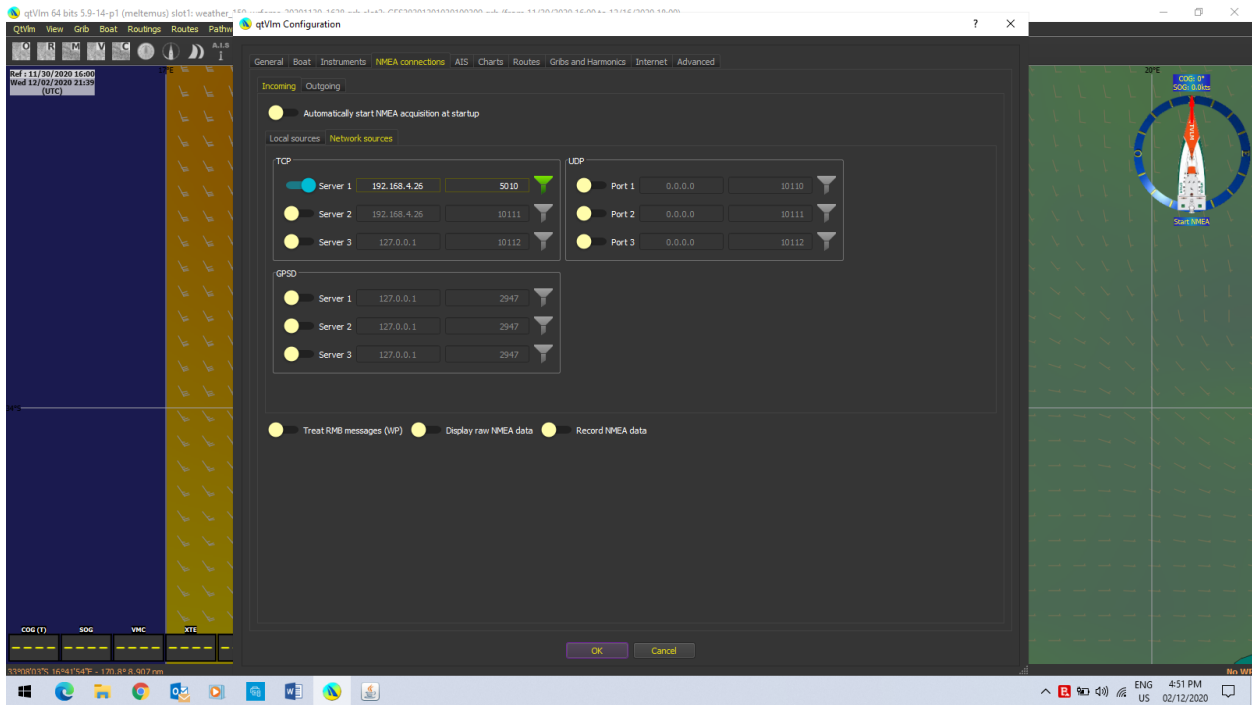
Quit without saving
Save POIs and routes
Export qtVlm data
Import qtVlm data
Run batch commands Ctrl+B
Screen shot Ctrl+E
Real or Vlm mode
Configuration Alt+X

COG (T) SOG VMG XTE TSP PPC TWD TWA TWS AWA AWS CTW (T) STW CA/CD DPH PRE RDL/FCH STP ATP

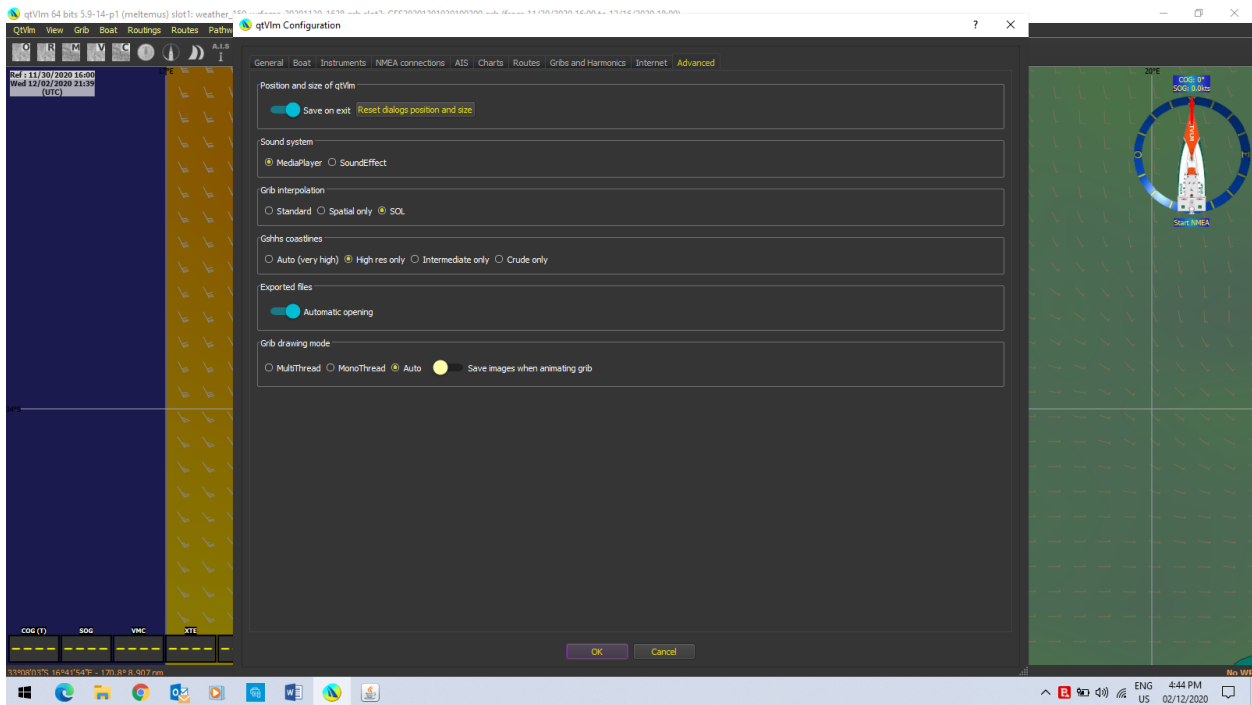
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While in qtVlm Configuration go to NMEA Connections tab settings and Incoming/Network sources. It should be filled in like this. Note that it is the same IP Address and Port as in the Proxy.



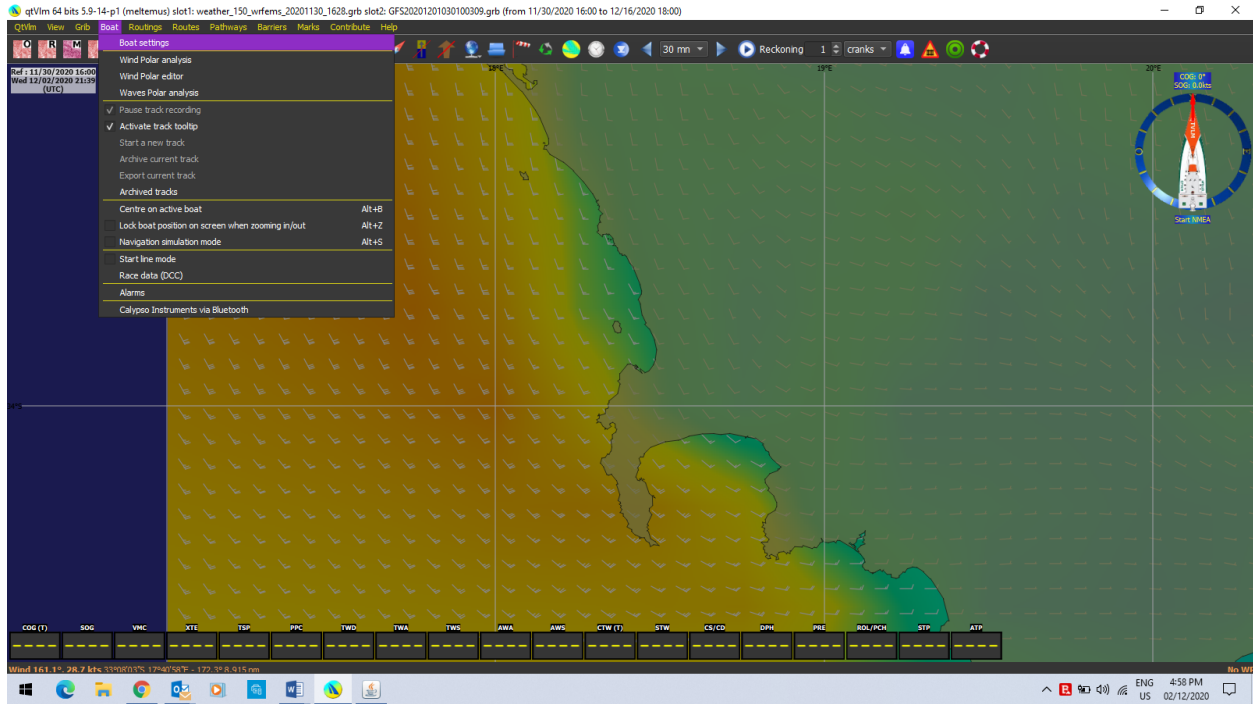
While in qtVlm Configuration go to the Advanced tab settings and they should be filled in like this. Particularly make sure SOL is selected. Make sure that you press OK to save the settings.



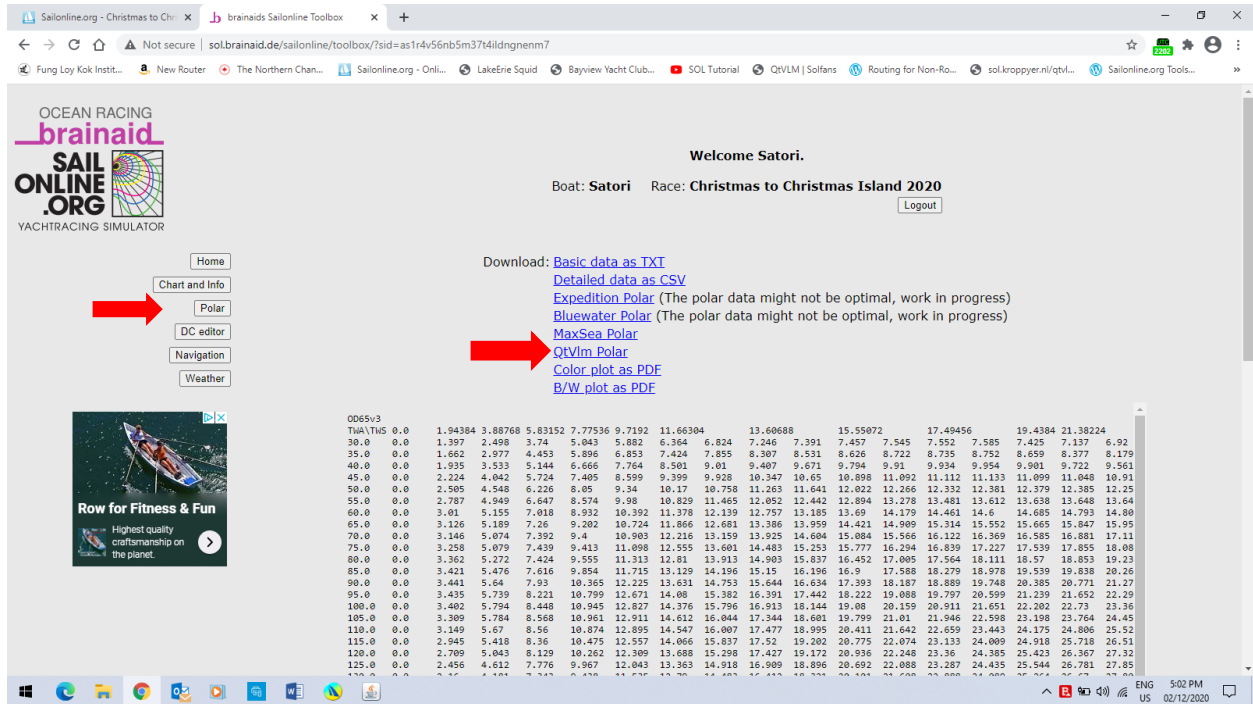
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Once back on the main Qt Screen, go to Boat tab and select Boat Settings



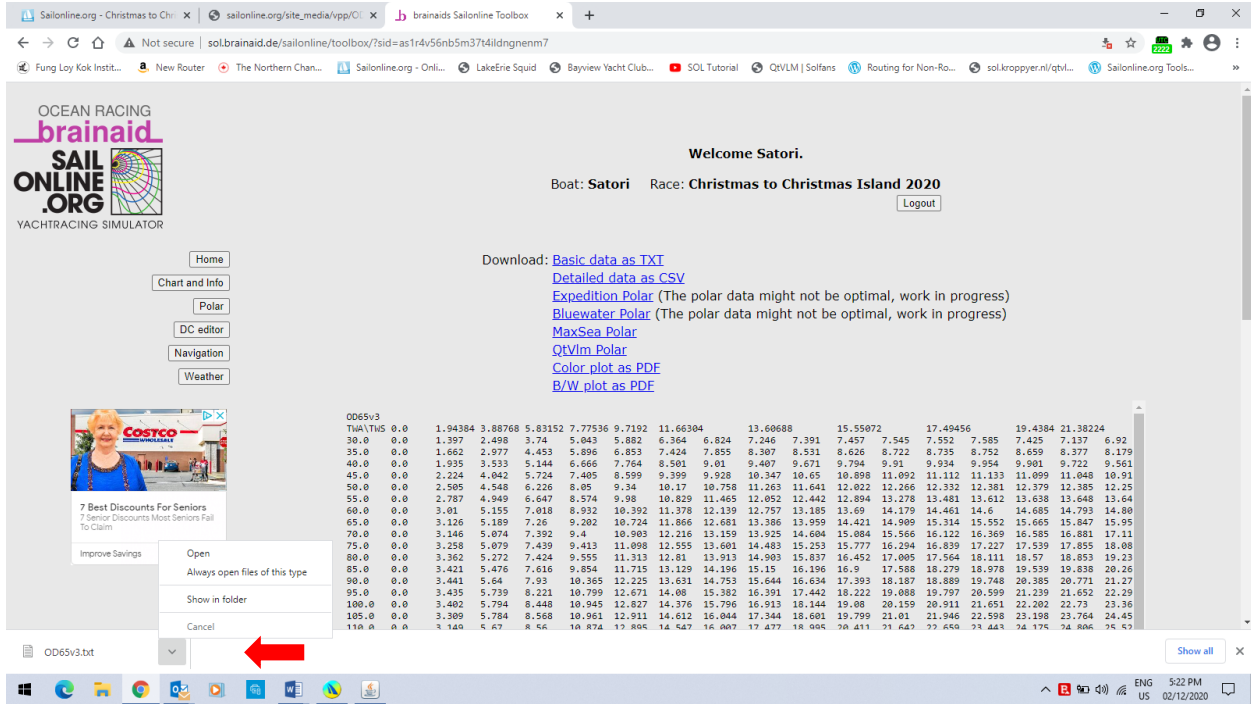
Now you need to go back to Brainaid to import the Polar for the OD65 v3



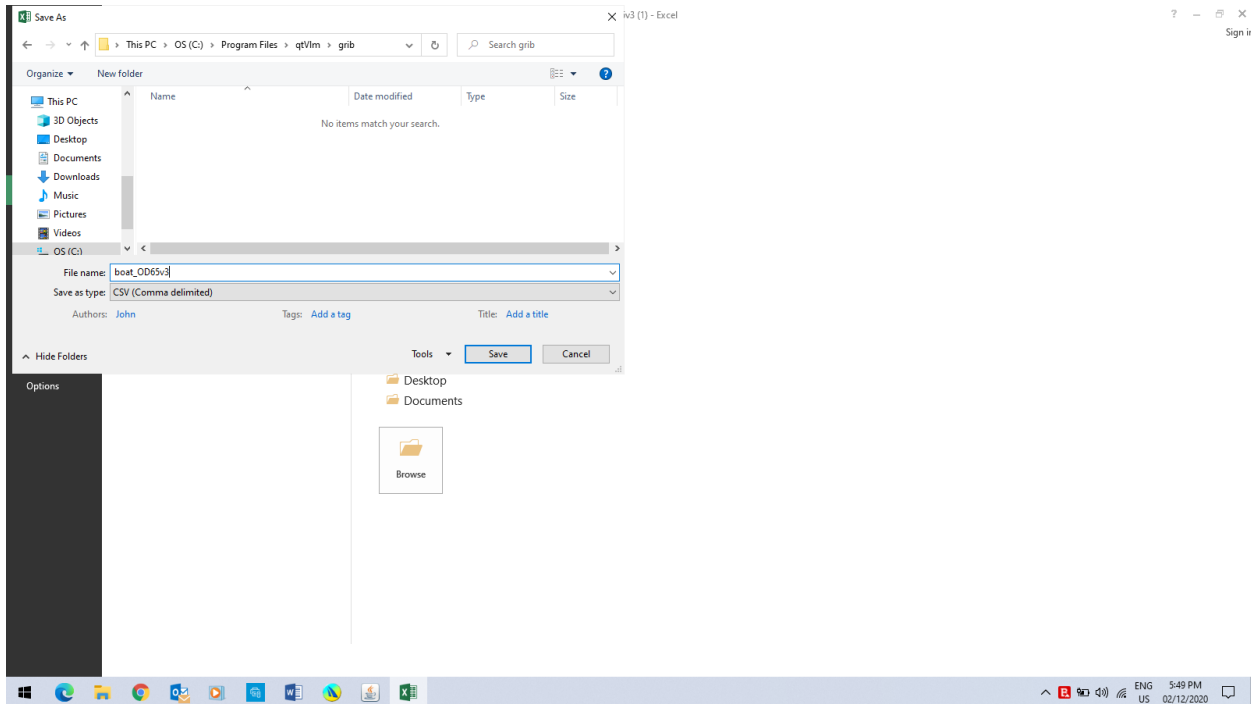
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Download the QtVlm polar for the OD65 v3. Open and save to your computer



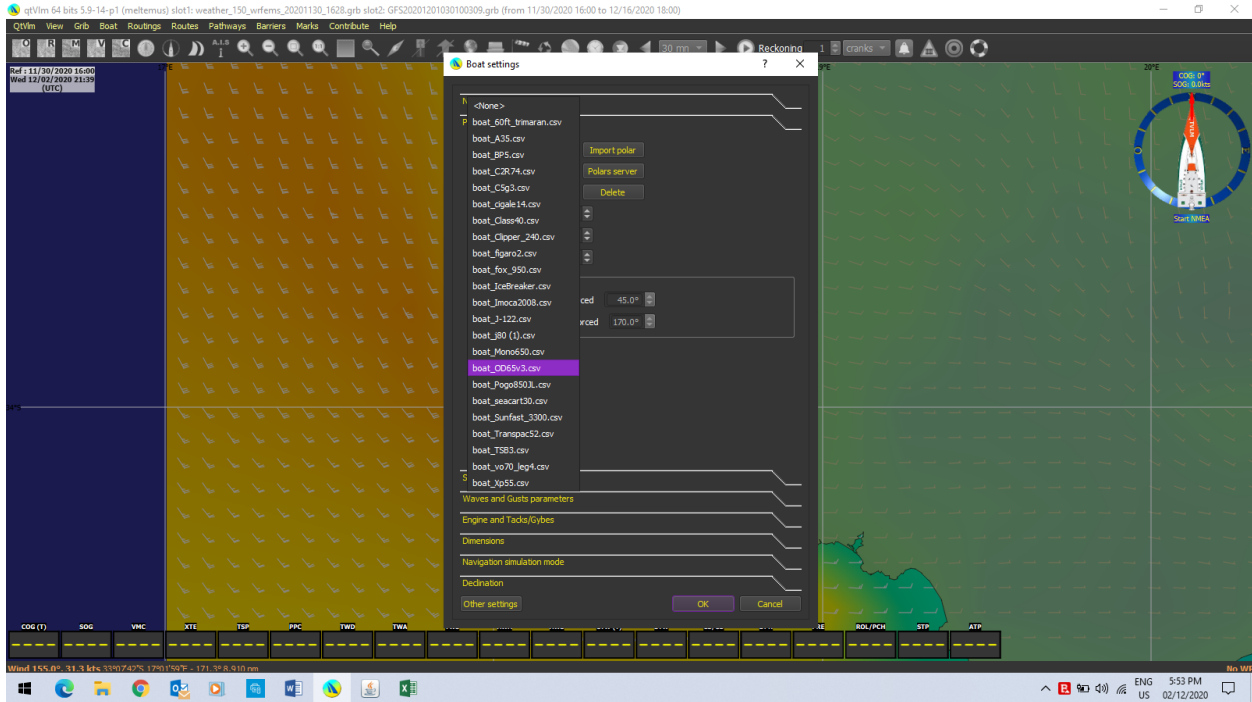
In my case this one time Program Files/qtVlm/grib! (I should have filed it in Program Files/qtVlm/polar as I normally do. But as long as you know where you saved it to you can retrieve it!)



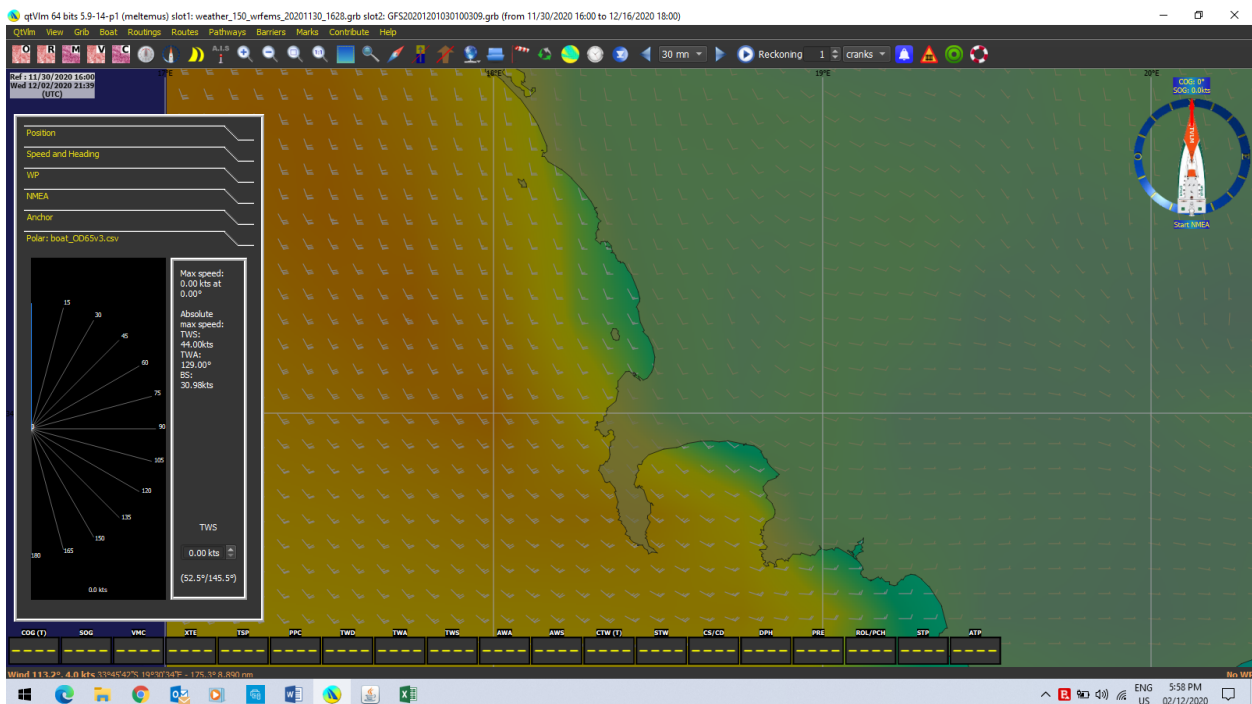
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Now on the Qt Boat tab/Boat Settings click on Polar and import it from wherever you downloaded it to from Brainaid. Because I saved it in the Programs/qtVlm/polar folder it is in the dropdown list of boat polars. Select OD65v3.csv and Click OK.



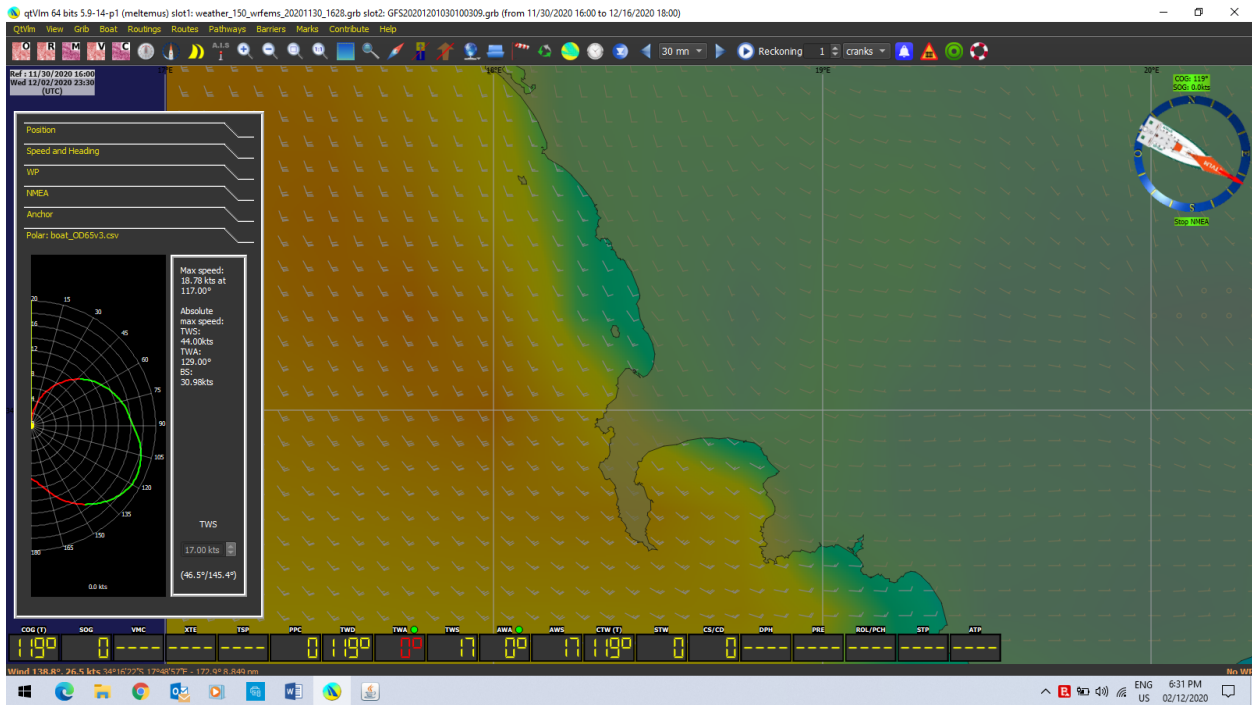
Now click on the boat image on the right hand side of the screen and verify the correct polar on the left side of the screen. You can open and close box by clicking on the Boat Image on the right.



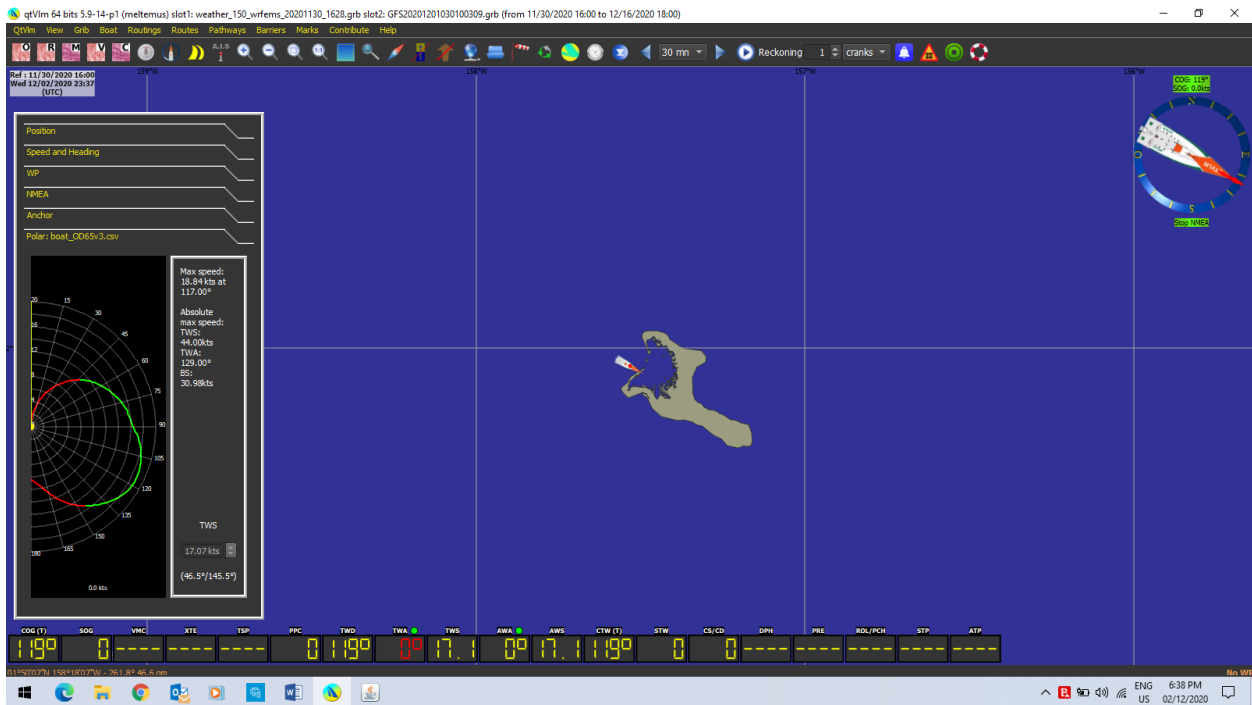
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Click on Start NMEA under the boat image on the right and your NMEA dashboard from SOL will show up on the bottom of the screen and the Polar analysis will adjust to the TWS



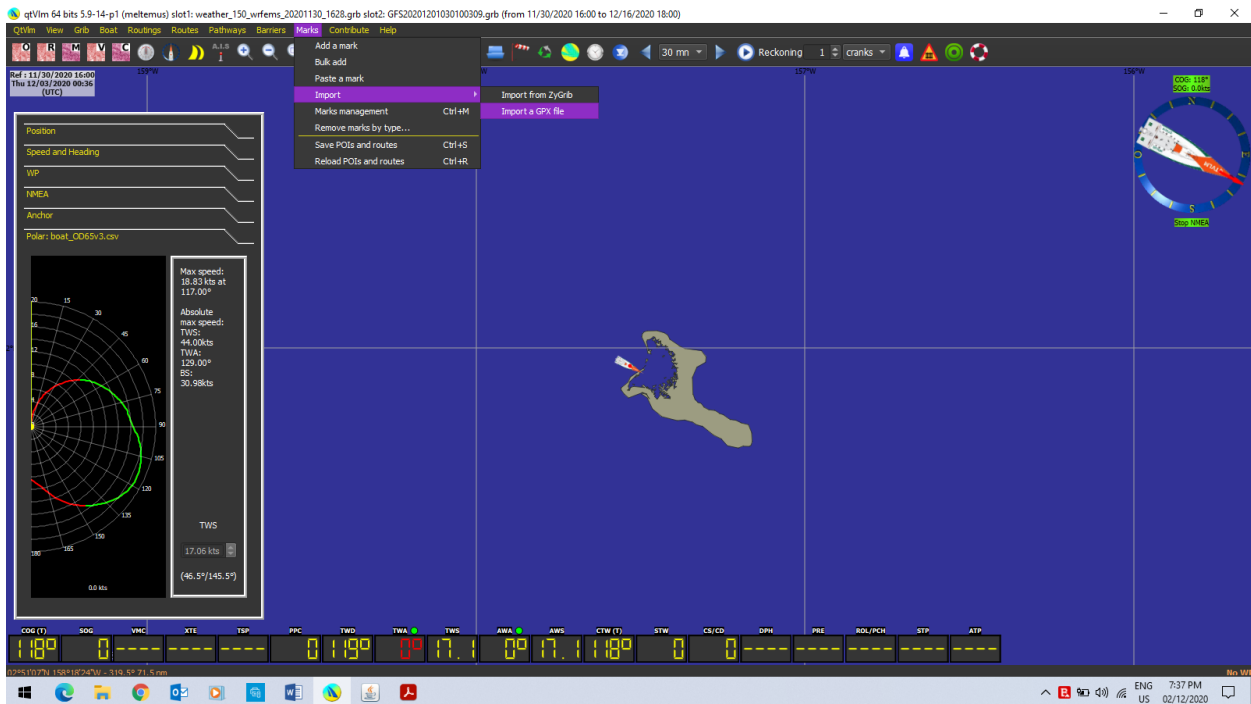
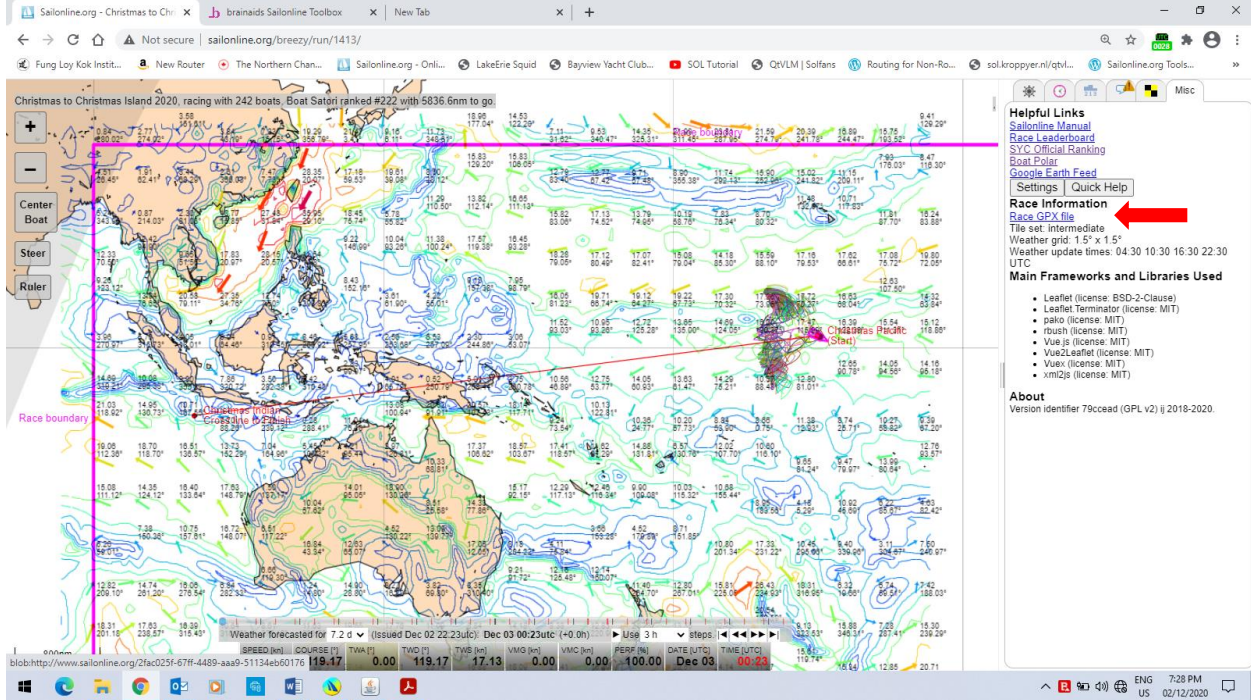
So we are now connected with SOL. Go to the Boat Tab in QtVlm and click on Centre on Active Boat. You will now see the boat in the position that it is in on the Christmas Island Starting Line in SOL.



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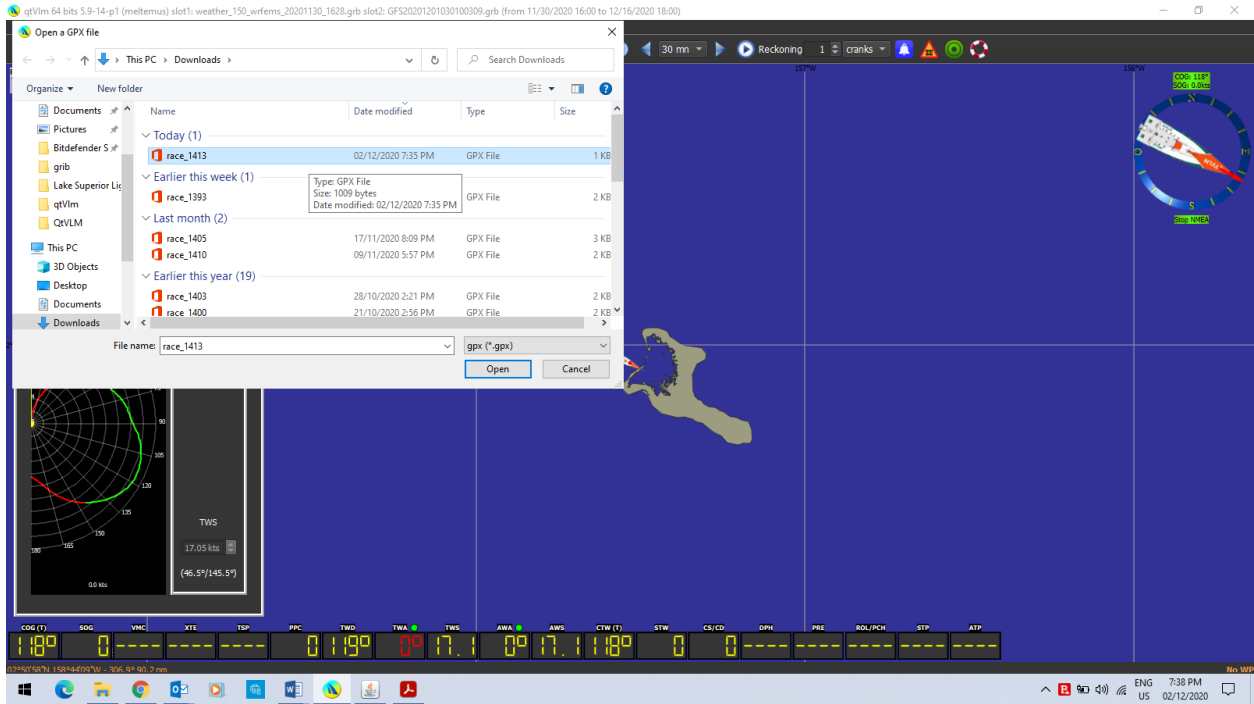
Now you need some waypoints which can be downloaded by going to the SOL screen for the Race and clicking on the Misc Tab and you will see under Race Information a Race GPX File which needs to be downloaded and imported to QtVlm and opened.



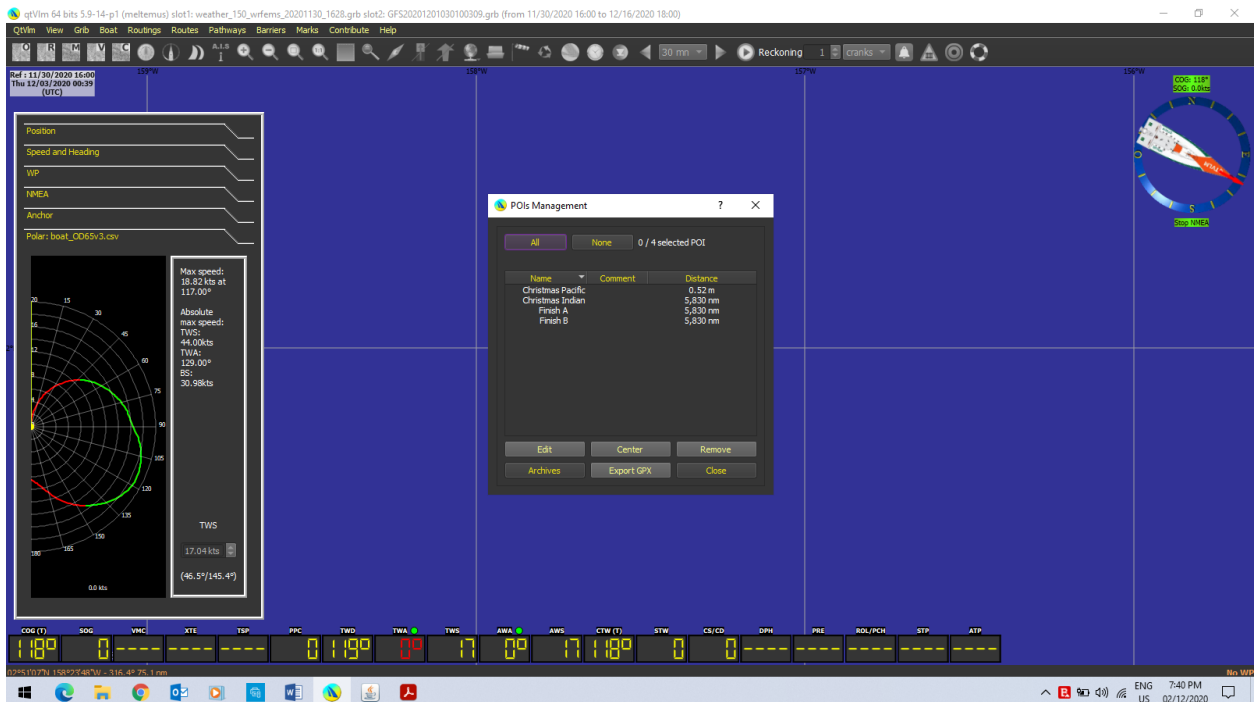
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Part I – Registering for a Sailonline (SOL) Race and Linking With Routing Platform QtVlm Via a Java Proxy Downloaded From SOL’s Home Page Link to Brainaid Tools

Open the Downloaded GPX file

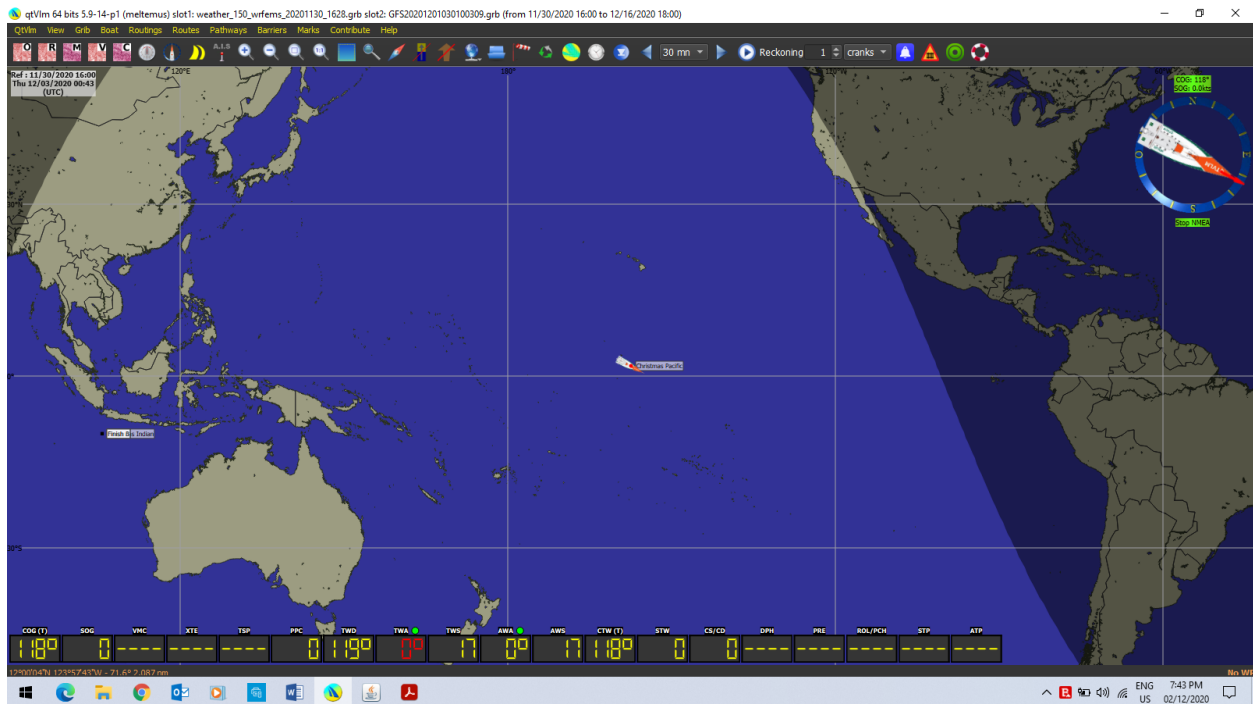


You have now imported the Marks for the Race and are ready to produce a routing which I will deal with in a separate Parts II & III documents since this is already large due to the screen prints.



Introduction to Sailonline and Using QtVlm

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From here we have to add the Wind grib files and produce a routing to be converted to Route which will produce a Log that can be exported to Kroppyer's Converter available in the Links on the SOL Home Page. Those tacks and gybes now converted into a list of TWA and COG timed commands can then be cut and pasted into the Brainaid DC Editor and then Applied to SOL where they can be Refreshed (loaded) into the Command Box of SOL for future execution.