

## Melbourne to Osaka Race Report – Kipper1258

After 24 days, 4 hours, 27 minutes and 58 seconds, Kipper1258 finished this epic ocean race and crossed the line in Osaka Bay. And what a race. Interestingly, we beat the IRL current record set by Wild Thing in 1995 (26d 20h 47m 06s) by 2d 16h 19m 8s. This was Kipper's first win in SOL in a very close finish.

### Race Strategy

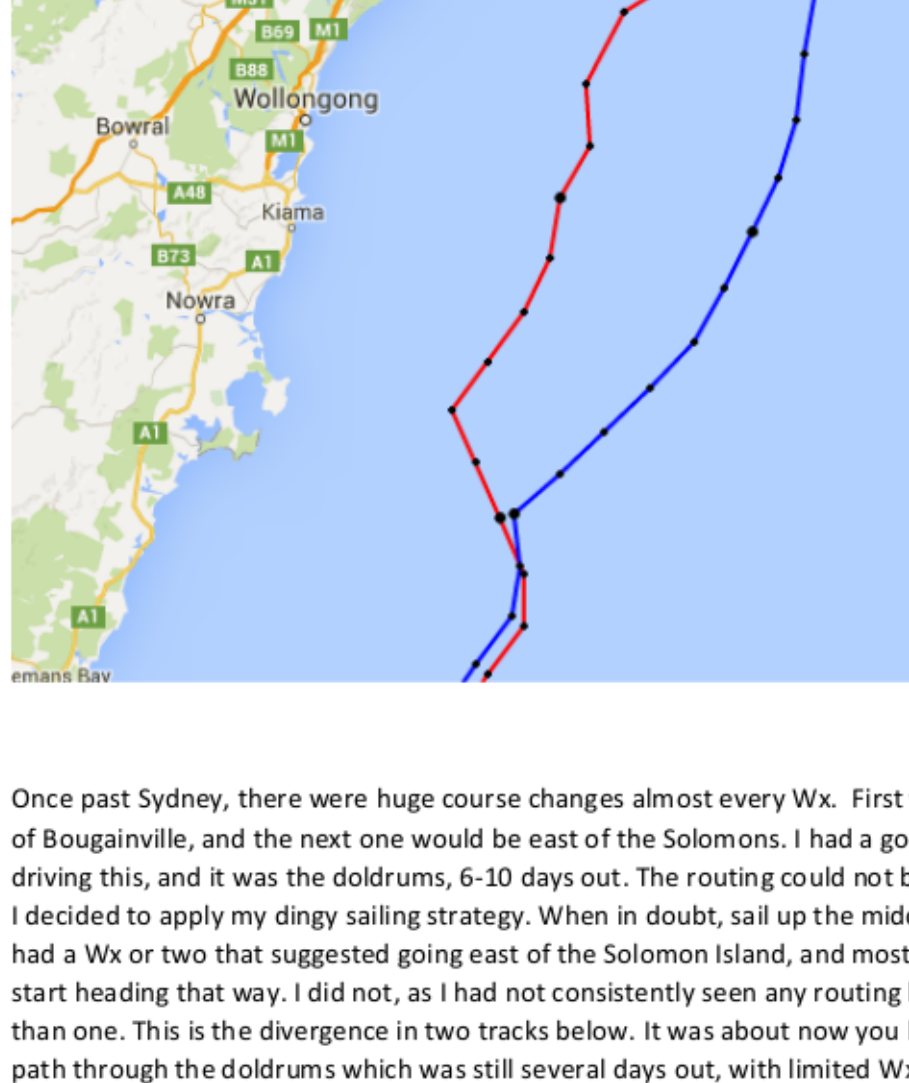
Essentially, this was a race of four parts. Part 1 was rounding Wilson's Prom, Part 2 was sailing up to the doldrums, Part 3 the doldrums and Part 4 the NE Trades into Osaka Bay.

#### Part 1 – Wilson's Prom

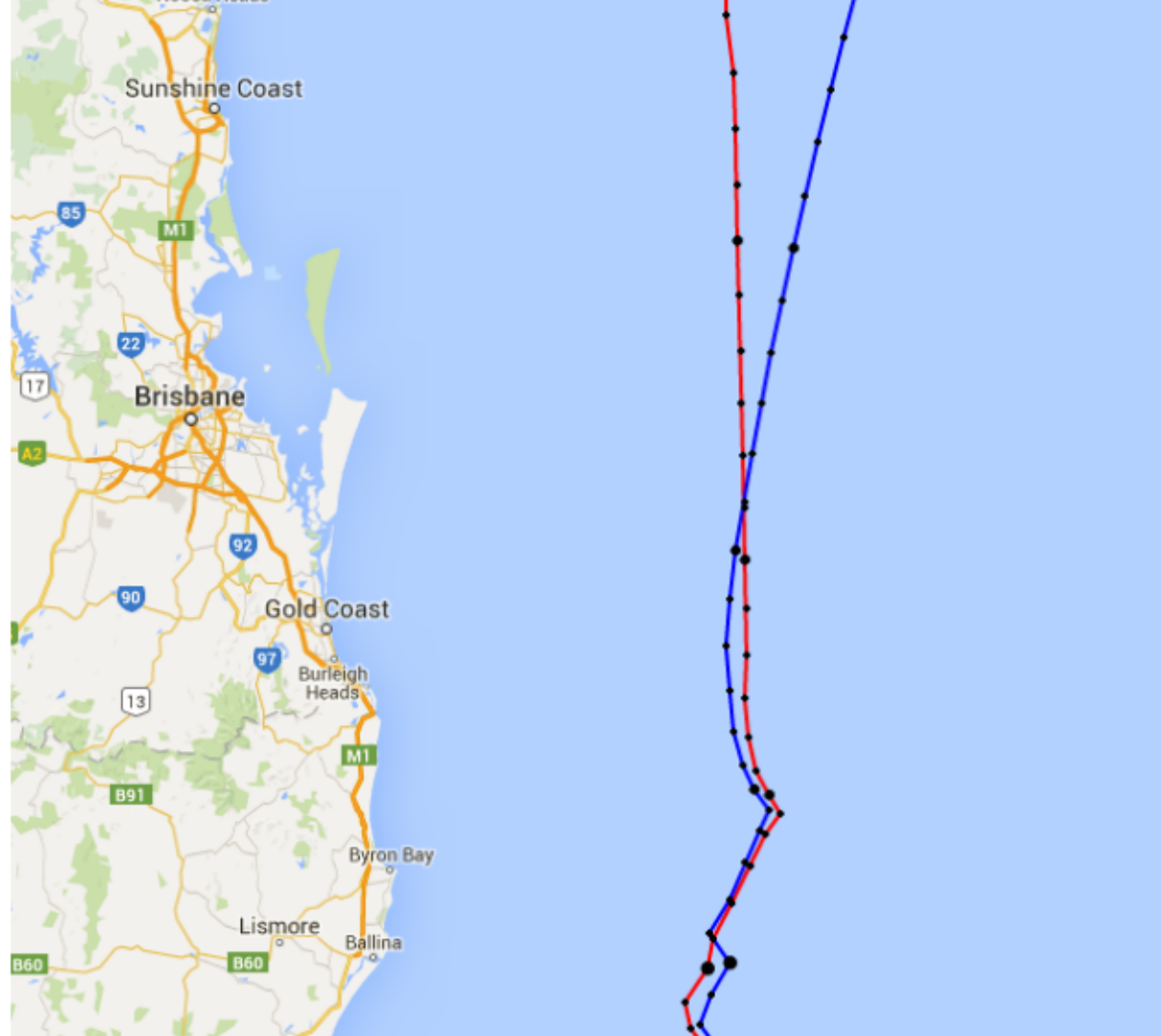
There was not too much in this leg, other than tacking along the Mornington Peninsular shortly after the start. The boats that did that gained about 15 minutes by the time we got to Wilson's Prom. I did not have the time to do that, so had to rely on DC's and ended up rounding about 15 minutes behind. But still a long way to go.

#### Part 2 – The Australian East Coast

It was this leg where things started to get interesting. I took one punt off the southern NSW coast, which did not pay off, but also did not lose too much (only about 5 min). Red boat is me, blue is WINSTON\_4.



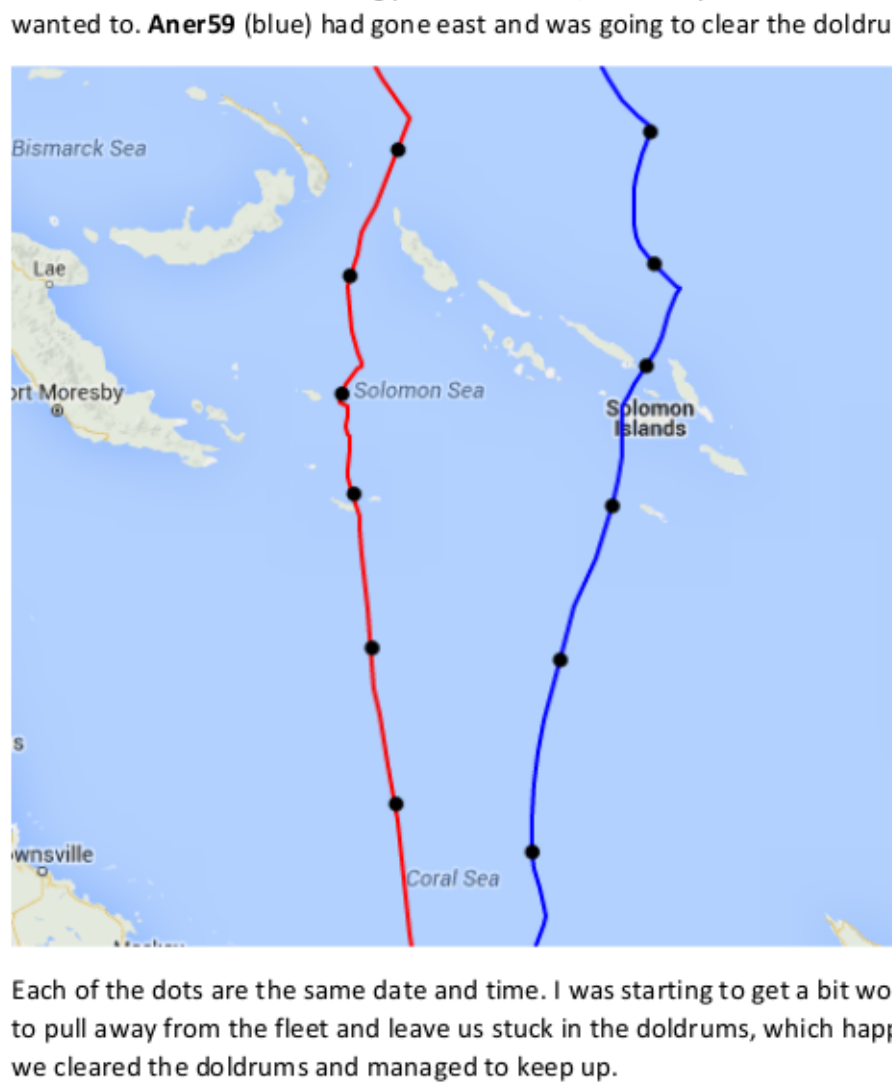
Once past Sydney, there were huge course changes almost every Wx. First we would be going west of Bougainville, and the next one would be east of the Solomons. I had a good look at what was driving this, and it was the doldrums, 6-10 days out. The routing could not be relied on. This is where I decided to apply my dingy sailing strategy. When in doubt, sail up the middle. Just off Brisbane, we had a Wx or two that suggested going east of the Solomon Island, and most of the fleet decided to start heading that way. I did not, as I had not consistently seen any routing heading that way more than one. This is the divergence in two tracks below. It was about now you had to commit to your path through the doldrums which was still several days out, with limited Wx reliability. A challenge and a risk.



But for me, it paid off. When we came back together again at Sudest Island, I was about 45 minutes ahead.

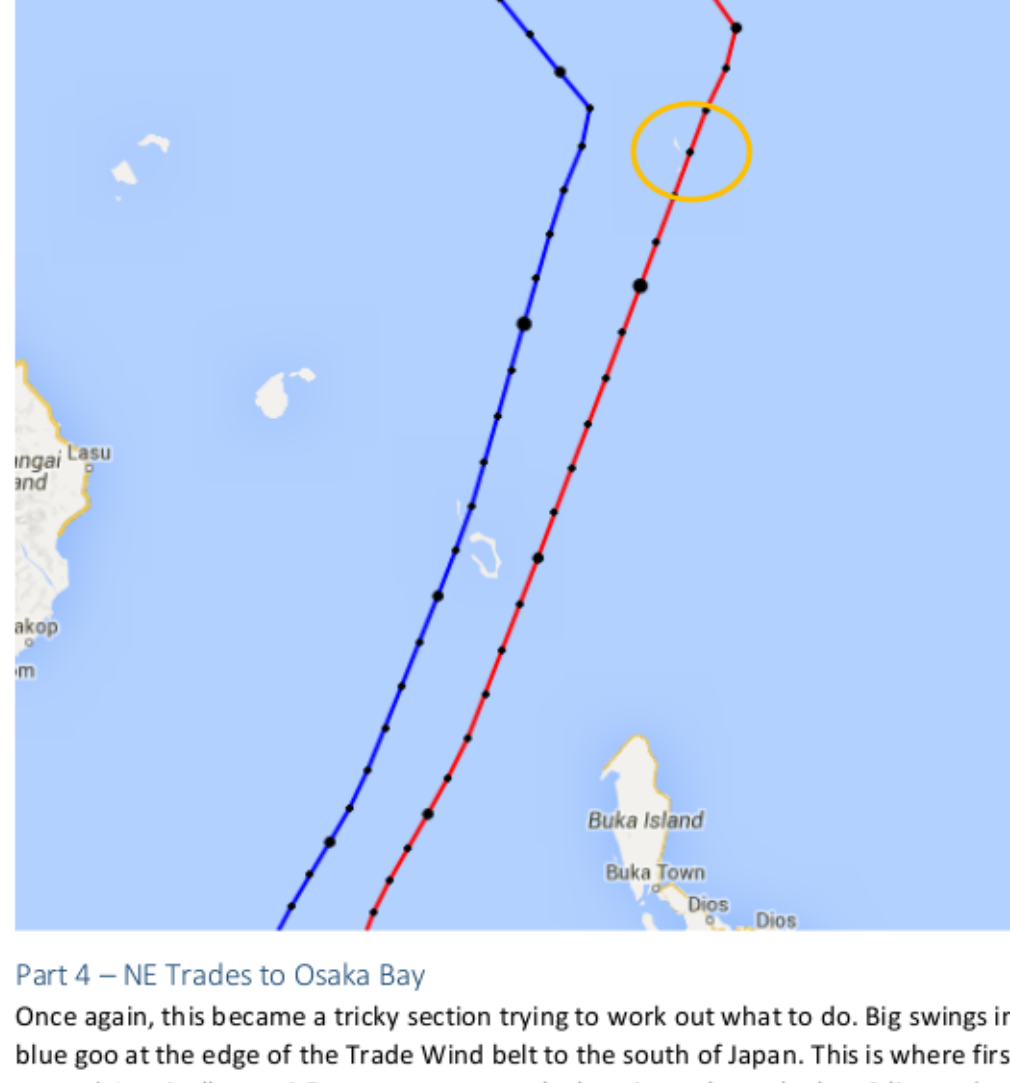
#### Part 3 – The Doldrums

We were now in the frustrating part of the race, and really stuck with nowhere to go even if you wanted to. Aner59 (blue) had gone east and was going to clear the doldrums into the NE Trades first.



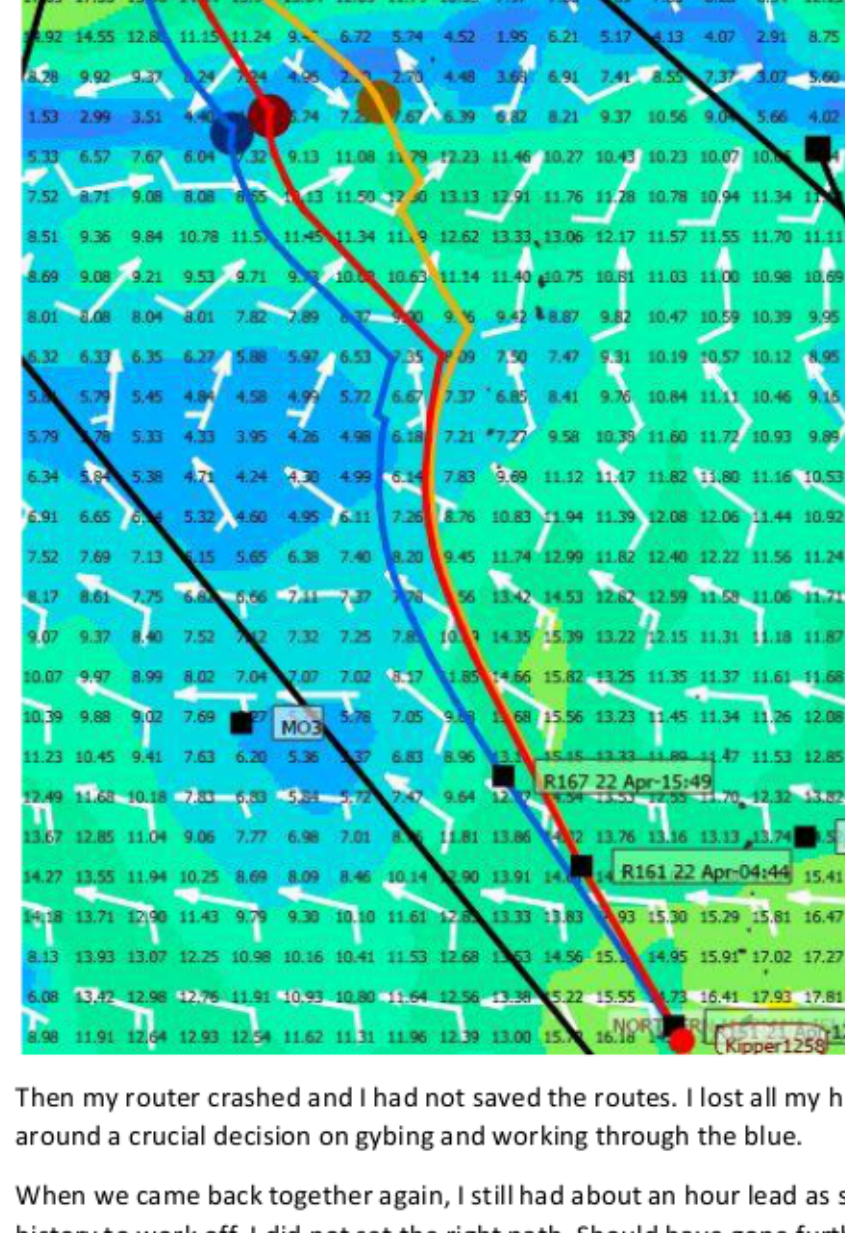
Each of the dots are the same date and time. I was starting to get a bit worried that Aner was going to pull away from the fleet and leave us stuck in the doldrums, which happened for a while. But then we cleared the doldrums and managed to keep up.

The battle with Winston (rumskib and NZL\_Scotsman were also there) kept up through the doldrums and I gybed into the NE Trades a fair bit later them. The main reason I got tangled up with Poapoa Island (circled in orange) and could not gybe across. And when passed, the routing took me further north. This took me into stronger winds with a higher VMC and into the final Part.



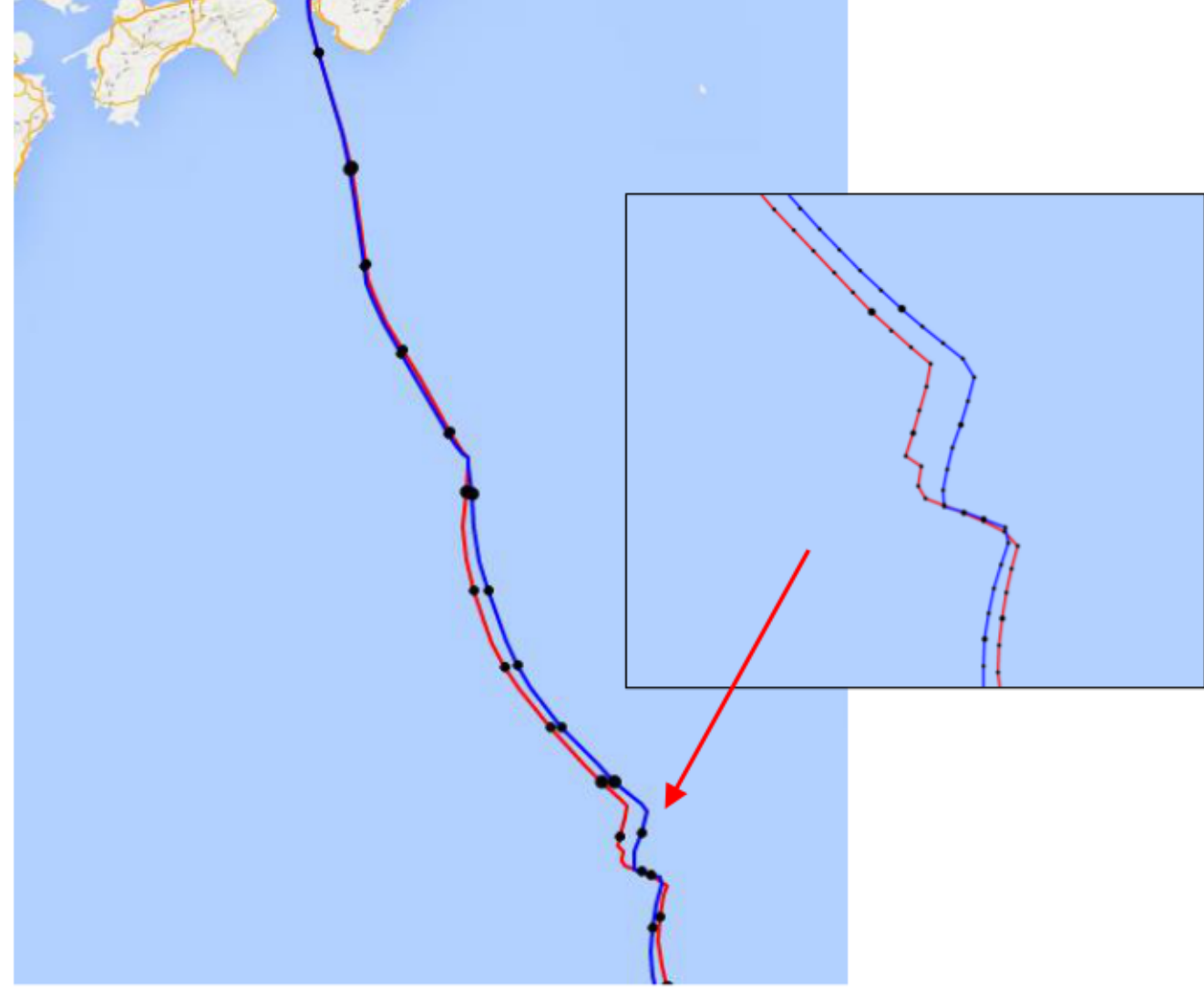
#### Part 4 – NE Trades to Osaka Bay

Once again, this became a tricky section trying to work out what to do. Big swings in routes driven by blue goo at the edge of the Trade Wind belt to the south of Japan. This is where first bit of trouble started. I typically run 4-5 routes concurrently, keeping at least the last 3 live and compare. Quite often, the new route is slower than the one of the previous ones, and should not be used. The image below shows some of the dilemma's facing the navigator. Three Wx's with three very different routes, all driven by the band of blue. Two concur for the first section, one doesn't. The latest Wx gave the blue one. In this instance, I ignored the blue route and stayed my course on red/orange.



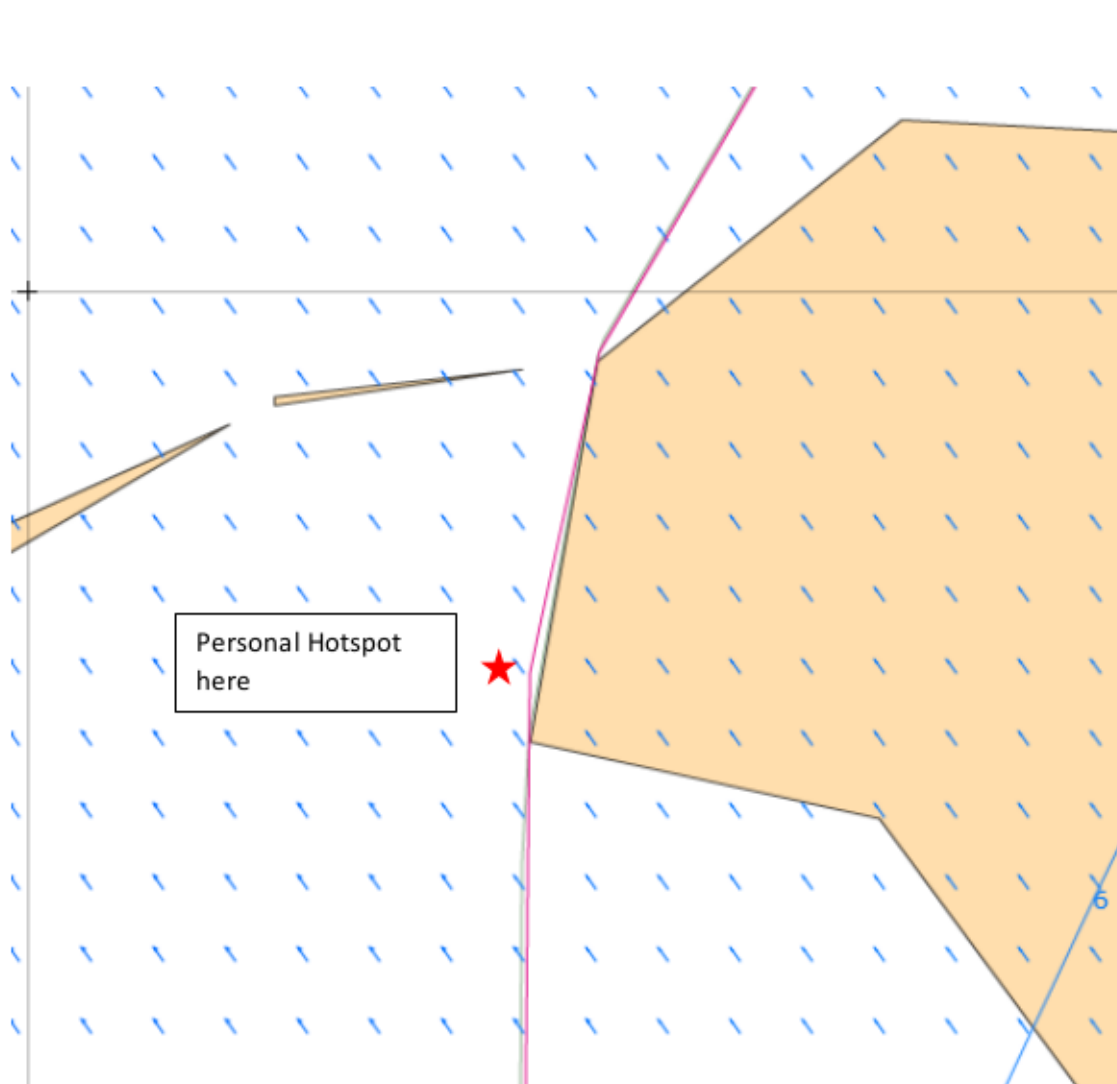
Then my router crashed and I had not saved the routes. I lost all my history and was working blind around a crucial decision on gybing and saving through the blue.

When we came back together again, I still had about an hour lead as shown below. Without any history to work off, I did not set the right path. Should have gone further north and one less gybe.



Winston was now in more favourable winds and closing the gap. When we came back together, my lead was now down to a few minutes. Scottie had gone even a bit further north and my DC editor another 10 minutes in doing so. The race was extremely close now, and Kipper was very nervous. Could I snatch defeat from the jaws of victory. Well, I nearly did, thanks to the internet dropping out at a crucial stage of the race.

Just as I need to make two more roundings to finish, a couple of technical issues. Firstly, the internet went down as shown below, about 8 minutes out from the rounding. I quickly connected my iPhone which then proceeded to lock up my primary computer. No internet and no computer. I then switched over to my backup computer to take control and switched over the iPhone. Got control back, but only momentarily. The internet came back up (unknown to me) and confused the computer. I lost control again. With about two minutes left and the slenderest of leads, what do you do? Panic seems like a good idea! Actually, I turned off the main internet router so that all the computer could see was the iPhone. I then had to reload the client (each time your network changes, you have to do that) and got control back just after passing the round point.



I was then able to set a course to the next rounding and a few minutes later, the final one to the finish. Phew. Disaster averted and I managed to win by all of two and a half minutes.

And then, of course, my primary computer unfroze itself and the internet came back up, just when I no longer needed them.

### My Technical Strategy

I used TWC which share a few of my technical strategies. Firstly, I like my sleep so I rarely got up for the 14:25 UTC Wx as it is 02:25 AEST. In this race, it was not that for me. Most of the time, there were only course changes of a couple of degrees, and sometimes none at all. And I do my routing in Qt.

Secondly, I used mostly cc with twa only when going max VMG up or down wind. Below is a sample of my spreadsheet that I use to generate DC's to load through brainaid or my DC editor (<http://solfans.org/blog/weather/automatic-grib-downloader/>). I compare each value given by the router and try and work out what it is trying to do. TWA and COG columns are straight router output. If the value is near to the max VMG up or VMG down, it is trying to sail at that, so I will use a twa with the max value. The number 3 in the first column will do that for me. If it appears to be trying to go at maximum speed, I use a twa with that value. The number 2 in column 1 does that. In all other instances, I'll use cc. The number 4 does that.

	CMD	VALUE	TWA	COG	Max VMG	Local	IS	WP	WS	TWA	VMG Up	TWA	VMG Down	Max BS			
1	2016/04/27 22:00:00	twa	113.22	113.22	276.15	59	00:00	Thu 28/04/2016 08:50	9.11	80.89	25.14	59	2.30	174	-9.30	140.00	9.90
2	2016/04/27 23:00:00	twa	142	113.76	276.11	59	00:10	Thu 28/04/2016 09:00	9.1	25.54	59	2.30	174.5	-9.48	142.00	9.92	
3	2016/04/27 23:10:00	twa	59	113.93	276.06	59	00:20	Thu 28/04/2016 09:10	9.05	25.98	59	2.25	175	-9.54	143.00	9.93	
4	2016/04/27 23:20:00	cc	276.01	114.13	276.01	59.1	00:30	Thu 28/04/2016 09:30	9	26.43	59.1	2.19	175.7	-9.63	144.00	9.94	

I have loaded the polar into this spreadsheet and calculated all these values using the interpolator I posted here. <http://solfans.org/blog/sailonline-org-technical-stuff/bi-linear-and-linear-interpolators-for-excel/>

As I mention in the main section, I always carry several previous routes from previous Wx's and then re-optimize them on the current Wx. Quite often one of the older routes will reach a common point earlier than the new one. And if the routes are wildly different, I try and work out what and why things are doing what they are doing. I'll also run at time a short term, medium term and long term waypoint to see if I get major changes. The medium waypoint will lie on the long term route and the short on the medium term route.

My final strategy, which I needed in this race, is to have a disaster recovery plan. My final strategy. I typically have a client running on two computers, one a laptop with an iPhone hotspot ready to connect, should I lose power. It will be modified based on the reconnection issue I had causing me to lose control at a crucial stage of the race.

### Congratulations and Thanks

This was a great race and well done to Scottie and Winston. My congratulations to the remaining top 10 and thanks to the SOL organisers and Race Committee for all the hard work you put in to make this possible. And my final thanks to the rest of the SOLers, without you, we would not have a race.