

Brisbane to Keppel race report

Brisbane to Keppel race is very special to me as home of the most unexpected and so far only 40' Class races SOTO victory, back in 2017. For some reasons not so pretty I was unable to start this race last two years, and was happy that can start it this year.

How it turned out, this year's race was all downwind, with only things to care about VMG and Performance Loss. Seems my choices and performance were the fastest, although if Dingo in front of Šime at that moment didn't miss NW12 West Cardinal Mark by 1 server hop, or Kipper didn't do 4 more gybes, who knows...

Without any major navigation challenge, my main intention was to lead Šime to some stronger winds, because it lets a bit higher TWA for max VMG, even if it meant some extra miles. The same time, I did try to keep number of gybes as low as possible. Not as fast as trimaran or cat, jet with over 14 kn downwind speed TP 52 jumps down just near 93% border, with not so negligible recovering time. Rounding Polmaise Reef Mark, Šime was in small lead, and the hardest task become stay awake till dawn, few last hours of second sleepless night. Big pot of coffee and alarm set 3x for every decisive moment did help, but after the race ended, I felt asleep almost instantly, and remain such till noon. Price of success.

As I wished to offer some mine considerations on router and Perf Loss after Auckland to Uruguay Race, but was really under pressure at workplace that time, I'm writing them now, as they are also applicable in this race.

Routers are useful (I rely on qtVlm), they can help skipper decides, but can't decide instead. With fresh grib, the route is accurate for next 6 hours, as further time goes predictions are less reliable, and longer that 3 days it's more statistic than forecast (not accidentally is weather prediction computing in the very base of the Chaos Theory). I'm usually very suspicious when with new WX grib router offers dramatically course changes, especially when, during routing, new route hectically jumps one side to another and at the end shows 2 min gain in 7 days on the old route. What I usually do is try to get a big picture of weather systems developing and then adjust route for no more than 3 days. Not that this works every time, and I was stuck in blue, ignoring router suggestions, for to many times I want to remember, but if one avoid rush left to right and back again with every new WX, it can make a difference... even in race with just a few WX updates.

Another question is router's ability to take into account Performance Loss when calculating route. Yes, there are setup for perf loss % and duration by gybes and tacks, but every single one is so specific that can hardly be covered with general setup. For example, in B2K race Kipper did 4 additional gybes than Šime, me presume they were suggested by router (because qtVlm suggested the same to me). I avoid to did that, led by nothing but feeling that 2 close consecutive gybes will cost more in PL that benefit in BS. Don't know if it did the difference, but if Kipper didn't do that... - see Paragraph 2. And this lead us to a second topic...

Performance Loss! Every now and then, especially when really fast boat is involved, discussion arises on how unrealistic Perf Loss are and how that need to be changed. IMHO it's correct that PL is unrealistic in most cases, but that can goes both ways - as I remember, someone has argumented (with youtube clip as example) that IRL more than 30 min is needed for tack a tall ship in light wind, and all that time the ship is practically in place.

With lower BS PL's impact isn't to big, and PL fulfill it's intention to discourage zig-zaging by every server jump.

And when BS grows - sorry, you have to be careful. The rules are clear, simple and equal to all:

1) $PL(\%) = \text{newBS}(\text{kn})/2$

2) if $PL > 7\%$ (i.e. $PERF < 93\%$), there's no further PL, whatever maneuver may be

I wish I can offer a simple (or even not so simple) advice how to manage that. Unfortunately, I can't. Not that I don't want to, but every single case is so specific and depends on so many parameters, that way to handle it is mostly based on previous experience and momentarily inspiration. Anything that will achieve PL minimization is permissible, and I really can't tell that one way is better than other. It's all a trial and error method, and maybe the least painful way to find it out is try them all in prerace free sailing or in PR's. Even prepared, almost certainly you'll find yourself in situation where your palm meets the forehead. Two examples, both from Auckland to Uruguay Race (luckily race long enough that errors can be corrected, in Sprint Race things like this will led to 50 places loss):

1) Leaving too little security margin to $< 93\%$ Perf leads to press "Gybe" button to late and execute full speed gybe next server jump, at 93,06% Perf. Result: returning to early '80es - not a bad time, I remember them with nostalgia, but in terms of PL = one hour to recover.

2) Trying to avoid 3 successive gybes, persisting on course that finally led to VMG 30% less than optimal, realizing to late that even full speed gybe and 20% PL would be better than that...

Apologize if I turn of course Brisbane to Keppel race report to much, please consider this as 2-in-1 RR, meant primarily to share my personal experience with new SOLers and encourage them to find their own ways, not being afraid of make mistakes or ask questions. And always look on the bright side of life!

Fair winds!

Mladen / SimeMali

August 2020.