

Handicap Normalisation Using TopYacht

Background

We often get questions around the feasibility of "normalising" the handicaps used across multiple series and events.

While this is possible, there are a few things to consider.

Please have a look at the first link at the end of this document for an introduction to the terminology used below.

If the Series you are looking at is "pursuit", it is awkward to re-run an old Series with a new form of automatic handicap updating.

After each race, the *next* race handicap (CHC) determines the start time for each boat in that *next* race. This start time in turn impacts the recorded finish time and hence the calculated elapsed time and the *new* handicap calculated for the race after this one.

BUT if you're re processing old data it already has a start time which in turn affects the finish time for the boat.

So you need to manually alter the *finish time* for race #2 so that with the new AHC (and start time) the finish time will produce the same elapsed time as under the previous handicap maths.

There is no easy way to do this ... UNLESS.

Before starting the process change the Series Set-up to Fleet Starts.

Then you just change the finish times in this re-run of the race to the elapsed time under the original handicap maths. Note: set fleet start time at 00:00:00.

Logic Check your data.

If you're looking at a range of data, different years, boats and events, you're not comparing apples and apples.

A boats handicap is generated based off the boat's performance, along with:

- 1. The initial handicap allocated,
- 2. Weather conditions,
- 3. The group of boats,
- 4. The length of races,
- 5. The crew, skipper and infrastructure (new sails etc.);

Prevailing at the time of that race/regatta.

You may have to 'normalise' the handicaps across the event to make comparison more meaningful.

Regatta Starting Handicaps

When determining the starting handicap for each boat we recommend looking more at the class standards than the performance history, and then do some sanity checks for age of the boats etc.

So should we run a comparison before a regatta?

- 1. Yes, it is worthwhile to run a comparison
- 2. It is better to convert 'pursuit races' into Fleet starts (to avoid having to mess with start/finish times) Can also use more than one handicap recipe in the same Series to look at different outcomes)
- 3. Do a logic check on validity of the years (i.e. boat has new sail that year, gun skipper etc.)
- 4. Check the class ratings and standards

Further Reading.

- Establishing Sensible Starting Handicap for a Regatta or New Season
- ► Handicap Drift Over a Season ~ Detecting it and Correcting it
- Handicap Progression in TopYacht
- How the Next Handicap is Calculated
- Measured Performance Handicapping
- ▶ PHS Handicapping ~ A Sailors Guide
- Why CHC values from Previous Race are NOT the AHC of the Current One
- Across Group (Division) Handicapping

Document Revision.

2021-10-16, 2020-02-27, 2020-02-26