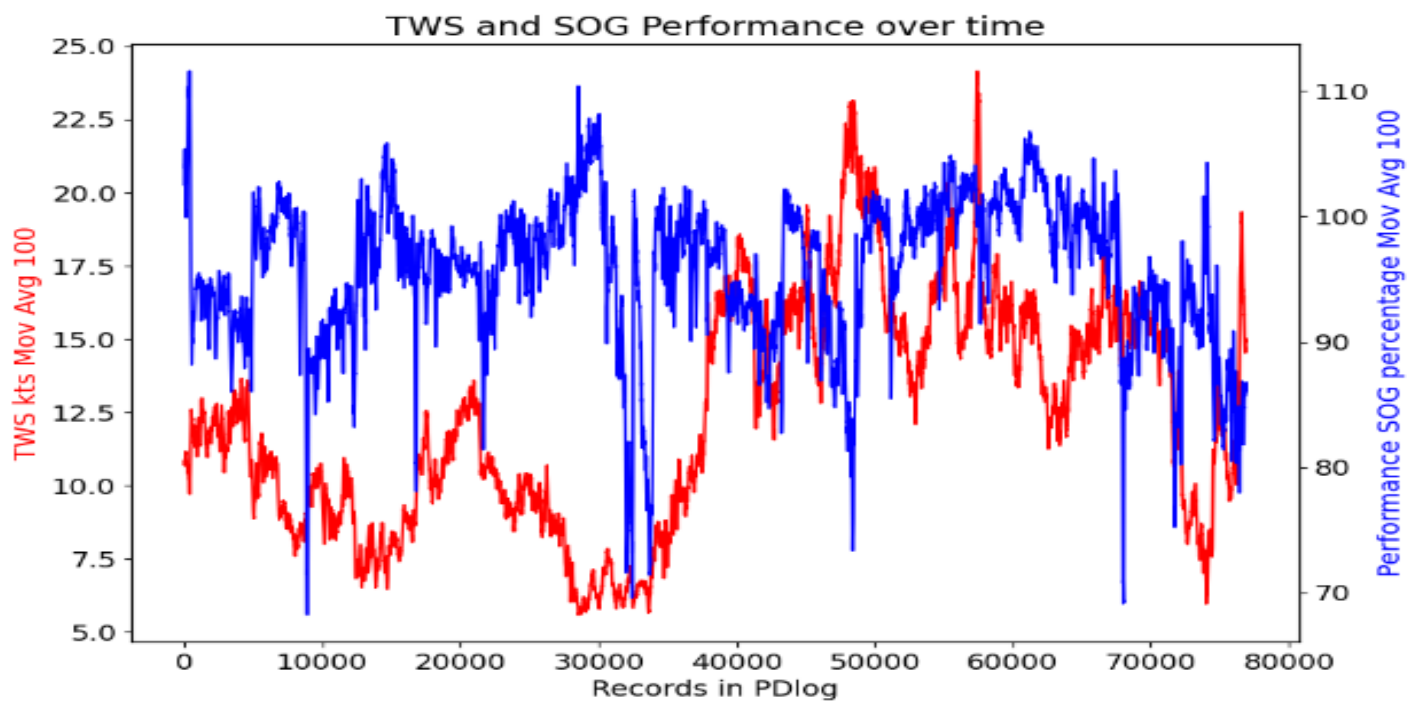
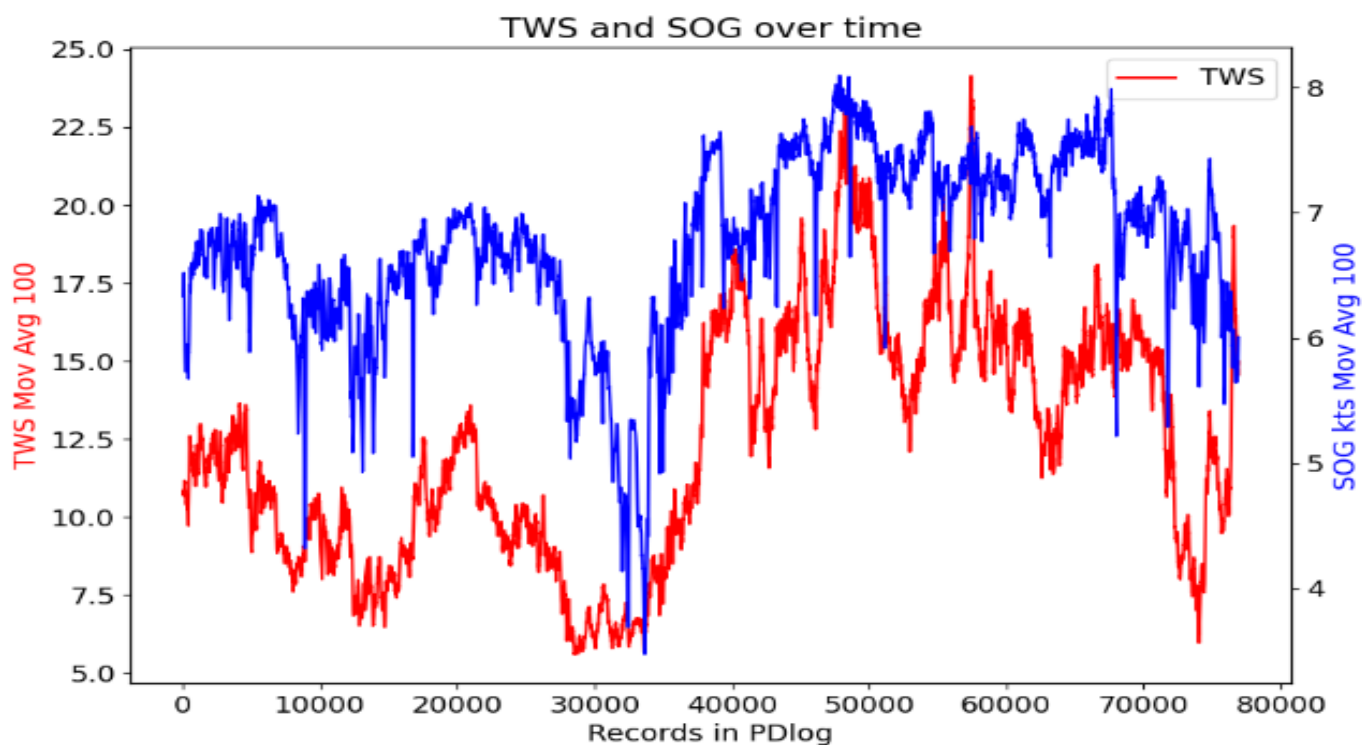


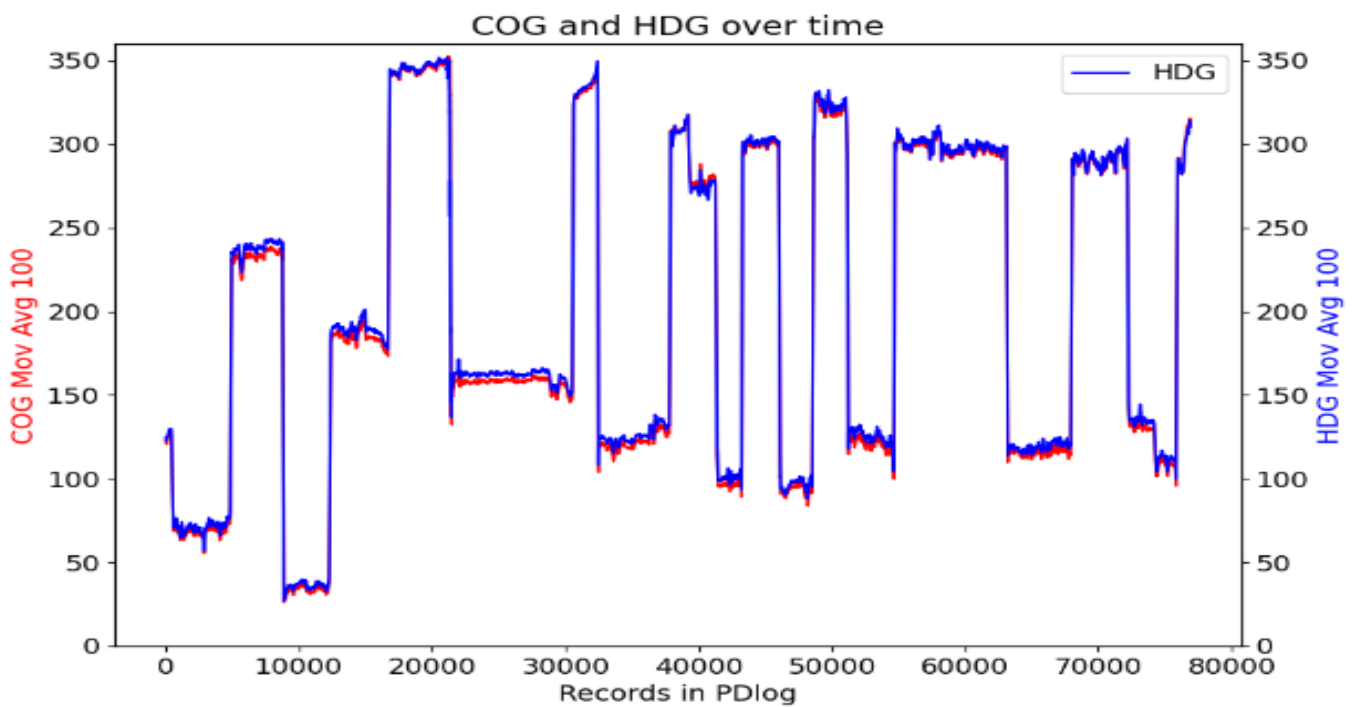
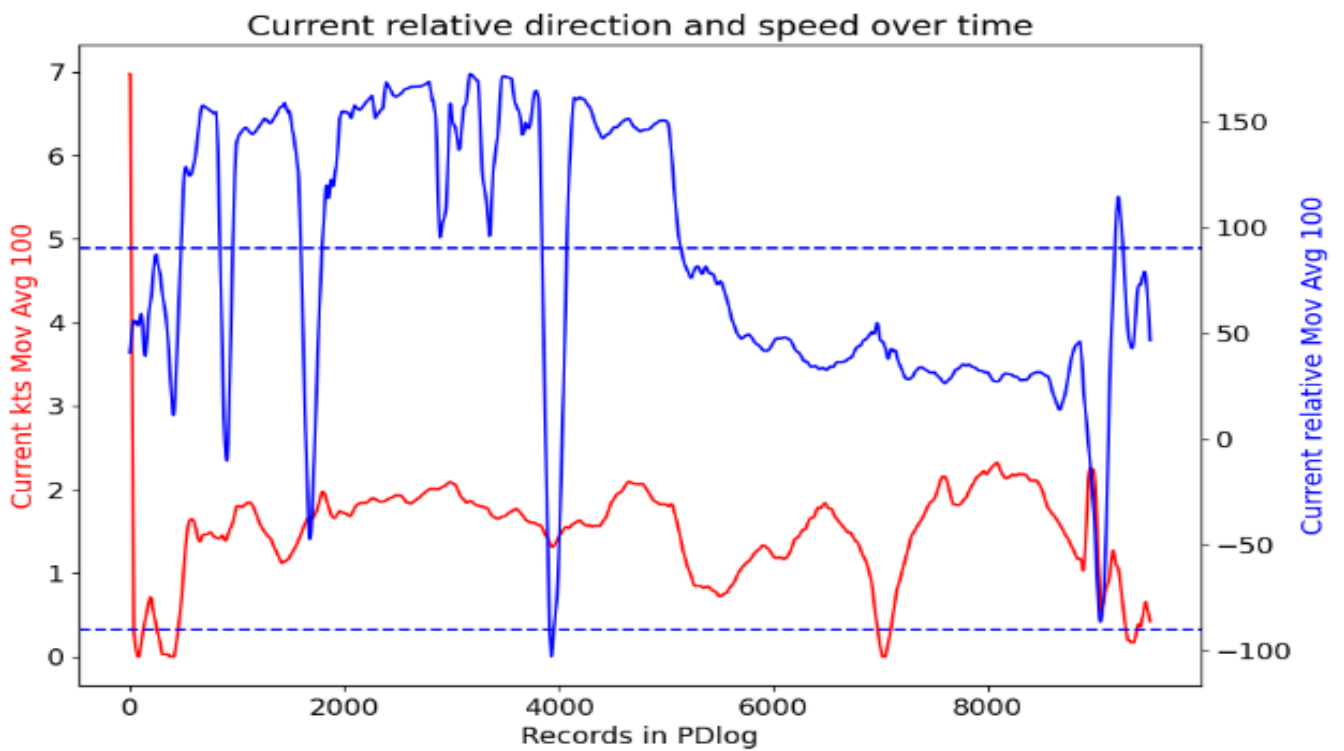
Above: Wind direction (red) and wind speed (blue) during 24 hours. When the change from 320 to 220 is complete, the wind increases from 5 to 20 kts.

Below: depth during 24 hours



Above: TWS and SOG over 24 hours. Obviously SOG goes up as TWS goes up

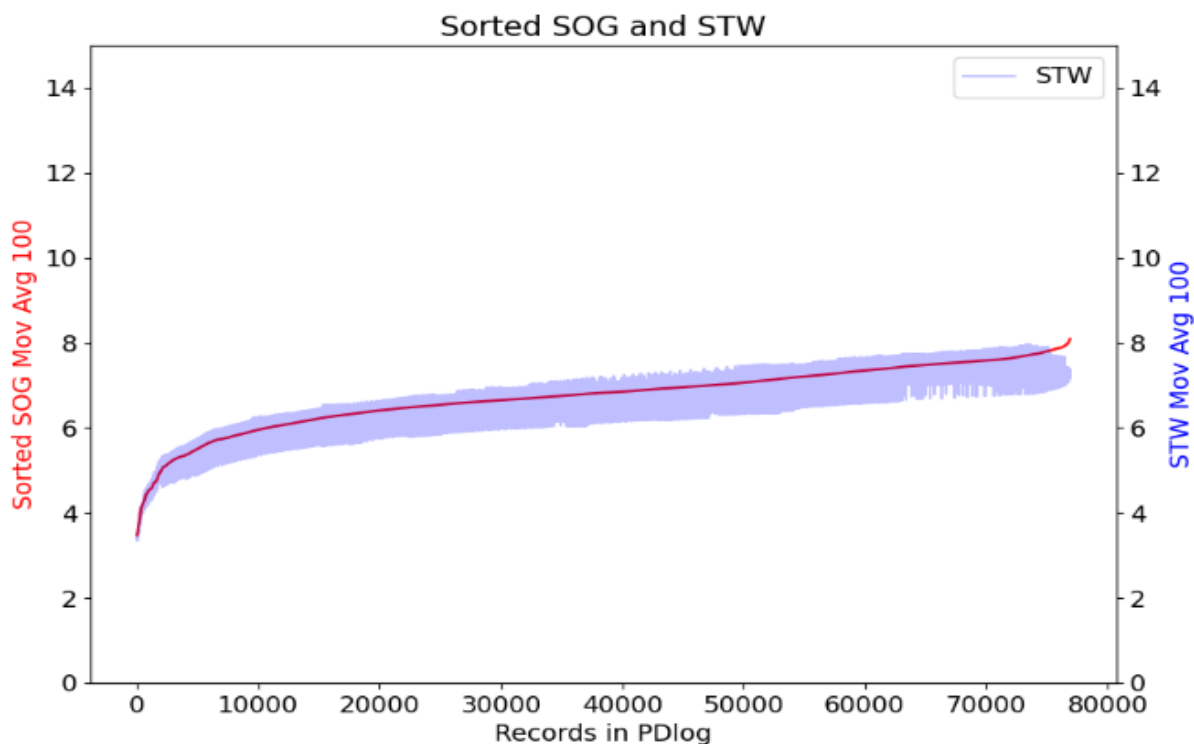
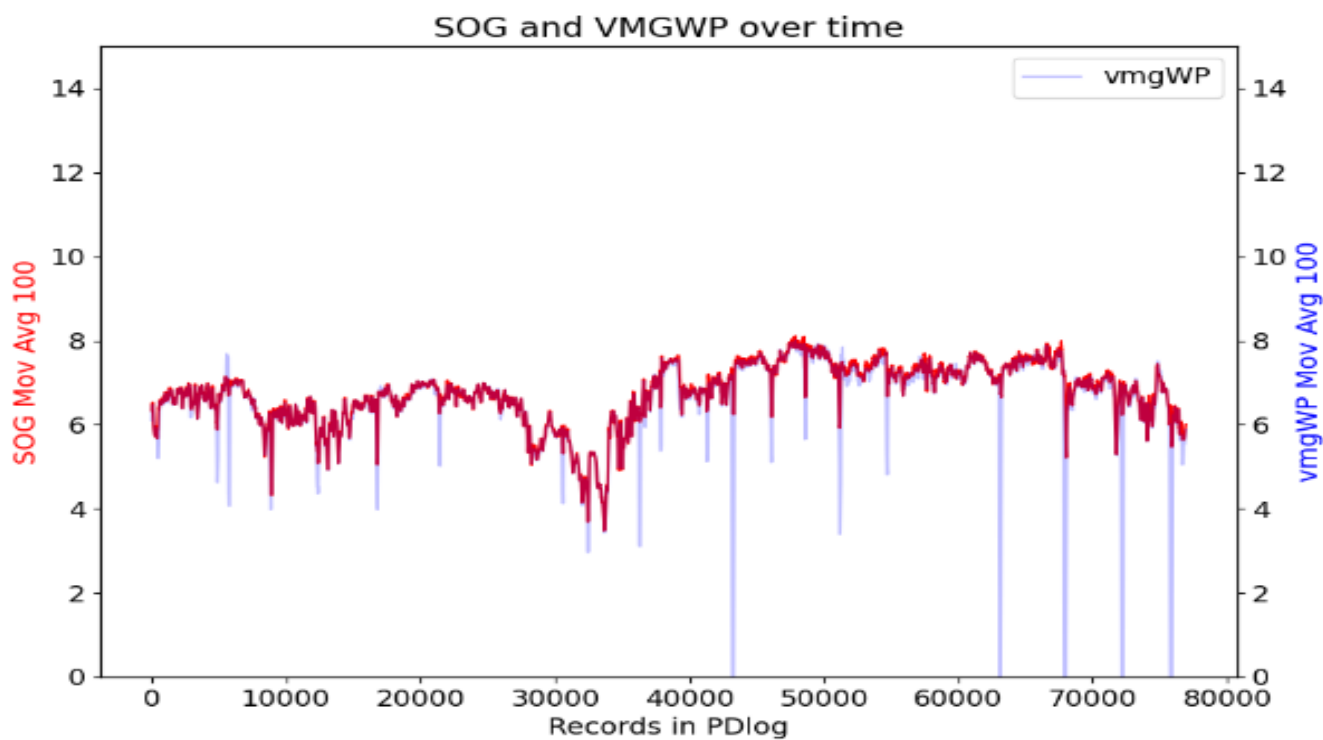
Below: TWS and Performance over 24 hours. Same TWS as above, but Performance hovers around 100%



Above: Current direction relative to boat (blue) and current speed in red kts.

Between the 2 dotted lines at 90 and -90 current is slowing boat down.

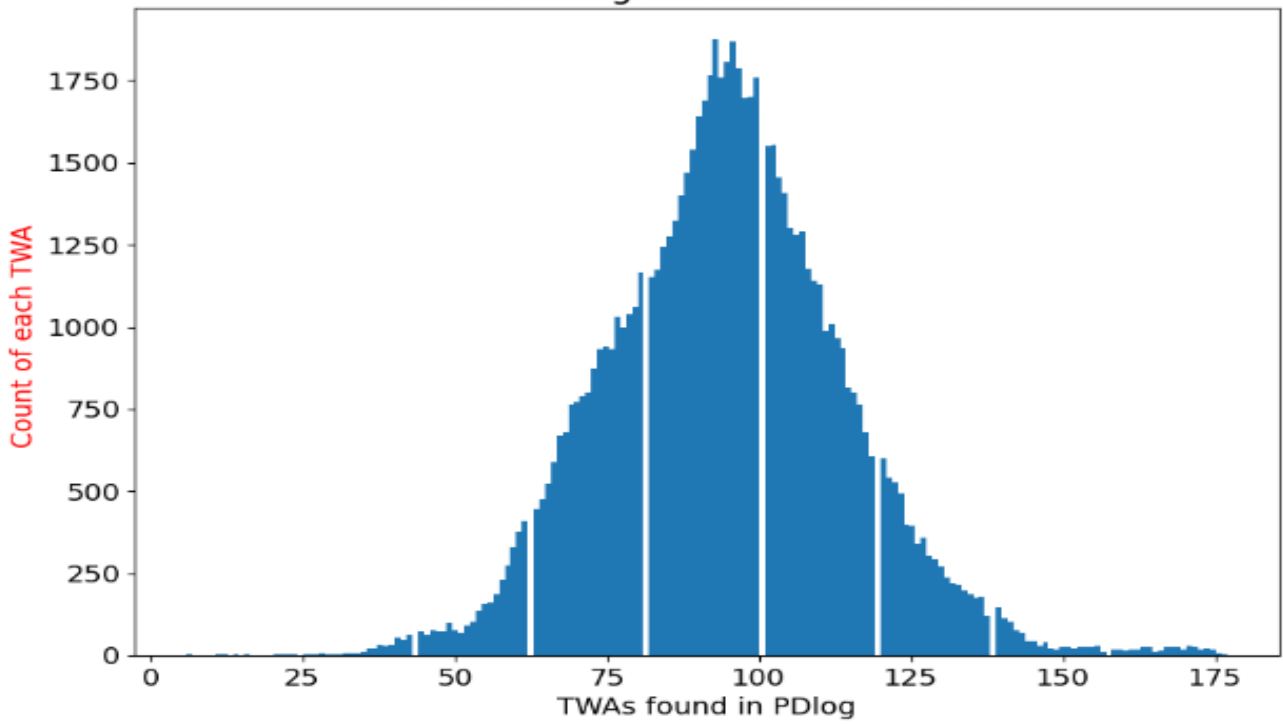
Below: COG and heading over 24 hours. Difference due to Deviation and Variation.



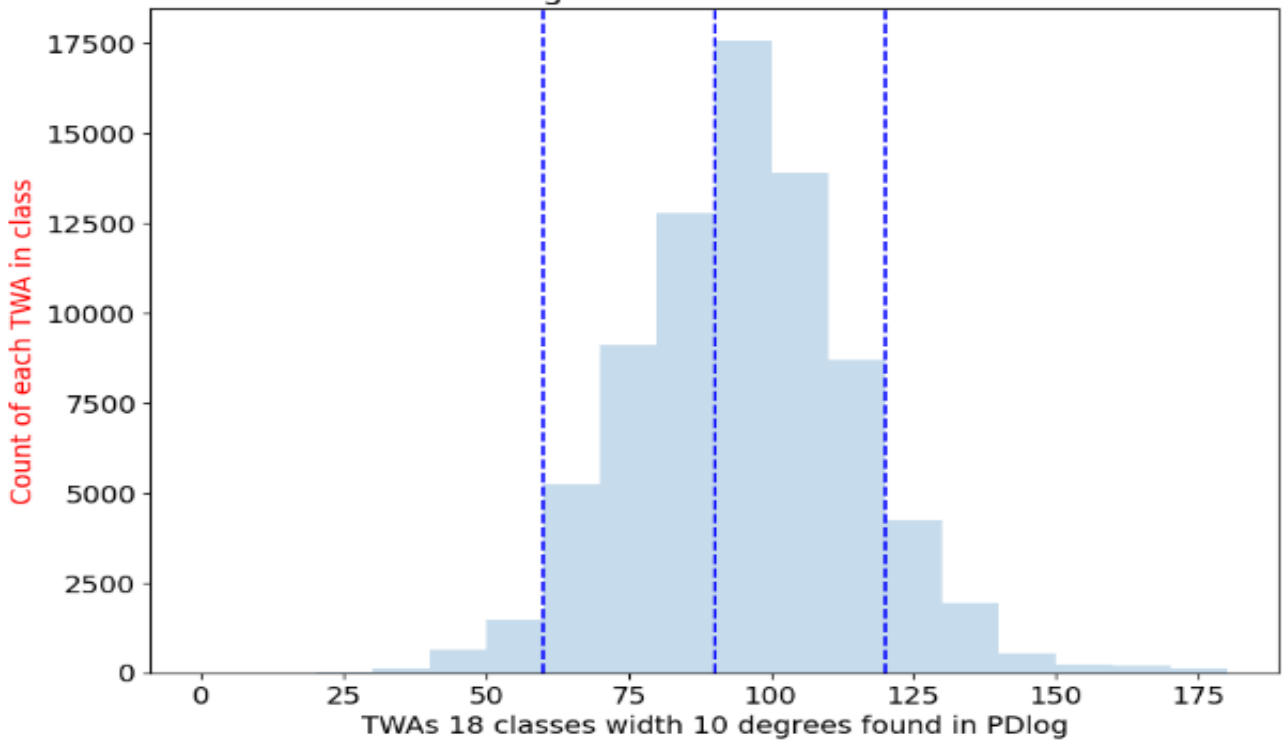
Above: SOG and Closing Speed to WP. Closing Speed most of the time a fraction lower than SOG: not all speed goes into the direction to the WP: up/down and left/right movements.

Below: Sorted SOG (red) and STW. The error of the STW is mostly downwards (lower) but also very noisy.

TWA Histogram with 180 TWA's



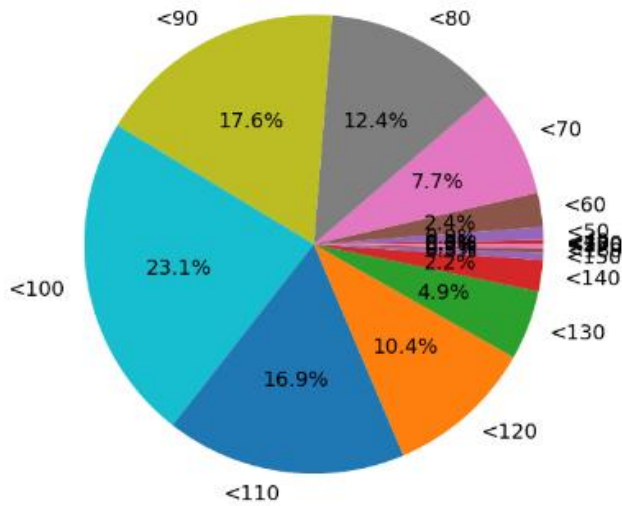
TWA Histogram with 18 classes of TWA's



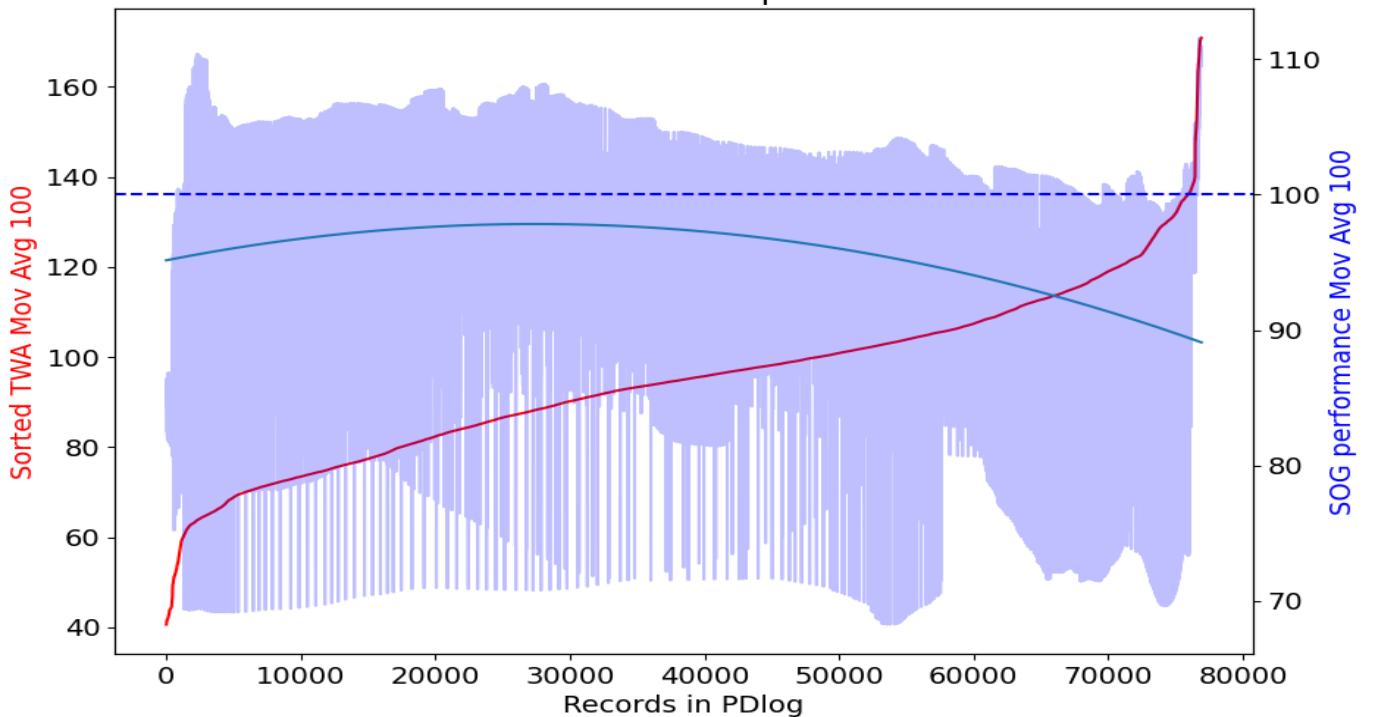
Above: distribution of TWAs sailed during 24hour race.

Below: same but now in classes of 10 degrees wide TWA

TWA Pie with 18 classes of 10 deg wide



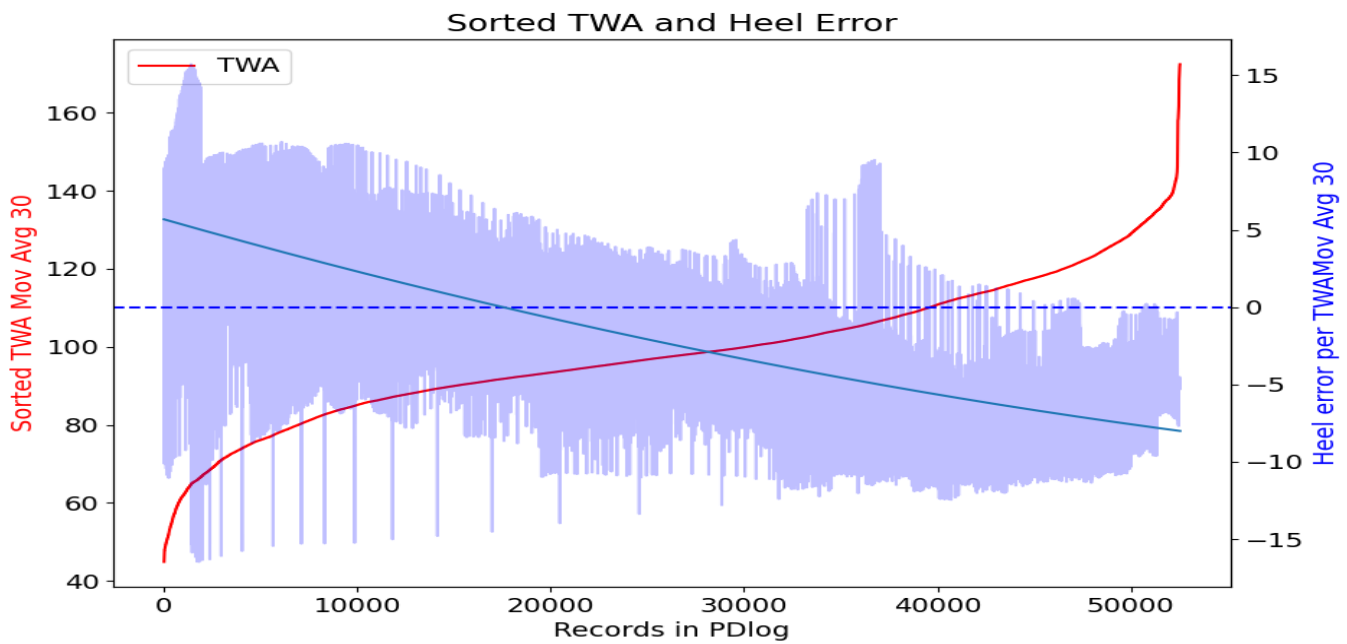
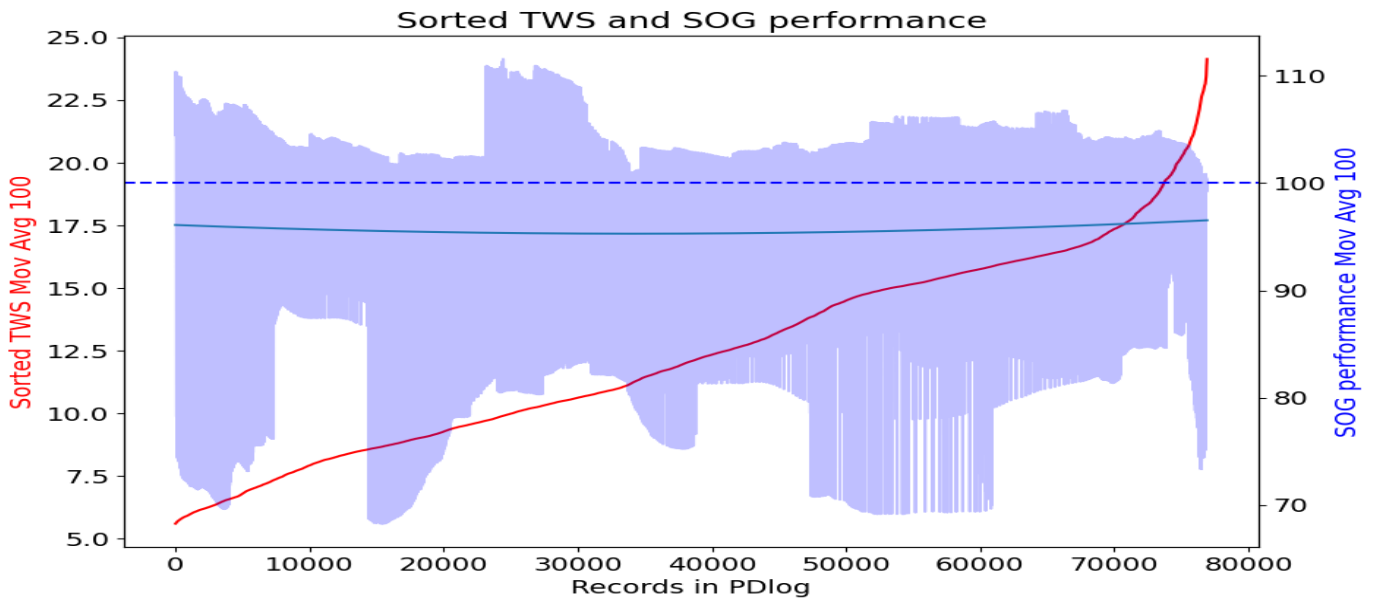
Sorted TWA and SOG performance



Above: TWA distribution in 18 classes of 10 degrees as pie chart with percentages

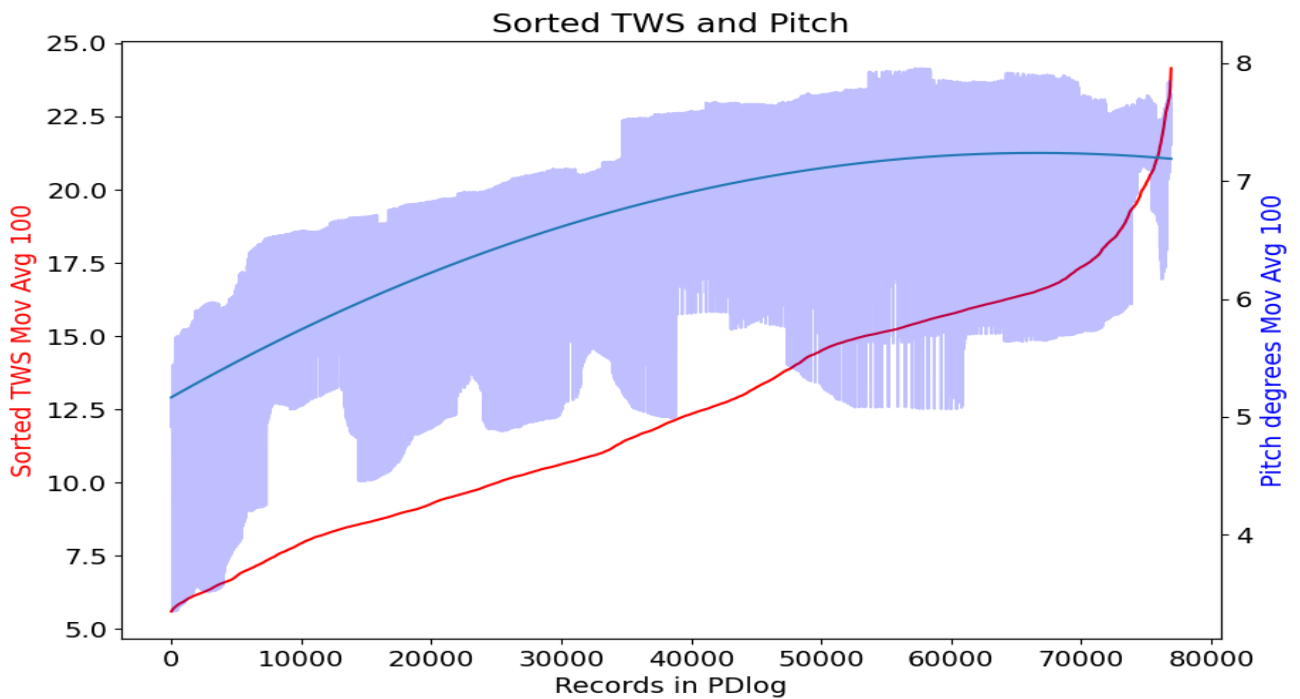
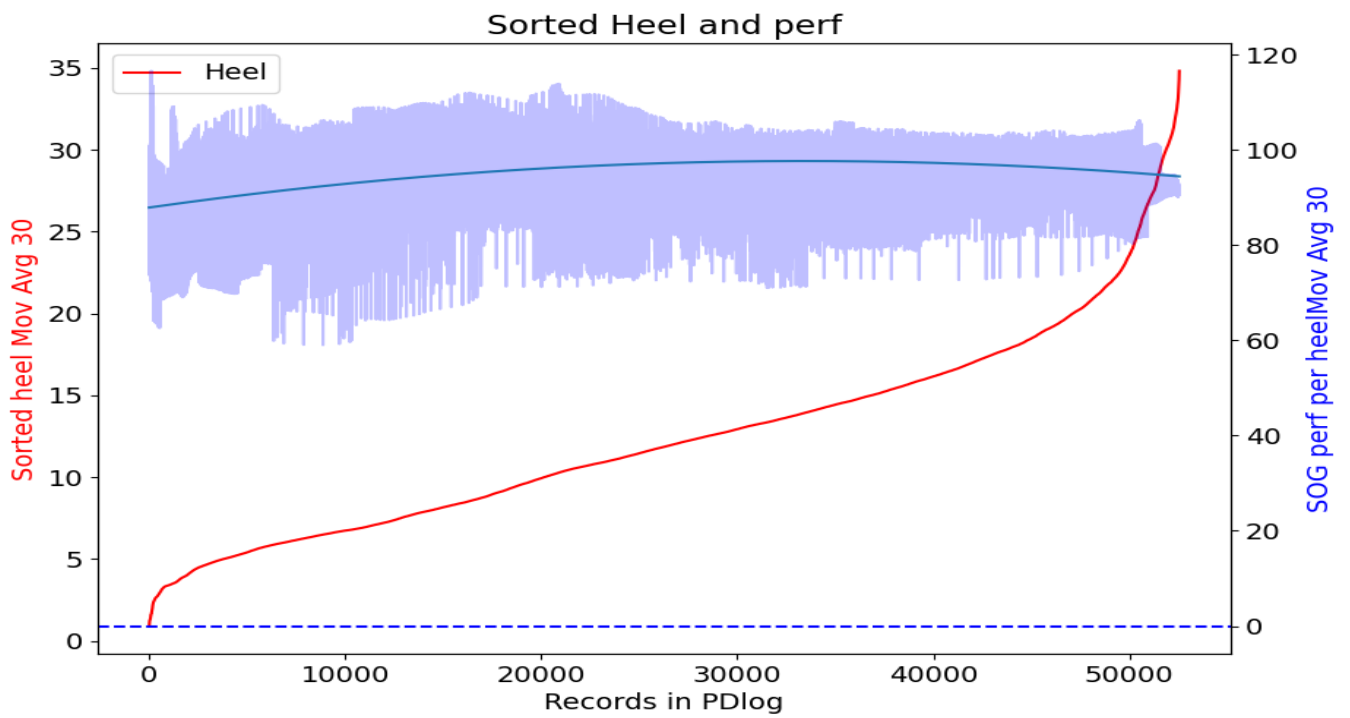
Below: TWA sorted (red line, left axis) over 24 hours. Purple all SOG performance per TWA; varies from 70 to 105 %. Trendline highest point is at ca 90 TWA (as expected).

TWA above 140 is slow! TWA 60 also a bit slow.



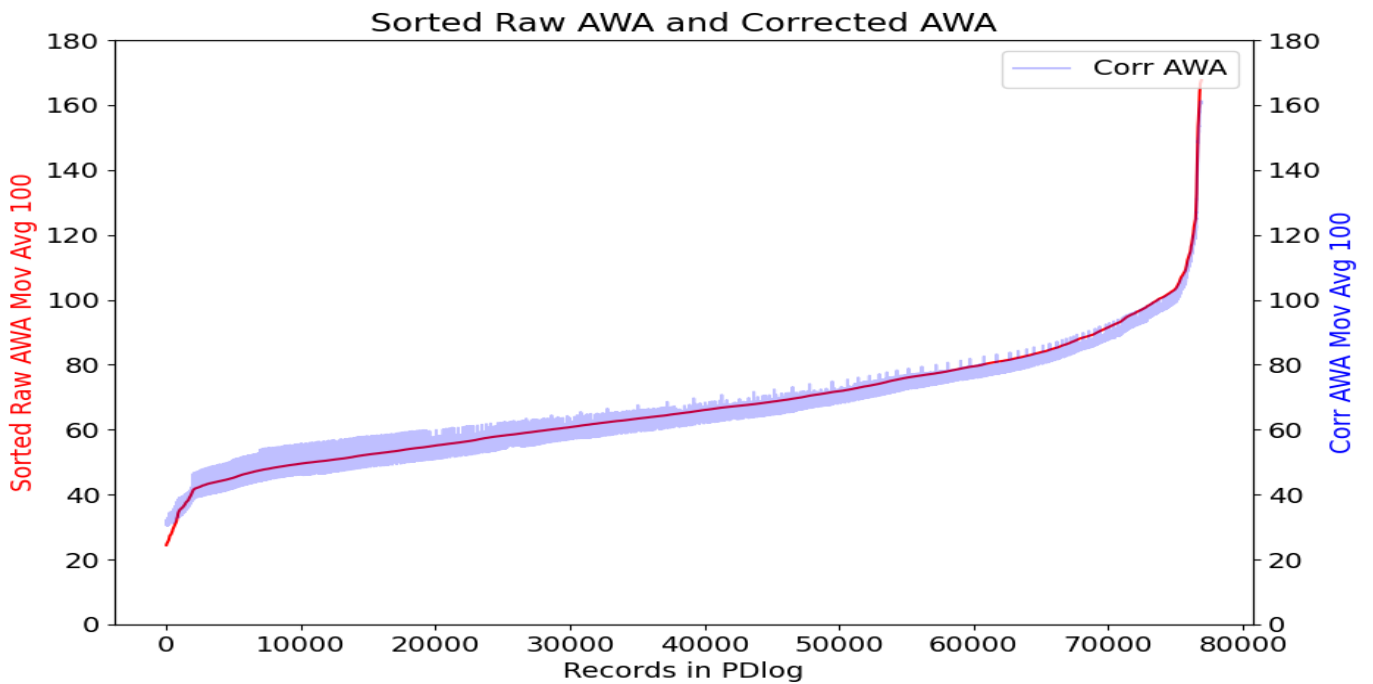
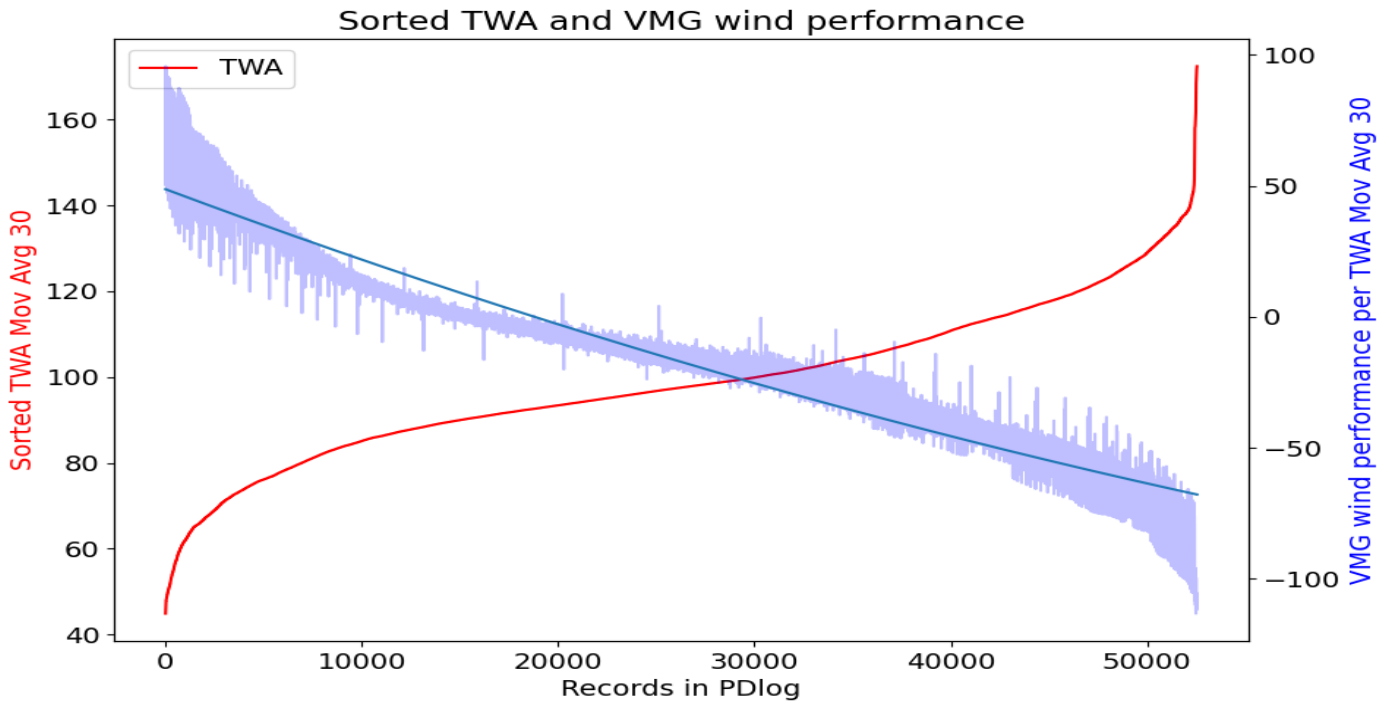
Above: TWS (red) sorted over 24 hours; 6 to 25 kts. Purple all Performance for each TWS measurement, varies form 70 to 100+ %. No effect of TWS on Performance (as it should be).

Below: TWA sorted (red). Heel error is measured heel minus target heel (from polar). Purple all heel per TWA. Too much heel at low TWA (lefthand, heel error > 0). Too few heel at wide TWA, re=ight hand side. Error negative.



Above: Sorted Heel (red) and Performance. Left and right side (low resp high heel) have slightly less performance.

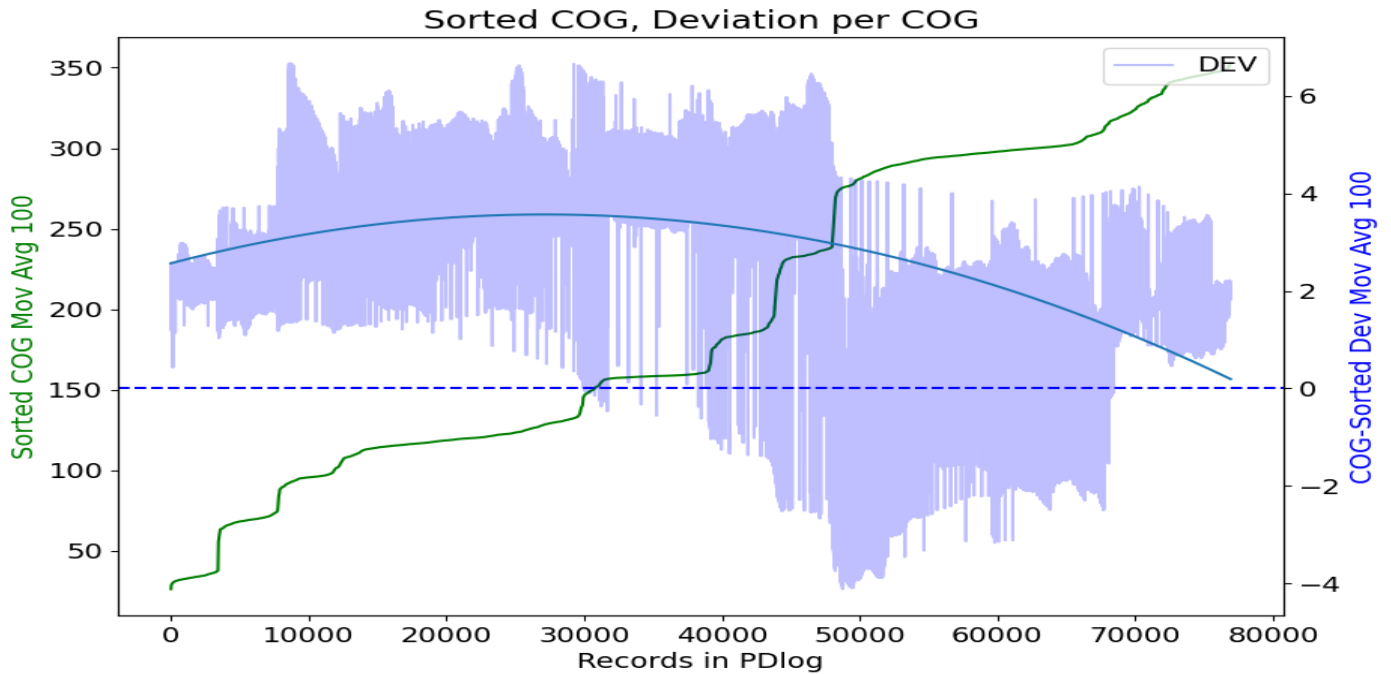
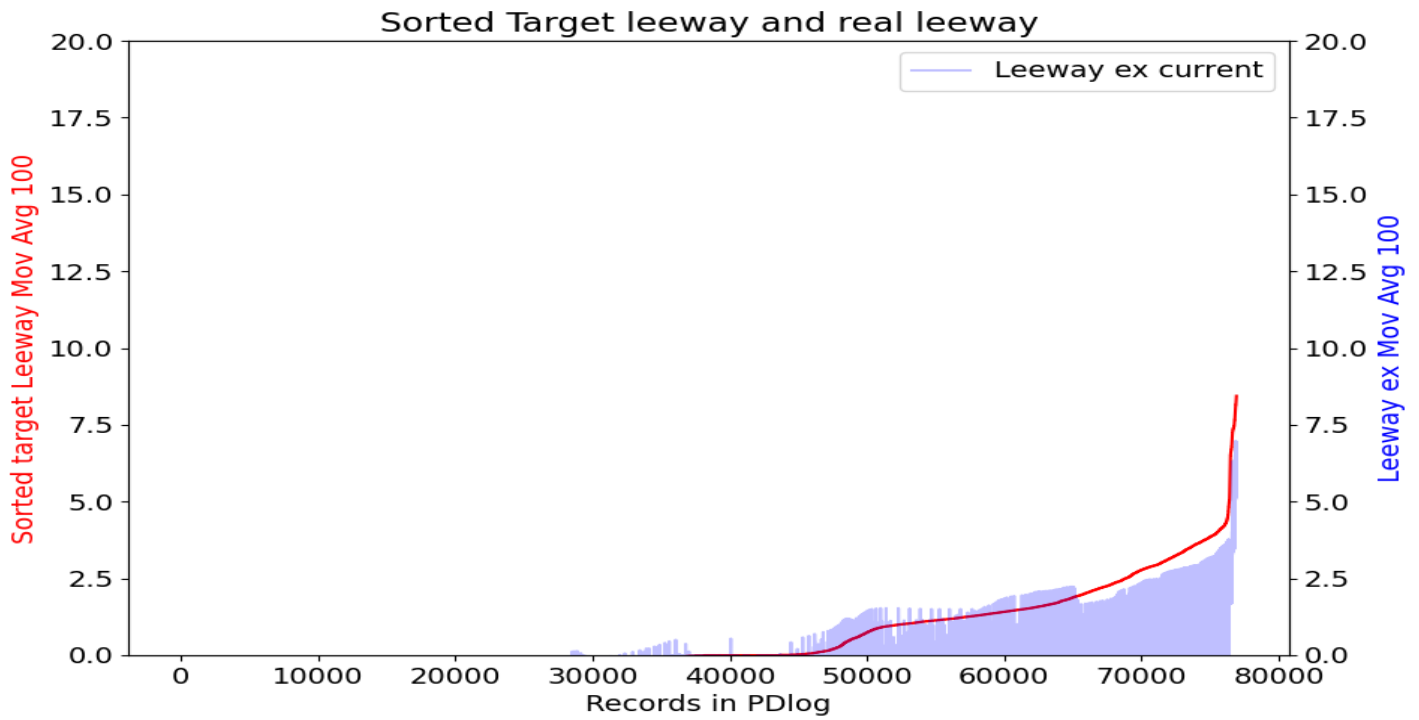
Below: Sorted TWS (red) 5 to 25 kts, and Pitch (bow up-down). Pitch increase with wind: more waves. Pitch is never below 4 degrees: too many people in the cockpit.



Above: Sorted TWA (red) and VMG to Wind Performance. Of course at 90 TWA VMGperf is 0.

Most lefthand side: beating to windward, VMGperf about 100%. Other side: Downwind, -100%

Below: Sorted Raw AWA (as measured by windset, red), with corrected AWA (for heel), purple. Wider TWA given less correction. Can be used to improve correction calculation in SPD.



Above: Sorted target Leeway according to K formula (red) with measured real leeway. Real never higher than target.

Below: Sorted COG (green) and deviation (diff between COG and HDG). Purple part has a bit the look of a sinus (as it should). Can be used to create a Deviation Table for the electronic compass.