

Data & Racing

Part Two – What is Data & GPS
Speed?

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What Is Data?

- Data comes from a data system that measures and records information from sensors either in the data systems itself and from sensors installed in your vehicle.
- AiM has standalone and fully integrated data systems (they call them [loggers](#))
- Loggers use internal data from GPS and internal sensors & your ECU or external sensors



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Why Use GPS Speed?

- We will be focusing on GPS Speed and the logger internal sensors alone as the data from these two sources is very helpful in understanding overall performance.
- AiM uses global positioning satellites to pinpoint your vehicles position on the racetrack.
- It then compares this data by continuously taking samples as you move around the track.

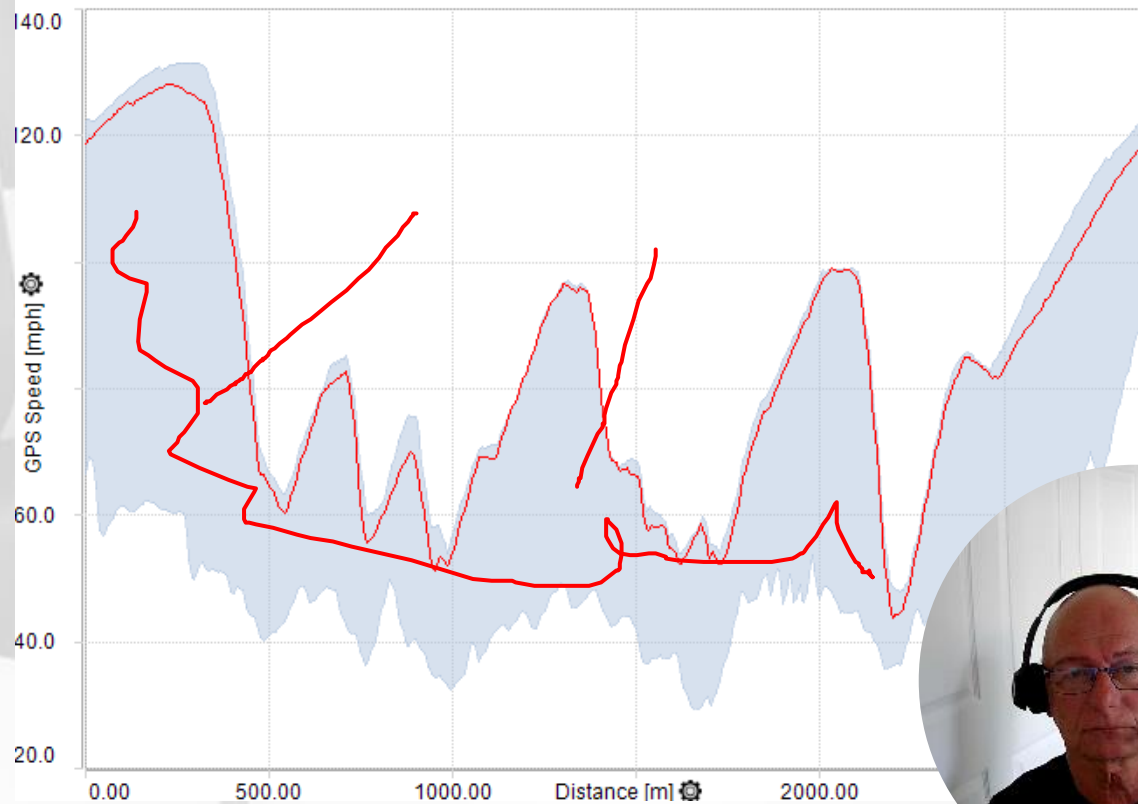


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GPS Speed, A Closer Look

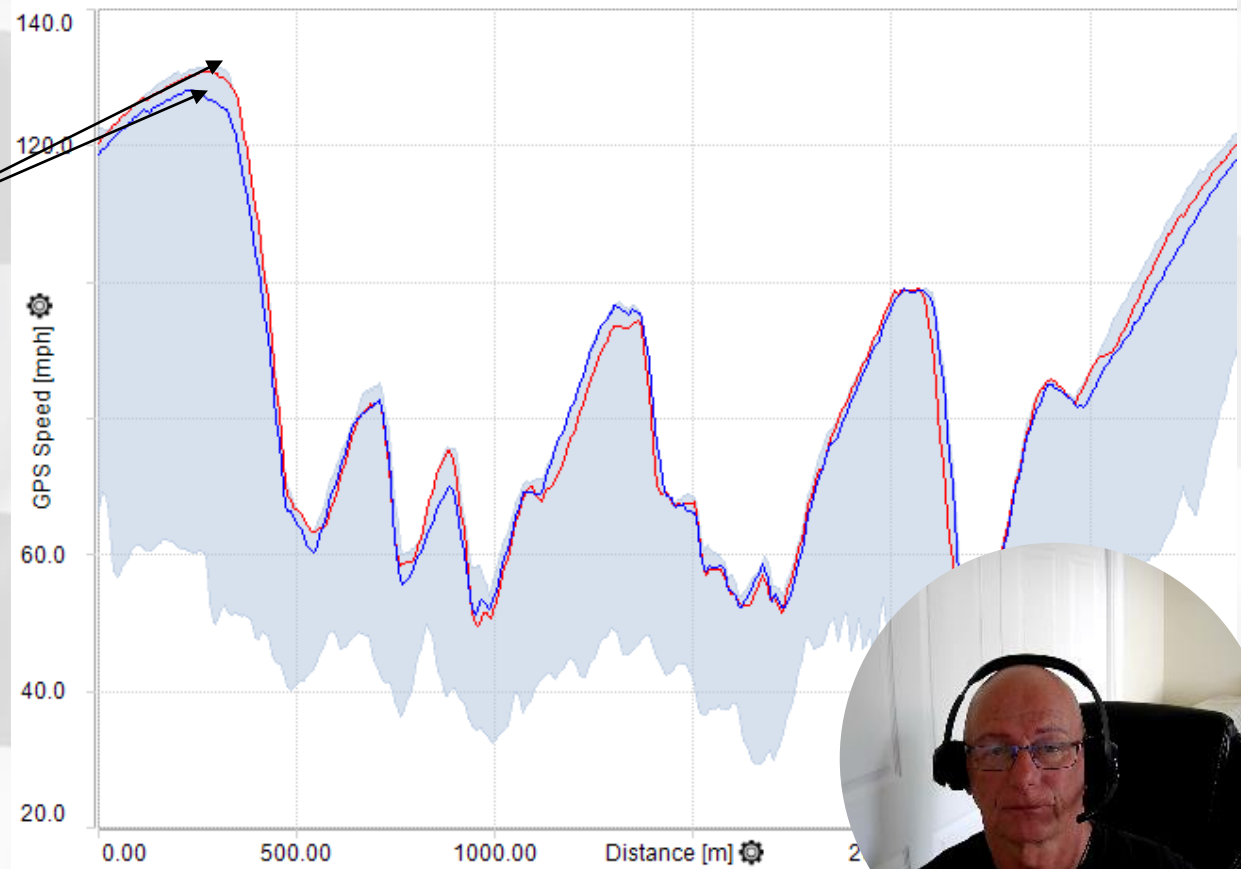
- The area under the curve – the bigger the area the faster the lap!!



GPS Speed, A Closer Look

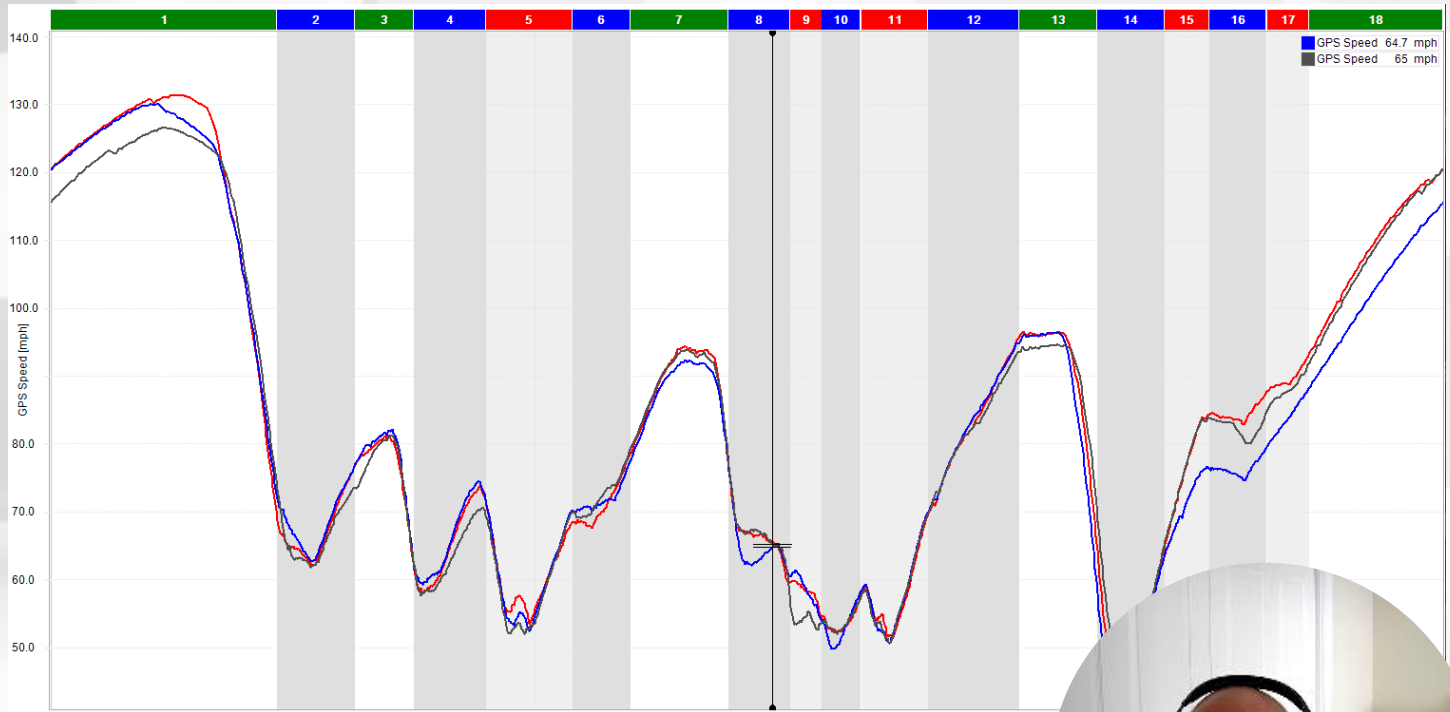
- The higher the GPS Speed, the faster the lap!!

Comparing two laps the red lap is the fast lap, the blue lap is the second fastest.



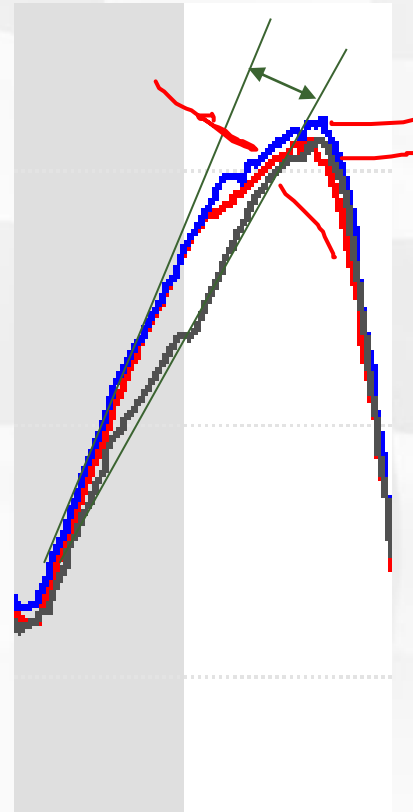
GPS Speed, A Closer Look

- Look for consistency when comparing laps.



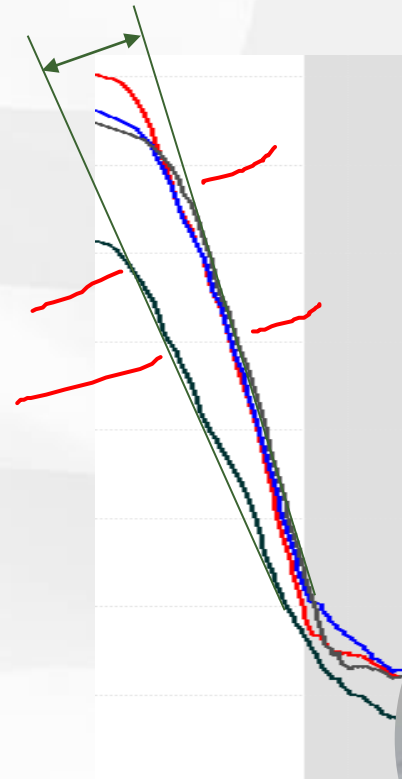
GPS Speed, A Closer Look

- Look at the angle of change in the GPS Speed trace – in acceleration (up).



GPS Speed, A Closer Look

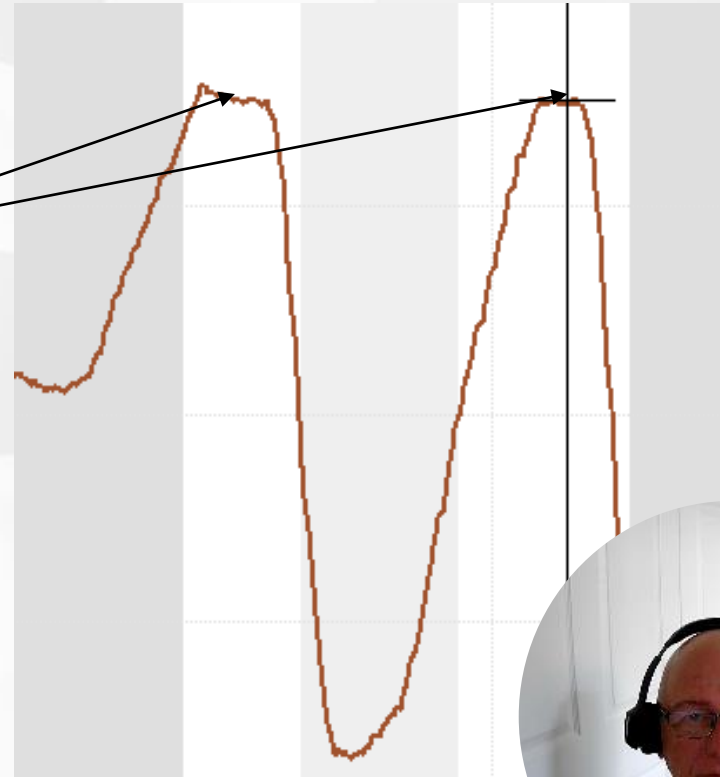
- Look at the angle of change in the GPS Speed trace – in braking (down).



GPS Speed, A Closer Look

- Look for coasting (neutral throttle) in the GPS Speed trace.

This “flat” section is caused by coasting prior to braking, Lap time is lost here.



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What is Data & GPS Speed?

Thanks for joining us for our discussion of data and GPS speed, I have posted all of the links in the section below, as well as a link to the PDF copy of this presentation. Stay tuned to our YouTube channel for our next video on longitudinal g in seven days. See you soon!!



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