## Data & Racing

Part Three – Longitudinal g April 2024



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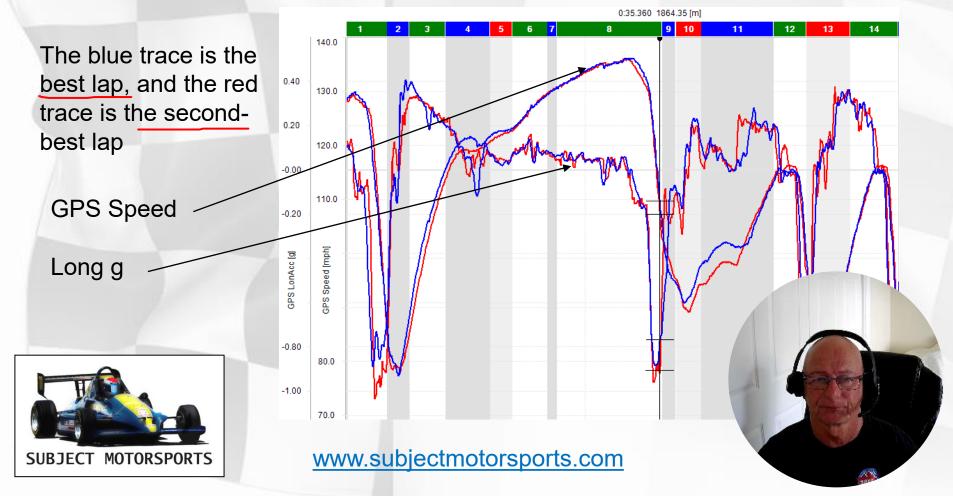


#### Longitudinal g

- Reviewing the longitudinal g in your analysis can be very beneficial:
  - When long g goes up you are accelerating
  - When long g remains constant you are travelling at the same rate
  - When long g goes down, you are slowing, either by braking or lifting the throttle



Compare laps with GPS speed and long g

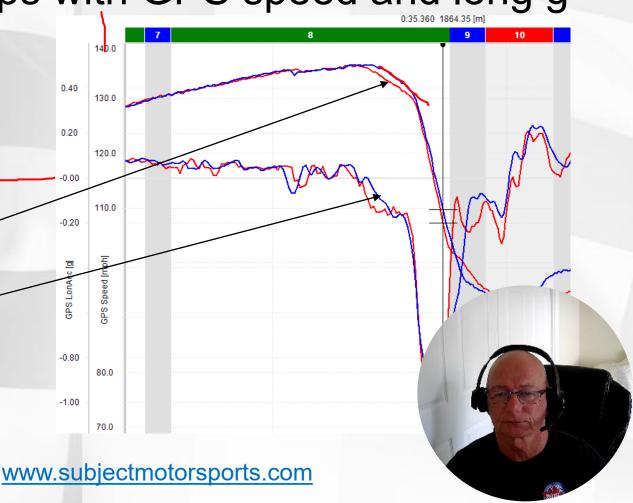


Compare laps with GPS speed and long g

The blue trace is the best lap, and the red trace is the second-best lap

What is happening here in corner 8? GPS speed trace is slowly going down and long g is slightly negative.



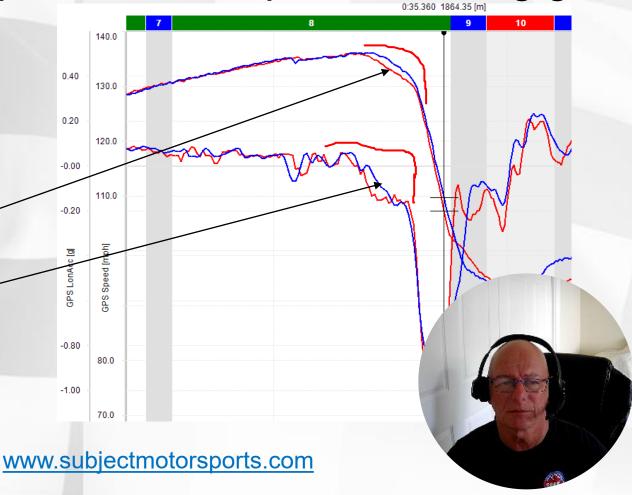


Compare laps with GPS speed and long g

The blue trace is the best lap, and the red trace is the second-best lap

The driver is coasting prior to heavy braking for corner 9 – carry the throttle further then brake!!





- Many attributes can be analyzed using long g including:
  - Throttle application
  - Braking points
  - Coasting
  - Lap to lap performance





#### Longitudinal g

Thanks for joining us for our introduction to longitudinal g, 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 summary video in seven days. See you soon!!



