



AiM Webinar
"Finding Trends in Your Driving"
5.5.20
Edited Q&A

1 **Q:**Can you plot pitch on a track map so you can verify that you are getting weight shift at the right places in the corner?

A1:Whenever you have a pitch channel, you can do a coloring of the GPS plot, and see where your channel has the values you look for.

A2:You can select the gyro channel to be overlaid on the GPS map by left clicking the color spectrum bar in the GPS map view and selecting the gyro channel.

2 **Q:**I can see why TPS and brake pressure makes sense, what should I be learning from the RPM trace?

A1:The RPM will help you understand if you are in the correct range to make power. If speed is slower to increase, then you might have grabbed a gear too soon or too late and RPM can help with that assessment.

A2:[Answered live]

3 **Q:**How do I switch from time base to distance base?

A:There is a button at the top right when in the measures graph, the icon looks like a white and gray pie graph.

4 **Q:**How do I add multiple channels to one graph?

A:You can add channels by clicking on the measure on the left side tool bar. If you want all of the channels in a single graph, select the "show graphs mixed" button from the icons in the top right. (Looks like 2 blue sideways L's)

7 **Q:**Do you use your personal best at a track as a comparison or your best for the day?

A1:It depends on the conditions. The comparison is more meaningful when conditions are the same. Also answered live later in the video by James.

8 **Q:**How is the zoom function linked between windows?

A:The measures graph is your "master view". If you zoom in on the measures graph it will also zoom in on GPS map, X/Y plot, etc.

9 **Q:**My GPS map view is very limited on zoom. Any help?

A1:If you are not seeing the entire GPS Map, try zooming out on the measures graph. Zooming on the GPS map will make the map smaller and larger but will not allow you to see the entire lap if you have zoomed in on the measures graph.

A2:The viewable track is linked to the data you are looking at, if you are zoomed in it is eliminating it from the GPS view. If you want to understand your position on track, try opening the track map found under the map section in the top right corner.

10 **Q:**If I see data that needs addressing, is there an “easy” way to tell if it is my driver or is it my kart?

A1:There are too many variables at play here to have an “easy”, one-way-tells-all way of doing it. It would depend on what you find to be a problem and whether that problem has to do with driver inputs or the vehicle itself.

A2:I find the best way to get to the bottom of this is through driver debriefing and comparing the data to other laps within the session to see if the section was done better on other laps.

11 **Q:**Is it possible the vehicle [in the data shown on screen] was following another car and had to lift to avoid hitting them?

A:Yes, it is possible. What James is showing is the process to understand what happened in order to immediately understand why it happened.

12 **Q:**One of the most difficult things I deal with is not having a faster lap to compare to with a single customer. Any suggestions?

A:Try to use the split report and identify single sectors which are the fastest.

13 **Q:**I would find it very useful to have predicted lap time in the logs to see where a mistake costed time that you never recovered. Is there a way to do this?

A:The Predictive Lap Time as seen live in the car is the same information shown in the Time Compare Bar in the bottom most graph in the Measures Graph in Race Studio 2. It is designed to do exactly what you are interested in doing.

14 **Q:**Can a measures graph be generated for the best theoretical lap?

A:No. Best theoretical is only available in the split reports window.

15 **Q:**When looking at the GPS map, is there a function that shows track edges, instead of just comparison of driver to driver as James is now showing?

A:Unfortunately, no. When RS3 Analysis is released, it will allow you to overlay driven lines on track maps from Google Earth within the software. For now, files may be exported to Google Earth for GPS overlay.

16 **Q:**Could you explain the difference between the Throttle Pos and the ACCEL POS channel? Which one is best?

A:You may see similar things like this in many ECU based data. In this example, the Throttle position is what the engines throttle body car is doing, pedal (or accelerator) position is what the driver is asking the car to do. In a Spec E46 the Throttle Pos and Pedal Position are the same as there isn't a traction or stability control system in play. If the vehicle has traction control, looking at both channels can show the difference between what the engines throttle body is doing compared to the driver's throttle pedal input.

17 **Q:**For a Solo 2 user, what best equates to throttle position in terms of GPS data?

A:The GPS_LonAcc channel is a good alternative as it can show transitions between braking (negative GPS_LonAcc values) and acceleration (positive GPS_LonAcc values).