



AiM Webinar

"Finding Trends with Only GPS Data"

5.19.20

Edited Q&A

1 Q:
Is the throttle on/off channel a math channel?

A1:
Yes, it's a math channel using GPS Inline Acceleration.

A2:
[Answered live]

2 Q:
Could we get a post on how to create brake speed as a math channel?

A1:
Here is the channel information for you:

- GPS BRAKE SPEED
- IF(LT(GPS_LonAcc,-0.15),deriv(GPS_LonAcc),0)
- Unit of measure: Unit
- Full scale: 0
- Zero scale: -2

A2:
Also check out James' video on math channels:
https://youtu.be/FhkMyda_Ncs

3 Q:
Does the Mychron5 only have GPS or can you add other sensors?

A:
Mychron5 has more than GPS, but the analysis we're introducing is for any unit with GPS.

A2:
The Mychron5 does have GPS, it also has RPM and 1 (or 2 for the Mychron5 2T) temp sensors. If you would like additional sensors you can purchase the Mychron Expansion and add throttle/brake sensors, additional temperatures, and/or speed.

4 Q:
When brake speed goes above zero, that means the car is accelerating, right?

A:
Yes.

5 Q:
Is there a gyro sensor as well?

A:
GPS_Gyro is a computation the AiM software does. There are also sensor based gyros that can be added to most systems.

6 Q:
Is there an easy way to make these show on every analysis?

A:
[Answered live]

7 Q:
Is there any Math Channel to see oversteer and understeer?

A:
Not with GPS only but it can be done with additional sensors. In the general tab of RaceStudio Analysis you can find the formula structure to use for this calculation.

8 Q:
Why is it GPS_Inv_LonG and not GPS_Inv_LonAcc?

A:
That's just what James decided to call it. It is a calculated channel and can be named in any way.

9 Q:
Can you talk about the wiggles in the G Sum at end of the lap?

A:
[Answered live]



10: Q:
Does this still work with the map where you can piece together segments for the fastest theoretical lap?

A:
This is going to be just the GPS based map. You can see your best splits in the split report.

11: Q:
In an chicane or “S” corner, where you change direction quickly, is the dip in GSum acceptable or should the idea be to link the corners so the GSum is always maxed?

A:
Generally speaking you would want to see a smooth transition, but it is dependent on track conditions, type of turn, etc.

12 Q:
Is there a standard set of channel labels that would allow data from multiple systems to be compared easily?

A:
Not currently for RS2. You can change channel names to your liking within analysis. RS3 is looking to have a standard channel name to eliminate that confusion.

13 Q:
Roger, does the set of math channels you previously distributed include all these discussed today?

A:
[Answered live]

14 Q:
I have been tweaking the threshold values in these "on" channels to get closer to where I believe I am on the brakes. Is this a reasonable approach or am I better off using your values?

A:
[Answered live]

15 Q:
How do you view two sessions in the channels report?

A:
Open two tests and use the test compare tab found at the top of the window.