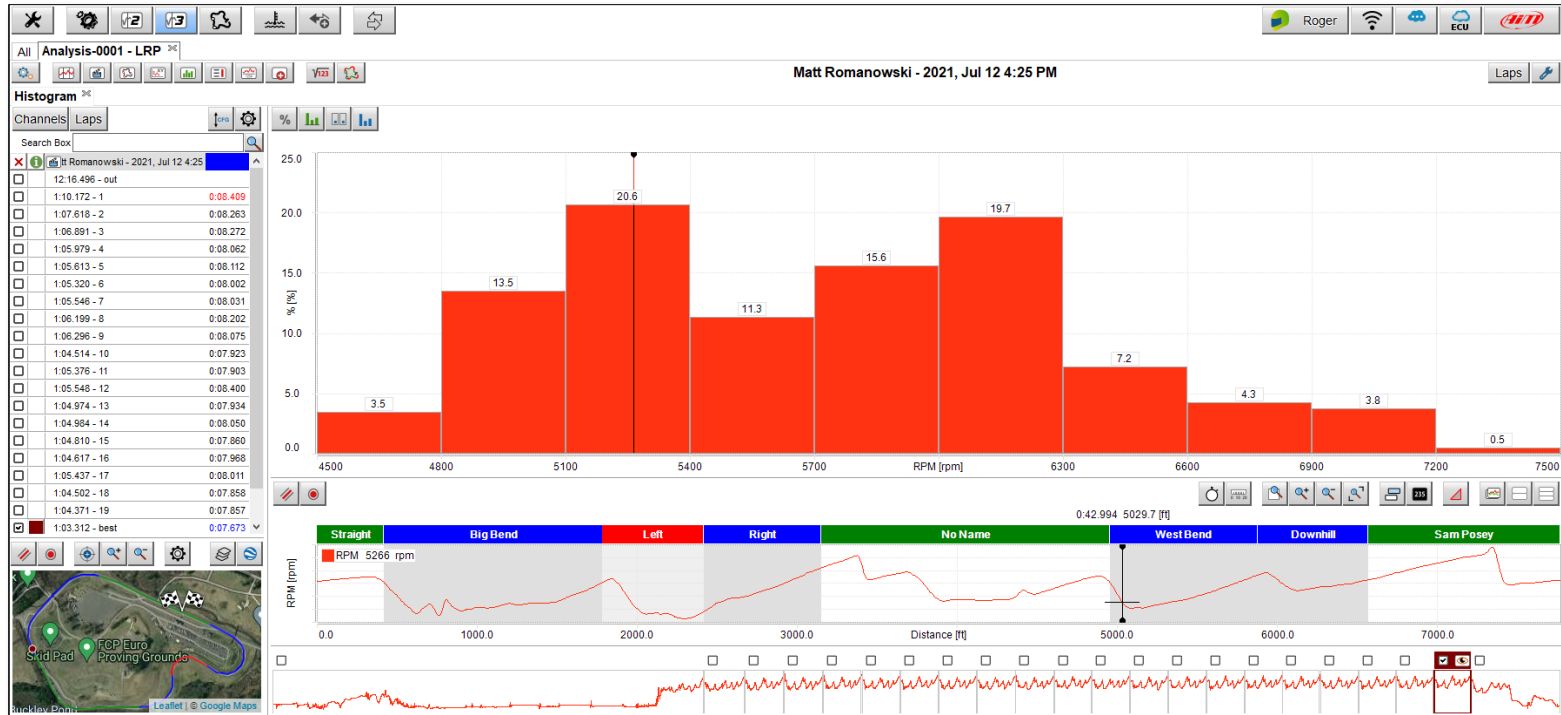


Histogram Function

Settings and Tips for the Best Use of This RS3A Function



Host:

Roger Caddell

AiM Sports - National Training Manager



Co-Host:

Matt Romanowski

TrailBrake.com - Owner



aimsports.com

Tuesday May 10th, 2022

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Co-Host:

Matt Romanowski

www.TrailBrake.com

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- Leading Technical and Stocking AiM Sports Dealer
- Seminars, at Track Coaching, Offsite Support, Online Sales, Pro Racing DAG
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- Many Time AiM Sports Webinar Co-Host!



www.TrailBrake.com

Matt Romanowski

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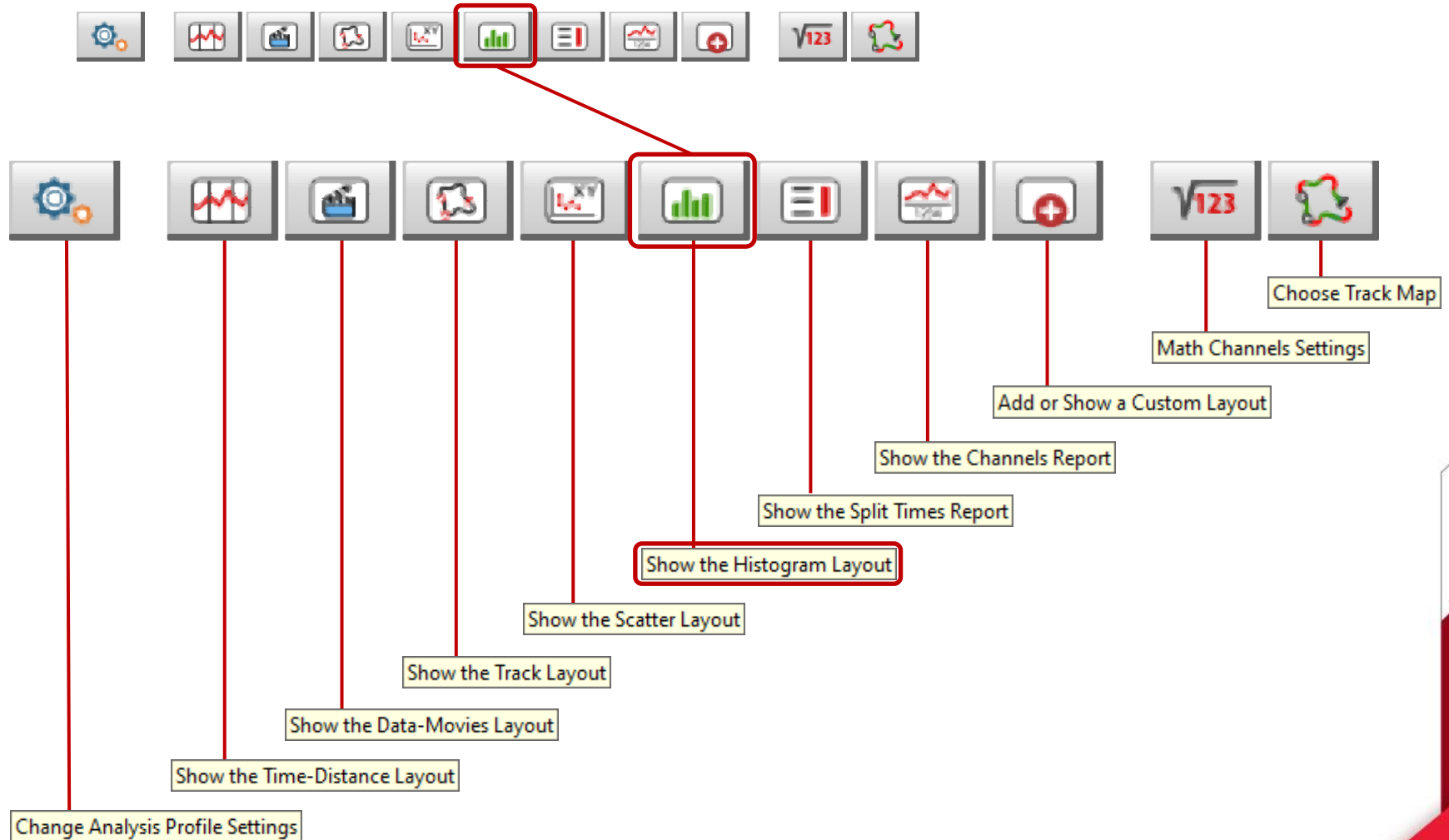


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Histogram Report



Race Studio 3 Analysis Function Toolbar



Race Studio 3 Histogram Report

Race Studio 3 Analysis Function Toolbar



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Histogram Function

Histogram Toolbar



Show the Histogram Layout



Choose the way you want the histogram to be displayed



Show histogram as bars



Show histogram as lines



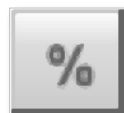
Choose how to orient histogram bars



Horizontal bars



Vertical bars



Choose a computation method for histograms

% Percent

⌚ Time

1234 N. of samples



Choose if you want to display histogram values



Hide bars values



Show bars values

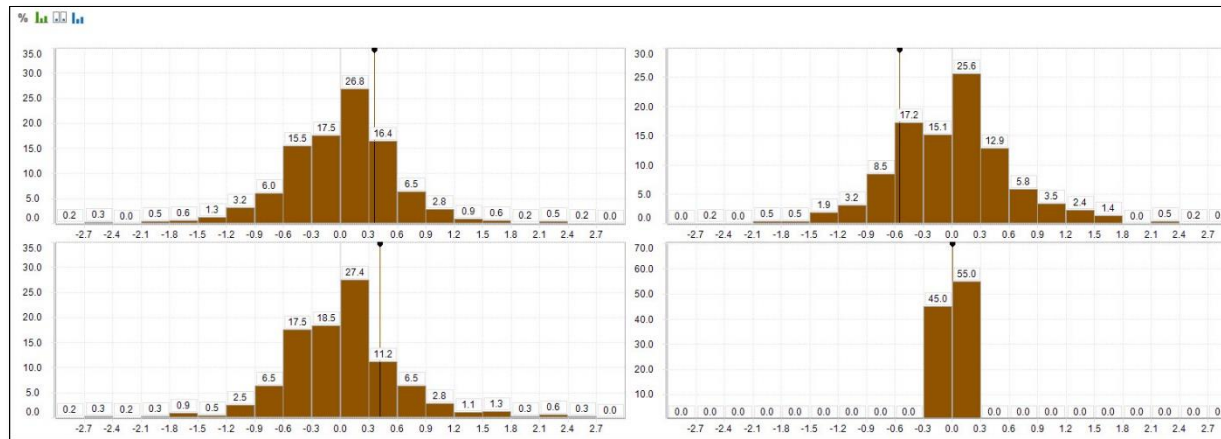
Histogram Plot Function



Histogram Plot Description

A Histogram Plot is also known as a bar graph. It groups values into bars (ranges or bins) and shows how often that occurs. The height of the graph can be based on percentage of the whole, time, or number of events.

The Most Well Known in motorsports is probably shock speed, but Histograms can be a useful tool to give you characteristics of the driver, car, and track.



Race Studio 3 Histogram Function

Histogram Plot Description

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Histogram Plot Function

Settings Dialog Box



The screenshot shows a 'Settings' dialog box for the 'Histogram' function. It contains several sections with radio button options:

- Name:** Histogram
- Choose how to orient histogram bars:** ☐ Horizontal bars, ☒ Vertical bars
- Choose a computation method for histograms:** ☒ Percent, ☐ Time, ☐ N. of samples
- Choose the number of bars you want the histogram to be divided into:** ☐ 5, ☒ 10, ☐ 15, ☐ 20, ☐ 25, ☐ 30
- Choose if you want to display histogram values:** ☐ Hide bars values, ☒ Show bars values
- Choose if you want to compute the sum of all histograms for every session:** ☒ Hide sum for all slices/laps, ☐ Show sum for all slices/laps
- Choose the way you want the histogram to be displayed:** ☒ Show histogram as bars, ☐ Show histogram as lines
- Choose if you want labels on plot Y axis:** ☐ Hide labels, ☒ Show labels
- Choose if you want labels on plot X axis:** ☐ Hide labels, ☒ Show labels
- Choose which channels to display:** ☒ Use channels in common with other panels, ☐ Allow different channels in panel
- Choose if to increment available space:** ☒ Keep this window unaffected by space bar being pressed, ☐ Hide/show this window when space bar gets pressed

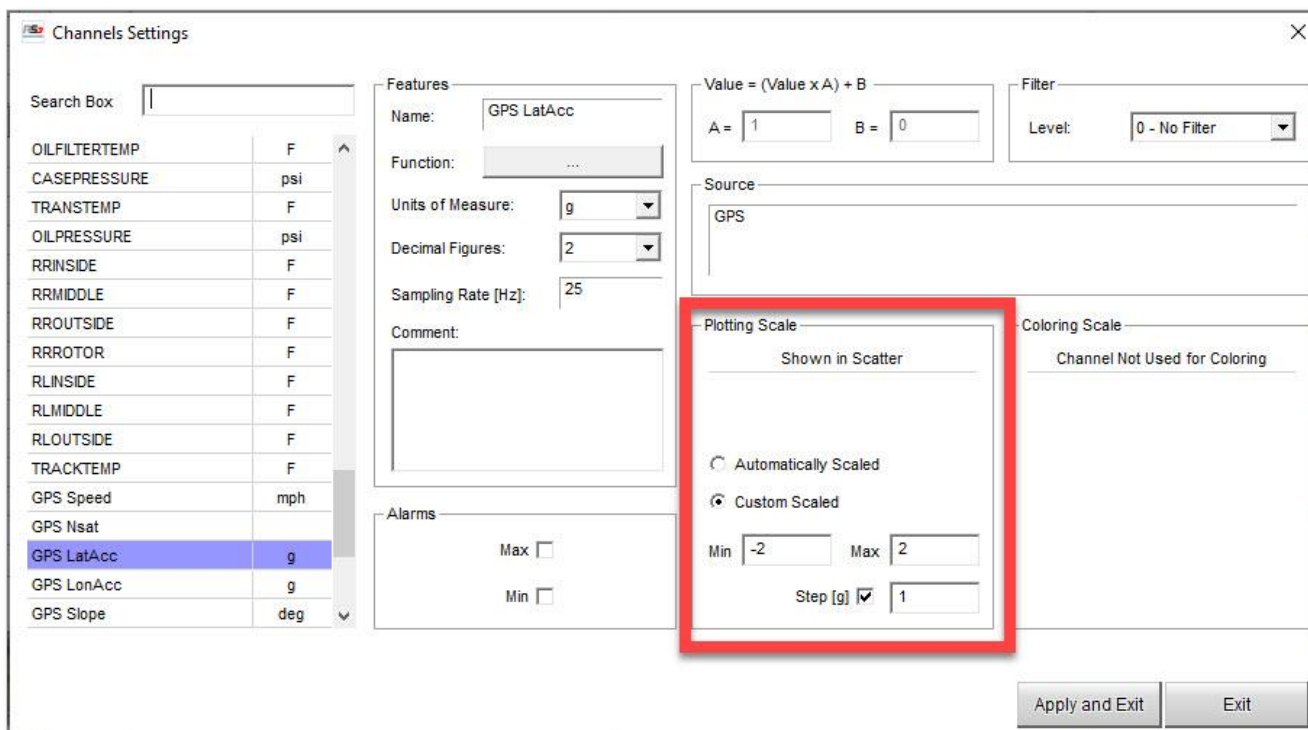
At the bottom are 'OK' and 'Cancel' buttons.

Right Clicking on the Graph Gives you the First Set of Options not able to be Done with Buttons/Icons on the Graph Itself.

Histogram Plot Function

Channel Settings for Plotting

The Channel Settings for the Individual Measures Controls the Plot Range and the Grid Line Spacing. This is for Both the X and Y axis. Watch the step control!



Channels Settings

Search Box:

OILFILTERTEMP	F
CASEPRESSURE	psi
TRANSTEMP	F
OILPRESSURE	psi
RRINSIDE	F
RRMIDDLE	F
RROUTSIDE	F
RRROTOR	F
RLINSIDE	F
RLMIDDLE	F
RLOUTSIDE	F
TRACKTEMP	F
GPS Speed	mph
GPS Nsat	
GPS LatAcc	g
GPS LonAcc	g
GPS Slope	deg

Features

Name: GPS LatAcc

Function:

Units of Measure:

Decimal Figures:

Sampling Rate [Hz]:

Comment:

Alarms

Max ☐

Min ☐

Value = (Value x A) + B

A = B =

Filter

Level:

Source

GPS

Plotting Scale

Shown in Scatter

☐ Automatically Scaled

☒ Custom Scaled

Min Max

Step [g] ☒

Coloring Scale

Channel Not Used for Coloring

Apply and Exit Exit

Histogram Plot Function

Coloring Histograms



The Channel Settings for the Individual Measures also Control the Coloring Scale that is Used When Coloring Graph Points.

Channels Settings

Search Box:

TPMS Temp RF	F
TPMS Temp LR	F
TPMS Temp RR	F
TPMS Volt LF	mV
TPMS Volt RF	mV
TPMS Volt LR	mV
TPMS Volt RR	mV
RIGHT Lambda	lambda
RIGHT AFR	AFR
RIGHT LmdTmp	F
RIGHT Diagn	#
FLROTOR	F
FUELPRESSURE	psi
OILTANKTEMP	F
THROTTLEPOSITION	%
OILFILTERTEMP	F
CASEPRESSURE	psi

Features

Name: THROTTLEPOSITION

Function: Pct Throttle Load

Units of Measure: %

Decimal Figures: 2

Sampling Rate [Hz]: 50

Comment:

Alarms

Max ☐

Min ☐

Value = (Value x A) + B

A = 1 B = 0

Filter: Level: 0 - No Filter

Source: Device

Plotting Scale

Channel Is Not Shown

☒ Automatically Scaled

☐ Custom Scaled

Min: -60 Max: 140

Step [%] ☒ 20

Coloring Scale

Color Channel in Scatter

☒ Automatically Scaled

☐ Custom Scaled

Min: -60 Max: 140

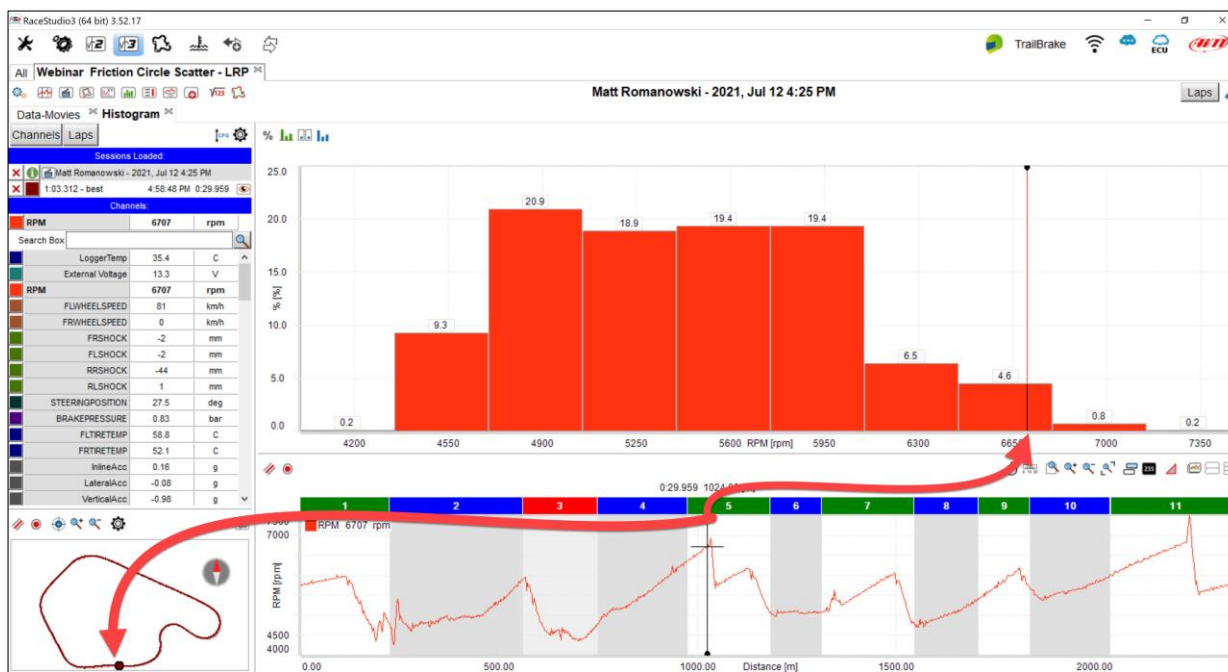
Apply and Exit Exit

Histogram Plot Function

Dynamic Linking



The Histogram is dynamically linked to any other graphs that are displayed. That means that the bar in the measures graph matches the data point in the histogram and track position shown on the map.



Race Studio 3 Histogram Function

Dynamic Linking

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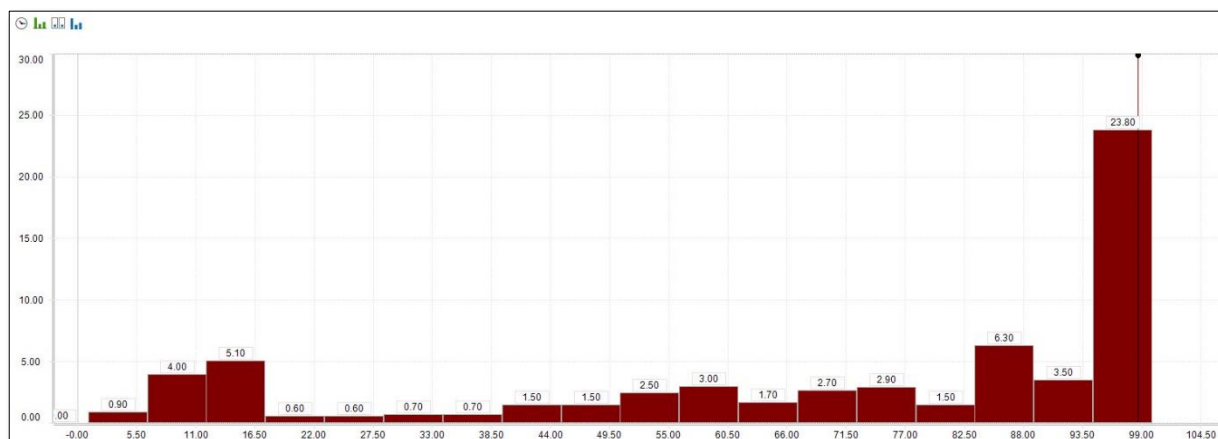


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Histogram Plot Function

Throttle Time

Histograms of Throttle Position are helpful for seeing how much of a track is driven at full throttle or other positions. Here you can see LRP is 27.9% full throttle!



Race Studio 3 Histogram Function

Throttle Time

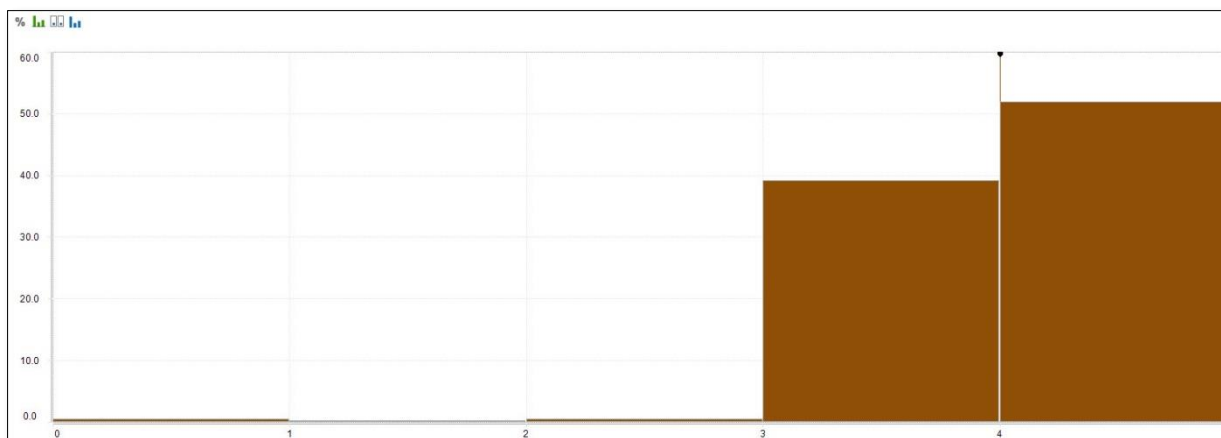
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Histogram Plot Function

Gear Position Use



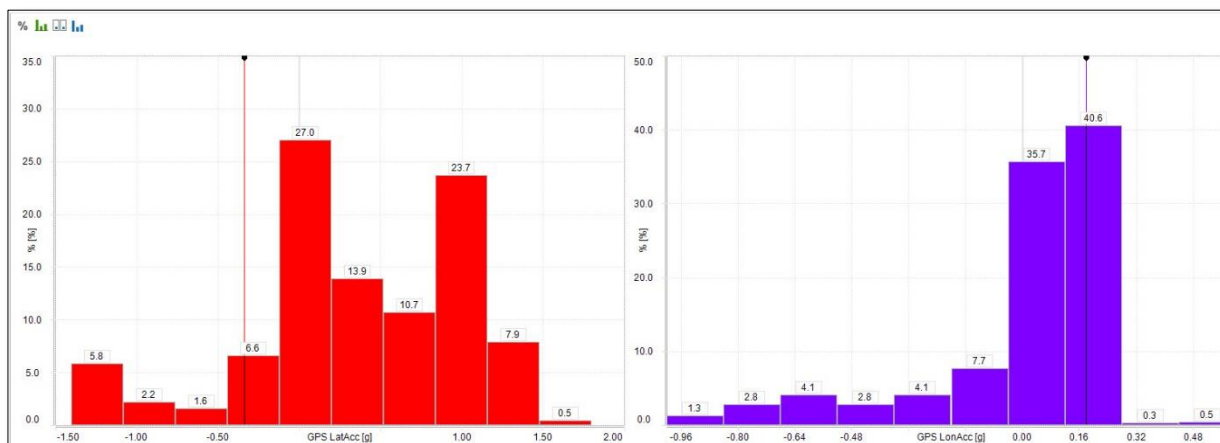
With a histogram, you can quickly see what gears are used most on a particular track.



Histogram Plot Function

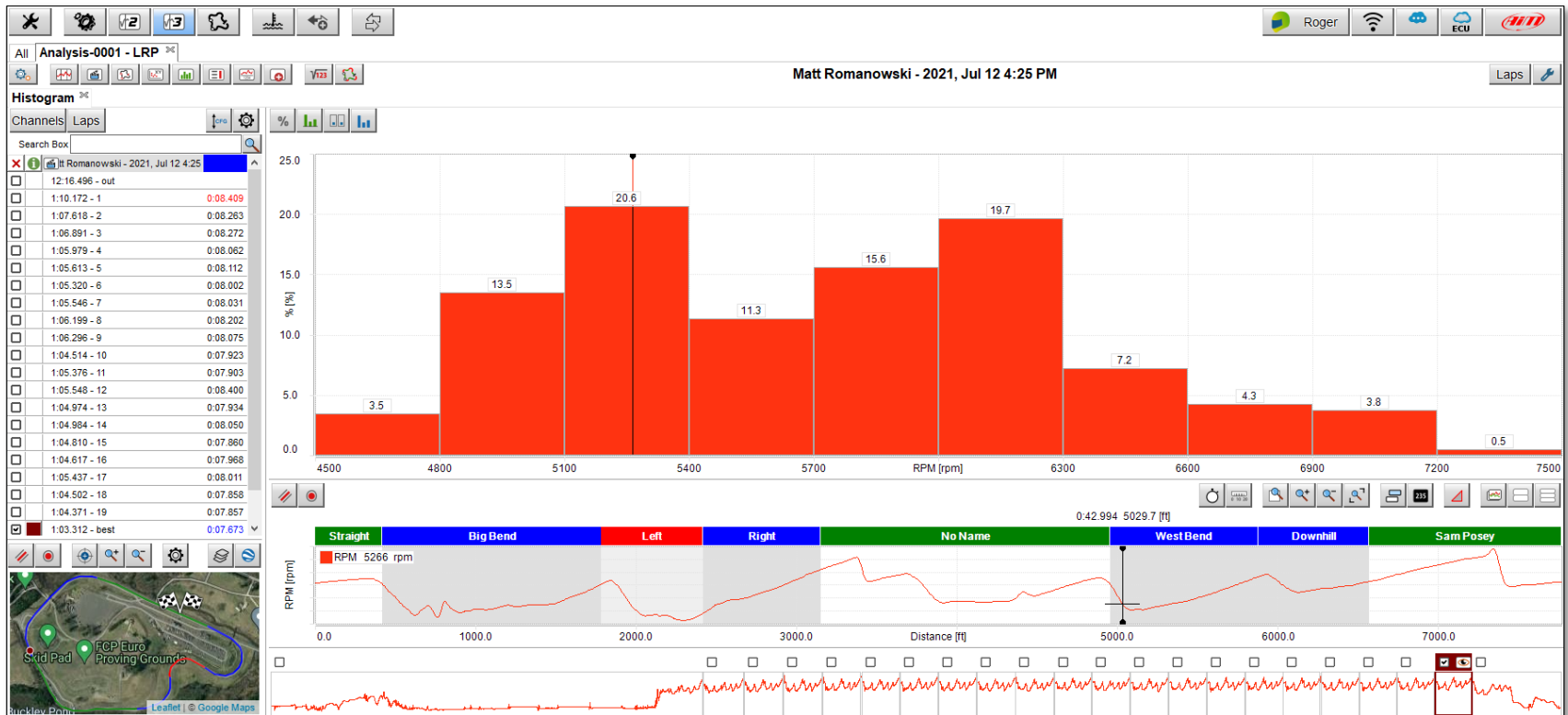
G Forces

Creating a histogram for G Forces can quickly show you the cornering and braking profiles for the track. They are especially helpful in looking at the types of brake zones and corners that characterize a track. These histogram profiles will be unique to this car and track.



Live Race Studio Demonstration

RS3A Histogram Function



Race Studio 3 Histogram Function

Live Race Studio Demonstration

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Histogram Function
Settings and Tips for the Best Use of This RS3A Function

Host:
Roger Caddell
AiM Sports - National Training Manager

Co-Host:
Matt Romanowski
TrailBrake.com - Owner

aimsports.com Tuesday May 10th, 2022 LearnFast™

Split Times Report
Settings and Tips for the Best Use of This RS3A Function

Host:
Roger Caddell
AiM Sports - National Training Manager

Co-Host:
James Colburn
JamesColburn.com

aimsports.com Tuesday April 26th, 2022 LearnFast™

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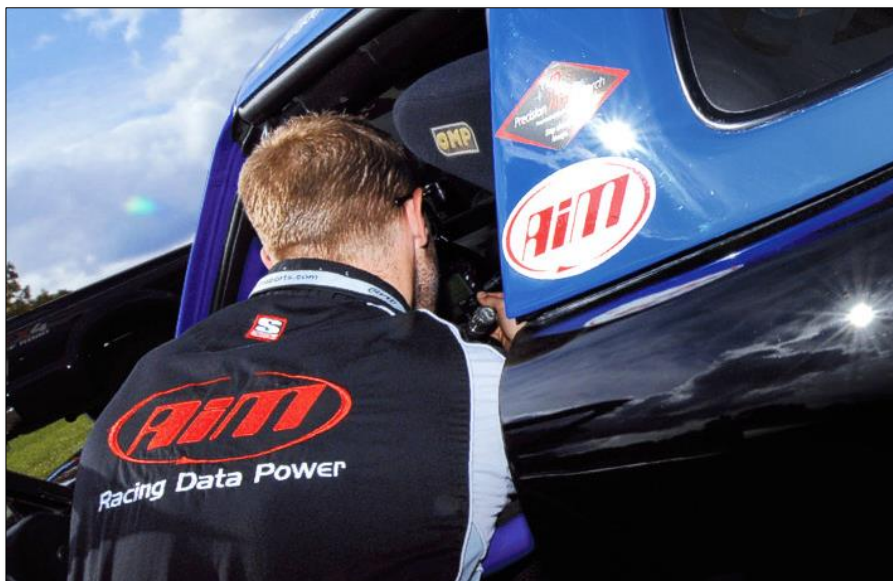
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Customer Support

At An Event Near You!

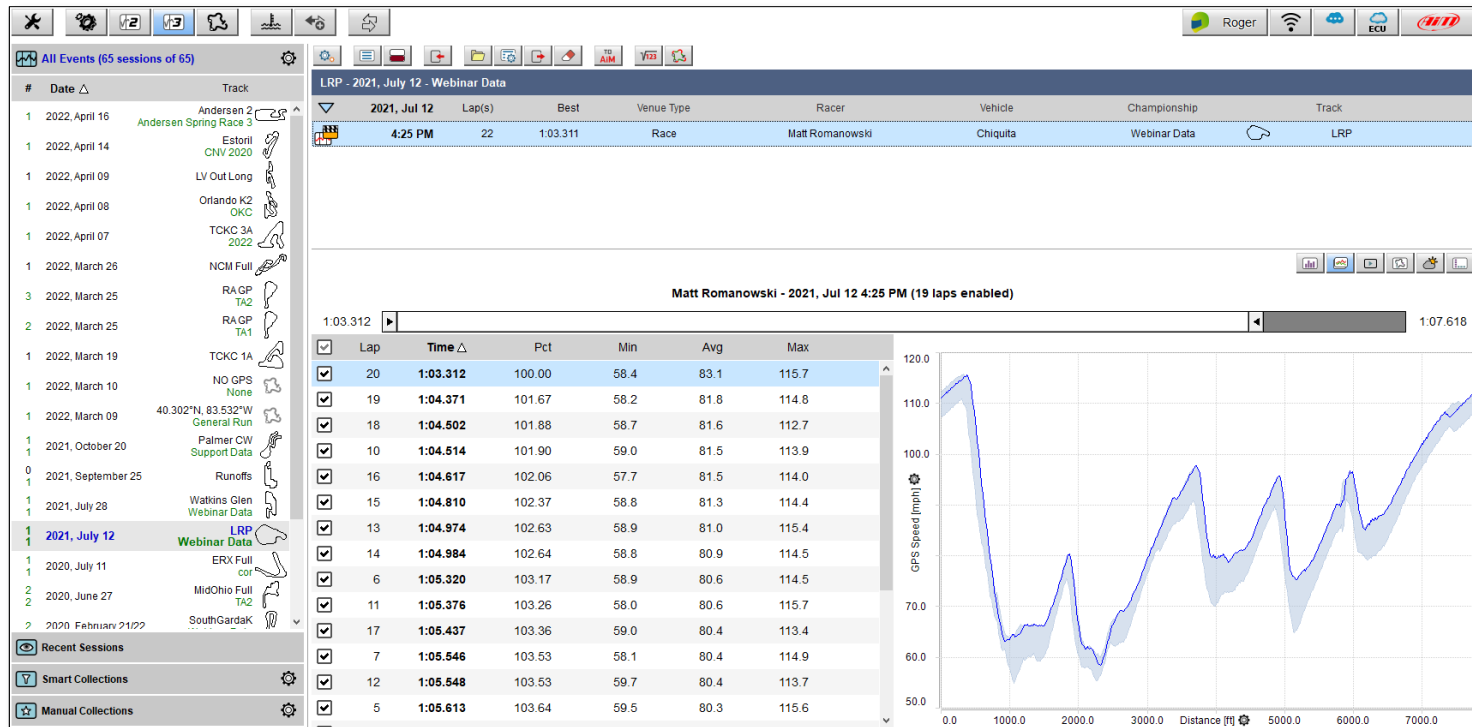
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Race Studio 3 Analysis

The Best Use of the 'Opening Database' Function



Host:

Roger Caddell

AiM Sports - National Training Manager

Co-Host:

Emiliano Bina

AiM-Sportline – Software Lead

Next Webinar: Tuesday May 17th, 2022 - 10:00am Pac/1:00pm East

Next Webinar

RS3A Opening Database Function

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Upcoming Webinars

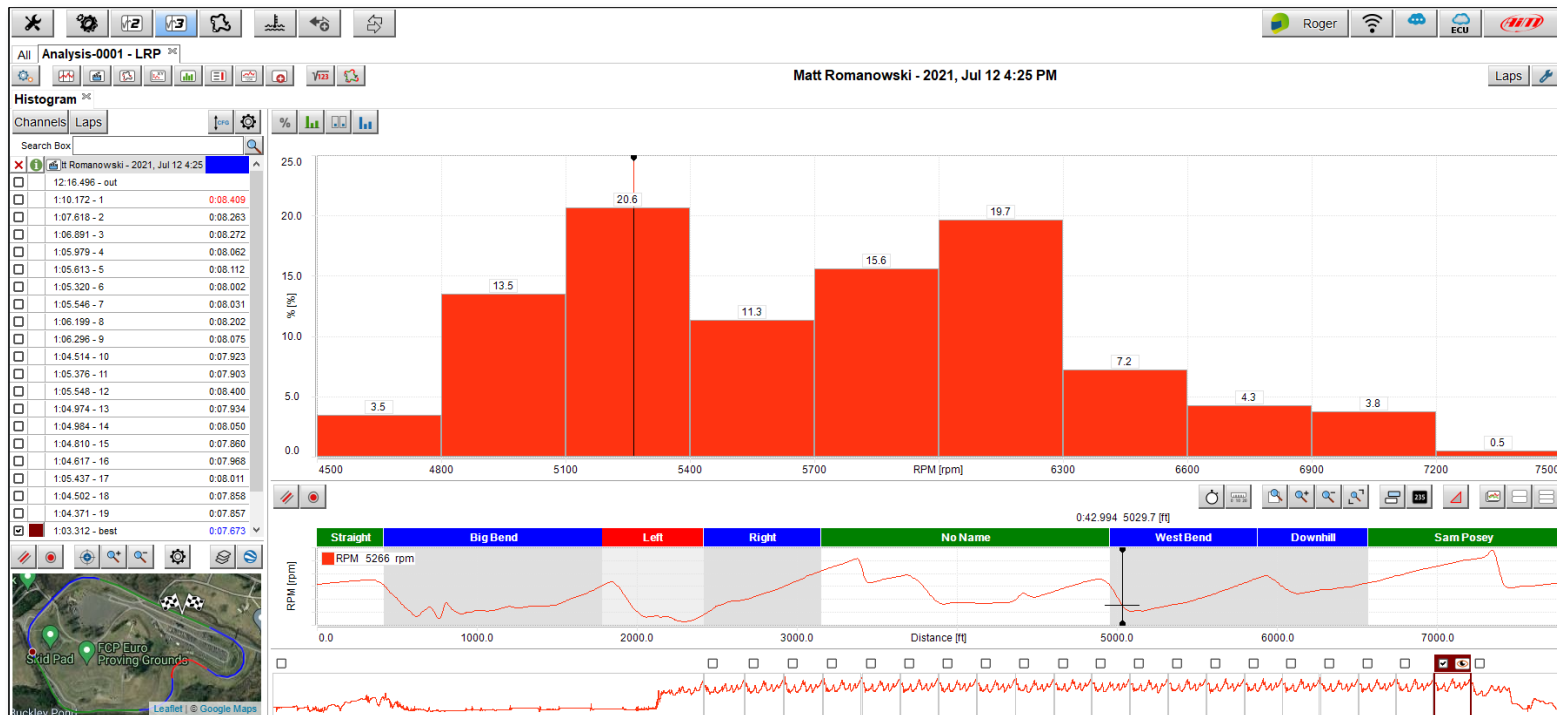
RS3A Focused Webinar Tentative Schedule



Here is our Tentative RS3 Analysis Focused Webinar Schedule

- 3/01/2022 - Personalizing Your RS3A Experience - <https://youtu.be/jEfu8nJuP5k>
- 3/08/2022 - RS3A Beta to RS3A Production - <https://youtu.be/weU3A7mWXGQ>
- 3/15/2022 - RS3A Math Channels - <https://youtu.be/bFeScFY33Jk>
- 3/22/2022 - Transitioning from RS2A to RS3A - <https://youtu.be/hakFXcK3PGg>
- 3/29/2022 - RS3A 'Time-Distance' Function - https://youtu.be/zyB0OWOB8_s
- 4/05/2022 - RS3A 'Channels Report' Function - <https://youtu.be/8lsii5FrAd4>
- 4/12/2022 - RS3A 'Scatter' Function – <https://youtu.be/z0lqlt7YfeQ>
- 4/19/2022 - RS3A 'Track' Function – <https://youtu.be/-BTxDZ5FL9Y>
- 4/26/2022 - RS3A 'Split Times Report' Function - <https://youtu.be/qn7l2uYK3MI>
- 5/03/2022 - Rapid SCHD Data/Video Review - <https://youtu.be/x5ukLvLAR4A>
- **5/10/2022 - RS3A 'Histogram' Function – Today's Webinar**
- 5/17/2022 - RS3A 'Opening Database' Function

Contact Information



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Tuesday May 10th, 2022

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