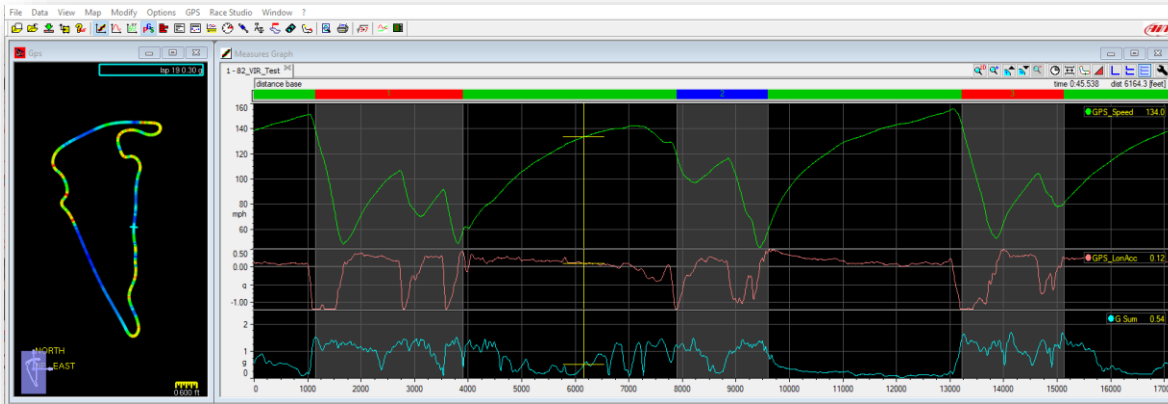




Co-Host: Peter Krause

www.peterkrause.net

www.gofasternow.com

Webinar Series

Bringing Data Support and Training to You

Self Coaching/Instructing
With AiM Sports Data



May 21st, 2020

www.aimsports.com



YouTube

1.800.718.9090

Peter Krause
peter@peterkrause.net
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www.gofasternow.com



- Krause & Associates LLC has been a top-three end-user US AiM dealer for nearly a decade
- We USE these systems every day to coach drivers and teach drivers to coach themselves
- In partnership with Ross Bentley's Speed Secrets Virtual Track Walks, online and on-demand, for many North American Tracks. Go to <https://speedsecrets.com/virtual-track-walks/>



May 21, 2020

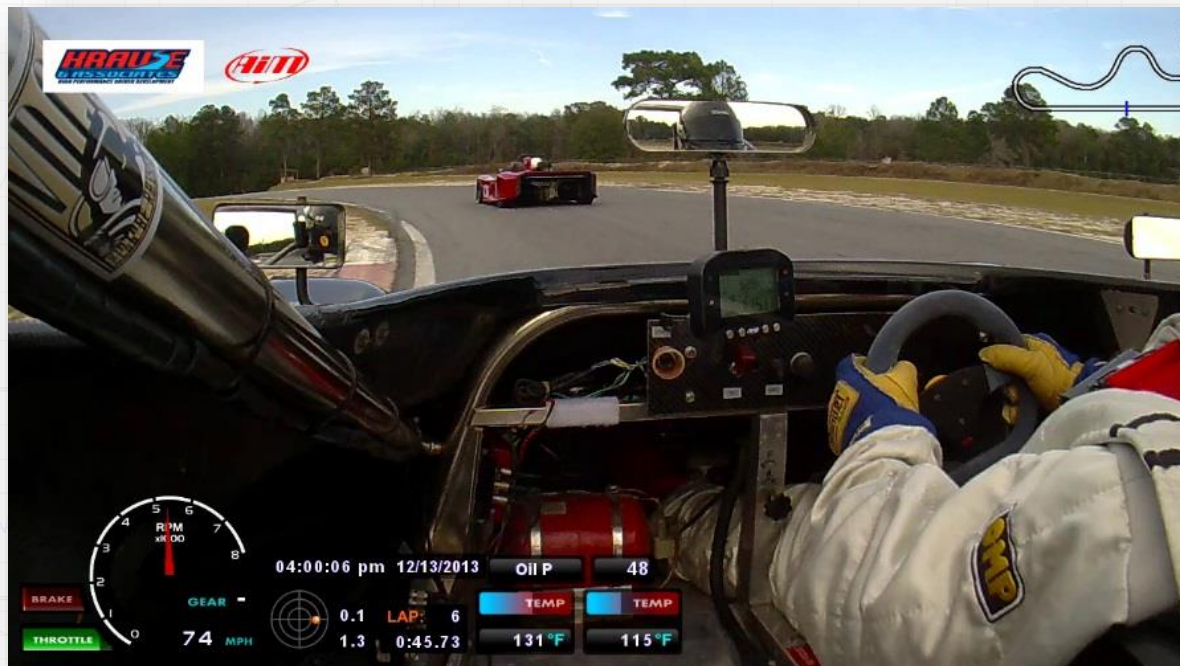
Self-Coaching and Instruction With AiM Data

- Your common goal is to solve the problem; “how do I go faster, with *less* risk?”
- Tightly targeted and limited review of what happened
- Avoid going down the “rabbit hole”
- Pick TWO things to work on next session

K.I.S.S.

Video Review, MUCH More Valuable With Measures

- Car Placement
- Gear Selection
- Shifting Up/Down
- Throttle behavior
- Handling Traffic
- Consistency



Are They Hitting EVERY Apex?

Develop a Methodology to Identify Low-Hanging Fruit

- Goal not necessarily to optimize driver performance
- Find targeted, actionable opportunities for improvement
- Reinforcement of “best execution of fundamental skills”
- Pre-event prep required, MASSIVE time-saving tool!
- Prep with three profiles maximum, always include GPS map
- Load GPS math channels
- Maths are objective measures of subjective valuation

Places to Look for Opportunities for Improvement

- Transitions with pedal inputs
- Sawtooth from WOT to brake, “v’s” and “u’s” at vMin areas
- Shifting, pauses in acceleration, inconsistent length of shift
- Straight line downward stroke on speed versus distance
- Hockey-stick speed trace at corner entry, double-pump
- Multiple braking zones, when ONE will do
- “Stepped” deceleration

AiM Race Studio 2 - Math Channel Examples

Here are Some "Switch" Math Channels Focused on GPS Based Data:

Brake_On:

$\text{IF}(\text{LT}(\text{GPS_LonAcc}, -0.30), 1, 0)$

A channel is created that shows a '1' when the Brakes are on, a '0' when the Brakes are off

Throttle_On:

$\text{IF}(\text{GT}(\text{GPS_LonAcc}, 0.01), 1, 0)$

A channel is created that shows a '1' when the Throttle is on, a '0' when the Throttle is off

Corner_On:

$\text{IF}(\text{GT}(\text{abs}(\text{GPS_LatAcc}), 0.25), 1, 0)$

A channel is created that shows a '1' when the vehicle is cornering, a '0' when going straight

Coast_On:

$\text{IF}(\text{GT}(\text{Brake_On}, 0.5), 0, \text{IF}(\text{GT}(\text{Corner_On}, 0.5), 0, \text{IF}(\text{GT}(\text{Throttle_On}, 0.5), 0, 1)))$

A channel shows a '1' if the driver is NOT doing any one of these: Brake_On, Throttle_On, or Corner_On ... Coasting!

Here are Some Additional Math Channels Focused on GPS Based Data:

Brake_LapT:

$\text{lap_integ}(\text{Brake_On})$ Channel showing Braking in seconds per lap

Throttle_LapT:

$\text{lap_integ}(\text{Throttle_On})$ Channel showing Acceleration in seconds per lap

Corner_LapT:

$\text{lap_integ}(\text{Corner_On})$ Channel showing Cornering in seconds per lap

Coast_LapT:

$\text{lap_integ}(\text{Coast_On})$ Channel showing Coasting in seconds per lap

Coast_LapD:

$\text{lap_integ}(\text{Coast_On} * \text{GPS_Speed} * \text{MPH2FTS}), 0$ Channel showing Coasting in feet per lap

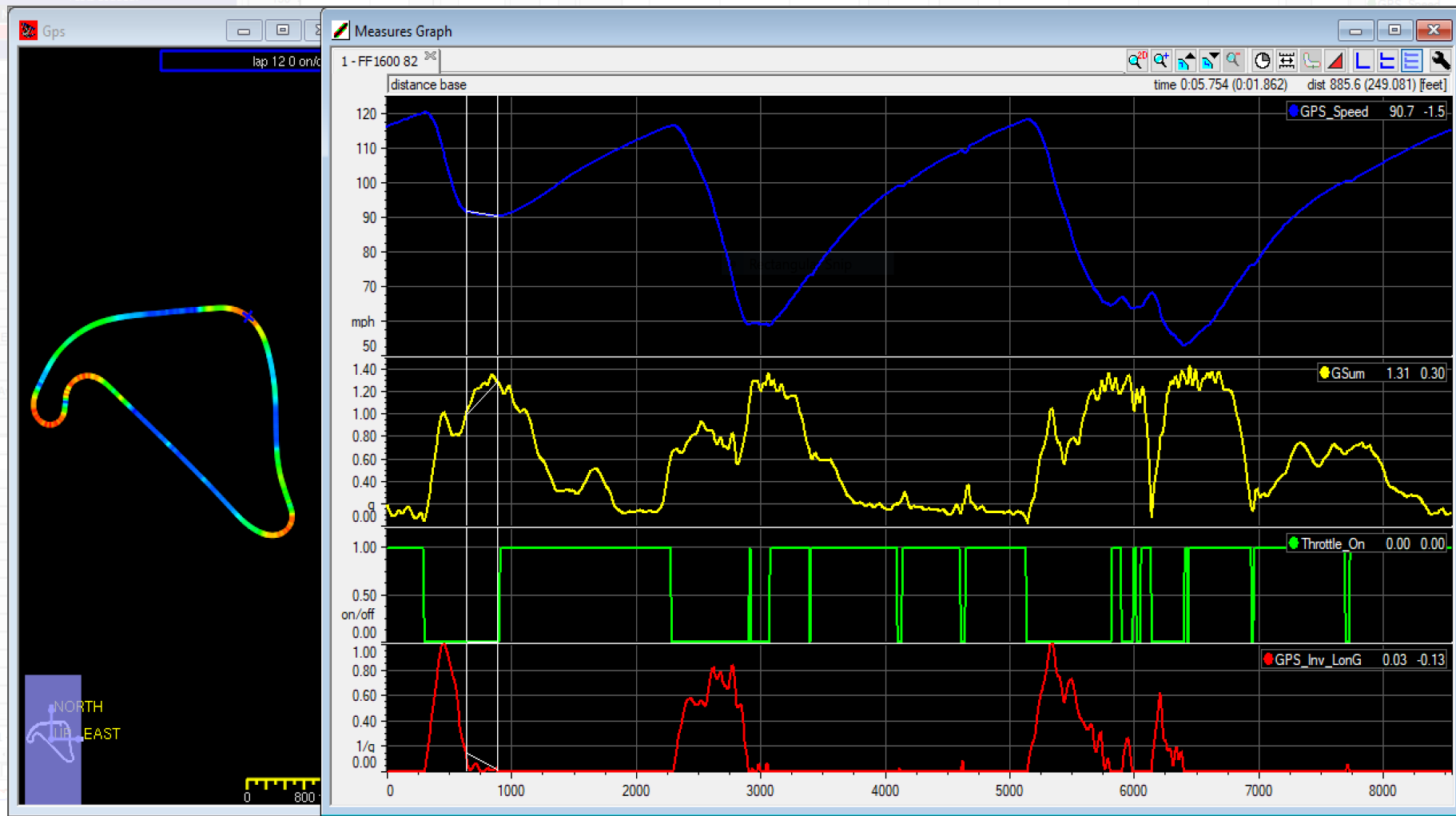
Brake_LapD:

$\text{lap_integ}(\text{Brake_On} * \text{GPS_Speed} * \text{MPH2FTS}), 0$ Channel showing Braking in feet per lap

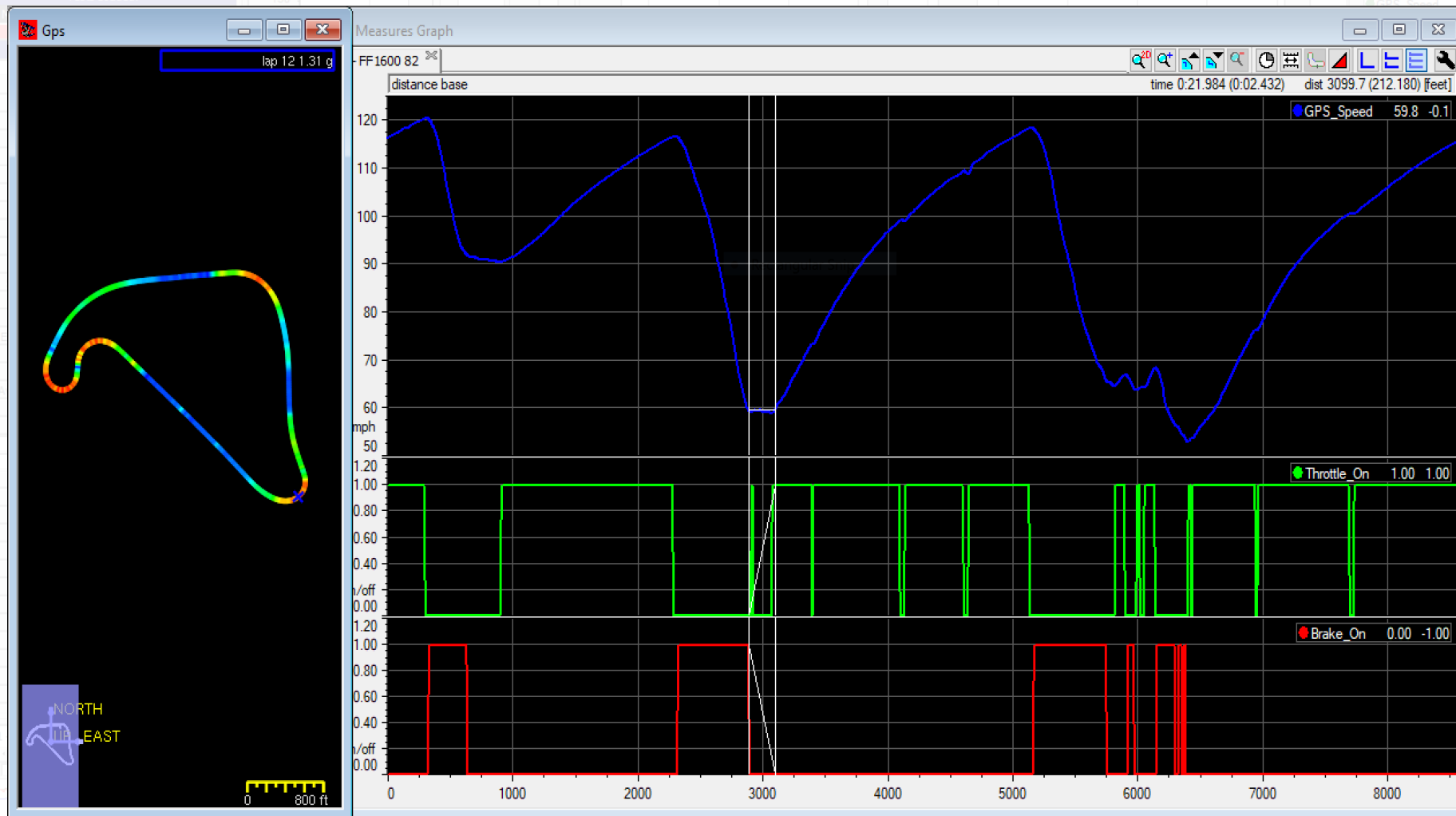
Brake_LapP:

$(\text{Brake_LapT} * 100) / \text{time}()$ Channel showing Braking in percentage of a lap

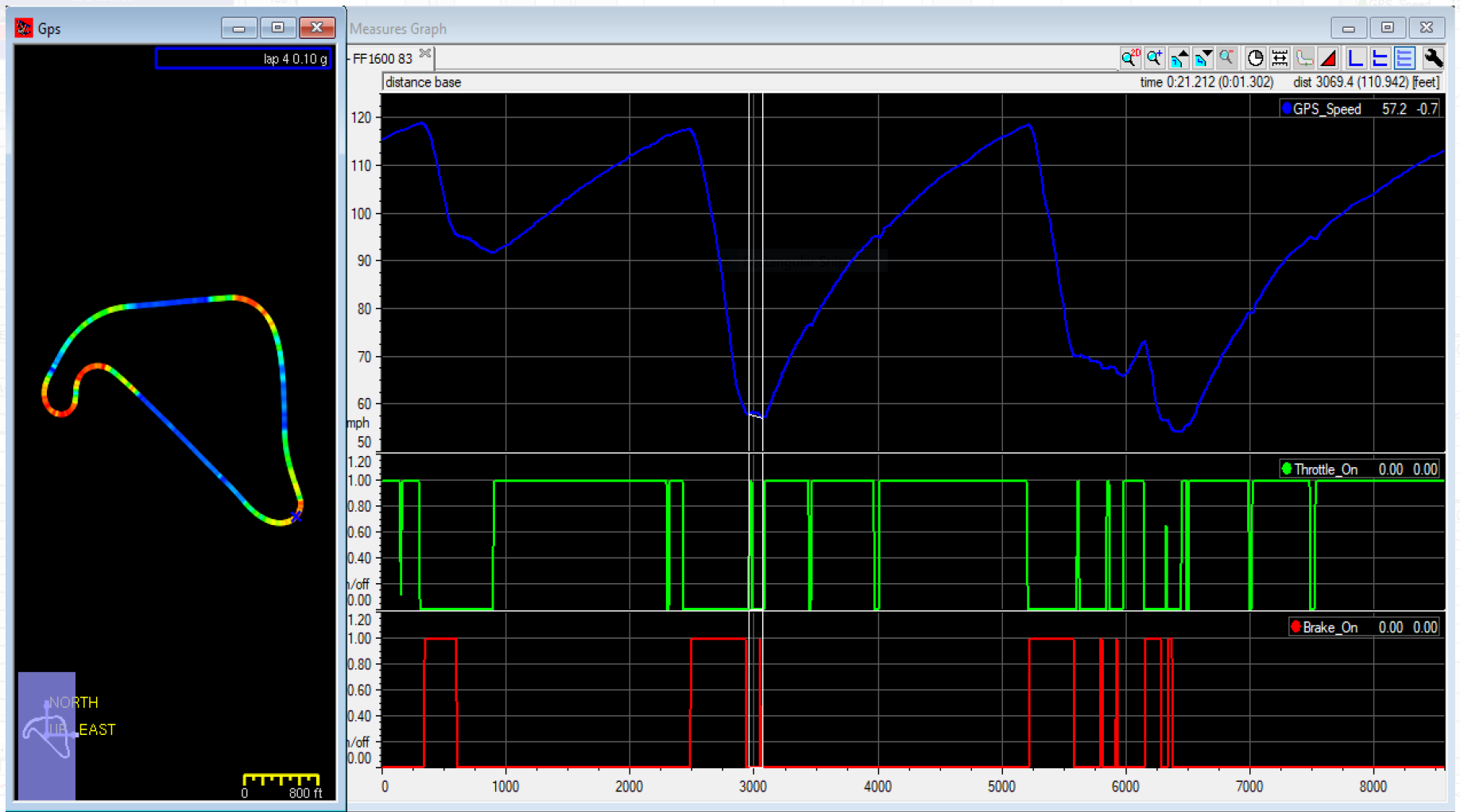
Colborn Copse - Trading Brake for Cornering



Colborn Maggots - Big Lag EoB to Throttle On

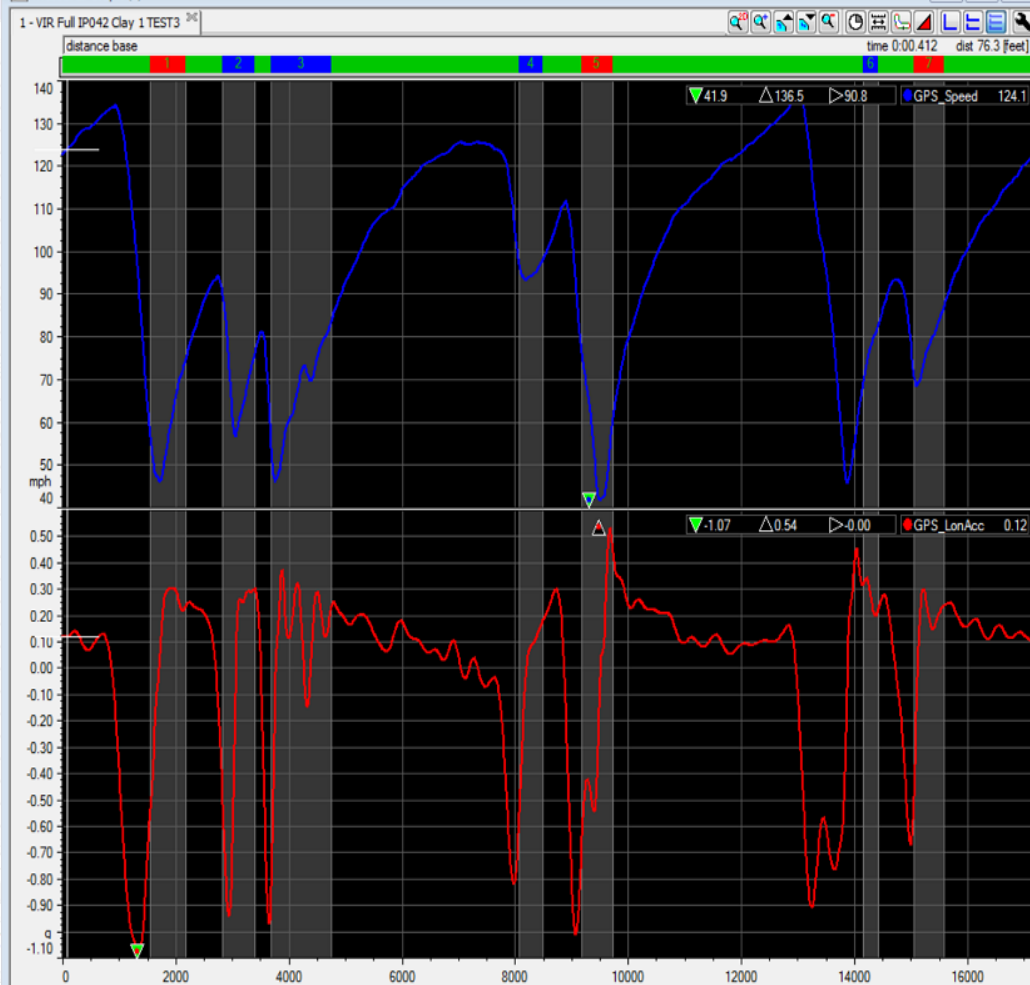


Colborn Maggots - Race, MUCH Better, In and OUT!



James Clay - World Challenge and IMSA Winner

Measures Graph (3)



Gps



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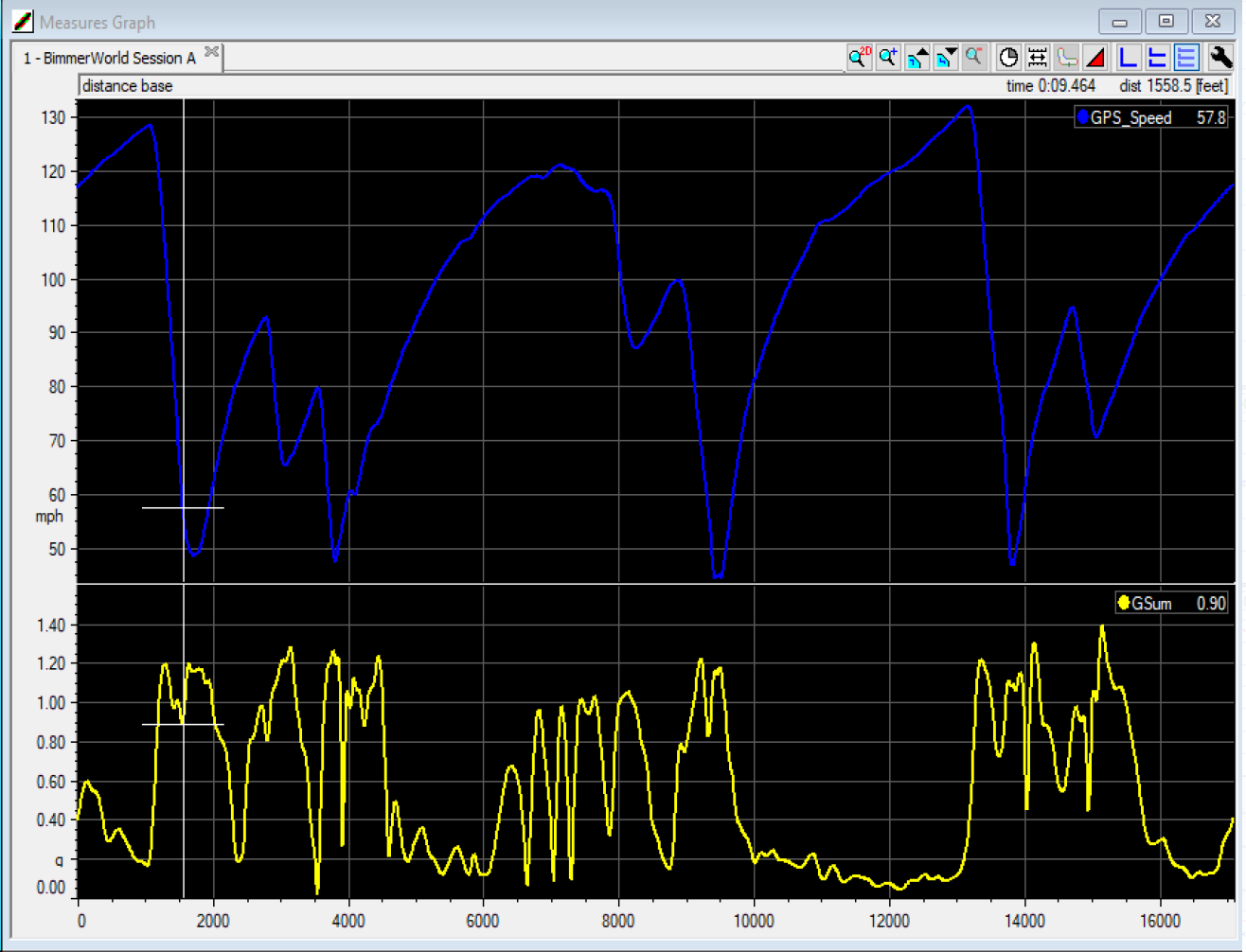
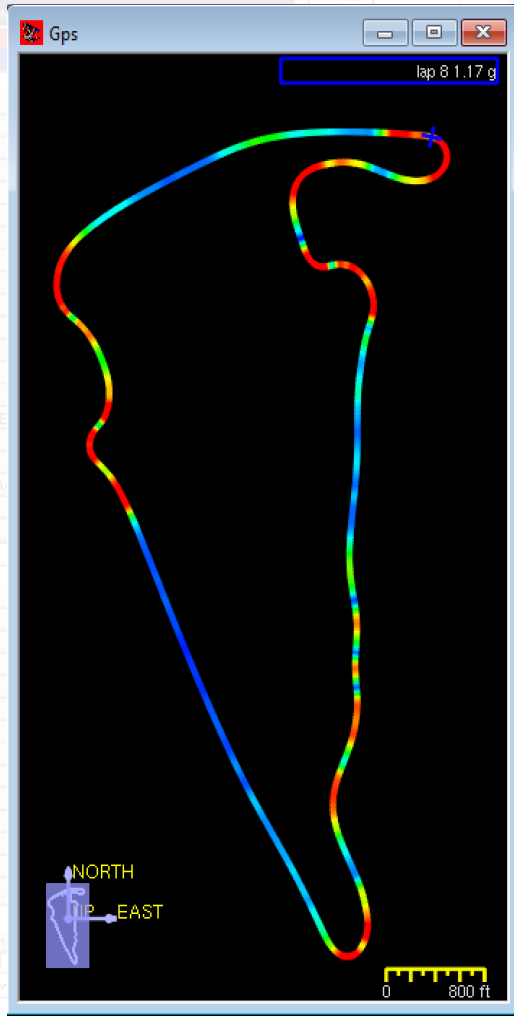
YouTube

Consistent Slowing Rates

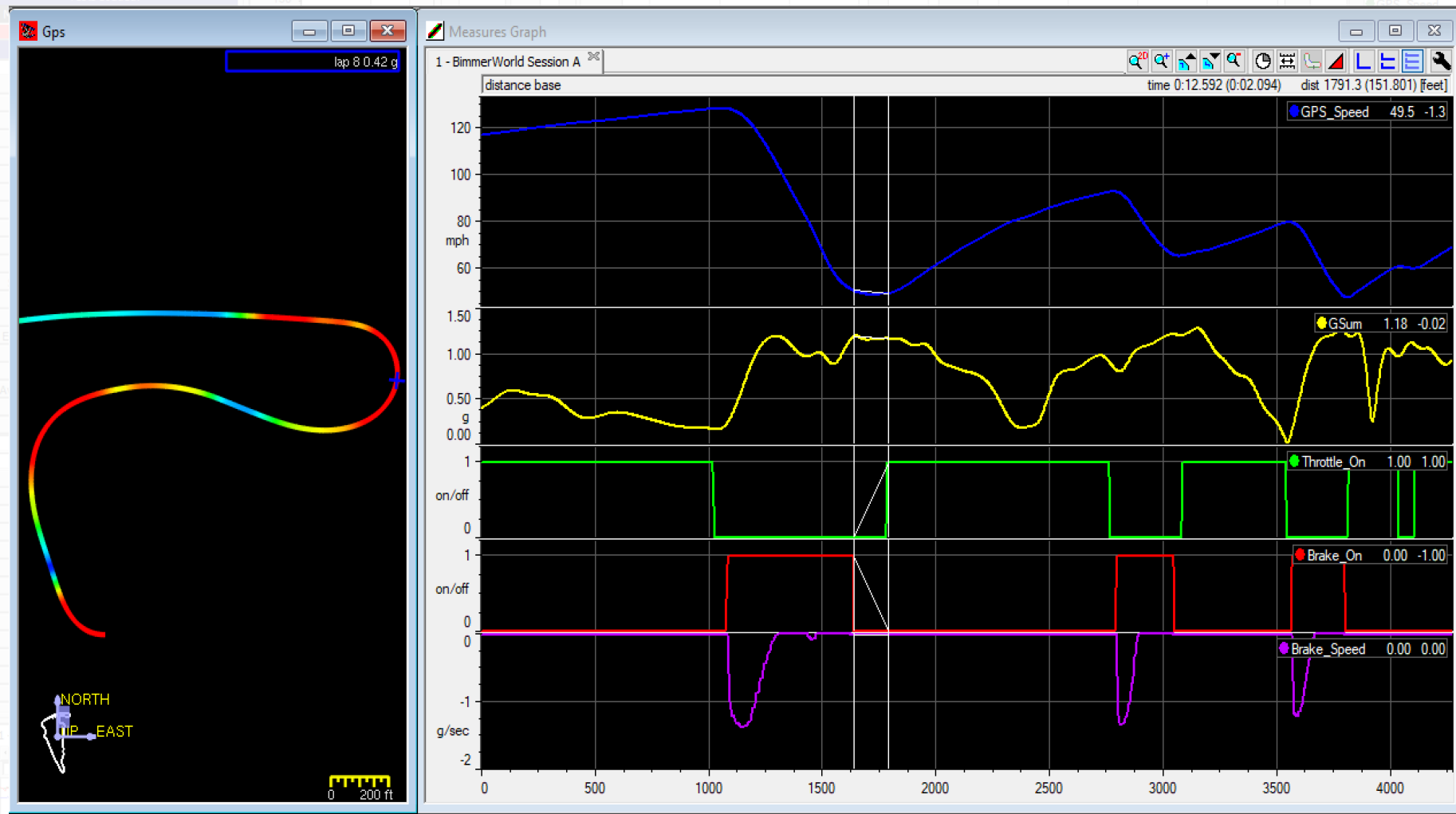
Smooth, No Question in Driver's Mind



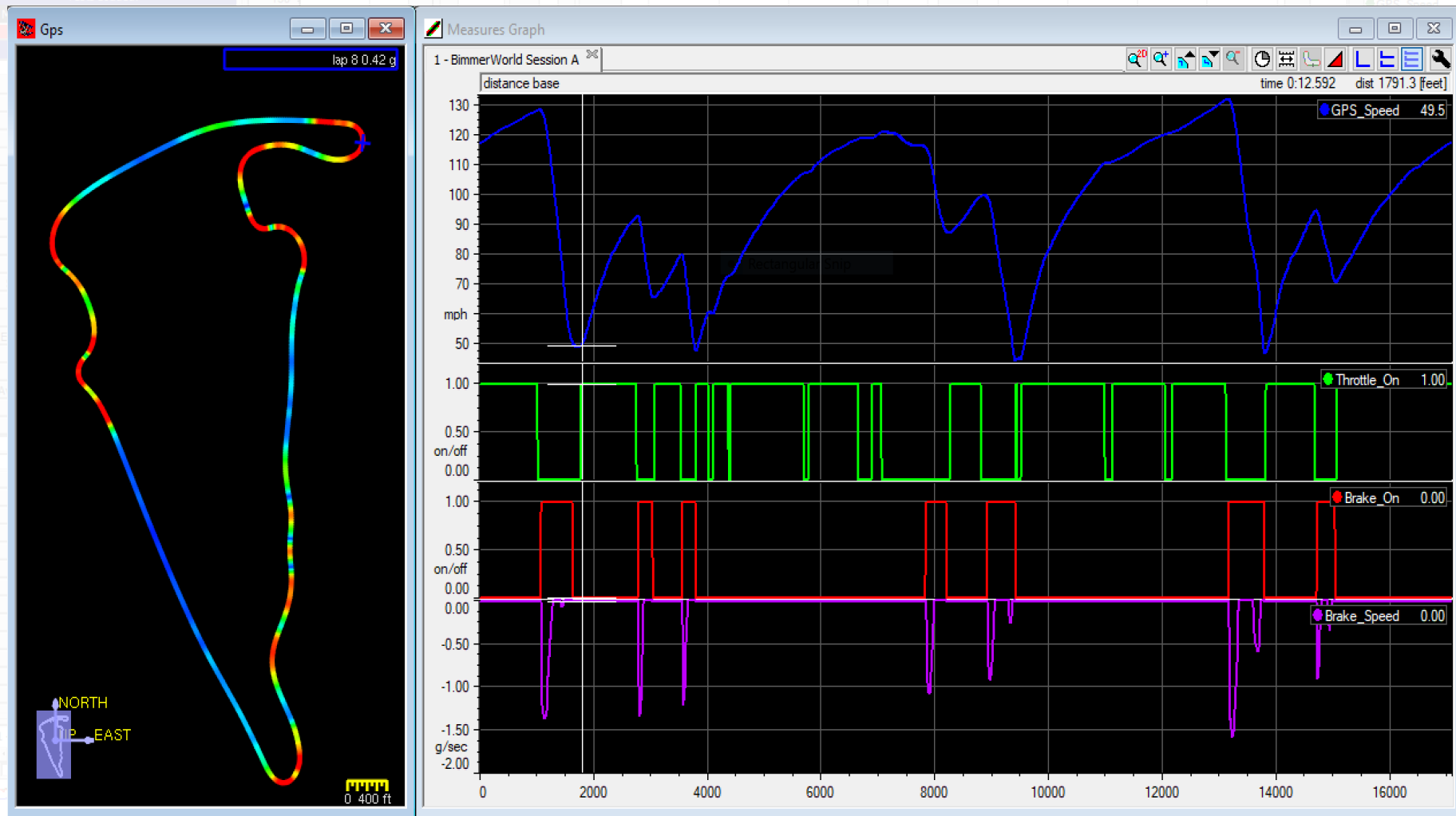
BimmerWorld Quick Lap - GSum Corner Entry



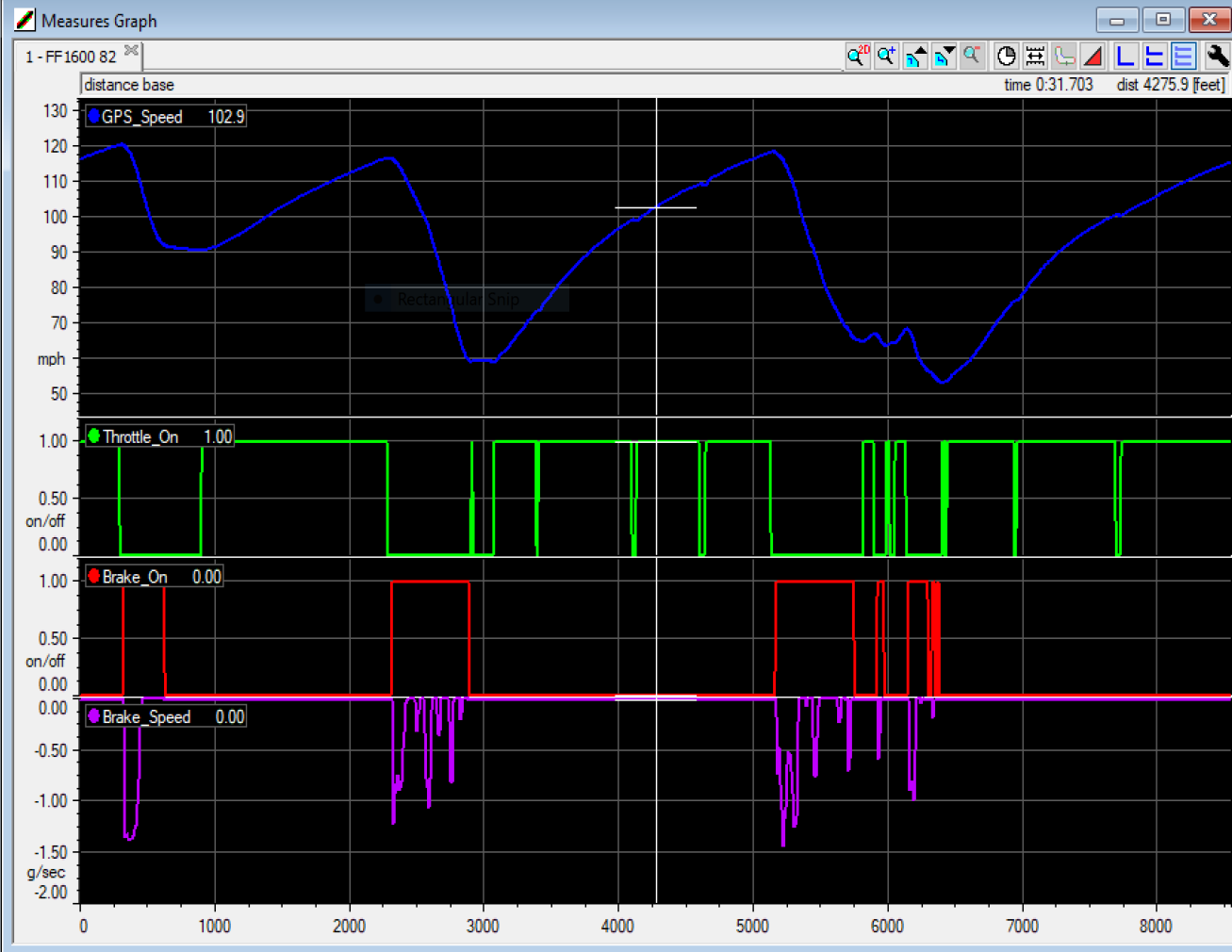
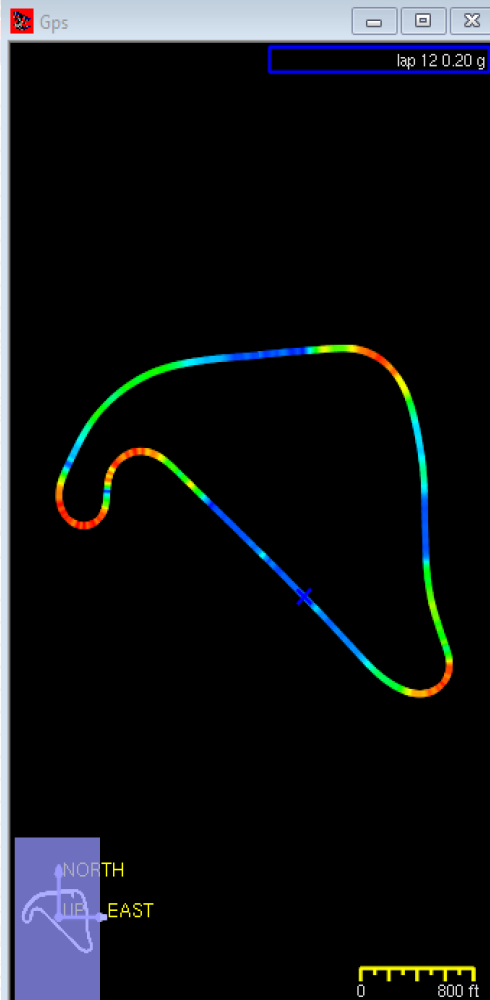
BimmerWorld Quick Lap - Turn 1 Corner Entry



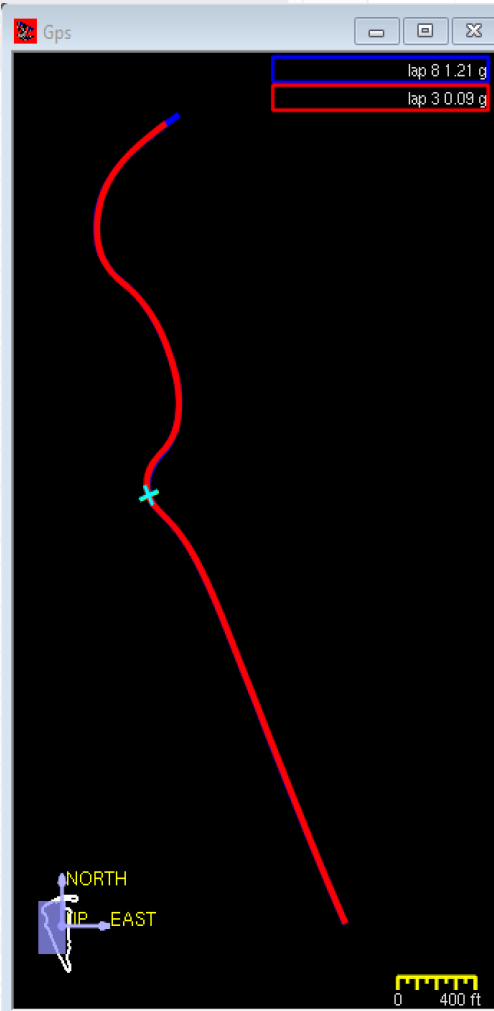
Clay GPS Throttle, Brake, and Brake Speed Switches



Colborn GPS Throttle, Brake, Brake Speed Switches



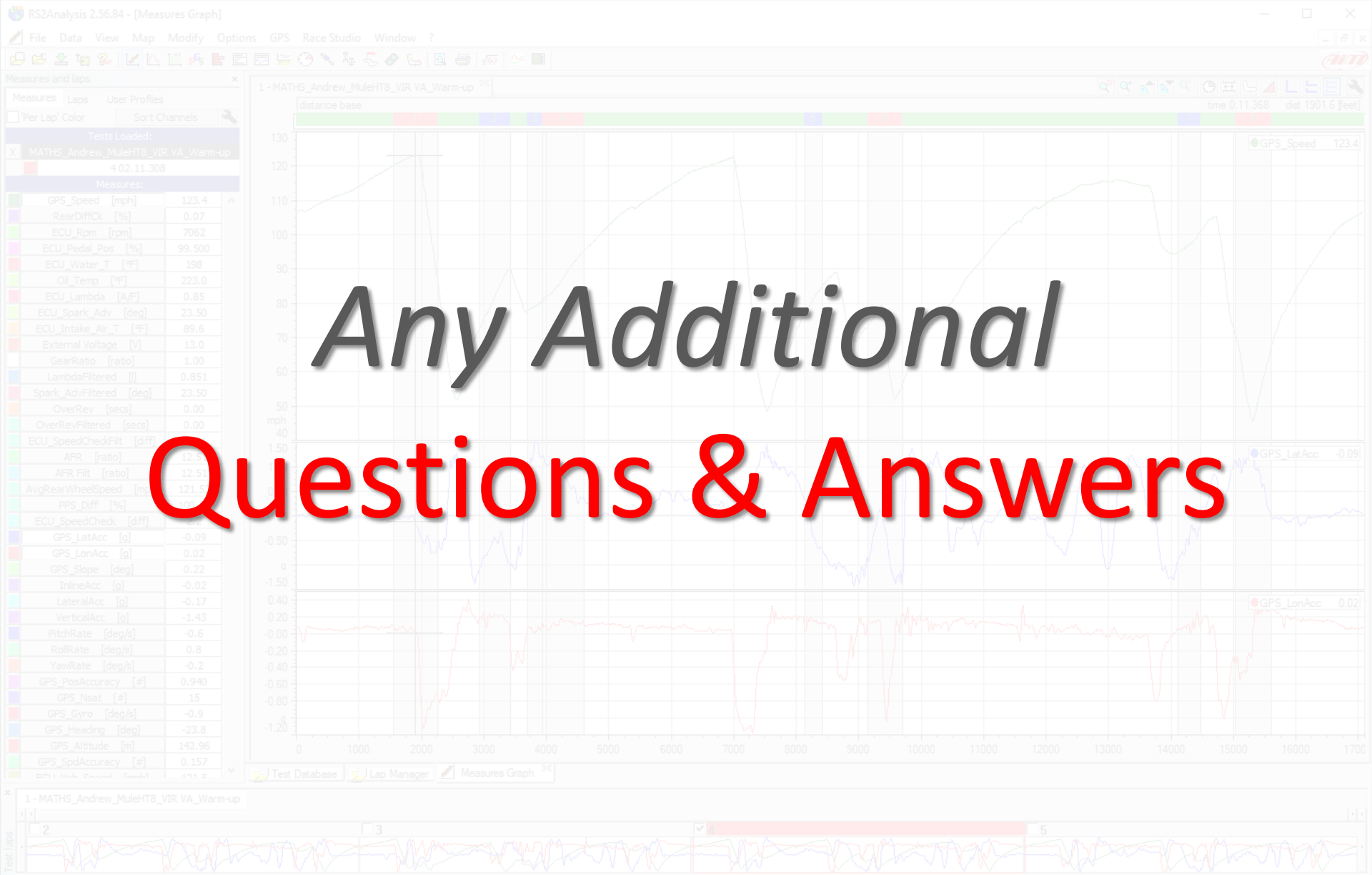
Quick-Blue, Less Quick - Red. Where? Why?



Recap-Implement an ACTION Plan

- Develop a ten-minute review, evaluation and goal selection
- Examine speed changes for certainty, decisiveness!
- Reduce time/distance driver is at vMin, slow corners cost!
- Minimize "Coast" time under GSum
- Look for QUALITY of brake speed, not just the decel number
- Maths, particularly GPS "Switches," SAVE TIME

K.I.S.S!



Any Additional Questions & Answers



Additional AiM Sports Training and Support

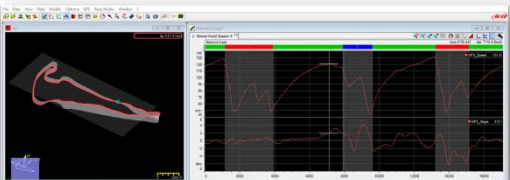
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Currently 60 Videos and Growing

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- All New Bi-Weekly 2020 Webinar Videos
- Software Updates with Race Studio 3
- Pre-Calculated Gear Position Function
- Configuring WiFi Communication
- Customizing AiM Device Logos
- Race Studio 3 Basic Configuration - Part 1
- Race Studio 3 Basic Configuration - Part 2
- **I Have Downloaded my Data, Now What - Part 1*
- **I Have Downloaded my Data, Now What - Part 2*
- GPS Lap Insert
- Data Views
- Measure Units
- Sort Channels
- Test Properties
- Per Lap Color
- Export Tests
- Channel Reports
- Setting Time
- Track Mapping
- Selection Criteria
- Sensor Calibration
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bimmerworld
Co-Host: James Clay

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Next Webinar

Tuesday May 26th, 2020

10:00am Pac / 1:00pm East



TrailBrake.com
Learn to go faster...

Co-Host: Matt Romanowski

Custom Sensors in Race Studio 3 Software

Modify Alarm

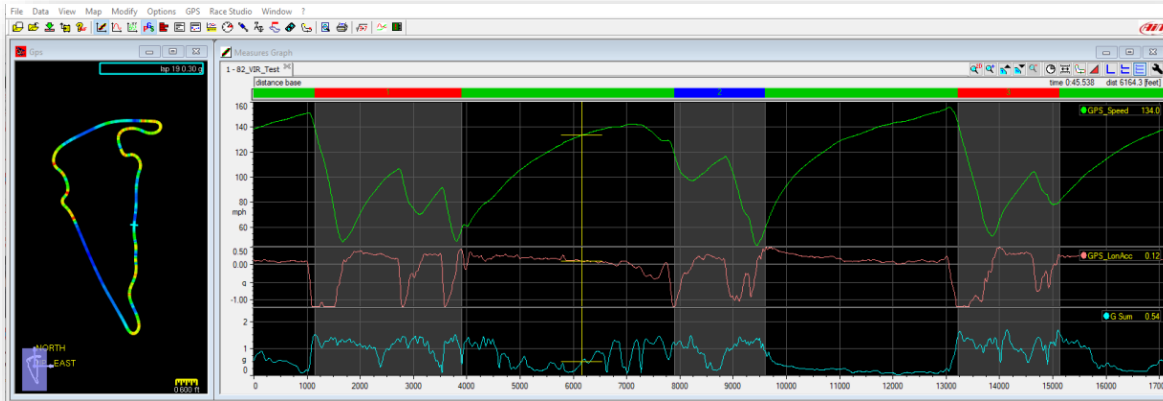
Description:

If of the following conditions are true:

Water Temp	greater than	F	220	-	+
RPM	greater than	rpm	500	-	+

then trigger the following action(s):

Popup Color msg timed	Too Hot	☐ text	☒ bkg	until alarm end	+
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