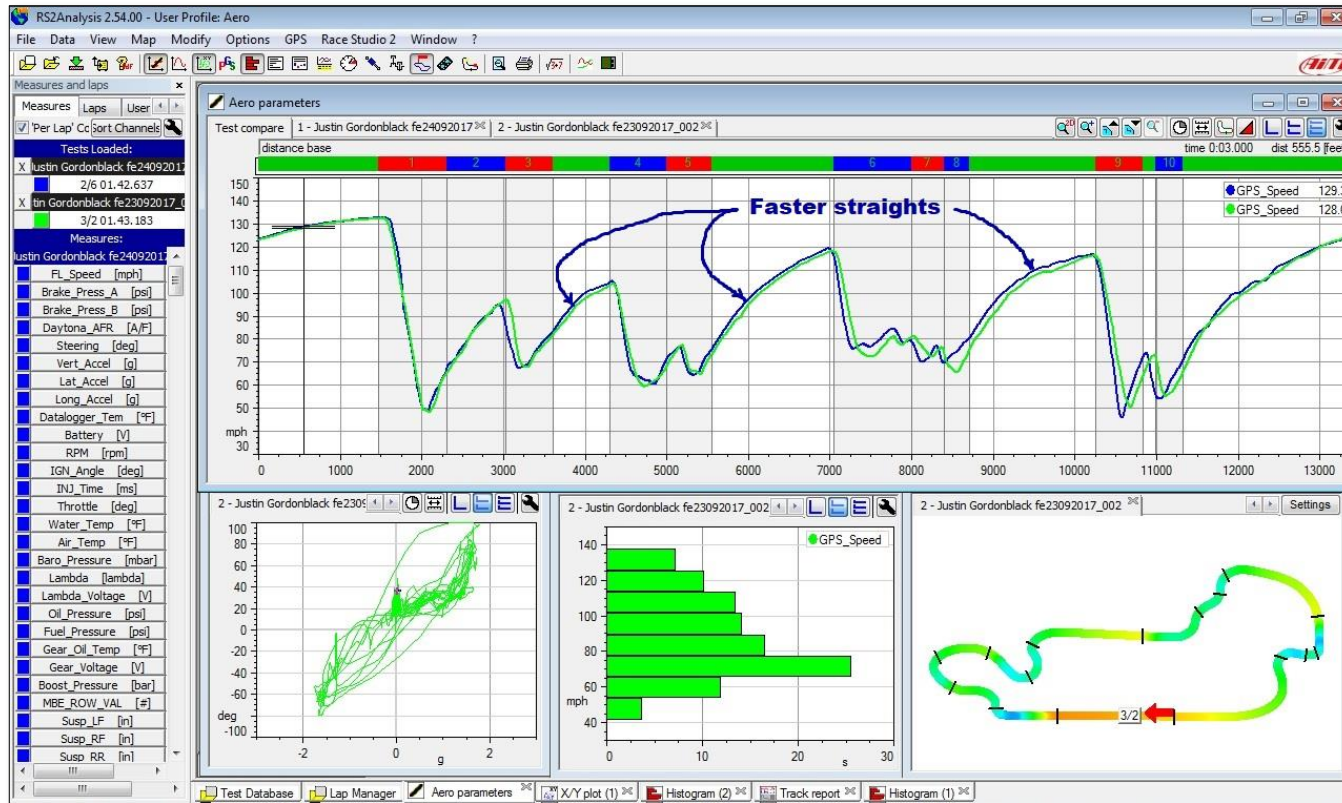


Indy, A Path To The Pole

A Data Story from the 2017 SCCA Runoffs



Host:

Roger Caddell

AiM Sports - National Training Manager

Co-Host:

John Block

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Tuesday Aug 17th, 2021

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Co-Host:

John Block

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- Involved in Motorsports For Over 50 years as a:
Driver, Designer, Fabricator, Engineer, DAG,
Driver Coach, Webinar Instructor
- IndyCar, ARCA, NASCAR, Indy Lights, TransAM, SCCA,
USF2000, Sprint Cars, Modifieds, Etc.



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Baseline and Observations



Auto-ware USF17 run sheet

DATE	9/21/17	EVENT	TEST DAY	CHASSIS	
DRIVER	JUSTIN	TRACK	INDY R-O	ENGINE	
				WEATHER	75% cumu 84.4 - 60%

Run	COCKPIT	SETUP	SPRINGS & SHOCKS	BUILD	AERO
TIRES		LF RIDE HT. RF RIDE HT.	LF SPRING RF SPRING	LF CASTOR RF CASTOR	FRONT WING MAIN ang
Set # condition	BRAKE BAL	REAR RIDE HT.	LR SPRING RR SPRING	REAR SUSP.	L WICKER R WICKER
1 STICKER			1000 1000		
600 3		LF TOE RF TOE	LF PRELOAD RF PRELOAD	FARB	REAR UPPER ELEMENT
OUT PRESSURES		LR TOE RR TOE	LR PRELOAD RR PRELOAD	MIDDLE	setting setting
LF PSI RF PSI		LF CAMBER RF CAMBER	44 44	RARB	yaw
12.5 12.5		LR CAMBER RF CAMBER	LF C/R RF C/R	OFF	
13 13		LF weight RF weight	0 STIFF 3 0 STIFF 3	Dash pg 1	LOWER REAR MAIN ang
IN PRESSURES	FUEL	LR weight RF weight	LF DAMPER RF DAMPER		WICKER Fence angle
LF PSI RF PSI	on board	322 334	LR DAMPER RR DAMPER	Dash pg 2	Set Back PLANE HGT
16.0 15.5	FULL 7				Diffuser L Side Pod R side Pod
17.0 16.5	pump out				TUNNEL WICKER Windscreen

LAP TIME	NOTES	LAP TIME	NOTES	LAP TIME	NOTES	DRIVER COMMENTS
OUT	1 Low oil WENT	11		21		
50.43	CLEAR					
47.50	TRAFFIC 2nd corner					
44.82						
45.41	TRAFFIC					
46.99						
44.46						
MISS						
CHECK IN						
10		20		30		

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Baseline and Observations

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Quick Check



RS2Analysis 2.54.00 - User Profile: JB's Quick check

File Data View Map Modify Options GPS Race Studio 2 Window ?

Measures and laps

Laps User Profiles

Current User Profile

JB's Quick check

Available User Profiles

[Ctrl+1] line speed ☐ ☐

[Ctrl+2] scratchpac ☐ ☐

[Ctrl+3] scratch 2 ☐ ☐

[Ctrl+4] Gearing ☐ ☐

[Ctrl+5] compare ☐ ☐

[Ctrl+6] Transient ☐ ☐

[Ctrl+7] Platform ☐ ☐

[Ctrl+8] LifeCycle ☐ ☐

[Ctrl+9] Stastics ☐ ☐

Engine ☐ ☐

Driver ☐ ☐

Braking ☐ ☐

Handling ☐ ☐

Shocks ☐ ☐

JB's Quick check ☐ ☐

Aero ☐ ☐

Seg times Consistai ☐ ☐

Engine QC

1 - Justin Gordonblack fe21092017_001

Lap			Oil Pressure	RPM	Water Temp	Battery	Add / Remove
Num	Time	Dist	min	max	min	max	
run 3 / lap 2	01.45.110	13324	50	6879	196	14.2	14.5
run 3 / lap 3	01.48.177	13366	48	6496	193	14.3	14.7
run 3 / lap 4	01.44.077	13302	43	6559	193	14.5	14.8
run 3 / lap 5	01.44.600	13451	36	6496	194	14.6	14.8
run 3 / lap 6	01.43.940	13414	35	6422	195	14.6	14.9
run 3 / lap 7	01.43.738	13404	35	6859	195	14.6	15.1
run 3 / lap 8	01.43.672	13406	35	6461	196	14.7	14.9
run 3 / lap 9	01.44.229	13321	23	6832	195	14.8	15.1

↑ ↑ ↑ ↑ ↑

Okay

1 - Justin Gordonblack fe21092017_001

Lap			LF lbs	RF lbs	LR lbs	RR lbs	Add / Remove
Num	Time	Dist	min	min	min	min	
run 3 / lap 2	01.45.110	13324	218.00	221.00	322.00	334.00	
run 3 / lap 3	01.48.177	13366	218.00	221.00	322.00	334.00	
run 3 / lap 4	01.44.077	13302	218.00	221.00	322.00	334.00	
run 3 / lap 5	01.44.600	13451	218.00	221.00	322.00	334.00	
run 3 / lap 6	01.43.940	13414	218.00	221.00	322.00	334.00	
run 3 / lap 7	01.43.738	13404	218.00	221.00	322.00	334.00	
run 3 / lap 8	01.43.672	13406	218.00	221.00	322.00	334.00	
run 3 / lap 9	01.44.229	13321	218.00	221.00	322.00	334.00	

Oh oh

Test Database Lap Manager Engine QC Chassis QC

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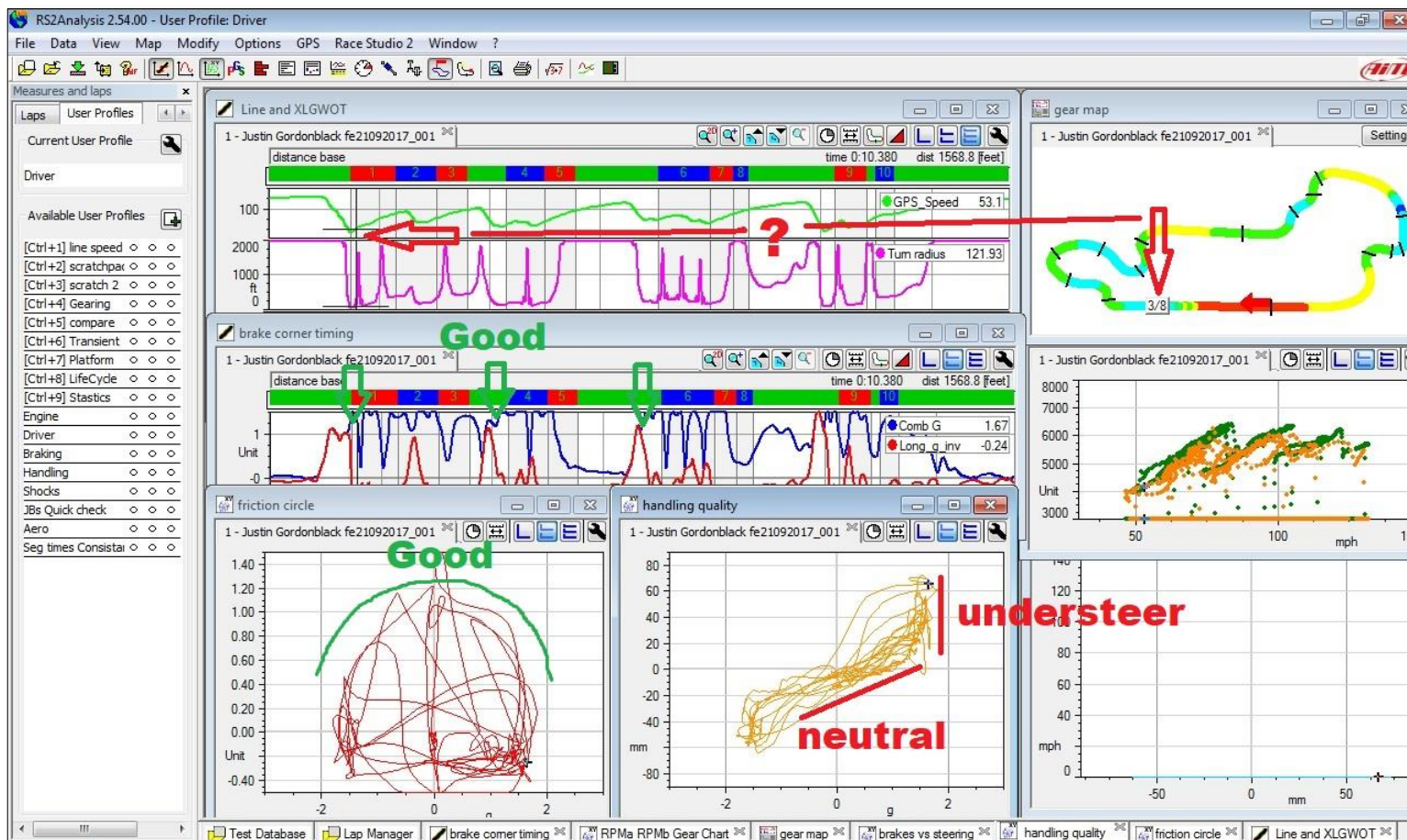
Quick Check

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Driver Review



Indy, A Path To The Pole

Driver Review

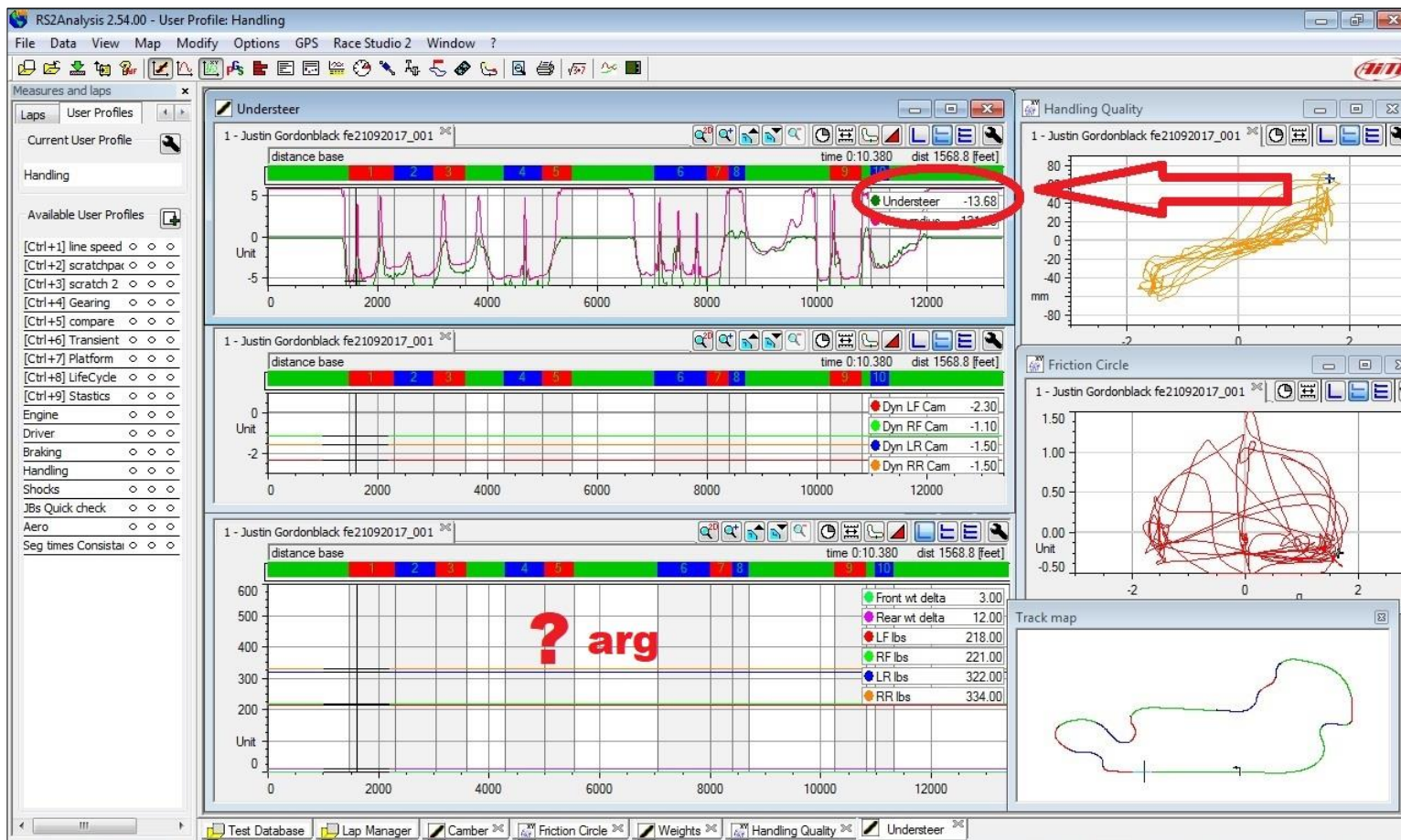
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Handling



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Handling

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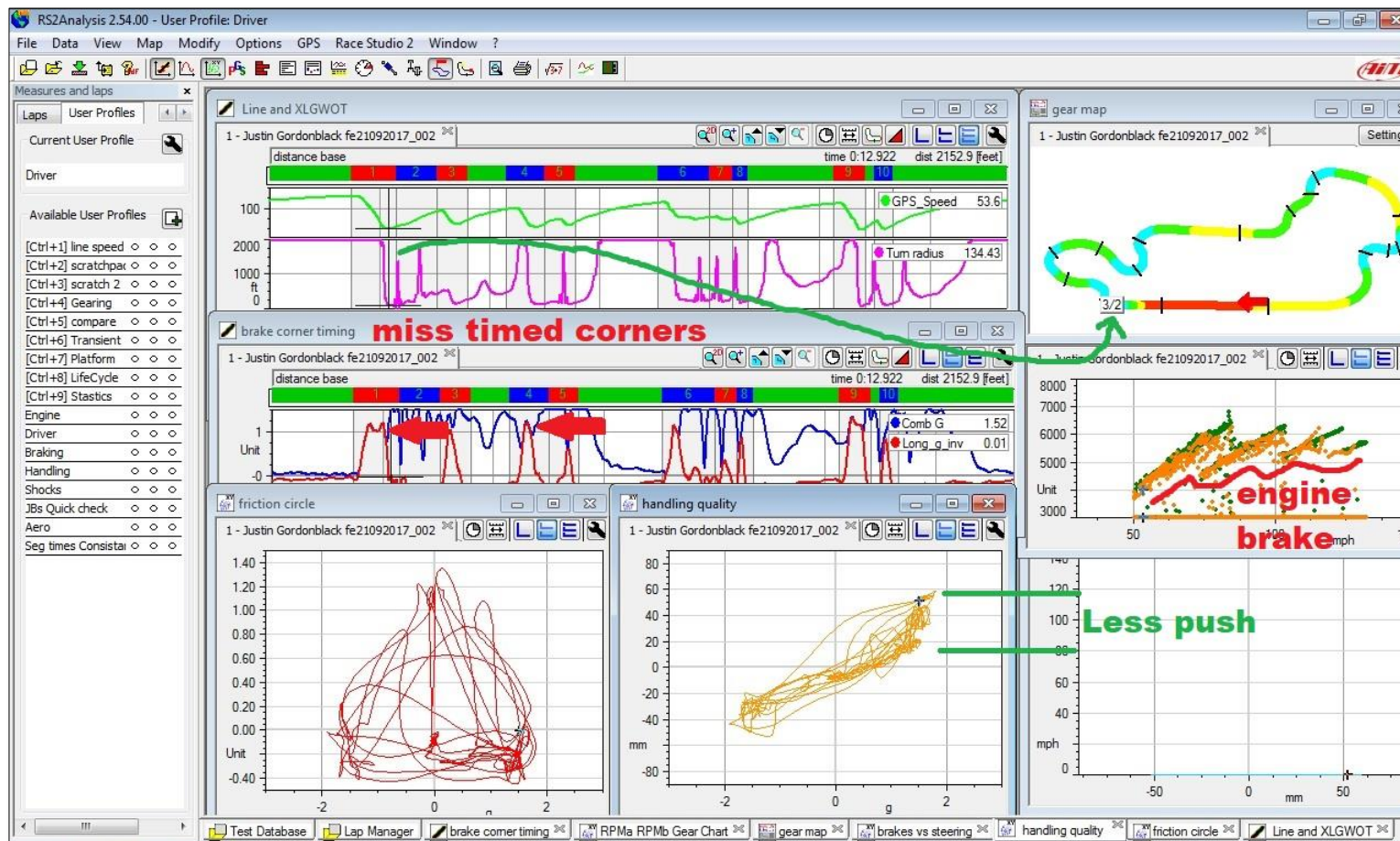
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Run 2		COCKPIT		SETUP		SPRINGS & SHOCKS		BUILD		AERO		
TIRES		BRAKE BAL		LF RIDE HT. RF RIDE. HT.		LF SPRING RF SPRING		LF CASTOR RF CASTOR		FRONT WING MAIN ang		
Set # condition				REAR RIDE HT.		LR SPRING RR SPRING		REAR SUSP.		L WICKER R WICKER		
OUT PRESSURES		FUEL		LF TOE RF TOE		LF PRELOAD RF PRELOAD		FARB		REAR UPPER ELEMENT setting setting		
LF PSI RF PSI				LR TOE RR TOE		LR PRELOAD RR PRELOAD		RARB		yaw		
LR PSI RR PSI				LF CAMBER RF CAMBER		LF C/R RF C/R		Dash pg 1		LOWER REAR MAIN ang		
~0.5 ~0.5				LR CAMBER RR CAMBER		LR C/R RR C/R				Set Back PLANE HGT		
IN PRESSURES		on board +3 to Full pump out		LF weight RF weight		LF DAMPER RF DAMPER		Dash pg 2		Diffuser L Side Pod R side Pod		
LF PSI RF PSI				LR weight RR weight		LR DAMPER RR DAMPER				TUNNEL WICKER Windscreen		
16.5 16.0		16.75 17.5										
16.75 17.5												
LAP TIME NOTES		LAP TIME NOTES		LAP TIME NOTES		DRIVER COMMENTS						
1 HEAVY TRAFFIC		11		21								
45.34 TRAFFIC												
48.18 u												
43.97												
44.41 SUFFING												
44.15 CLEAR												
MIS												
3-27.21												
44.22												
10		20		30								

Run 2 Driver Review



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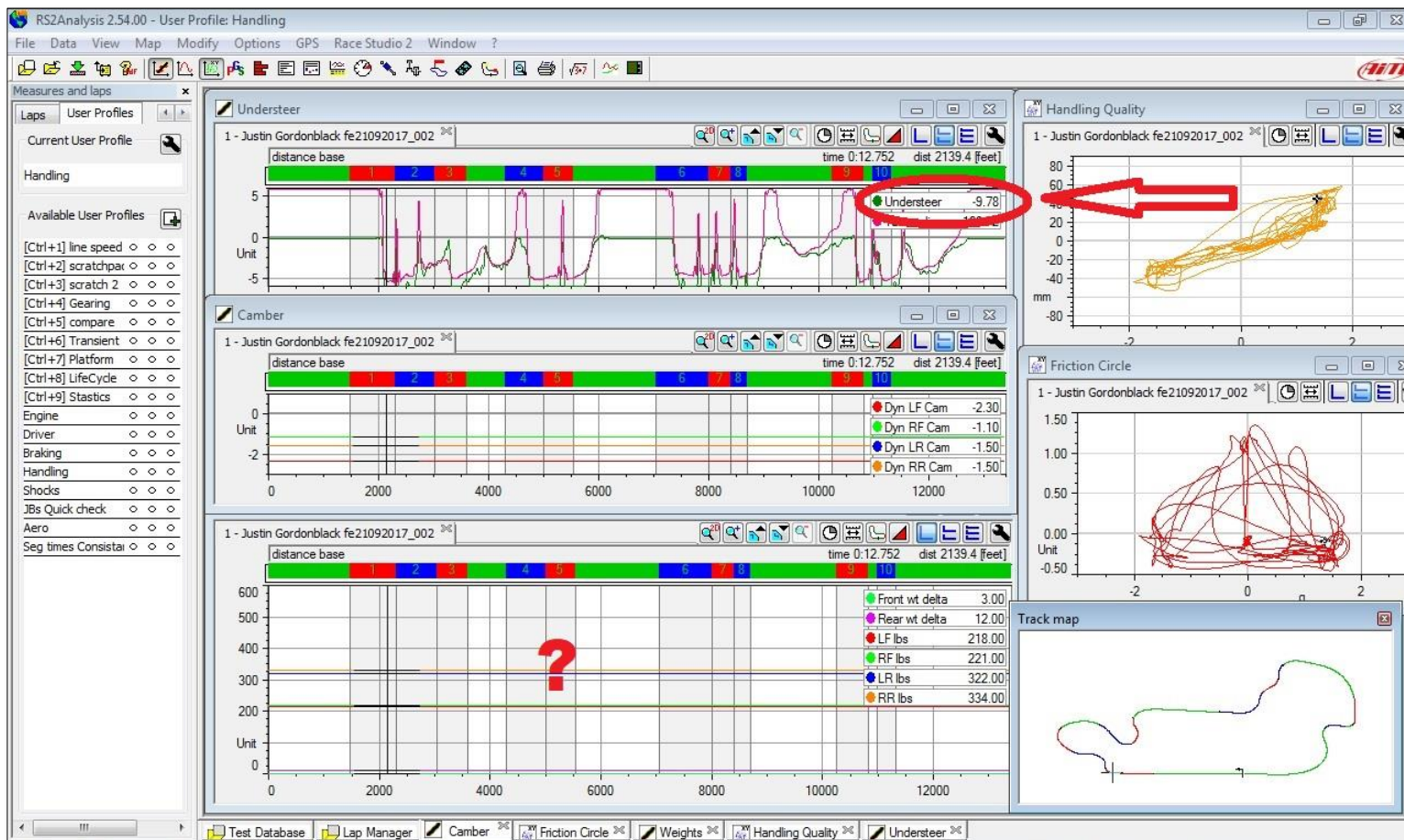
Run 2 Driver Review

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Run 2 Handling Review



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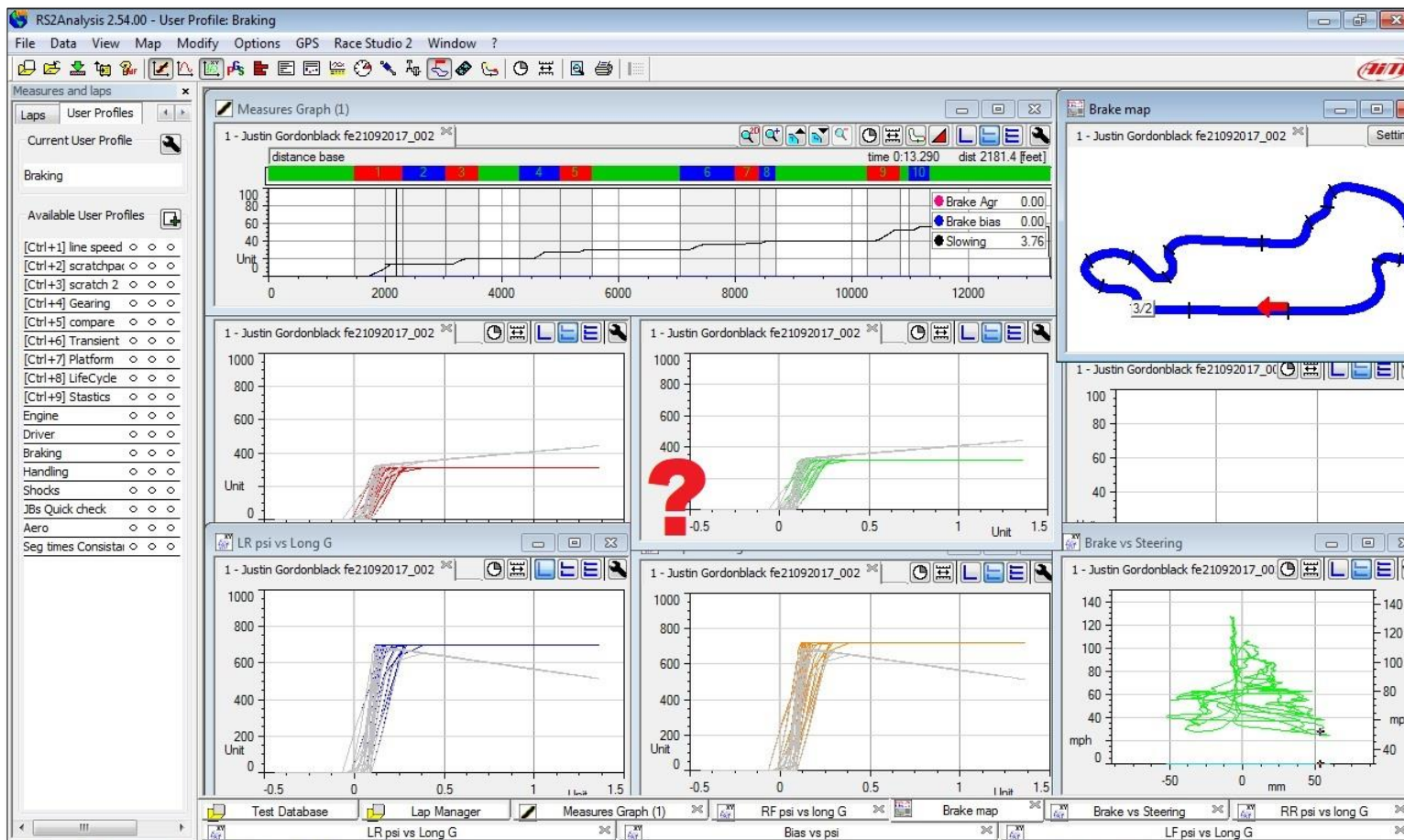
Run 2 Handling Review

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Brake Review



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Brake Review

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Auto-ware USF17 run sheet

DATE <u>9/21/17</u>	EVENT	CHASSIS	
DRIVER	TRACK	ENGINE	WEATHER <u>96° 43%</u>

Run <u>3</u>	COCKPIT	SETUP	SPRINGS & SHOCKS	BUILD	AERO
TIRES					
Set # <u>1</u> condition	BRAKE BAL	LF RIDE HT. RF RIDE HT. REAR RIDE HT.	LF SPRING RF SPRING LR SPRING RR SPRING	LF CASTOR RF CASTOR REAR SUSP.	FRONT WING MAIN ang
OUT PRESSURES		LF TOE RF TOE LR TOE RR TOE <u>1/25</u> <u>1/25</u>	LF PRELOAD RF PRELOAD LR PRELOAD RR PRELOAD	FARB RARB	REAR UPPER ELEMENT <u>-1/12</u>
LF PSI RF PSI LR PSI RR PSI		LF CAMBER RF CAMBER LR CAMBER RR CAMBER <u>+1.5</u>	LF C/R RF C/R LR C/R RR C/R <u>+2</u> <u>+2</u>	Dash pg 1	LOWER REAR MAIN ang
IN PRESSURES	FUEL	LF weight RF weight LR weight RR weight	LF DAMPER RF DAMPER LR DAMPER RR DAMPER	Dash pg 2	WICKER Set Back
LF PSI RF PSI LR PSI RR PSI	on board <u>+</u> pump out				Fence angle PLANE HGT
					Diffuser TUNNEL WICKER
					R side Pod Windscreen

LAP TIME	NOTES	LAP TIME	NOTES	LAP TIME	NOTES	DRIVER COMMENTS
OUT	1	11		21		
44.12						
BFA						
OUT						
44.23						
46.46	HELD UP IN TRAFFIC					
10		20		30		

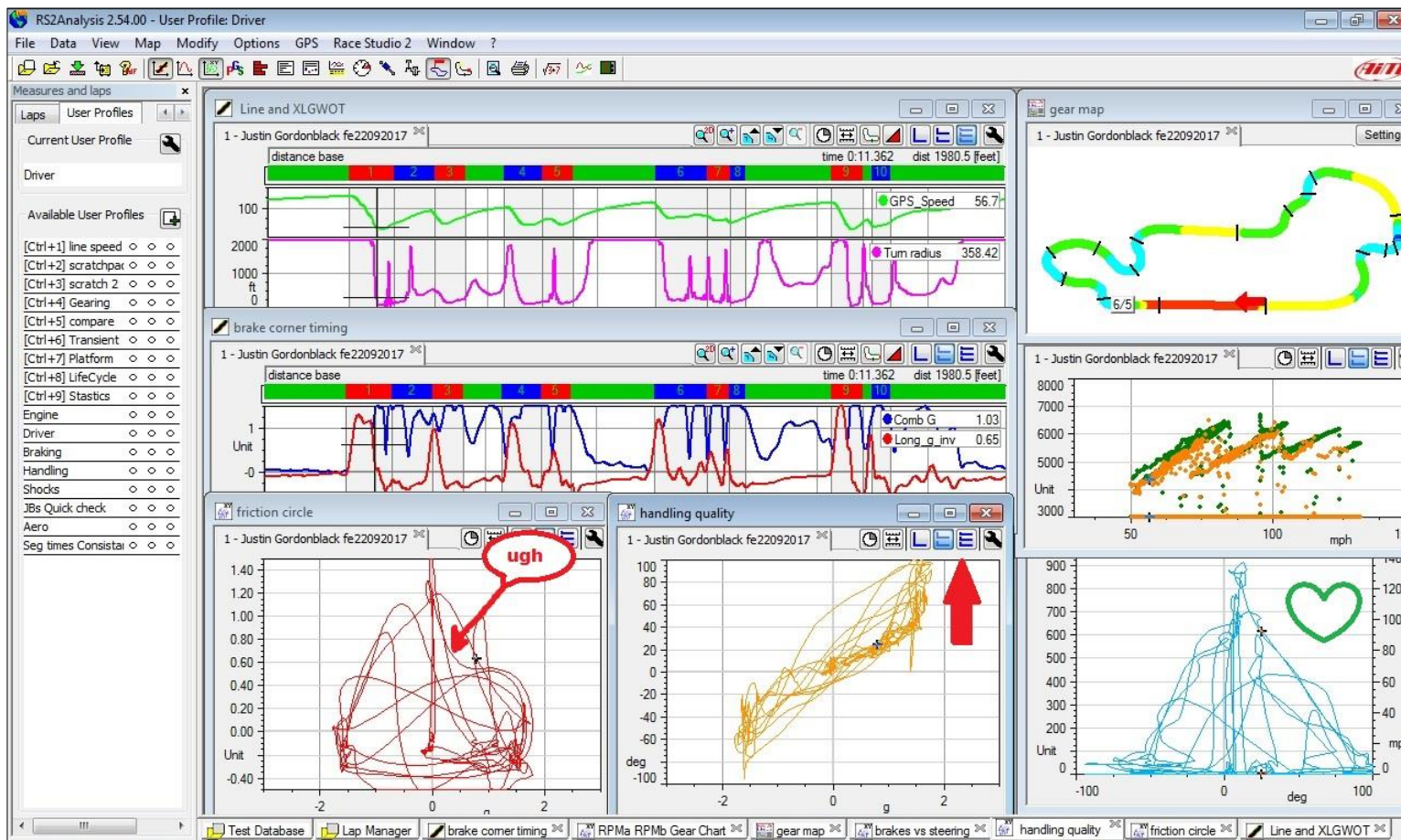
Auto-ware USF17 run sheet

DATE 9/22/17		EVENT		CHASSIS	
DRIVER		TRACK		ENGINE	
				WEATHER	

Run 1		COCKPIT		SETUP		SPRINGS & SHOCKS		BUILD		AERO			
TIRES		BRAKE BAL		LF RIDE HT.		RF RIDE HT.		LF SPRING		RF SPRING			
Set # 7 condition				REAR RIDE HT.		LR SPRING		RR SPRING		LF CASTOR		RF CASTOR	
OUT PRESSURES LF PSI 11.5 RF PSI 12 LR PSI 17 RR PSI 12.5				LF TOE		RF TOE		LF PRELOAD		RF PRELOAD		REAR SUSP.	
				LR TOE		RR TOE		LR PRELOAD		RR PRELOAD		FARB	
IN PRESSURES LF PSI 15.5 RF PSI 15.1 LR PSI 16 RR PSI 16.5		FUEL on board F pump out		LF CAMBER		RF CAMBER		LF C/R		RF C/R			
				LR CAMBER		RR CAMBER		LR C/R		RR C/R			
				LF DAMPER		RF DAMPER		Dash pg 1					
				LR DAMPER		RR DAMPER							
Dash pg 2		FRONT WING MAIN ang		L WICKER Y		R WICKER Y							
		REAR UPPER ELEMENT		setting max		setting max							
		LOWER REAR MAIN ang		WICKER max		Fence angle max							
		Diffuser		L Side Pod		R side Pod							
Dash pg 2		TUNNEL WICKER		Windscreen									
		Set Back		PLANE HGT									
		yaw		yaw									
		Dash pg 2		Dash pg 2									

LAP TIME		NOTES		LAP TIME		NOTES		LAP TIME		NOTES		DRIVER COMMENTS	
1		PASSING TRAFFIC		11		CLEAR		21		CHICKENS TOW			
2				12				22					
3				13				23					
4				14				24					
5				15				25					
6		CLEAR		16		CLEAR		26		CLEAR			
7				17				27					
8				18				28					
9				19				29					
10				20				30					

D2 R1 Driver Review



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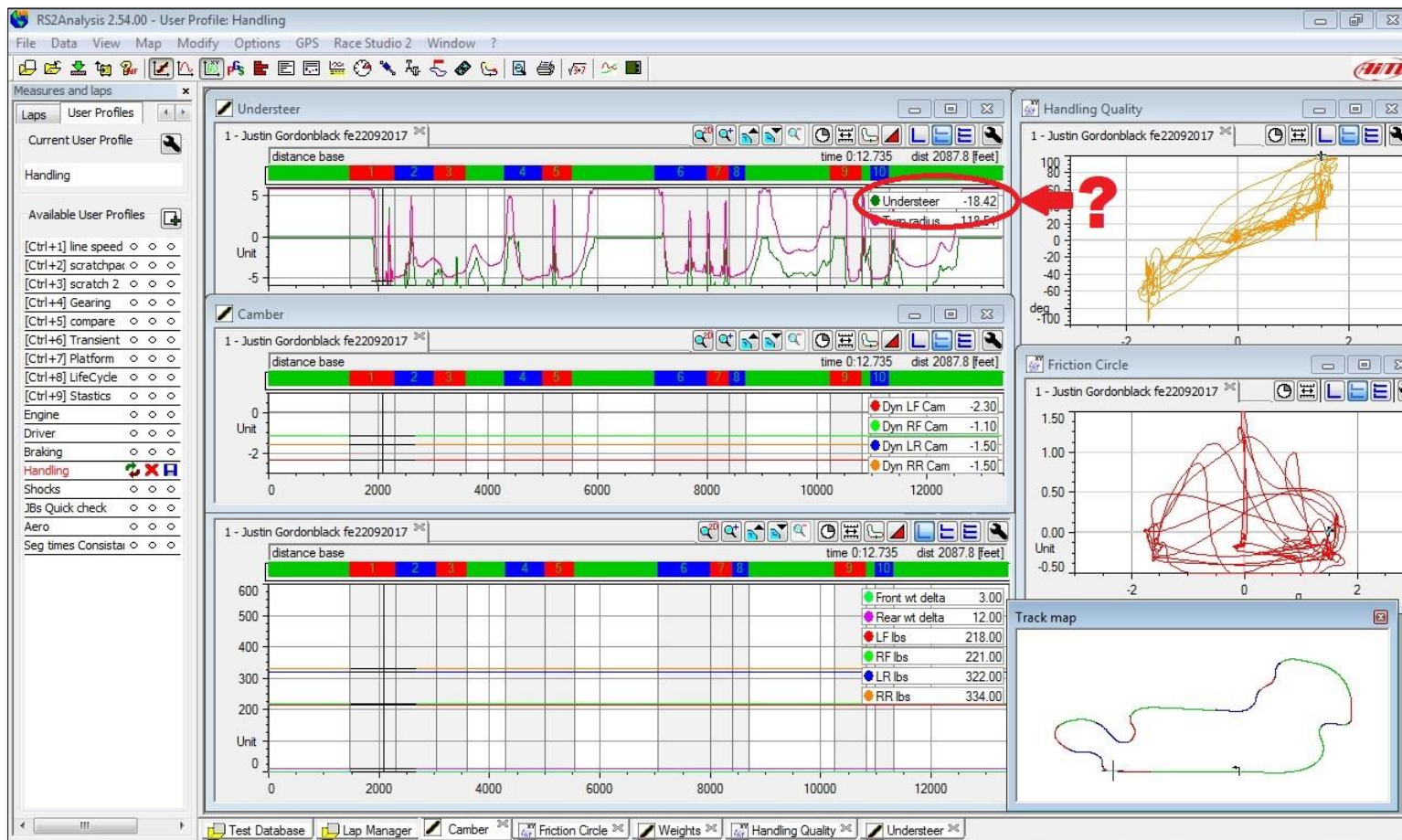
D2 R1 Driver Review

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D2 R1 Handling Review



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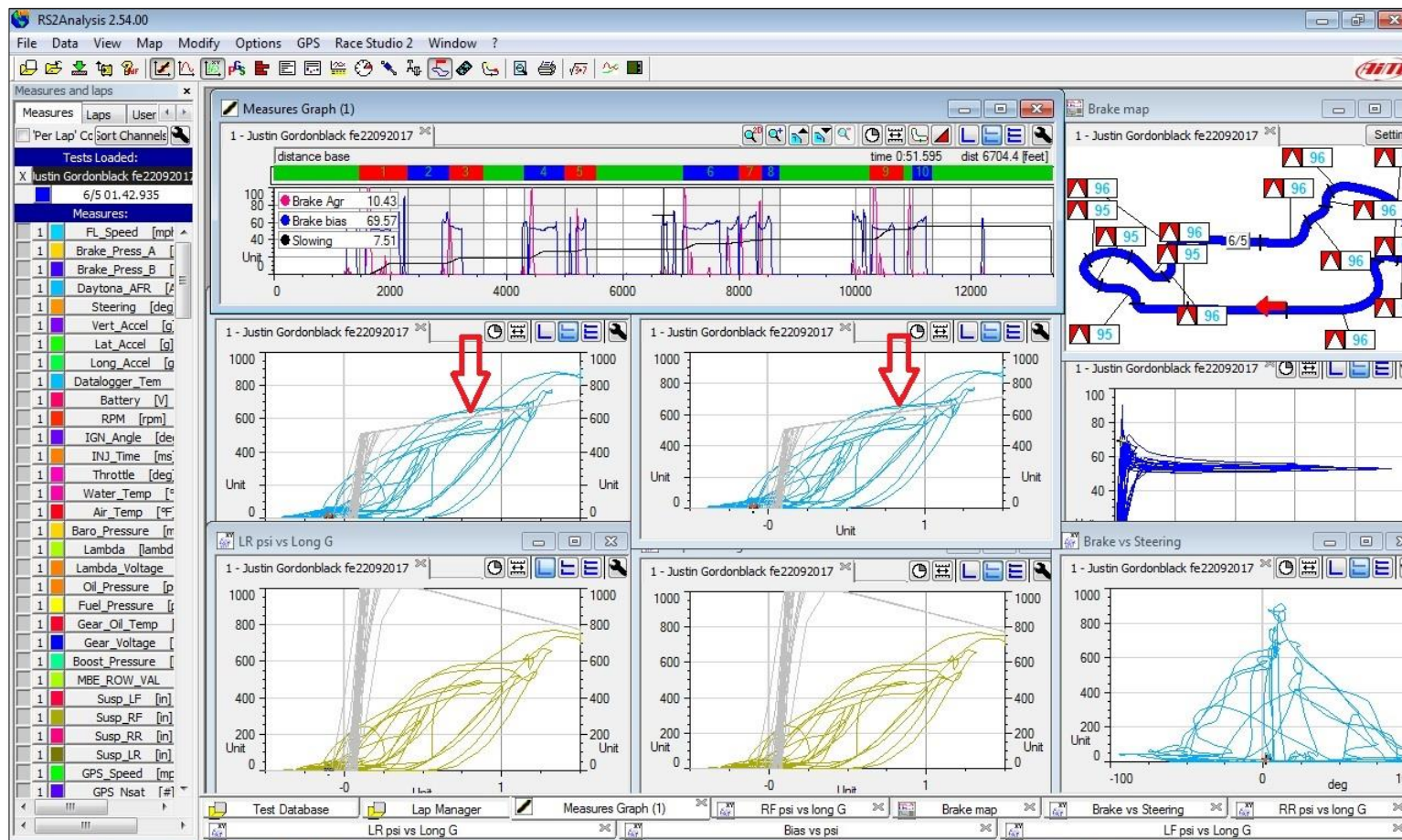
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D2 R1 Brake Review



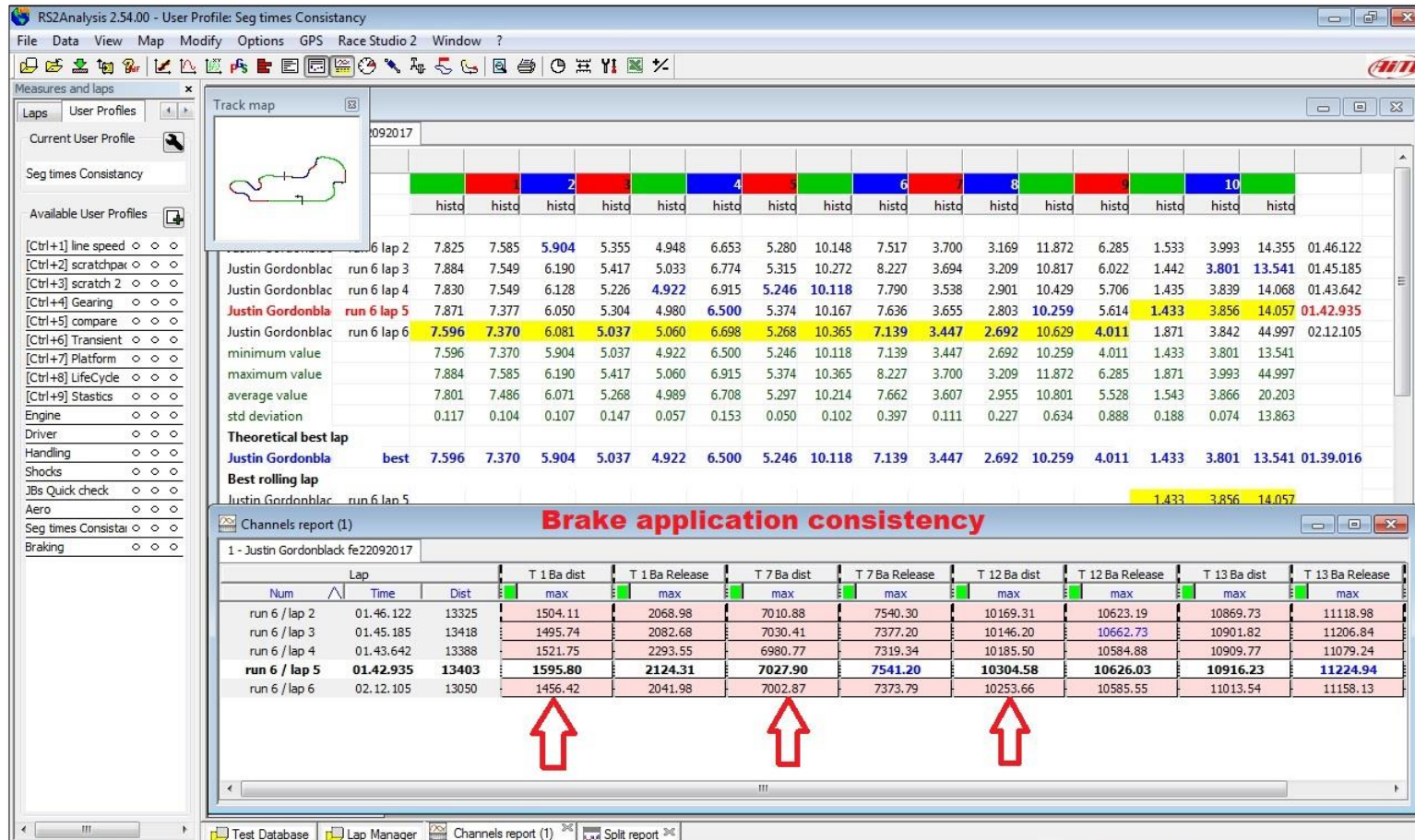
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D2 R1 Brake Review

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Consistency Coaching



D2 R2 Changes & Observations



Run <u>2</u>		COCKPIT	SETUP	SPRINGS & SHOCKS		BUILD		AERO			
TIRES		BRAKE BAL	LF RIDE HT.	RF RIDE HT.	LF SPRING	RF SPRING	LF CASTOR	RF CASTOR	FRONT WING MAIN ang	L WICKER	R WICKER
Set #	condition		REAR RIDE HT.		LR SPRING	RR SPRING	REAR SUSP.				
<u>1</u>			LF TOE	RF TOE	LF PRELOAD	RF PRELOAD	FARB		REAR UPPER ELEMENT	setting	setting
OUT PRESSURES			LR TOE	RR TOE	LR PRELOAD	RR PRELOAD	RARB		yaw		
LF PSI	RF PSI		<u>← 1/2 F</u>	<u>1/2 F →</u>	LF C/R	RF C/R	Dash pg 1		LOWER REAR MAIN ang	WICKER	Fence angle
<u>+4</u>	<u>+3.5</u>		LF CAMBER	RF CAMBER	LR C/R	RR C/R			Set Back	PLANE HGT	
LR PSI	RR PSI		LF weight	RF weight	LF DAMPER	RF DAMPER	Dash pg 2		Diffuser	L Side Pod	R side Pod
<u>+1.2</u>	<u>+2</u>		LR weight	RR weight	LR DAMPER	RR DAMPER			TUNNEL WICKER	Windscreen	
IN PRESSURES		FUEL									
LF PSI	RF PSI	on board									
<u>15.5</u>	<u>16+</u>	<u>F</u>									
LR PSI	RR PSI	pump out									
<u>18.5</u>	<u>19.0</u>										
LAP TIME	NOTES	LAP TIME	NOTES	LAP TIME	NOTES	DRIVER COMMENTS					
<u>OUT</u>	<u>1</u>										
<u>44.05</u>											
<u>45.23</u>	<u>coming to traffic</u>										
<u>44.28</u>	<u>TRAFFIC</u>										
<u>45.35</u>	<u>?</u>										
<u>44.08</u>											
<u>45.13</u>											
<u>IN</u>	<u>4 251 Front</u>										
<u>OUT</u>											
<u>41.91</u>	<u>10</u>		<u>20</u>		<u>30</u>						

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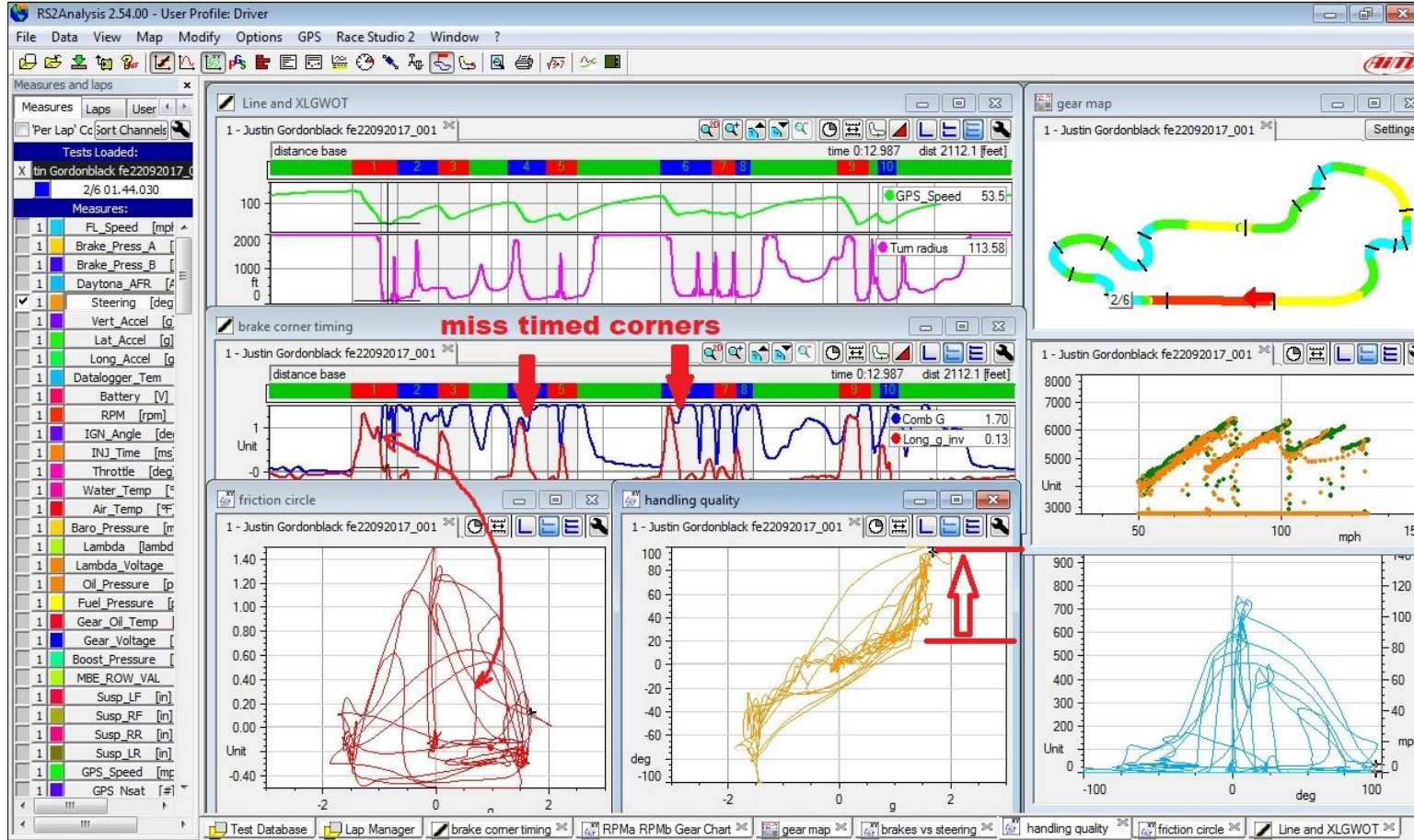
D2 R2 Changes & Observations

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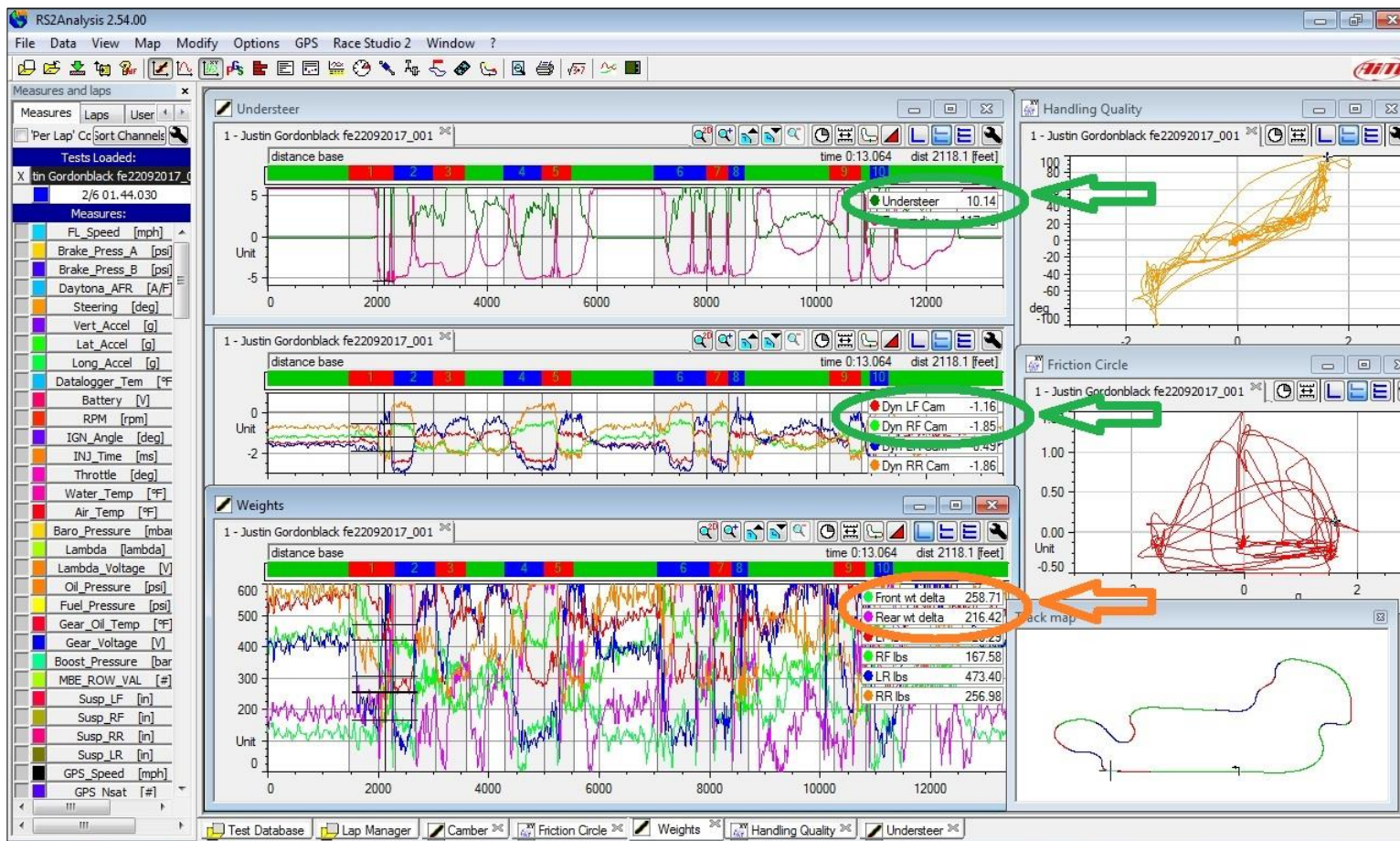


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D2 R2 Driver Review



D2 R2 Handling Review



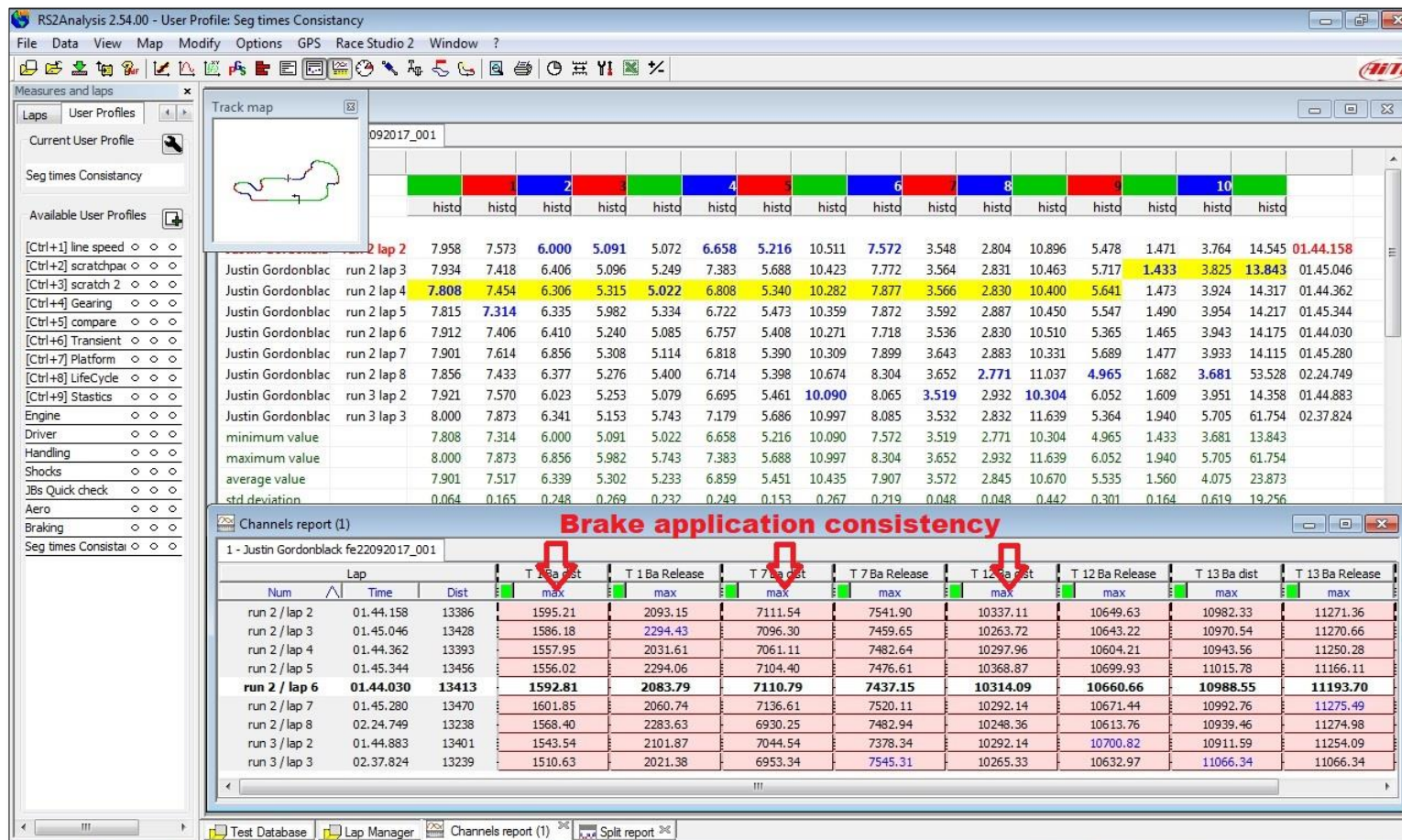
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D2 R2 Handling Review

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D2 R2 Consistency



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D2 R2 Consistency

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D2 R3 Changes & Observations



Auto-ware USF17 run sheet

DATE <u>9/22/17</u>	EVENT	CHASSIS	SPOT CUMU
DRIVER	TRACK	ENGINE	WEATHER <u>96° 42g</u>

Run <u>3</u>	COCKPIT	SETUP	SPRINGS & SHOCKS	BUILD	AERO
TIRES					
Set # <u>1</u> condition	BRAKE BAL	LF RIDE HT. RF RIDE HT.	LF SPRING RF SPRING	LF CASTOR RF CASTOR	FRONT WING MAIN ang
		REAR RIDE HT.	LR SPRING RR SPRING	REAR SUSP.	
OUT PRESSURES		LF TOE RF TOE	LF PRELOAD RF PRELOAD	FARB	REAR UPPER ELEMENT
LF PSI RF PSI		LR TOE RR TOE	LR PRELOAD RR PRELOAD	RARB	setting setting
LR PSI RR PSI		LF CAMBER RF CAMBER	LF C/R RF C/R	Dash pg 1	yaw
<u>-2</u> <u>-2</u>		LR CAMBER RR CAMBER	LR C/R RR C/R		LOWER REAR MAIN ang
IN PRESSURES	FUEL	LF weight RF weight	LF DAMPER RF DAMPER	Dash pg 2	WICKER Fence angle
LF PSI RF PSI	on board <u>43</u>	LR weight RR weight	LR DAMPER RR DAMPER		Set Back PLANE HGT
<u>15.5</u> <u>16.5</u>	pump out				Diffuser L Side Pod R side Pod
<u>15.5</u> <u>16.0</u>					TUNNEL WICKER Windscreen

LAP TIME	NOTES	LAP TIME	NOTES	LAP TIME	NOTES	DRIVER COMMENTS
OUT	1	11		21		
58.62	BEARING BRAKES					
44.31						
45.03						
46.33						
44.50						
44.97						
41.55						
330.41						
16N	10	20		30		

509 CUMU

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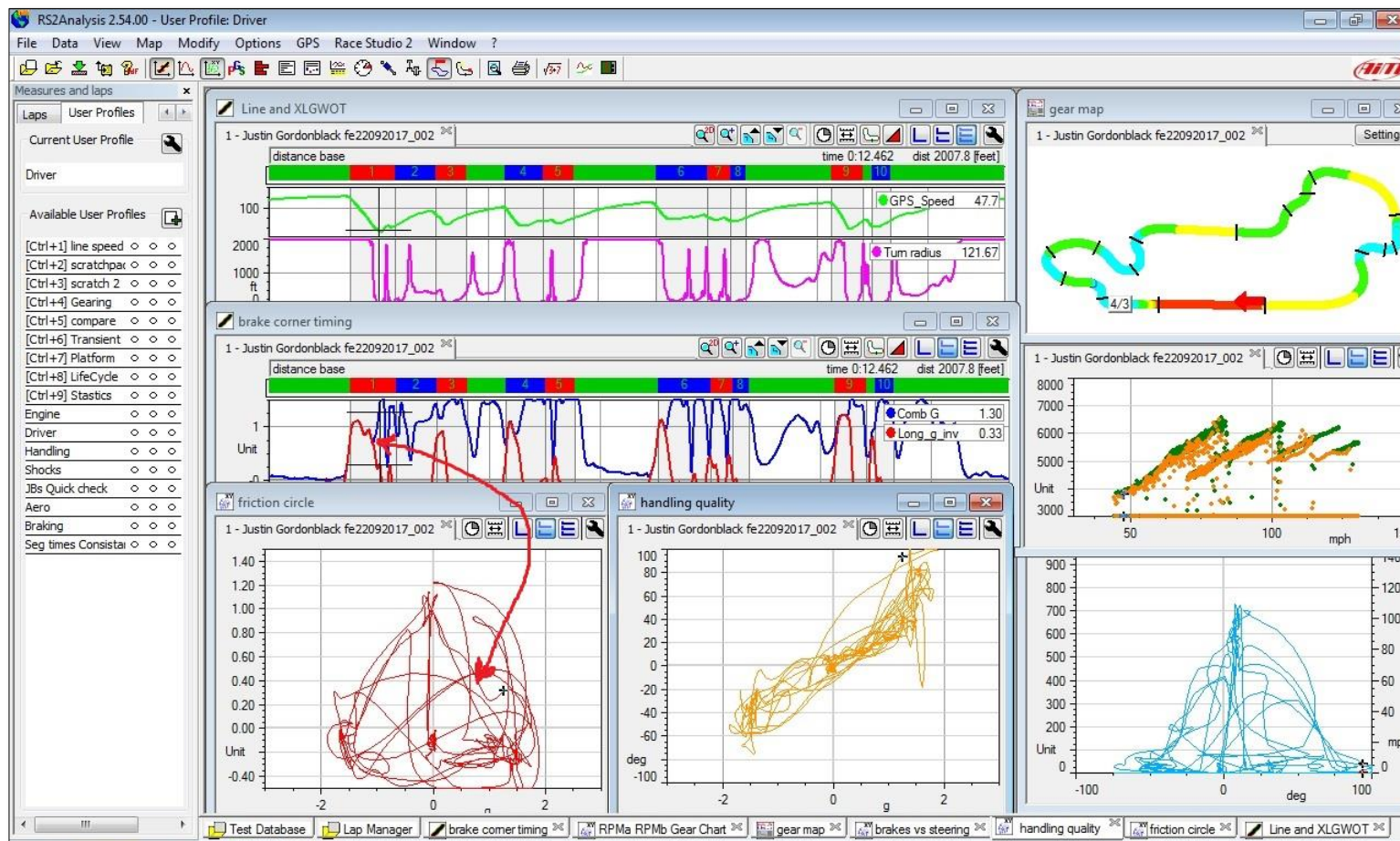
D2 R3 Changes & Observations

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D2 R3 Driver Review



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D2 R3 Driver Review

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D2 R3 Handling



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D2 R3 Handling

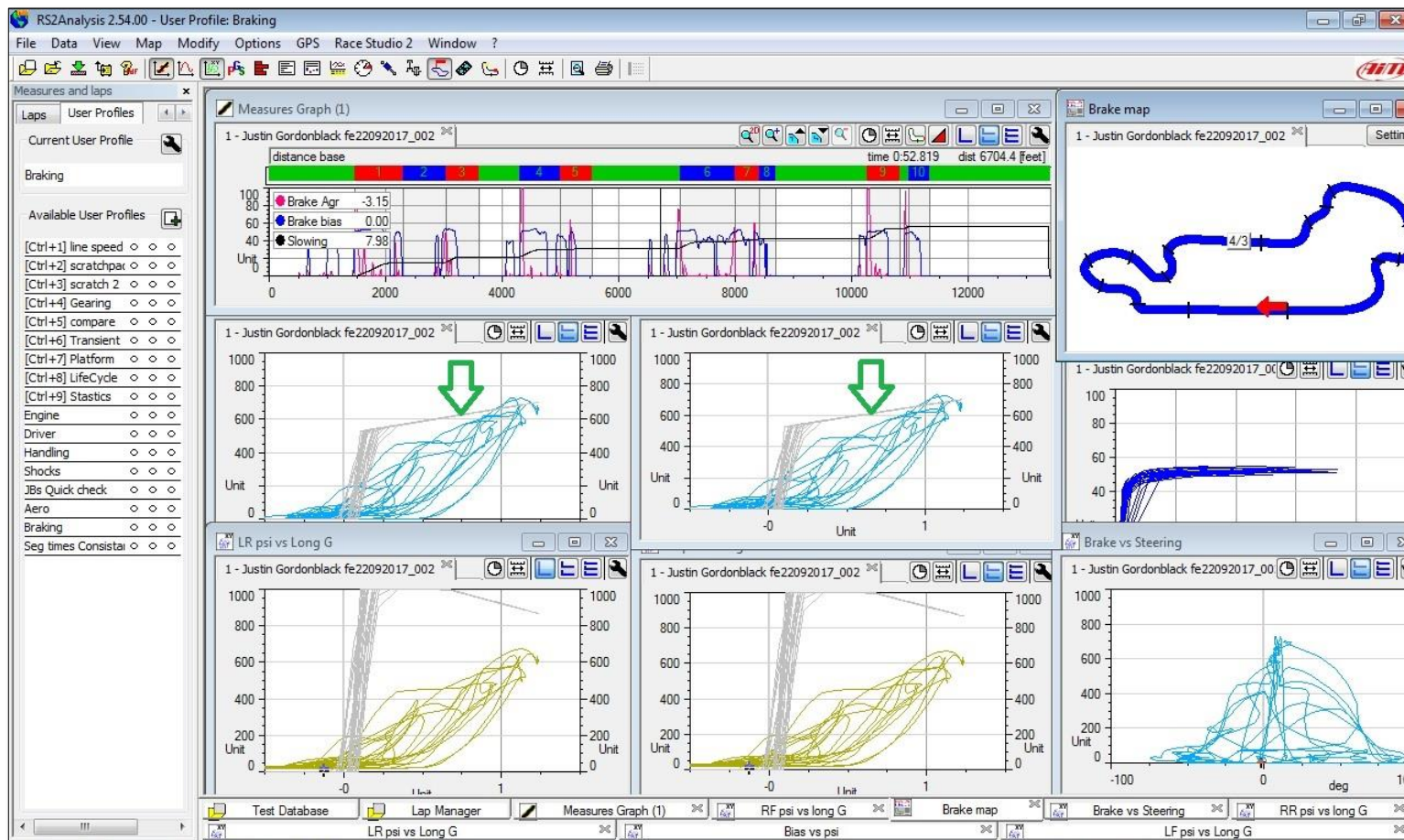
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D2 R3 Brakes



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D2 R3 Brakes

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D2 R4 Changes & Observations



Run <u>4</u>		COCKPIT		SETUP		SPRINGS & SHOCKS		BUILD <u>97° 37%</u> AERO	
TIRES									
Set #	condition	BRAKE BAL		REAR RIDE HT.		REAR SUSP.		FRONT WING MAIN ang	
								L WICKER <u>X</u> R WICKER <u>Y</u>	
OUT PRESSURES				LF TOE RF TOE		LF PRELOAD RF PRELOAD		FARB	
LF PSI	RF PSI			LR TOE RR TOE		LR PRELOAD RR PRELOAD		RARB	
LR PSI	RR PSI			LF CAMBER RF CAMBER		LF C/R RF C/R		Dash pg 1	
IN PRESSURES		FUEL		LR CAMBER RR CAMBER		LR C/R RR C/R		Dash pg 2	
LF PSI	RF PSI	on board <u>85</u>		LF weight RF weight		LF DAMPER RF DAMPER		LOWER REAR MAIN ang	
LR PSI	RR PSI	pump out		LR weight RR weight		LR DAMPER RR DAMPER		WICKER Set Back PLANE HGT	
								Diffuser L Side Pod R side Pod	
								TUNNEL WICKER Windscreen	
LAP TIME	NOTES	LAP TIME	NOTES	LAP TIME	NOTES	DRIVER COMMENTS			
OUT	<u>1</u> TRUCK	41.07	<u>11</u> 4.4 → wide 14	94°	<u>48%</u>				
45.28									
46.12	comm?								
46.53	BIG PUSH					FARB WAS BEEN STUCK & STIFF			
47	F FLAPS max BFA					COLD			
OUT	timed →					MORNING			
43.47	5.0 →					11.0 / 12.75			
44.19	6.4 →					11.75 / 11.75			
43.98	5.0 → PART SHADE								
44.24	10.6 →								

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D2 R4 Changes & Observation

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D2 R4 Straight Speed



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D2 R4 Straight Speed

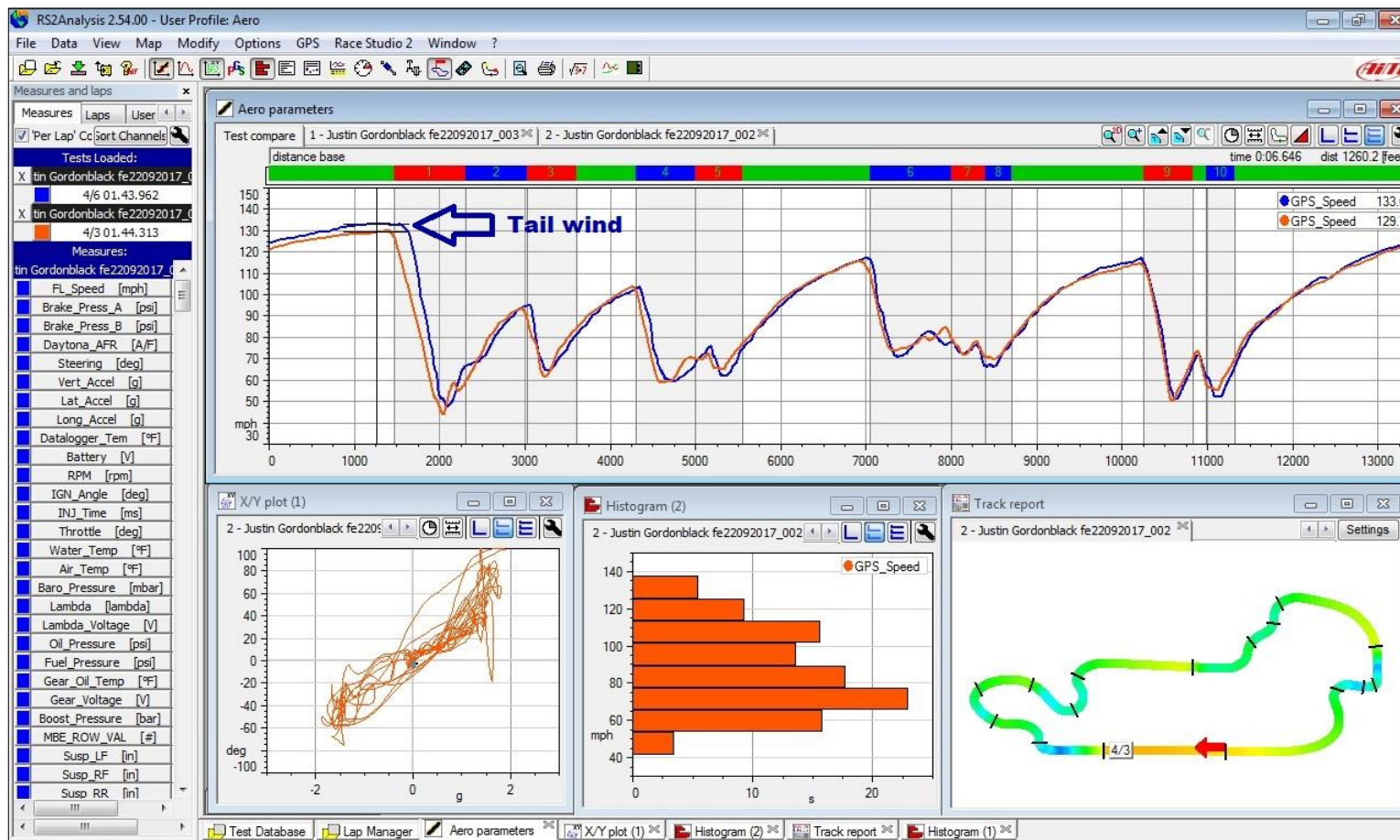
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D2 R4 Corner Speed Change



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D2 R4 Corner Speed Change

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D3 R1 Changes & Observations



Auto-ware USF17 run sheet

DATE <u>9/23/17</u>	EVENT <u>Day 3</u>	CHASSIS	<u>CLEAR</u>
DRIVER	TRACK	ENGINE	WEATHER <u>87° 55%</u>

Run <u>1</u>	COCKPIT	SETUP	SPRINGS & SHOCKS	BUILD	AERO
TIRES					
Set # <u>2</u> condition <u>STICKER</u>	BRAKE BAL	LF RIDE HT. RF RIDE HT. REAR RIDE HT. <u>SET DOWN</u> LF TOE <u>← 0.5</u> RF TOE <u>← 1.0</u> LR TOE <u>← 0.5</u> RR TOE <u>← 0.5</u> LF CAMBER <u>2.3</u> RF CAMBER <u>1.1</u> LR CAMBER RR CAMBER	LF SPRING RF SPRING LR SPRING RR SPRING LF PRELOAD <u>+2T</u> RF PRELOAD <u>+2T</u> LR PRELOAD RR PRELOAD LF C/R RF C/R LR C/R RR C/R LF DAMPER RF DAMPER LR DAMPER RR DAMPER	LF CASTOR RF CASTOR REAR SUSP. FARB <u>F SOFT</u> RARB Dash pg 1 Dash pg 2	FRONT WING MAIN ang REAR UPPER ELEMENT setting yaw LOWER REAR MAIN ang WICKER Fence angle Set Back PLANE HGT Diffuser L Side Pod R side Pod TUNNEL WICKER Windscreen
OUT PRESSURES	<u>LEVELLED</u>				
LF PSI <u>11.5</u> RF PSI <u>12</u> LR PSI <u>12</u> RR PSI <u>11.75</u>					
IN PRESSURES	FUEL				
LF PSI <u>15.5</u> RF PSI <u>15.5</u> LR PSI <u>16.0</u> RR PSI <u>15.75</u>	on board pump out				

LAP TIME	NOTES	LAP TIME	NOTES	LAP TIME	NOTES	DRIVER COMMENTS
OUT	1	11		21		
45.17	TRAFFIC					
49.19	11					
43.23	CLEAR					
41.89						
IN						
OUT						
42.49						
IN						
	10		20		30	

Indy, A Path To The Pole

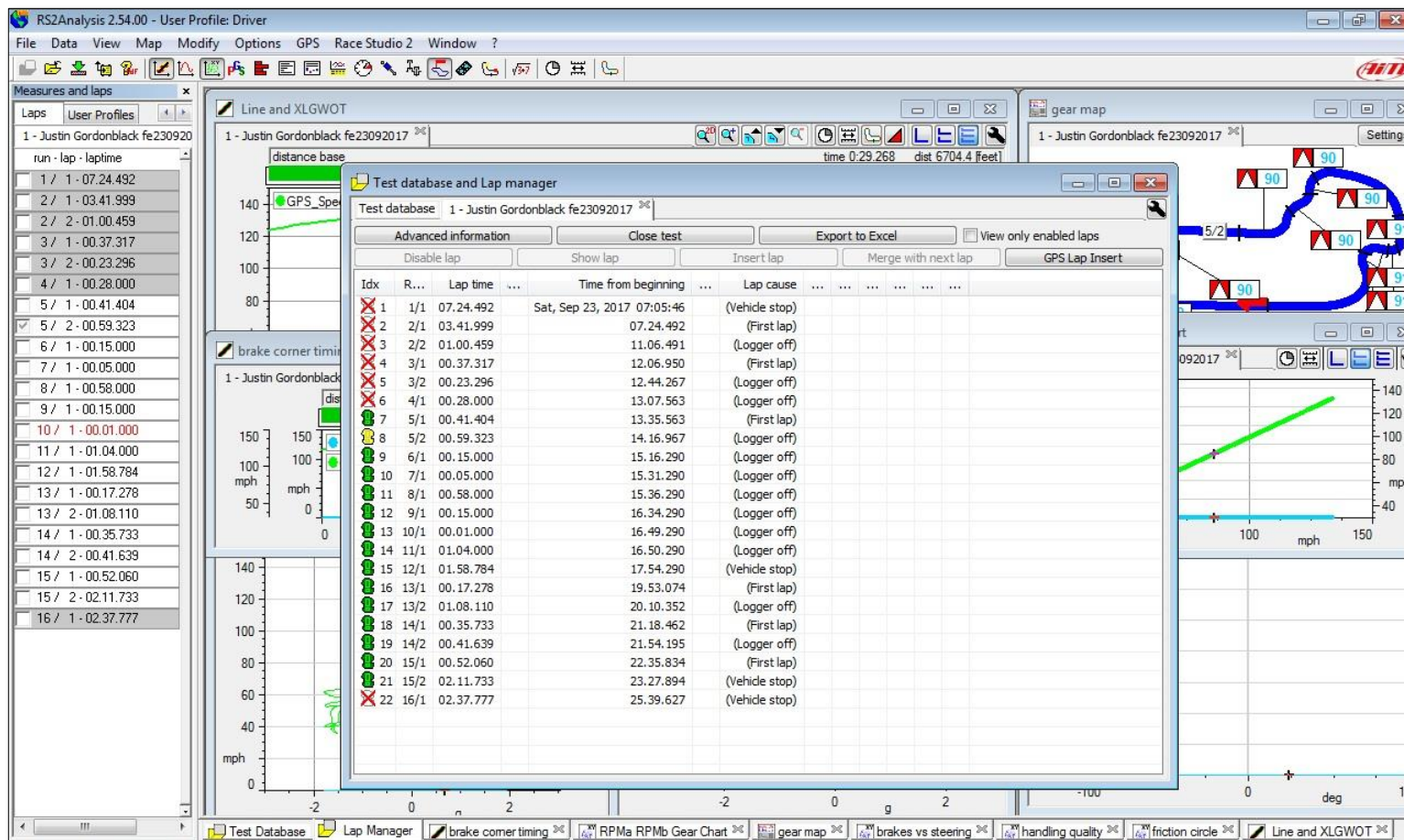
D3 R1 Changes & Observations

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Data Problem



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Data Problem

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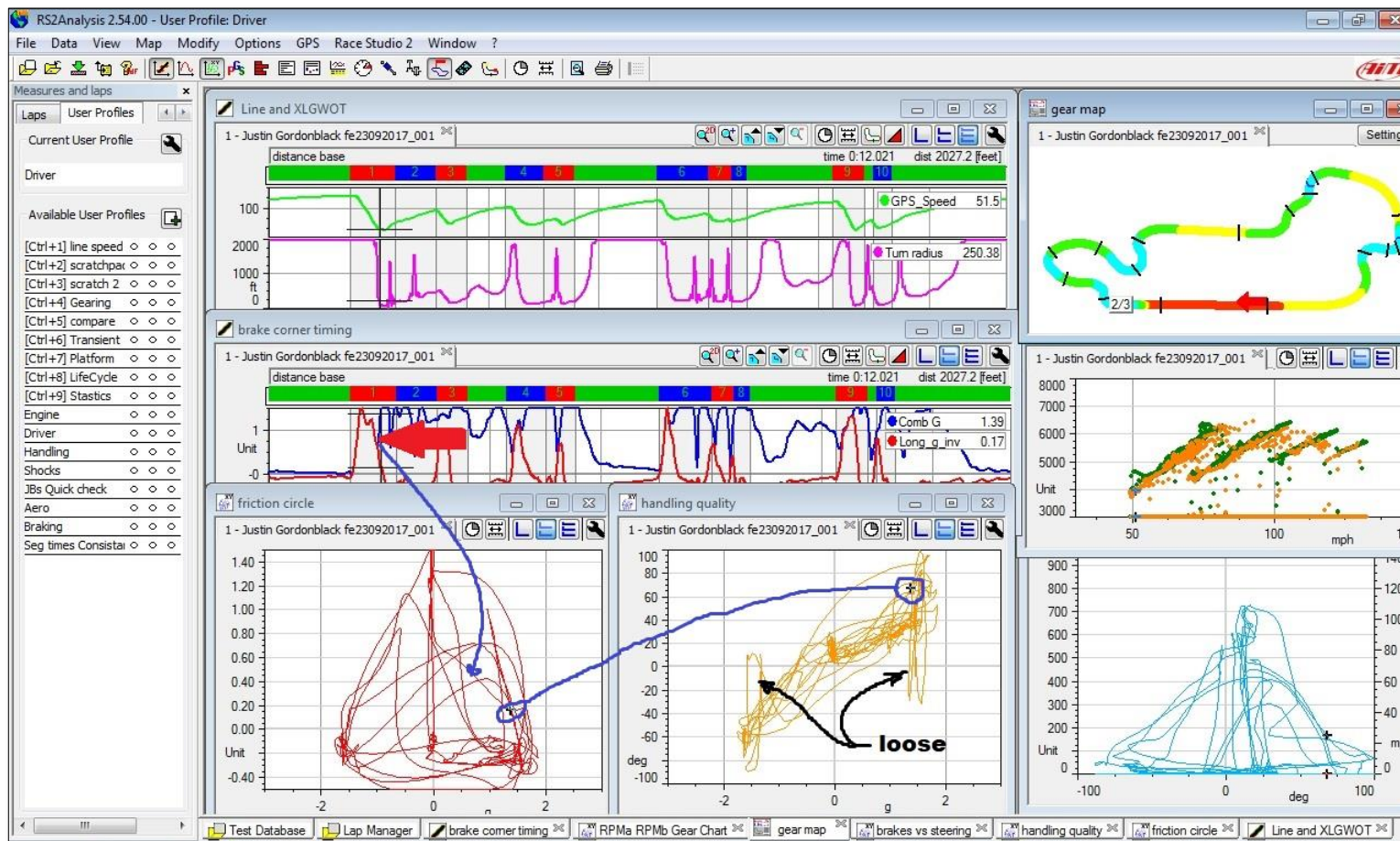
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D3 R2 Driver Review



Indy, A Path To The Pole

D3 R2 Driver Review

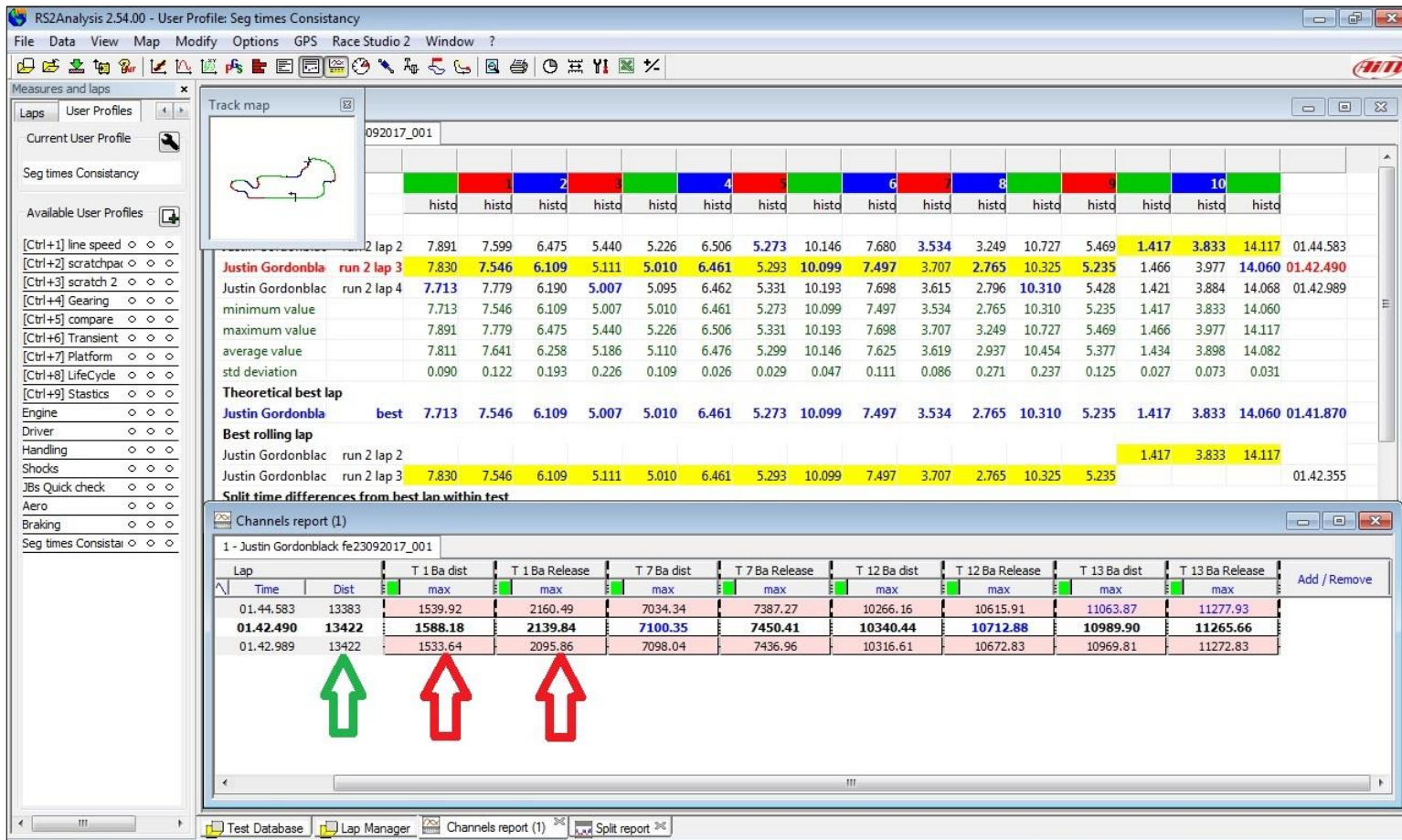
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D3 R2 Consistency



D3 R2 Speed



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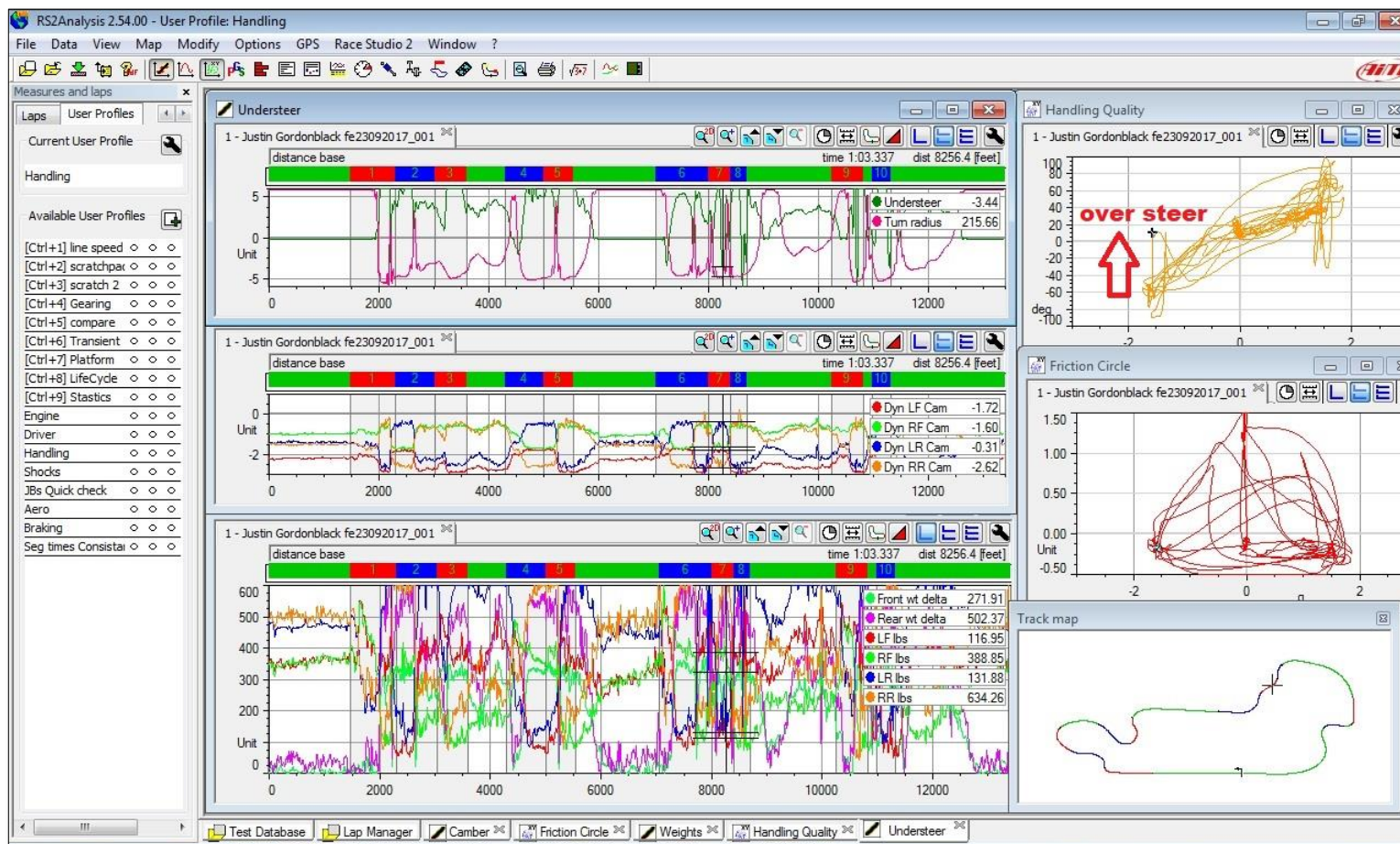
D3 R2 Speed

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D3 R2 Handling



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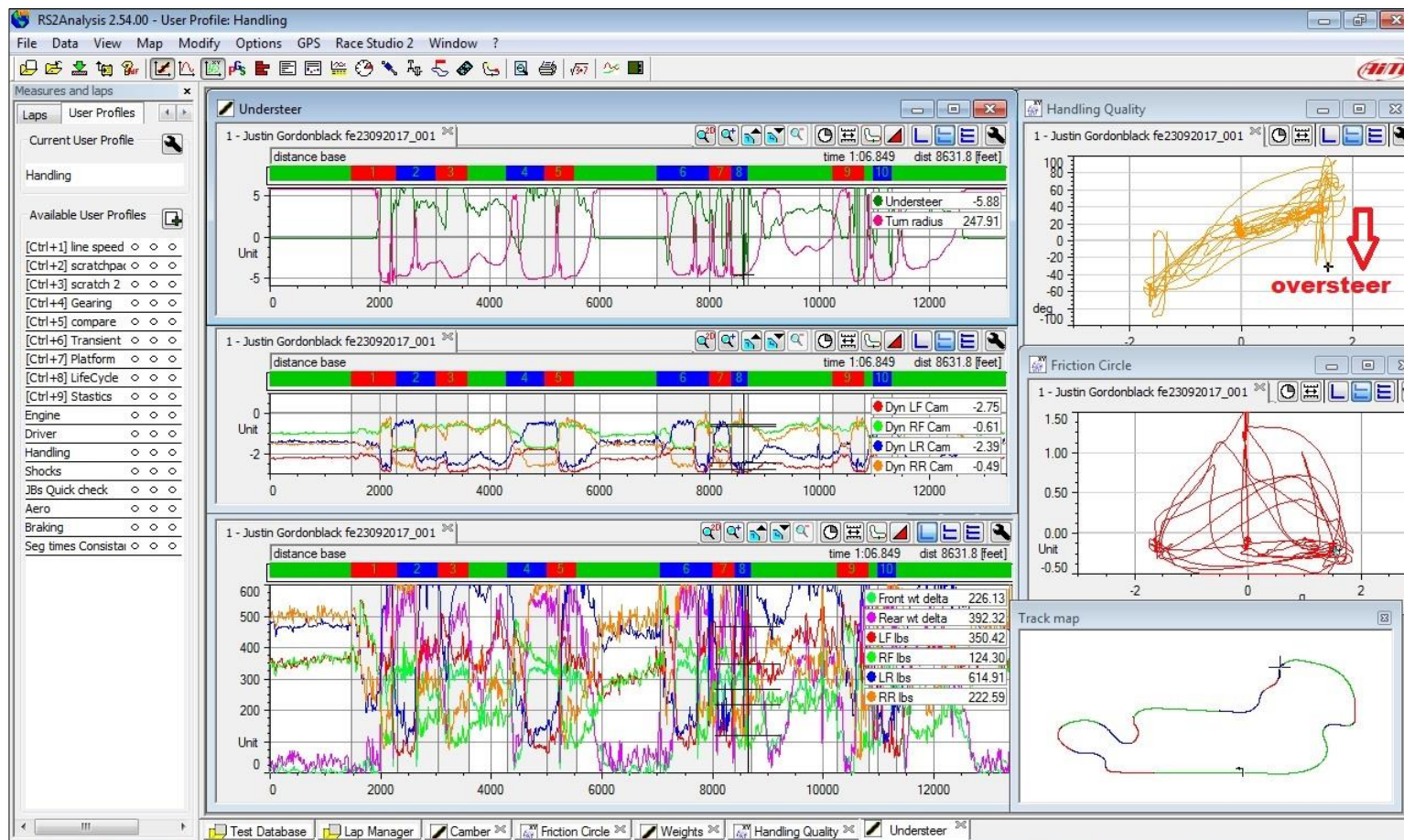
D3 R2 Handling

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D3 R2 Handling, Pt2



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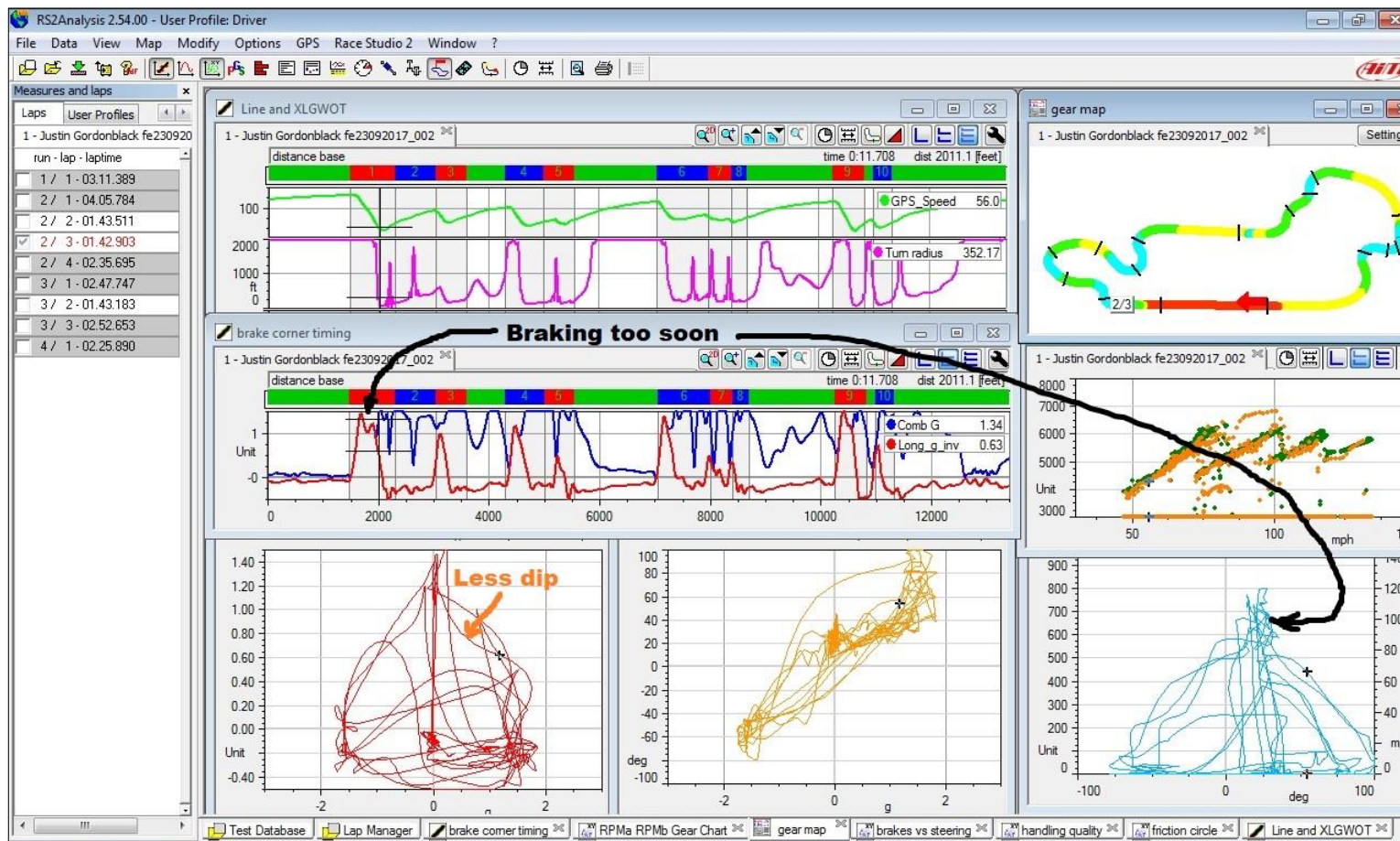
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D3 R3 Driver Review



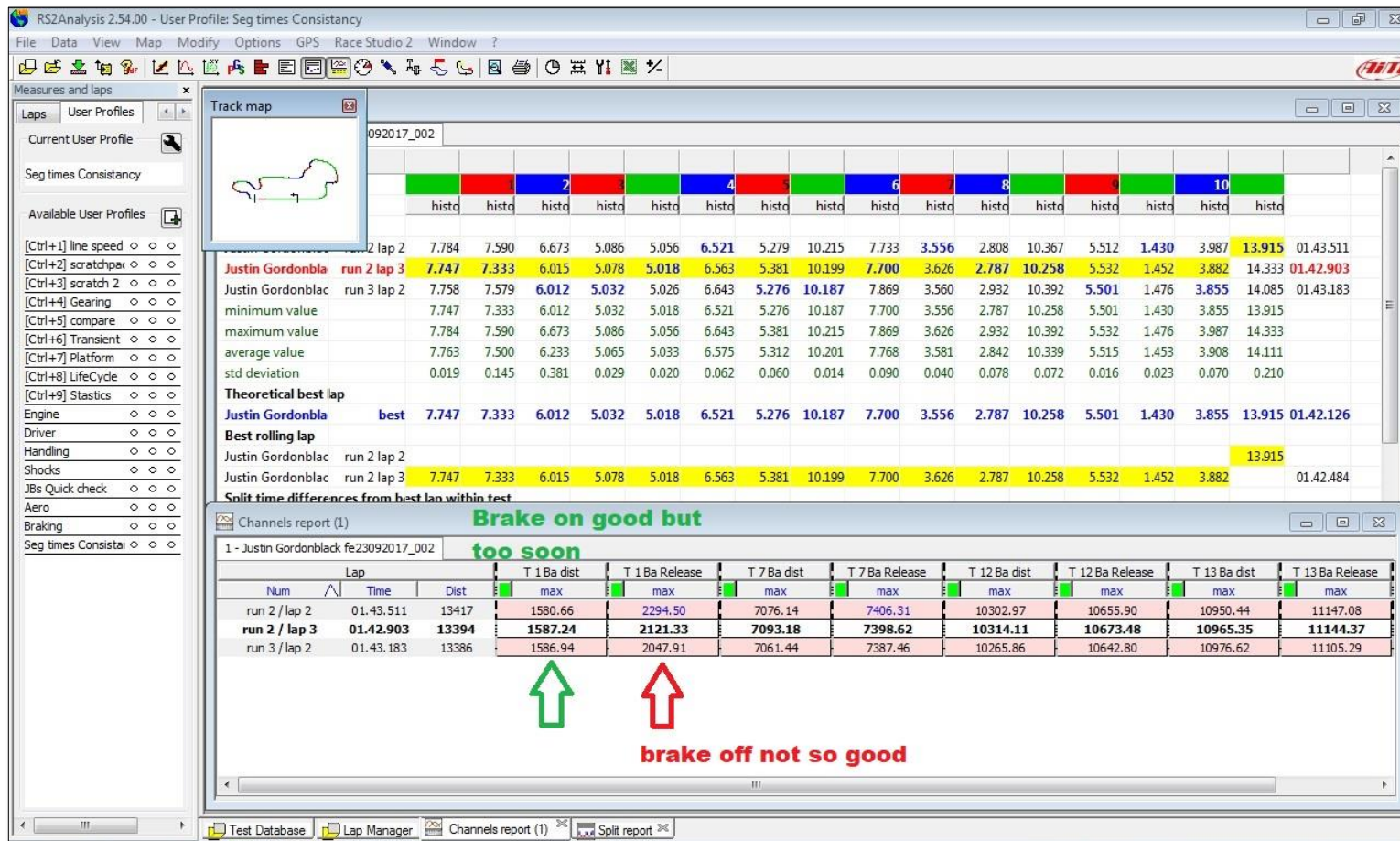
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D3 R3 Driver Review

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D3 R3 Consistency



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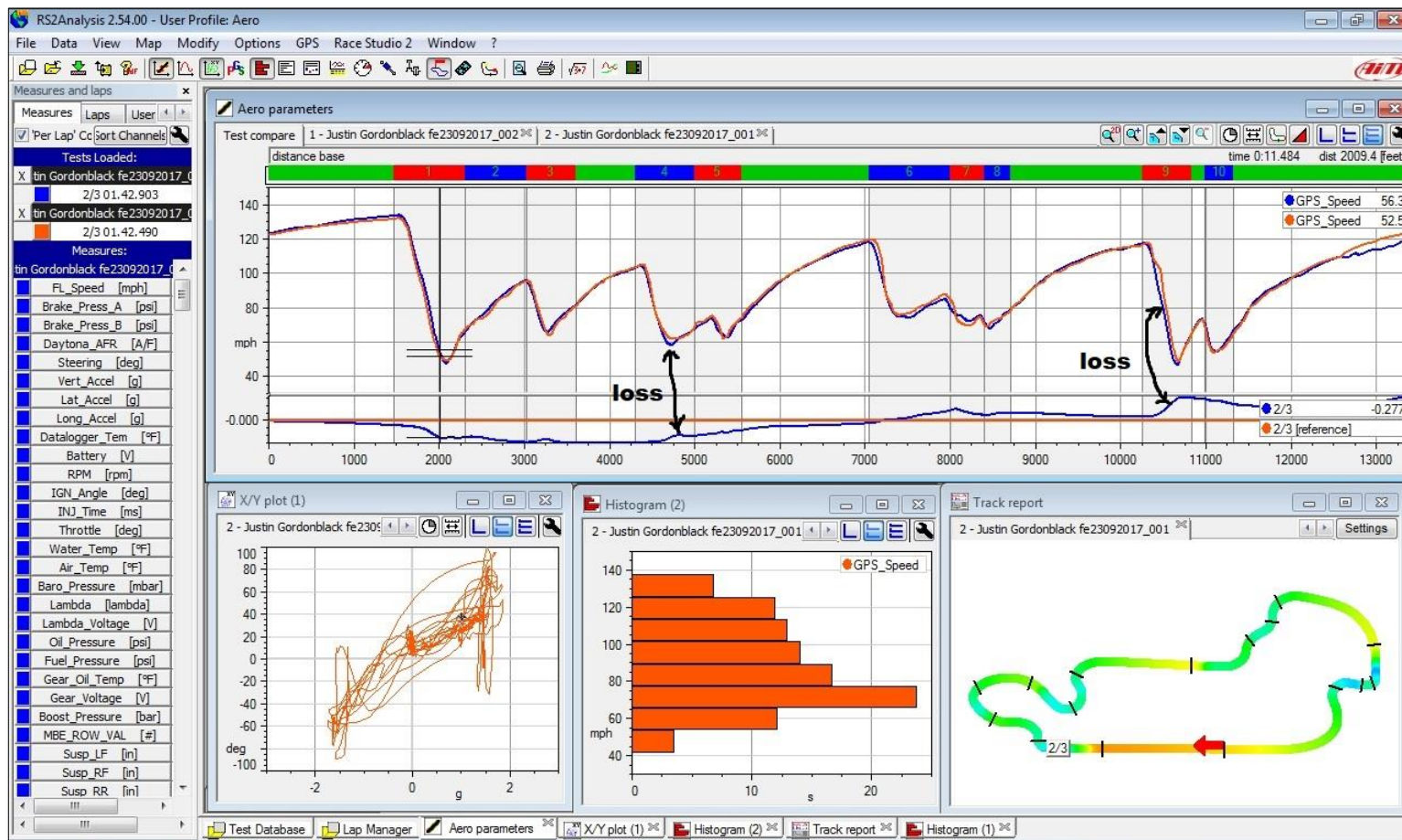
D3 R3 Consistency

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D3 R3 Speed



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D3 R3 Speed

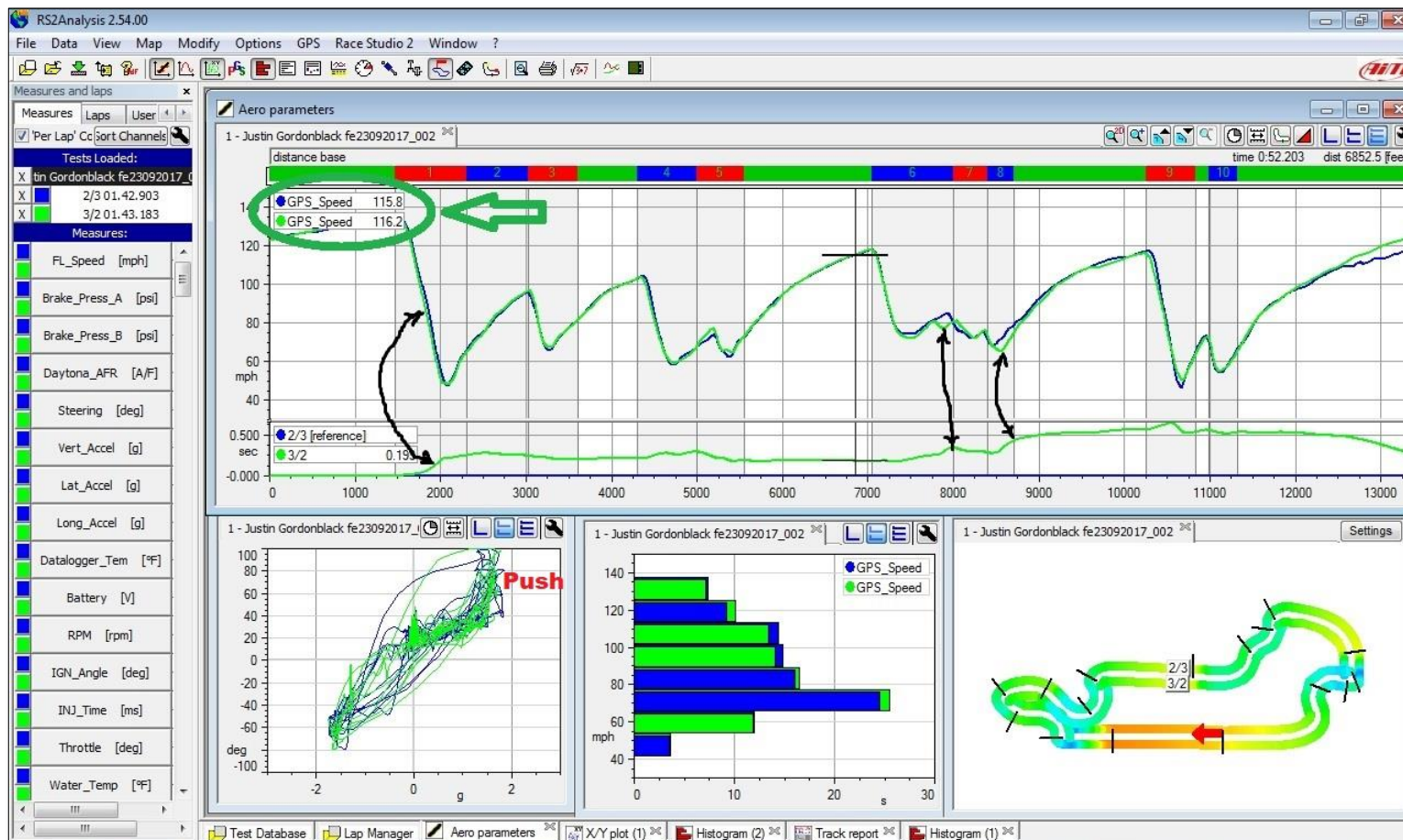
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D3 R3a Speed



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D3 R3a Speed

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D4 R1 Changes & Observations



Auto-ware USF17 run sheet

DATE <u>9/24/17</u>	EVENT <u>SUNDAY TEST</u>	CHASSIS	<u>CLEAR</u>
DRIVER	TRACK	ENGINE	WEATHER <u>82° 50%</u>

Run <u>1</u>	COCKPIT	SETUP	SPRINGS & SHOCKS	BUILD	AERO
TIRES		LF RIDE HT. RF RIDE HT.	LF SPRING RF SPRING	LF CASTOR RF CASTOR	FRONT WING MAIN ang
Set # <u>2</u> condition	BRAKE BAL	REAR RIDE HT. <u>HT ↑ 1/2 T</u>	LR SPRING RR SPRING	REAR SUSP.	
OUT PRESSURES		LF TOE RF TOE	LF PRELOAD RF PRELOAD	FARB	REAR UPPER ELEMENT
LF PSI <u>12</u> RF PSI <u>13</u>		LR TOE RR TOE	LR PRELOAD RR PRELOAD	<u>mid</u> RARB	setting yaw
LR PSI <u>12</u> RR PSI <u>12.25</u>		LF CAMBER RF CAMBER	LF C/R RF C/R	Dash pg 1	LOWER REAR MAIN ang
IN PRESSURES	FUEL	LR CAMBER RR CAMBER	LR C/R RR C/R	Dash pg 2	WICKER Fence angle
LF PSI <u>16</u> RF PSI <u>16+</u>	on board <u>F</u>	LF weight RF weight	LF DAMPER RF DAMPER		Set Back PLANE HGT
LR PSI <u>15.5</u> RR PSI <u>15.5</u>	pump out	LR weight RR weight	LR DAMPER RR DAMPER		Diffuser L Side Pod R side Pod
					TUNNEL WICKER Windscreen

LAP TIME	NOTES	LAP TIME	NOTES	LAP TIME	NOTES	DRIVER COMMENTS
<u>?</u>	<u>1</u>	<u>11</u>		<u>21</u>		
<u>OUT</u>						
<u>49.39</u>						
<u>42.75</u>						
<u>42.78</u>						
<u>BFA</u>						
<u>OUT</u>						
<u>42.70</u>	<u>CATCHING TRAFFIC</u>	<u>FBAL SUFT</u>				
<u>43.33</u>	<u>TRAFFIC</u>					
<u>IN</u>	<u>10</u>	<u>20</u>		<u>30</u>		

DASH TEMPS

? BALANCE BAR?

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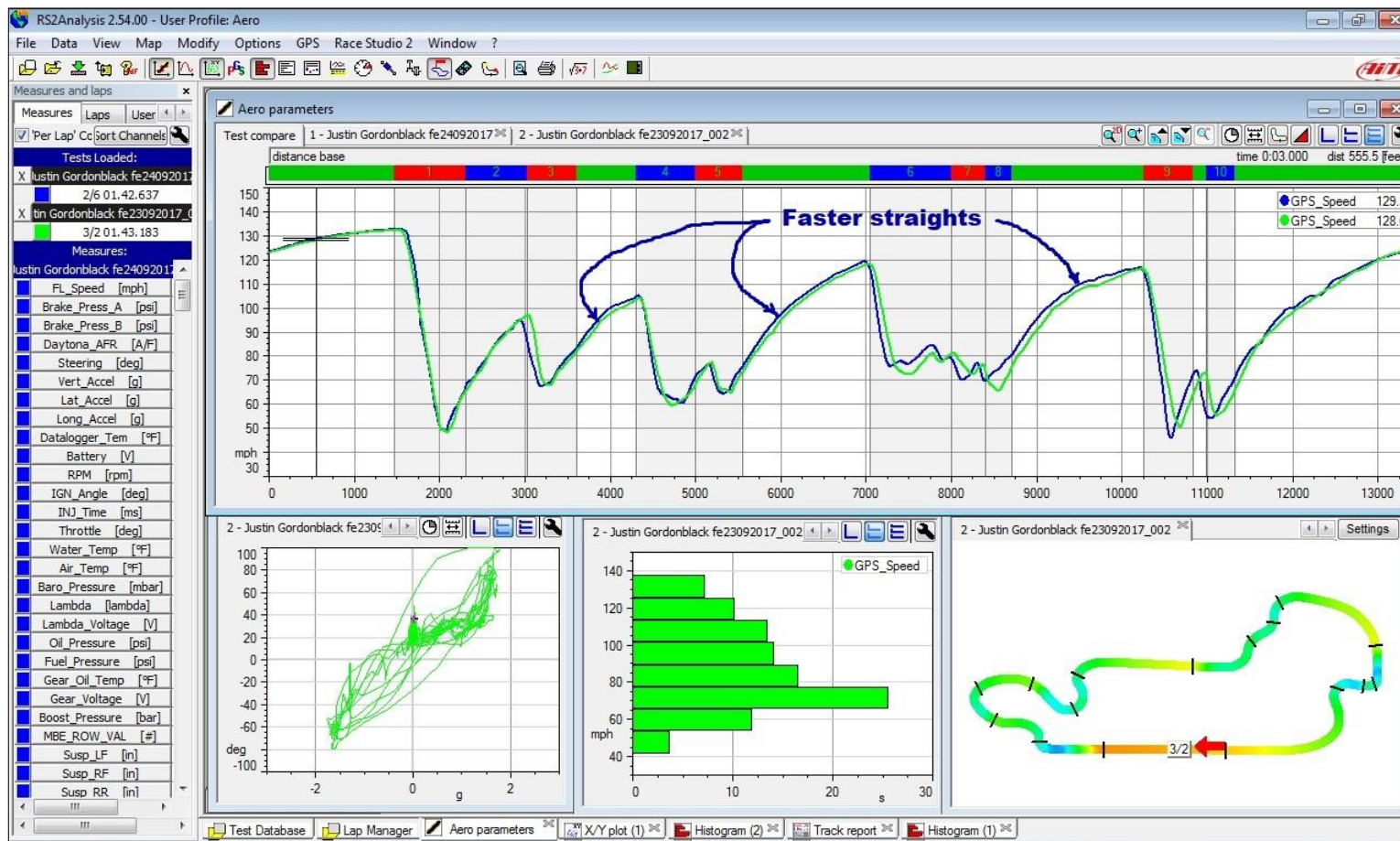
D4 R1 Changes & Observations

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D4 R1 Speed



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D4 R1 Speed

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D4 R1 Handling



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D4 R1 Handling

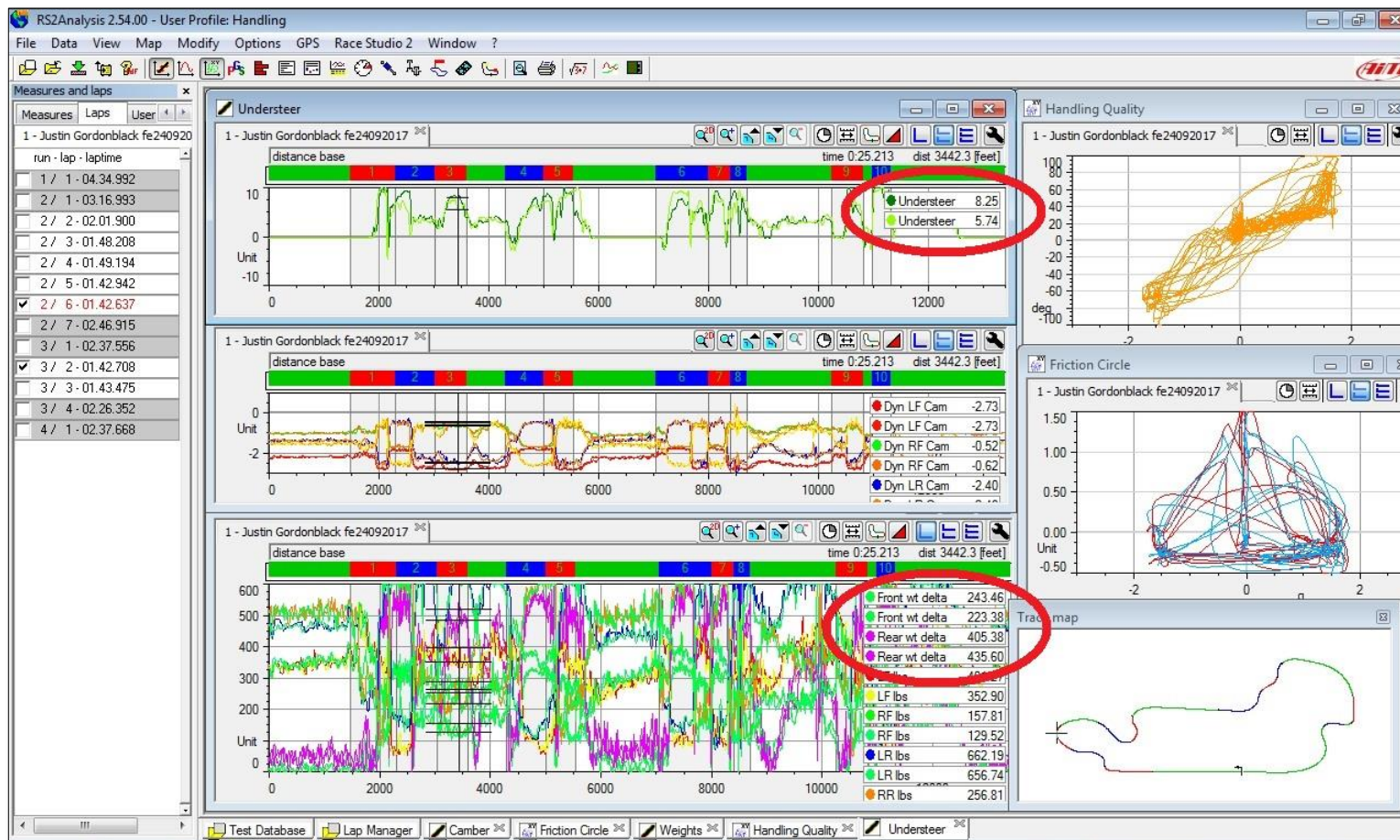
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D4 R1 Handling pt2



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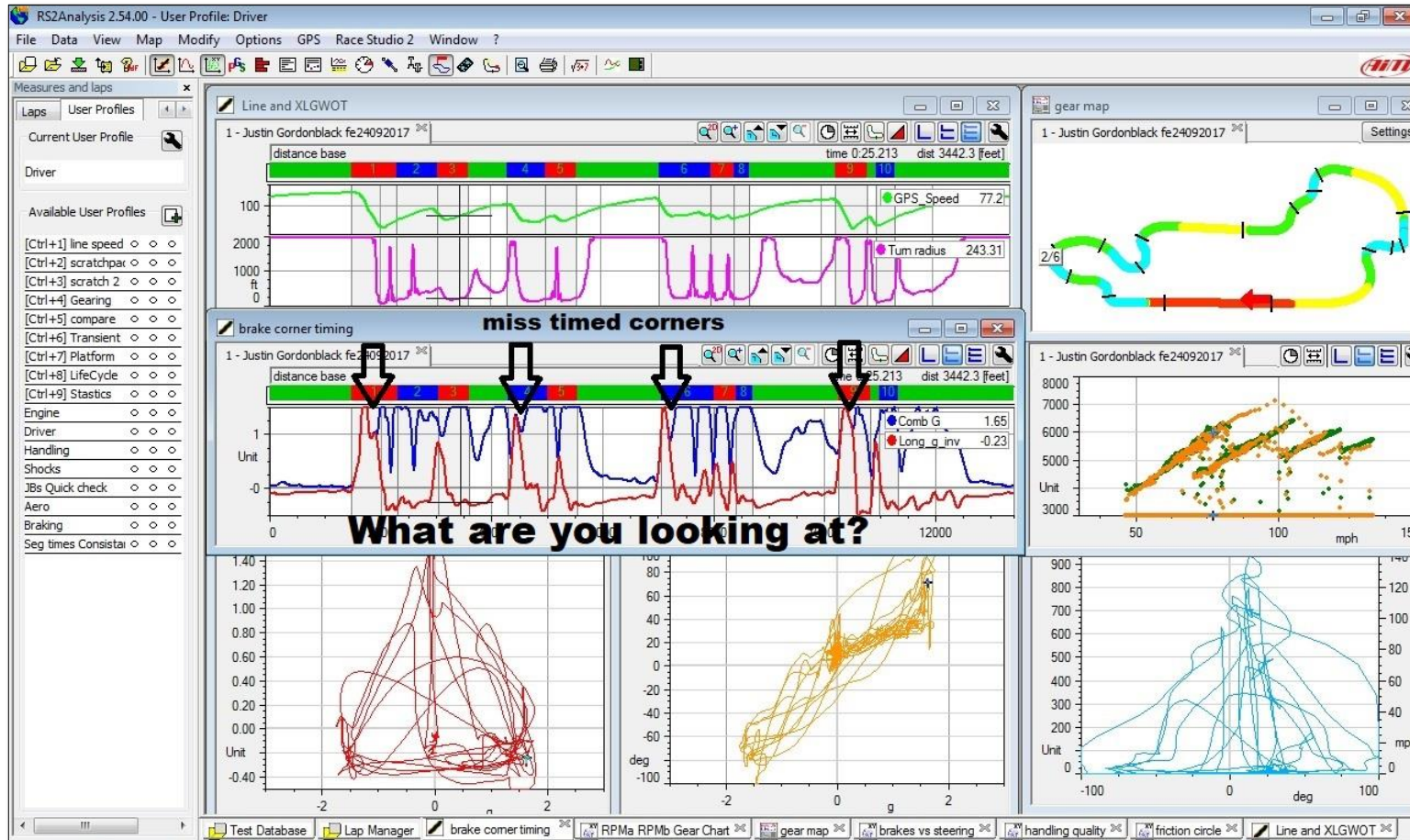
D4 R1 Handling Pt2

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D4 R1 Driver



What are you looking at?

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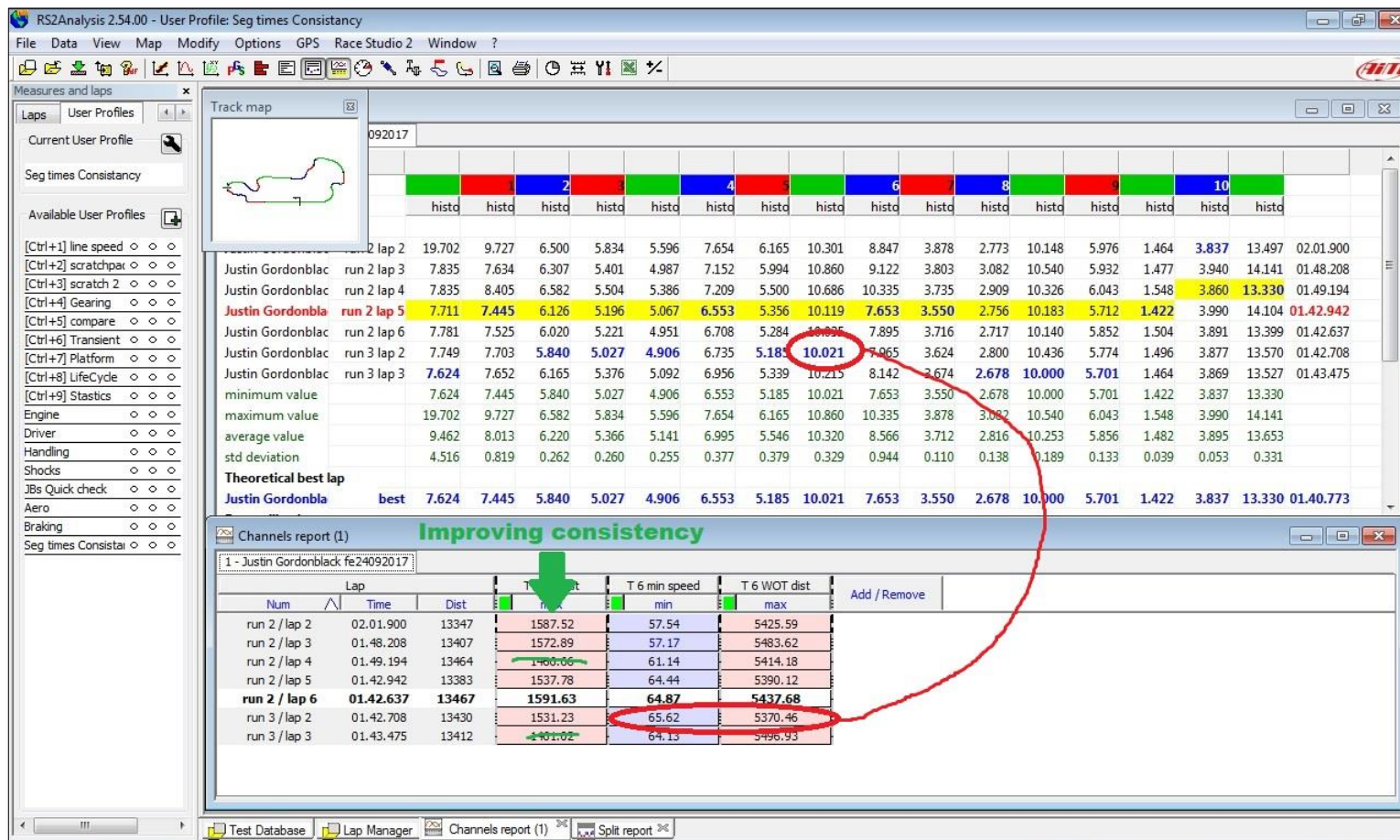
D4 R1 Driver



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D4 R1 Consistency & Control



Indy, A Path To The Pole

D4 R1 Consistency & Control

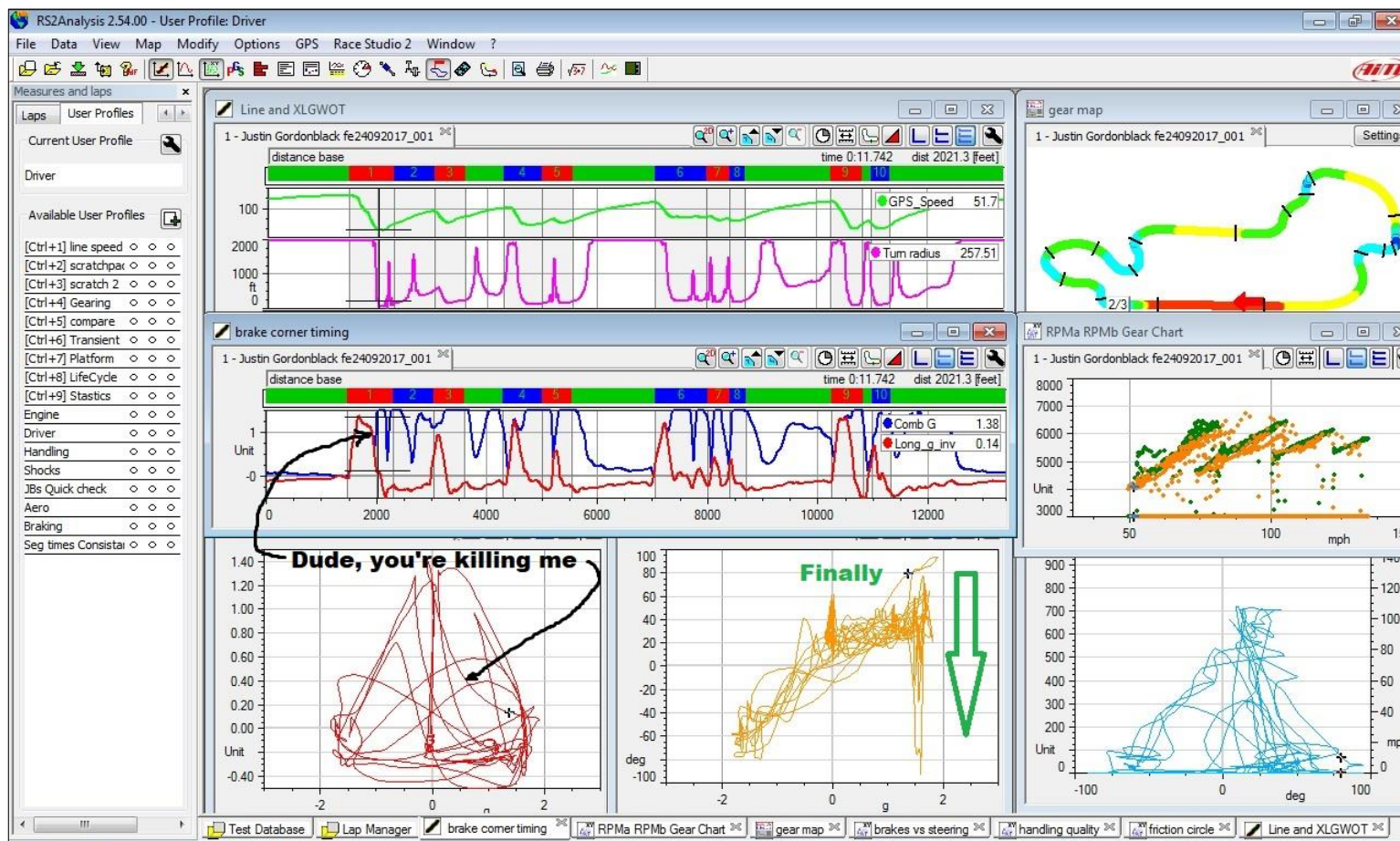
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D4 R2 Driver



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D4 R2 Driver

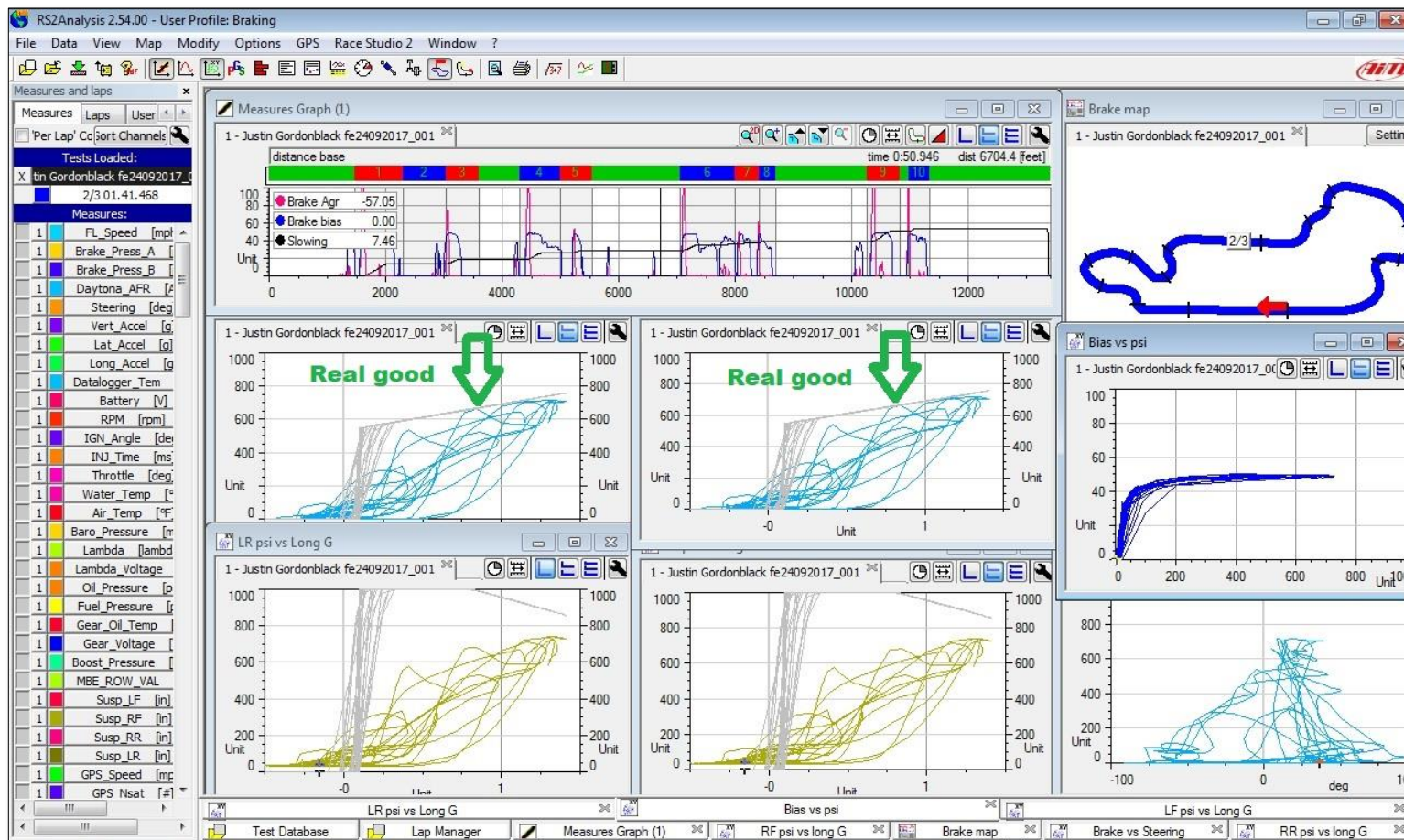
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D4 R2 Brakes



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D4 R2 Brakes

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D4 R2 Coaching



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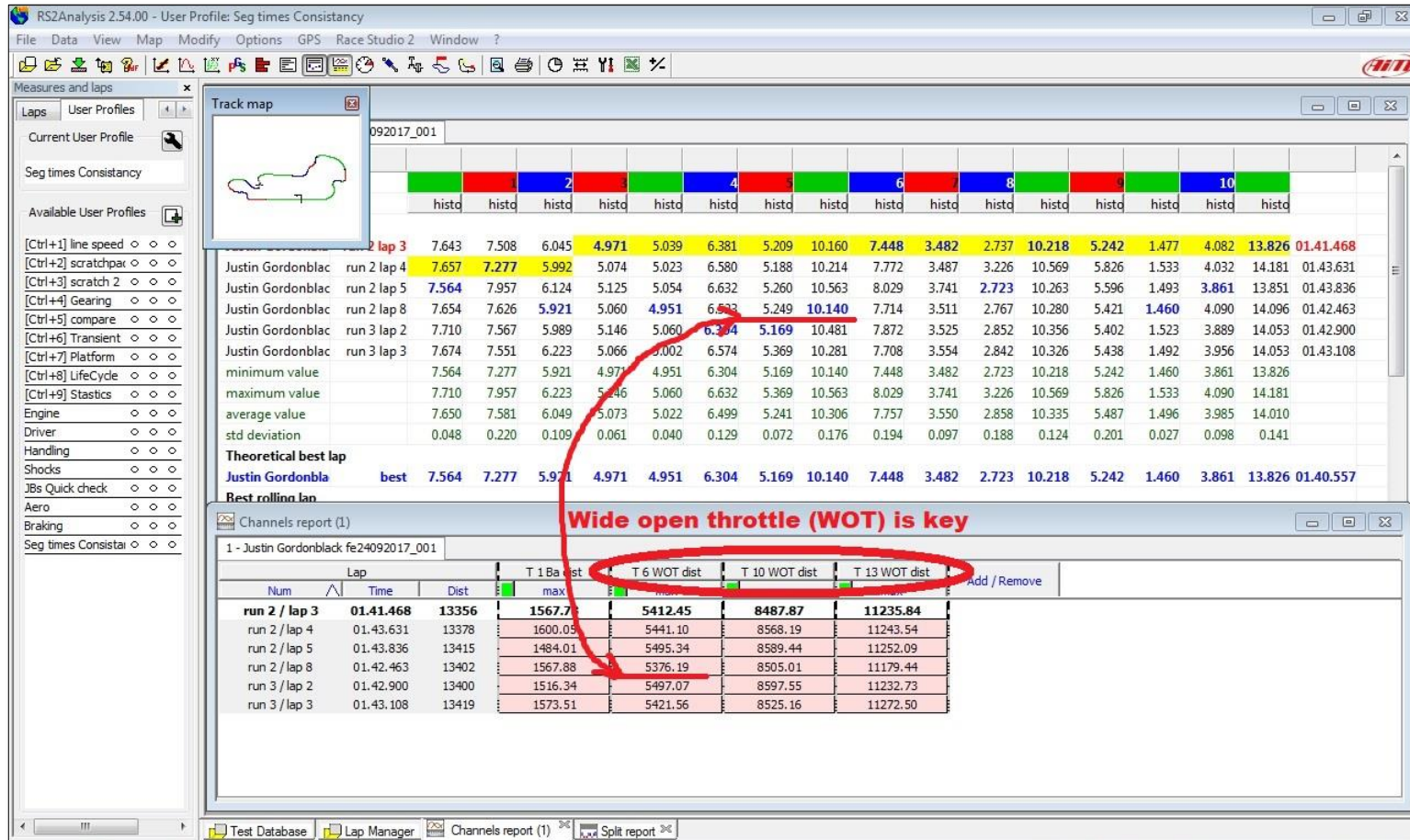
D4 R2 Coaching

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D4 R2 Segment Times



Qualifying



Provisional Qualifying 1

Sanction No. IDC-17-S
Indianapolis Motor Speedway
2.592 Mile Road Course



FE

Monday, September 25, 2017

Pos	Car No.	Driver/Hometown/Region	Sponsor	Make/Model	1st Qual Fast Lap
1	59	Elliot Finlayson / Yorkville IL / CHI	Performance AFX Motorsports	Mazda FE	1:40.209
2	6	Justin Gordon / Lake Worth FL / FLA	AAA Garden Center	Mazda FE	1:42.028
3	73	Paul Schneider / Charlotte NC / CCR	Comprent Motorsports/Syvel Images	Mazda FE	1:42.416
4	042	Finn Lazier / Vail CO / Colo	Tivoli Lodge/Lazier/Primus	Mazda FE	1:42.459
5	37	Sabré Cook / Grand Junction CO / Colo	Apple Motorsports/AllianceAutosport	Mazda FE	1:43.148
6	83	Brandon Aleckson / Campbell CA / SFR	Dan's Upholstery/OP Consulting	Mazda FE	# 1:43.332
7	112	Quinten Nelson / Newark OH / OVR	Fancast 360/Alliance Autosport/Jaes	Mazda FE	1:43.392
8	27	Dean Oppermann / Plainfield IL / CHI	Oppermann Racing	Mazda FE	1:43.460
9	57	Joe Sammut / Locust Valley NY / NYR	Pencils Plus/Motion Dynamics	Mazda FE	1:43.603
10	93	Daniel Smith / Pendleton IN / IND	Sign Age	Mazda FE	1:43.805
11	64	David Budres / Beloit WI / BVR	ManicRacing/Simpson/CDS/Oneformula	Mazda FE	1:44.053
12	7	Dale Vandebush / Green Bay WI / Milw	Nicholson Supply	Mazda FE	1:44.109
13	25	Kelton Jago / Alexandria VA / WDC	Cruz Associates	Mazda FE	1:44.885
14	01	Rhett Barkau / Freeport IL / BVR	Barkau Automotive	Mazda FE	1:44.891
15	31	Elliott Sohn / Iowa City IA / Iowa	Ulowa Wynn Institute Vision Researc	Mazda FE	1:44.921

Whaaaat!! ➡

Indy, A Path To The Pole

Qualifying

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LearnFast™ E-Training Videos



Currently **172** Videos and Growing



YouTube

www.youtube.com/aimdata

Indy, A Path To The Pole
A Data Story from the 2017 SCCA Runoffs

Host:
Roger Caddell
AiM Sports - National Training Manager

Co-Host:
John Block
Auto-Ware.com

aimsports.com Tuesday Aug 17th, 2021 LearnFast™ #107

Chasing a Laptime in Your Own Data
Goal Oriented Data Analysis

Host:
Roger Caddell
AiM Sports - National Training Manager

Guest:
Matt Romanowski
YouTube.com

aimsports.com Tuesday August 10th, 2021 LearnFast™

Webinar Series
Bringing Data Support and Training to You

Data Download Options
In Race Studio 3

March 31st, 2020

www.aimsports.com www.facebook.com/aimsports www.youtube.com/aimdata 1.800.718.9090

- All New 2020 - 21 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
 - Conditional Alarms
 - Gear Position
 - Firmware Update
 - Solo Configuration
 - Transmit Tracks
 - Gps Manager Overview
 - New GPS Track
 - Webinars
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Additional Materials

LearnFast™ E-Training Videos

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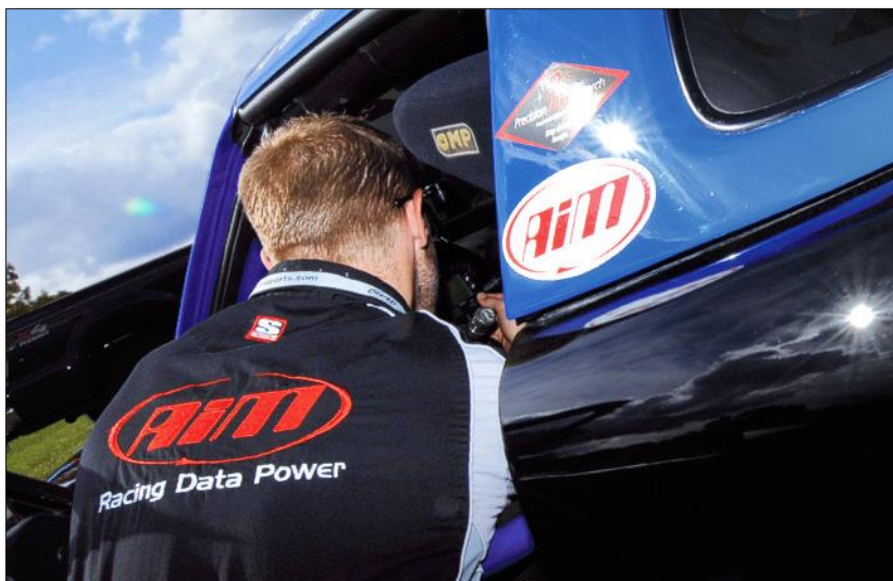
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john@auto-ware.com or (505)-890-8708

Next Round of Webinars Start: Monday, August 30th

- Start Time 8pm Eastern / 5pm Pacific
- All 5 Sessions for Only \$175!
- Handouts and Links to Recordings Included
- Limited to Only 8 Attendees per Session
- Highly Interactive with Even More Features

Remember: ***Race the Track***
Not the Other Cars
Be Safe and Have Fun!

The Original Data Acquisition Webinars

NEXT SESSION STARTS Aug 30th. All sessions start 8pm Eastern - 7pm Central - 5pm Pacific unless other arrangements have been made.

How it works: Each classes consisting of 5 sessions. Prior to each live session you will receive (via email) handouts to use for notes during the live session. Also, after each live session you will get a link to a recording of that session.

Data Acquisition session 1, Aug 30th.
Data displays; reading & understanding the different ways data can be displayed and placing different signals from the car in the display types.

Data Acquisition session 2, Sept 5th.
Working with data display appearances, manipulating and creating your own displays and creating typical pages/tabs/profiles for your own analysis.

Data Acquisition session 3, Sept 12th
Tips and tricks prior to analyzing your data; math channels (understanding and creating). Understanding data quality, calibrating, sample rates, filtering & noise.

Data Acquisition session 4, Sept 19th.
Using your views to analyze and interpreting the data; first things first, lap/segment times, driver skill & performance and the secret tool of comparing drivers.

Data Acquisition session 5, Sept 26th.
Part 2, Using your views to analyze and interpreting the data; steady state handling, transient handling, chassis platform movement, and shock absorber performance, tire loading and pre-failure diagnostics.

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Imagination Is Your Only Limit

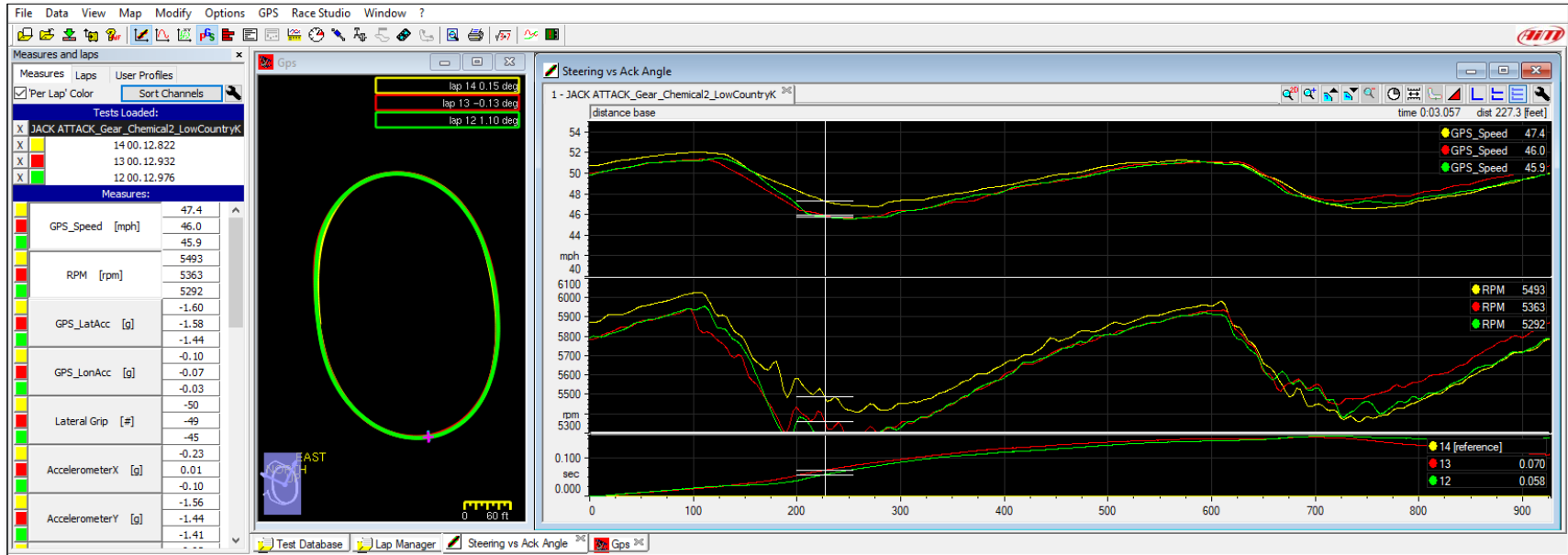
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Digging for Speed With Data

Small Gains Can Be Huge on Short Tracks!



Host:

Roger Caddell

AiM Sports - National Training Manager

Co-Host:

David Smith

KartSpeed Solutions

Next Webinar: Tuesday August 24th, 2021 - 10:00am Pac/1:00pm East

Next Webinar Topic

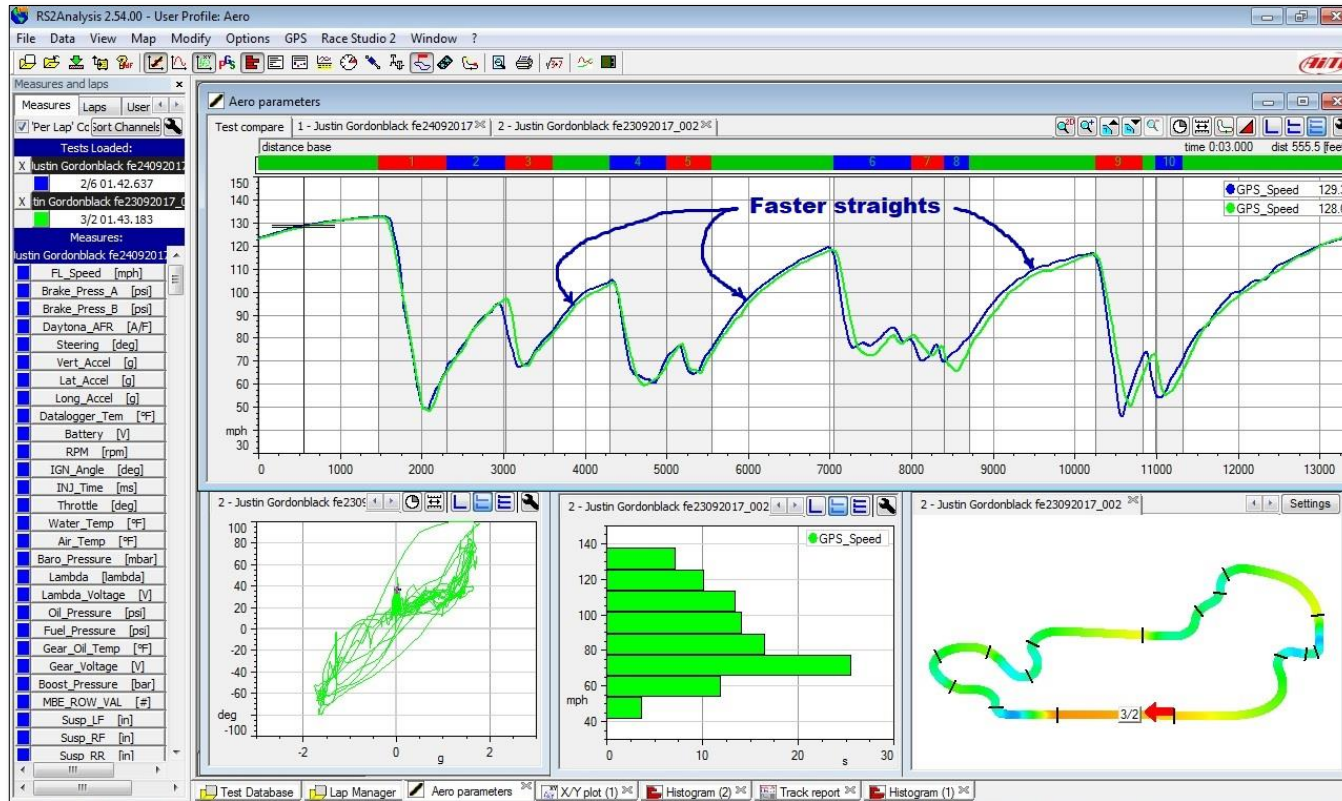
Digging for Speed With Data

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(505)-890-8708



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Tuesday Aug 17th, 2021

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