



REFERENCE	BI_2014_X98_R3T_03
DATE	06/08/2014
SUBJECT	Clio 4 R3T Softwares

Nous tenons à vous informer de la mise en ligne d'un lien pour télécharger les logiciels et configurations pour exploiter votre Clio R3T.
Pour cela, il de suivre la procédure suivante :

Cliquer sur : ftp.pigroup.com or <ftp://clio4cup:yf12t83o@ftp.pigroup.com>

User: **clio4cup**

Password: **yf12t83o**

Si ces liens ne fonctionnent pas, copier cette adresse <ftp://clio4cup:yf12t83o@ftp.pigroup.com> dans un explorateur internet.

L'écran suivant apparait :

Directory listing

[Parent Directory](#) ([Root Directory](#))

```
0 Jul 14 10:13 ./
0 Jul 14 10:13 ../
205168729 Jul 14 09:59 Toolbox 6.3 SR2.zip
22188605 May 20 08:20 Toolset 3.5.985.2.zip
```

Cliquer sur chaque lien (Toolbox 6.3 et Toolset 3.5) pour les télécharger.

Le manuel d'utilisation "Softwares" est disponible sur l'extranet Renault Sport (G_Softwares) via le lien suivant : <http://extranet-competition.renault-sport.com/>

L'équipe Rallye

We would like to inform you that new Clio R3T softwares are now available on the following permanent Pi Cosworth ftp server :

Go to ftp.pigroup.com or <ftp://clio4cup:yf12t83o@ftp.pigroup.com>

User: **clio4cup**

Password: **yf12t83o**

If these links don't work, enter the following URL in the address bar:

<ftp://clio4cup:yf12t83o@ftp.pigroup.com>

The following screen appears:



RENAULT *SPORT*

CLIO **R3T**

Directory listing

Parent Directory (Root Directory)

```
0 Jul 14 10:13 ./
0 Jul 14 10:13 ../
205168729 Jul 14 09:59 Toolbox 6.3 SR2.zip
22188605 May 20 08:20 Toolset 3.5.985.2.zip
```

Click on each link to download successively *PI TOOLSET 3.5* and *TOOLBOX 6.3*

We remind you that the "Softwares" User Manual is available on the Renault Sport Extranet (Chapter *G_Softwares*) through the following link : <http://extranet-competition.renault-sport.com/>

Rally Team



Presentation:

- **TOOLSET 3.5**

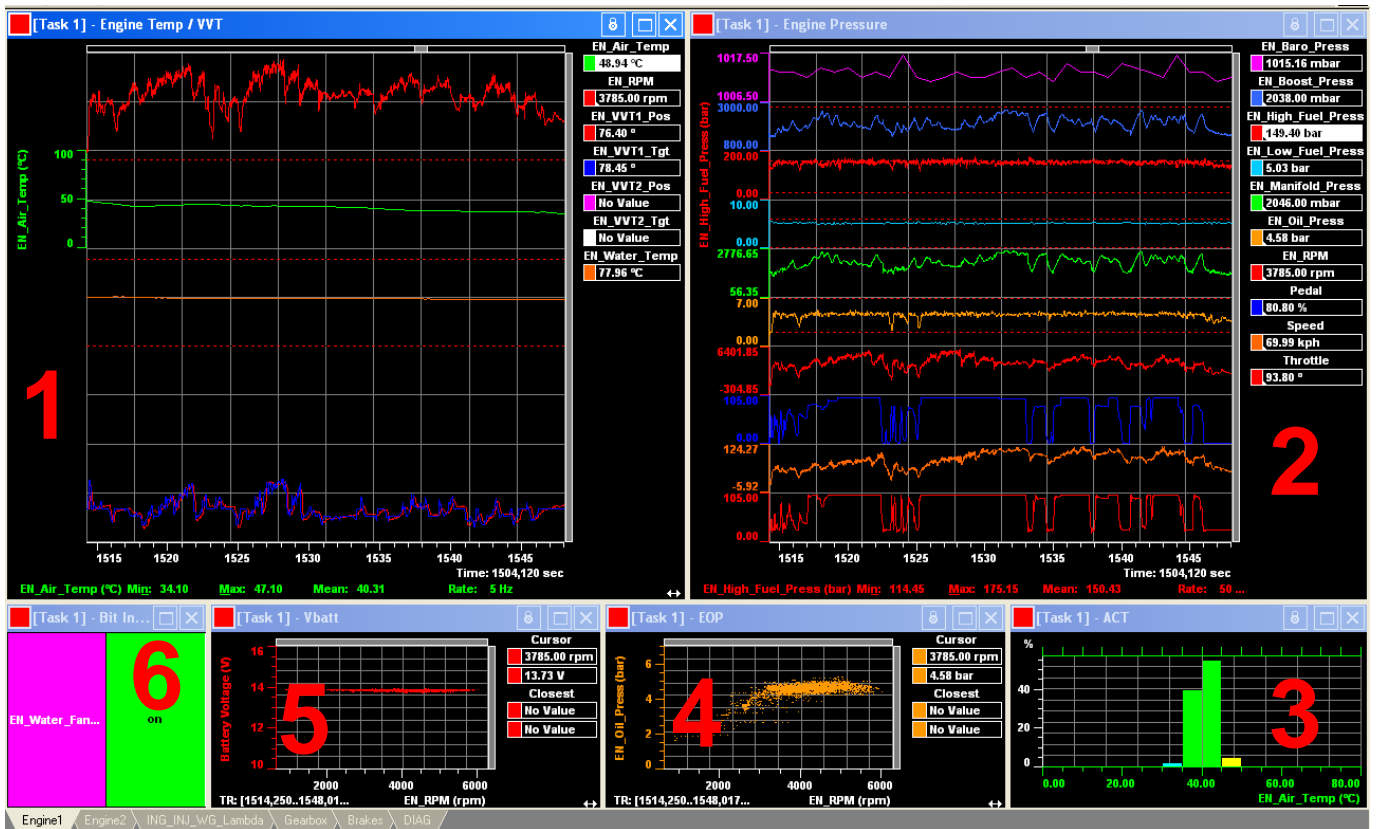
Allow to download the data and check car parameter. (See G - Softwares2014)

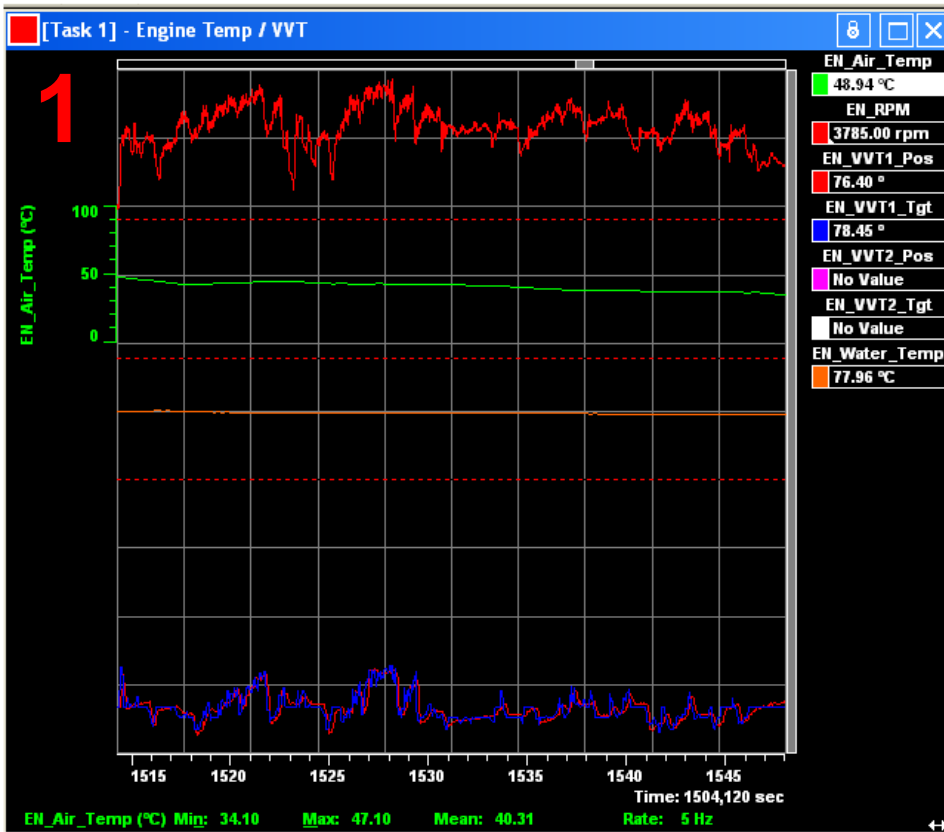
- **TOOLBOX 6.3**

This version allows you to work on 6 worksheets. A workbook is available to help you to analyse the data. You can find this workbook on the extranet, called Clio_R3T_2014_Client_v1.pwb (4. Softwares)

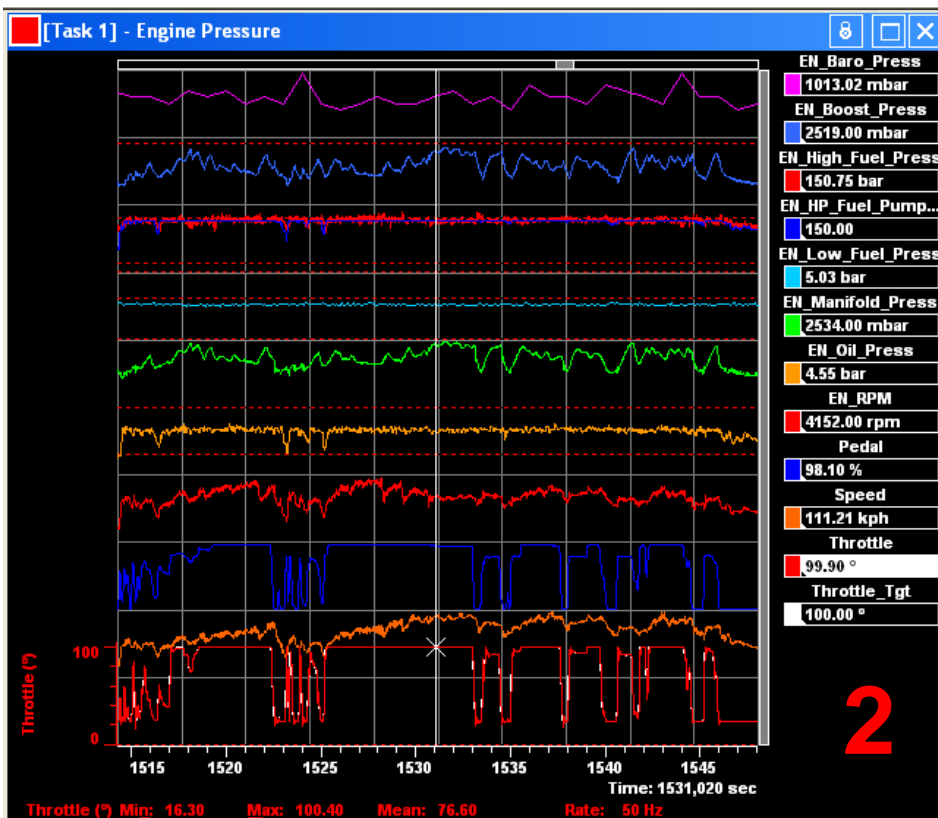


• **Engine1 :**

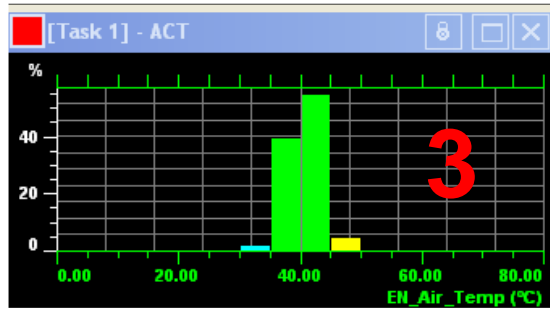




- **EN_Air_Temp**: Should be around 40°C (use the RAS potentiometer to adjust it).
- **EN_RPM**: Engine speed
- **EN_VVT1_Pos** : must follow **EN_VVT1_Tgt**
- **EN_VVT2_Pos**: must follow **EN_VVT2_Tgt**
- **EN_Water_Temp**: Engine coolant temperature.

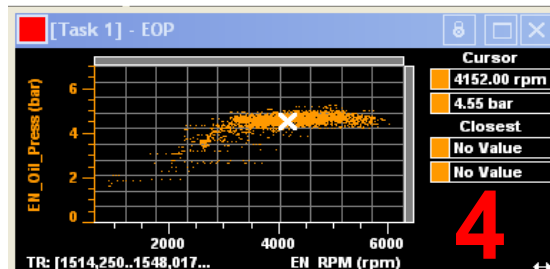


- **EN_Baro_Press**: atmospheric pressure.
- **EN_Boost_Press**: Boost pressure (before the throttle).
- **EN_High_Fuel_Press**: must follow **EN_HP_Fuel_Pump_Tgt**
- **EN_Low_Fuel_Press**: around 5b in use.
- **EN_Manifold_Press**: air intake pressure (after throttle), = **EN_Boost_Press** when throttle is at 100°
- **EN_Oil_Pressure**: around 4.5b in use.
- **Pedal**: pedal position
- **Speed**: vehicle speed
- **Throttle** : throttle body position, must follow **Throttle_Tgt**

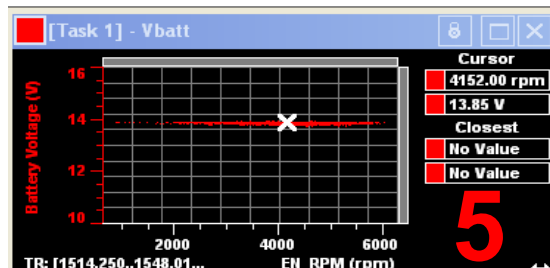


- Allows you to follow air intake temperature.
 - o From 0 to 35°C => Blue
 - o From 35°C to 45°C => Green
 - o From 45°C to 60°C => Yellow
 - o From 60°C to 75°C => Orange
 - o Upper than 75°C => Red

When the EN_Air_Temp is upper than 60°C; ECU corrections appear, and so performance decreases slightly. To control it, use the RAS potentiometer to target 40°C.



- Allows you to follow the engine oil pressure vs the engine speed.

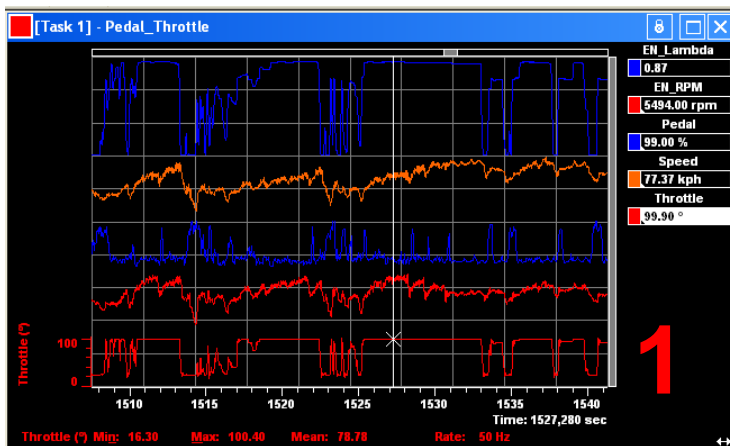
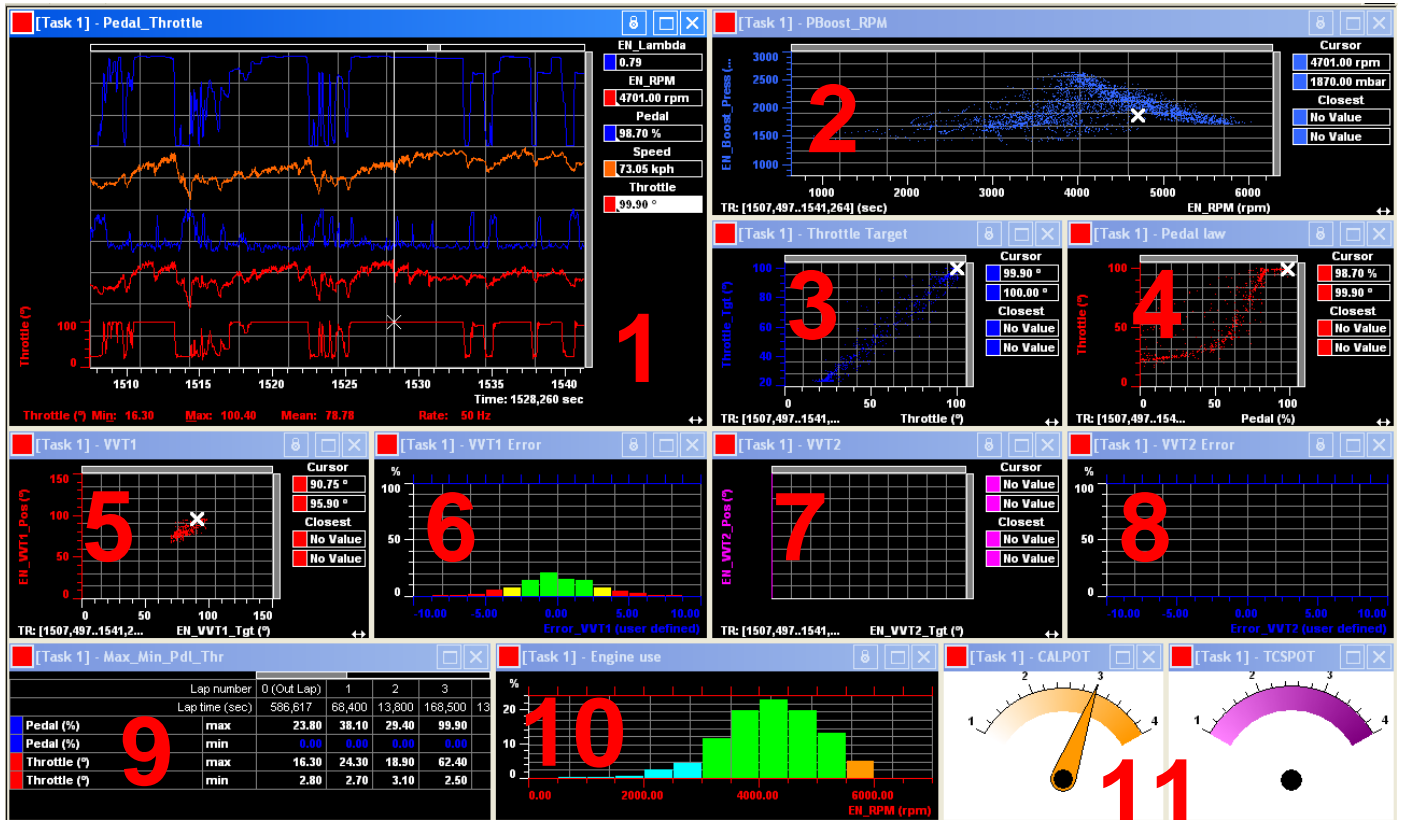


- Allows you to follow the battery charge.

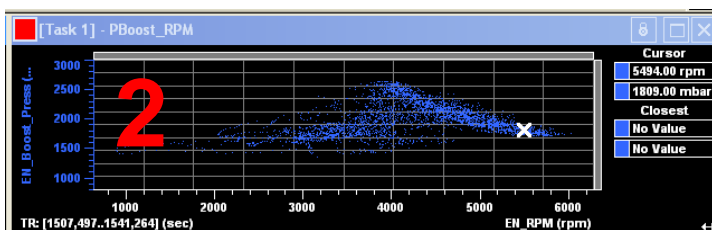


- Allows you to follow the water fan activation.

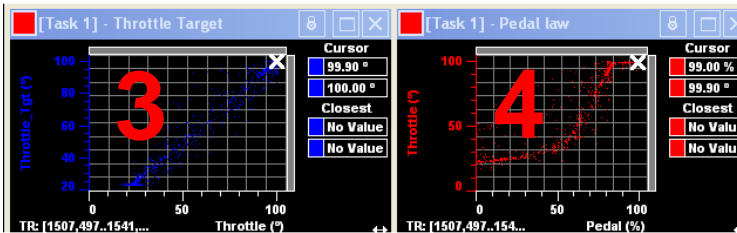
• Engine2 :



- **En_Lambda** : Richness value. Should be around 0.86 / 0.88 when full throttle

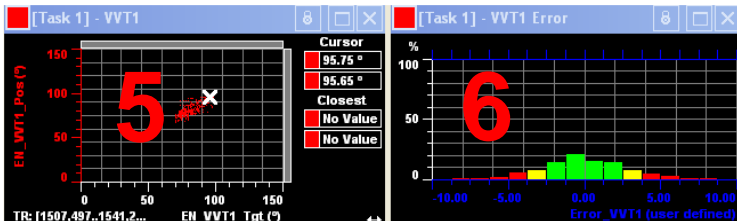


- Allow to check the boost pressure vs the engine speed.



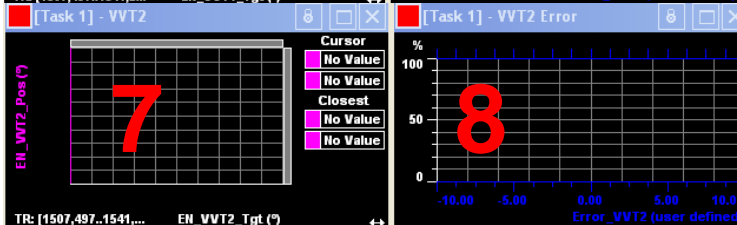
- 3 : Allow to check that the throttle follows the target.

- 4 : Allow to check throttle response against pedal use.



- 5 : Allow to check that the VVT1 position (intake camshaft) follow the target.

- 6 : Allow to check the VVT1 error. Must be green (between -2° and 2° difference)

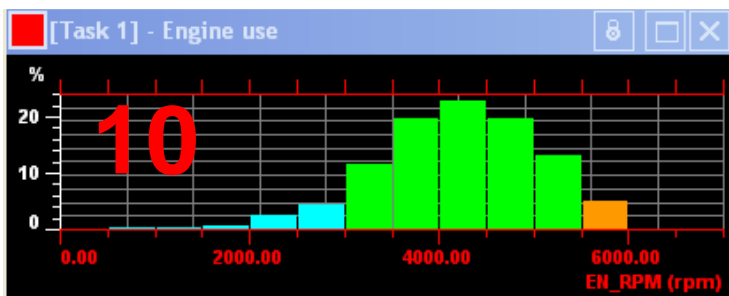


- 7 : Allow to check that the VVT2 position (exhaust camshaft) follow the target. (not shown here)

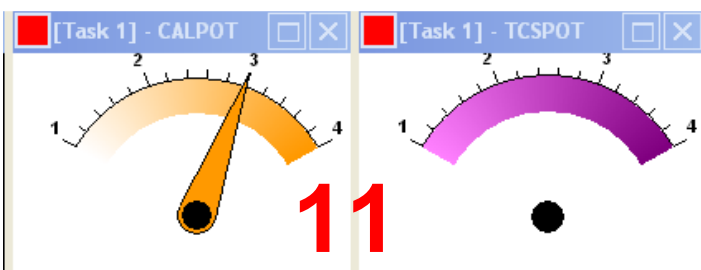
- 8 : Allow to check the VVT2 error. Must be green (between -2° and 2° difference). (not shown here)

		Lap number	0 (Out Lap)	1	2	3
		Lap time (sec)	586,617	68,400	13,800	168,500
Pedal (%)	max		23.80	38.10	29.40	99.90
	min		0.00	0.00	0.00	0.00
Throttle (%)	max		16.30	24.30	18.90	62.40
	min		2.80	2.70	3.10	2.50

- Allow to check max and min values for the pedal and throttle



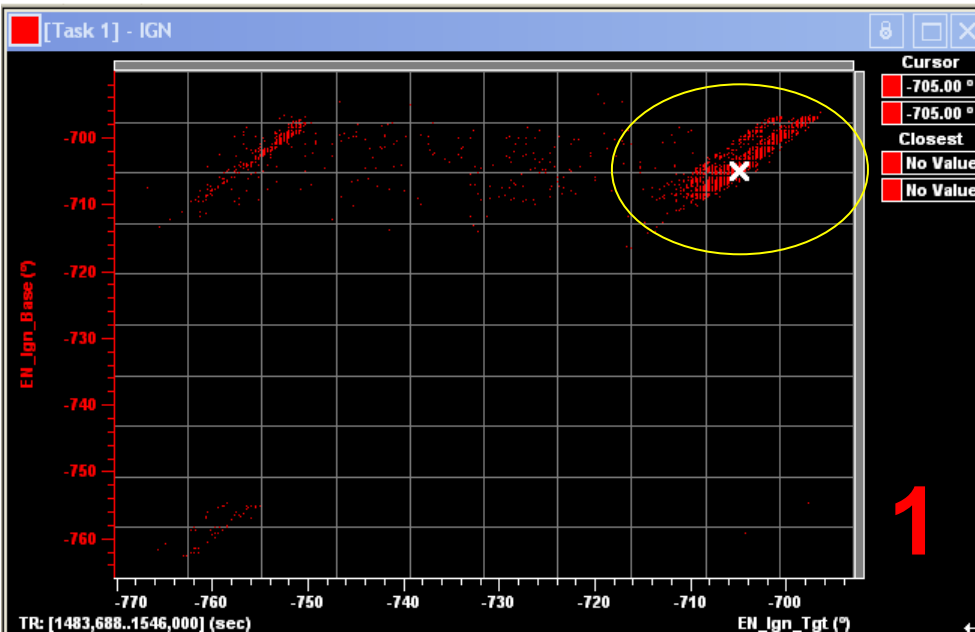
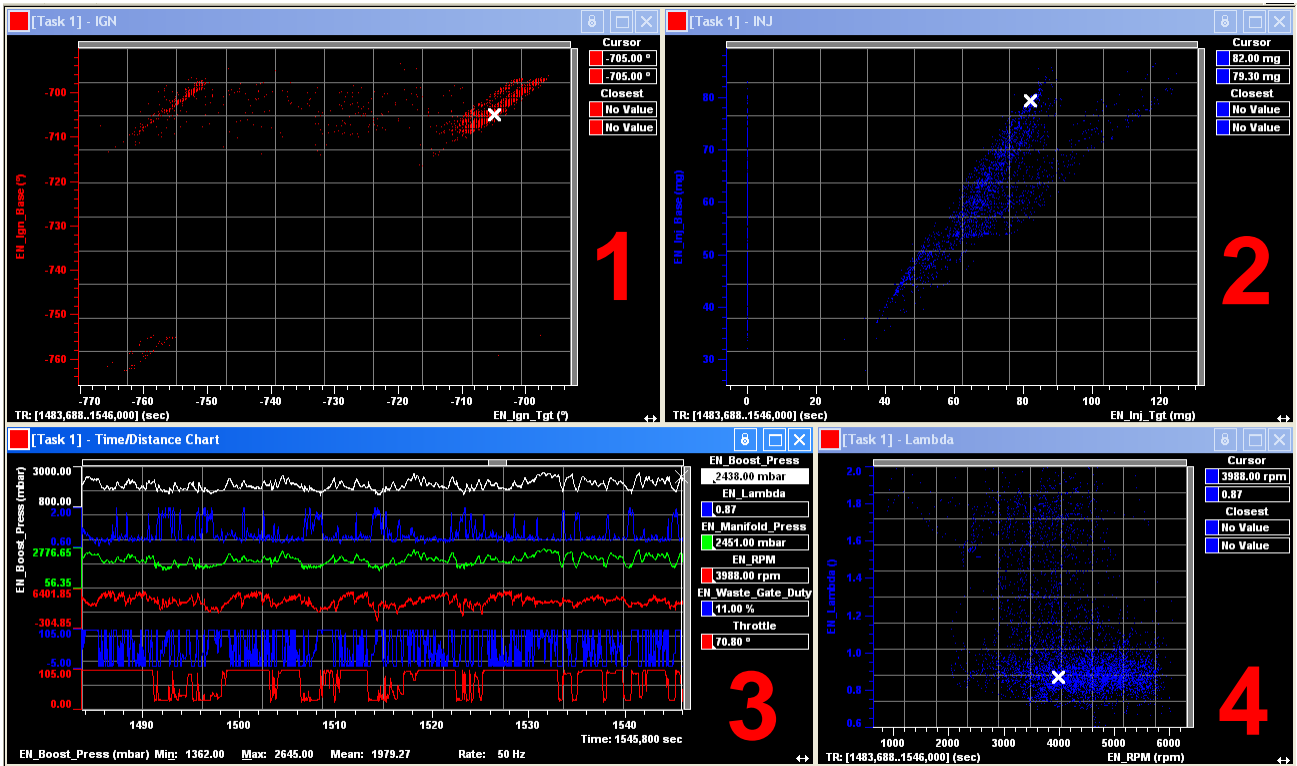
- Allow to check the engine use.



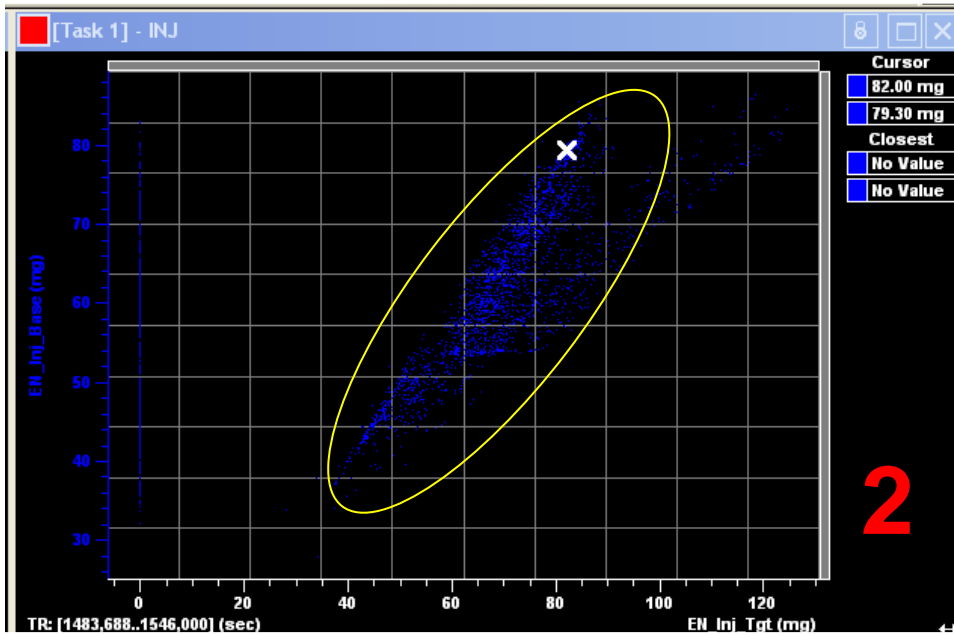
- Allow to check the Engine Map and Traction control settings used.



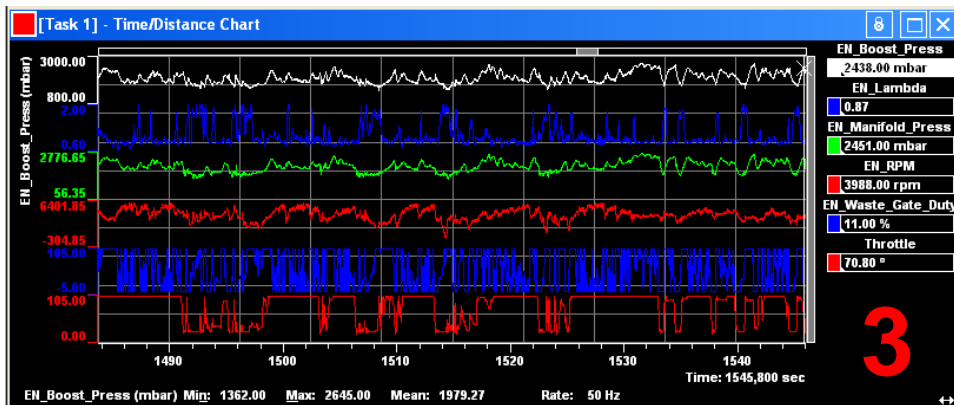
• IGN INJ WG Lambda :



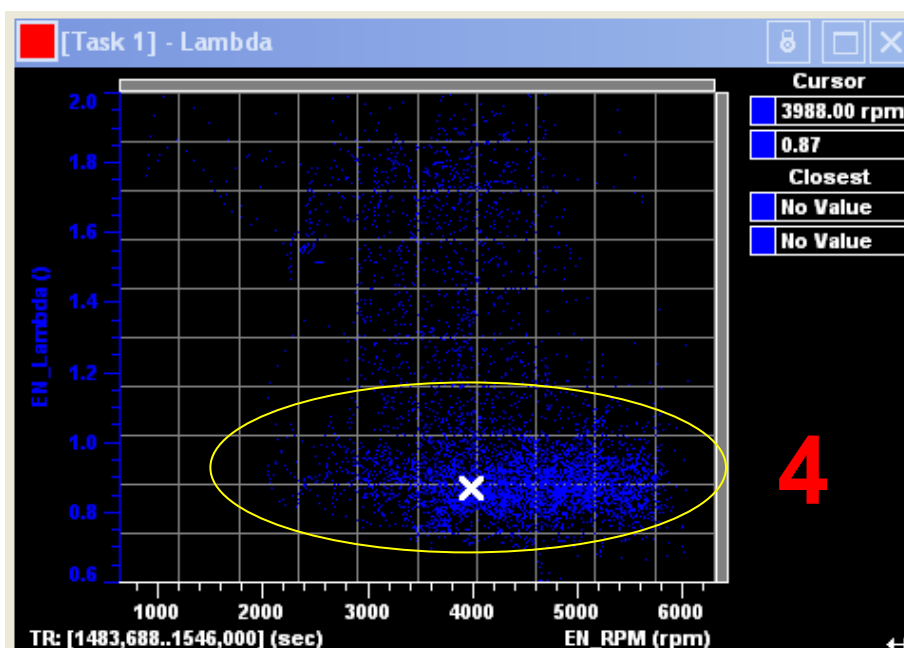
- Allow you to check that **EN_Ign_Base** follows **EN_Ign_Tgt** when throttle is fully open.



- Allow you to check that **EN_Inj_Base** follows **EN_Inj_Tgt**.

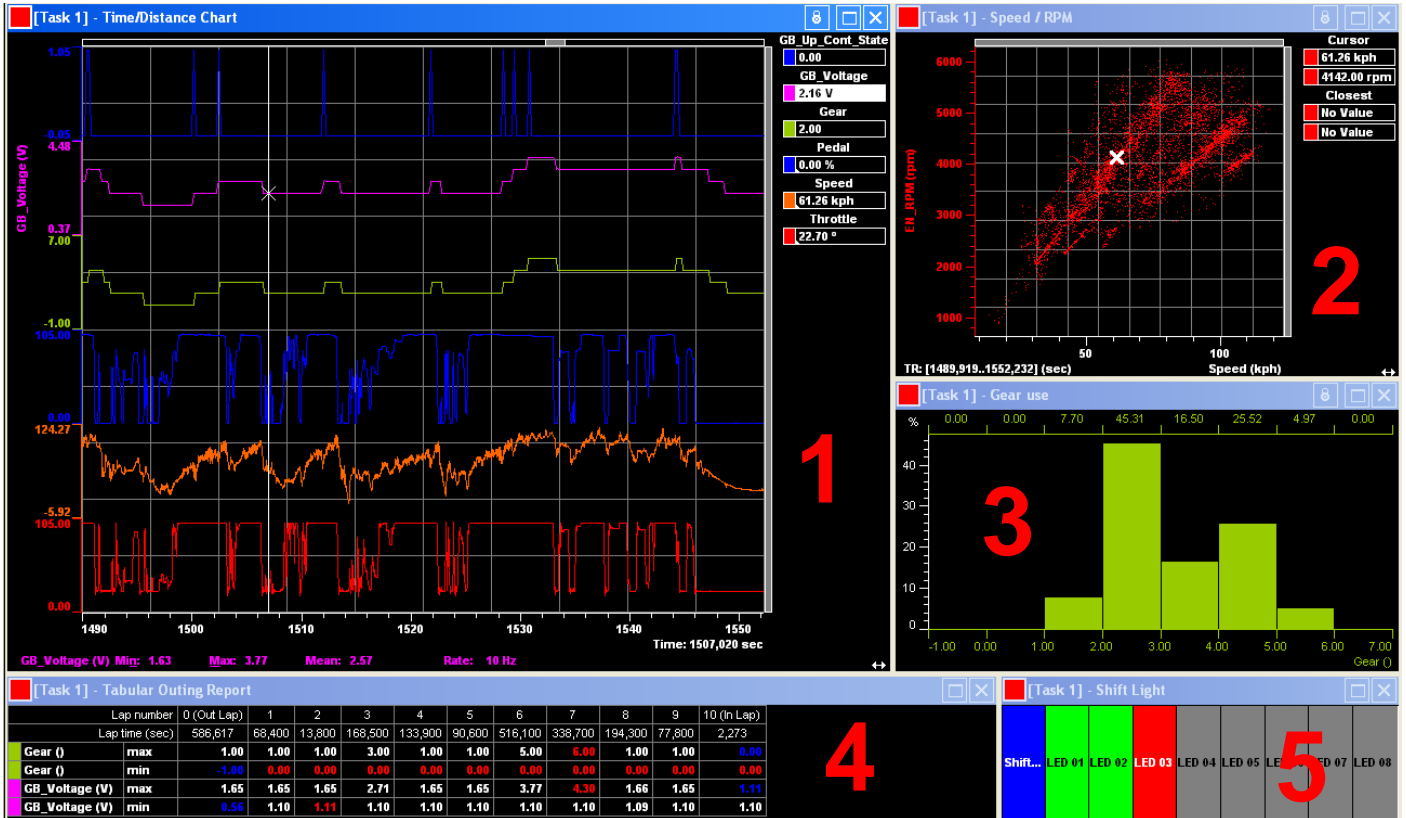


- **EN_Waste_Gate_Duty**: corresponds to the waste gate regulation to adjust the boost pressure.



- Allow to follow the lambda value. Should be around 0.86-0.88 at full throttle

- Gearbox:



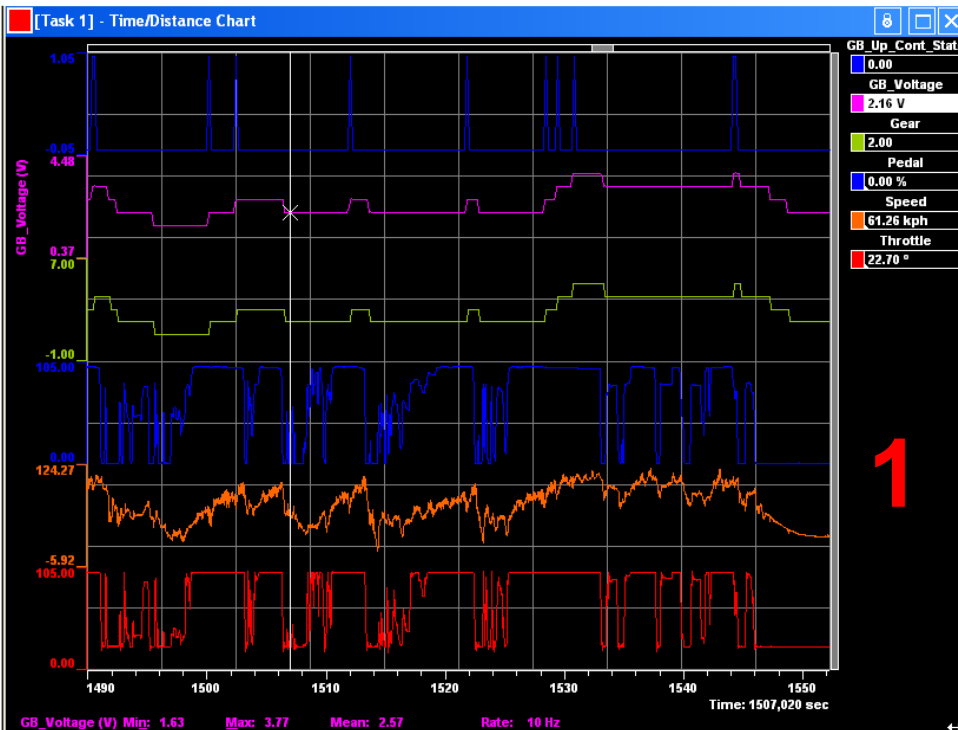
1

2

3

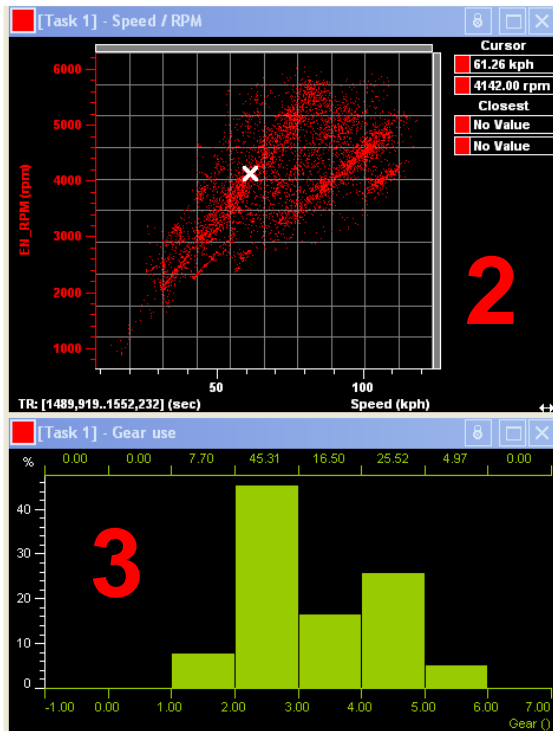
4

5



1

- **GB_Up_Cont_State**: goes to 1 when an upshift is detected.
- **GB_Voltage**: barrel sensor voltage. Should be at 1.07V in Neutral.
- **Gear**: gear engaged.



- 2: allow to see the engine revs vs vehicle speed.

- 3: allow to see the gear use.

Lap number		0 (Out Lap)	1	2	3	4	5	6
Lap time (sec)		586,617	68,400	13,800	168,500	133,900	90,600	516,100
Gear ()	max	1.00	1.00	1.00	3.00	1.00	1.00	5.00
Gear ()	min	-1.00	0.00	0.00	0.00	0.00	0.00	0.00
GB_Voltage (V)	max	1.65	1.65	1.65	2.71	1.65	1.65	3.77
GB_Voltage (V)	min	0.56	1.10	1.11	1.10	1.10	1.10	1.10

A large red number '4' is overlaid on the table, specifically over the 'min' values for Gear and GB_Voltage.

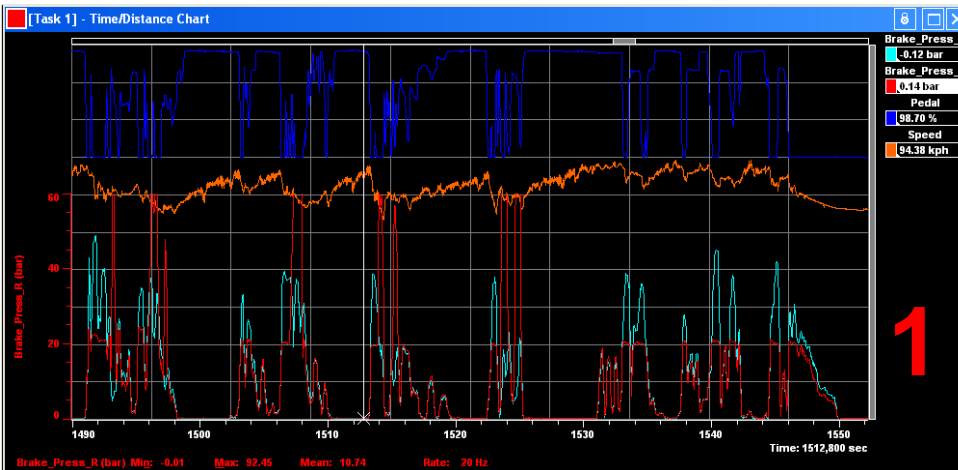
- allow to see the max/min values for Gear and GB_Voltage.



- allow to see how the shift lights are coming up.

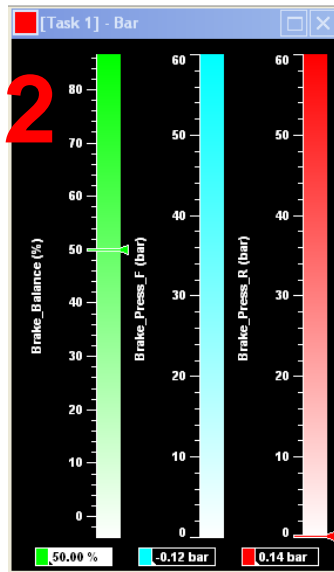


• Brakes:

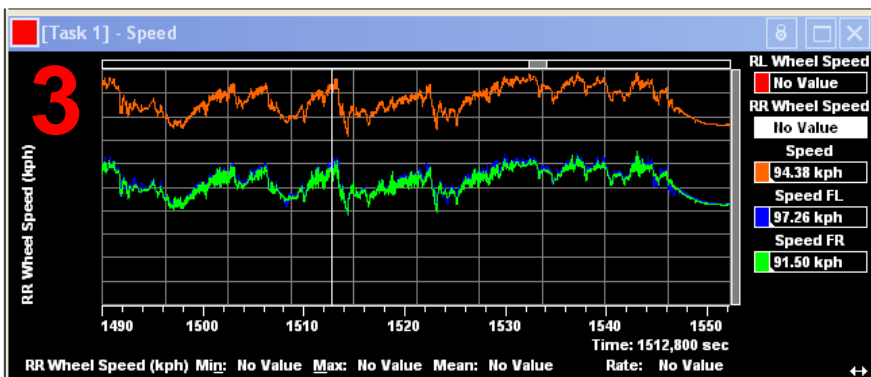


- Brake_Press_F: front brake pressure.
- Brahe_Press_R: rear brake pressure.

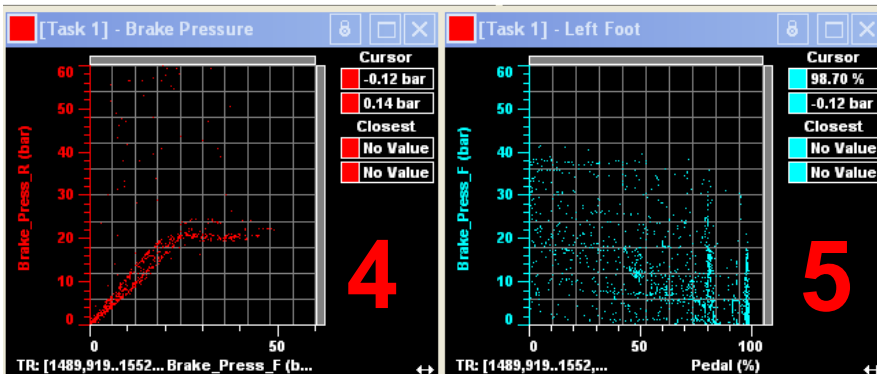
1



- this bar graph allow to see the actual Brake_Balance as well as Brake_Press_F and Brahe_Press_R.



- this graph shows the Speed and each wheel speed. (Rear speed not represented here)



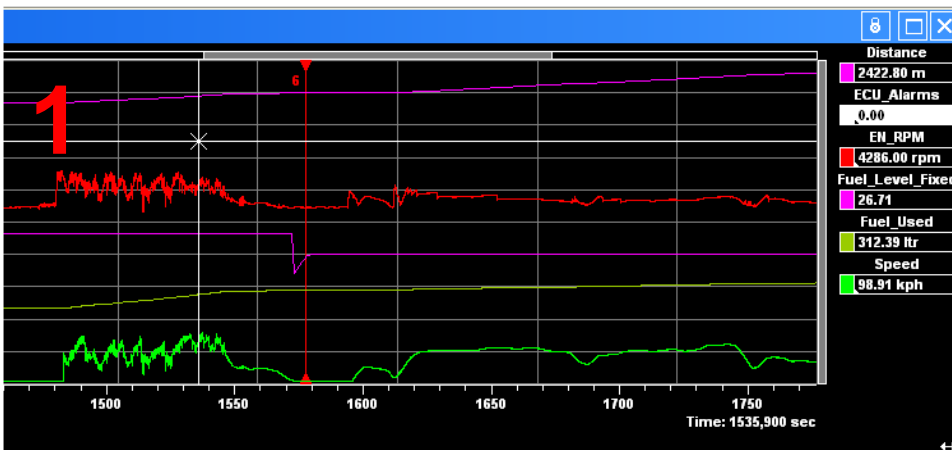
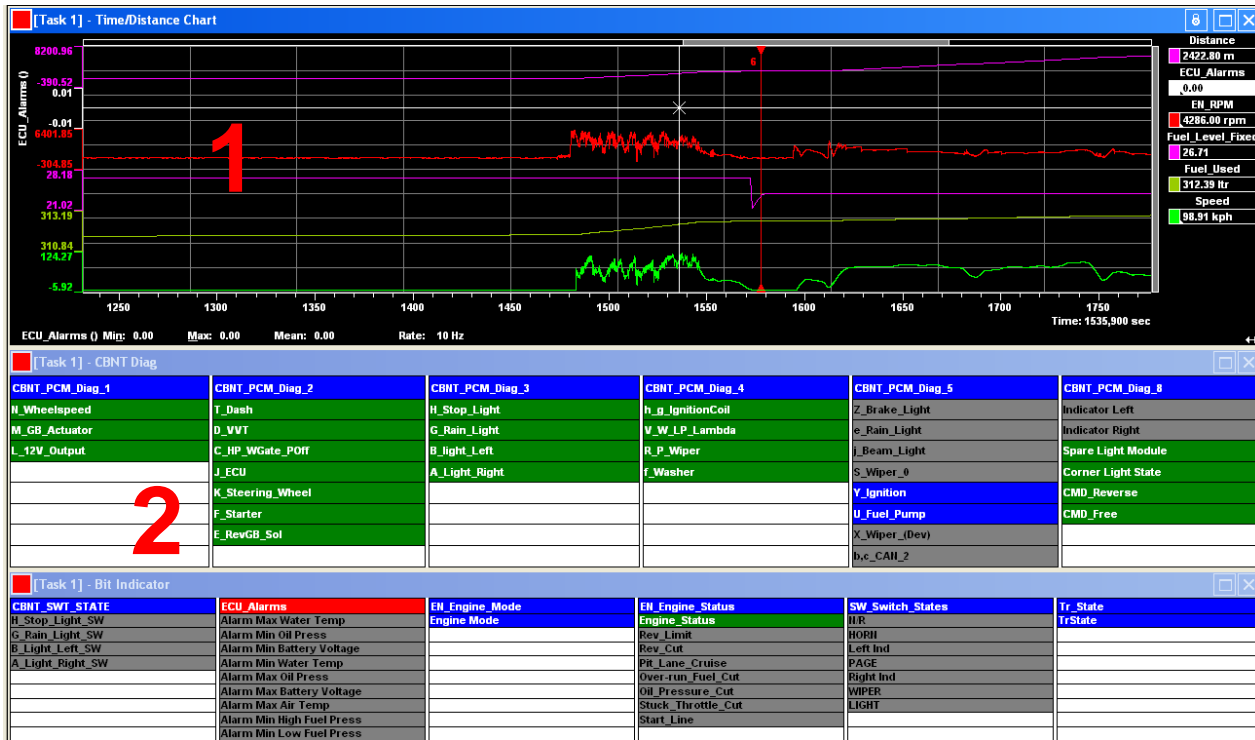
- 4 : allow to see the brake balance as well as the brake limiter action.

- 5: shown the left foot use



- DIAG:**

On this page we have placed all parameters allowing you to understand when and why a problem appears.



- **Distance** : in meter
- **ECU_Alarms** : allow to see if an alarm raised up.
- **Fuel_Level_Fixed**: gives the amount of fuel in the tank. Updated when Speed=0.
- **Fuel_Used**: fuel consumption calculated by the ECU



[Task 1] - CBNT Diag					
CBNT_PCM_Diag_1	CBNT_PCM_Diag_2	CBNT_PCM_Diag_3	CBNT_PCM_Diag_4	CBNT_PCM_Diag_5	CBNT_PCM_Diag_8
N_Wheelspeed	T_Dash	H_Stop_Light	h_g_IgnitionCoil	Z_Brake_Light	Indicator Left
M_GB_Actuator	D_VVT	G_Rain_Light	V_W_LP_Lambda	e_Rain_Light	Indicator Right
L_12V_Output	C_HP_WGate_POff	B_light_Left	R_P_Wiper	I_Beam_Light	Spare Light Module
2	J_ECU	A_Light_Right	f_Washer	S_Wiper_0	Corner Light State
	K_Steering_Wheel			Y_Ignition	CMD_Reverse
	F_Starter			U_Fuel_Pump	CMD_Free
	E_RevGB_Sol			X_Wiper_(Dev)	
				b,c_CAN_2	

[Task 1] - Bit Indicator					
CBNT_SWT_STATE	ECU Alarms	EH_Engine_Mode	EH_Engine_Status	SW_Switch_States	Tr_State
H_Stop_Light_SW	Alarm Max Water Temp	Engine Mode	Engine_Status	RR	TrState
G_Rain_Light_SW	Alarm Min Oil Press		Rev_Limit	BORH	
B_Light_Left_SW	Alarm Min Battery Voltage		Rev_Cut	Left Ind	
A_Light_Right_SW	Alarm Min Water Temp		PL Lane Cruise	PAGE	
	Alarm Max Oil Press		Over-run_Fuel_Cut	Right Ind	
	Alarm Max Battery Voltage		Oil_Pressure_Cut	WIPER	
	Alarm Max Air Temp		Stuck_Throttle_Cut	LIGHT	
	Alarm Min High Fuel Press		Start_Line		
	Alarm Min Low Fuel Press				

Here you can check the CBNT Diag, alarms and states/status.

Renault Sport Technologies
The Rally Team.