

PSAT Training

Part 04C

How to Use PSAT - Analyze Results

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*A U.S. Department of Energy
Office of Science Laboratory
Operated by The University of Chicago*

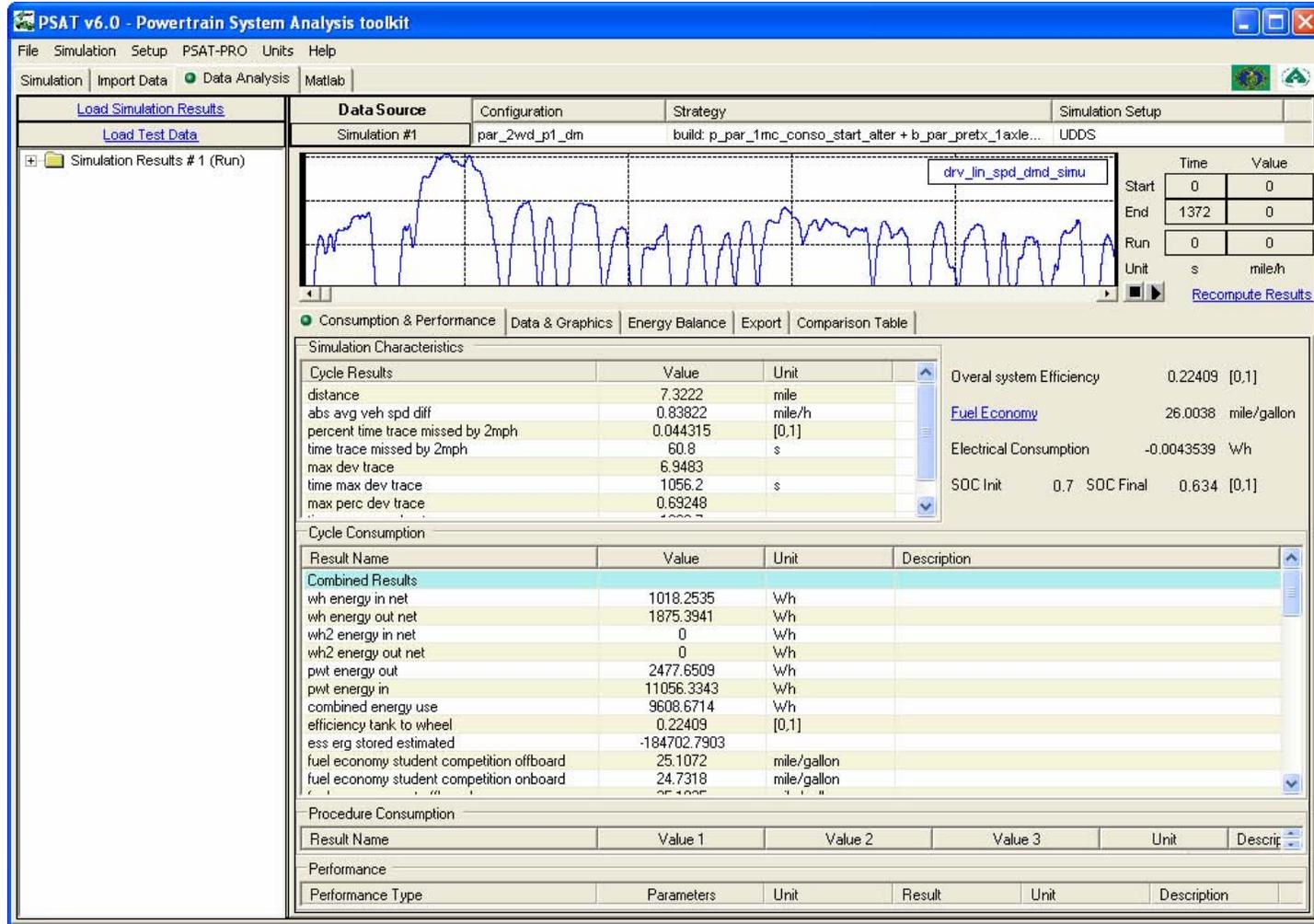


Outline

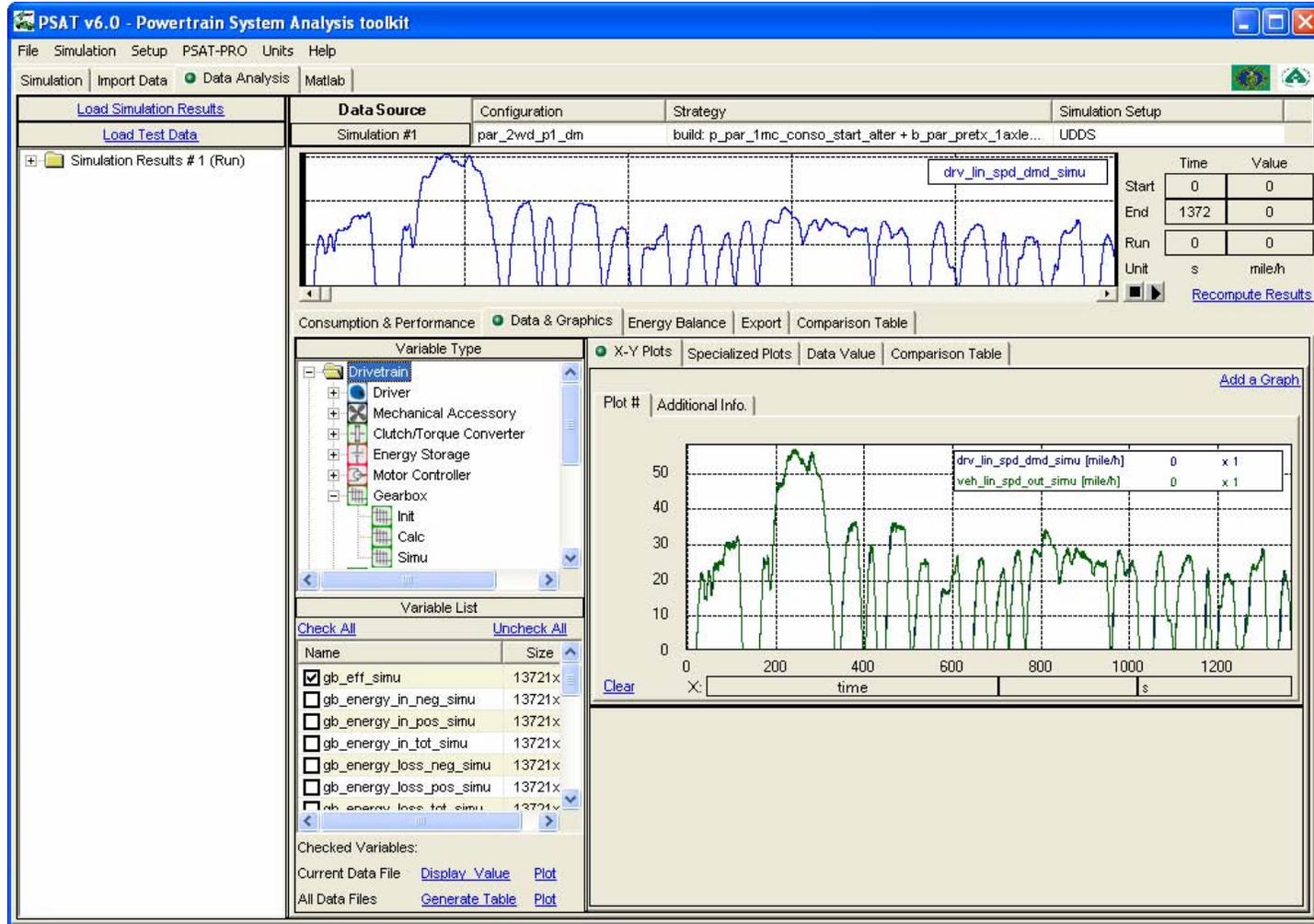
- **Saved information description**
- **Access consumption and performance results**
- **Plots parameters**
- **Analyze energy balance**
- **Export specific parameters**



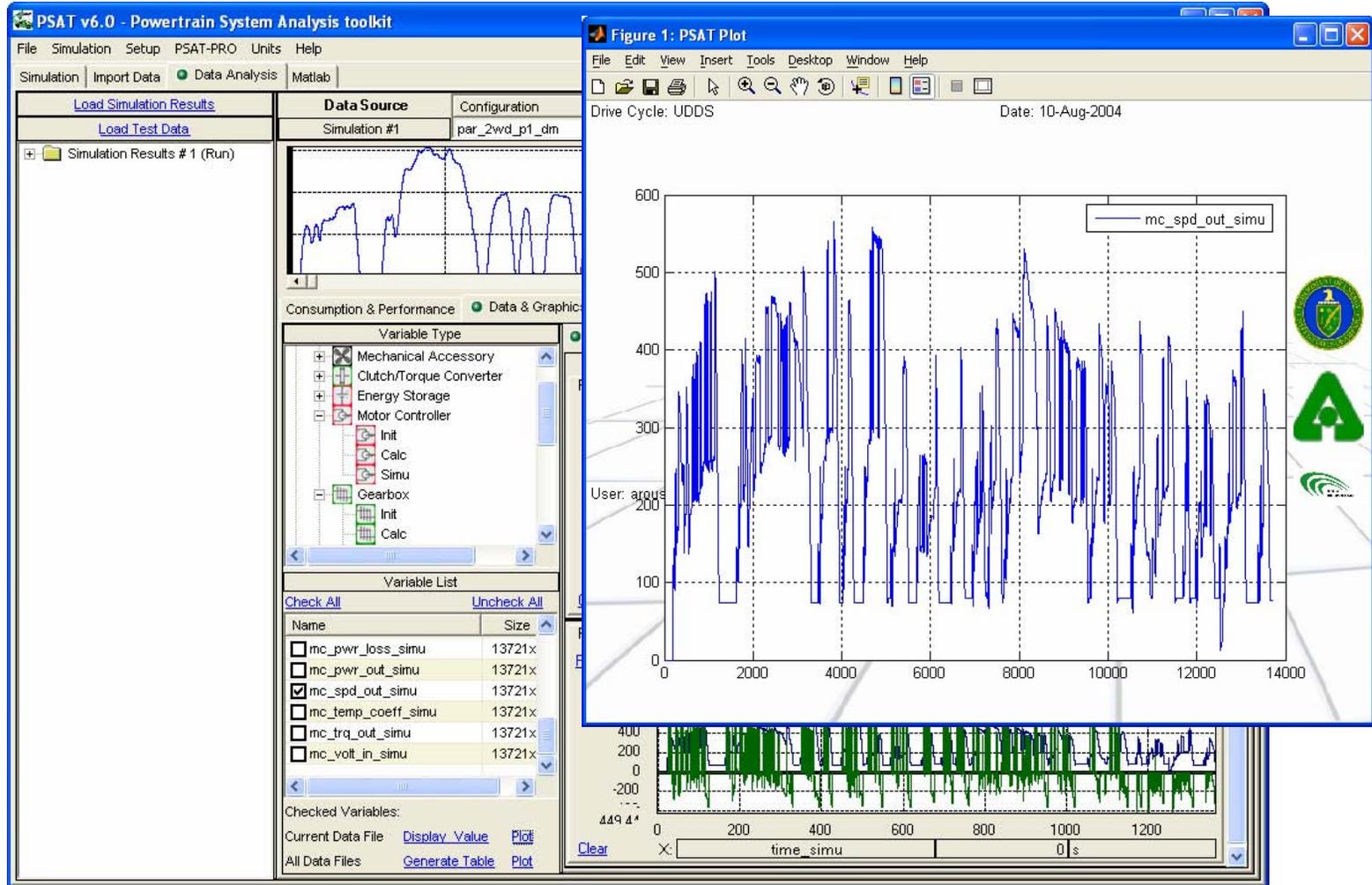
Data Analysis



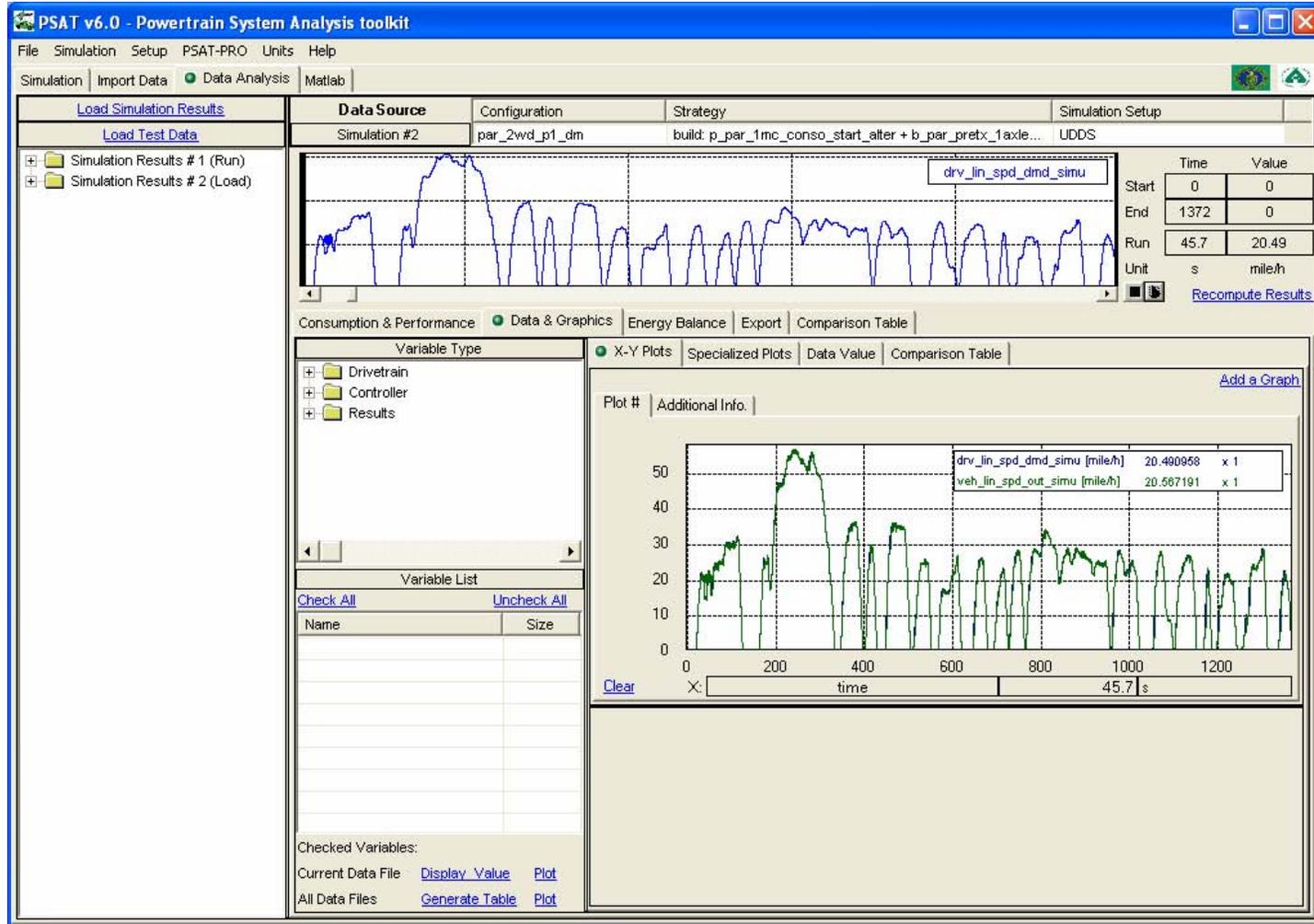
Plot the Different Parameters



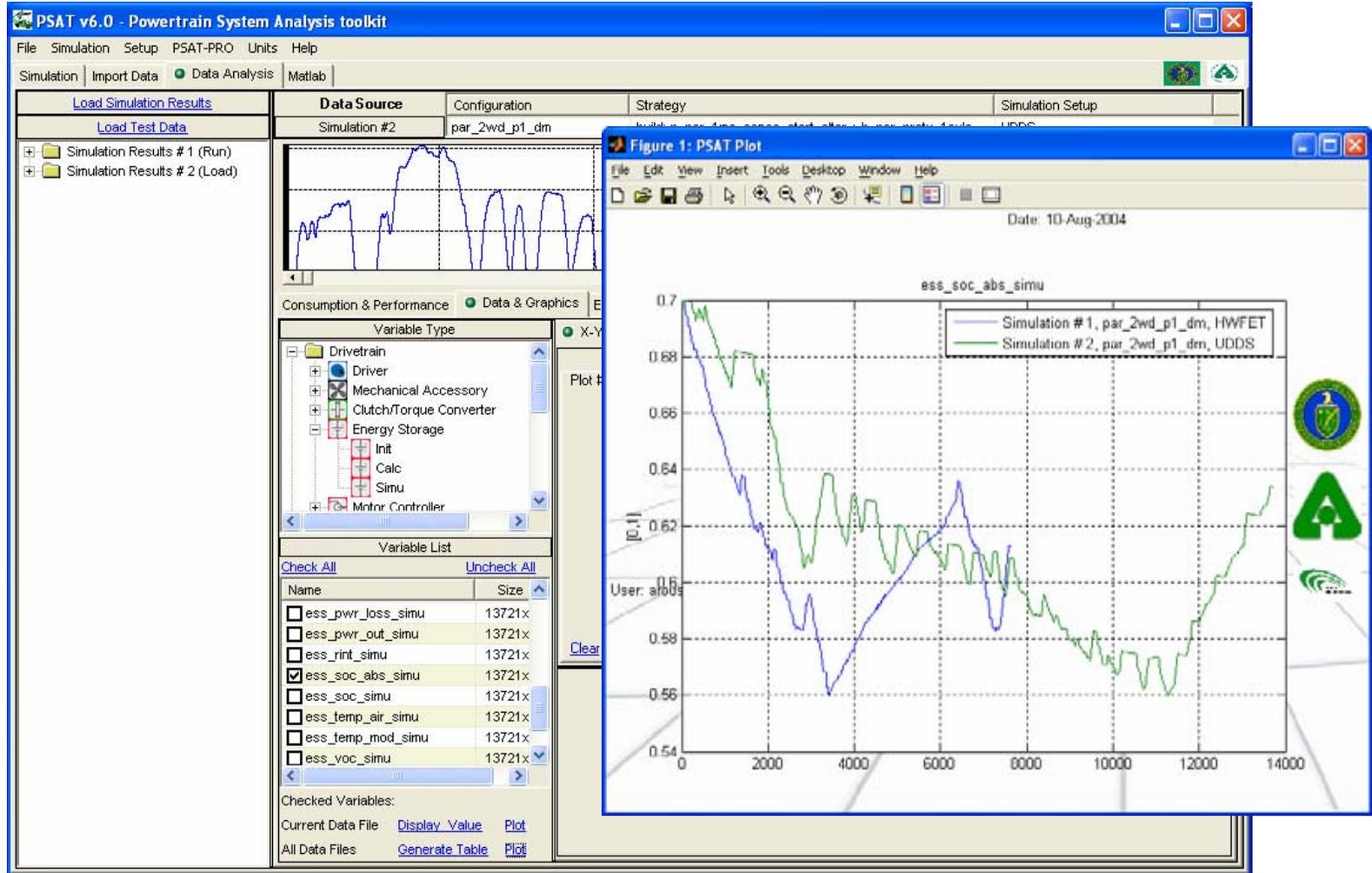
Plot Parameters in MATLAB



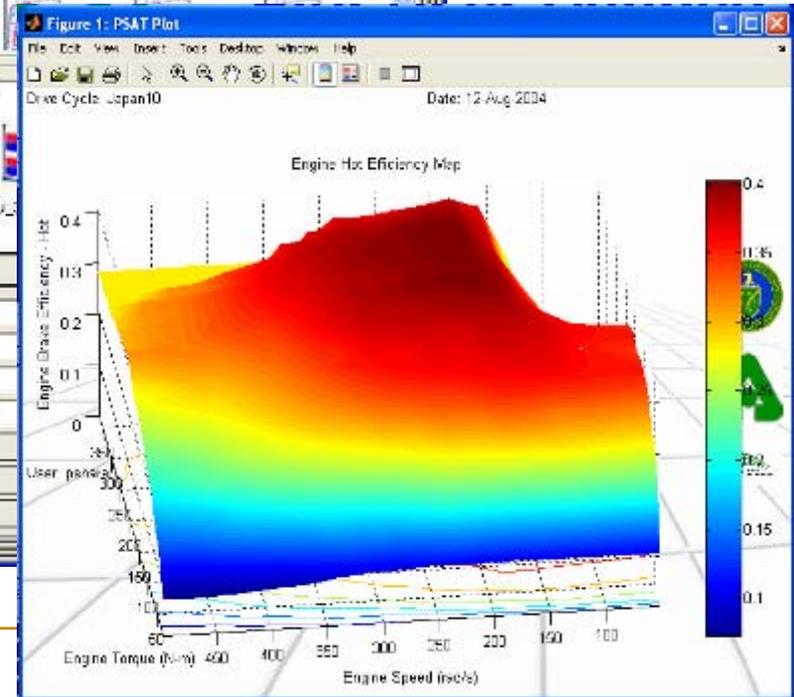
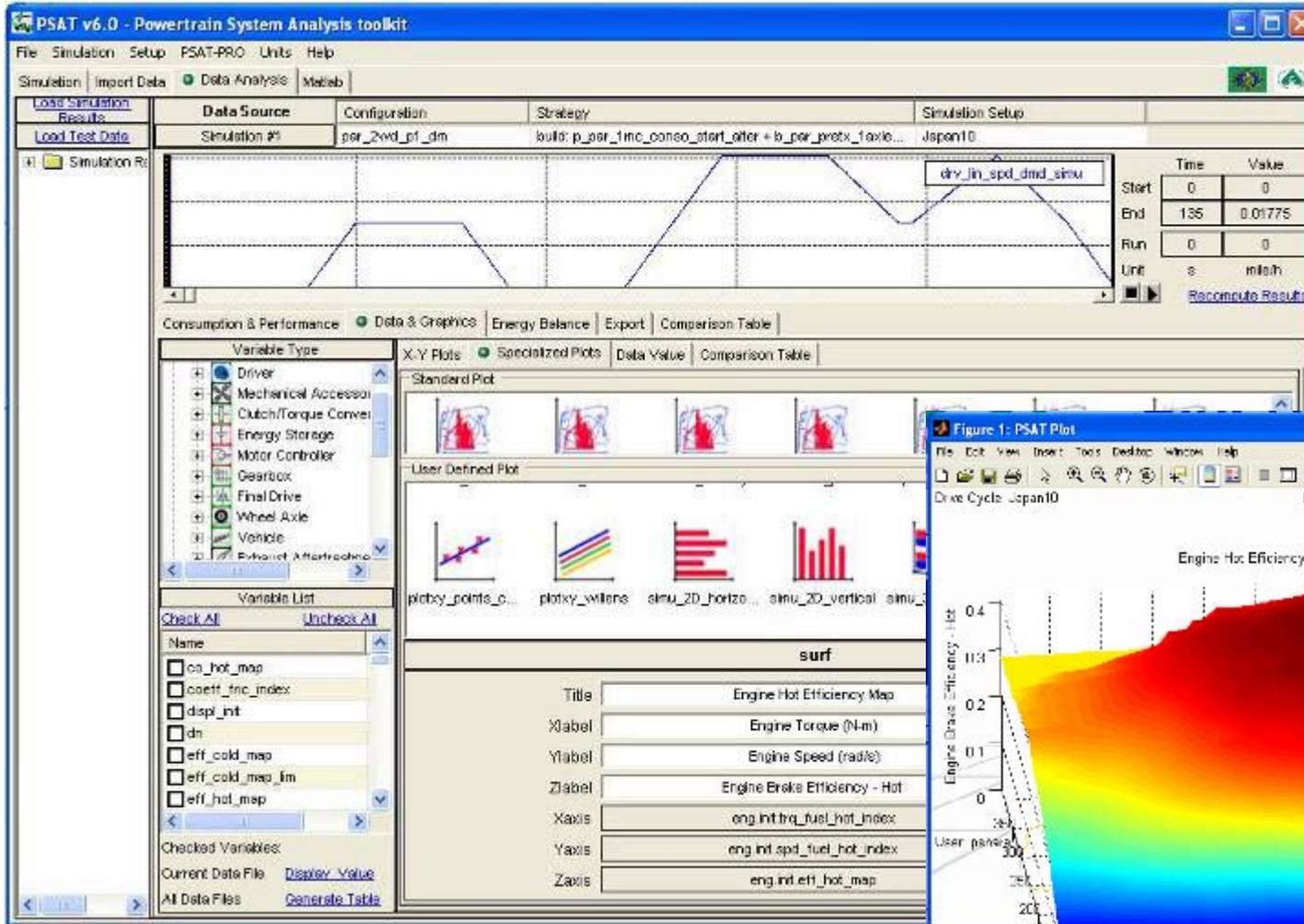
Replay the Simulation



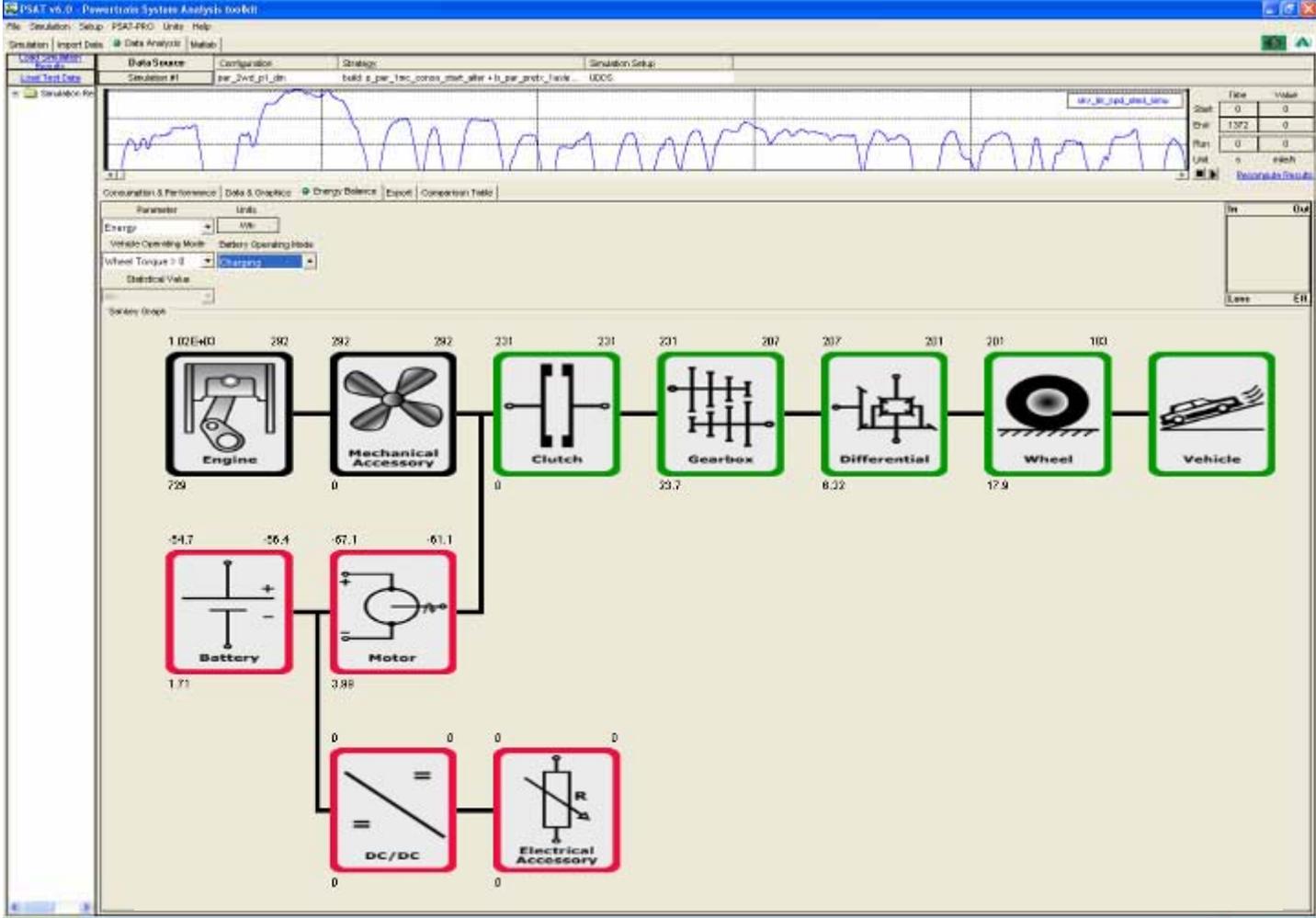
Plot the Same Parameter from All Data Files



Plot User-Defined Plots



Energy Balance



Export Variables

The screenshot shows the PSAT v6.0 - Powertrain System Analysis Toolkit interface. The 'Export' dialog is open, showing a tree view of components and a list of variables to be exported. The 'Export' button is visible at the bottom right.

DataFile / Component	Variable Name	Unit	Description
Controller	eng_energy_in_neg_simu	J	
Controller	eng_energy_in_pos_simu	J	
Controller	eng_energy_in_tot_simu	J	
Controller	eng_energy_loss_neg_simu	J	
Controller	eng_energy_loss_pos_simu	J	
Controller	eng_energy_loss_tot_simu	J	
Controller	eng_energy_out_neg_simu	J	
Controller	eng_energy_out_pos_simu	J	
Controller	eng_energy_out_tot_simu	J	
Drivetrain			
Clutch/Torque Converter			
Driver			
Electrical Accessory			
Energy Storage			
Engine			
calc			
init			
simu			
energy			

DataPath	DataFile	Variable Name	Unit
L:\modeling\development\psat_v60_beta6\users\spagerit\s...	data.mat	eng_spd_out_simu	rad/s
L:\modeling\development\psat_v60_beta6\projects\Prius_M...	60403037_Data.xls	eng_spd_hbm	rpm
L:\modeling\development\psat_v60_beta6\users\spagerit\s...	data.mat	ptc_eng_trq_hot_mn_cstr_simu	Nm
L:\modeling\development\psat_v60_beta6\users\spagerit\s...	data.mat	ptc_eng_trq_hot_mx_cstr_simu	Nm

Export Type: Matlab File Text File Excel File

.m .mat CSV tab-delimited with Delimiter: \t xls [Export](#)

Comparison Table

