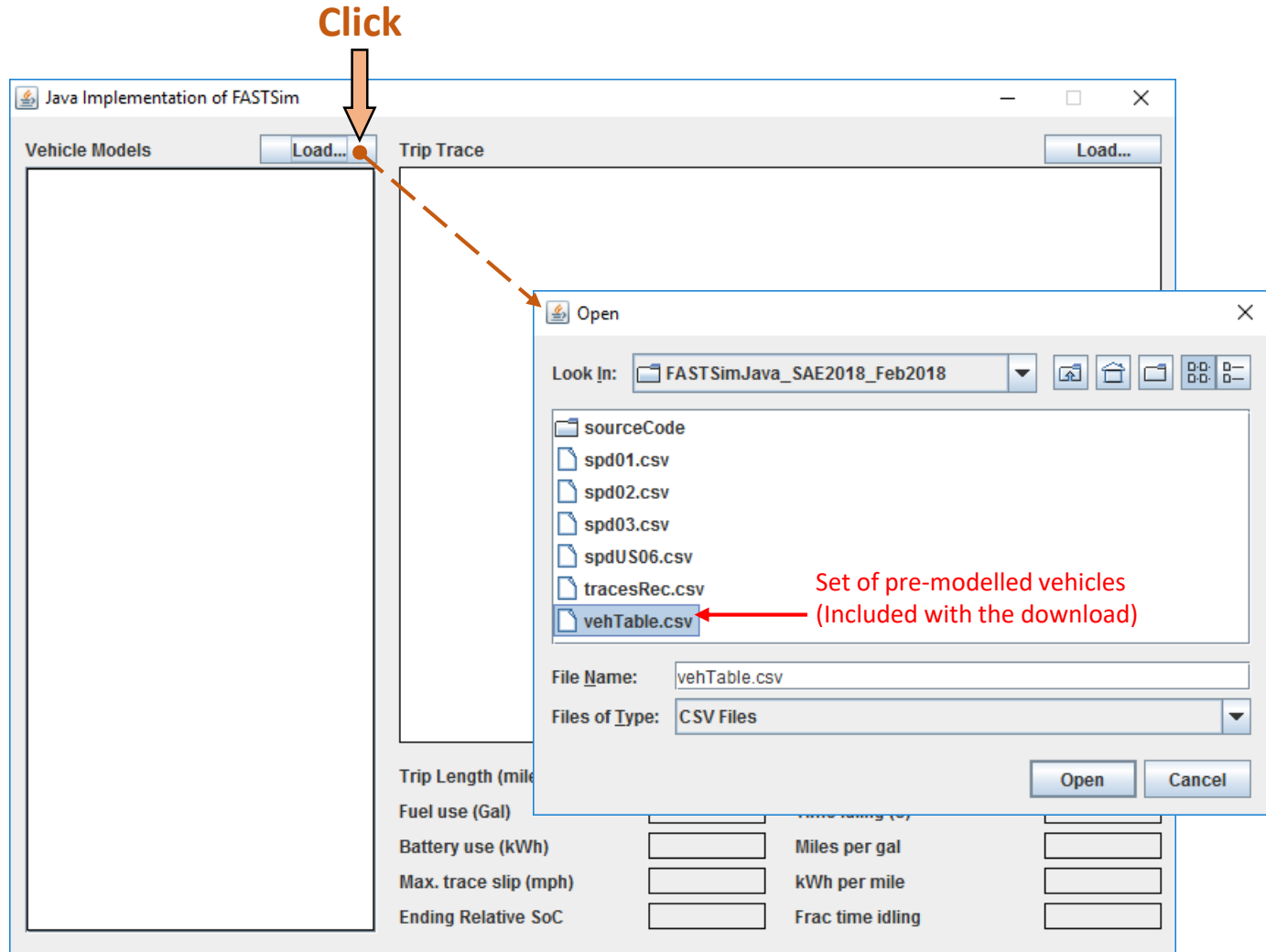
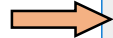


Step 1: Load Vehicle Models File



Step 2: Select Vehicle Model Of Interest

Click to select
from list



Java Implementation of FASTSim

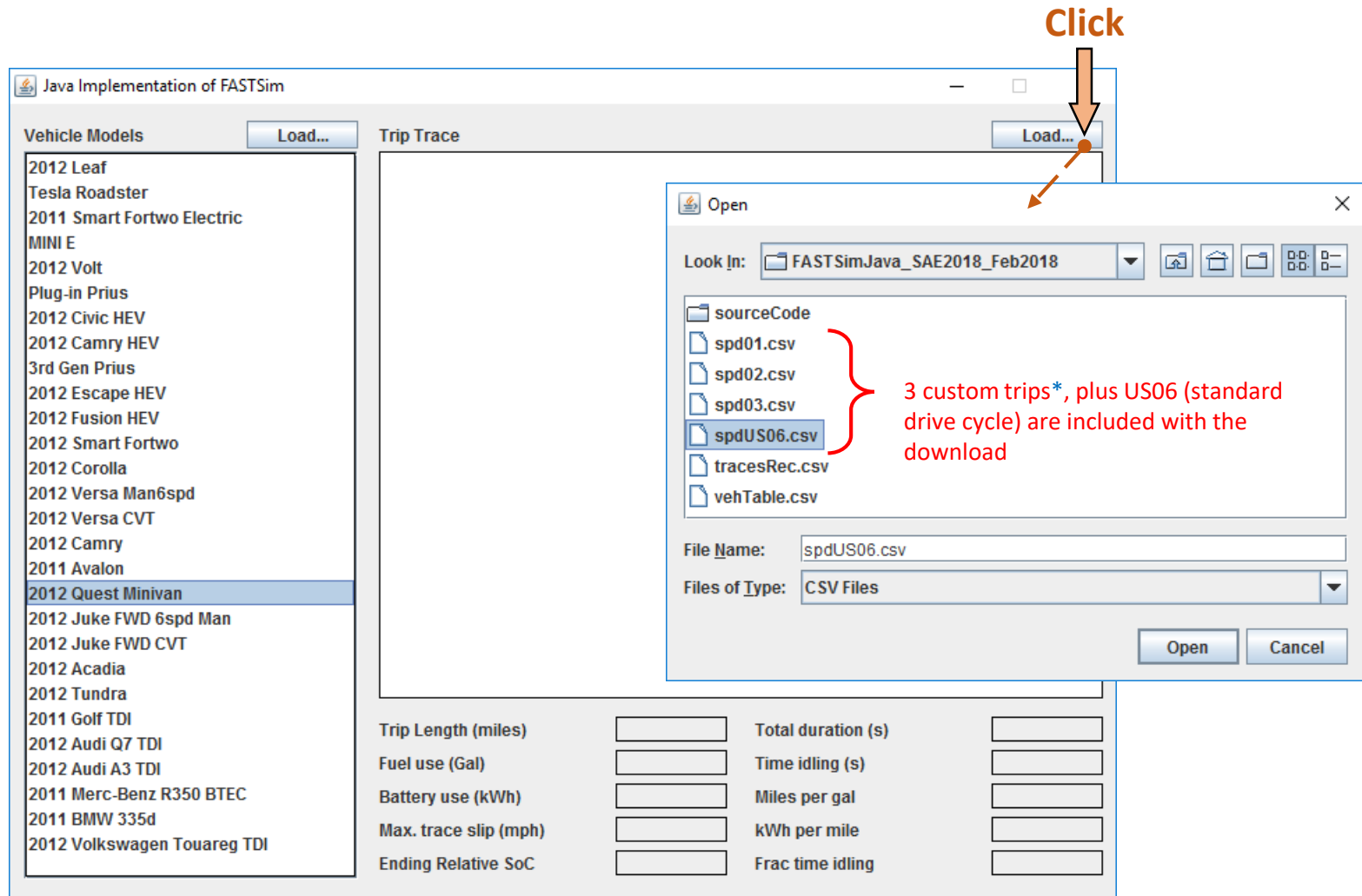
Vehicle Models

2012 Leaf
Tesla Roadster
2011 Smart Fortwo Electric
MINI E
2012 Volt
Plug-in Prius
2012 Civic HEV
2012 Camry HEV
3rd Gen Prius
2012 Escape HEV
2012 Fusion HEV
2012 Smart Fortwo
2012 Corolla
2012 Versa Man6spd
2012 Versa CVT
2012 Camry
2011 Avalon
2012 Quest Minivan
2012 Juke FWD 6spd Man
2012 Juke FWD CVT
2012 Acadia
2012 Tundra
2011 Golf TDI
2012 Audi Q7 TDI
2012 Audi A3 TDI
2011 Merc-Benz R350 BTEC
2011 BMW 335d
2012 Volkswagen Touareg TDI

Trip Trace

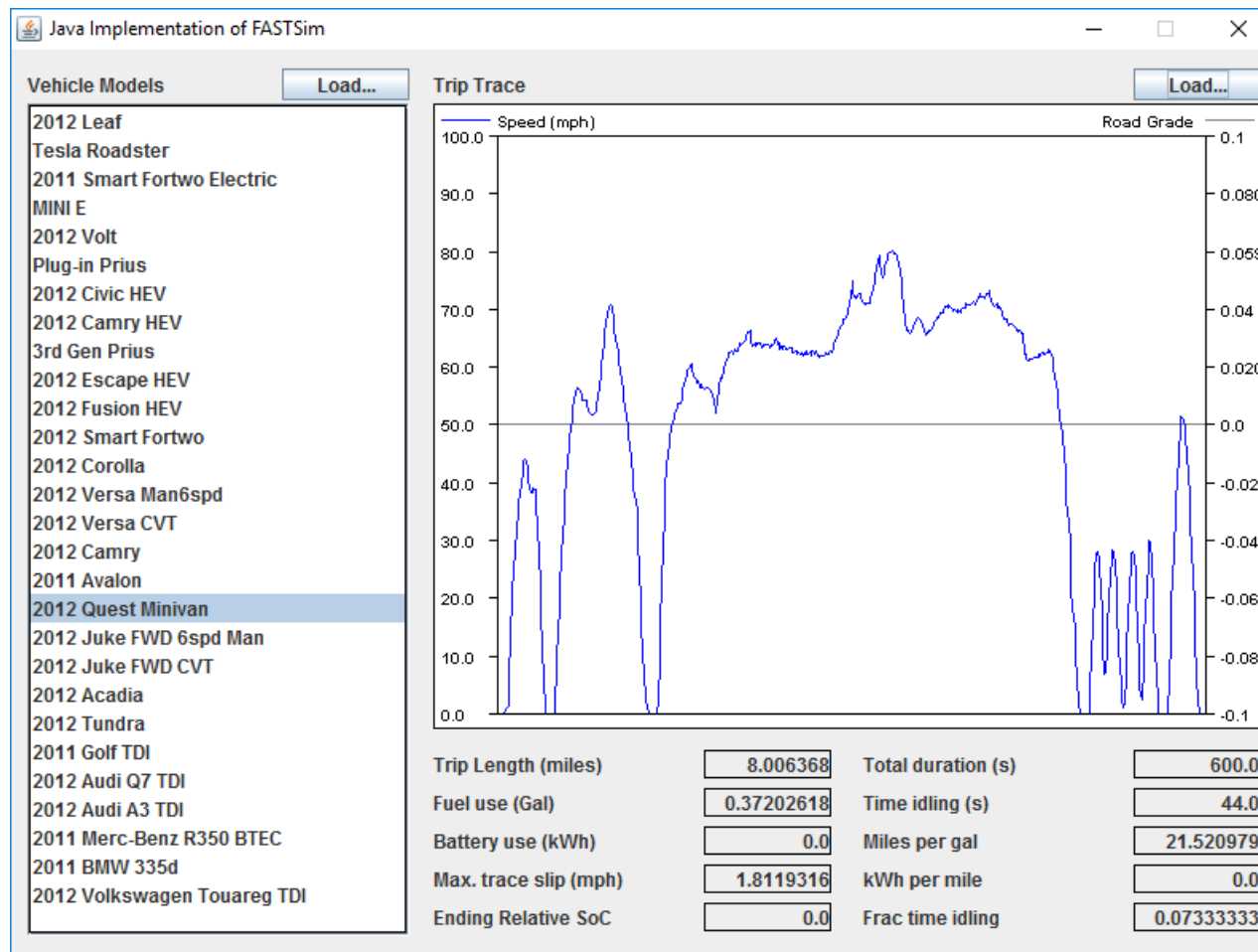
Trip Length (miles)	<input type="text"/>	Total duration (s)	<input type="text"/>
Fuel use (Gal)	<input type="text"/>	Time idling (s)	<input type="text"/>
Battery use (kWh)	<input type="text"/>	Miles per gal	<input type="text"/>
Max. trace slip (mph)	<input type="text"/>	kWh per mile	<input type="text"/>
Ending Relative SoC	<input type="text"/>	Frac time idling	<input type="text"/>

Step 3: Load a Trip Record



- Notes:**
- Trip files are comma separated text files with one, two or three columns of data
 - Interpretation of the data in trip files depends on number of columns as follows:
 - ❖ Three-Columns: Time [s], Speed [mph], Road Grade = $\tan(\text{road inclination angle})$
 - ❖ Two-Columns: Speed [mph] & Road Grade, at constant intervals of 1s
 - ❖ One-Column: Speed[mph] at constant intervals of 1s, Zero Road Grade

Step 4: Examine Results



- Change selection of vehicle model to examine how a different vehicle would Perform for same trip
- Re-Load different trips to examine how a vehicle model performs differently across different trips
- In this GUI, plugin vehicles are assumed to start the trip with a full battery. More advanced options require re-compiling the source code and use of a special function that allows setting the initial SoC. See source code documentation for further details.