

Model Name: Project-2\_PriusDrivetrain

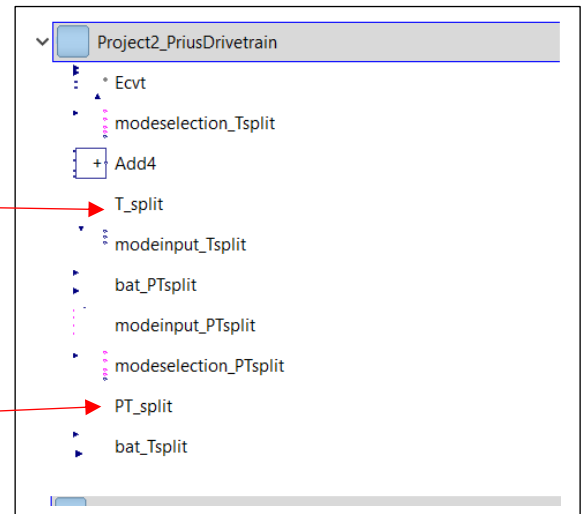
Models to run:

The complete assembled model for T-Split algorithm:

T\_split.mo

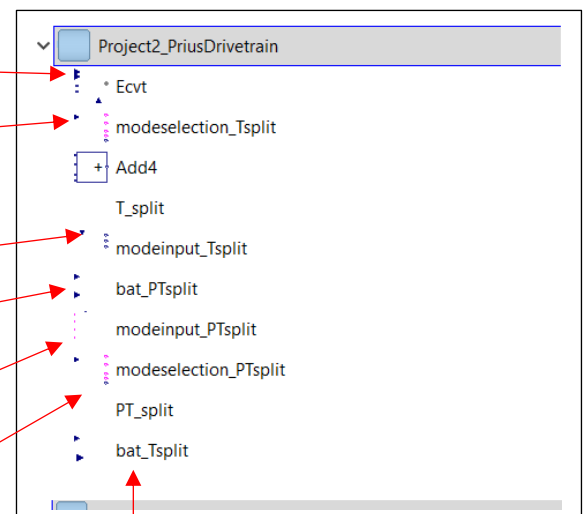
The complete assembled model for PT Split algorithm:

PT\_split.mo



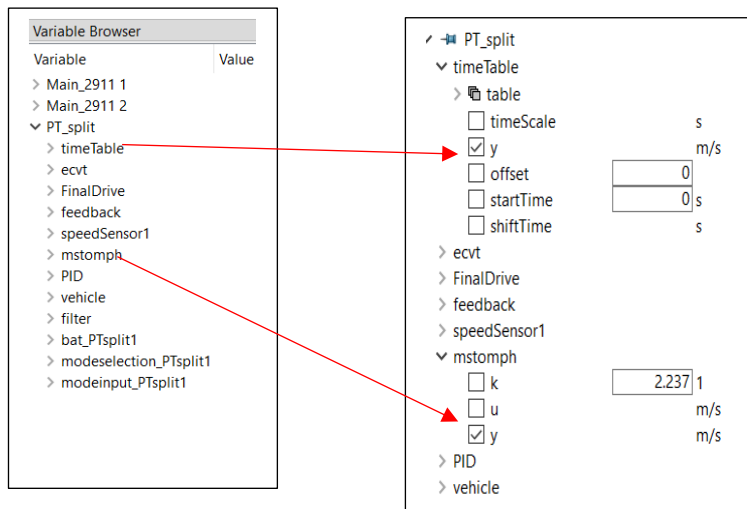
Following other packages are included in the Project:

1. Ecvt.mo: e-CVT operation model
2. modeselection\_Tsplit.mo : Different mode selection model  
for T-Split algorithm
3. modeinput\_Tsplit.mo: Mode input model  
for T-Split algorithm
4. bat\_PTsplit.mo : Battery model for PT Split algorithm
5. modeinput\_PTsplit.mo: Mode input model  
for PT Split algorithm
6. modeselection\_PTsplit.mo: Different mode selection model  
For PT Split algorithm
7. bat\_Tsplit.mo: Battery model for T-Split algorithm



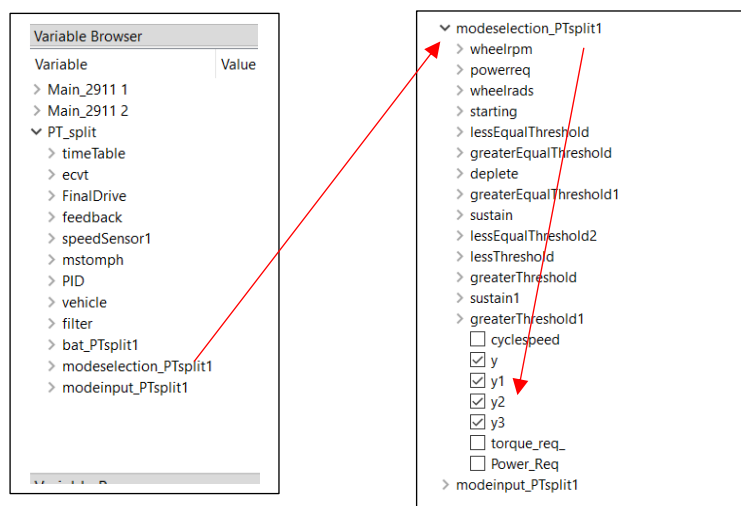
## Plotting Figures:

### 1. Drive Cycle Tracing:



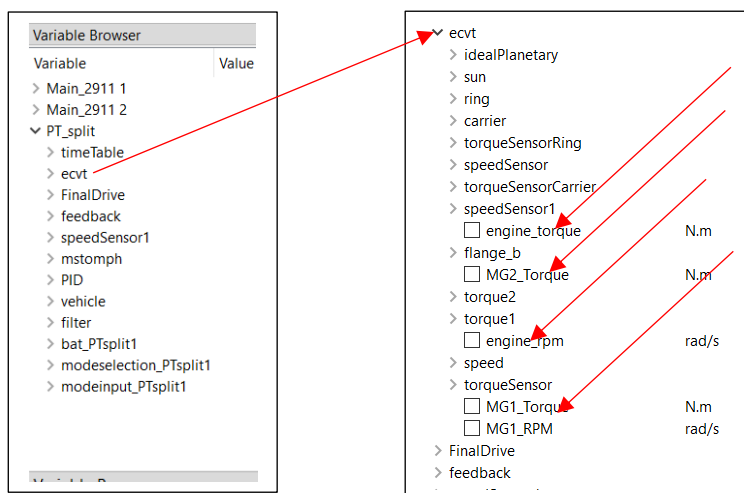
The value of y is actually in mph, as they are converted inside model using a gain value

### 2. Different Modes vs Time



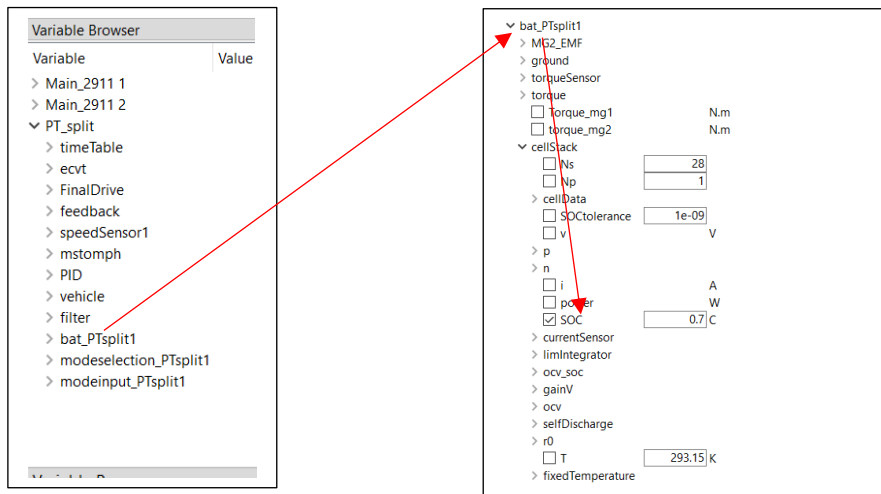
y = Starting mode  
y1 = Deplete mode  
y2 = Sustain mode  
y3 = Regeneration mode

### 3. Engine and MG2 Output vs Time:



Ring and Carrier Speed can be plotted from PT\_split→ecvt→ring or carrier

#### 4. Battery SOC vs Time:



Similarly, plots can be obtained for other algorithm.