



EV Remote Internship Project Report

Created by

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Project Name

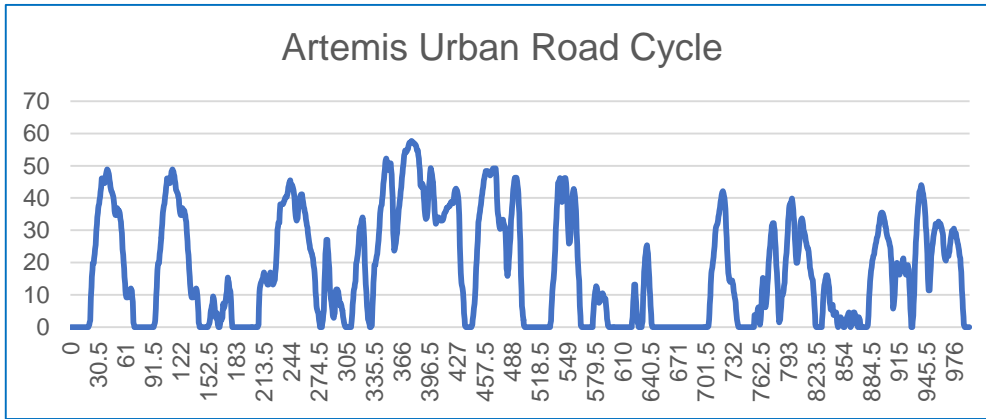
Comparison of Drive Cycle

Case Studies: Artemis Urban/Artemis Rural/HWFET Drive Cycle

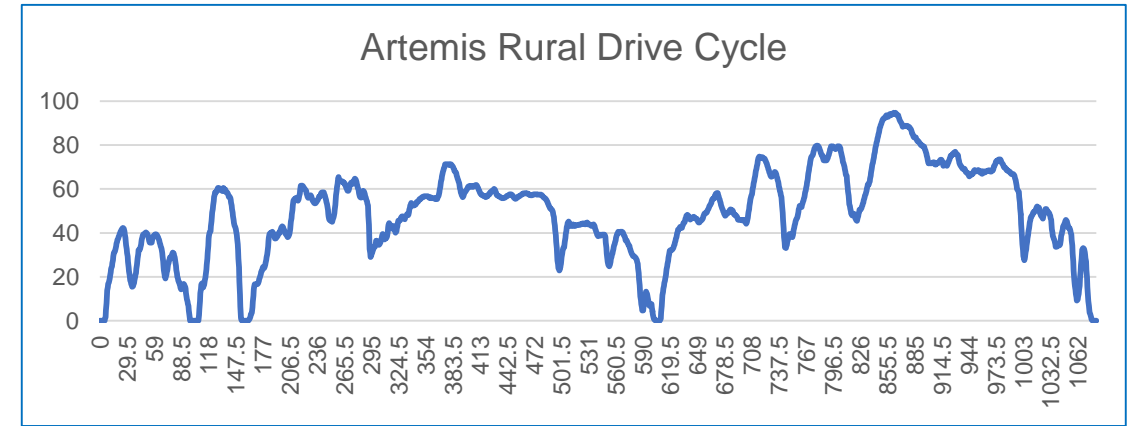


Drive Cycles

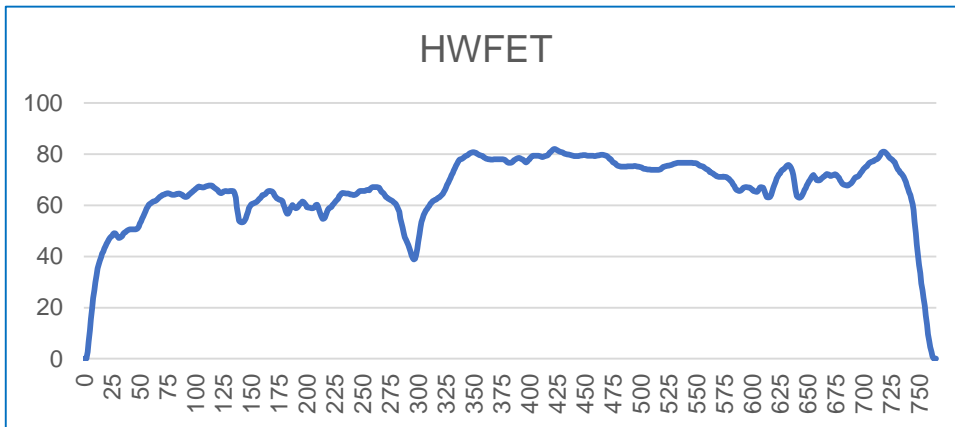
Artemis Urban Drive Cycle



Artemis Rural Drive Cycle



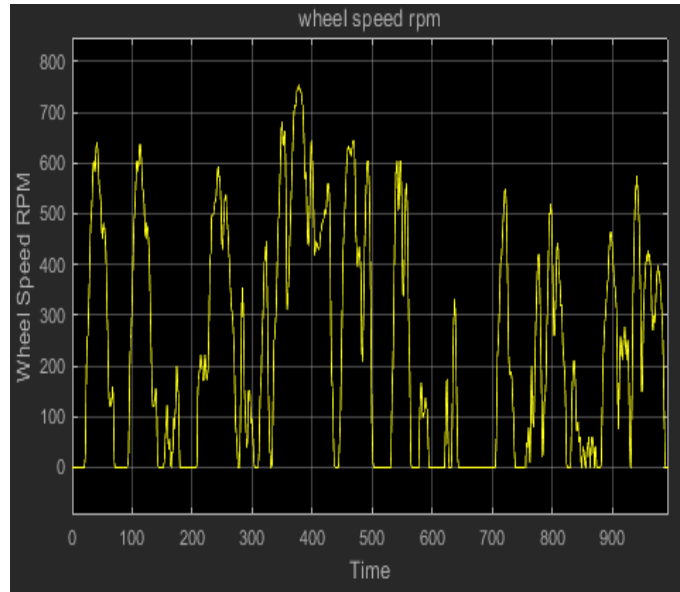
HWFET Drive Cycle





Wheel Speed for different Drive Cycles

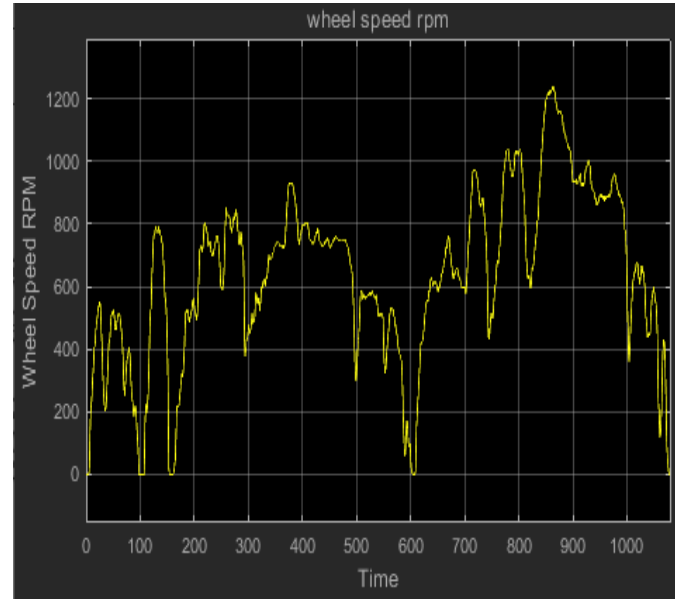
Artemis Urban Drive Cycle



Max speed = 753.21

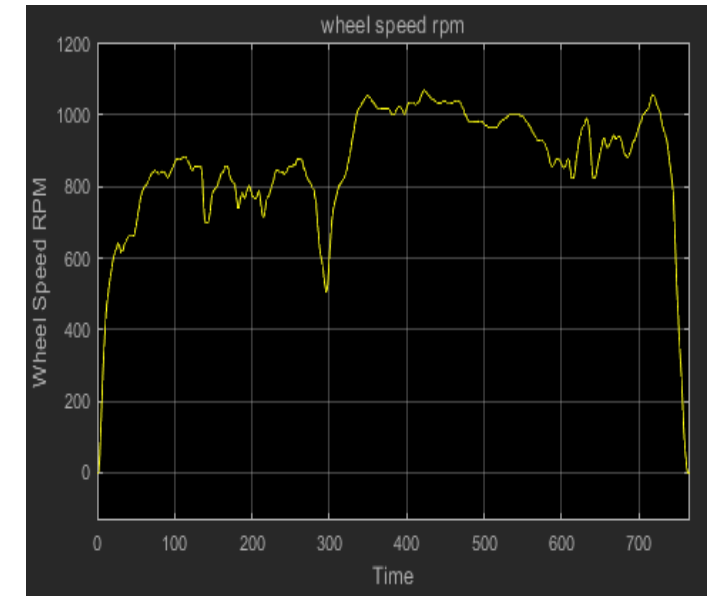
Max Speed = 1020 rpm

Artemis Rural Drive Cycle



Max Speed= 1237.2

HWFET Drive Cycle

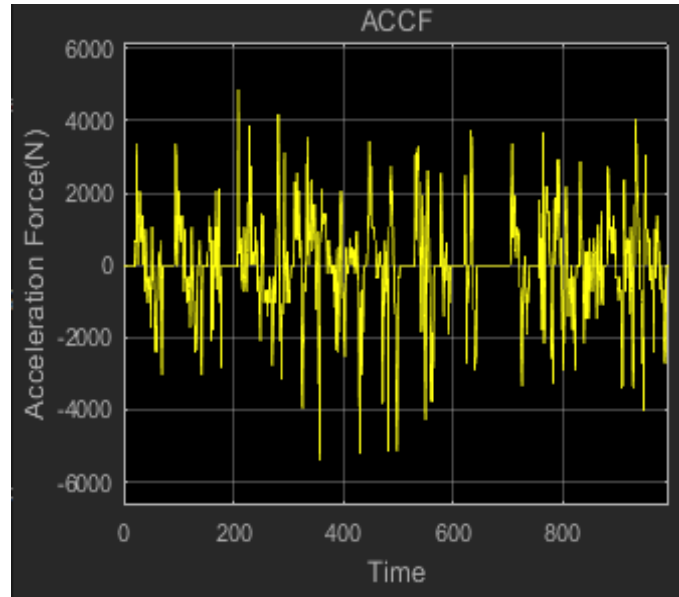


Max Speed= 1069.6

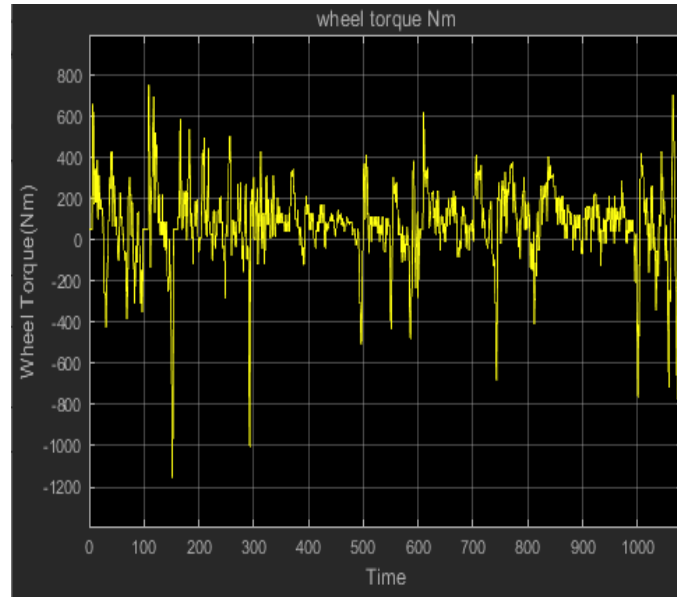


Wheel Torque for different Drive Cycles

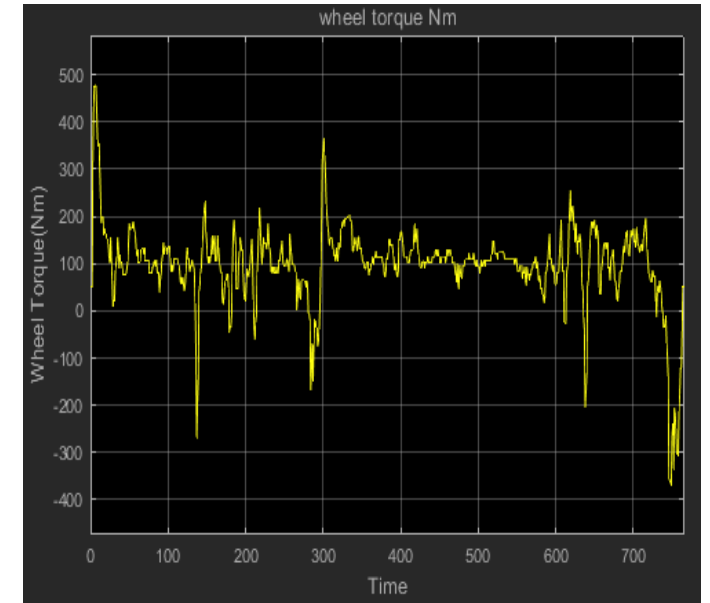
Artemis Urban Drive Cycle



Artemis Rural Drive Cycle



HWFET Drive Cycle



Max Torque = 1046.9

Max Torque= 750.3766

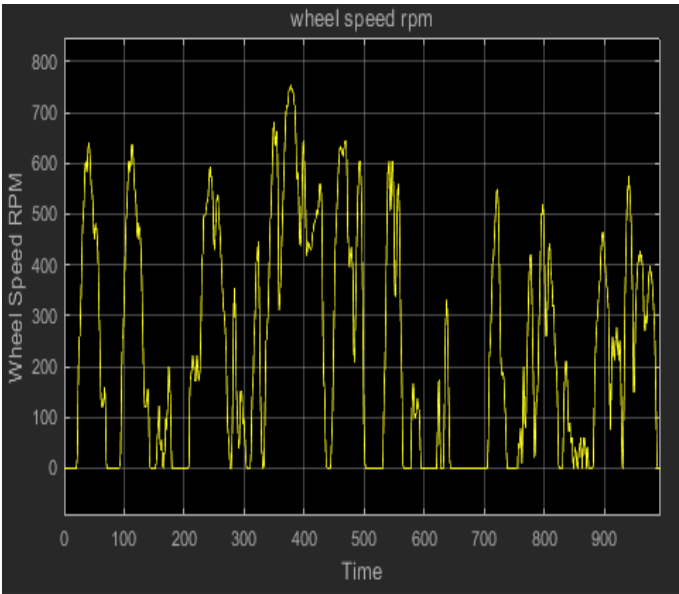
MaxTorque = 477.8488

Max Torque = 758.376 Nm



Motor Speed for different Drive Cycles

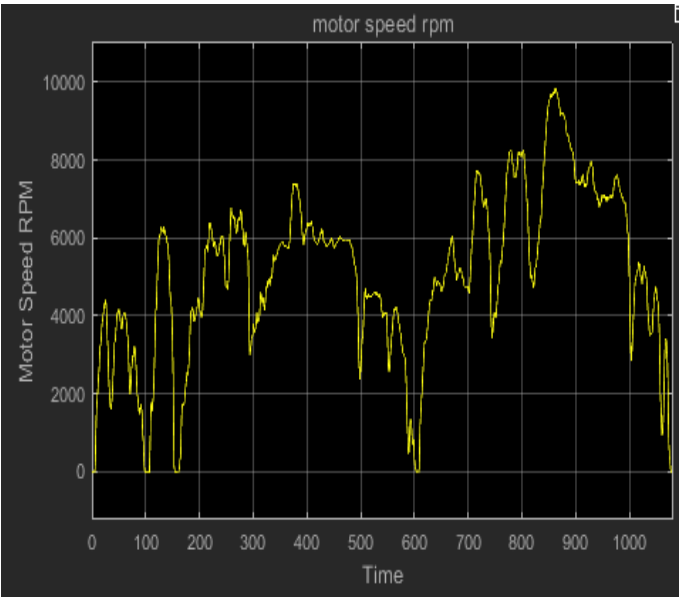
Artemis Urban Drive Cycle



Max Speed = 5978.8

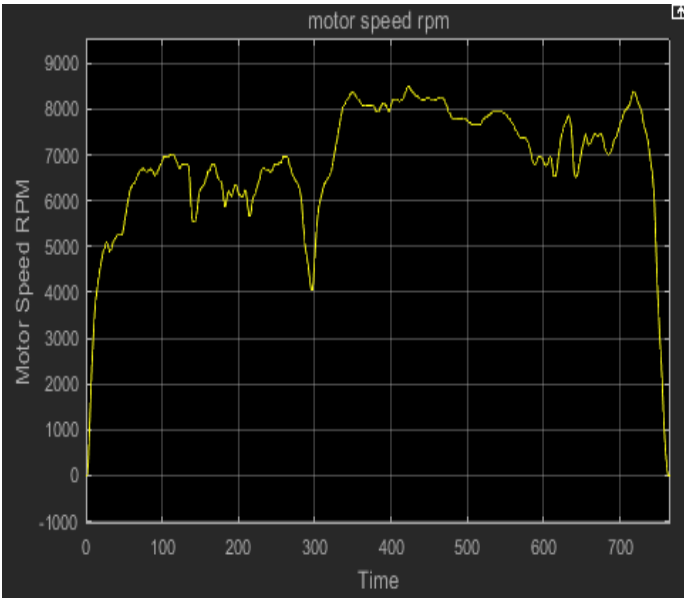
Max Speed = 8096.6 rpm

Artemis Rural Drive Cycle



Max Speed= 9820.5

HWFET Drive Cycle

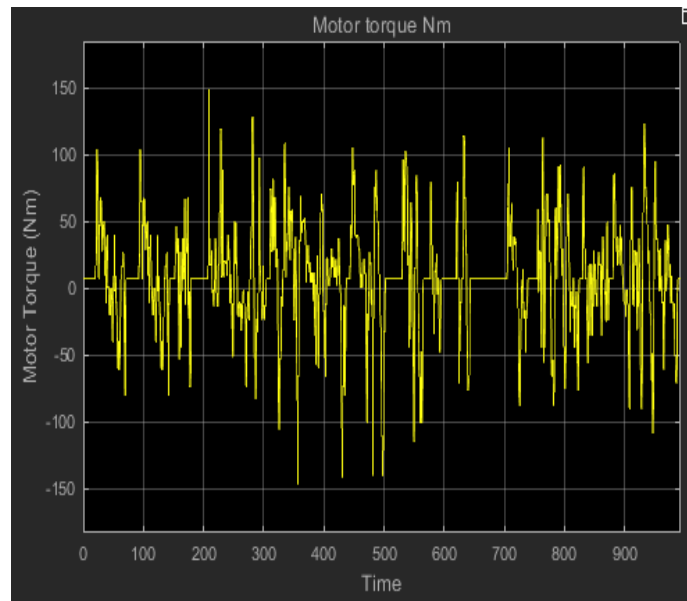


Max Speed = 8490.5

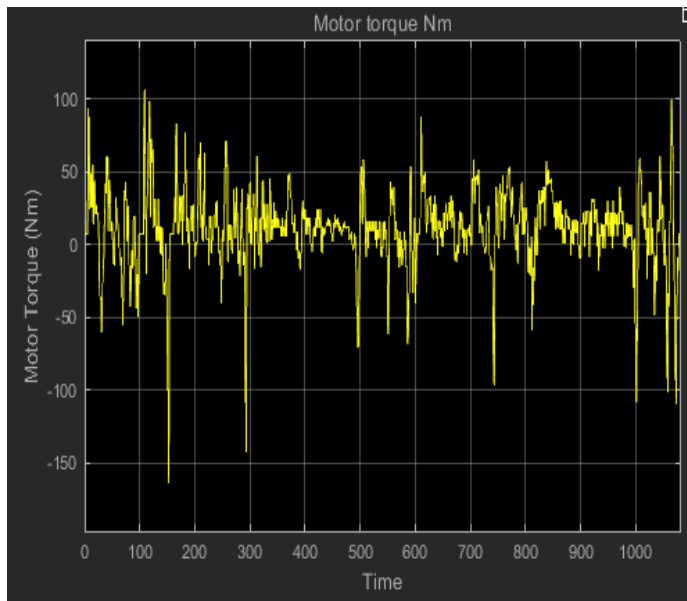


Motor Torque for different Drive Cycles

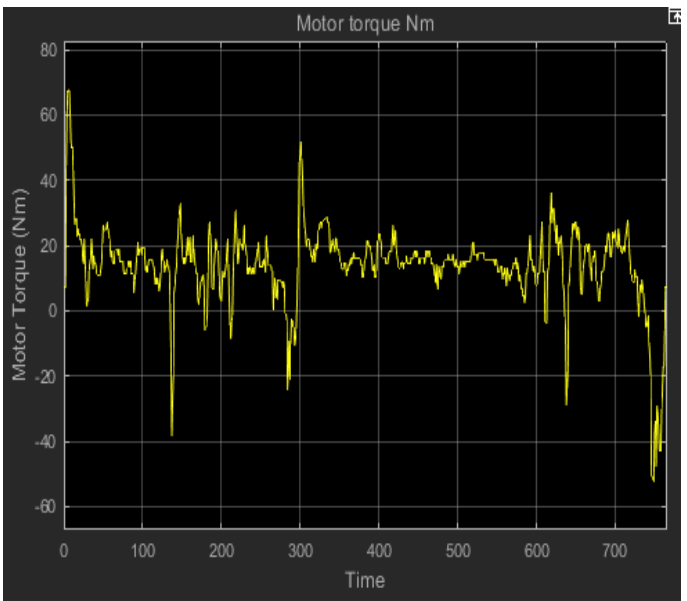
Artemis Urban Drive Cycle



Artemis Rural Drive Cycle



HWFET Drive Cycle



Nominal Torque= 8.1092

Nominal Torque= 32.1853

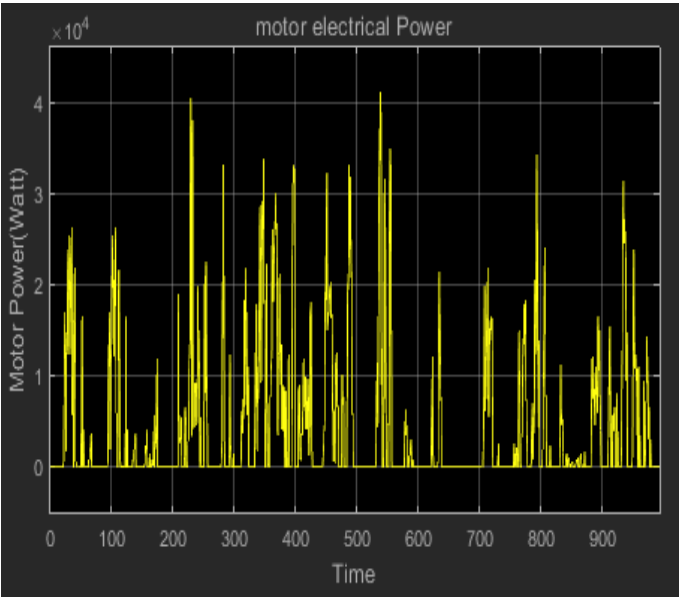
Nominal Torque = 15.1870

Nominal Torque = 18.4939 Nm

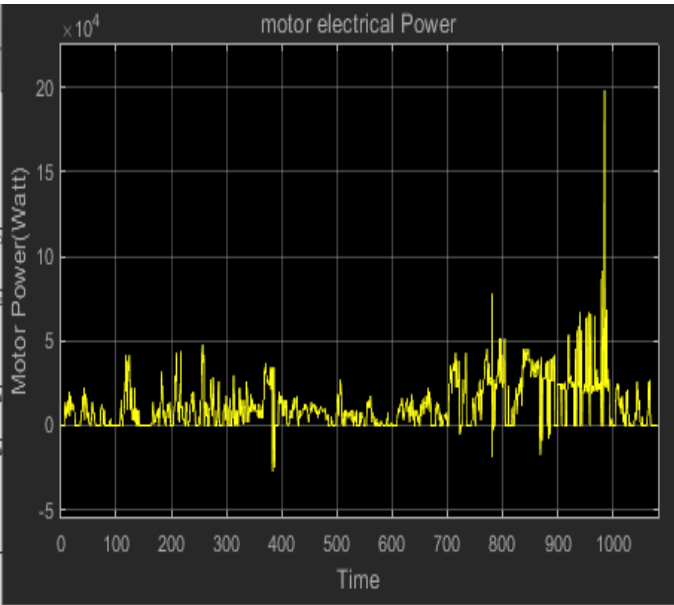


Motor Power for different Drive Cycles

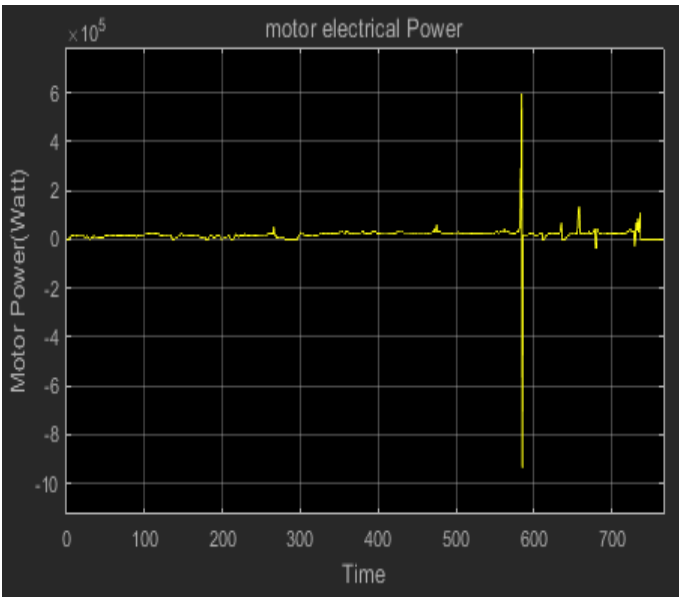
Artemis Urban Drive Cycle



Artemis Rural Drive Cycle



HWFET Drive Cycle



Nominal Power= 4168

Nominal Power= 8549.7

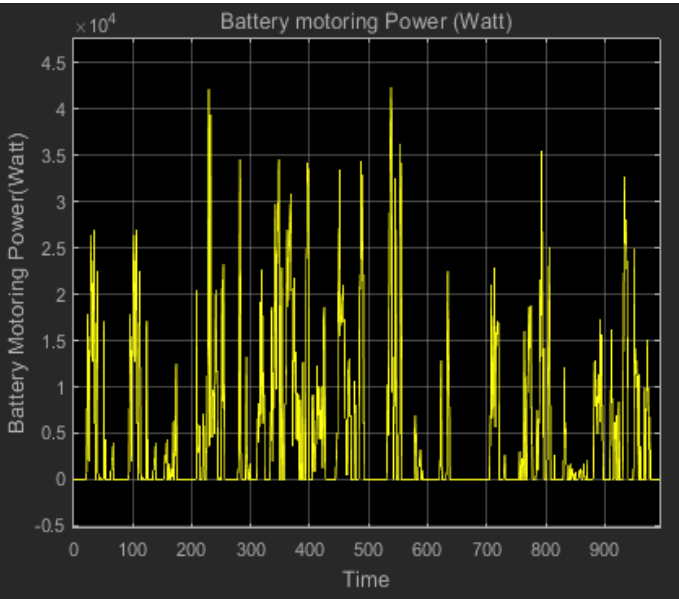
Nominal Power = 10837

Nominal Power =7851.57 W

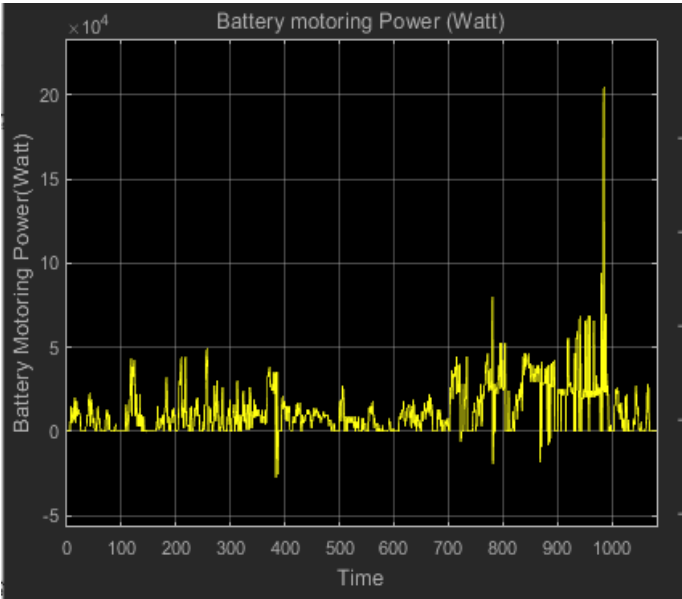


Battery Power for different Drive Cycles

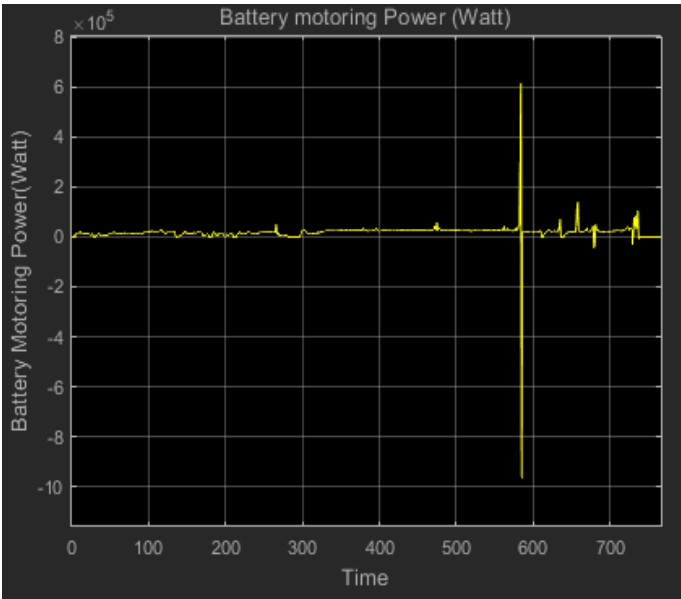
Artemis Urban Drive Cycle



Artemis Rural Drive Cycle



HWFET Drive Cycle



Nominal Power= 4601.9

Nominal Power=12251

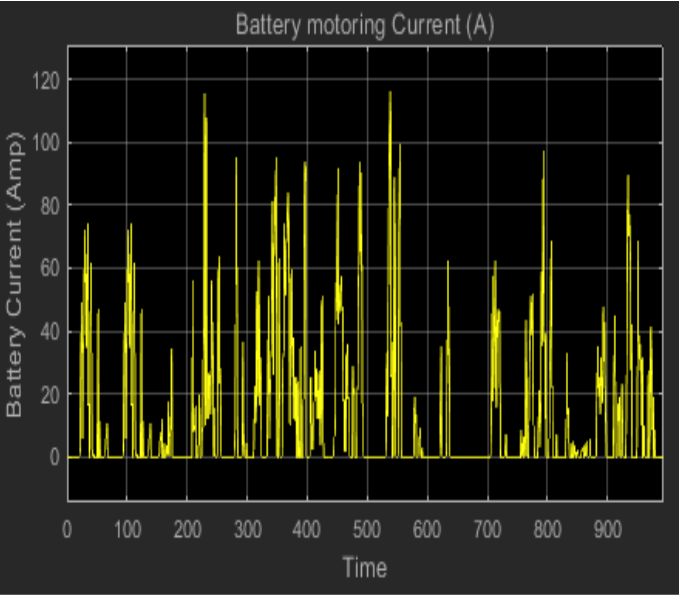
Nominal Power=19743

Nominal Power = 12198.63 W

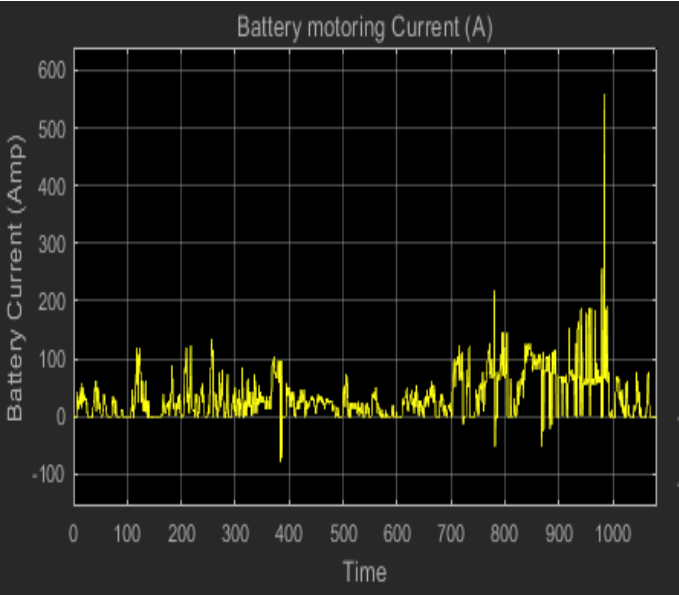


Battery Current for different Drive Cycles

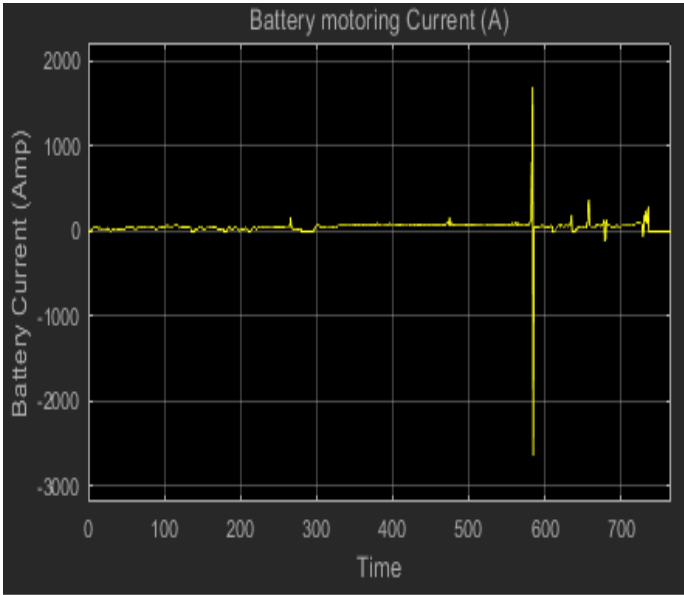
Artemis Urban Drive Cycle



Artemis Rural Drive Cycle



HWFET Drive Cycle



Nominal Current= 12.6148

Nominal Current=33.5831

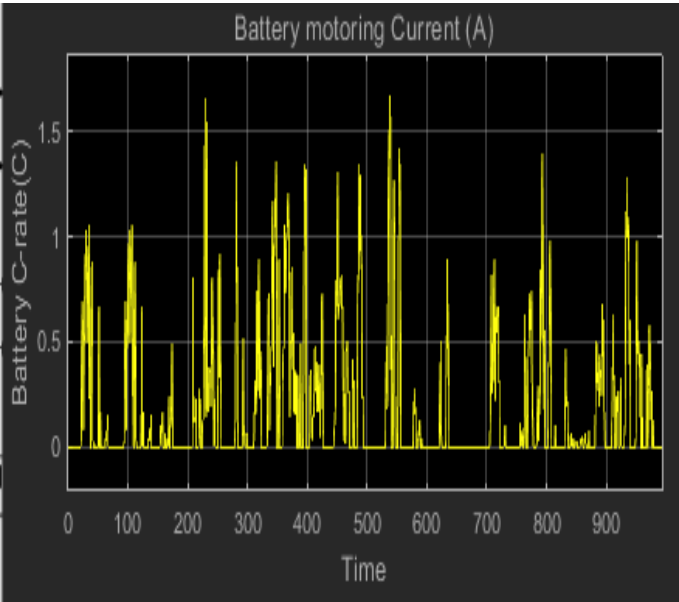
Nominal Current=54.1208

Nominal Current = 33.439 Amp



Battery C-Rate for different Drive Cycles

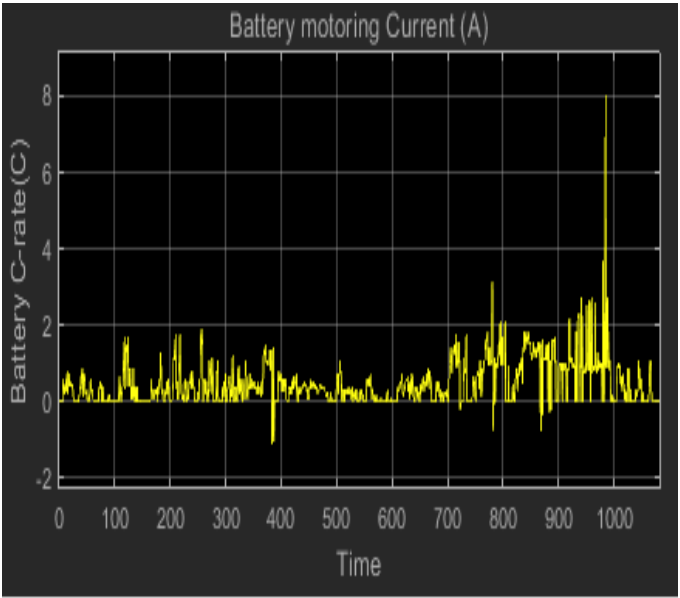
Artemis Urban Drive Cycle



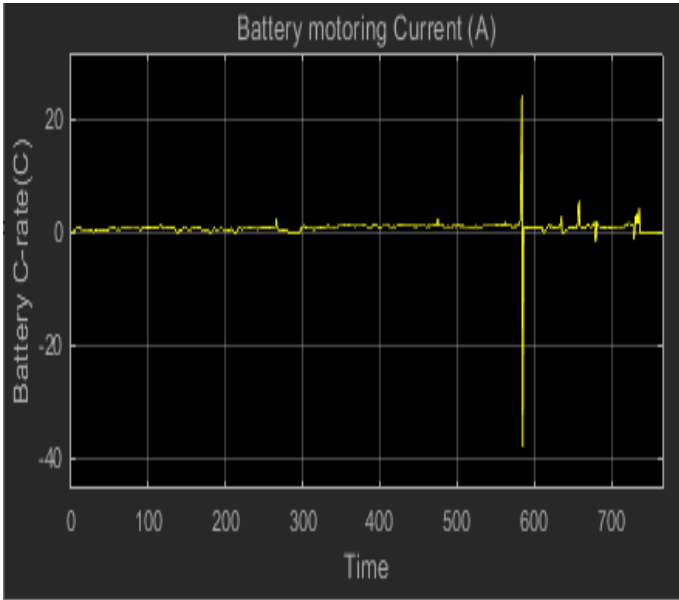
Nominal C-rate= 0.1802	Nominal C rate=0.4798	Nomial C rate=0.7733
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Nominal C-Rate = 0.4777C

Artemis Rural Drive Cycle



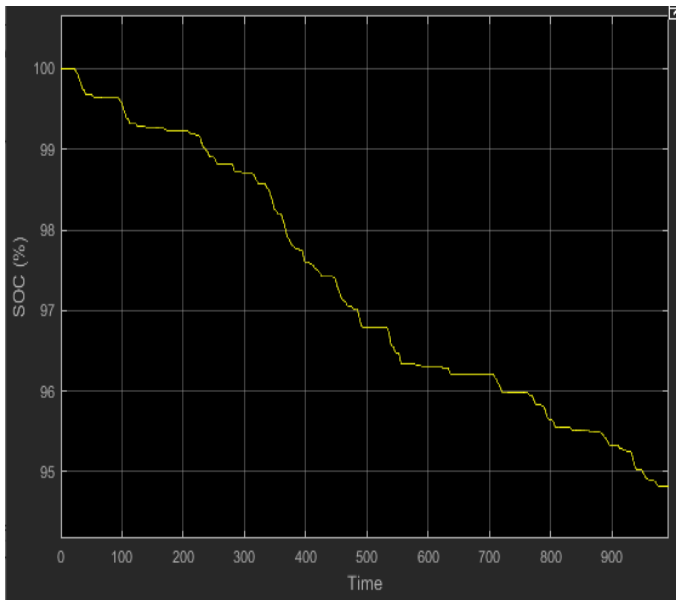
HWFET Drive Cycle





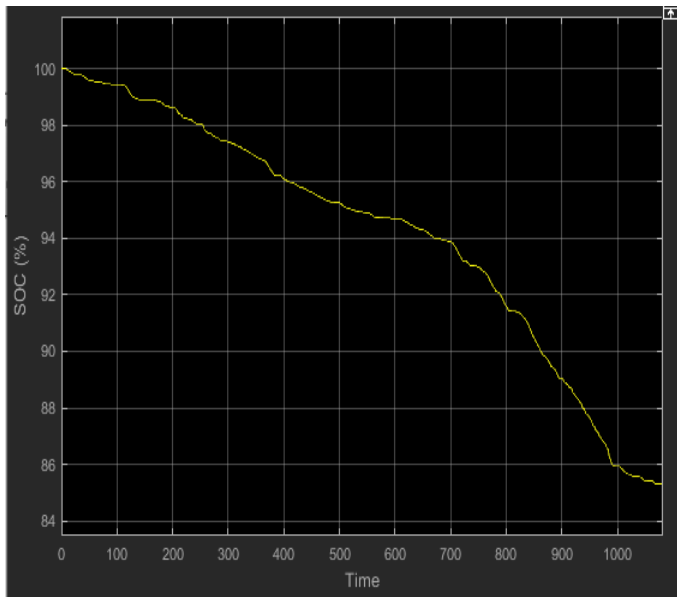
SOC for different Drive Cycles

Artemis Urban Drive Cycle



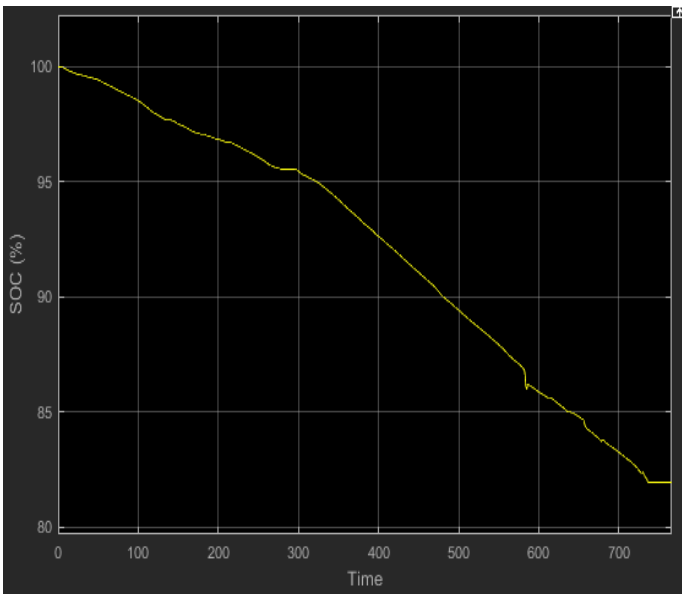
Soc= 94.8192%

Artemis Rural Drive Cycle



Soc=85.3178

HWFET Drive Cycle



Soc=81.9403



Range for different Drive Cycles

Artemis Urban	Artemis Rural	HWFET
4.87 KM	14.68 KM	14.03 KM



Thank you

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