

```

%Test Paramters
f = 50;
W = 2*pi*f;
P = 2;
r_s = 1.2;
r_r = 0.9;
Lls = 12e-3;
Llr = 12e-3;
Lms = 0.35;
J = 0.0015;
B = 0.0015;
LM = (3/2)*Lms;
gain = 1/((Lls*Llr) + LM*(Lls + Llr));

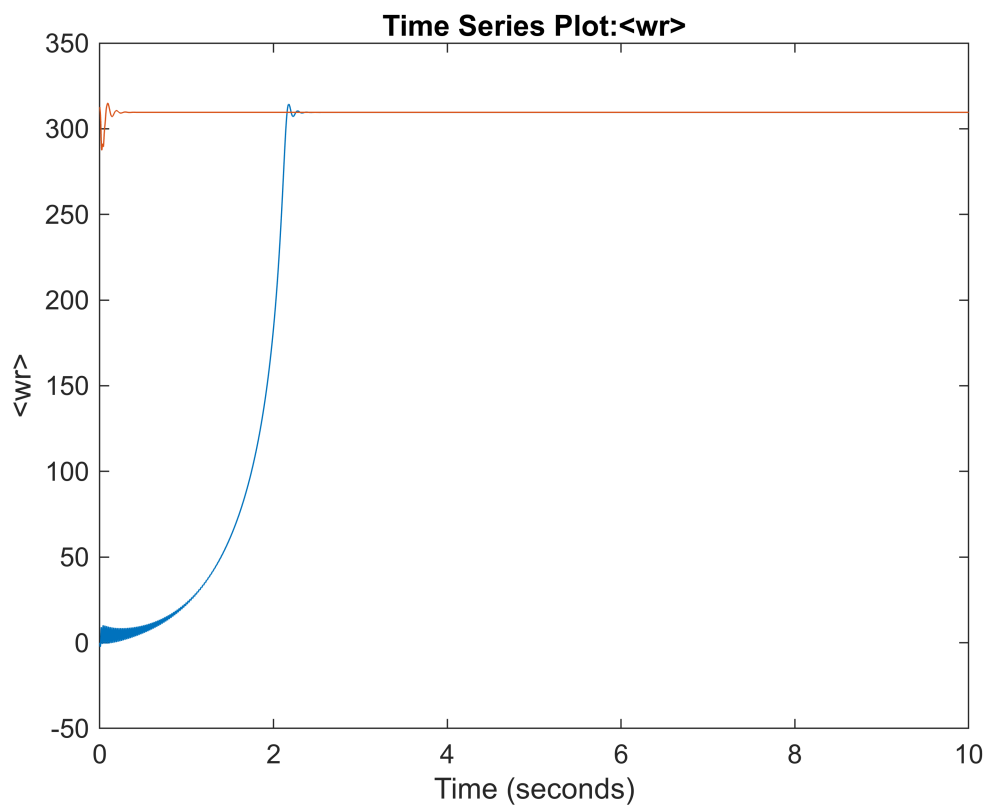
```

## Plots: Custom Model vs Simulink Built-in

```

plot(out.Wr_custom)
hold on
plot(out.Wr_builtin)
hold off

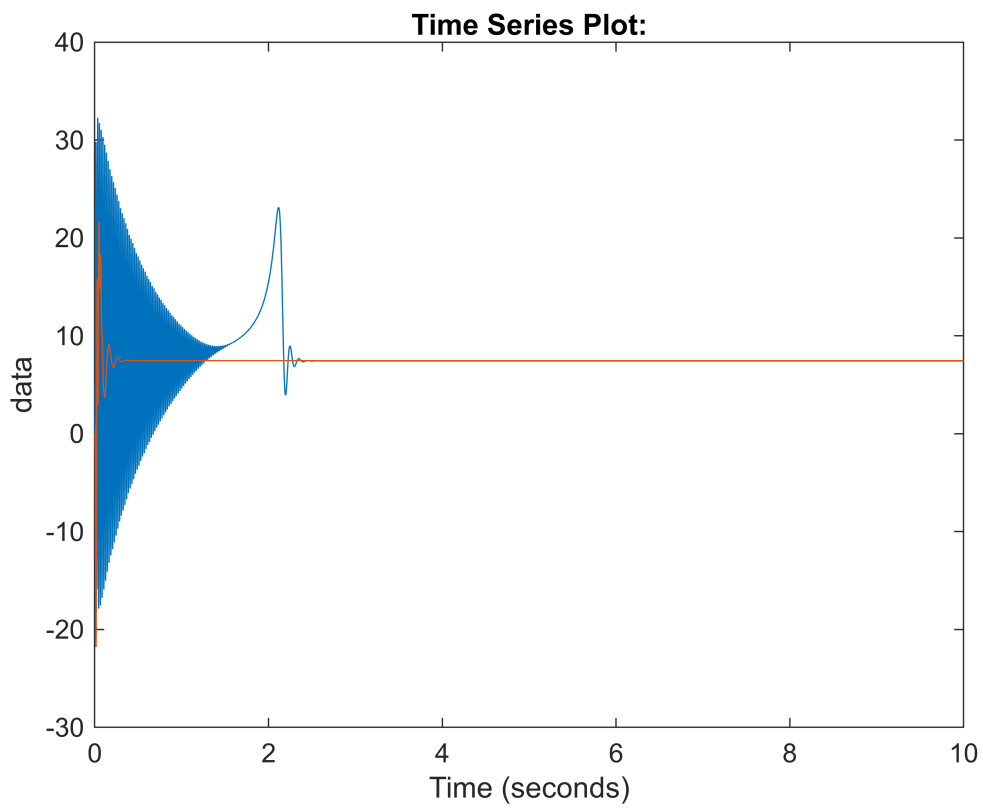
```



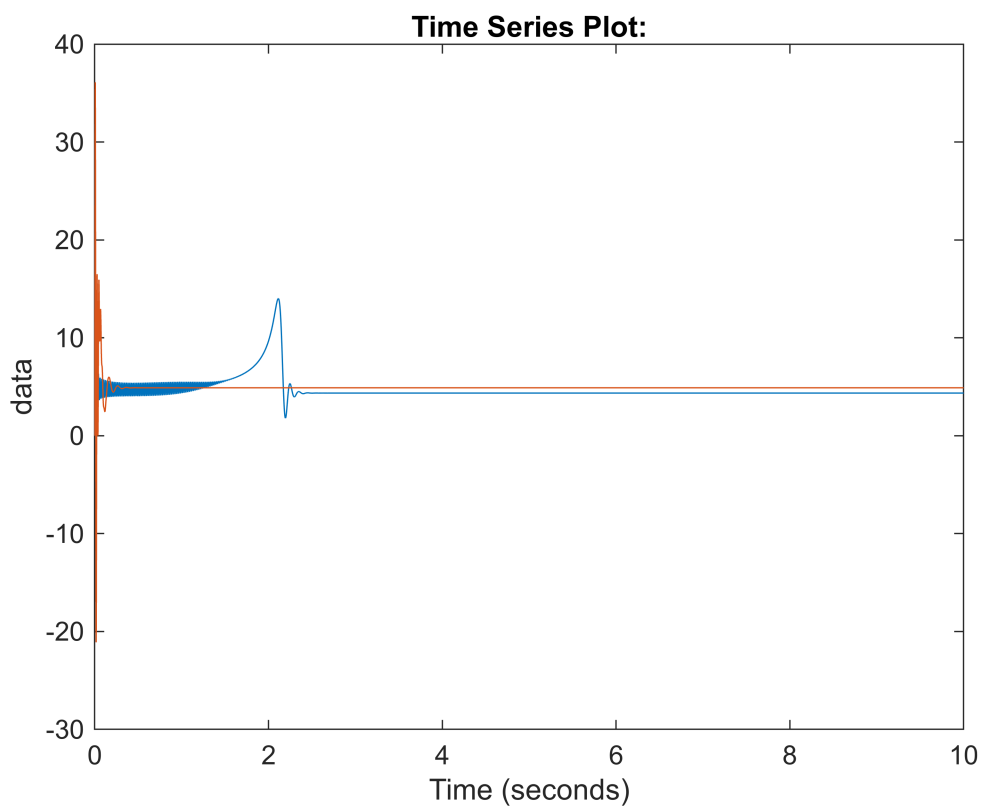
```

plot(out.Te_custom)
hold on
plot(out.Te_builtin)
hold off

```

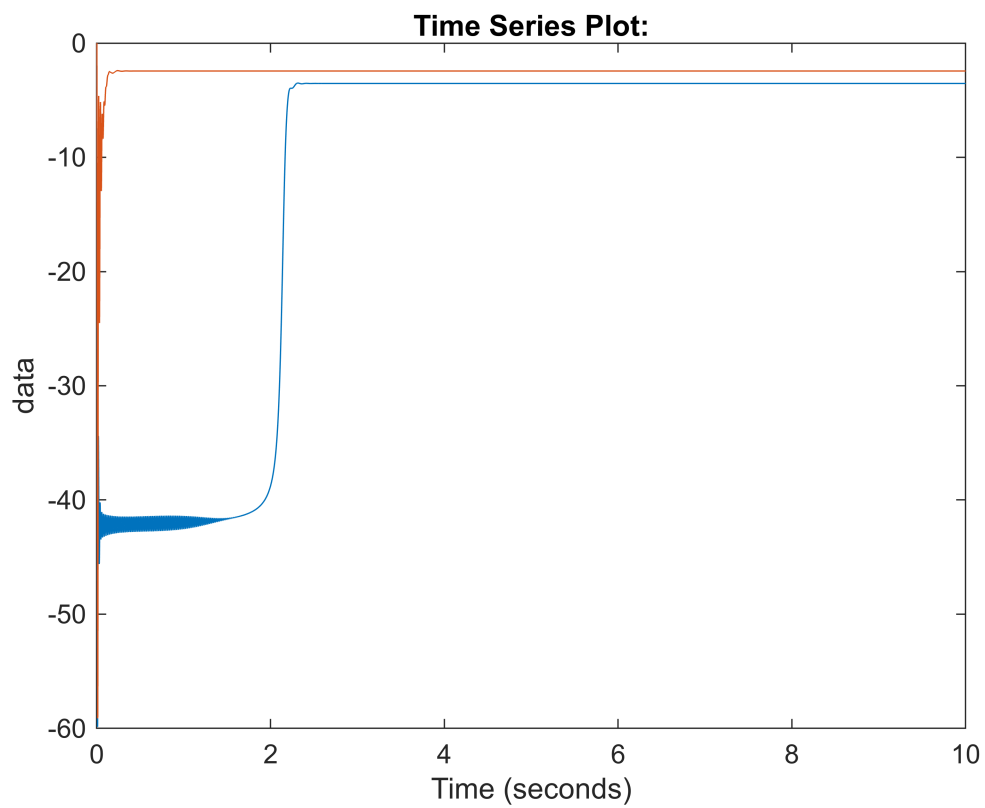


```
plot(out.ids_custom)  
hold on  
plot(out.ids_builtin)  
hold off
```

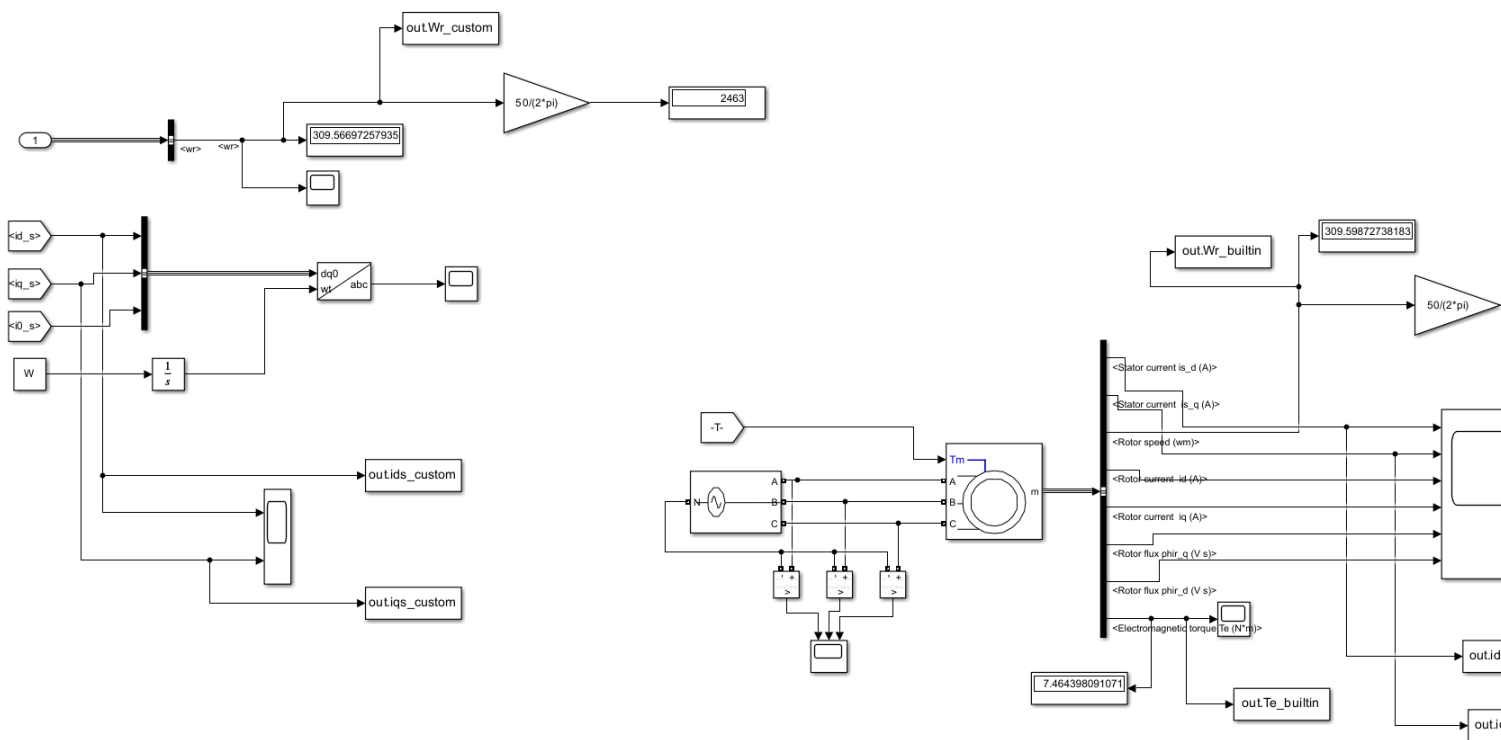
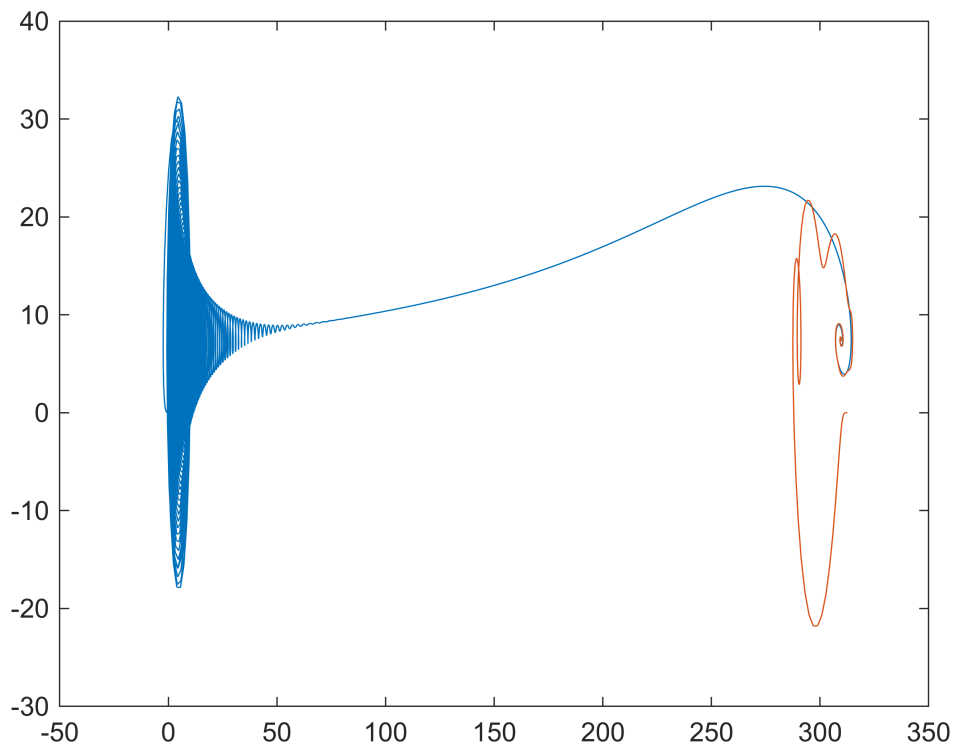


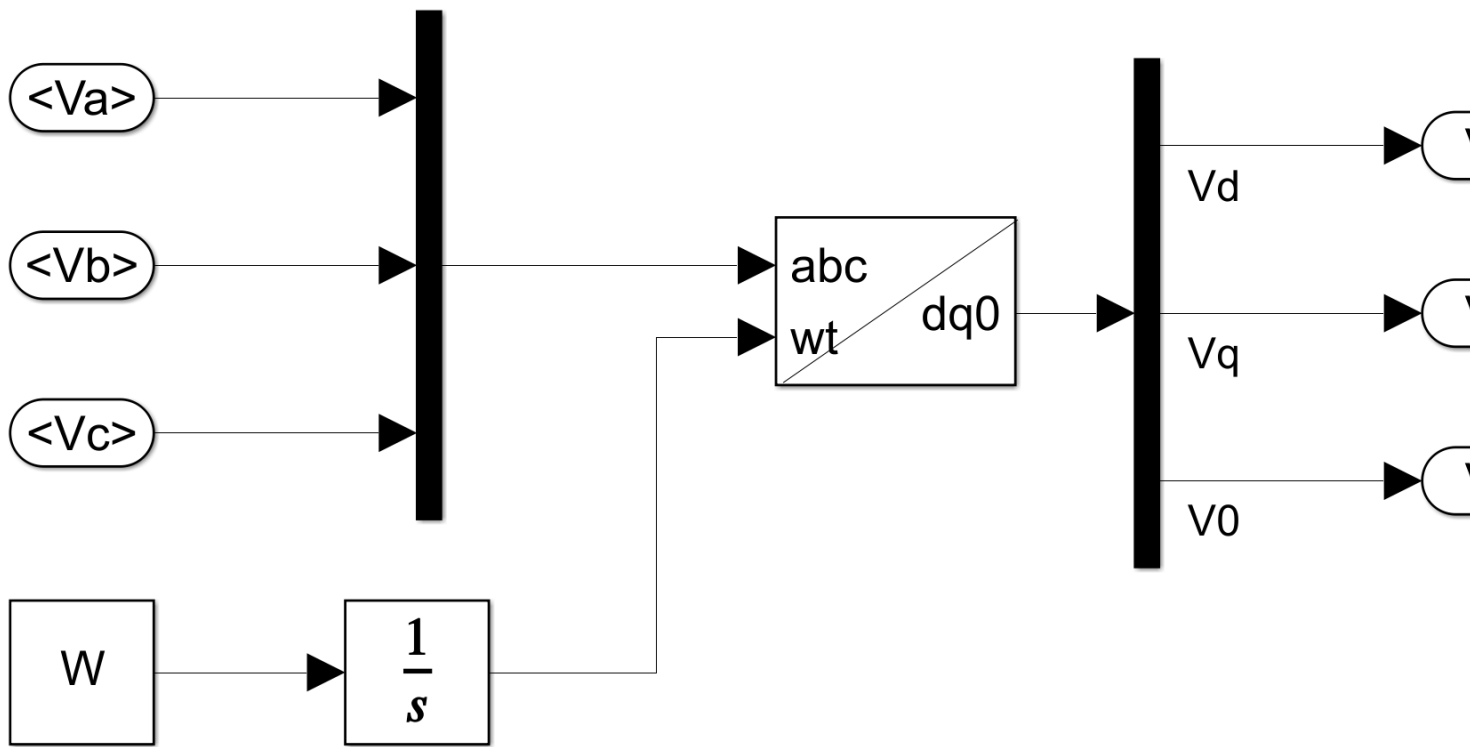
```
plot(out.iqs_custom)
```

```
hold on  
plot(out.iqs_builtin)  
hold off
```



```
plot(out.Wr_custom.Data,out.Te_custom.Data)  
hold on  
plot(out.Wr_builtin.Data,out.Te_builtin.Data)  
hold off
```





## Input Signal Processing

