Box-Cox Analysis for net imports

No Terms with Pr F < 0.00001 at the Selected Lambda

Dependent Variable BoxCox(net imports)
net imports

Number of Observations Read	48
Number of Observations Used	48

Model Statement Specification Details				
Type	**DF**	**Variable**	**Description**	**Value**
Dep	1	BoxCox(net imports)	Lambda Used	1
			Lambda	1
			Log Likelihood	-51.5510
			Conv. Lambda	1
			Conv. Lambda LL	-51.5510
			CI Limit	-61.3067
			Alpha	0.00001
			Parameter	2
			Options	Convenient Lambda Used
			Label	net imports
Ind	1	Identity(Real-World MPG)	Label	Real-World MPG

**The TRANSREG Procedure Hypothesis Tests for BoxCox(net imports)**
net imports

| Univariate ANOVA Table Based on the Usual Degrees of Freedom					
Source	**DF**	**Sum of Squares**	**Mean Square**	**F Value**	**Liberal p**
Model	1	134.9013	134.9013	15.75	>= 0.0003
The above statistics are not adjusted for the fact that the dependent variable was transformed and so are generally liberal.					

Univariate ANOVA Table Based on the Usual Degrees of Freedom					
Source	DF	Sum of Squares	Mean Square	F Value	Liberal p
Error	46	394.0977	8.5673		
Corrected Total	47	528.9989			

The above statistics are not adjusted for the fact that the dependent variable was transformed and so are generally liberal.

Root MSE	2.92700	R-Square	0.2550
Dependent Mean	8.03108	Adj R-Sq	0.2388
Coeff Var	36.44592	Lambda	1.0000

Univariate Regression Table Based on the Usual Degrees of Freedom							
Variable	DF	Coefficient	Type II Sum of Squares	Mean Square	F Value	Liberal p	Label
Intercept	1	17.9403463	429.872	429.872	50.18	>= <.0001	Intercept
Identity(Real-World MPG)	1	-0.4163511	134.901	134.901	15.75	>= 0.0003	Real-World MPG

The above statistics are not adjusted for the fact that the dependent variable was transformed and so are generally liberal.
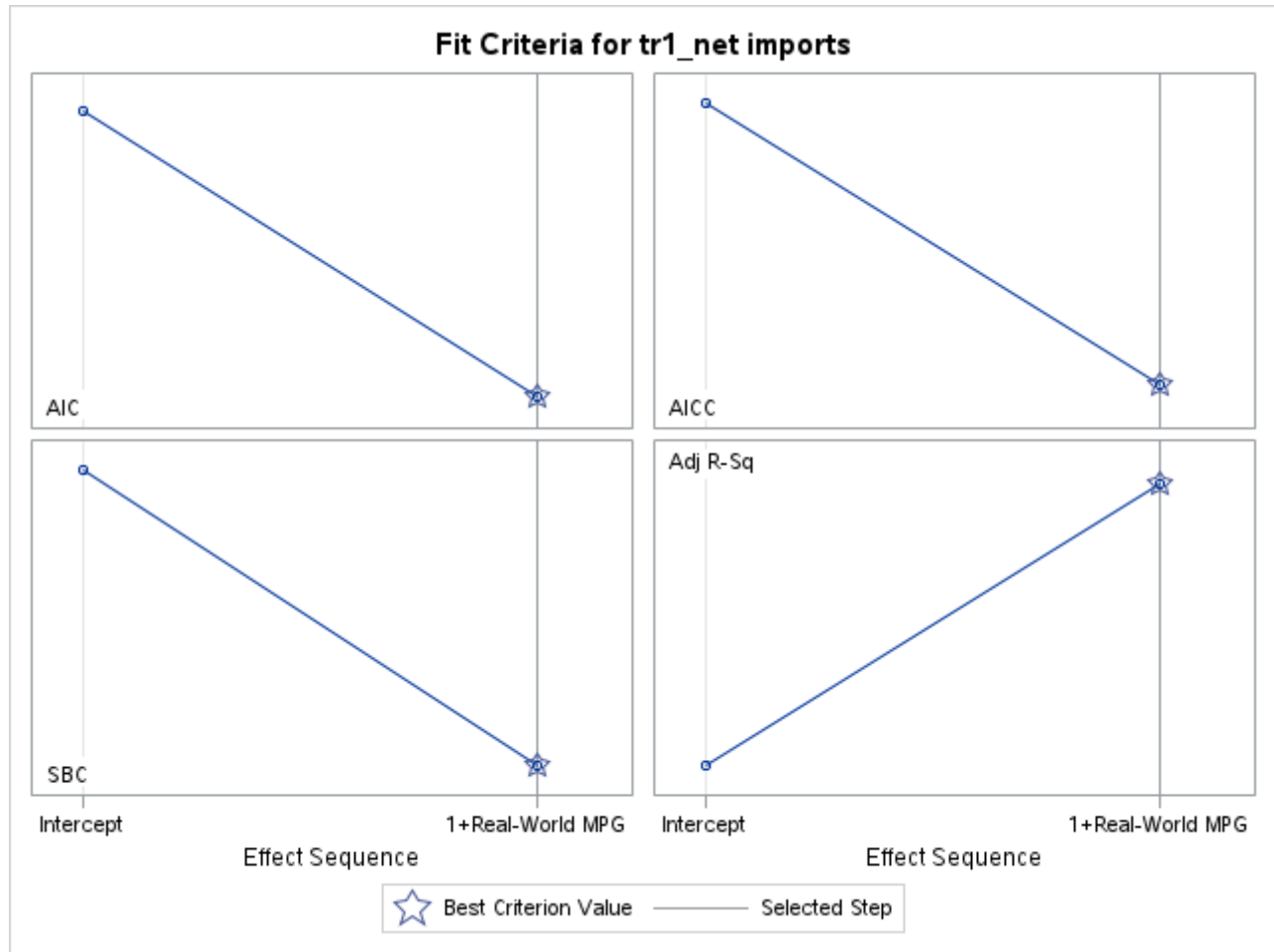
Observed Data

Observed by Predicted
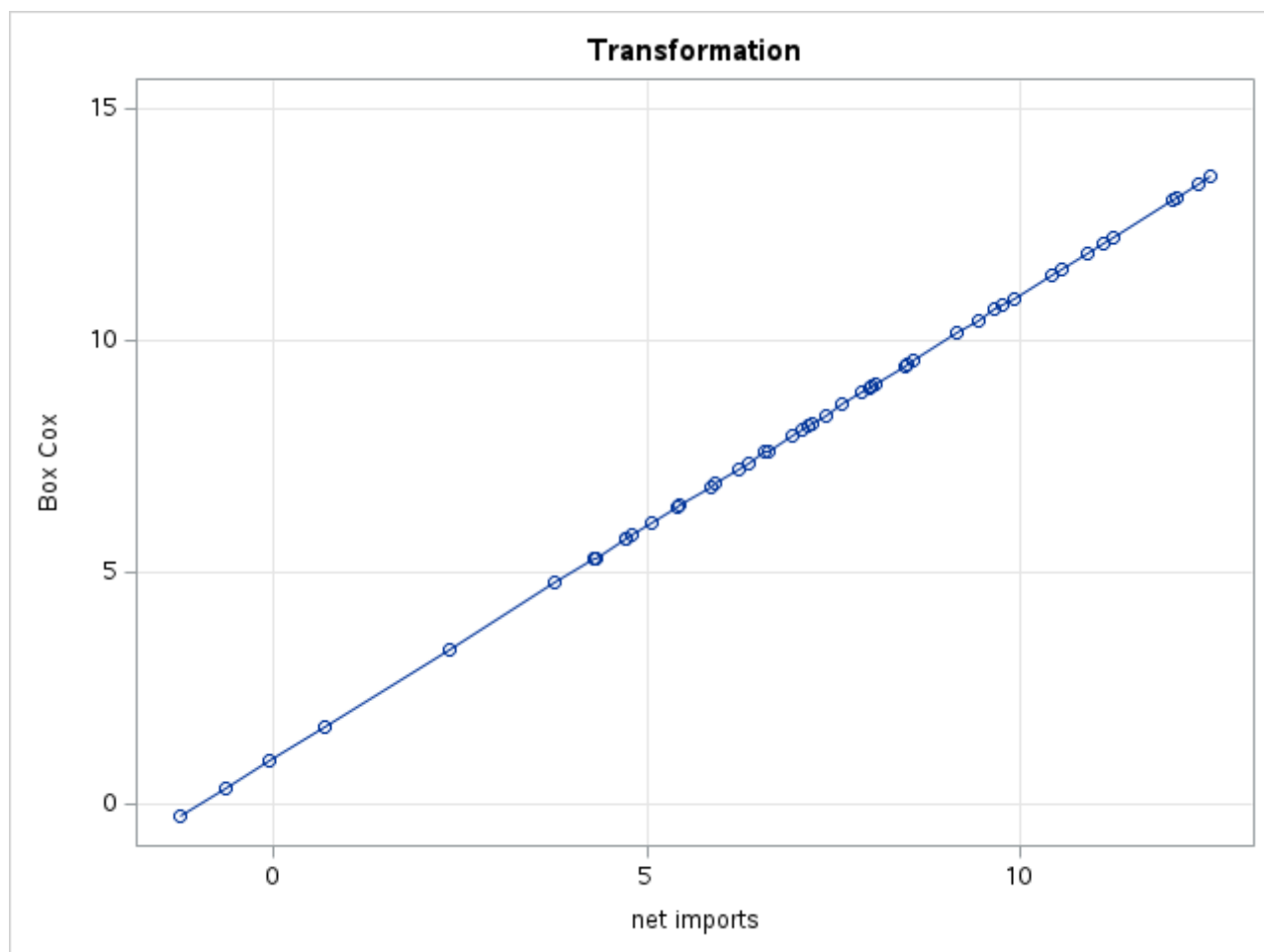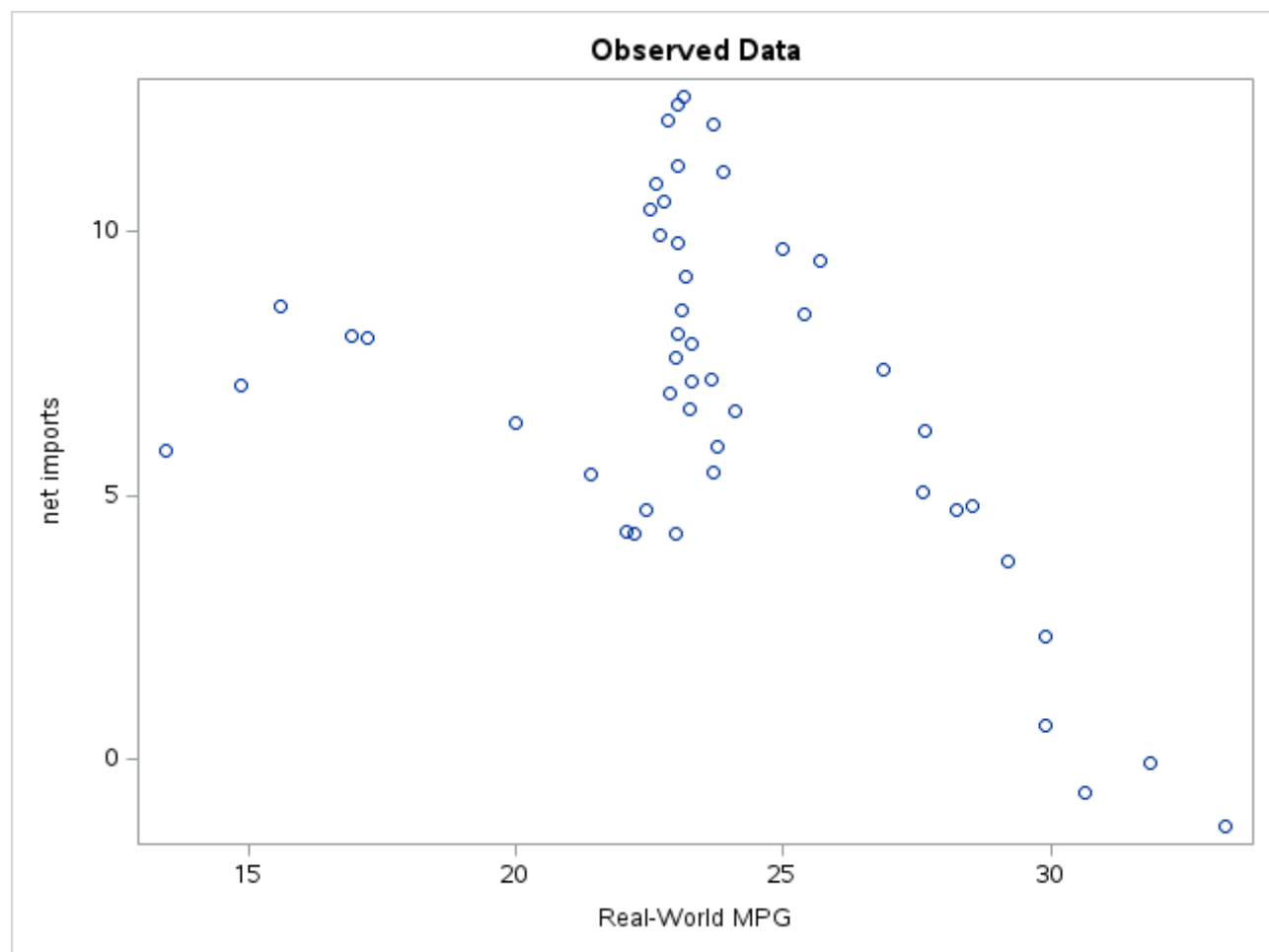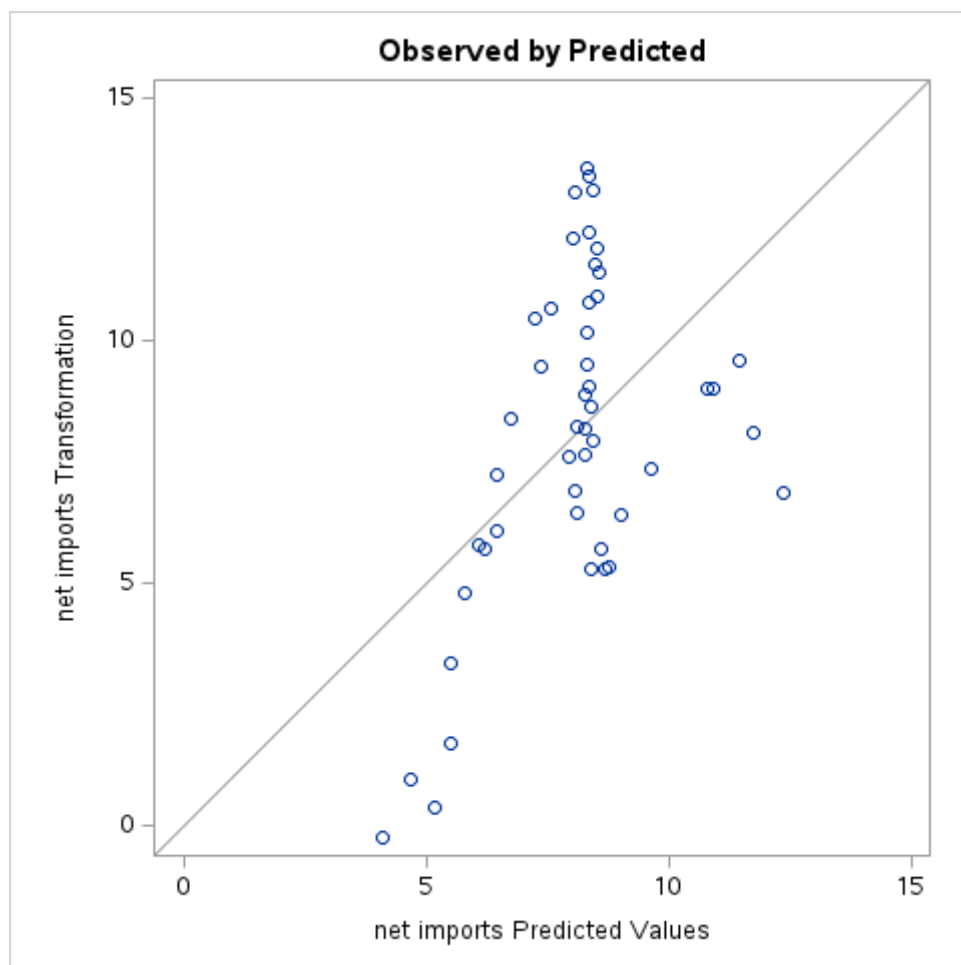
Data Set	WORK.TRANSFORM
Dependent Variable	tr1_net imports
Selection Method	Stepwise
Select Criterion	SBC
Stop Criterion	SBC
Effect Hierarchy Enforced	None

Number of Observations Read	48
Number of Observations Used	48

Dimensions	
Number of Effects	2
Number of Parameters	2

Stepwise Selection Summary				
Step	Effect Entered	Effect Removed	Number Effects In	SBC
0	Intercept		1	119.0609
1	Real-World MPG		2	108.8015*
* Optimal Value of Criterion				

Selection stopped because all effects are in the final model.

Fit Criteria for tr1_net imports

AIC

AICC

SBC

Adj R-Sq

Intercept   1+Real-World MPG   Intercept   1+Real-World MPG

Effect Sequence   Effect Sequence

☆ Best Criterion Value —— Selected Step

Selected Model

The selected model is the model at the last step (Step 1).
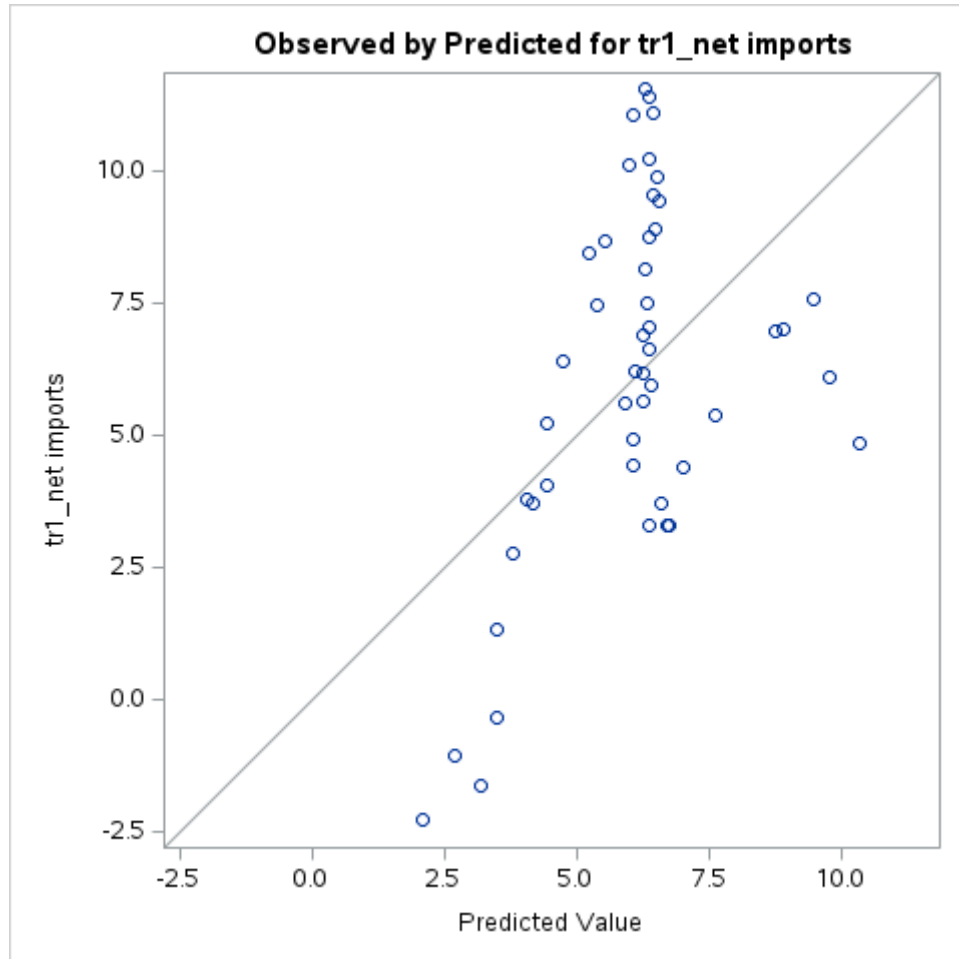
Effects:	Intercept Real-World MPG

Note: The p-values for parameters and effects are not adjusted for the fact that the terms in the model have been selected and so are generally liberal.

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	134.90125	134.90125	15.75	0.0003
Error	46	394.09767	8.56734		
Corrected Total	47	528.99892			

Root MSE	2.92700
Dependent Mean	6.03108
R-Square	0.2550
Adj R-Sq	0.2388
AIC	155.05909
AICC	155.60455
SBC	108.80149

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	15.940346	2.532702	6.29	<.0001
Real-World MPG	1	-0.416351	0.104924	-3.97	0.0003

Model: MODEL1
Dependent Variable: tr1_net imports

Observed by Predicted for tr1_net imports

Fit Diagnostics for tr1_net imports

Observations	48
Parameters	2
Error DF	46
MSE	8.5673
R-Square	0.255
Adj R-Square	0.2388

Residuals for tr1_net imports
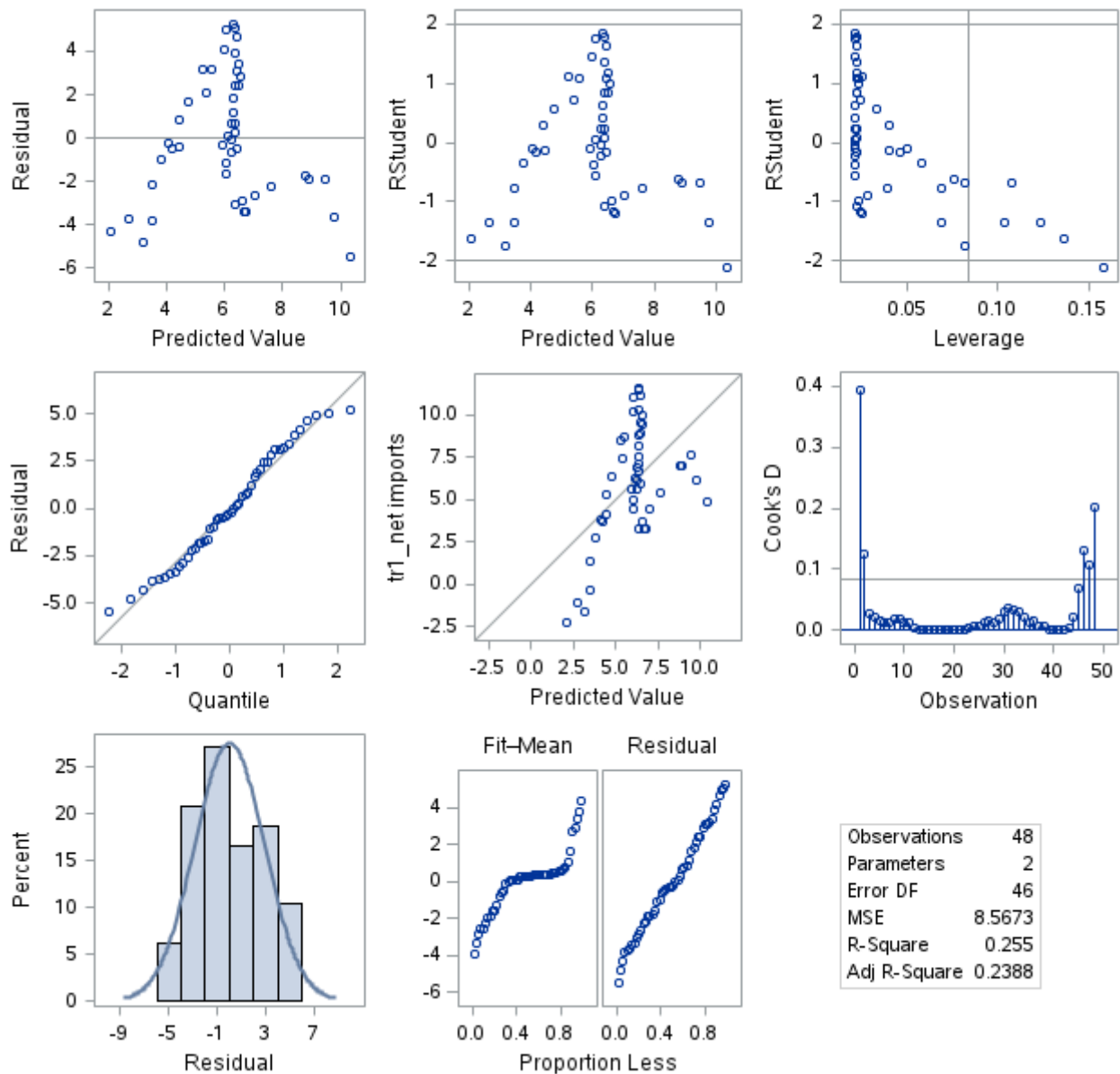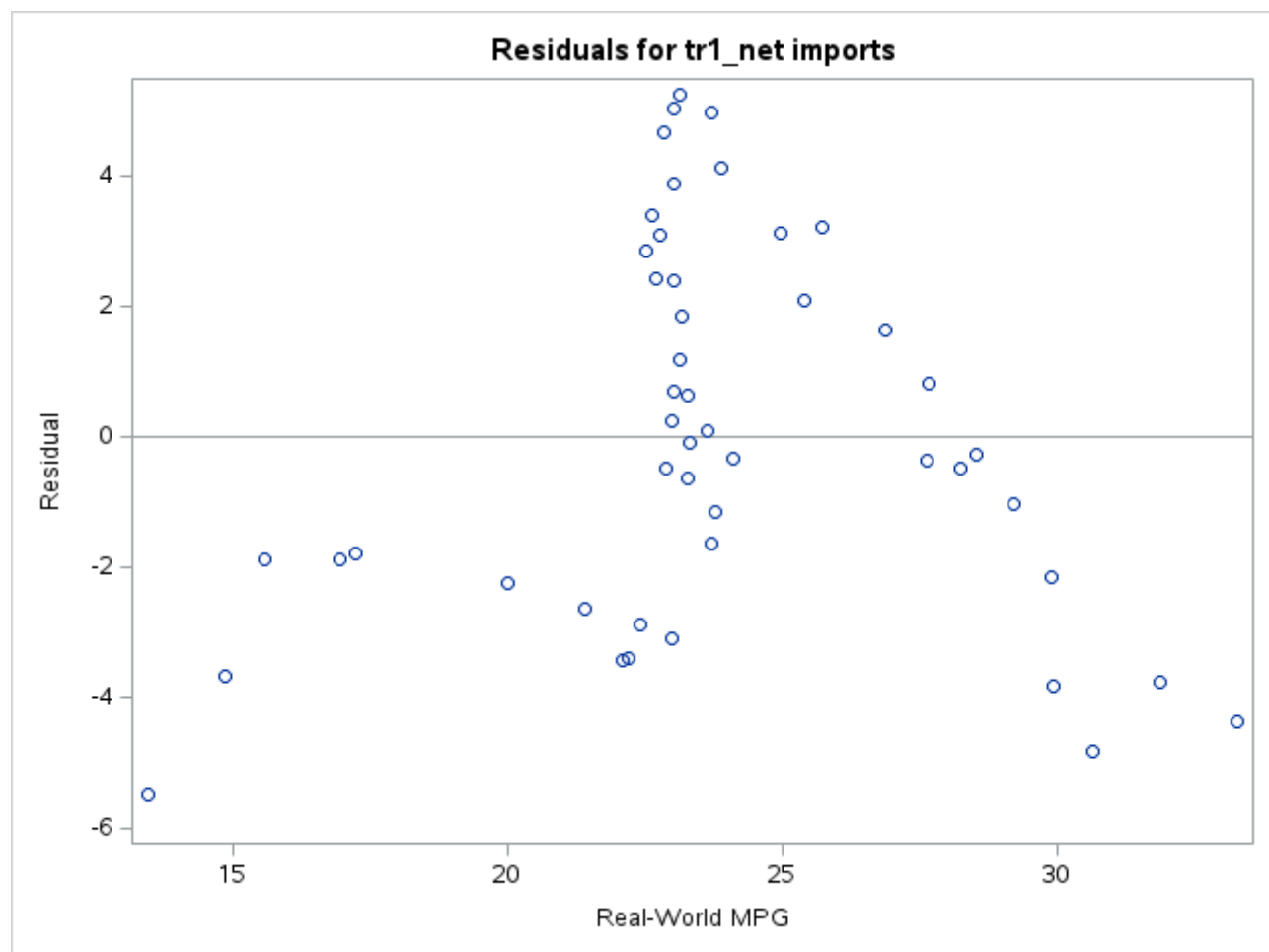
Fit Plot for tr1_net imports

Observations	48
Parameters	2
Error DF	46
MSE	8.5673
R-Square	0.255
Adj R-Square	0.2388

Fit — 95% Confidence Limits — — — 95% Prediction Limits