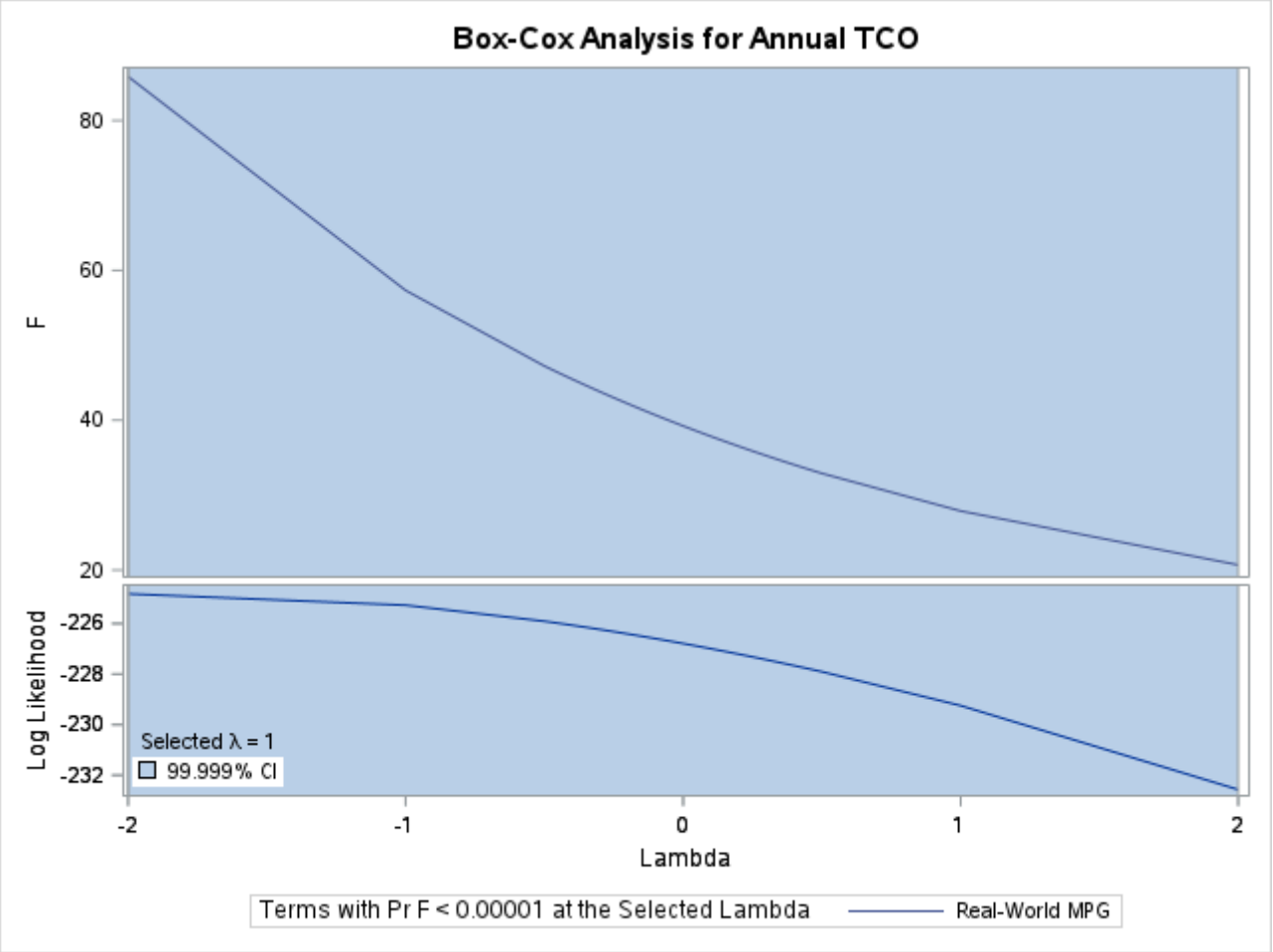


Dependent Variable BoxCox(Annual TCO)
Annual TCO

Number of Observations Read	48
Number of Observations Used	48

TRANSREG Univariate Algorithm Iteration History for BoxCox(Annual TCO)

Iteration Number	Average Change	Maximum Change	R-Square	Criterion Change	Note
1	0.83925	2.61213	0.16467		
2	0.00000	0.00000	0.79327	0.62860	Converged

Algorithm converged.

Model Statement Specification Details

Type	DF	Variable	Description	Value
Dep	12	BoxCox(Annual TCO)	Lambda Used	1
			Lambda	-2
			Log Likelihood	-224.8
			Conv. Lambda	1
			Conv. Lambda LL	-229.2
			CI Limit	-234.6
			Alpha	0.00001
			Parameter	2
			Options	Convenient Lambda Used
				Contains Missing Values

Model Statement Specification Details				
Type	DF	Variable	Description	Value
			Label	Annual TCO
Ind	1	Identity(Real-World MPG)	Label	Real-World MPG

The TRANSREG Procedure Hypothesis Tests for BoxCox(Annual TCO)
Annual TCO

Univariate ANOVA Table Based on the Usual Degrees of Freedom					
Source	DF	Sum of Squares	Mean Square	F Value	Liberal p
Model	1	15680278	15680278	176.51	>= <.0001
Error	46	4086418	88835		
Corrected Total	47	19766696			
The above statistics are not adjusted for the fact that the dependent variable was transformed and so are generally liberal.					

Root MSE	298.05231	R-Square	0.7933
Dependent Mean	2492.93030	Adj R-Sq	0.7888
Coeff Var	11.95590	Lambda	1.0000

Adjusted Multivariate ANOVA Table Based on the Usual Degrees of Freedom					
Dependent Variable Scoring Parameters=12 S=1 M=5 N=16.5					
Statistic	Value	F Value	Num DF	Den DF	p
Wilks' Lambda	0.206732	11.19	12	35	<.0001
Pillai's Trace	0.793268	11.19	12	35	<.0001
Hotelling-Lawley Trace	3.837169	11.19	12	35	<.0001
Roy's Greatest Root	3.837169	11.19	12	35	<.0001

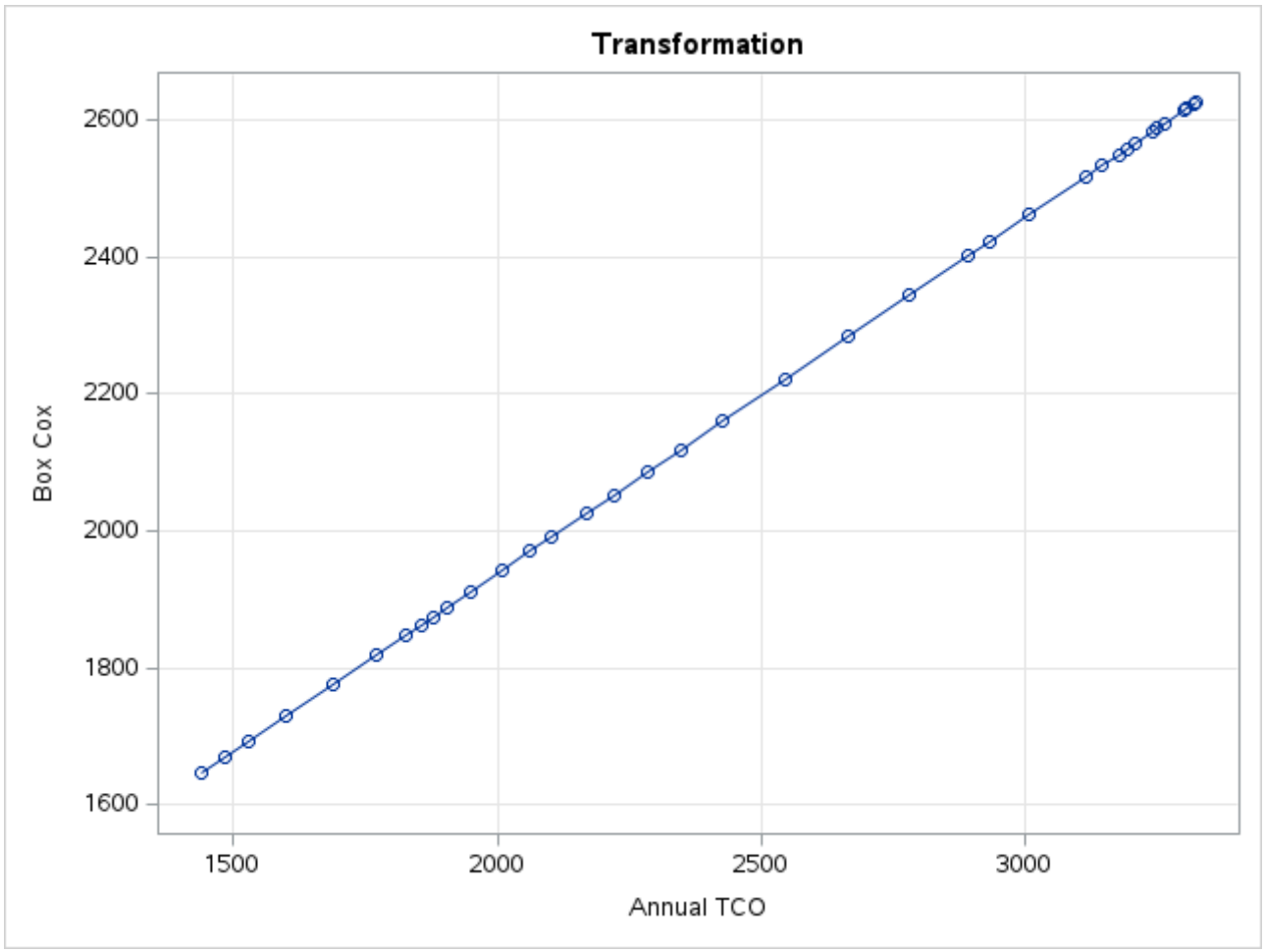
The Wilks' Lambda, Pillai's Trace, and Hotelling-Lawley Trace statistics are a conservative adjustment of the normal statistics. Roy's Greatest Root is liberal. These statistics are normally defined in terms of the squared canonical correlations which are the eigenvalues of the matrix H*inv(H+E). Here the R-Square is used for the first eigenvalue and all other eigenvalues are set to zero since only one linear combination is used. Degrees of freedom are computed assuming all linear combinations contribute to the Lambda and Trace statistics, so the F tests for those statistics are conservative. The p values for the liberal and conservative statistics provide approximate lower and upper bounds on p. A liberal test statistic with conservative degrees of freedom and a conservative test statistic with liberal degrees of freedom yield at best an approximate p value, which is indicated by a "~" before the p value. The multivariate F tests are all the same since S=1.0.

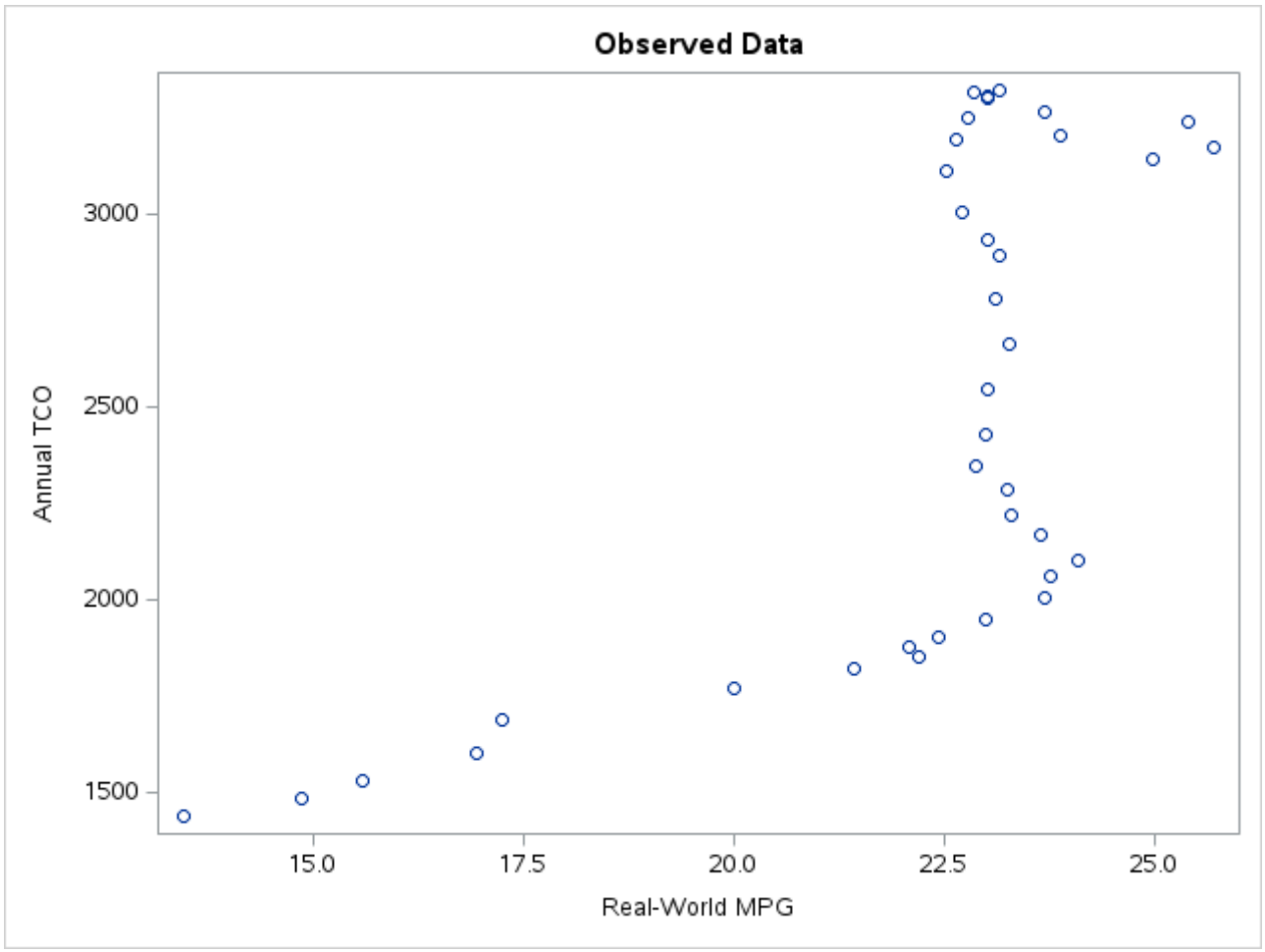
Univariate Regression Table Based on the Usual Degrees of Freedom							
Variable	DF	Coefficient	Type II Sum of Squares	Mean Square	F Value	Liberal p	Label
Intercept	1	-885.46322	1047174	1047174	11.79	>= 0.0013	Intercept
Identity(Real-World MPG)	1	141.94779	1.568E7	1.568E7	176.51	>= <.0001	Real-World MPG

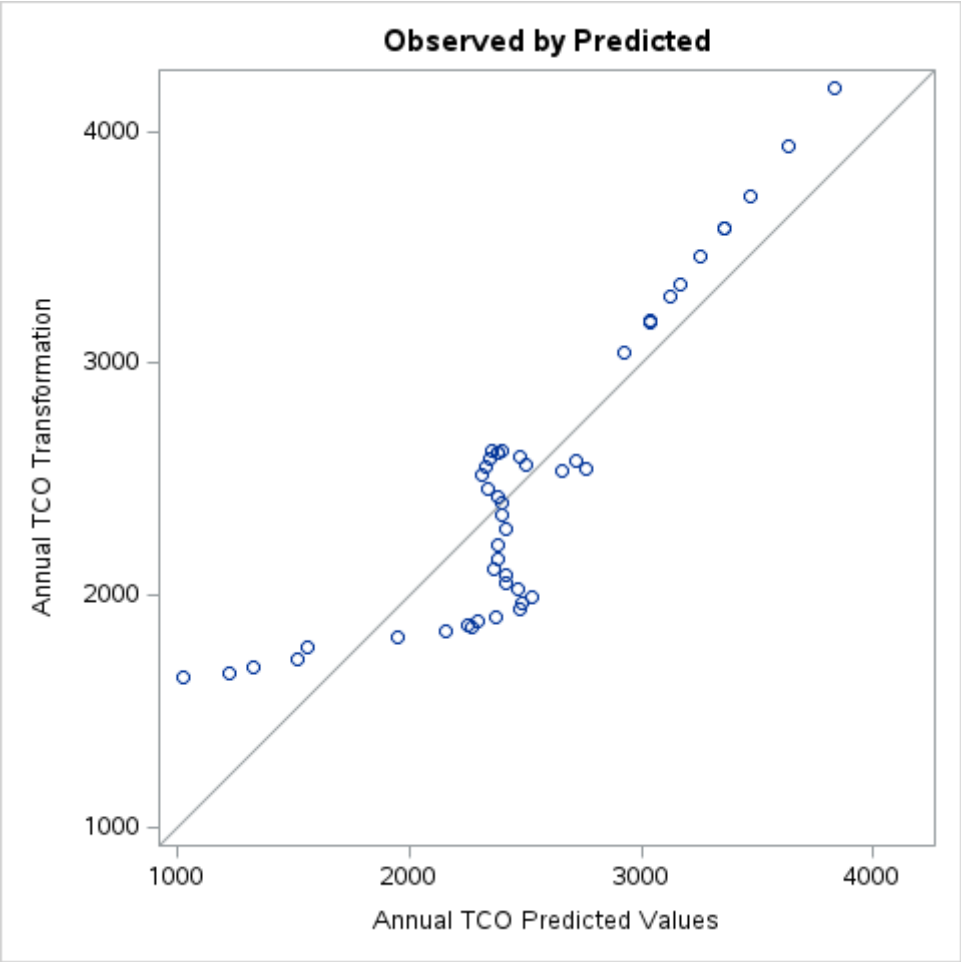
The above statistics are not adjusted for the fact that the dependent variable was transformed and so are generally liberal.

Adjusted Multivariate Regression Table Based on the Usual Degrees of Freedom								
Variable	Coefficient	Statistic	Value	F Value	Num DF	Den DF	p	Label
Intercept	-885.46322	Wilks' Lambda	0.796015	0.75	12	35	0.6969	Intercept
		Pillai's Trace	0.203985	0.75	12	35	0.6969	
		Hotelling-Lawley Trace	0.256257	0.75	12	35	0.6969	
		Roy's Greatest Root	0.256257	0.75	12	35	0.6969	
Identity(Real-World MPG)	141.94779	Wilks' Lambda	0.206732	11.19	12	35	<.0001	Real-World MPG
		Pillai's Trace	0.793268	11.19	12	35	<.0001	
		Hotelling-Lawley Trace	3.837169	11.19	12	35	<.0001	
		Roy's Greatest Root	3.837169	11.19	12	35	<.0001	

These statistics are adjusted in the same way as the multivariate statistics above.


Transformation
2600
2400
2200
2000
1800
1600
Box Cox
1500
2000
2500
3000
Annual TCO


Observed Data
Annual TCO
3000
2500
2000
1500
15.0
17.5
20.0
22.5
25.0
Real-World MPG



Data Set	WORK.TRANSFORM
Dependent Variable	tr1_Annual TCO
Selection Method	Stepwise
Select Criterion	SBC
Stop Criterion	SBC
Effect Hierarchy Enforced	None

Number of Observations Read	48
Number of Observations Used	37

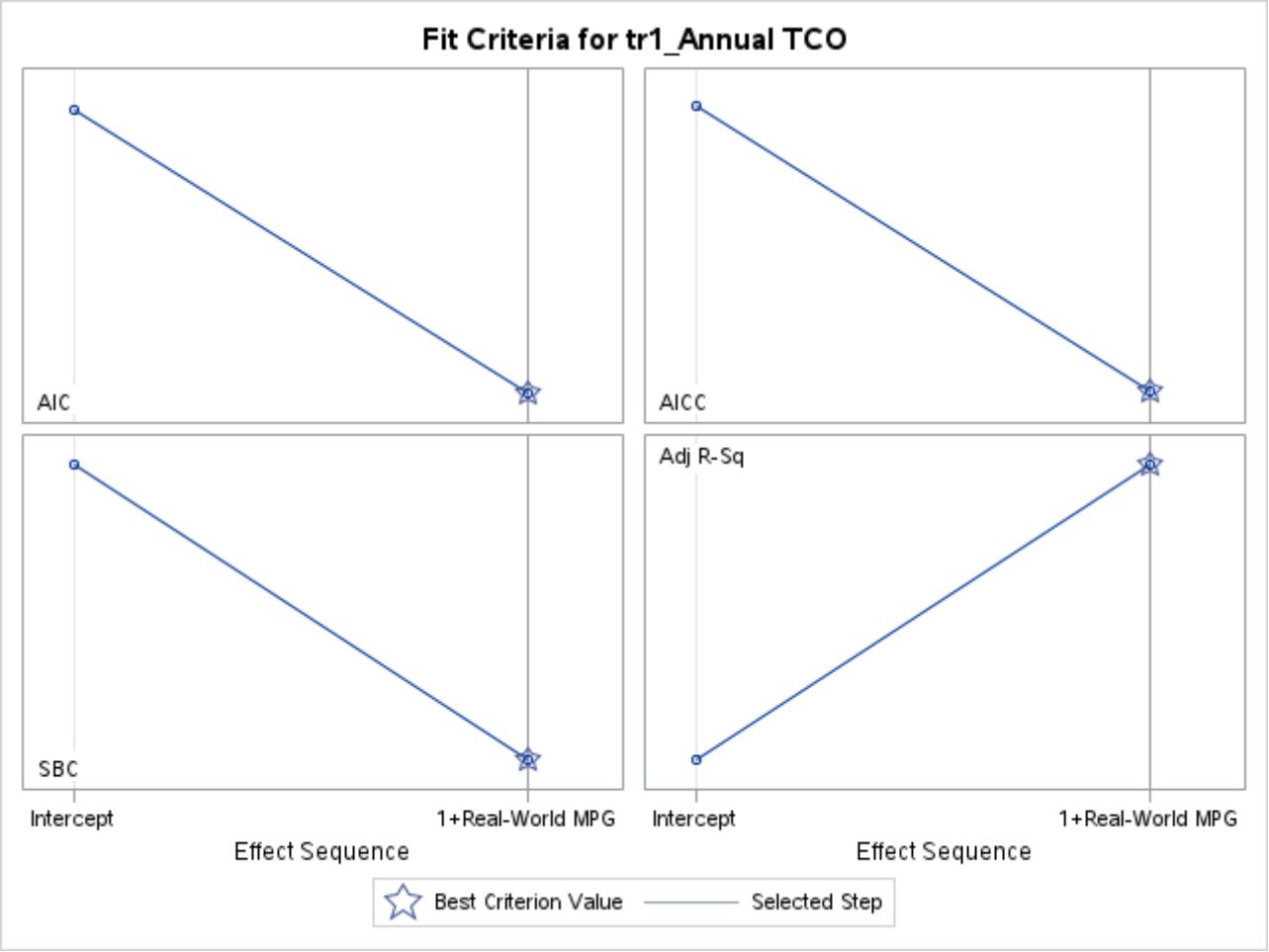
Dimensions	
Number of Effects	2
Number of Parameters	2

Stepwise Selection Summary

Step	Effect Entered	Effect Removed	Number Effects In	SBC
0	**Intercept**		1	481.7235
1	**Real-World MPG**		2	463.6580*

*** Optimal Value of Criterion**

Selection stopped because all effects are in the final model.



Selected Model

The selected model is the model at the last step (Step 1).

Effects:	Intercept Real-World MPG

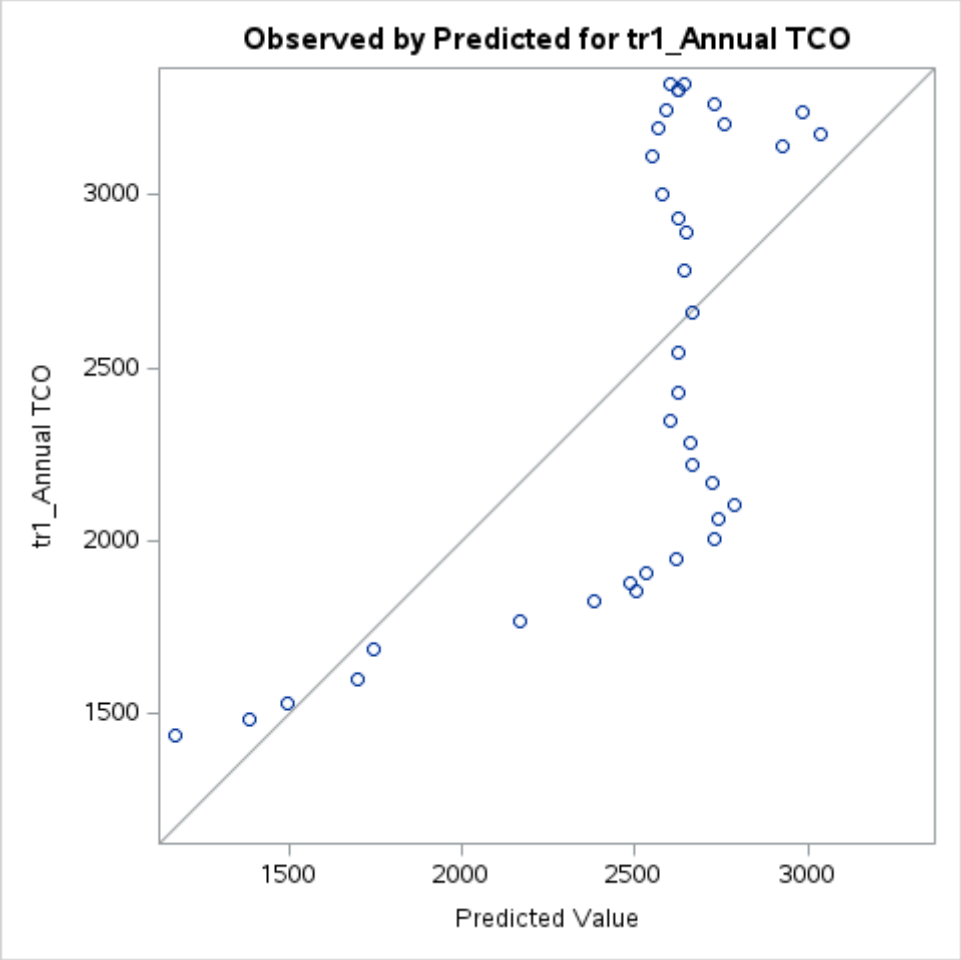
Note: The p-values for parameters and effects are not adjusted for the fact that the terms in the model have been selected and so are generally liberal.

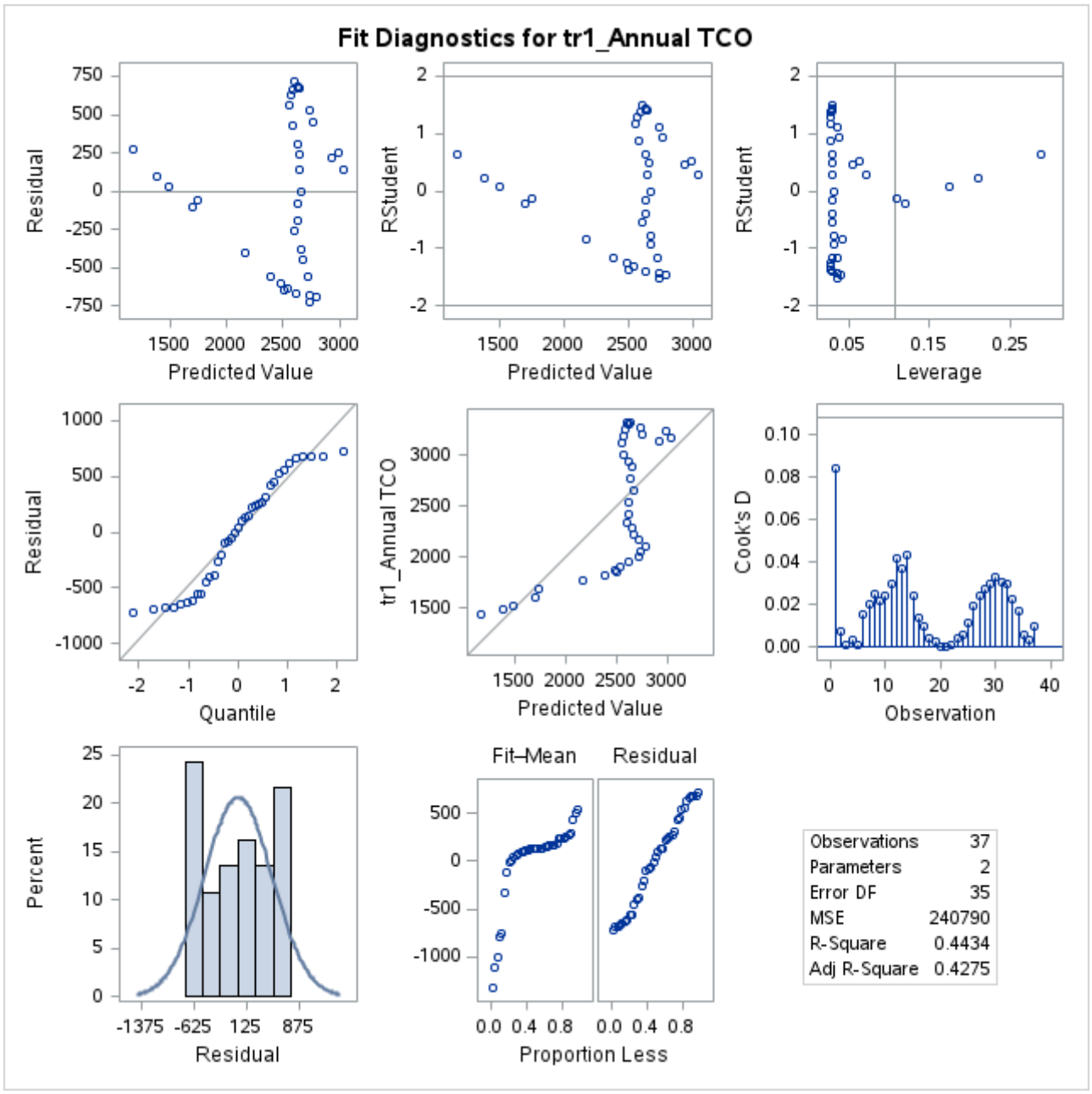
Analysis of Variance					
Source	**DF**	**Sum of Squares**	**Mean Square**	**F Value**	**Pr > F**
Model	1	6712788	6712788	27.88	<.0001
Error	35	8427661	240790		
Corrected Total	36	15140448			

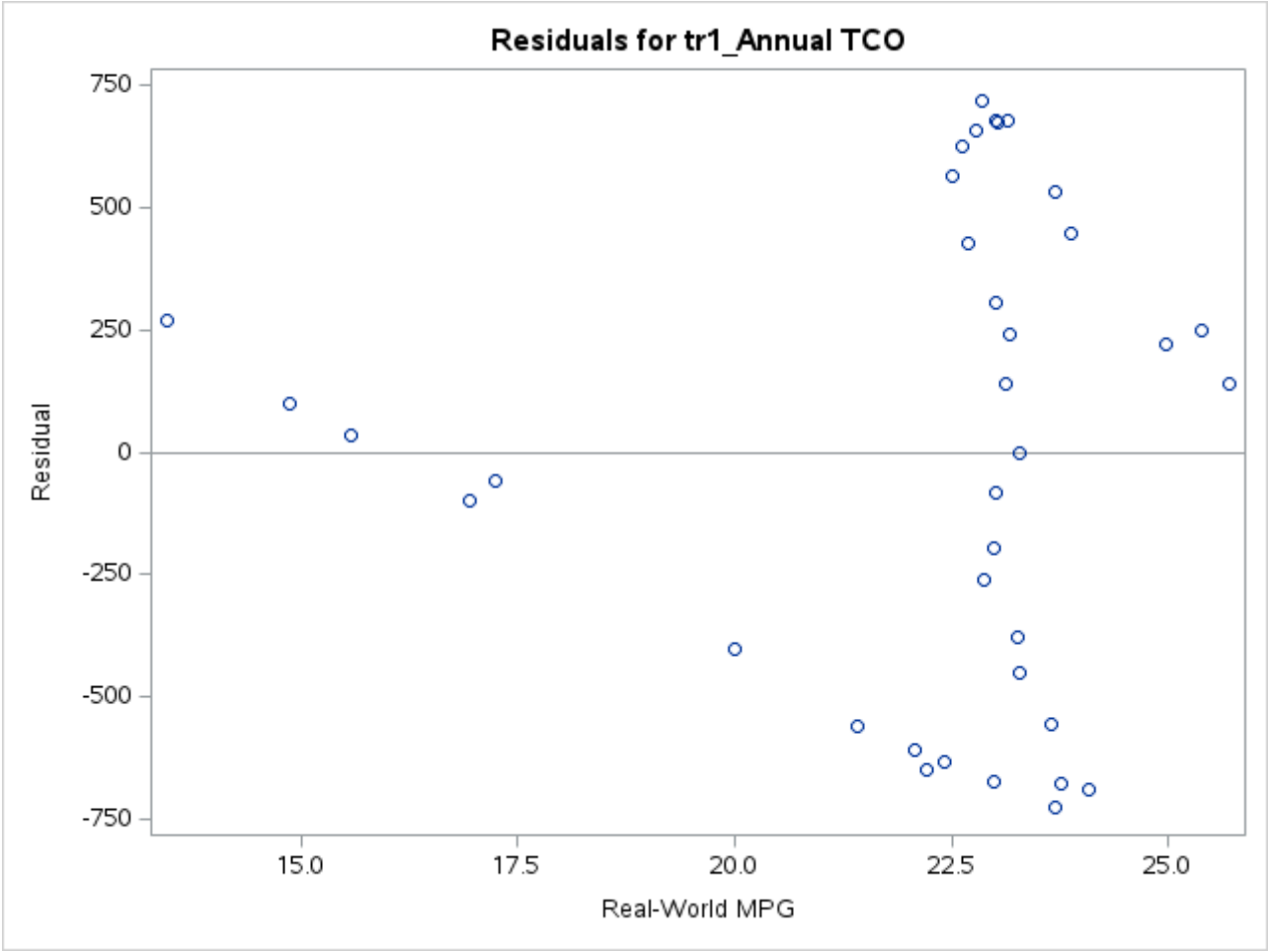
Root MSE	490.70389
Dependent Mean	2490.93030
R-Square	0.4434
Adj R-Sq	0.4275
AIC	499.43614
AICC	500.16341
SBC	463.65798

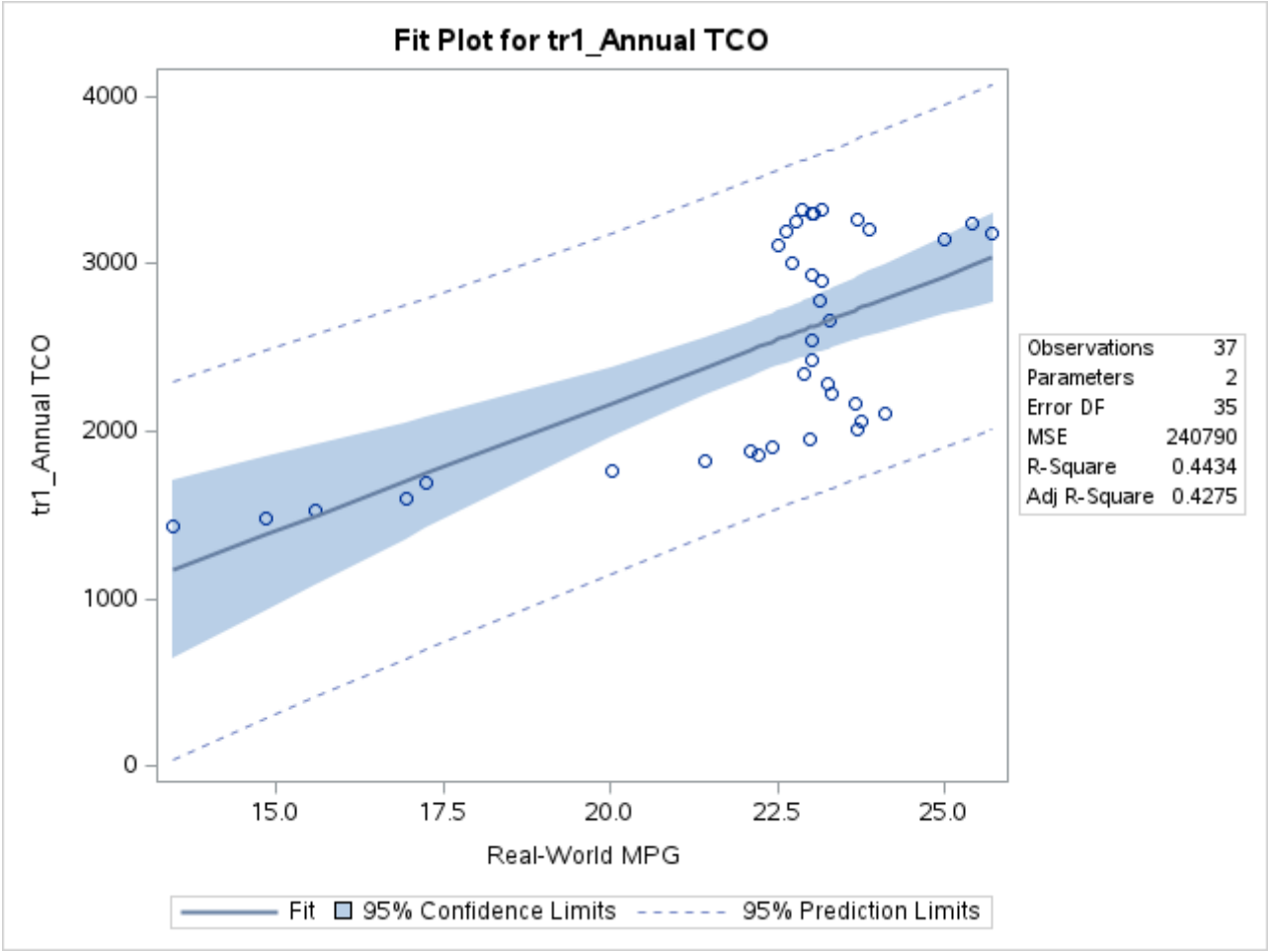
Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	-881.385049	643.773436	-1.37	0.1797
Real-World MPG	1	152.399304	28.863635	5.28	<.0001

Model: MODEL1
Dependent Variable: tr1_Annual TCO




Fit Diagnostics for tr1_Annual TCO
Residual
Predicted Value
RStudent
Predicted Value
RStudent
Leverage
Residual
Quantile
tr1_Annual TCO
Predicted Value
Cook's D
Observation
Percent
Residual
Fit–Mean
Residual
Proportion Less
Observations 37
Parameters 2
Error DF 35
MSE 240790
R-Square 0.4434
Adj R-Square 0.4275


Residuals for tr1_Annual TCO
750
500
250
0
-250
-500
-750
Residual
15.0
17.5
20.0
22.5
25.0
Real-World MPG


Fit Plot for tr1_Annual TCO
tr1_Annual TCO
4000
3000
2000
1000
0
15.0
17.5
20.0
22.5
25.0
Real-World MPG
Observations 37
Parameters 2
Error DF 35
MSE 240790
R-Square 0.4434
Adj R-Square 0.4275
Fit
95% Confidence Limits
95% Prediction Limits