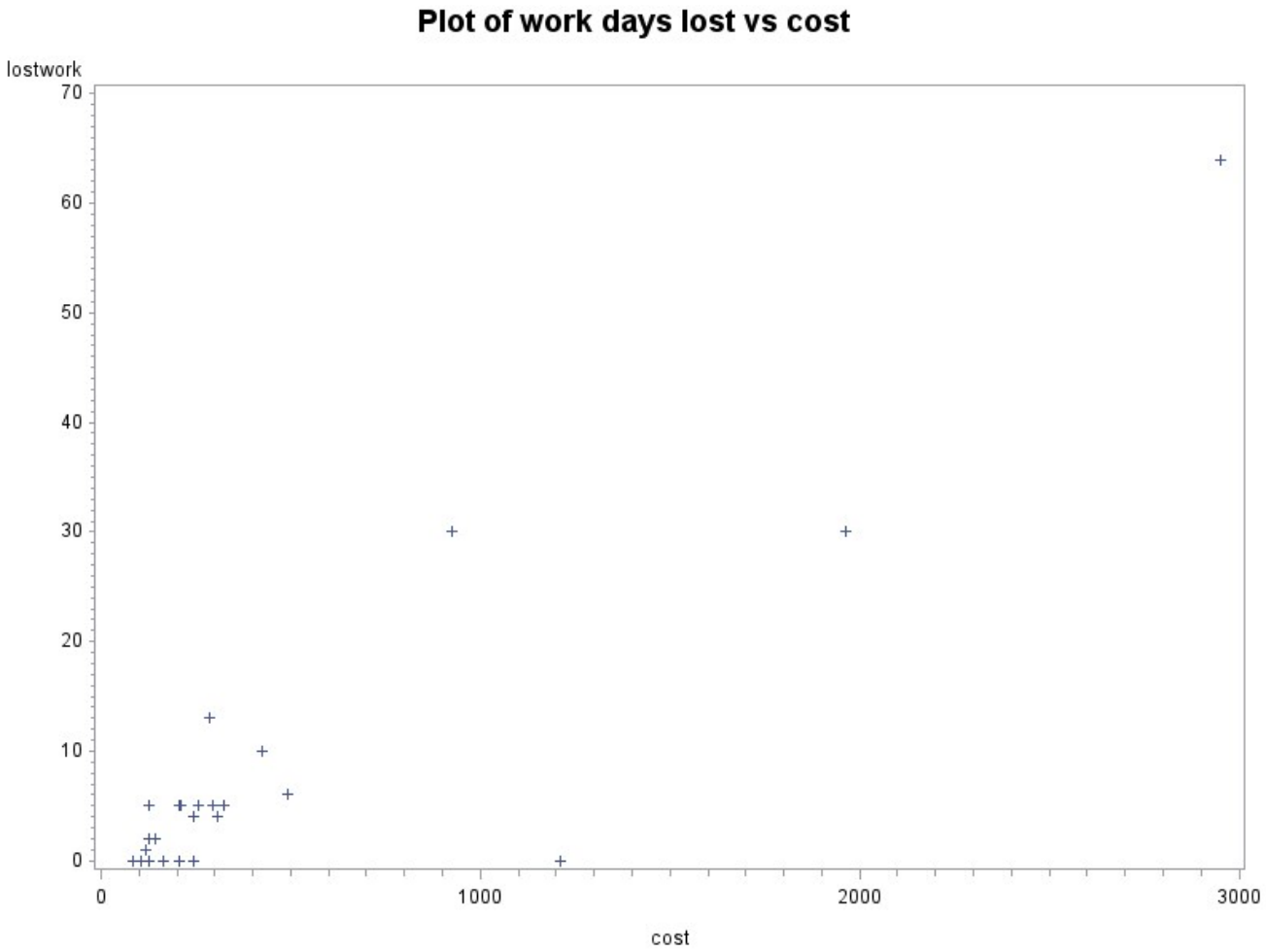

Plot of work days lost vs cost
lostwork
70
60
50
40
30
20
10
0
0
1000
2000
3000
cost

Correlation of work days lost vs cost

The CORR Procedure

1 With Variables:	cost
1 Variables:	lostwork

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
cost	38	340.13158	566.38609	12925	85.00000	2951
lostwork	38	5.21053	12.04083	198.00000	0	64.00000

Pearson Correlation Coefficients, N = 38

Prob > |r| under H0: Rho=0

	lostwork
cost	0.90876 <.0001

Correlation of house size, appliance index, family size, and income

The CORR Procedure

4 Variables:	sqft appliancecap famnum income

Pearson Correlation Coefficients, N = 60
Prob > |r| under H0: Rho=0

	sqft	appliancecap	famnum	income
sqft	1.00000	0.83167 <.0001	-0.19500 0.1354	0.86077 <.0001
appliancecap	0.83167 <.0001	1.00000	-0.12157 0.3548	0.93423 <.0001
famnum	-0.19500 0.1354	-0.12157 0.3548	1.00000	-0.08524 0.5173
income	0.86077 <.0001	0.93423 <.0001	-0.08524 0.5173	1.00000

Correlation of peak loak vs air conditioning capacity

The CORR Procedure

1 With Variables:	accap
1 Variables:	peakload

Pearson Correlation Coefficients, N = 60 Prob > |r| under H0: Rho=0	
	peakload
accap	0.92727 <.0001

Estimated regression lines of peak load with air capacity as the explanatory variable

The REG Procedure
Model: MODEL1
Dependent Variable: peakload

Number of Observations Read	60
Number of Observations Used	60

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	103.68699	103.68699	355.80	<.0001
Error	58	16.90217	0.29142		
Corrected Total	59	120.58915			

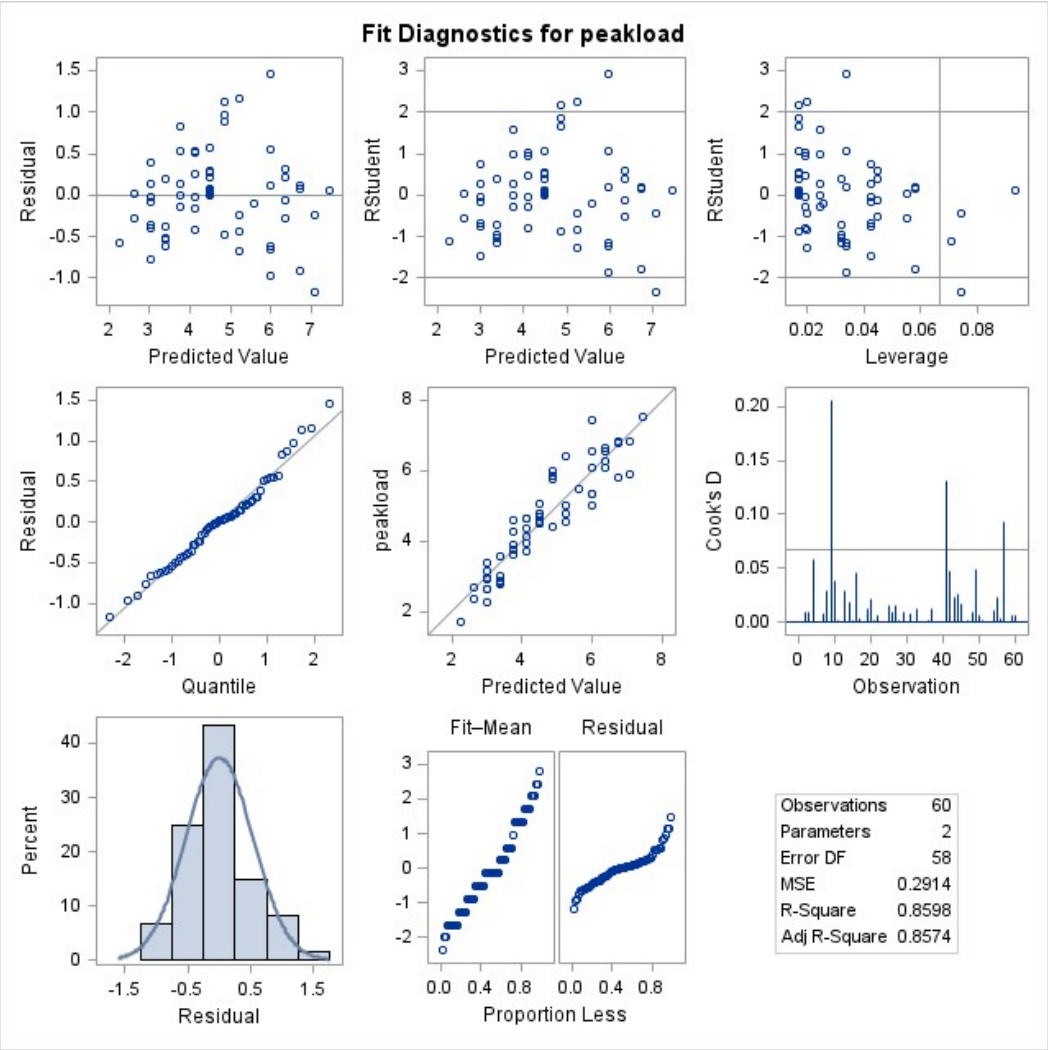
Root MSE	0.53983	R-Square	0.8598
Dependent Mean	4.63792	Adj R-Sq	0.8574
Coeff Var	11.63950		

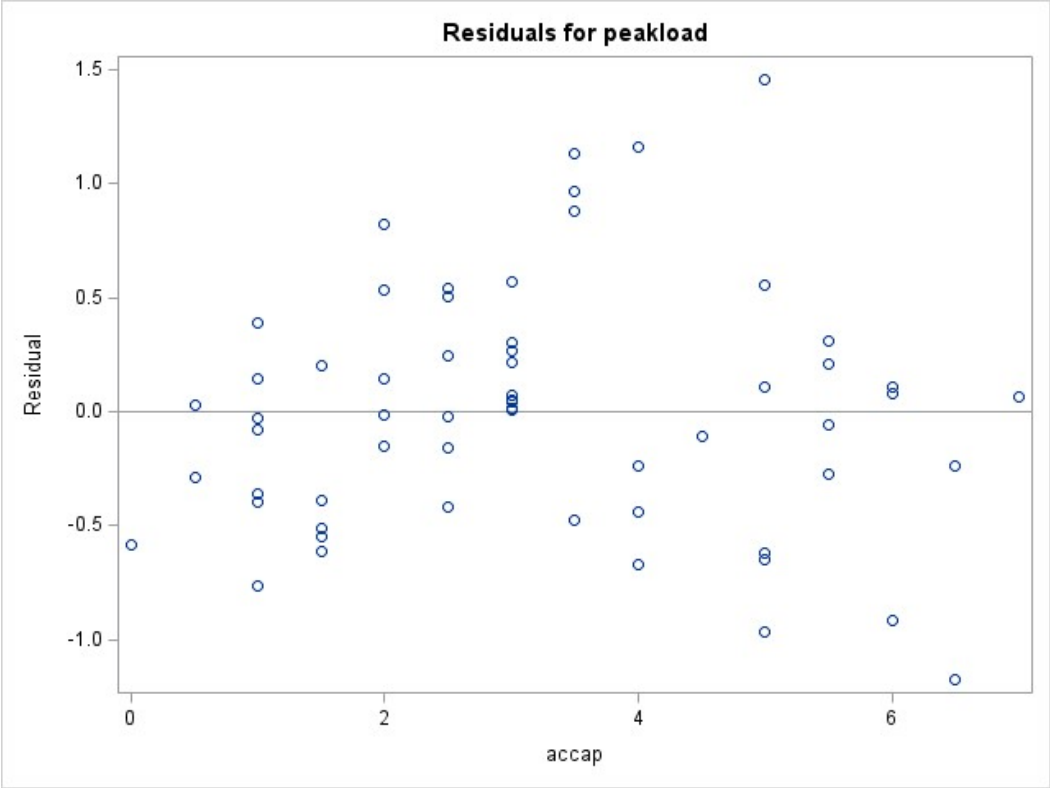
Parameter Estimates

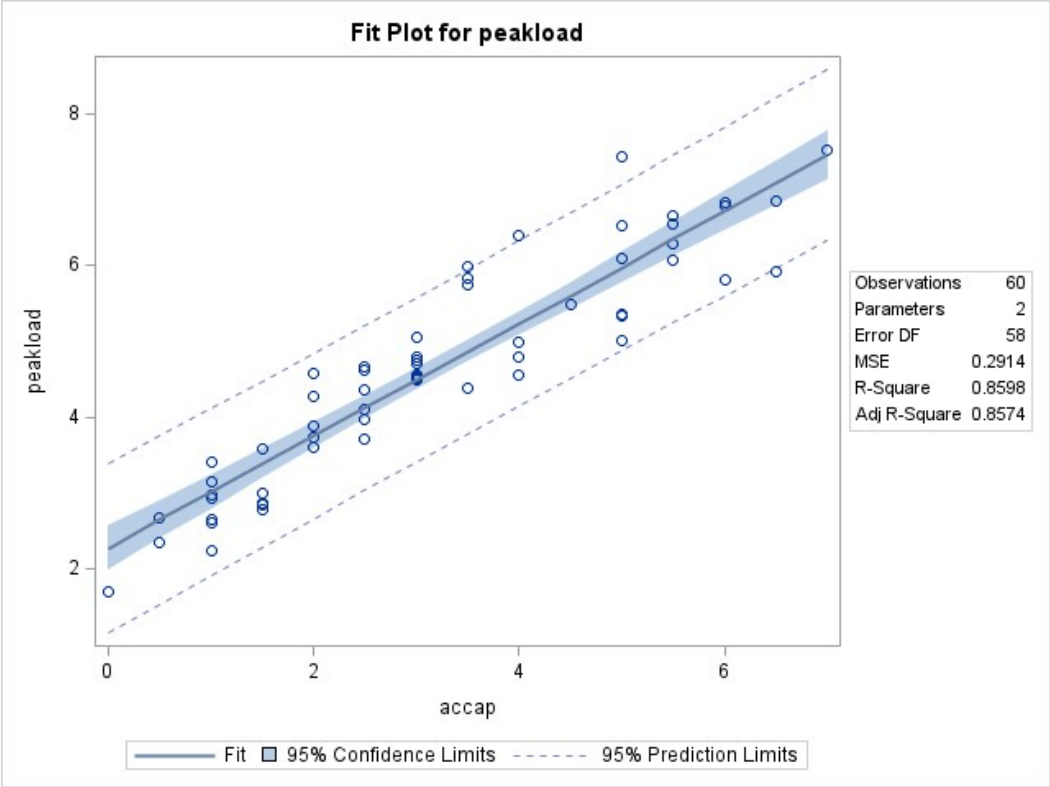
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	2.26523	0.14380	15.75	<.0001
accap	1	0.74147	0.03931	18.86	<.0001

Estimated regression lines of peak load with air capacity as the explanatory variable

The REG Procedure
Model: MODEL1
Dependent Variable: peakload

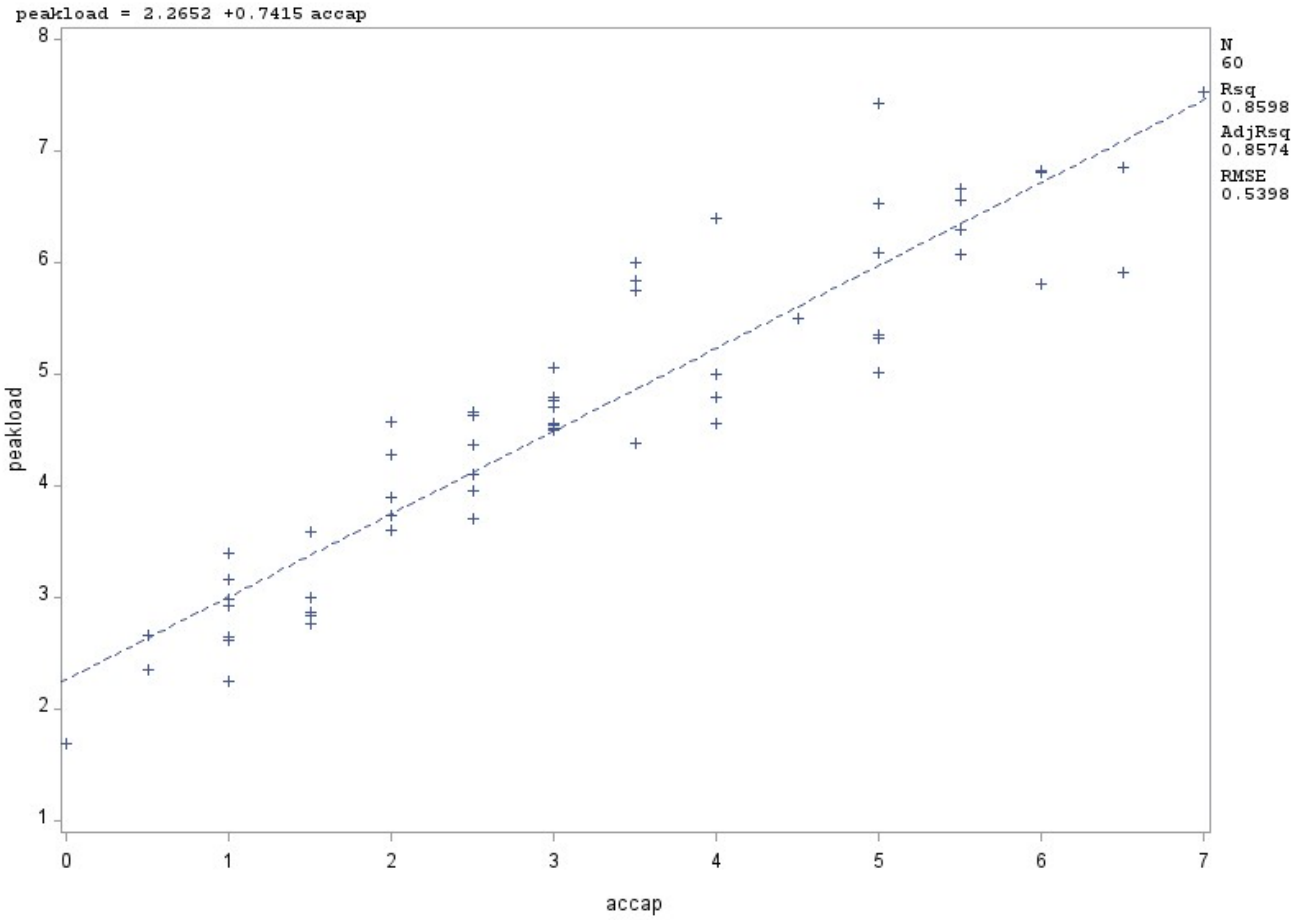



Residuals for peakload
Residual
1.5
1.0
0.5
0.0
-0.5
-1.0
0
2
4
6
accap


Fit Plot for peakload
peakload
8
6
4
2
0
2
4
6
accap
Observations 60
Parameters 2
Error DF 58
MSE 0.2914
R-Square 0.8598
Adj R-Square 0.8574
Fit
95% Confidence Limits
95% Prediction Limits

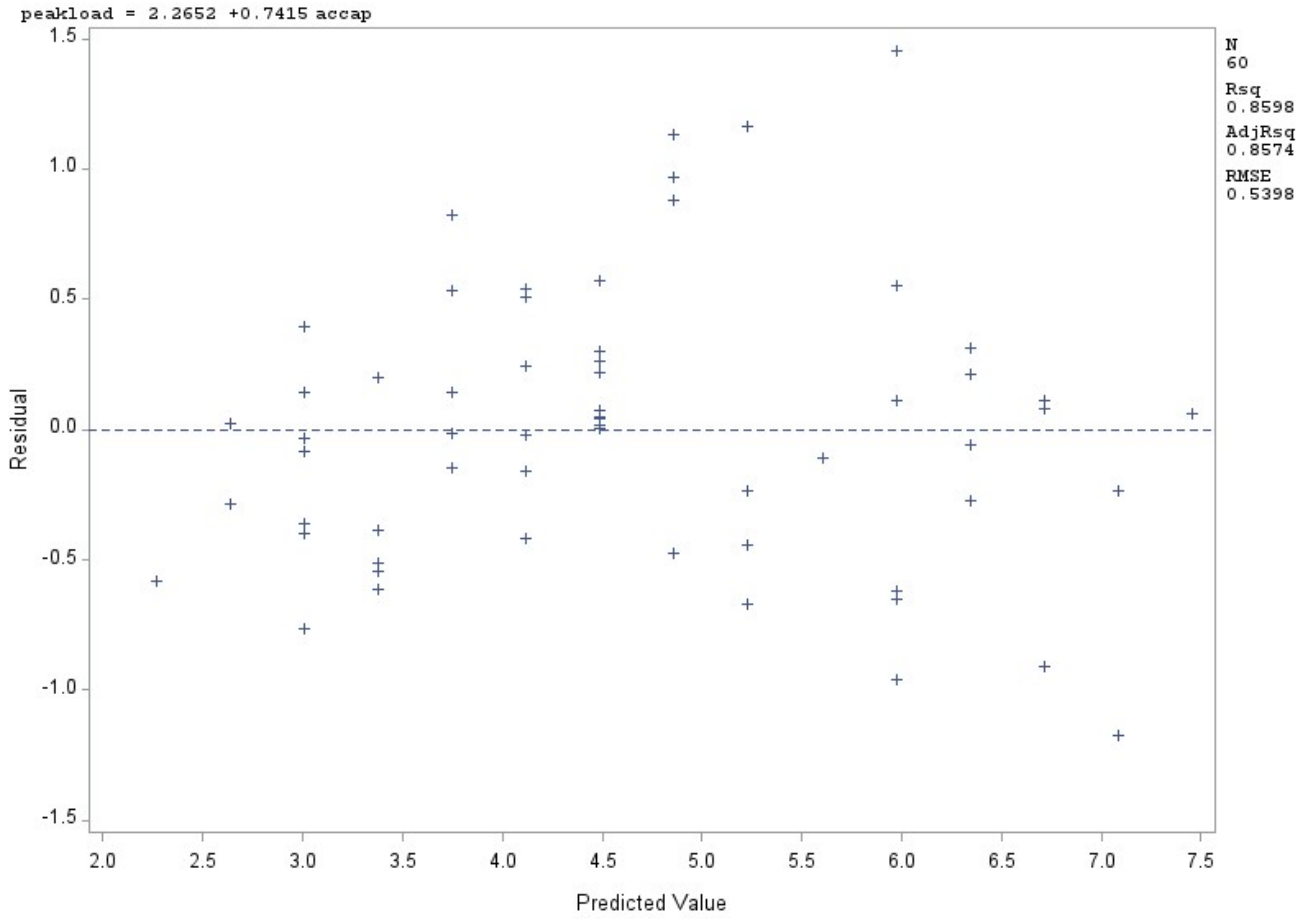
The REG Procedure

Estimated regression lines of peak load with air capacity as the explanatory variable



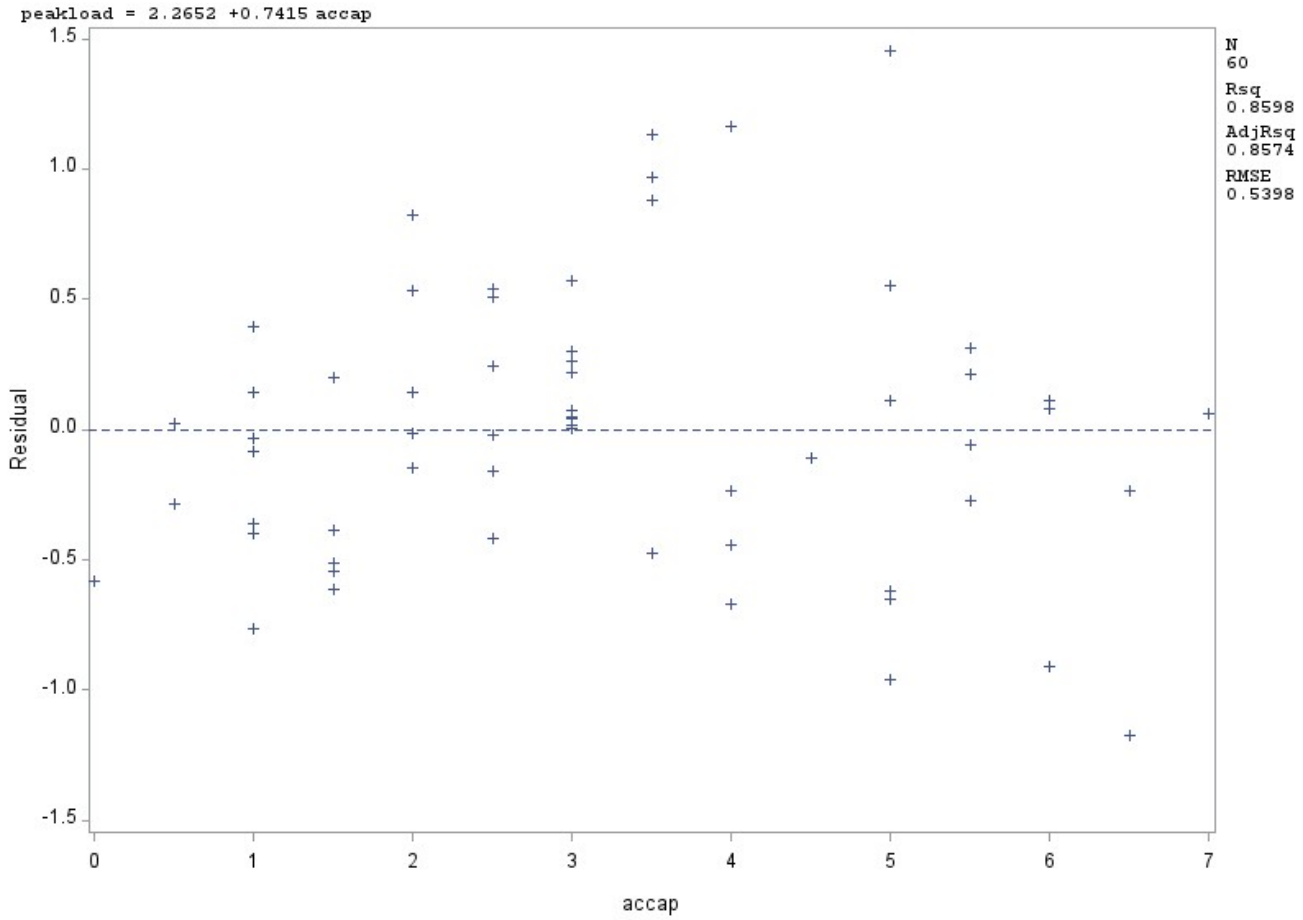
The REG Procedure

Estimated regression lines of peak load with air capacity as the explanatory variable



The REG Procedure

Estimated regression lines of peak load with air capacity as the explanatory variable



normality check for residuals

The UNIVARIATE Procedure
Variable: resid (Residual)

Moments			
N	60	Sum Weights	60
Mean	0	Sum Observations	0
Std Deviation	0.53523588	Variance	0.28647744
Skewness	0.39492751	Kurtosis	0.33781195
Uncorrected SS	16.9021692	Corrected SS	16.9021692
Coeff Variation	.	Std Error Mean	0.06909865

Basic Statistical Measures			
Location		Variability	
Mean	0.000000	Std Deviation	0.53524
Median	0.010877	Variance	0.28648
Mode	.	Range	2.62920
		Interquartile Range	0.64630

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	1	Pr >= |M|	0.8974
Signed Rank	S	-30	Pr >= |S|	0.8273

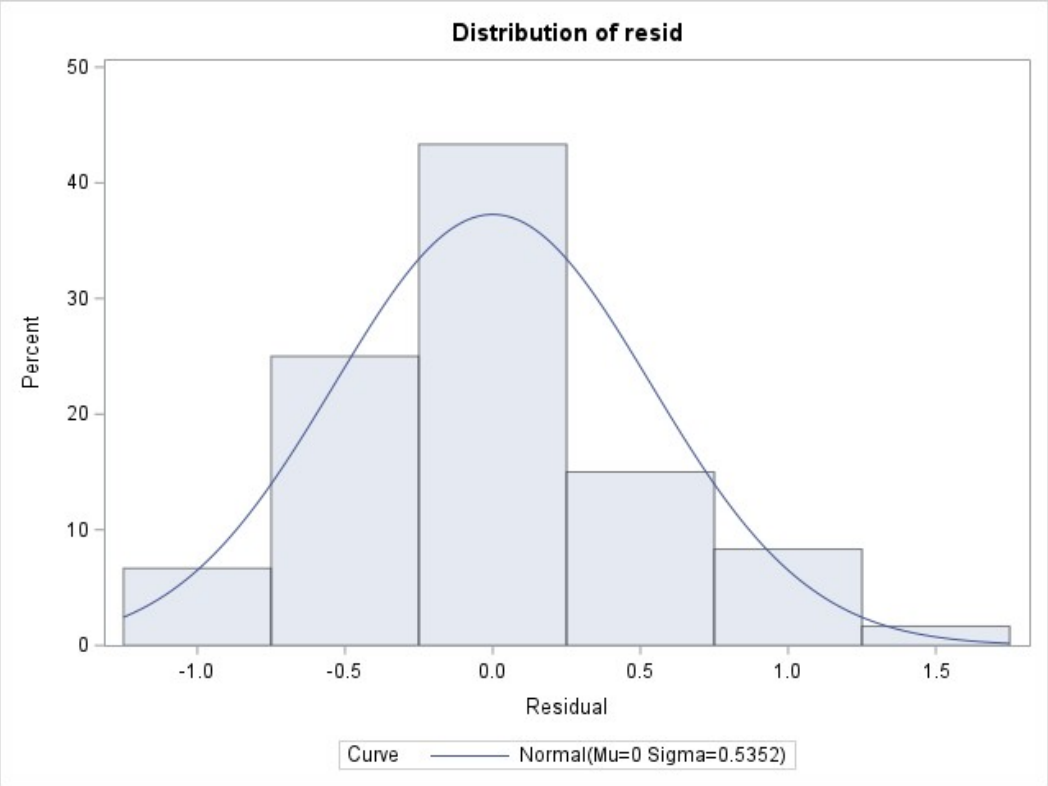
Quantiles (Definition 5)	
Level	Quantile
100% Max	1.4544444
99%	1.4544444
95%	1.0491435
90%	0.6961096
75% Q3	0.2547431
50% Median	0.0108765
25% Q1	-0.3915578
10%	-0.6340556
5%	-0.8383565
1%	-1.1747547
0% Min	-1.1747547

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
-1.174755	9	0.879644	43
-0.962556	4	0.968644	8

-0.912022	57	1.129644	10
-0.764691	16	1.162910	49
-0.671090	25	1.454444	41

normality check for residuals

The UNIVARIATE Procedure



normality check for residuals

The UNIVARIATE Procedure
Fitted Normal Distribution for resid (Residual)

Parameters for Normal Distribution		
Parameter	**Symbol**	**Estimate**
Mean	Mu	0
Std Dev	Sigma	0.535236

Goodness-of-Fit Tests for Normal Distribution				
Test	**Statistic**		**p Value**	
Kolmogorov-Smirnov	**D**	0.07952618	**Pr > D**	>0.150
Cramer-von Mises	**W-Sq**	0.06325826	**Pr > W-Sq**	>0.250
Anderson-Darling	**A-Sq**	0.39139159	**Pr > A-Sq**	>0.250

Quantiles for Normal Distribution		
	Quantile	
Percent	**Observed**	**Estimated**
1.0	-1.17475	-1.24514
5.0	-0.83836	-0.88038
10.0	-0.63406	-0.68593
25.0	-0.39156	-0.36101
50.0	0.01088	0.00000
75.0	0.25474	0.36101
90.0	0.69611	0.68593
95.0	1.04914	0.88038
99.0	1.45444	1.24514

normality check for residuals

The UNIVARIATE Procedure