

**The GLM Procedure**

*Dependent Variable: failtime*

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
<b>Model</b>	4	28027.85183	7006.96296	101.81	<.0001
<b>Error</b>	32	2202.36420	68.82388		
<b>Corrected Total</b>	36	30230.21603			

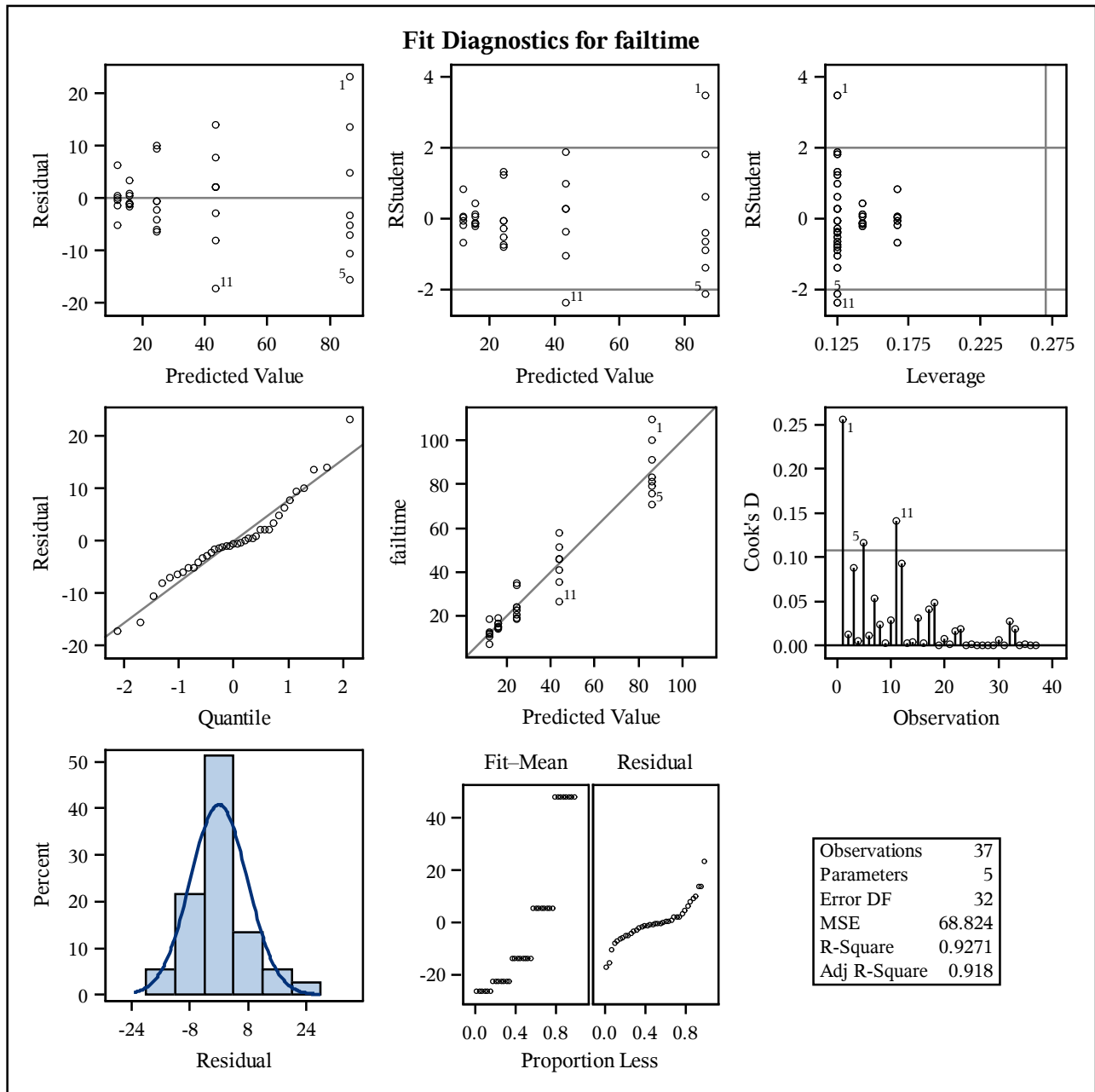
R-Square	Coeff Var	Root MSE	failtime Mean
0.927147	21.65762	8.296016	38.30529

Source	DF	Type I SS	Mean Square	F Value	Pr > F
<b>temp</b>	4	28027.85183	7006.96296	101.81	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
<b>temp</b>	4	28027.85183	7006.96296	101.81	<.0001

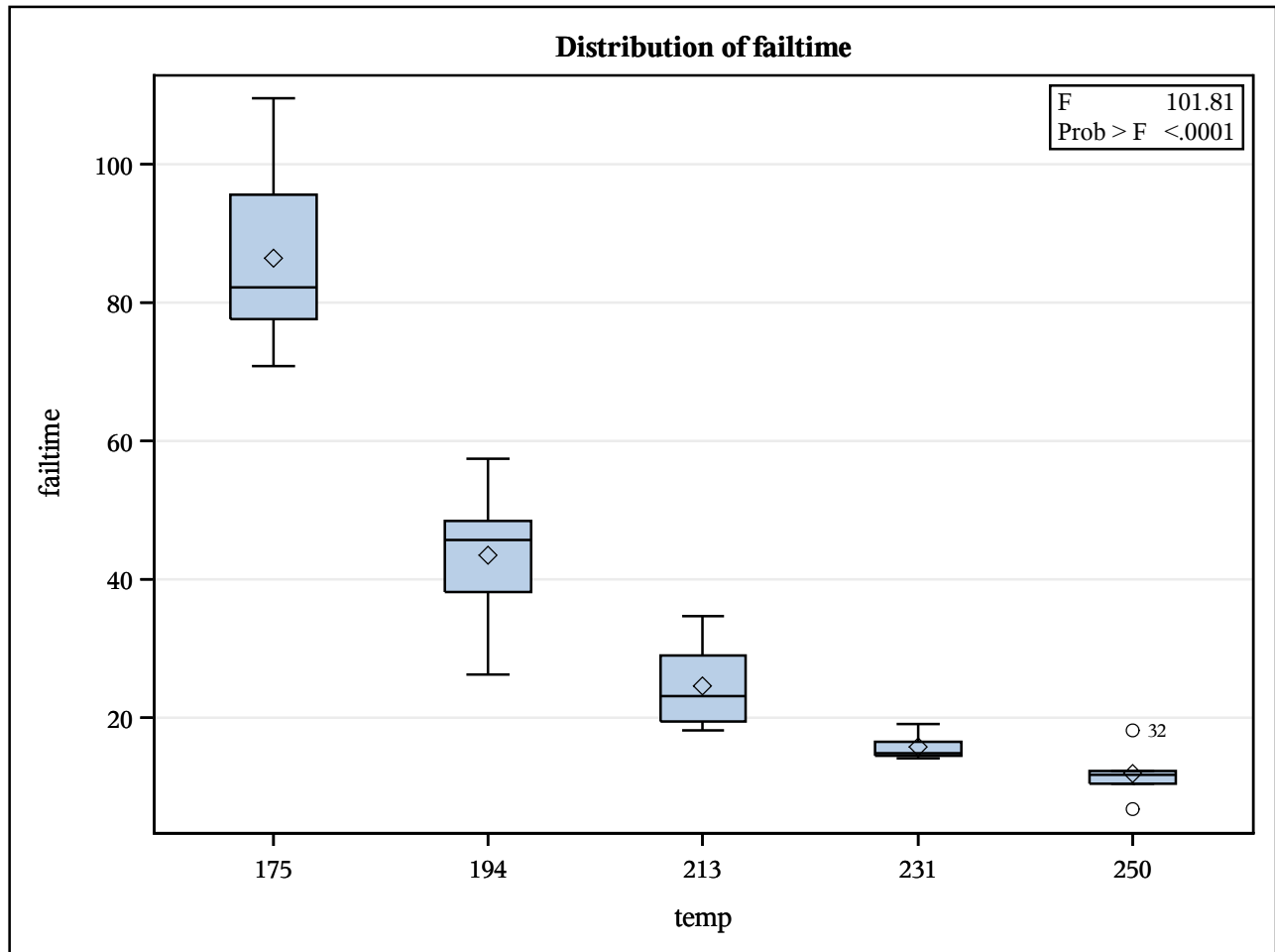
The GLM Procedure

Dependent Variable: failtime



The GLM Procedure

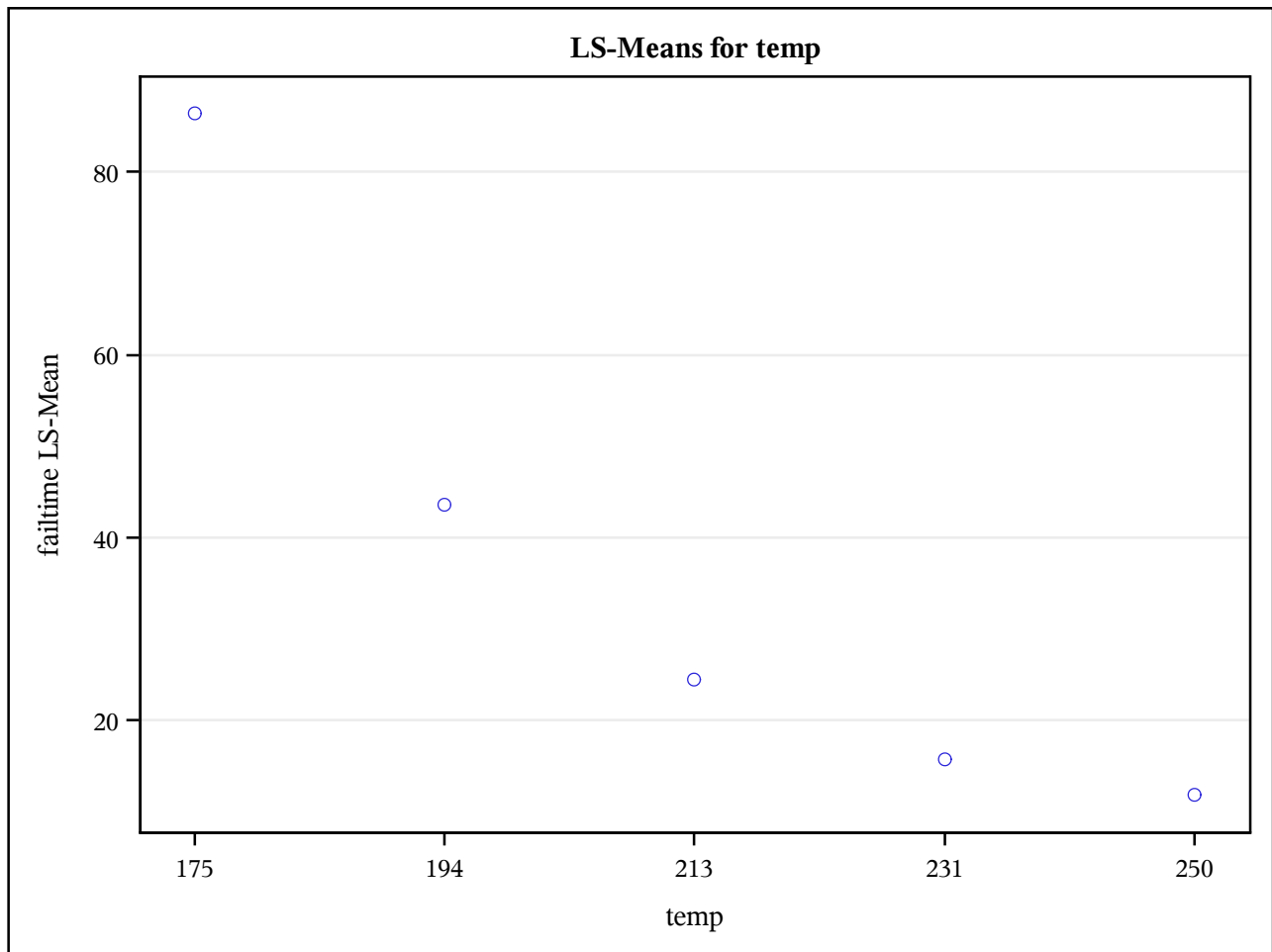
Dependent Variable: failtime



**The GLM Procedure  
Least Squares Means**

temp	failtime LSMEAN	Standard Error	Pr >  t
175	86.4241838	2.9330846	<.0001
194	43.5598300	2.9330846	<.0001
213	24.5196550	2.9330846	<.0001
231	15.7186457	3.1355993	<.0001
250	11.8726667	3.3868343	0.0014

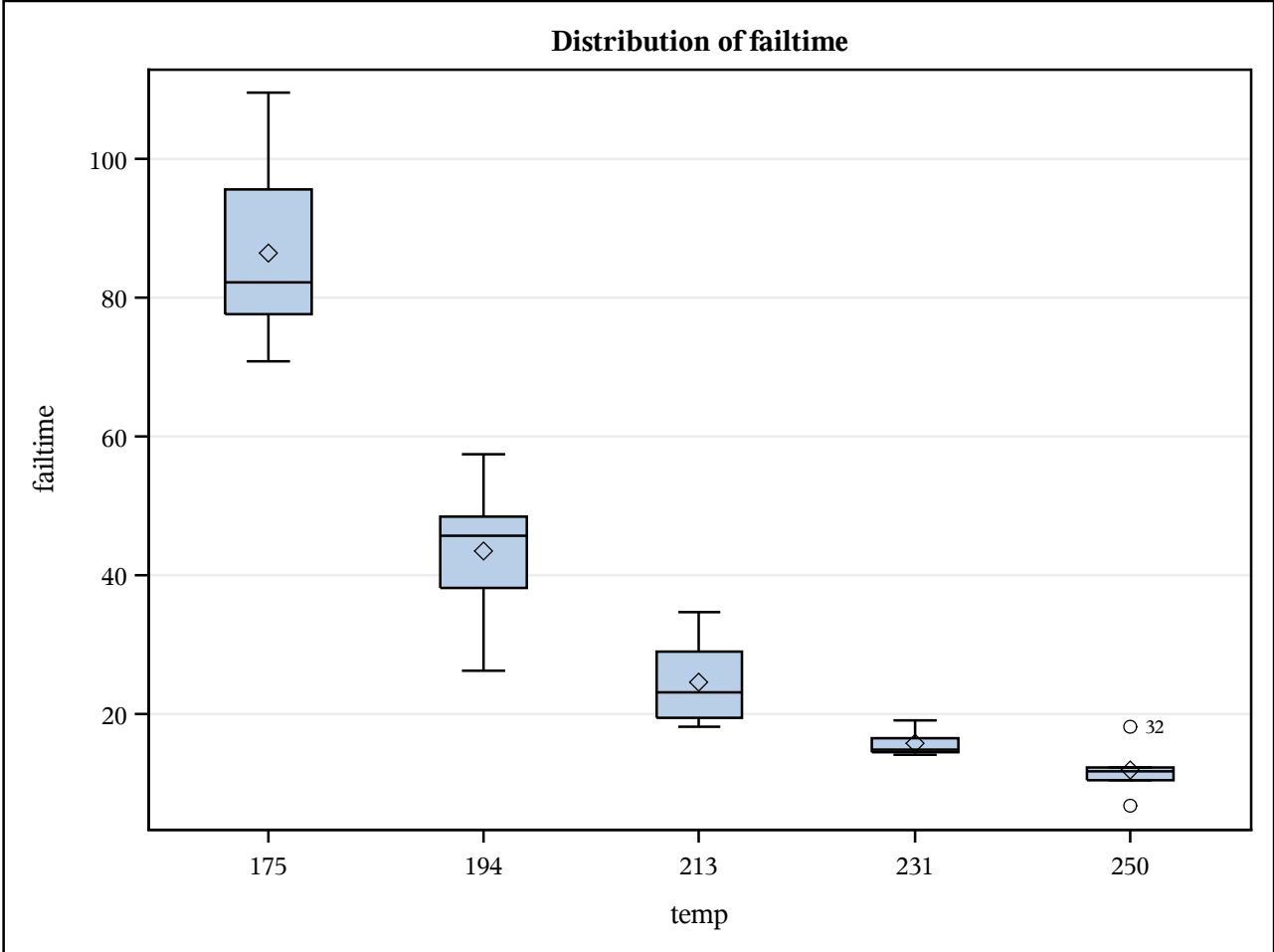
temp	failtime LSMEAN	95% Confidence Limits	
175	86.424184	80.449686	92.398682
194	43.559830	37.585332	49.534328
213	24.519655	18.545157	30.494153
231	15.718646	9.331639	22.105653
250	11.872667	4.973911	18.771422



*The GLM Procedure*

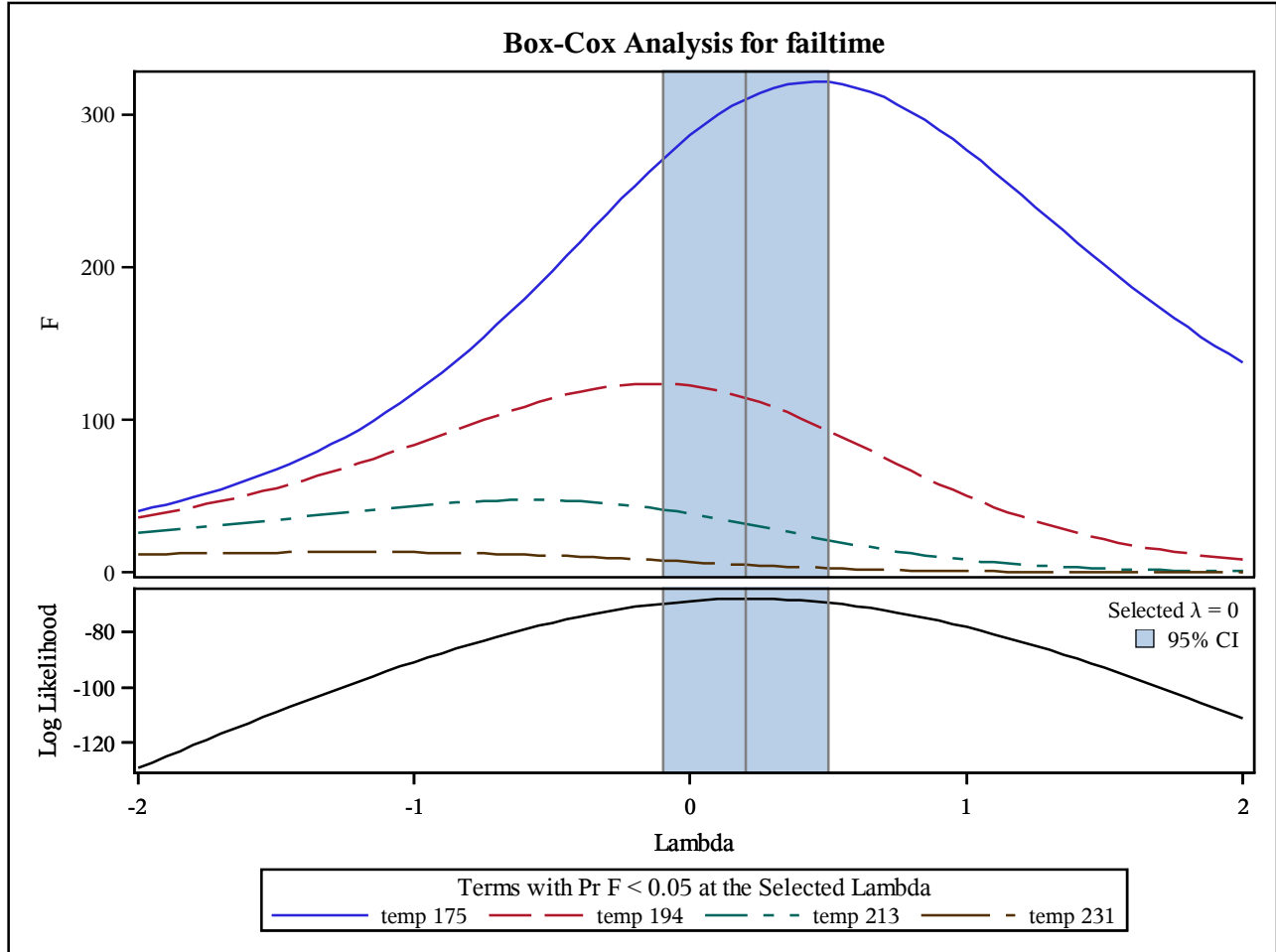
<b>Brown and Forsythe's Test for Homogeneity of failtime Variance ANOVA of Absolute Deviations from Group Medians</b>					
<b>Source</b>	<b>DF</b>	<b>Sum of Squares</b>	<b>Mean Square</b>	<b>F Value</b>	<b>Pr &gt; F</b>
<b>temp</b>	4	331.0	82.7539	2.37	0.0729
<b>Error</b>	32	1115.2	34.8497		

The GLM Procedure



Level of temp	N	failtime	
		Mean	Std Dev
175	8	86.4241838	13.0288162
194	8	43.5598300	9.5628810
213	8	24.5196550	6.4088705
231	7	15.7186457	1.7323012
250	6	11.8726667	3.7000660

The TRANSREG Procedure



Dependent Variable BoxCox(failtime)

Class Level Information		
Class	Levels	Values
temp	5	175 194 213 231 250

Number of Observations Read	37
Number of Observations Used	37

**The TRANSREG Procedure**

**The TRANSREG Procedure Hypothesis Tests for BoxCox(failtime)**

<b>Univariate ANOVA Table Based on the Usual Degrees of Freedom</b>					
<b>Source</b>	<b>DF</b>	<b>Sum of Squares</b>	<b>Mean Square</b>	<b>F Value</b>	<b>Liberal p</b>
<b>Model</b>	4	18.75616	4.689041	96.36	>= <.0001
<b>Error</b>	32	1.55713	0.048660		
<b>Corrected Total</b>	36	20.31329			

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

<b>Root MSE</b>	0.22059	<b>R-Square</b>	0.9233
<b>Dependent Mean</b>	3.37360	<b>Adj R-Sq</b>	0.9138
<b>Coeff Var</b>	6.53873	<b>Lambda</b>	0.0000



**The MEANS Procedure**

temp=175

Analysis Variable : failtime	
Mean	Std Dev
86.4241838	13.0288162

temp=194

Analysis Variable : failtime	
Mean	Std Dev
43.5598300	9.5628810

temp=213

Analysis Variable : failtime	
Mean	Std Dev
24.5196550	6.4088705

temp=231

Analysis Variable : failtime	
Mean	Std Dev
15.7186457	1.7323012

temp=250

Analysis Variable : failtime	
Mean	Std Dev
11.8726667	3.7000660

**The REG Procedure**  
**Model: MODEL1**  
**Dependent Variable: logsd**

Number of Observations Read	5
Number of Observations Used	5

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1.90170	1.90170	8.60	0.0609
Error	3	0.66320	0.22107		
Corrected Total	4	2.56490			

Root MSE	0.47018	R-Square	0.7414
Dependent Mean	1.70811	Adj R-Sq	0.6552
Coeff Var	27.52624		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t
Intercept	1	-1.16818	1.00296	-1.16	0.3283
logmean	1	0.86313	0.29428	2.93	0.0609

***The GLM Procedure***

***Dependent Variable: logfail***

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
<b>Model</b>	4	18.75616285	4.68904071	96.36	<.0001
<b>Error</b>	32	1.55712649	0.04866020		
<b>Corrected Total</b>	36	20.31328934			

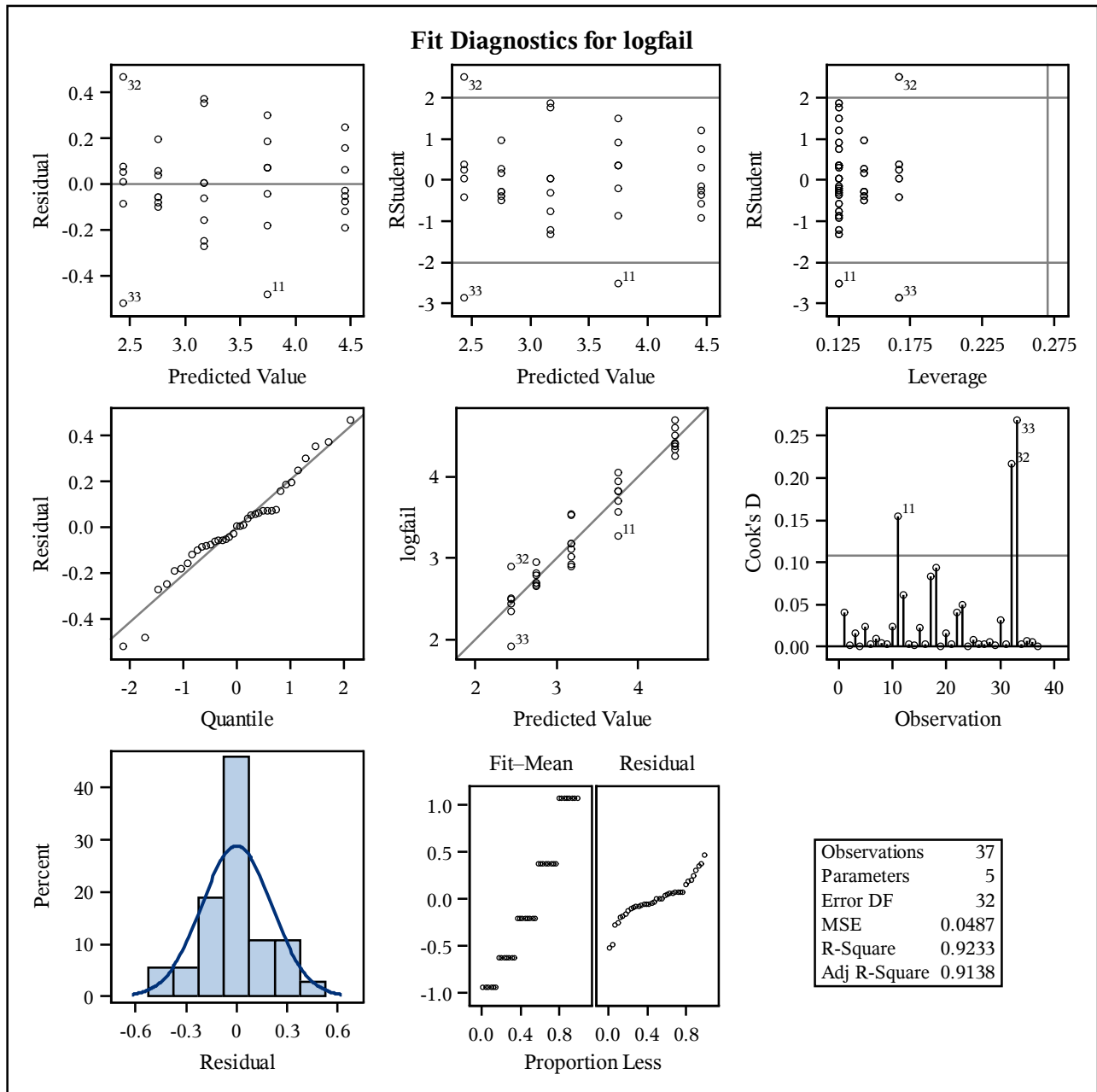
R-Square	Coeff Var	Root MSE	logfail Mean
0.923344	6.538733	0.220591	3.373598

Source	DF	Type I SS	Mean Square	F Value	Pr > F
<b>temp</b>	4	18.75616285	4.68904071	96.36	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
<b>temp</b>	4	18.75616285	4.68904071	96.36	<.0001

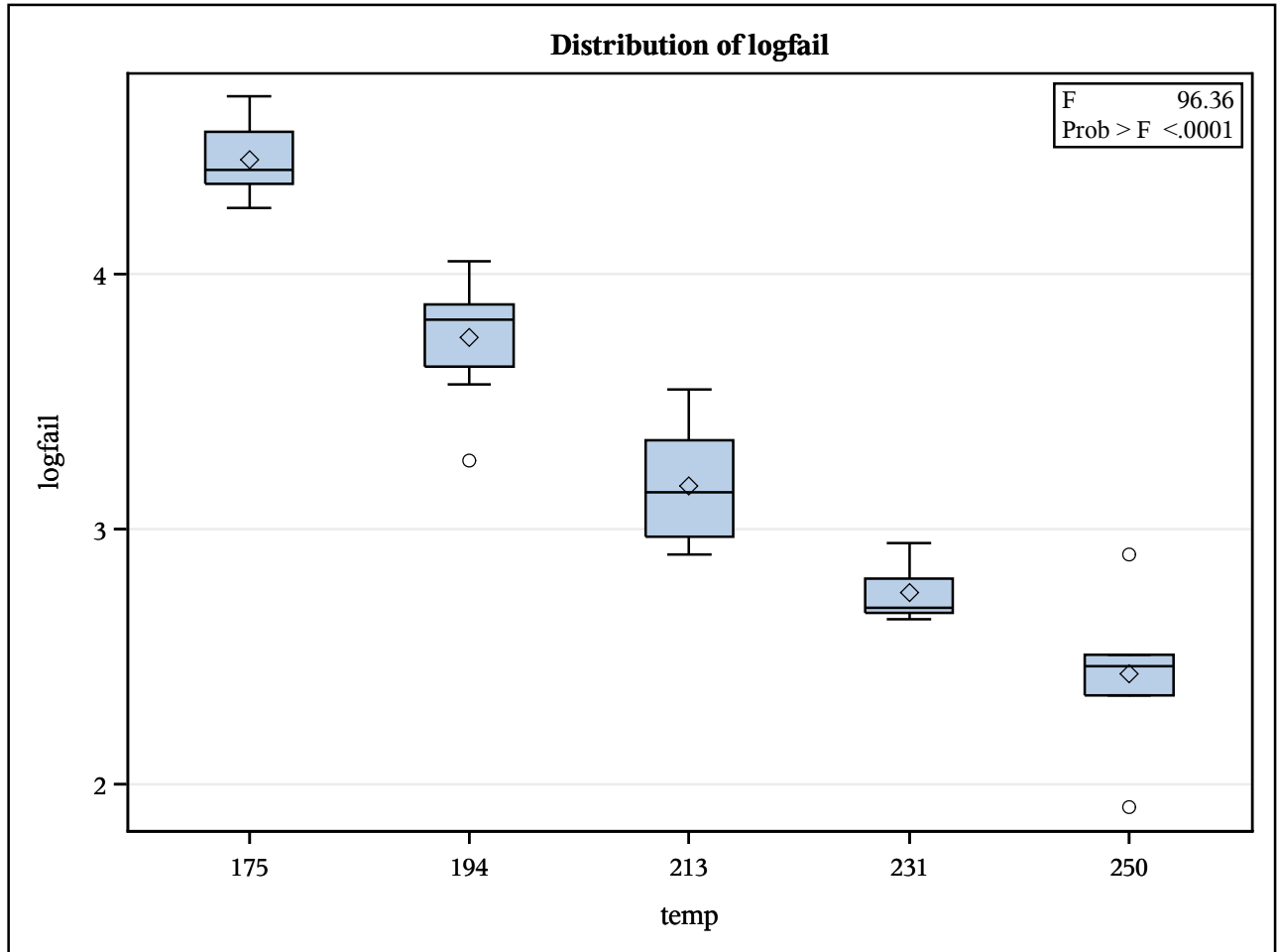
The GLM Procedure

Dependent Variable: logfail



The GLM Procedure

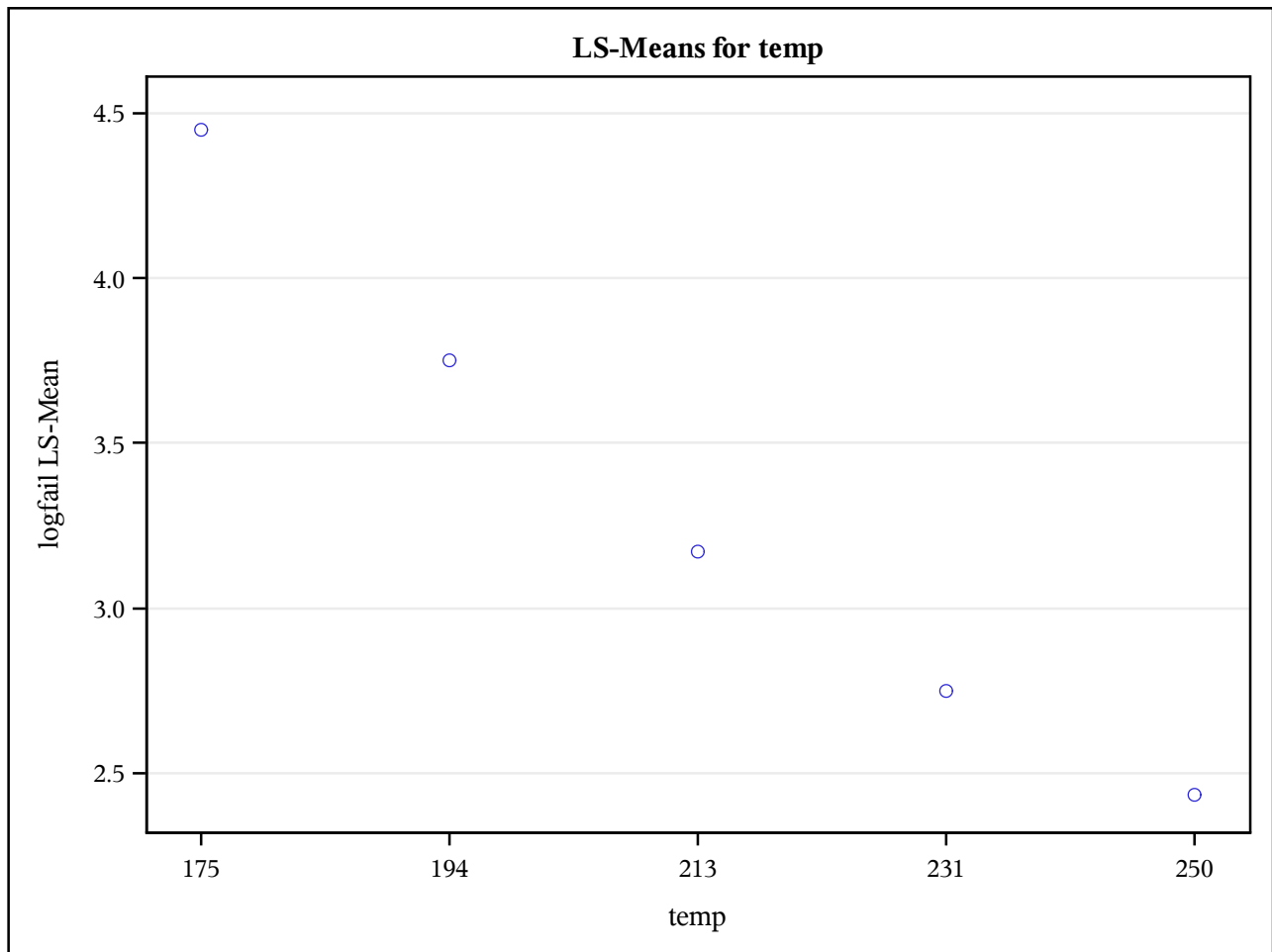
Dependent Variable: logfail



**The GLM Procedure**  
**Least Squares Means**

temp	logfail LSMEAN	Standard Error	Pr >  t
175	4.44974567	0.07799055	<.0001
194	3.75033549	0.07799055	<.0001
213	3.17181100	0.07799055	<.0001
231	2.74994450	0.08337540	<.0001
250	2.43306503	0.09005573	<.0001

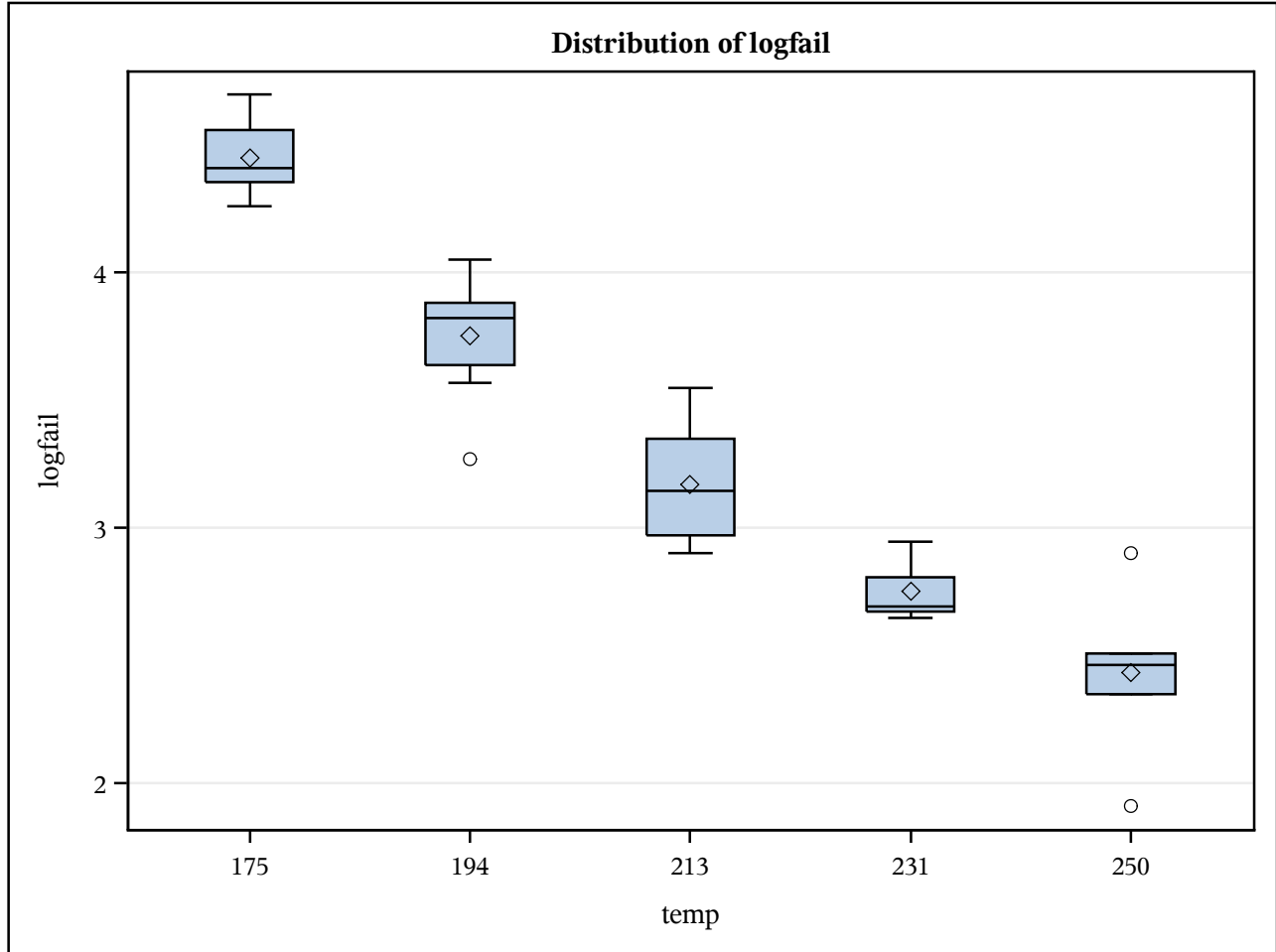
temp	logfail LSMEAN	95% Confidence Limits	
175	4.449746	4.290884	4.608607
194	3.750335	3.591474	3.909197
213	3.171811	3.012949	3.330673
231	2.749944	2.580114	2.919775
250	2.433065	2.249628	2.616503



***The GLM Procedure***

<b>Brown and Forsythe's Test for Homogeneity of logfail Variance ANOVA of Absolute Deviations from Group Medians</b>					
<b>Source</b>	<b>DF</b>	<b>Sum of Squares</b>	<b>Mean Square</b>	<b>F Value</b>	<b>Pr &gt; F</b>
<b>temp</b>	4	0.0754	0.0188	0.75	0.5624
<b>Error</b>	32	0.7991	0.0250		

**The GLM Procedure**



Level of temp	N	logfail	
		Mean	Std Dev
175	8	4.44974567	0.14601777
194	8	3.75033549	0.24132067
213	8	3.17181100	0.24669464
231	7	2.74994450	0.10539802
250	6	2.43306503	0.31861210



**The Mixed Procedure**

Model Information	
Data Set	WORK.RESIN
Dependent Variable	failtime
Covariance Structure	Variance Components
Group Effect	temp
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Between-Within

Class Level Information		
Class	Levels	Values
temp	5	175 194 213 231 250

Dimensions	
Covariance Parameters	5
Columns in X	6
Columns in Z	0
Subjects	37
Max Obs Per Subject	1

Number of Observations	
Number of Observations Read	37
Number of Observations Used	37
Number of Observations Not Used	0

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	236.19768585	
1	1	214.02327375	0.00000000

Convergence criteria met.

**The Mixed Procedure**

Covariance Parameter Estimates		
Cov Parm	Group	Estimate
Residual	temp 175	169.75
Residual	temp 194	91.4487
Residual	temp 213	41.0736
Residual	temp 231	3.0009
Residual	temp 250	13.6905

Fit Statistics	
-2 Res Log Likelihood	214.0
AIC (smaller is better)	224.0
AICC (smaller is better)	226.3
BIC (smaller is better)	232.1

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
4	22.17	0.0002

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
temp	4	32	78.54	<.0001

Least Squares Means									
Effect	temp	Estimate	Standard Error	DF	t Value	Pr >  t	Alpha	Lower	Upper
temp	175	86.4242	4.6064	32	18.76	<.0001	0.05	77.0413	95.8071
temp	194	43.5598	3.3810	32	12.88	<.0001	0.05	36.6730	50.4467
temp	213	24.5197	2.2659	32	10.82	<.0001	0.05	19.9042	29.1351
temp	231	15.7186	0.6547	32	24.01	<.0001	0.05	14.3850	17.0523
temp	250	11.8727	1.5105	32	7.86	<.0001	0.05	8.7958	14.9495

The Mixed Procedure

