NEW SYNTHETIC FIBER STUDY

The GLM Procedure

Class Level Information		
Class	Levels	Values
PERCENT	5	15 20 25 30 35

Number of Observations Read	25
Number of Observations Used	25

NEW SYNTHETIC FIBER STUDY

The GLM Procedure

Dependent Variable: STRENGTH

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	475.7600000	118.9400000	14.76	<.0001
Error	20	161.2000000	8.0600000		
Corrected Total	24	636.9600000			

R-Square	Coeff Var	Root MSE	STRENGTH Mean
0.746923	18.87642	2.839014	15.04000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
PERCENT	4	475.7600000	118.9400000	14.76	<.0001

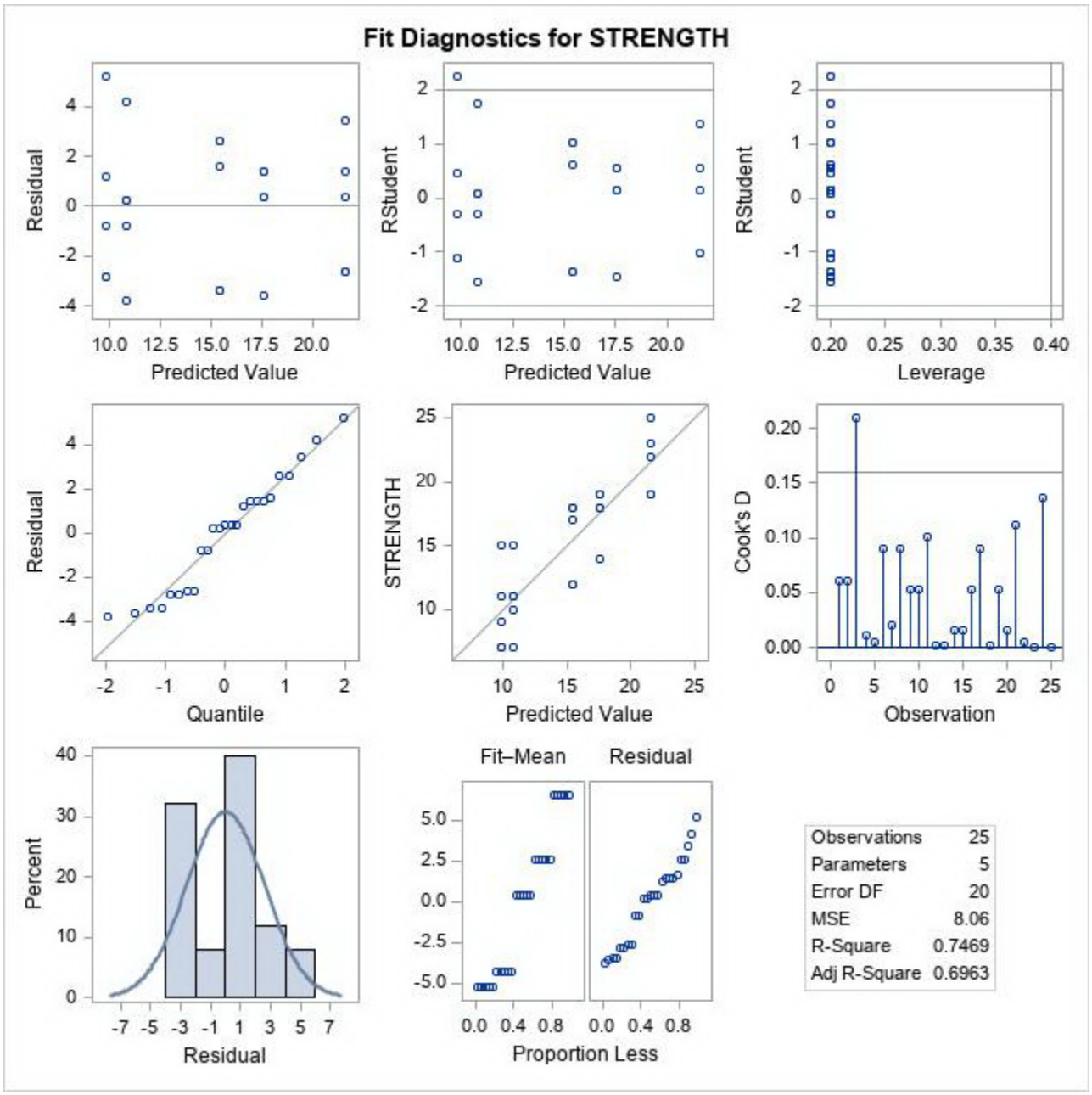
Source	DF	Type III SS	Mean Square	F Value	Pr > F
PERCENT	4	475.7600000	118.9400000	14.76	<.0001

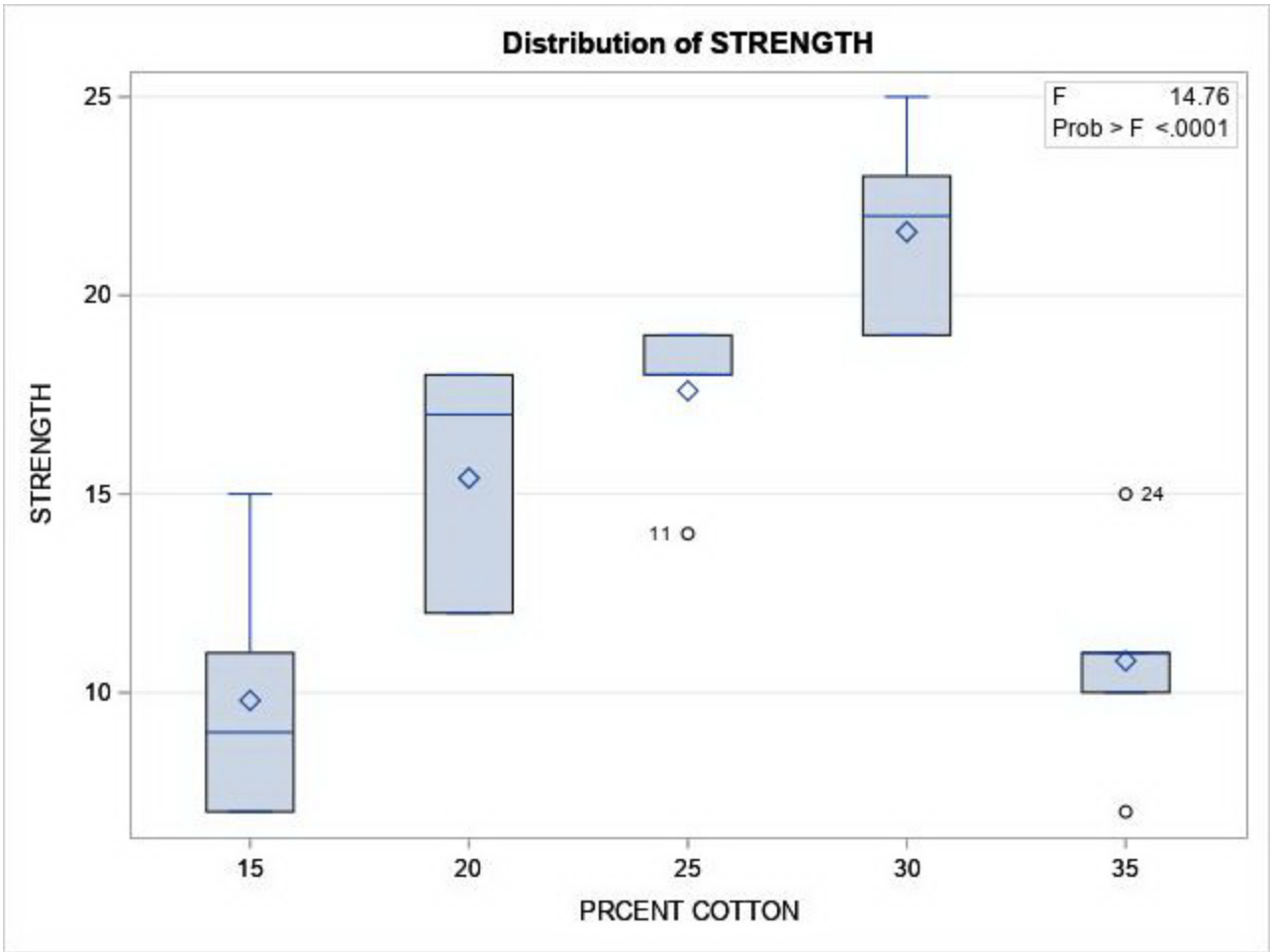
NEW SYNTHETIC FIBER STUDY

The GLM Procedure

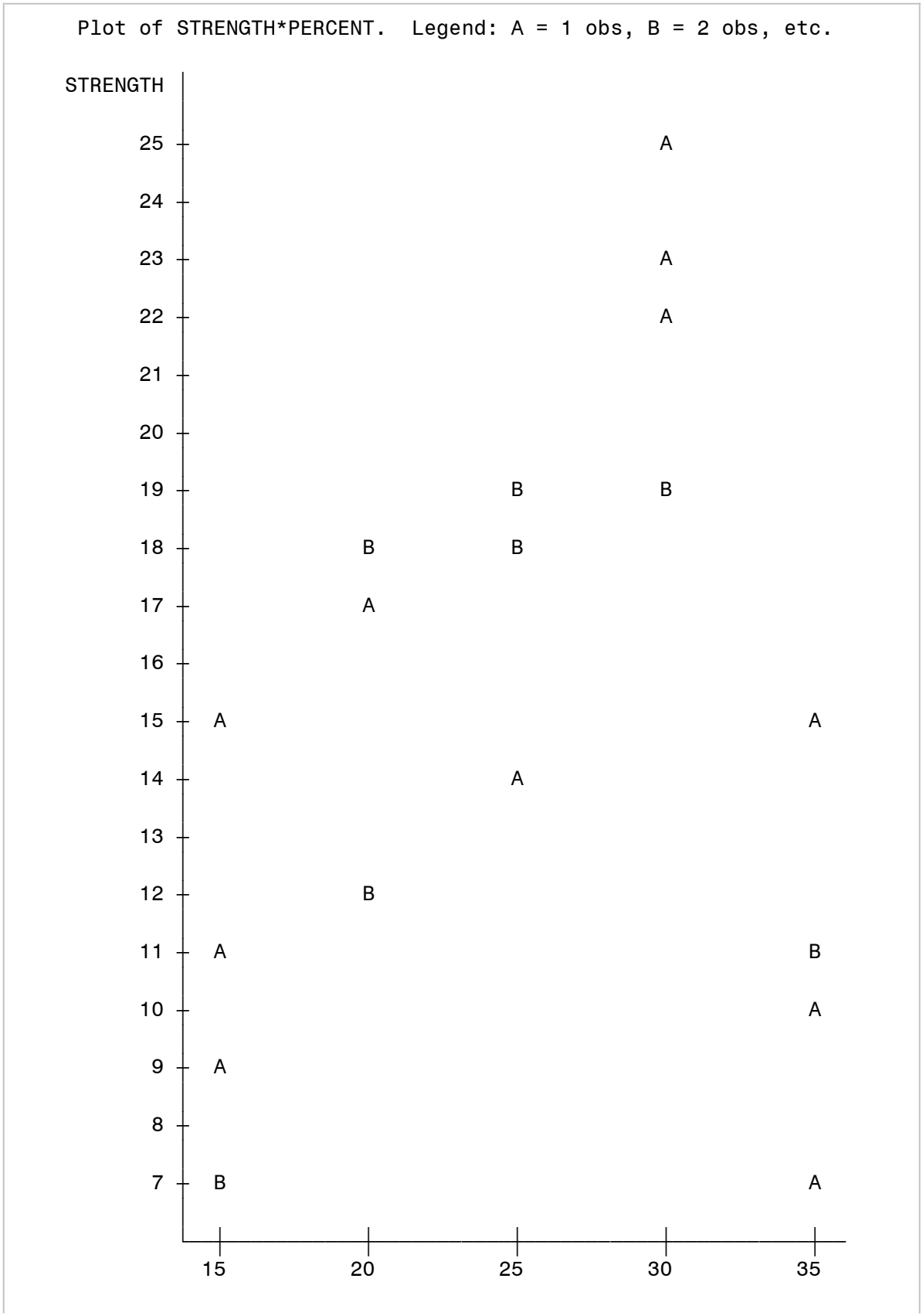
Observation		Observed	Predicted	Residual
1		7.00000000	9.80000000	-2.80000000
2		7.00000000	9.80000000	-2.80000000
3		15.00000000	9.80000000	5.20000000
4		11.00000000	9.80000000	1.20000000
5		9.00000000	9.80000000	-0.80000000
6		12.00000000	15.40000000	-3.40000000
7		17.00000000	15.40000000	1.60000000
8		12.00000000	15.40000000	-3.40000000
9		18.00000000	15.40000000	2.60000000
10		18.00000000	15.40000000	2.60000000
11		14.00000000	17.60000000	-3.60000000
12		18.00000000	17.60000000	0.40000000
13		18.00000000	17.60000000	0.40000000
14		19.00000000	17.60000000	1.40000000
15		19.00000000	17.60000000	1.40000000
16		19.00000000	21.60000000	-2.60000000
17		25.00000000	21.60000000	3.40000000
18		22.00000000	21.60000000	0.40000000
19		19.00000000	21.60000000	-2.60000000
20		23.00000000	21.60000000	1.40000000
21		7.00000000	10.80000000	-3.80000000
22		10.00000000	10.80000000	-0.80000000
23		11.00000000	10.80000000	0.20000000
24		15.00000000	10.80000000	4.20000000
25		11.00000000	10.80000000	0.20000000

Sum of Residuals	0.0000000
Sum of Squared Residuals	161.2000000
Sum of Squared Residuals - Error SS	0.0000000
First Order Autocorrelation	-0.2255583
Durbin-Watson D	2.4022333


Fit Diagnostics for STRENGTH
Residual
Predicted Value
RStudent
Predicted Value
RStudent
Leverage
Residual
Quantile
STRENGTH
Predicted Value
Cook's D
Observation
Percent
Residual
Fit–Mean
Residual
Proportion Less
Observations 25
Parameters 5
Error DF 20
MSE 8.06
R-Square 0.7469
Adj R-Square 0.6963


Distribution of STRENGTH
F 14.76
Prob > F <.0001
STRENGTH
25
20
15
10
11
24
15
20
25
30
35
PRCENT COTTON

NEW SYNTHETIC FIBER STUDY



PRCENT COTTON

NEW SYNTHETIC FIBER STUDY

The UNIVARIATE Procedure
Variable: RESID

Moments			
N	25	Sum Weights	25
Mean	0	Sum Observations	0
Std Deviation	2.59165327	Variance	6.71666667
Skewness	0.11239681	Kurtosis	-0.8683604
Uncorrected SS	161.2	Corrected SS	161.2
Coeff Variation	.	Std Error Mean	0.51833065

Basic Statistical Measures			
Location		Variability	
Mean	0.00000	Std Deviation	2.59165
Median	0.40000	Variance	6.71667
Mode	-3.40000	Range	9.00000
		Interquartile Range	4.00000

Note: The mode displayed is the smallest of 7 modes with a count of 2.

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	2.5	Pr >= |M|	0.4244
Signed Rank	S	0.5	Pr >= |S|	0.9896

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.943868	Pr < W	0.1818
Kolmogorov-Smirnov	D	0.162123	Pr > D	0.0885
Cramer-von Mises	W-Sq	0.080455	Pr > W-Sq	0.2026
Anderson-Darling	A-Sq	0.518572	Pr > A-Sq	0.1775

Quantiles (Definition 5)	
Level	Quantile

100% Max	5.2
99%	5.2
95%	4.2
90%	3.4
75% Q3	1.4
50% Median	0.4
25% Q1	-2.6
10%	-3.4
5%	-3.6
1%	-3.8
0% Min	-3.8

Extreme Observations			
Lowest		**Highest**	
Value	**Obs**	**Value**	**Obs**
-3.8	21	2.6	9
-3.6	11	2.6	10
-3.4	8	3.4	17
-3.4	6	4.2	24
-2.8	2	5.2	3