Obs	aggregate	compaction	r	i	strength	agBasalt	compReg	compLow	intAgCompBR	intAgCompBL
1	Basalt	Regular	2	1	106	1	1	0	1	0
2	Basalt	Regular	2	2	108	1	1	0	1	0
3	Basalt	Low	3	1	93	1	0	1	0	1
4	Basalt	Low	3	2	101	1	0	1	0	1
5	Basalt	Low	3	3	98	1	0	1	0	1
6	Basalt	VeryLow	1	1	56	1	-1	-1	-1	-1
7	Silicious	Regular	3	1	107	-1	1	0	-1	0
8	Silicious	Regular	3	2	110	-1	1	0	-1	0
9	Silicious	Regular	3	3	116	-1	1	0	-1	0
10	Silicious	Low	2	1	63	-1	0	1	0	-1
11	Silicious	Low	2	2	60	-1	0	1	0	-1
12	Silicious	VeryLow	3	1	40	-1	-1	-1	1	1
13	Silicious	VeryLow	3	2	41	-1	-1	-1	1	1
14	Silicious	VeryLow	3	3	44	-1	-1	-1	1	1

The GLM Procedure

Class Level Information		
Class	**Levels**	**Values**
aggregate	2	Basalt Silicious
compaction	3	Low Regular VeryLow

Number of Observations Read	14
Number of Observations Used	14

The GLM Procedure

Dependent Variable: strength

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	10873.38095	2174.67619	193.66	<.0001
Error	8	89.83333	11.22917		
Corrected Total	13	10963.21429			

R-Square	Coeff Var	Root MSE	strength Mean
0.991806	4.104456	3.350995	81.64286

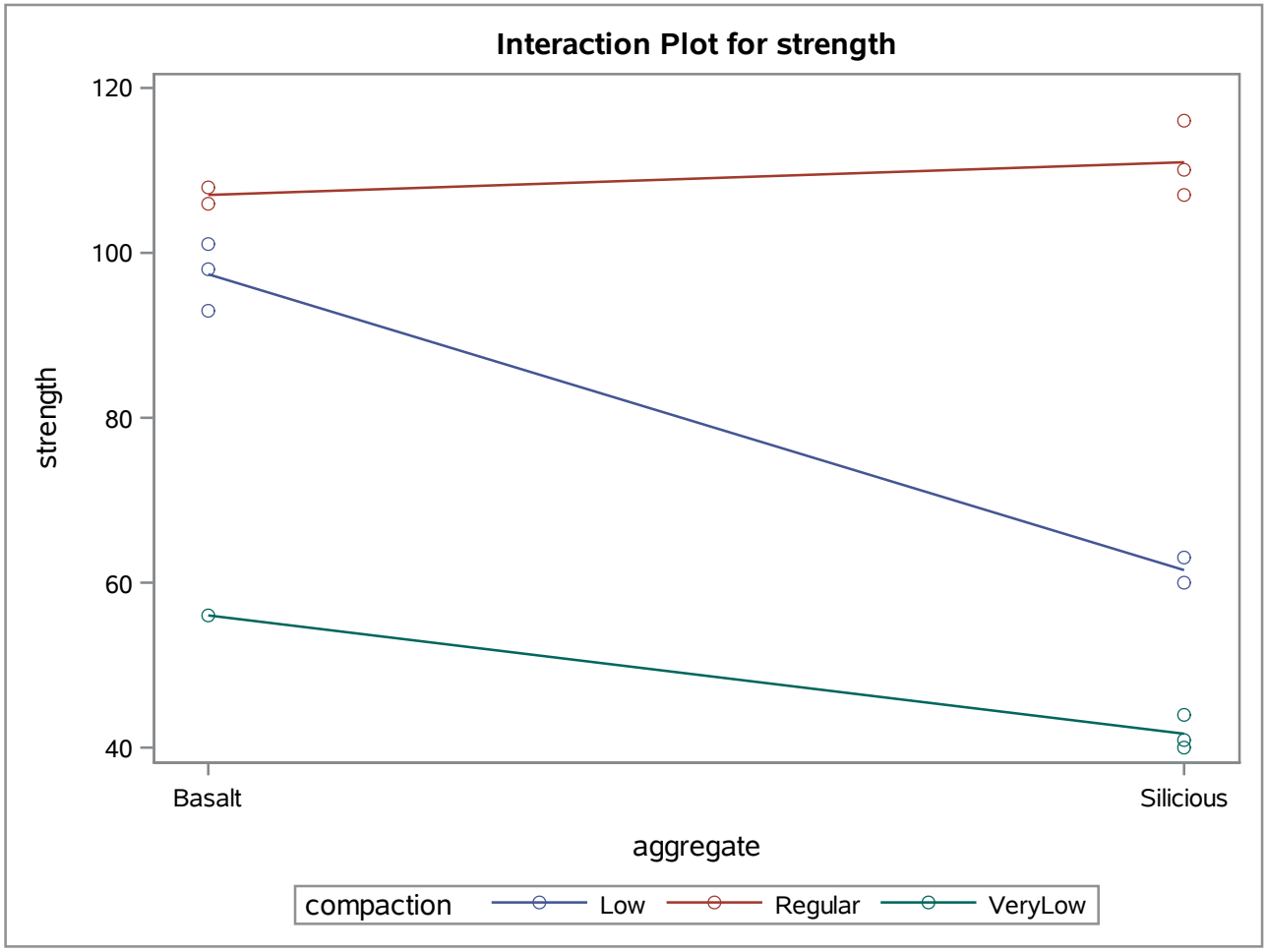
Source	DF	Type I SS	Mean Square	F Value	Pr > F
aggregate	1	1518.005952	1518.005952	135.18	<.0001
compaction	2	8401.925794	4200.962897	374.11	<.0001
aggregate*compaction	2	953.449206	476.724603	42.45	<.0001

Source	DF	Type II SS	Mean Square	F Value	Pr > F
aggregate	1	760.667460	760.667460	67.74	<.0001
compaction	2	8401.925794	4200.962897	374.11	<.0001
aggregate*compaction	2	953.449206	476.724603	42.45	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
aggregate	1	710.453704	710.453704	63.27	<.0001
compaction	2	6806.452381	3403.226190	303.07	<.0001
aggregate*compaction	2	953.449206	476.724603	42.45	<.0001

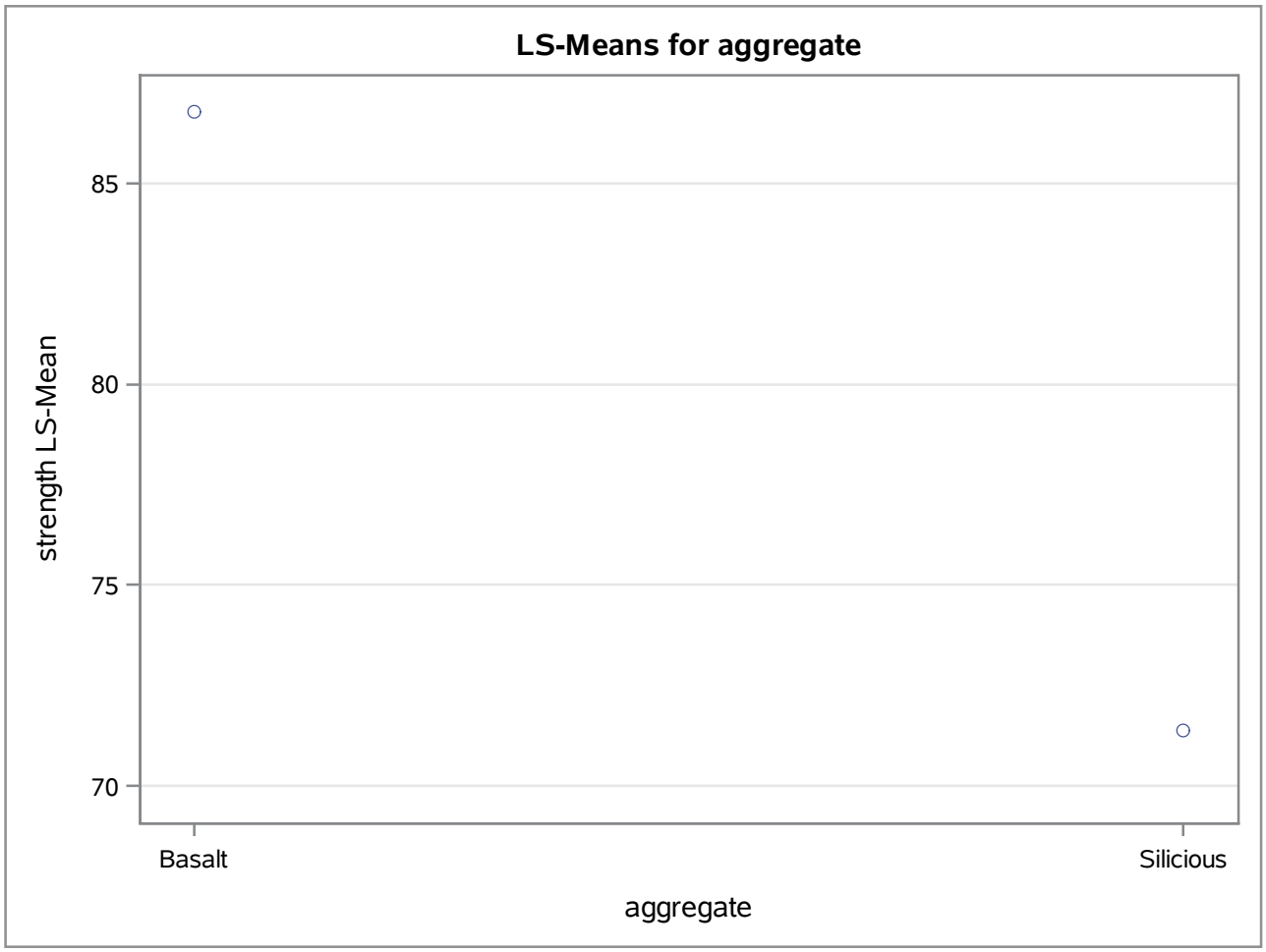
The GLM Procedure

Dependent Variable: strength



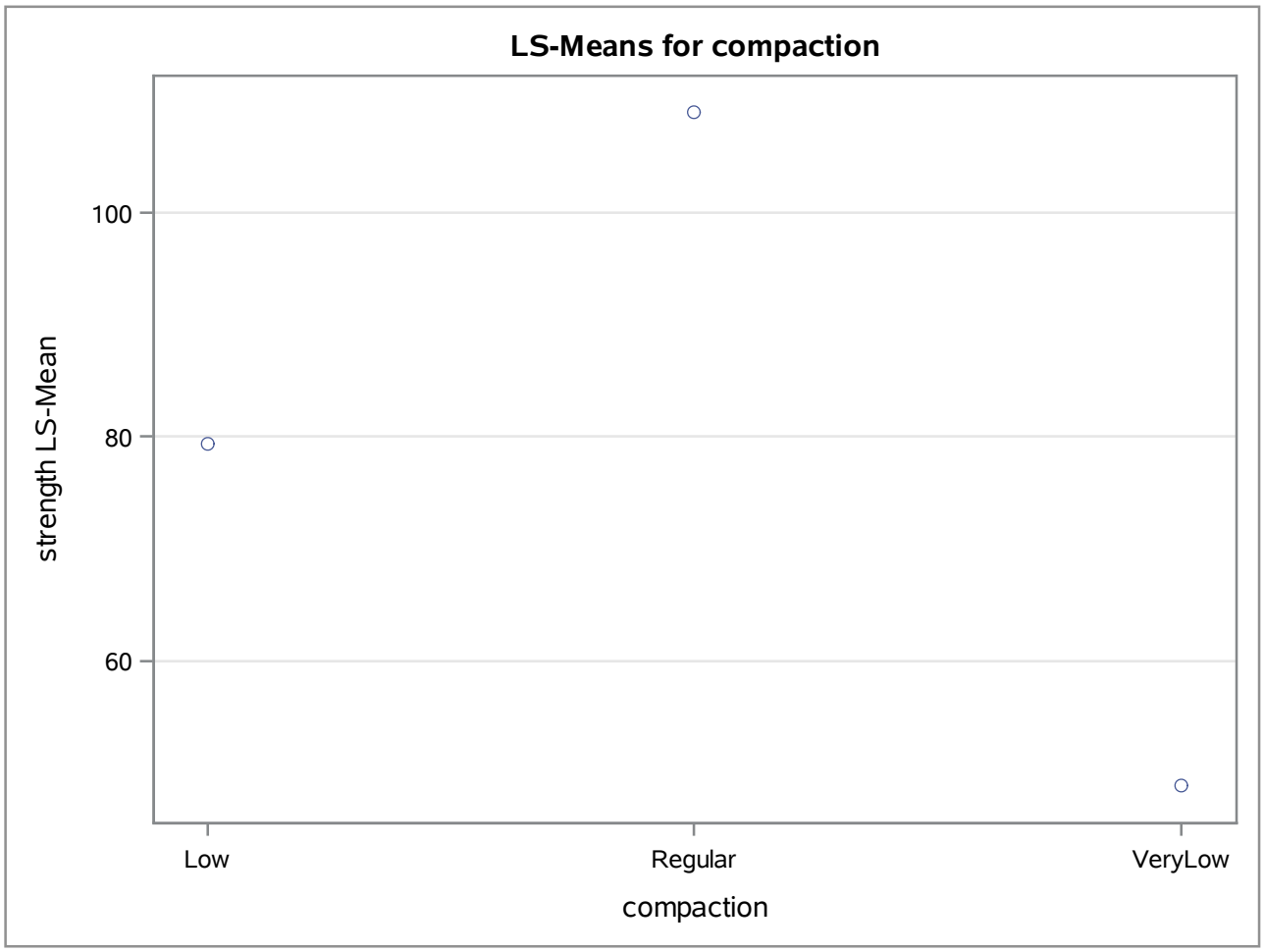
The GLM Procedure
Least Squares Means

aggregate	strength LSMEAN	Standard Error	Pr > |t|
Basalt	86.7777778	1.5124228	<.0001
Silicious	71.3888889	1.2064960	<.0001



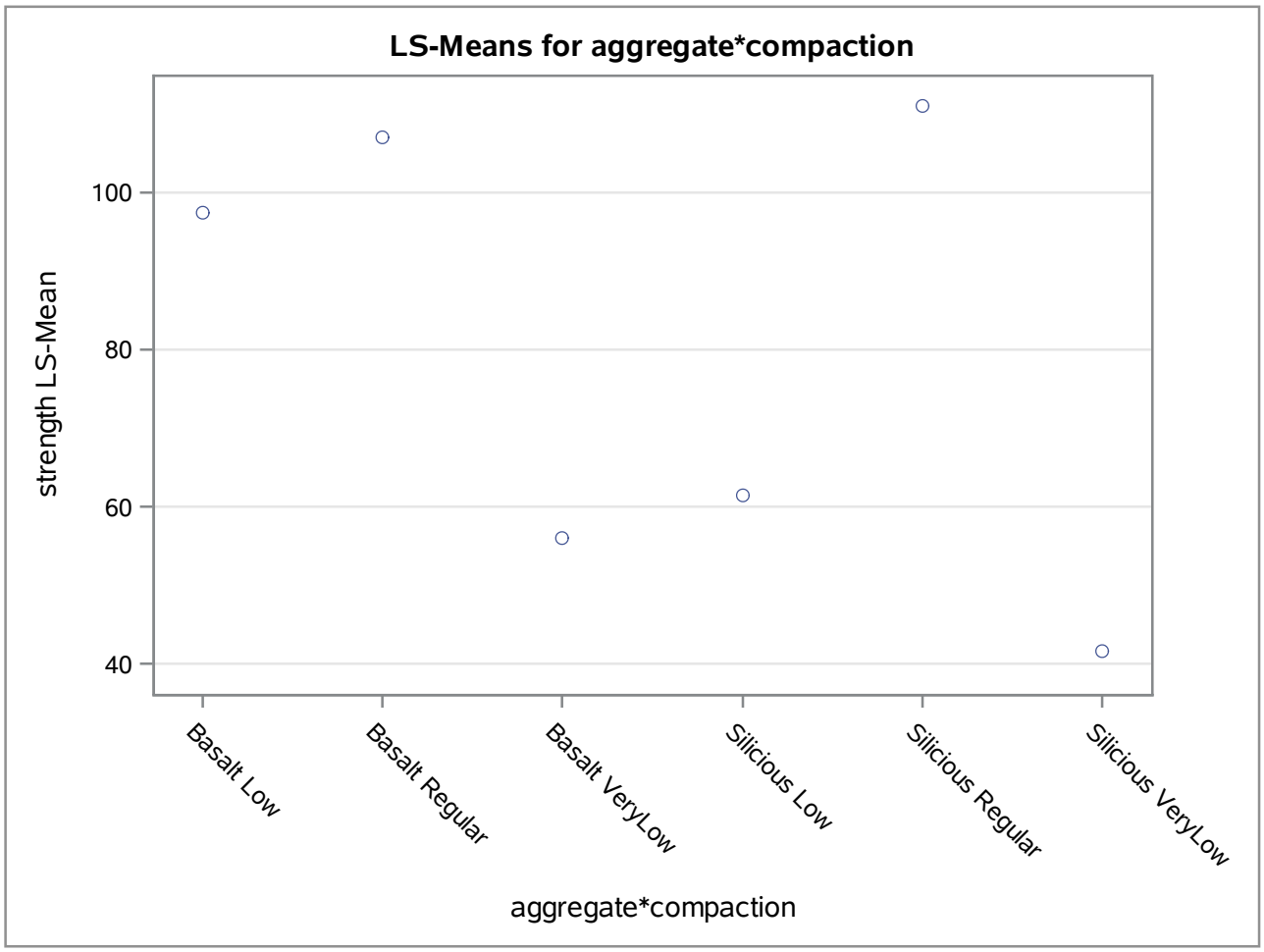
compaction	strength LSMEAN	Standard Error	Pr > |t|
Low	79.416667	1.529513	<.0001
Regular	109.000000	1.529513	<.0001
VeryLow	48.833333	1.934698	<.0001

The GLM Procedure
Least Squares Means



aggregate	compaction	strength LSMEAN	Standard Error	Pr > |t|
Basalt	**Low**	97.333333	1.934698	<.0001
Basalt	**Regular**	107.000000	2.369511	<.0001
Basalt	**VeryLow**	56.000000	3.350995	<.0001
Silicious	**Low**	61.500000	2.369511	<.0001
Silicious	**Regular**	111.000000	1.934698	<.0001
Silicious	**VeryLow**	41.666667	1.934698	<.0001

The GLM Procedure
Least Squares Means



The REG Procedure
Model: allterms
Dependent Variable: strength

Number of Observations Read	14
Number of Observations Used	14

Analysis of Variance

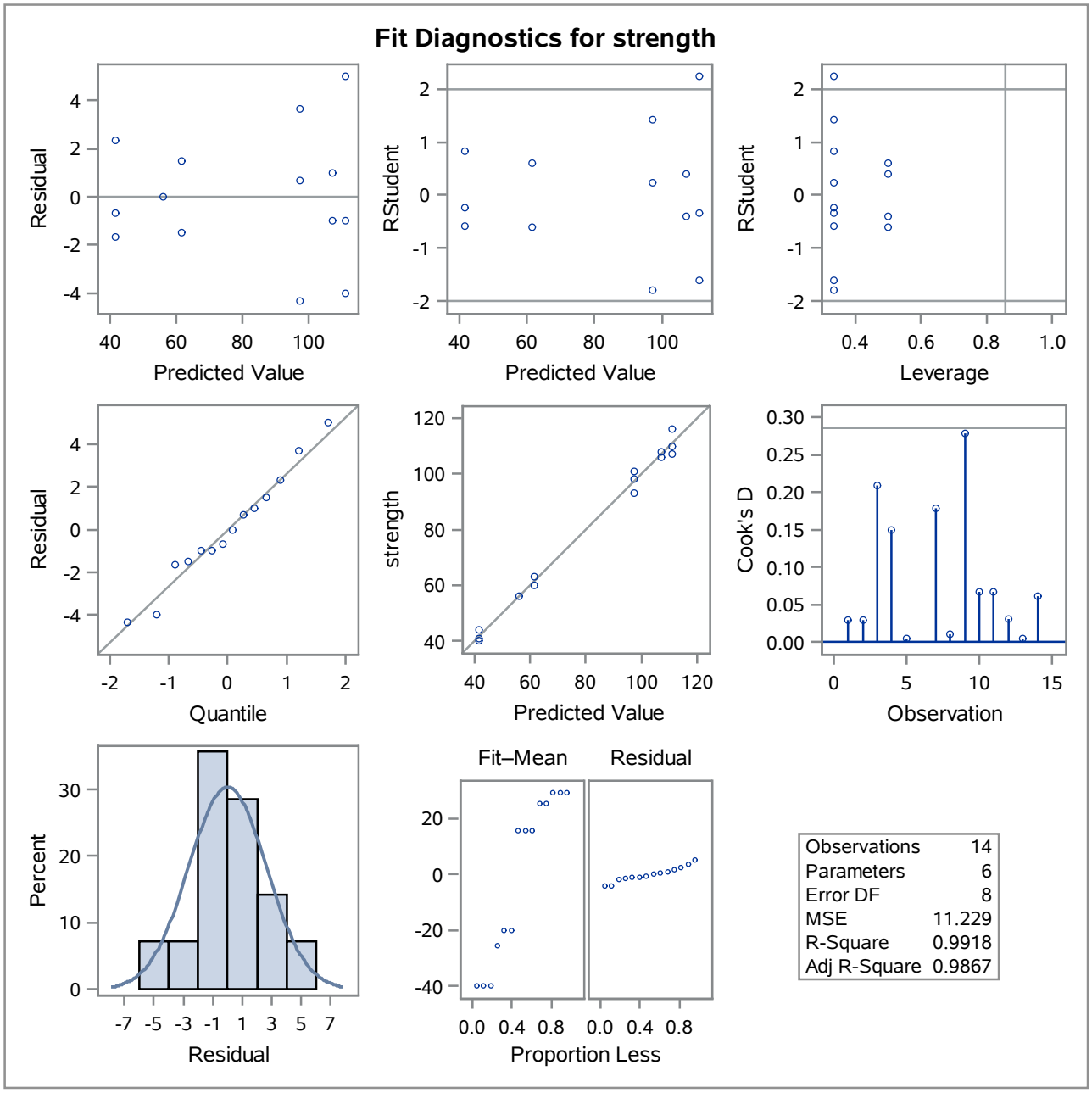
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	10873	2174.67619	193.66	<.0001
Error	8	89.83333	11.22917		
Corrected Total	13	10963			

Root MSE	3.35099	R-Square	0.9918
Dependent Mean	81.64286	Adj R-Sq	0.9867
Coeff Var	4.10446		

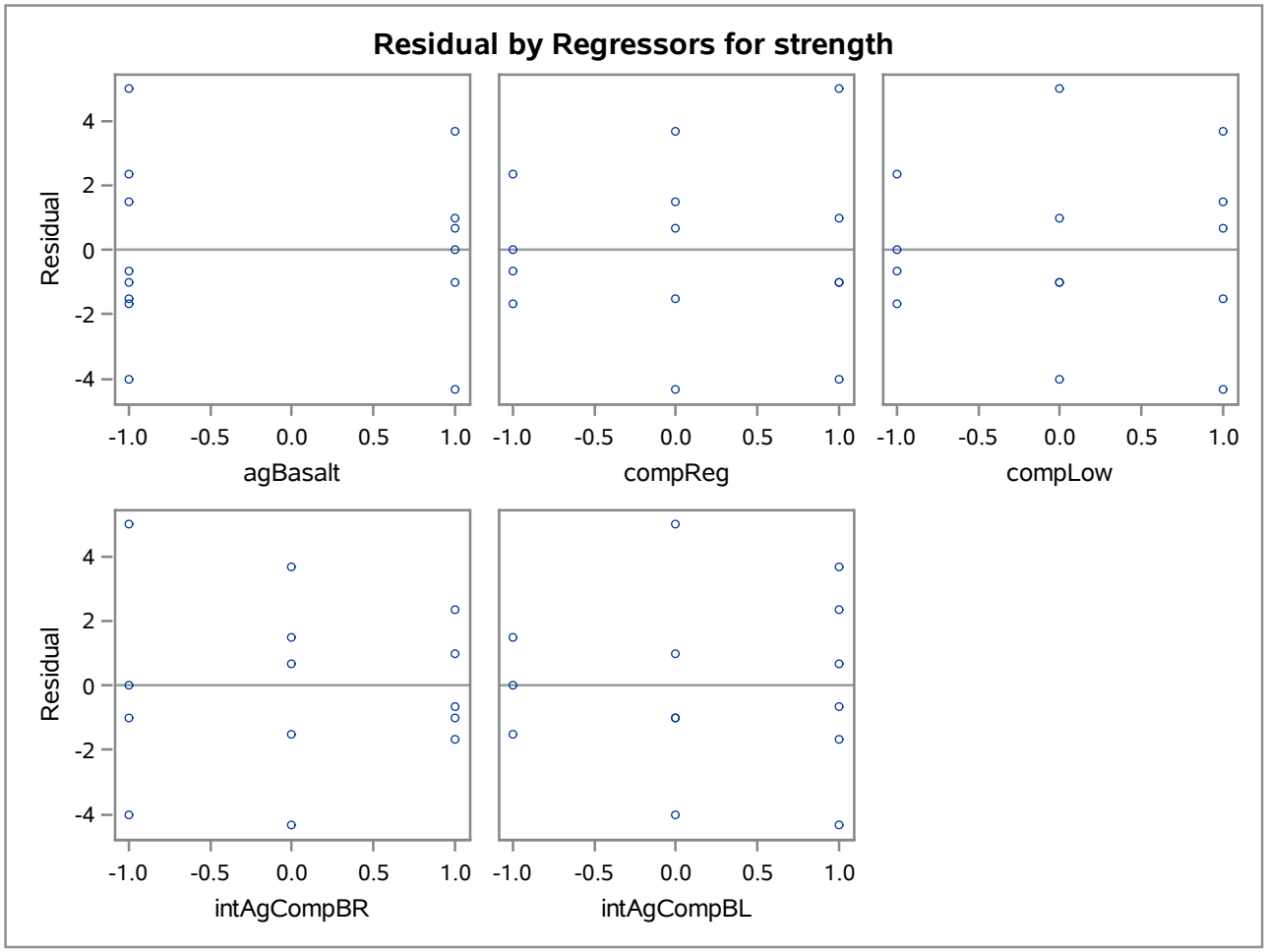
Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	79.08333	0.96735	81.75	<.0001
agBasalt	1	7.69444	0.96735	7.95	<.0001
compReg	1	29.91667	1.30980	22.84	<.0001
compLow	1	0.33333	1.30980	0.25	0.8055
intAgCompBR	1	-9.69444	1.30980	-7.40	<.0001
intAgCompBL	1	10.22222	1.30980	7.80	<.0001

The REG Procedure
Model: allterms
Dependent Variable: strength



The REG Procedure
Model: allterms
Dependent Variable: strength



The REG Procedure
Model: mainAg
Dependent Variable: strength

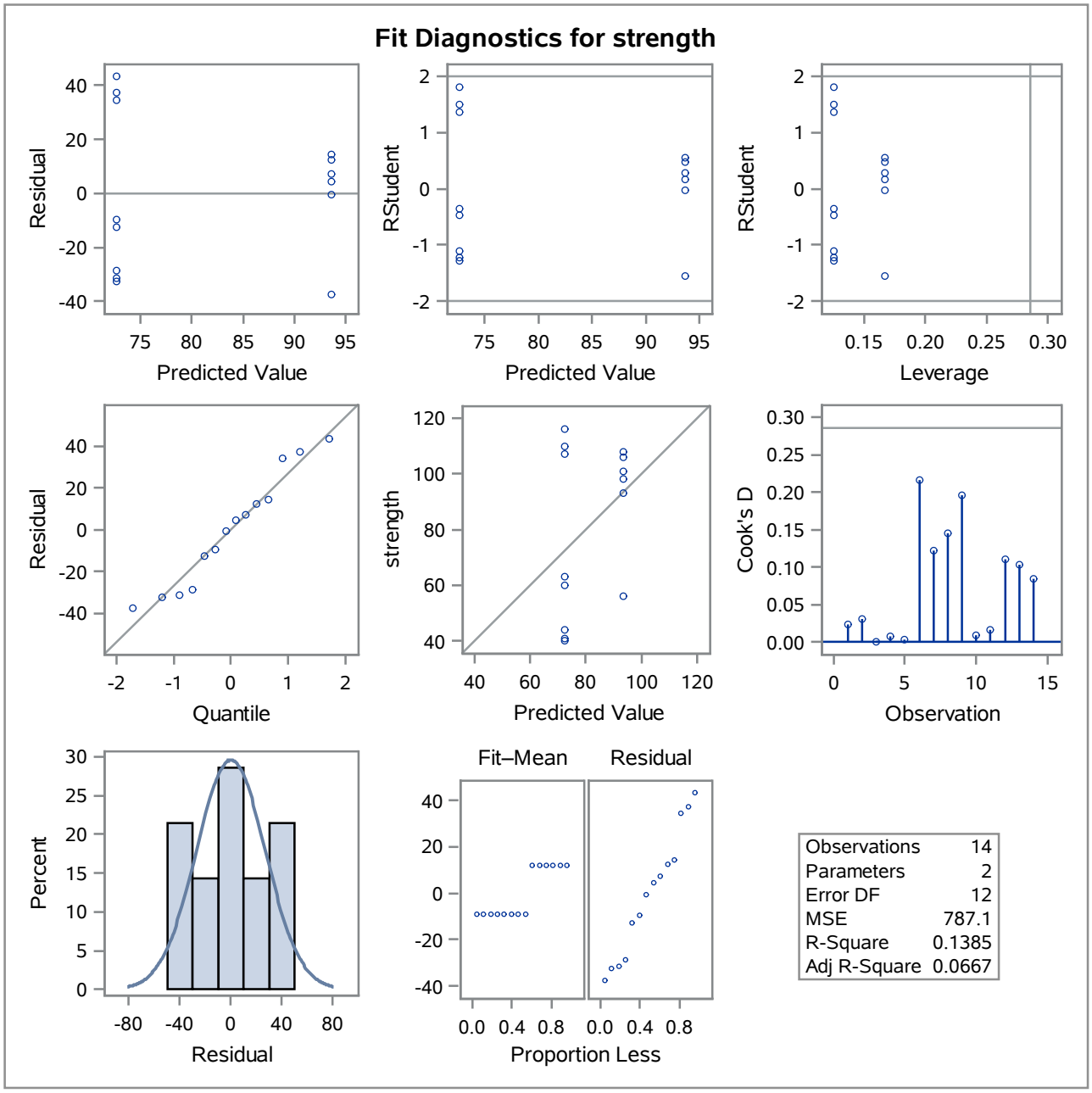
Number of Observations Read	14
Number of Observations Used	14

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1518.00595	1518.00595	1.93	0.1901
Error	12	9445.20833	787.10069		
Corrected Total	13	10963			

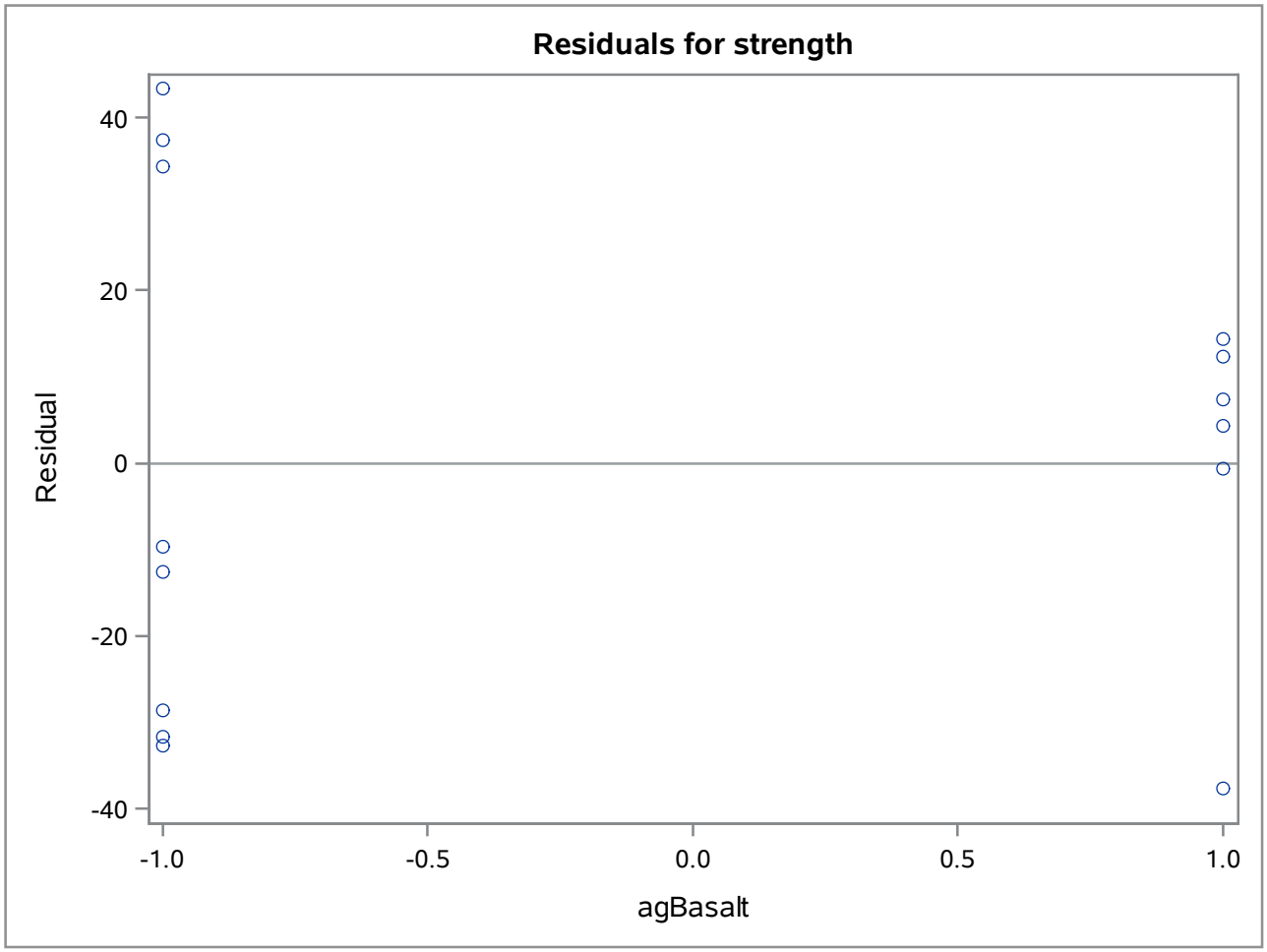
Root MSE	28.05531	R-Square	0.1385
Dependent Mean	81.64286	Adj R-Sq	0.0667
Coeff Var	34.36347		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	83.14583	7.57580	10.98	<.0001
agBasalt	1	10.52083	7.57580	1.39	0.1901

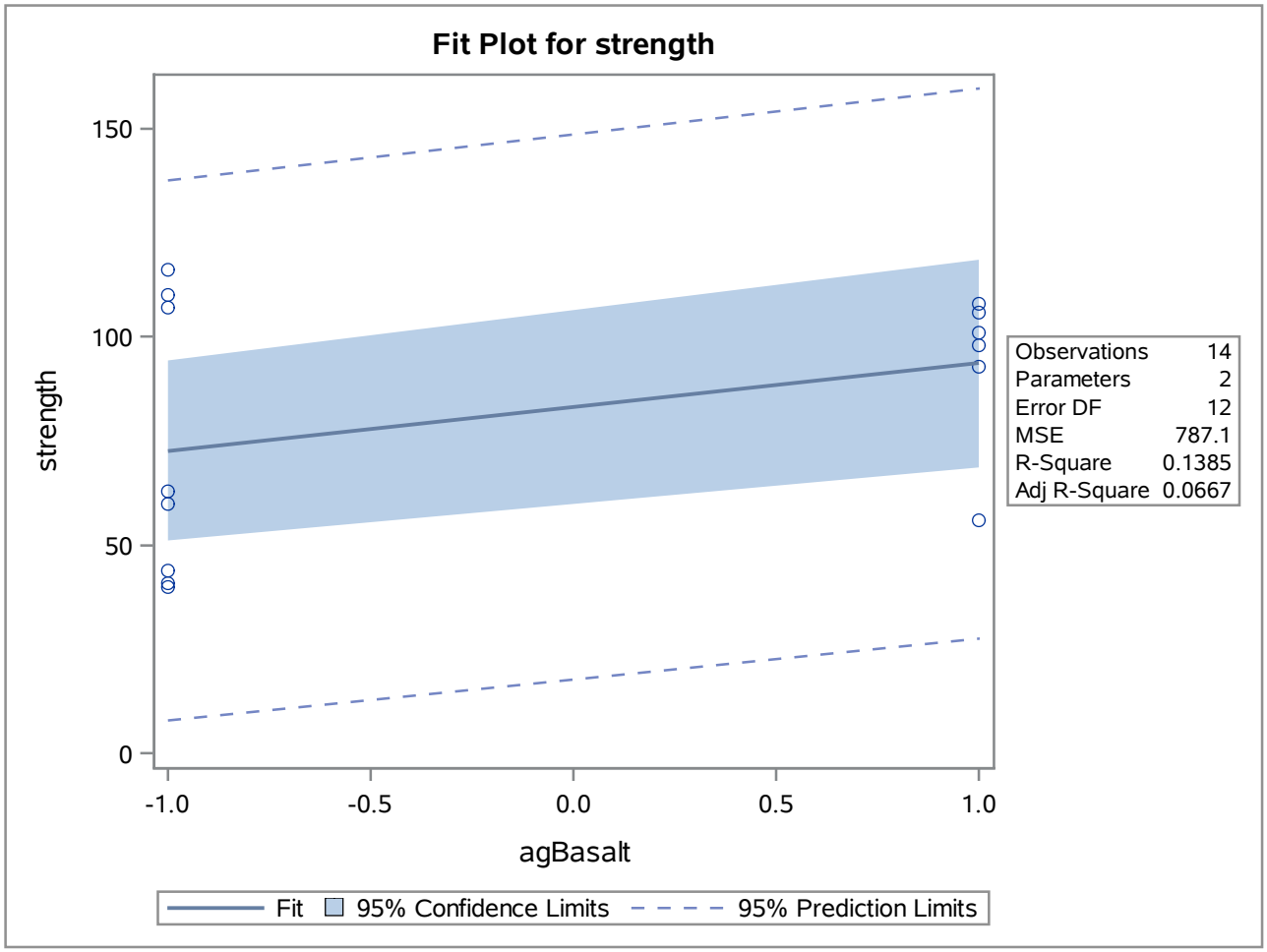
The REG Procedure
Model: mainAg
Dependent Variable: strength



The REG Procedure
Model: mainAg
Dependent Variable: strength



The REG Procedure
Model: mainAg
Dependent Variable: strength



The REG Procedure
Model: mainComp
Dependent Variable: strength

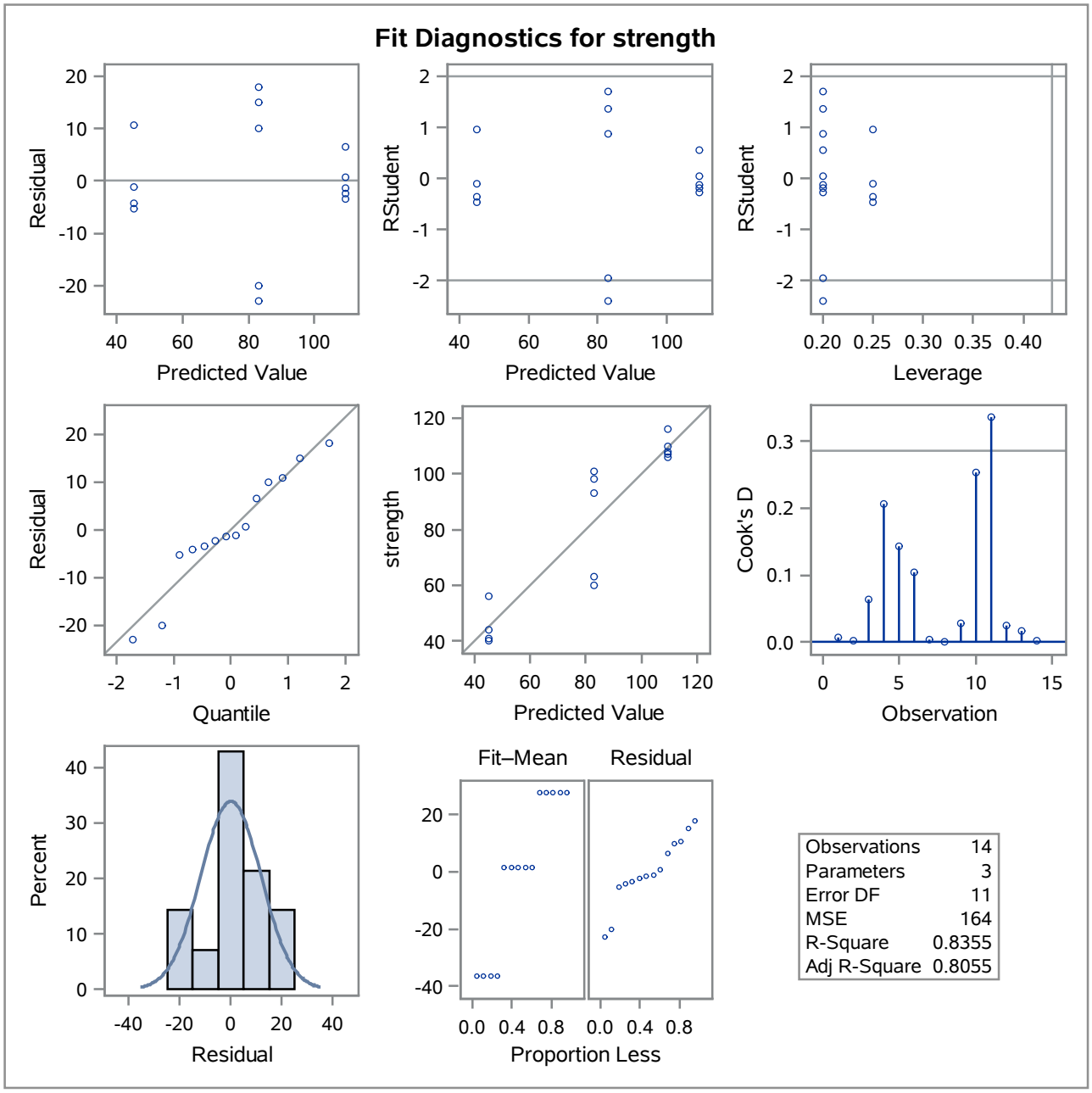
Number of Observations Read	14
Number of Observations Used	14

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	9159.26429	4579.63214	27.93	<.0001
Error	11	1803.95000	163.99545		
Corrected Total	13	10963			

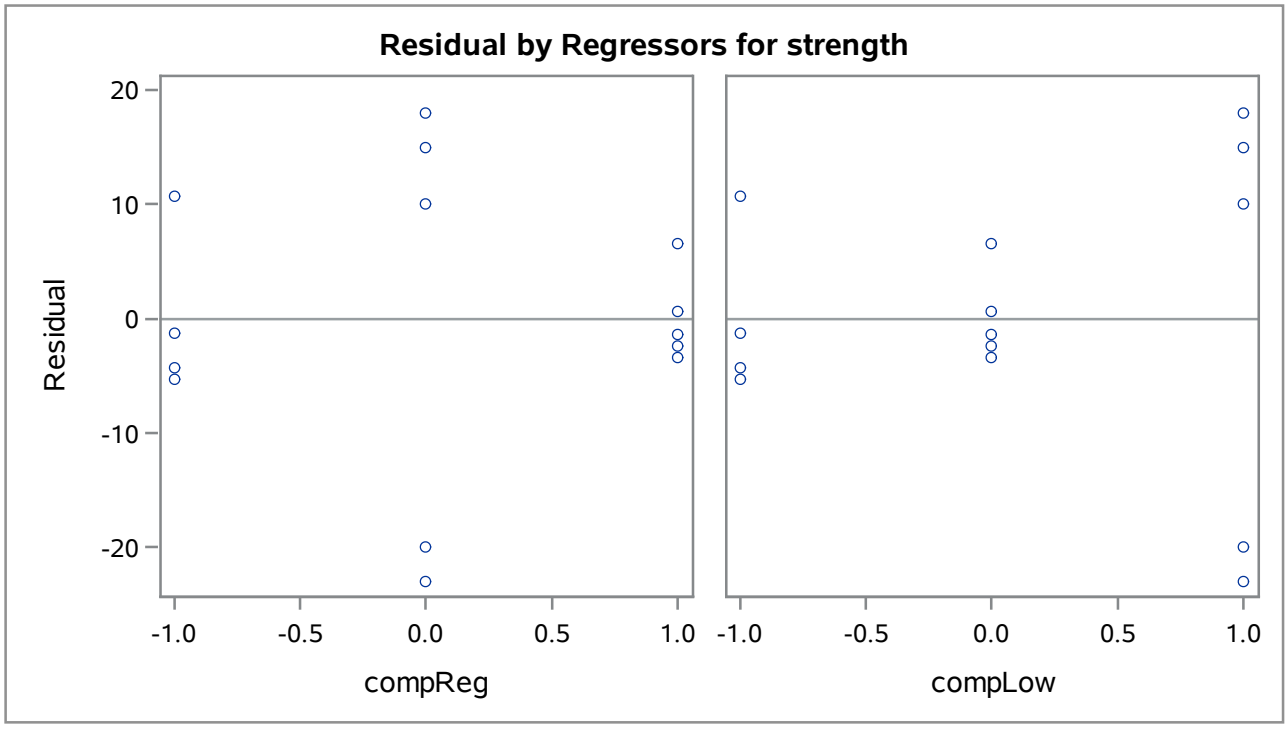
Root MSE	12.80607	R-Square	0.8355
Dependent Mean	81.64286	Adj R-Sq	0.8055
Coeff Var	15.68548		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	79.21667	3.44153	23.02	<.0001
compReg	1	30.18333	4.77254	6.32	<.0001
compLow	1	3.78333	4.77254	0.79	0.4447

The REG Procedure
Model: mainComp
Dependent Variable: strength



The REG Procedure
Model: mainComp
Dependent Variable: strength



The REG Procedure
Model: bothmain
Dependent Variable: strength

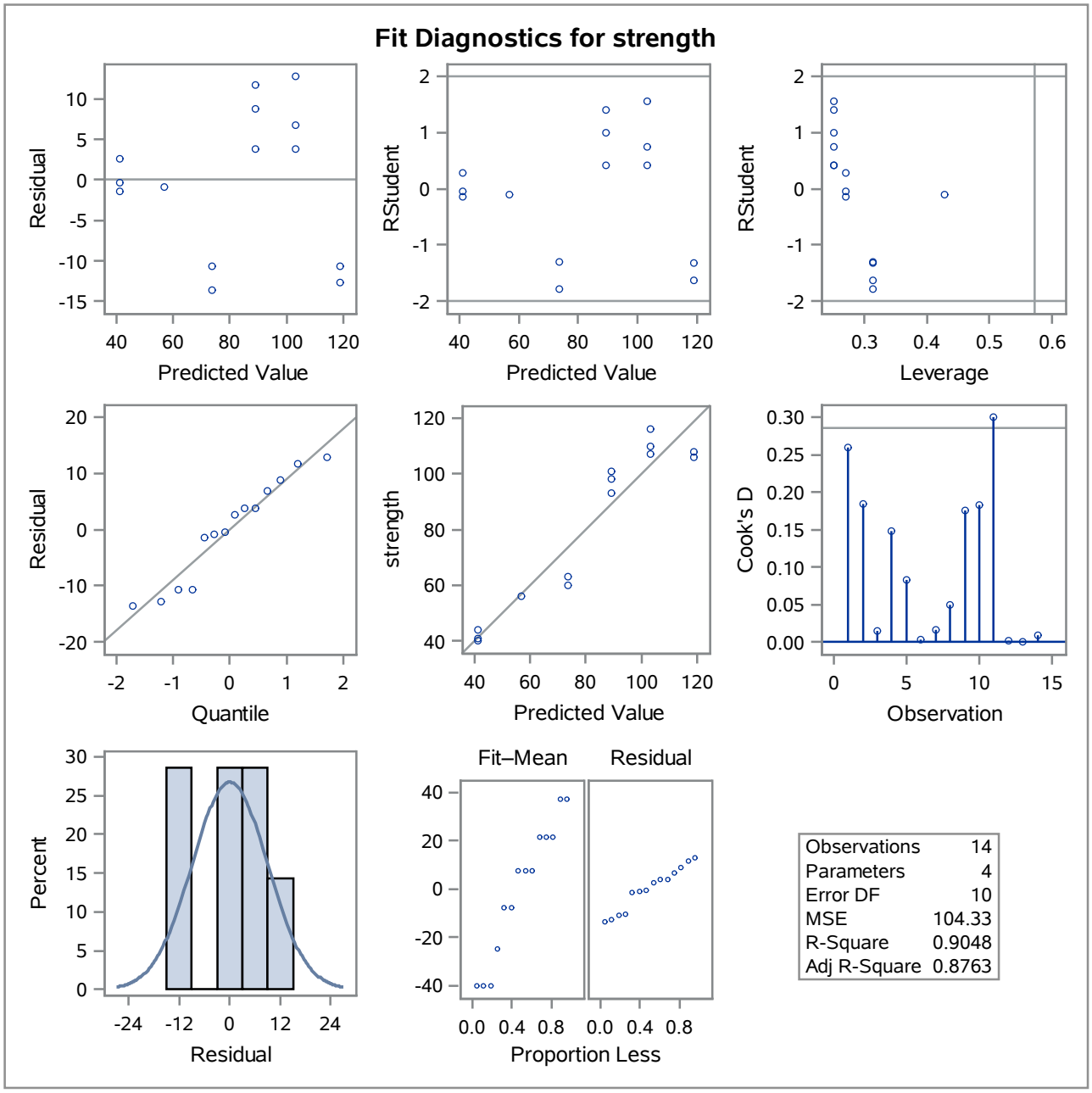
Number of Observations Read	14
Number of Observations Used	14

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	9919.93175	3306.64392	31.69	<.0001
Error	10	1043.28254	104.32825		
Corrected Total	13	10963			

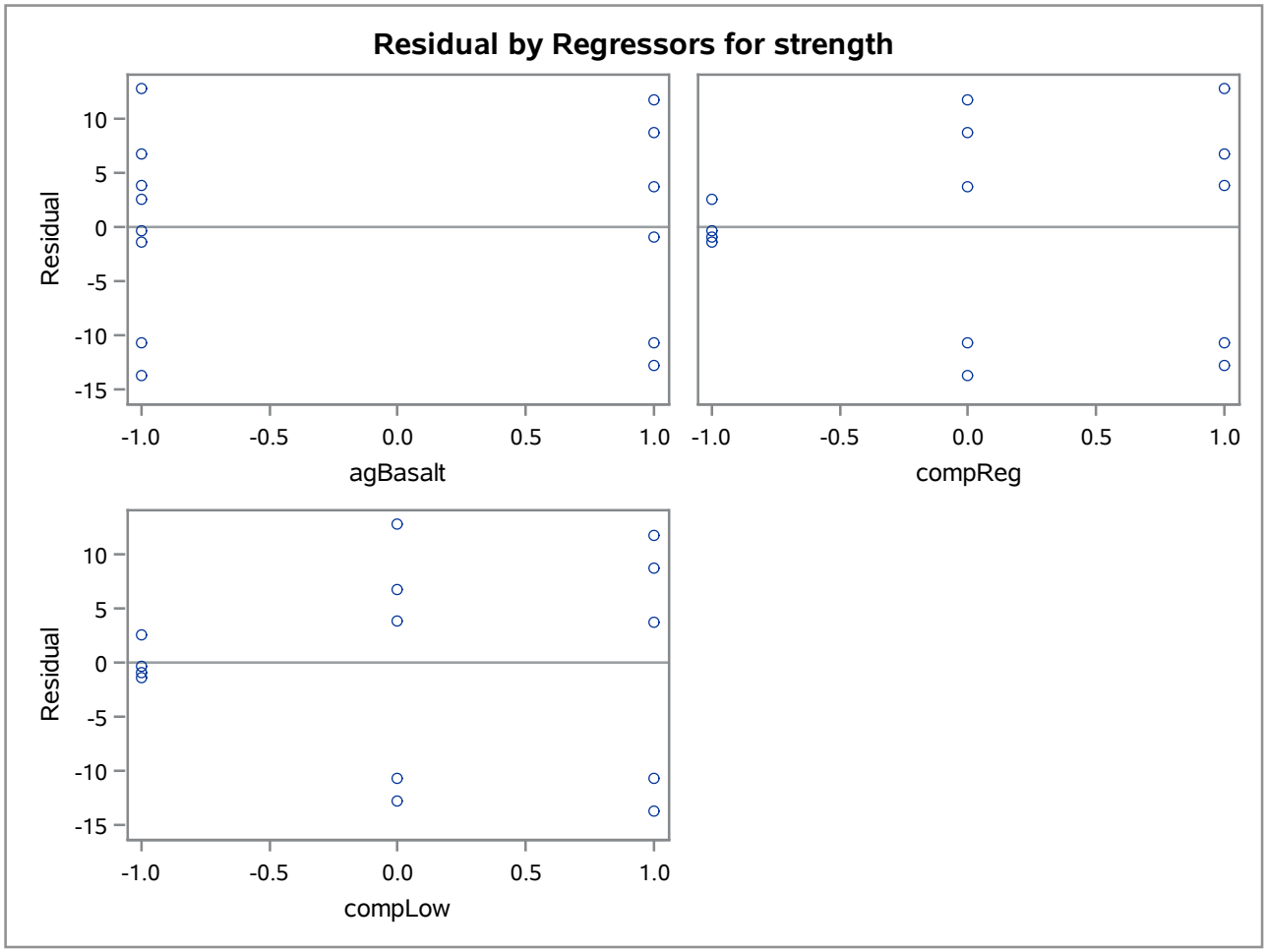
Root MSE	10.21412	R-Square	0.9048
Dependent Mean	81.64286	Adj R-Sq	0.8763
Coeff Var	12.51073		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	80.51164	2.78654	28.89	<.0001
agBasalt	1	7.76984	2.87750	2.70	0.0223
compReg	1	30.44233	3.80779	7.99	<.0001
compLow	1	0.93439	3.95009	0.24	0.8178

The REG Procedure
Model: bothmain
Dependent Variable: strength



The REG Procedure
Model: bothmain
Dependent Variable: strength



The REG Procedure
Model: AgInteract
Dependent Variable: strength

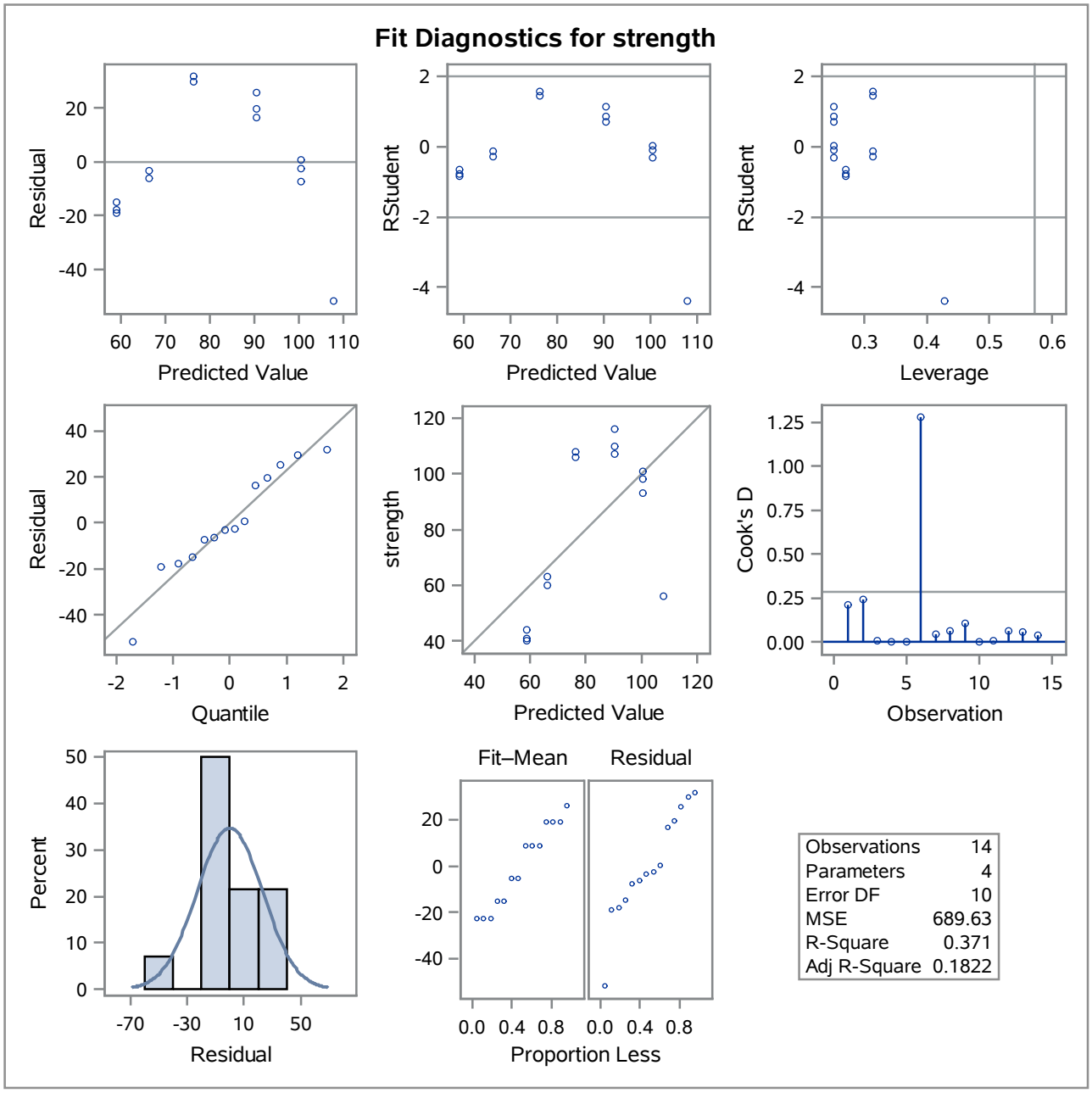
Number of Observations Read	14
Number of Observations Used	14

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	4066.92857	1355.64286	1.97	0.1832
Error	10	6896.28571	689.62857		
Corrected Total	13	10963			

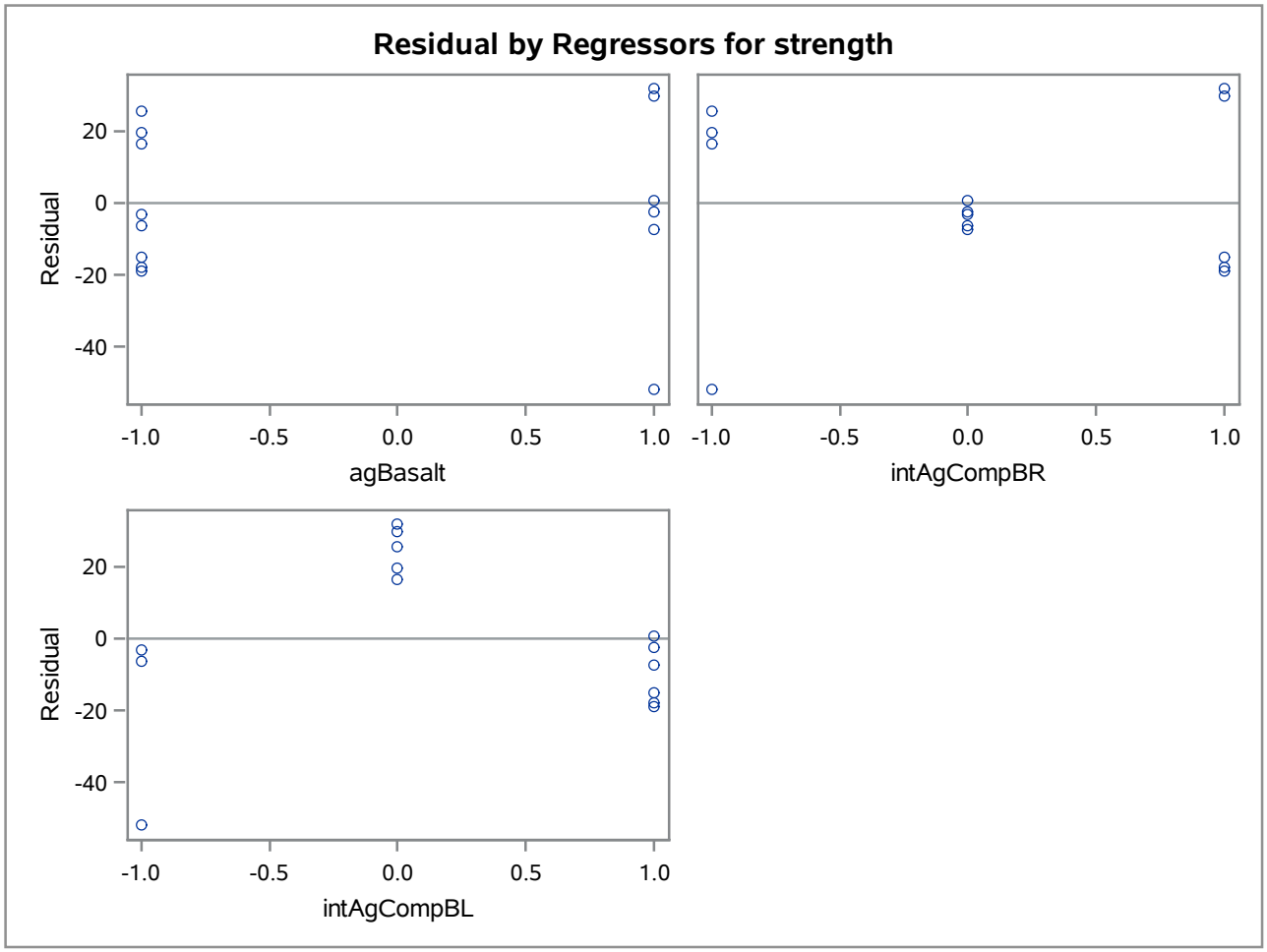
Root MSE	26.26078	R-Square	0.3710
Dependent Mean	81.64286	Adj R-Sq	0.1822
Coeff Var	32.16543		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	83.40476	7.39814	11.27	<.0001
agBasalt	1	11.48413	7.16428	1.60	0.1400
intAgCompBR	1	-18.60317	9.78992	-1.90	0.0866
intAgCompBL	1	5.63492	10.15580	0.55	0.5912

The REG Procedure
Model: AgInteract
Dependent Variable: strength



The REG Procedure
Model: AgInteract
Dependent Variable: strength



The REG Procedure
Model: CompInteract
Dependent Variable: strength

Number of Observations Read	14
Number of Observations Used	14

Analysis of Variance

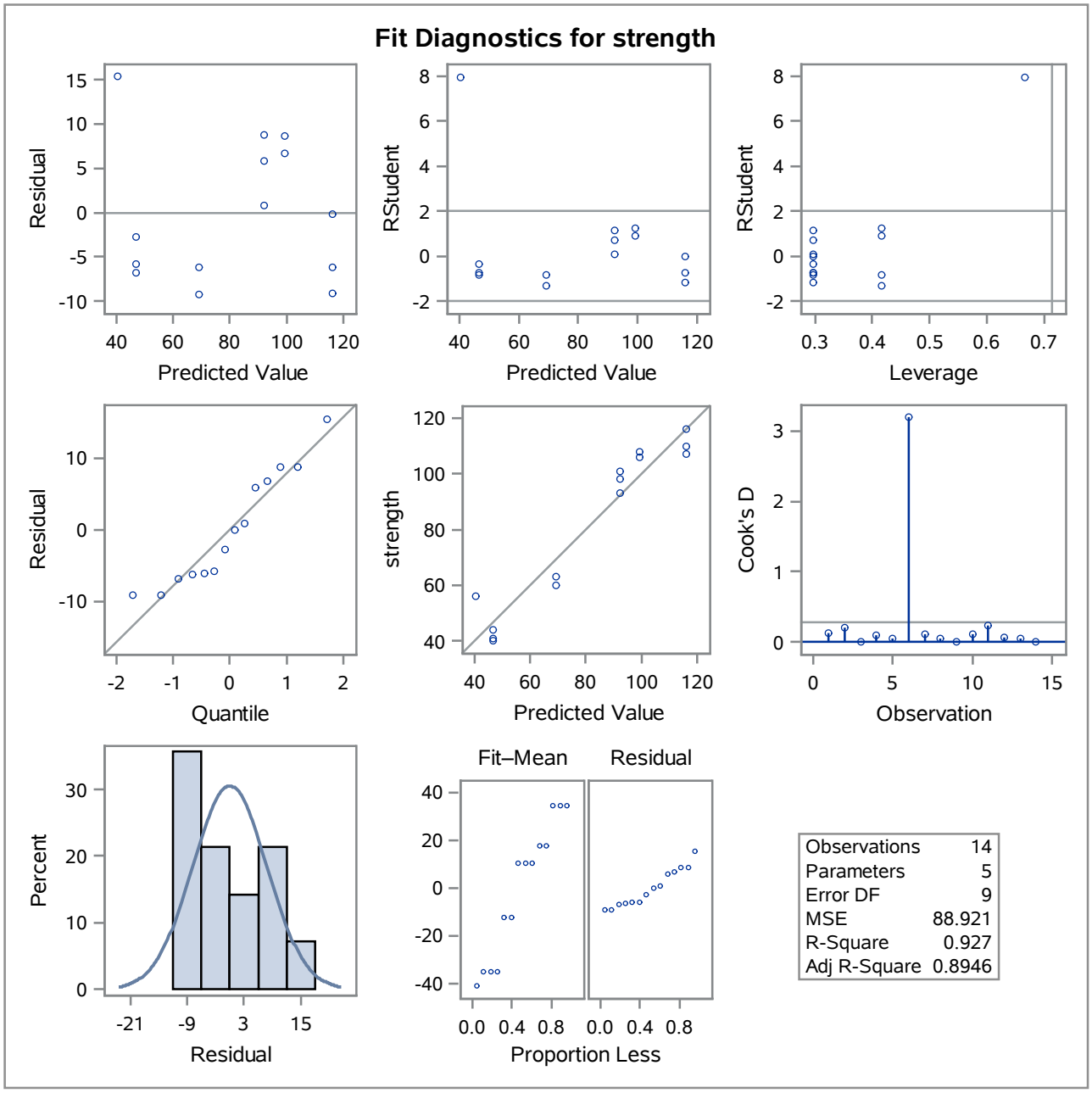
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	10163	2540.73181	28.57	<.0001
Error	9	800.28704	88.92078		
Corrected Total	13	10963			

Root MSE	9.42978	R-Square	0.9270
Dependent Mean	81.64286	Adj R-Sq	0.8946
Coeff Var	11.55004		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	77.37346	2.65408	29.15	<.0001
compReg	1	30.34414	3.68270	8.24	<.0001
compLow	1	3.32562	3.53050	0.94	0.3708
intAgCompBR	1	-8.41204	3.65777	-2.30	0.0470
intAgCompBL	1	11.50463	3.65777	3.15	0.0118

The REG Procedure
Model: CompInteract
Dependent Variable: strength



The REG Procedure
Model: CompInteract
Dependent Variable: strength