One-Way ANOVA with Heating Quality as Predictor

Class Level Information		
Class	**Levels**	**Values**
Heating_QC	4	Average/Typical Excellent Fair Good

Number of Observations Read	300
Number of Observations Used	300

Dependent Variable: SalePrice Sale price in dollars

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	66835556221	22278518740	18.50	<.0001
Error	296	356387963289	1204013389.5		
Corrected Total	299	423223519511			

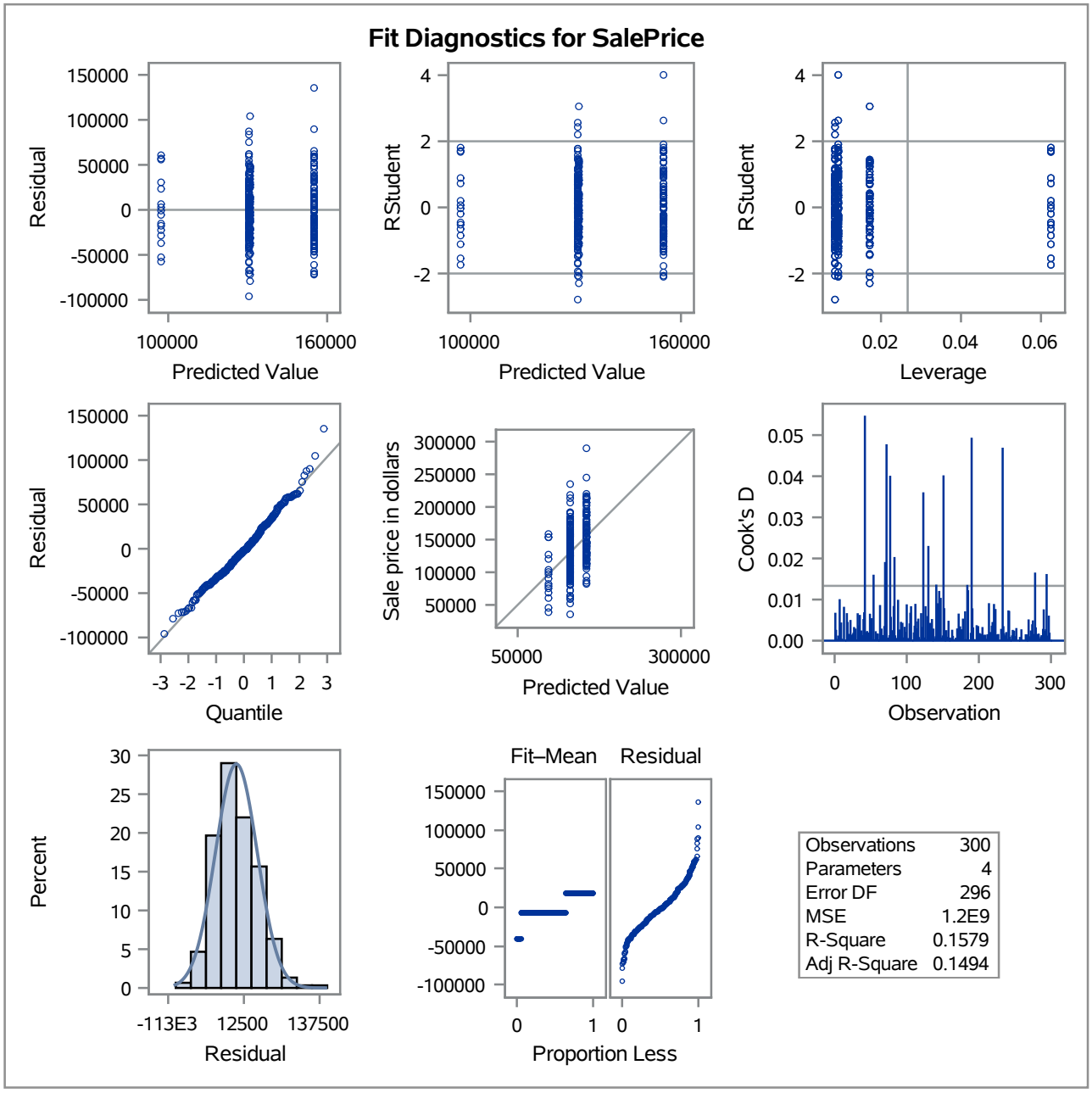
R-Square	Coeff Var	Root MSE	SalePrice Mean
0.157920	25.23100	34698.90	137524.9

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Heating_QC	3	66835556221	22278518740	18.50	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Heating_QC	3	66835556221	22278518740	18.50	<.0001

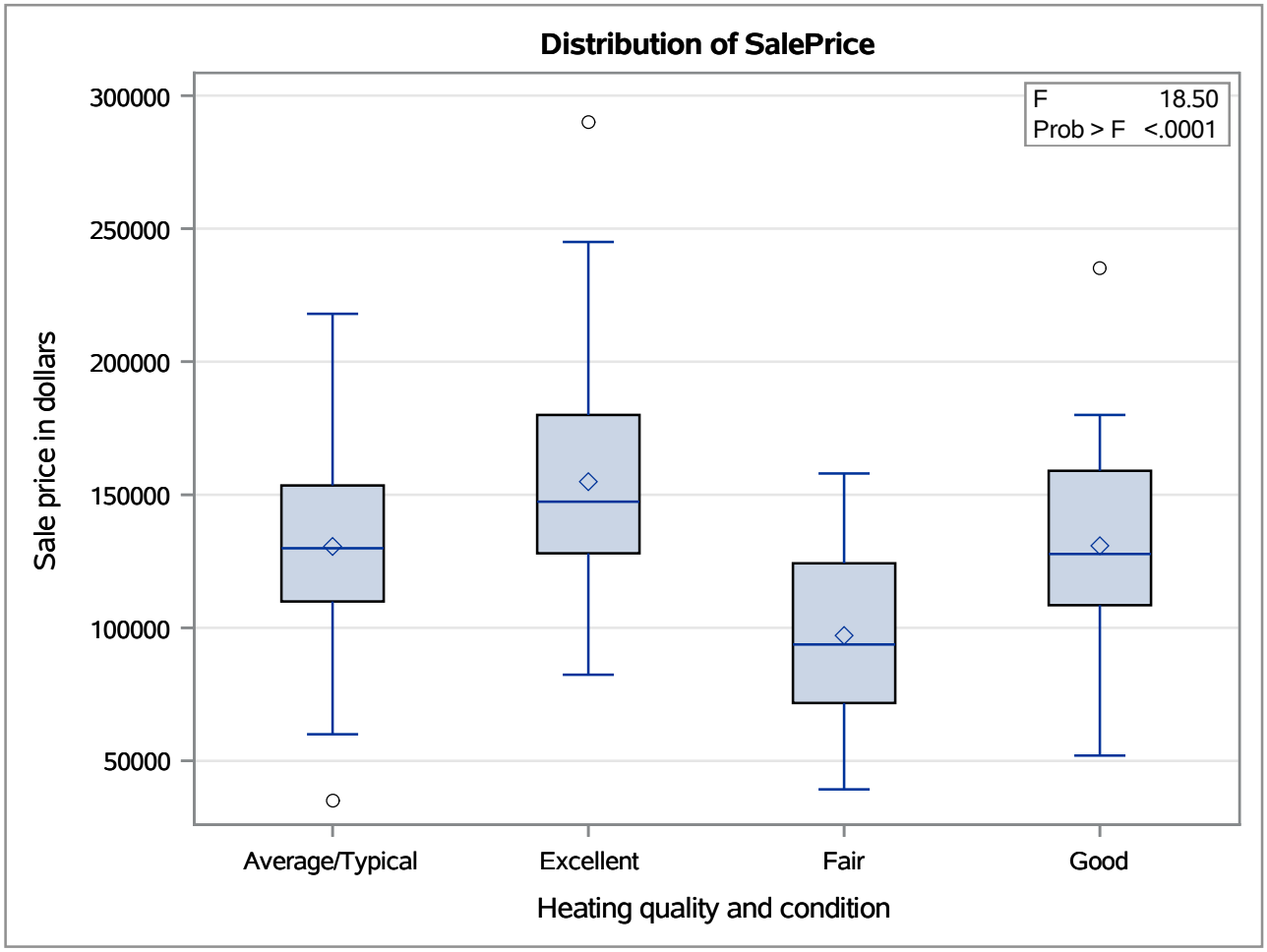
One-Way ANOVA with Heating Quality as Predictor

Dependent Variable: SalePrice Sale price in dollars



One-Way ANOVA with Heating Quality as Predictor

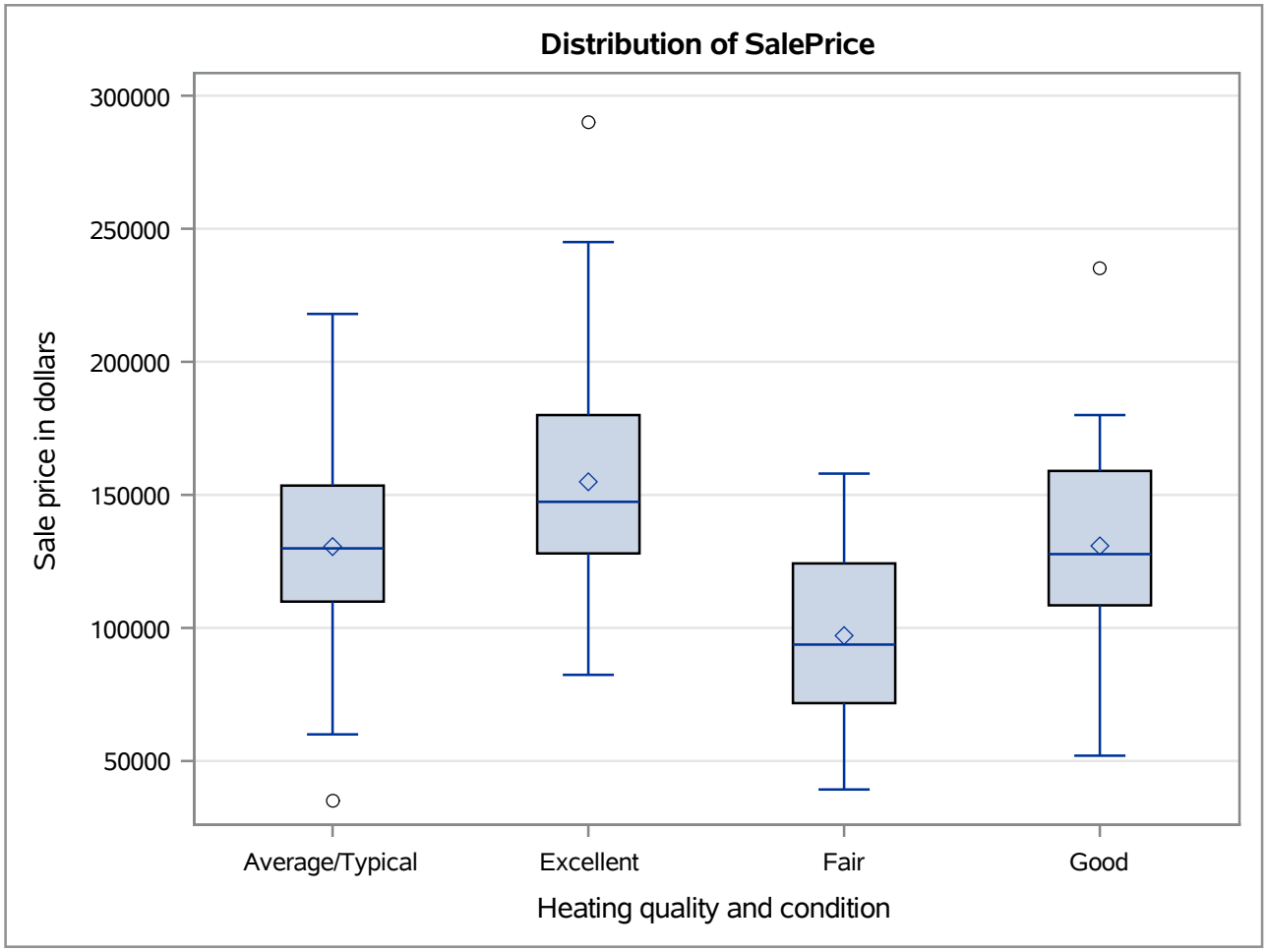
Dependent Variable: SalePrice Sale price in dollars



Levene's Test for Homogeneity of SalePrice Variance
ANOVA of Squared Deviations from Group Means

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Heating_QC	3	5.931E18	1.977E18	0.58	0.6305
Error	296	1.014E21	3.426E18		

One-Way ANOVA with Heating Quality as Predictor



Level of Heating_QC	N	SalePrice	
		Mean	Std Dev
Average/Typical	119	130573.529	32177.4508
Excellent	107	154919.187	36822.8795
Fair	16	97118.750	37423.5437
Good	58	130844.086	34912.5027

Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

Heating_QC	SalePrice LSMEAN	LSMEAN Number
Average/Typical	130573.529	1
Excellent	154919.187	2
Fair	97118.750	3
Good	130844.086	4

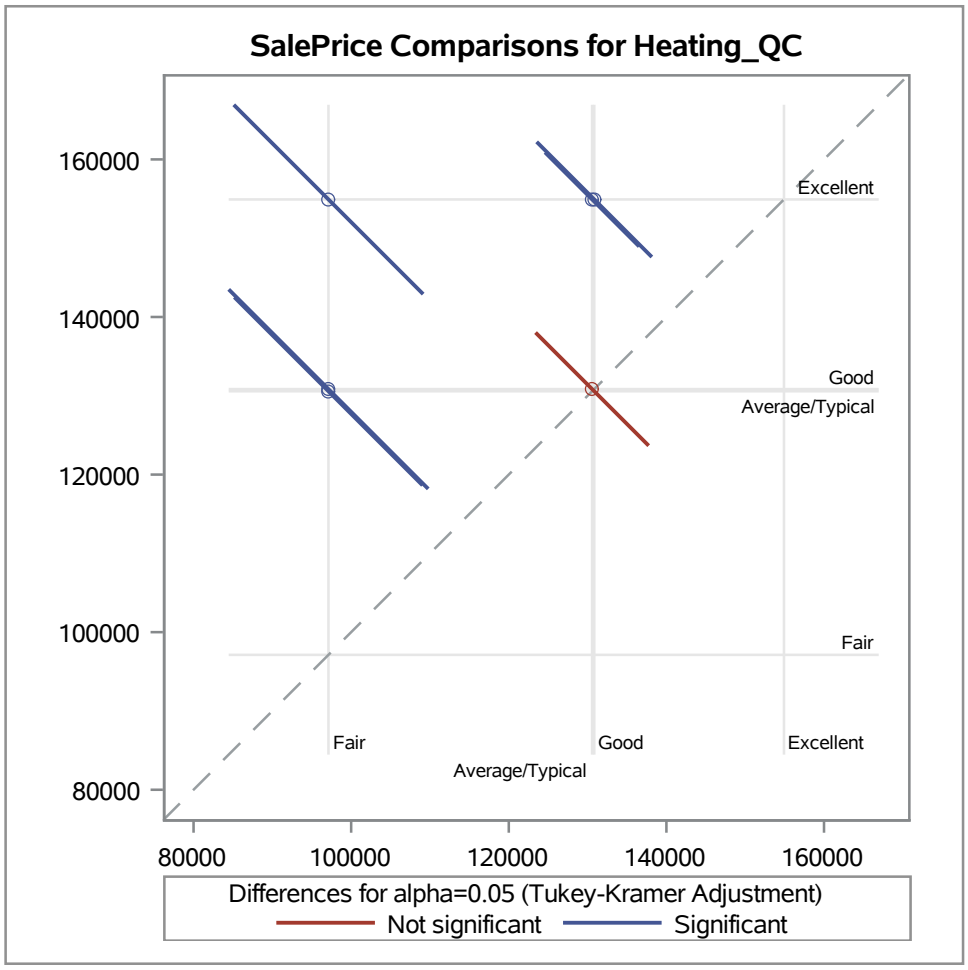
Post-Hoc Analysis of ANOVA - Heating Quality as Predictor

Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

Least Squares Means for effect Heating_QC
Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: SalePrice

i/j	1	2	3	4
1		<.0001	0.0020	1.0000
2	<.0001		<.0001	0.0002
3	0.0020	<.0001		0.0037
4	1.0000	0.0002	0.0037	

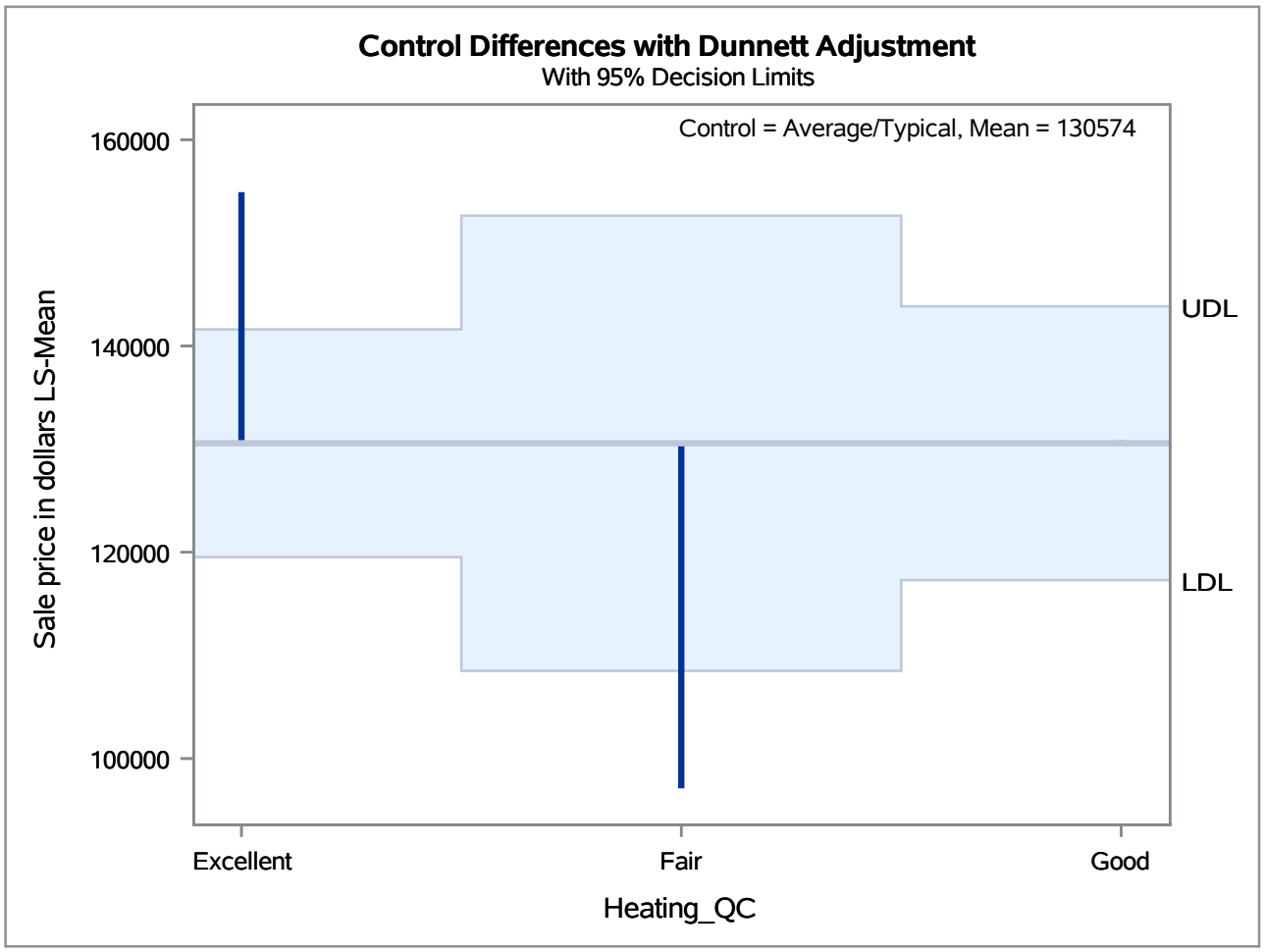


Least Squares Means
Adjustment for Multiple Comparisons: Dunnett

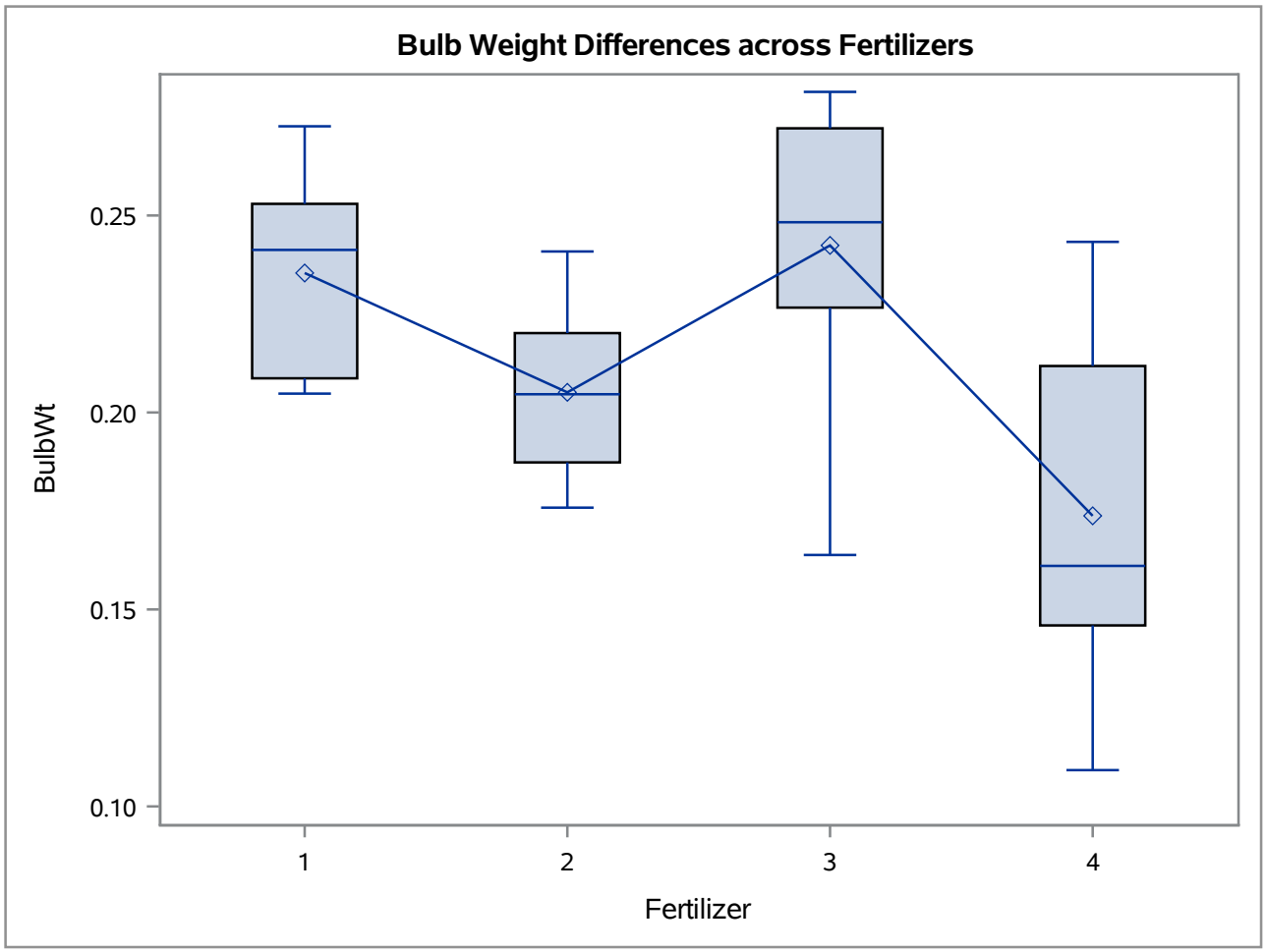
Heating_QC	SalePrice LSMEAN	H0:LSMean=Control Pr > |t|
Average/Typical	130573.529	
Excellent	154919.187	<.0001
Fair	97118.750	0.0010
Good	130844.086	0.9999

Post-Hoc Analysis of ANOVA - Heating Quality as Predictor

Least Squares Means
Adjustment for Multiple Comparisons: Dunnett



Analysis Variable : BulbWt						
Fertilizer	N Obs	N	Mean	Std Dev	Minimum	Maximum
1	8	8	0.2353998	0.0254092	0.2047856	0.2726395
2	8	8	0.2051141	0.0222098	0.1758361	0.2408676
3	8	8	0.2424075	0.0386855	0.1638284	0.2813780
4	8	8	0.1737649	0.0444702	0.1092144	0.2433058



Class Level Information		
Class	Levels	Values
Fertilizer	4	1 2 3 4

Number of Observations Read	32
Number of Observations Used	32

Dependent Variable: BulbWt

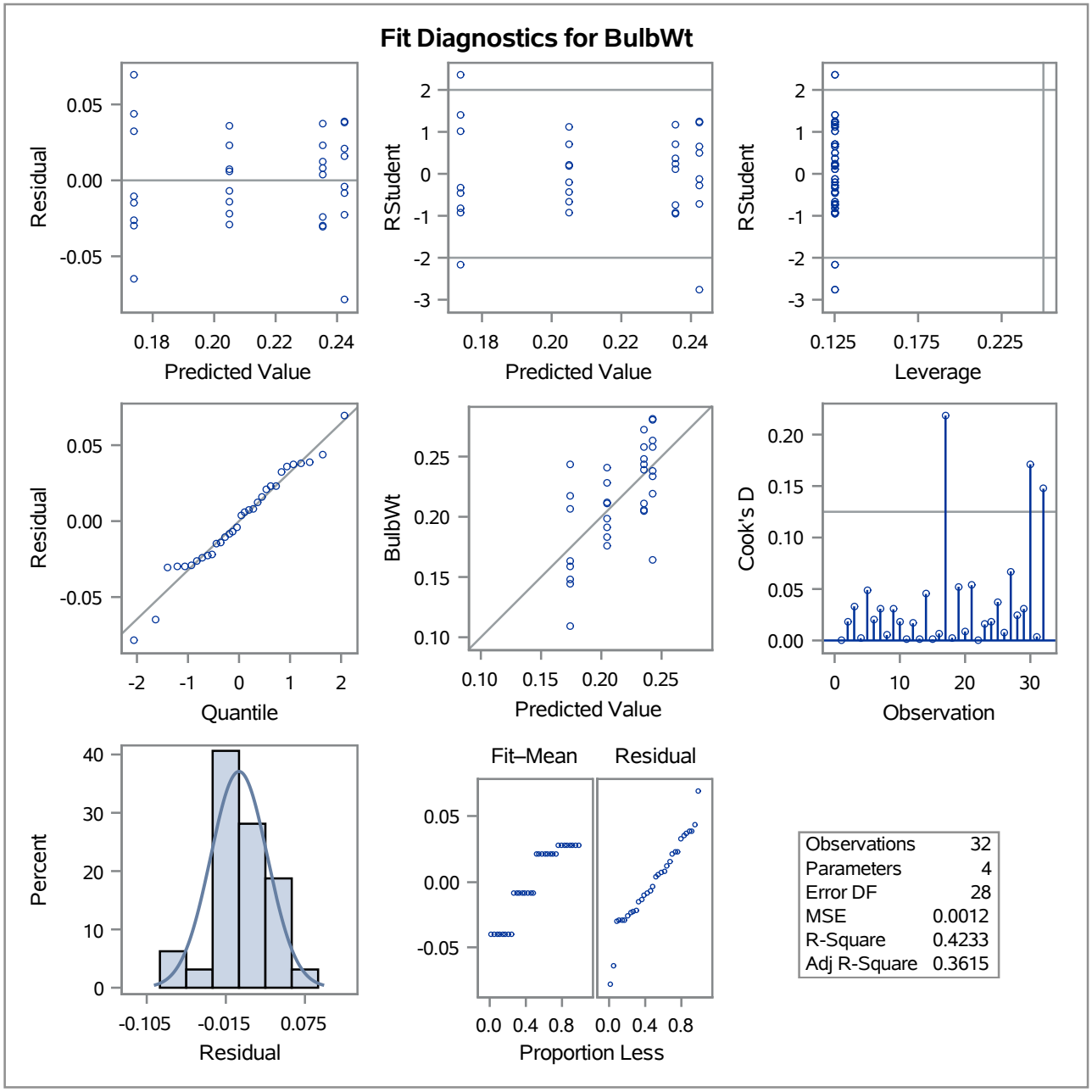
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	0.02370114	0.00790038	6.85	0.0013
Error	28	0.03229141	0.00115326		
Corrected Total	31	0.05599255			

R-Square	Coeff Var	Root MSE	BulbWt Mean
0.423291	15.85633	0.033960	0.214172

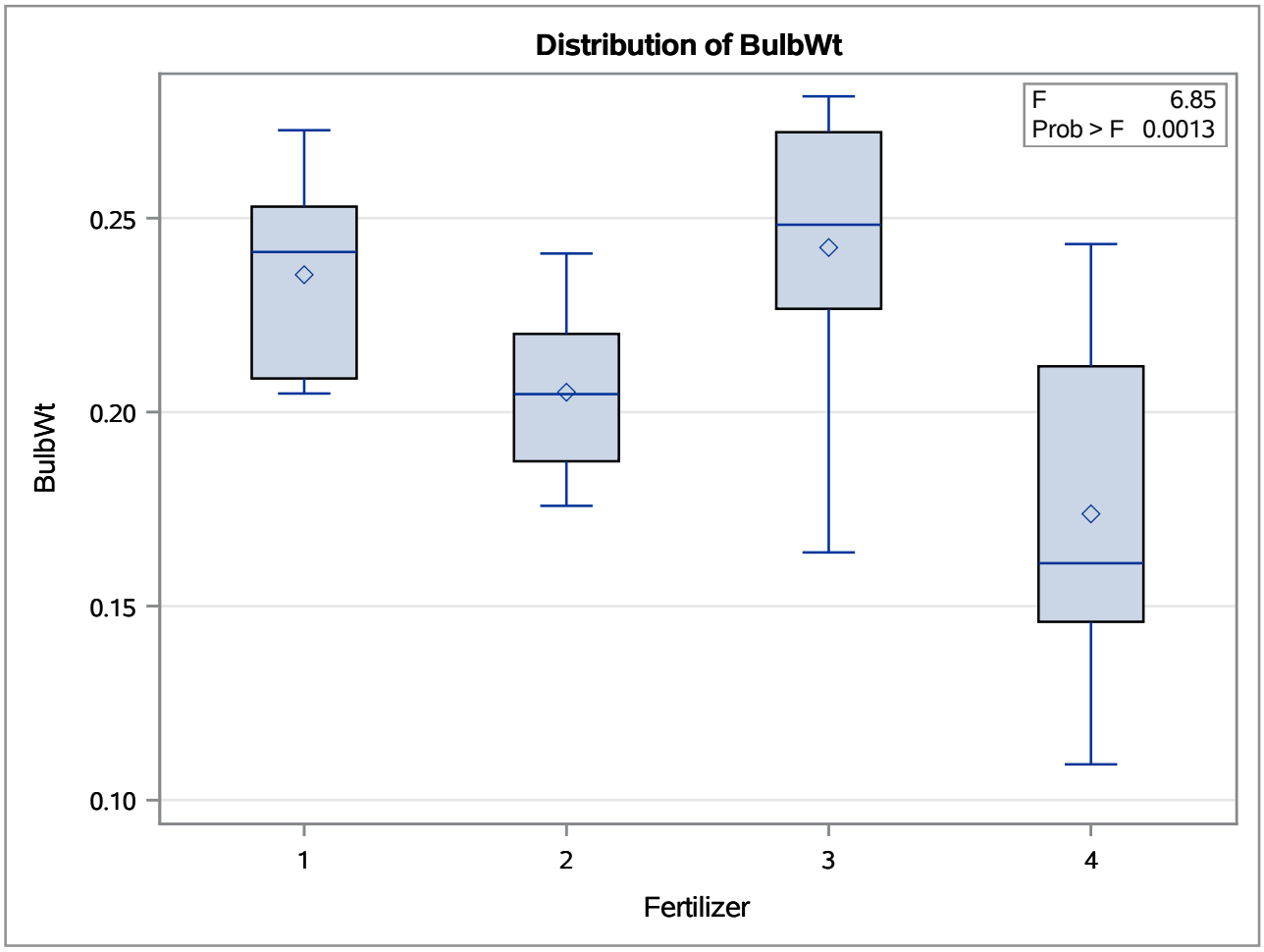
Source	DF	Type I SS	Mean Square	F Value	Pr > F
Fertilizer	3	0.02370114	0.00790038	6.85	0.0013

Dependent Variable: BulbWt

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Fertilizer	3	0.02370114	0.00790038	6.85	0.0013

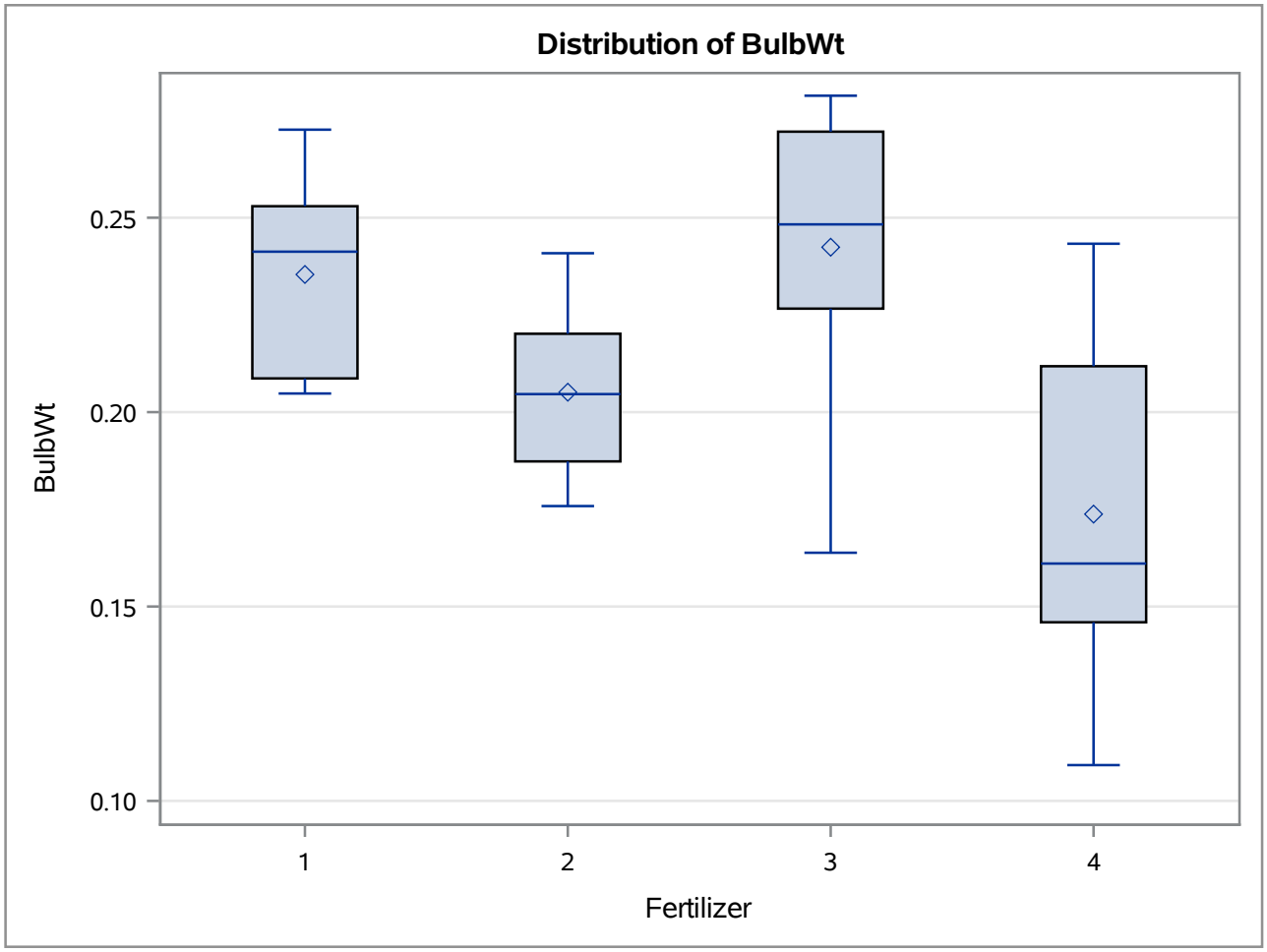


Dependent Variable: BulbWt



Levene's Test for Homogeneity of BulbWt Variance ANOVA of Squared Deviations from Group Means					
Source	**DF**	**Sum of Squares**	**Mean Square**	**F Value**	**Pr > F**
Fertilizer	3	9.13E-6	3.043E-6	1.54	0.2257
Error	28	0.000055	1.974E-6		

One-Way ANOVA with Fertilizer as Predictor



Level of Fertilizer	N	BulbWt	
		Mean	Std Dev
1	8	0.23539981	0.02540915
2	8	0.20511406	0.02220977
3	8	0.24240747	0.03868547
4	8	0.17376488	0.04447015

Least Squares Means
Adjustment for Multiple Comparisons: Tukey

Fertilizer	BulbWt LSMEAN	LSMEAN Number
1	0.23539981	1
2	0.20511406	2
3	0.24240747	3
4	0.17376488	4

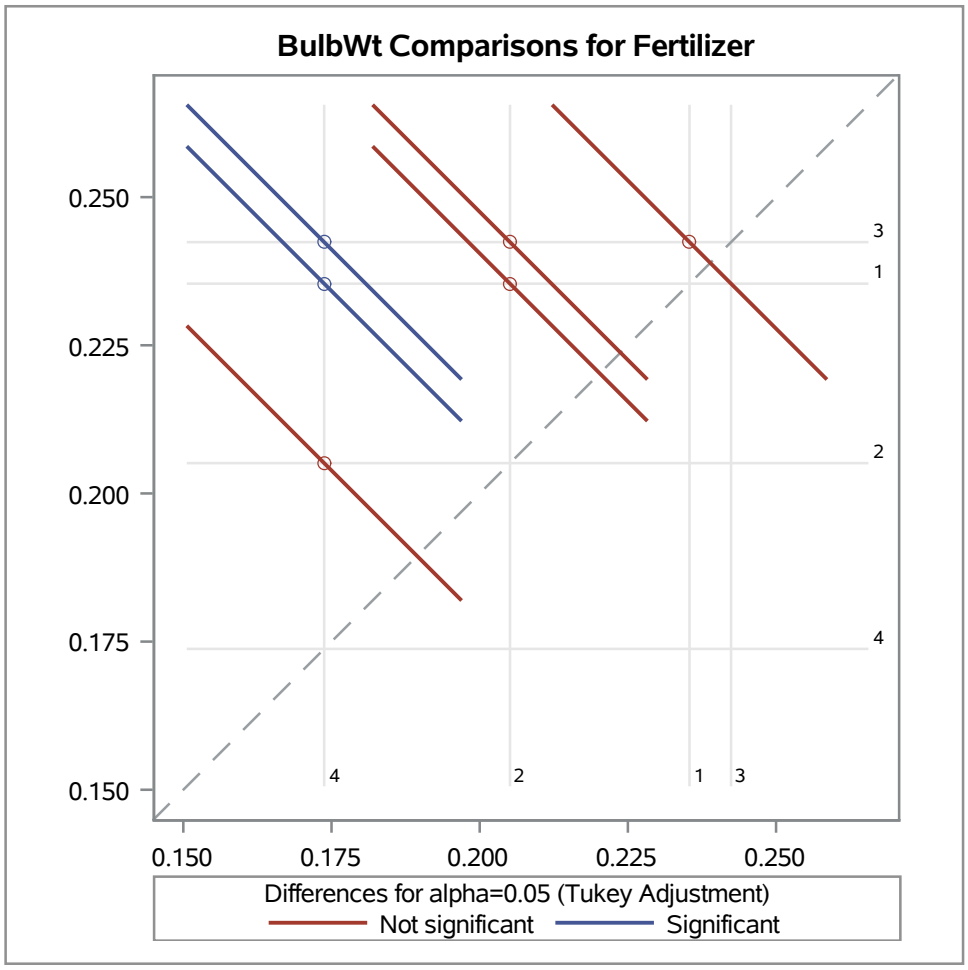
Post-Hoc Analysis of ANOVA - 'Fertilizer' as Predictor

Least Squares Means
Adjustment for Multiple Comparisons: Tukey

Least Squares Means for effect Fertilizer
Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: BulbWt

i/j	1	2	3	4
1		0.3021	0.9758	0.0058
2	0.3021		0.1490	0.2738
3	0.9758	0.1490		0.0020
4	0.0058	0.2738	0.0020	



Analysis Variable : BulbWt

Fertilizer	N Obs	N	Mean	Std Dev	Minimum	Maximum
1	8	8	0.2353998	0.0254092	0.2047856	0.2726395
2	8	8	0.2051141	0.0222098	0.1758361	0.2408676
3	8	8	0.2424075	0.0386855	0.1638284	0.2813780
4	8	8	0.1737649	0.0444702	0.1092144	0.2433058

Post-Hoc Analysis of ANOVA - 'Fertilizer' as Predictor

Least Squares Means
Adjustment for Multiple Comparisons: Dunnett

Fertilizer	BulbWt LSMEAN	H0:LSMean=Control Pr > |t|
1	0.23539981	0.0031
2	0.20511406	0.1801
3	0.24240747	0.0011
4	0.17376488