The GLM Procedure

Class Level Information		
Class	Levels	Values
METHOD	3	1 2 3

Number of Observations Read	36
Number of Observations Used	36

The GLM Procedure

Dependent Variable: AROMA

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	1.05055556	0.52527778	1.29	0.2880
Error	33	13.40833333	0.40631313		
Corrected Total	35	14.45888889			

R-Square	Coeff Var	Root MSE	AROMA Mean
0.072658	12.24513	0.637427	5.205556

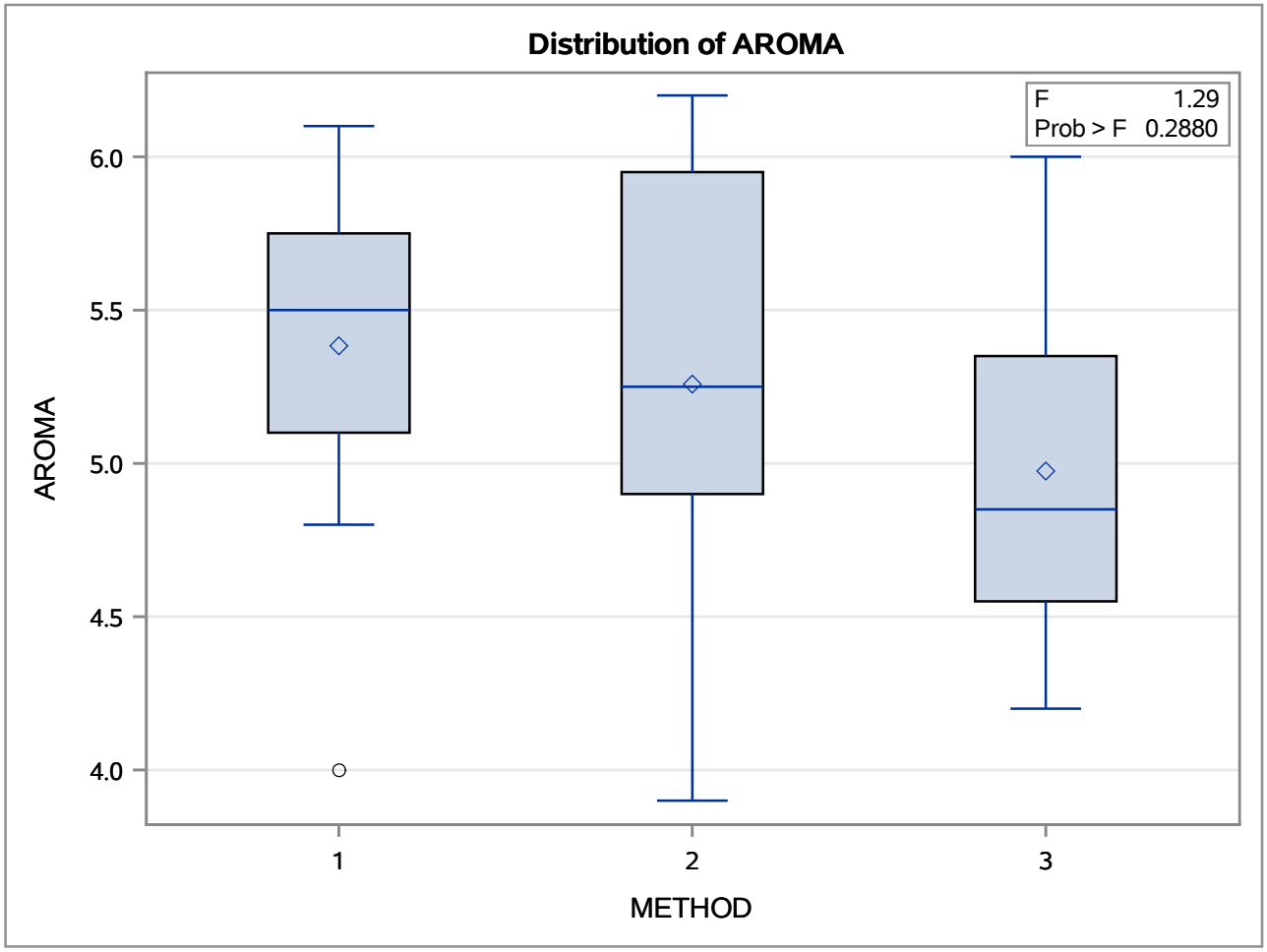
Source	DF	Type I SS	Mean Square	F Value	Pr > F
METHOD	2	1.05055556	0.52527778	1.29	0.2880

Source	DF	Type III SS	Mean Square	F Value	Pr > F
METHOD	2	1.05055556	0.52527778	1.29	0.2880

Contrast	DF	Contrast SS	Mean Square	F Value	Pr > F
One - Two Vs Three	1	0.95680556	0.95680556	2.35	0.1344
One vs Two	1	0.09375000	0.09375000	0.23	0.6341

The GLM Procedure

Dependent Variable: AROMA



The GLM Procedure

Dependent Variable: FLAVOR

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	4.88000000	2.44000000	9.50	0.0006
Error	33	8.48000000	0.25696970		
Corrected Total	35	13.36000000			

R-Square	Coeff Var	Root MSE	FLAVOR Mean
0.365269	9.625097	0.506922	5.266667

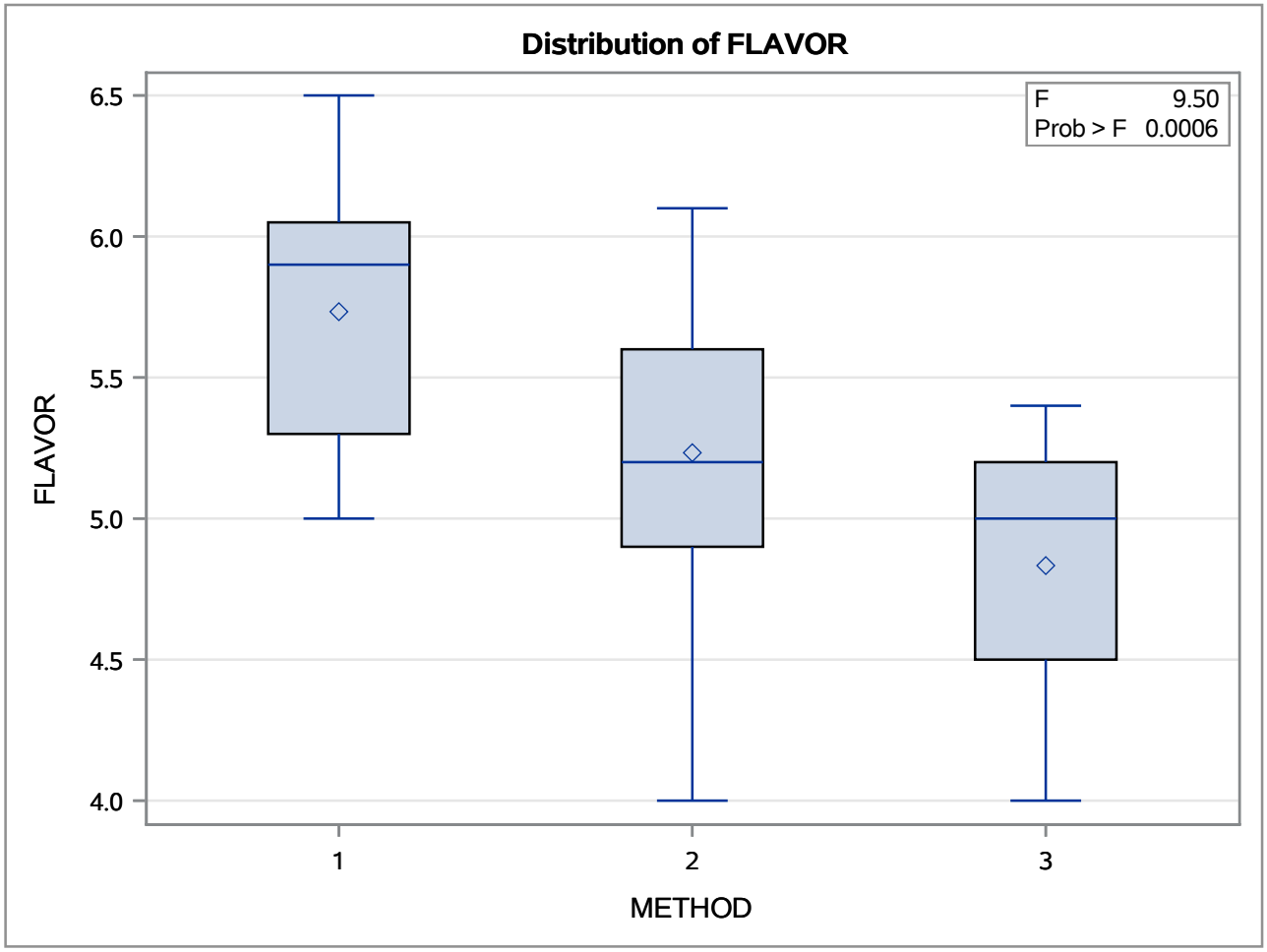
Source	DF	Type I SS	Mean Square	F Value	Pr > F
METHOD	2	4.88000000	2.44000000	9.50	0.0006

Source	DF	Type III SS	Mean Square	F Value	Pr > F
METHOD	2	4.88000000	2.44000000	9.50	0.0006

Contrast	DF	Contrast SS	Mean Square	F Value	Pr > F
One - Two Vs Three	1	3.38000000	3.38000000	13.15	0.0010
One vs Two	1	1.50000000	1.50000000	5.84	0.0214

The GLM Procedure

Dependent Variable: FLAVOR



The GLM Procedure

Dependent Variable: TEXTURE

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	2.38222222	1.19111111	3.39	0.0460
Error	33	11.60750000	0.35174242		
Corrected Total	35	13.98972222			

R-Square	Coeff Var	Root MSE	TEXTURE Mean
0.170284	10.68076	0.593079	5.552778

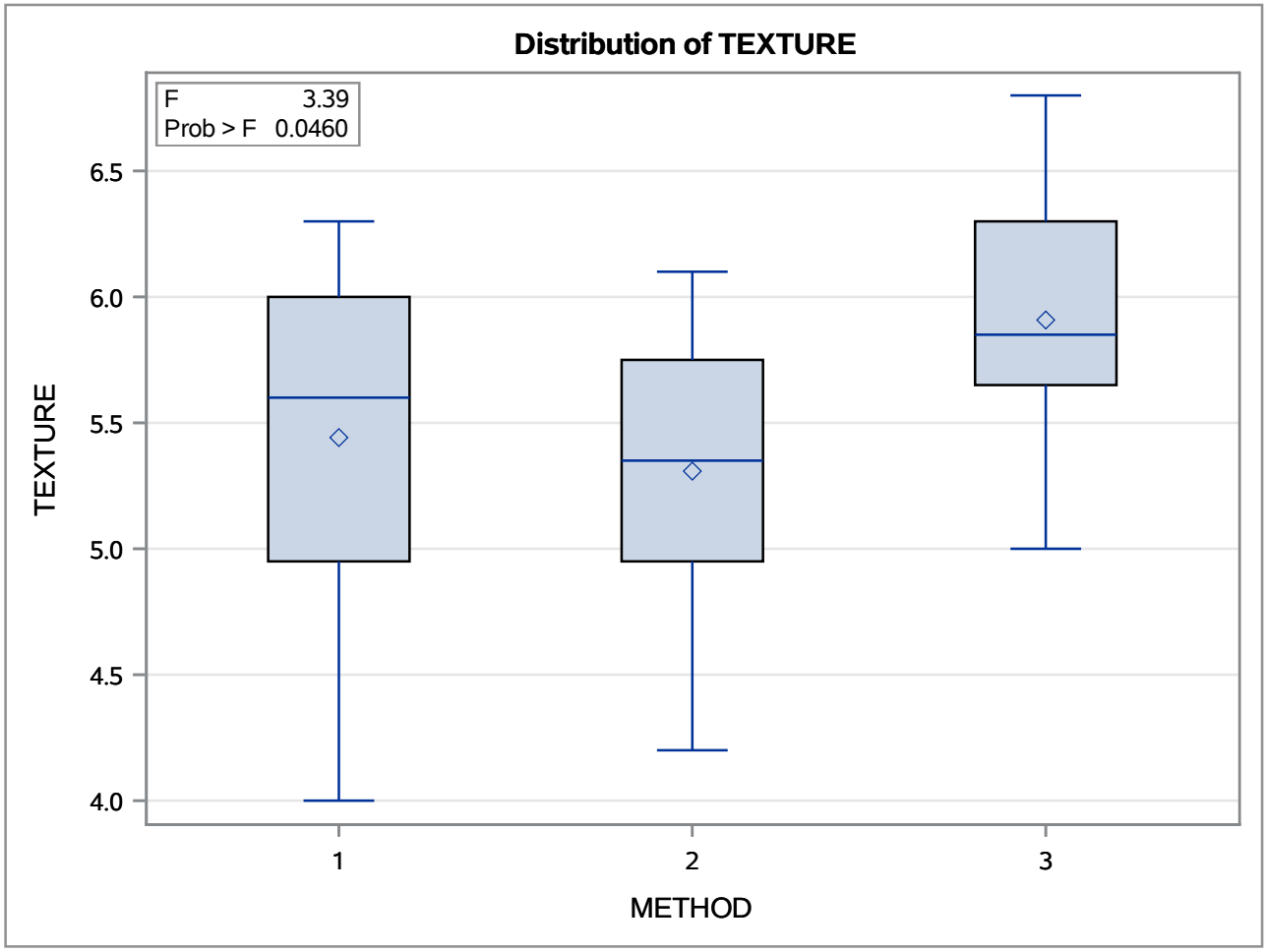
Source	DF	Type I SS	Mean Square	F Value	Pr > F
METHOD	2	2.38222222	1.19111111	3.39	0.0460

Source	DF	Type III SS	Mean Square	F Value	Pr > F
METHOD	2	2.38222222	1.19111111	3.39	0.0460

Contrast	DF	Contrast SS	Mean Square	F Value	Pr > F
One - Two Vs Three	1	2.27555556	2.27555556	6.47	0.0158
One vs Two	1	0.10666667	0.10666667	0.30	0.5856

The GLM Procedure

Dependent Variable: TEXTURE



The GLM Procedure

Dependent Variable: MOISTURE

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	0.81055556	0.40527778	1.27	0.2954
Error	33	10.56583333	0.32017677		
Corrected Total	35	11.37638889			

R-Square	Coeff Var	Root MSE	MOISTURE Mean
0.071249	9.382911	0.565842	6.030556

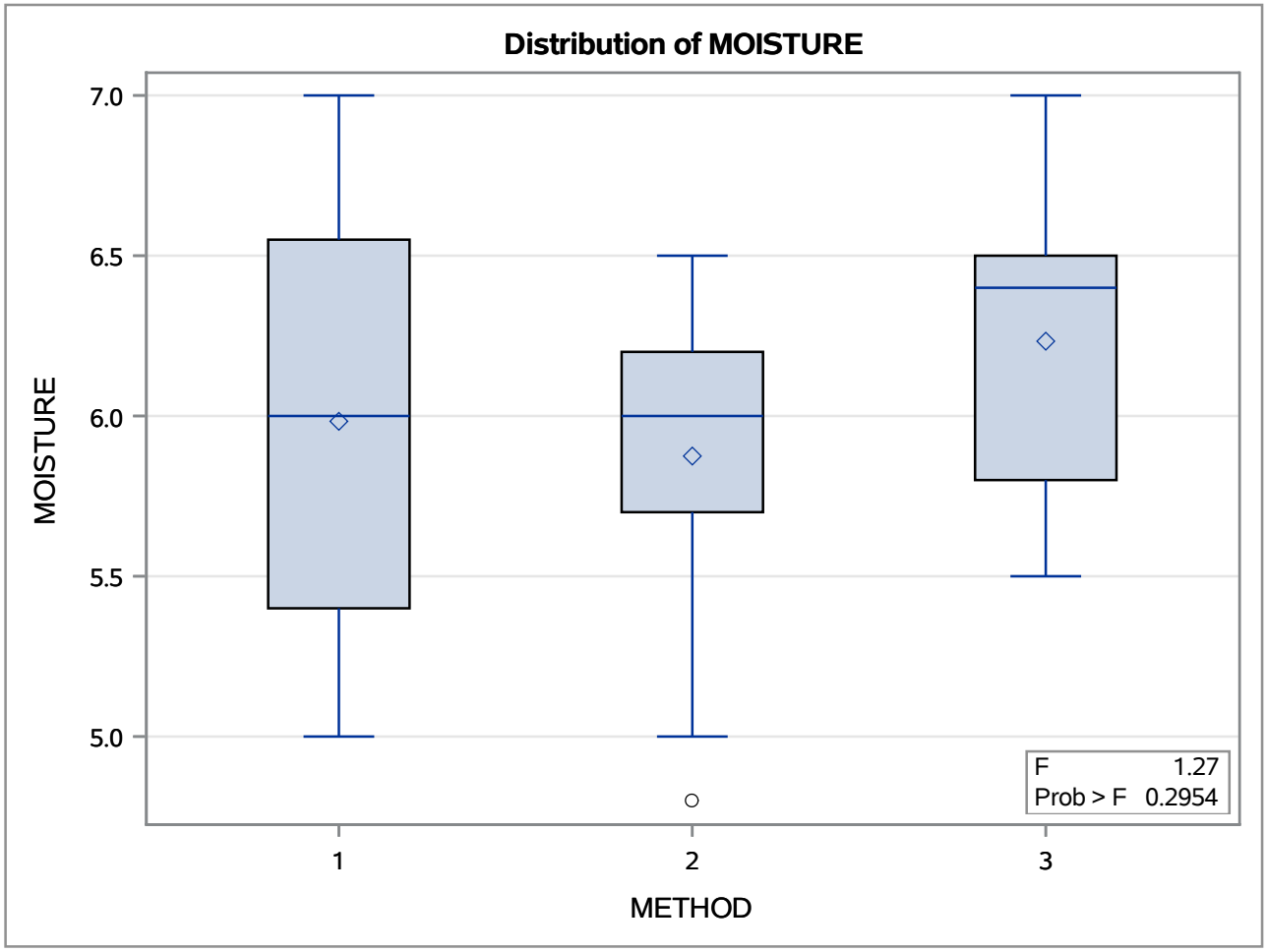
Source	DF	Type I SS	Mean Square	F Value	Pr > F
METHOD	2	0.81055556	0.40527778	1.27	0.2954

Source	DF	Type III SS	Mean Square	F Value	Pr > F
METHOD	2	0.81055556	0.40527778	1.27	0.2954

Contrast	DF	Contrast SS	Mean Square	F Value	Pr > F
One - Two Vs Three	1	0.74013889	0.74013889	2.31	0.1379
One vs Two	1	0.07041667	0.07041667	0.22	0.6422

The GLM Procedure

Dependent Variable: MOISTURE



The GLM Procedure
Multivariate Analysis of Variance

E = Error SSCP Matrix				
	AROMA	FLAVOR	TEXTURE	MOISTURE
AROMA	13.408333333	7.7233333333	8.675	5.8641666667
FLAVOR	7.7233333333	8.48	7.5266666667	6.2133333333
TEXTURE	8.675	7.5266666667	11.6075	7.0375
MOISTURE	5.8641666667	6.2133333333	7.0375	10.565833333

Partial Correlation Coefficients from the Error SSCP Matrix / Prob > |r|				
DF = 33	AROMA	FLAVOR	TEXTURE	MOISTURE
AROMA	1.000000	0.724302 <.0001	0.695365 <.0001	0.492682 0.0031
FLAVOR	0.724302 <.0001	1.000000	0.758639 <.0001	0.656409 <.0001
TEXTURE	0.695365 <.0001	0.758639 <.0001	1.000000	0.635473 <.0001
MOISTURE	0.492682 0.0031	0.656409 <.0001	0.635473 <.0001	1.000000

The GLM Procedure
Multivariate Analysis of Variance

H = Type III SSCP Matrix for METHOD				
	AROMA	FLAVOR	TEXTURE	MOISTURE
AROMA	1.0505555556	2.1733333333	-1.375555556	-0.760277778
FLAVOR	2.1733333333	4.88	-2.373333333	-1.256666667
TEXTURE	-1.375555556	-2.373333333	2.3822222222	1.3844444444
MOISTURE	-0.760277778	-1.256666667	1.3844444444	0.8105555556

Characteristic Roots and Vectors of: E Inverse * H, where H = Type III SSCP Matrix for METHOD E = Error SSCP Matrix					
Characteristic Root	Percent	Characteristic Vector V'EV=1			
		AROMA	FLAVOR	TEXTURE	MOISTURE
2.95147543	95.86	0.02070610	0.53343536	-0.34683549	-0.13507923
0.12732437	4.14	-0.31733855	0.29837224	0.24313963	-0.02626254
0.00000000	0.00	0.01442826	-0.02423642	-0.24987896	0.40275575
0.00000000	0.00	0.27340509	-0.08726609	0.07093056	0.00000000

MANOVA Test Criteria and F Approximations for the Hypothesis of No Overall METHOD Effect H = Type III SSCP Matrix for METHOD E = Error SSCP Matrix S=2 M=0.5 N=14					
Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.22448732	8.33	8	60	<.0001
Pillai's Trace	0.85987383	5.84	8	62	<.0001
Hotelling-Lawley Trace	3.07879980	11.33	8	40.602	<.0001
Roy's Greatest Root	2.95147543	22.87	4	31	<.0001
NOTE: F Statistic for Roy's Greatest Root is an upper bound.					
NOTE: F Statistic for Wilks' Lambda is exact.					

H = Contrast SSCP Matrix for One - Two Vs Three				
	AROMA	FLAVOR	TEXTURE	MOISTURE
AROMA	0.9568055556	1.7983333333	-1.475555556	-0.841527778
FLAVOR	1.7983333333	3.38	-2.773333333	-1.581666667
TEXTURE	-1.475555556	-2.773333333	2.2755555556	1.2977777778
MOISTURE	-0.841527778	-1.581666667	1.2977777778	0.7401388889

The GLM Procedure
Multivariate Analysis of Variance

Characteristic Roots and Vectors of: E Inverse * H, where
H = Contrast SSCP Matrix for One - Two Vs Three
E = Error SSCP Matrix

Characteristic Root	Percent	Characteristic Vector V'EV=1			
		AROMA	FLAVOR	TEXTURE	MOISTURE
2.70206732	100.00	-0.04113410	-0.51307665	0.36179773	0.13310371
0.00000000	0.00	0.04161438	-0.05283886	-0.26797149	0.40426689
0.00000000	0.00	0.26813661	-0.08175769	0.07422765	0.00000000
0.00000000	0.00	-0.31744291	0.33023951	0.19663752	0.00000000

MANOVA Test Criteria and Exact F Statistics for the Hypothesis of No Overall One - Two Vs Three Effect
H = Contrast SSCP Matrix for One - Two Vs Three
E = Error SSCP Matrix

S=1 M=1 N=14

Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.27011934	20.27	4	30	<.0001
Pillai's Trace	0.72988066	20.27	4	30	<.0001
Hotelling-Lawley Trace	2.70206732	20.27	4	30	<.0001
Roy's Greatest Root	2.70206732	20.27	4	30	<.0001

H = Contrast SSCP Matrix for One vs Two

	AROMA	FLAVOR	TEXTURE	MOISTURE
AROMA	0.09375	0.375	0.1	0.08125
FLAVOR	0.375	1.5	0.4	0.325
TEXTURE	0.1	0.4	0.1066666667	0.0866666667
MOISTURE	0.08125	0.325	0.0866666667	0.0704166667

Characteristic Roots and Vectors of: E Inverse * H, where
H = Contrast SSCP Matrix for One vs Two
E = Error SSCP Matrix

Characteristic Root	Percent	Characteristic Vector V'EV=1			
		AROMA	FLAVOR	TEXTURE	MOISTURE
0.37673248	100.00	-0.15892782	0.60932989	-0.15353075	-0.12693576
0.00000000	0.00	0.29751928	-0.08379193	0.02111276	0.01745556
0.00000000	0.00	-0.03454000	-0.02672039	-0.19718713	0.40587059
0.00000000	0.00	-0.24722910	-0.05257444	0.42893143	0.00000000

The GLM Procedure
Multivariate Analysis of Variance

MANOVA Test Criteria and Exact F Statistics for the Hypothesis of No Overall One vs Two Effect
H = Contrast SSCP Matrix for One vs Two
E = Error SSCP Matrix

S=1 M=1 N=14

Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.72635753	2.83	4	30	0.0422
Pillai's Trace	0.27364247	2.83	4	30	0.0422
Hotelling-Lawley Trace	0.37673248	2.83	4	30	0.0422
Roy's Greatest Root	0.37673248	2.83	4	30	0.0422