

```

PROC GLM DATA=biom;
CLASS F T R;
MODEL HT = F|T R(F T);
TEST H = F|T E=R(F T);
CONTRAST 'First vs Third in F' F -1 0 1 / E = R(F T);
MEANS F / LSD E = R(F T) CLDIFF;
RUN;

```

The GLM Procedure
Class Level Information

Class	Levels	Values
F	3	1 2 3
T	2	1 2
R	12	1 2 3 4 5 6 7 8 9 10 11 12

Number of Observations Read 48
Number of Observations Used 48

The GLM Procedure

Dependent Variable: HT

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	13932.98500	1266.63500	38.89	<.0001
Error	36	1172.50500	32.56958		
Corrected Total	47	15105.49000			

R-Square 0.922379
Coeff Var 16.69927
Root MSE 5.706977
HT Mean 34.17500

Source	DF	Type I SS	Mean Square	F Value	Pr > F
F	2	12599.05875	6299.52938	193.42	<.0001
T	1	1281.33333	1281.33333	39.34	<.0001
F*T	2	14.54042	7.27021	0.22	0.8010
R(F*T)	6	38.05250	6.34208	0.19	0.9763

Source	DF	Type III SS	Mean Square	F Value	Pr > F
F	2	12599.05875	6299.52938	193.42	<.0001
T	1	1281.33333	1281.33333	39.34	<.0001
F*T	2	14.54042	7.27021	0.22	0.8010
R(F*T)	6	38.05250	6.34208	0.19	0.9763

Tests of Hypotheses Using the Type III MS for R(F*T) as an Error Term

Source	DF	Type III SS	Mean Square	F Value	Pr > F
F	2	12599.05875	6299.52938	993.29	<.0001
T	1	1281.33333	1281.33333	202.04	<.0001
F*T	2	14.54042	7.27021	1.15	0.3788

Tests of Hypotheses Using the Type III MS for R(F*T) as an Error Term

Contrast	DF	Contrast SS	Mean Square	F Value	Pr > F
First vs Third in F	1	12580.94531	12580.94531	1983.72	<.0001