

```

proc glm
  class inoc time;
  model y=inoc time inoc*time;
  lsmeans inoc time;
  lsmeans inoc*time / slice=time;
  lsmeans inoc*time / slice=inoc;
  estimate 'nematode - control at time 0' inoc -1 1 inoc*time -1 0
  estimate 'nematode - control at time 12' inoc -1 1 inoc*time 0 -1
  estimate 'nematode - control at time 24' inoc -1 1 inoc*time 0 0
run;

```

The GLM Procedure

Class Level Information

Class	Levels	Values
inoc	2	control nematode
time	3	0 12 24

Number of observations 24

Dependent Variable: y (activity level)

Source	DF	Sum of Squares	Mean Square	F Value
Model	5	179.7083333	35.9416667	13.14
Error	18	49.2500000	2.7361111	
Corrected Total	23	228.9583333		

R-Square	Coeff Var	Root MSE	y Mean
0.784895	14.12771	1.654119	11.70833

Source	DF	Type I SS	Mean Square	F Value
inoc	1	63.37500000	63.37500000	23.16
time	2	77.08333333	38.54166667	14.09
inoc*time	2	39.25000000	19.62500000	7.17

Source	DF	Type III SS	Mean Square	F Value
inoc	1	63.37500000	63.37500000	23.16
time	2	77.08333333	38.54166667	14.09
inoc*time	2	39.25000000	19.62500000	7.17

Least Squares Means

Least Squares Means

inoc	y LSMEAN
control	10.0833333
nematode	13.3333333

time	y LSMEAN
0	9.6250000
12	11.5000000
24	14.0000000

inoc	time	y LSMEAN
control	0	9.5000000
control	12	10.0000000
control	24	10.7500000
nematode	0	9.7500000
nematode	12	13.0000000
nematode	24	17.2500000

inoc\*time Effect Sliced by time for y

time	DF	Sum of Squares	Mean Square	F Value	Pr > F
0	1	0.1250000	0.1250000	0.05	0.8332
12	1	18.0000000	18.0000000	6.58	0.0195
24	1	84.5000000	84.5000000	30.88	<.0001

inoc\*time Effect Sliced by inoc for y

inoc	DF	Sum of Squares	Mean Square	F Value	Pr > F
control	2	3.1666667	1.5833333	0.58	0.5707
nematode	2	113.1666667	56.5833333	20.68	<.0001

Parameter	Estimate	Standard Error	t Value
nematode - control at time 0	0.25000000	1.16963907	0.21
nematode - control at time 12	3.00000000	1.16963907	2.56
nematode - control at time 24	6.50000000	1.16963907	5.56