

IMPORT successfully completed.

Effects coding used for categorical variables in model.

Categorical values encountered during processing are:

POWER (2 levels)

1, 2

HEIGHT (3 levels)

1, 2, 3

TRUNK (3 levels)

1, 2, 3

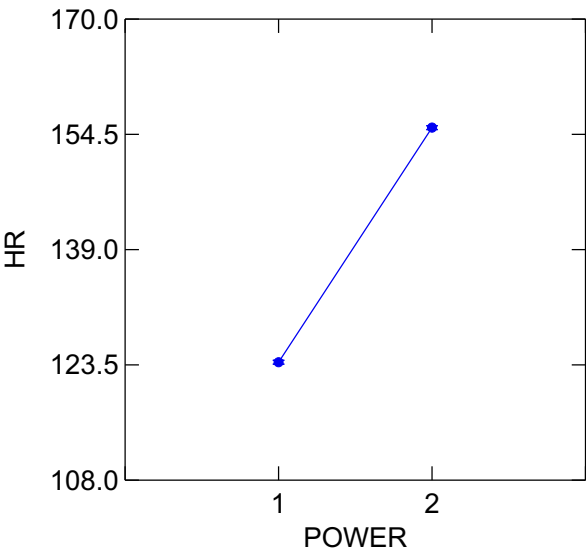
5 case(s) deleted due to missing data.

Dep Var: HR N: 54 Multiple R: 0.997811827 Squared multiple R: 0.995628443

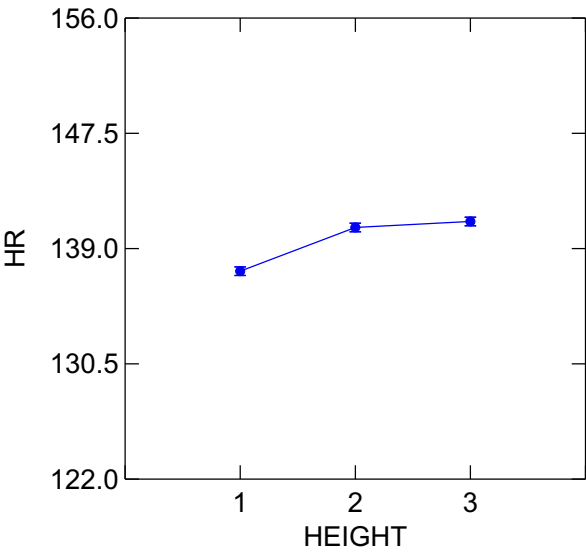
#### Analysis of Variance

Source	Sum-of-Squares	df	Mean-Square	F-ratio	P
POWER	1.34427E+04	1	1.34427E+04	7.48355E+03	0.000000000
HEIGHT	1.44148E+02	2	7.20741E+01	4.01237E+01	0.000000001
TRUNK	1.25815E+02	2	6.29074E+01	3.50206E+01	0.000000004
HEIGHT*POWER	3.33333E+01	2	1.66667E+01	9.278350515	0.000562573
TRUNK*POWER	4.41000E+02	2	2.20500E+02	1.22753E+02	0.000000000
TRUNK*HEIGHT	1.67296E+02	4	4.18241E+01	2.32835E+01	0.000000001
TRUNK*HEIGHT*POWER	3.73667E+02	4	9.34167E+01	5.20052E+01	0.000000000
Error	6.46667E+01	36	1.796296296		

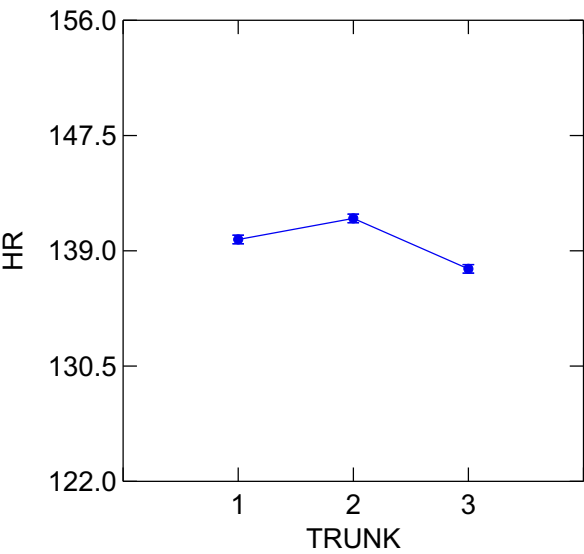
Least Squares Means



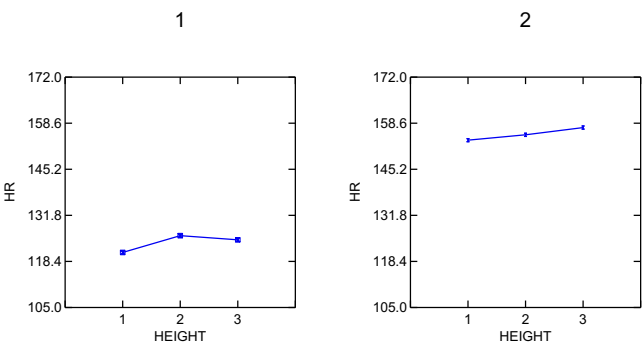
Least Squares Means



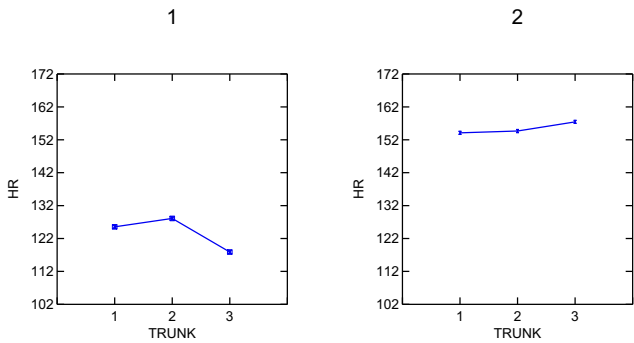
Least Squares Means



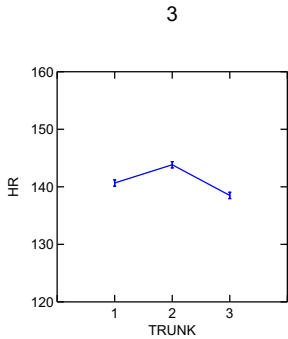
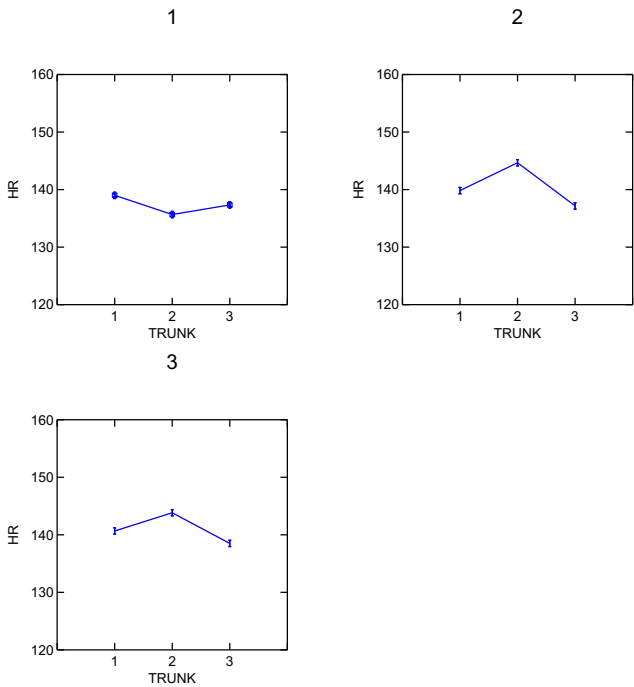
Least Squares Means



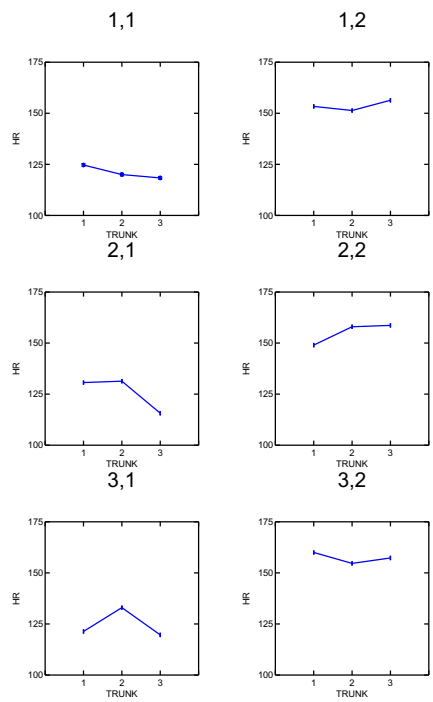
Least Squares Means



Least Squares Means



Least Squares Means



Durbin-Watson D Statistic 2.601  
First Order Autocorrelation -0.308

Effects coding used for categorical variables in model.

Categorical values encountered during processing are:

POWER (2 levels)  
1, 2  
HEIGHT (3 levels)  
1, 2, 3  
TRUNK (3 levels)  
1, 2, 3  
5 case(s) deleted due to missing data.

Dep Var: MECHP N: 54 Multiple R: 0.999292026 Squared multiple R: 0.998584553

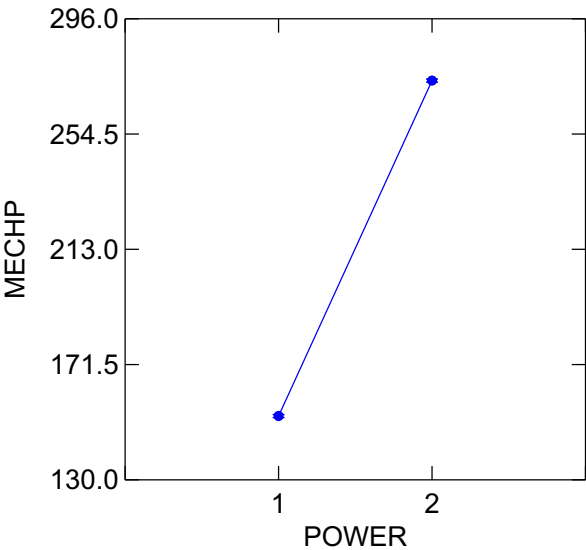
Analysis of Variance

Source	Sum-of-Squares	df	Mean-Square	F-ratio	P
POWER	1.96928E+05	1	1.96928E+05	2.50215E+04	0.000000000
HEIGHT	3.40037E+02	2	1.70019E+02	2.16024E+01	0.000000685
TRUNK	3.67259E+02	2	1.83630E+02	2.33318E+01	0.000000318
HEIGHT*POWER	5.77000E+02	2	2.88500E+02	3.66565E+01	0.000000002

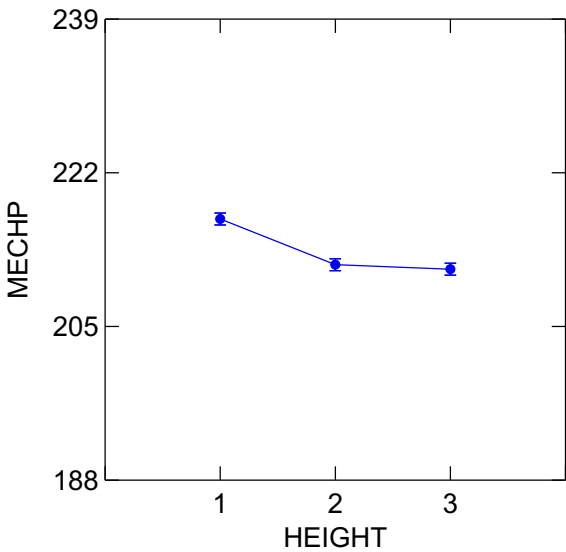
TRUNK*POWER	4.11111E+02	2	2.05556E+02	2.61176E+01	0.000000098
TRUNK*HEIGHT	2.05852E+02	4	5.14630E+01	6.538823529	0.000461368
TRUNK*HEIGHT*POWER	1.05956E+03	4	2.64889E+02	3.36565E+01	0.000000000
Error	2.83333E+02	36	7.870370370		

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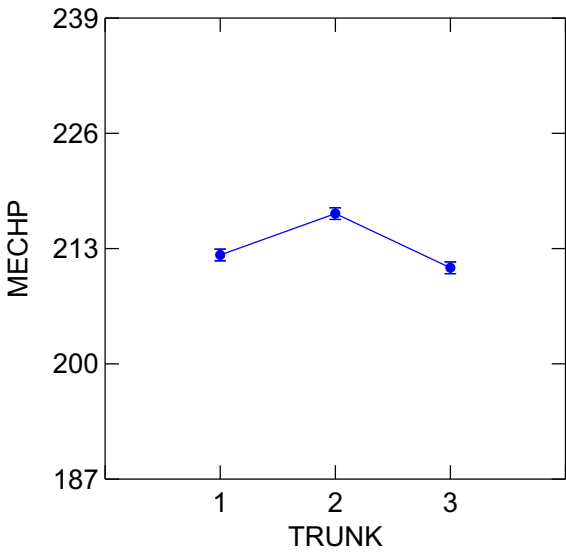
Least Squares Means



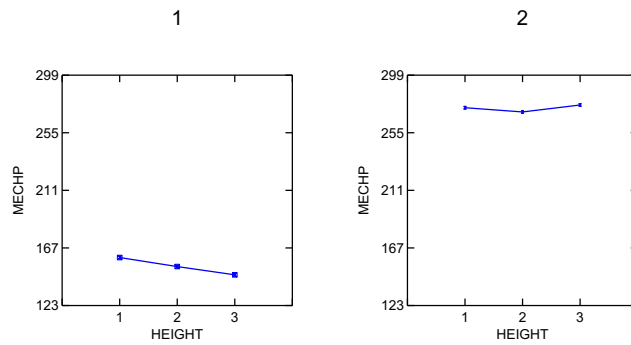
Least Squares Means



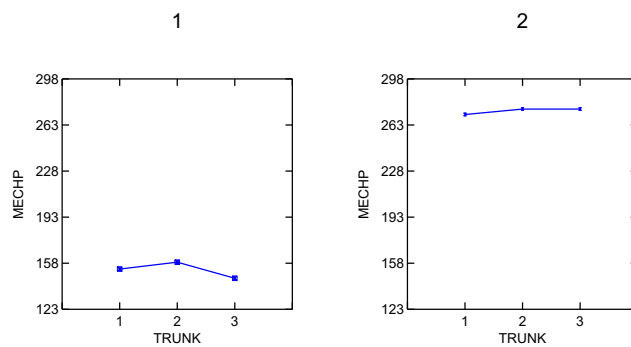
Least Squares Means



## Least Squares Means

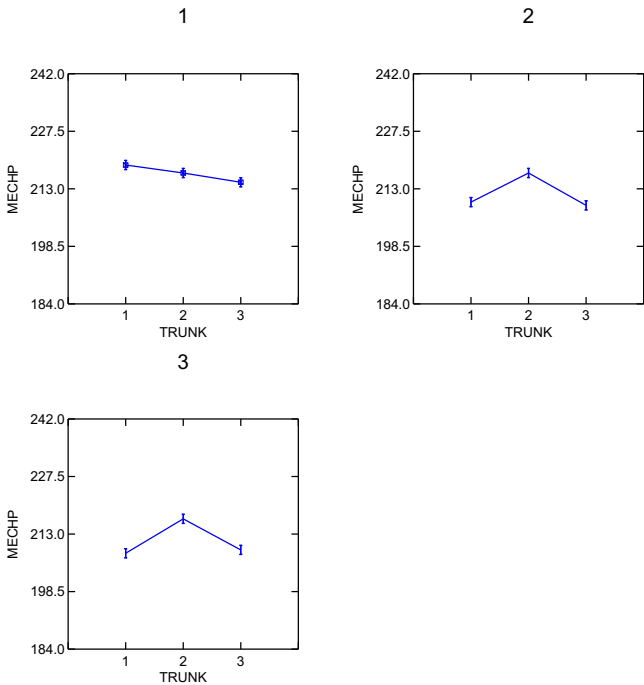


## Least Squares Means

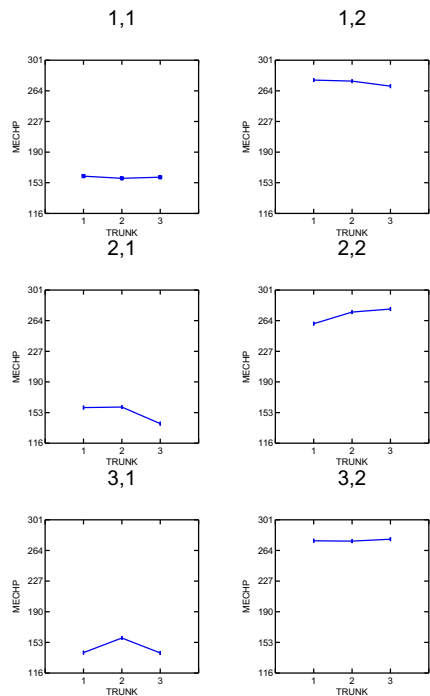




Least Squares Means



Least Squares Means



Durbin-Watson D Statistic 2.596  
First Order Autocorrelation -0.311

Effects coding used for categorical variables in model.

Categorical values encountered during processing are:

POWER (2 levels)  
1, 2  
HEIGHT (3 levels)  
1, 2, 3  
TRUNK (3 levels)  
1, 2, 3  
5 case(s) deleted due to missing data.

Dep Var: VE N: 54 Multiple R: 0.996213982 Squared multiple R: 0.992442299

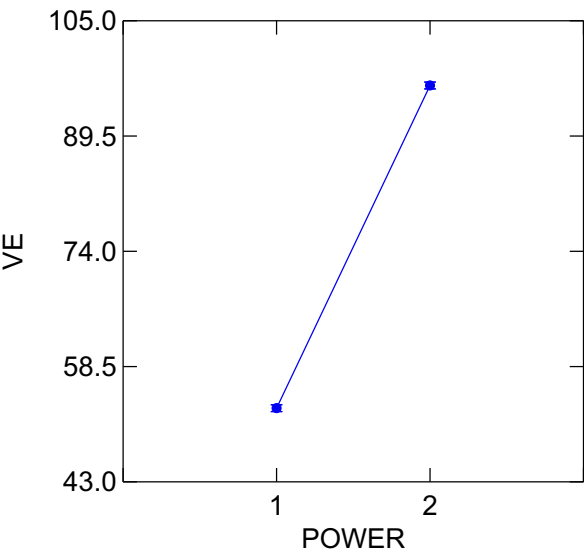
Analysis of Variance

Source	Sum-of-Squares	df	Mean-Square	F-ratio	P
POWER	2.54224E+04	1	2.54224E+04	4.46446E+03	0.000000000
HEIGHT	3.37343E+02	2	1.68672E+02	2.96206E+01	0.000000025
TRUNK	6.06795E+02	2	3.03397E+02	5.32800E+01	0.000000000
HEIGHT*POWER	6.64494E+01	2	3.32247E+01	5.834633020	0.006384879

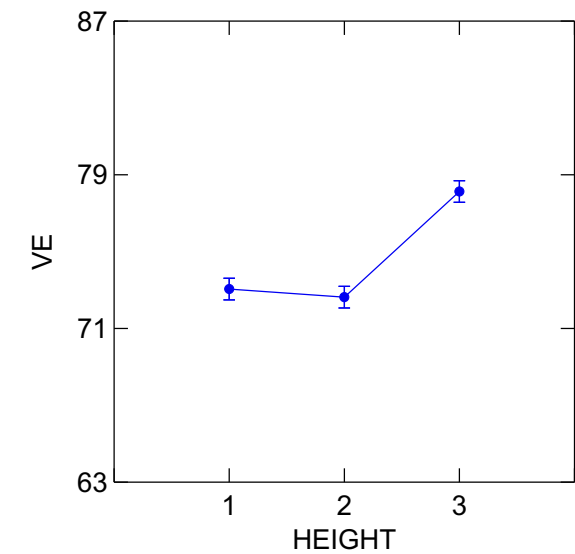
TRUNK*POWER	1.51038E+02	2	7.55190E+01	1.32620E+01	0.000048373
TRUNK*HEIGHT	1.71283E+02	4	4.28208E+01	7.519807816	0.000164347
TRUNK*HEIGHT*POWER	1.64087E+02	4	4.10217E+01	7.203878213	0.000227815
Error	2.04998E+02	36	5.694394444		

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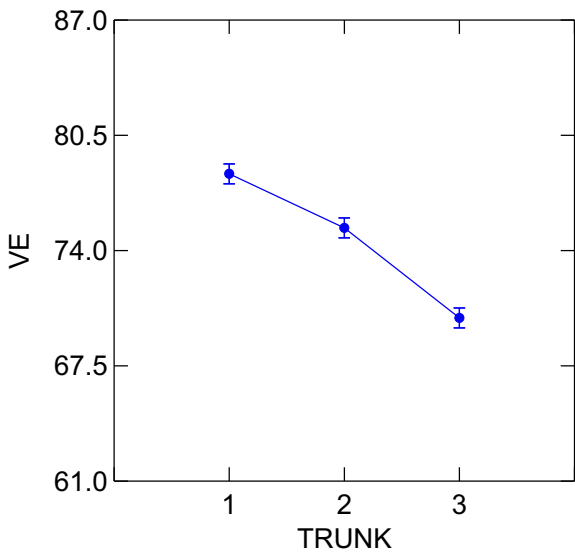
Least Squares Means



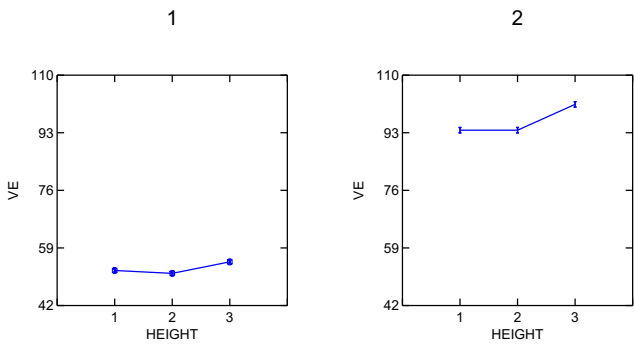
Least Squares Means



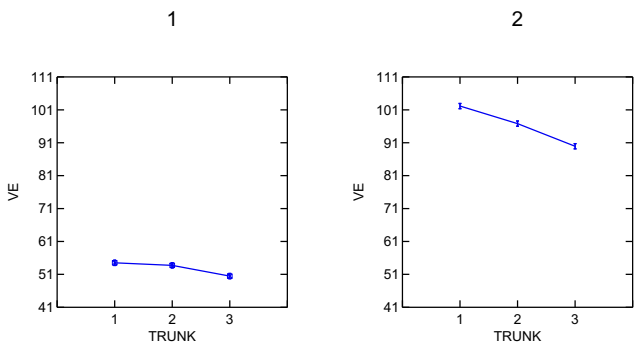
Least Squares Means



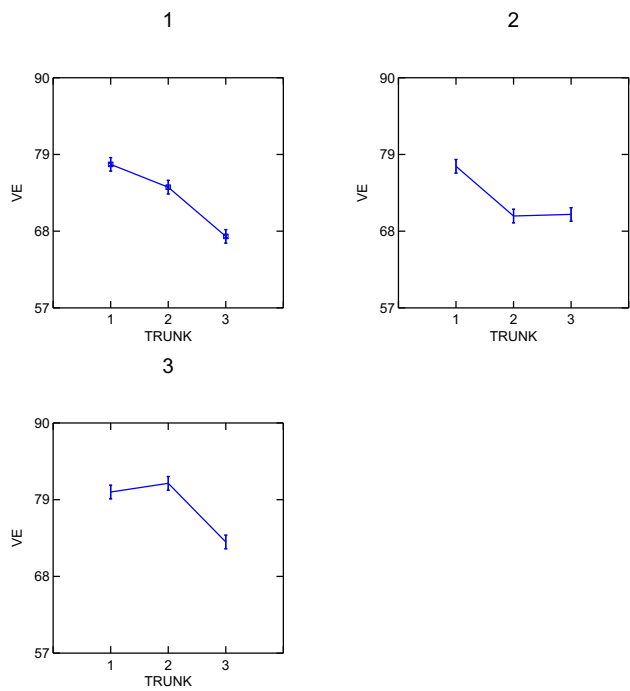
Least Squares Means



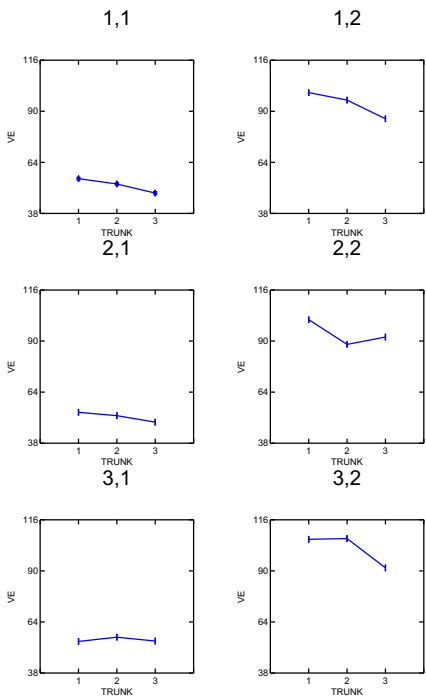
Least Squares Means



Least Squares Means



Least Squares Means



\*\*\* WARNING \*\*\*  
Case 28 is an outlier (Studentized Residual = -3.665110684)  
  
Durbin-Watson D Statistic 2.563  
First Order Autocorrelation -0.284  
  
Effects coding used for categorical variables in model.  
  
Categorical values encountered during processing are:  
POWER (2 levels)  
1, 2  
HEIGHT (3 levels)  
1, 2, 3  
TRUNK (3 levels)  
1, 2, 3  
5 case(s) deleted due to missing data.  
  
Dep Var: VO2 N: 54 Multiple R: 0.997016491 Squared multiple R: 0.994041884

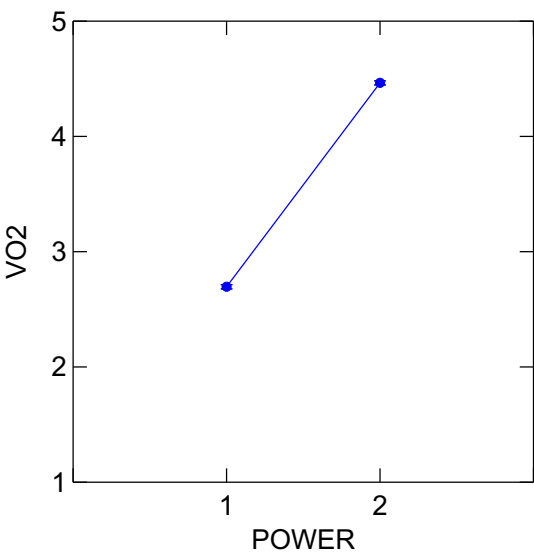
Analysis of Variance

Source	Sum-of-Squares	df	Mean-Square	F-ratio	P
POWER	4.22588E+01	1	4.22588E+01	4.74028E+03	0.000000000
HEIGHT	3.404292593	2	1.702146296	1.90935E+02	0.000000000

TRUNK	2.067292593	2	1.033646296	1.15947E+02	0.000000000
HEIGHT*POWER	0.130048148	2	0.065024074	7.293934358	0.002190837
TRUNK*POWER	2.492848148	2	1.246424074	1.39815E+02	0.000000000
TRUNK*HEIGHT	0.840362963	4	0.210090741	2.35665E+01	0.000000001
TRUNK*HEIGHT*POWER	2.350362963	4	0.587590741	6.59117E+01	0.000000000
Error	0.320933333	36	0.008914815		

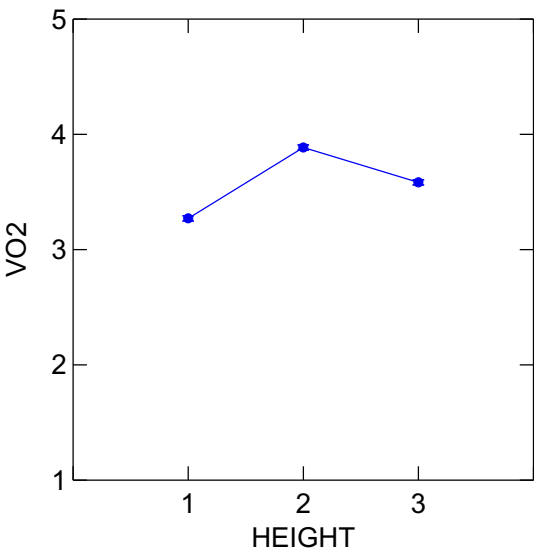
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Least Squares Means

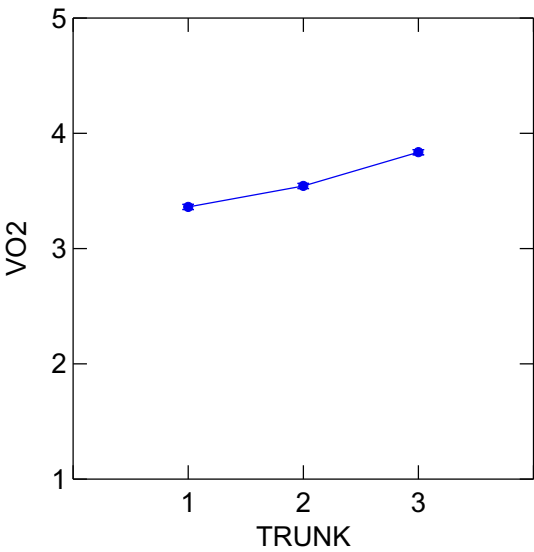




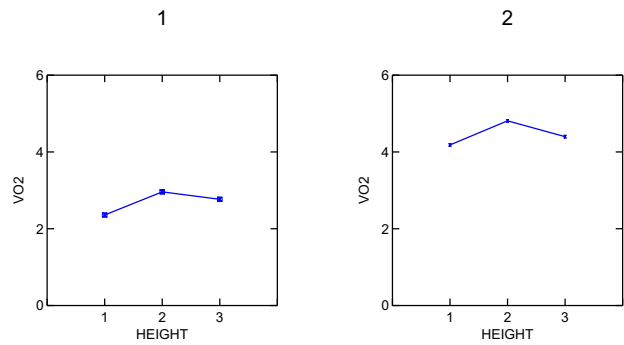
Least Squares Means



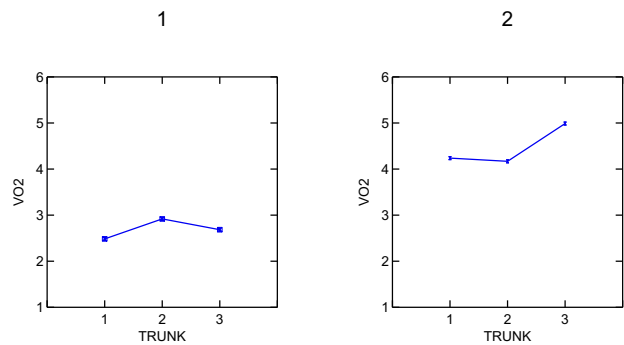
Least Squares Means



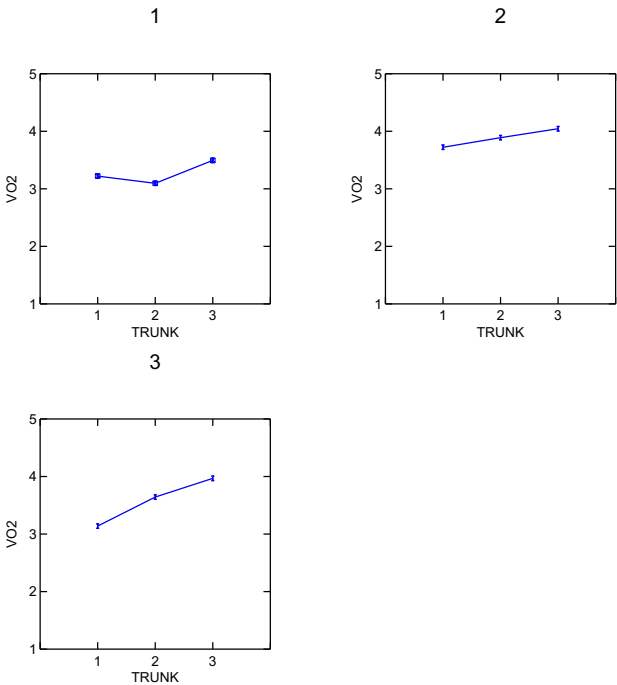
Least Squares Means



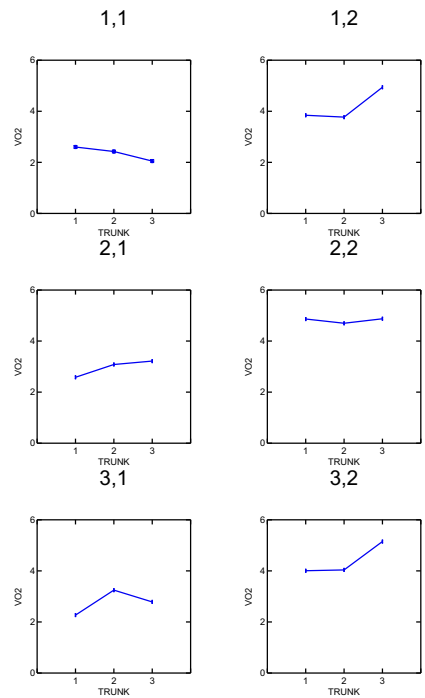
Least Squares Means



Least Squares Means



Least Squares Means



\*\*\* WARNING \*\*\*  
Case 20 is an outlier (Studentized Residual = 3.456331086)  
Durbin-Watson D Statistic 2.649  
First Order Autocorrelation -0.332

Effects coding used for categorical variables in model.

Categorical values encountered during processing are:  
POWER (2 levels)  
1, 2  
HEIGHT (3 levels)  
1, 2, 3  
TRUNK (3 levels)  
1, 2, 3  
5 case(s) deleted due to missing data.

Dep Var: RER N: 54 Multiple R: 0.988218083 Squared multiple R: 0.976574979

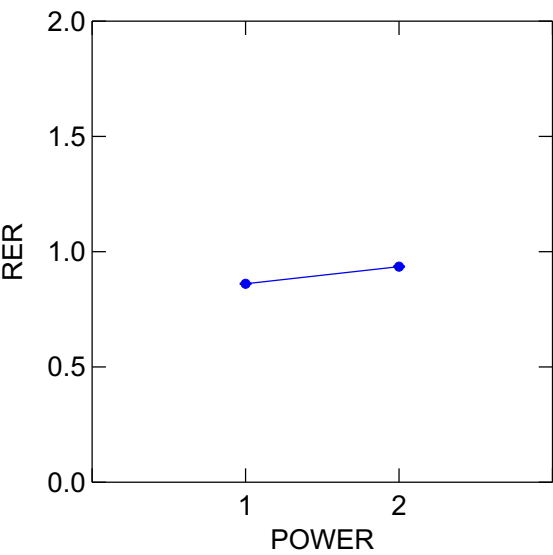
Analysis of Variance

Source	Sum-of-Squares	df	Mean-Square	F-ratio	P
POWER	0.074593500	1	0.074593500	6.16664E+02	0.000000000
HEIGHT	0.004342704	2	0.002171352	1.79506E+01	0.000003910

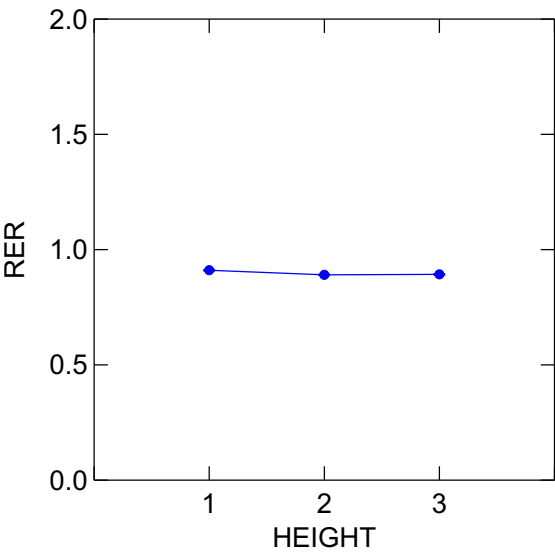
TRUNK	0.002778481	2	0.001389241	1.14848E+01	0.000138716
HEIGHT*POWER	0.003700778	2	0.001850389	1.52972E+01	0.000015545
TRUNK*POWER	0.003502333	2	0.001751167	1.44769E+01	0.000024354
TRUNK*HEIGHT	0.056170074	4	0.014042519	1.16089E+02	0.000000000
TRUNK*HEIGHT*POWER	0.036455556	4	0.009113889	7.53445E+01	0.000000000
Error	0.004354667	36	0.000120963		

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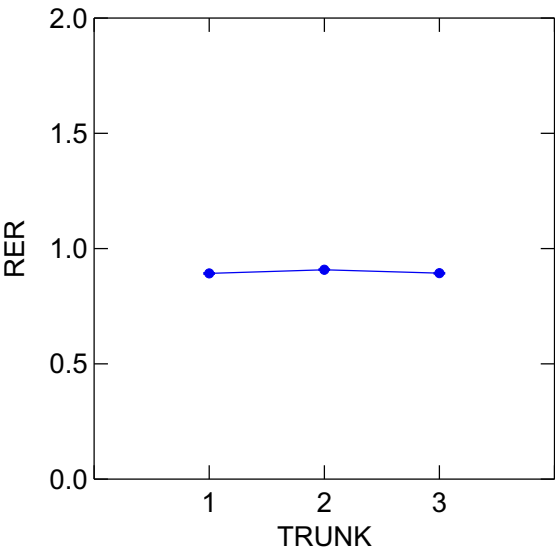
Least Squares Means



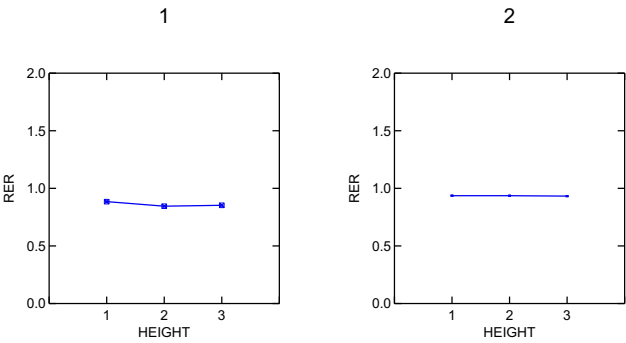
Least Squares Means



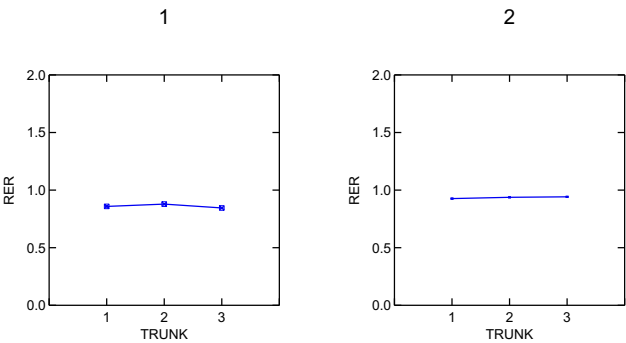
Least Squares Means



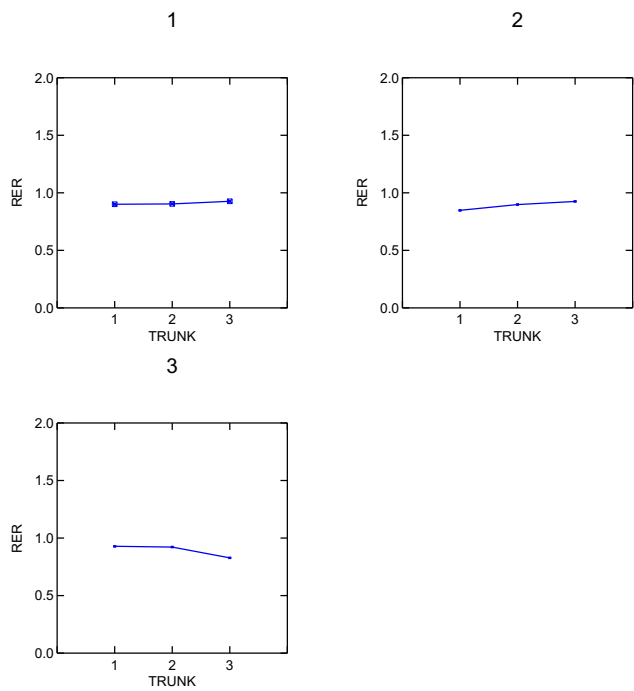
Least Squares Means



Least Squares Means

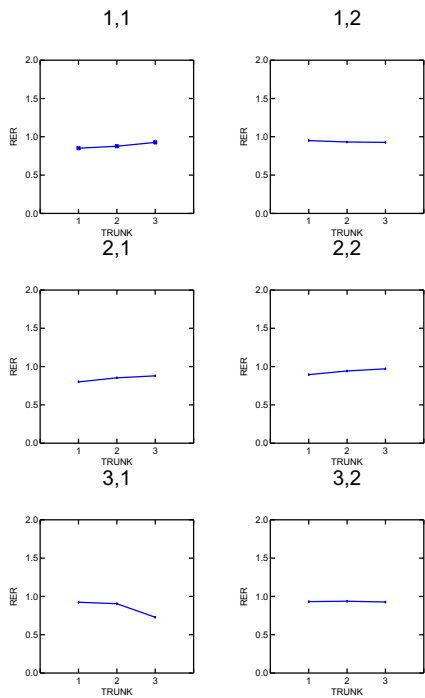


Least Squares Means





Least Squares Means



Durbin-Watson D Statistic      2.019  
First Order Autocorrelation   -0.014

Effects coding used for categorical variables in model.

Categorical values encountered during processing are:

POWER (2 levels)  
1,                      2  
HEIGHT (3 levels)  
1,                      2,                      3  
TRUNK (3 levels)  
1,                      2,                      3  
5 case(s) deleted due to missing data.

Dep Var: EFFIC    N: 54    Multiple R: 0.982573925    Squared multiple R: 0.965451518

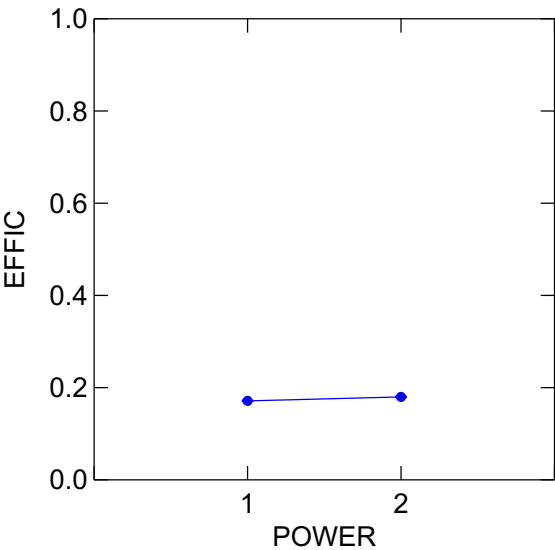
Analysis of Variance

Source	Sum-of-Squares	df	Mean-Square	F-ratio	P
POWER	0.001005352	1	0.001005352	2.80274E+01	0.000006101
HEIGHT	0.013041815	2	0.006520907	1.81791E+02	0.000000000
TRUNK	0.004153593	2	0.002076796	5.78973E+01	0.000000000
HEIGHT*POWER	0.002435593	2	0.001217796	3.39499E+01	0.000000005

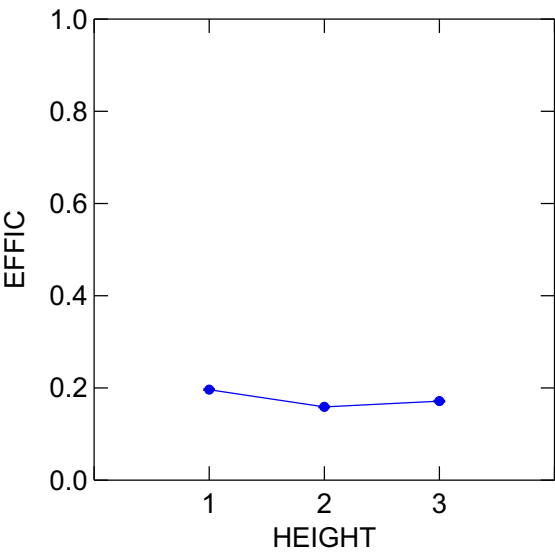
TRUNK*POWER	0.003584259	2	0.001792130	4.99613E+01	0.000000000
TRUNK*HEIGHT	0.001881852	4	0.000470463	1.31156E+01	0.000001094
TRUNK*HEIGHT*POWER	0.009983630	4	0.002495907	6.95813E+01	0.000000000
Error	0.001291333	36	0.000035870		

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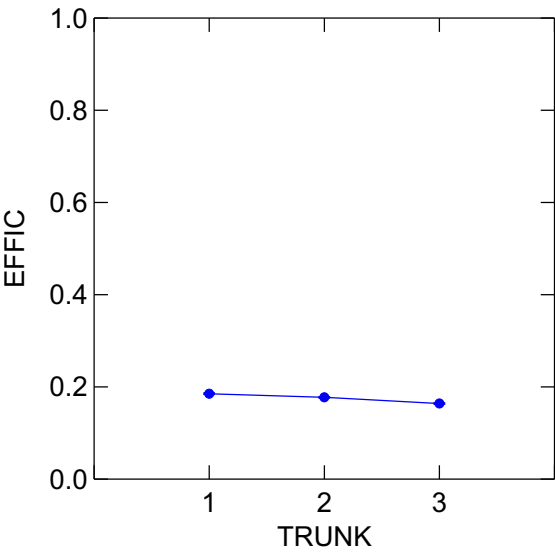
Least Squares Means



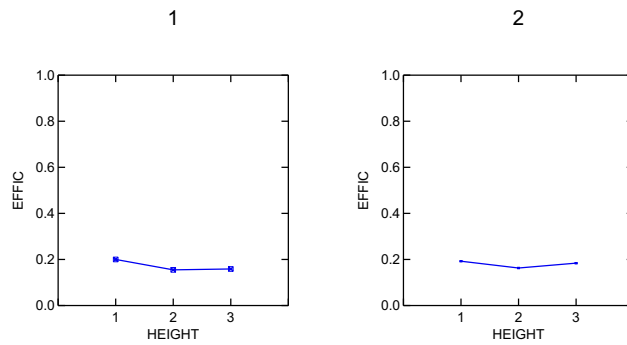
Least Squares Means



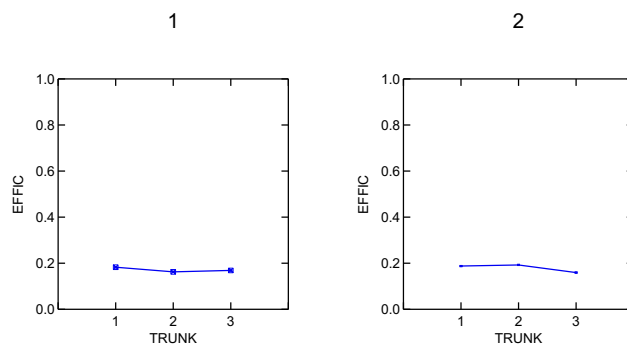
Least Squares Means



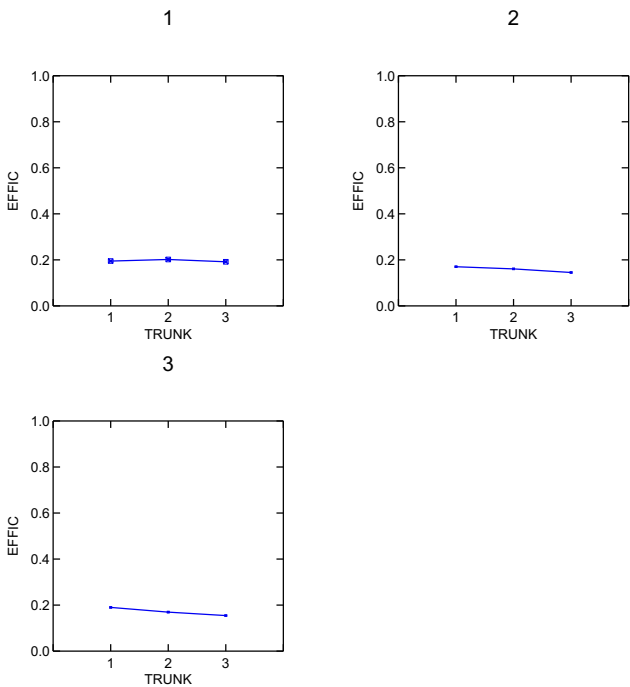
## Least Squares Means



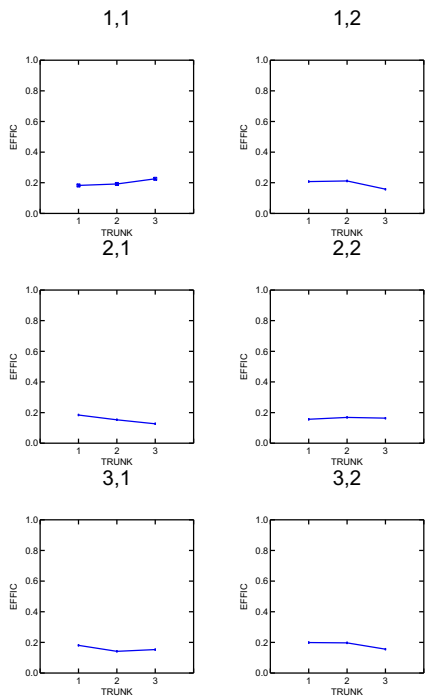
## Least Squares Means



Least Squares Means



Least Squares Means



\*\*\* WARNING \*\*\*  
Case 27 is an outlier (Studentized Residual = 4.595833846)  
Durbin-Watson D Statistic 2.193  
First Order Autocorrelation -0.100

Effects coding used for categorical variables in model.

Categorical values encountered during processing are:  
POWER (2 levels)  
1, 2  
HEIGHT (3 levels)  
1, 2, 3  
TRUNK (3 levels)  
1, 2, 3  
5 case(s) deleted due to missing data.

Dep Var: BRFRQ N: 54 Multiple R: 0.987961105 Squared multiple R: 0.976067145

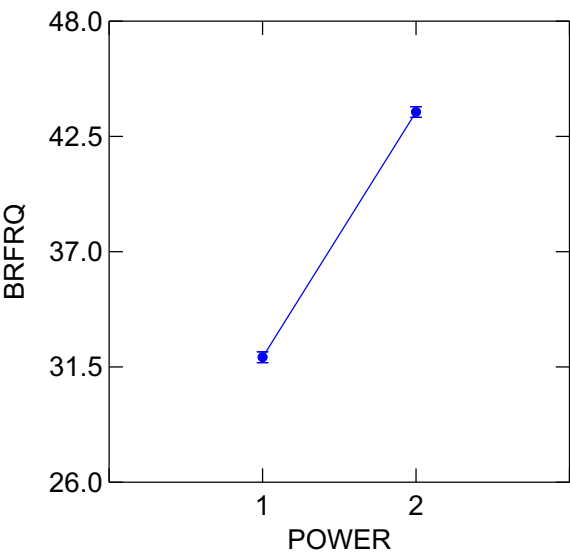
Analysis of Variance

Source	Sum-of-Squares	df	Mean-Square	F-ratio	P
POWER	1.84919E+03	1	1.84919E+03	1.04017E+03	0.000000000
HEIGHT	5.62593E+01	2	2.81296E+01	1.58229E+01	0.000011725

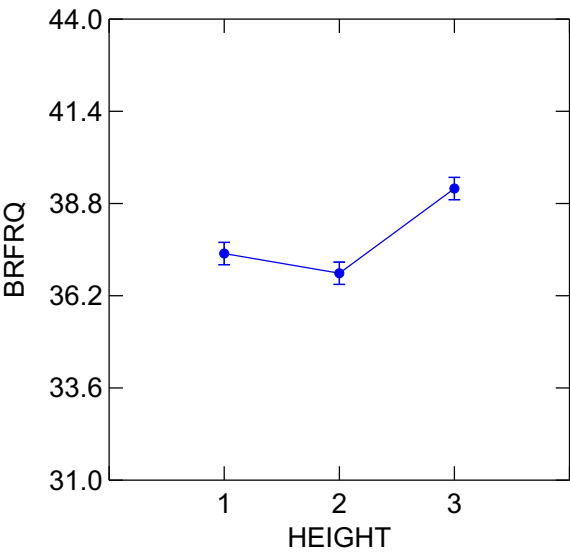
TRUNK	3.00481E+02	2	1.50241E+02	8.45104E+01	0.000000000
HEIGHT*POWER	6.89259E+01	2	3.44630E+01	1.93854E+01	0.000001933
TRUNK*POWER	7.55926E+01	2	3.77963E+01	2.12604E+01	0.000000801
TRUNK*HEIGHT	1.75074E+02	4	4.37685E+01	2.46198E+01	0.000000001
TRUNK*HEIGHT*POWER	8.46296E+01	4	2.11574E+01	1.19010E+01	0.000002914
Error	6.40000E+01	36	1.777777778		

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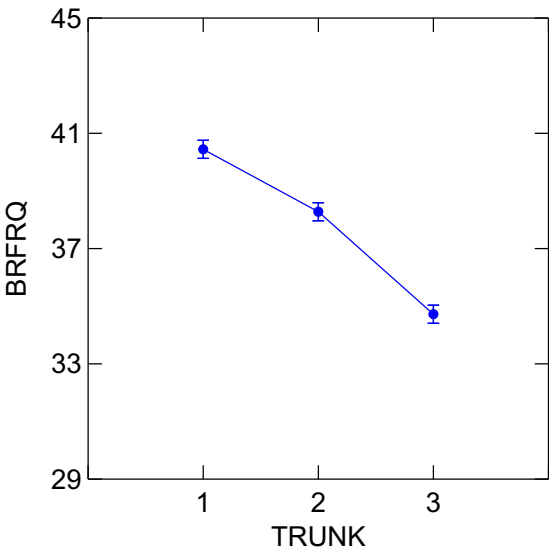
Least Squares Means



Least Squares Means

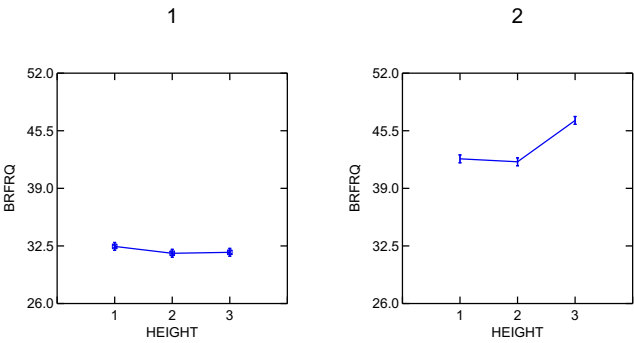


Least Squares Means

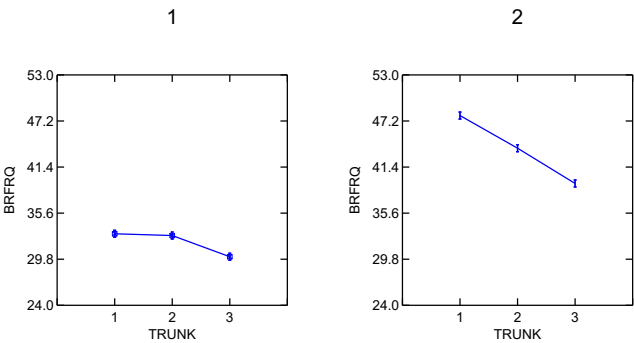




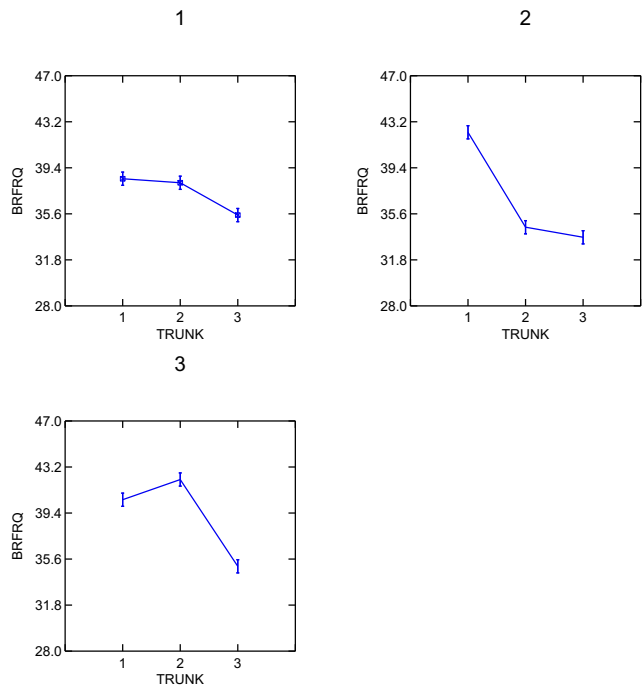
Least Squares Means



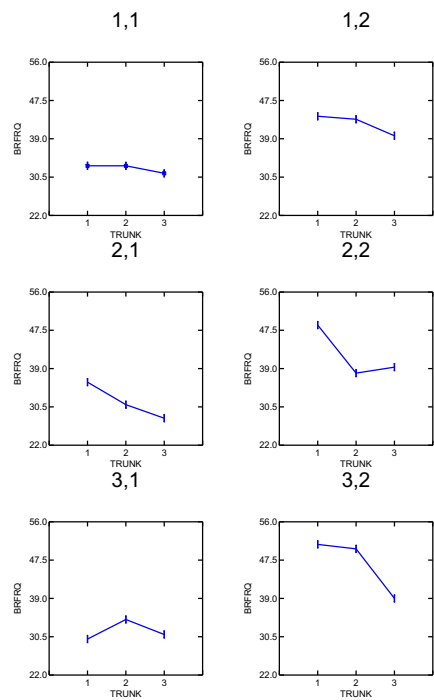
Least Squares Means



Least Squares Means



Least Squares Means



Durbin-Watson D Statistic      2.941  
First Order Autocorrelation   -0.474

Effects coding used for categorical variables in model.

Categorical values encountered during processing are:

POWER (2 levels)  
1,                      2  
HEIGHT (3 levels)  
1,                      2,                      3  
TRUNK (3 levels)  
1,                      2,                      3  
5 case(s) deleted due to missing data.

Dep Var: BRVOL    N: 54    Multiple R: 0.989025320    Squared multiple R: 0.978171083

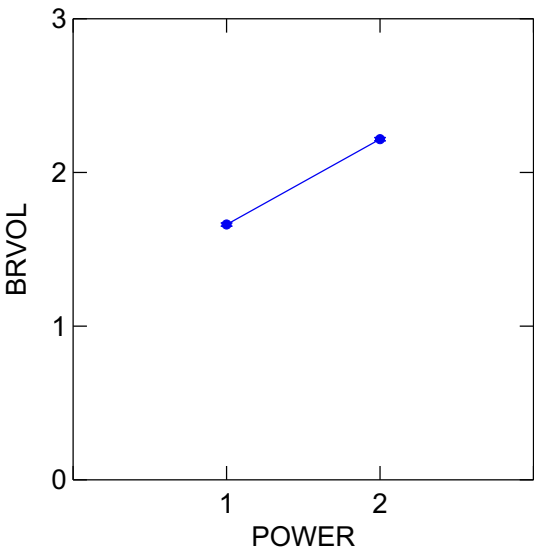
Analysis of Variance

Source	Sum-of-Squares	df	Mean-Square	F-ratio	P
POWER	4.166666667	1	4.166666667	1.42857E+03	0.000000000
HEIGHT	0.019811111	2	0.009905556	3.396190476	0.044550122
TRUNK	0.063077778	2	0.031538889	1.08133E+01	0.000210001
HEIGHT*POWER	0.069033333	2	0.034516667	1.18343E+01	0.000112208

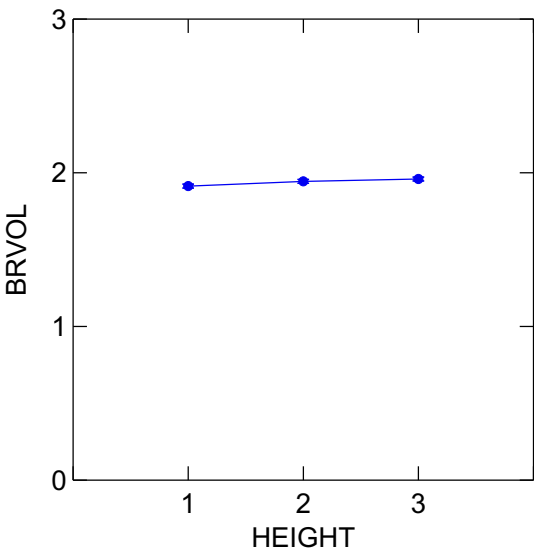
TRUNK*POWER	0.045077778	2	0.022538889	7.727619048	0.001613290
TRUNK*HEIGHT	0.298511111	4	0.074627778	2.55867E+01	0.000000000
TRUNK*HEIGHT*POWER	0.042955556	4	0.010738889	3.681904762	0.012979145
Error	0.105000000	36	0.002916667		

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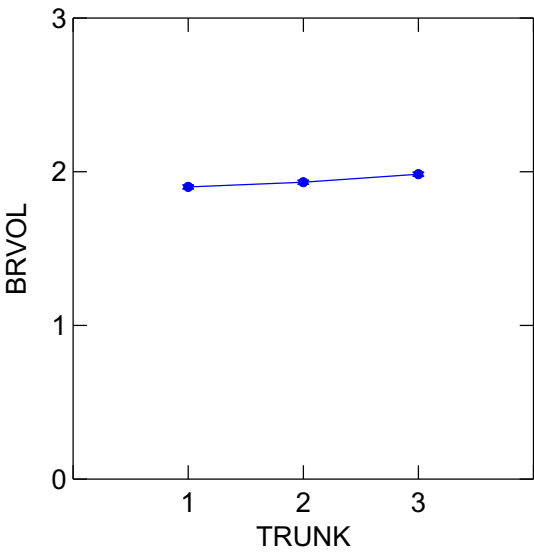
Least Squares Means



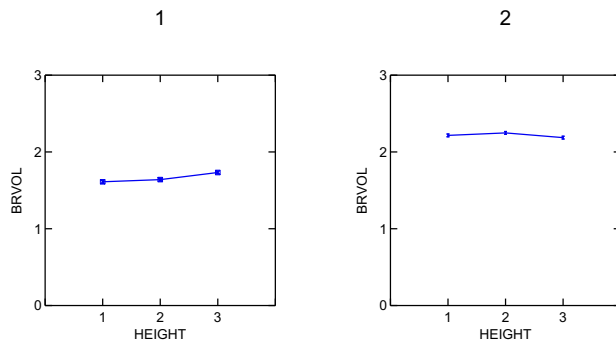
Least Squares Means



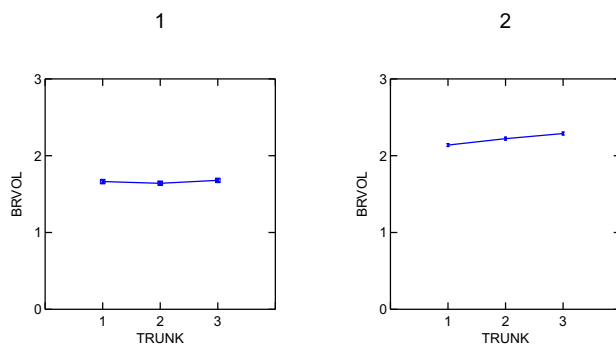
Least Squares Means



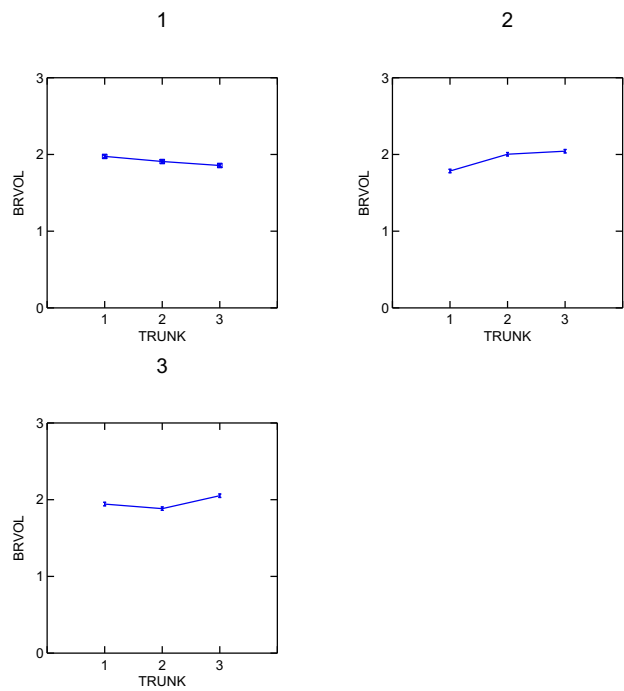
## Least Squares Means



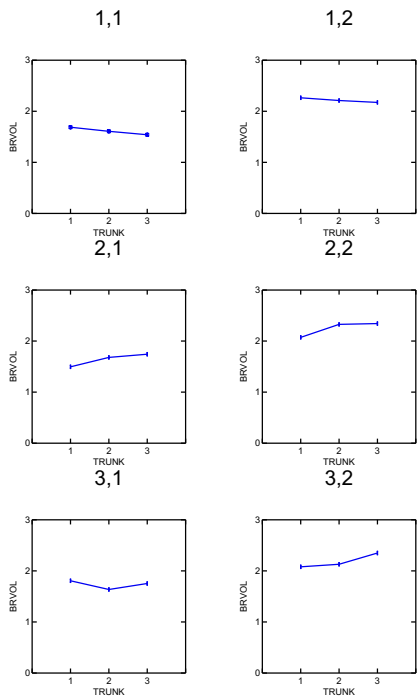
## Least Squares Means



Least Squares Means



Least Squares Means



Durbin-Watson D Statistic 2.608  
First Order Autocorrelation -0.307

Effects coding used for categorical variables in model.

Categorical values encountered during processing are:

POWER (2 levels)  
1, 2  
HEIGHT (3 levels)  
1, 2, 3  
TRUNK (3 levels)  
1, 2, 3  
5 case(s) deleted due to missing data.

Dep Var: CAD N: 54 Multiple R: 0.893348334 Squared multiple R: 0.798071246

Analysis of Variance

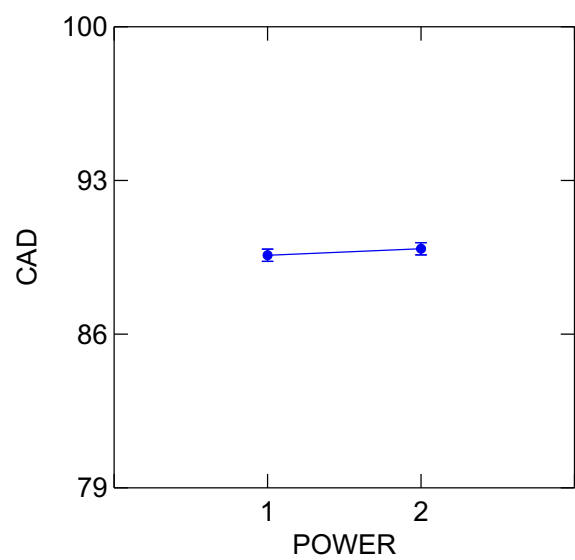
Source	Sum-of-Squares	df	Mean-Square	F-ratio	P
POWER	1.185185185	1	1.185185185	0.561403509	0.458563606
HEIGHT	1.74037E+02	2	8.70185E+01	4.12193E+01	0.000000000
TRUNK	3.814814815	2	1.907407407	0.903508772	0.414134561
HEIGHT*POWER	6.44815E+01	2	3.22407E+01	1.52719E+01	0.000015758



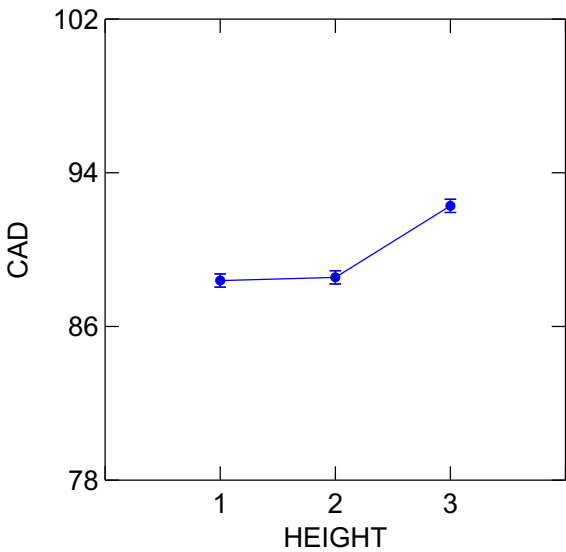
TRUNK*POWER	1.60370E+01	2	8.018518519	3.798245614	0.031865251
TRUNK*HEIGHT	3.01852E+01	4	7.546296296	3.574561404	0.014860094
TRUNK*HEIGHT*POWER	1.06296E+01	4	2.657407407	1.258771930	0.304066726
Error	7.60000E+01	36	2.111111111		

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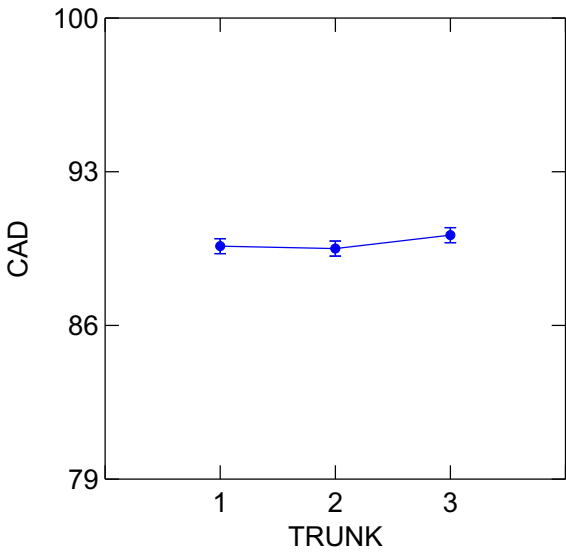
Least Squares Means



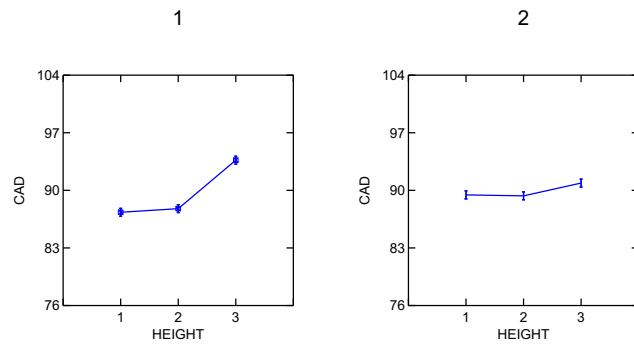
Least Squares Means



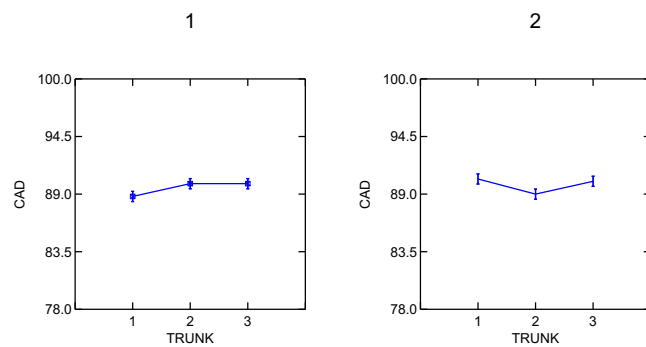
Least Squares Means



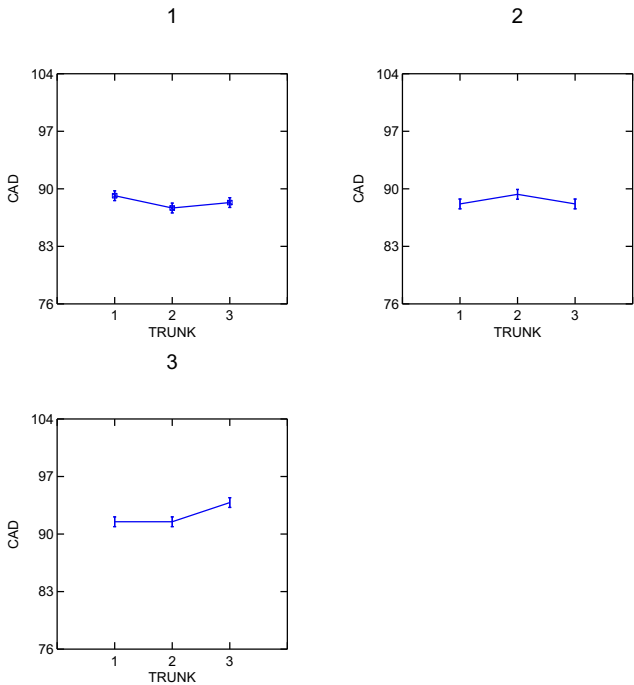
## Least Squares Means



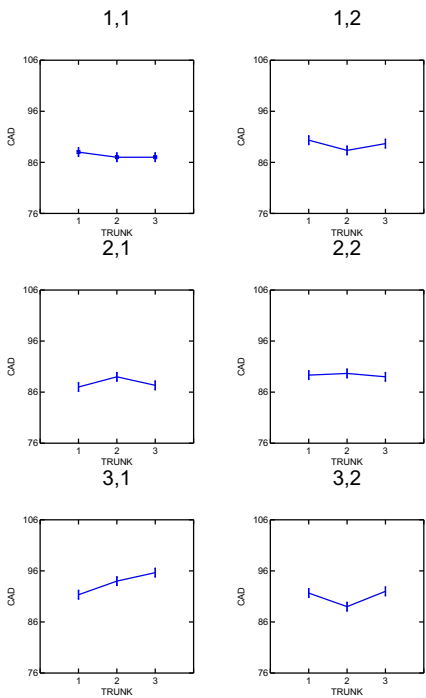
## Least Squares Means



Least Squares Means



Least Squares Means



\*\*\* WARNING \*\*\*  
Case 32 is an outlier (Studentized Residual = 4.539796923)  
Case 33 is an outlier (Studentized Residual = -5.136595700)  
  
Durbin-Watson D Statistic 2.816  
First Order Autocorrelation -0.411