

GLM 程序

類別層級資訊		
類別	層級	值
a	2	high background contrast low background contrast
b	3	high figure speed low figure speed medium figure speed
c	3	long figure length medium figure length short figure length
d	3	long background width medium background width short background width
e	36	0 1 10 11 12 13 14 15 16 17 18 19 2 20 21 22 23 24 25 26 27 28 29 3 30 31 32 33 34 35 4 5 6 7 8 9
response	2	0 1

讀取的觀測值數目	1944
使用的觀測值數目	1944

GLM 程序

應變數: response

來源	自由度	平方和	均方	F 值	Pr > F
模型	88	126.8292181	1.4412411	9.27	<.0001
誤差	1855	288.3677984	0.1554543		
已校正的總計	1943	415.1970165			

R 平方	變異係數	根 MSE	response 平均值
0.305468	127.5332	0.394277	0.309156

來源	自由度	類型 I SS	均方	F 值	Pr > F
a	1	6.33796296	6.33796296	40.77	<.0001
b	2	0.37757202	0.18878601	1.21	0.2971
c	2	5.71707819	2.85853909	18.39	<.0001
d	2	61.06275720	30.53137860	196.40	<.0001
e	35	42.77109053	1.22203116	7.86	<.0001
a*b	2	0.08333333	0.04166667	0.27	0.7649
a*c	2	1.24382716	0.62191358	4.00	0.0185
a*d	2	4.70679012	2.35339506	15.14	<.0001
b*c	4	0.29218107	0.07304527	0.47	0.7579
b*d	4	0.60390947	0.15097737	0.97	0.4221
c*d	4	0.14403292	0.03600823	0.23	0.9207
a*b*c	4	0.09876543	0.02469136	0.16	0.9590
a*b*d	4	0.44135802	0.11033951	0.71	0.5852
a*c*d	4	0.12345679	0.03086420	0.20	0.9392
b*c*d	8	1.23559671	0.15444959	0.99	0.4389
a*b*c*d	8	1.58950617	0.19868827	1.28	0.2504

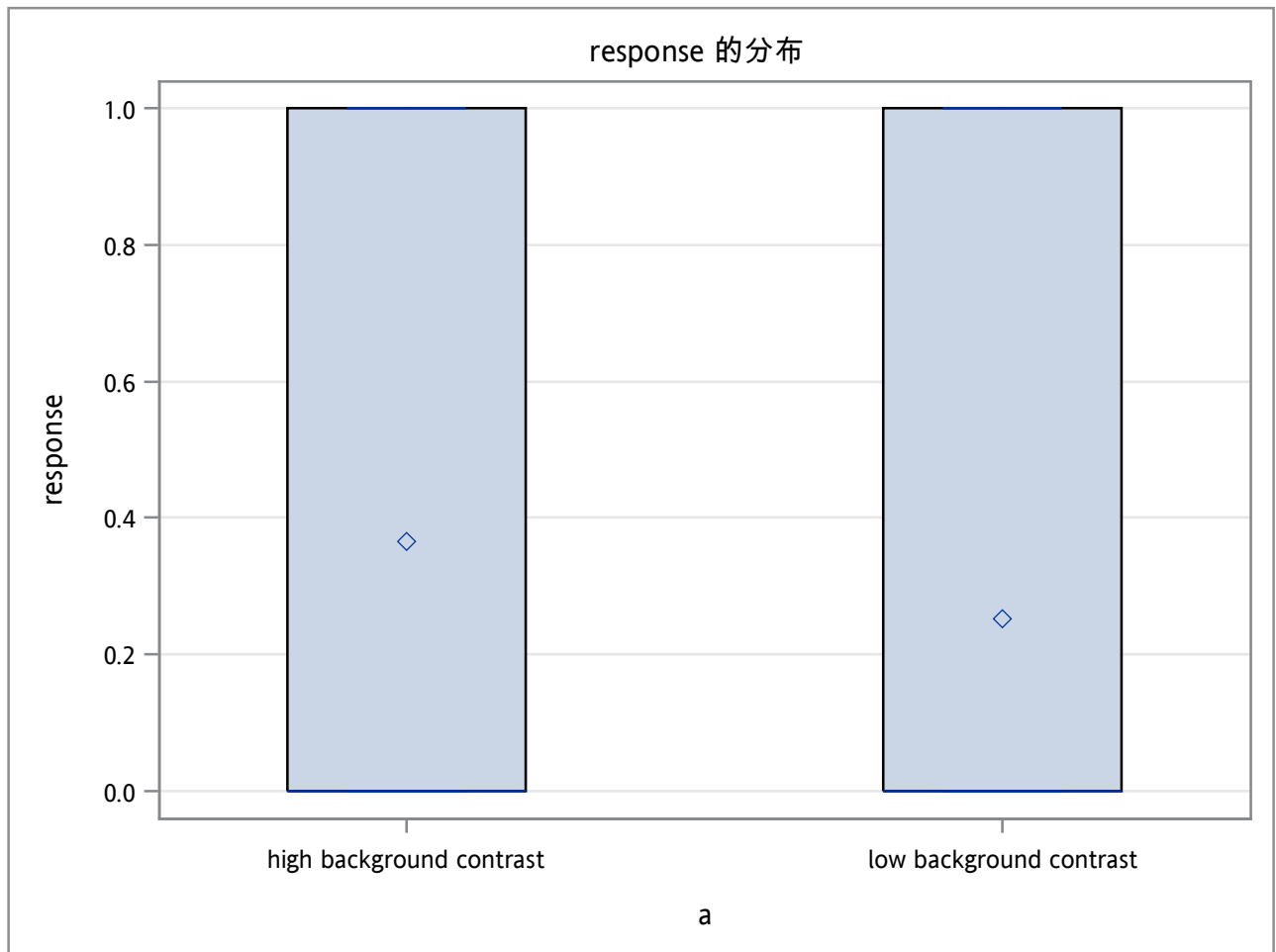
來源	自由度	類型 III SS	均方	F 值	Pr > F
a	1	6.33796296	6.33796296	40.77	<.0001
b	2	0.37757202	0.18878601	1.21	0.2971
c	2	5.71707819	2.85853909	18.39	<.0001
d	2	61.06275720	30.53137860	196.40	<.0001
e	35	42.77109053	1.22203116	7.86	<.0001
a*b	2	0.08333333	0.04166667	0.27	0.7649
a*c	2	1.24382716	0.62191358	4.00	0.0185

GLM 程序

應變數: response

來源	自由度	類型 III SS	均方	F 值	Pr > F
a*d	2	4.70679012	2.35339506	15.14	<.0001
b*c	4	0.29218107	0.07304527	0.47	0.7579
b*d	4	0.60390947	0.15097737	0.97	0.4221
c*d	4	0.14403292	0.03600823	0.23	0.9207
a*b*c	4	0.09876543	0.02469136	0.16	0.9590
a*b*d	4	0.44135802	0.11033951	0.71	0.5852
a*c*d	4	0.12345679	0.03086420	0.20	0.9392
b*c*d	8	1.23559671	0.15444959	0.99	0.4389
a*b*c*d	8	1.58950617	0.19868827	1.28	0.2504

GLM 程序



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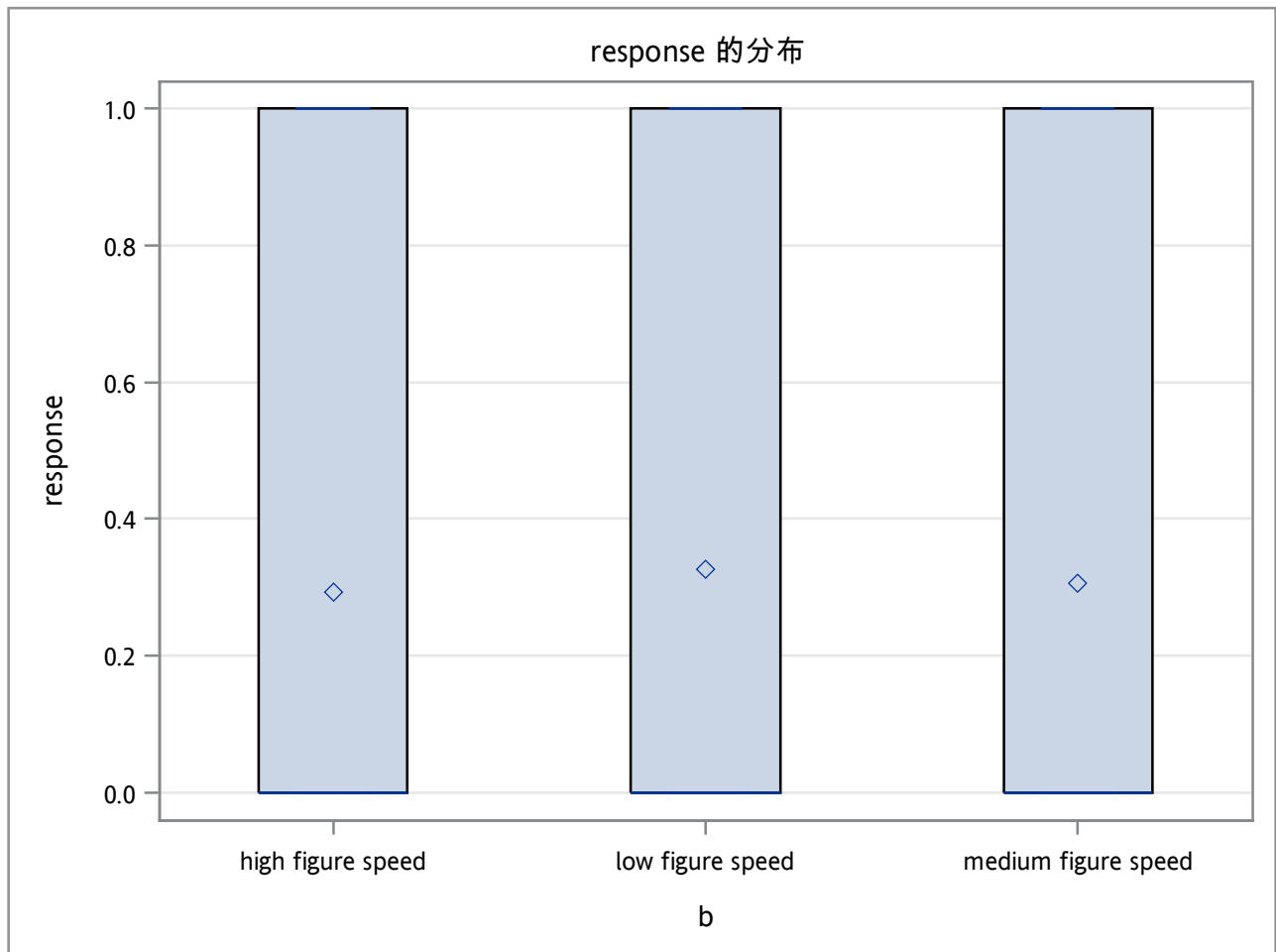
Tukey's Studentized Range (HSD) Test for response

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	1855
Error Mean Square	0.155454
Critical Value of Studentized Range	2.77362
Minimum Significant Difference	0.0351

具有相同字母的平均值沒有顯著不同。			
Tukey 群組	平均值	N	a
A	0.36626	972	high background contrast
B	0.25206	972	low background contrast

GLM 程序



GLM 程序

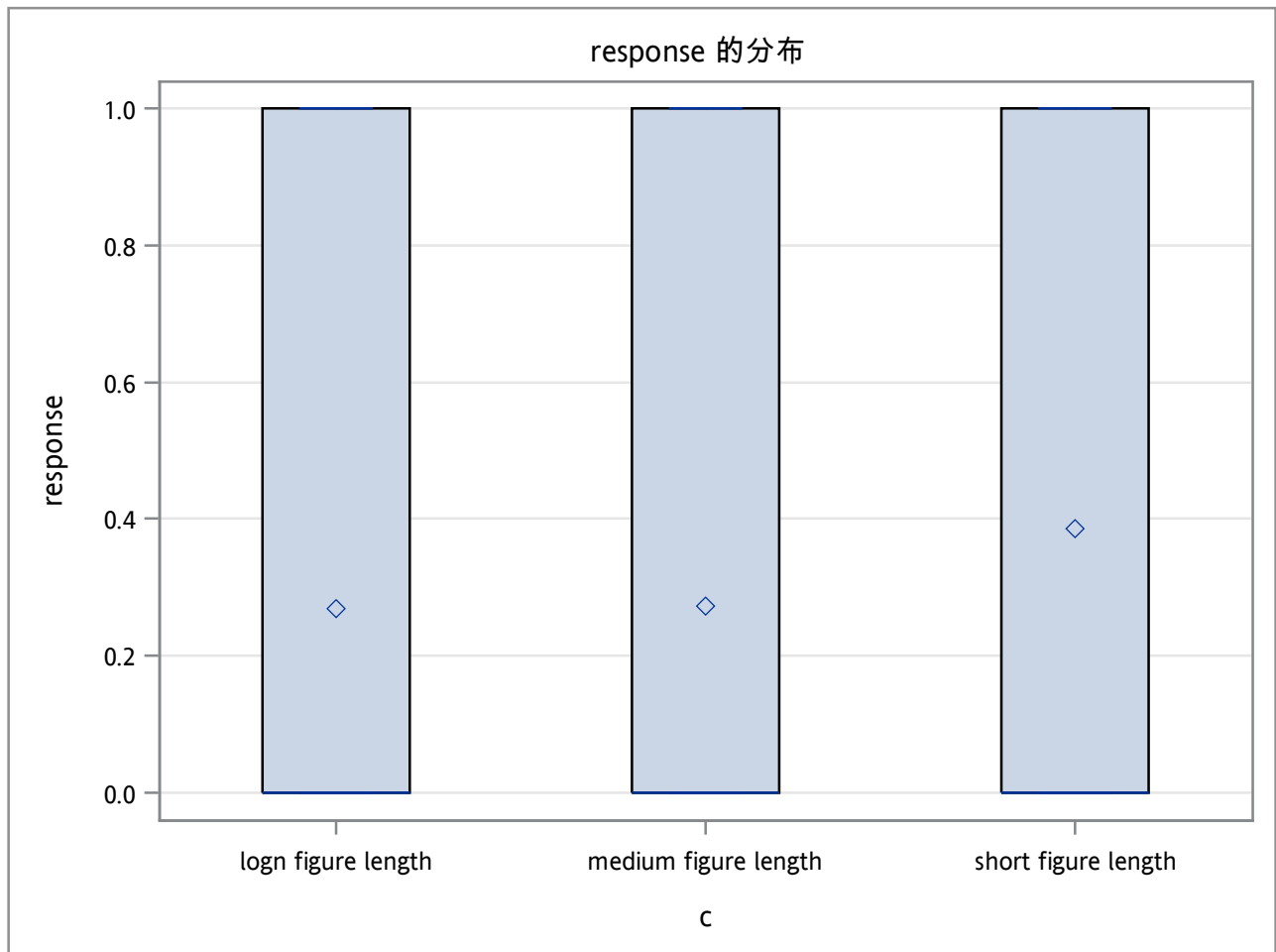
Tukey's Studentized Range (HSD) Test for response

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	1855
Error Mean Square	0.155454
Critical Value of Studentized Range	3.31716
Minimum Significant Difference	0.0514

具有相同字母的平均值沒有顯著不同。			
Tukey 群組	平均值	N	b
A	0.32716	648	low figure speed
A			
A	0.30710	648	medium figure speed
A			
A	0.29321	648	high figure speed

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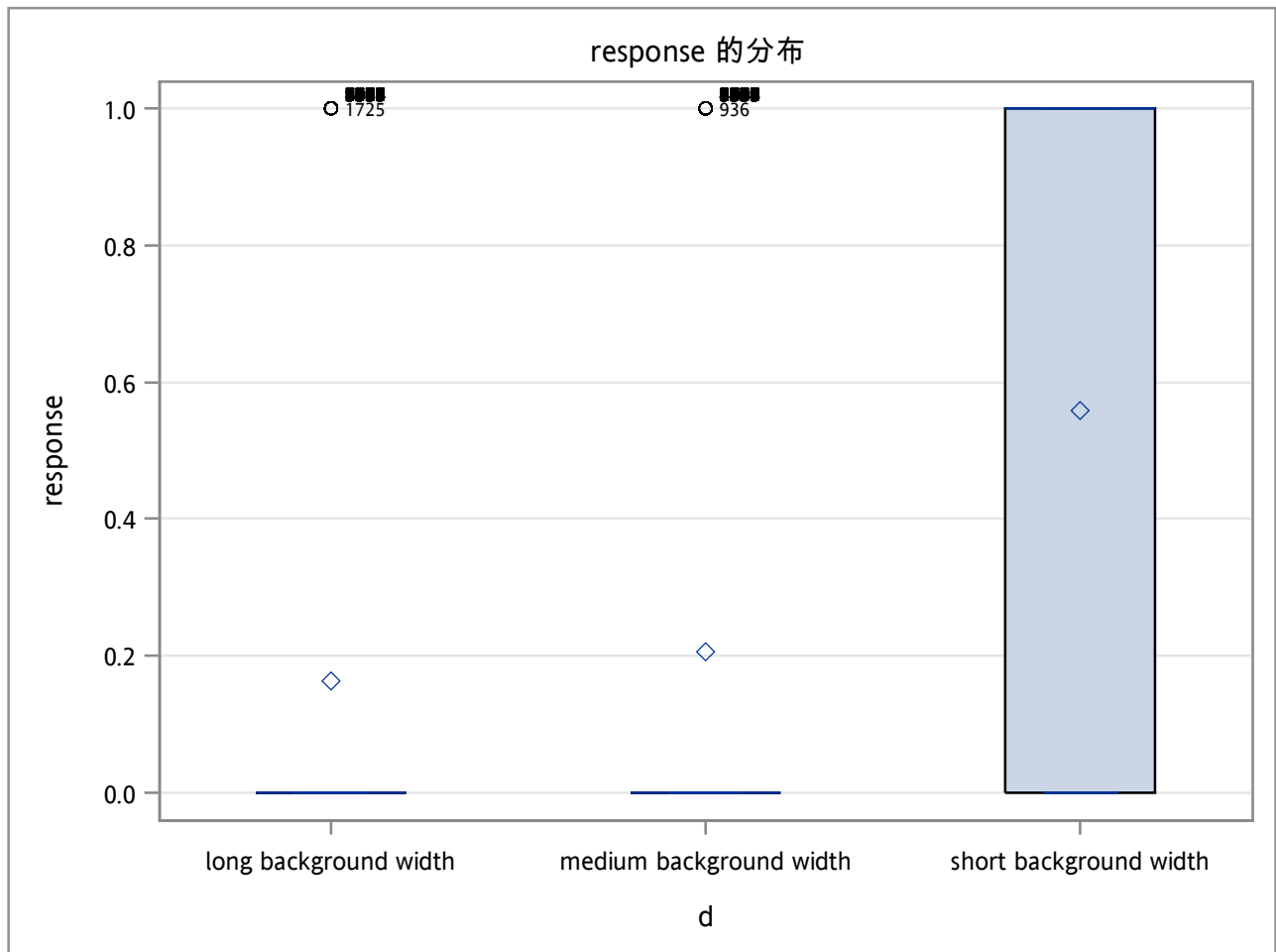
Tukey's Studentized Range (HSD) Test for response

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	1855
Error Mean Square	0.155454
Critical Value of Studentized Range	3.31716
Minimum Significant Difference	0.0514

具有相同字母的平均值沒有顯著不同。			
Tukey 群組	平均值	N	c
A	0.38580	648	short figure length
B	0.27315	648	medium figure length
B			
B	0.26852	648	logn figure length

GLM 程序



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Tukey's Studentized Range (HSD) Test for response

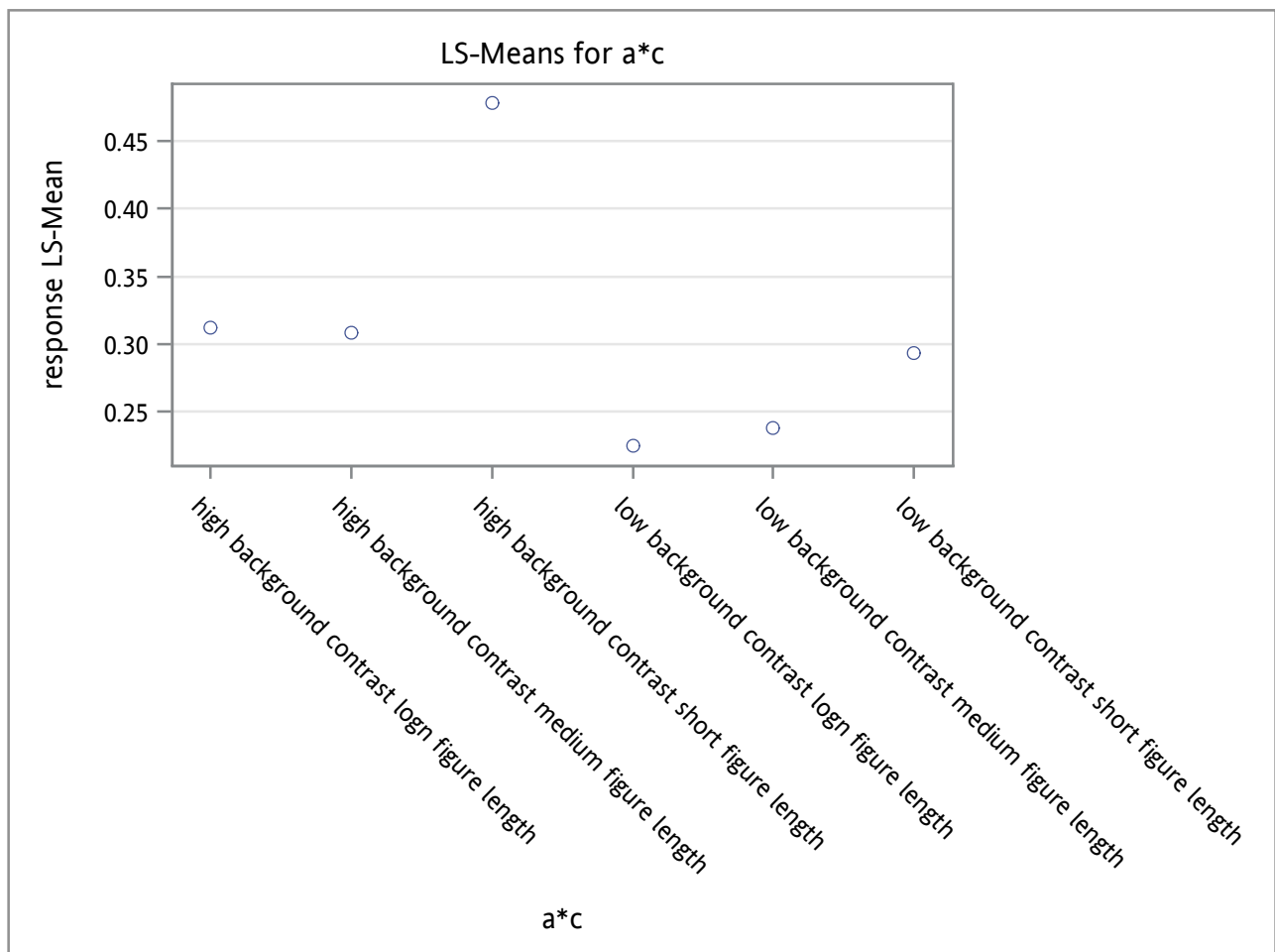
Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

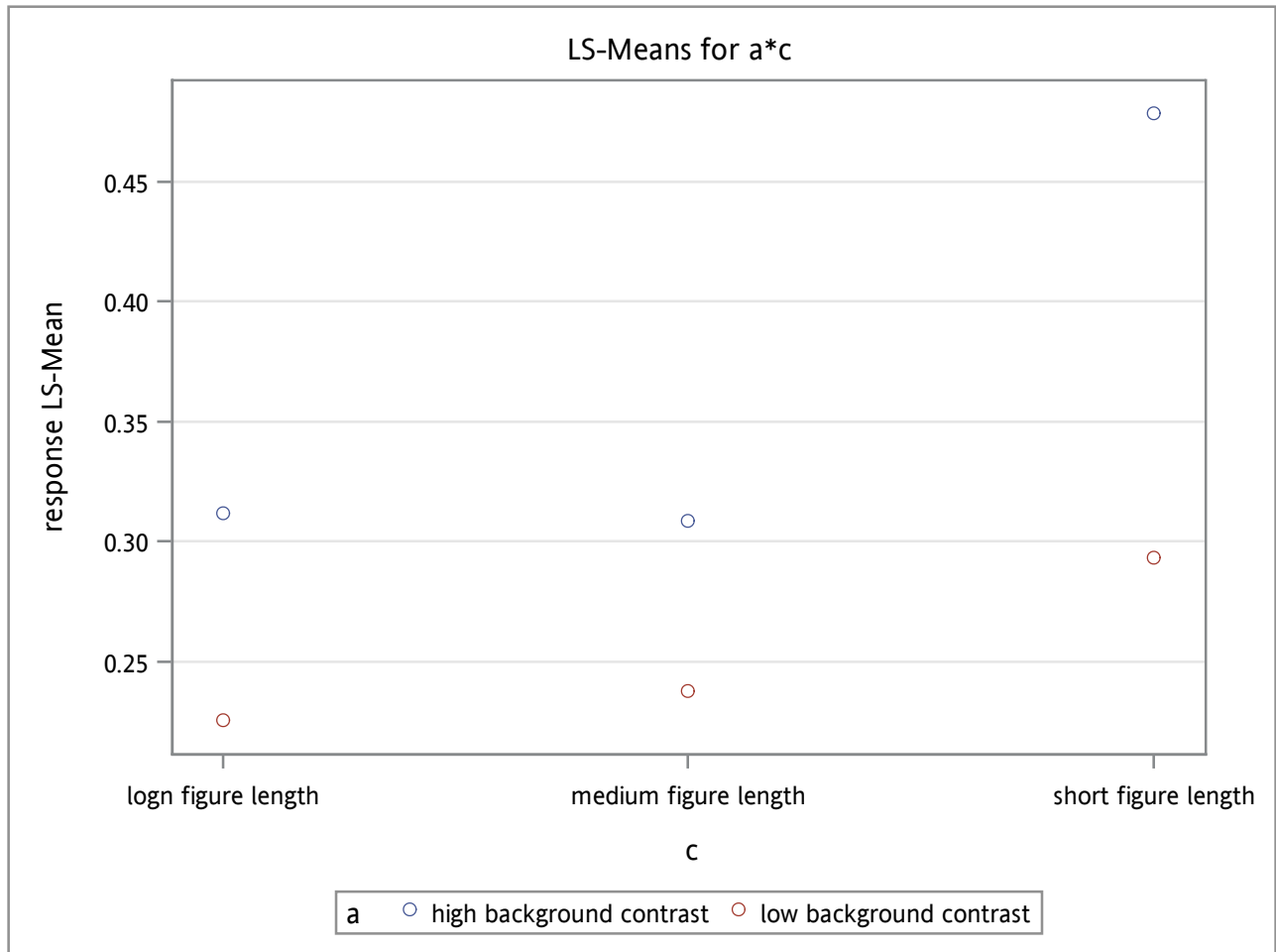
Alpha	0.05
Error Degrees of Freedom	1855
Error Mean Square	0.155454
Critical Value of Studentized Range	3.31716
Minimum Significant Difference	0.0514

具有相同字母的平均值沒有顯著不同。			
Tukey 群組	平均值	N	d
A	0.55864	648	short background width
B	0.20525	648	medium background width
B			
B	0.16358	648	long background width

GLM 程序
最小平方平均值

a	c	response LSMEAN
high background contrast	logn figure length	0.31172840
high background contrast	medium figure length	0.30864198
high background contrast	short figure length	0.47839506
low background contrast	logn figure length	0.22530864
low background contrast	medium figure length	0.23765432
low background contrast	short figure length	0.29320988



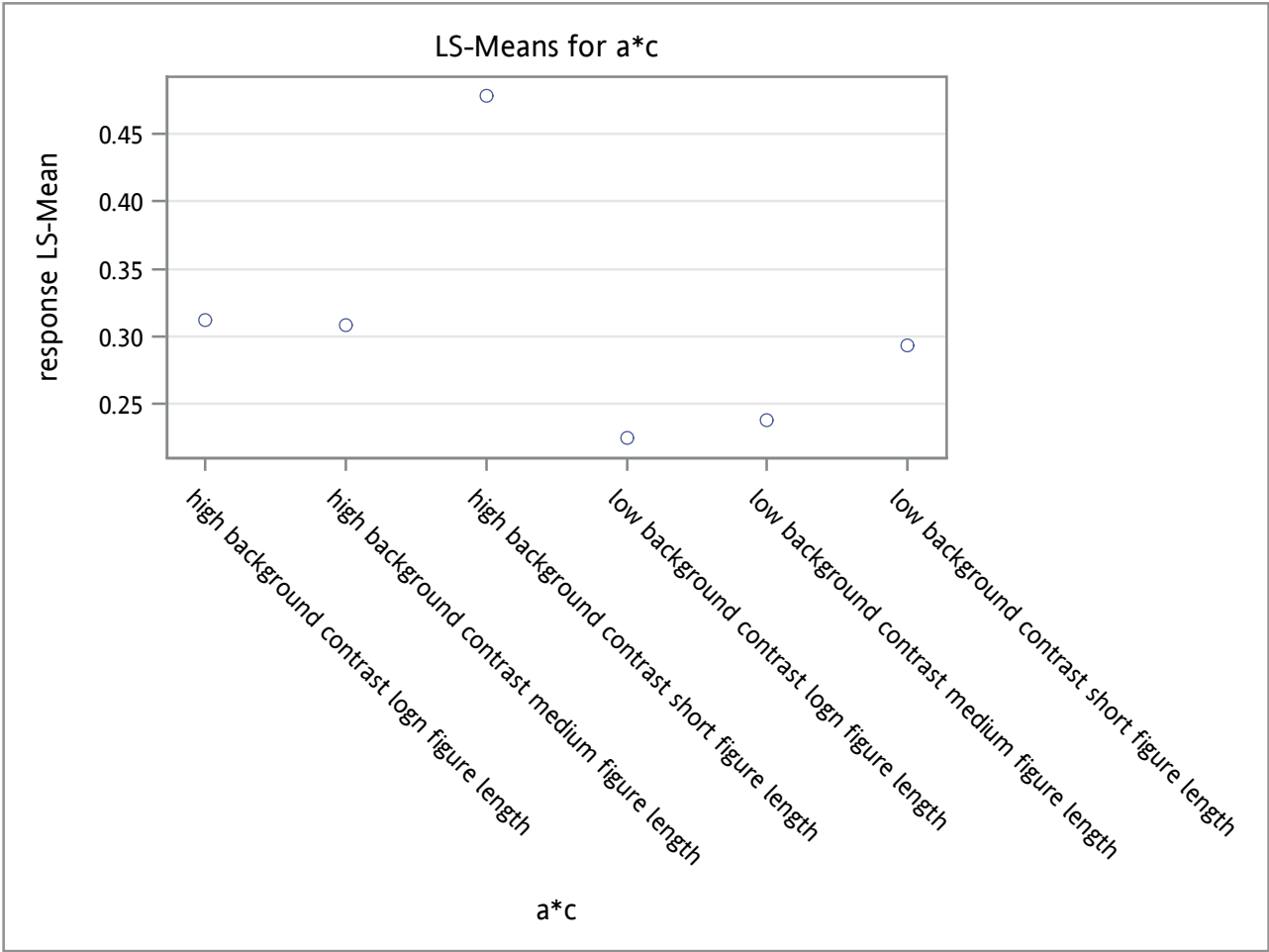
GLM 程序
最小平方平均值

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最小平方平均值

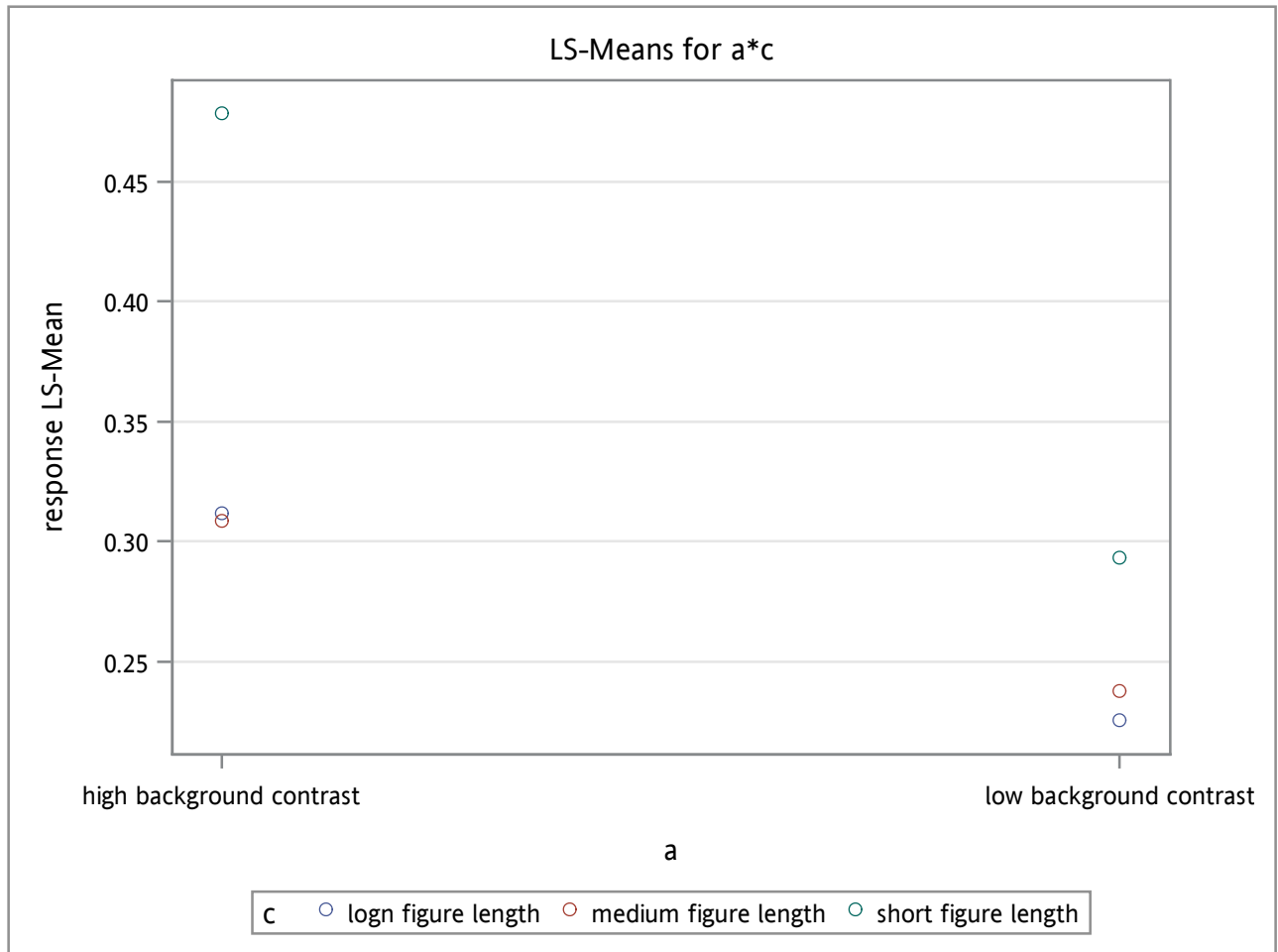
a*c 依 a 配量的效果 response					
a	自由度	平方和	均方	F 值	Pr > F
high background contrast	2	6.113169	3.056584	19.66	<.0001
low background contrast	2	0.847737	0.423868	2.73	0.0657

GLM 程序
最小平方平均值

a	c	response LSMEAN
high background contrast	logn figure length	0.31172840
high background contrast	medium figure length	0.30864198
high background contrast	short figure length	0.47839506
low background contrast	logn figure length	0.22530864
low background contrast	medium figure length	0.23765432
low background contrast	short figure length	0.29320988



GLM 程序
最小平方平均值

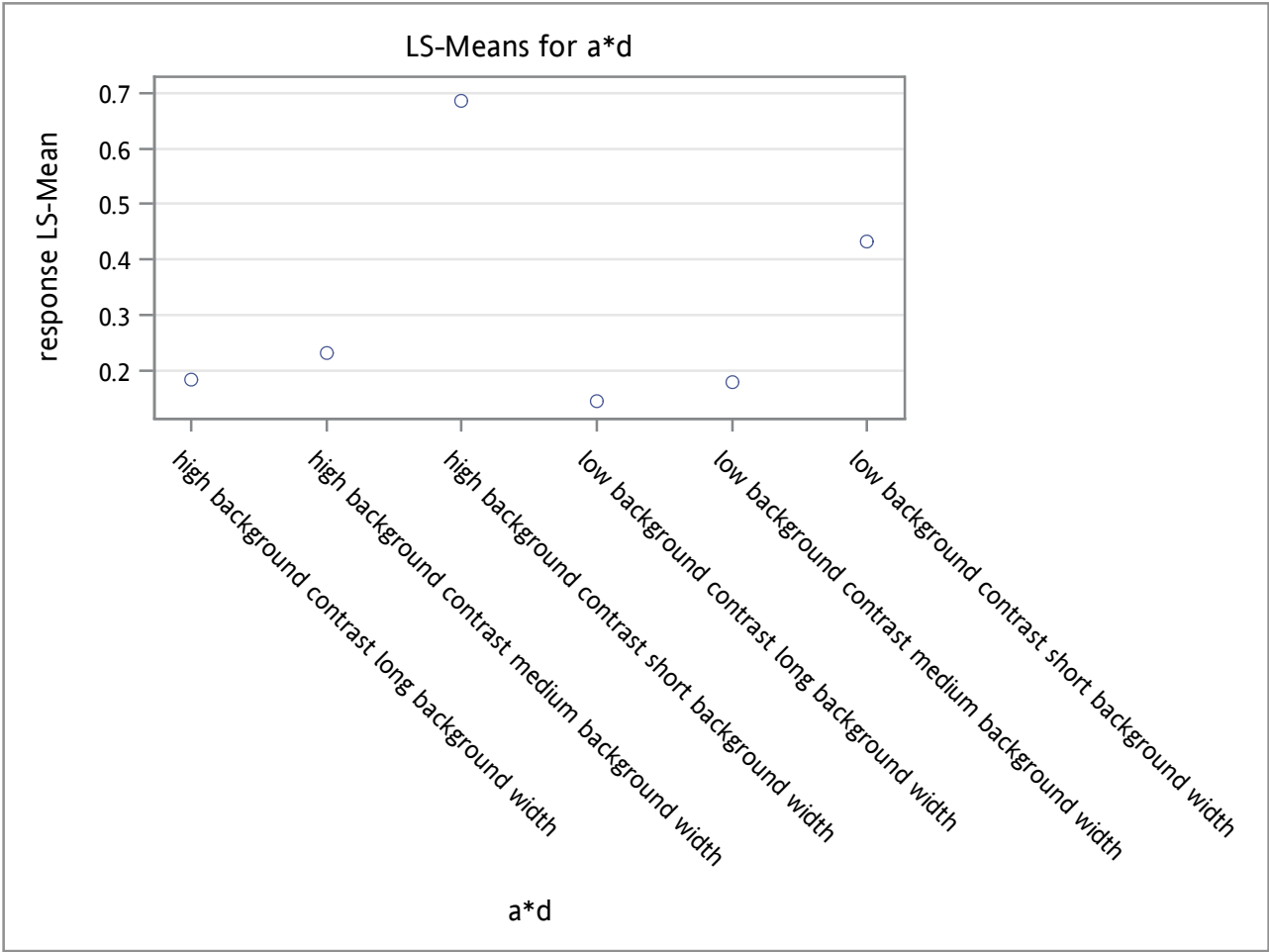


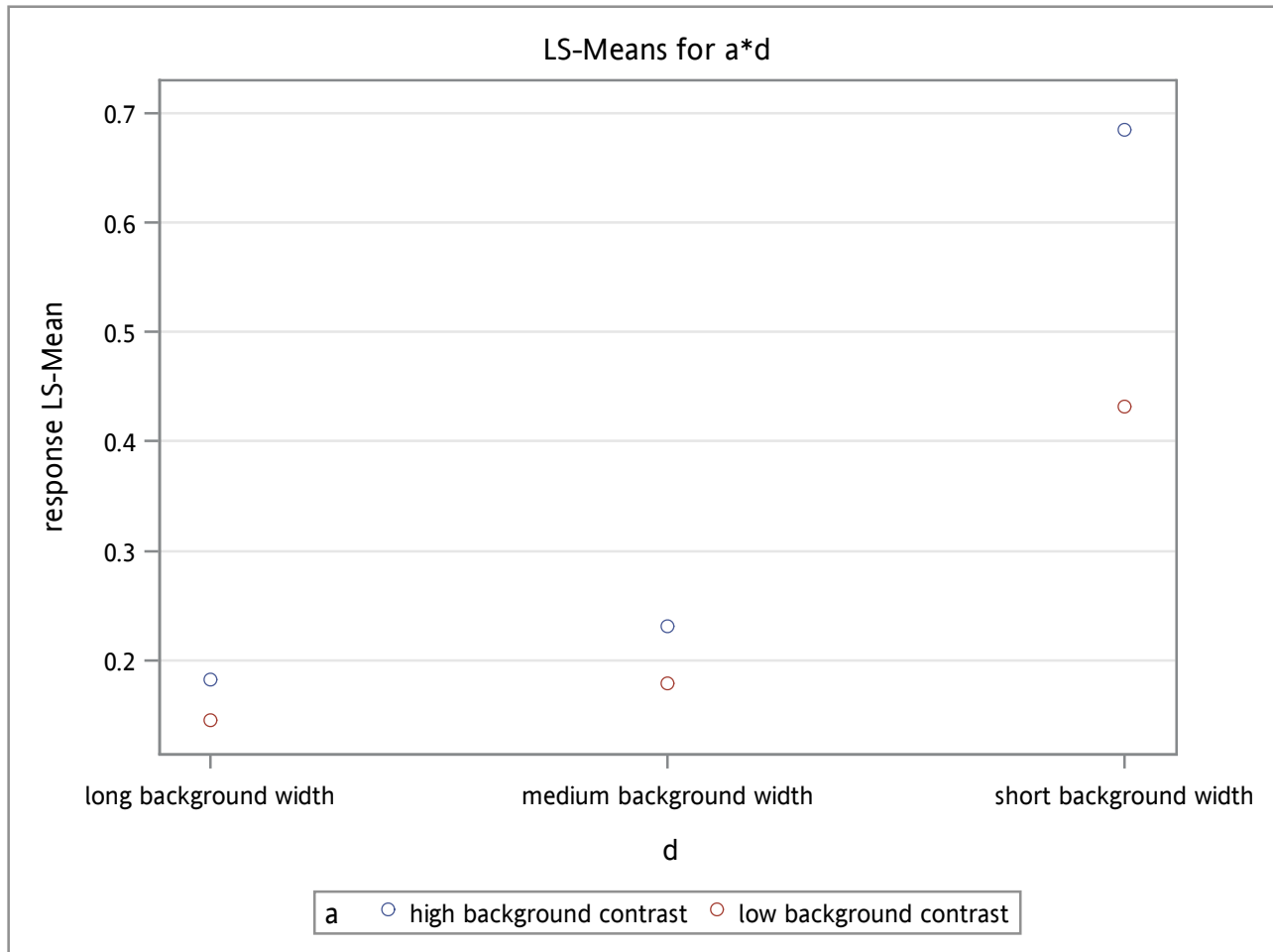
GLM 程序
最小平方平均值

a*c 依 c 配量的效果 response					
c	自由度	平方和	均方	F 值	Pr > F
logn figure length	1	1.209877	1.209877	7.78	0.0053
medium figure length	1	0.816358	0.816358	5.25	0.0220
short figure length	1	5.555556	5.555556	35.74	<.0001

GLM 程序
最小平方平均值

a	d	response LSMEAN
high background contrast	long background width	0.18209877
high background contrast	medium background width	0.23148148
high background contrast	short background width	0.68518519
low background contrast	long background width	0.14506173
low background contrast	medium background width	0.17901235
low background contrast	short background width	0.43209877



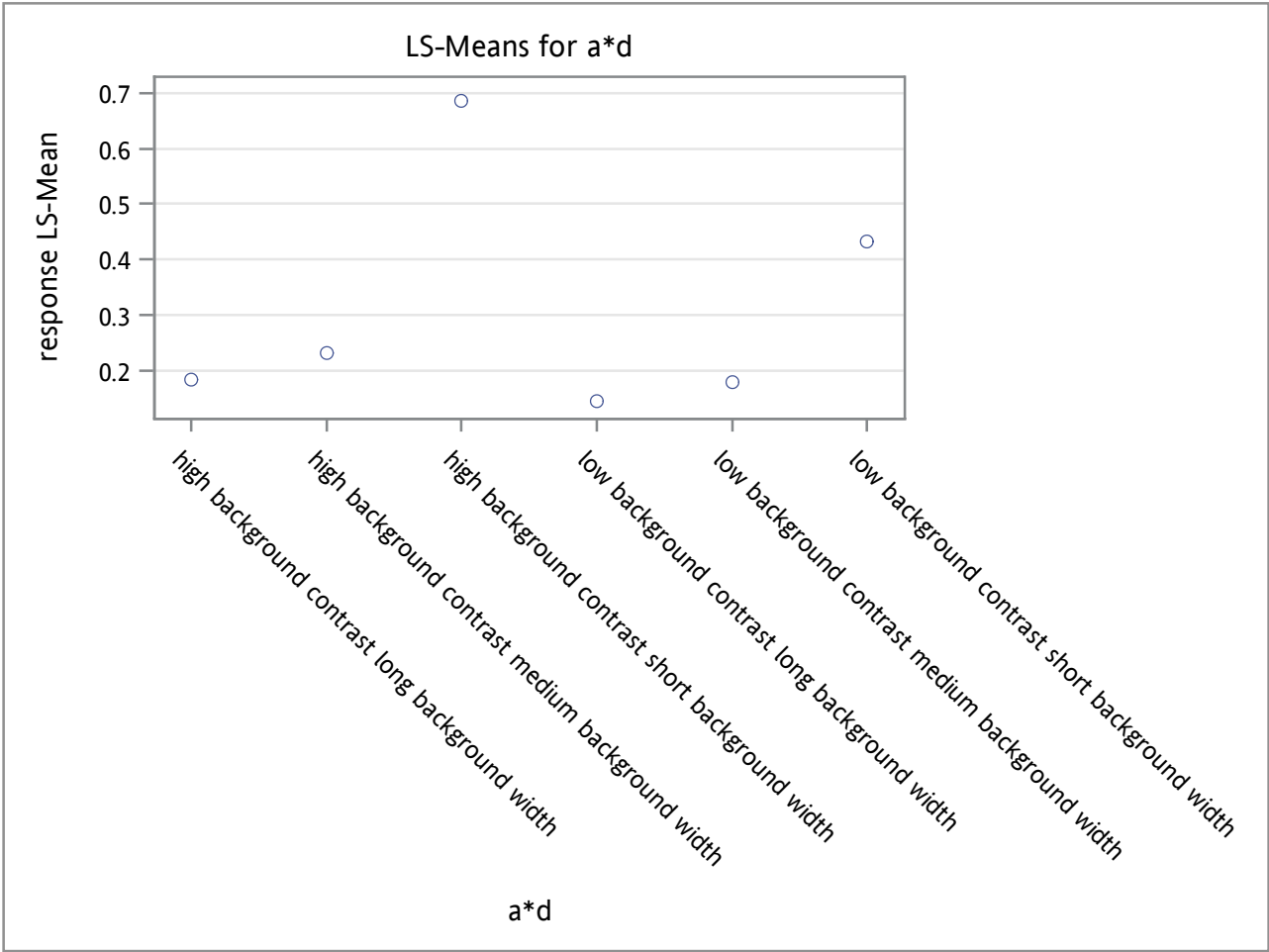
GLM 程序
最小平方平均值

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最小平方平均值

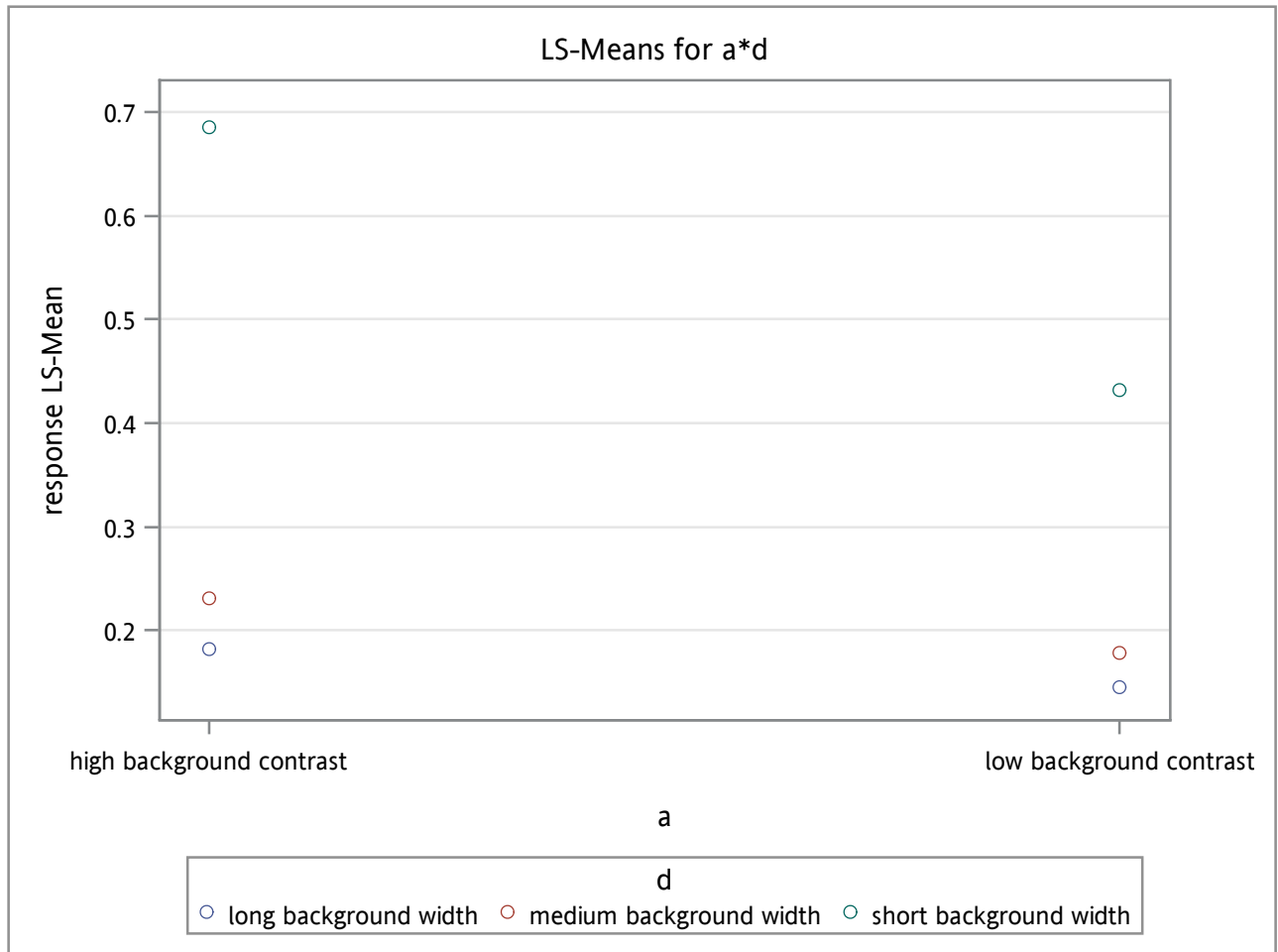
a*d 依 a 配量的效果 response					
a	自由度	平方和	均方	F 值	Pr > F
high background contrast	2	49.829218	24.914609	160.27	<.0001
low background contrast	2	15.940329	7.970165	51.27	<.0001

GLM 程序
最小平方平均值

a	d	response LSMEAN
high background contrast	long background width	0.18209877
high background contrast	medium background width	0.23148148
high background contrast	short background width	0.68518519
low background contrast	long background width	0.14506173
low background contrast	medium background width	0.17901235
low background contrast	short background width	0.43209877



GLM 程序
最小平方平均值



GLM 程序
最小平方平均值

a*d 依 d 配量的效果 response					
d	自由度	平方和	均方	F 值	Pr > F
long background width	1	0.222222	0.222222	1.43	0.2320
medium background width	1	0.445988	0.445988	2.87	0.0905
short background width	1	10.376543	10.376543	66.75	<.0001