The GLIMMIX Procedure

Model Information	
Data Set	WORK.SIM_LINEUP_DATA
Response Variable	correct
Response Distribution	Binomial
Link Function	Logit
Variance Function	Default
Variance Matrix	Not blocked
Estimation Technique	Residual PL
Degrees of Freedom Method	Containment

Class Level Information		
Class	**Levels**	**Values**
nick_name	33	07917c8f20bd64d139a5b2236f7e4e17 0cf70ba06ca136fd39b9656dc36a1e28 0fd70ce79e7389144e6241d6e33b0c47 11d0f4e6d5fab9bd5b4a9356cb804540 19966d4664333b7f76919371876714d0 1a81e4bc01b252e4a1b54b449d5f2e96 1b37544d470da5ef08adef40f2b62e28 1dd51f5bdadfcf7af6f7ec9b986824ee 28fad056d8ae07f1fce2cfb4f2a2652a 29fd2ae75eb8f9c21c055211b45fb2de 2ac7cb9bd776d407e08b85eb619f15ca 4c7cee72e71798b9ee3092a8d60ed224 5083fc7d8a5a8f50e96063237f0c8afe 589a7834099998445cd20117a88d444c 5a2733563a0f8a8cc2ee6116a4744271 5e535b9cd42f5f965117a845328ecdc7 5fad3241413670ce6c8f40d0dc138dfd 607a9c29102832b993d8adb5d9855f3b 7b86b70c45775969aa583a90e87bcfa6 7cda7482f5b4af74e92c562af71838c2 81998917829c2defc8897a6aa438e044 84f6fb2625fee48472f92836151eae49 965675ef51352b48492b478a0ff20cca 9c38c2ef339980c656cb722b5c0d4a1d a25a0a4fdf05472157f78375e565027b a9af0281dc579f92ceaa690a71727808 bd24ec8a44cfb366c742b894c06334d4 c0f02f7d7aa23c41a53a8373bcbb0ae2 c3d6ecc6236ee802fcf9d979374877b6 d148d77a34a4c200e621563ea9812399 e8780996f49098d76b26612bb3144739 f01138c98cd648f4a5945d7219e60734 f9cd0853cfefc7c816a417b1909fb239
run	39	1 10 11 12 13 14 15 16 18 19 2 20 21 22 23 24 25 29 3 30 33 34 35 36 37 38 4 40 43 44 45 48 49 5 52 54 56 6 9
data_name	12	184b9f1a90081e0ffeedc112c6431d9c 3d689aa117d70559b73fe8398f1a44c6 47748c8978f11fc269bed62ca7f6a4d3 6a72b42ba970ea6798a886761baf324f 7ff3391e264e98652cdb6eb8b85088c4 87f34b01f1fce217b6c33e04da081ed0 8ad2ea6719790c191cedf1038d3cbca5 b79bc1a0fdbb69edc87fe34883a066d6 d14de6e8946c29750256921ce0462931 d5c6dd039c67d2cb6771b22aa1c6aaac e079c7c97296f2c777bede60f7d1c5b7 f28e70dc6b7365974b49d253cdd85363
pic_id	24	10 11 12 13 14 15 16 21 22 23 24 25 26 27 28 29 30 31 32 5 6 7 8 9
test_param	2	linear log
param_value	6	target-E-Lv_null-H-Lv_r0 target-E-Lv_null-M-Lv_r0 target-H-Lv_null-E-Lv_r0 target-H-Lv_null-M-Lv_r0 target-M-Lv_null-E-Lv_r0 target-M-Lv_null-H-Lv_r0
curvature	6	t-E_n-H t-E_n-M t-H_n-E t-H_n-M t-M_n-E t-M_n-H
target_curvature	3	E H M
null_curvature	3	E H M

Number of Observations Read	459
Number of Observations Used	459

Dimensions	
G-side Cov. Parameters	3
Columns in X	21
Columns in Z	1443

The GLIMMIX Procedure

Dimensions	
Subjects (Blocks in V)	1
Max Obs per Subject	459

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	3
Lower Boundaries	3
Upper Boundaries	0
Fixed Effects	Profiled
Starting From	Data

Iteration History					
Iteration	Restarts	Subiterations	Objective Function	Change	Max Gradient
0	0	8	2053.0501195	0.84970644	18.42037
1	0	5	2208.2266537	2.00000000	10.4886
2	0	4	2321.295926	0.65368451	6.177393
3	0	3	2361.0712879	0.05939212	4.932041
4	0	3	2366.8525169	0.00249048	4.753718
5	0	1	2367.3118777	0.00028758	4.737833
6	0	1	2367.346911	0.00010832	4.73656
7	0	1	2367.3492408	0.00003607	4.736528
8	0	1	2367.3512512	0.00000900	4.736455
9	0	1	2367.3517049	0.00000207	4.736442
10	0	0	2367.3518194	0.00000000	4.736438

Convergence criterion (PCONV=1.11022E-8) satisfied.

Estimated G matrix is not positive definite.

Fit Statistics	
-2 Res Log Pseudo-Likelihood	2367.35
Generalized Chi-Square	283.70
Gener. Chi-Square / DF	0.63

The GLIMMIX Procedure

Covariance Parameter Estimates			
Cov Parm	**Subject**	**Estimate**	**Standard Error**
Intercept	run	2.2441	0.7843
Intercept	data_name	0.7035	0.5716
curvature	run*data_name	0	.

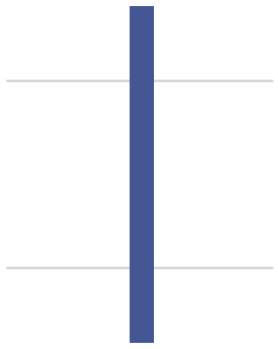
Type III Tests of Fixed Effects				
Effect	**Num DF**	**Den DF**	**F Value**	**Pr > F**
curvature	5	182	4.61	0.0006
test_param	1	221	10.55	0.0013
test_param*curvature	5	221	6.34	<.0001

F Test for test_param*curvature Least Squares Means Slice				
Slice	**Num DF**	**Den DF**	**F Value**	**Pr > F**
curvature t-E_n-H	1	221	1.09	0.2977

correct Tukey Grouping for LS-Means of test_param*curvature (Alpha = 0.05)

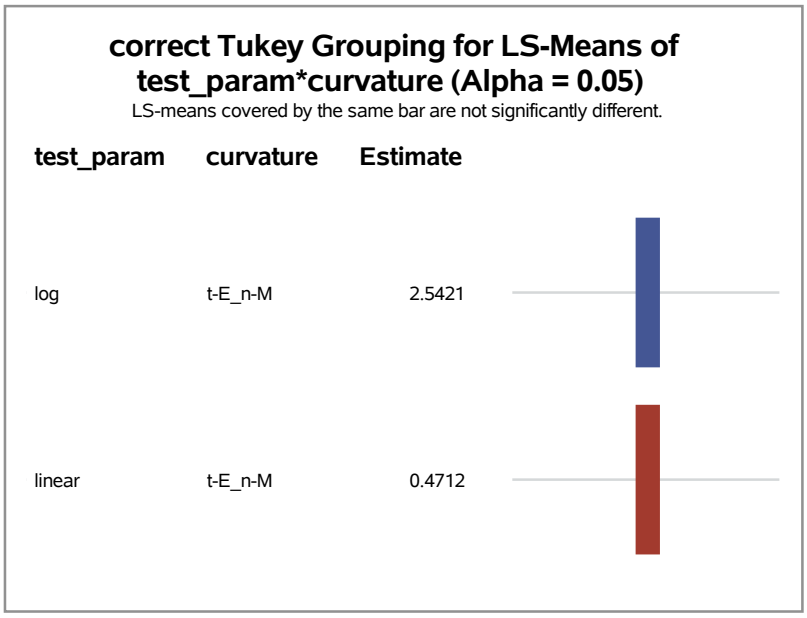
LS-means covered by the same bar are not significantly different.

test_param	curvature	Estimate
linear	t-E_n-H	4.3874
log	t-E_n-H	3.0926

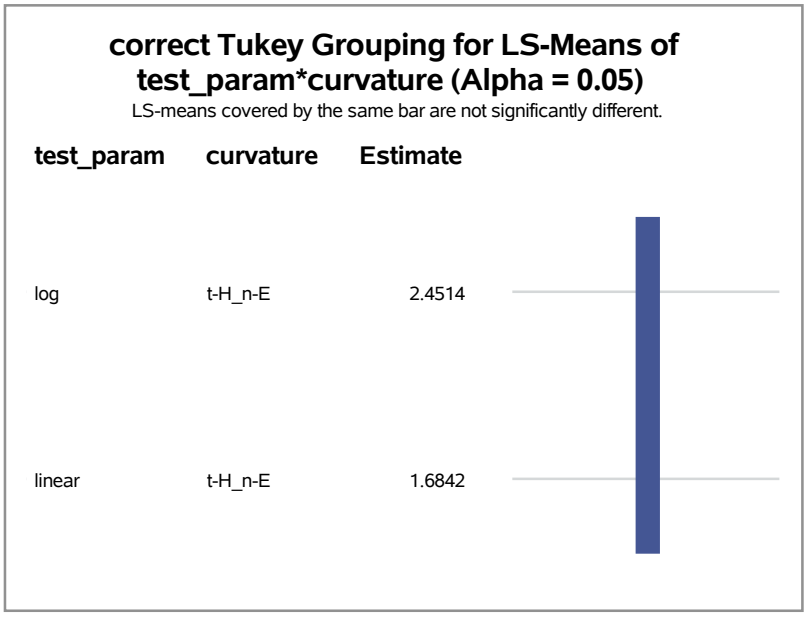


F Test for test_param*curvature Least Squares Means Slice				
Slice	**Num DF**	**Den DF**	**F Value**	**Pr > F**
curvature t-E_n-M	1	221	8.70	0.0035

The GLIMMIX Procedure

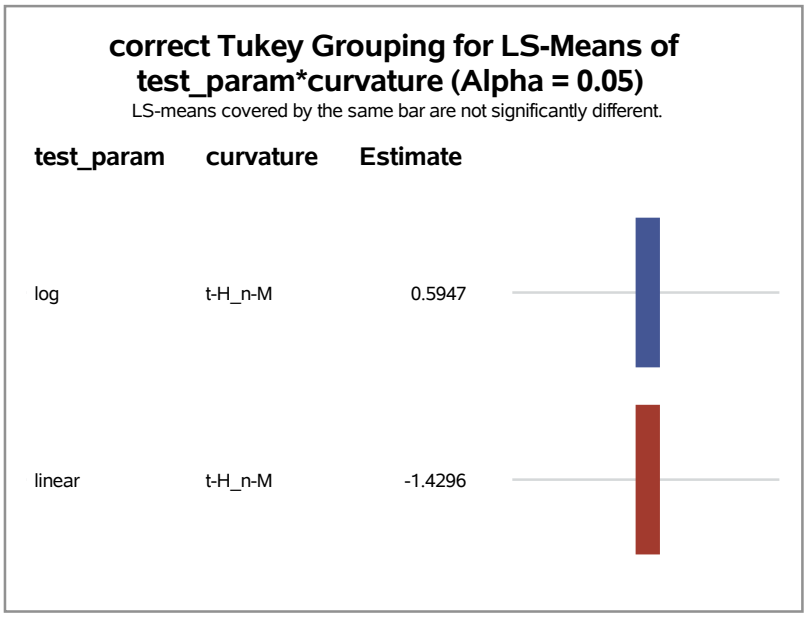


F Test for test_param*curvature Least Squares Means Slice				
Slice	Num DF	Den DF	F Value	Pr > F
curvature t-H_n-E	1	221	1.19	0.2760

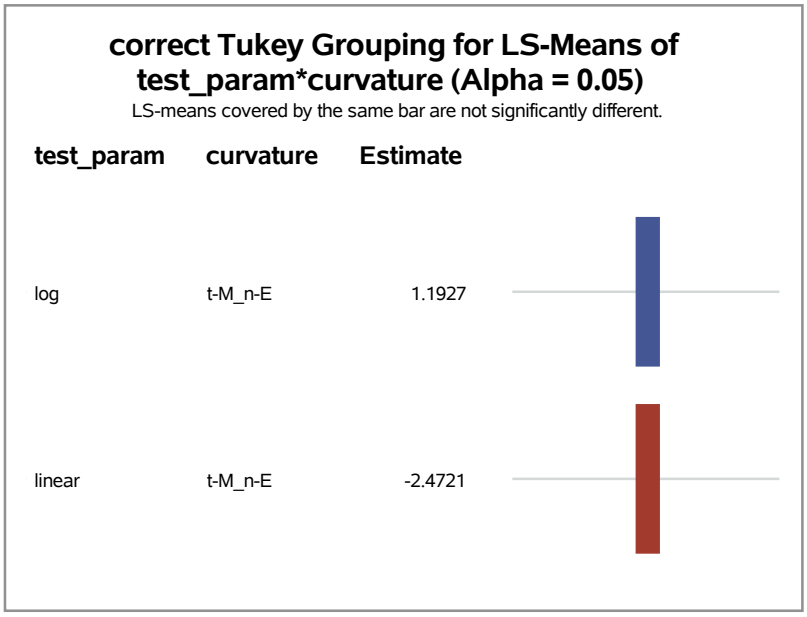


F Test for test_param*curvature Least Squares Means Slice				
Slice	Num DF	Den DF	F Value	Pr > F
curvature t-H_n-M	1	221	11.99	0.0006

The GLIMMIX Procedure

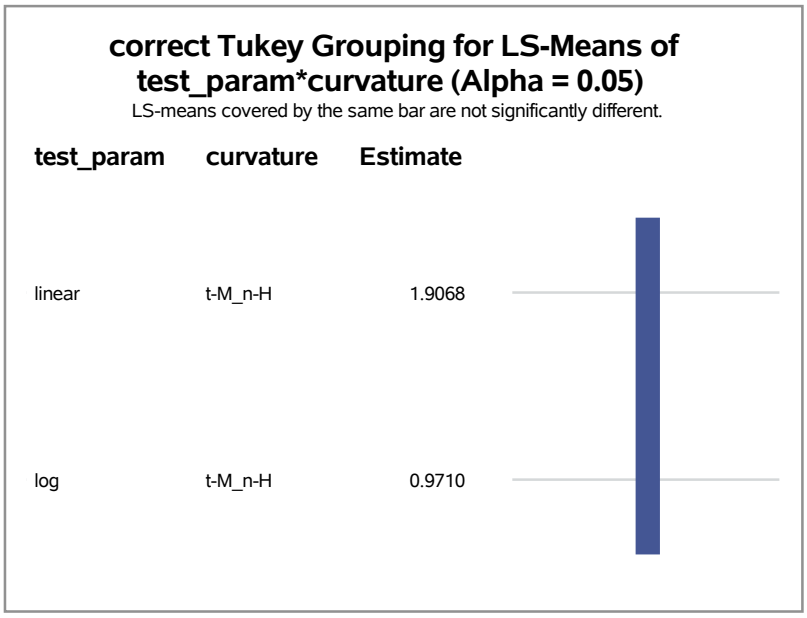


F Test for test_param*curvature Least Squares Means Slice				
Slice	Num DF	Den DF	F Value	Pr > F
curvature t-M_n-E	1	221	28.71	<.0001

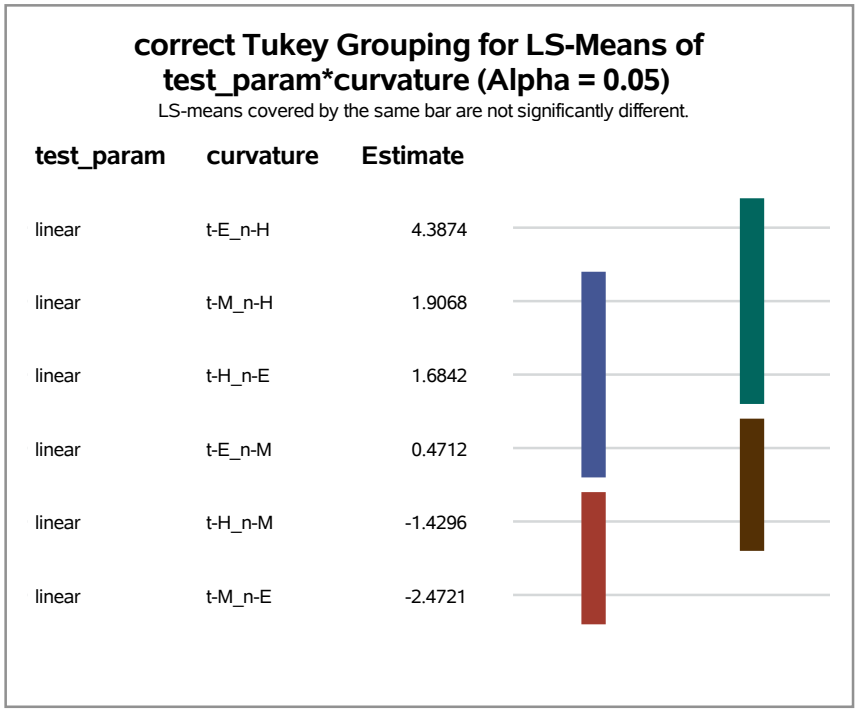


F Test for test_param*curvature Least Squares Means Slice				
Slice	Num DF	Den DF	F Value	Pr > F
curvature t-M_n-H	1	221	2.26	0.1344

The GLIMMIX Procedure

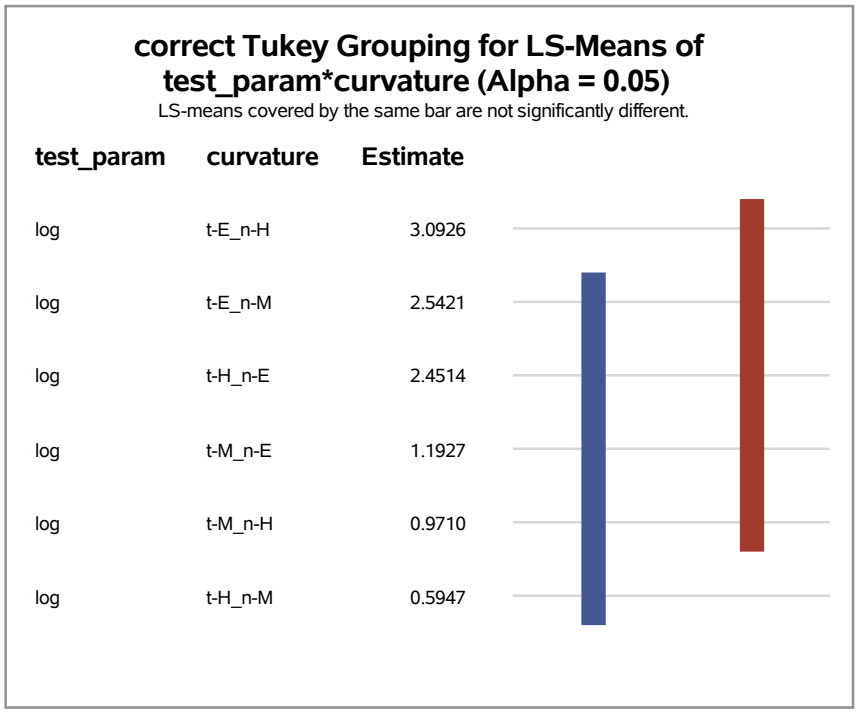


F Test for test_param*curvature Least Squares Means Slice				
Slice	Num DF	Den DF	F Value	Pr > F
test_param linear	5	221	7.07	<.0001



F Test for test_param*curvature Least Squares Means Slice				
Slice	Num DF	Den DF	F Value	Pr > F
test_param log	5	221	1.65	0.1483

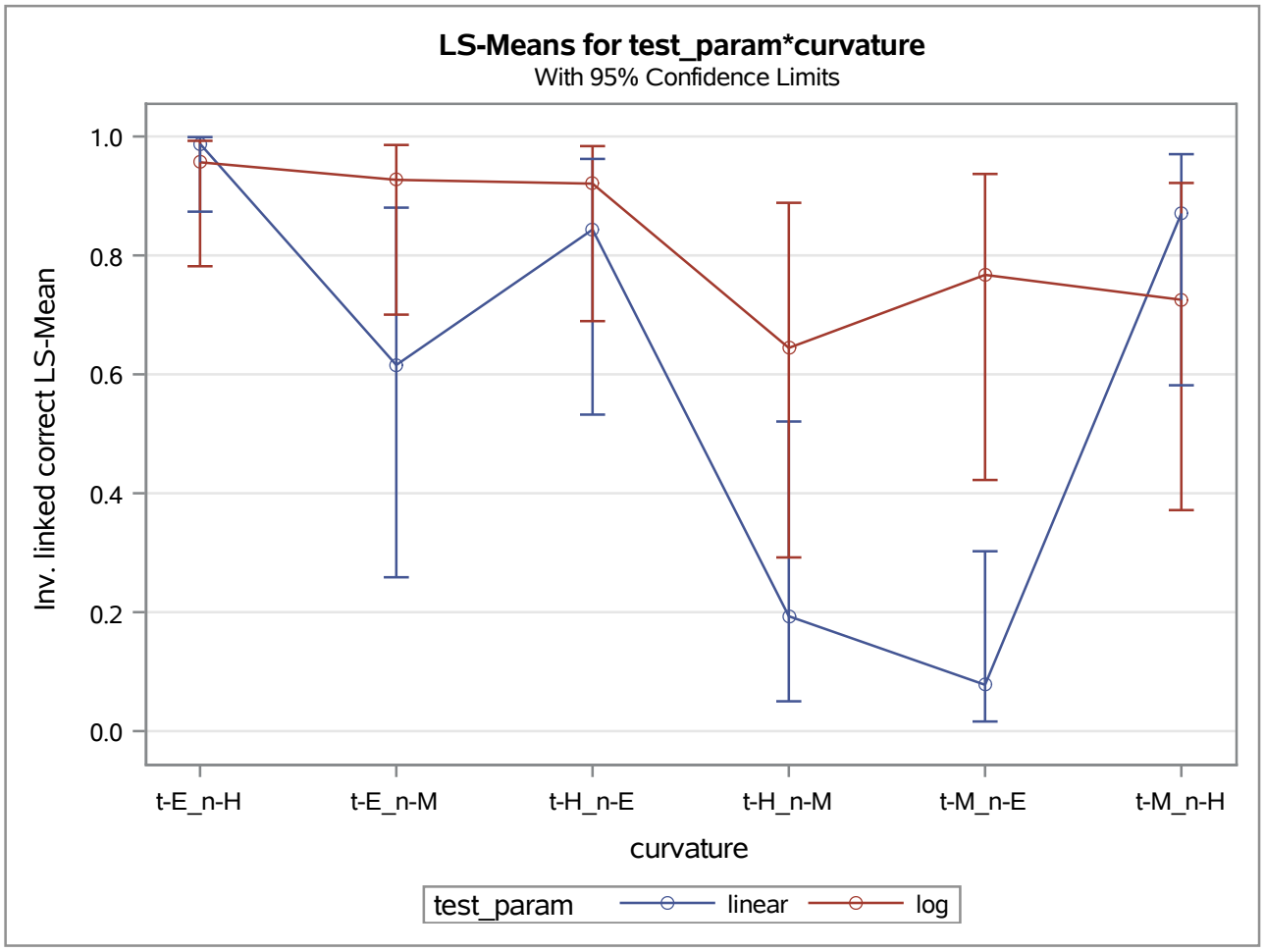
The GLIMMIX Procedure



test_param*curvature Least Squares Means

test_param	curvature	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper	Mean	Standard Error Mean	Lower Mean	Upper Mean
linear	t-E_n-H	4.3874	1.2453	221	3.52	0.0005	0.05	1.9331	6.8416	0.9877	0.01511	0.8736	0.9989
linear	t-E_n-M	0.4712	0.7733	221	0.61	0.5429	0.05	-1.0528	1.9952	0.6157	0.1830	0.2587	0.8803
linear	t-H_n-E	1.6842	0.7890	221	2.13	0.0339	0.05	0.1292	3.2393	0.8435	0.1042	0.5323	0.9623
linear	t-H_n-M	-1.4296	0.7673	221	-1.86	0.0638	0.05	-2.9419	0.08262	0.1932	0.1196	0.05012	0.5206
linear	t-M_n-E	-2.4721	0.8304	221	-2.98	0.0032	0.05	-4.1086	-0.8356	0.07784	0.05960	0.01616	0.3025
linear	t-M_n-H	1.9068	0.8005	221	2.38	0.0181	0.05	0.3293	3.4844	0.8707	0.09014	0.5816	0.9702
log	t-E_n-H	3.0926	0.9218	221	3.35	0.0009	0.05	1.2759	4.9093	0.9566	0.03828	0.7818	0.9927
log	t-E_n-M	2.5421	0.8590	221	2.96	0.0034	0.05	0.8492	4.2349	0.9270	0.05810	0.7004	0.9857
log	t-H_n-E	2.4514	0.8392	221	2.92	0.0038	0.05	0.7976	4.1052	0.9207	0.06130	0.6895	0.9838
log	t-H_n-M	0.5947	0.7510	221	0.79	0.4293	0.05	-0.8854	2.0749	0.6445	0.1721	0.2921	0.8884
log	t-M_n-E	1.1927	0.7642	221	1.56	0.1200	0.05	-0.3133	2.6987	0.7672	0.1365	0.4223	0.9369
log	t-M_n-H	0.9710	0.7592	221	1.28	0.2022	0.05	-0.5252	2.4672	0.7253	0.1513	0.3716	0.9218

The GLIMMIX Procedure



T Grouping for test_param*curvature Least Squares Means (Alpha=0.05)						
LS-means with the same letter are not significantly different.						
test_param	**curvature**	**Estimate**				
linear	t-E_n-H	4.3874			A	
					A	
log	t-E_n-H	3.0926	B		A	
			B		A	
log	t-E_n-M	2.5421	B		A	C
			B		A	C
log	t-H_n-E	2.4514	B	D	A	C
			B	D	A	C
linear	t-M_n-H	1.9068	B	D	A	C
			B	D	A	C
linear	t-H_n-E	1.6842	B	D	A	C
			B	D		C
log	t-M_n-E	1.1927	B	D		C

The GLIMMIX Procedure

T Grouping for test_param*curvature Least Squares Means (Alpha=0.05)						
LS-means with the same letter are not significantly different.						
test_param	**curvature**	**Estimate**				
			B	D		C
log	t-M_n-H	0.9710	B	D		C
				D		C
log	t-H_n-M	0.5947		D		C
				D		
linear	t-E_n-M	0.4712		D	E	
					E	
linear	t-H_n-M	-1.4296	F		E	
			F			
linear	t-M_n-E	-2.4721	F			