

STATS ASSESSMENT SUMARIZED ANALYTICAL RESULTS.

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1 Experiment 2A

1.1 slice: test+lang, variables: size

Fold: bible-ka.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	X
exp	not F	not F
log	not F	not F
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−23.0814	−0.0229
poly2	−22.8695	0.0468
poly3	−22.9897	0.0079
exp	−22.9710	0.0140
log	−22.8996	0.0372
power	−22.8776	0.0443
mult	−22.8776	0.0443
hybrid mult	−23.0247	−0.0038
scaling	−22.8703	0.0466

Fold: flores-hi.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	not F
exp	not F	not F
log	X	X
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−22.4973	0.2471
poly2	−22.2754	0.2933
poly3	−21.8090	0.3815
exp	−22.1999	0.3084
log	−22.4905	0.2485
power	−22.0347	0.3403
mult	−22.0347	0.3403
hybrid mult	−22.0677	0.3340
scaling	−22.0347	0.3403

Fold: gov-ka.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	not F
exp	not F	not F
log	not F	not F
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−24.3840	0.0259
poly2	−24.1639	0.0948
poly3	−24.2527	0.0677
exp	−24.3307	0.0431
log	−24.2129	0.0800
power	−24.2105	0.0807
mult	−24.2105	0.0807
hybrid mult	−24.3344	0.0419
scaling	−24.1910	0.0866

Fold: flores-gu.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	X
poly3	not F	X
exp	not F	not F
log	not F	X
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−20.3448	−0.1176
poly2	−19.7032	0.0976
poly3	−19.9010	0.0361
exp	−20.0457	−0.0116
log	−19.9775	0.0112
power	−19.7932	0.0701
mult	−19.7932	0.0701
hybrid mult	−20.0953	−0.0284
scaling	−19.7615	0.0799

Fold: gov-gu.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	X
poly3	not F	not F
exp	not F	not F
log	not F	not F
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	X

models	LogLikelyhood	R2 coefficient
linear	−24.9647	−0.0132
poly2	−24.9919	−0.0225
poly3	−25.0314	−0.0360
exp	−24.9295	−0.0014
log	−24.8693	0.0185
power	−24.9180	0.0024
mult	−24.9180	0.0024
hybrid mult	−24.9346	−0.0031
scaling	−24.9257	−0.0002

Fold: gov-si.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	not F
exp	not F	not F
log	not F	X
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−30.1994	0.2663
poly2	−30.2273	0.2604
poly3	−30.1380	0.2790
exp	−30.0956	0.2877
log	−30.5292	0.1938
power	−30.2896	0.2471
mult	−30.2896	0.2471
hybrid mult	−30.1954	0.2671
scaling	−30.2896	0.2471

Fold: gov-hi.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	X
exp	not F	not F
log	not F	X
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−28.3239	0.2017
poly2	−28.3898	0.1866
poly3	−28.2760	0.2126
exp	−28.1754	0.2349
log	−28.5844	0.1400
power	−28.4087	0.1822
mult	−28.4087	0.1822
hybrid mult	−28.3314	0.2000
scaling	−28.4087	0.1822

Fold: bible-hi.csv

models	Normal Test	Homoscedasticity Test
linear	X	not F
poly2	not F	not F
poly3	not F	not F
exp	X	not F
log	not F	not F
power	not F	not F
mult	not F	not F
hybrid mult	X	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−27.7301	−0.0690
poly2	−27.3438	0.0427
poly3	−27.2781	0.0605
exp	−27.6986	−0.0594
log	−27.7092	−0.0626
power	−27.7511	−0.0754
mult	−27.7511	−0.0754
hybrid mult	−27.7324	−0.0697
scaling	−27.7316	−0.0694

Fold: gov-ta.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	X
exp	not F	not F
log	not F	X
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−28.9764	0.2343
poly2	−29.0160	0.2256
poly3	−28.8728	0.2567
exp	−28.8289	0.2659
log	−29.2918	0.1621
power	−29.0597	0.2159
mult	−29.0597	0.2159
hybrid mult	−28.9825	0.2330
scaling	−29.0597	0.2159

Fold: bible-ta.csv

models	Normal Test	Homoscedasticity Test
linear	X	not F
poly2	not F	X
poly3	not F	X
exp	X	not F
log	not F	not F
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−27.8461	−0.0652
poly2	−27.4205	0.0568
poly3	−27.3053	0.0873
exp	−27.8132	−0.0552
log	−27.8325	−0.0610
power	−27.8529	−0.0672
mult	−27.8529	−0.0672
hybrid mult	−27.8525	−0.0671
scaling	−27.8257	−0.0589

Fold: bible-gu.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	not F
exp	not F	not F
log	not F	X
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−22.7525	−0.0525
poly2	−22.8294	−0.0798
poly3	−22.8376	−0.0828
exp	−22.6551	−0.0189
log	−22.5752	0.0079
power	−22.6341	−0.0118
mult	−22.6341	−0.0118
hybrid mult	−22.6988	−0.0338
scaling	−22.6462	−0.0159

Fold: bible-si.csv

models	Normal Test	Homoscedasticity Test
linear	X	not F
poly2	not F	X
poly3	not F	X
exp	X	not F
log	X	not F
power	not F	not F
mult	not F	not F
hybrid mult	X	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−29.3513	−0.0282
poly2	−28.9601	0.0806
poly3	−28.9654	0.0792
exp	−29.3526	−0.0285
log	−29.3897	−0.0395
power	−29.4237	−0.0497
mult	−29.4237	−0.0497
hybrid mult	−29.3893	−0.0394
scaling	−29.4114	−0.0460

Fold: flores-si.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	not F
exp	not F	not F
log	X	X
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−19.2995	0.2988
poly2	−19.0673	0.3438
poly3	−18.8386	0.3853
exp	−19.6238	0.2307
log	−19.4001	0.2784
power	−18.8835	0.3774
mult	−18.8835	0.3774
hybrid mult	−18.6862	0.4115
scaling	−18.8835	0.3774

Fold: flores-ka.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	not F
exp	not F	not F
log	not F	not F
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−18.1067	0.1648
poly2	−17.6767	0.2763
poly3	−17.6614	0.2800
exp	−18.4738	0.0561
log	−17.8612	0.2304
power	−17.8842	0.2245
mult	−17.8842	0.2245
hybrid mult	−17.8087	0.2438
scaling	−17.8514	0.2329

Fold: flores-ta.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	not F
exp	not F	not F
log	not F	not F
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−17.0897	0.4799
poly2	−16.9917	0.4942
poly3	−16.8935	0.5082
exp	−22.7558	−1.6254
log	−17.8182	0.3595
power	−22.7558	−1.6254
mult	−22.7558	−1.6254
hybrid mult	−16.6039	0.5473
scaling	−16.7926	0.5222

1.2 slice: test, variables: size

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	not F
poly2	X	not F
poly3	X	not F
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	not F
scaling	X	X

models	LogLikelyhood	R2 coefficient
linear	−137.6568	0.1801
poly2	−137.8068	0.1726
poly3	−137.2028	0.2024
exp	−137.0258	0.2109
log	−138.6462	0.1295
power	−137.9789	0.1640
mult	−137.9789	0.1640
hybrid mult	−137.6614	0.1799
scaling	−137.9789	0.1640

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	not F
exp	X	X
log	X	not F
power	X	not F
mult	X	not F
hybrid mult	X	X
scaling	X	not F

models	LogLikelyhood	R2 coefficient
linear	−132.0038	−0.0756
poly2	−130.3458	0.0273
poly3	−129.9383	0.0510
exp	−131.7342	−0.0581
log	−131.4905	−0.0426
power	−131.6457	−0.0525
mult	−131.6457	−0.0525
hybrid mult	−131.7799	−0.0611
scaling	−131.5156	−0.0442

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	not F
exp	X	X
log	not F	not F
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−103.4872	0.1096
poly2	−102.0407	0.1844
poly3	−100.7741	0.2446
exp	−103.3208	0.1186
log	−102.2535	0.1738
power	−101.3119	0.2196
mult	−101.3119	0.2196
hybrid mult	−101.1917	0.2253
scaling	−101.2977	0.2203

1.3 slice: lang, variables: size

Fold: si.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	not F
poly3	X	not F
exp	X	X
log	X	not F
power	X	X
mult	X	X
hybrid mult	X	X
scaling	X	not F

models	LogLikelyhood	R2 coefficient
linear	−89.1500	0.0125
poly2	−89.2919	−0.0009
poly3	−88.9283	0.0332
exp	−89.0203	0.0247
log	−88.9531	0.0309
power	−88.8905	0.0366
mult	−88.8905	0.0366
hybrid mult	−89.0559	0.0213
scaling	−88.9330	0.0327

Fold: gu.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	not F
exp	not F	not F
log	not F	not F
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−70.4186	−0.0361
poly2	−70.4162	−0.0359
poly3	−70.5989	−0.0571
exp	−70.1804	−0.0091
log	−69.9802	0.0131
power	−70.0839	0.0017
mult	−70.0839	0.0017
hybrid mult	−70.2834	−0.0207
scaling	−70.1058	−0.0007

Fold: ka.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	not F	not F
exp	not F	not F
log	not F	not F
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−69.4955	−0.0135
poly2	−68.5449	0.0881
poly3	−68.7634	0.0657
exp	−69.1555	0.0241
log	−68.9318	0.0481
power	−68.7487	0.0672
mult	−68.7487	0.0672
hybrid mult	−69.2160	0.0175
scaling	−68.6758	0.0748

Fold: hi.csv

models	Normal Test	Homoscedasticity Test
linear	not F	not F
poly2	not F	not F
poly3	X	not F
exp	not F	X
log	X	not F
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F
scaling	X	not F

models	LogLikelyhood	R2 coefficient
linear	−83.1310	0.0016
poly2	−83.4267	−0.0269
poly3	−82.8380	0.0291
exp	−82.8723	0.0259
log	−82.8575	0.0273
power	−82.7468	0.0375
mult	−82.7468	0.0375
hybrid mult	−83.0015	0.0139
scaling	−82.8234	0.0305

Fold: ta.csv

models	Normal Test	Homoscedasticity Test
linear	X	not F
poly2	X	not F
poly3	X	not F
exp	X	X
log	X	not F
power	X	not F
mult	X	not F
hybrid mult	X	not F
scaling	X	not F

models	LogLikelyhood	R2 coefficient
linear	−85.0555	−0.0028
poly2	−85.0877	−0.0058
poly3	−84.6588	0.0344
exp	−84.8138	0.0201
log	−84.8444	0.0172
power	−84.6663	0.0337
mult	−84.6663	0.0337
hybrid mult	−84.9559	0.0067
scaling	−84.6952	0.0311

2 Experiment 2B

2.1 slice: lang, variables: jsd

Fold: si.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−89.5074	−0.0217
poly2	−89.4325	−0.0144
poly3	−89.3442	−0.0059
exp	−78.7171	0.6344
log	−73.3197	0.7813
power	−52.9826	0.9685
mult	−52.9826	0.9685
hybrid mult	−53.7375	0.9661

Fold: gu.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−70.4886	−0.0442
poly2	−70.4886	−0.0442
poly3	−70.4886	−0.0442
exp	−67.2615	0.2704
log	−61.0672	0.6334
power	−62.8424	0.5535
mult	−62.8424	0.5535
hybrid mult	−65.1495	0.4230

Fold: ka.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−69.7907	−0.0472
poly2	−69.7966	−0.0479
poly3	−69.7850	−0.0466
exp	−67.1134	0.2222
log	−60.7686	0.6157
power	−59.2971	0.6736
mult	−59.2971	0.6736
hybrid mult	−60.0089	0.6468

Fold: hi.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	not F

models	LogLikelyhood	R2 coefficient
linear	−83.5482	−0.0388
poly2	−83.7055	−0.0545
poly3	−83.5479	−0.0388
exp	−77.8857	0.3942
log	−69.8956	0.7170
power	−69.9596	0.7152
mult	−69.9596	0.7152
hybrid mult	−73.3024	0.6085

Fold: ta.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	not F	not F
mult	not F	not F
hybrid mult	not F	not F

models	LogLikelyhood	R2 coefficient
linear	−85.2829	−0.0247
poly2	−85.3692	−0.0332
poly3	−85.3951	−0.0357
exp	−77.0493	0.5322
log	−69.8579	0.7642
power	−60.2541	0.9055
mult	−60.2541	0.9055
hybrid mult	−60.1216	0.9067

3 Experiment 2C

3.1 slice: test, variables: inv+pho+syn+gen+geo

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	not F
poly2	X	not F
poly3	X	X
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.3590	−0.0261
poly2	−141.4099	−0.0293
poly3	−141.5251	−0.0365
exp	−140.7671	0.0100
log	−141.3748	−0.0271
power	−140.9474	−0.0008
mult	−141.4802	−0.0337
hybrid mult	−141.2519	−0.0195
am	−141.2251	−0.0178
gm	−141.2269	−0.0179
hm	−141.2314	−0.0182

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.5552	−0.0467
poly2	−131.6354	−0.0518
poly3	−131.7263	−0.0576
exp	−131.1116	−0.0189
log	−131.4199	−0.0382
power	−130.8260	−0.0015
mult	−130.9702	−0.0102
hybrid mult	−131.0456	−0.0149
am	−131.4331	−0.0390
gm	−131.4428	−0.0396
hm	−131.4501	−0.0401

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−107.9267	−0.1652
poly2	−109.1203	−0.2527
poly3	−109.3360	−0.2691
exp	−119.5050	−1.3505
log	−108.2116	−0.1855
power	−105.5076	−0.0063
mult	−104.6104	0.0469
hybrid mult	−104.8292	0.0342
am	−108.1047	−0.1779
gm	−108.5080	−0.2070
hm	−108.6305	−0.2160

3.2 slice: test, variables: fea

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.2739	−0.0208
poly2	−141.8203	−0.0552
poly3	−141.4820	−0.0338
exp	−140.8083	0.0076
log	−141.2741	−0.0209
power	−141.9328	−0.0624
mult	−141.9328	−0.0624
hybrid mult	−142.0187	−0.0680

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.4377	−0.0393
poly2	−131.7208	−0.0573
poly3	−131.5237	−0.0447
exp	−131.0018	−0.0122
log	−131.3023	−0.0308
power	−131.5468	−0.0462
mult	−131.5468	−0.0462
hybrid mult	−132.8720	−0.1337

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.4578	−0.2034
poly2	−108.1466	−0.1809
poly3	−108.1199	−0.1790
exp	−106.1789	−0.0481
log	−108.1249	−0.1793
power	−105.8493	−0.0274
mult	−105.8493	−0.0274
hybrid mult	−106.4625	−0.0663

3.3 slice: test, variables: inv

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.2378	−0.0186
poly2	−141.2776	−0.0211
poly3	−141.2676	−0.0204
exp	−140.7222	0.0127
log	−141.2141	−0.0171
power	−141.3939	−0.0283
mult	−141.3939	−0.0283
hybrid mult	−141.6865	−0.0467

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.4262	−0.0386
poly2	−131.7417	−0.0586
poly3	−131.3999	−0.0369
exp	−130.8660	−0.0039
log	−131.3073	−0.0311
power	−130.9124	−0.0067
mult	−130.9124	−0.0067
hybrid mult	−130.9597	−0.0096

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.1269	−0.1795
poly2	−108.1349	−0.1800
poly3	−108.4436	−0.2023
exp	−106.0604	−0.0406
log	−108.1273	−0.1795
power	−105.0524	0.0211
mult	−105.0524	0.0211
hybrid mult	−104.9970	0.0243

3.4 slice: test, variables: gen+geo

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X
diff	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.1383	−0.0125
poly2	−141.3062	−0.0228
poly3	−141.7421	−0.0502
exp	−141.5519	−0.0382
log	−141.2739	−0.0208
power	−141.2961	−0.0222
mult	−141.7016	−0.0476
hybrid mult	−142.3516	−0.0897
am	−141.2777	−0.0211
gm	−141.2846	−0.0215
hm	−141.2252	−0.0178
diff	−141.4281	−0.0304

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X
diff	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.5833	−0.0485
poly2	−131.4932	−0.0428
poly3	−131.7397	−0.0585
exp	−131.2631	−0.0283
log	−131.4326	−0.0390
power	−131.0004	−0.0121
mult	−131.2714	−0.0289
hybrid mult	−132.0439	−0.0782
am	−131.4200	−0.0382
gm	−131.4303	−0.0388
hm	−131.4452	−0.0397
diff	−131.4014	−0.0370

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X
diff	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.1441	−0.1807
poly2	−107.7367	−0.1519
poly3	−109.3373	−0.2692
exp	−106.3692	−0.0603
log	−107.8975	−0.1632
power	−105.0001	0.0242
mult	−105.1016	0.0181
hybrid mult	−105.1764	0.0137
am	−108.1536	−0.1814
gm	−108.1317	−0.1798
hm	−108.5614	−0.2109
diff	−107.9574	−0.1674

3.5 slice: test, variables: inv+syn

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	not F
poly2	X	not F
poly3	X	not F
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X
diff	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.2132	−0.0171
poly2	−141.3858	−0.0278
poly3	−141.2536	−0.0196
exp	−140.7316	0.0122
log	−141.3873	−0.0279
power	−141.2465	−0.0191
mult	−141.2159	−0.0173
hybrid mult	−141.2846	−0.0215
am	−141.2261	−0.0179
gm	−141.2728	−0.0208
hm	−141.2741	−0.0209
diff	−141.4430	−0.0314

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X
diff	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.4189	−0.0381
poly2	−131.6842	−0.0549
poly3	−131.5293	−0.0451
exp	−131.0850	−0.0173
log	−131.5475	−0.0462
power	−130.8689	−0.0041
mult	−130.9124	−0.0067
hybrid mult	−130.9597	−0.0096
am	−131.4330	−0.0390
gm	−131.4310	−0.0389
hm	−131.4360	−0.0392
diff	−131.8549	−0.0659

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X
diff	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.1356	−0.1801
poly2	−108.0363	−0.1730
poly3	−109.2085	−0.2594
exp	−106.6310	−0.0772
log	−108.1276	−0.1795
power	−105.5095	−0.0064
mult	−105.1058	0.0179
hybrid mult	−104.9967	0.0243
am	−108.3949	−0.1988
gm	−108.4231	−0.2008
hm	−108.4563	−0.2032
diff	−107.5754	−0.1407

3.6 slice: test, variables: inv+pho+syn

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	not F
poly3	X	not F
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.2640	−0.0202
poly2	−141.2692	−0.0205
poly3	−141.1427	−0.0128
exp	−140.7317	0.0122
log	−141.5363	−0.0372
power	−141.0130	−0.0048
mult	−141.2155	−0.0172
hybrid mult	−141.6346	−0.0434
am	−141.2739	−0.0208
gm	−141.2283	−0.0180
hm	−141.2289	−0.0181

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.3956	−0.0366
poly2	−131.6027	−0.0497
poly3	−131.5341	−0.0454
exp	−131.0641	−0.0160
log	−131.6796	−0.0546
power	−130.8732	−0.0043
mult	−130.9167	−0.0070
hybrid mult	−130.9598	−0.0096
am	−131.4441	−0.0397
gm	−131.4500	−0.0401
hm	−131.4522	−0.0402

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.7601	−0.2256
poly2	−108.1531	−0.1813
poly3	−108.8446	−0.2319
exp	−106.6415	−0.0779
log	−108.2682	−0.1896
power	−105.7286	−0.0199
mult	−105.0980	0.0183
hybrid mult	−105.0274	0.0225
am	−108.5585	−0.2107
gm	−108.6046	−0.2141
hm	−108.0550	−0.1743

3.7 slice: test, variables: syn

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	not F
poly3	X	X
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.2248	−0.0178
poly2	−141.2109	−0.0169
poly3	−141.2848	−0.0215
exp	−140.7324	0.0121
log	−141.2728	−0.0208
power	−141.9460	−0.0633
mult	−141.9460	−0.0633
hybrid mult	−140.9800	−0.0028

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.4139	−0.0378
poly2	−131.5701	−0.0477
poly3	−131.7691	−0.0604
exp	−131.0685	−0.0163
log	−131.4254	−0.0385
power	−131.6373	−0.0519
mult	−131.6373	−0.0519
hybrid mult	−130.8612	−0.0036

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.1263	−0.1794
poly2	−108.1459	−0.1808
poly3	−107.8766	−0.1617
exp	−106.6333	−0.0774
log	−108.1273	−0.1795
power	−105.4437	−0.0024
mult	−105.4437	−0.0024
hybrid mult	−108.1273	−0.1795

3.8 slice: test, variables: pho+syn

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	not F
poly3	X	X
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X
diff	X	not F

models	LogLikelyhood	R2 coefficient
linear	−141.6748	−0.0459
poly2	−141.2692	−0.0205
poly3	−141.3427	−0.0251
exp	−140.6939	0.0144
log	−141.5626	−0.0389
power	−141.2276	−0.0180
mult	−141.9451	−0.0632
hybrid mult	−141.8154	−0.0549
am	−141.2275	−0.0180
gm	−141.2268	−0.0179
hm	−141.2739	−0.0208
diff	−141.5773	−0.0398

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X
diff	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.4375	−0.0393
poly2	−131.9719	−0.0735
poly3	−131.4751	−0.0416
exp	−131.0693	−0.0163
log	−131.4612	−0.0408
power	−131.1126	−0.0190
mult	−131.8198	−0.0636
hybrid mult	−133.3801	−0.1691
am	−131.4257	−0.0385
gm	−131.4425	−0.0396
hm	−131.4238	−0.0384
diff	−131.5452	−0.0461

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	not F	X
am	X	X
gm	X	X
hm	X	X
diff	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.2597	−0.1890
poly2	−108.5475	−0.2099
poly3	−108.1002	−0.1776
exp	−106.6998	−0.0817
log	−109.8001	−0.3053
power	−105.6901	−0.0175
mult	−106.8158	−0.0894
hybrid mult	−107.5642	−0.1399
am	−108.0358	−0.1730
gm	−108.0385	−0.1732
hm	−108.1223	−0.1791
diff	−109.8963	−0.3130

3.9 slice: test, variables: pho

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.2736	−0.0208
poly2	−141.2722	−0.0207
poly3	−141.2740	−0.0208
exp	−141.5663	−0.0391
log	−141.2403	−0.0188
power	−141.9451	−0.0632
mult	−141.9451	−0.0632
hybrid mult	−141.8155	−0.0549

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.4820	−0.0421
poly2	−131.6340	−0.0517
poly3	−131.4742	−0.0416
exp	−131.5777	−0.0481
log	−131.3680	−0.0349
power	−131.8195	−0.0636
mult	−131.8195	−0.0636
hybrid mult	−132.4886	−0.1076

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	not F	X

models	LogLikelyhood	R2 coefficient
linear	−108.1273	−0.1795
poly2	−108.5309	−0.2087
poly3	−108.2519	−0.1884
exp	−106.7664	−0.0861
log	−108.1295	−0.1796
power	−106.8146	−0.0893
mult	−106.8146	−0.0893
hybrid mult	−107.7975	−0.1562

3.10 slice: test, variables: fea+inv+pho+syn+gen+geo

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	not F
poly2	X	not F
poly3	X	not F
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.3710	−0.0269
poly2	−141.4461	−0.0315
poly3	−141.5378	−0.0373
exp	−140.7394	0.0117
log	−141.3285	−0.0242
power	−140.9426	−0.0005
mult	−141.4799	−0.0337
hybrid mult	−141.7294	−0.0494
am	−141.2260	−0.0179
gm	−141.2855	−0.0216
hm	−141.2821	−0.0213

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.6152	−0.0505
poly2	−131.7231	−0.0574
poly3	−131.9110	−0.0695
exp	−131.0655	−0.0161
log	−131.4253	−0.0385
power	−130.8197	−0.0011
mult	−131.0009	−0.0121
hybrid mult	−131.0264	−0.0137
am	−131.4329	−0.0390
gm	−131.4401	−0.0394
hm	−131.4500	−0.0401

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.6415	−0.2168
poly2	−108.9408	−0.2391
poly3	−108.7867	−0.2276
exp	−119.5050	−1.3505
log	−108.1604	−0.1819
power	−105.4844	−0.0049
mult	−104.7338	0.0398
hybrid mult	−104.6222	0.0462
am	−108.3916	−0.1985
gm	−108.0531	−0.1742
hm	−108.6038	−0.2141

3.11 slice: test, variables: gen

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	not F
log	X	X
power	X	not F
mult	X	not F
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.2503	−0.0194
poly2	−141.3313	−0.0244
poly3	−141.4094	−0.0293
exp	−141.4634	−0.0326
log	−141.2737	−0.0208
power	−141.0755	−0.0086
mult	−141.0755	−0.0086
hybrid mult	−141.2733	−0.0208

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.4820	−0.0421
poly2	−131.4782	−0.0418
poly3	−131.3966	−0.0367
exp	−131.2629	−0.0283
log	−131.4257	−0.0385
power	−131.4490	−0.0400
mult	−131.4490	−0.0400
hybrid mult	−131.4256	−0.0385

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.0226	−0.1720
poly2	−108.3506	−0.1956
poly3	−108.3862	−0.1981
exp	−106.3713	−0.0604
log	−108.1280	−0.1795
power	−108.1266	−0.1794
mult	−108.1266	−0.1794
hybrid mult	−108.1269	−0.1795

3.12 slice: test, variables: inv+pho

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X
diff	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.2197	−0.0175
poly2	−141.1955	−0.0160
poly3	−141.2798	−0.0212
exp	−140.7104	0.0134
log	−141.2750	−0.0209
power	−141.2465	−0.0191
mult	−141.3939	−0.0283
hybrid mult	−141.6351	−0.0434
am	−141.2407	−0.0188
gm	−141.2739	−0.0208
hm	−141.2745	−0.0209
diff	−141.2741	−0.0209

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X
diff	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.3772	−0.0355
poly2	−131.5020	−0.0433
poly3	−131.4156	−0.0379
exp	−130.8660	−0.0039
log	−131.5871	−0.0487
power	−130.8687	−0.0040
mult	−130.9124	−0.0067
hybrid mult	−130.9596	−0.0096
am	−131.4266	−0.0386
gm	−131.4253	−0.0385
hm	−131.4739	−0.0416
diff	−131.4255	−0.0385

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X
diff	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.6937	−0.2207
poly2	−108.1307	−0.1797
poly3	−108.0052	−0.1708
exp	−106.0572	−0.0404
log	−108.5675	−0.2114
power	−105.8279	−0.0261
mult	−105.0907	0.0188
hybrid mult	−105.0270	0.0226
am	−107.7301	−0.1514
gm	−108.1273	−0.1795
hm	−107.6048	−0.1427
diff	−107.9907	−0.1698

3.13 slice: test, variables: geo

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.2658	−0.0203
poly2	−141.2714	−0.0207
poly3	−141.2601	−0.0200
exp	−141.1081	−0.0106
log	−141.2673	−0.0204
power	−141.7016	−0.0476
mult	−141.7016	−0.0476
hybrid mult	−142.3512	−0.0897

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.4258	−0.0385
poly2	−131.2127	−0.0252
poly3	−131.5549	−0.0467
exp	−131.1802	−0.0232
log	−131.4398	−0.0394
power	−131.2714	−0.0289
mult	−131.2714	−0.0289
hybrid mult	−132.0430	−0.0781

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.1275	−0.1795
poly2	−108.2957	−0.1916
poly3	−108.1341	−0.1800
exp	−106.6621	−0.0793
log	−107.8977	−0.1632
power	−105.1015	0.0181
mult	−105.1015	0.0181
hybrid mult	−105.1760	0.0137

3.14 slice: test, variables: fea+inv+pho+syn

Fold: gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	not F
poly3	X	not F
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.6197	−0.0425
poly2	−141.4836	−0.0339
poly3	−141.2586	−0.0199
exp	−140.7224	0.0127
log	−141.2701	−0.0206
power	−140.9957	−0.0038
mult	−141.2187	−0.0174
hybrid mult	−141.2870	−0.0216
am	−141.2274	−0.0180
gm	−141.2267	−0.0179
hm	−141.2739	−0.0208

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.6382	−0.0520
poly2	−131.6127	−0.0504
poly3	−131.6295	−0.0514
exp	−131.0357	−0.0143
log	−131.3184	−0.0318
power	−130.8628	−0.0037
mult	−130.9151	−0.0069
hybrid mult	−130.9597	−0.0096
am	−131.4460	−0.0398
gm	−131.4456	−0.0398
hm	−131.4502	−0.0401

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.5159	−0.2076
poly2	−108.5724	−0.2117
poly3	−119.5050	−1.3505
exp	−119.5050	−1.3505
log	−108.2639	−0.1893
power	−105.5895	−0.0113
mult	−105.0896	0.0188
hybrid mult	−105.0311	0.0223
am	−108.5339	−0.2089
gm	−108.5663	−0.2113
hm	−108.6026	−0.2140

3.15 slice: test, variables: fea+gen+geo**Fold:** gov.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	not F
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−141.3104	−0.0231
poly2	−141.4813	−0.0338
poly3	−141.4429	−0.0313
exp	−140.8526	0.0049
log	−141.5748	−0.0396
power	−141.1348	−0.0123
mult	−141.6773	−0.0461
hybrid mult	−142.4472	−0.0961
am	−141.2224	−0.0177
gm	−141.2849	−0.0215
hm	−141.2265	−0.0179

Fold: bible.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−131.4211	−0.0382
poly2	−131.7020	−0.0561
poly3	−131.6407	−0.0521
exp	−131.1565	−0.0217
log	−131.2467	−0.0273
power	−130.8629	−0.0037
mult	−131.0841	−0.0172
hybrid mult	−131.3120	−0.0314
am	−131.4182	−0.0380
gm	−131.4330	−0.0390
hm	−131.4424	−0.0396

Fold: flores.csv

models	Normal Test	Homoscedasticity Test
linear	X	X
poly2	X	X
poly3	X	X
exp	X	X
log	X	X
power	X	X
mult	X	X
hybrid mult	X	X
am	X	X
gm	X	X
hm	X	X

models	LogLikelyhood	R2 coefficient
linear	−108.5646	−0.2112
poly2	−108.7678	−0.2262
poly3	−108.8547	−0.2326
exp	−106.3746	−0.0606
log	−107.9008	−0.1634
power	−105.7156	−0.0191
mult	−105.1041	0.0180
hybrid mult	−105.1767	0.0136
am	−108.0963	−0.1773
gm	−108.3887	−0.1983
hm	−108.0714	−0.1755