Bayesian Model Report

Art Tay

Marginal Effects

```
beta_tables <- tar_read(beta_tables)

for(tbl in beta_tables) {
    print(tbl)
}
```

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Table 1: Summary of count logNormal model with ridge prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
aligner_kallisto	-0.2853	0.0103	-0.2994	-0.2664	1.0783	0.0011
min_phred_x_aligner_kallisto	-0.0003	0.0003	-0.0009	0.0001	1.0353	0.0024
min_phred_x_aligner_STAR	-0.0002	0.0002	-0.0006	0.0002	1.0910	0.0031
min_phred_x_trim_poly_x_X1	0.0000	0.0002	-0.0003	0.0003	1.0941	0.0034
min_length_x_aligner_kallisto	0.0001	0.0002	-0.0002	0.0003	1.0163	0.0032
min_length_x_aligner_salmon	0.0000	0.0002	-0.0002	0.0003	1.0776	0.0015
min_length_x_aligner_STAR	-0.0001	0.0001	-0.0003	0.0002	1.0602	0.0039
aligner_kallisto_x_trim_poly_g_X1	0.0000	0.0020	-0.0031	0.0034	1.0681	0.0033
aligner_kallisto_x_trim_poly_x_X1	-0.0019	0.0019	-0.0050	0.0013	1.0596	0.0031
aligner_salmon_x_trim_poly_g_X1	0.0014	0.0019	-0.0017	0.0046	1.0296	0.0037
aligner_salmon_x_trim_poly_x_X1	-0.0008	0.0020	-0.0040	0.0025	1.0440	0.0043
aligner_STAR_x_trim_poly_g_X1	0.0008	0.0015	-0.0018	0.0034	1.0468	0.0032
aligner_STAR_x_trim_poly_x_X1	-0.0012	0.0014	-0.0036	0.0012	1.0429	0.0074
trim_poly_g_X1_x_trim_poly_x_X1	-0.0001	0.0012	-0.0020	0.0019	1.0076	0.0115

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Table 2: Summary of p-value Normal model with lasso prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent

Table 3: Summary of count logNormal model with lasso prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
intercept	8.0063	0.0163	7.9785	8.0316	1.0903	0.0023
min_phred	-0.0002	0.0007	-0.0012	0.0010	1.0814	0.0019
min_length	0.0000	0.0004	-0.0007	0.0007	1.0827	0.0018
aligner_kallisto	-0.2824	0.0092	-0.2973	-0.2662	1.0474	0.0024

aligner_salmon	-0.2497	0.0097	-0.2658	-0.2329	1.0445	0.0025
aligner_STAR	0.1406	0.0078	0.1266	0.1529	1.0503	0.0021
min_phred_x_min_length	0.0000	0.0000	0.0000	0.0000	1.0821	0.0011
min_phred_x_aligner_kallisto	-0.0004	0.0003	-0.0009	0.0001	1.0290	0.0057
min_phred_x_aligner_salmon	-0.0003	0.0003	-0.0008	0.0002	1.0239	0.0064
min_phred_x_aligner_STAR	-0.0002	0.0002	-0.0006	0.0001	1.0262	0.0040
min_length_x_aligner_kallisto	0.0000	0.0002	-0.0002	0.0003	1.0124	0.0073
min_length_x_aligner_salmon	0.0000	0.0002	-0.0002	0.0003	1.0171	0.0100
min_length_x_aligner_STAR	-0.0001	0.0001	-0.0003	0.0001	1.0158	0.0068
min_length_x_trim_poly_g_X1	0.0000	0.0001	-0.0002	0.0001	1.0703	0.0041
min_length_x_trim_poly_x_X1	-0.0002	0.0001	-0.0004	0.0000	1.0868	0.0012
aligner_kallisto_x_trim_poly_g_X1	0.0004	0.0019	-0.0026	0.0035	1.0795	0.0033
aligner_kallisto_x_trim_poly_x_X1	-0.0018	0.0019	-0.0048	0.0013	1.0446	0.0047
aligner_salmon_x_trim_poly_g_X1	0.0013	0.0019	-0.0018	0.0045	1.0465	0.0049
aligner_salmon_x_trim_poly_x_X1	-0.0008	0.0019	-0.0041	0.0024	1.0245	0.0045
aligner_STAR_x_trim_poly_g_X1	0.0008	0.0015	-0.0016	0.0033	1.0857	0.0045
aligner_STAR_x_trim_poly_x_X1	-0.0013	0.0016	-0.0036	0.0014	1.0396	0.0050
trim_poly_g_X1_x_trim_poly_x_X1	0.0001	0.0012	-0.0019	0.0020	1.0145	0.0089

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Table 4: Summary of p-value logNormal model with lasso prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent

Table 5: Summary of count Gamma model with lasso prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
intercept	8.0034	0.1002	7.8387	8.1658	1.0004	0.0563
min_phred	0.0000	0.0038	-0.0062	0.0063	1.0005	0.0605
min_length	0.0001	0.0024	-0.0038	0.0040	1.0006	0.0564
aligner_kallisto	-0.2841	0.0542	-0.3728	-0.1944	1.0018	0.0701
aligner_salmon	-0.2500	0.0531	-0.3373	-0.1628	1.0026	0.0897
aligner_STAR	0.1392	0.0428	0.0685	0.2102	1.0028	0.0790
trim_poly_g_X1	-0.0071	0.0360	-0.0661	0.0524	1.0012	0.0722
trim_poly_x_X1	0.0077	0.0368	-0.0527	0.0682	1.0008	0.0705
min_phred_x_min_length	0.0000	0.0001	-0.0002	0.0001	1.0009	0.0586
min_phred_x_aligner_kallisto	-0.0004	0.0016	-0.0030	0.0022	1.0012	0.0911
min_phred_x_aligner_salmon	-0.0003	0.0017	-0.0031	0.0024	1.0015	0.1223
min_phred_x_aligner_STAR	-0.0002	0.0012	-0.0022	0.0018	1.0015	0.1212
min_phred_x_trim_poly_g_X1	0.0003	0.0011	-0.0015	0.0020	1.0011	0.1171
min_phred_x_trim_poly_x_X1	0.0001	0.0011	-0.0017	0.0018	1.0010	0.1174
min_length_x_aligner_kallisto	0.0001	0.0009	-0.0014	0.0015	1.0010	0.1520
min_length_x_aligner_salmon	0.0001	0.0008	-0.0012	0.0014	1.0014	0.2055
min_length_x_aligner_STAR	-0.0001	0.0007	-0.0012	0.0011	1.0013	0.1699
min_length_x_trim_poly_g_X1	0.0000	0.0006	-0.0009	0.0009	1.0003	0.1821
min_length_x_trim_poly_x_X1	-0.0002	0.0006	-0.0011	0.0007	1.0002	0.1897
aligner_kallisto_x_trim_poly_g_X1	0.0005	0.0102	-0.0163	0.0172	1.0011	0.0796
aligner_kallisto_x_trim_poly_x_X1	-0.0021	0.0096	-0.0178	0.0137	1.0025	0.1141
aligner_salmon_x_trim_poly_g_X1	0.0016	0.0100	-0.0147	0.0183	1.0018	0.0654
aligner_salmon_x_trim_poly_x_X1	-0.0008	0.0102	-0.0174	0.0161	1.0020	0.0953

aligner_STAR_x_trim_poly_g_X1	0.0010	0.0078	-0.0118	0.0138	1.0012	0.0676
aligner_STAR_x_trim_poly_x_X1	-0.0014	0.0079	-0.0145	0.0117	1.0021	0.0894
trim_poly_g_X1_x_trim_poly_x_X1	0.0000	0.0065	-0.0108	0.0106	1.0011	0.1041

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Table 6: Summary of p-value Gamma model with lasso prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
min_phred	-0.0002	0.0055	-0.0090	0.0089	1.0143	0.0153
min_length	-0.0002	0.0032	-0.0054	0.0050	1.0038	0.0292
trim_poly_g_X1	0.0017	0.0486	-0.0788	0.0815	1.0055	0.0425
trim_poly_x_X1	-0.0028	0.0501	-0.0861	0.0790	1.0134	0.0241
min_phred_x_min_length	0.0000	0.0001	-0.0002	0.0002	1.0026	0.0400
min_phred_x_aligner_kallisto	0.0000	0.0020	-0.0032	0.0032	1.0027	0.0504
min_phred_x_aligner_salmon	-0.0001	0.0020	-0.0033	0.0031	1.0027	0.0860
min_phred_x_aligner_STAR	0.0000	0.0013	-0.0022	0.0022	1.0011	0.1076
min_phred_x_trim_poly_g_X1	0.0000	0.0012	-0.0021	0.0020	1.0019	0.1029
min_phred_x_trim_poly_x_X1	0.0000	0.0012	-0.0020	0.0021	1.0040	0.0724
min_phred_x_norm_method_none	0.0000	0.0042	-0.0069	0.0071	1.0228	0.0099
min_phred_x_norm_method_RLE	0.0000	0.0044	-0.0072	0.0074	1.0230	0.0116
min_phred_x_norm_method_TMM	0.0000	0.0043	-0.0069	0.0072	1.0247	0.0110
min_phred_x_norm_method_TMMwsp	0.0000	0.0043	-0.0069	0.0071	1.0229	0.0112
min_phred_x_norm_method_upperquartile	0.0000	0.0044	-0.0071	0.0074	1.0222	0.0110
min_length_x_aligner_kallisto	0.0000	0.0010	-0.0017	0.0017	1.0022	0.1018
min_length_x_aligner_salmon	0.0000	0.0009	-0.0015	0.0015	1.0019	0.1312
min_length_x_aligner_STAR	0.0000	0.0007	-0.0012	0.0012	1.0008	0.2099
min_length_x_trim_poly_g_X1	0.0000	0.0007	-0.0011	0.0012	1.0014	0.1426
min_length_x_trim_poly_x_X1	0.0000	0.0007	-0.0011	0.0012	1.0010	0.1325
min_length_x_norm_method_none	0.0001	0.0017	-0.0027	0.0029	1.0066	0.0252
min_length_x_norm_method_RLE	0.0001	0.0018	-0.0029	0.0031	1.0070	0.0281
min_length_x_norm_method_TMM	0.0001	0.0018	-0.0028	0.0030	1.0064	0.0272
min_length_x_norm_method_TMMwsp	0.0001	0.0018	-0.0028	0.0030	1.0061	0.0282
min_length_x_norm_method_upperquartile	0.0001	0.0018	-0.0028	0.0031	1.0061	0.0273
aligner_kallisto_x_trim_poly_g_X1	0.0000	0.0124	-0.0203	0.0205	1.0064	0.0437
aligner_kallisto_x_trim_poly_x_X1	0.0017	0.0123	-0.0182	0.0225	1.0057	0.0546
aligner_salmon_x_trim_poly_g_X1	0.0003	0.0114	-0.0181	0.0193	1.0032	0.0510
aligner_salmon_x_trim_poly_x_X1	0.0009	0.0120	-0.0187	0.0207	1.0031	0.0668
aligner_STAR_x_trim_poly_g_X1	0.0003	0.0084	-0.0135	0.0141	1.0032	0.0664
aligner_STAR_x_trim_poly_x_X1	0.0002	0.0085	-0.0137	0.0143	1.0024	0.0668
trim_poly_g_X1_x_trim_poly_x_X1	-0.0002	0.0076	-0.0127	0.0122	1.0022	0.0831
trim_poly_g_X1_x_norm_method_none	-0.0016	0.0231	-0.0406	0.0355	1.0070	0.0188
trim_poly_g_X1_x_norm_method_RLE	-0.0017	0.0241	-0.0423	0.0371	1.0083	0.0162
trim_poly_g_X1_x_norm_method_TMM	-0.0018	0.0238	-0.0421	0.0367	1.0075	0.0177
trim_poly_g_X1_x_norm_method_TMMwsp	-0.0017	0.0242	-0.0427	0.0374	1.0074	0.0193
trim_poly_g_X1_x_norm_method_upperquartile	-0.0018	0.0235	-0.0415	0.0363	1.0076	0.0173
trim_poly_x_X1_x_norm_method_none	0.0008	0.0269	-0.0435	0.0449	1.0137	0.0141
trim_poly_x_X1_x_norm_method_RLE	0.0009	0.0270	-0.0434	0.0446	1.0132	0.0159
trim_poly_x_X1_x_norm_method_TMM	0.0010	0.0272	-0.0440	0.0452	1.0147	0.0173
trim_poly_x_X1_x_norm_method_TMMwsp	0.0006	0.0264	-0.0430	0.0436	1.0131	0.0188
trim_poly_x_X1_x_norm_method_upperquartile	0.0008	0.0267	-0.0433	0.0443	1.0127	0.0164

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Table 7: Summary of effect size Normal model with weak ridge prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent

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Table 8: Summary of count logNormal model with weak ridge prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
intercept	8.0069	0.0187	7.9761	8.0372	1.0684	0.0021
min_phred	-0.0002	0.0007	-0.0013	0.0009	1.0575	0.0027
min_length	0.0000	0.0004	-0.0007	0.0007	1.0512	0.0026
trim_poly_g_X1	-0.0057	0.0069	-0.0176	0.0054	1.0543	0.0030
min_phred_x_min_length	0.0000	0.0000	0.0000	0.0000	1.0465	0.0030
min_phred_x_aligner_kallisto	-0.0004	0.0003	-0.0008	0.0001	1.0816	0.0034
min_phred_x_aligner_salmon	-0.0003	0.0003	-0.0009	0.0003	1.0806	0.0028
min_phred_x_aligner_STAR	-0.0002	0.0002	-0.0006	0.0002	1.0684	0.0034
min_phred_x_trim_poly_g_X1	0.0002	0.0002	-0.0001	0.0006	1.0380	0.0057
min_phred_x_trim_poly_x_X1	0.0000	0.0002	-0.0003	0.0003	1.0623	0.0041
min_length_x_aligner_kallisto	0.0001	0.0002	-0.0002	0.0003	1.0412	0.0066
min_length_x_aligner_salmon	0.0000	0.0002	-0.0002	0.0003	1.0448	0.0057
min_length_x_aligner_STAR	-0.0001	0.0001	-0.0003	0.0001	1.0415	0.0044
min_length_x_trim_poly_g_X1	0.0000	0.0001	-0.0002	0.0001	1.0217	0.0101
min_length_x_trim_poly_x_X1	-0.0002	0.0001	-0.0004	0.0000	1.0476	0.0054
aligner_kallisto_x_trim_poly_g_X1	0.0003	0.0020	-0.0031	0.0035	1.0382	0.0033
aligner_kallisto_x_trim_poly_x_X1	-0.0021	0.0019	-0.0053	0.0011	1.0318	0.0057
aligner_salmon_x_trim_poly_g_X1	0.0017	0.0019	-0.0014	0.0047	1.0367	0.0041
aligner_salmon_x_trim_poly_x_X1	-0.0009	0.0019	-0.0041	0.0022	1.0285	0.0048
aligner_STAR_x_trim_poly_g_X1	0.0009	0.0016	-0.0018	0.0036	1.0268	0.0043
aligner_STAR_x_trim_poly_x_X1	-0.0015	0.0016	-0.0042	0.0010	1.0518	0.0055
trim_poly_g_X1_x_trim_poly_x_X1	0.0000	0.0013	-0.0021	0.0021	1.0154	0.0106

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Table 9: Summary of p-value logNormal model with weak ridge prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent

Table 10: Summary of count Gamma model with weak ridge prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
intercept	7.9996	0.0359	7.9404	8.0576	1.0150	0.0058
min_phred	0.0001	0.0014	-0.0021	0.0023	1.0138	0.0077
min_length	0.0002	0.0008	-0.0012	0.0016	1.0148	0.0067
aligner_kallisto	-0.2828	0.0200	-0.3143	-0.2487	1.0111	0.0096
aligner_salmon	-0.2463	0.0188	-0.2771	-0.2156	1.0121	0.0144
aligner_STAR	0.1417	0.0154	0.1163	0.1670	1.0071	0.0215
trim_poly_g_X1	-0.0056	0.0130	-0.0269	0.0158	1.0151	0.0237
trim_poly_x_X1	0.0089	0.0137	-0.0135	0.0319	1.0134	0.0131
min_phred_x_min_length	0.0000	0.0000	-0.0001	0.0000	1.0136	0.0102

min_phred_x_aligner_kallisto	-0.0004	0.0006	-0.0014	0.0005	1.0073	0.0165
min_phred_x_aligner_salmon	-0.0004	0.0006	-0.0014	0.0006	1.0077	0.0276
min_phred_x_aligner_STAR	-0.0003	0.0004	-0.0010	0.0005	1.0051	0.0498
min_phred_x_trim_poly_g_X1	0.0002	0.0004	-0.0004	0.0008	1.0083	0.0454
min_phred_x_trim_poly_x_X1	0.0000	0.0004	-0.0006	0.0007	1.0062	0.0353
min_length_x_aligner_kallisto	0.0000	0.0003	-0.0005	0.0006	1.0051	0.0285
min_length_x_aligner_salmon	0.0000	0.0003	-0.0005	0.0005	1.0063	0.0453
min_length_x_aligner_STAR	-0.0001	0.0002	-0.0005	0.0003	1.0044	0.0600
min_length_x_trim_poly_g_X1	0.0000	0.0002	-0.0004	0.0003	1.0075	0.0672
min_length_x_trim_poly_x_X1	-0.0002	0.0002	-0.0006	0.0001	1.0065	0.0386
aligner_kallisto_x_trim_poly_g_X1	0.0003	0.0037	-0.0059	0.0064	1.0107	0.0151
aligner_kallisto_x_trim_poly_x_X1	-0.0019	0.0034	-0.0075	0.0036	1.0091	0.0158
aligner_salmon_x_trim_poly_g_X1	0.0015	0.0036	-0.0043	0.0075	1.0034	0.0217
aligner_salmon_x_trim_poly_x_X1	-0.0008	0.0036	-0.0066	0.0052	1.0171	0.0240
aligner_STAR_x_trim_poly_g_X1	0.0009	0.0029	-0.0037	0.0057	1.0035	0.0170
aligner_STAR_x_trim_poly_x_X1	-0.0014	0.0027	-0.0058	0.0031	1.0048	0.0290
trim_poly_g_X1_x_trim_poly_x_X1	-0.0002	0.0023	-0.0040	0.0037	1.0036	0.0341

Table 11: Summary of effect size Gamma model with weak ridge prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
intercept	-0.5811	0.0421	-0.6527	-0.5159	1.0483	0.0032
min_phred	0.0002	0.0016	-0.0022	0.0029	1.0452	0.0039
min_length	0.0001	0.0010	-0.0014	0.0018	1.0325	0.0043
aligner_kallisto	0.5505	0.0227	0.5151	0.5894	1.0304	0.0044
aligner_salmon	0.5660	0.0215	0.5311	0.6010	1.0193	0.0032
aligner_STAR	0.0011	0.0156	-0.0238	0.0279	1.0277	0.0038
trim_poly_g_X1	-0.0025	0.0144	-0.0273	0.0209	1.0517	0.0028
trim_poly_x_X1	0.0022	0.0125	-0.0182	0.0227	1.0159	0.0056
norm_method_RLE	0.0056	0.0246	-0.0365	0.0449	1.0667	0.0017
norm_method_TMM	0.0080	0.0200	-0.0247	0.0408	1.0288	0.0021
norm_method_TMMwsp	0.0047	0.0241	-0.0351	0.0447	1.0738	0.0029
min_phred_x_min_length	0.0000	0.0000	-0.0001	0.0001	1.0355	0.0042
min_phred_x_aligner_kallisto	-0.0001	0.0007	-0.0012	0.0009	1.0166	0.0086
min_phred_x_aligner_salmon	0.0000	0.0007	-0.0011	0.0011	1.0132	0.0064
min_phred_x_aligner_STAR	0.0001	0.0004	-0.0006	0.0008	1.0180	0.0070
min_phred_x_trim_poly_g_X1	0.0001	0.0004	-0.0005	0.0007	1.0269	0.0082
min_phred_x_trim_poly_x_X1	0.0000	0.0004	-0.0006	0.0007	1.0137	0.0118
min_phred_x_norm_method_RLE	0.0000	0.0006	-0.0010	0.0011	1.0324	0.0045
min_phred_x_norm_method_TMM	0.0000	0.0006	-0.0010	0.0010	1.0235	0.0039
min_phred_x_norm_method_TMMwsp	0.0000	0.0007	-0.0011	0.0012	1.0365	0.0049
min_phred_x_norm_method_upperquartile	0.0000	0.0006	-0.0010	0.0011	1.0853	0.0027
min_length_x_aligner_kallisto	0.0001	0.0003	-0.0005	0.0007	1.0197	0.0095
min_length_x_aligner_salmon	0.0000	0.0003	-0.0005	0.0006	1.0149	0.0147
min_length_x_aligner_STAR	0.0000	0.0002	-0.0004	0.0004	1.0148	0.0118
min_length_x_trim_poly_g_X1	0.0000	0.0002	-0.0004	0.0004	1.0218	0.0060
min_length_x_trim_poly_x_X1	-0.0001	0.0002	-0.0004	0.0003	1.0191	0.0178
min_length_x_norm_method_RLE	0.0000	0.0004	-0.0006	0.0007	1.0298	0.0045
min_length_x_norm_method_TMM	0.0000	0.0003	-0.0005	0.0005	1.0065	0.0132
min_length_x_norm_method_TMMwsp	0.0000	0.0003	-0.0005	0.0006	1.0390	0.0080
min_length_x_norm_method_upperquartile	0.0000	0.0004	-0.0006	0.0005	1.0538	0.0058
aligner_kallisto_x_trim_poly_g_X1	0.0001	0.0039	-0.0063	0.0063	1.0143	0.0056

aligner_kallisto_x_trim_poly_x_X1	-0.0001	0.0038	-0.0066	0.0062	1.0360	0.0051
aligner_kallisto_x_norm_method_RLE	-0.0096	0.0058	-0.0195	0.0000	1.0544	0.0022
aligner_kallisto_x_norm_method_TMM	-0.0085	0.0055	-0.0173	0.0008	1.0754	0.0031
aligner_kallisto_x_norm_method_TMMwsp	-0.0089	0.0051	-0.0174	-0.0009	1.0700	0.0037
aligner_salmon_x_trim_poly_g_X1	-0.0001	0.0037	-0.0063	0.0061	1.0076	0.0074
aligner_salmon_x_trim_poly_x_X1	-0.0003	0.0038	-0.0064	0.0061	1.0307	0.0041
aligner_salmon_x_norm_method_RLE	-0.0106	0.0055	-0.0197	-0.0017	1.0313	0.0040
aligner_salmon_x_norm_method_TMM	-0.0096	0.0052	-0.0182	-0.0013	1.0638	0.0044
aligner_salmon_x_norm_method_TMMwsp	-0.0093	0.0052	-0.0180	-0.0005	1.0532	0.0033
aligner_salmon_x_norm_method_upperquartile	-0.0145	0.0050	-0.0229	-0.0061	1.0354	0.0072
aligner_STAR_x_trim_poly_g_X1	-0.0001	0.0027	-0.0045	0.0042	1.0171	0.0086
aligner_STAR_x_trim_poly_x_X1	-0.0010	0.0026	-0.0053	0.0032	1.0114	0.0077
aligner_STAR_x_norm_method_RLE	-0.0031	0.0040	-0.0098	0.0035	1.0575	0.0041
aligner_STAR_x_norm_method_TMM	-0.0018	0.0038	-0.0079	0.0044	1.0923	0.0017
aligner_STAR_x_norm_method_TMMwsp	-0.0022	0.0047	-0.0100	0.0053	1.0624	0.0051
trim_poly_g_X1_x_trim_poly_x_X1	-0.0001	0.0025	-0.0041	0.0042	1.0105	0.0099
trim_poly_g_X1_x_norm_method_RLE	-0.0002	0.0038	-0.0065	0.0058	1.0239	0.0035
trim_poly_g_X1_x_norm_method_TMM	-0.0005	0.0036	-0.0064	0.0053	1.0115	0.0058
trim_poly_g_X1_x_norm_method_TMMwsp	-0.0006	0.0038	-0.0070	0.0056	1.0193	0.0078
trim_poly_g_X1_x_norm_method_upperquartile	0.0000	0.0034	-0.0056	0.0056	1.0153	0.0056
trim_poly_x_X1_x_norm_method_RLE	-0.0002	0.0036	-0.0063	0.0057	1.0362	0.0054
trim_poly_x_X1_x_norm_method_TMM	-0.0003	0.0036	-0.0065	0.0055	1.0582	0.0040
trim_poly_x_X1_x_norm_method_TMMwsp	0.0003	0.0041	-0.0068	0.0069	1.0299	0.0048
trim_poly_x_X1_x_norm_method_upperquartile	-0.0002	0.0036	-0.0062	0.0053	1.0633	0.0050

Table 12: Summary of p-value Gamma model with weak ridge prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
min_length	0.0000	0.0010	-0.0017	0.0017	1.0244	0.0104
trim_poly_g_X1	-0.0007	0.0156	-0.0264	0.0244	1.0147	0.0075
trim_poly_x_X1	0.0022	0.0161	-0.0246	0.0283	1.0965	0.0063
min_phred_x_min_length	0.0000	0.0000	-0.0001	0.0001	1.0175	0.0100
min_phred_x_aligner_kallisto	-0.0001	0.0006	-0.0011	0.0009	1.0180	0.0149
min_phred_x_aligner_salmon	0.0000	0.0006	-0.0010	0.0010	1.0067	0.0199
min_phred_x_aligner_STAR	0.0000	0.0004	-0.0007	0.0007	1.0152	0.0143
min_phred_x_trim_poly_g_X1	0.0000	0.0004	-0.0006	0.0007	1.0022	0.0197
min_phred_x_trim_poly_x_X1	-0.0001	0.0004	-0.0007	0.0006	1.0140	0.0239
min_length_x_aligner_kallisto	-0.0001	0.0003	-0.0006	0.0005	1.0061	0.0178
min_length_x_aligner_salmon	0.0000	0.0003	-0.0005	0.0004	1.0034	0.0276
min_length_x_aligner_STAR	0.0000	0.0002	-0.0004	0.0003	1.0146	0.0145
min_length_x_trim_poly_g_X1	0.0000	0.0002	-0.0004	0.0004	1.0046	0.0253
min_length_x_trim_poly_x_X1	0.0000	0.0002	-0.0004	0.0003	1.0120	0.0301
min_length_x_norm_method_none	-0.0001	0.0005	-0.0009	0.0008	1.0376	0.0090
min_length_x_norm_method_RLE	0.0000	0.0006	-0.0010	0.0009	1.0338	0.0128
min_length_x_norm_method_TMM	-0.0001	0.0005	-0.0009	0.0008	1.0373	0.0089
min_length_x_norm_method_TMMwsp	0.0000	0.0005	-0.0009	0.0008	1.0348	0.0134
min_length_x_norm_method_upperquartile	-0.0001	0.0006	-0.0010	0.0009	1.0399	0.0131
aligner_kallisto_x_trim_poly_g_X1	-0.0002	0.0037	-0.0063	0.0058	1.0182	0.0070
aligner_kallisto_x_trim_poly_x_X1	0.0009	0.0039	-0.0054	0.0073	1.0294	0.0103
aligner_salmon_x_trim_poly_g_X1	-0.0003	0.0036	-0.0062	0.0059	1.0383	0.0085
aligner_salmon_x_trim_poly_x_X1	0.0002	0.0038	-0.0062	0.0064	1.0276	0.0103
aligner_STAR_x_trim_poly_g_X1	0.0000	0.0026	-0.0043	0.0043	1.0144	0.0141

aligner_STAR_x_trim_poly_x_X1	-0.0001	0.0025	-0.0042	0.0040	1.0159	0.0156
trim_poly_g_X1_x_trim_poly_x_X1	0.0001	0.0024	-0.0037	0.0040	1.0071	0.0146
trim_poly_g_X1_x_norm_method_none	0.0005	0.0069	-0.0109	0.0119	1.0692	0.0039
trim_poly_g_X1_x_norm_method_RLE	0.0005	0.0072	-0.0113	0.0122	1.0703	0.0037
trim_poly_g_X1_x_norm_method_TMM	0.0006	0.0072	-0.0112	0.0123	1.0769	0.0039
trim_poly_g_X1_x_norm_method_TMMwsp	0.0008	0.0073	-0.0113	0.0125	1.0774	0.0035
trim_poly_g_X1_x_norm_method_upperquartile	0.0005	0.0071	-0.0111	0.0120	1.0801	0.0037

NULL

Table 13: Summary of effect size Normal model with weak lasso prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent

Table 14: Summary of p-value Normal model with weak lasso prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent

Table 15: Summary of count logNormal model with weak lasso prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
aligner_kallisto	-0.2853	0.0104	-0.3024	-0.2685	1.0747	0.0014
trim_poly_x_X1	0.0079	0.0064	-0.0020	0.0191	1.0881	0.0018
min_phred_x_aligner_kallisto	-0.0003	0.0003	-0.0008	0.0002	1.0468	0.0028
min_phred_x_aligner_salmon	-0.0004	0.0003	-0.0009	0.0001	1.0771	0.0041
min_phred_x_aligner_STAR	-0.0002	0.0002	-0.0006	0.0001	1.0525	0.0018
min_phred_x_trim_poly_x_X1	0.0000	0.0002	-0.0003	0.0003	1.0413	0.0050
min_length_x_aligner_kallisto	0.0001	0.0002	-0.0002	0.0003	1.0363	0.0069
min_length_x_aligner_salmon	0.0000	0.0002	-0.0002	0.0003	1.0535	0.0063
min_length_x_aligner_STAR	-0.0001	0.0001	-0.0003	0.0001	1.0424	0.0040
min_length_x_trim_poly_g_X1	0.0000	0.0001	-0.0002	0.0001	1.0915	0.0022
min_length_x_trim_poly_x_X1	-0.0002	0.0001	-0.0004	0.0000	1.0438	0.0063
aligner_kallisto_x_trim_poly_g_X1	0.0002	0.0021	-0.0032	0.0036	1.0439	0.0044
aligner_kallisto_x_trim_poly_x_X1	-0.0019	0.0020	-0.0053	0.0015	1.0250	0.0023
aligner_salmon_x_trim_poly_g_X1	0.0013	0.0019	-0.0018	0.0045	1.0536	0.0045
aligner_salmon_x_trim_poly_x_X1	-0.0008	0.0020	-0.0038	0.0027	1.0243	0.0040
aligner_STAR_x_trim_poly_g_X1	0.0008	0.0014	-0.0016	0.0031	1.0751	0.0047
aligner_STAR_x_trim_poly_x_X1	-0.0011	0.0016	-0.0037	0.0014	1.0489	0.0037
trim_poly_g_X1_x_trim_poly_x_X1	-0.0001	0.0013	-0.0023	0.0019	1.0083	0.0076

NULL NULL

Table 16: Summary of count Gamma model with weak lasso prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
intercept	8.0047	0.0369	7.9447	8.0666	1.0199	0.0121
min_phred	-0.0001	0.0014	-0.0024	0.0022	1.0186	0.0165
min_length	0.0001	0.0009	-0.0014	0.0015	1.0168	0.0181
aligner_kallisto	-0.2823	0.0202	-0.3151	-0.2493	1.0290	0.0149

aligner_salmon	-0.2484	0.0191	-0.2796	-0.2162	1.0036	0.0146
aligner_STAR	0.1413	0.0160	0.1156	0.1683	1.0154	0.0086
trim_poly_g_X1	-0.0070	0.0126	-0.0280	0.0134	1.0057	0.0308
trim_poly_x_X1	0.0081	0.0137	-0.0144	0.0307	1.0038	0.0179
min_phred_x_min_length	0.0000	0.0000	-0.0001	0.0001	1.0158	0.0197
min_phred_x_aligner_kallisto	-0.0004	0.0006	-0.0014	0.0005	1.0174	0.0226
min_phred_x_aligner_salmon	-0.0004	0.0006	-0.0014	0.0006	1.0017	0.0377
min_phred_x_aligner_STAR	-0.0003	0.0005	-0.0010	0.0005	1.0093	0.0175
min_phred_x_trim_poly_g_X1	0.0002	0.0004	-0.0004	0.0009	1.0021	0.0619
min_phred_x_trim_poly_x_X1	0.0000	0.0004	-0.0006	0.0007	1.0012	0.0364
min_length_x_aligner_kallisto	0.0000	0.0003	-0.0005	0.0006	1.0145	0.0351
min_length_x_aligner_salmon	0.0000	0.0003	-0.0004	0.0005	1.0034	0.0499
min_length_x_aligner_STAR	-0.0001	0.0002	-0.0005	0.0003	1.0069	0.0383
min_length_x_trim_poly_g_X1	0.0000	0.0002	-0.0003	0.0003	1.0018	0.0827
min_length_x_trim_poly_x_X1	-0.0002	0.0002	-0.0006	0.0001	1.0011	0.0553
aligner_kallisto_x_trim_poly_g_X1	0.0007	0.0037	-0.0055	0.0068	1.0127	0.0177
aligner_kallisto_x_trim_poly_x_X1	-0.0021	0.0035	-0.0080	0.0036	1.0064	0.0225
aligner_salmon_x_trim_poly_g_X1	0.0018	0.0036	-0.0042	0.0078	1.0135	0.0213
aligner_salmon_x_trim_poly_x_X1	-0.0012	0.0037	-0.0073	0.0049	1.0111	0.0229
aligner_STAR_x_trim_poly_g_X1	0.0012	0.0030	-0.0035	0.0061	1.0146	0.0137
aligner_STAR_x_trim_poly_x_X1	-0.0015	0.0029	-0.0063	0.0033	1.0070	0.0168
trim_poly_g_X1_x_trim_poly_x_X1	0.0000	0.0024	-0.0039	0.0040	1.0113	0.0255

Table 17: Summary of effect size Gamma model with weak lasso prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
intercept	-0.5864	0.0391	-0.6505	-0.5215	1.0365	0.0025
min_phred	0.0004	0.0015	-0.0020	0.0028	1.0361	0.0029
min_length	0.0003	0.0010	-0.0013	0.0019	1.0459	0.0032
aligner_kallisto	0.5508	0.0217	0.5149	0.5860	1.0384	0.0034
aligner_salmon	0.5691	0.0204	0.5348	0.6023	1.0475	0.0056
aligner_STAR	0.0037	0.0145	-0.0198	0.0283	1.0134	0.0041
trim_poly_g_X1	-0.0046	0.0150	-0.0295	0.0195	1.0831	0.0029
trim_poly_x_X1	0.0016	0.0132	-0.0183	0.0248	1.0912	0.0013
norm_method_RLE	0.0068	0.0220	-0.0319	0.0418	1.0458	0.0037
norm_method_TMM	0.0060	0.0198	-0.0272	0.0379	1.0530	0.0024
norm_method_TMMwsp	0.0047	0.0247	-0.0351	0.0469	1.0575	0.0033
norm_method_upperquartile	0.0037	0.0221	-0.0335	0.0387	1.0465	0.0035
min_phred_x_min_length	0.0000	0.0000	-0.0001	0.0000	1.0455	0.0037
min_phred_x_aligner_kallisto	-0.0001	0.0006	-0.0012	0.0009	1.0158	0.0088
min_phred_x_aligner_salmon	-0.0001	0.0006	-0.0011	0.0010	1.0333	0.0098
min_phred_x_aligner_STAR	0.0000	0.0004	-0.0007	0.0007	1.0067	0.0090
min_phred_x_trim_poly_g_X1	0.0001	0.0004	-0.0005	0.0008	1.0359	0.0083
min_phred_x_trim_poly_x_X1	0.0000	0.0004	-0.0007	0.0007	1.0496	0.0026
min_phred_x_norm_method_RLE	0.0000	0.0006	-0.0010	0.0010	1.0258	0.0095
min_phred_x_norm_method_TMM	0.0001	0.0006	-0.0009	0.0010	1.0353	0.0045
min_phred_x_norm_method_TMMwsp	0.0000	0.0007	-0.0011	0.0012	1.0344	0.0058
min_phred_x_norm_method_upperquartile	0.0001	0.0006	-0.0008	0.0011	1.0317	0.0071
min_length_x_aligner_kallisto	0.0001	0.0003	-0.0004	0.0007	1.0254	0.0087
min_length_x_aligner_salmon	0.0000	0.0003	-0.0005	0.0005	1.0269	0.0139
min_length_x_aligner_STAR	0.0000	0.0002	-0.0004	0.0003	1.0032	0.0127
min_length_x_trim_poly_g_X1	0.0000	0.0002	-0.0004	0.0004	1.0370	0.0080

min_length_x_trim_poly_x_X1	-0.0001	0.0002	-0.0004	0.0003	1.0405	0.0039
min_length_x_norm_method_RLE	0.0000	0.0003	-0.0006	0.0005	1.0286	0.0068
min_length_x_norm_method_TMM	0.0000	0.0003	-0.0005	0.0004	1.0218	0.0095
min_length_x_norm_method_TMMwsp	0.0000	0.0003	-0.0006	0.0005	1.0302	0.0096
min_length_x_norm_method_upperquartile	0.0000	0.0003	-0.0005	0.0005	1.0269	0.0080
aligner_kallisto_x_trim_poly_g_X1	0.0005	0.0039	-0.0059	0.0070	1.0256	0.0070
aligner_kallisto_x_trim_poly_x_X1	-0.0002	0.0038	-0.0066	0.0058	1.0205	0.0055
aligner_kallisto_x_norm_method_RLE	-0.0096	0.0059	-0.0192	-0.0003	1.0538	0.0047
aligner_kallisto_x_norm_method_TMM	-0.0084	0.0054	-0.0176	0.0001	1.0757	0.0019
aligner_kallisto_x_norm_method_TMMwsp	-0.0076	0.0054	-0.0161	0.0016	1.0981	0.0027
aligner_kallisto_x_norm_method_upperquartile	-0.0137	0.0056	-0.0235	-0.0049	1.0472	0.0035
aligner_salmon_x_trim_poly_g_X1	0.0005	0.0037	-0.0056	0.0063	1.0107	0.0082
aligner_salmon_x_trim_poly_x_X1	0.0000	0.0038	-0.0063	0.0063	1.0190	0.0057
aligner_salmon_x_norm_method_RLE	-0.0111	0.0056	-0.0201	-0.0019	1.0401	0.0062
aligner_salmon_x_norm_method_TMM	-0.0088	0.0050	-0.0169	-0.0004	1.0752	0.0062
aligner_salmon_x_norm_method_upperquartile	-0.0138	0.0052	-0.0228	-0.0057	1.0420	0.0043
aligner_STAR_x_trim_poly_g_X1	0.0001	0.0026	-0.0042	0.0042	1.0100	0.0110
aligner_STAR_x_trim_poly_x_X1	-0.0013	0.0028	-0.0058	0.0032	1.0182	0.0076
aligner_STAR_x_norm_method_RLE	-0.0020	0.0040	-0.0085	0.0046	1.0388	0.0046
aligner_STAR_x_norm_method_TMM	-0.0008	0.0040	-0.0074	0.0058	1.0639	0.0034
aligner_STAR_x_norm_method_TMMwsp	-0.0006	0.0048	-0.0088	0.0071	1.0679	0.0029
aligner_STAR_x_norm_method_upperquartile	-0.0016	0.0041	-0.0081	0.0053	1.0397	0.0040
trim_poly_g_X1_x_trim_poly_x_X1	0.0001	0.0025	-0.0042	0.0041	1.0123	0.0118
trim_poly_g_X1_x_norm_method_RLE	0.0010	0.0040	-0.0056	0.0079	1.0297	0.0051
trim_poly_g_X1_x_norm_method_TMM	0.0005	0.0038	-0.0055	0.0068	1.0265	0.0061
trim_poly_g_X1_x_norm_method_TMMwsp	0.0006	0.0046	-0.0068	0.0087	1.0308	0.0042
trim_poly_g_X1_x_norm_method_upperquartile	0.0007	0.0038	-0.0057	0.0068	1.0340	0.0065
trim_poly_x_X1_x_norm_method_RLE	0.0004	0.0035	-0.0051	0.0064	1.0301	0.0060
trim_poly_x_X1_x_norm_method_TMM	0.0004	0.0035	-0.0051	0.0063	1.0256	0.0080
trim_poly_x_X1_x_norm_method_TMMwsp	0.0008	0.0043	-0.0061	0.0082	1.0371	0.0058
trim_poly_x_X1_x_norm_method_upperquartile	0.0006	0.0036	-0.0054	0.0065	1.0192	0.0062

Table 18: Summary of p-value Gamma model with weak lasso prior

predictor	mean	sd	q5	q95	rhat	avg_ess_percent
min_phred	0.0001	0.0017	-0.0028	0.0029	1.0361	0.0040
min_length	0.0001	0.0010	-0.0015	0.0017	1.0219	0.0155
trim_poly_g_X1	-0.0005	0.0154	-0.0257	0.0250	1.0302	0.0074
trim_poly_x_X1	-0.0005	0.0159	-0.0268	0.0255	1.0750	0.0071
min_phred_x_min_length	0.0000	0.0000	-0.0001	0.0001	1.0257	0.0125
min_phred_x_aligner_kallisto	0.0000	0.0006	-0.0010	0.0011	1.0257	0.0119
min_phred_x_aligner_salmon	0.0000	0.0006	-0.0011	0.0011	1.0220	0.0092
min_phred_x_aligner_STAR	0.0000	0.0004	-0.0007	0.0007	1.0161	0.0131
min_phred_x_trim_poly_g_X1	0.0000	0.0004	-0.0006	0.0007	1.0088	0.0121
min_phred_x_trim_poly_x_X1	0.0000	0.0004	-0.0006	0.0006	1.0123	0.0269
min_phred_x_norm_method_TMMwsp	-0.0001	0.0014	-0.0023	0.0023	1.0955	0.0010
min_length_x_aligner_kallisto	0.0000	0.0003	-0.0006	0.0005	1.0273	0.0091
min_length_x_aligner_salmon	0.0000	0.0003	-0.0005	0.0005	1.0114	0.0266
min_length_x_aligner_STAR	0.0000	0.0002	-0.0004	0.0004	1.0160	0.0212
min_length_x_trim_poly_g_X1	0.0000	0.0002	-0.0004	0.0004	1.0086	0.0150
min_length_x_trim_poly_x_X1	0.0000	0.0002	-0.0003	0.0004	1.0104	0.0304
min_length_x_norm_method_none	0.0000	0.0005	-0.0009	0.0008	1.0273	0.0074

min_length_x_norm_method_RLE	0.0000	0.0006	-0.0009	0.0009	1.0247	0.0089
min_length_x_norm_method_TMM	0.0000	0.0005	-0.0009	0.0009	1.0294	0.0074
min_length_x_norm_method_TMMwsp	0.0000	0.0005	-0.0009	0.0009	1.0269	0.0079
min_length_x_norm_method_upperquartile	0.0000	0.0006	-0.0009	0.0009	1.0243	0.0083
aligner_kallisto_x_trim_poly_g_X1	-0.0001	0.0039	-0.0067	0.0062	1.0184	0.0050
aligner_kallisto_x_trim_poly_x_X1	0.0011	0.0036	-0.0046	0.0071	1.0190	0.0115
aligner_salmon_x_trim_poly_g_X1	0.0001	0.0037	-0.0059	0.0062	1.0147	0.0088
aligner_salmon_x_trim_poly_x_X1	0.0004	0.0038	-0.0058	0.0067	1.0535	0.0089
aligner_STAR_x_trim_poly_g_X1	0.0000	0.0026	-0.0042	0.0043	1.0092	0.0143
aligner_STAR_x_trim_poly_x_X1	-0.0002	0.0026	-0.0045	0.0041	1.0134	0.0140
trim_poly_g_X1_x_trim_poly_x_X1	0.0001	0.0024	-0.0039	0.0041	1.0031	0.0163
trim_poly_g_X1_x_norm_method_none	-0.0008	0.0071	-0.0123	0.0111	1.0918	0.0010
trim_poly_g_X1_x_norm_method_RLE	-0.0010	0.0073	-0.0125	0.0114	1.0920	0.0009
trim_poly_g_X1_x_norm_method_TMM	-0.0008	0.0074	-0.0130	0.0115	1.0910	0.0010
trim_poly_g_X1_x_norm_method_TMMwsp	-0.0006	0.0074	-0.0124	0.0118	1.0783	0.0011
trim_poly_g_X1_x_norm_method_upperquartile	-0.0010	0.0072	-0.0127	0.0112	1.0938	0.0009