

Supplementary Information: *Relative model selection of evolutionary substitution models is sensitive to multiple sequence alignment uncertainty*

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Additional Figures

Figure S1

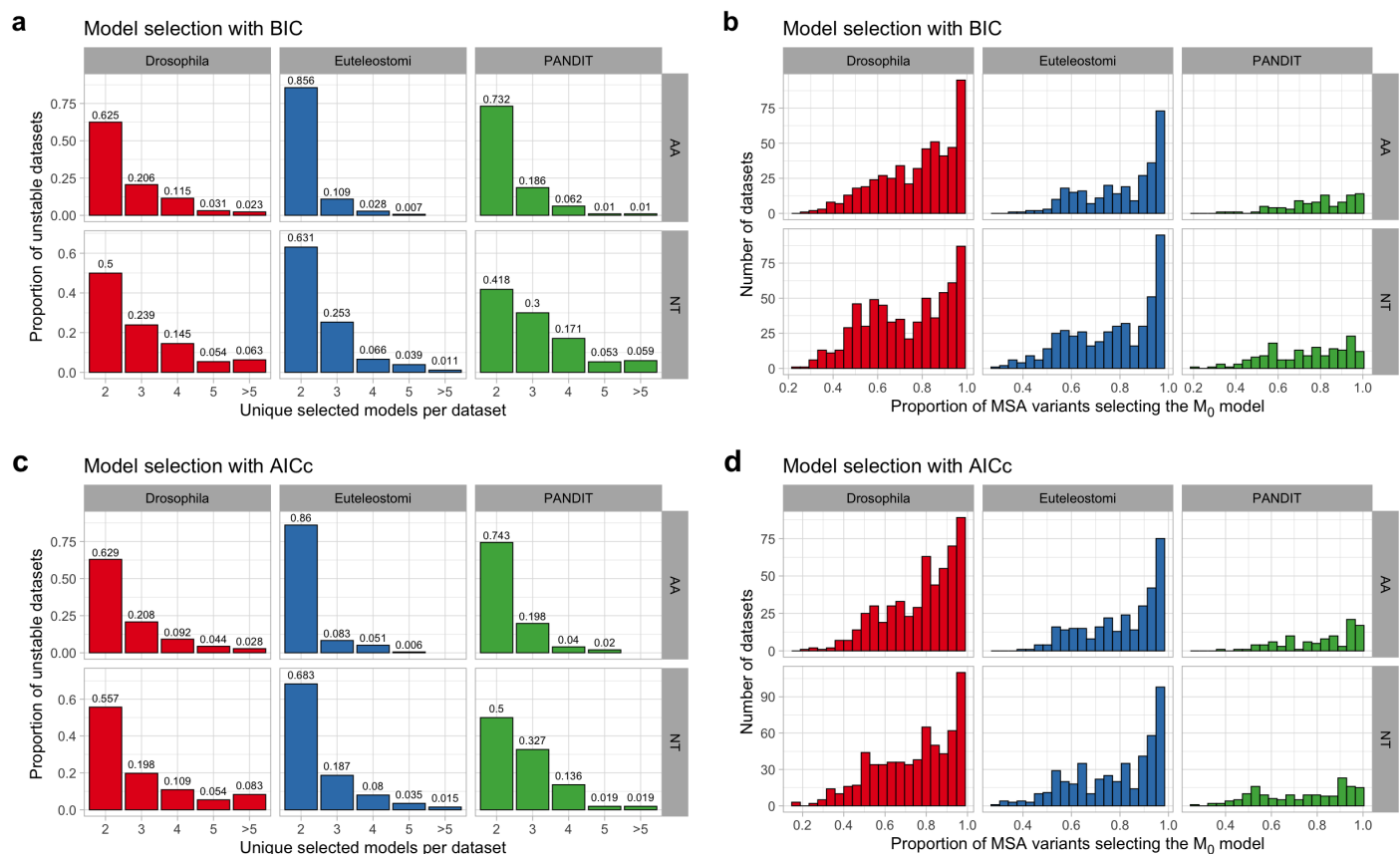


Figure S2

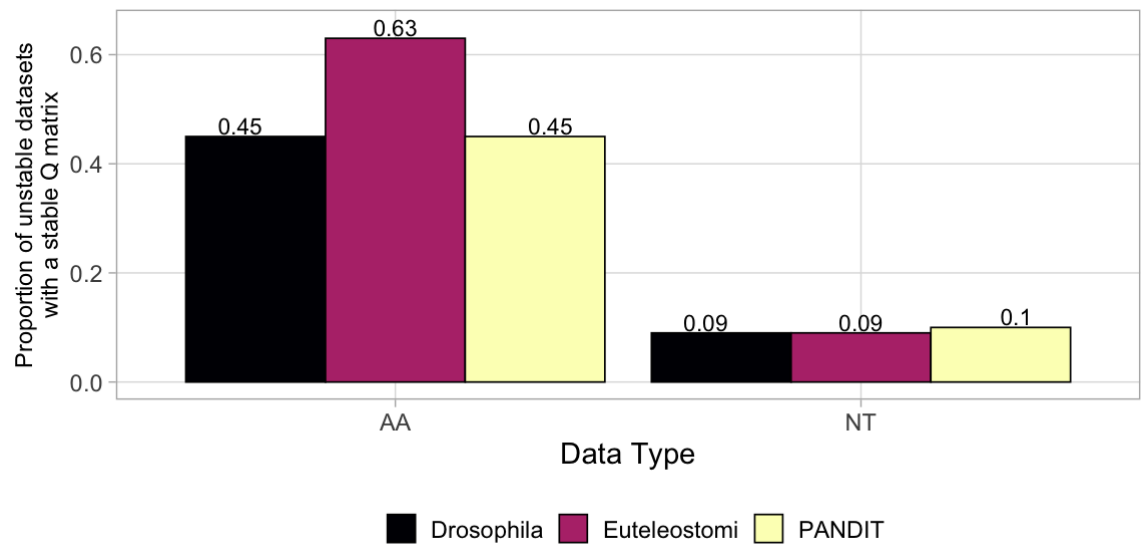
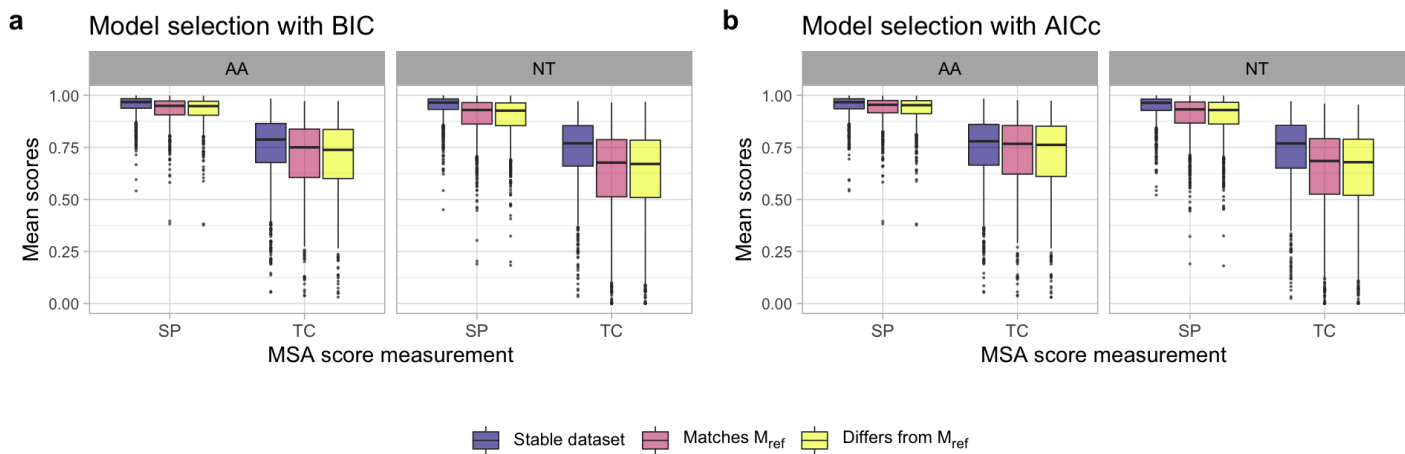


Figure S3



Additional Tables

Table S1

| SP and TC scores comparisons among groups | | | | |
|---|------------|-----------------------|-----------------------------|------------------|
| Model selection with BIC | | | | |
| Datatype | Score type | Comparison | Effect size (99% CI) | Adjusted P-value |
| AA | SP | differs-matches | -0.002 (-0.011, 0.008) | 0.867 |
| AA | SP | stable-matches | 0.023 (0.015, 0.032) | 0.000 |
| AA | SP | stable-differs | 0.025 (0.017, 0.033) | 0.000 |
| AA | TC | differs-matches | -0.006 (-0.034, 0.021) | 0.769 |
| AA | TC | stable-matches | 0.049 (0.026, 0.073) | 0.000 |
| AA | TC | stable-differs | 0.056 (0.032, 0.079) | 0.000 |
| NT | SP | differs-matches | -0.003 (-0.015, 0.009) | 0.739 |
| NT | SP | stable-matches | 0.05 (0.038, 0.062) | 0.000 |
| NT | SP | stable-differs | 0.053 (0.041, 0.065) | 0.000 |
| NT | TC | differs-matches | -0.007 (-0.033, 0.019) | 0.699 |
| NT | TC | stable-matches | 0.105 (0.079, 0.132) | 0.000 |
| NT | TC | stable-differs | 0.112 (0.086, 0.139) | 0.000 |

Table S2

| SP and TC scores comparisons among groups | | | | |
|---|------------|-----------------------|-----------------------------|------------------|
| Model selection with AICc | | | | |
| Datatype | Score type | Comparison | Effect size (99% CI) | Adjusted P-value |
| AA | SP | differs-matches | -0.002 (-0.012, 0.007) | 0.762 |
| AA | SP | stable-matches | 0.016 (0.008, 0.025) | 0.000 |
| AA | SP | stable-differs | 0.019 (0.01, 0.027) | 0.000 |
| AA | TC | differs-matches | -0.008 (-0.034, 0.018) | 0.653 |
| AA | TC | stable-matches | 0.025 (0.001, 0.048) | 0.006 |
| AA | TC | stable-differs | 0.033 (0.009, 0.056) | 0.000 |
| NT | SP | differs-matches | -0.002 (-0.014, 0.01) | 0.831 |
| NT | SP | stable-matches | 0.044 (0.032, 0.056) | 0.000 |
| NT | SP | stable-differs | 0.046 (0.034, 0.058) | 0.000 |
| NT | TC | differs-matches | -0.006 (-0.032, 0.02) | 0.788 |
| NT | TC | stable-matches | 0.095 (0.068, 0.121) | 0.000 |
| NT | TC | stable-differs | 0.101 (0.074, 0.127) | 0.000 |