|  |  |  |  |
| --- | --- | --- | --- |
| Tree type | Tree size | Rejection rate | Median alpha (95% HPD) |
| d/b = 0 | 25 | 0.095 | 0.165 (0-1.498) |
| d/b = 0 | 50 | 0.074 | 0.077 (0-0.589) |
| d/b = 0 | 100 | 0.078 | 0.045 (0-0.343) |
| d/b = 0 | 150 | 0.057 | 0.034 (0-0.249) |
| d/b = 0 | 200 | 0.055 | 0.021 (0-0.199) |
| d/b = 0 | 500 | 0.045 | 0.012 (0-0.115) |
| d/b = 0 | 1000 | 0.039 | 0.006 (0-0.075) |
| d/b = 0.25 | 25 | 0.093 | 0.136 (0-0.968) |
| d/b = 0.25 | 50 | 0.092 | 0.069 (0-0.478) |
| d/b = 0.25 | 100 | 0.065 | 0.04 (0-0.267) |
| d/b = 0.25 | 150 | 0.065 | 0.031 (0-0.213) |
| d/b = 0.25 | 200 | 0.054 | 0.025 (0-0.166) |
| d/b = 0.25 | 500 | 0.047 | 0.01 (0-0.095) |
| d/b = 0.25 | 1000 | 0.044 | 0.005 (0-0.06) |
| d/b = 0.5 | 25 | 0.102 | 0.104 (0-0.851) |
| d/b = 0.5 | 50 | 0.09 | 0.057 (0-0.394) |
| d/b = 0.5 | 100 | 0.075 | 0.039 (0-0.219) |
| d/b = 0.5 | 150 | 0.056 | 0.022 (0-0.154) |
| d/b = 0.5 | 200 | 0.066 | 0.017 (0-0.138) |
| d/b = 0.5 | 500 | 0.047 | 0.009 (0-0.07) |
| d/b = 0.5 | 1000 | 0.045 | 0.004 (0-0.047) |
| d/b = 0.75 | 25 | 0.111 | 0.068 (0-0.572) |
| d/b = 0.75 | 50 | 0.099 | 0.044 (0-0.28) |
| d/b = 0.75 | 100 | 0.081 | 0.022 (0-0.146) |
| d/b = 0.75 | 150 | 0.086 | 0.019 (0-0.108) |
| d/b = 0.75 | 200 | 0.069 | 0.012 (0-0.088) |
| d/b = 0.75 | 500 | 0.05 | 0.006 (0-0.047) |
| d/b = 0.75 | 1000 | 0.045 | 0.003 (0-0.03) |

Table XX. Rejection rate and alpha estimates for data simulated under a constant rate Brownian model on a range of constant-rate birth death trees. Tree type refers to the extinction fraction for the birth-death trees. The rejection rate is the proportion of OU models favoured relative to a Brownian motion model.