|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Rejection rate | | | | Median alpha (95% HPD) | | | |
| Tree size | 0% m.e. | 1% m.e. | 5% m.e. | 10% m.e. | 0% m.e. | 1% m.e. | 5% m.e. | 10% m.e. |
| 25 | 0.095 | 0.157 | 0.318 | 0.478 | 0.165 (0-1.498) | 0.234 (0-1.507) | 0.372 (0-5.51) | 0.574 (0-20) |
| 50 | 0.074 | 0.203 | 0.542 | 0.756 | 0.077 (0-0.589) | 0.163 (0-0.789) | 0.372 (0-2.2) | 0.538 (0.062-14.381) |
| 100 | 0.078 | 0.251 | 0.807 | 0.957 | 0.045 (0-0.343) | 0.135 (0-0.503) | 0.357 (0.06-1.236) | 0.54 (0.153-4.094) |
| 150 | 0.057 | 0.387 | 0.947 | 0.997 | 0.034 (0-0.249) | 0.14 (0-0.445) | 0.37 (0.121-1.104) | 0.566 (0.224-7.381) |
| 200 | 0.055 | 0.487 | 0.982 | 1 | 0.021 (0-0.199) | 0.136 (0-0.411) | 0.385 (0.142-1.089) | 0.544 (0.257-2.98) |
| 500 | 0.045 | 0.848 | 1 | 1 | 0.012 (0-0.115) | 0.152 (0.035-0.344) | 0.394 (0.219-0.919) | 0.58 (0.319-3.729) |
| 1000 | 0.039 | 0.995 | 1 | 1 | 0.006 (0-0.075) | 0.168 (0.079-0.335) | 0.417 (0.259-0.844) | 0.596 (0.361-2.328) |

Table XX. Rejection rate and alpha estimates for data simulated under a constant rate Brownian model with 0, 1, 5, or 10% measurement error (m.e.). The rejection rate is the proportion of OU models favoured relative to a Brownian motion model.