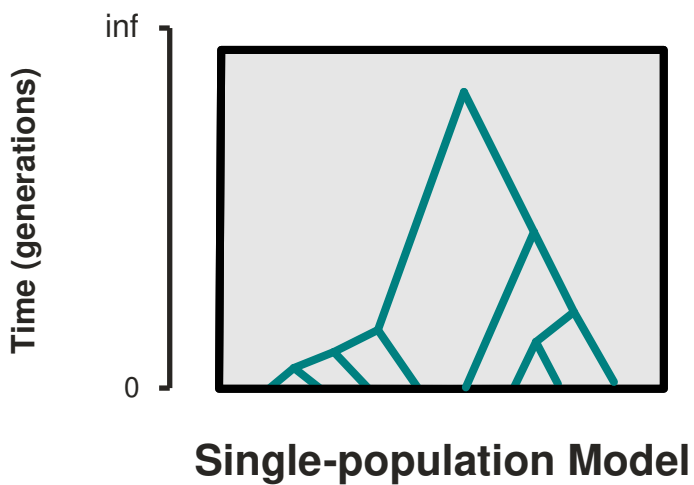
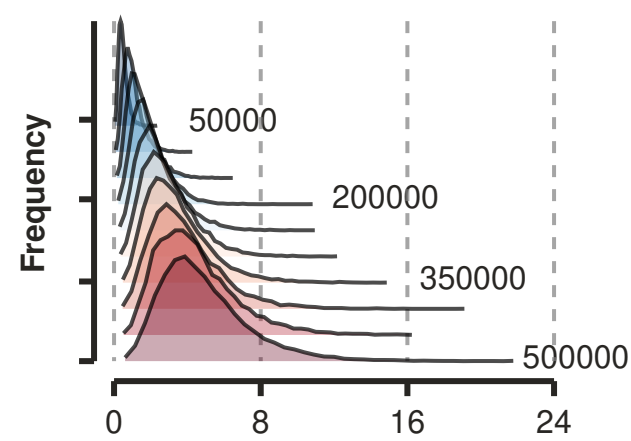


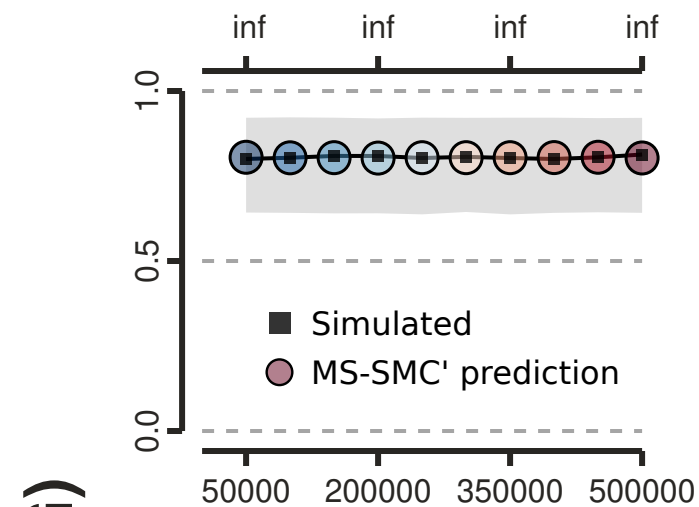
### (a) Constant $N_e$ Models



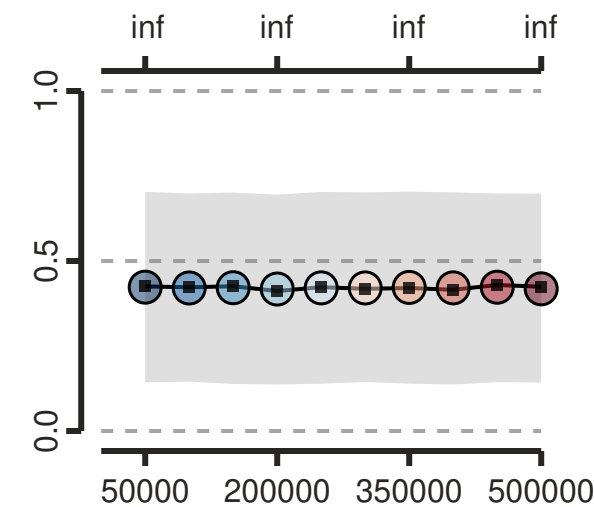
(b) Sum Genealogy Edge Length distribution x  $N_e$



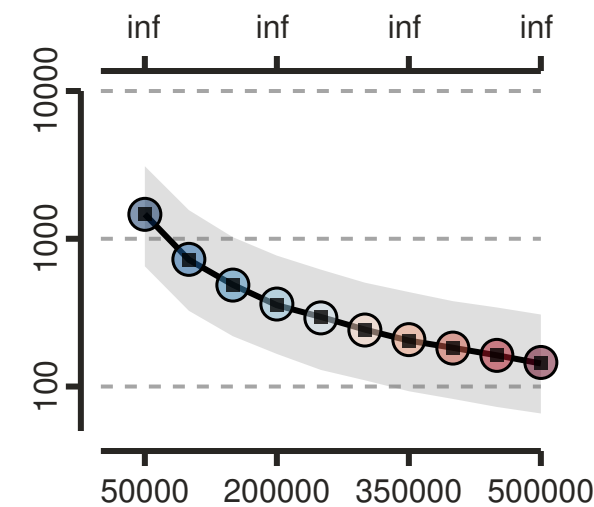
**(C) Model Edge Length ( $\times 1/2N_e$ )**



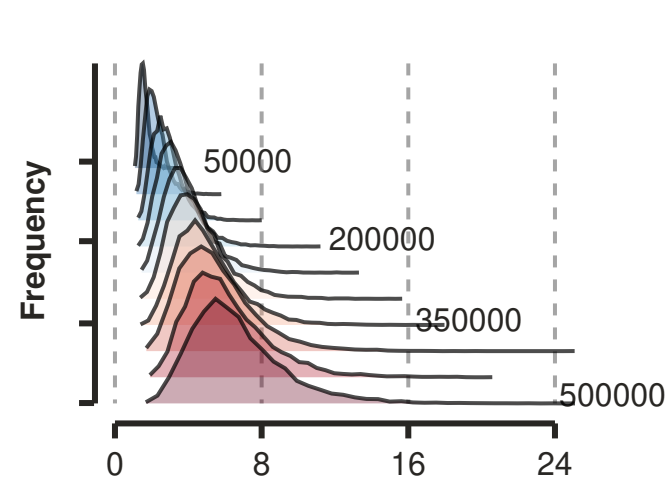
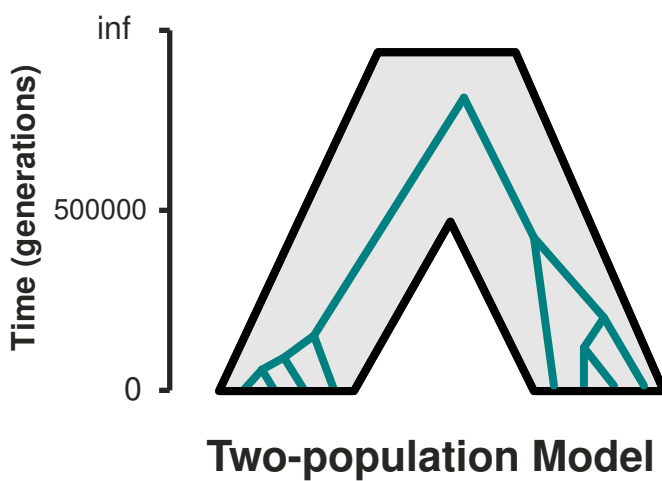
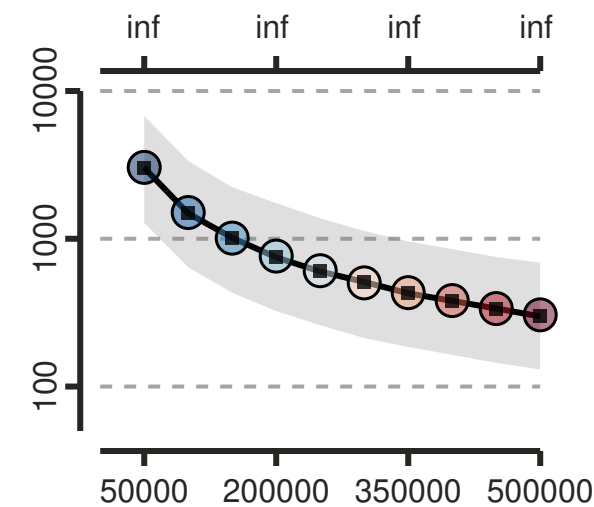
**(d) Model Edge Length ( $\times 1/2N_e$ )**



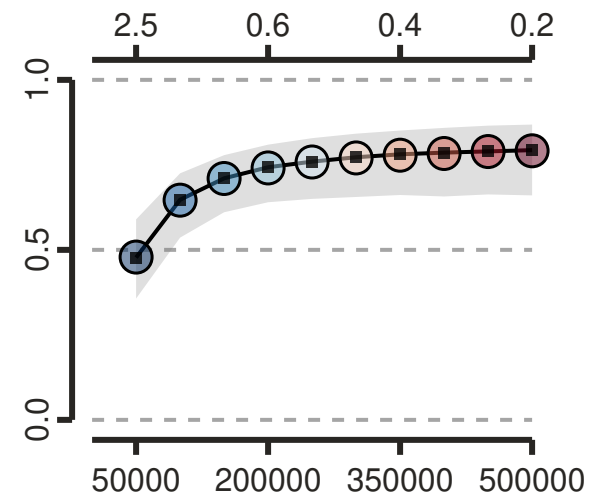
**(e) Model Edge Length (x 1/2N<sub>e</sub>)**



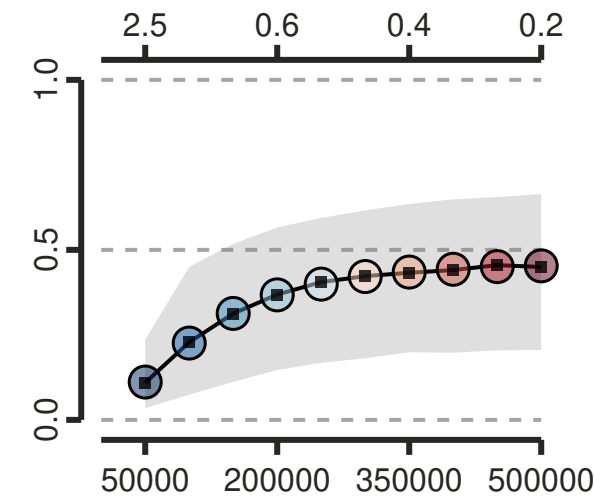
**(f) Model Edge Length (x 1/2N<sub>e</sub>)**



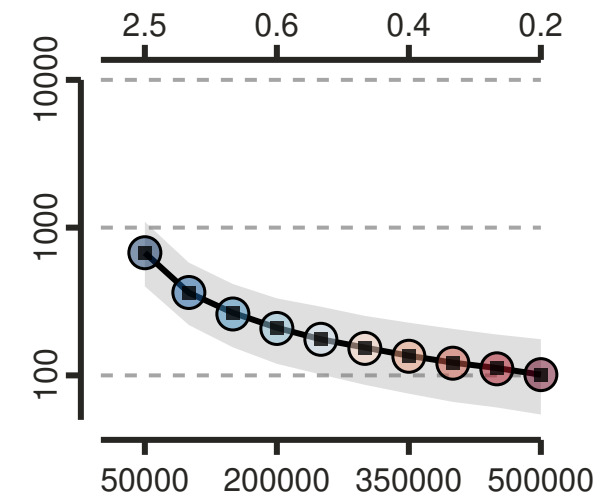
# P(tree-change | S,G)



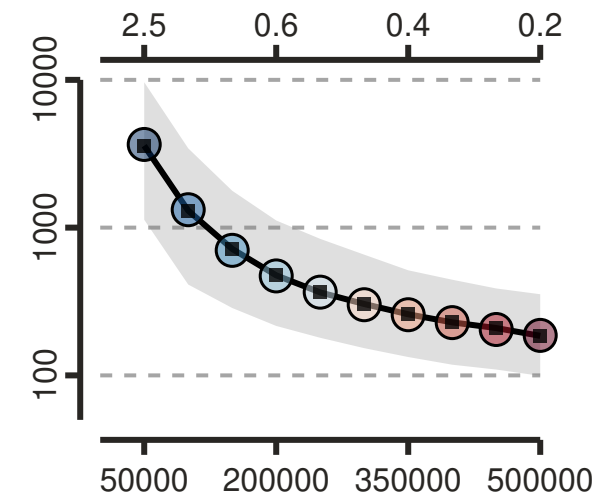
## P(topology-change | S,G)



## Waiting distance to tree-change



# Waiting distance to topology-change



The diagram shows a branching structure representing a phylogeny model. The y-axis is labeled 'Time (generations)' with values 0, 500,000, and inf. The x-axis is labeled 'Phylogeny Model'. The structure consists of a central trunk and multiple side branches, colored in teal and black.

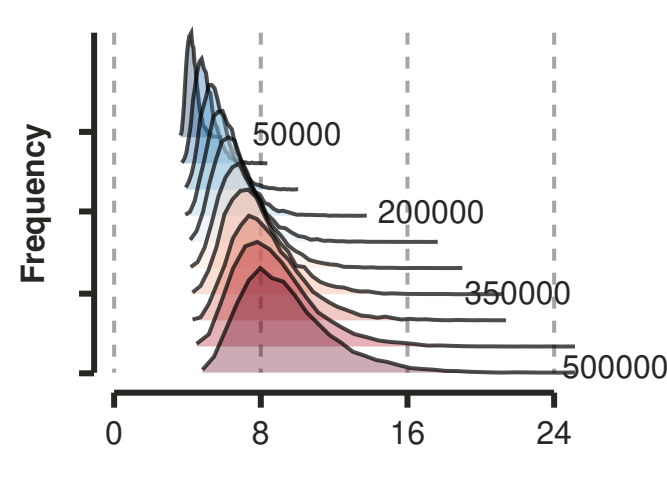
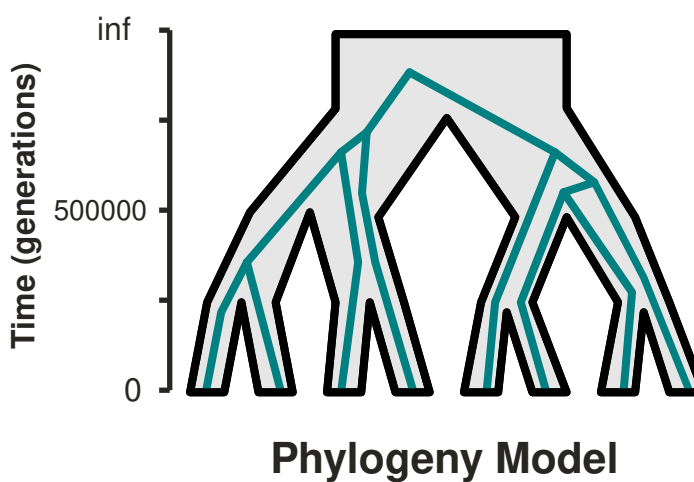


Figure 1: A plot showing the relationship between effective population size ( $N_e$ ) and the proportion of the genome in LD. The x-axis represents  $N_e$  on a logarithmic scale from 50,000 to 500,000. The y-axis represents the proportion of the genome in LD from 0.0 to 1.0. A solid black line with circular markers shows the observed relationship, which starts at approximately (50,000, 0.4) and rises to plateau at approximately 0.75 for  $N_e$  values above 200,000. A grey shaded area represents the 95% confidence interval. Horizontal dashed lines are drawn at y=0.0, y=0.5, and y=1.0. A top x-axis shows the proportion of the genome in LD with values 2.5, 0.6, 0.4, and 0.2 corresponding to the bottom axis values.

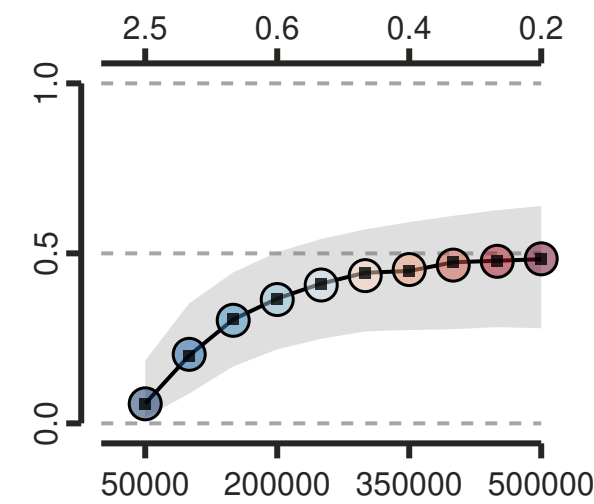
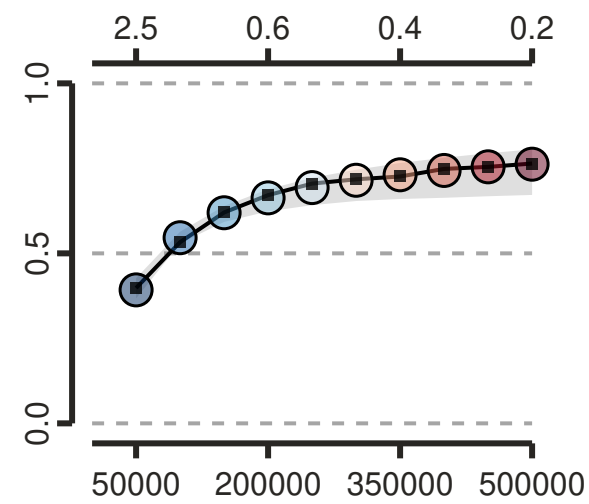


Figure 1 is a line graph showing the effective population size ( $N_e$ ) over time. The x-axis is labeled 'Effective population size ( $N_e$ )' and ranges from 50,000 to 500,000 on a logarithmic scale. The y-axis is labeled ' $N_e$ ' and ranges from 100 to 10,000 on a logarithmic scale. A series of data points connected by a line shows a decreasing trend in  $N_e$  over time. A shaded gray area around the line represents the confidence interval. The top x-axis shows values for the parameter  $\theta$  (2.5, 0.6, 0.4, 0.2) corresponding to the y-axis values.

