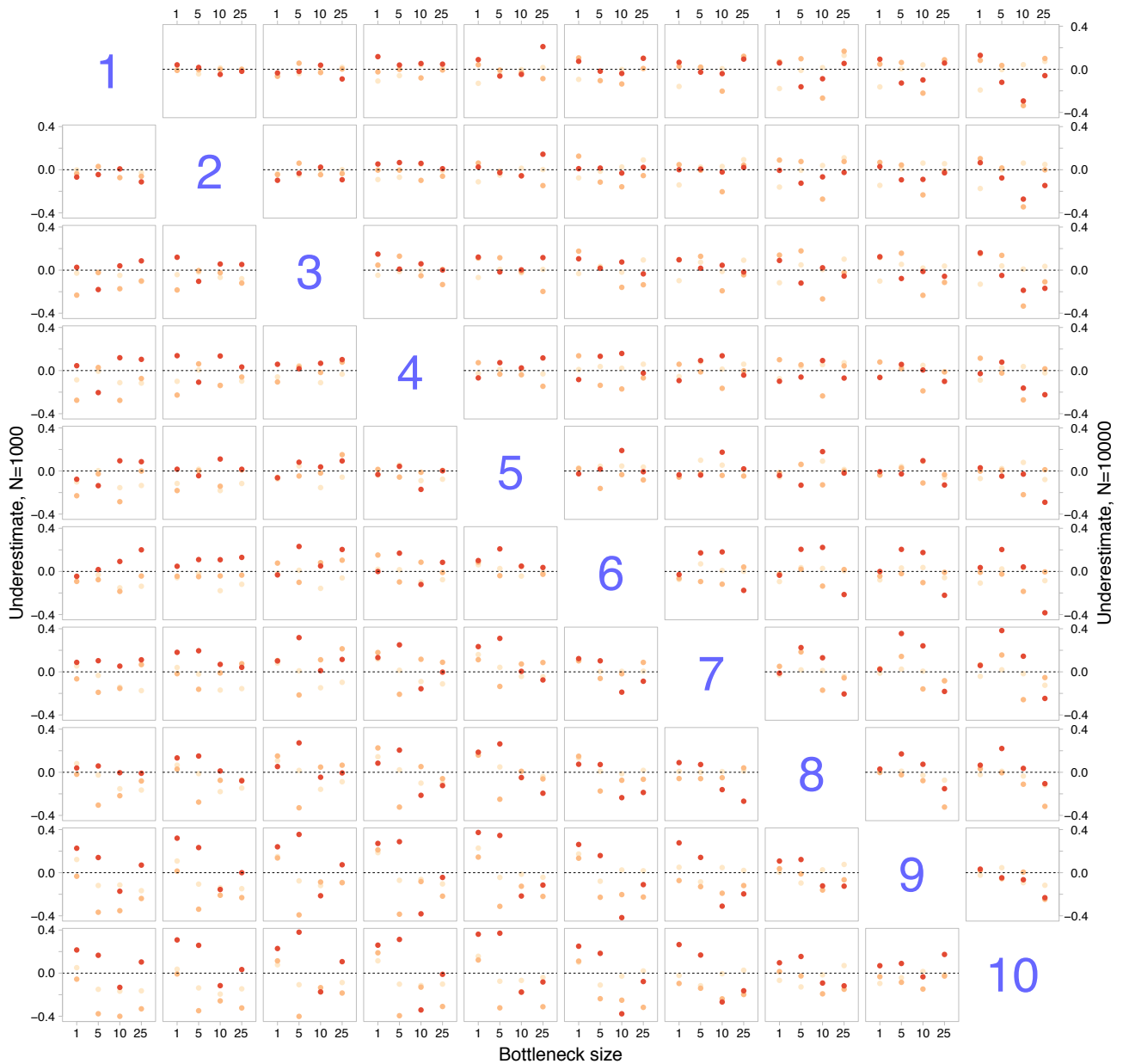**SI Figures**

Figure S1. Differences between empirical and estimated pairwise genetic distances using the Geometric-Poisson approximation. The (i, j)th plot shows the difference between the empirical and simulated mean distance between samples taken from individuals i and j. Each plot shows the underestimate for various levels of bottleneck size and mutation rate (light, medium and dark points denote 1×10^{-4}, 3×10^{-4}, and 5×10^{-4} respectively). Plots above the diagonal show underestimates for equilibrium population size 10000, while below the diagonal, $N_{eq} = 1000$.

C. J. Worby et al.