

Table S1 Parameters and priors used in the one-population models and in models A, B, C, D and E.

Parameter	Prior	Model
Current size Africa: N_{Ac}	$\text{unif}(1 \times 10^5, 1 \times 10^7)$	Bottleneck and Expansion
Time of bottleneck Africa: T_A	$\text{unif}(1 \times 10^2, 4 \times 10^5)$	Bottleneck and Expansion
Ancient size Africa: N_{Aa}	$\text{unif}(1 \times 10^5, 1 \times 10^7)$	Bottleneck and Expansion
Severity of bottleneck Africa: sev_A (decimal log)	$\text{unif}(-2, 2)$	Bottleneck
Time of split Africa-Europe (decimal log): T_{AE}	$\text{unif}(4, 7)$	Model A,B,C,D,E
Time of split Europe-North America (decimal log): T_{EN}	$\text{unif}(4, 7)$	Model A,B
Time of split Africa-North America (decimal log): T_{AN}	$\text{unif}(4, 7)$	Model D,E
Time of admixture (decimal log): T_{adm}	$\text{unif}(2, 4)$	Model C
Current size Europe: N_{Ec}	$\text{unif}(1 \times 10^4, 1 \times 10^7)$	Model A,B,C,D,E
Ancient size Europe (decimal log): N_{Ea}	$\text{unif}(2, 5)$	Model A,B,C,D,E
Current size North America: N_{Nc}	$\text{unif}(1 \times 10^4, 3 \times 10^7)$	Model A,B,C,D,E
Ancient size North America (decimal log): N_{Na}	$\text{unif}(2, 5)$	Model A,B,C,D,E
Proportion of European admixture: $Prop_{adm}$	$\text{unif}(0.01, 0.99)$	Model C
Migration rate (decimal log): M	$\text{unif}(-10, -2)$	Model B,E