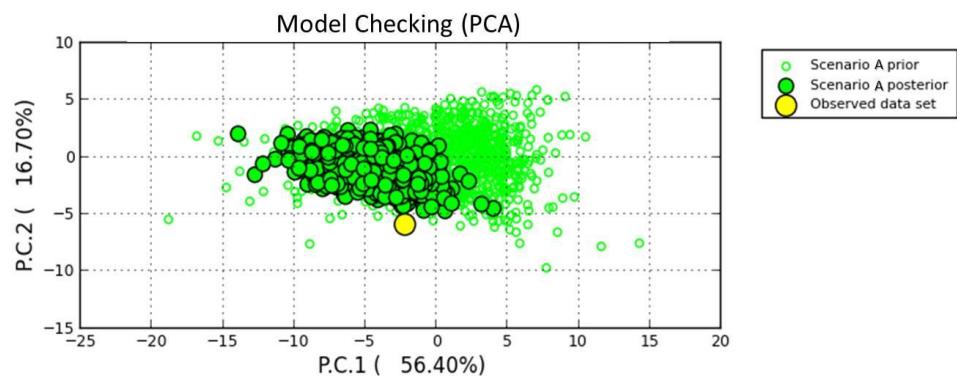
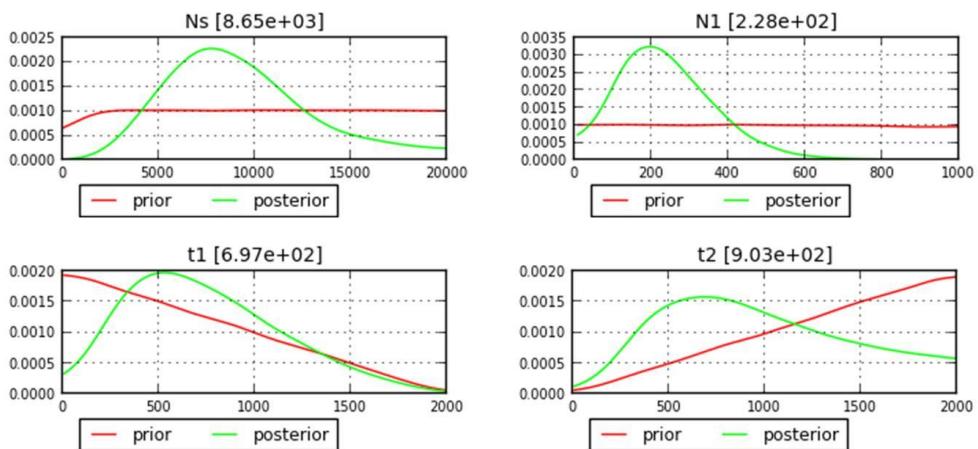


(a)



(b)

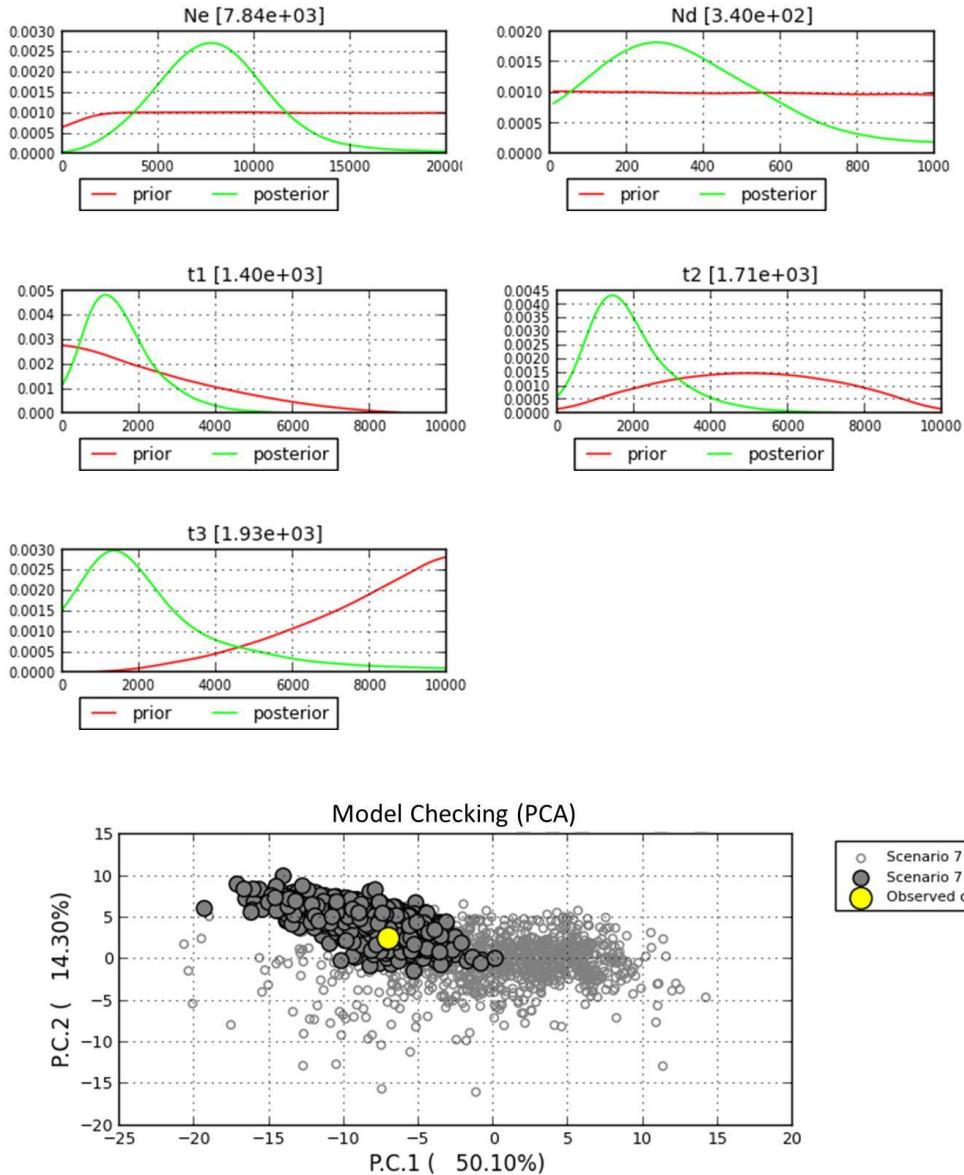


Fig. S4 The prior and posterior distributions of parameters and the Principal Component Analysis (PCA) of model checking in hierarchical ABC analyses. a, the diagrams of parameters (N_s, N_1, t_1, t_2) and PCA plots for scenario A; b, the diagrams of parameters (Ne, Nd, t_1, t_2, t_3) and PCA plots for scenario 7.