



**Figure S13** (A–D) BAYESCAN analyses of the datasets from Figure S1, using prior odds of 10 for the neutral model. (E) False positive rate as a function of the  $\log_{10}(\text{BF})$  threshold. Vertical lines indicate the  $\log_{10}(\text{BF}) = 1$ ,  $\log_{10}(\text{BF}) = 1.5$  and  $\log_{10}(\text{BF}) = 2$  thresholds, which correspond to “strong”, “very strong” and “decisive” support, respectively, following Jeffreys’ (1961) scale of evidence.