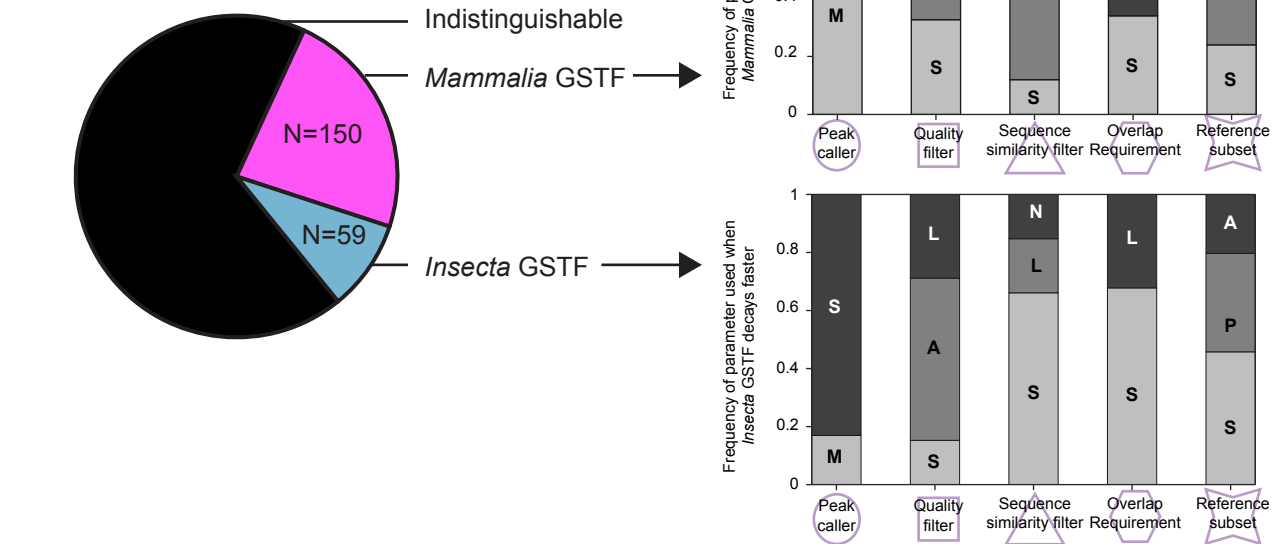


a

GSTF with the faster rate of change across 648 comparisons of analytical choices



b

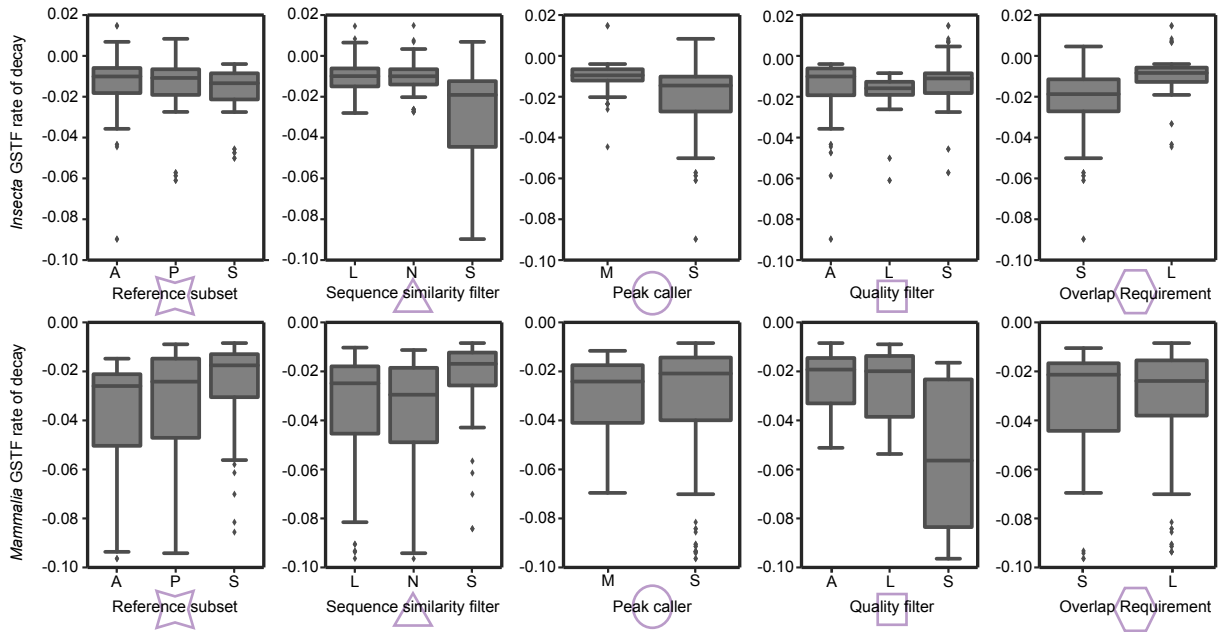


Figure 4 - figure supplement 1 | Measured GSTF binding divergence rates are influenced by parameter choices.

a. The pie chart on the left shows over 648 combinations, most combinations of parameters show indistinguishable rates of change, except 150 instances showed the mammalian GSTF decaying faster than the insect GSTF, and 59 indicated the opposite trend. The stacked histograms indicate how often a parameter was used when a difference in divergence rate was detected. For instance, 106/150 cases where *Mammalia* factors decayed significantly faster used MACS2 as a peak caller, whereas 49/59 cases of *Insecta* GSTF decaying faster used SPP. Interestingly, asymmetric quality filters showed an

enrichment for mammalian GSTFs decaying faster (84/150) as well as for insect GSTFs decaying faster (33/59).

b. Boxplots showing general influence of parameter choices on individual decay rates of *Insecta* (top) and *Mammalia* (bottom). Only instances when a significant fit was detected are considered. For example, for mammalian GSTFs, stringent quality filters yielded slightly faster decay rates than asymmetric or lenient quality filters. Summary of all parameter choices and the results are shown in **Fig. 4 – source data 2**. These parameters are further elaborated in **Fig. 4** and **Methods**.