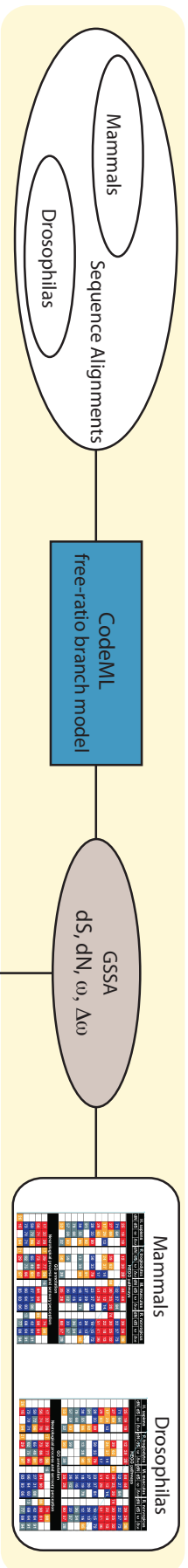
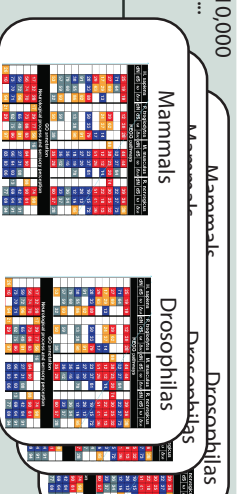
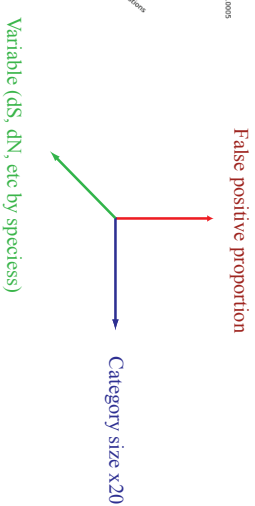
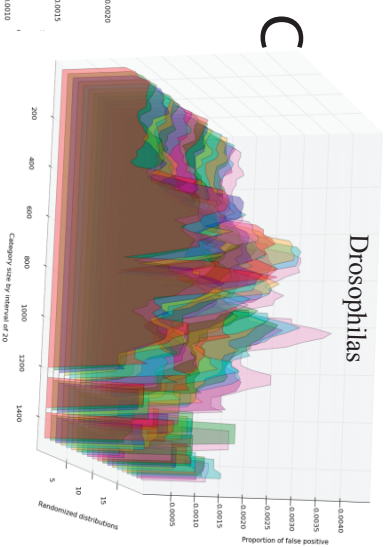
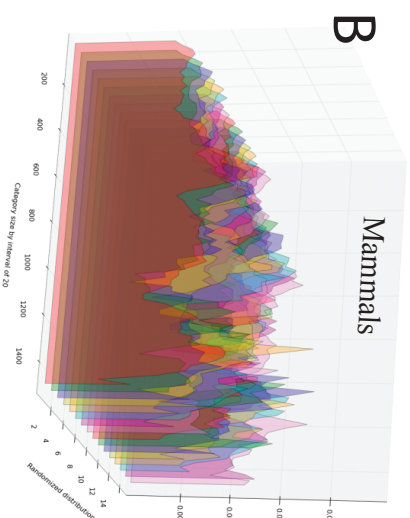
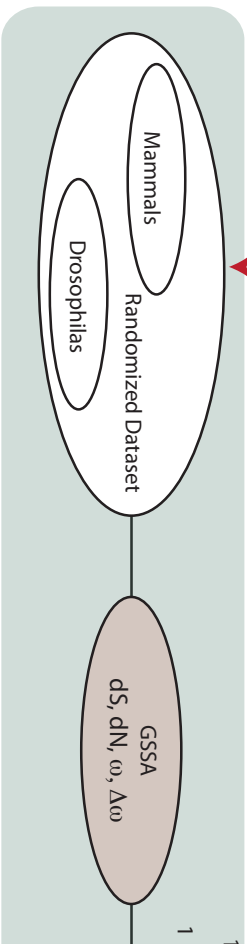
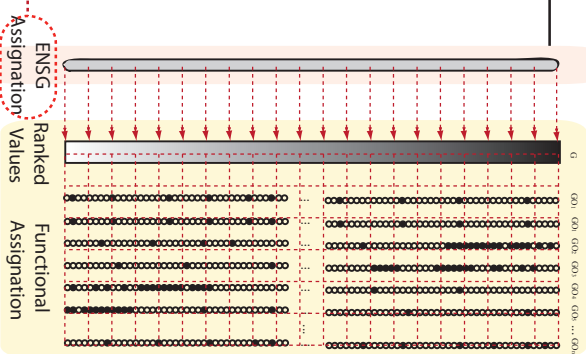


A

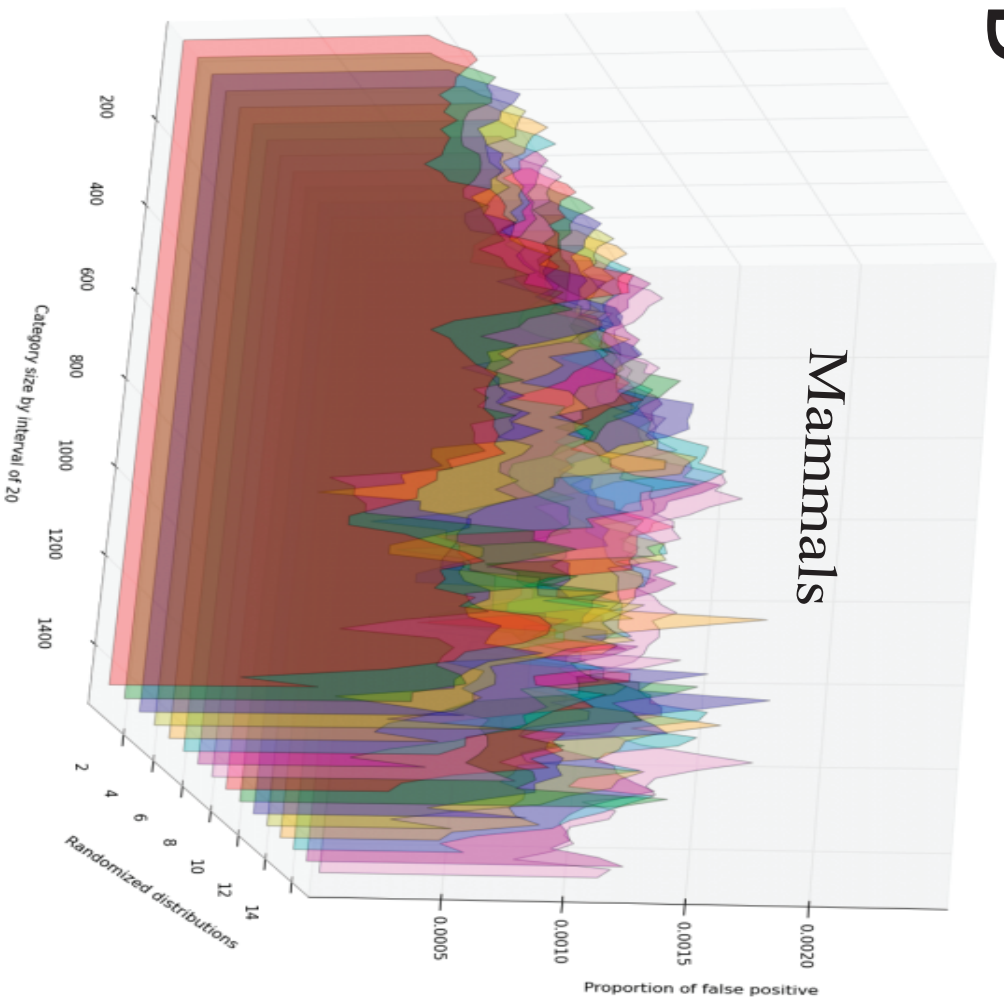


Obtain 10,000 randomized data for each evolutionary statistics ( $dS$ ,  $dN$ ,  $\omega$ ,  $\Delta\omega$ ) by arbitrary changing the ENSG assignment to the original list of ranked values and functional annotations



Count the number of false positives (red+orange and cyan+blue boxes over 10.000) considering the functional category size in each randomized variable

# B



False positive proportion

Category size x20

Variable ( $ds$ ,  $dN$ ,  $\omega$ ,  $\Delta\omega$ )

# C

