Right APOE2 Disaggregated by Sex

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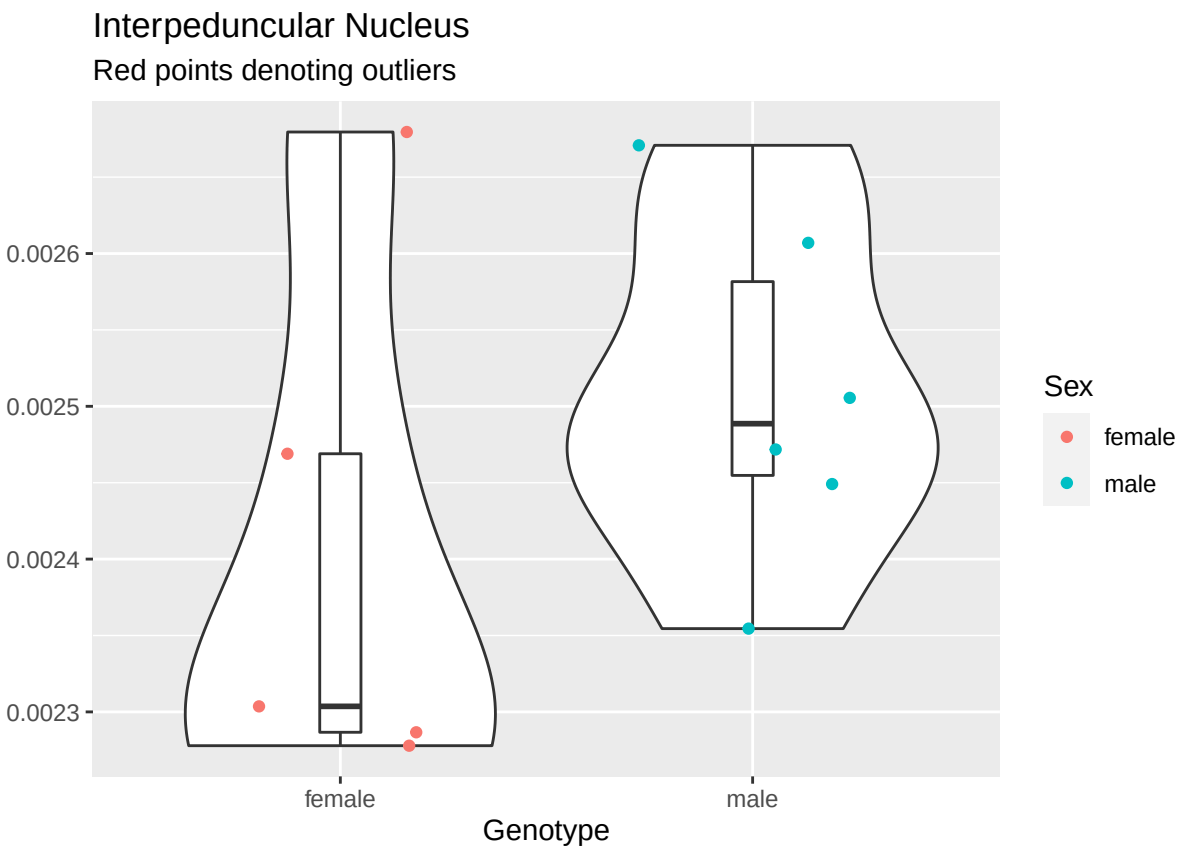
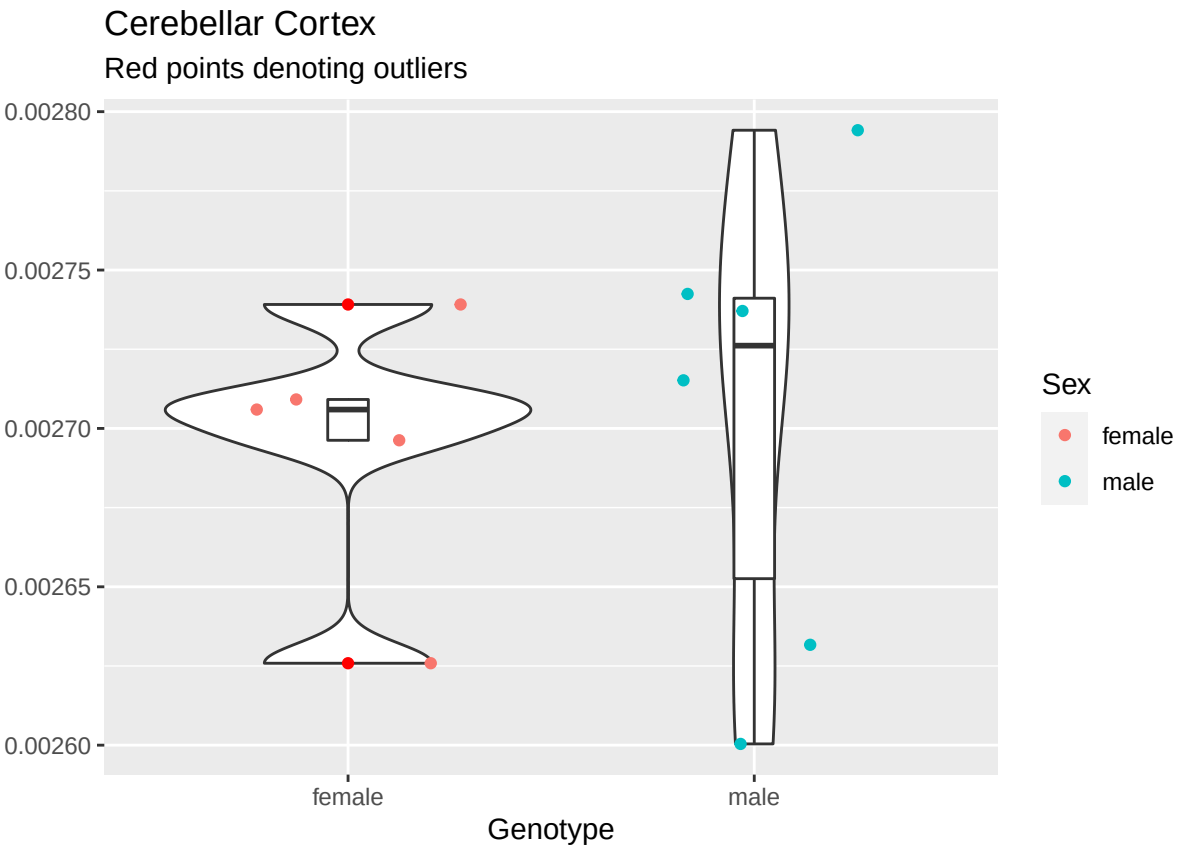
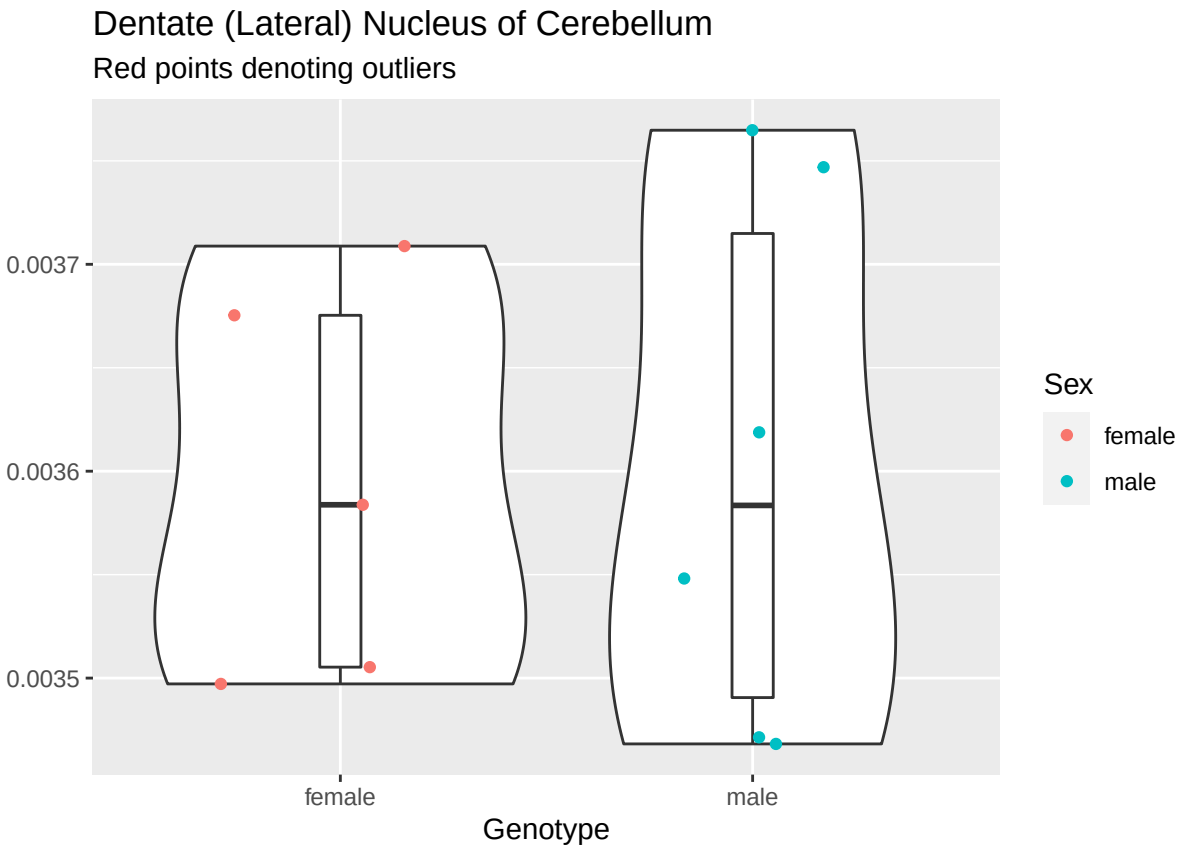
3/25/2021



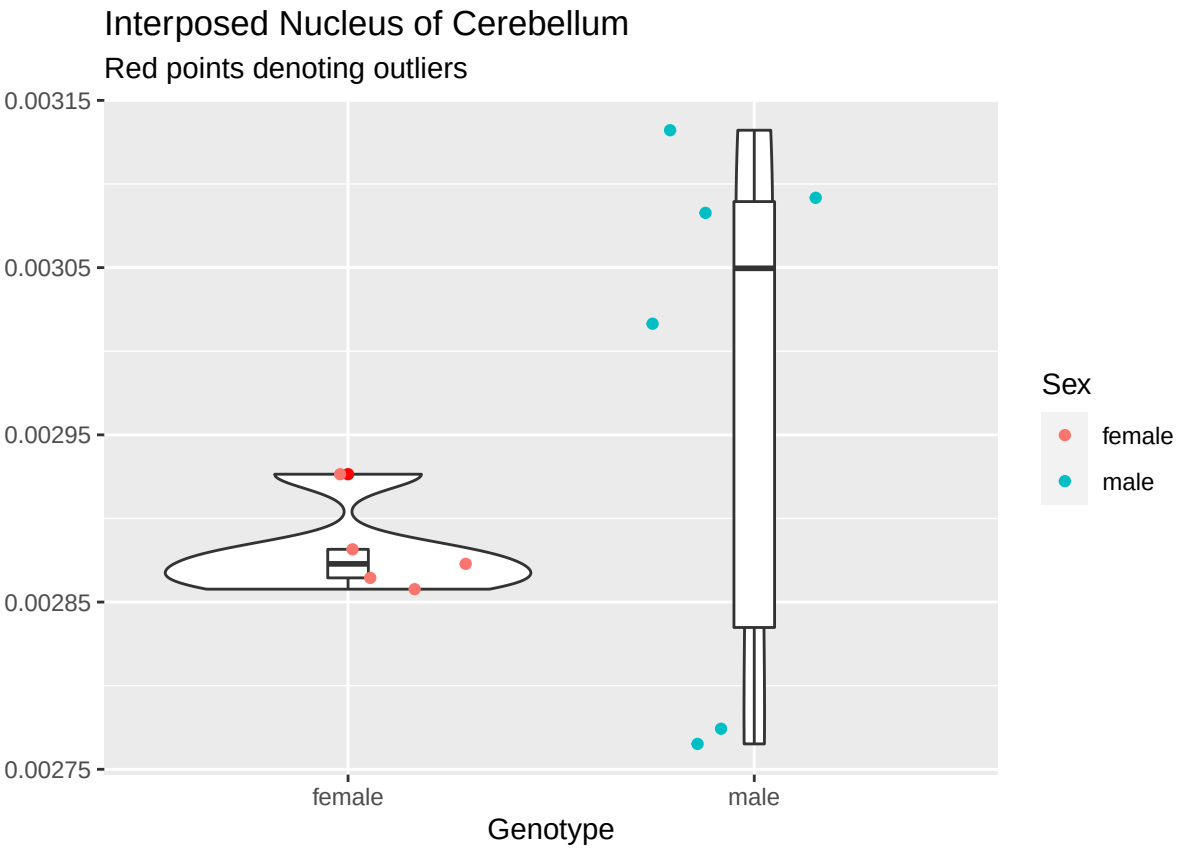

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.091e-08 3.091e-08   1.507  0.251
## Residuals    9 1.845e-07 2.050e-08
```



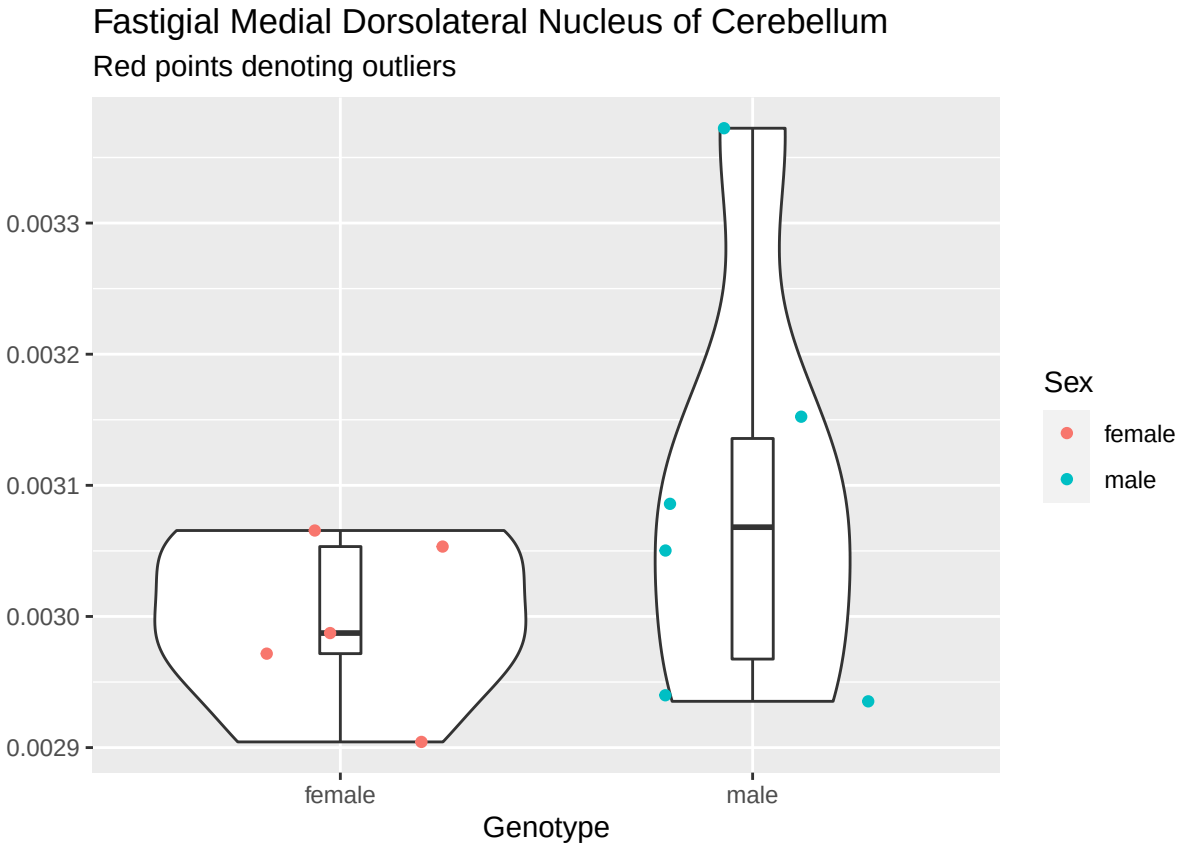

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.800e-10 1.840e-10   0.049   0.83
## Residuals    9 3.383e-08 3.759e-09
```



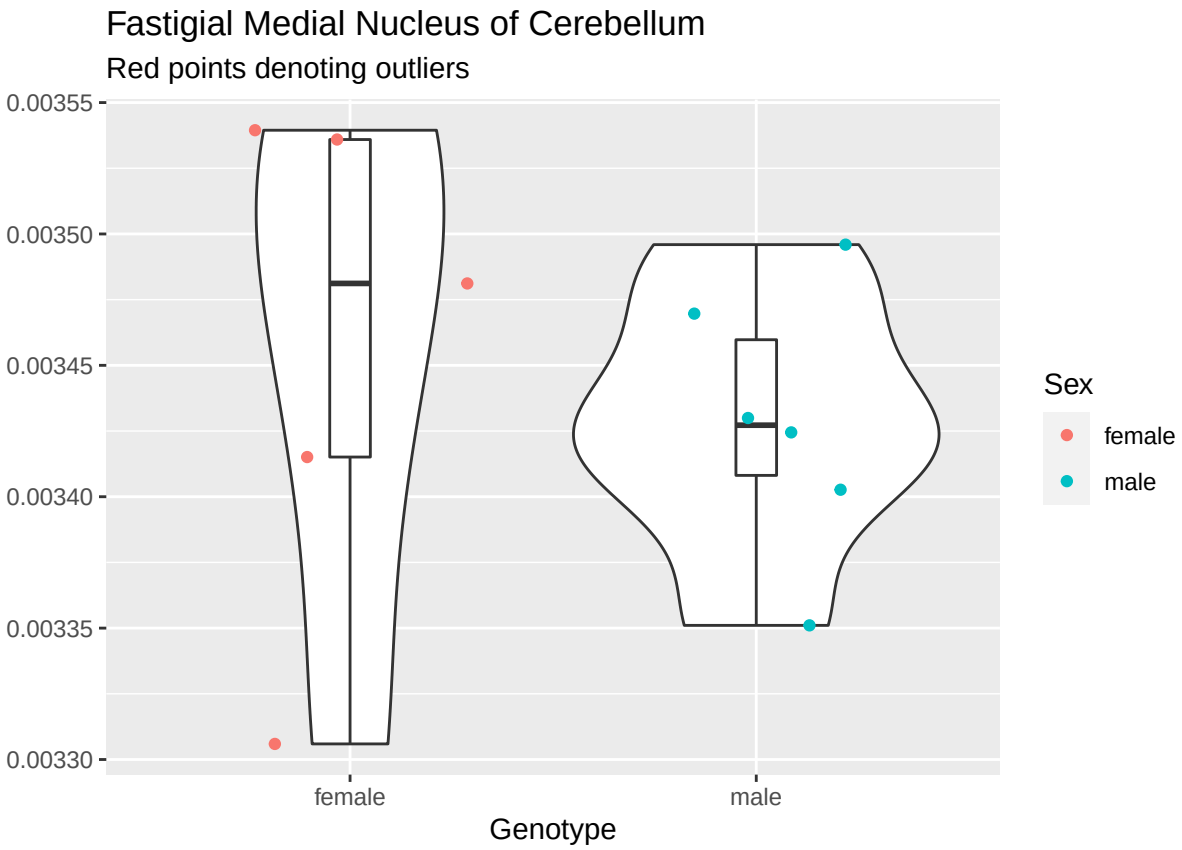

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.200e-10 2.190e-10   0.016  0.902
## Residuals    9 1.228e-07 1.365e-08
```




```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.539e-08 2.538e-08   1.645  0.232
## Residuals    9 1.389e-07 1.543e-08
```



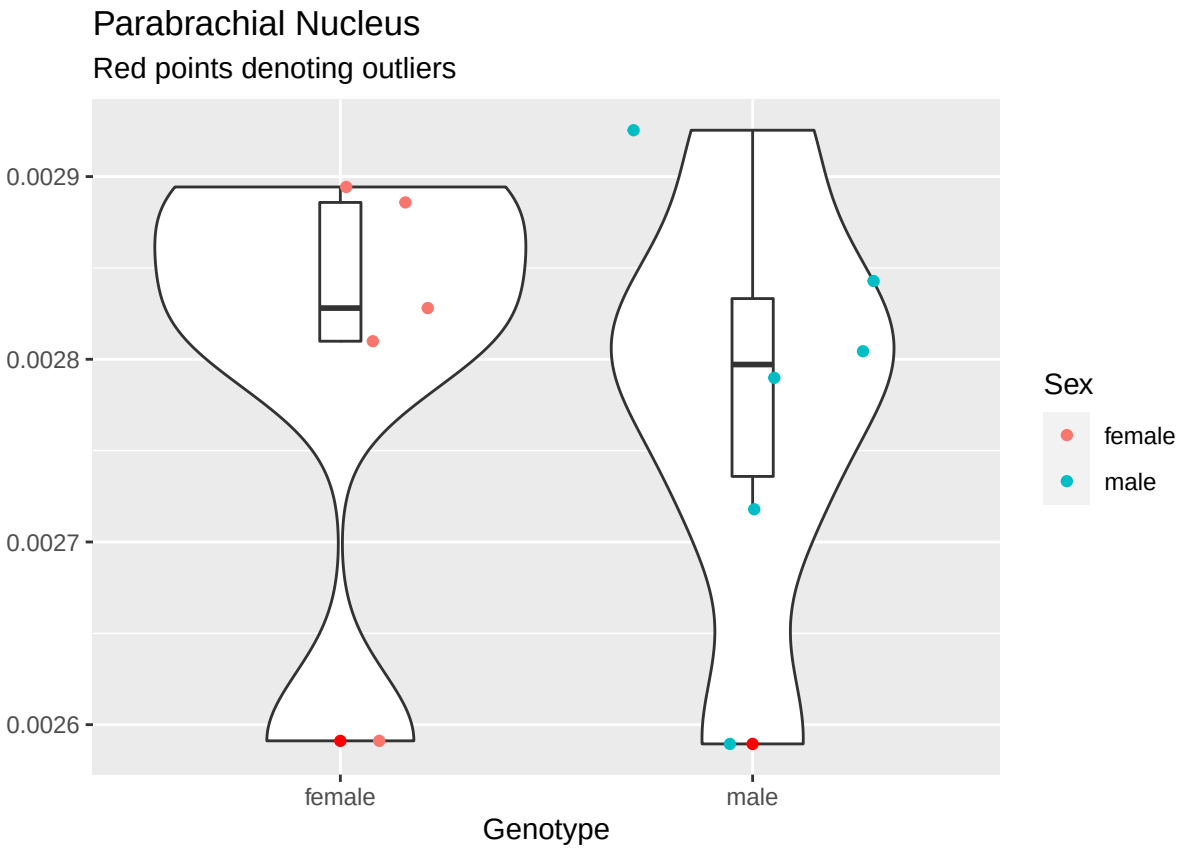

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.354e-08 2.354e-08   1.423  0.263
## Residuals    9 1.489e-07 1.654e-08
```



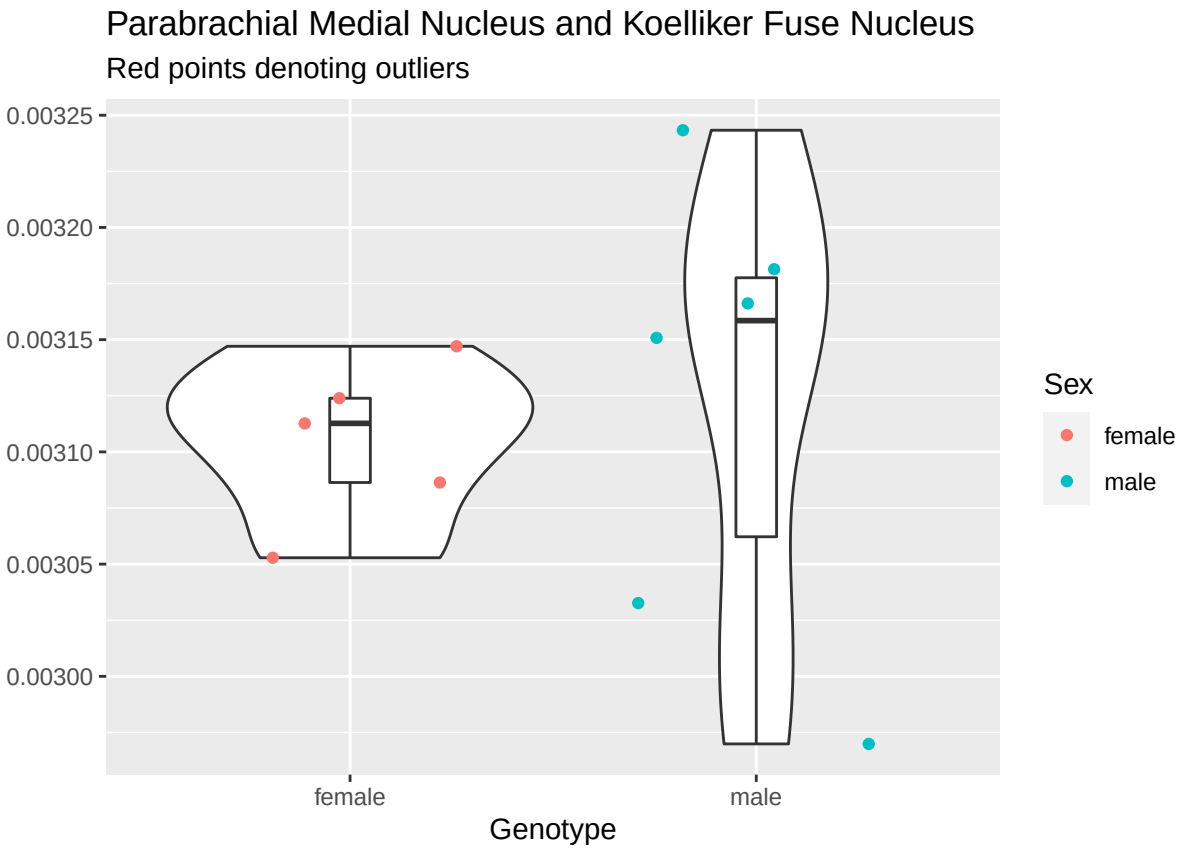

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.920e-09 1.924e-09   0.339  0.575
## Residuals    9 5.111e-08 5.679e-09
```

#“‘{r VII, echo = FALSE} #ggplot(data = apoe2, aes(factor(Sex), VII)) + #geom_violin() + #geom_boxplot(width = 0.1, outlier.color = “red”) + #geom_jitter(height = 0, width = 0.3) + #labs(x = “Genotype”, #y = "“, #title =”Ventral Lateral Lemniscus Nucleus“, #subtitle =”Red points denoting outliers")

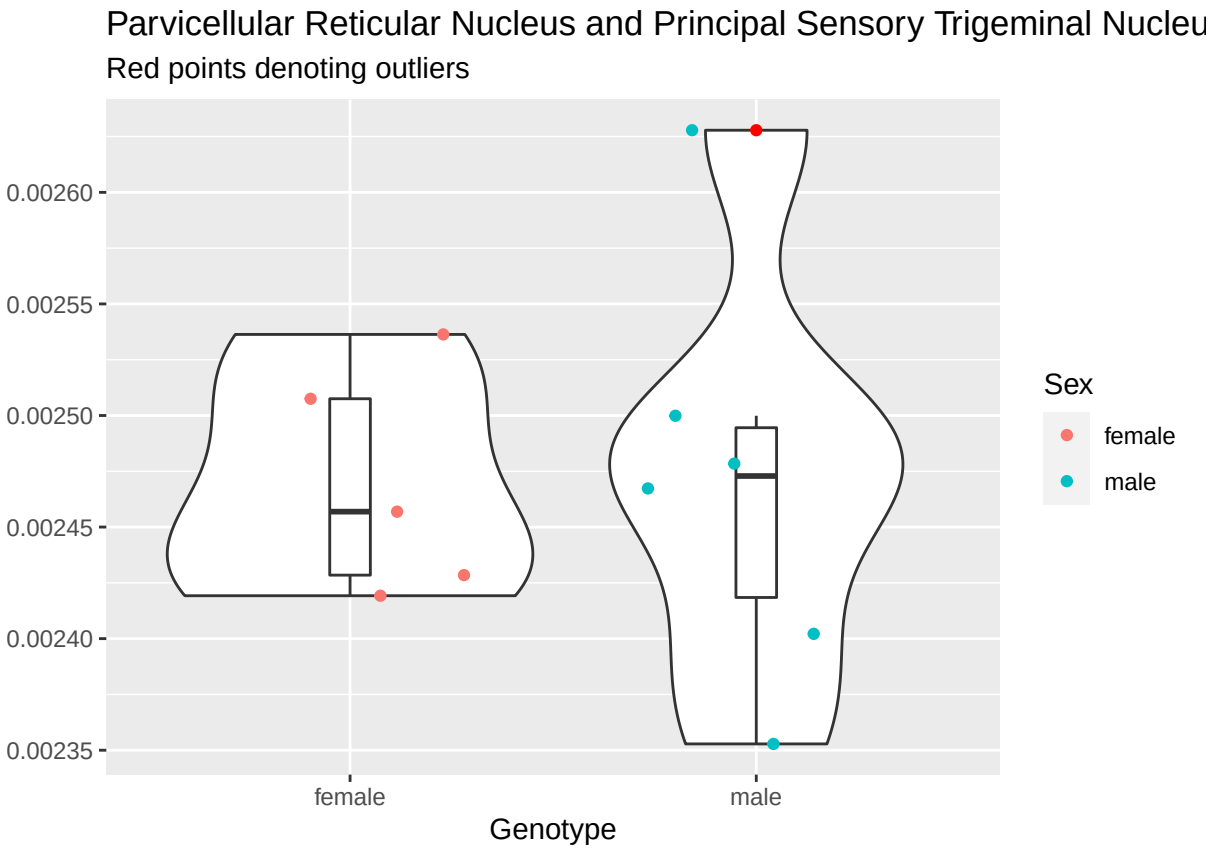
#res.aov <- aov(VII ~ Sex, data = apoe2) #summary(res.aov) #“‘



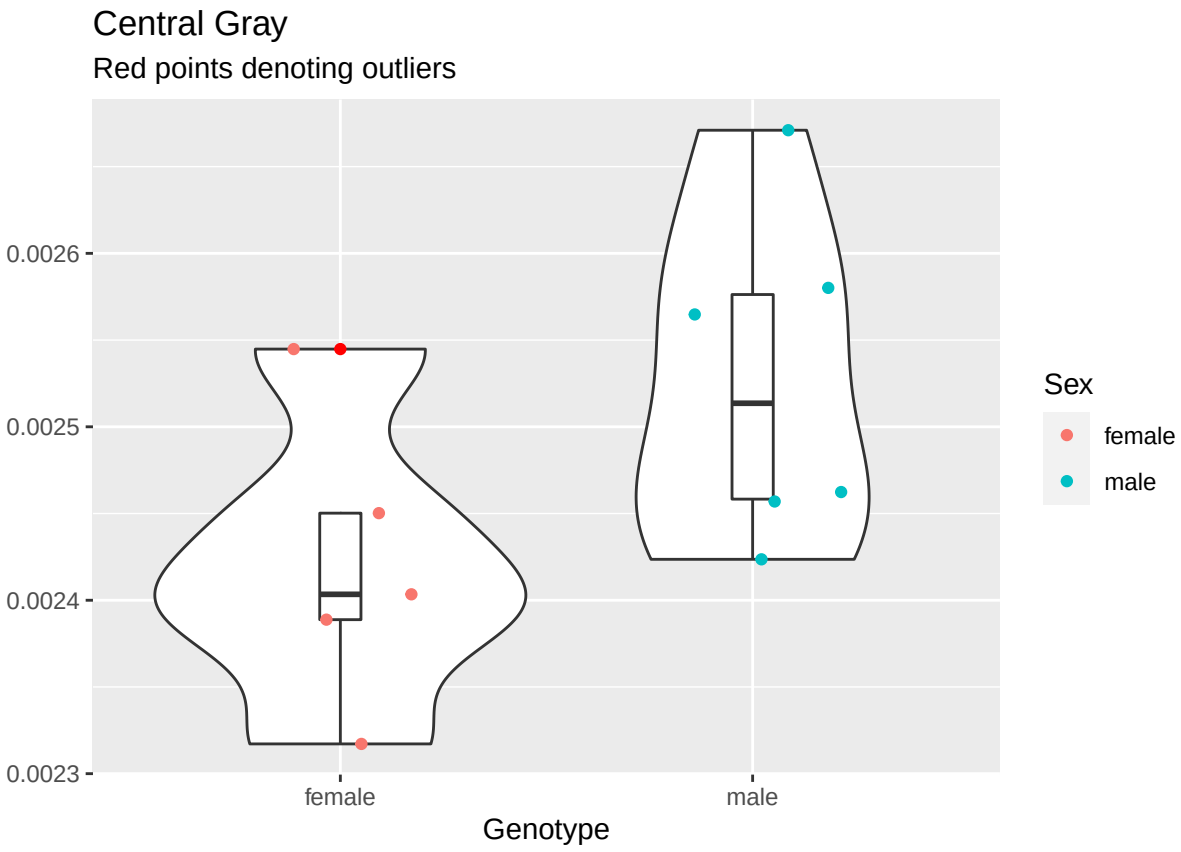

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.510e-09 1.511e-09   0.107  0.751
## Residuals    9 1.267e-07 1.408e-08
```



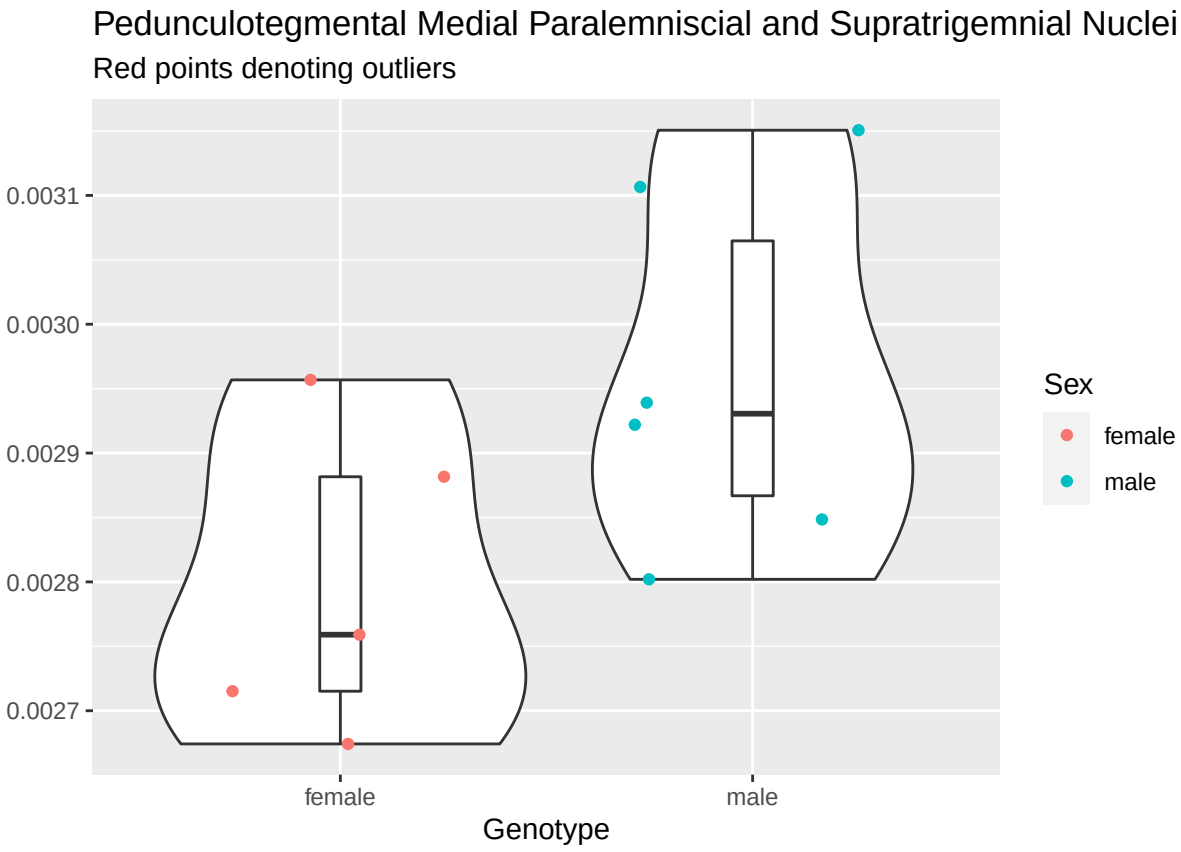

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.030e-09 1.033e-09   0.162  0.697
## Residuals    9 5.738e-08 6.376e-09
```



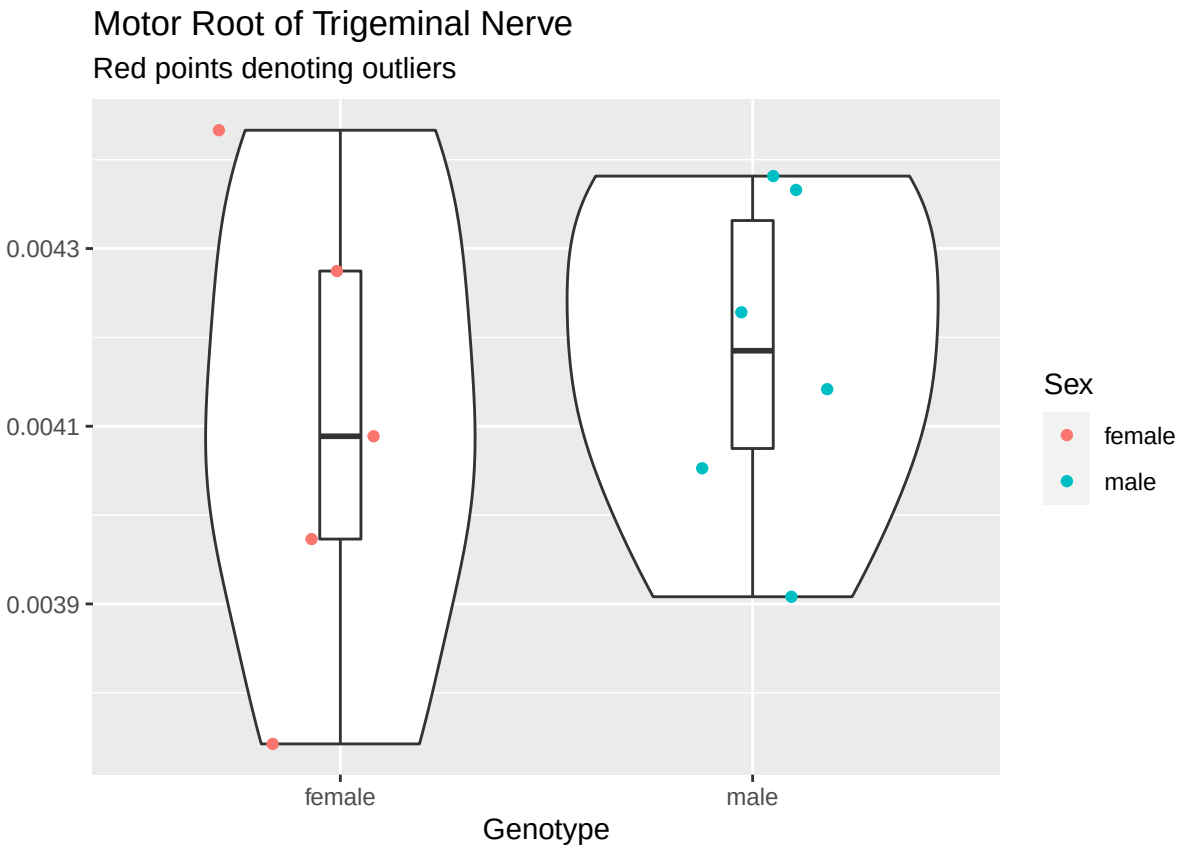

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.000e-11 8.000e-12   0.001  0.972
## Residuals    9 5.449e-08 6.054e-09
```



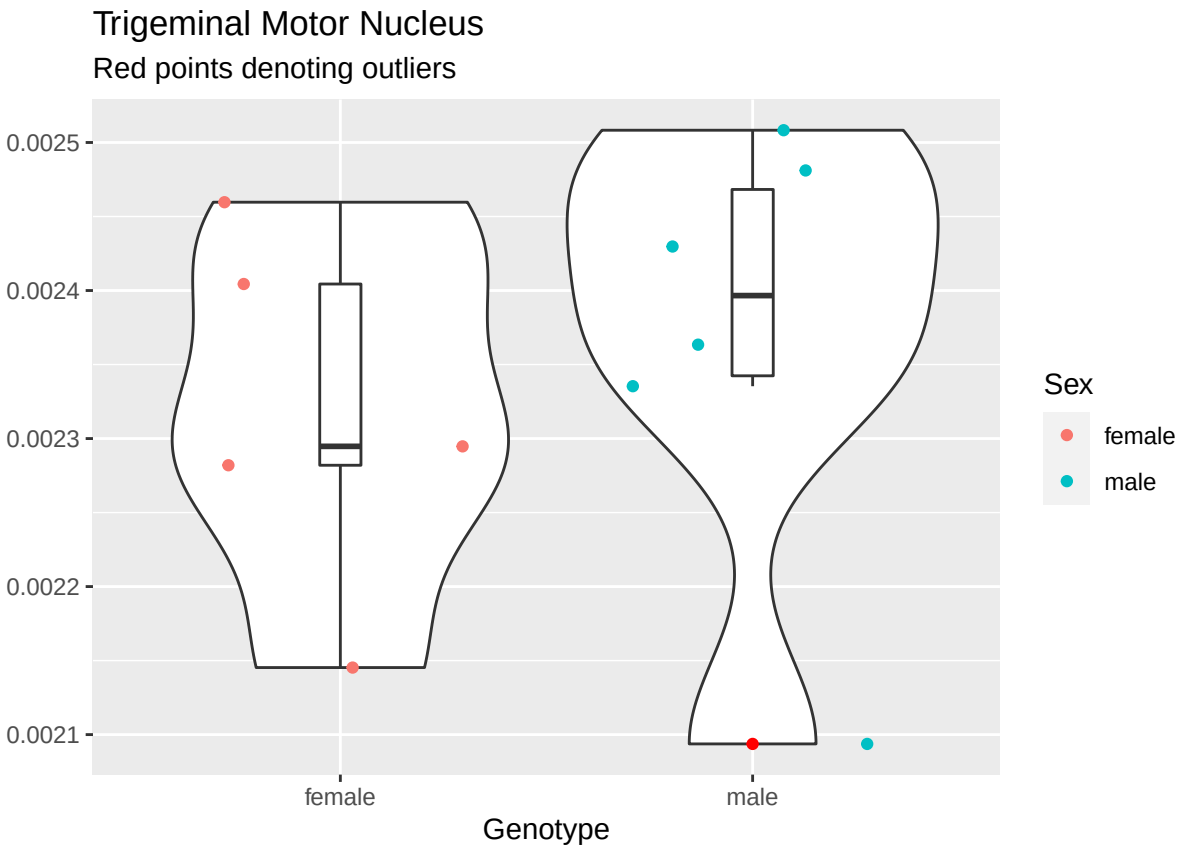

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.040e-08 3.040e-08   3.745  0.085 .
## Residuals    9 7.307e-08 8.119e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



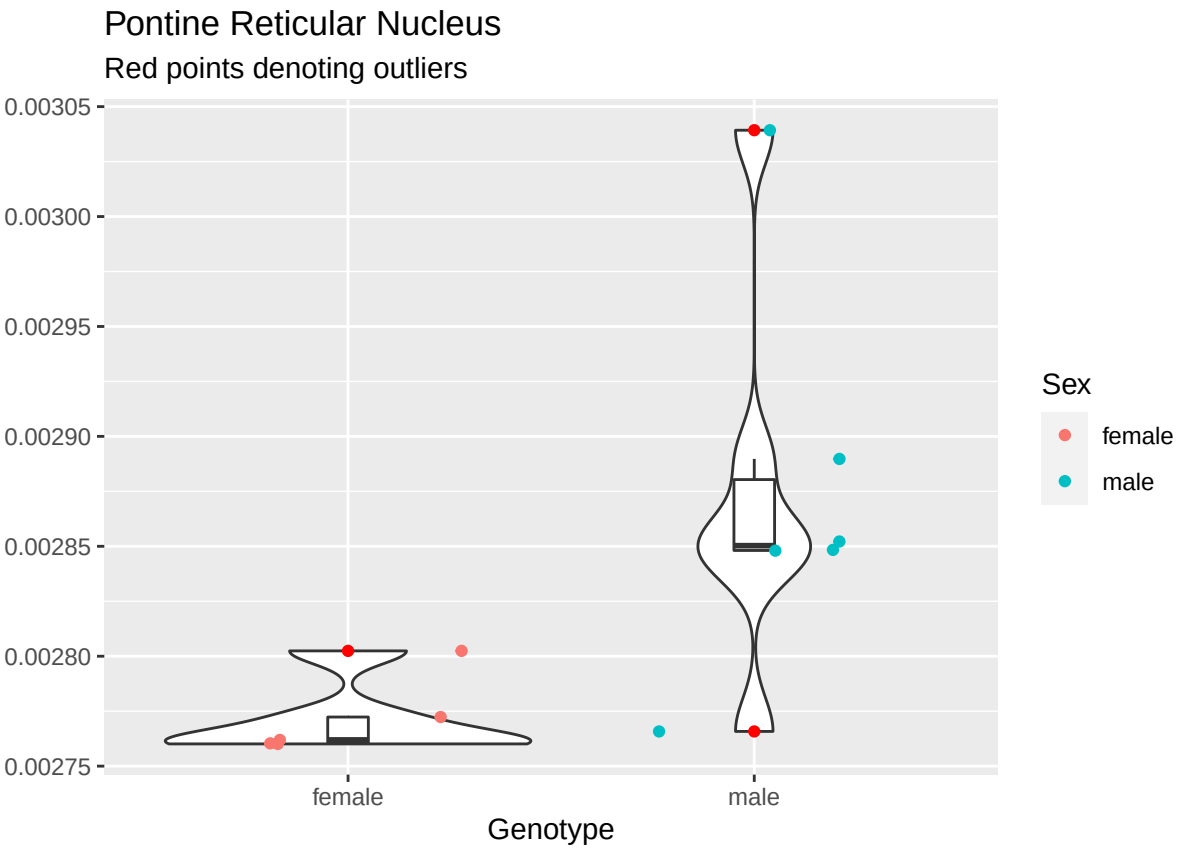

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 7.344e-08 7.344e-08    4.32 0.0674 .
## Residuals    9 1.530e-07 1.700e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



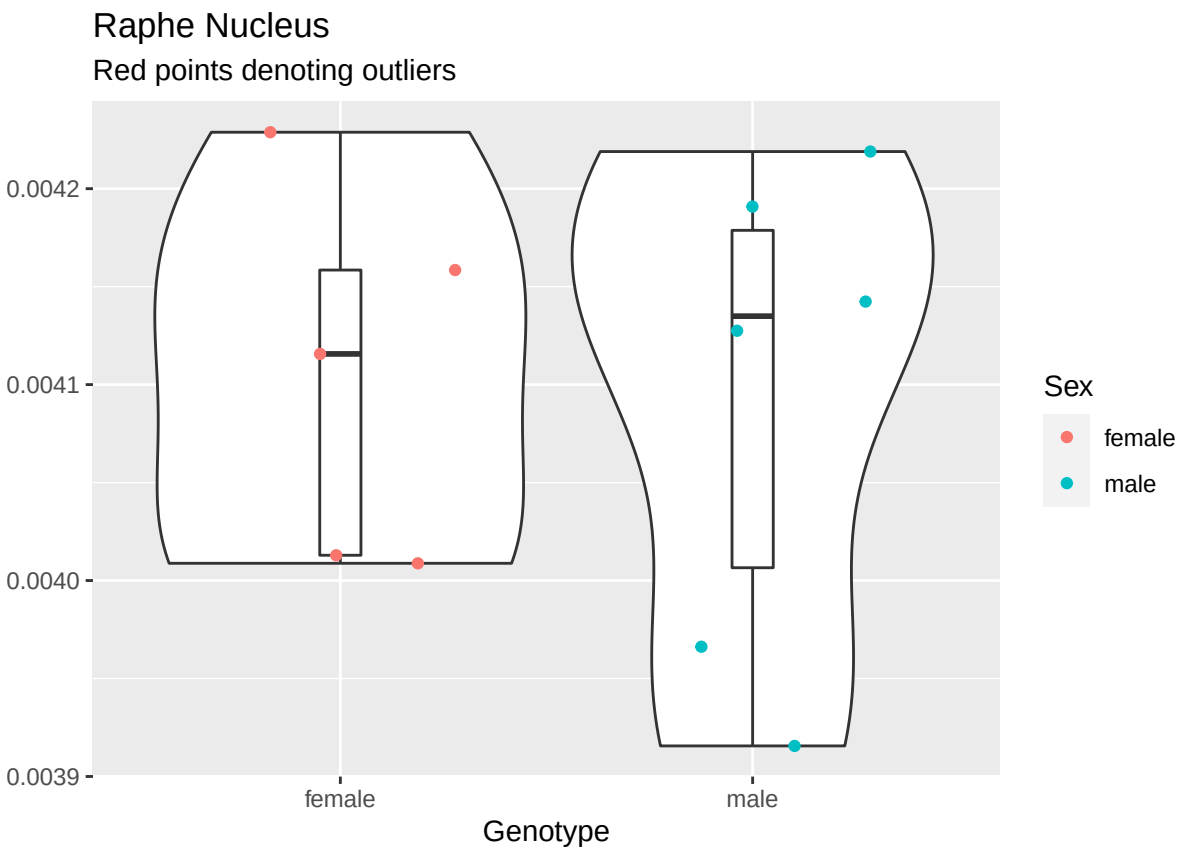

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.630e-08 1.630e-08   0.323  0.584
## Residuals    9 4.547e-07 5.052e-08
```



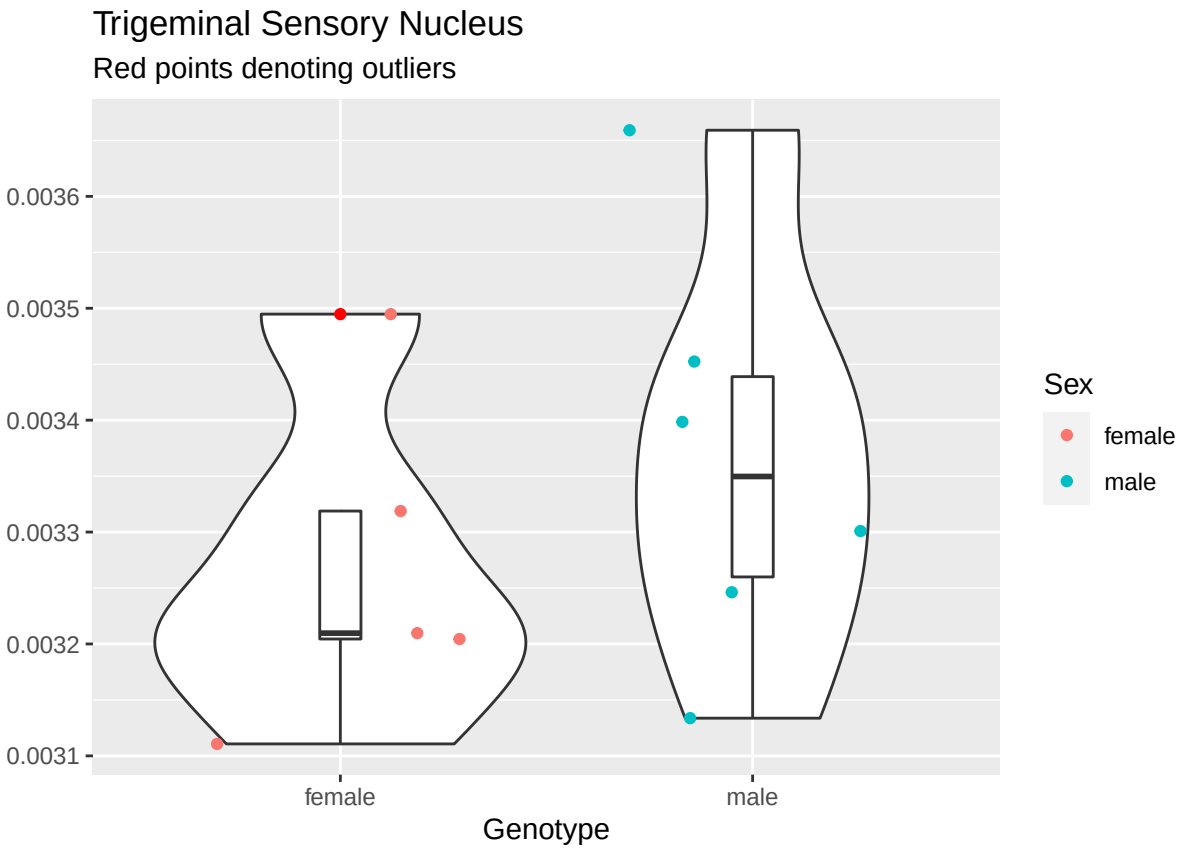

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 7.200e-09 7.204e-09   0.377  0.554
## Residuals    9 1.718e-07 1.909e-08
```



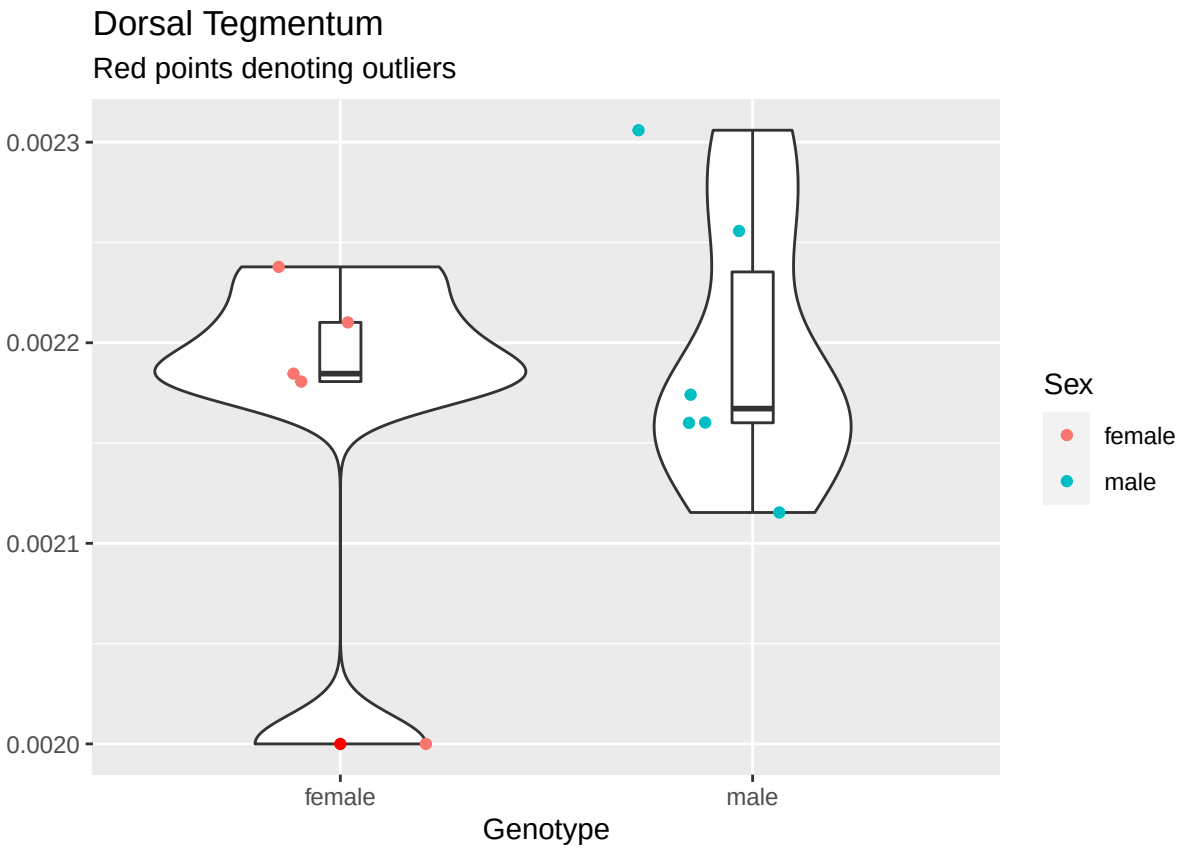

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.863e-08 2.864e-08    6.08 0.0358 *
## Residuals    9 4.238e-08 4.709e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



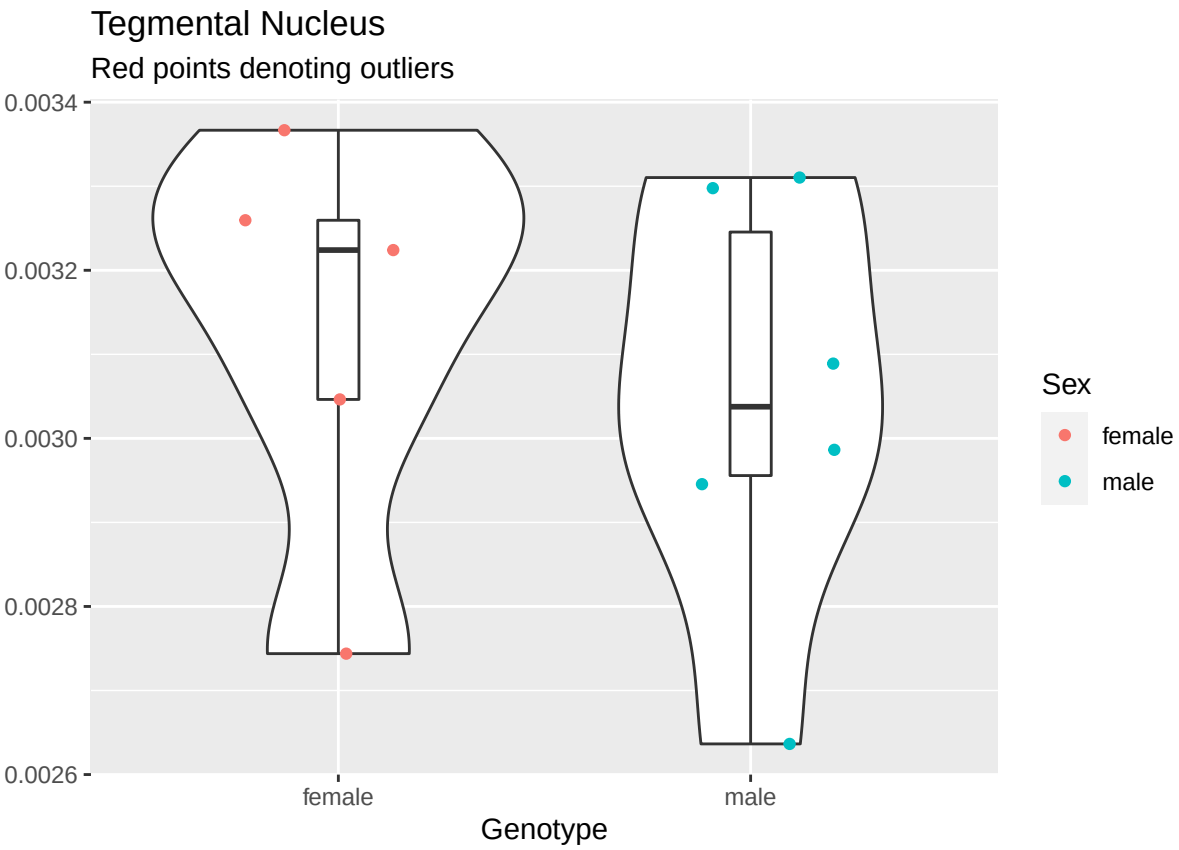

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.500e-10 3.510e-10   0.028  0.871
## Residuals    9 1.127e-07 1.252e-08
```



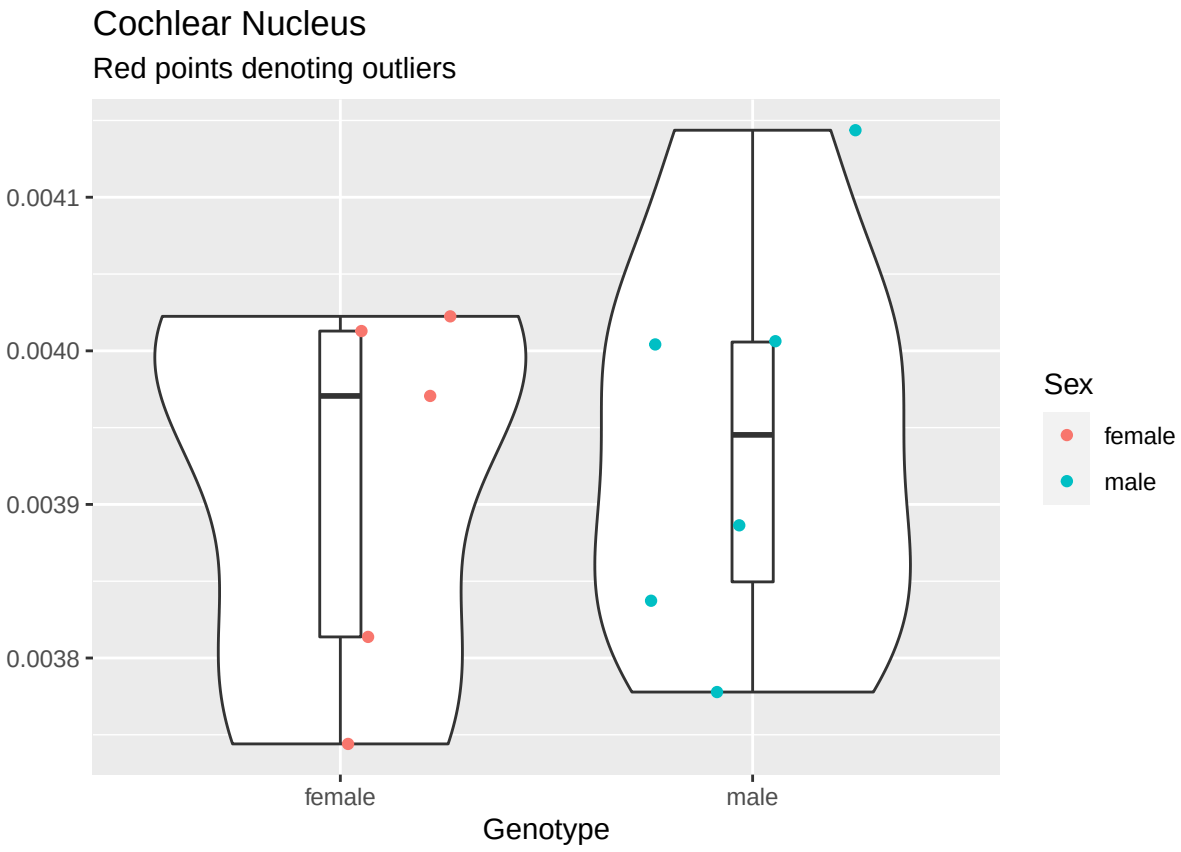

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.591e-08 2.591e-08   0.921  0.362
## Residuals    9 2.532e-07 2.813e-08
```



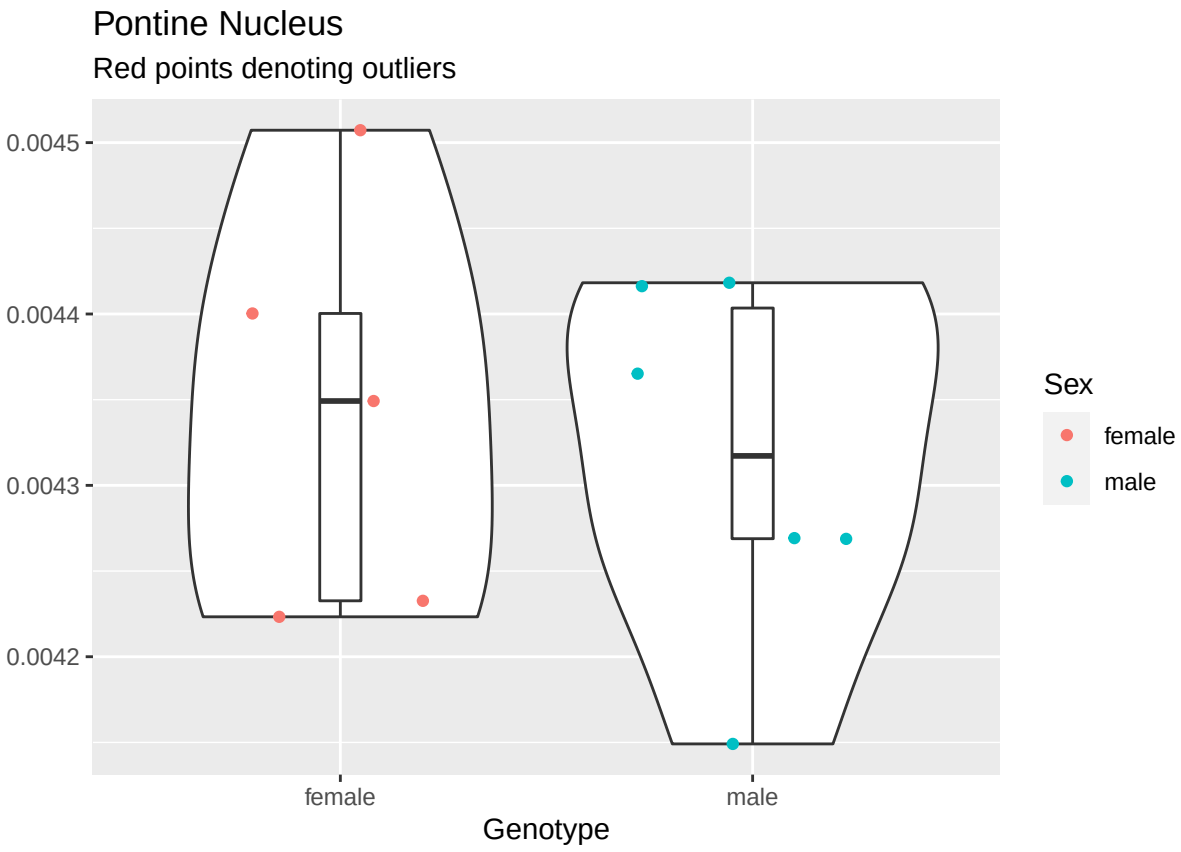

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.900e-09 2.898e-09   0.432  0.528
## Residuals    9 6.038e-08 6.709e-09
```



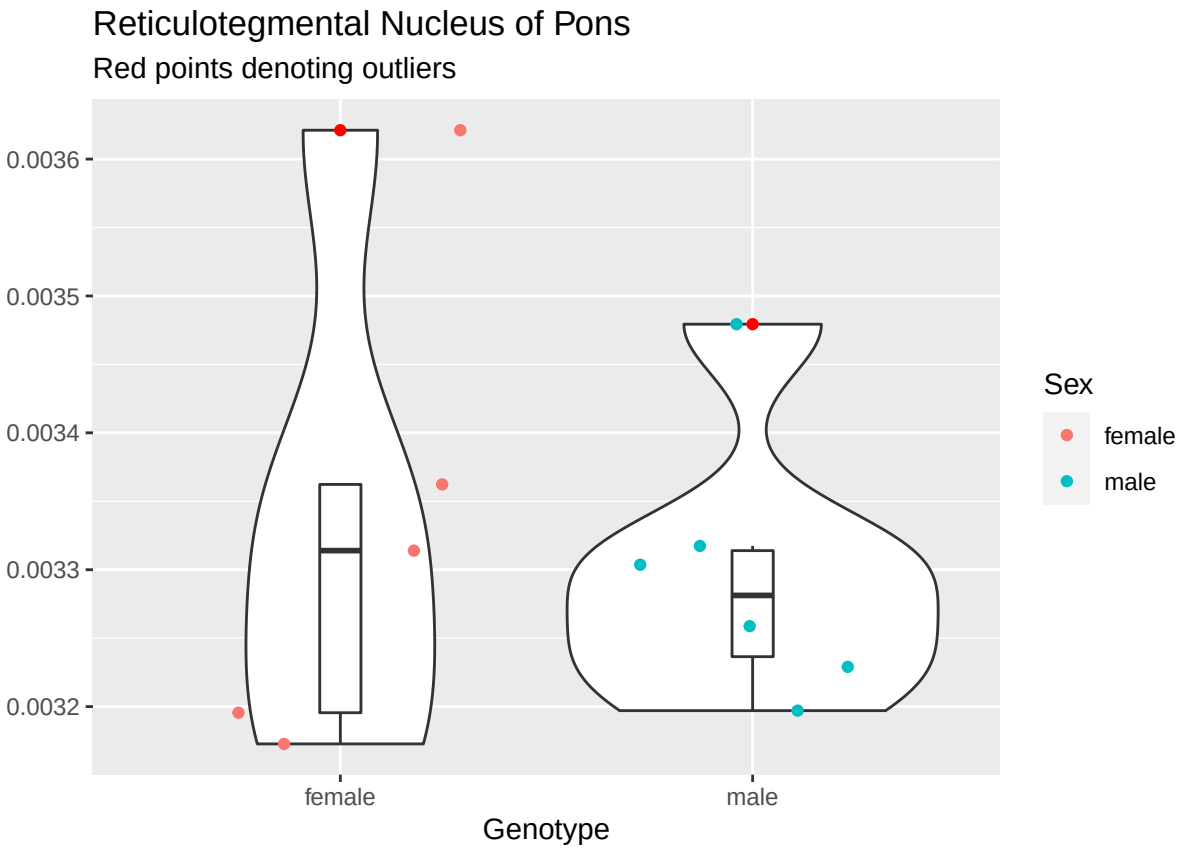

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.920e-08 1.918e-08   0.312   0.59
## Residuals    9 5.542e-07 6.157e-08
```



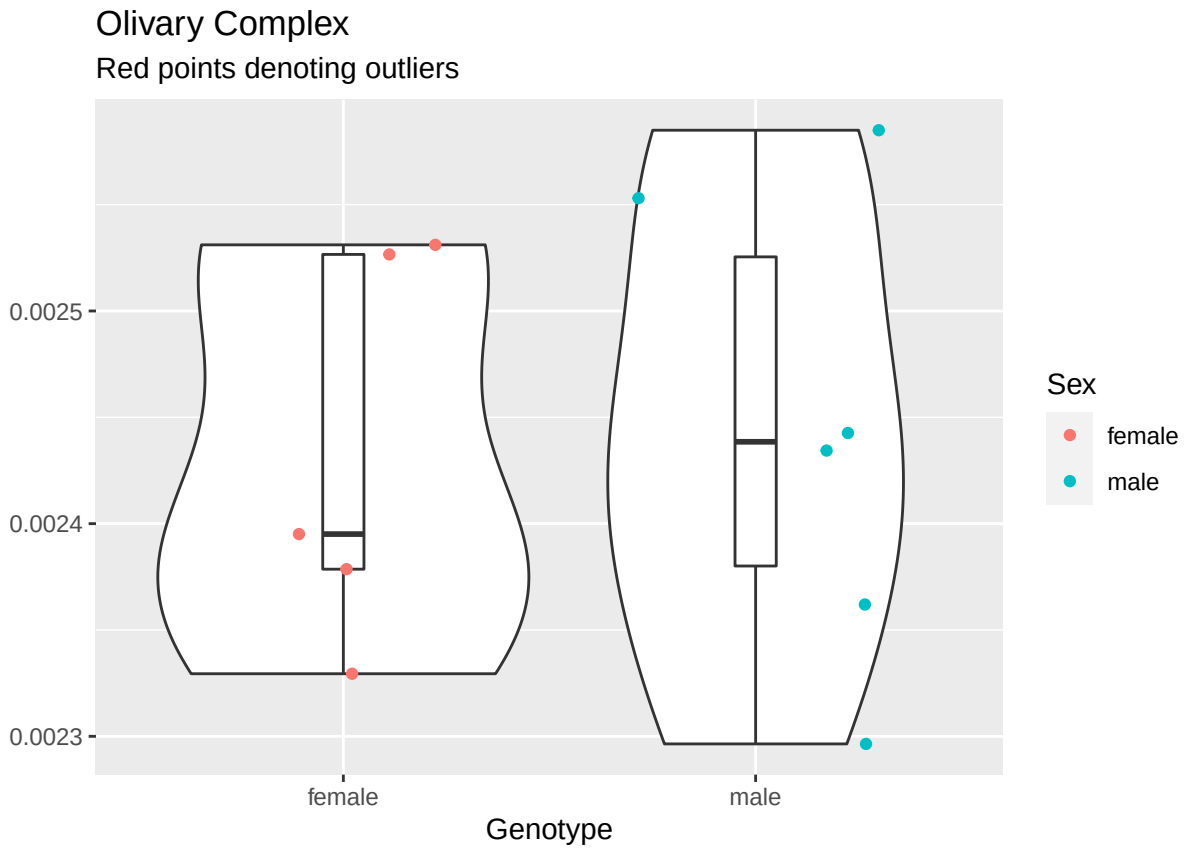

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.430e-09 2.430e-09   0.143  0.714
## Residuals    9 1.533e-07 1.704e-08
```




```
##             Df   Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.15e-09 2.150e-09   0.173  0.687
## Residuals    9 1.12e-07 1.244e-08
```



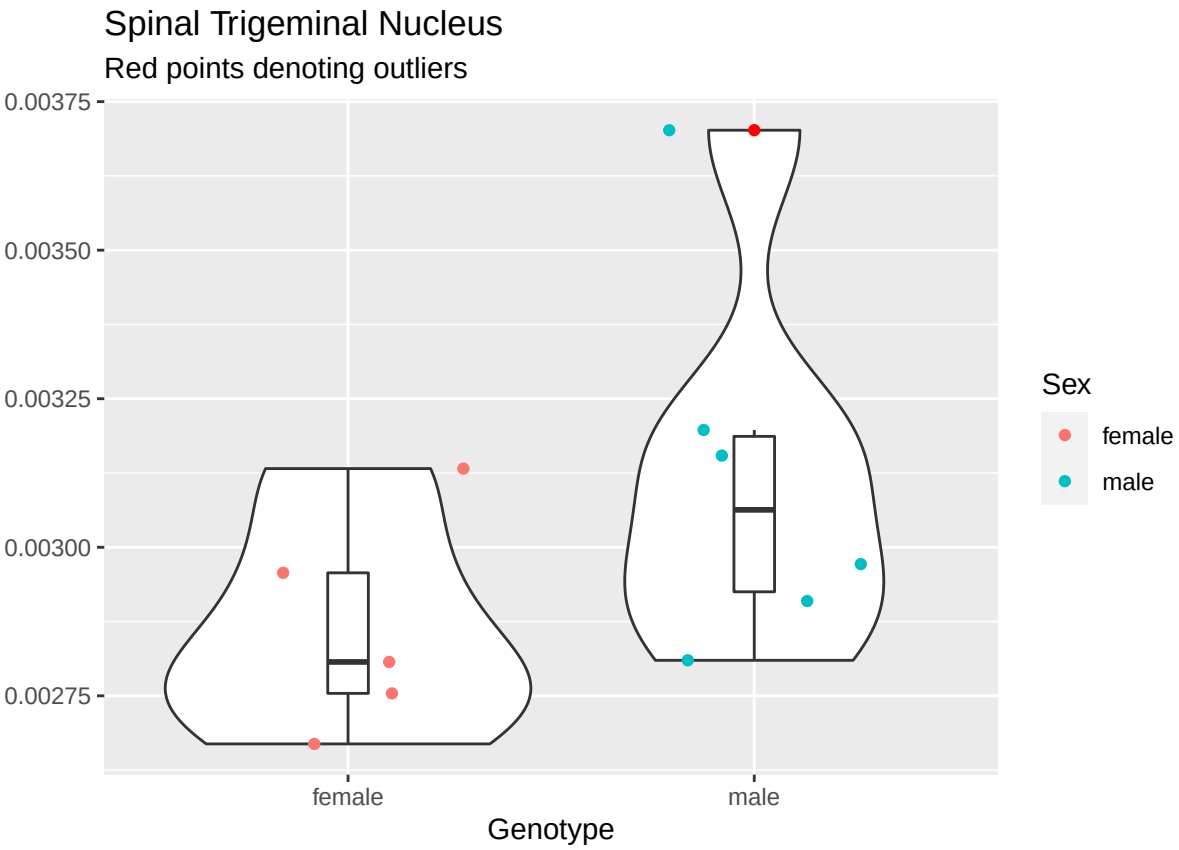

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.450e-09 3.452e-09   0.174  0.686
## Residuals    9 1.786e-07 1.984e-08
```



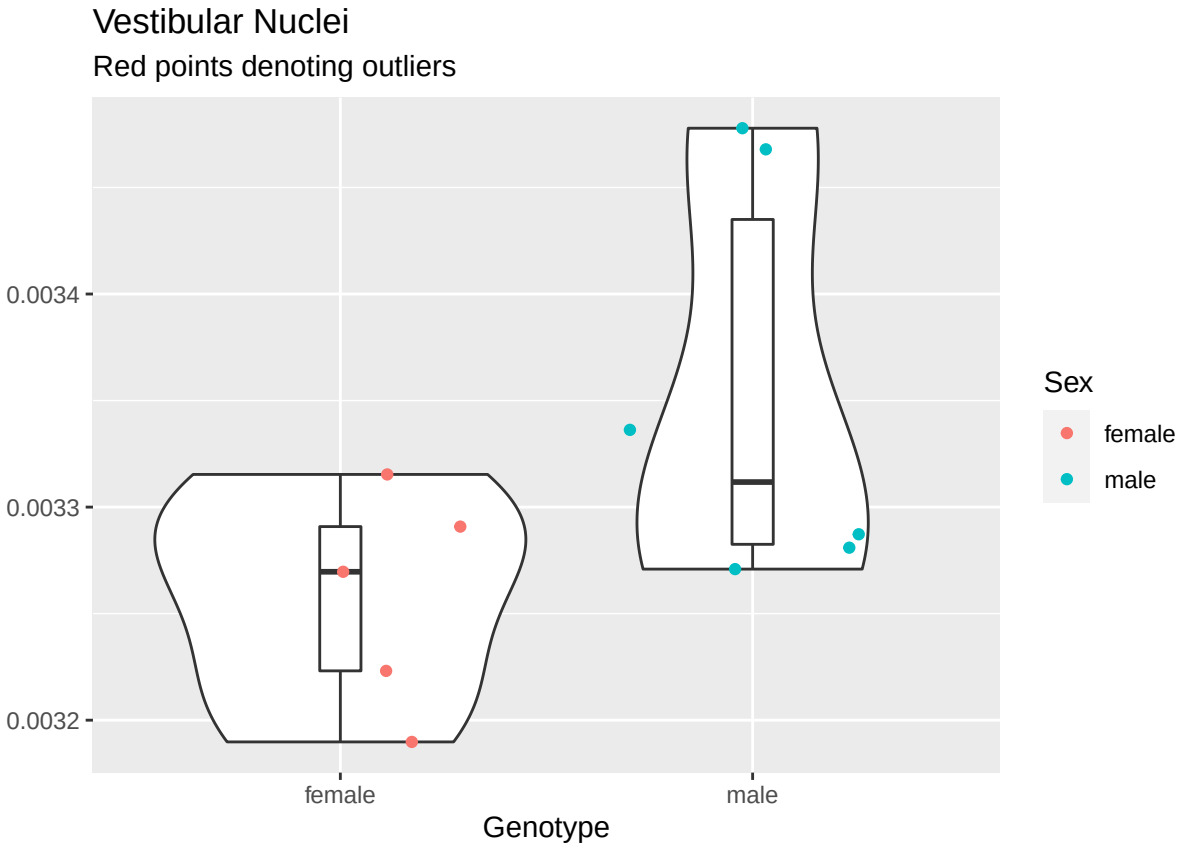

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 4.900e-10 4.910e-10   0.047  0.833
## Residuals    9 9.385e-08 1.043e-08
```

#“‘{r PnRt, echo = FALSE} #ggplot(data = apoe2, aes(factor(Sex), PnRt)) + # geom_violin() + # geom_boxplot(width = 0.1, outlier.color = “red”) + # geom_jitter(height = 0, width = 0.3) + # labs(x = “Genotype”, # y = "“, # title =”Pontine Reticular Nucleus“, # subtitle =”Red points denoting outliers")

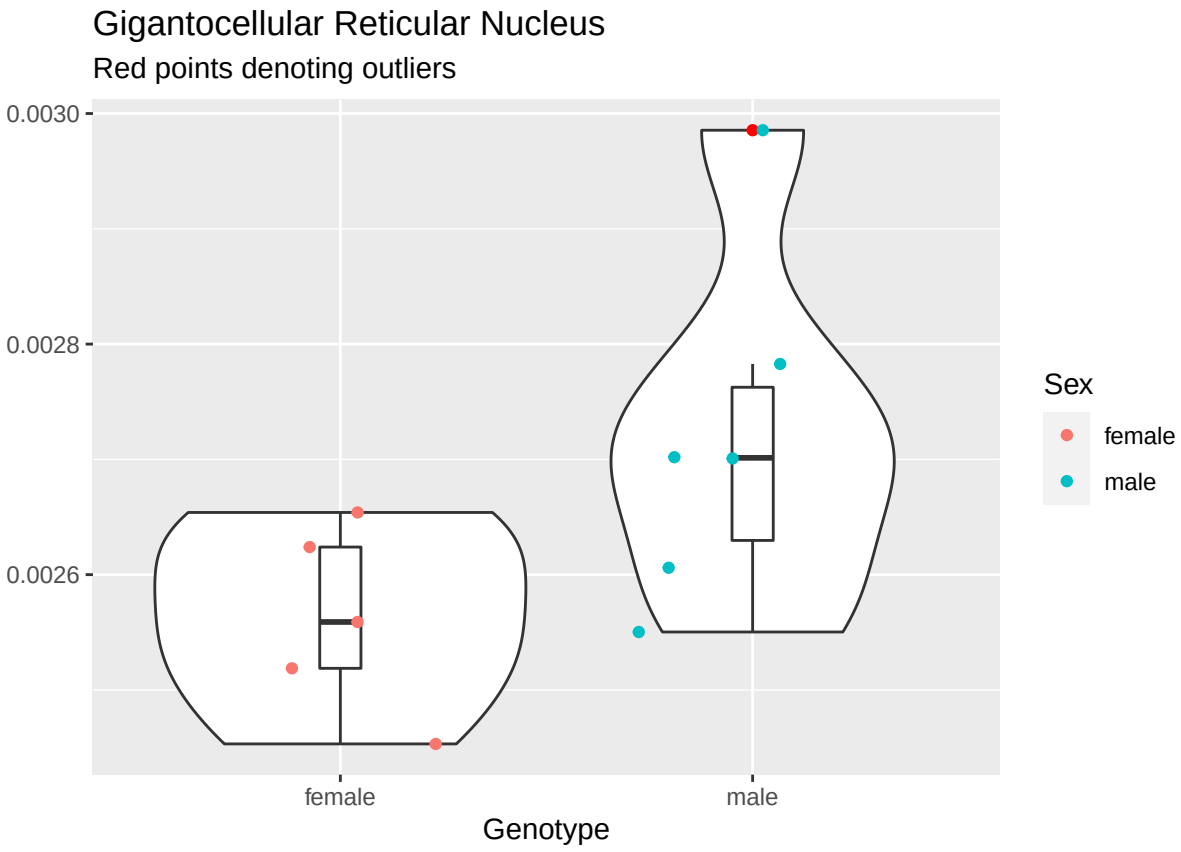
#res.aov <- aov(PnRt ~ Sex, data = apoe2) #summary(res.aov) #“‘



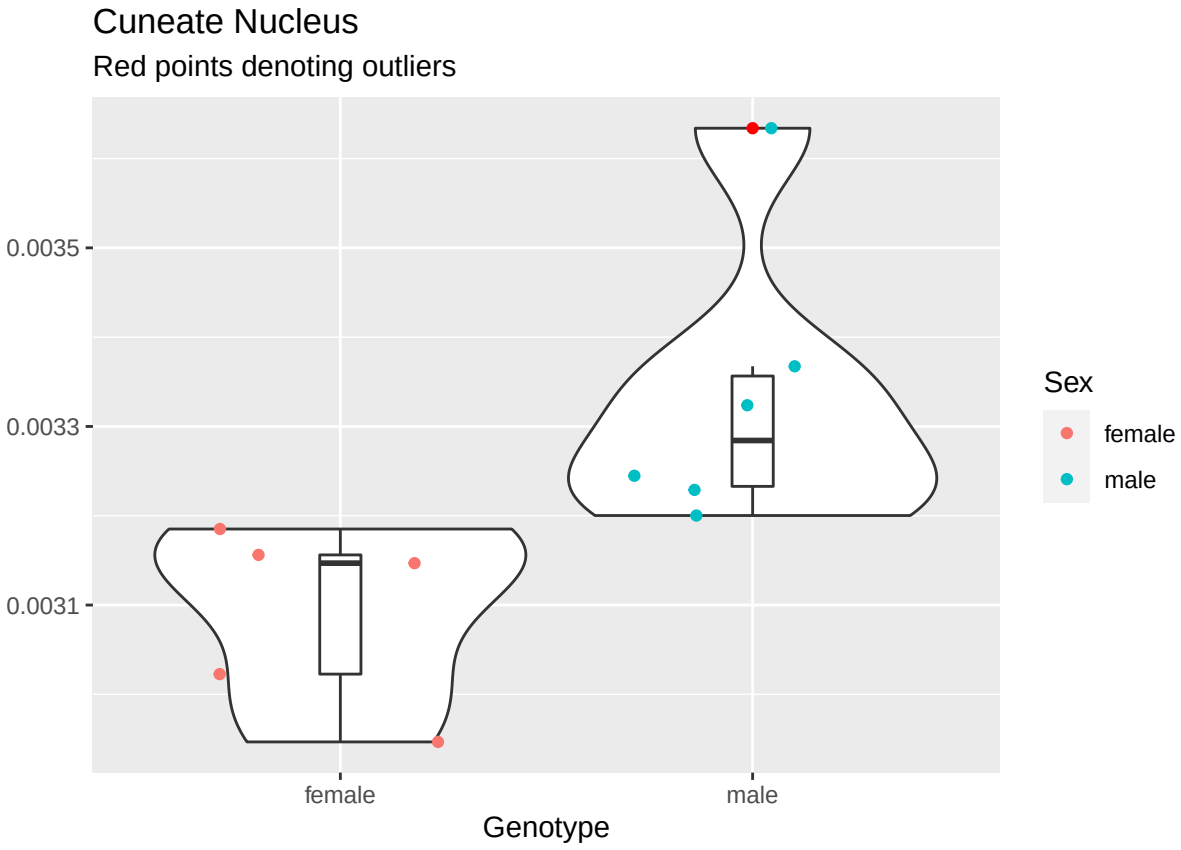

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.846e-07 1.846e-07   2.587  0.142
## Residuals    9 6.422e-07 7.136e-08
```



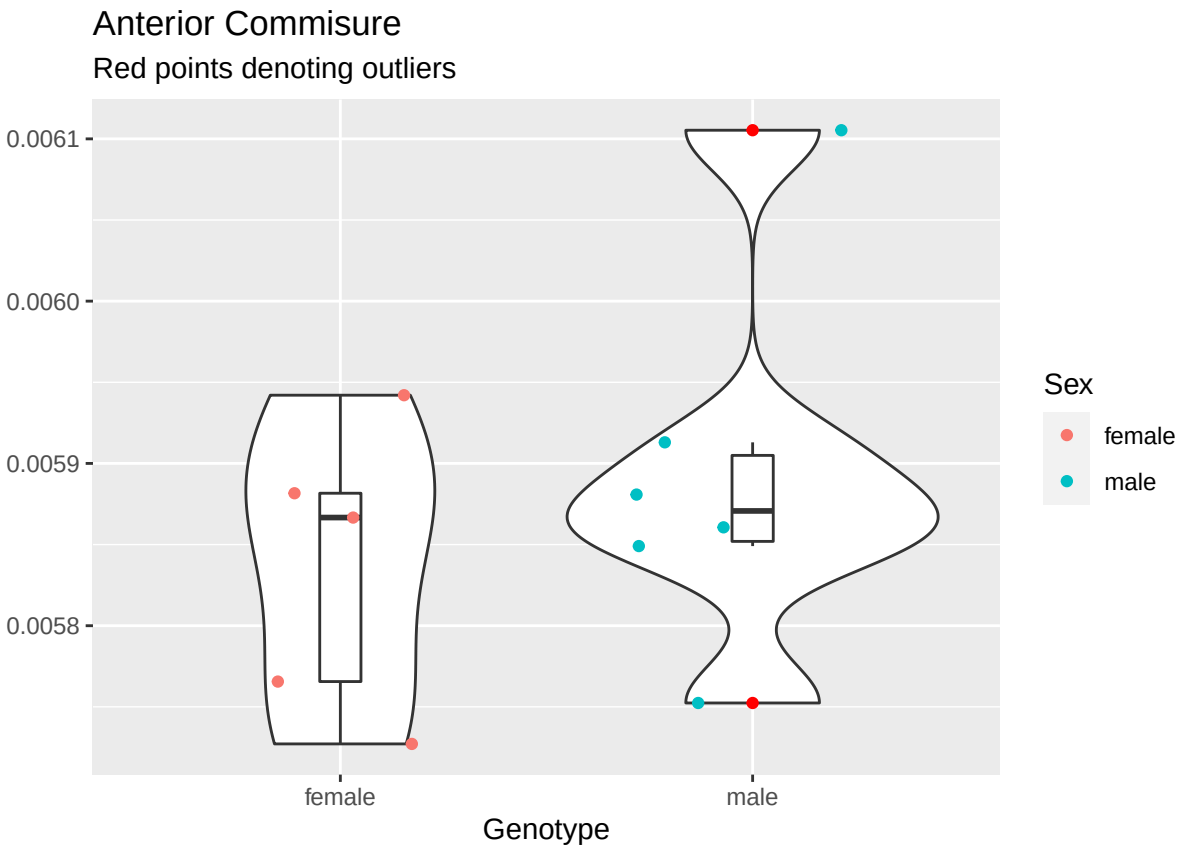

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.501e-08 2.501e-08   4.043 0.0753 .
## Residuals    9 5.568e-08 6.187e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



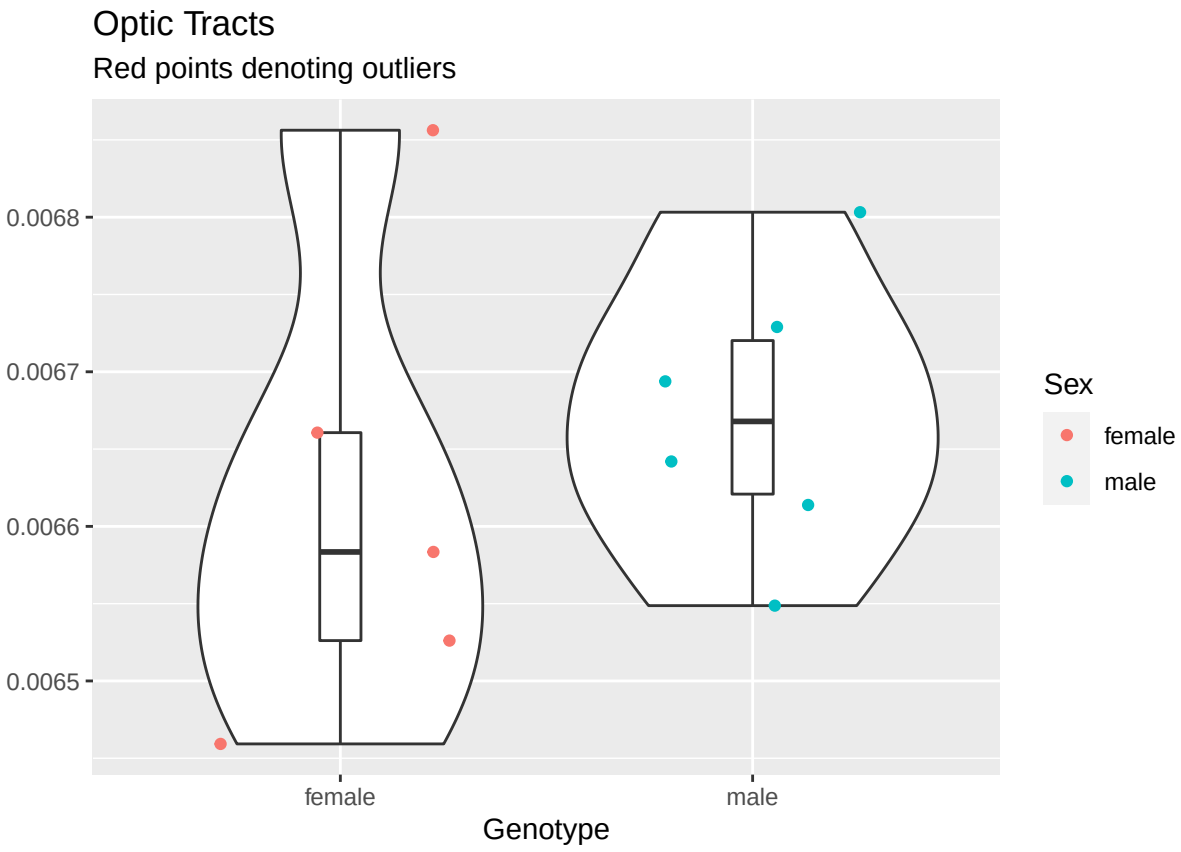

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 6.934e-08 6.934e-08   4.365 0.0663 .
## Residuals    9 1.430e-07 1.588e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



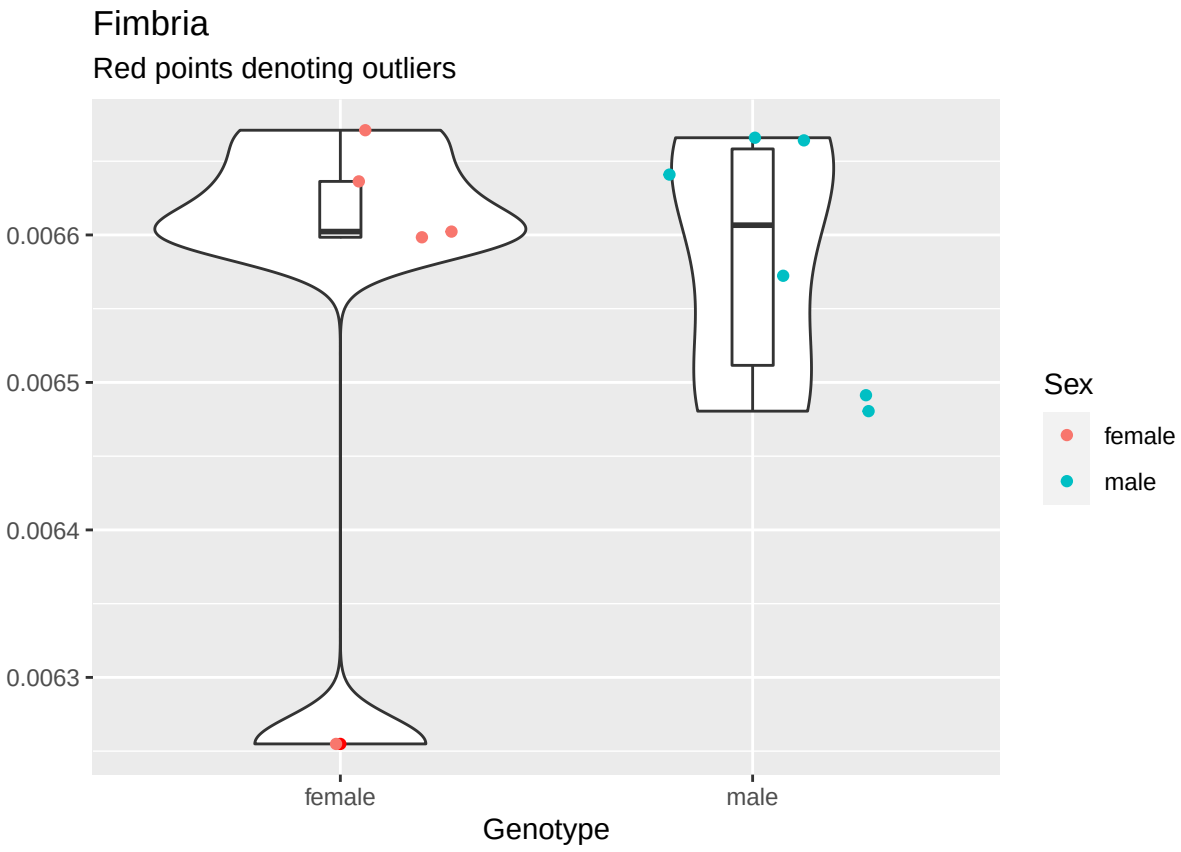

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.593e-07 1.593e-07   8.441 0.0174 *
## Residuals    9 1.698e-07 1.887e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



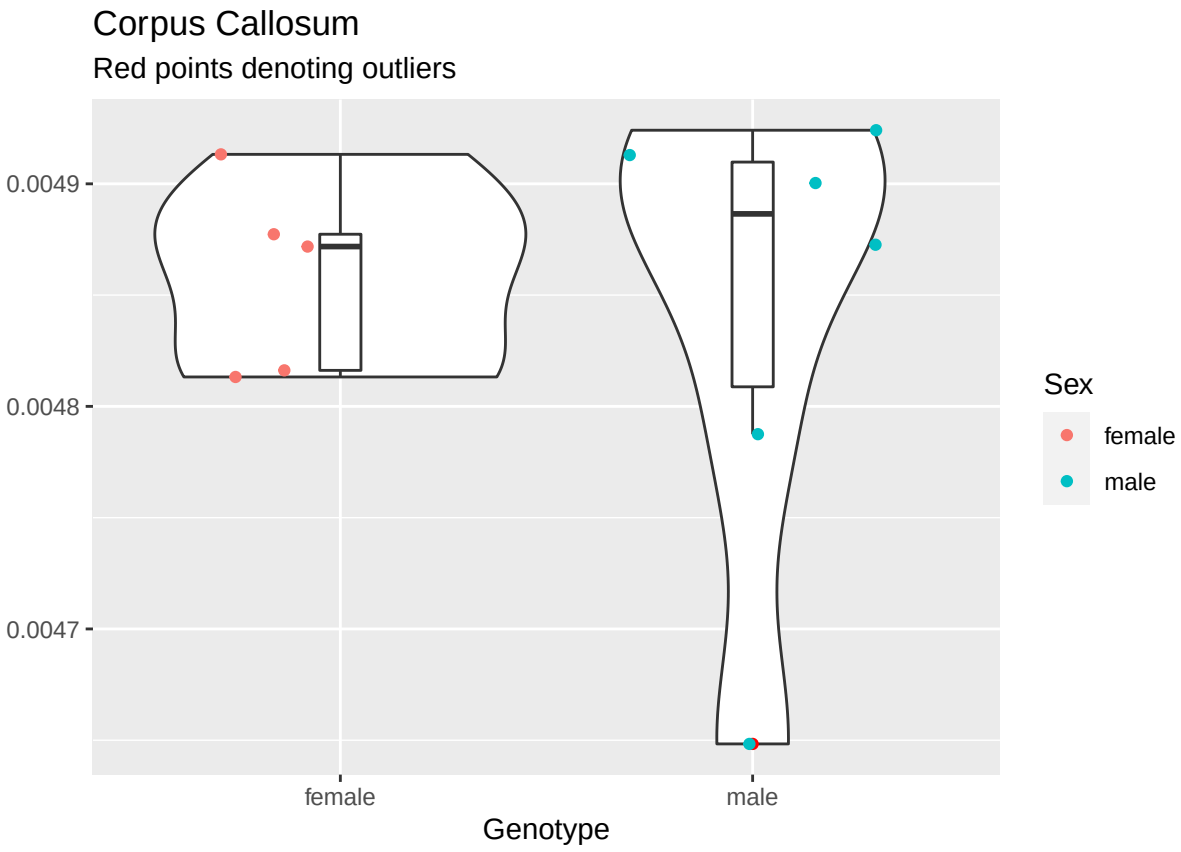

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 8.840e-09 8.837e-09     0.8  0.394
## Residuals    9 9.945e-08 1.105e-08
```



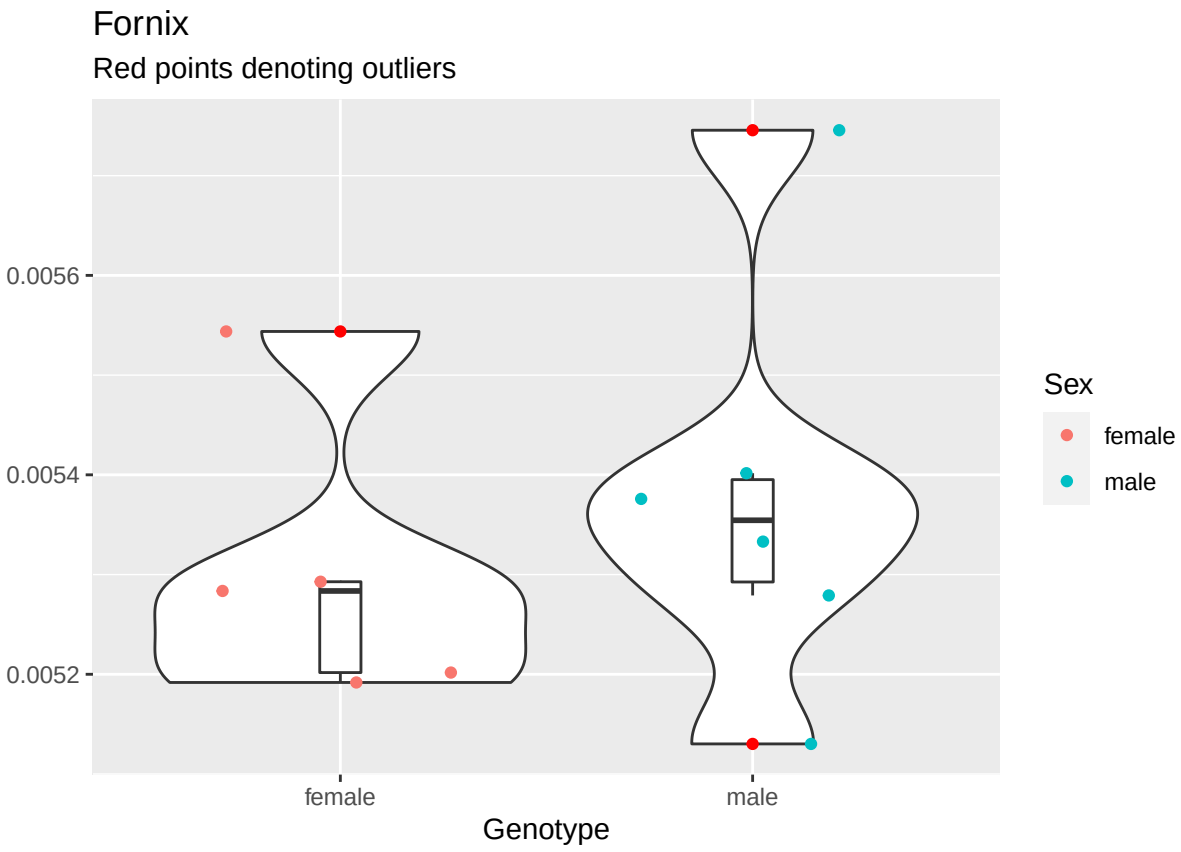

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 8.130e-09 8.134e-09   0.547  0.478
## Residuals    9 1.338e-07 1.487e-08
```



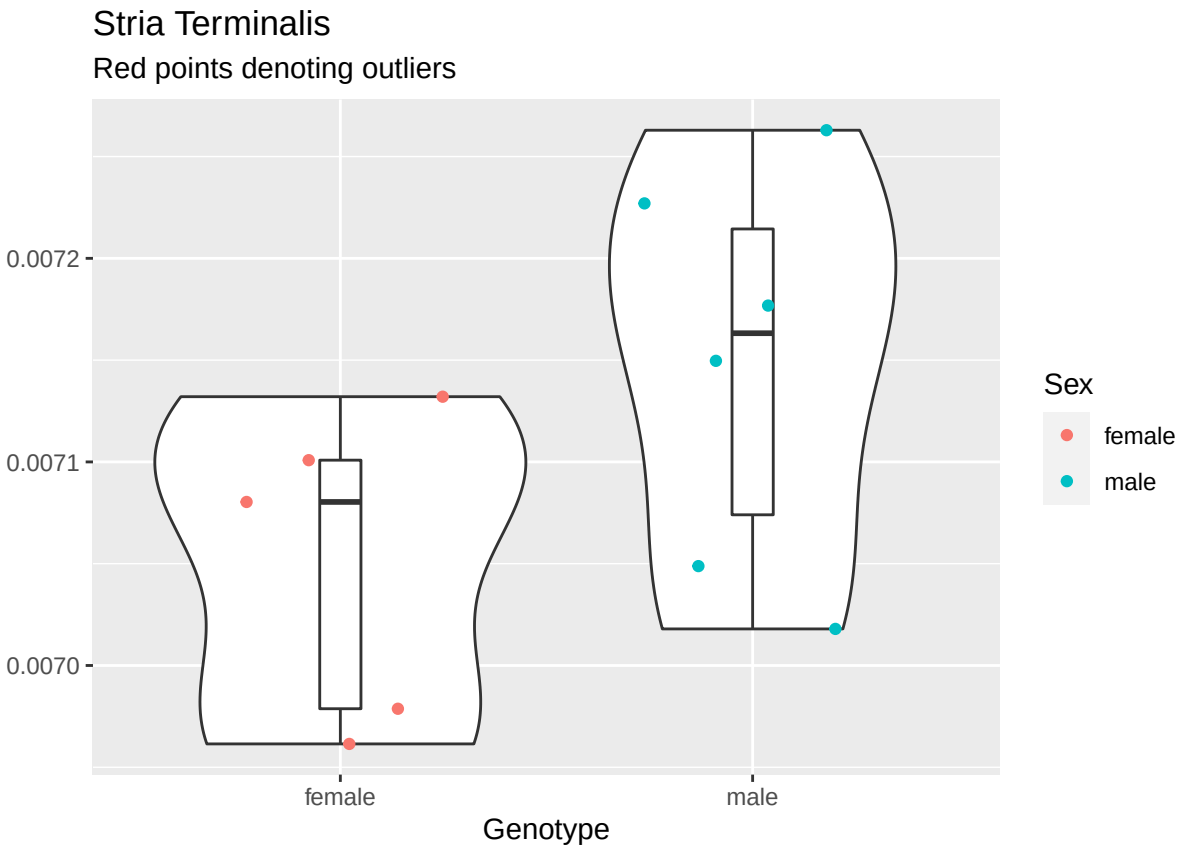

```
##             Df   Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.02e-09 3.020e-09   0.181   0.68
## Residuals    9 1.50e-07 1.667e-08
```



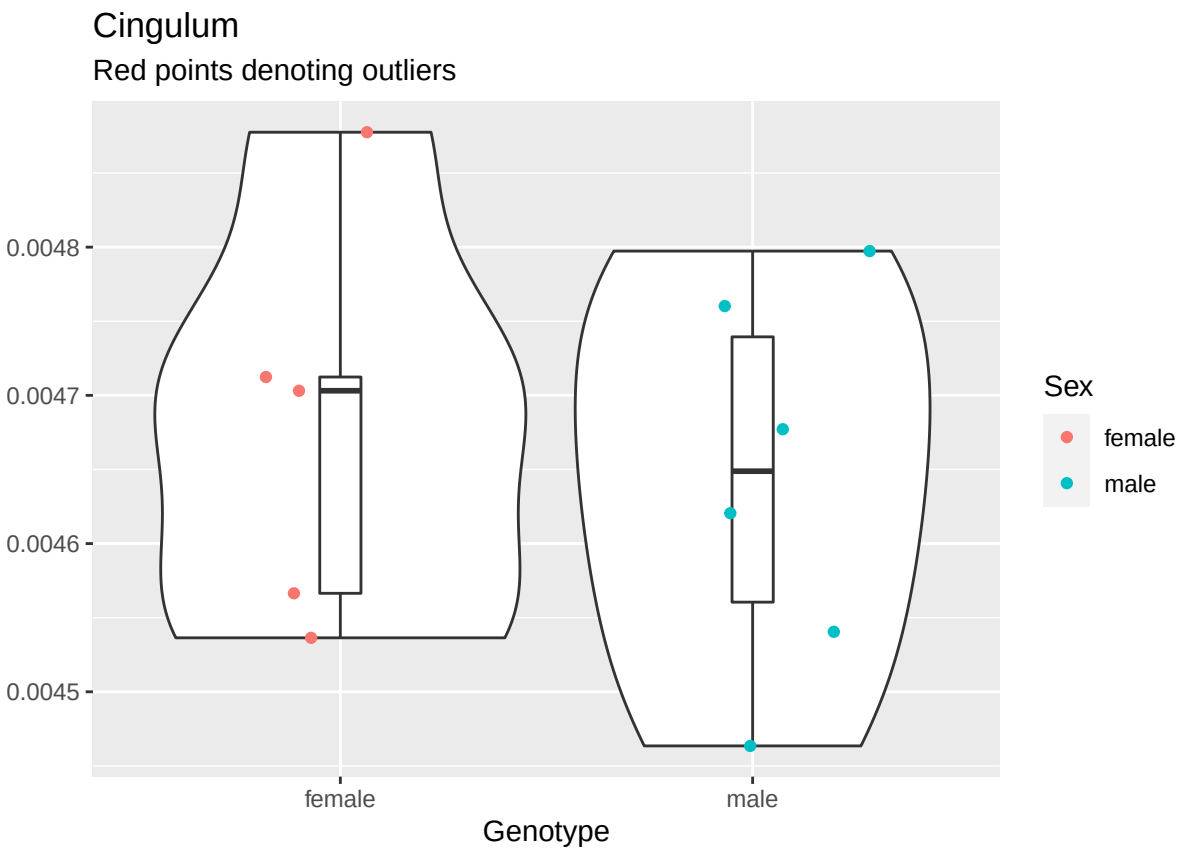

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 8.200e-10 8.240e-10   0.116  0.741
## Residuals    9 6.395e-08 7.105e-09
```



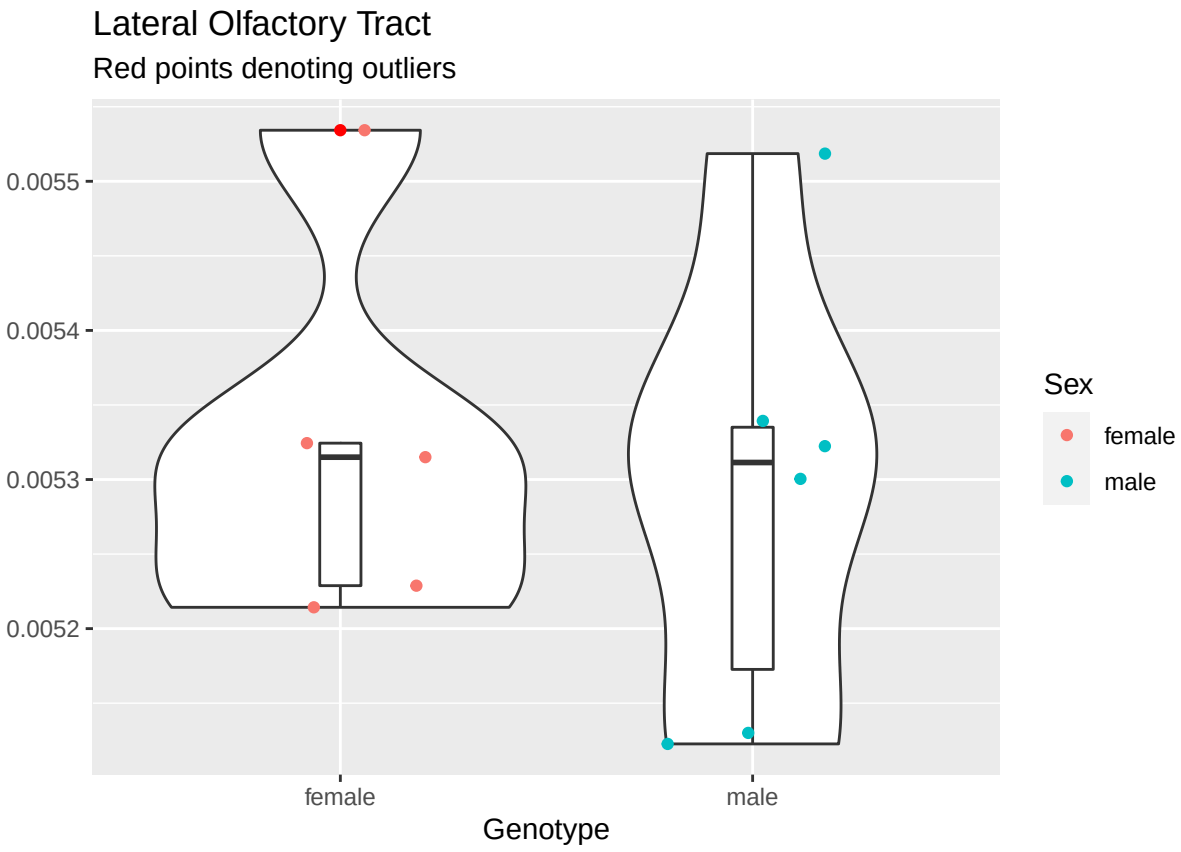

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.527e-08 1.527e-08   0.474  0.509
## Residuals    9 2.900e-07 3.222e-08
```



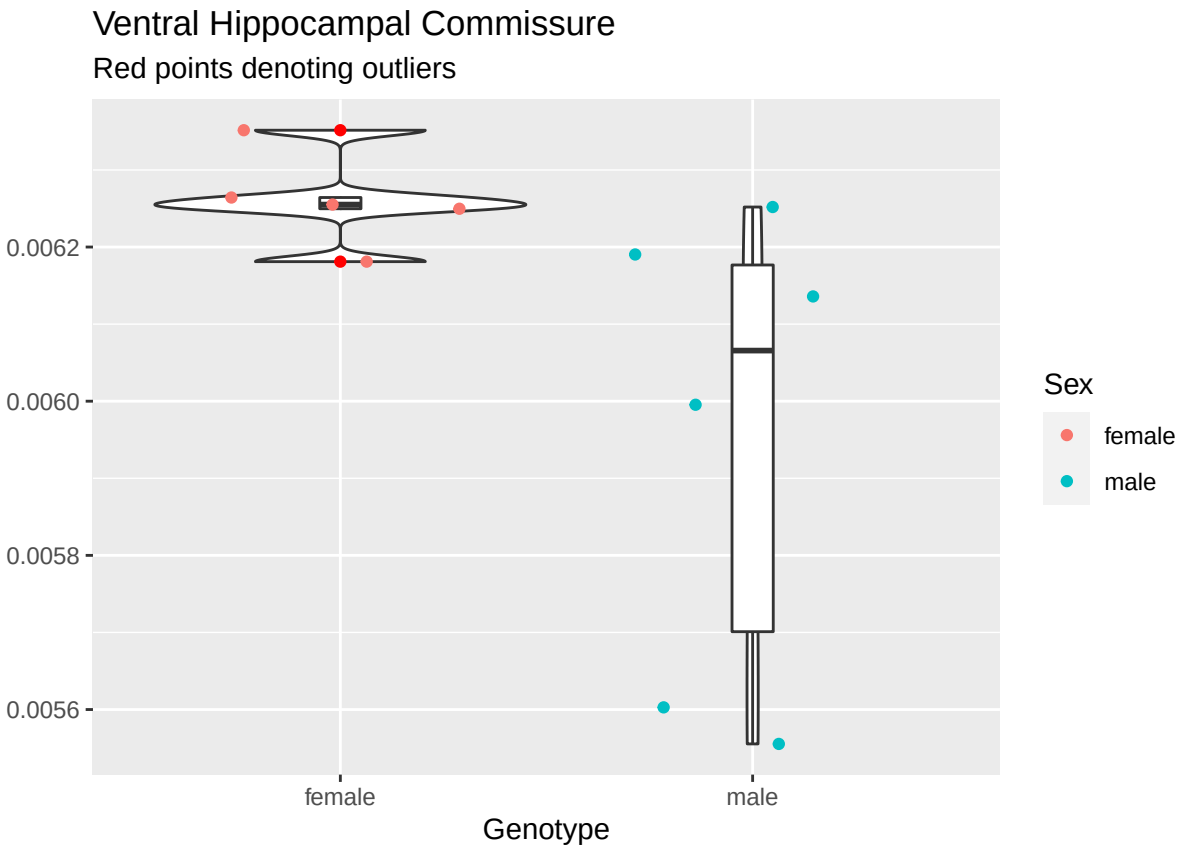

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.540e-08 2.540e-08   3.257  0.105
## Residuals    9 7.017e-08 7.797e-09
```



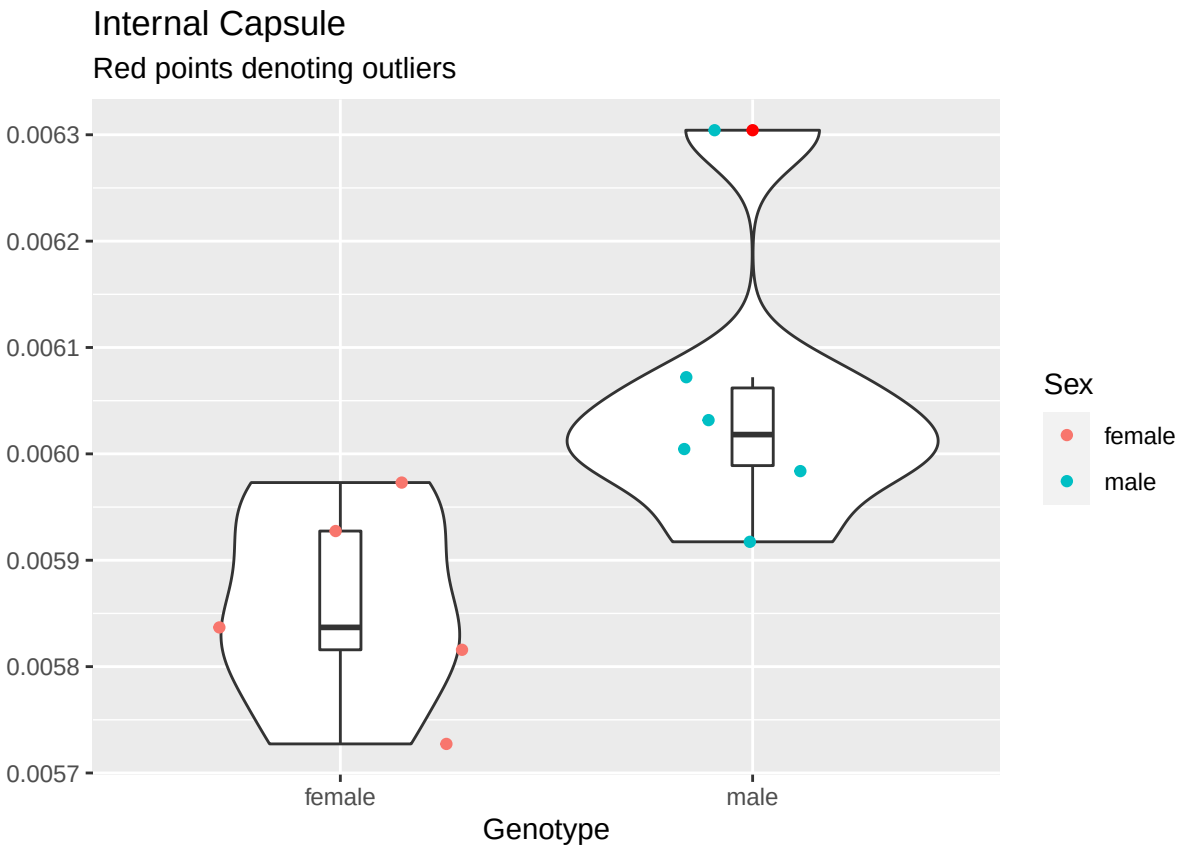

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.530e-09 3.530e-09   0.204  0.663
## Residuals    9 1.561e-07 1.734e-08
```



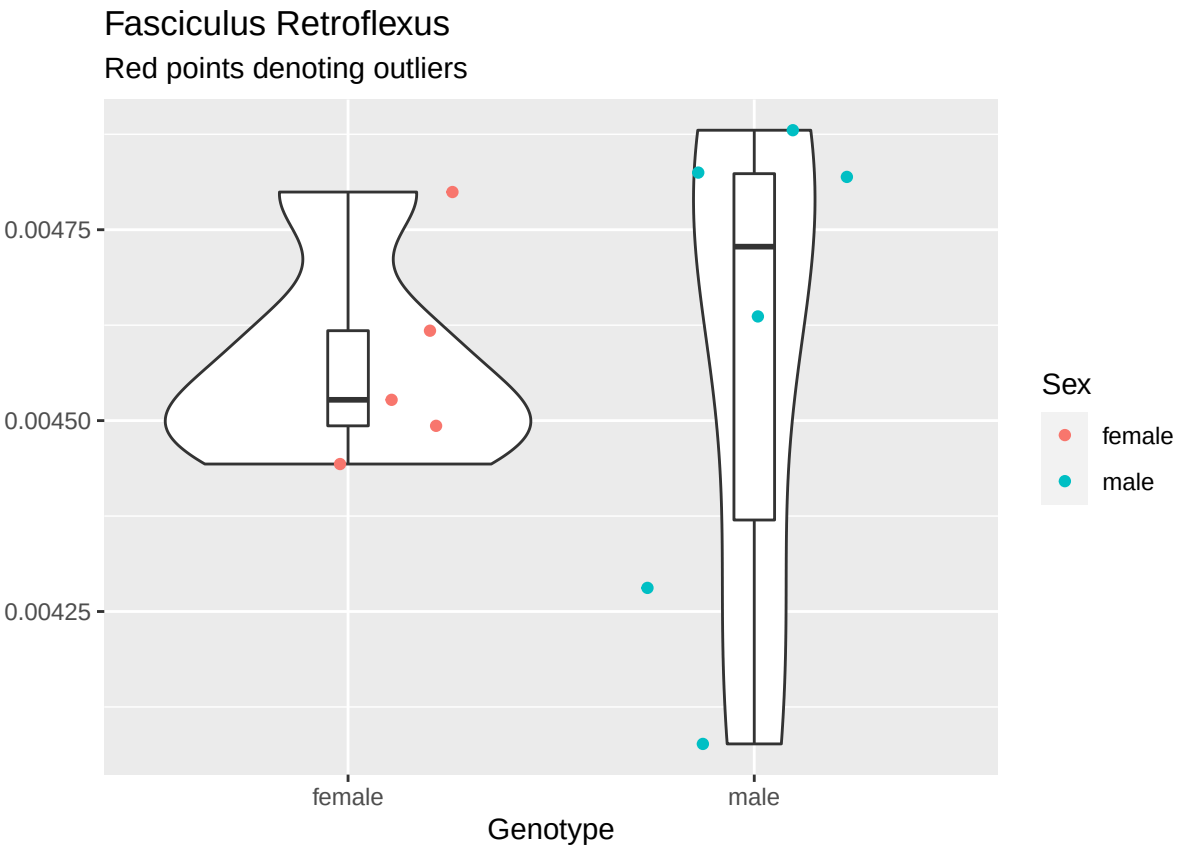

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.240e-09 3.236e-09   0.167  0.693
## Residuals    9 1.748e-07 1.942e-08
```



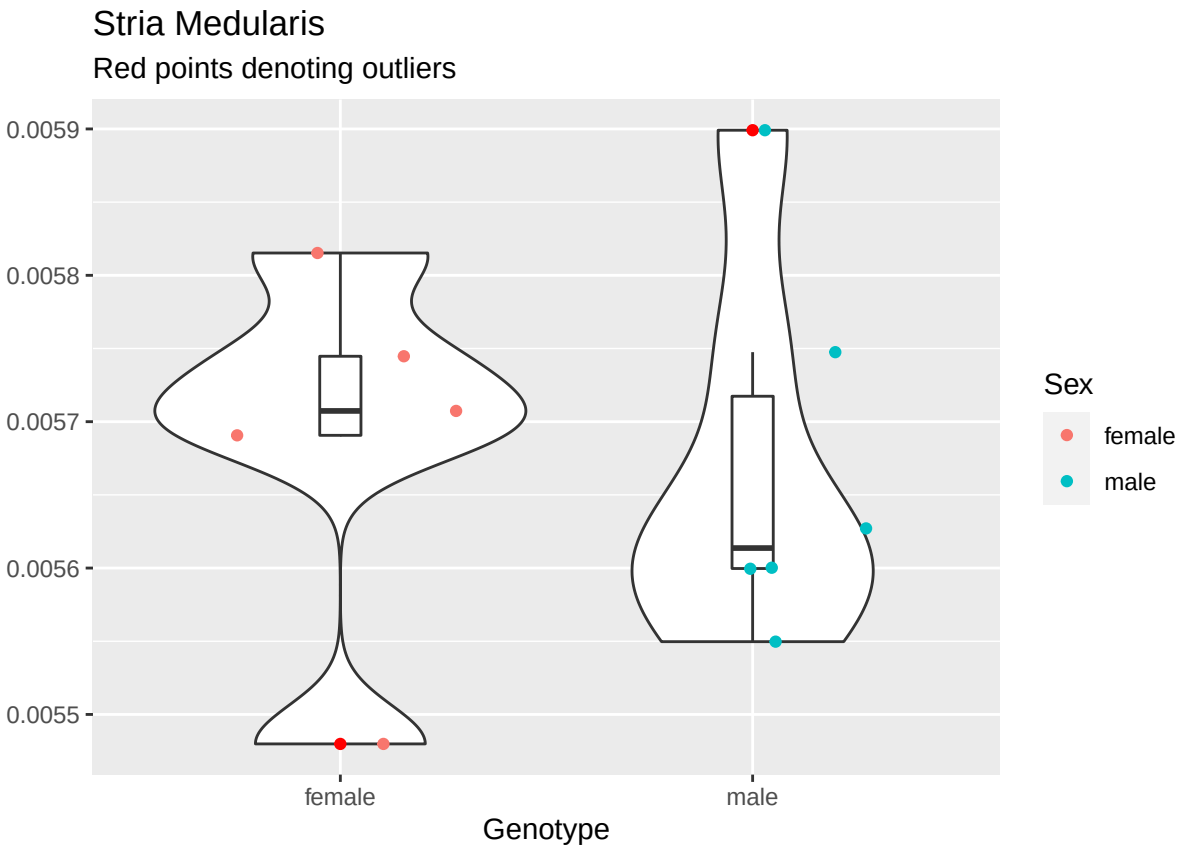

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.538e-07 2.538e-07   4.794 0.0563 .
## Residuals    9 4.764e-07 5.293e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



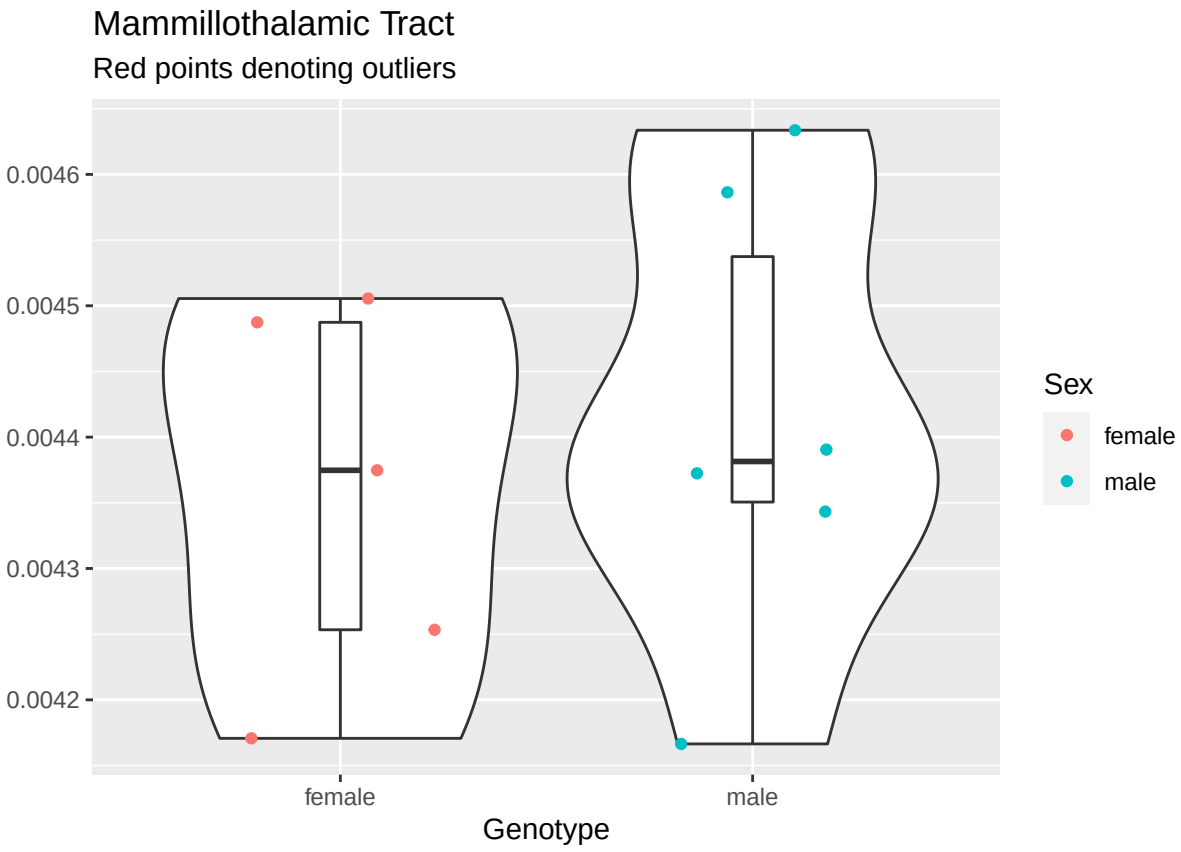

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.050e-07 1.050e-07    7.45 0.0232 *
## Residuals    9 1.268e-07 1.409e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



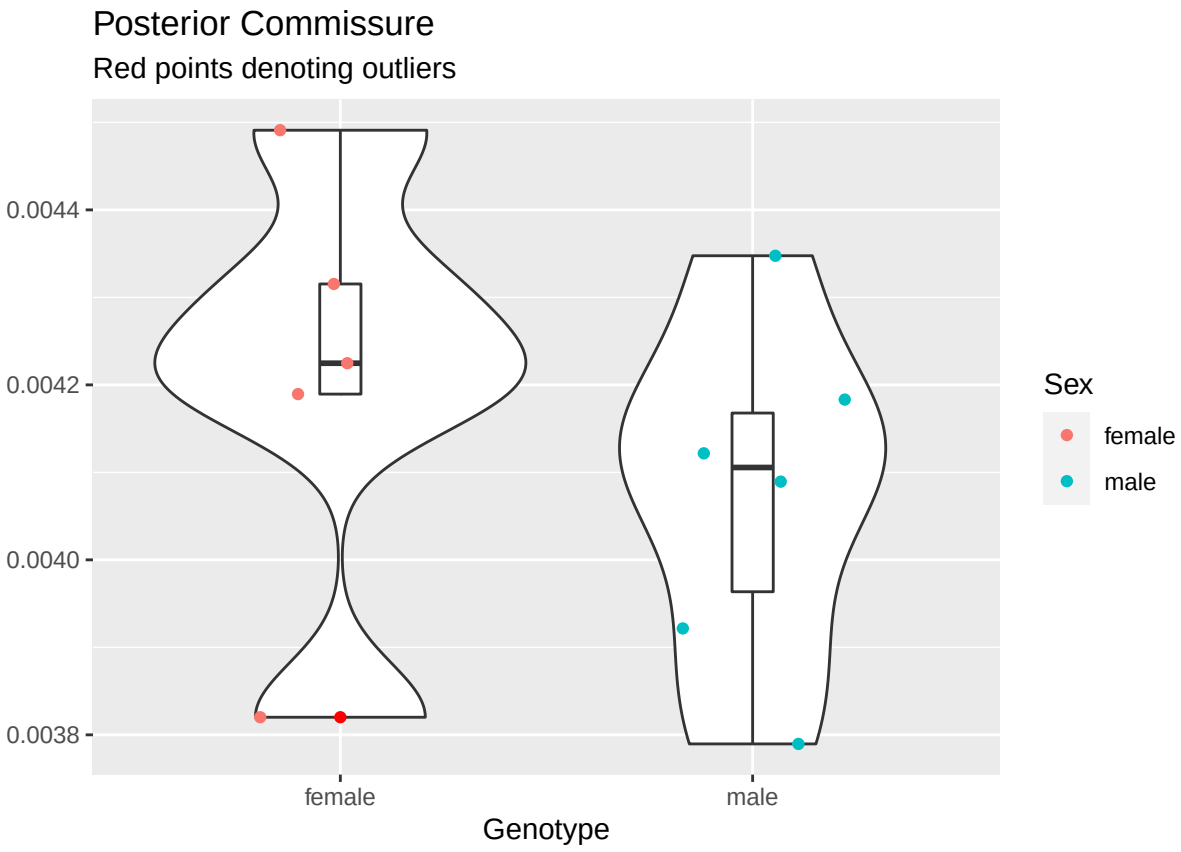

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.000e-10 2.900e-10   0.004   0.95
## Residuals    9 6.316e-07 7.018e-08
```



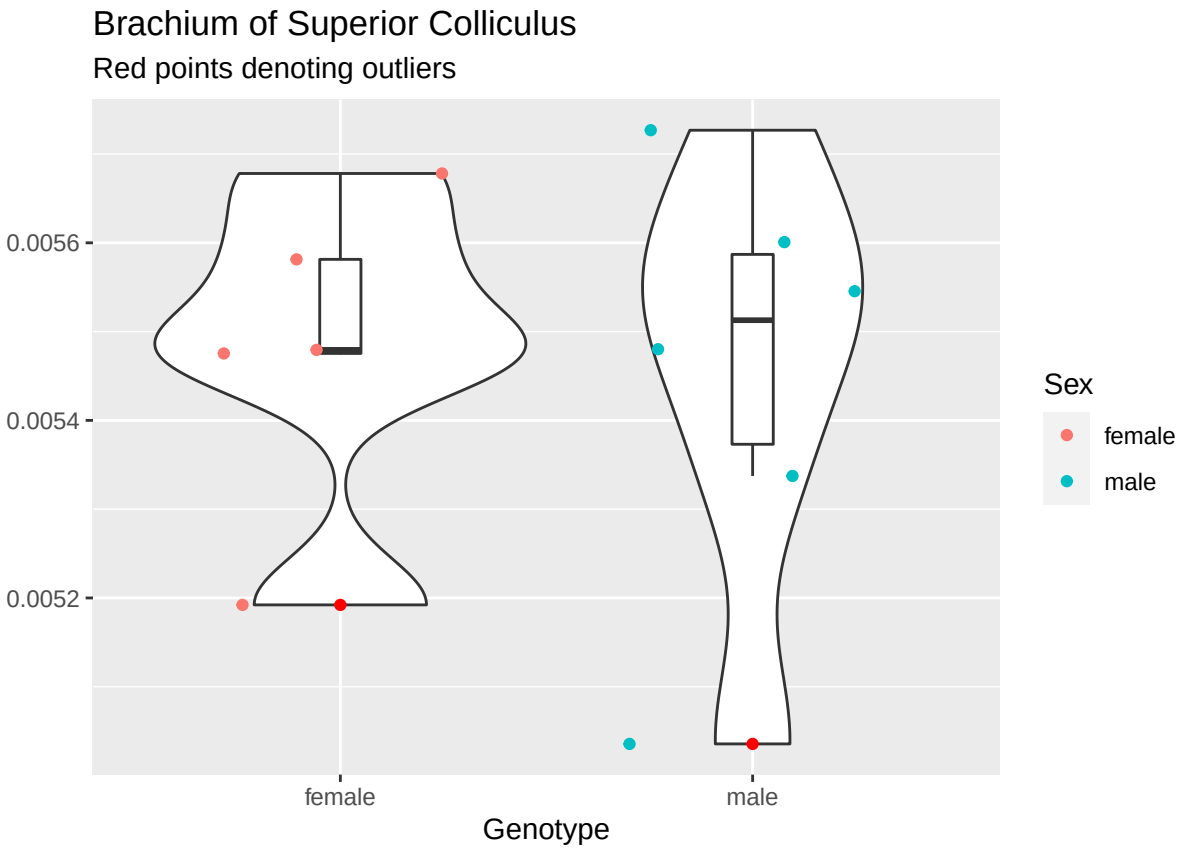

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 7.900e-10 7.920e-10   0.048  0.831
## Residuals    9 1.478e-07 1.642e-08
```



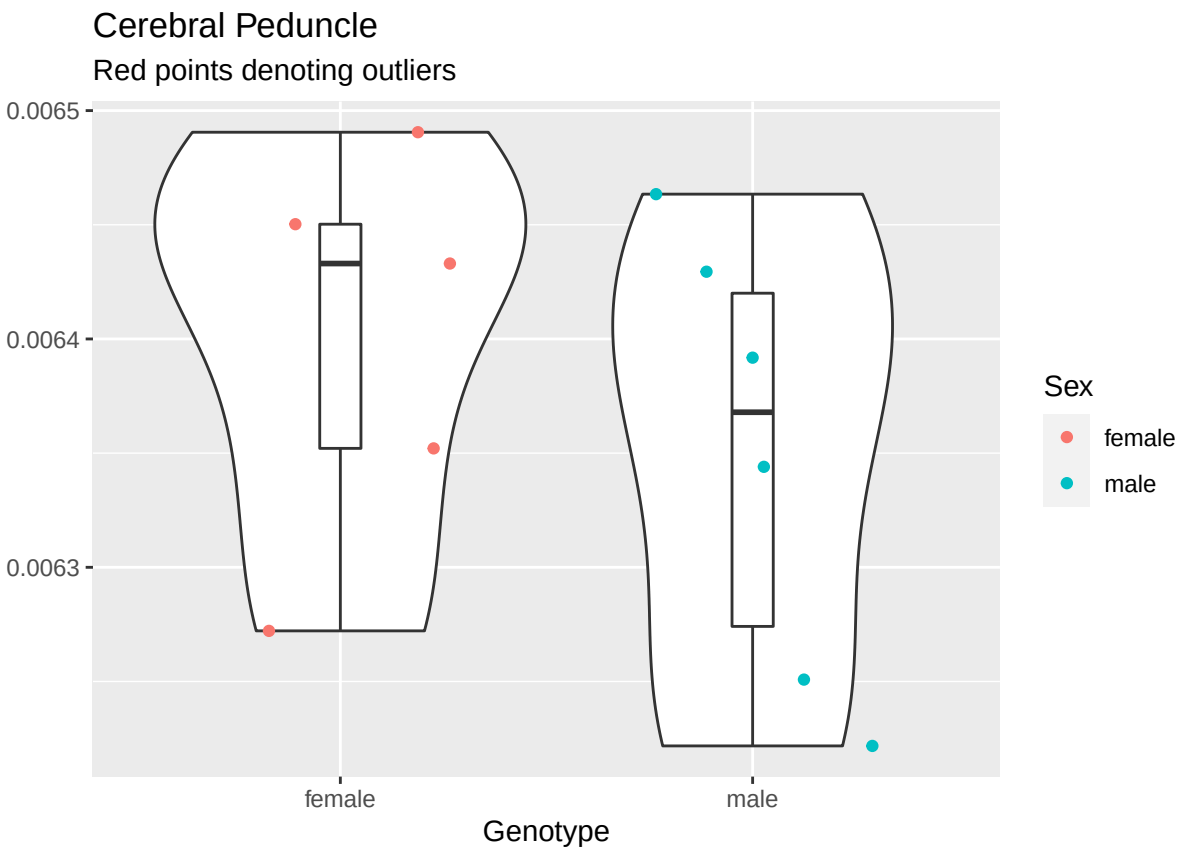

```
##              Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex           1 8.900e-09 8.896e-09   0.346  0.571
## Residuals     9 2.313e-07 2.570e-08
```



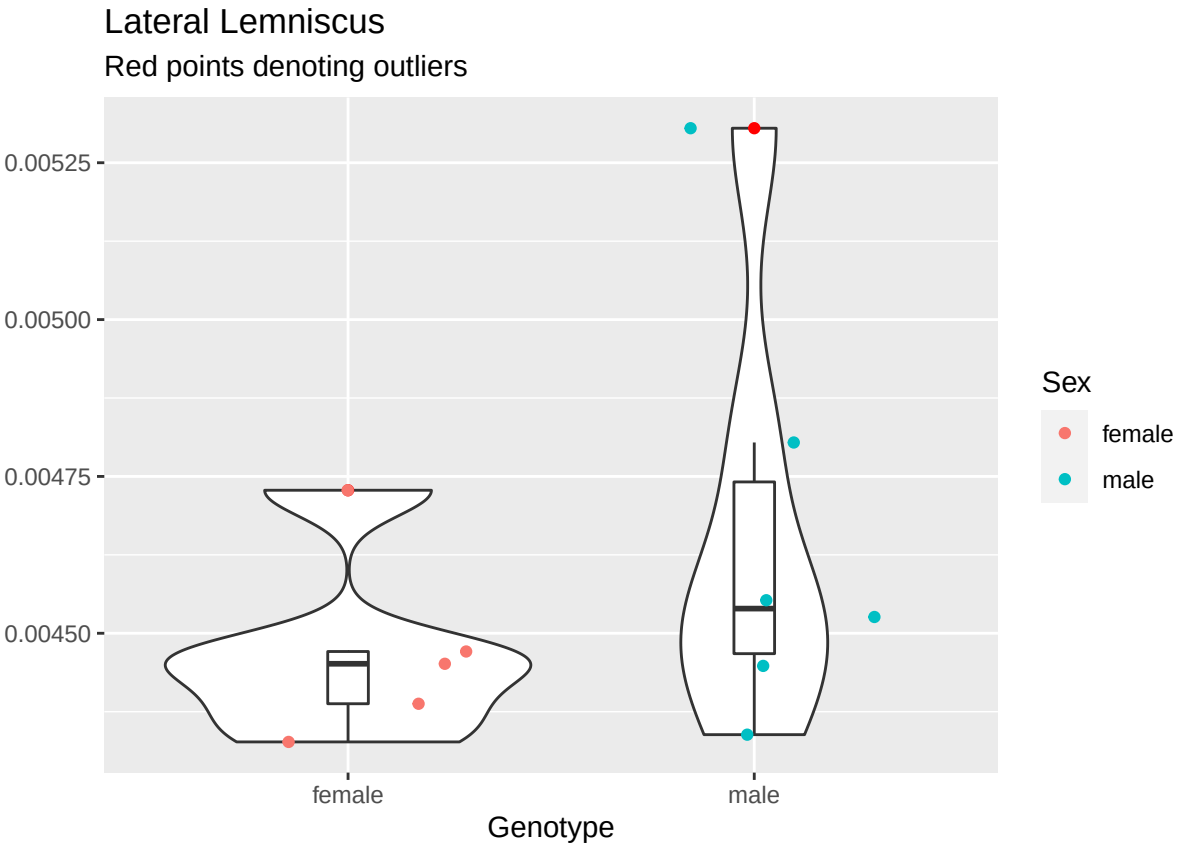

```
##             Df   Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 4.80e-08 4.796e-08    0.99  0.346
## Residuals    9 4.36e-07 4.845e-08
```



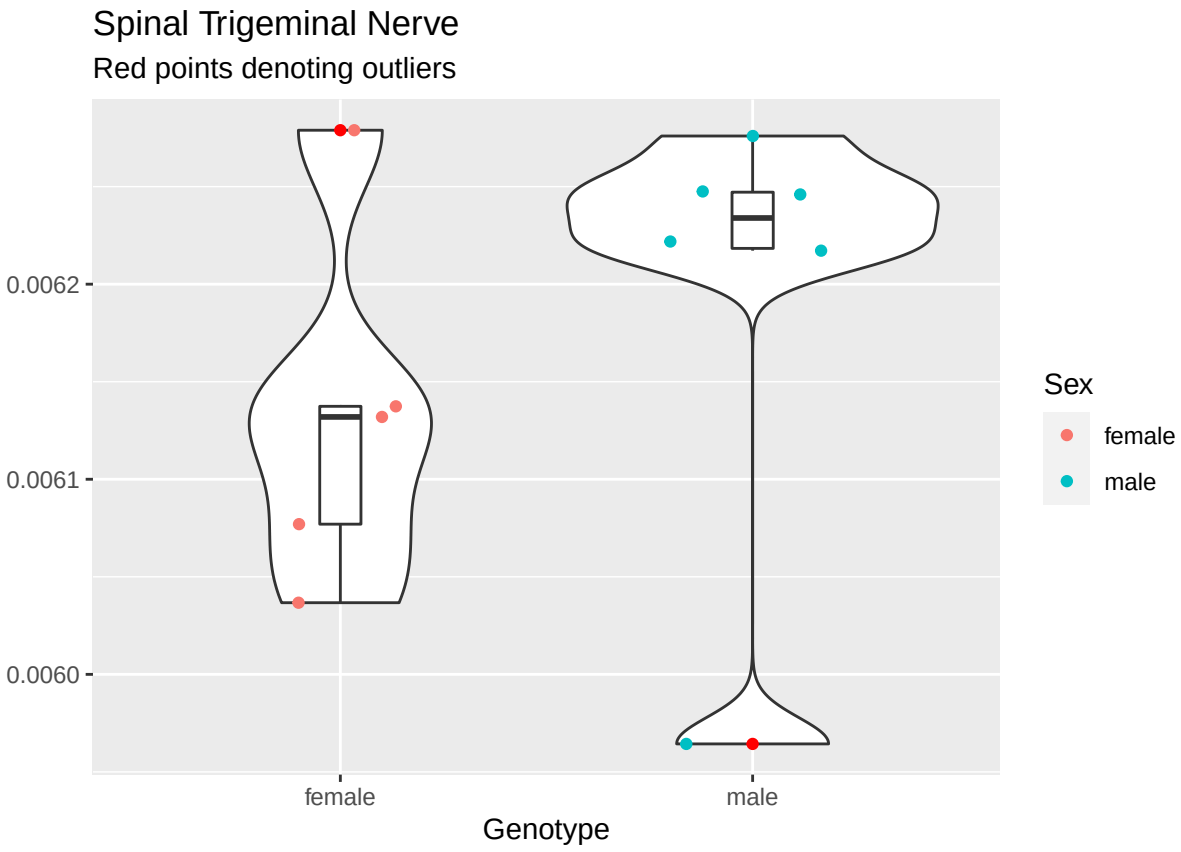

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.000e-09 1.980e-09   0.042  0.843
## Residuals    9 4.261e-07 4.734e-08
```



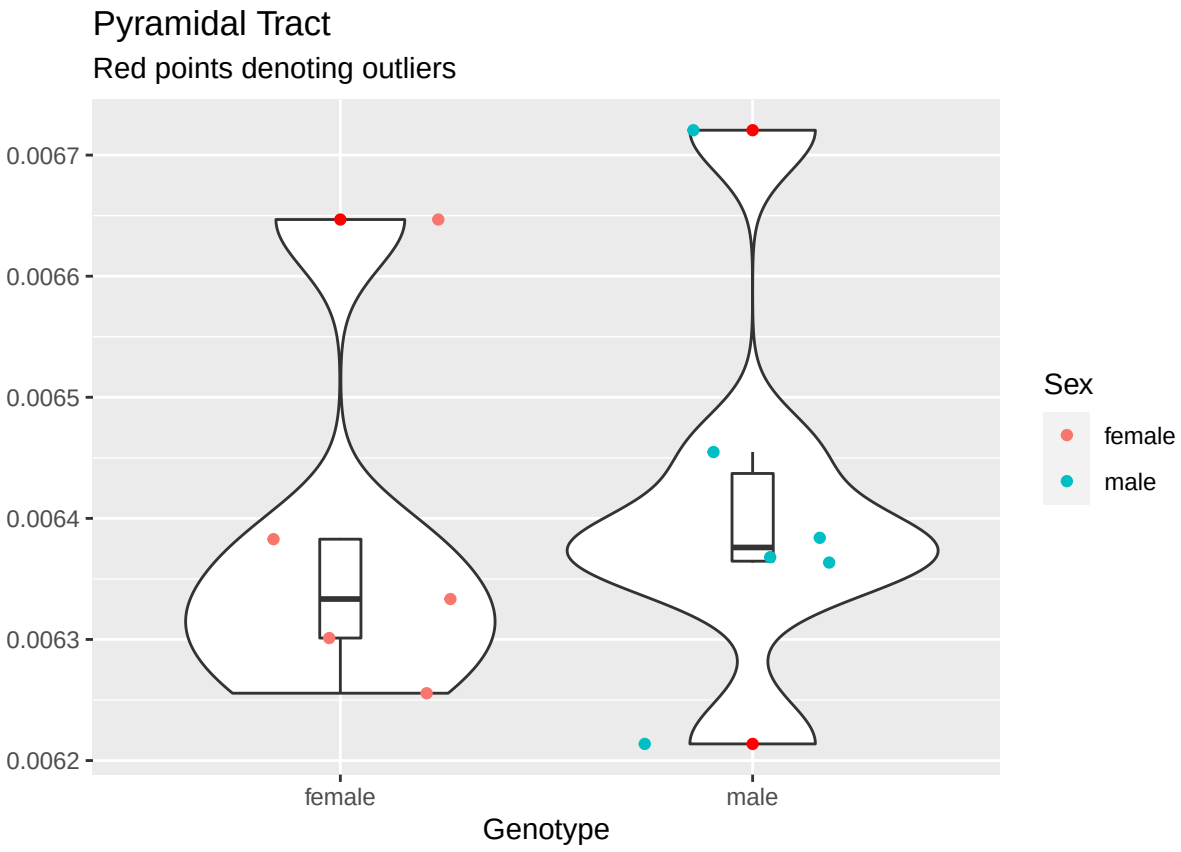

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 6.660e-09 6.655e-09   0.771  0.403
## Residuals    9 7.769e-08 8.632e-09
```



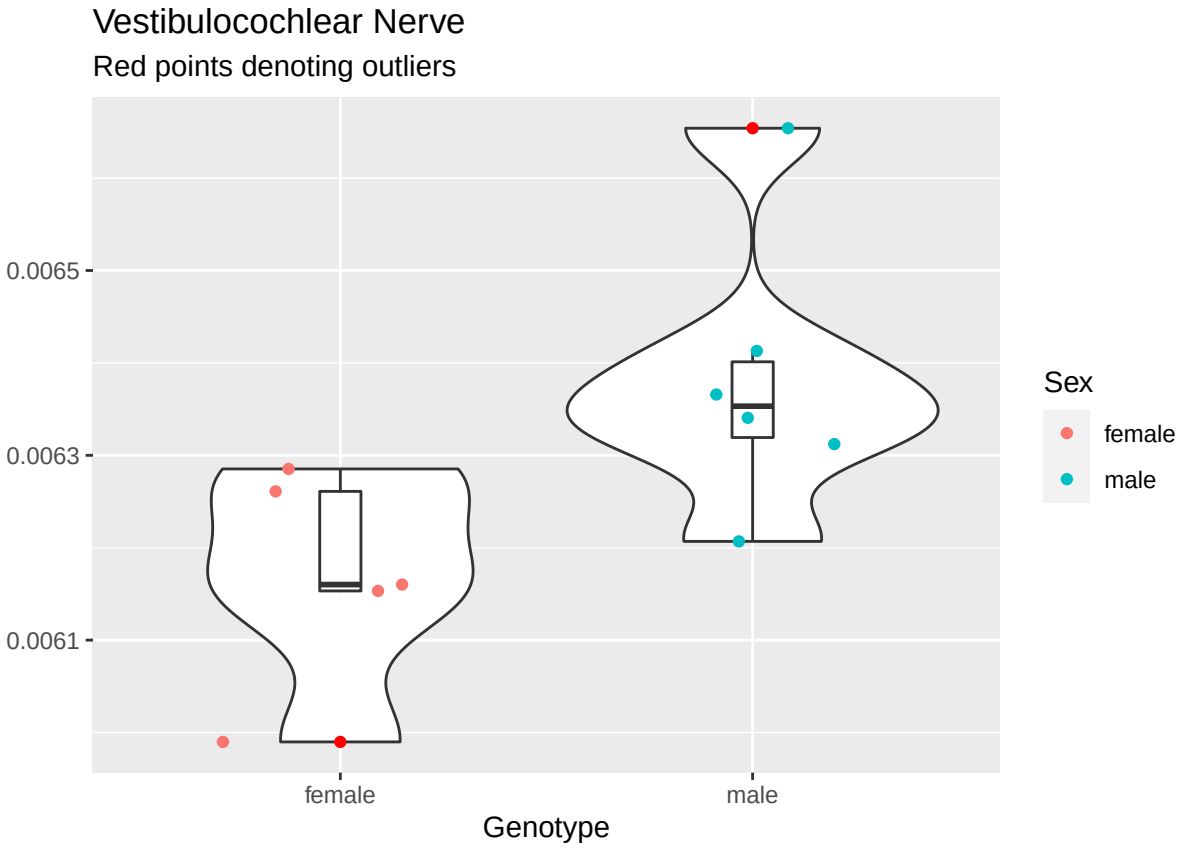

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 9.780e-08 9.783e-08   1.242  0.294
## Residuals    9 7.088e-07 7.875e-08
```



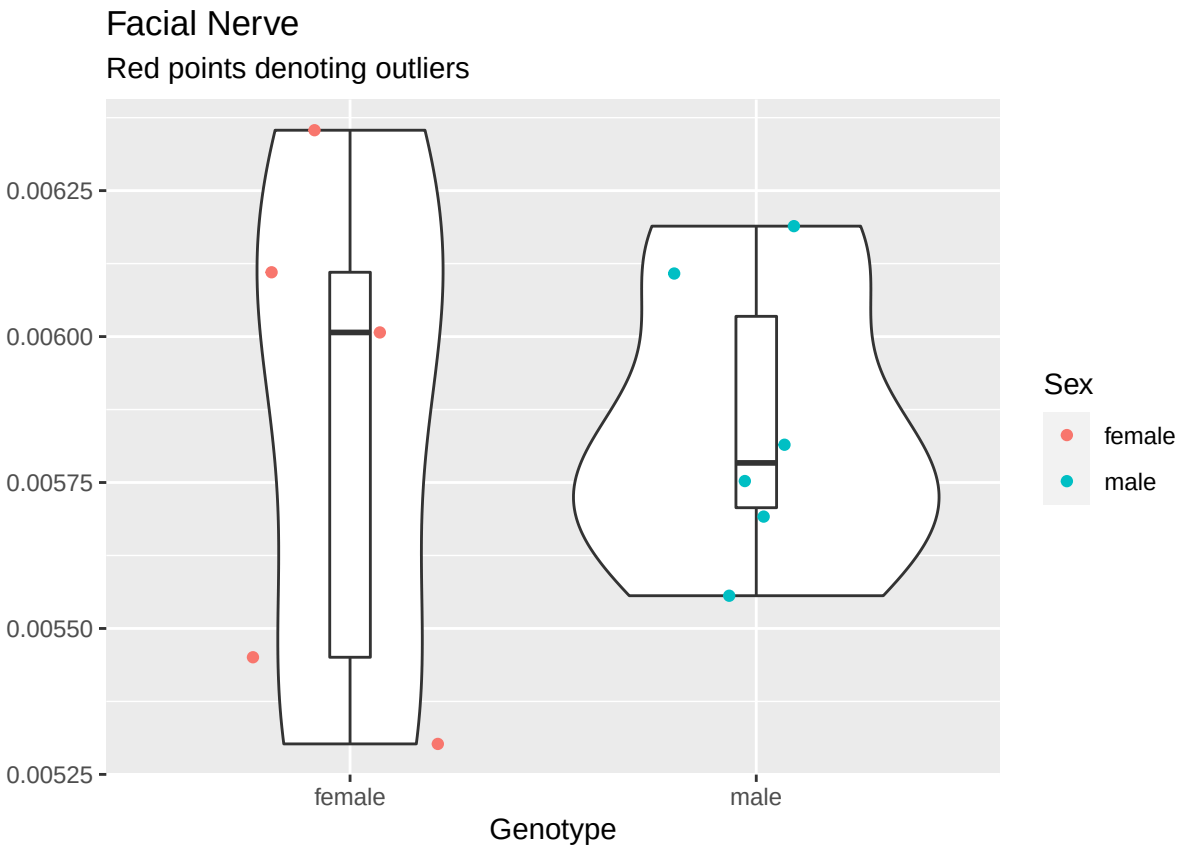

```
##              Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex           1 1.085e-08 1.085e-08   0.976  0.349
## Residuals     9 1.000e-07 1.112e-08
```



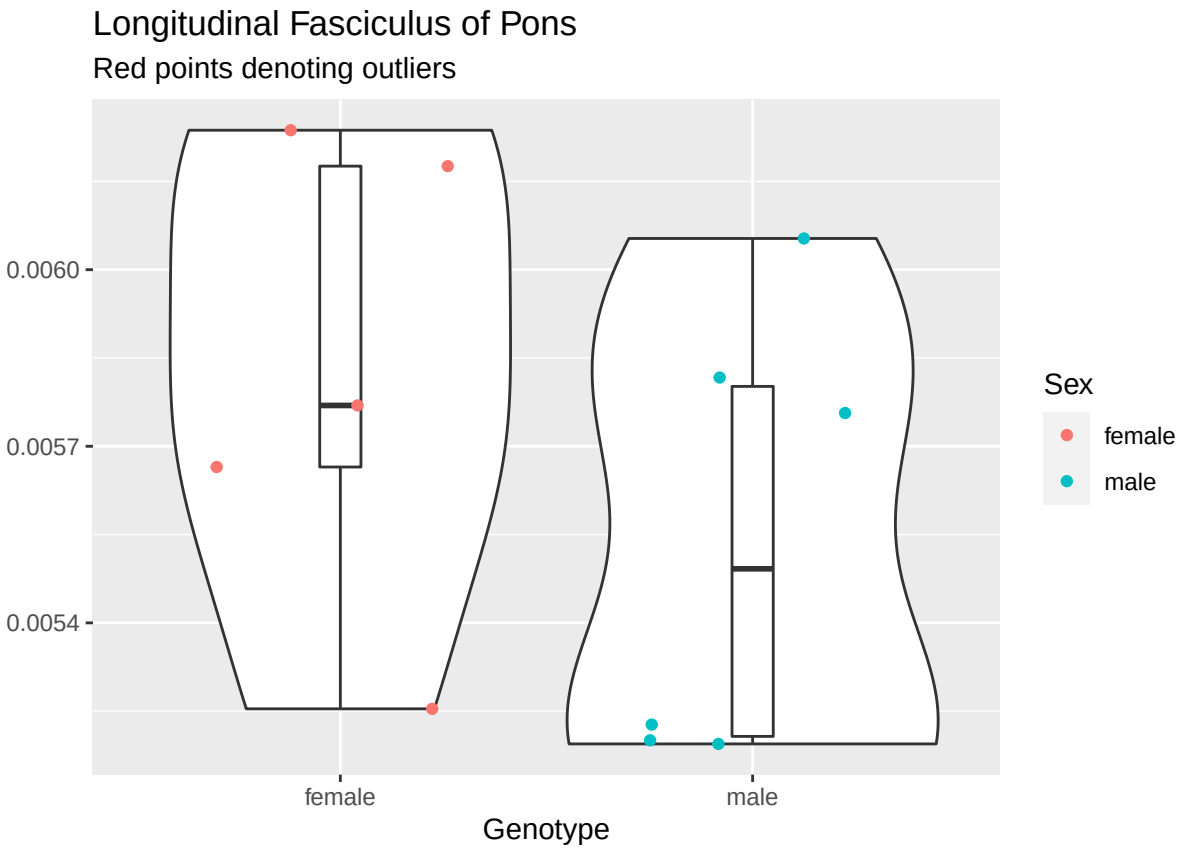

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.050e-09 3.054e-09   0.116  0.741
## Residuals    9 2.362e-07 2.625e-08
```



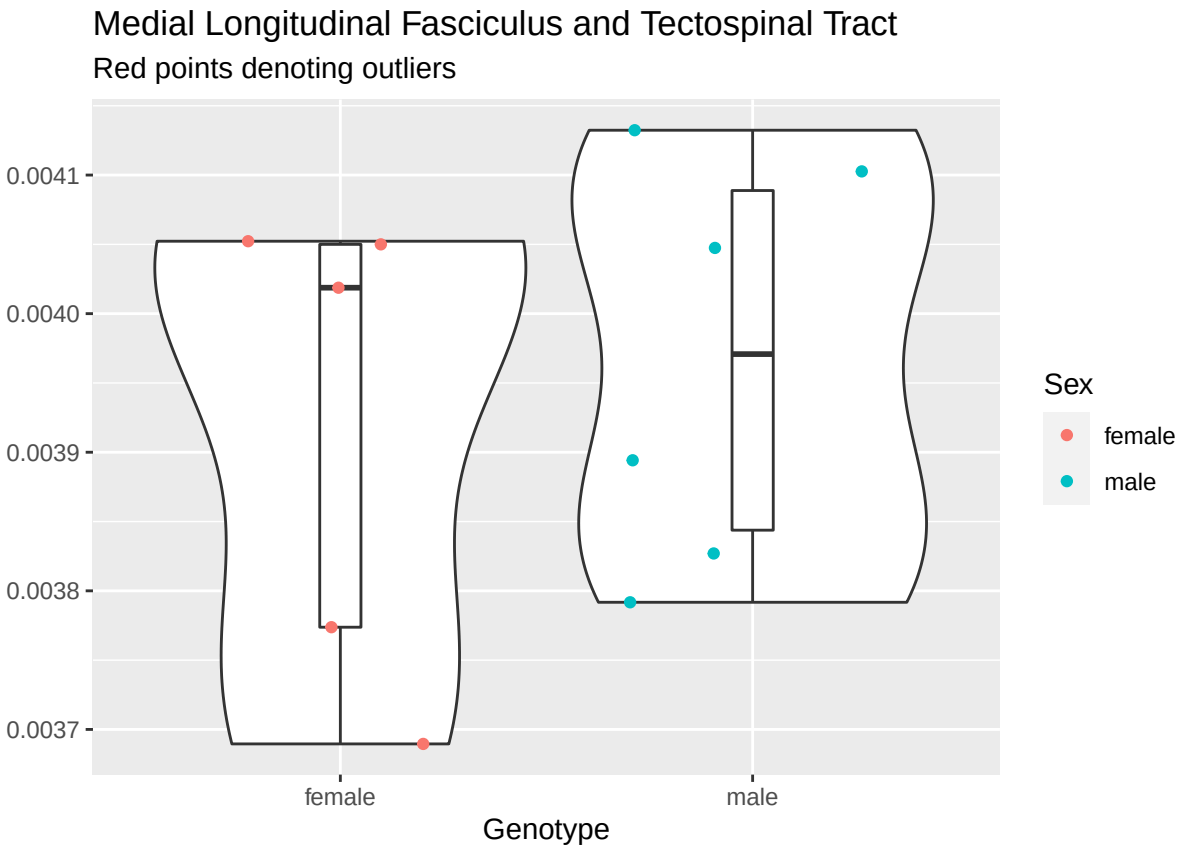

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.228e-07 1.228e-07   6.621   0.03 *
## Residuals    9 1.669e-07 1.854e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



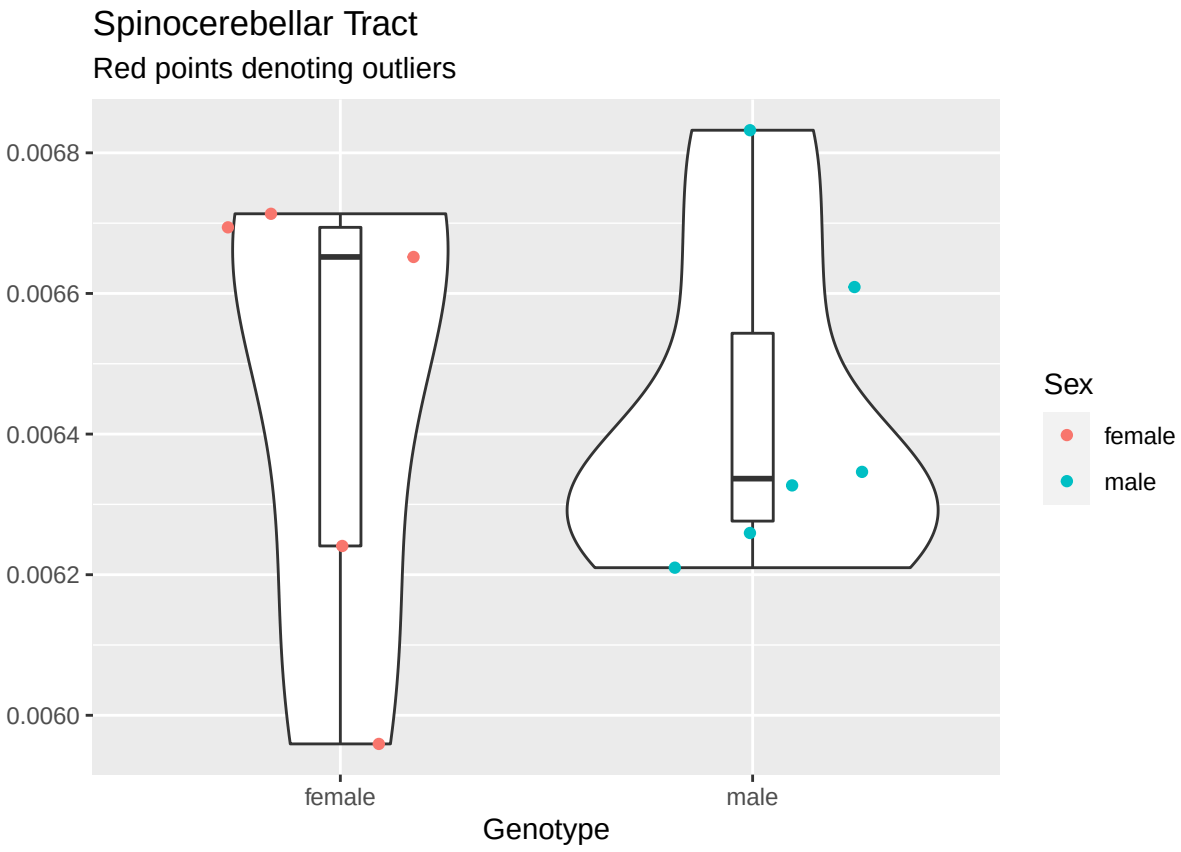

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.000e-10 1.400e-10   0.001  0.973
## Residuals    9 1.109e-06 1.232e-07
```



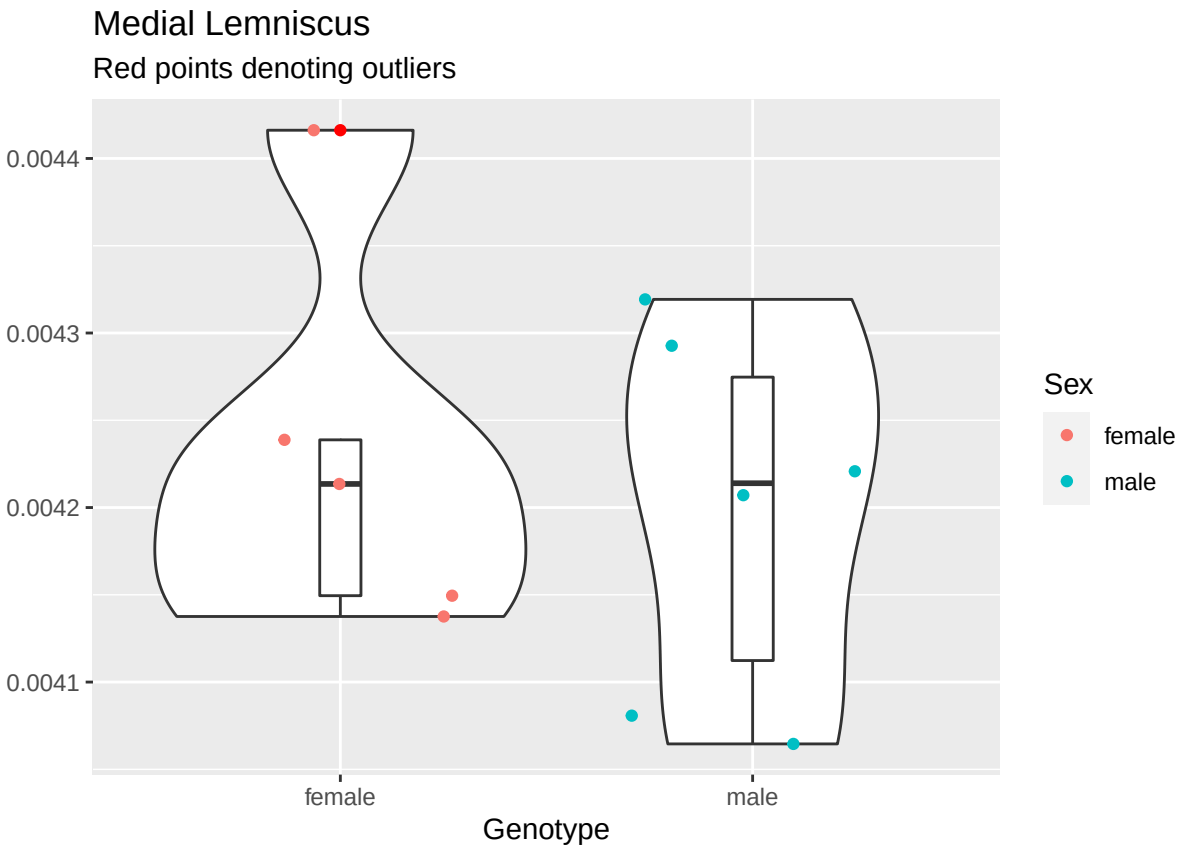

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.120e-07 2.120e-07   1.396  0.268
## Residuals    9 1.367e-06 1.519e-07
```



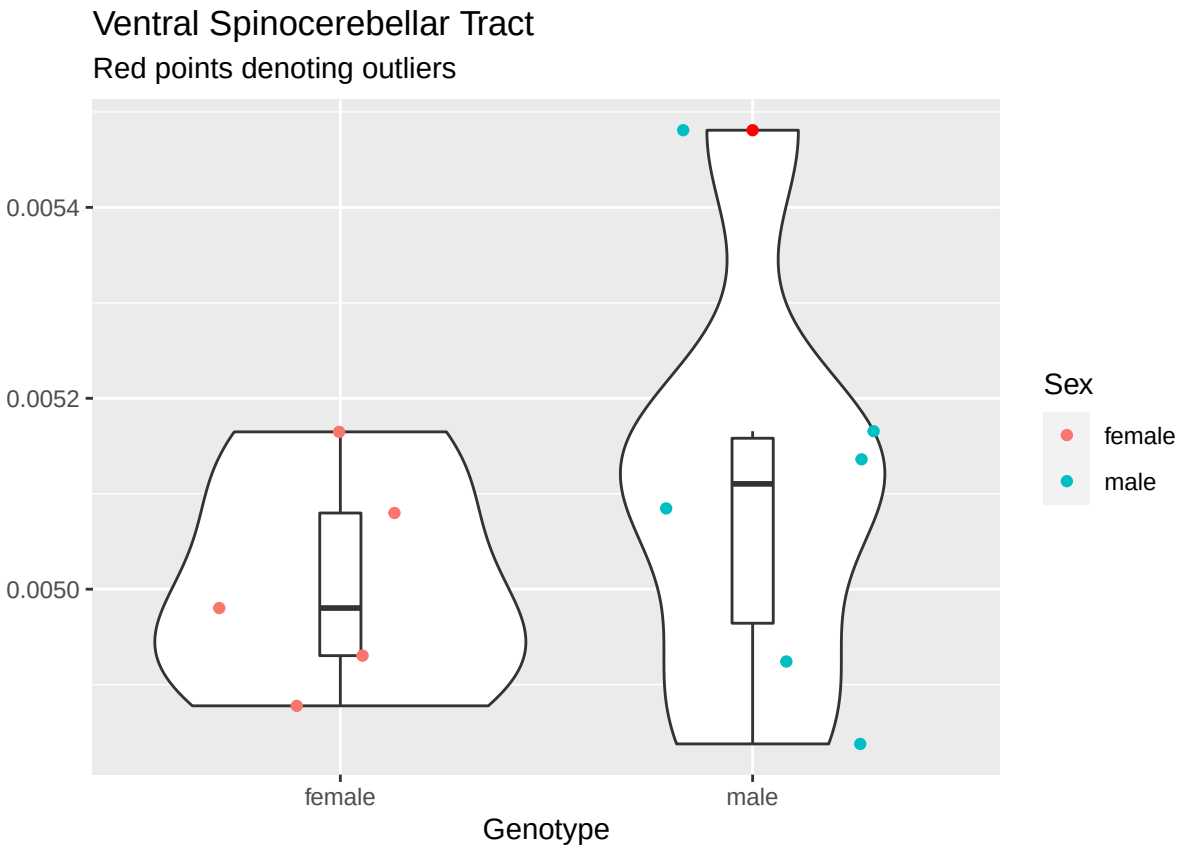

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 6.560e-09 6.556e-09   0.261  0.622
## Residuals    9 2.264e-07 2.516e-08
```



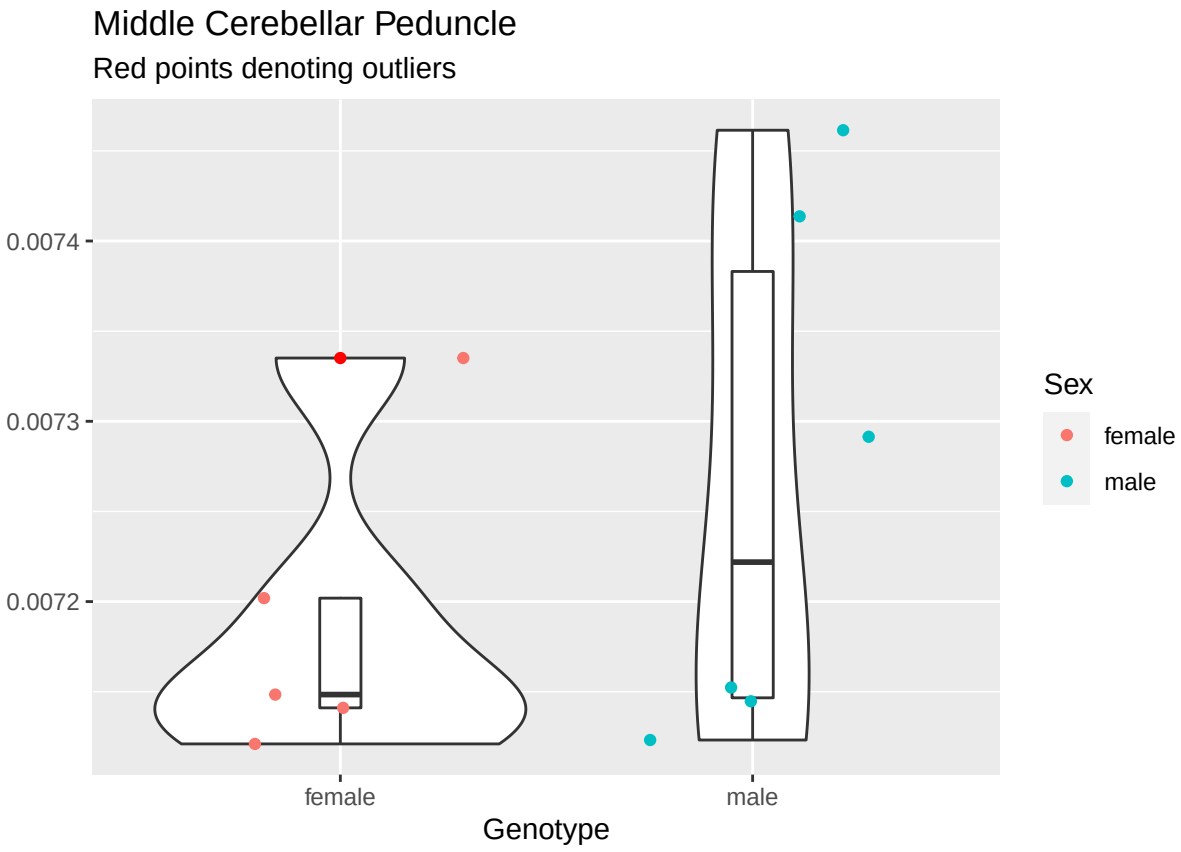

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.200e-09 1.230e-09   0.015  0.905
## Residuals    9 7.432e-07 8.258e-08
```



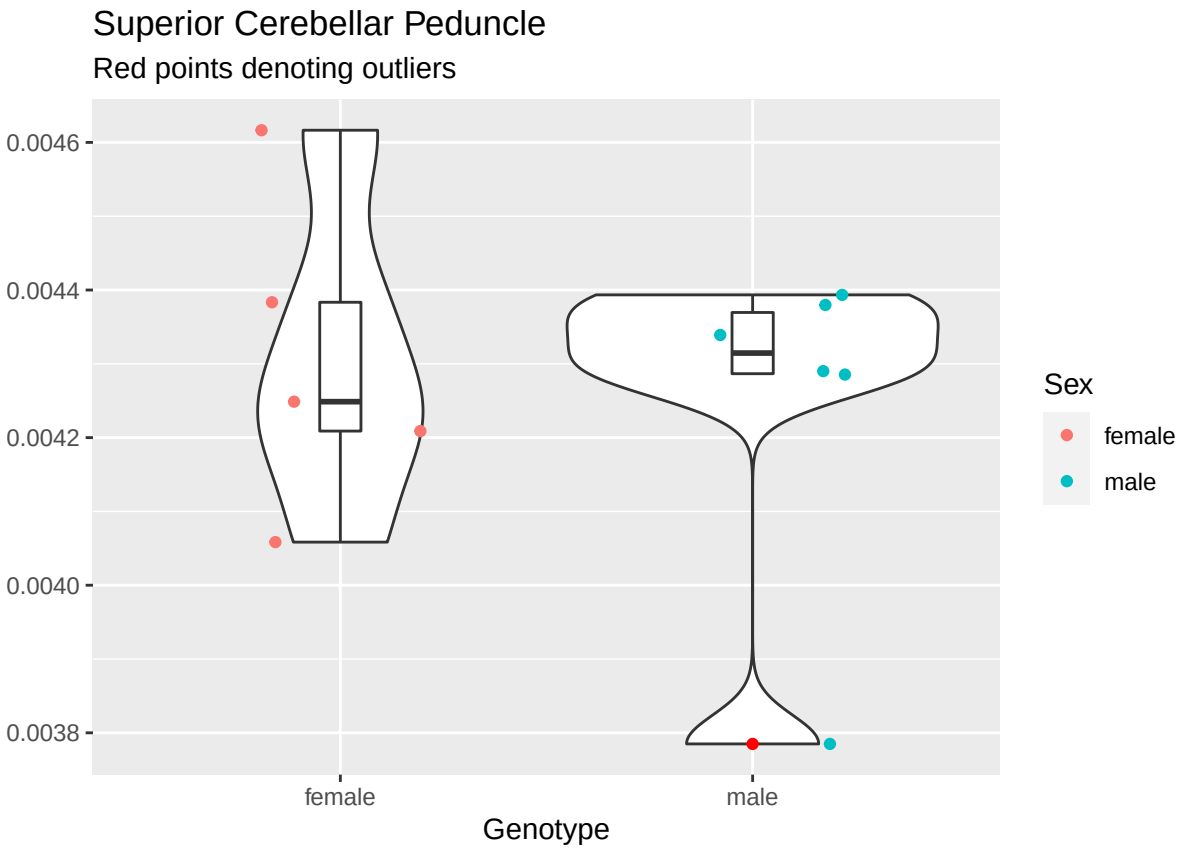

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.080e-09 3.077e-09   0.262  0.621
## Residuals    9 1.058e-07 1.176e-08
```



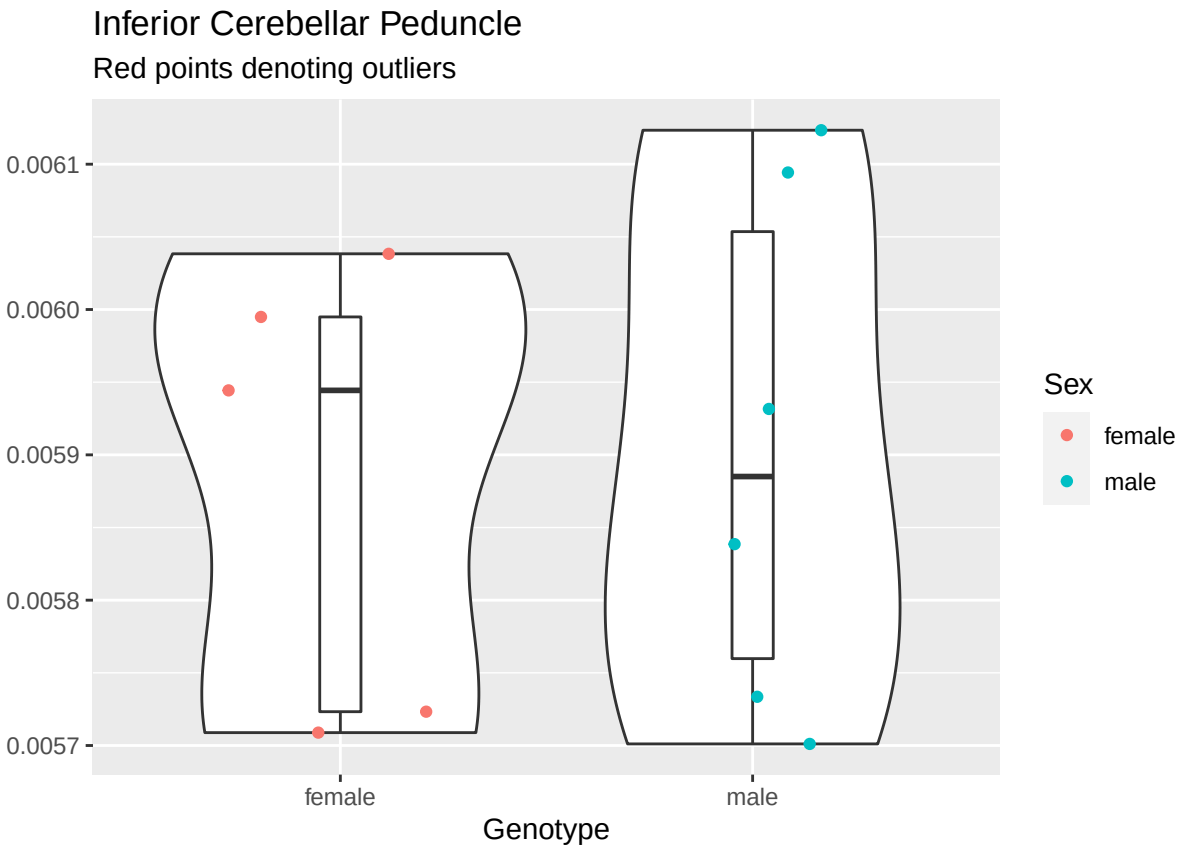

```
##              Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex           1 2.633e-08 2.633e-08    0.78    0.4
## Residuals     9 3.038e-07 3.376e-08
```



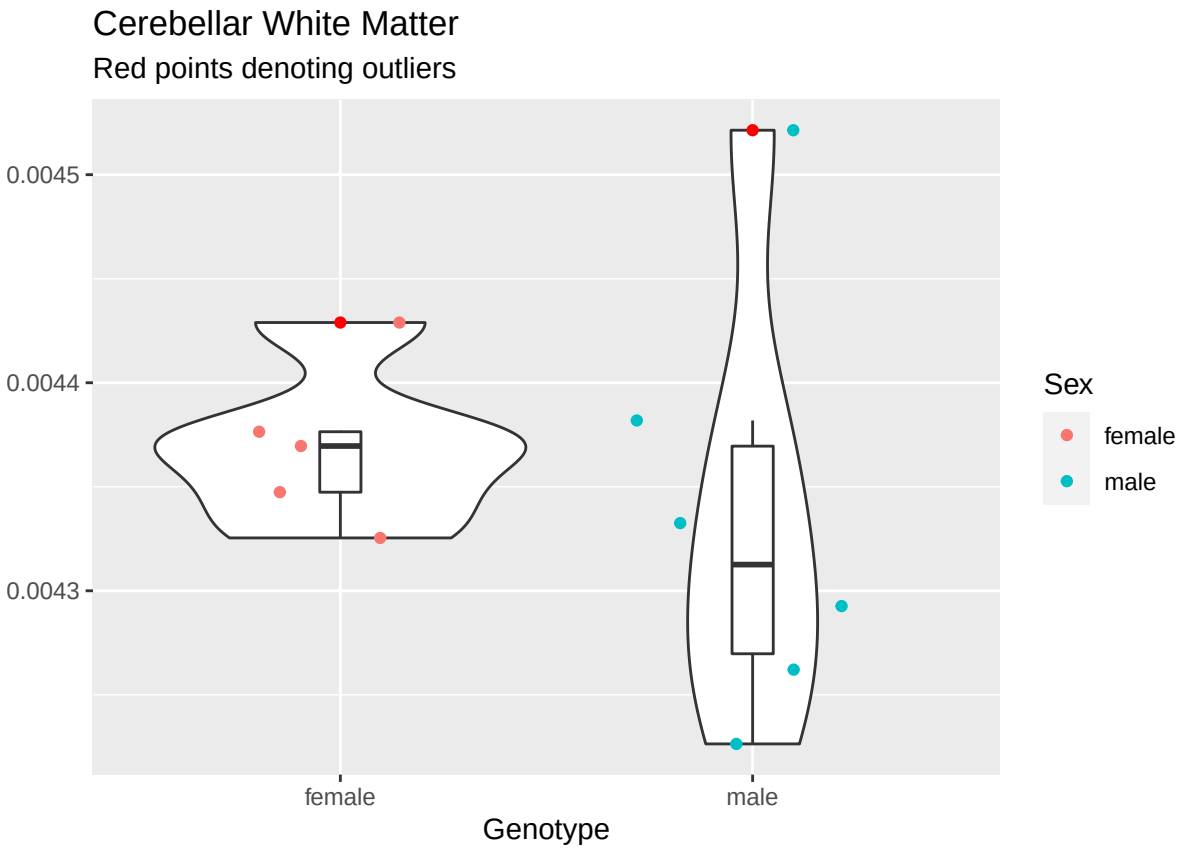

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.533e-08 1.533e-08   0.994  0.345
## Residuals    9 1.387e-07 1.541e-08
```



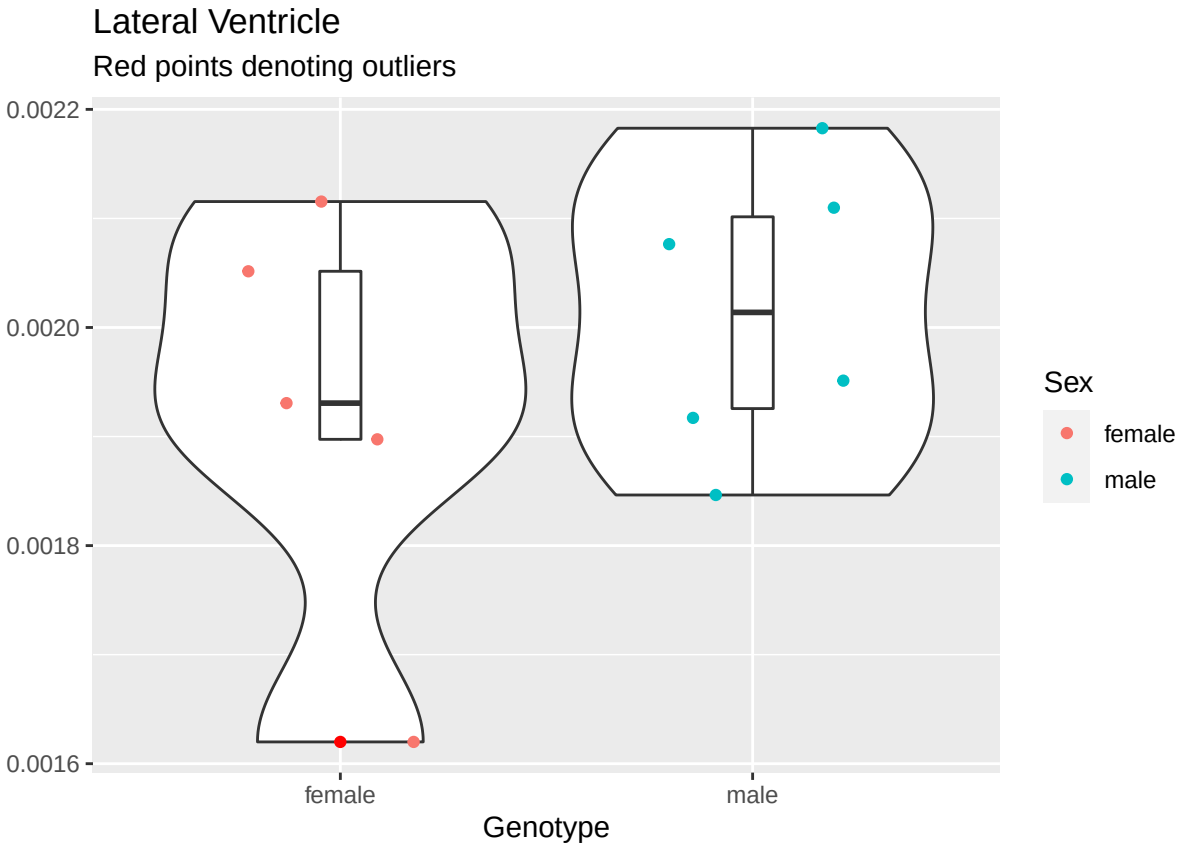

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 9.100e-09 9.090e-09   0.186  0.677
## Residuals    9 4.407e-07 4.897e-08
```



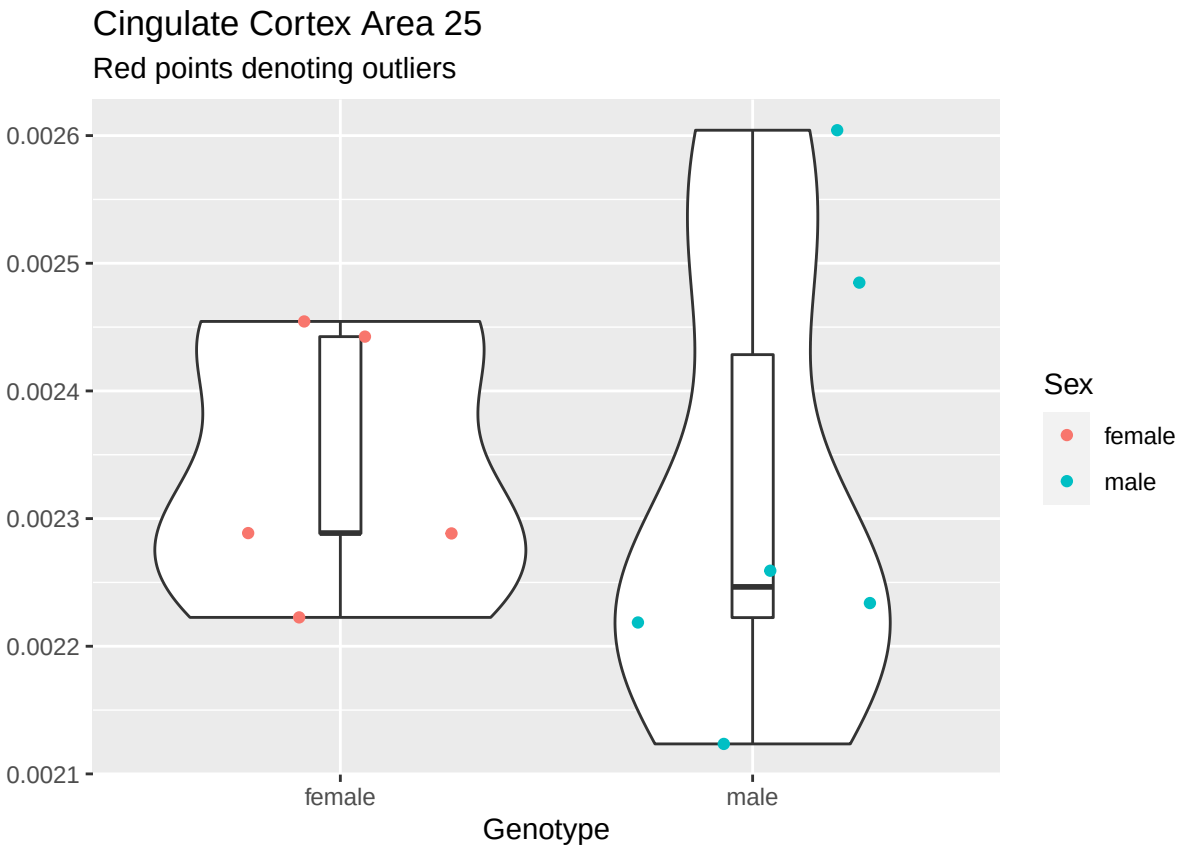

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.300e-09 1.295e-09   0.046  0.836
## Residuals    9 2.558e-07 2.843e-08
```



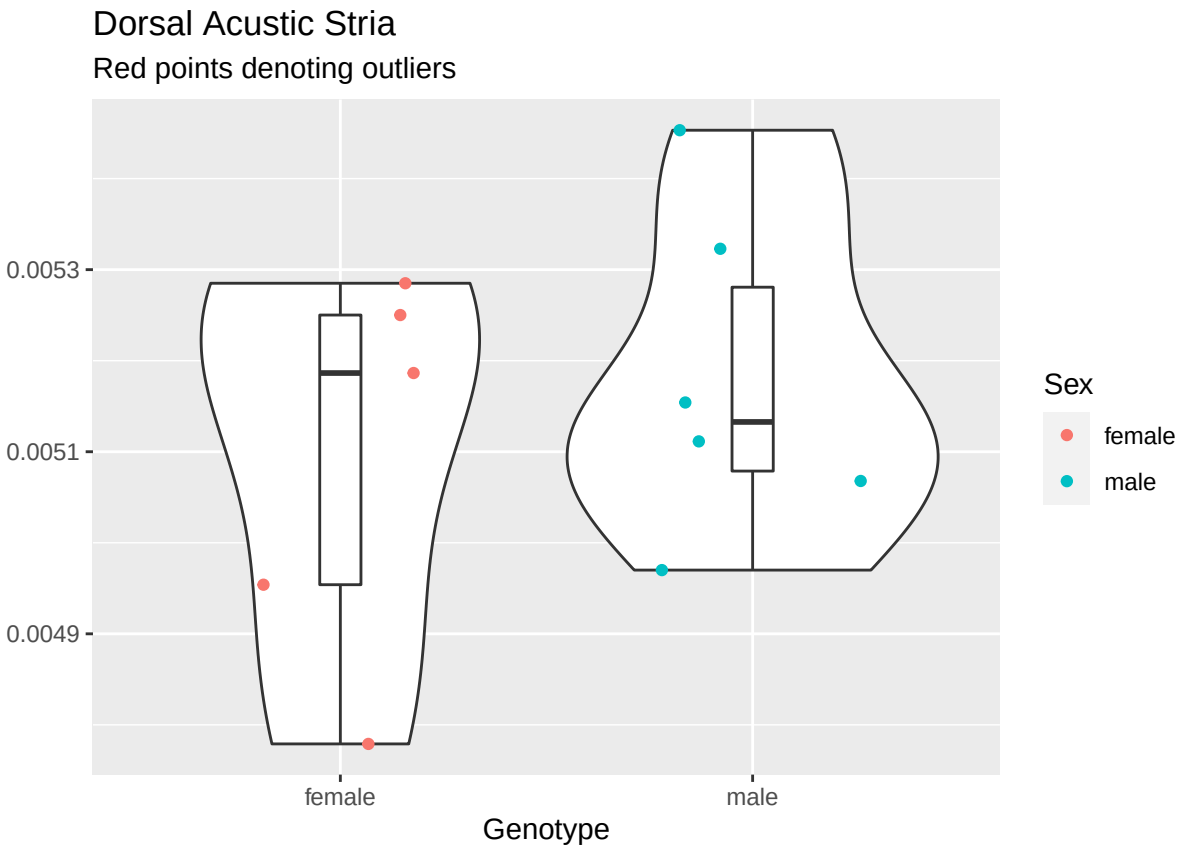

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.040e-09 3.044e-09   0.443  0.522
## Residuals    9 6.185e-08 6.873e-09
```



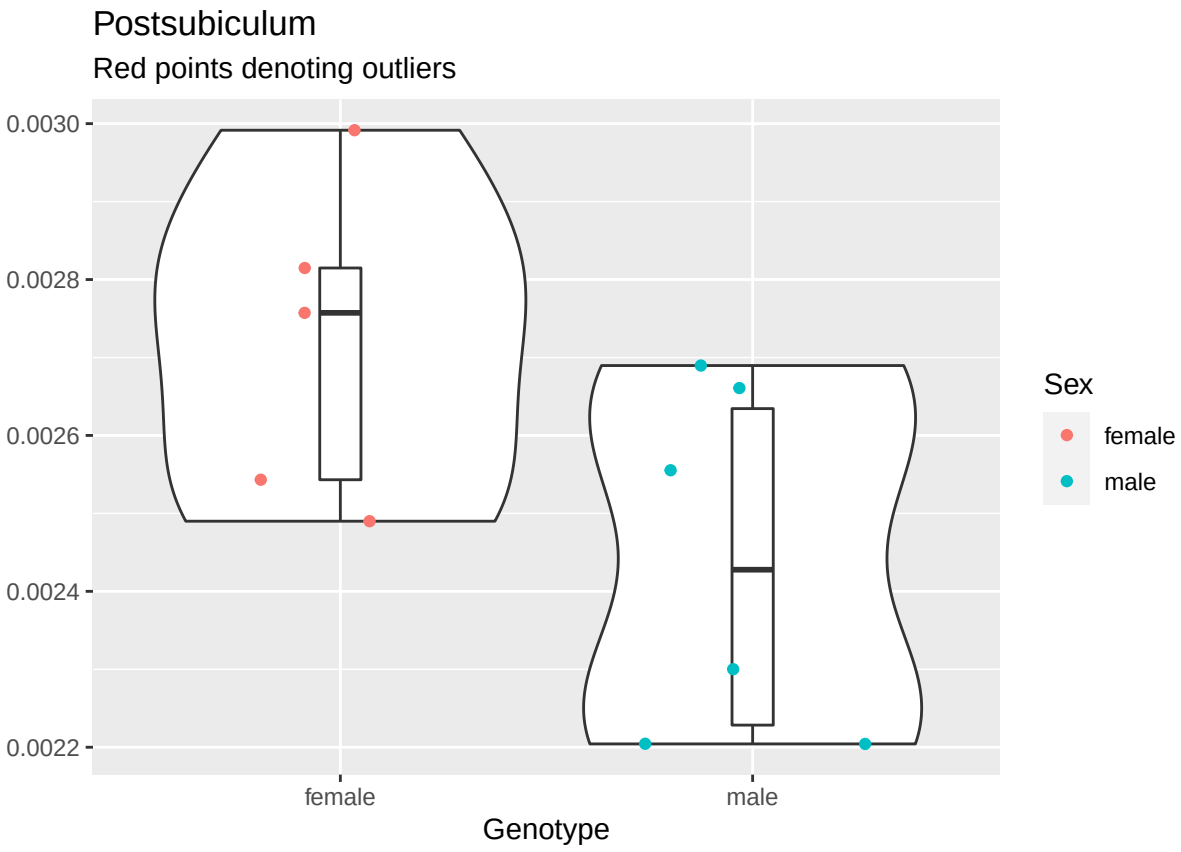

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.256e-08 2.256e-08   0.886  0.371
## Residuals    9 2.291e-07 2.545e-08
```



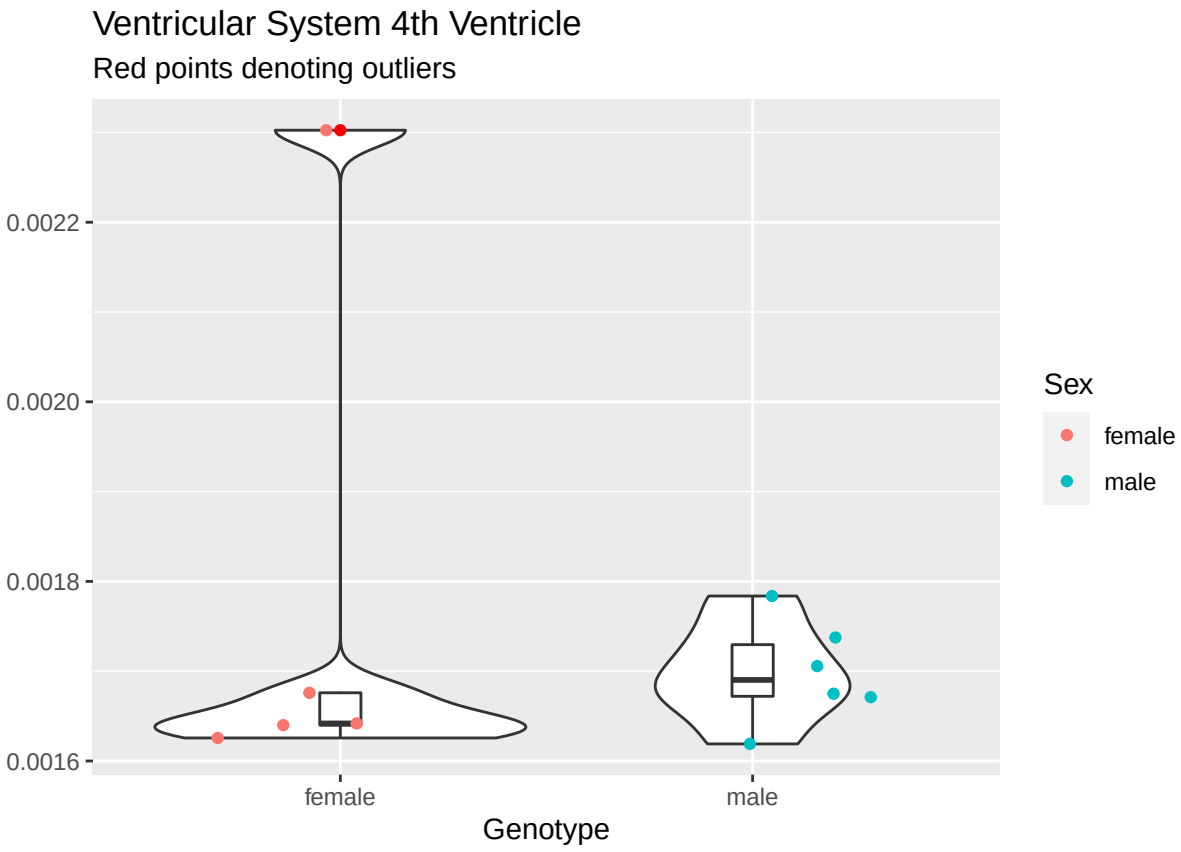

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 9.500e-10 9.460e-10    0.04  0.845
## Residuals    9 2.106e-07 2.341e-08
```



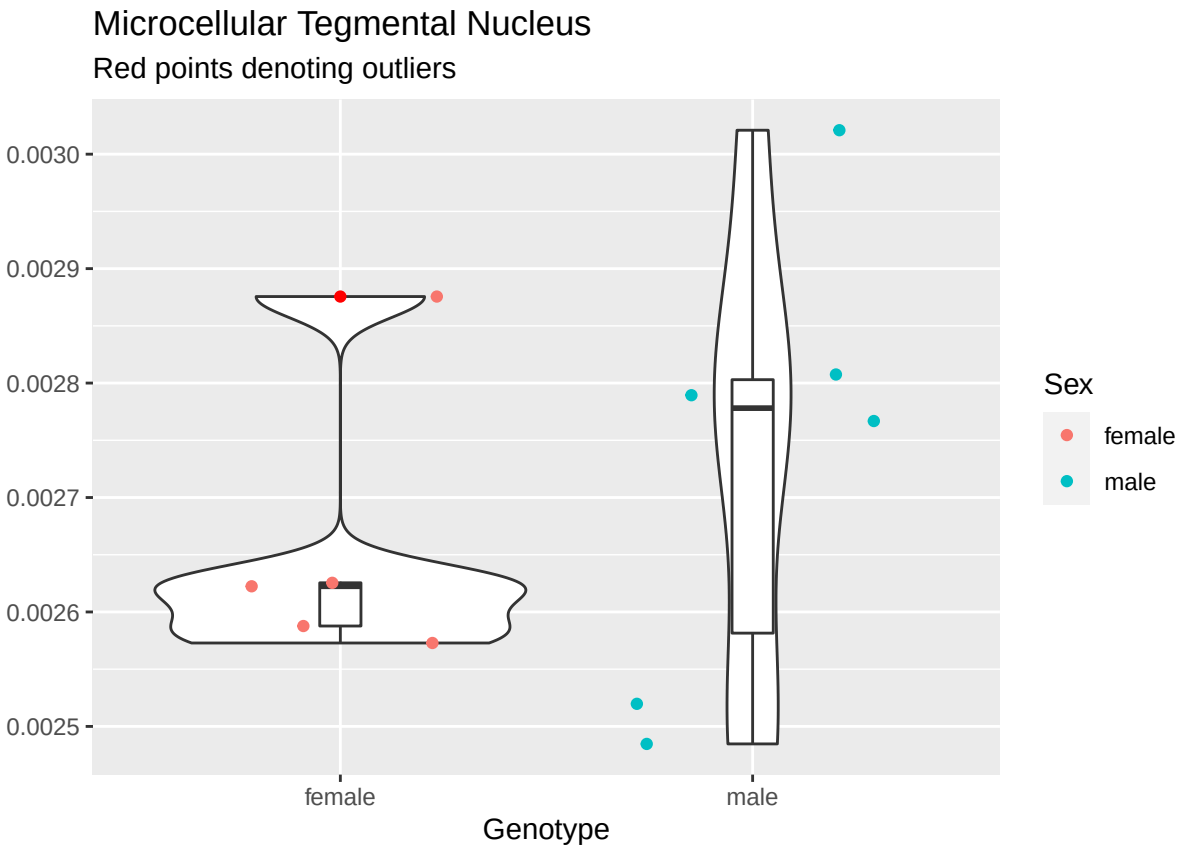

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.160e-08 2.159e-08   0.563  0.472
## Residuals    9 3.453e-07 3.837e-08
```



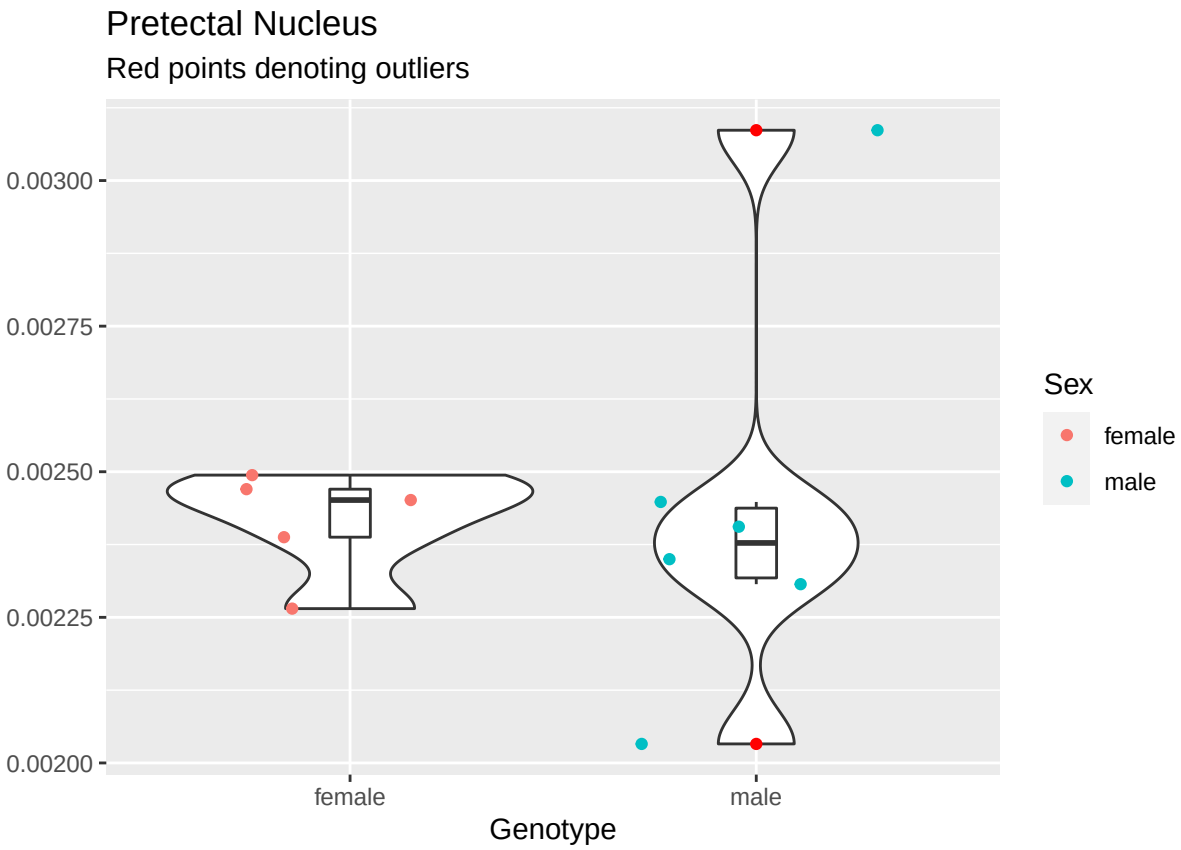

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.193e-07 2.193e-07   4.665 0.0591 .
## Residuals    9 4.232e-07 4.702e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



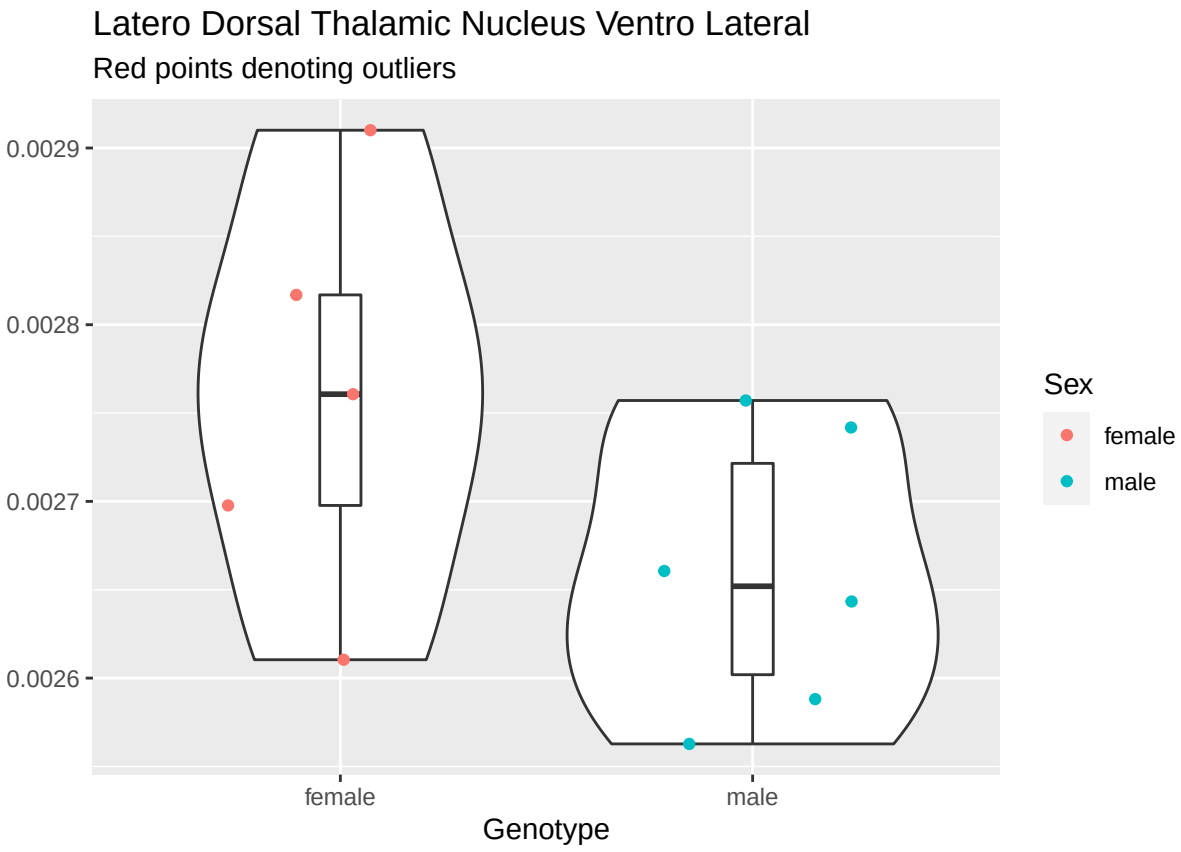

```
##              Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex           1 1.680e-08 1.681e-08   0.417  0.534
## Residuals     9 3.627e-07 4.030e-08
```



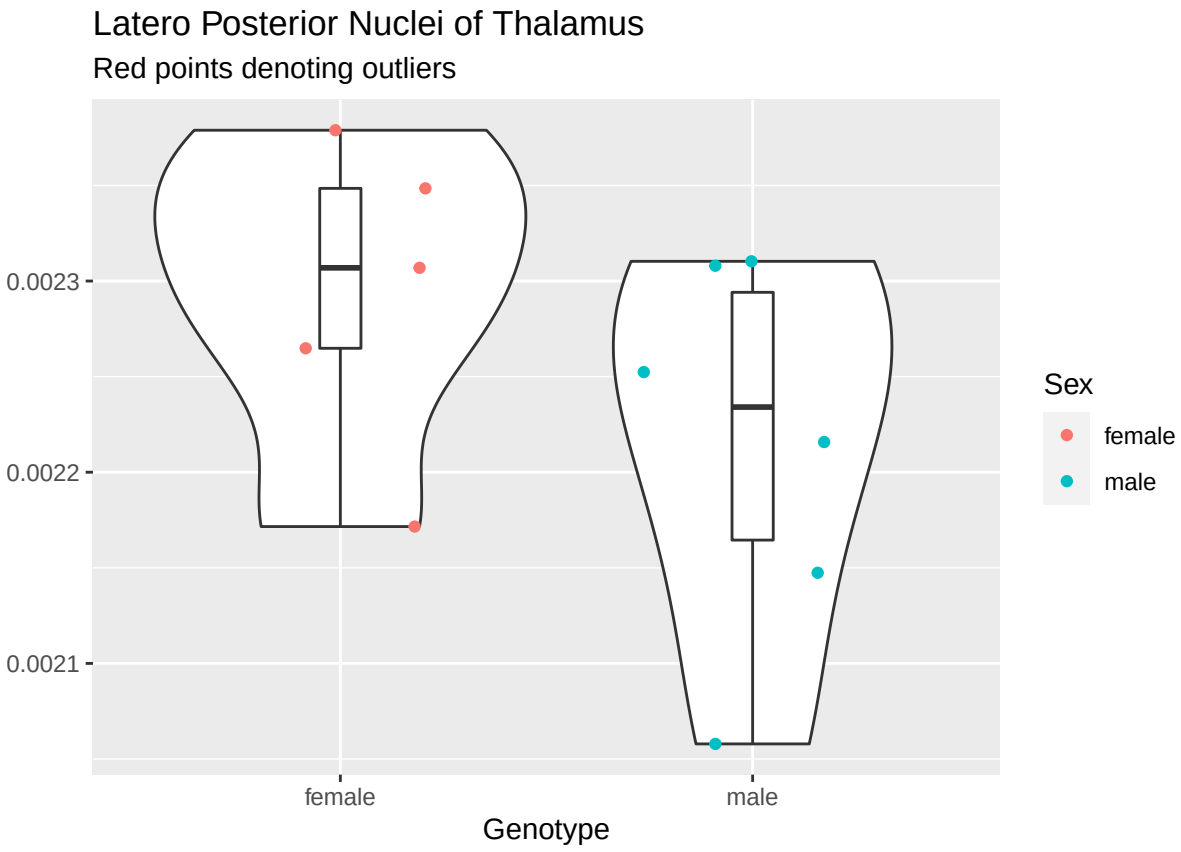

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.521e-08 1.522e-08   0.523  0.488
## Residuals    9 2.618e-07 2.908e-08
```



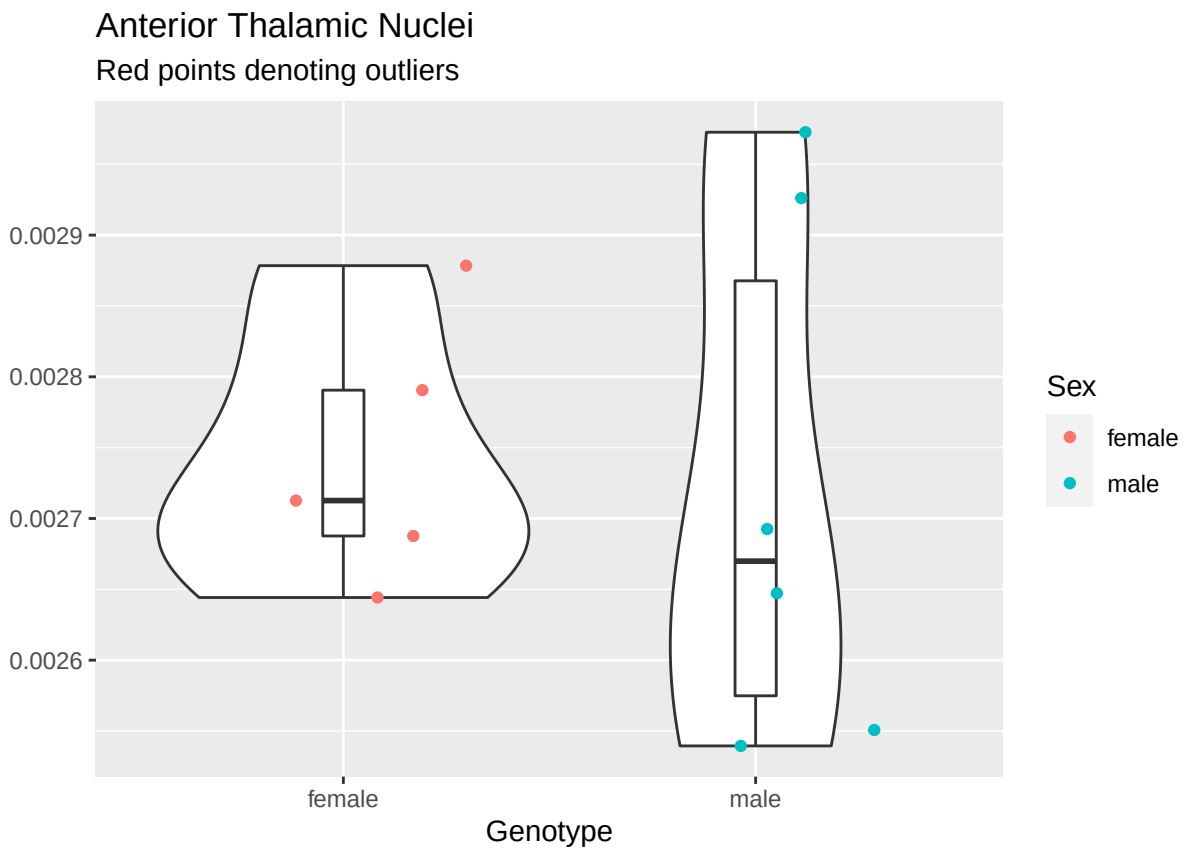

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.700e-09 1.650e-09   0.023  0.883
## Residuals    9 6.447e-07 7.164e-08
```



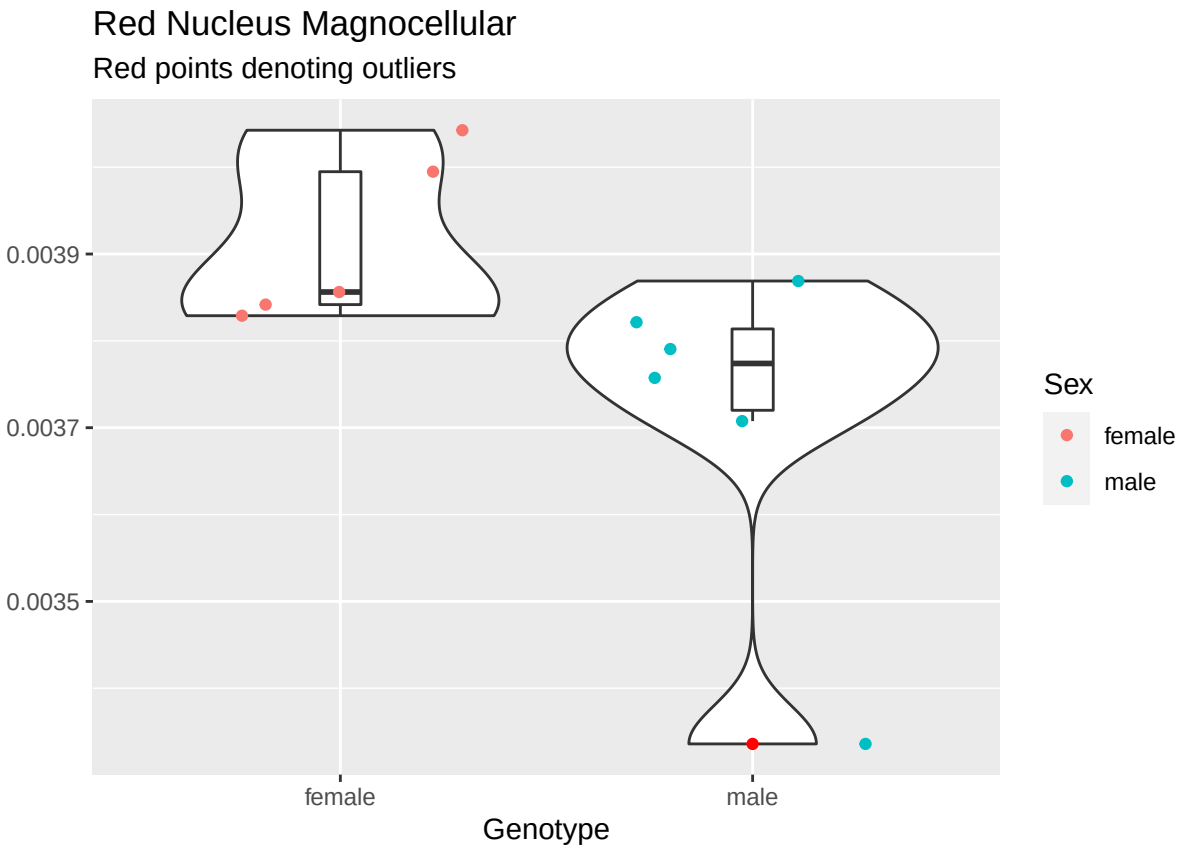

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.738e-08 2.738e-08   2.967  0.119
## Residuals    9 8.304e-08 9.227e-09
```



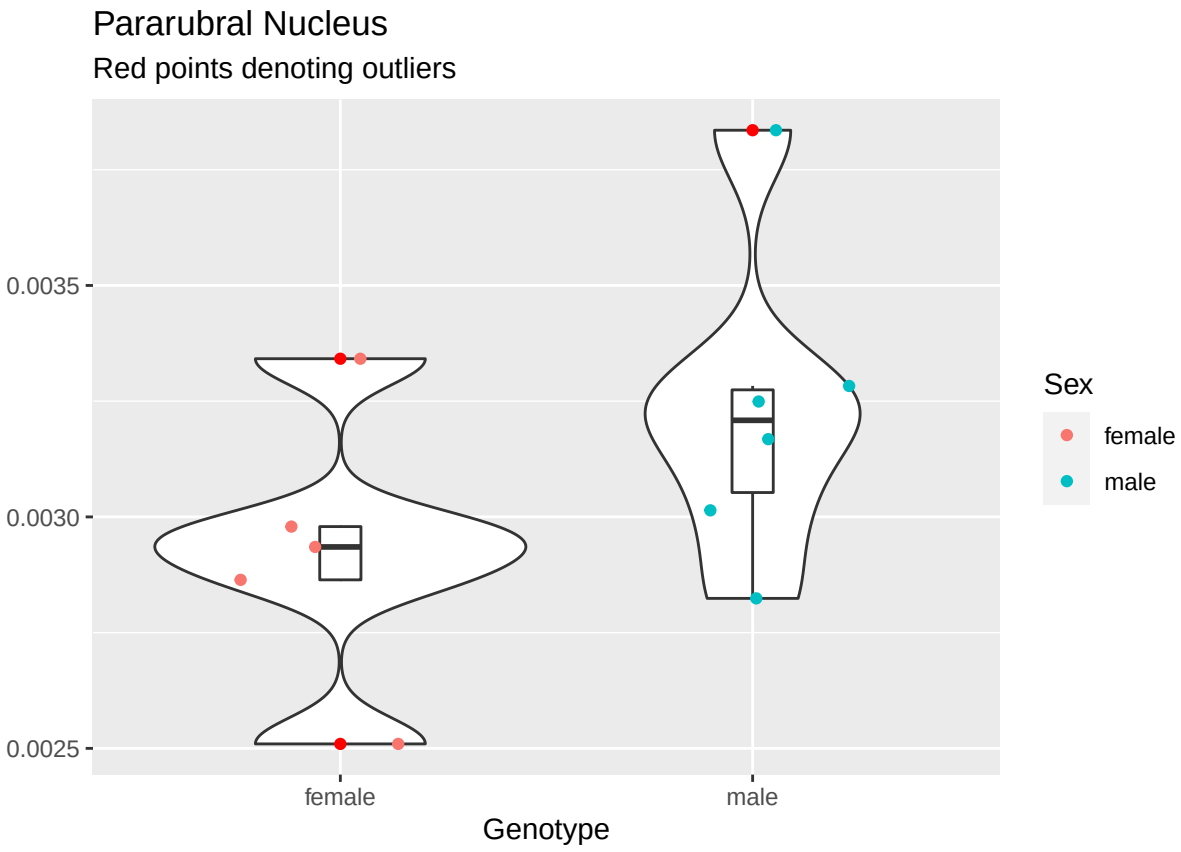

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.695e-08 1.695e-08   2.046  0.186
## Residuals    9 7.456e-08 8.285e-09
```



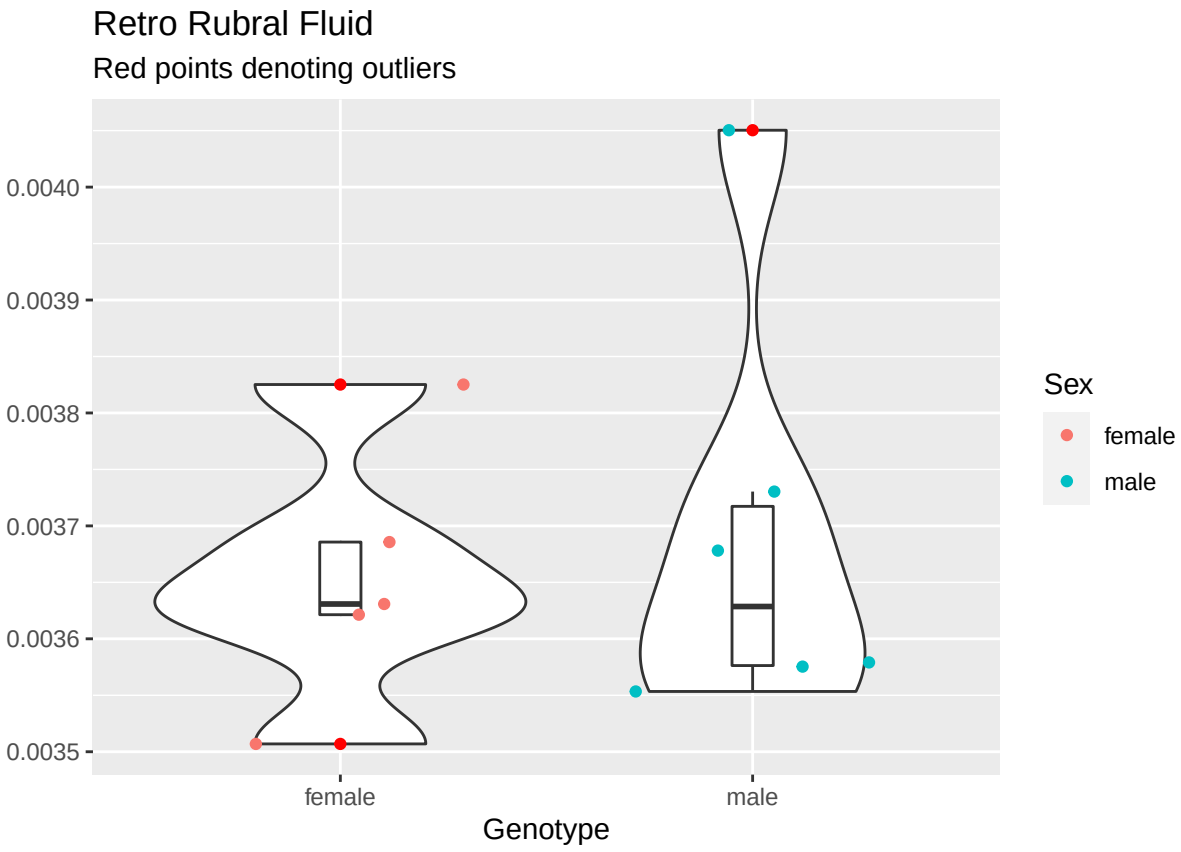

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.230e-09 1.231e-09   0.053  0.823
## Residuals    9 2.079e-07 2.310e-08
```



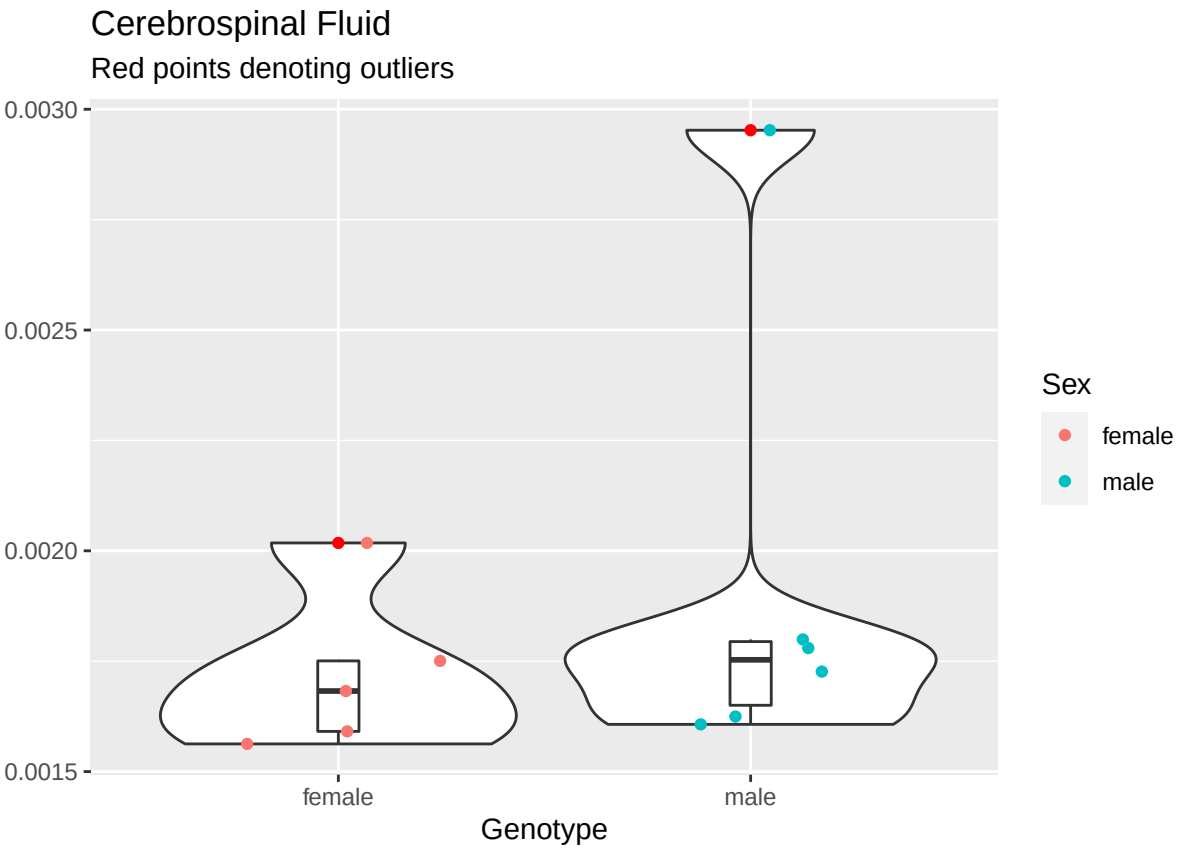

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.082e-07 1.082e-07   4.327 0.0672 .
## Residuals    9 2.251e-07 2.501e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



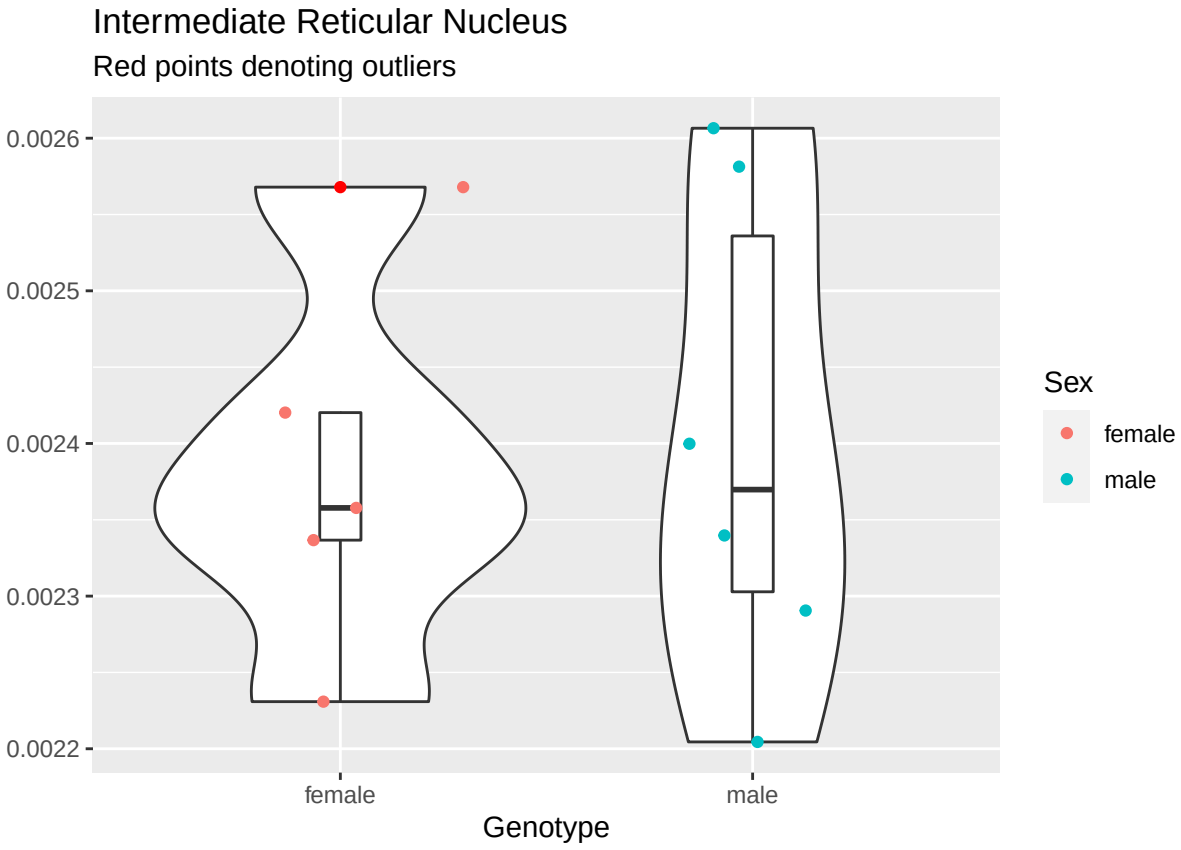

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.504e-07 2.504e-07   2.404  0.155
## Residuals    9 9.378e-07 1.042e-07
```



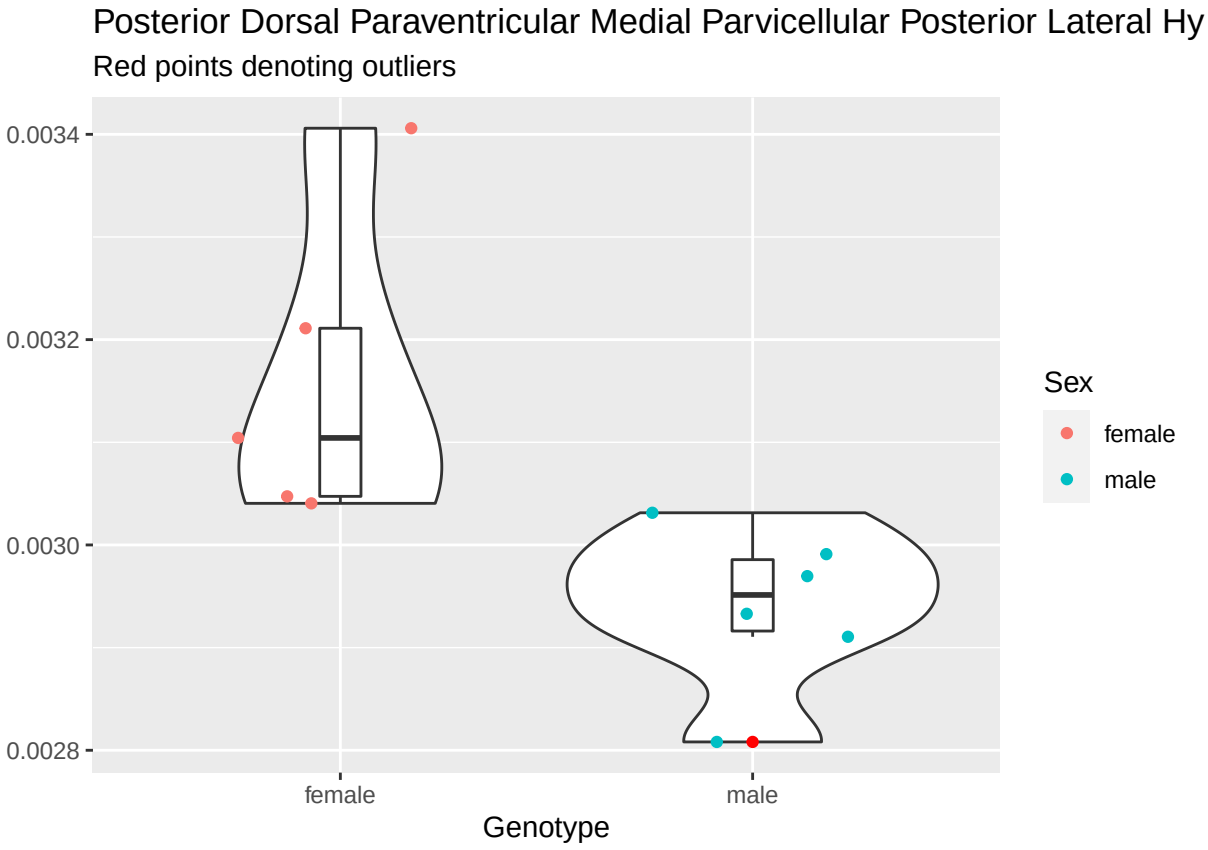

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 4.460e-09 4.465e-09   0.175  0.685
## Residuals    9 2.292e-07 2.546e-08
```



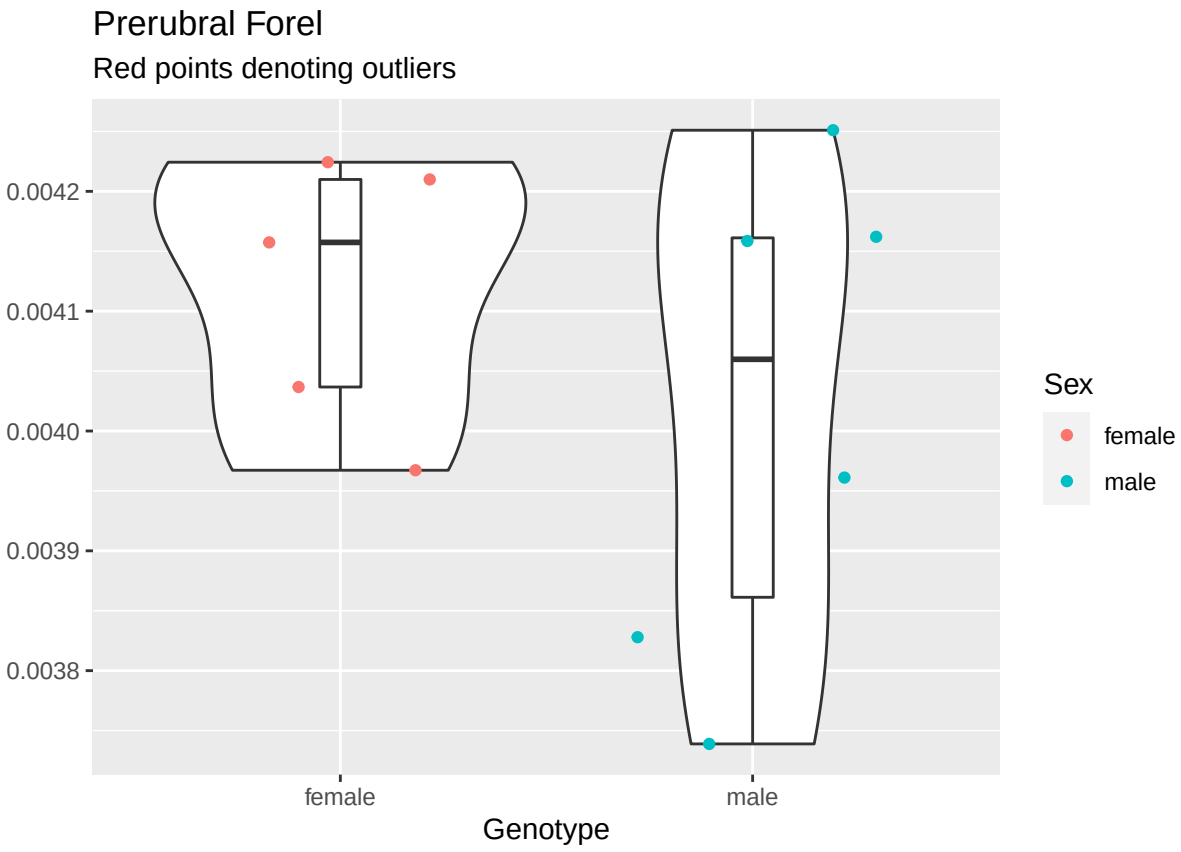

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.027e-07 1.027e-07   0.635  0.446
## Residuals    9 1.455e-06 1.617e-07
```



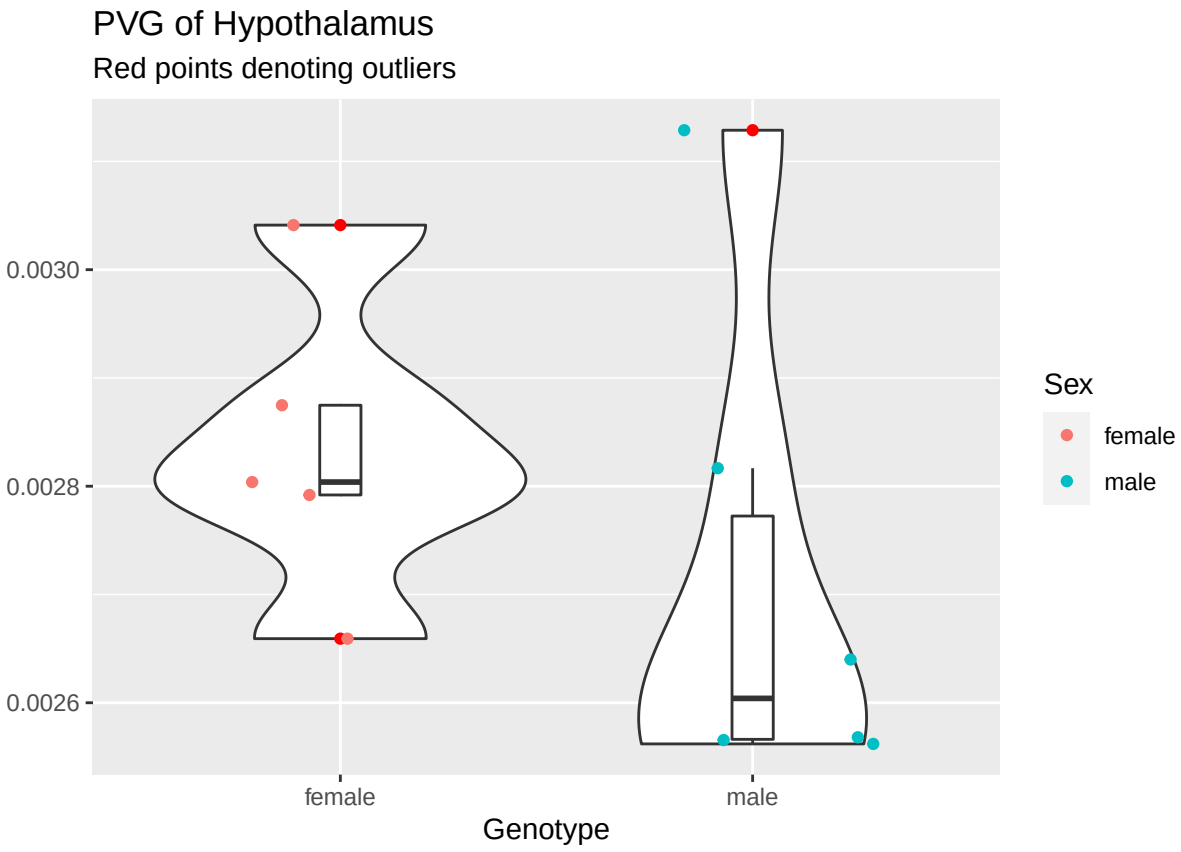

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.210e-09 1.208e-09   0.057  0.817
## Residuals    9 1.908e-07 2.120e-08
```



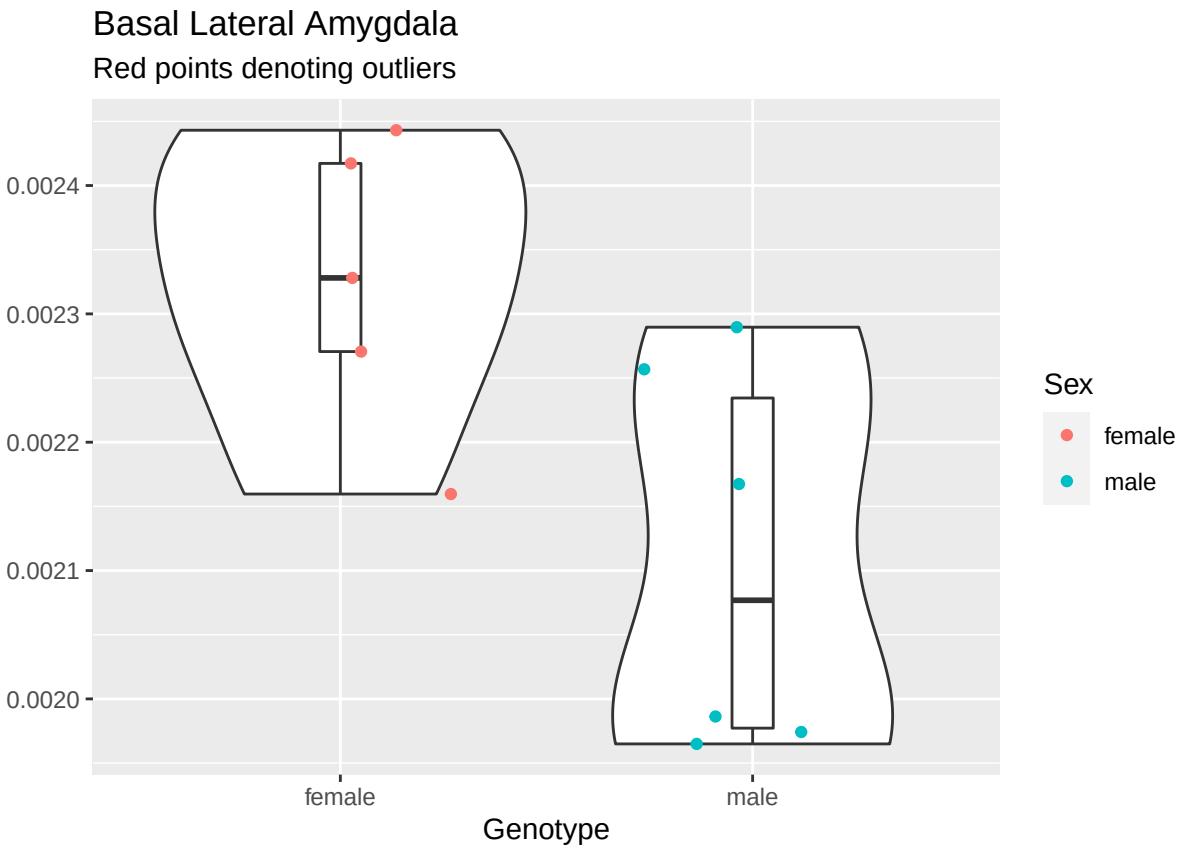

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.335e-07 1.335e-07   9.743 0.0123 *
## Residuals    9 1.233e-07 1.370e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



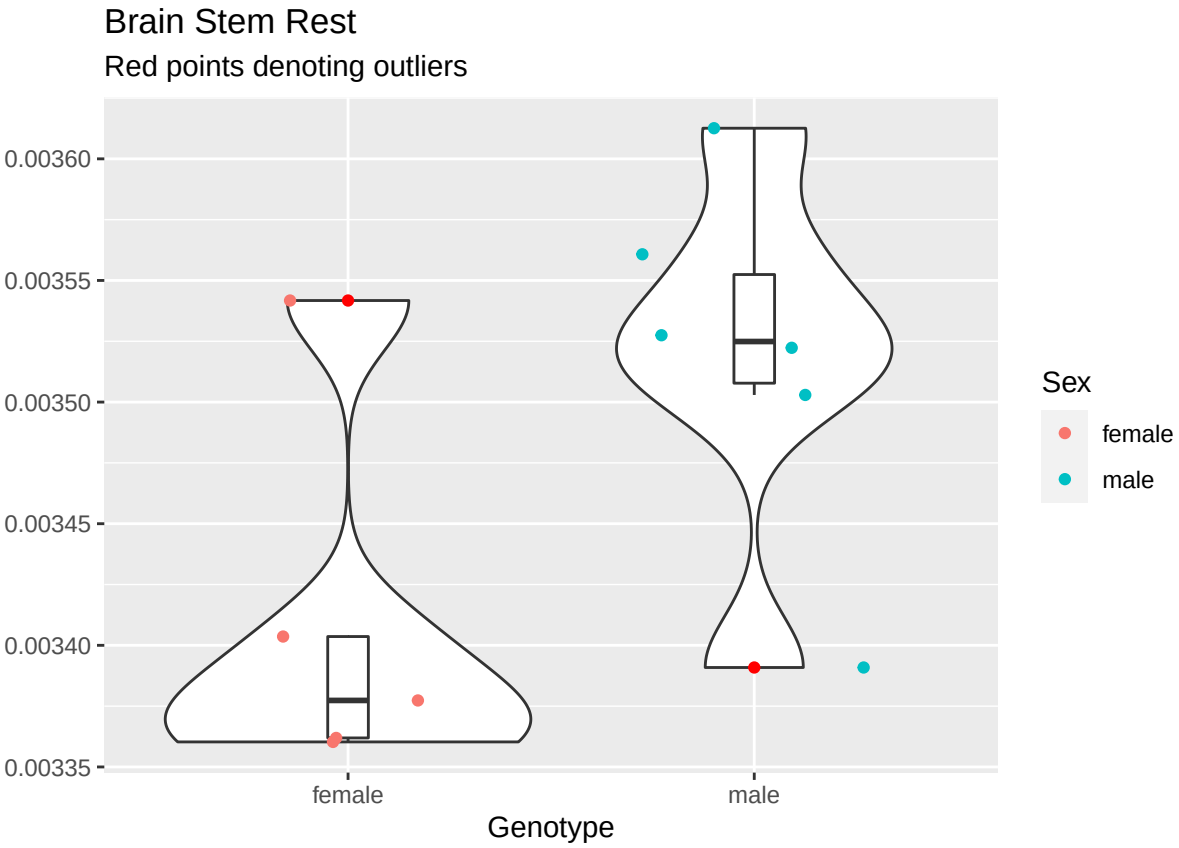

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.867e-08 2.867e-08   0.982  0.348
## Residuals    9 2.627e-07 2.919e-08
```



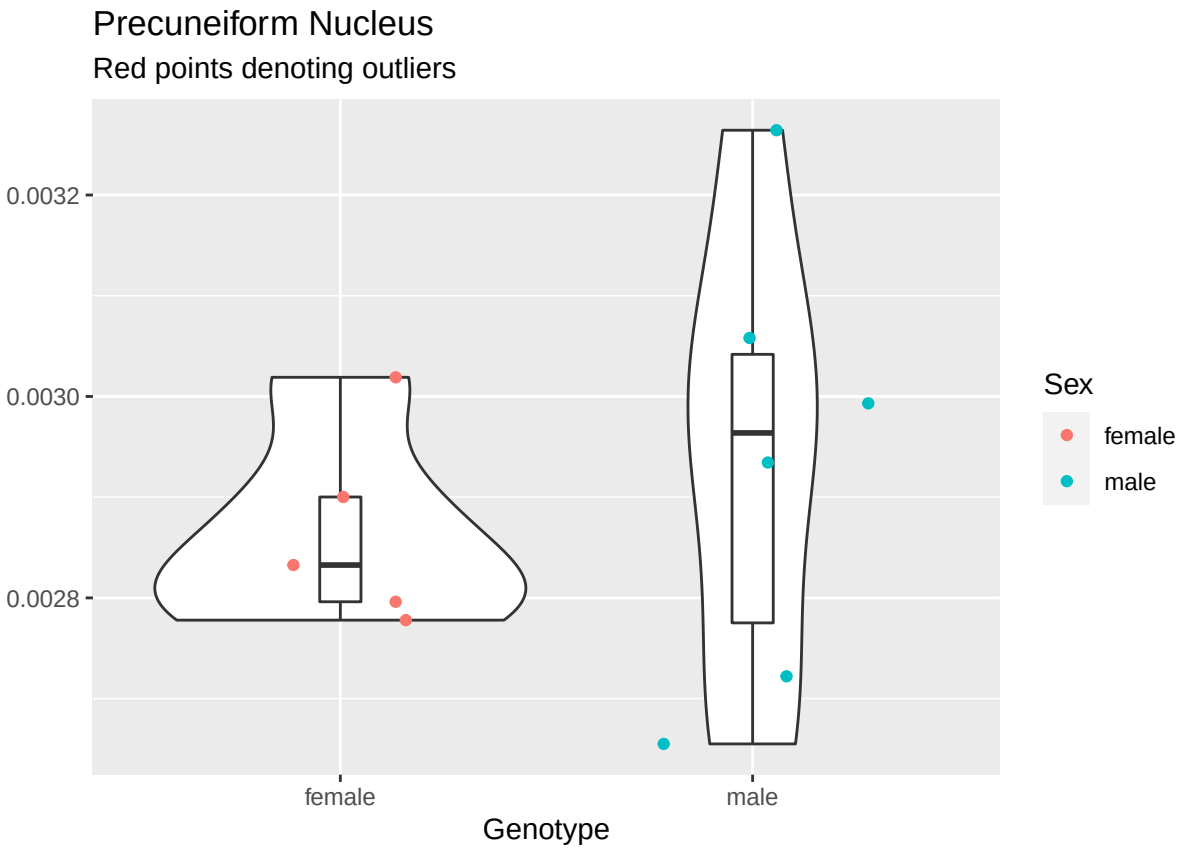

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.970e-08 3.971e-08   1.076  0.327
## Residuals    9 3.323e-07 3.692e-08
```



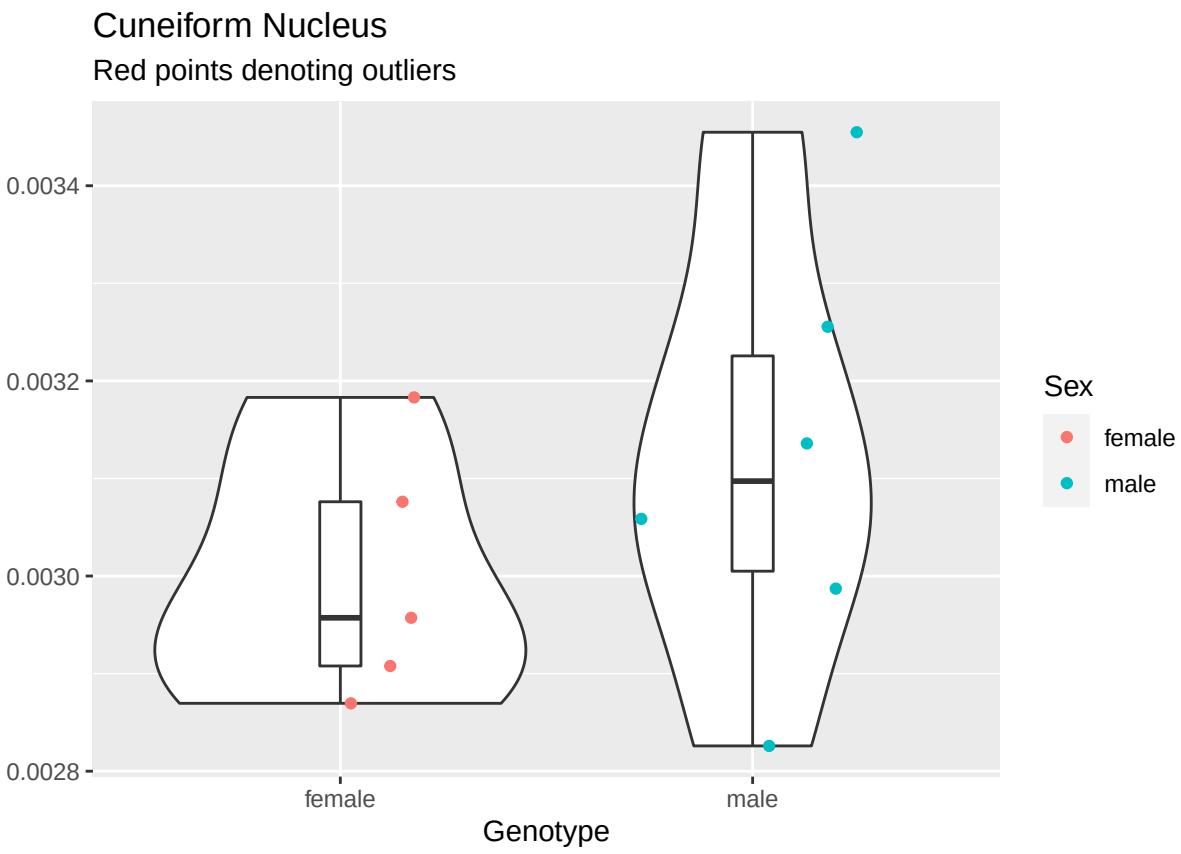

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.287e-07 1.287e-07   7.034 0.0264 *
## Residuals    9 1.646e-07 1.829e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



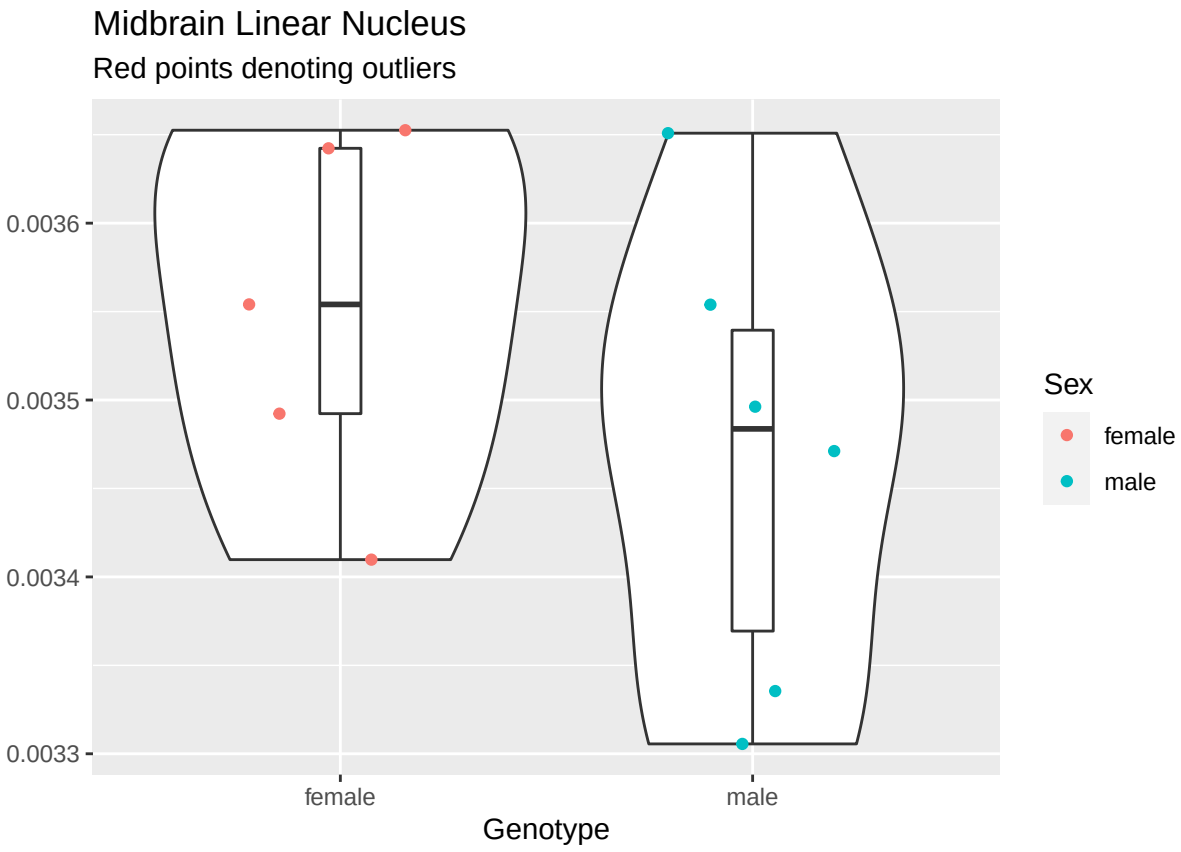

```
##             Df   Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 3.33e-08 3.33e-08   5.936 0.0376 *
## Residuals    9 5.05e-08 5.61e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



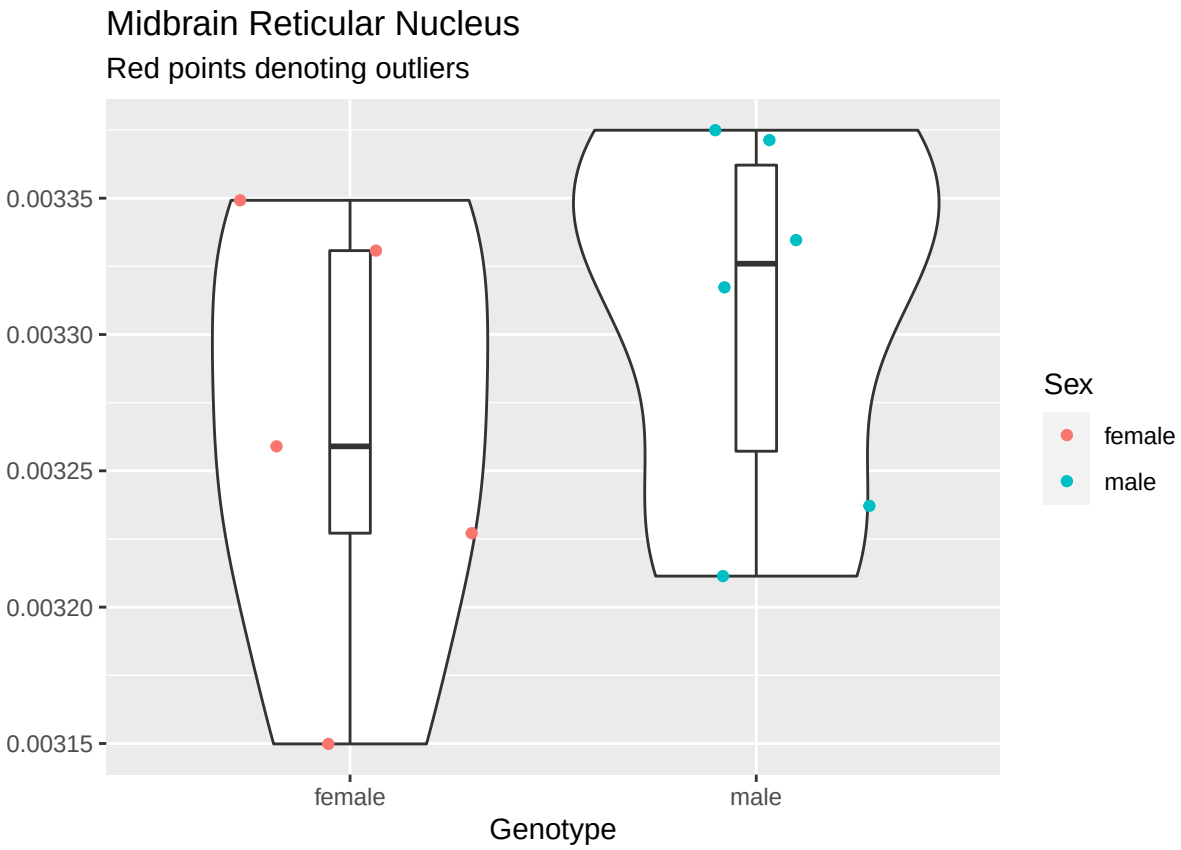

```
##             Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.440e-08 1.44e-08   0.449   0.52
## Residuals    9 2.889e-07 3.21e-08
```



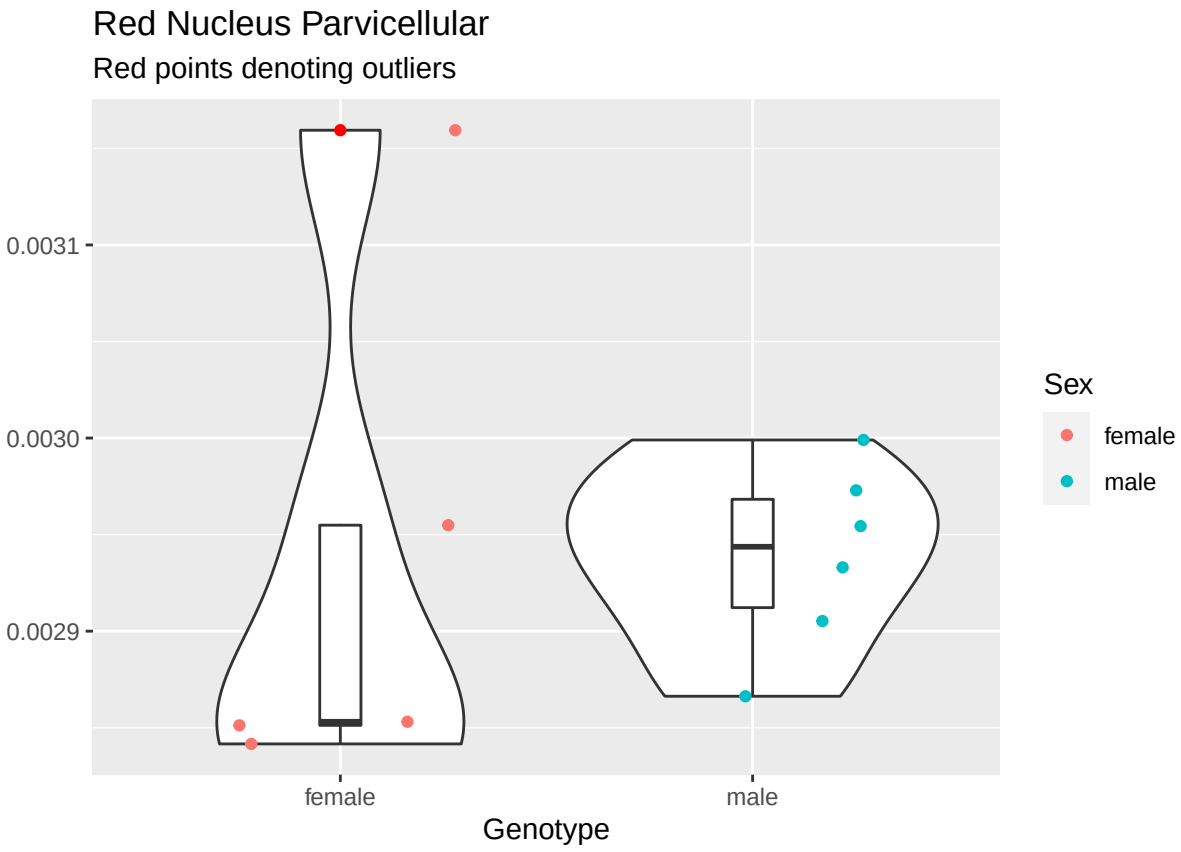

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.986e-08 3.986e-08   1.175  0.307
## Residuals    9 3.053e-07 3.393e-08
```



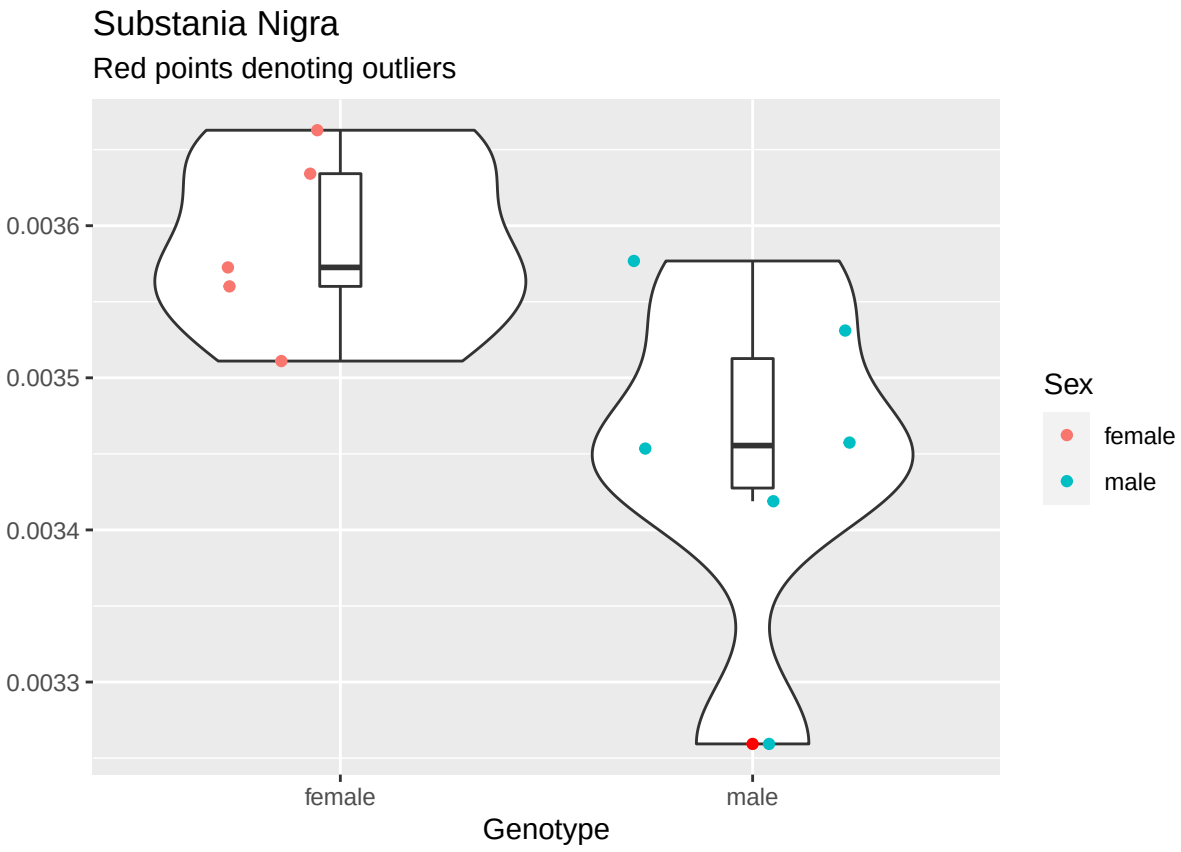

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.804e-08 1.804e-08   1.272  0.289
## Residuals    9 1.276e-07 1.418e-08
```



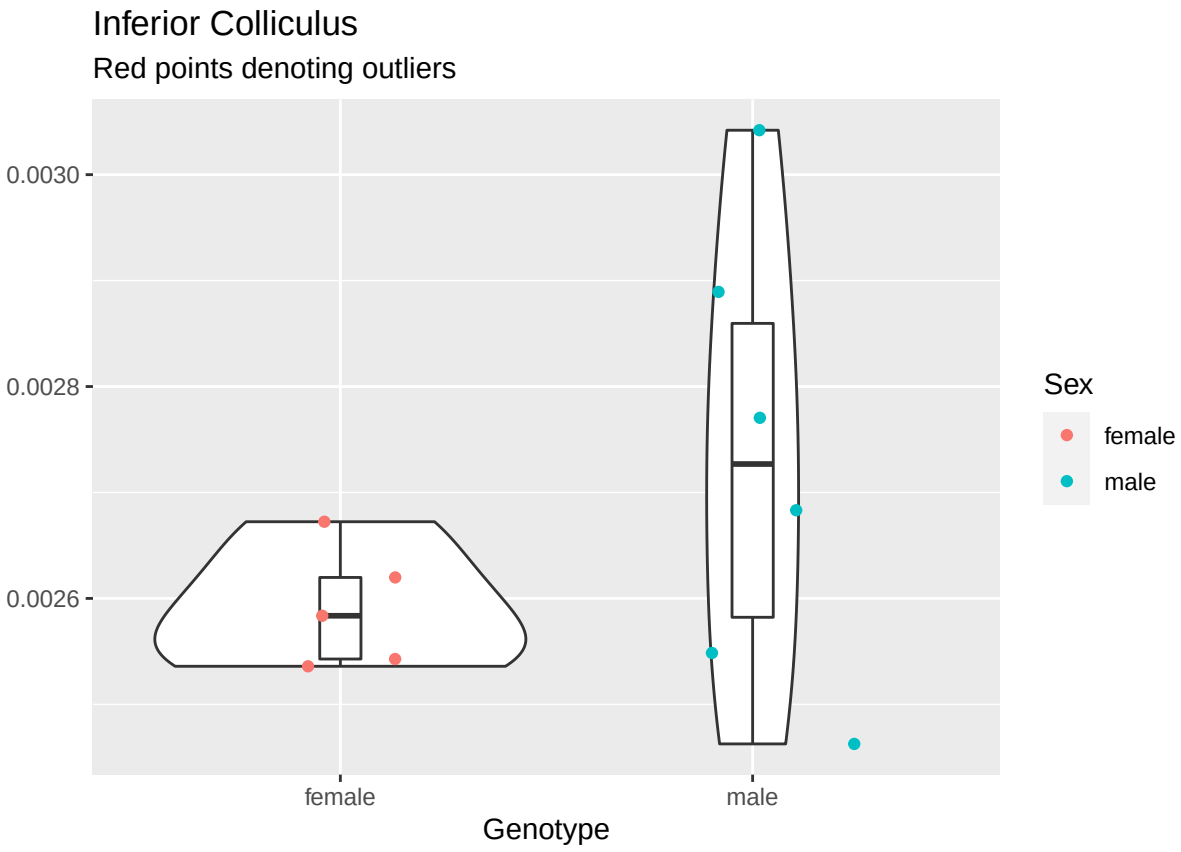

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 5.420e-09 5.425e-09   0.981  0.348
## Residuals    9 4.977e-08 5.530e-09
```



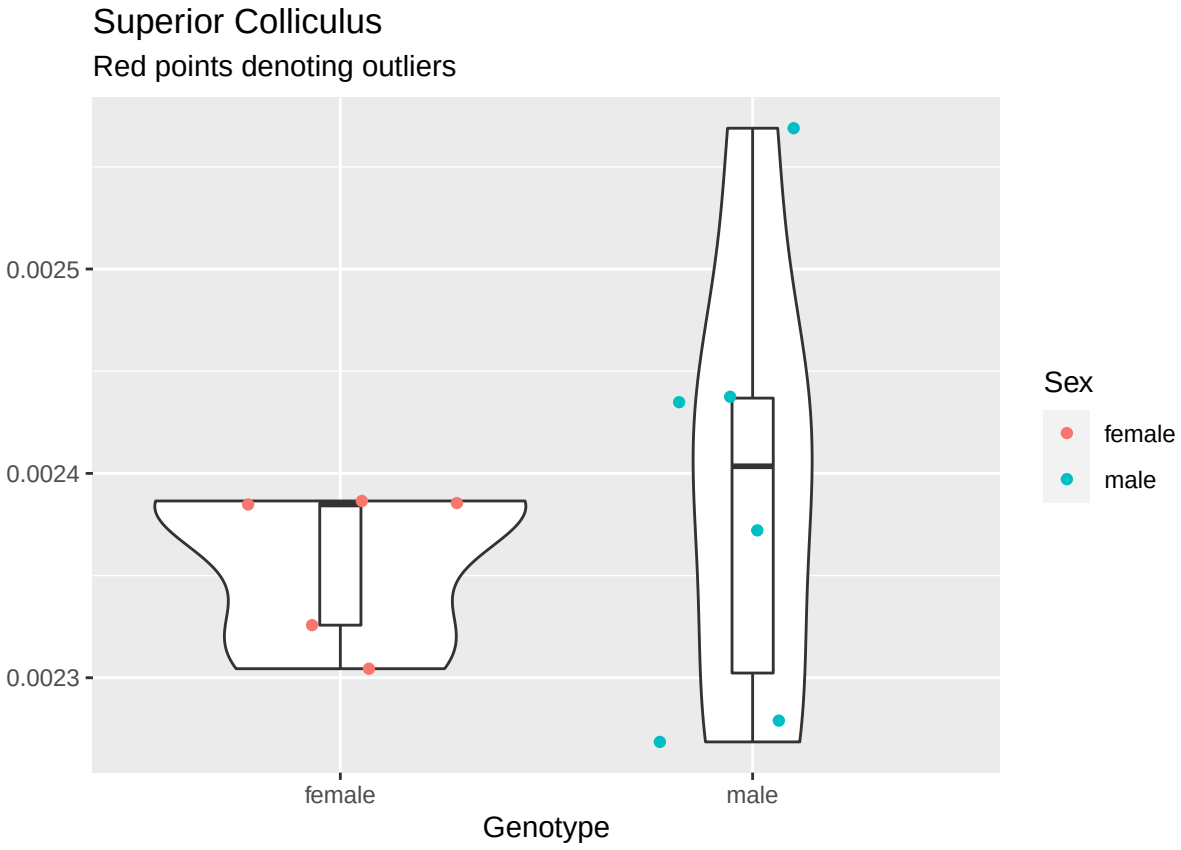

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.100e-10 1.130e-10   0.012  0.915
## Residuals    9 8.462e-08 9.403e-09
```



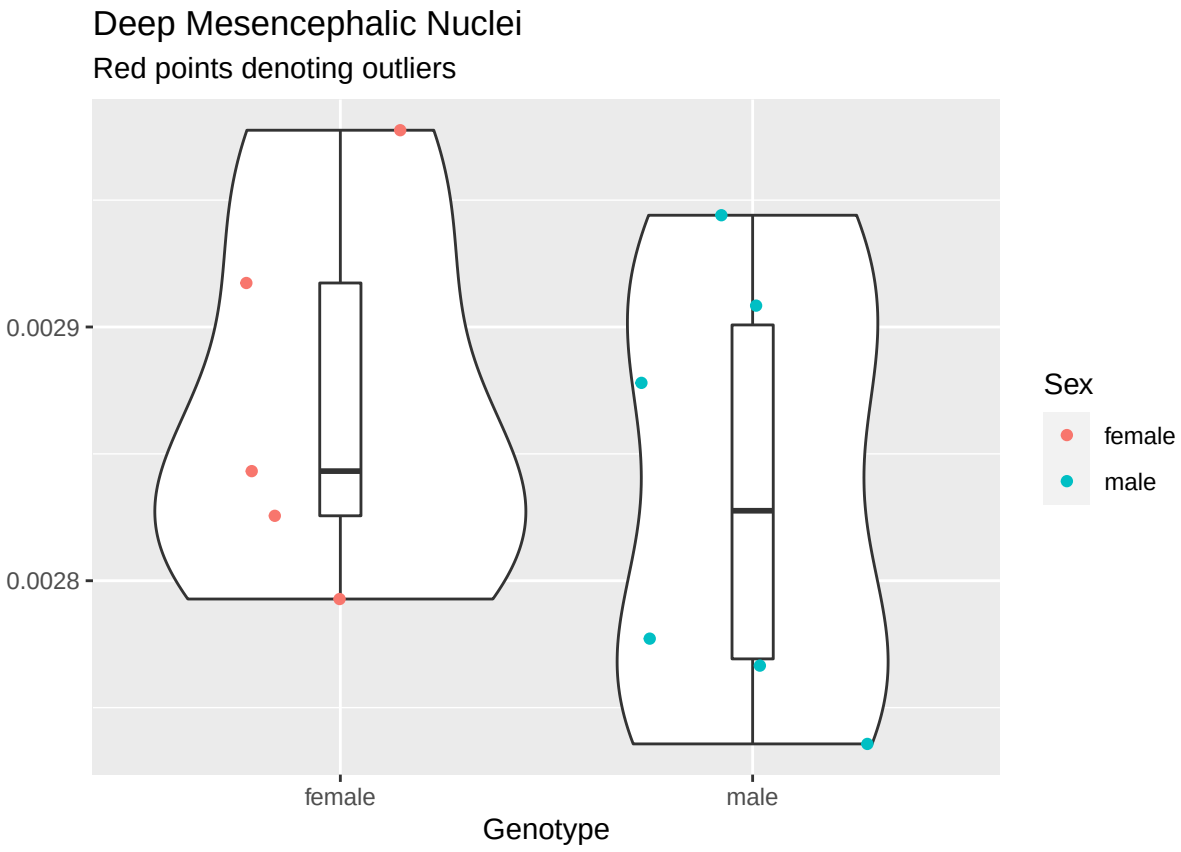

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 5.241e-08 5.241e-08   6.314 0.0332 *
## Residuals    9 7.471e-08 8.300e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



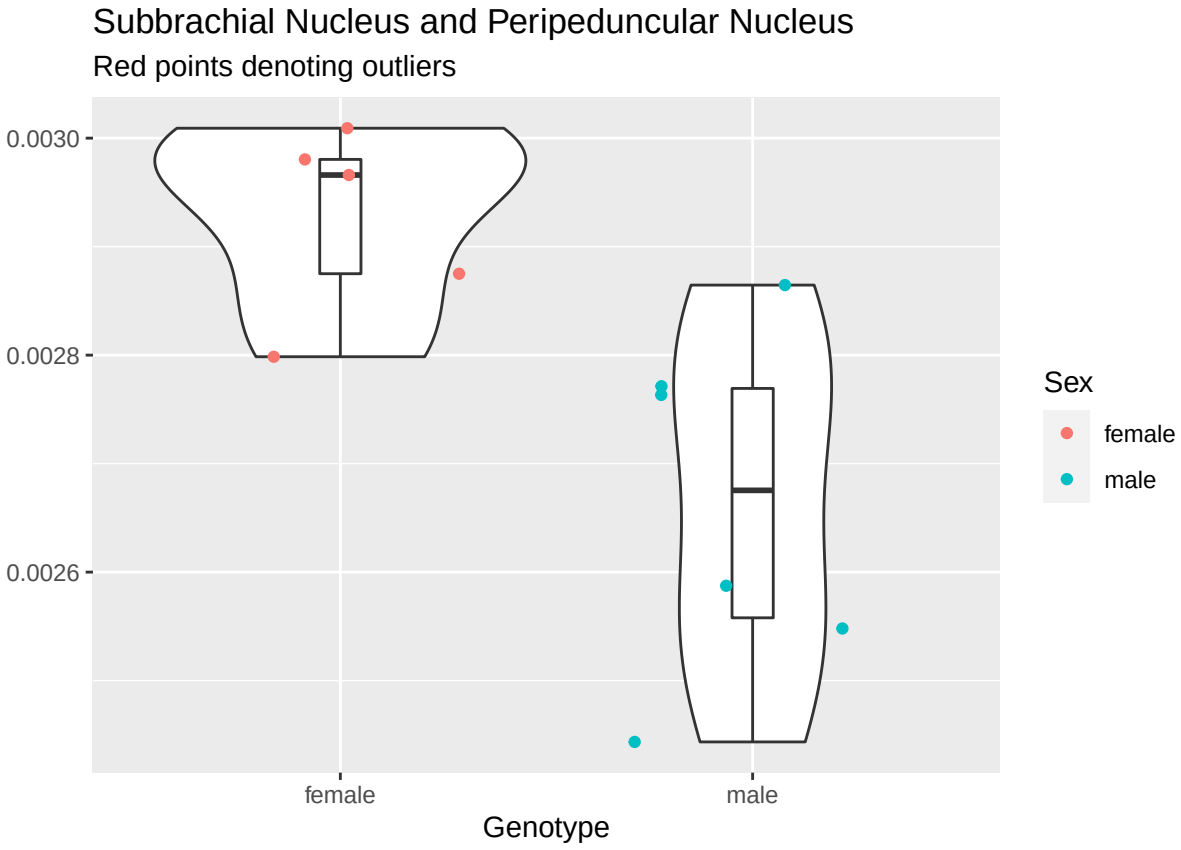

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 5.482e-08 5.482e-08   2.024  0.189
## Residuals    9 2.438e-07 2.708e-08
```



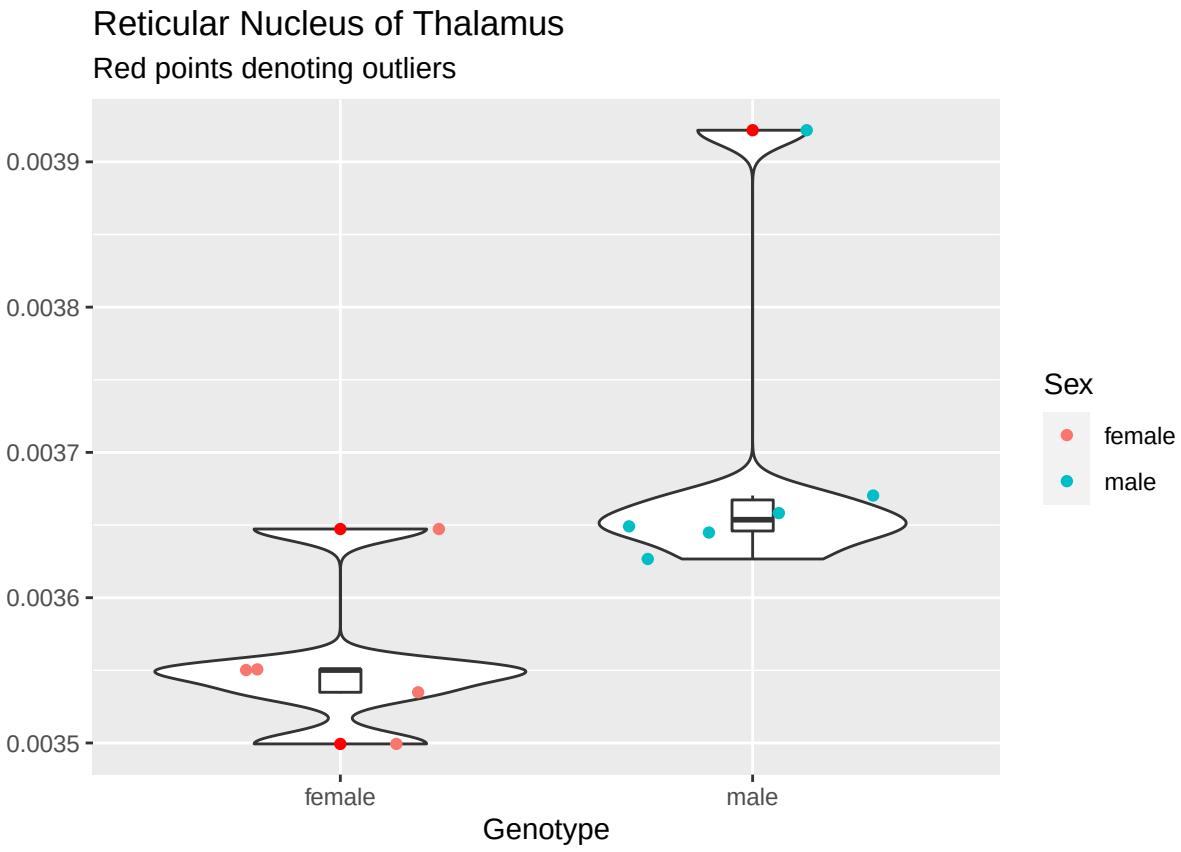

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.560e-09 3.556e-09   0.459  0.515
## Residuals    9 6.976e-08 7.751e-09
```



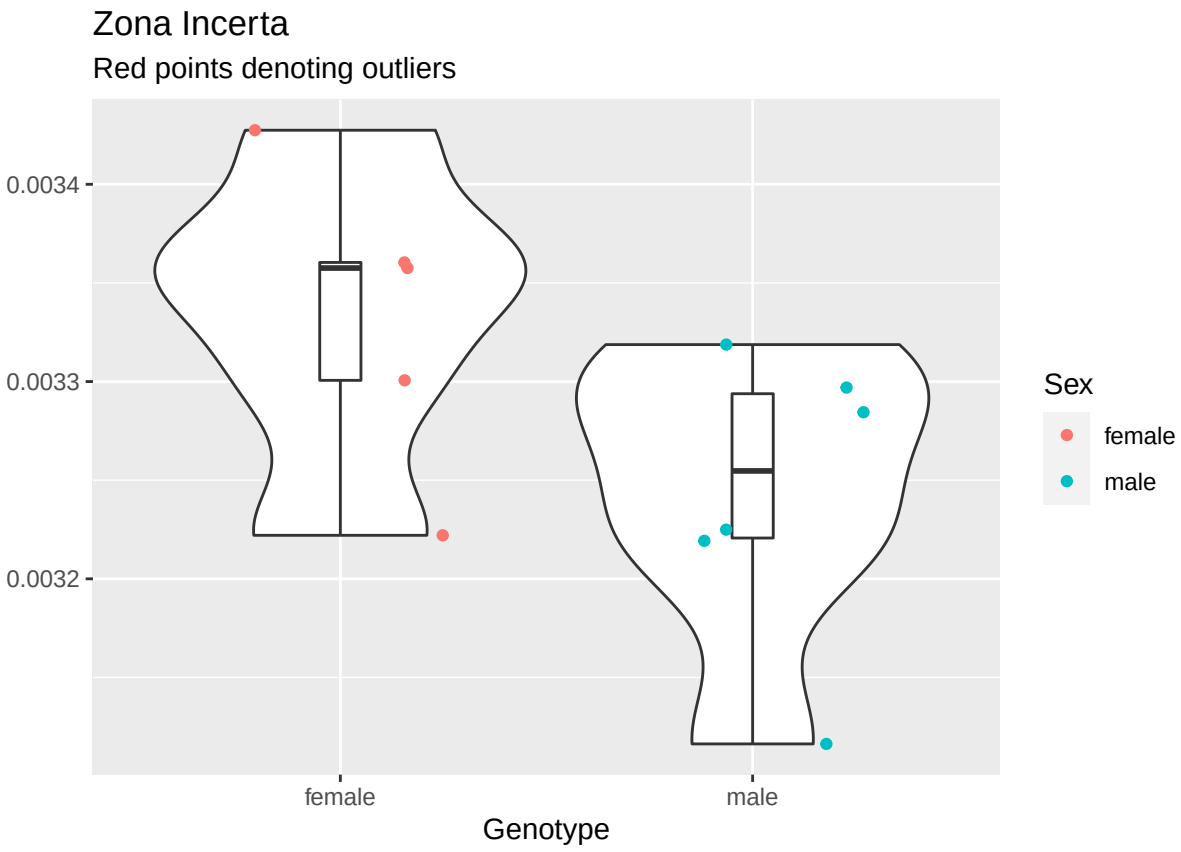

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.600e-09 3.597e-09   0.544  0.479
## Residuals    9 5.947e-08 6.608e-09
```



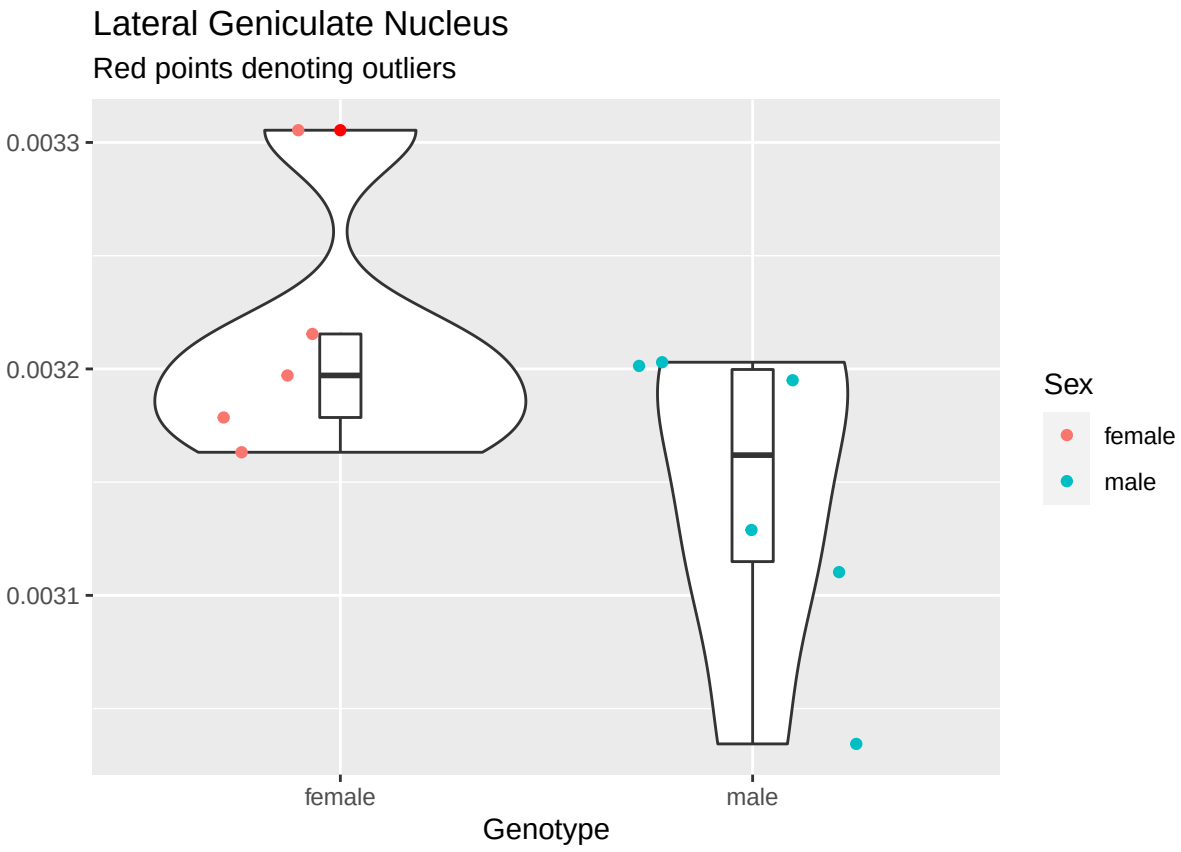

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.883e-07 1.883e-07    10.6 0.0099 **
## Residuals    9 1.599e-07 1.776e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



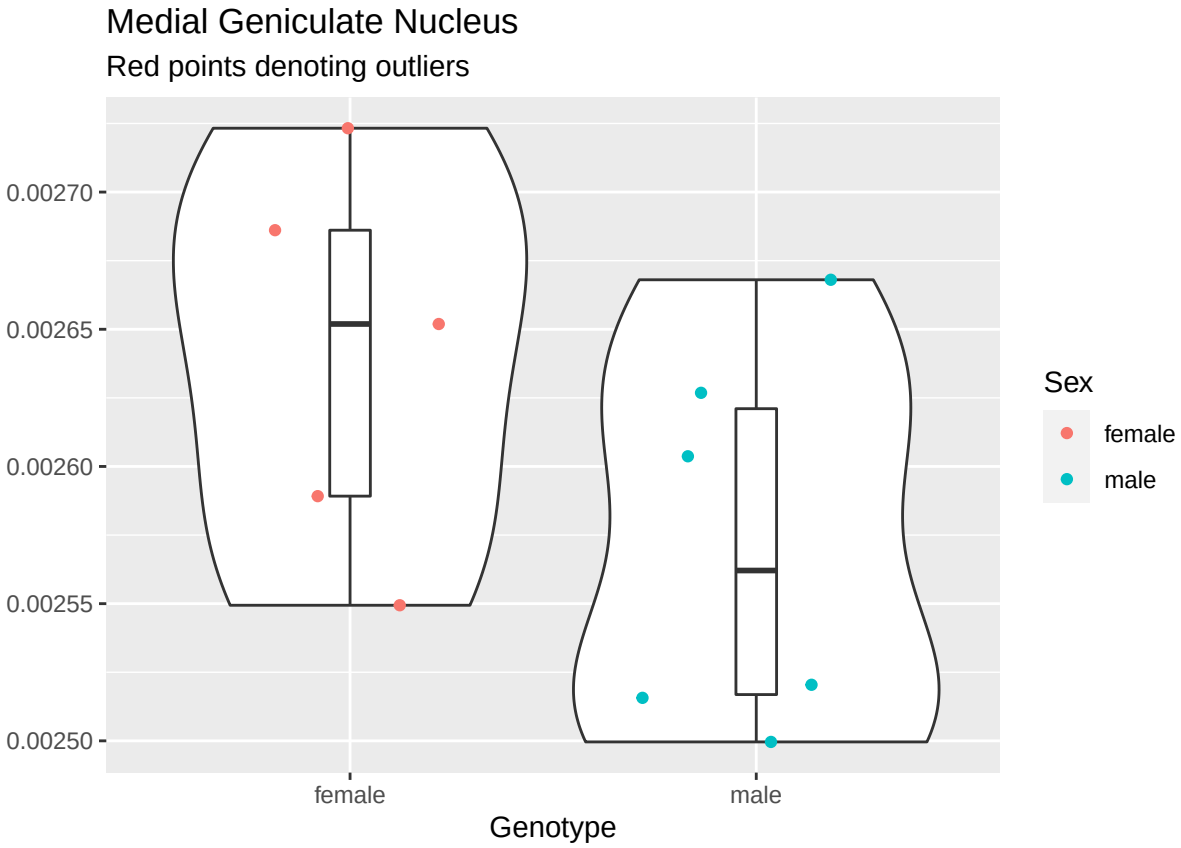

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 5.246e-08 5.246e-08   6.318 0.0331 *
## Residuals    9 7.473e-08 8.300e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



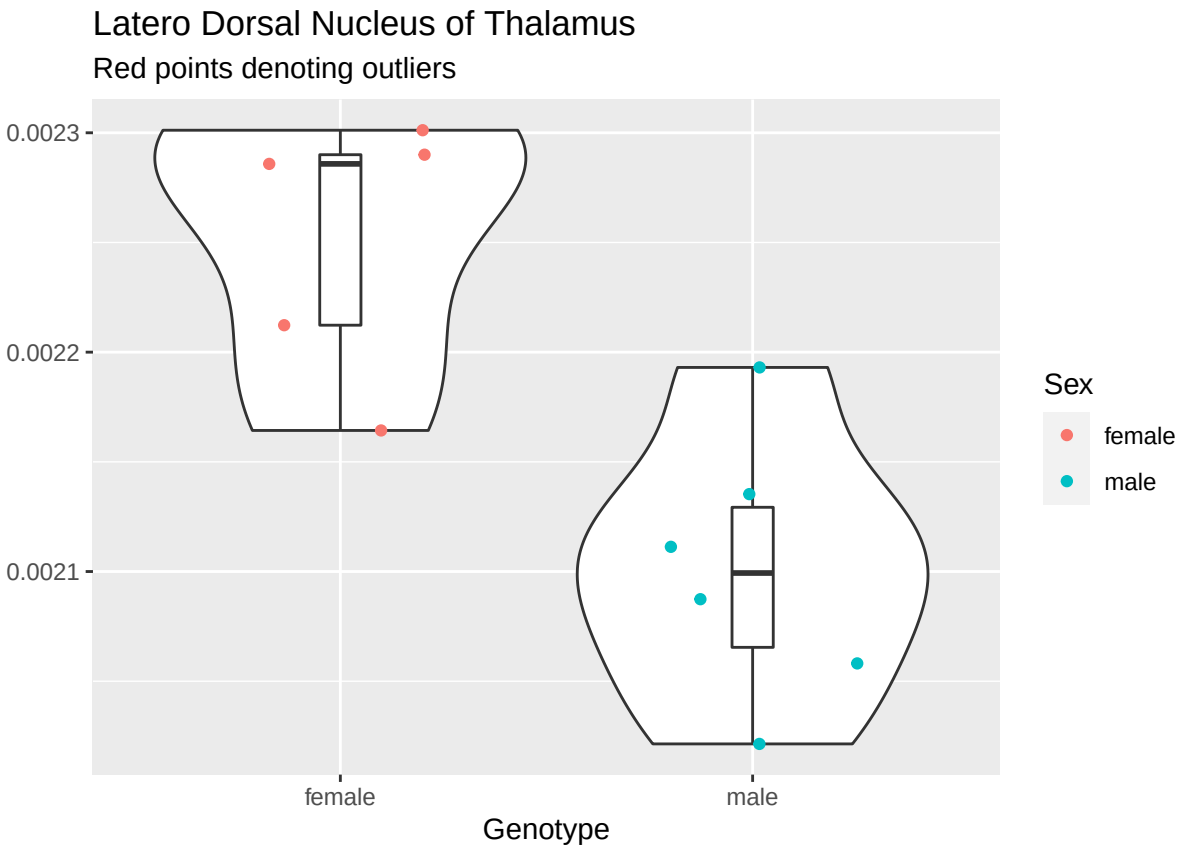

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.217e-08 2.217e-08   3.918 0.0791 .
## Residuals    9 5.092e-08 5.658e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



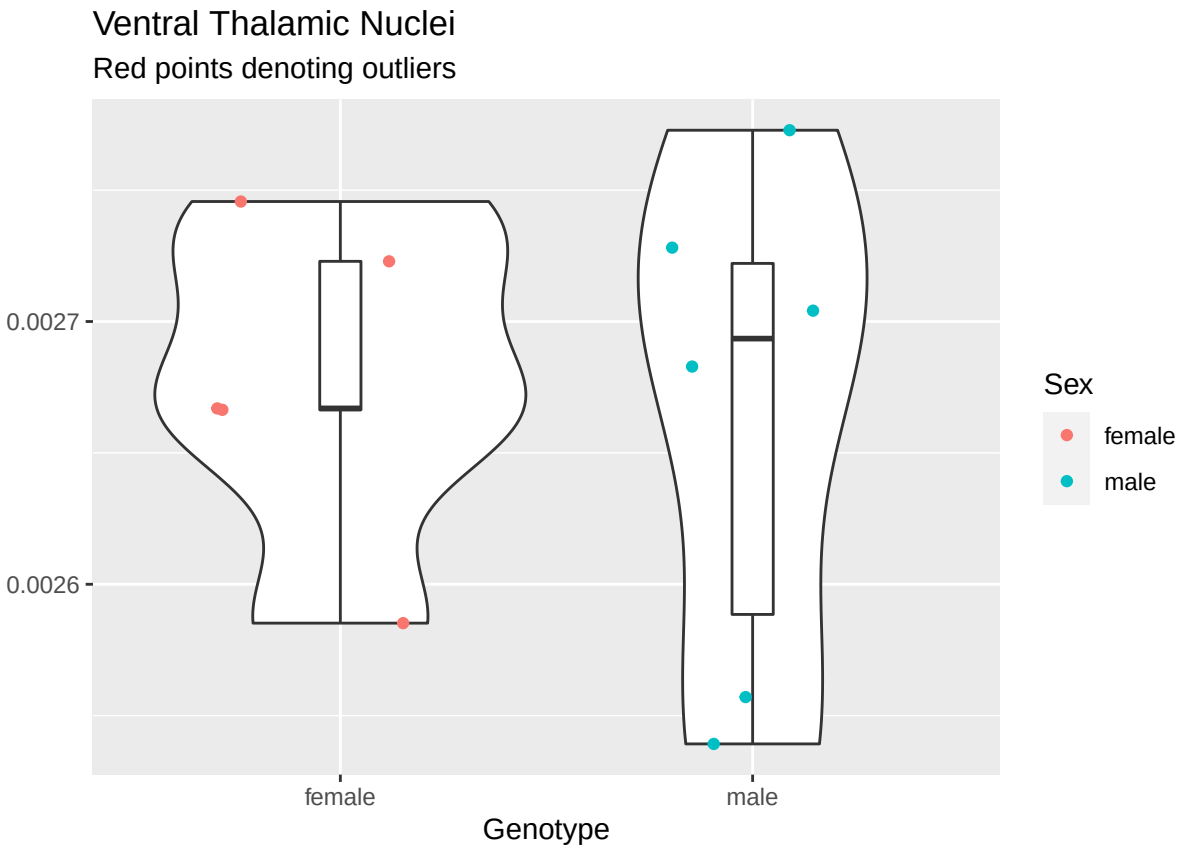

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.205e-08 1.205e-08   3.082  0.113
## Residuals    9 3.519e-08 3.910e-09
```



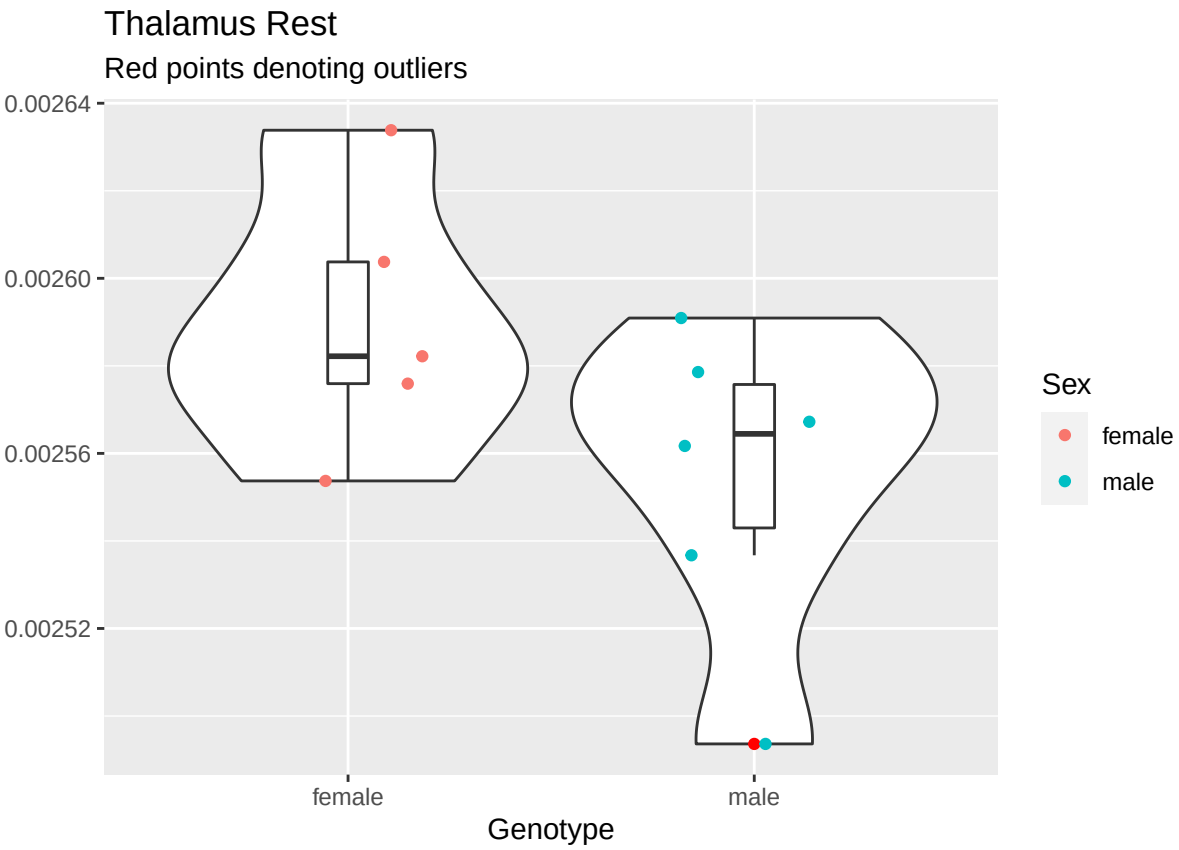

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.246e-08 1.246e-08   2.532  0.146
## Residuals    9 4.429e-08 4.922e-09
```



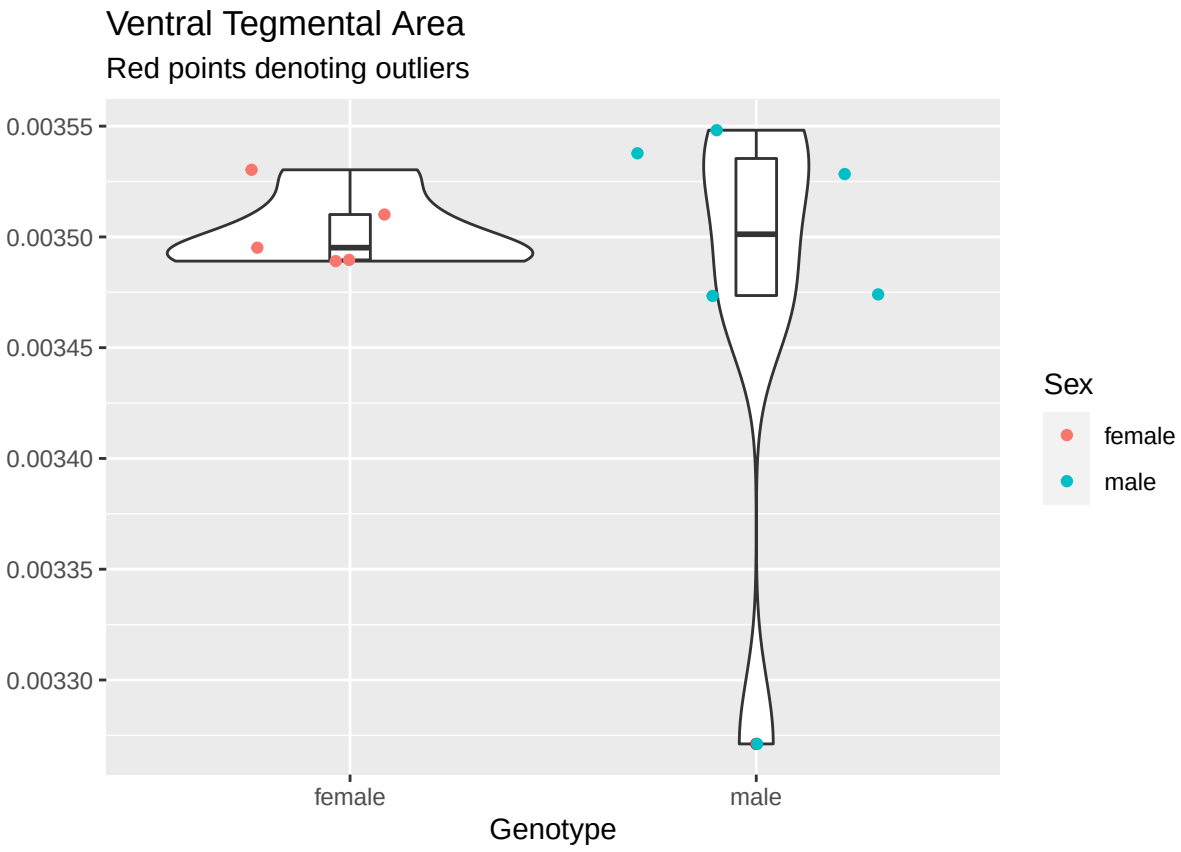

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 6.107e-08 6.107e-08   16.98 0.0026 **
## Residuals    9 3.238e-08 3.600e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



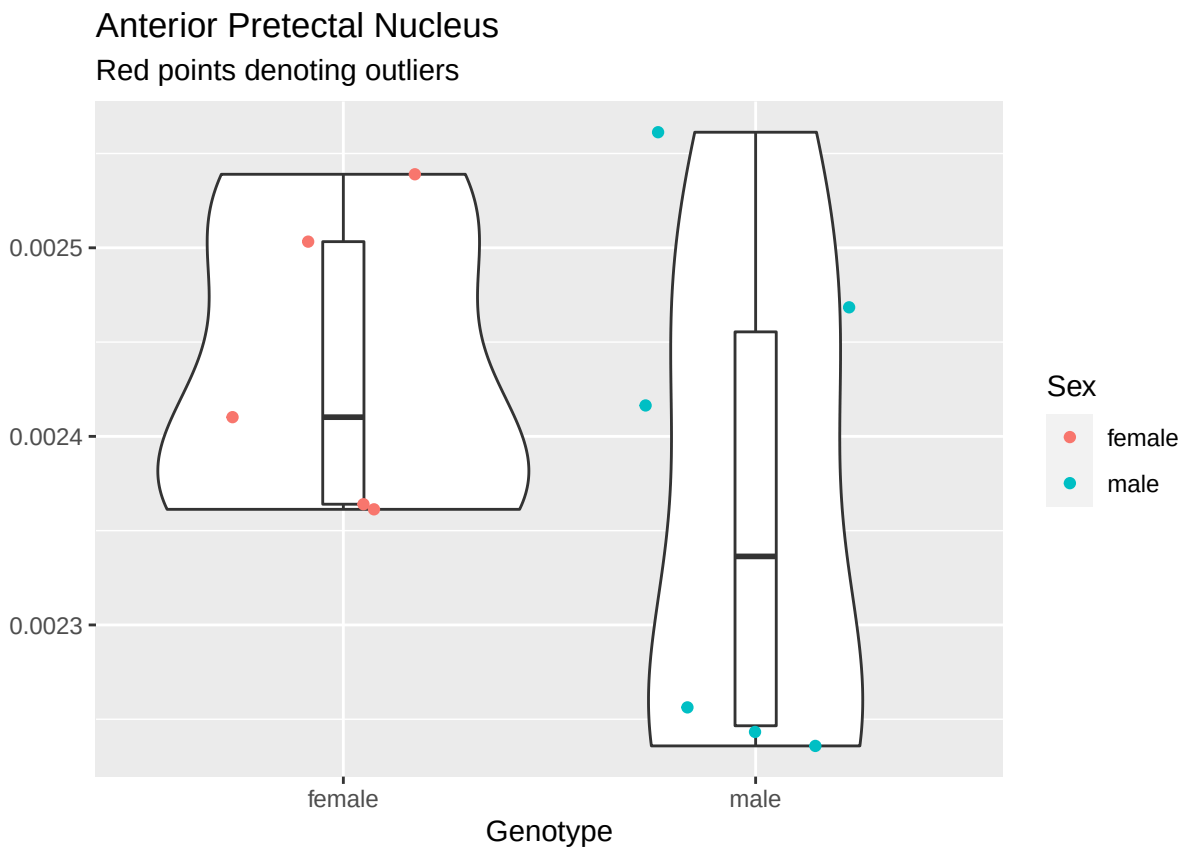

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 4.900e-10 4.890e-10   0.073  0.793
## Residuals    9 6.037e-08 6.708e-09
```



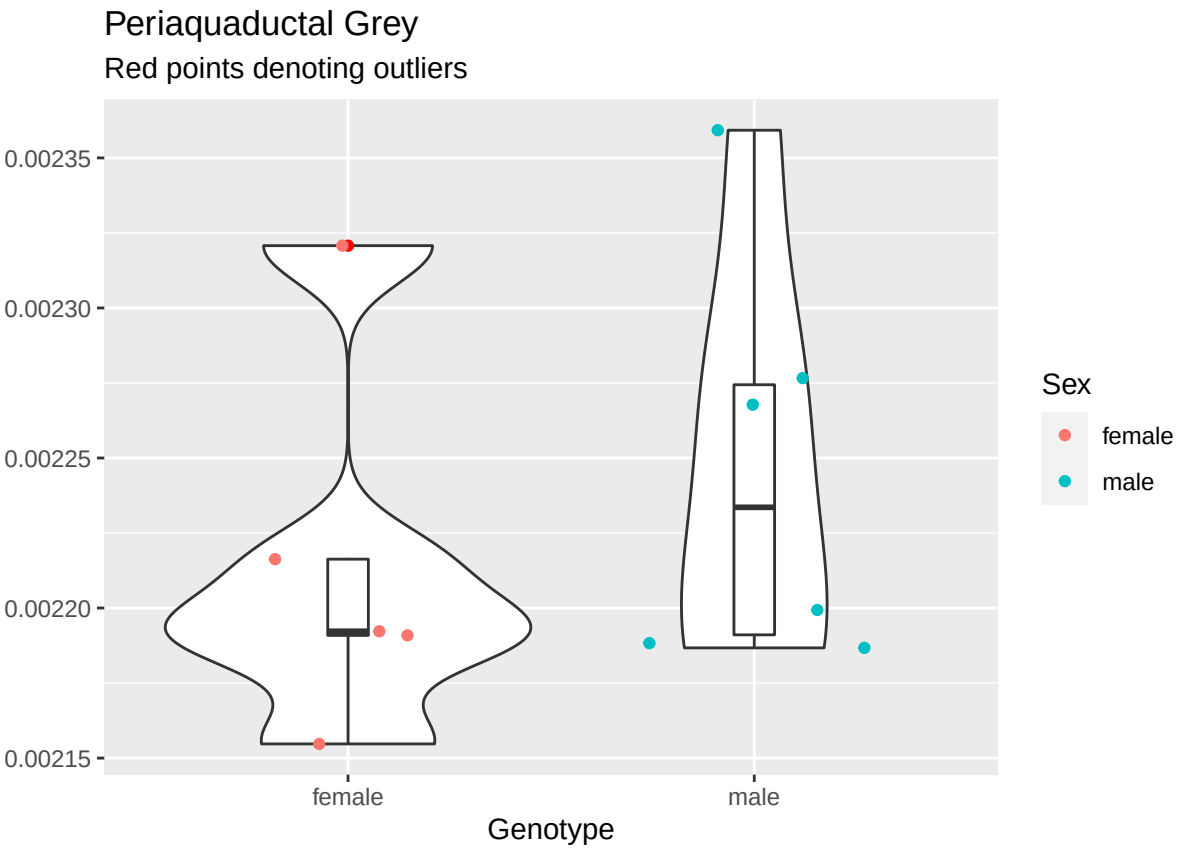

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.358e-09 3.358e-09   3.075  0.113
## Residuals    9 9.829e-09 1.092e-09
```



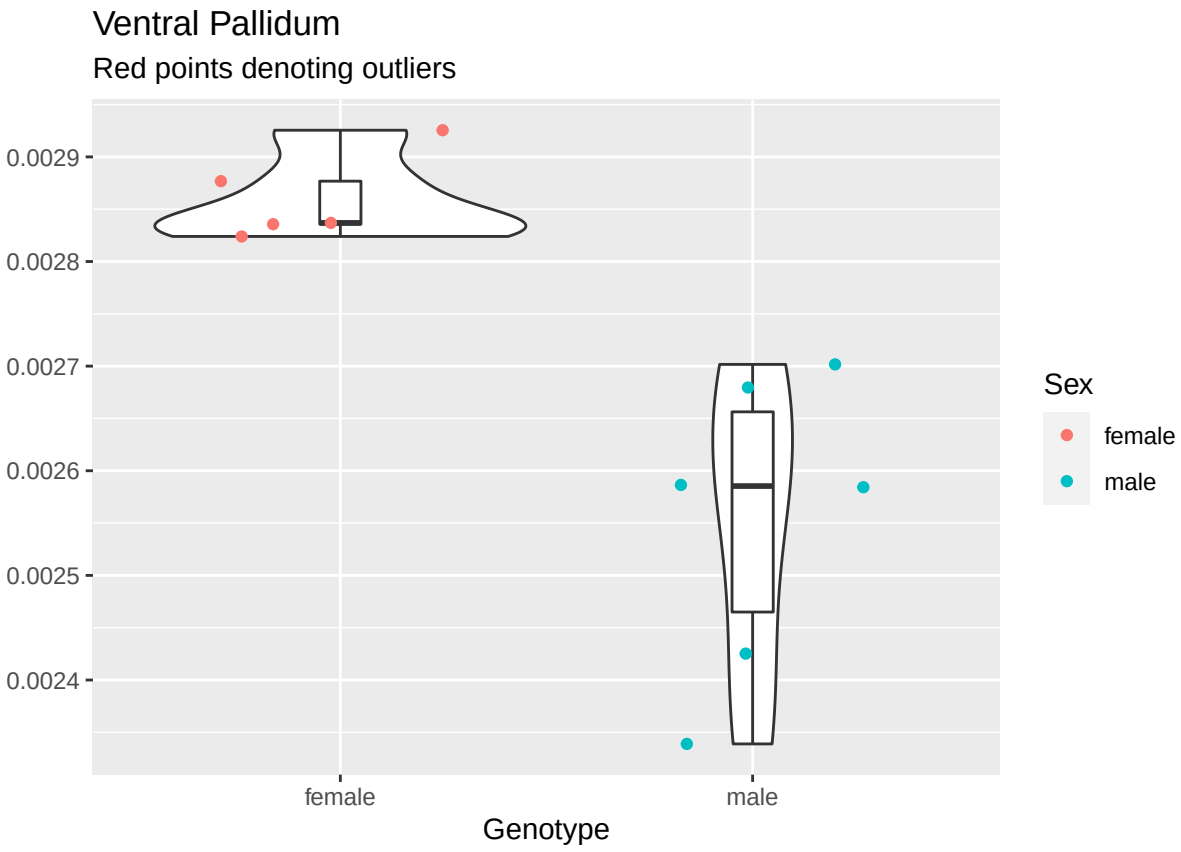

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.570e-09 2.573e-09   0.422  0.532
## Residuals    9 5.489e-08 6.098e-09
```



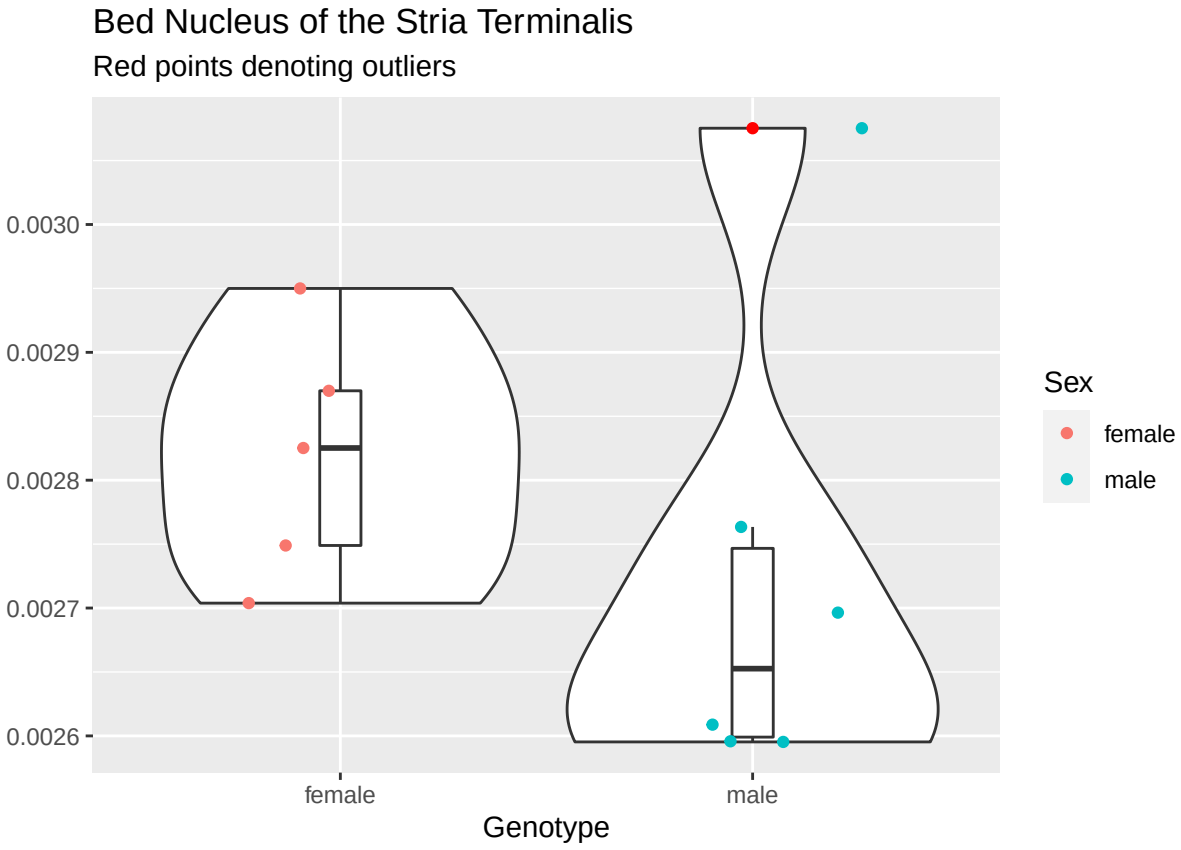

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.412e-08 1.412e-08   1.044  0.334
## Residuals    9 1.217e-07 1.353e-08
```



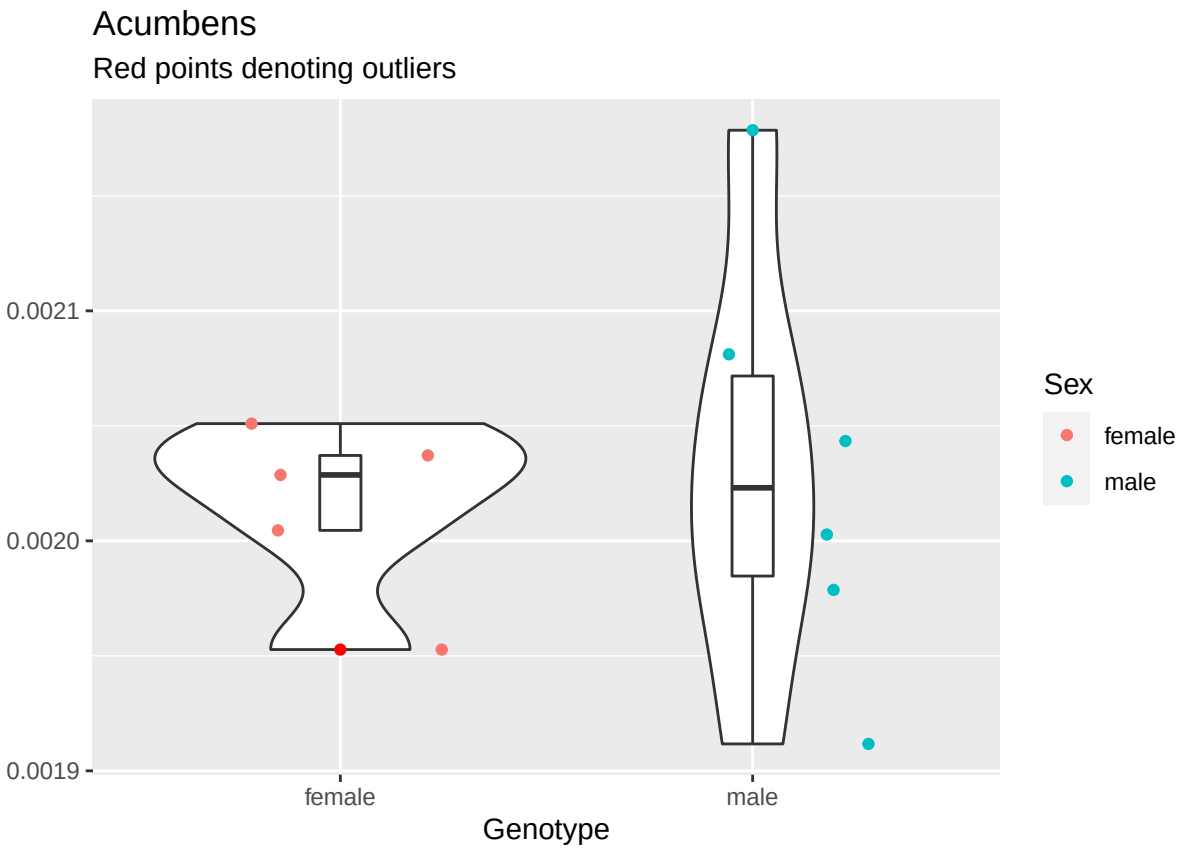

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.680e-09 2.681e-09   0.616  0.453
## Residuals    9 3.917e-08 4.352e-09
```



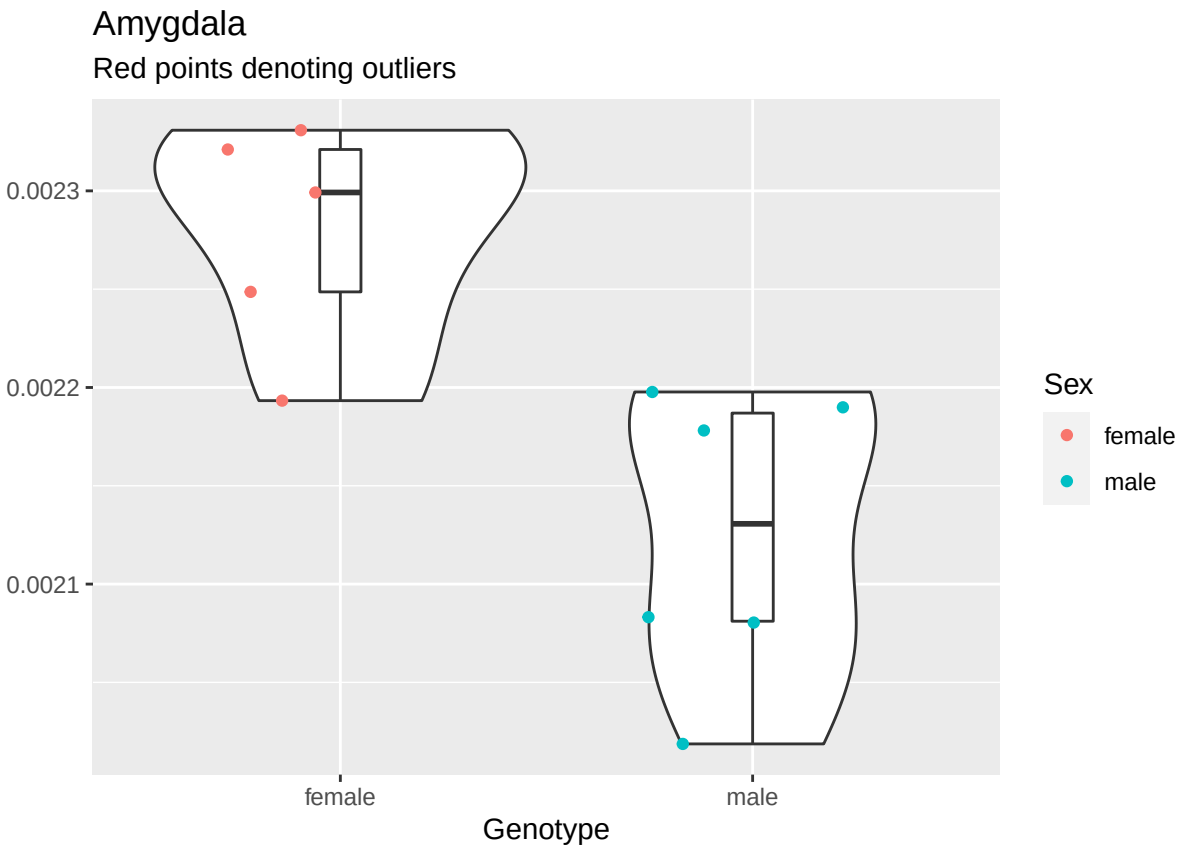

```
##             Df    Sum Sq   Mean Sq F value  Pr(>F)
## Sex          1 2.571e-07 2.571e-07   21.16 0.00129 **
## Residuals    9 1.094e-07 1.215e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



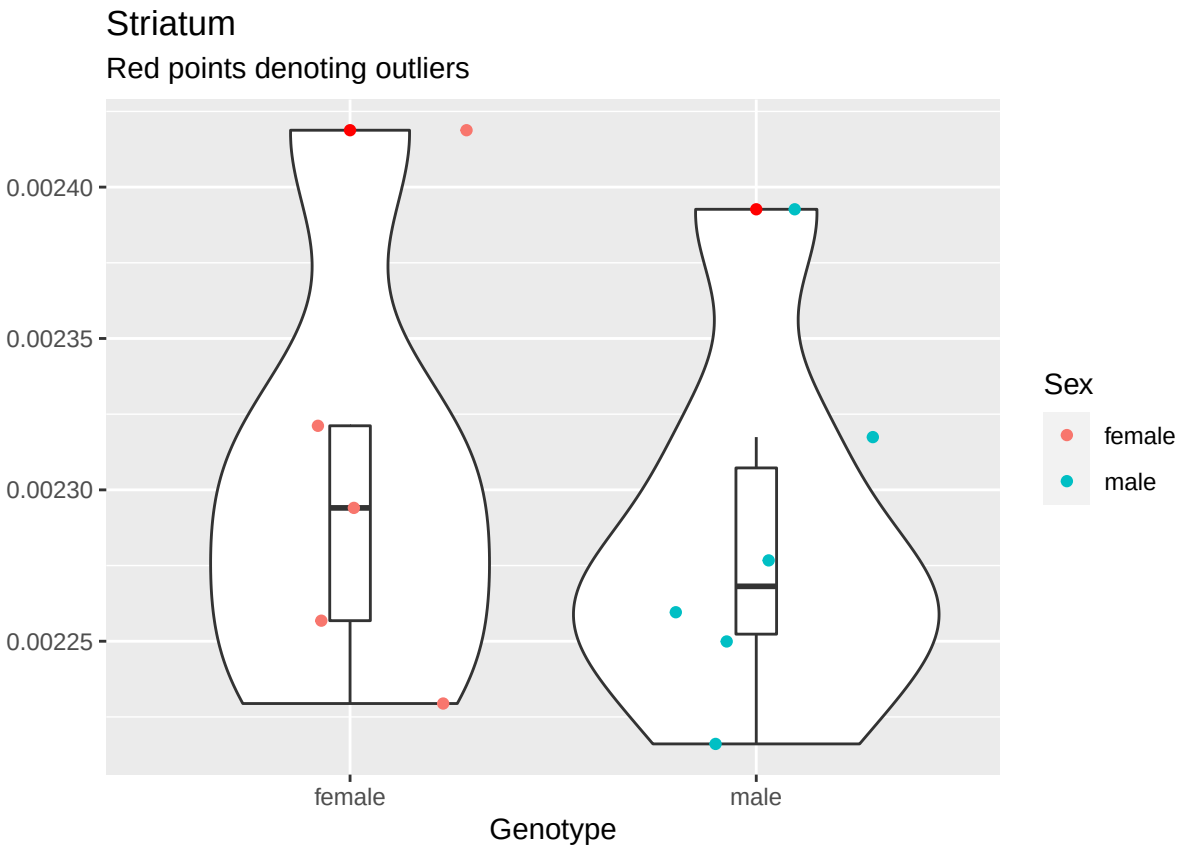

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.570e-08 2.570e-08   1.102  0.321
## Residuals    9 2.099e-07 2.333e-08
```



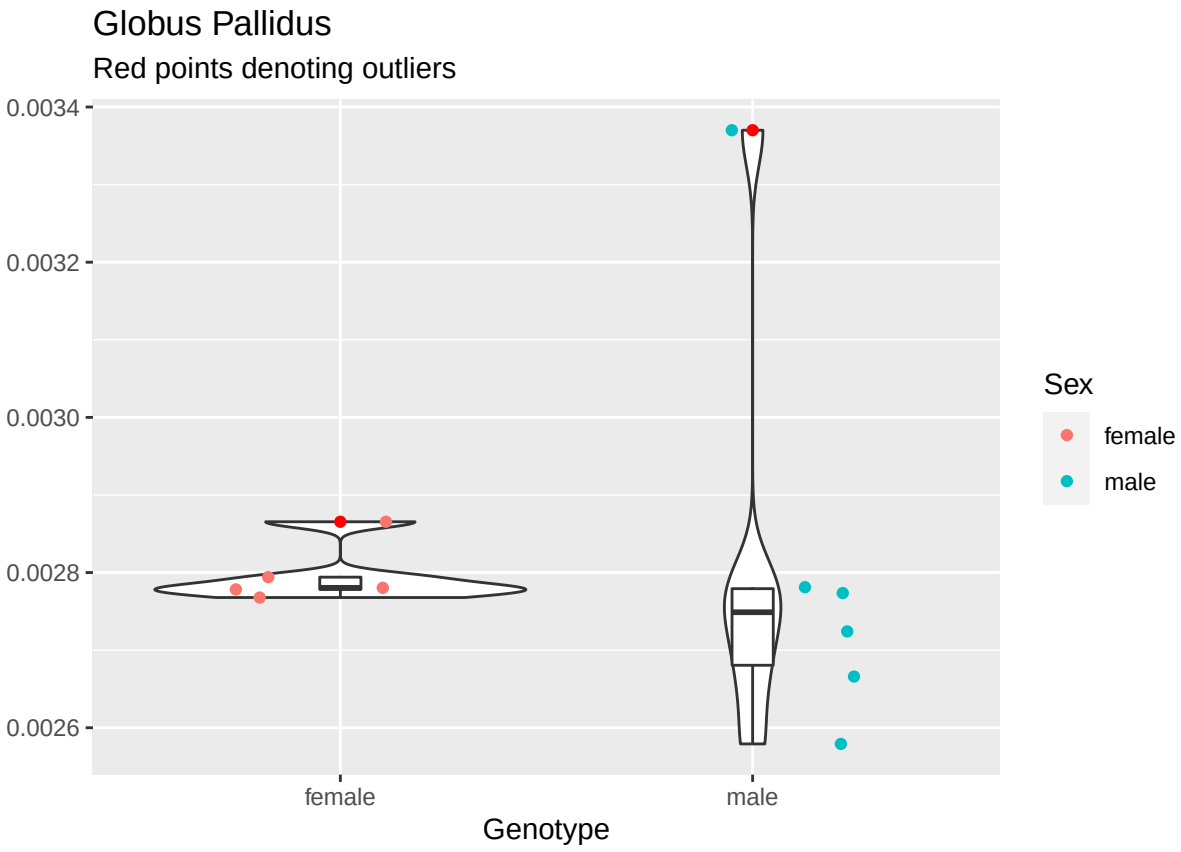

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 8.700e-10 8.720e-10   0.163  0.696
## Residuals    9 4.814e-08 5.349e-09
```



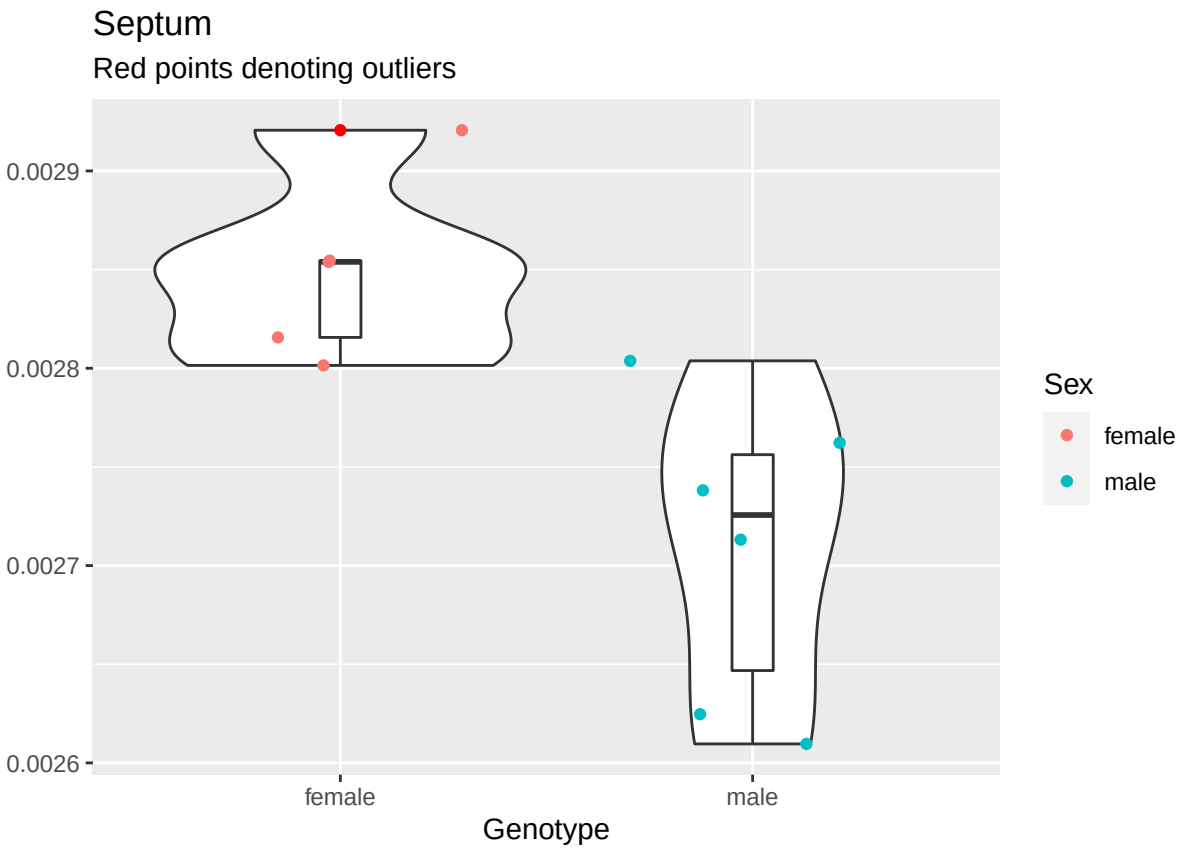

```
##             Df    Sum Sq   Mean Sq F value  Pr(>F)
## Sex          1 6.462e-08 6.462e-08   14.37 0.00428 **
## Residuals    9 4.048e-08 4.500e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



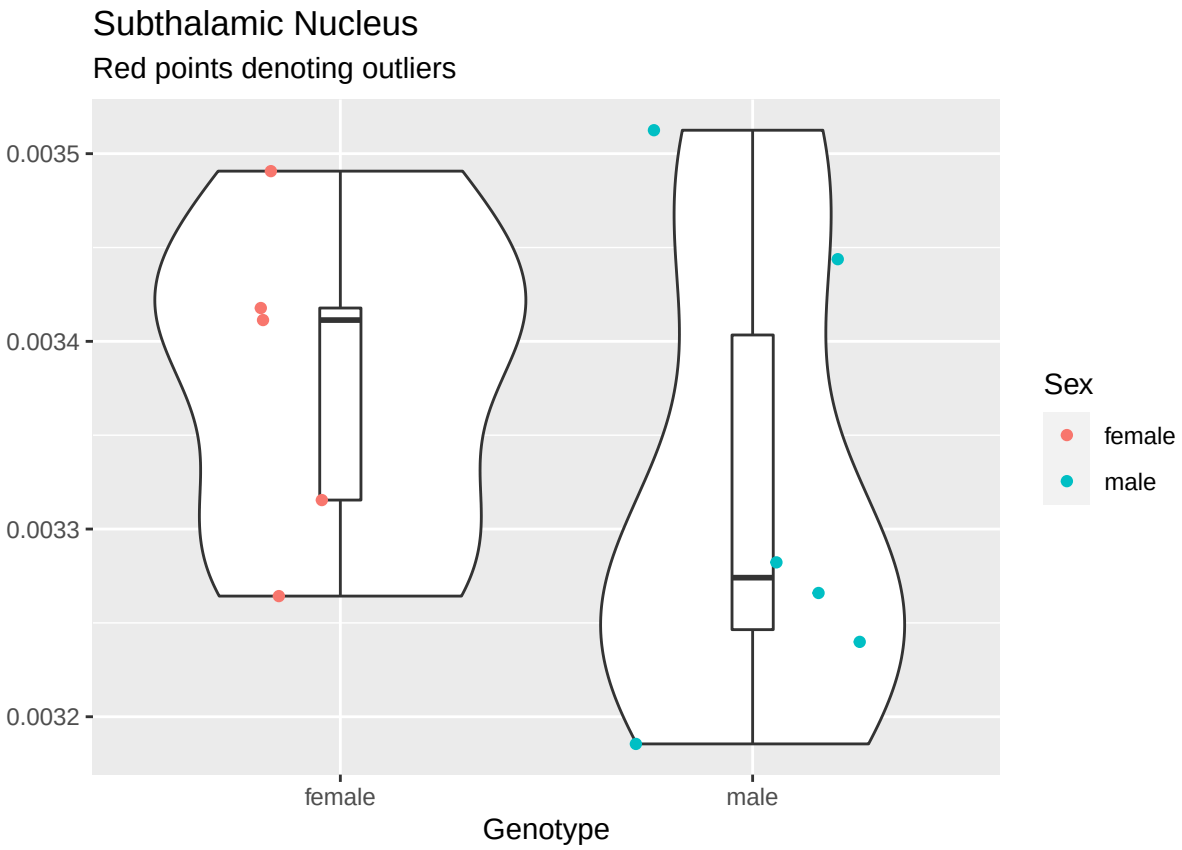

```
##             Df   Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 9.50e-10 9.480e-10    0.21  0.658
## Residuals    9 4.07e-08 4.522e-09
```




```
##             Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 9.000e-10 9.30e-10   0.021  0.889
## Residuals    9 4.032e-07 4.48e-08
```



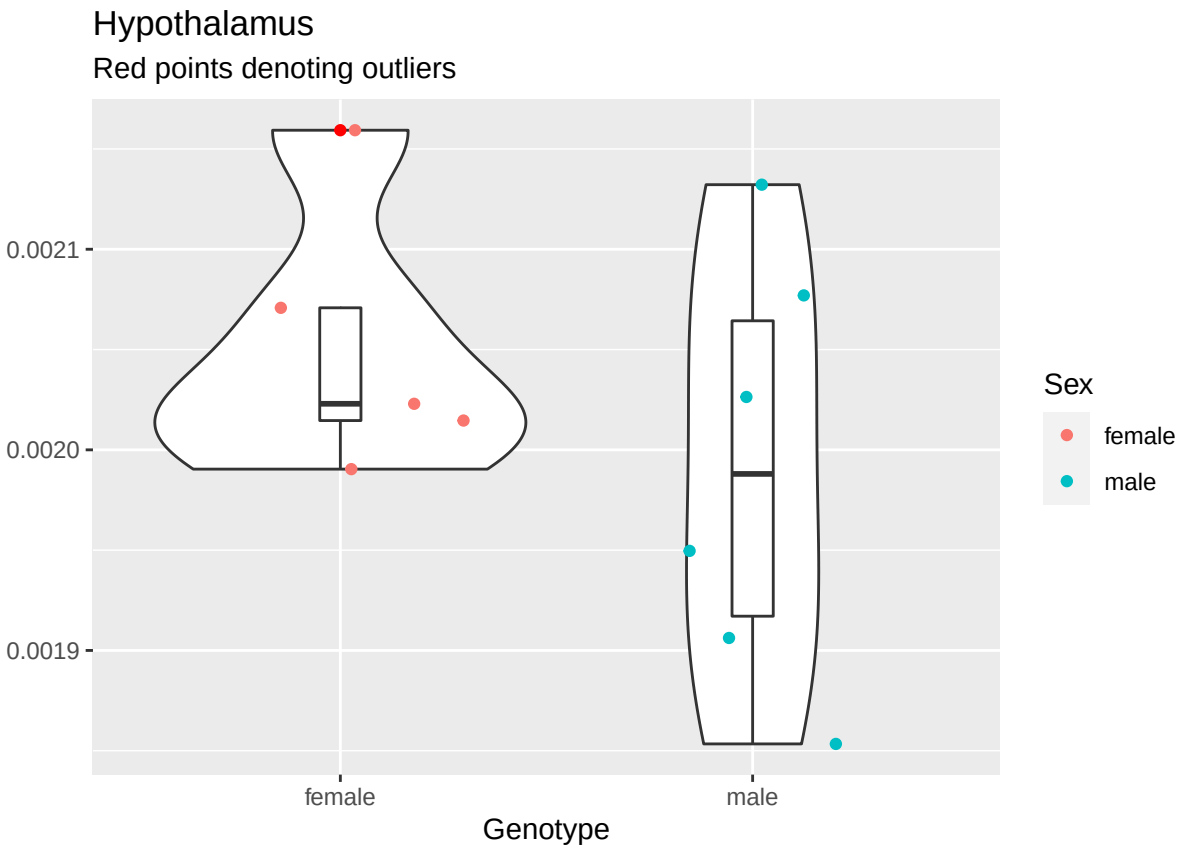

```
##             Df    Sum Sq   Mean Sq F value  Pr(>F)
## Sex          1 5.394e-08 5.394e-08    12.7 0.00608 **
## Residuals    9 3.822e-08 4.250e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



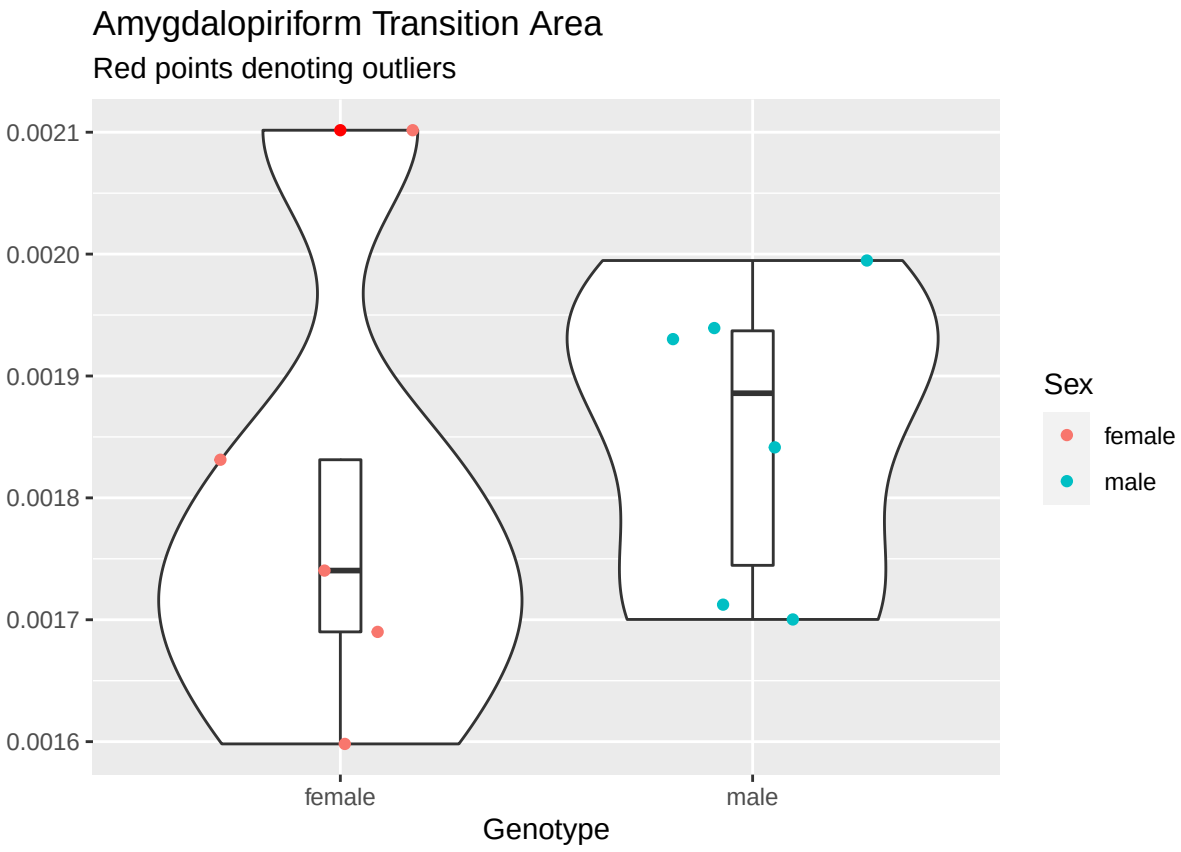

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 9.260e-09 9.256e-09   0.734  0.414
## Residuals    9 1.134e-07 1.260e-08
```

#“‘{r Preopt, echo = FALSE} #ggplot(data = apoe2, aes(factor(Sex), Preopt)) + #geom_violin() + #geom_boxplot(width = 0.1, outlier.color = “red”) + #geom_jitter(height = 0, width = 0.3, aes(color = Sex)) + #labs(x = “Genotype”, #y = "“, #title =”Preoptic Telencephalon“, #subtitle =”Red points denoting outliers")

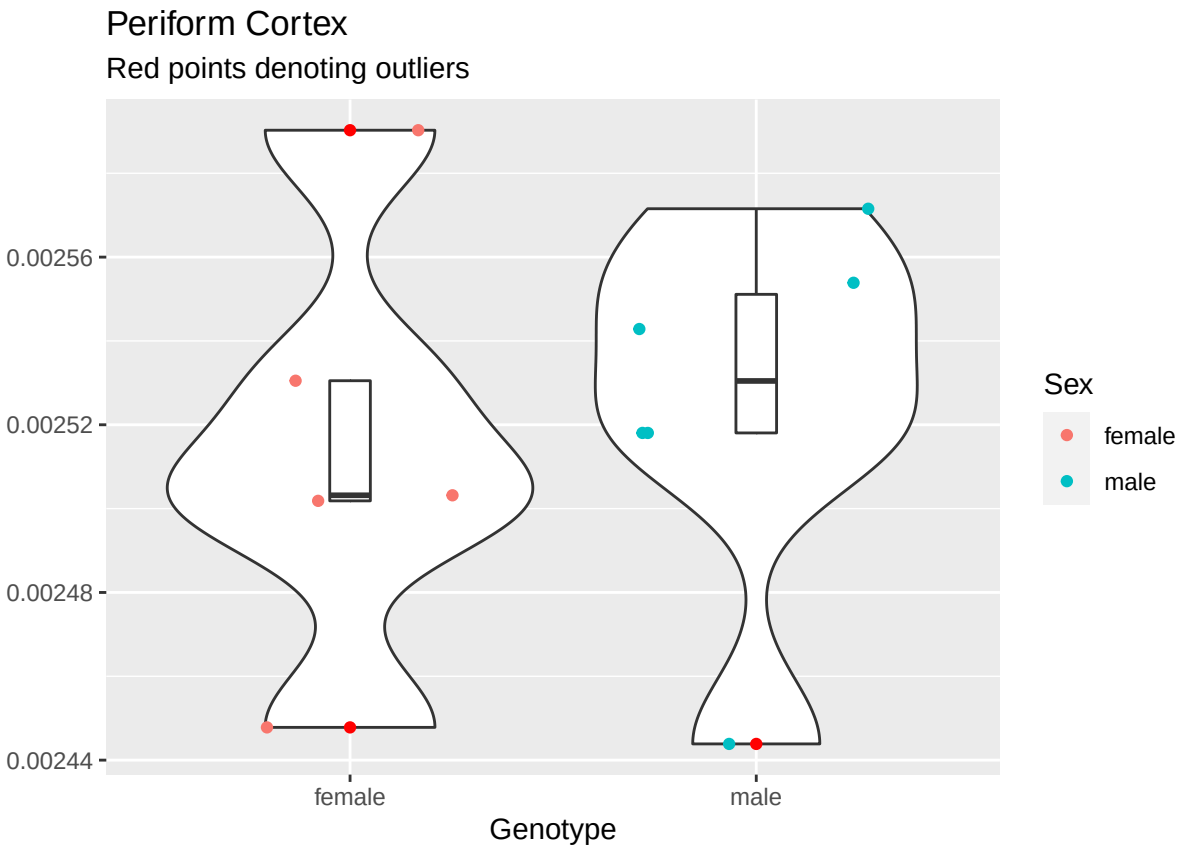
#res.aov <- aov(Preopt ~ Sex, data = apoe2) #summary(res.aov) #“‘



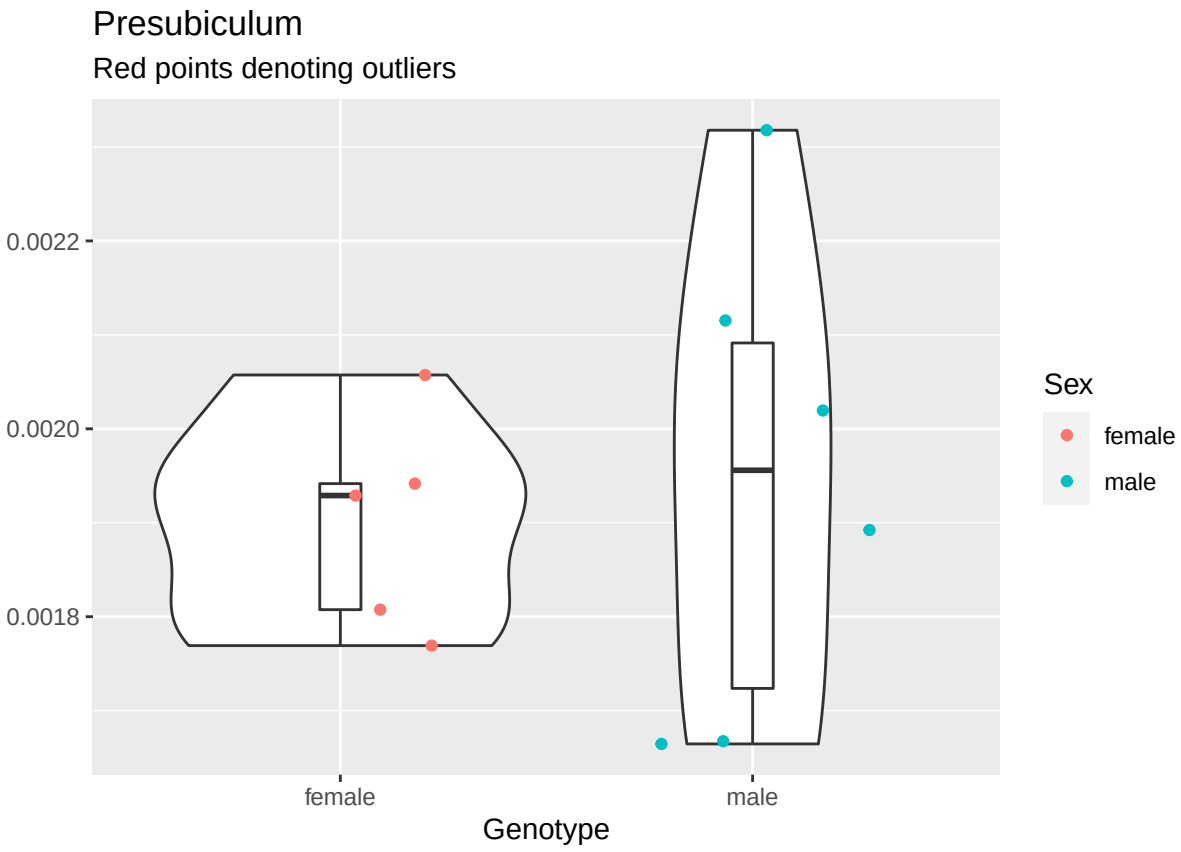

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.009e-08 1.009e-08   1.221  0.298
## Residuals    9 7.433e-08 8.258e-09
```



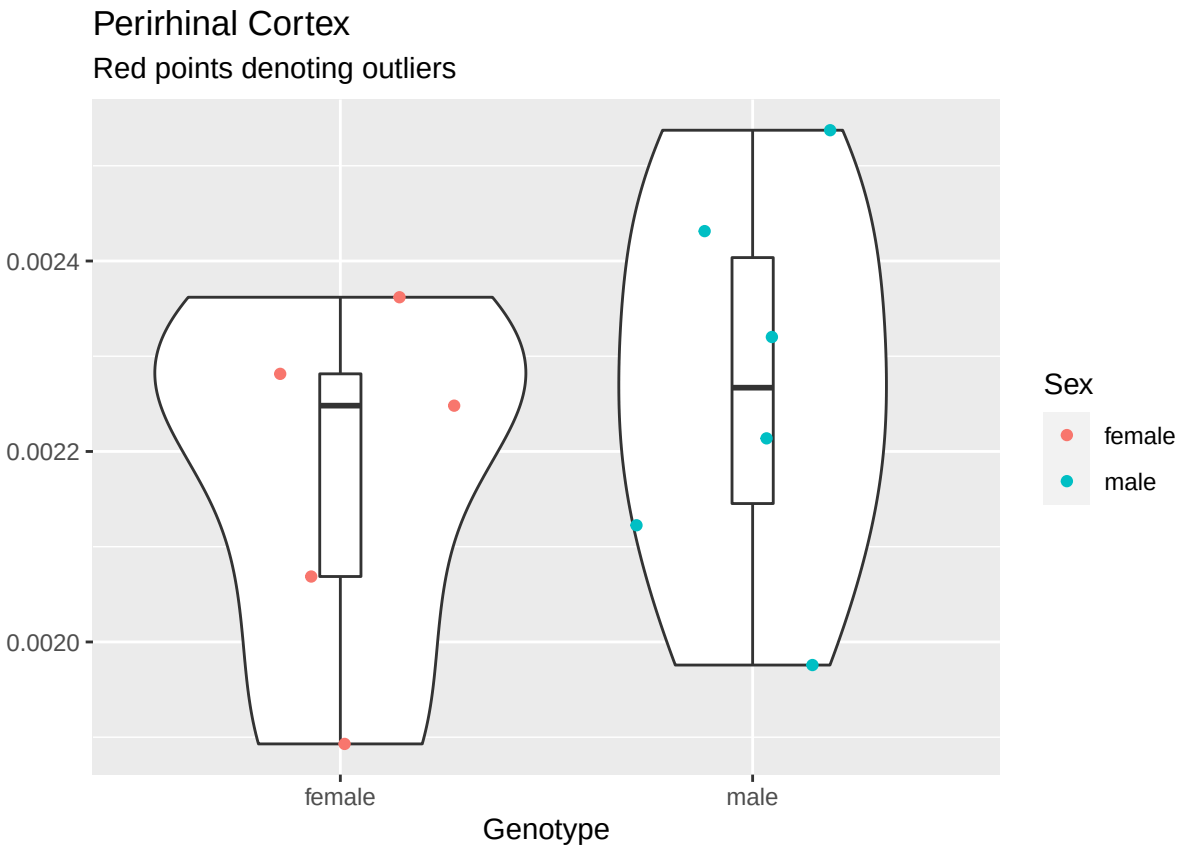

```
##              Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex           1 1.007e-08 1.007e-08   0.403  0.541
## Residuals     9 2.248e-07 2.498e-08
```



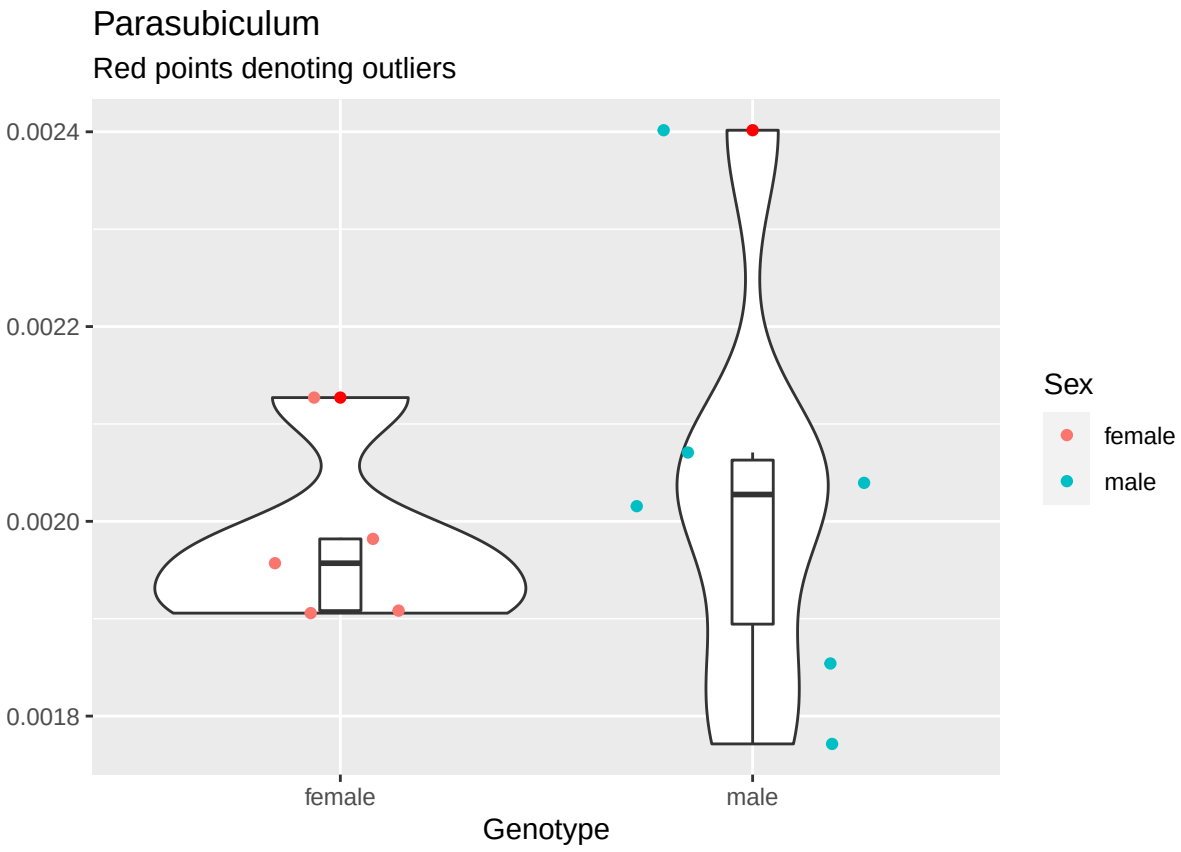

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.720e-10 2.718e-10   0.118  0.739
## Residuals    9 2.073e-08 2.303e-09
```



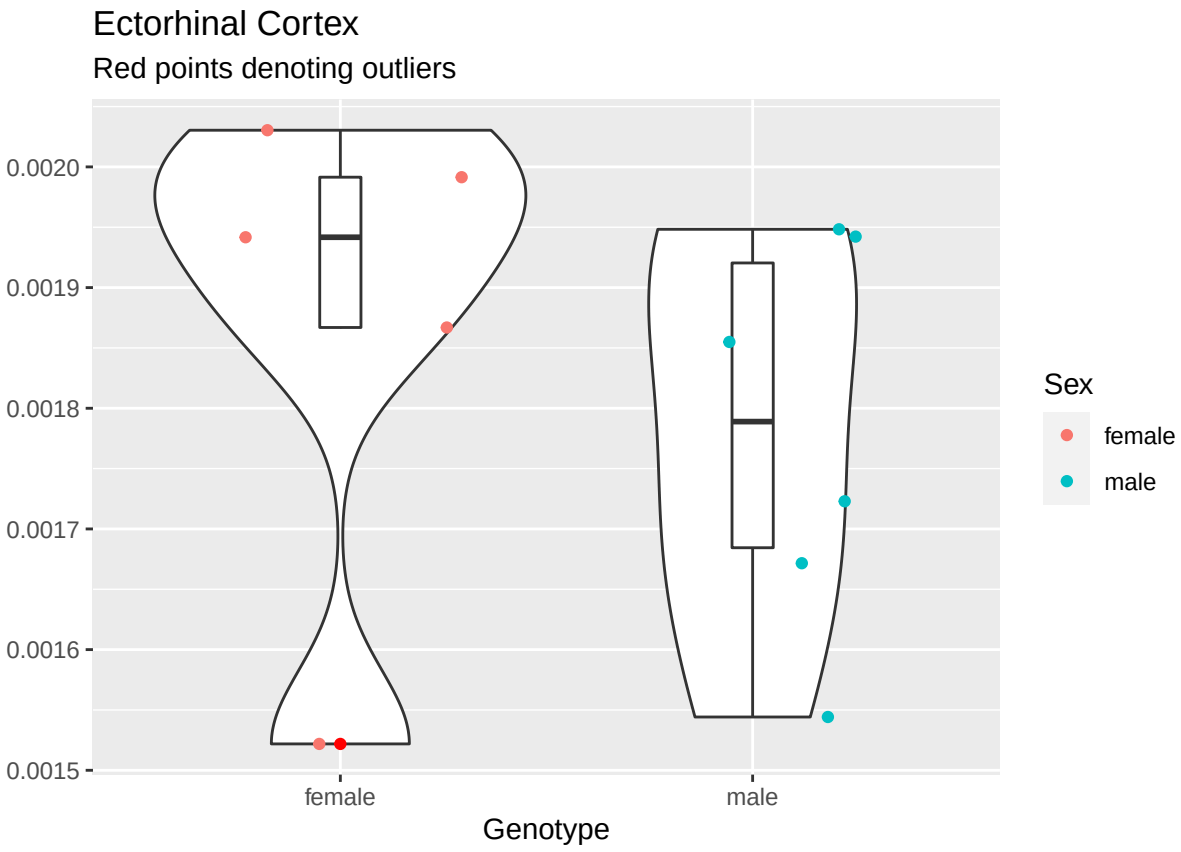

```
##             Df   Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 5.60e-09 5.580e-09    0.13  0.726
## Residuals    9 3.85e-07 4.278e-08
```



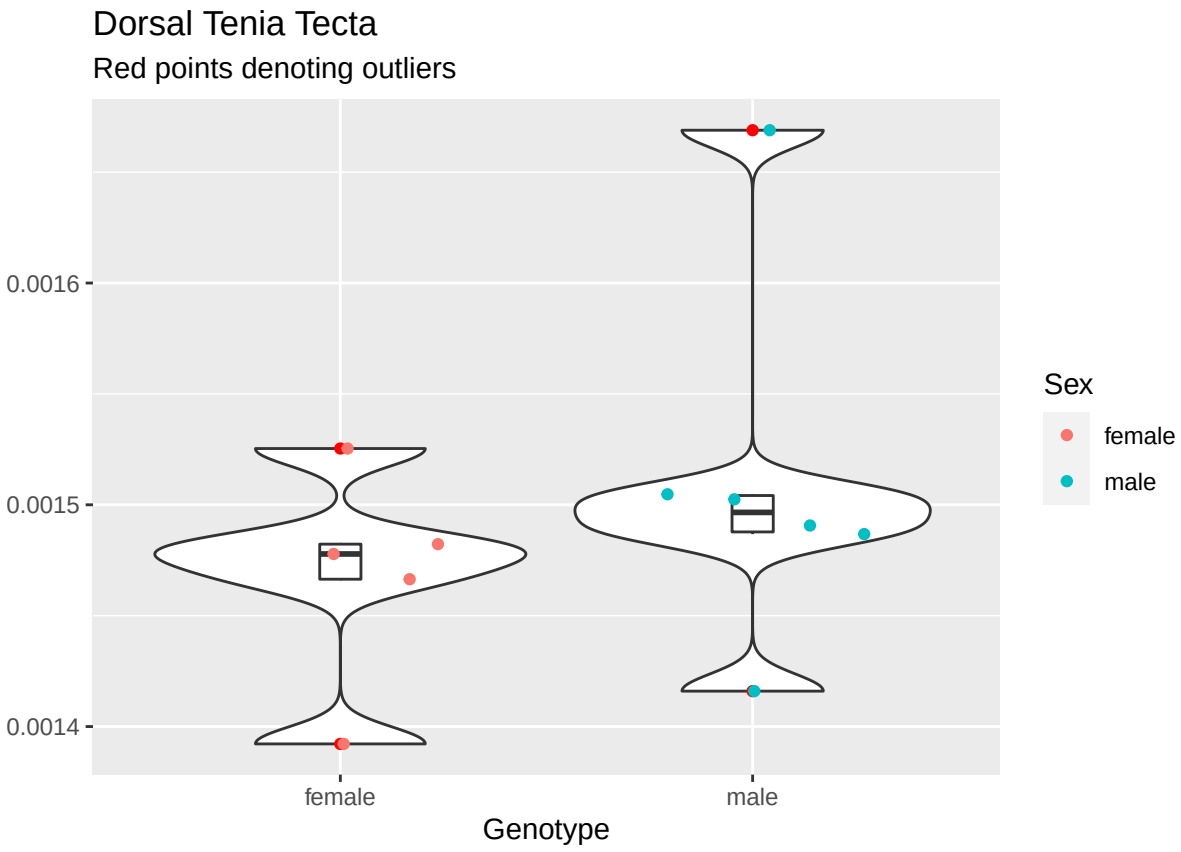

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.520e-08 2.523e-08   0.642  0.444
## Residuals    9 3.539e-07 3.932e-08
```



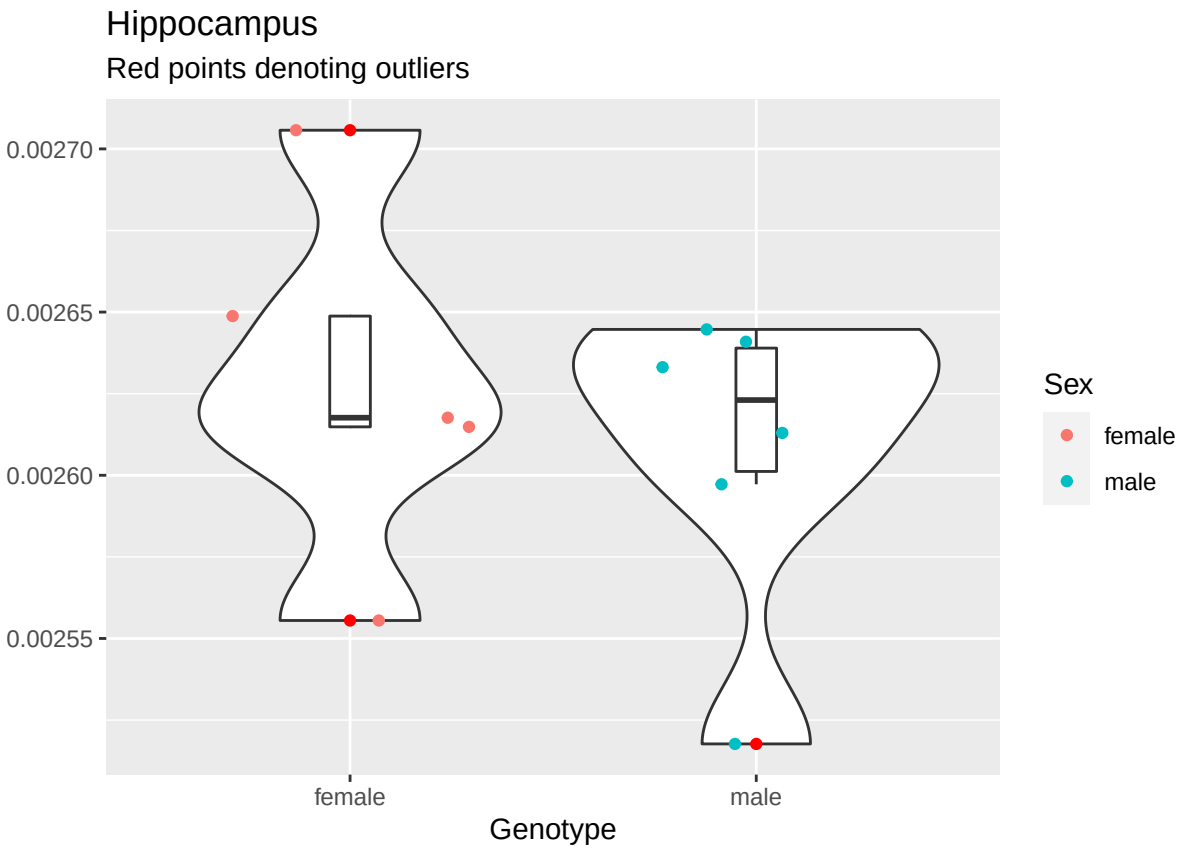

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 6.670e-09 6.671e-09   0.222  0.649
## Residuals    9 2.705e-07 3.005e-08
```



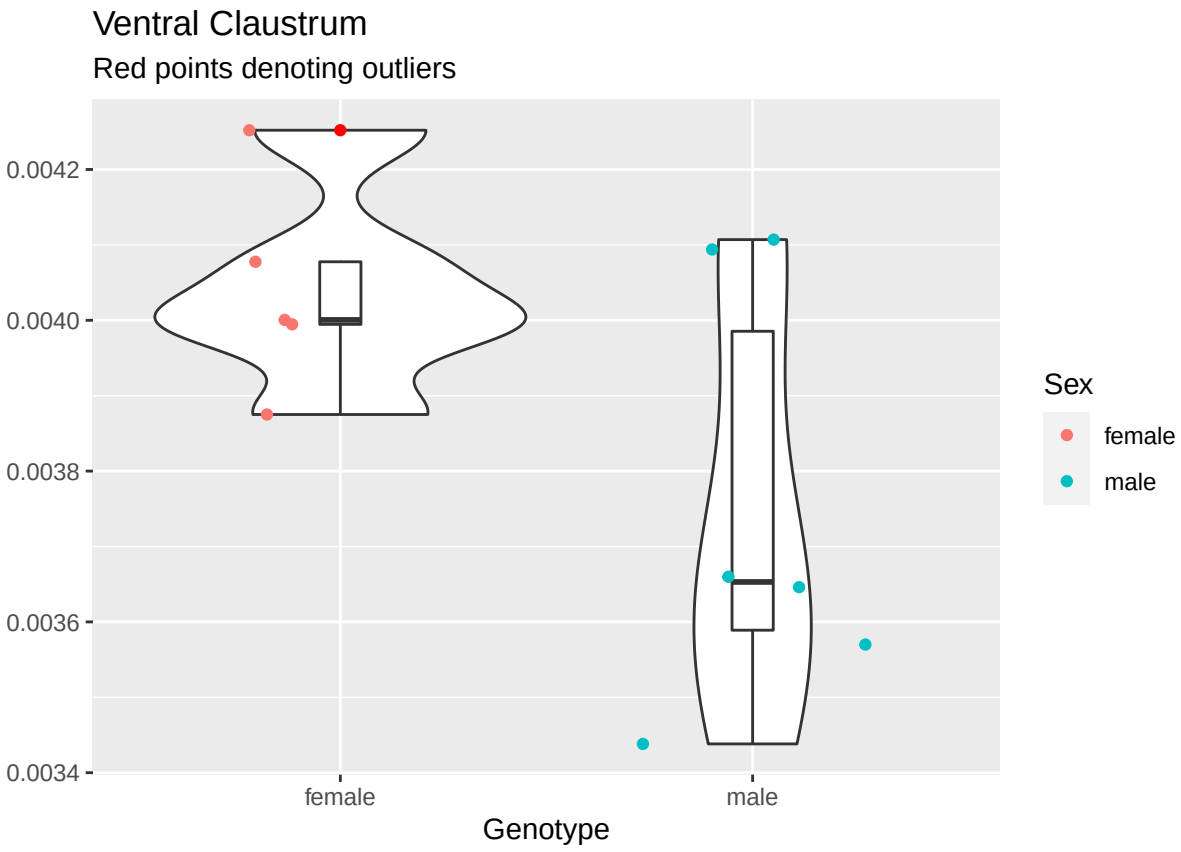

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.198e-08 2.198e-08   0.664  0.436
## Residuals    9 2.977e-07 3.308e-08
```



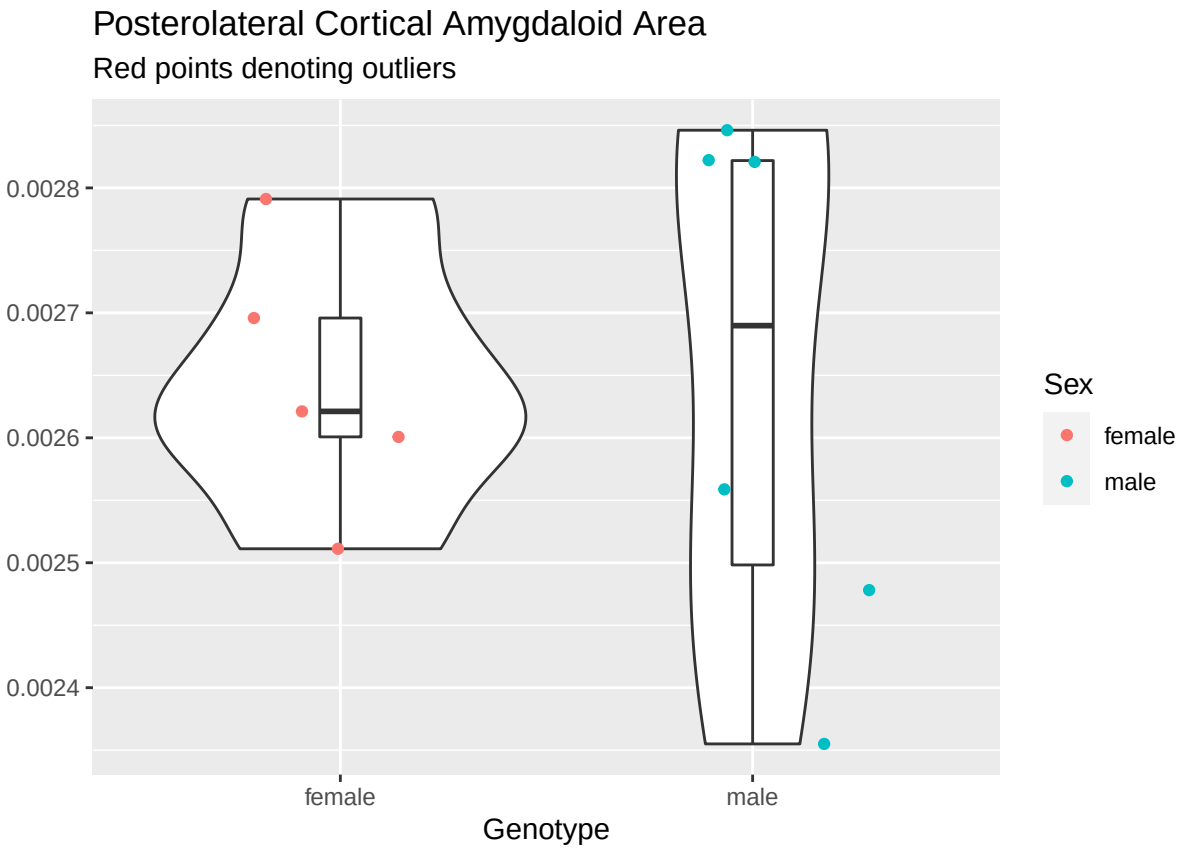

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 4.990e-09 4.992e-09   1.012  0.341
## Residuals    9 4.442e-08 4.935e-09
```



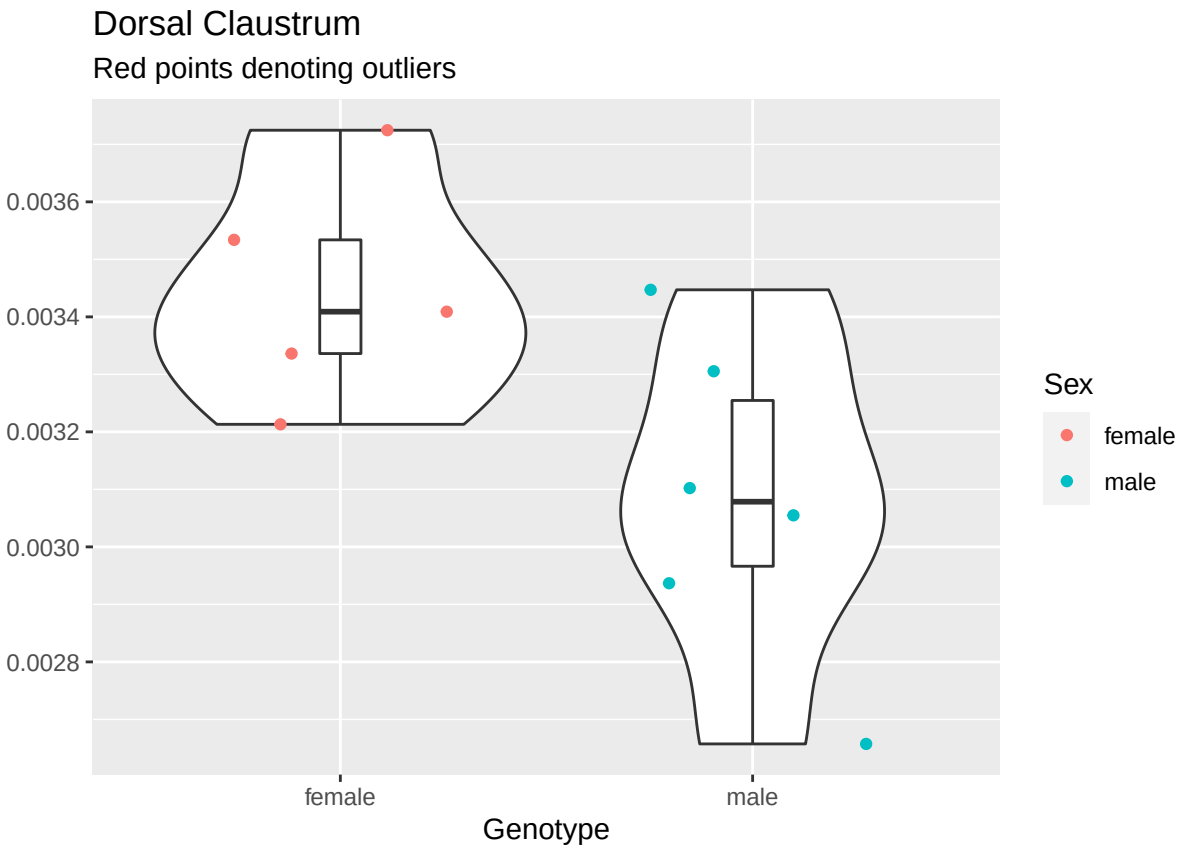

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.171e-09 1.171e-09   0.451  0.519
## Residuals    9 2.336e-08 2.596e-09
```



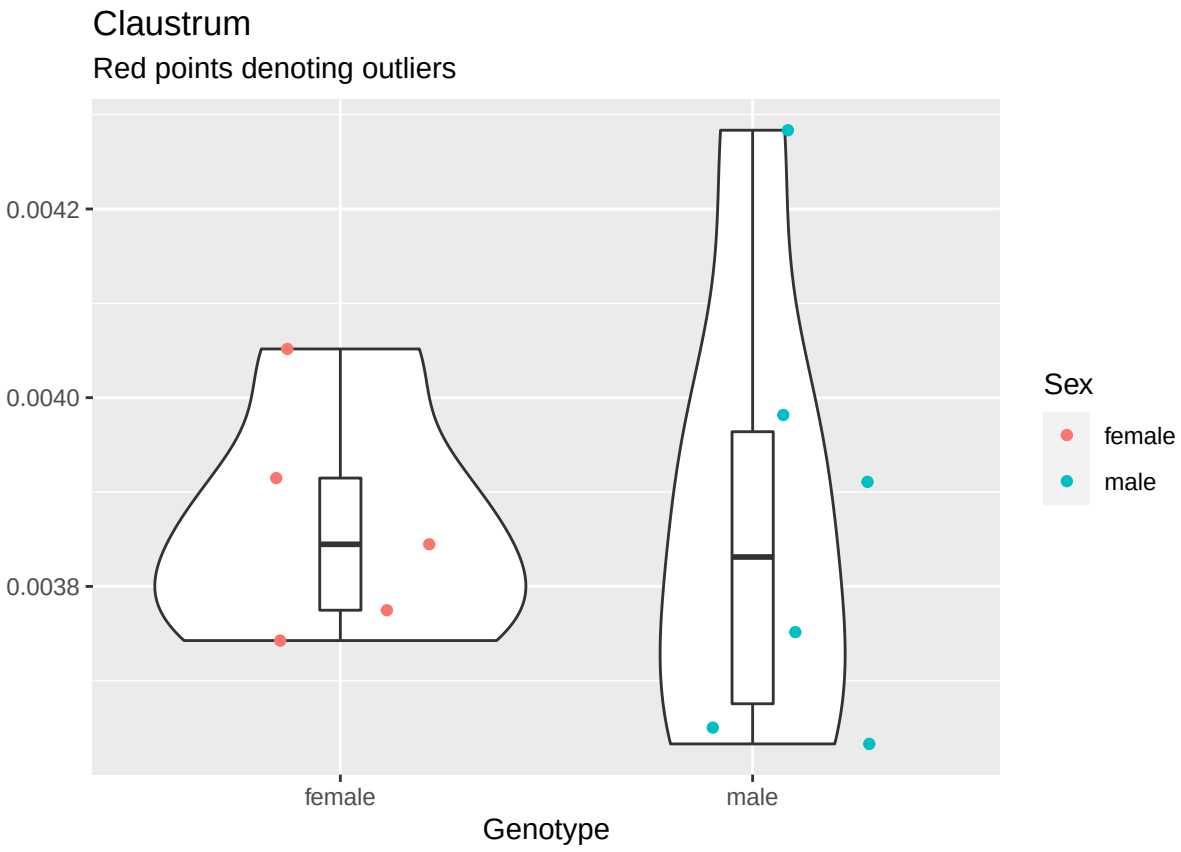

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.254e-07 2.254e-07   4.302 0.0679 .
## Residuals    9 4.715e-07 5.238e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



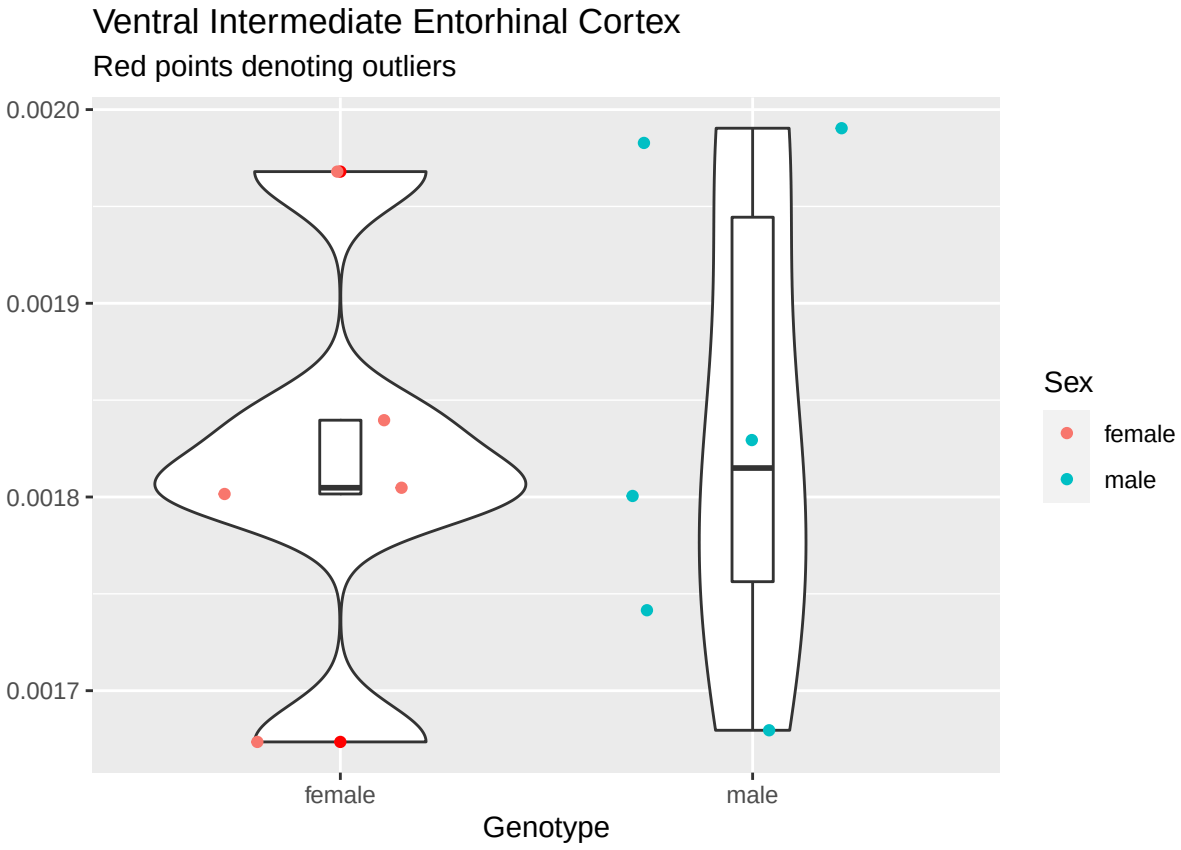

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.000e-11 2.200e-11   0.001  0.979
## Residuals    9 2.666e-07 2.962e-08
```



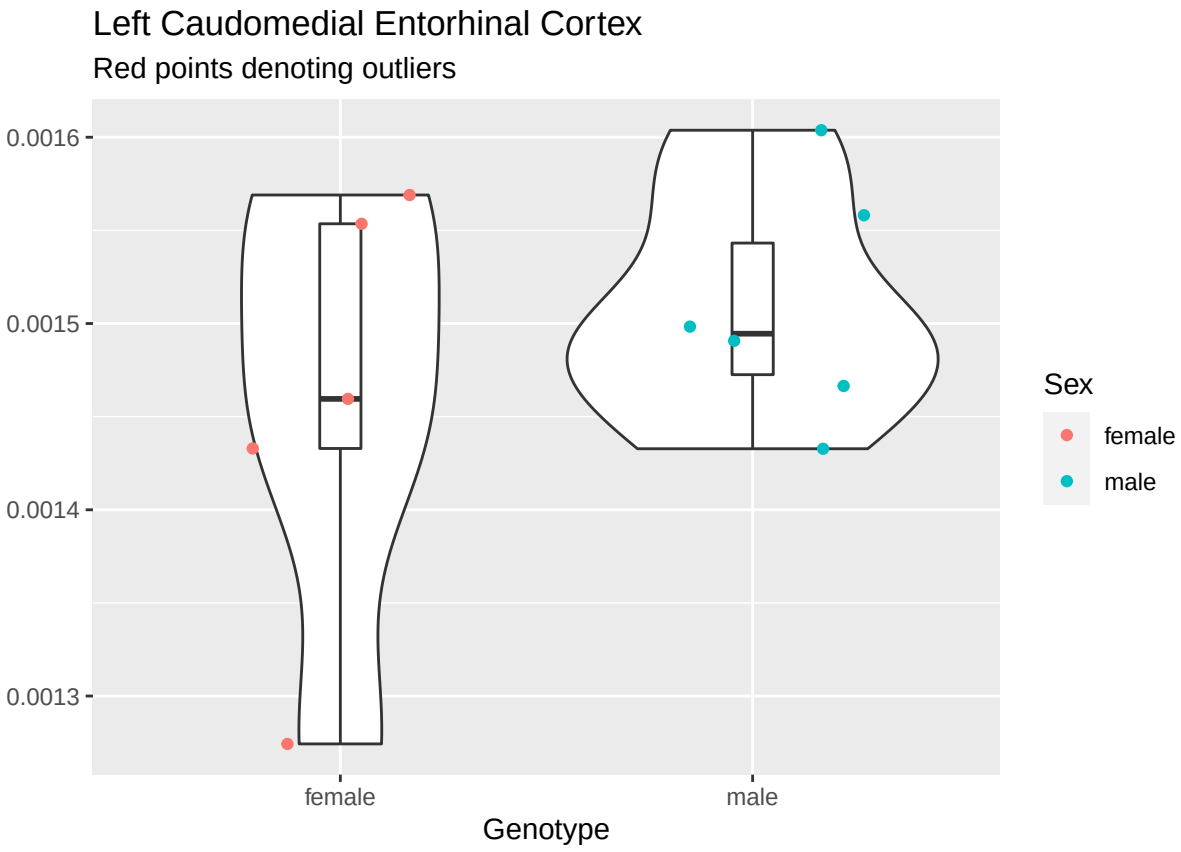

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.523e-07 3.523e-07   5.886 0.0382 *
## Residuals    9 5.387e-07 5.990e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



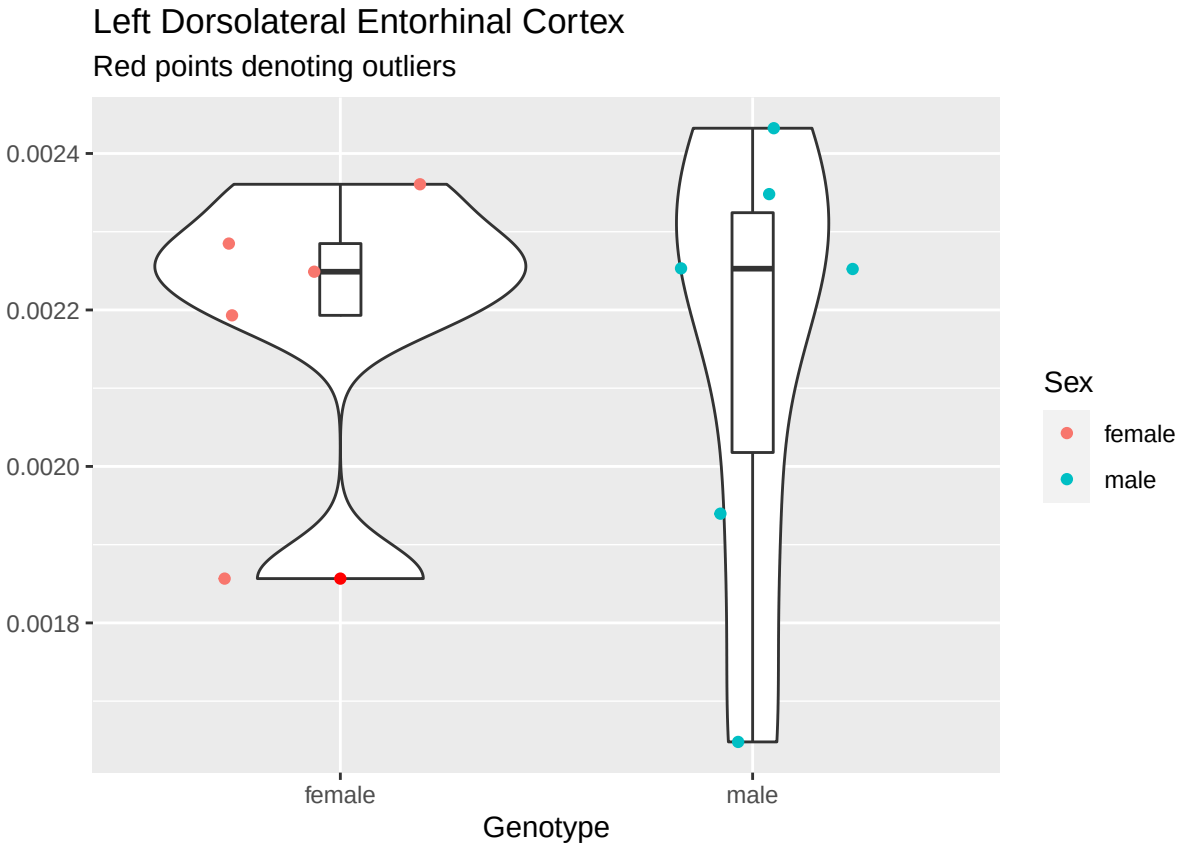

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 0.000e+00 2.000e-11   0.001  0.982
## Residuals    9 3.644e-07 4.049e-08
```



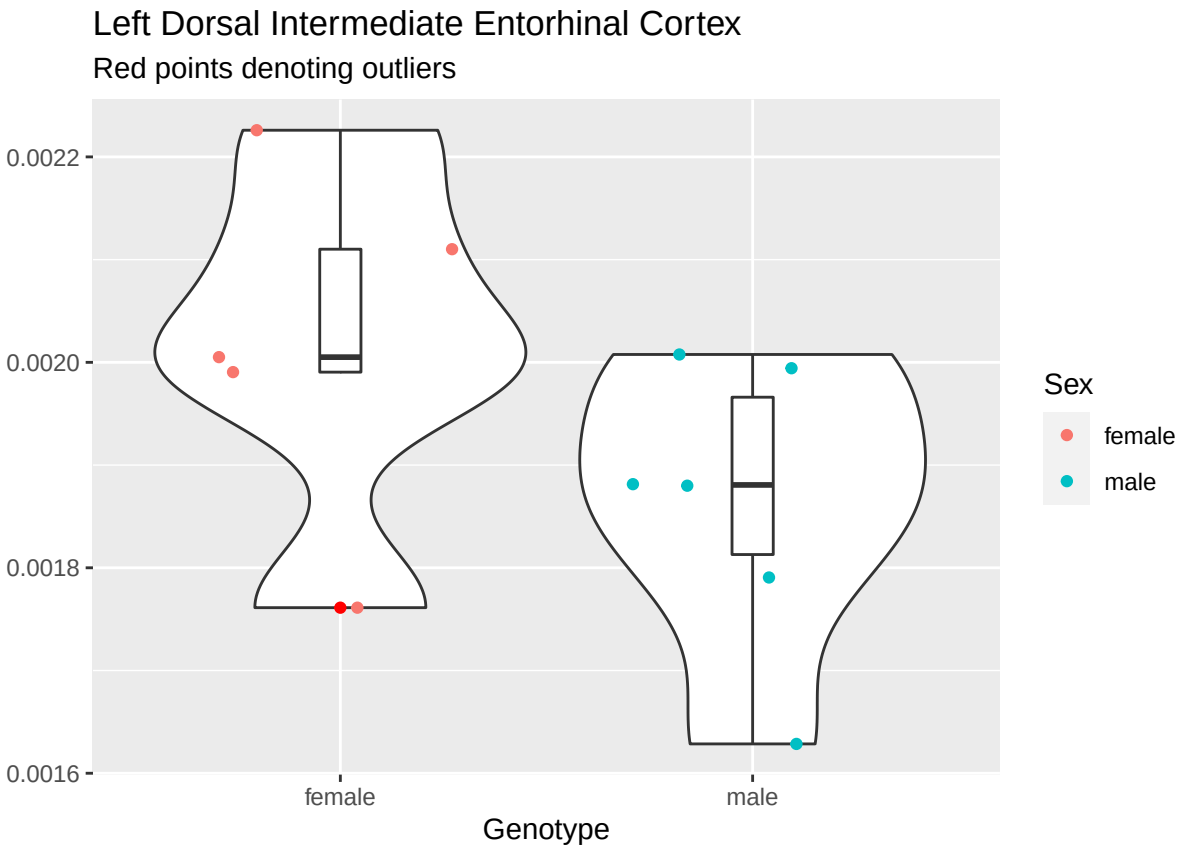

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.080e-09 1.076e-09   0.078  0.787
## Residuals    9 1.243e-07 1.382e-08
```



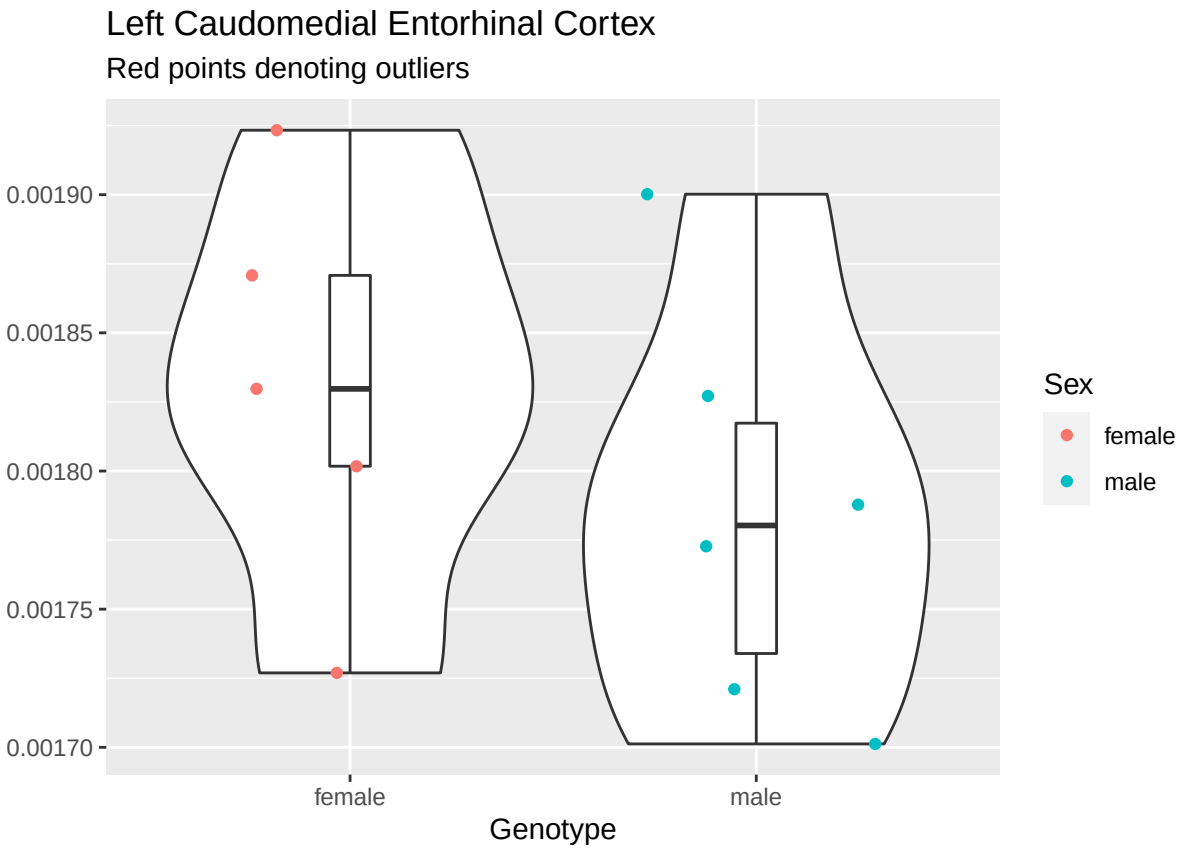

```
##              Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex           1 6.960e-09 6.960e-09   0.832  0.385
## Residuals     9 7.529e-08 8.365e-09
```



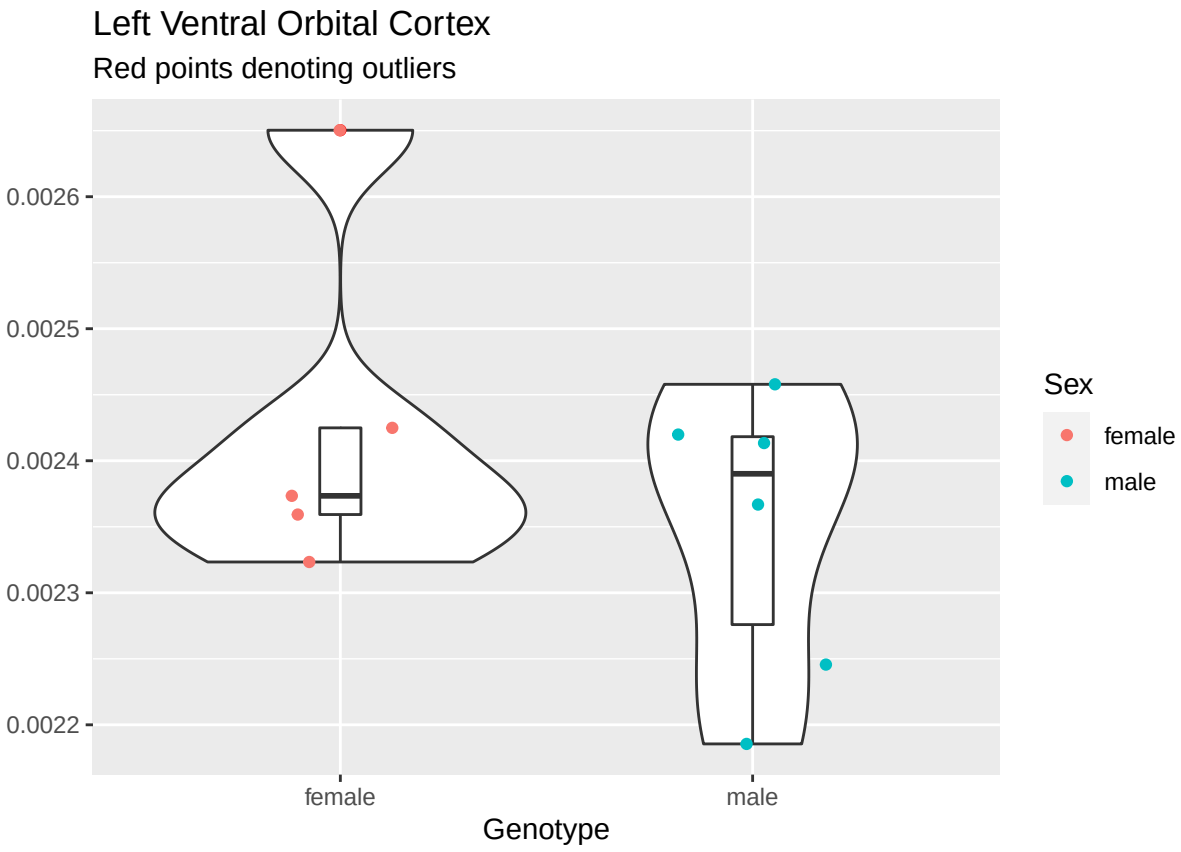

```
##              Df   Sum Sq   Mean Sq F value Pr(>F)
## Sex           1 5.10e-09 5.100e-09   0.078  0.786
## Residuals     9 5.89e-07 6.545e-08
```



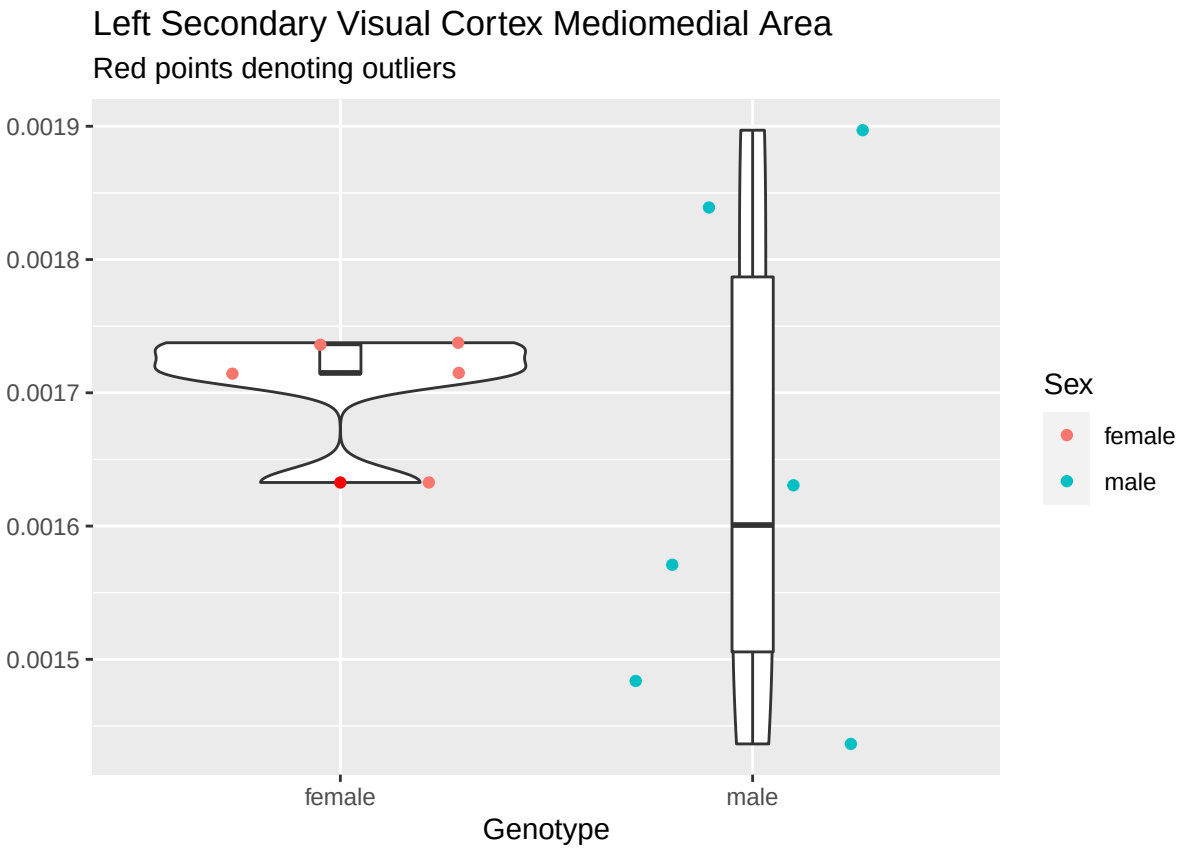

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 6.539e-08 6.539e-08   2.704  0.134
## Residuals    9 2.176e-07 2.418e-08
```



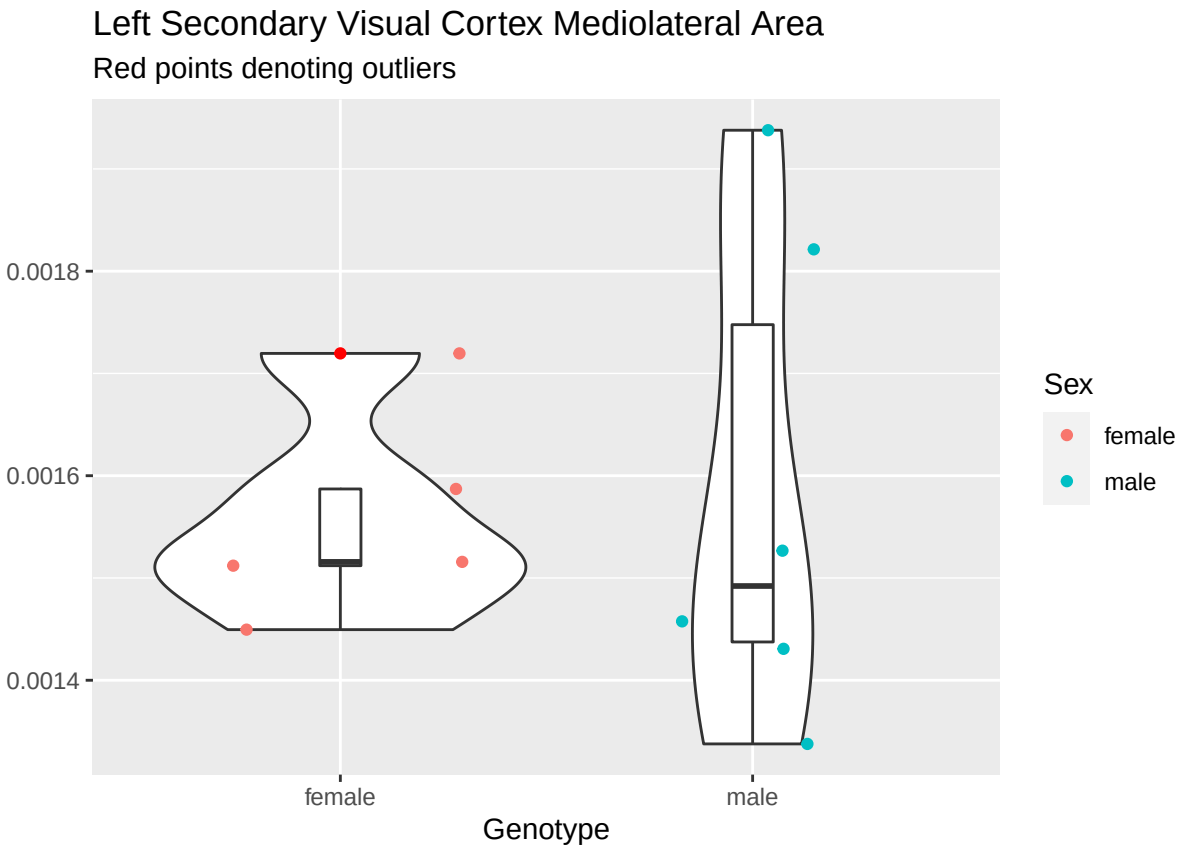

```
##              Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex           1 5.640e-09 5.641e-09   1.055  0.331
## Residuals     9 4.811e-08 5.345e-09
```



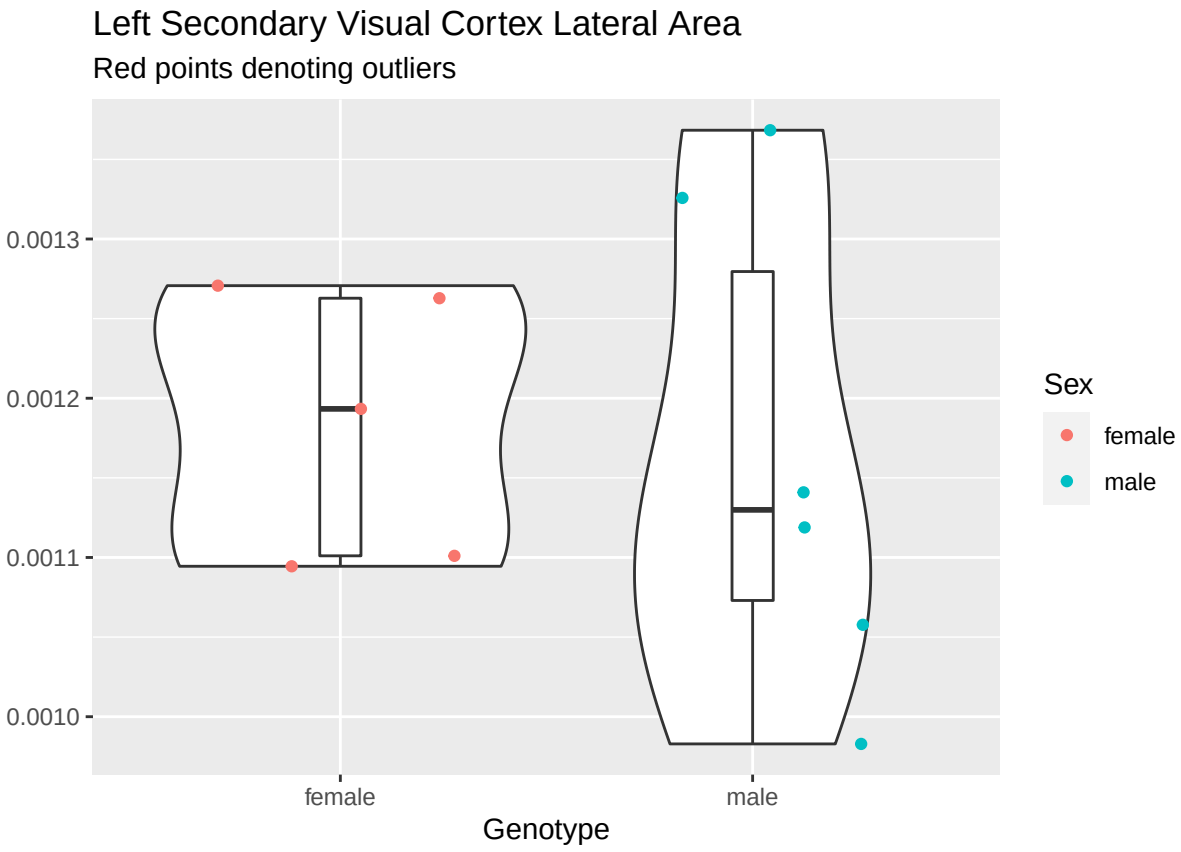

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.662e-08 1.662e-08   1.179  0.306
## Residuals    9 1.268e-07 1.409e-08
```



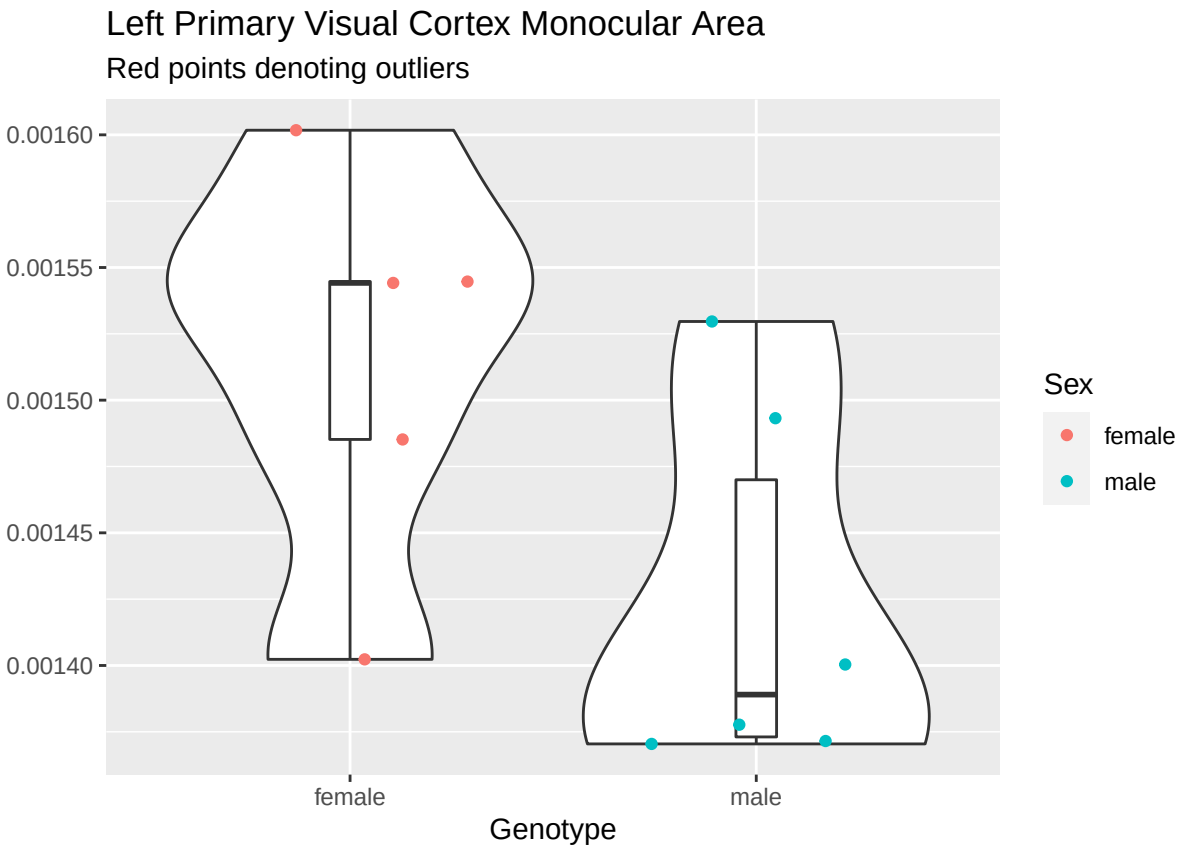

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.121e-08 1.121e-08   0.549  0.478
## Residuals    9 1.837e-07 2.041e-08
```



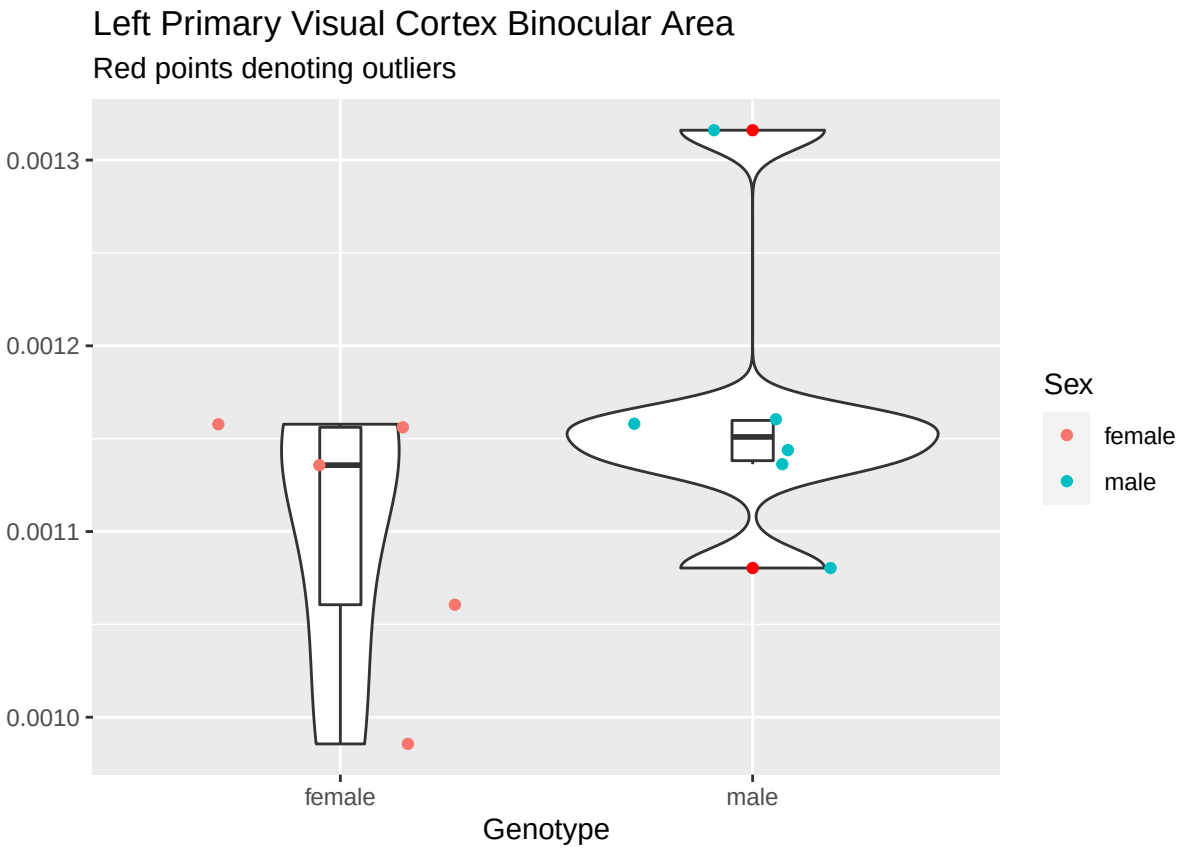

```
##             Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 2.200e-09 2.22e-09   0.061   0.81
## Residuals    9 3.276e-07 3.64e-08
```



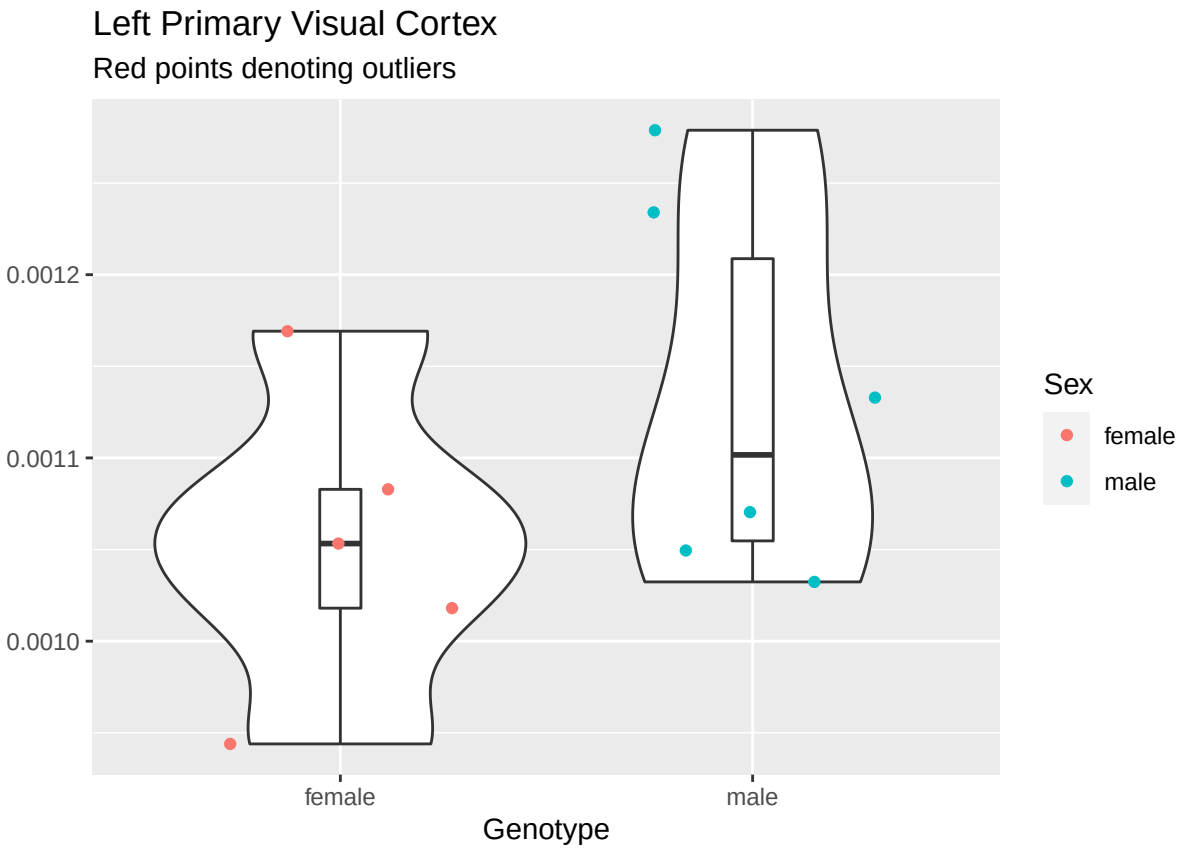

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 9.600e-10 9.550e-10    0.06  0.812
## Residuals    9 1.433e-07 1.592e-08
```



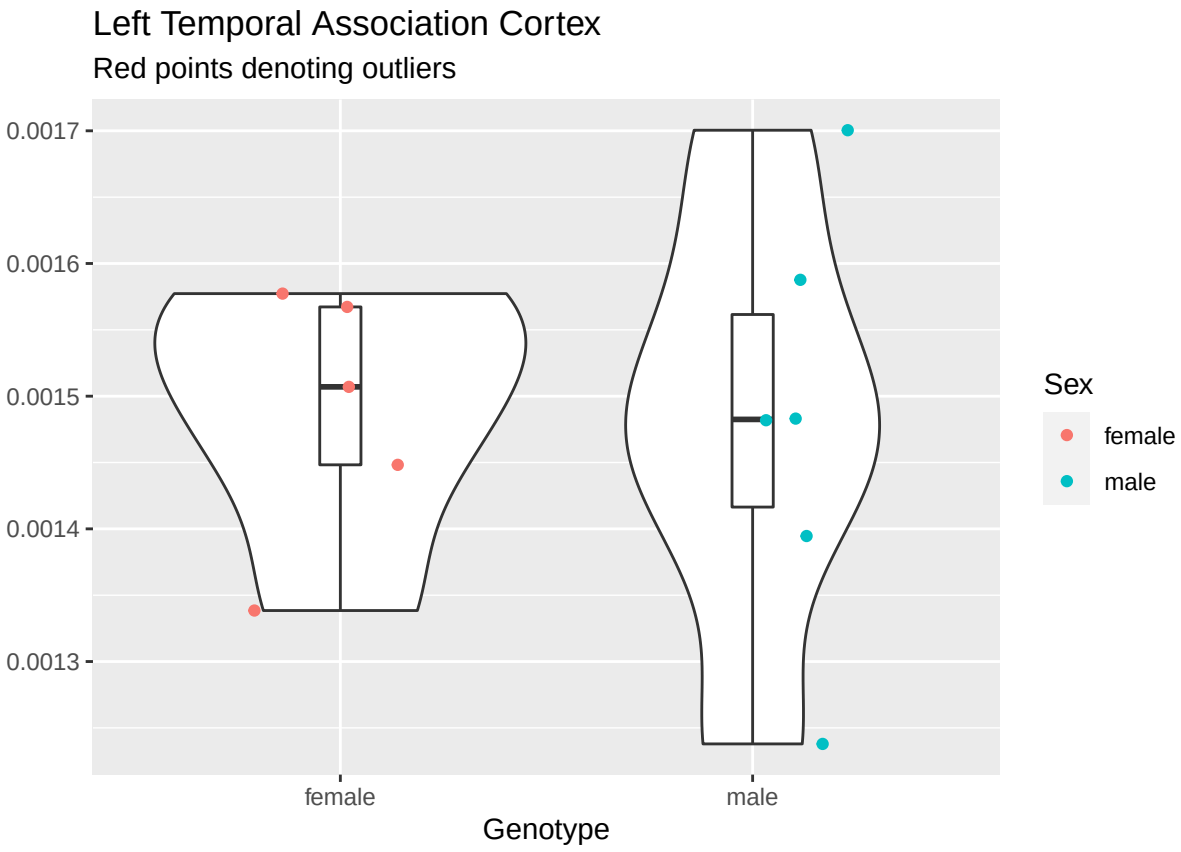

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.299e-08 2.299e-08   4.391 0.0656 .
## Residuals    9 4.712e-08 5.236e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



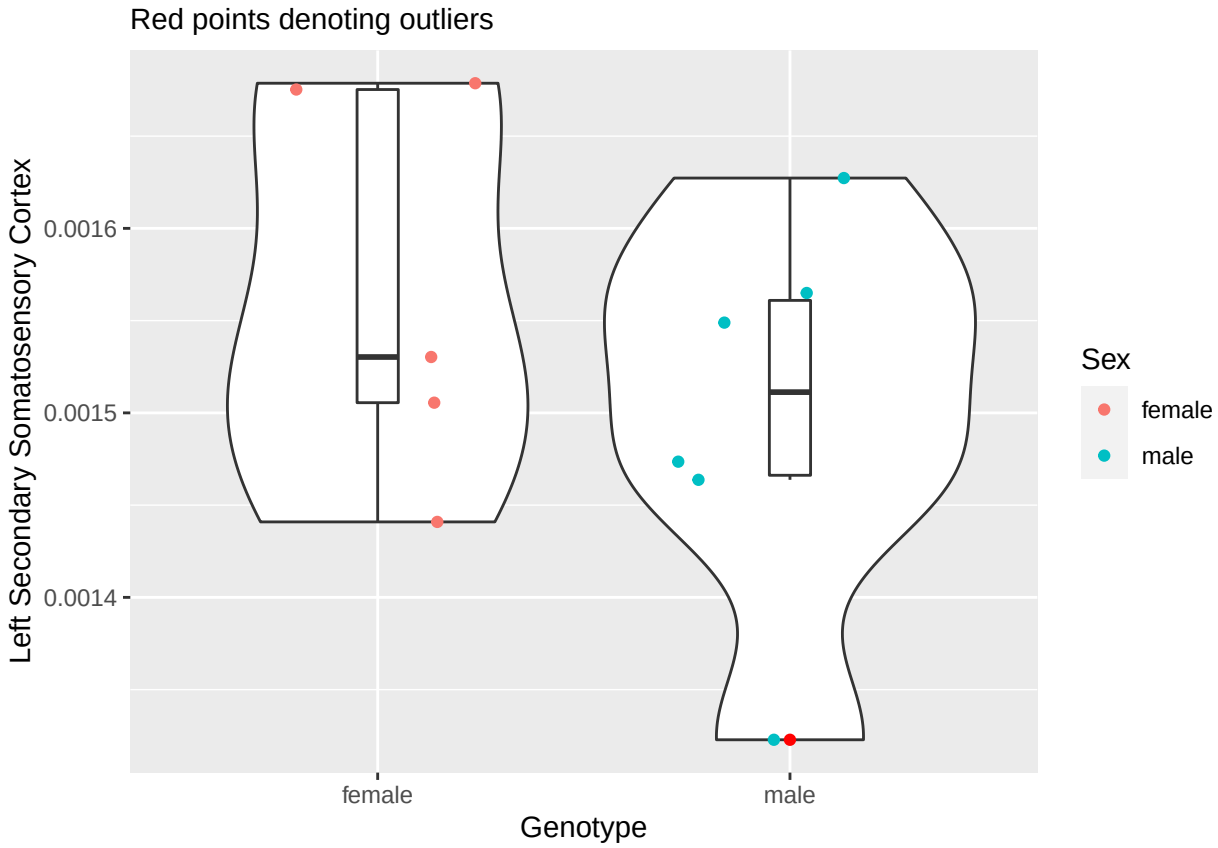

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.212e-08 1.212e-08    2.03  0.188
## Residuals    9 5.373e-08 5.970e-09
```



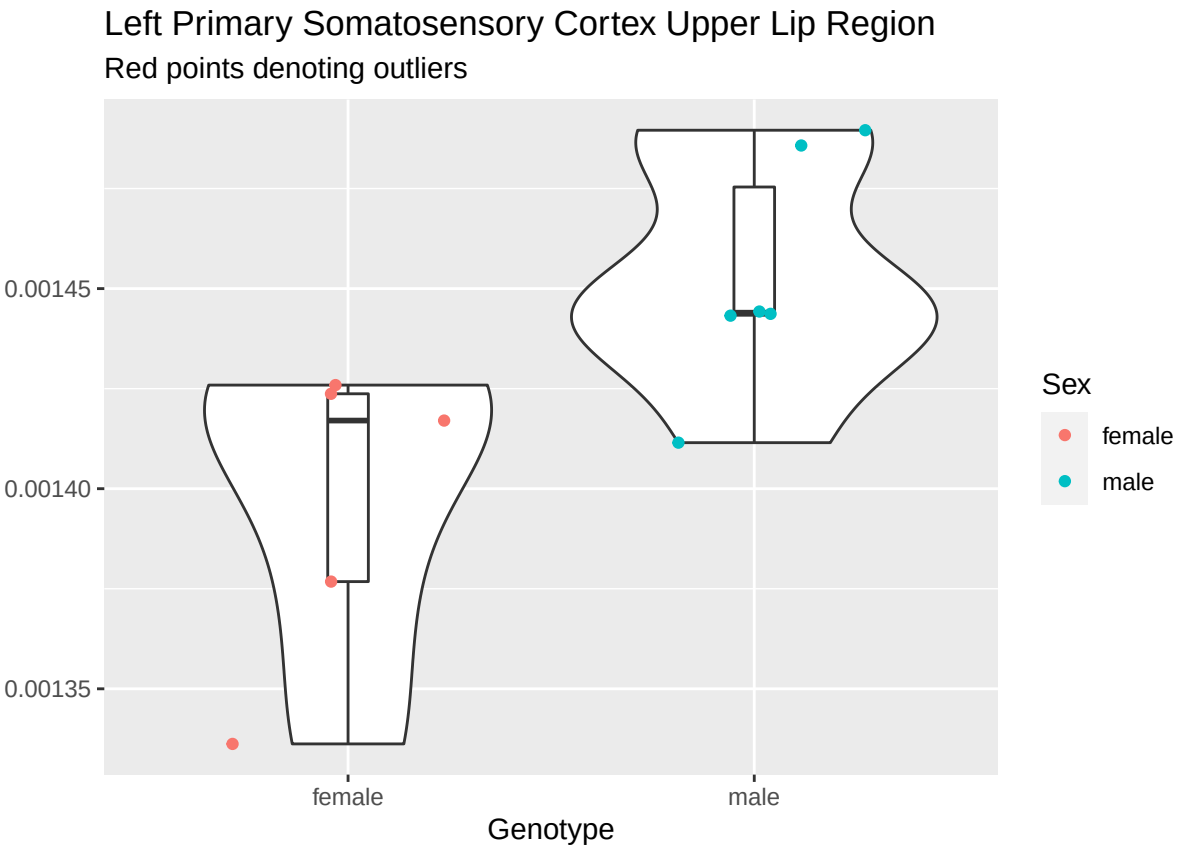

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.726e-08 1.726e-08   1.942  0.197
## Residuals    9 7.999e-08 8.888e-09
```



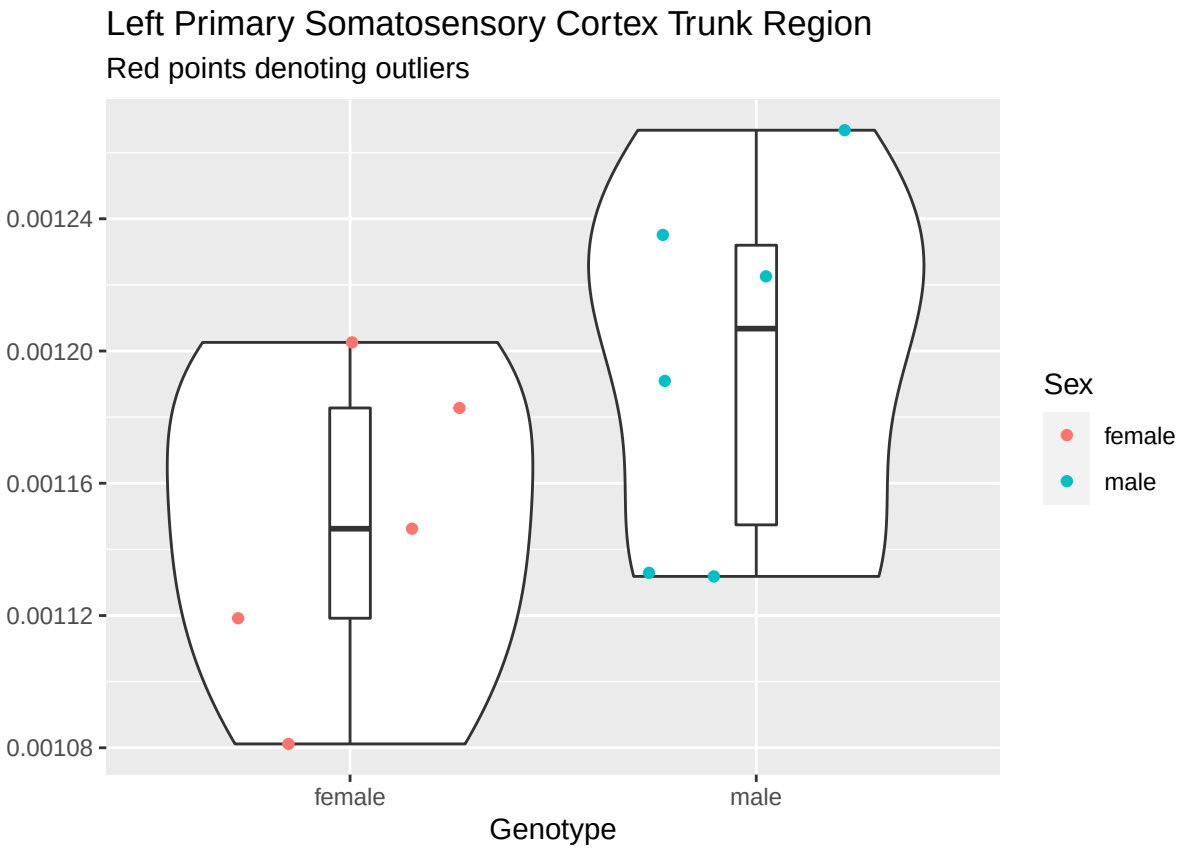

```
##              Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex           1 1.200e-10 1.23e-10   0.007  0.936
## Residuals     9 1.647e-07 1.83e-08
```



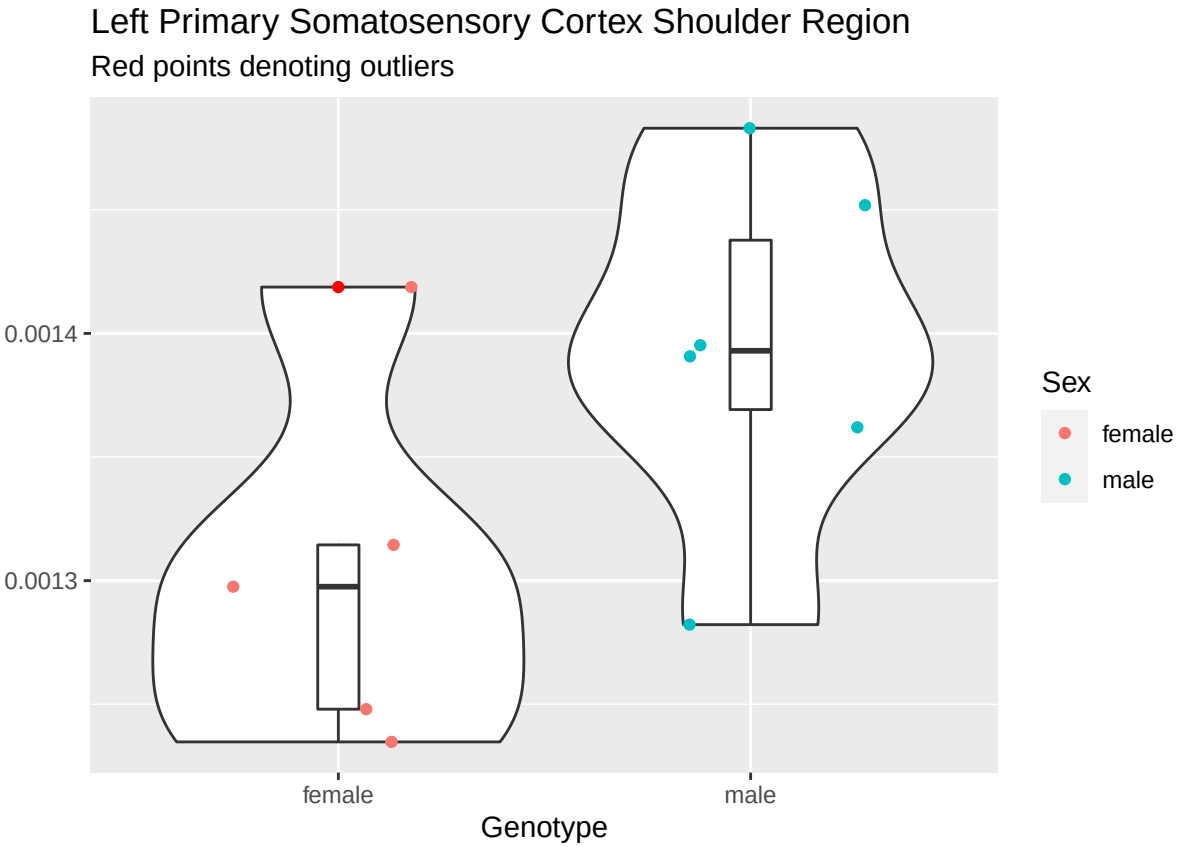

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.185e-08 1.185e-08   1.051  0.332
## Residuals    9 1.014e-07 1.127e-08
```



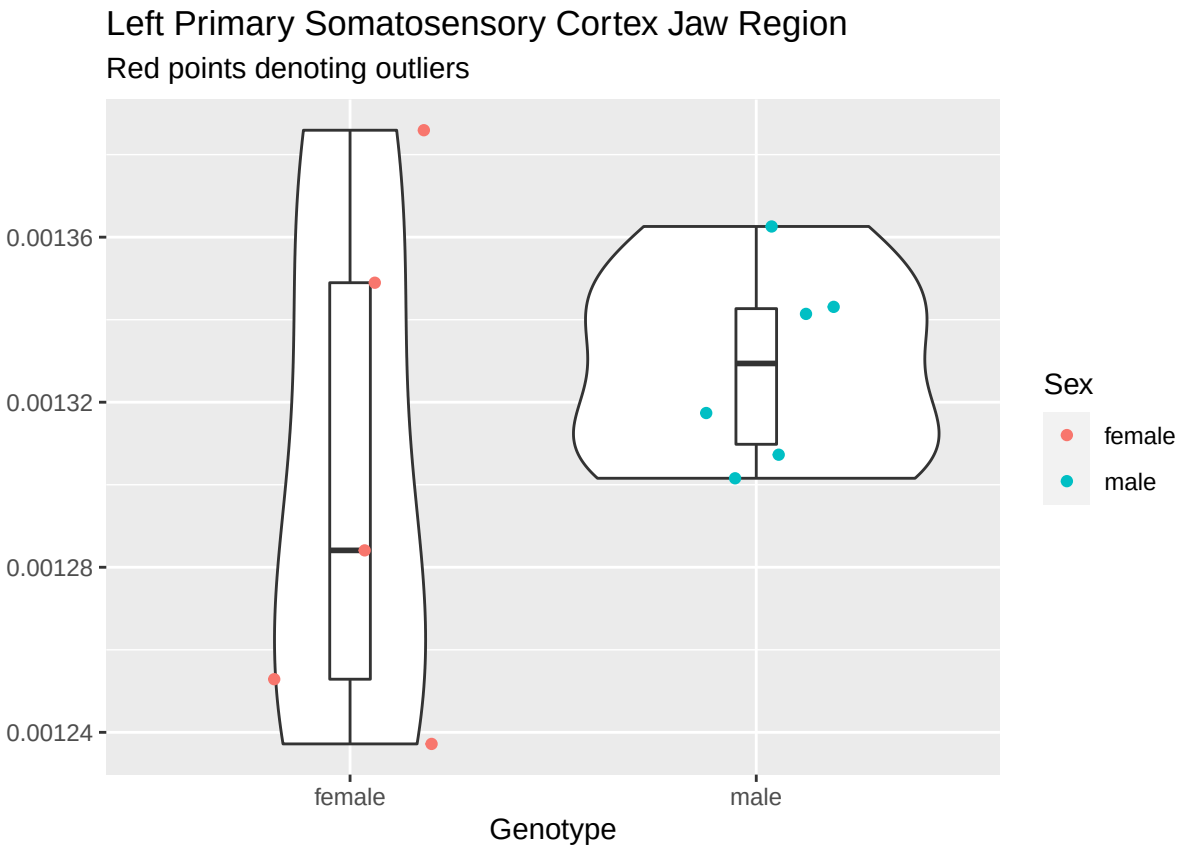

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 8.884e-09 8.884e-09   7.662 0.0218 *
## Residuals    9 1.044e-08 1.160e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



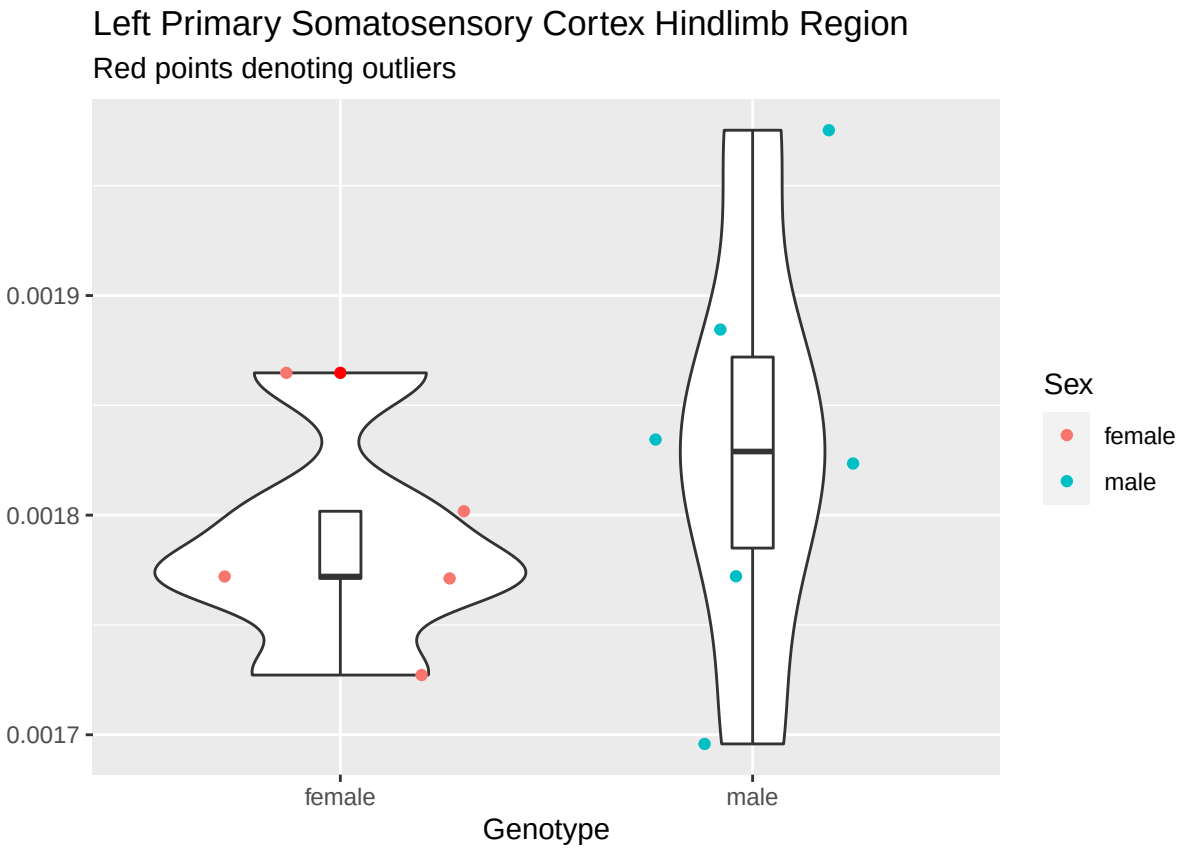

```
##              Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex           1 6.901e-09 6.901e-09     2.5  0.148
## Residuals     9 2.485e-08 2.761e-09
```



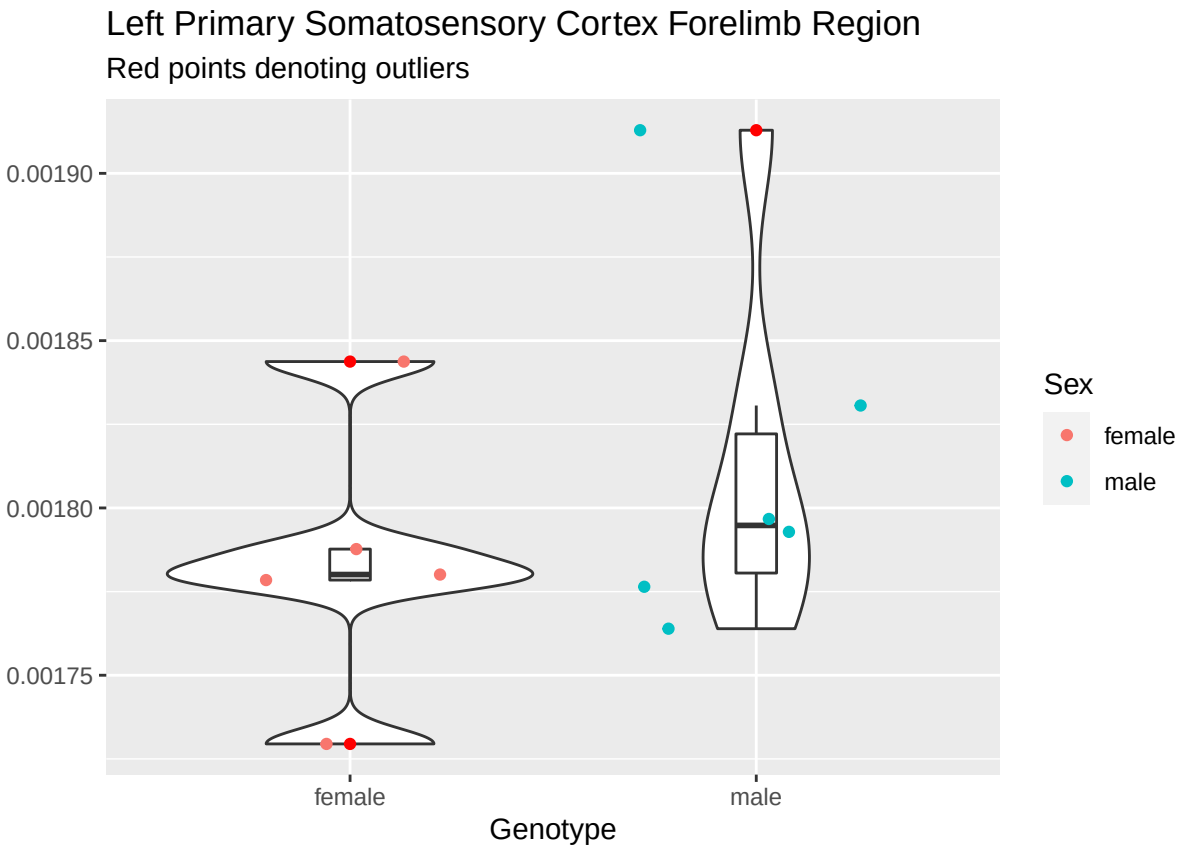

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.281e-08 2.281e-08   4.461 0.0639 .
## Residuals    9 4.603e-08 5.114e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



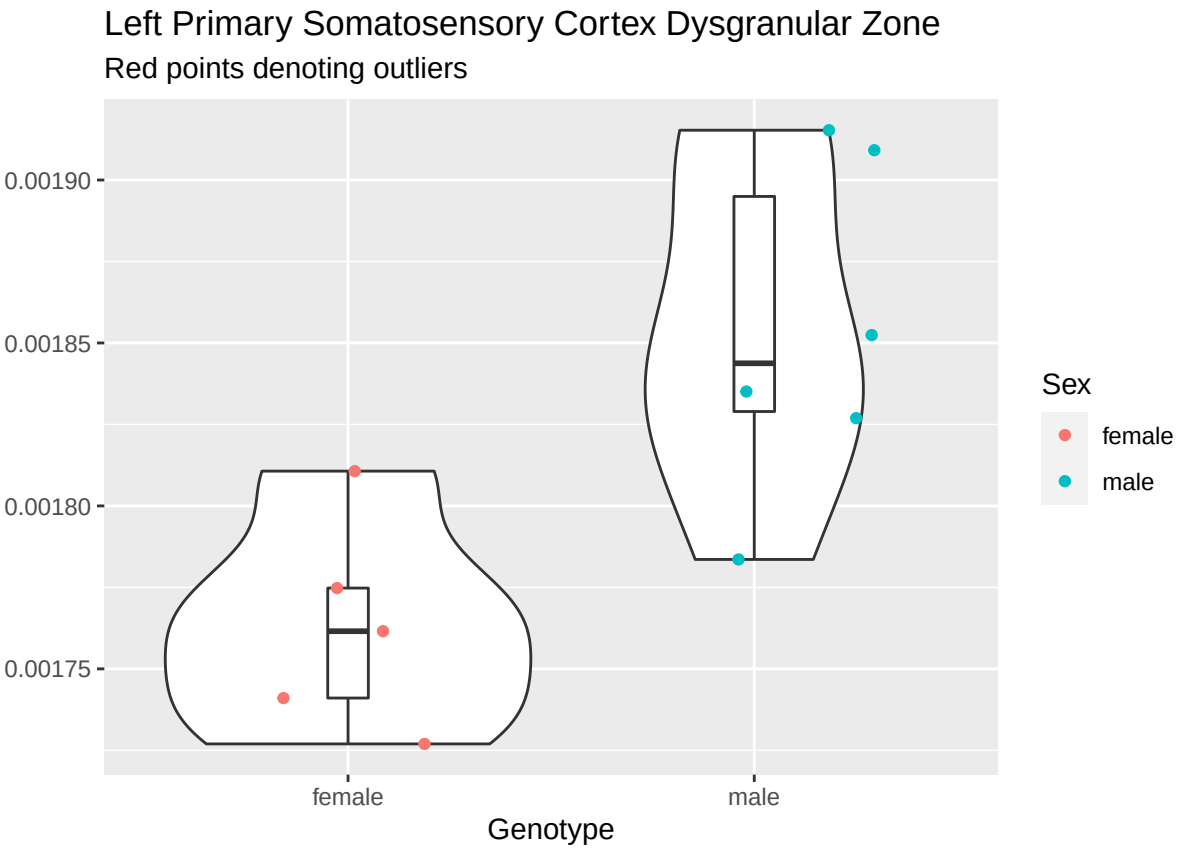

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.000e-09 2.000e-09   0.946  0.356
## Residuals    9 1.902e-08 2.114e-09
```



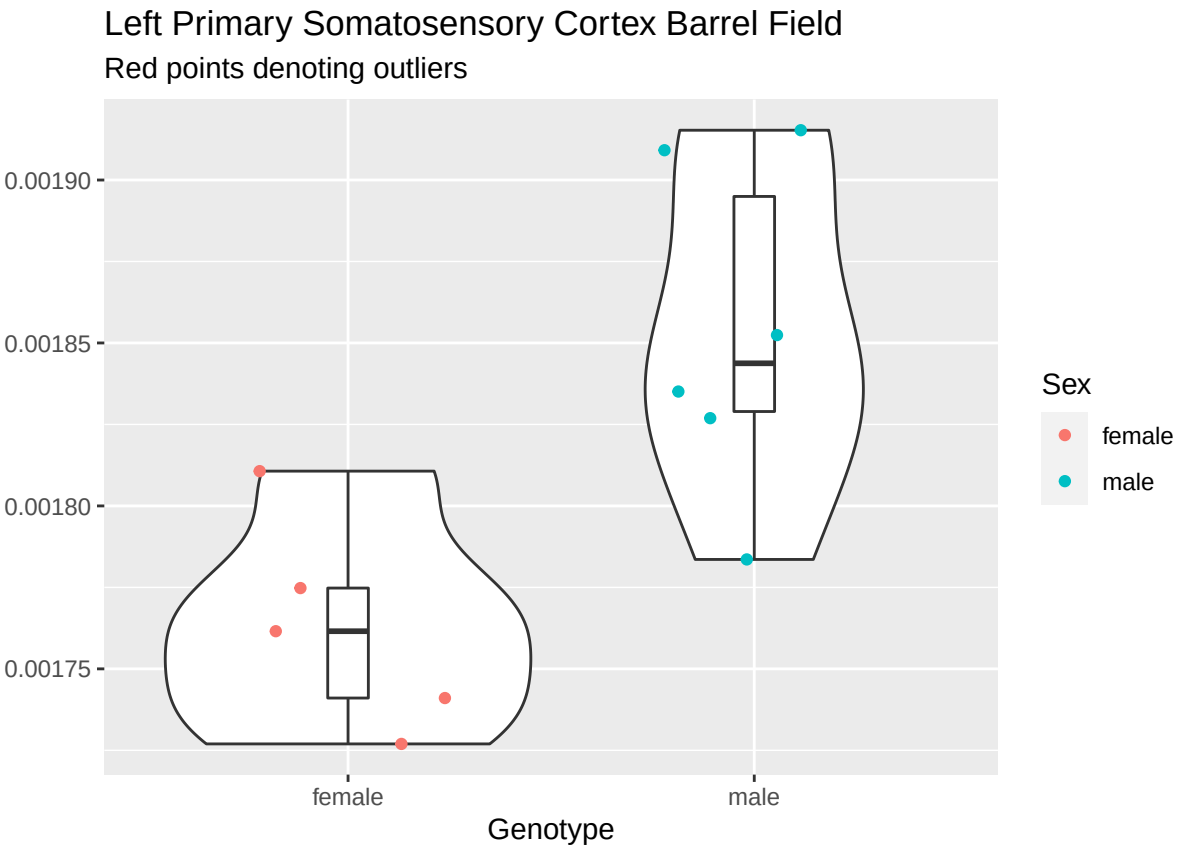

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 5.170e-09 5.173e-09   0.835  0.385
## Residuals    9 5.579e-08 6.199e-09
```



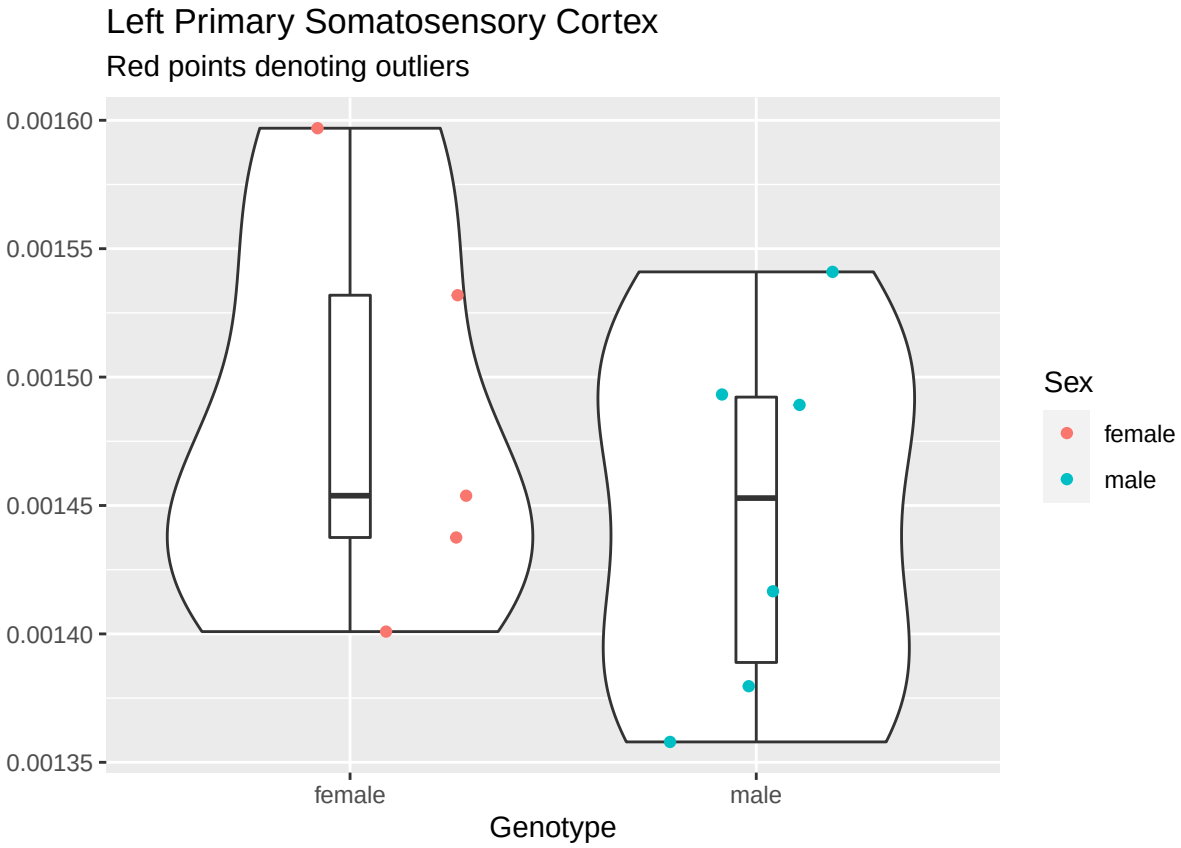

```
##              Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex           1 2.191e-09 2.191e-09   0.926  0.361
## Residuals     9 2.130e-08 2.367e-09
```



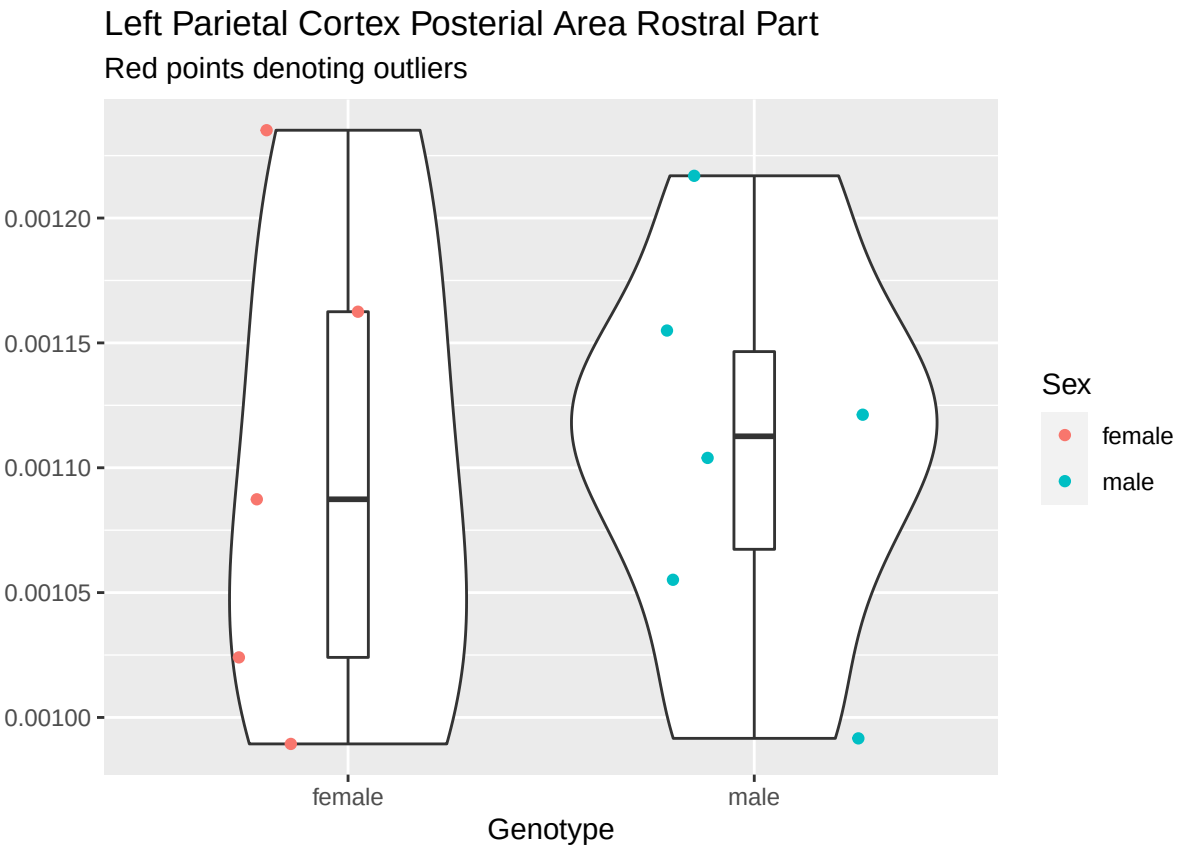

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.087e-08 1.087e-08   3.421 0.0974 .
## Residuals    9 2.860e-08 3.178e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



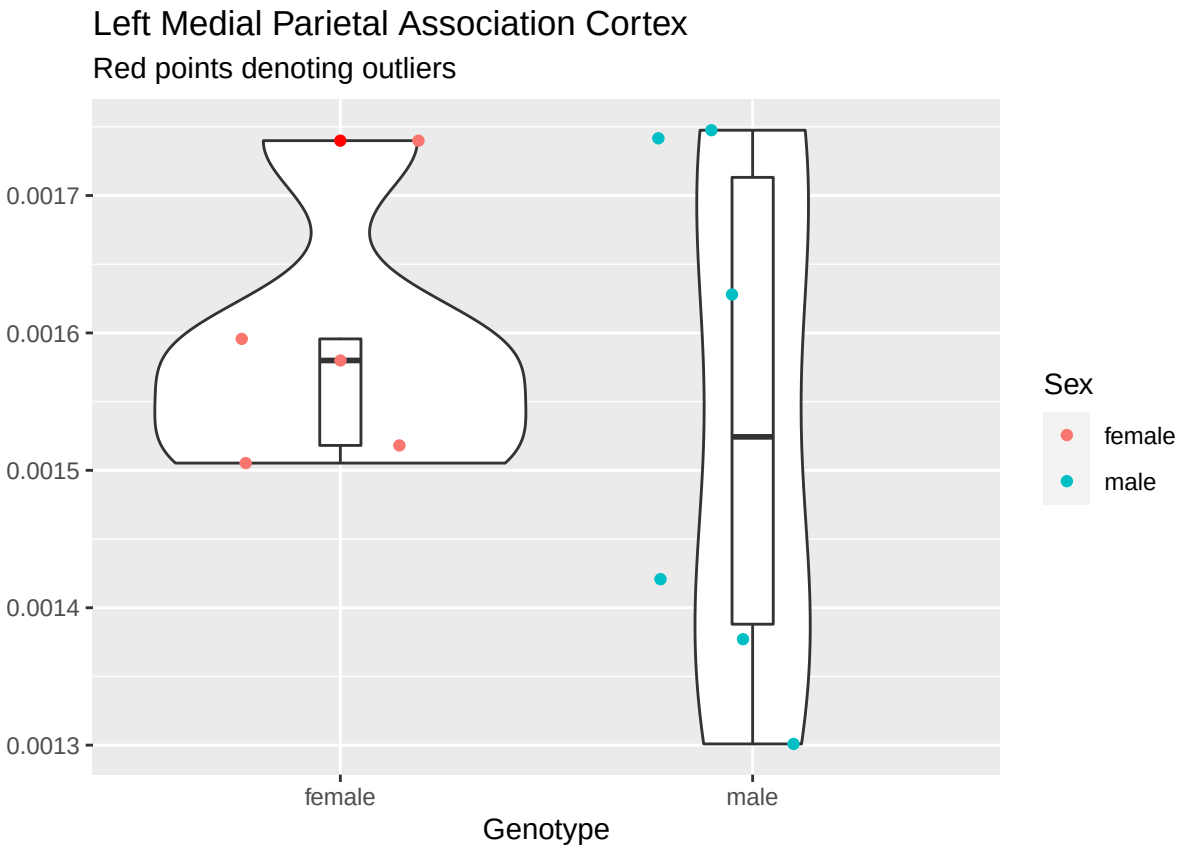

```
##             Df    Sum Sq   Mean Sq F value  Pr(>F)
## Sex          1 2.245e-08 2.245e-08   11.86 0.00735 **
## Residuals    9 1.704e-08 1.894e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



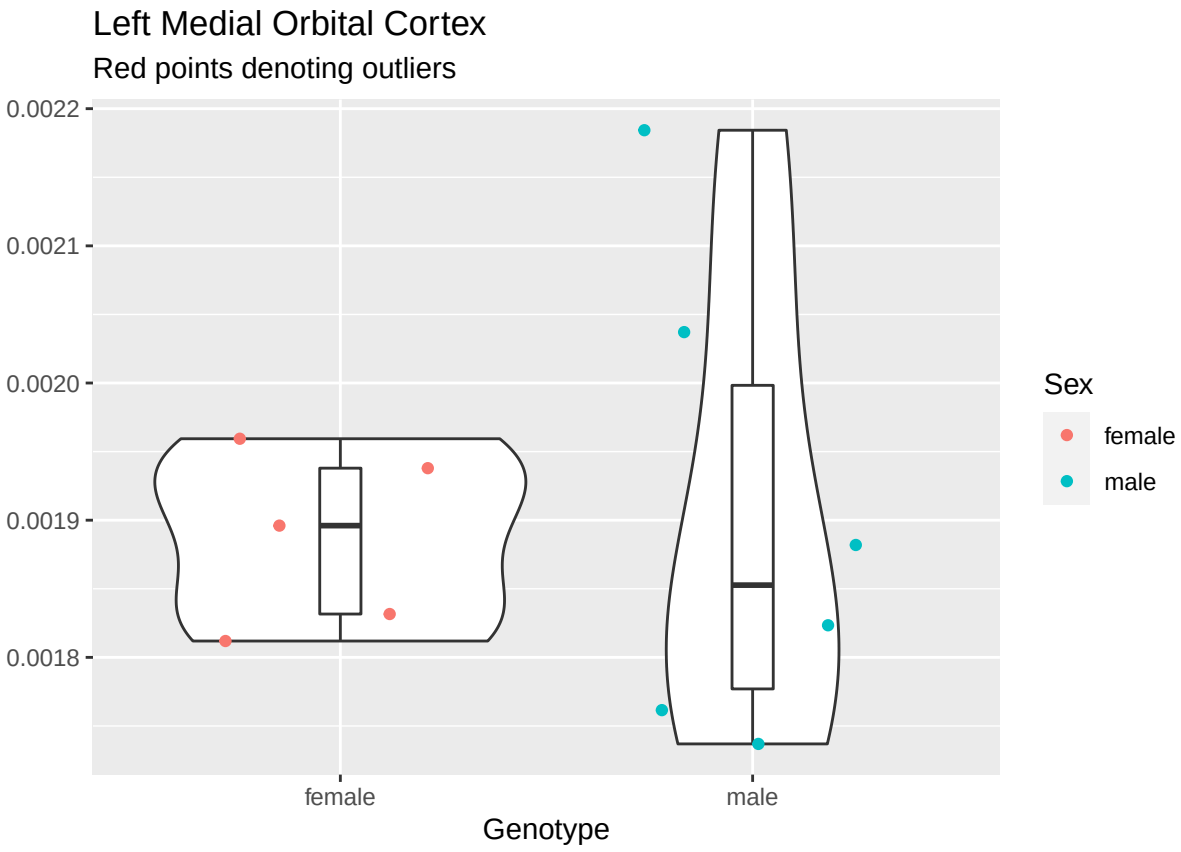

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.930e-09 3.927e-09   0.691  0.427
## Residuals    9 5.115e-08 5.684e-09
```



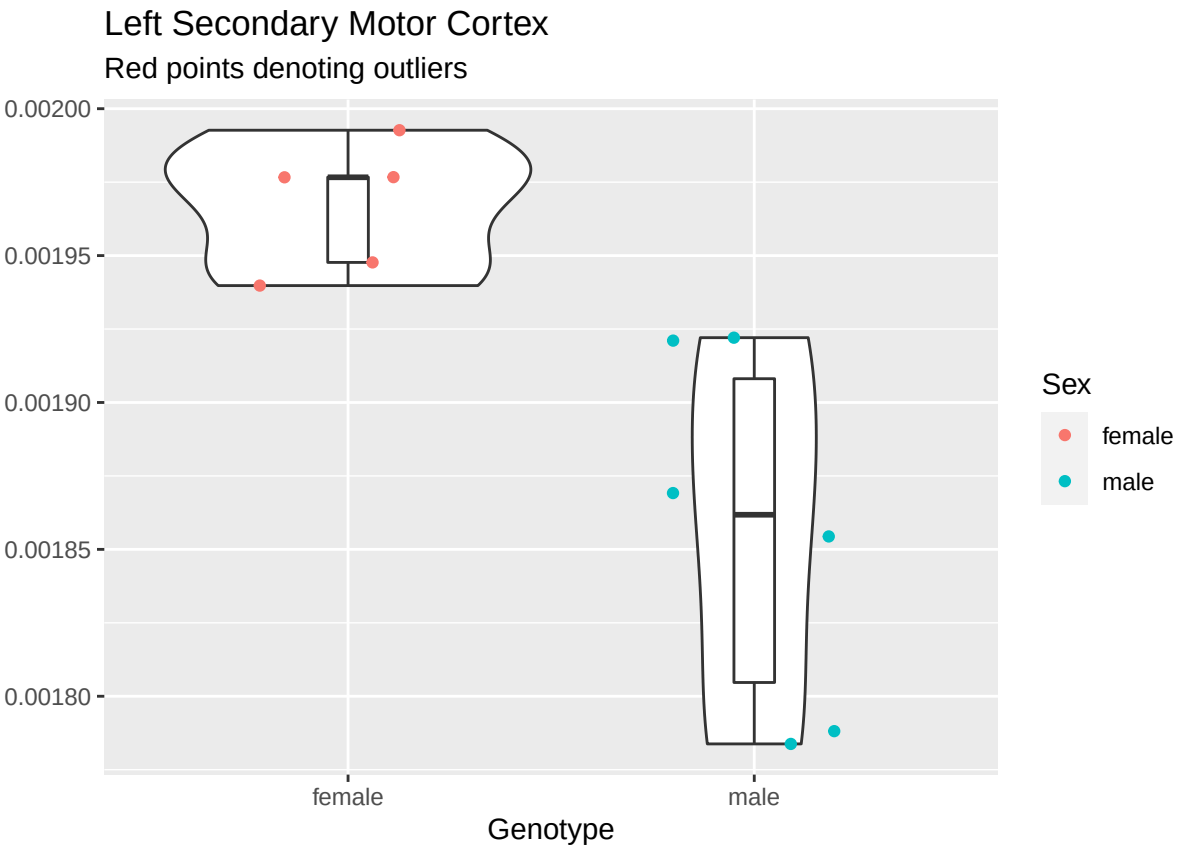

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.600e-10 1.580e-10    0.02  0.891
## Residuals    9 7.093e-08 7.881e-09
```



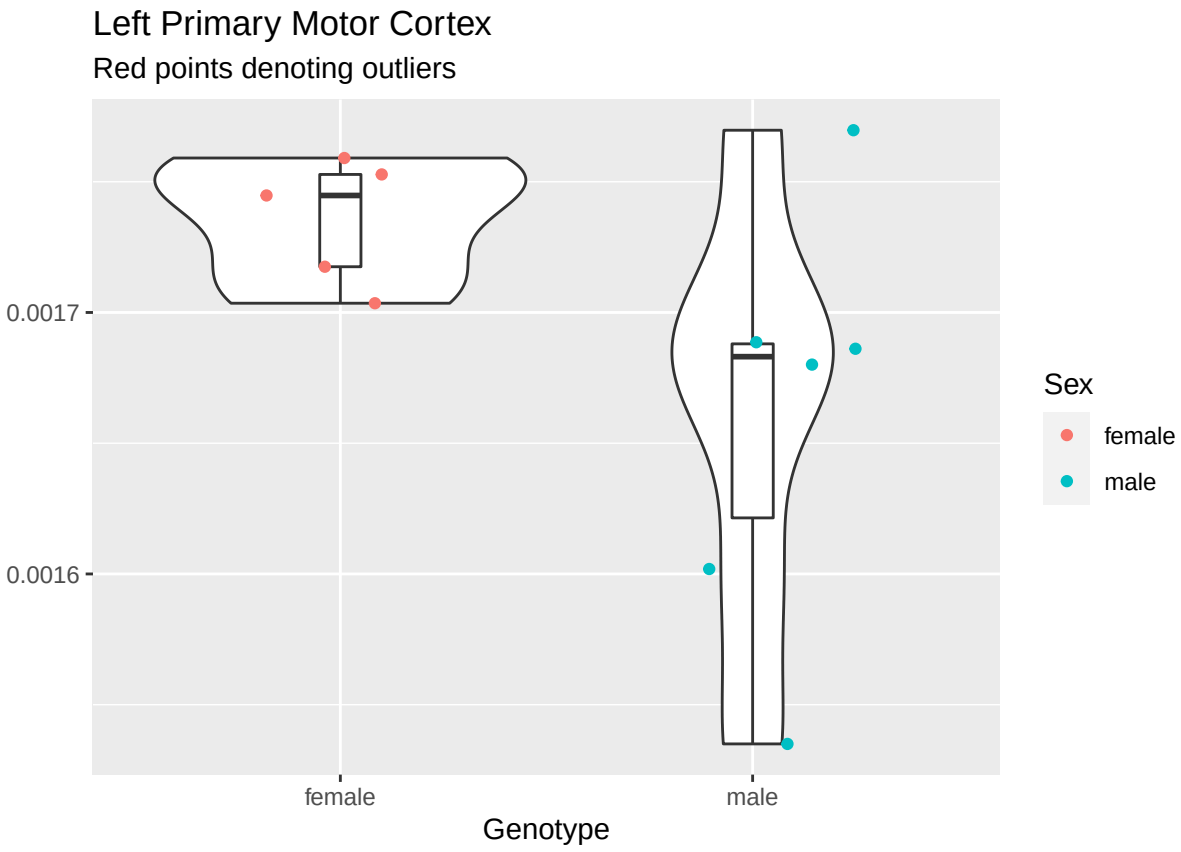

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 7.320e-09 7.319e-09   0.294  0.601
## Residuals    9 2.242e-07 2.491e-08
```



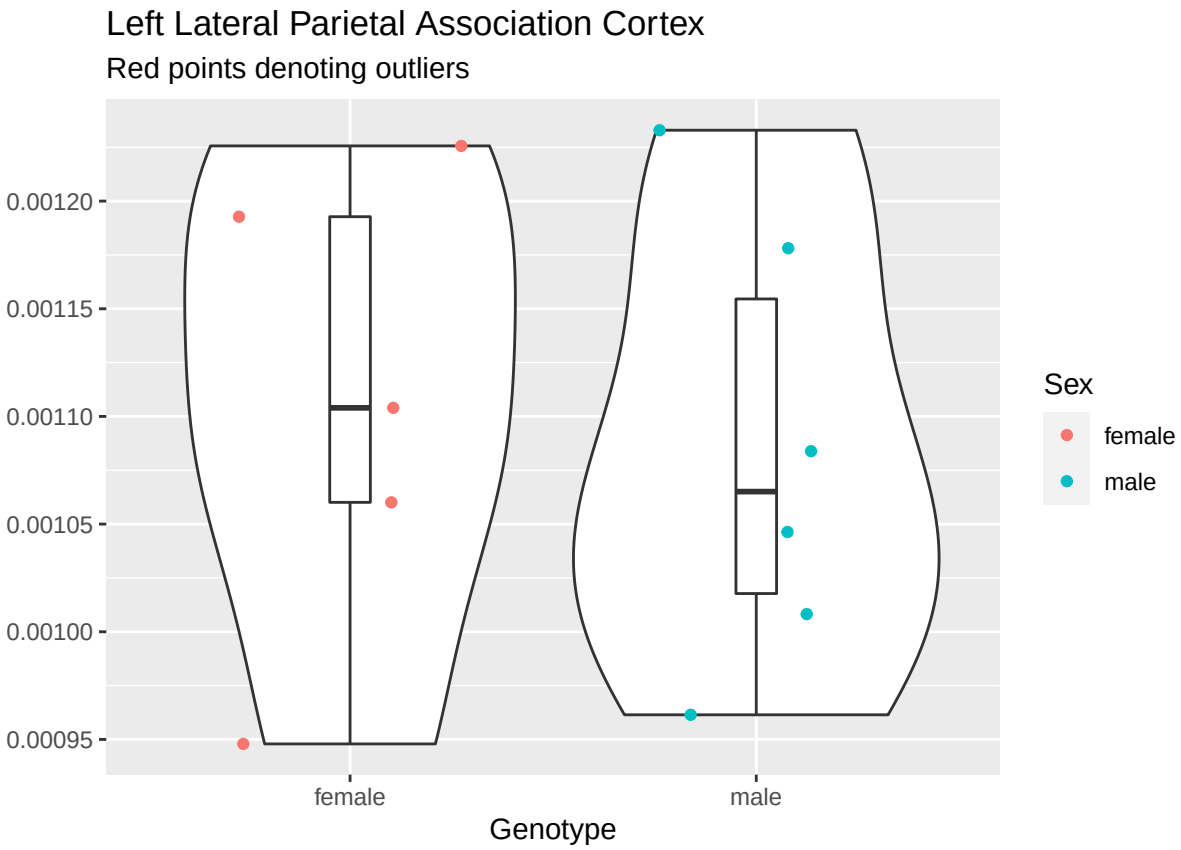

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 7.700e-10 7.720e-10   0.041  0.843
## Residuals    9 1.681e-07 1.868e-08
```



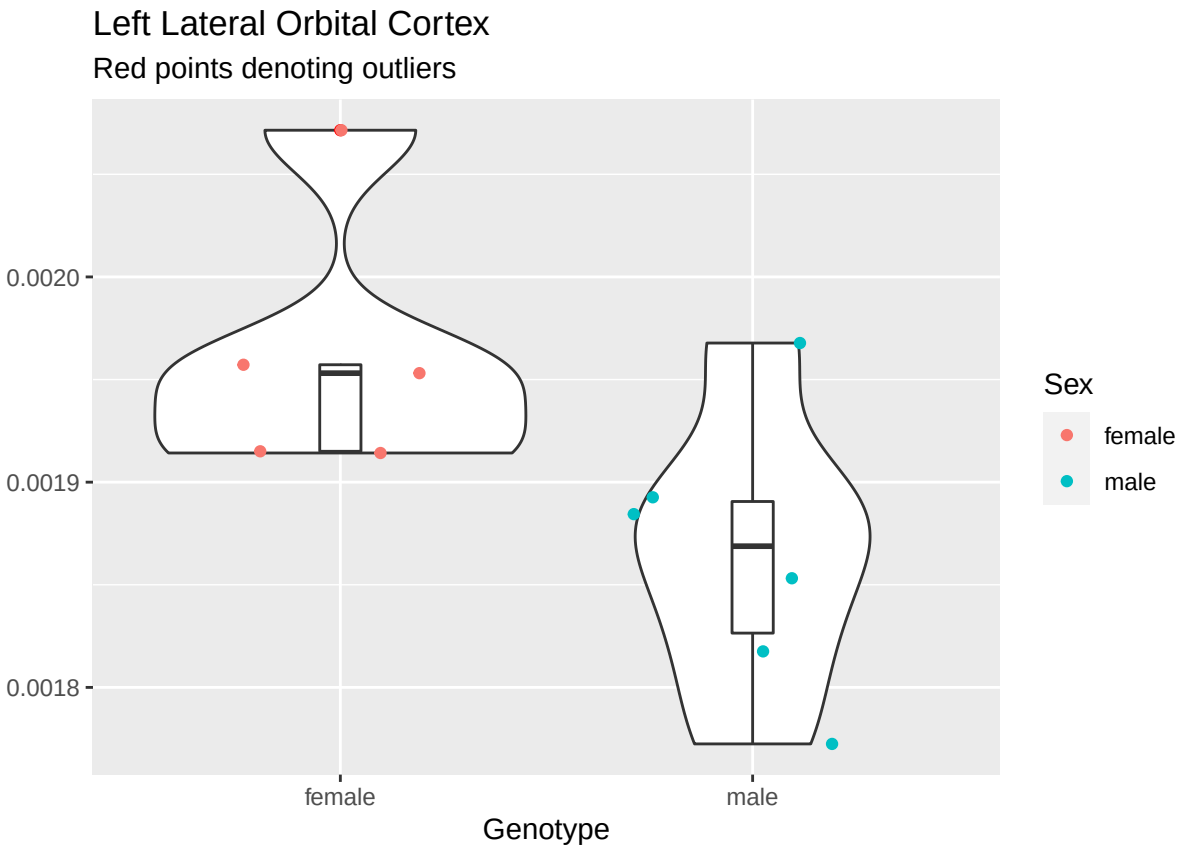

```
##             Df    Sum Sq   Mean Sq F value  Pr(>F)
## Sex          1 3.317e-08 3.317e-08   14.52 0.00415 **
## Residuals    9 2.056e-08 2.280e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



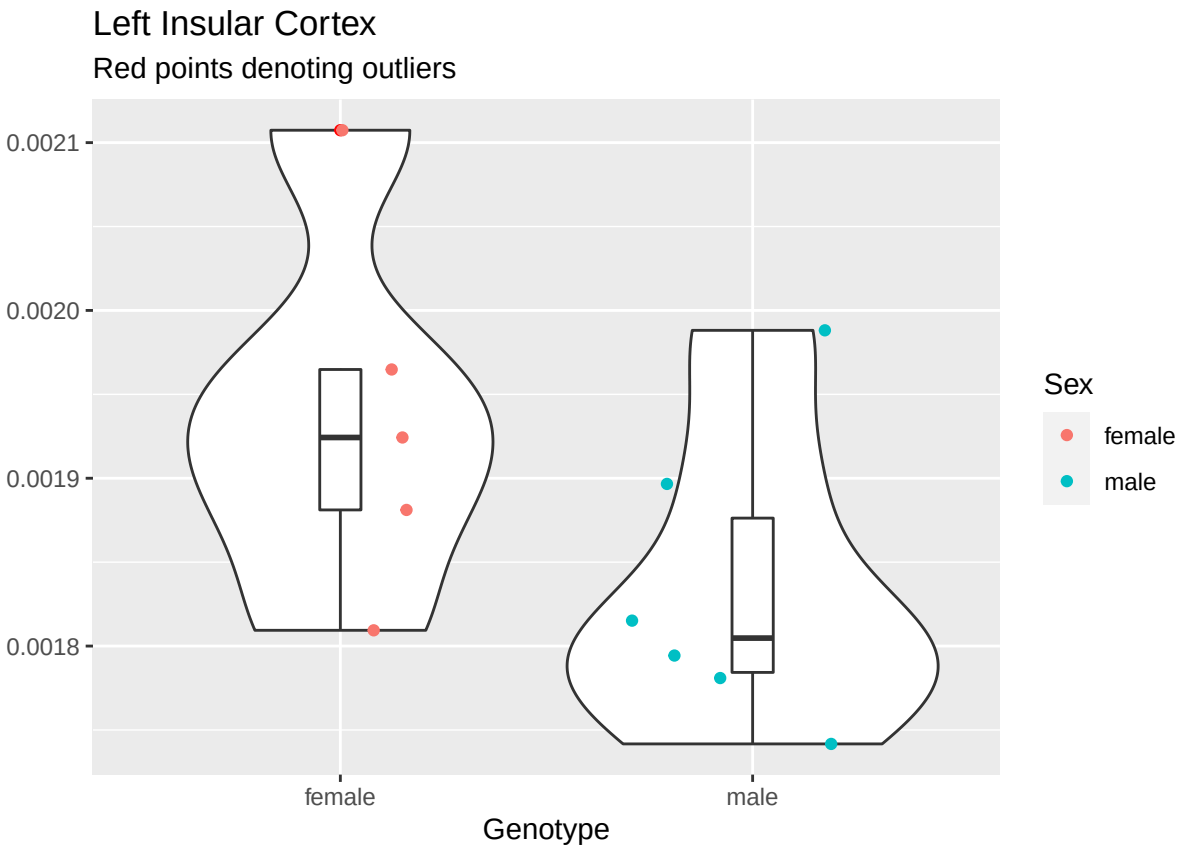

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.546e-08 1.546e-08    3.95 0.0781 .
## Residuals    9 3.523e-08 3.914e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



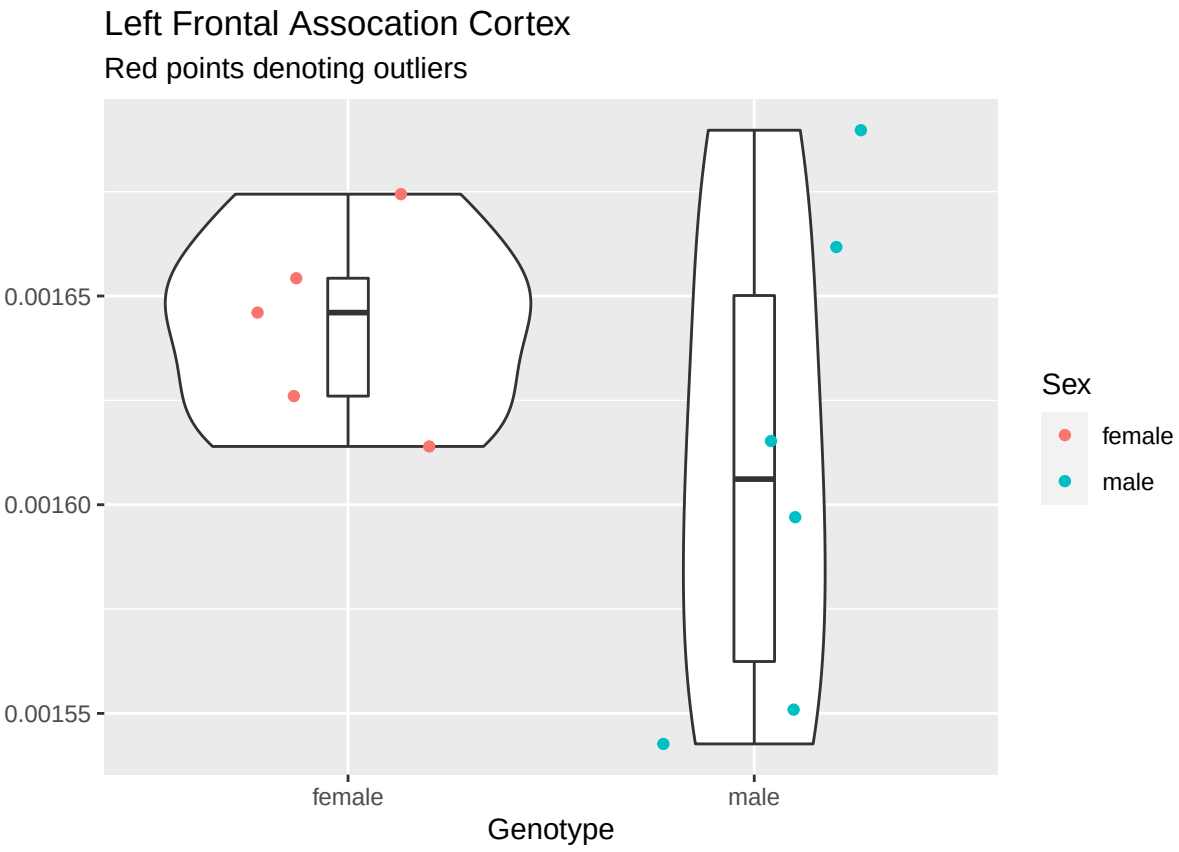

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.190e-09 1.195e-09   0.105  0.753
## Residuals    9 1.021e-07 1.135e-08
```



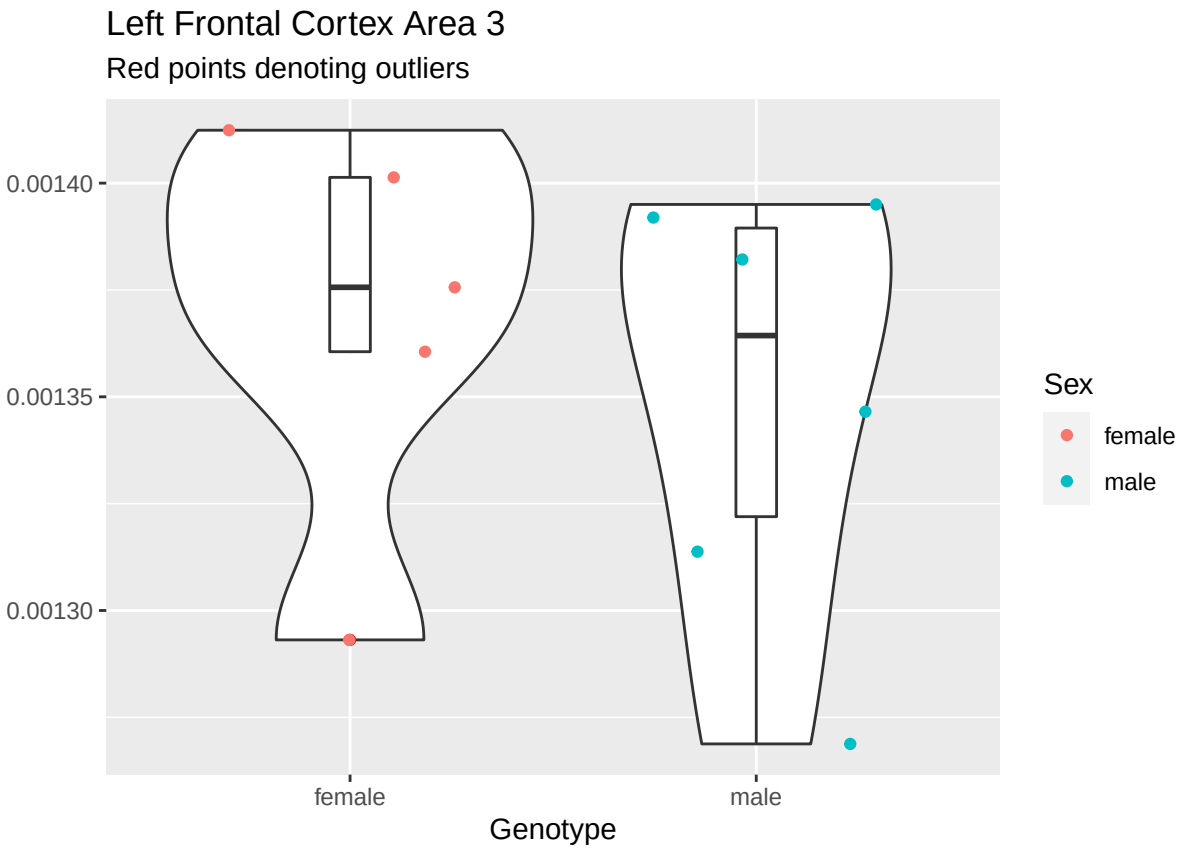

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.594e-08 2.594e-08   5.951 0.0374 *
## Residuals    9 3.923e-08 4.359e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



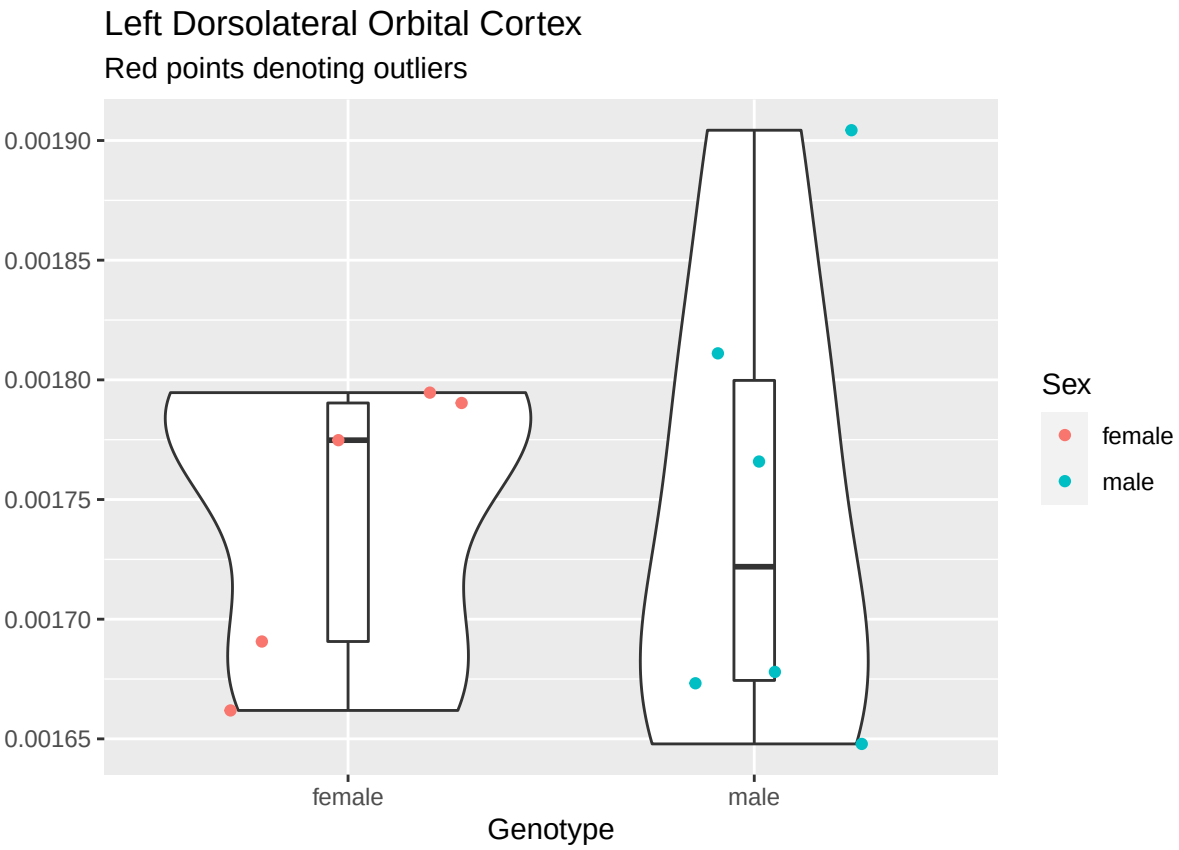

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.796e-08 2.796e-08   2.787  0.129
## Residuals    9 9.029e-08 1.003e-08
```



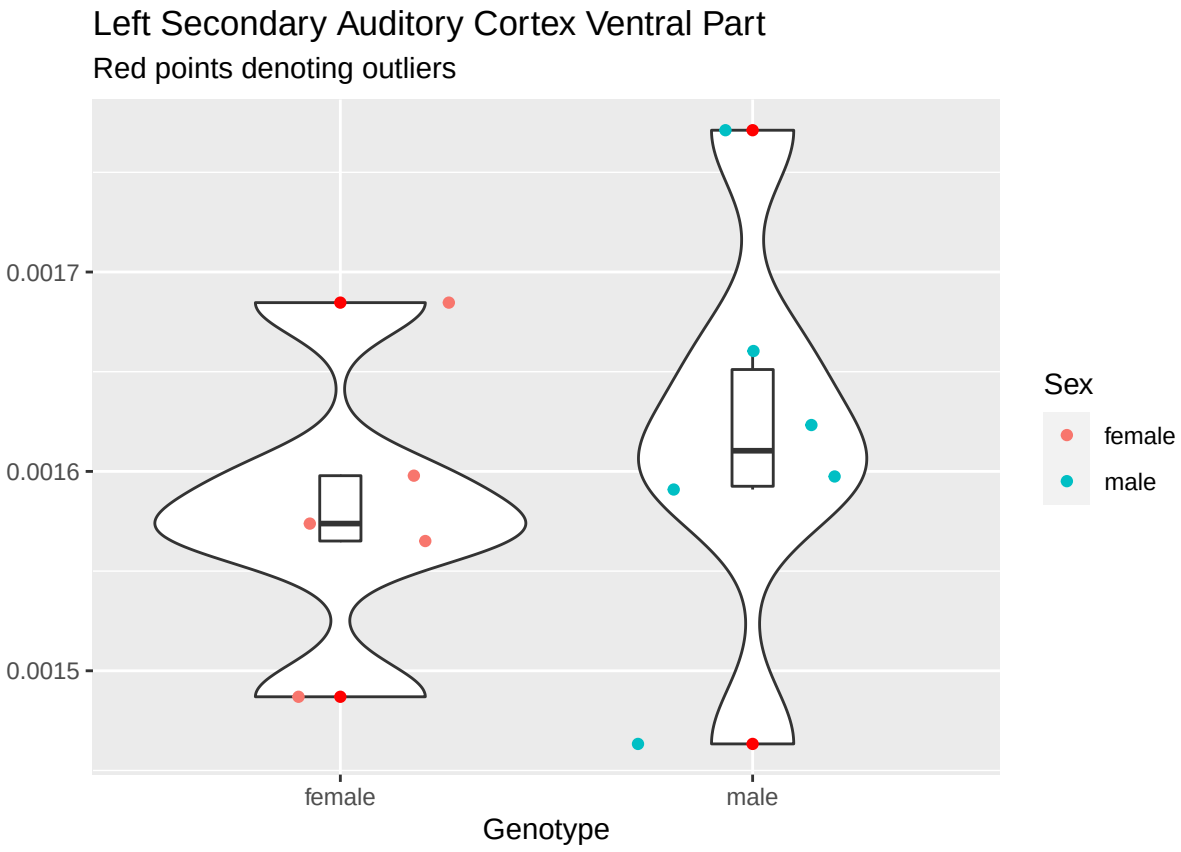

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.038e-09 3.038e-09   1.402  0.267
## Residuals    9 1.950e-08 2.167e-09
```



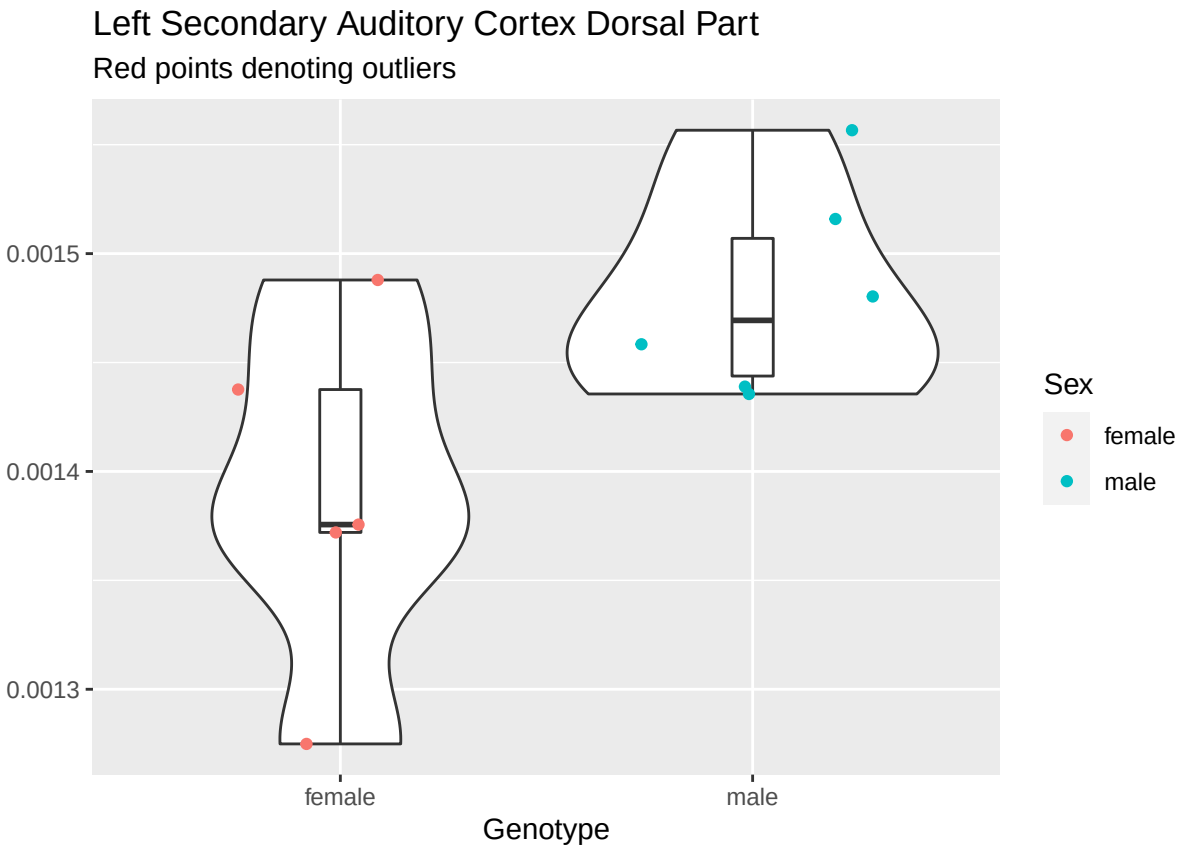

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 9.760e-10 9.755e-10   0.408  0.539
## Residuals    9 2.154e-08 2.394e-09
```



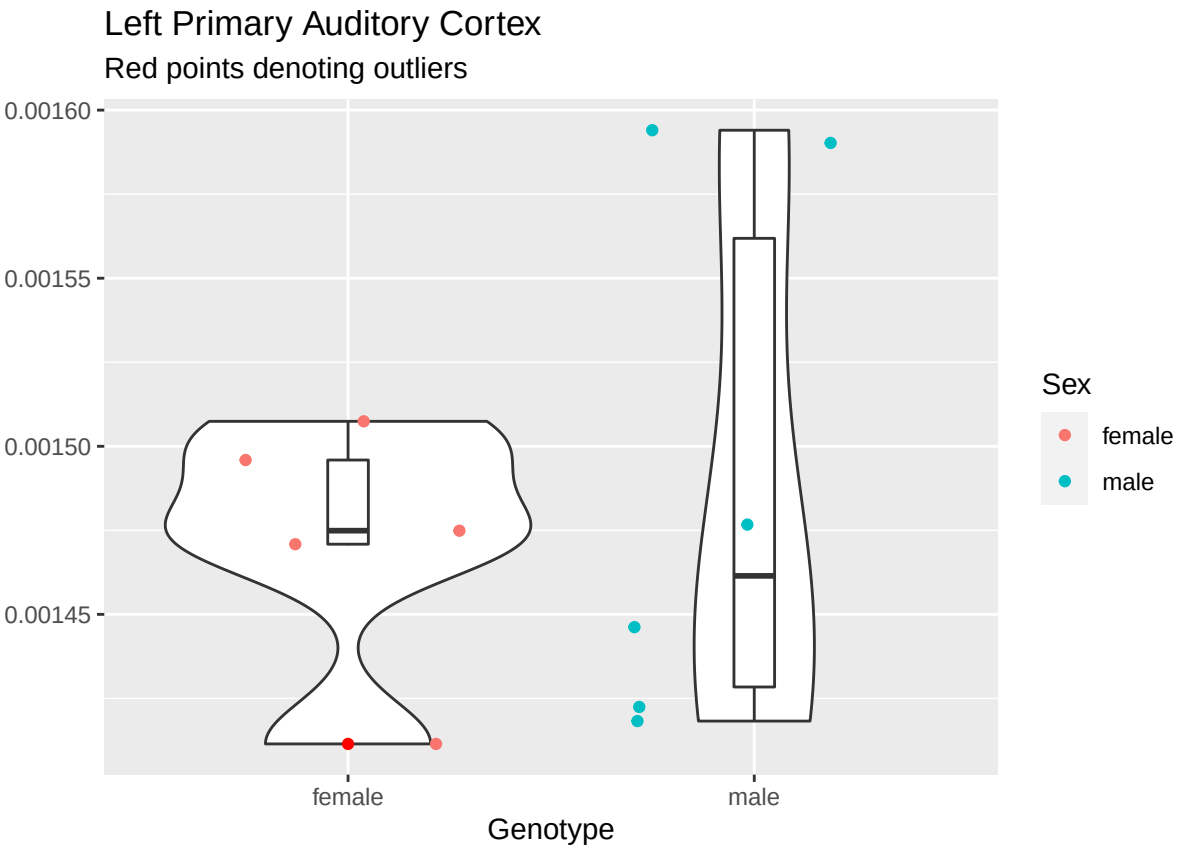

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 5.000e-11 4.900e-11   0.007  0.936
## Residuals    9 6.448e-08 7.164e-09
```



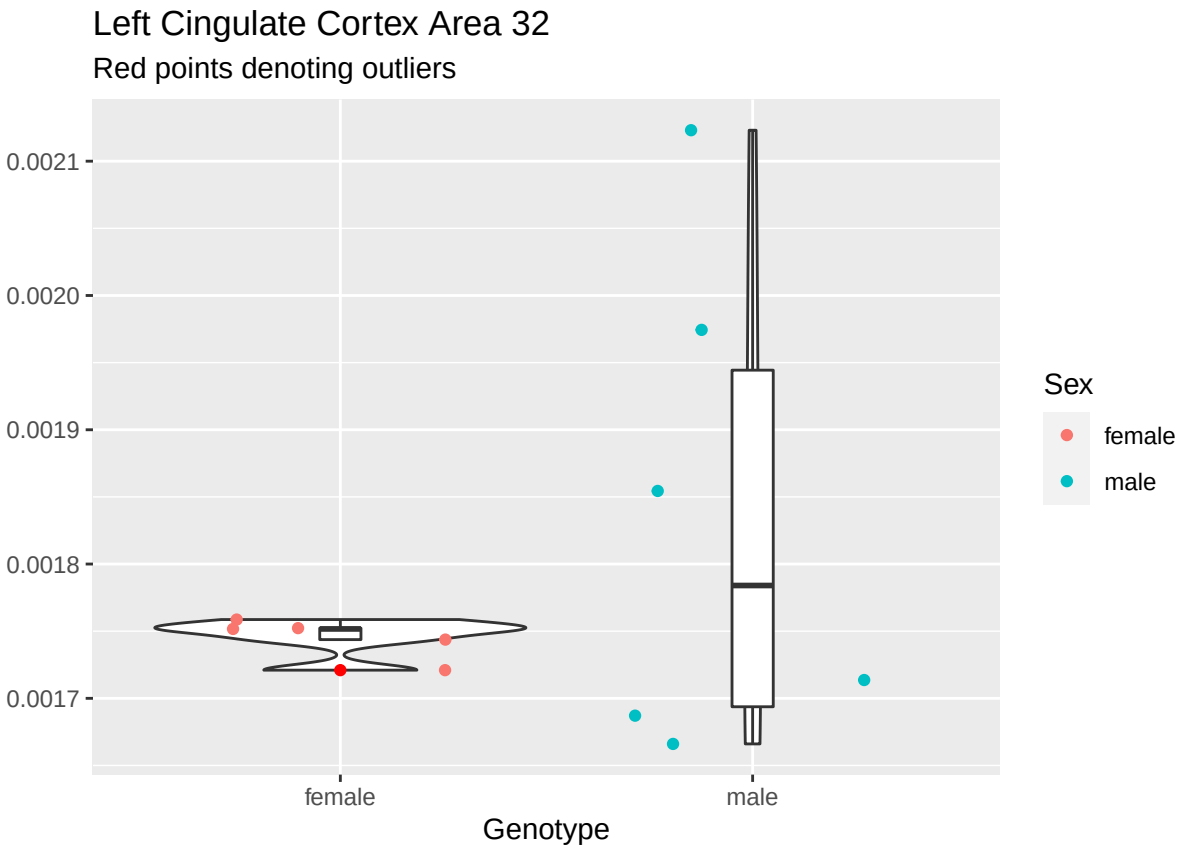

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.550e-09 3.548e-09   0.453  0.518
## Residuals    9 7.053e-08 7.836e-09
```



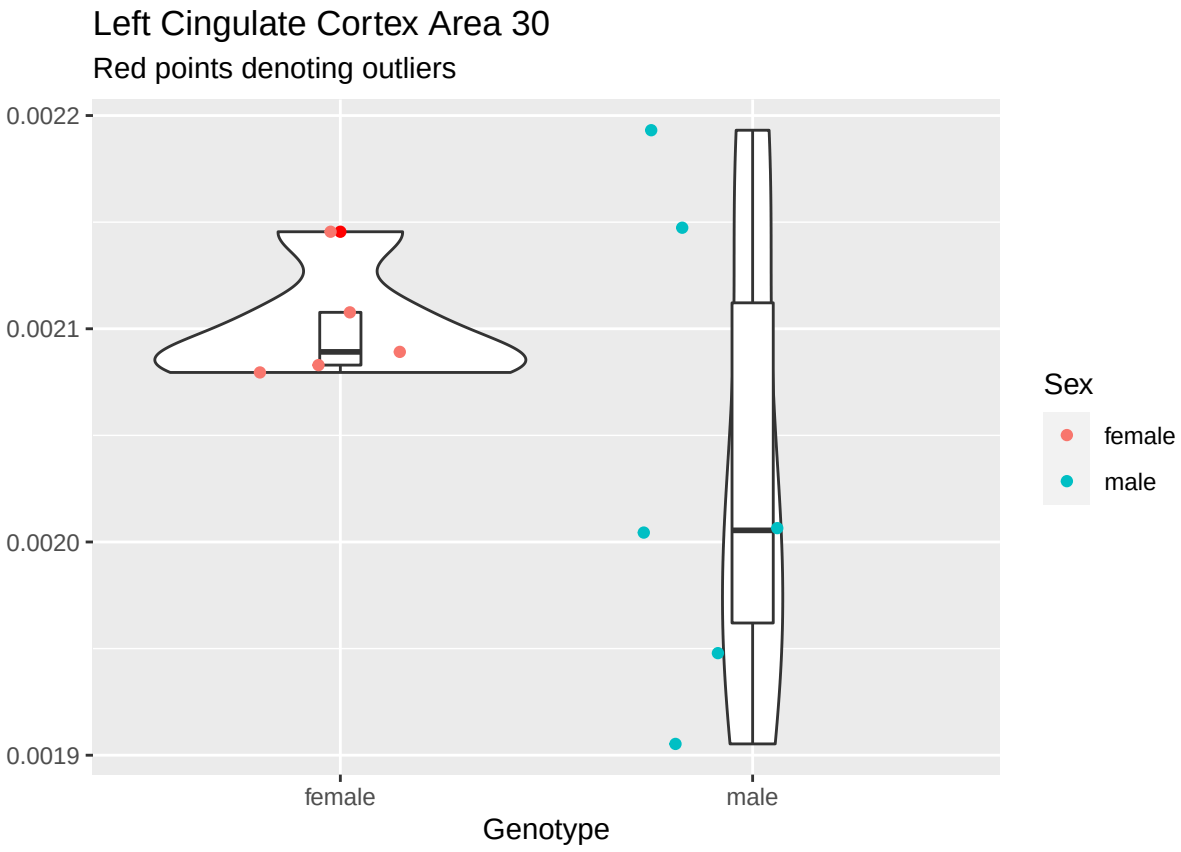

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.276e-08 2.276e-08    5.55 0.0429 *
## Residuals    9 3.691e-08 4.101e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



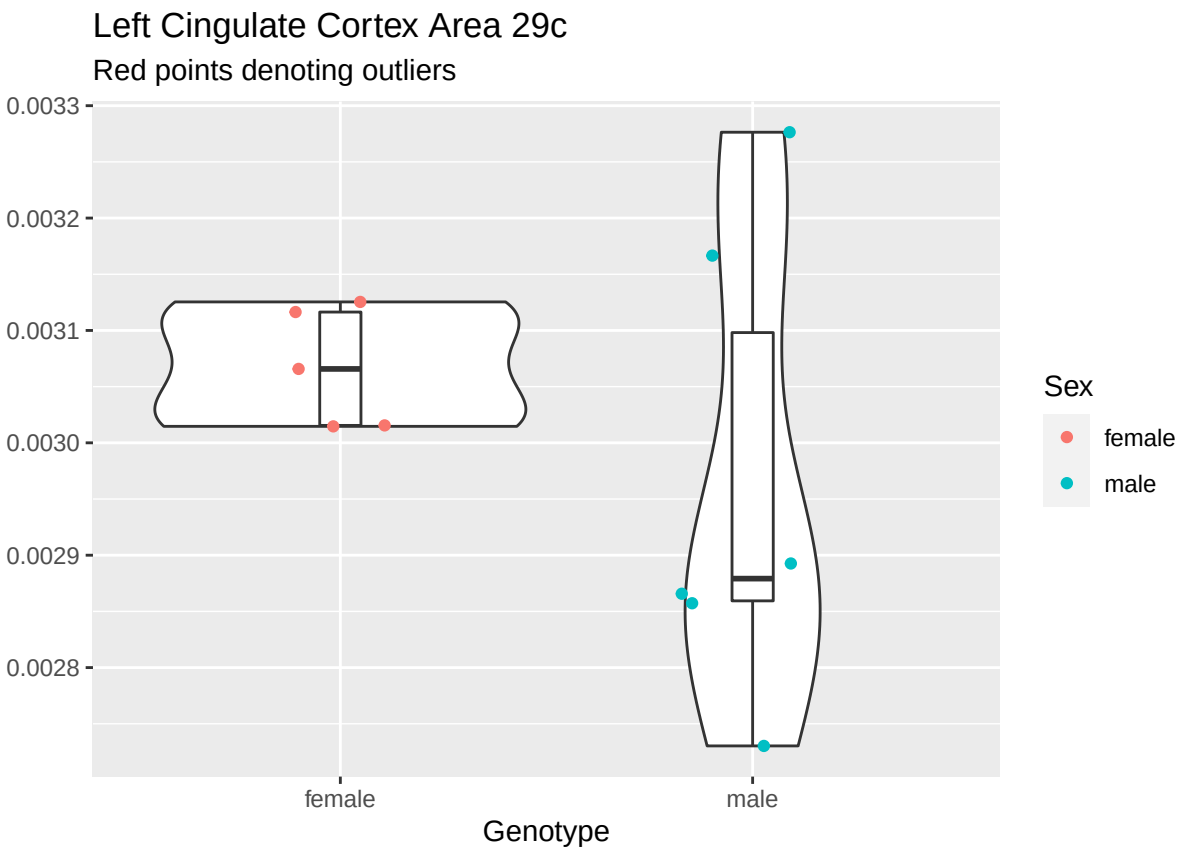

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.010e-09 1.005e-09   0.237  0.638
## Residuals    9 3.816e-08 4.241e-09
```



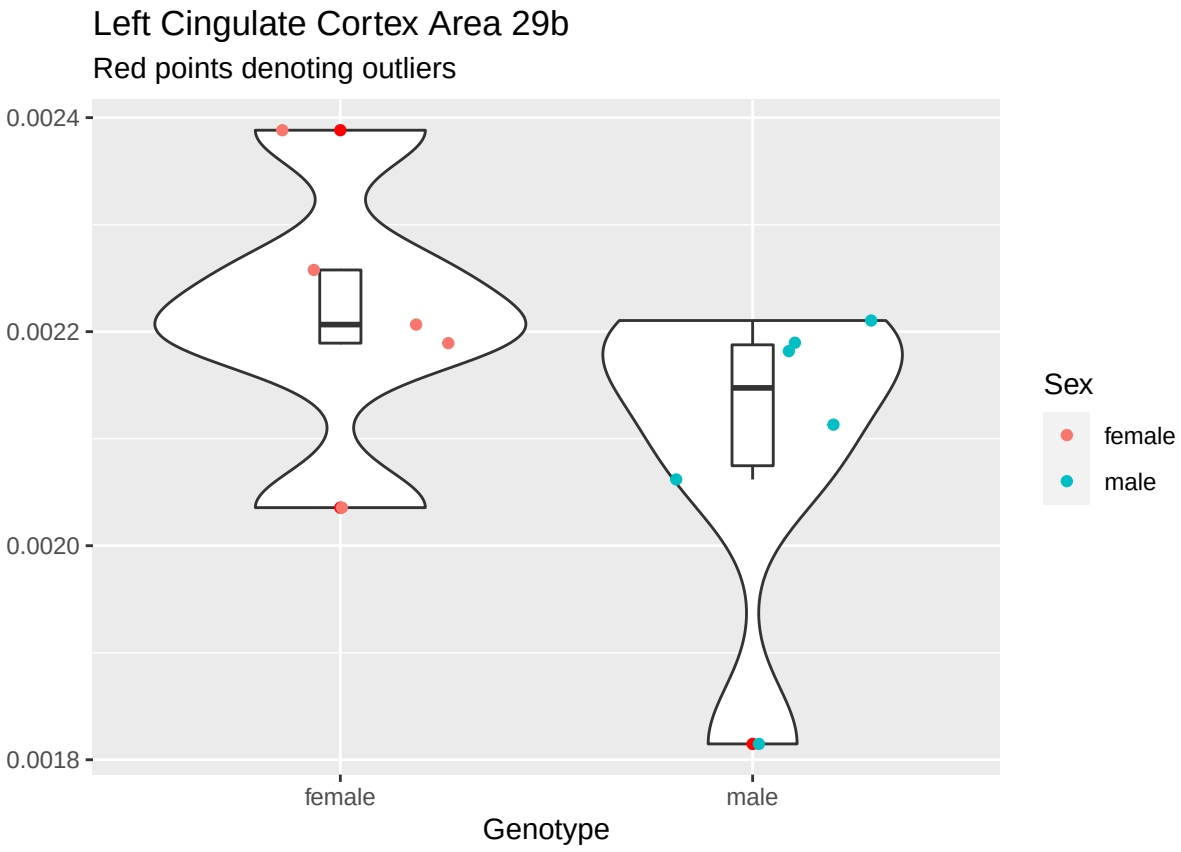

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.257e-08 2.257e-08   1.204  0.301
## Residuals    9 1.688e-07 1.876e-08
```



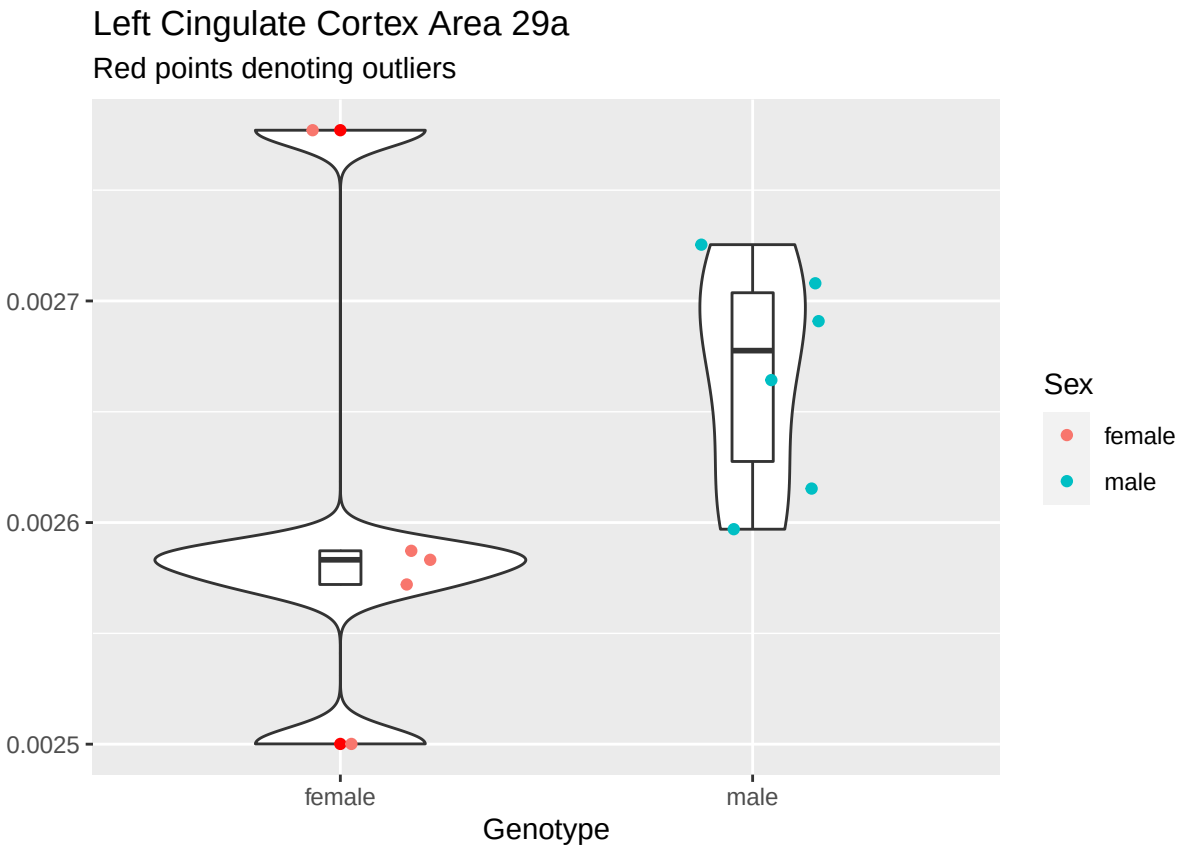

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.219e-08 1.219e-08   1.644  0.232
## Residuals    9 6.674e-08 7.415e-09
```



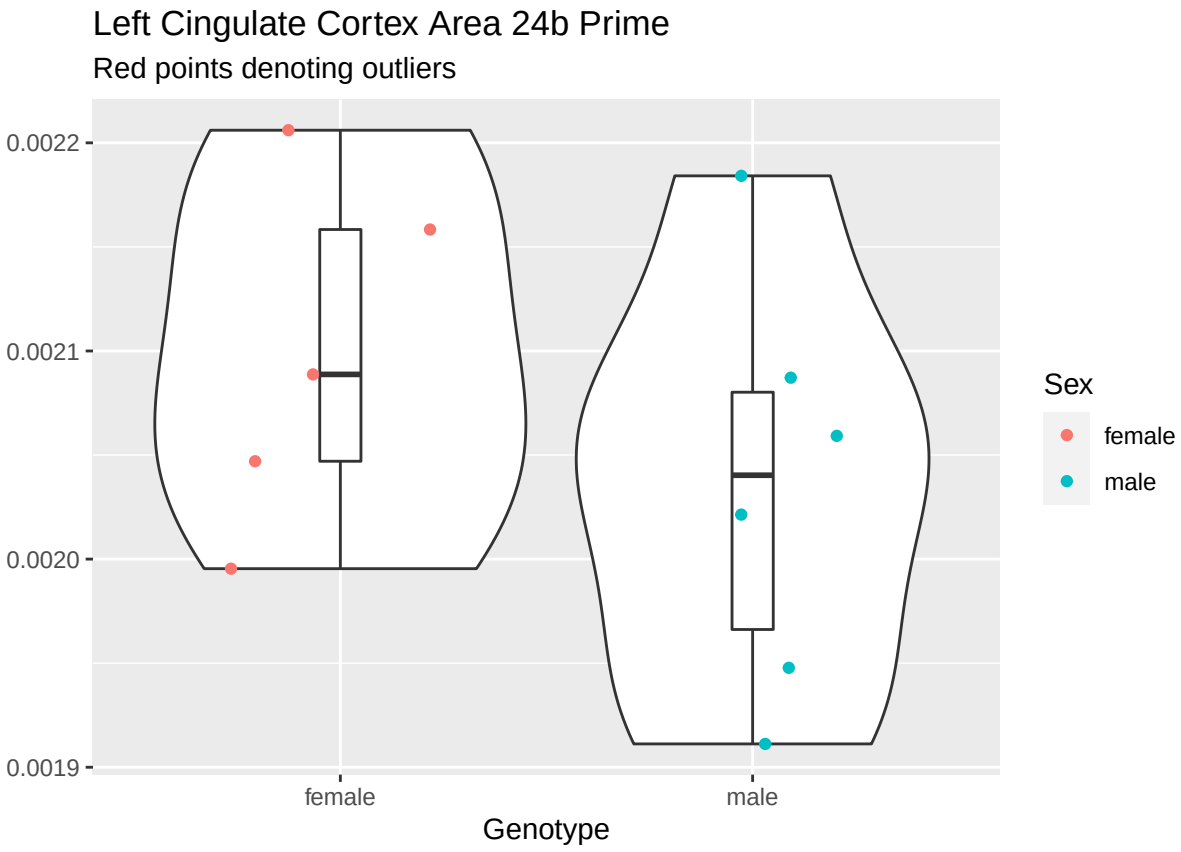

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.878e-08 2.878e-08   1.123  0.317
## Residuals    9 2.306e-07 2.563e-08
```



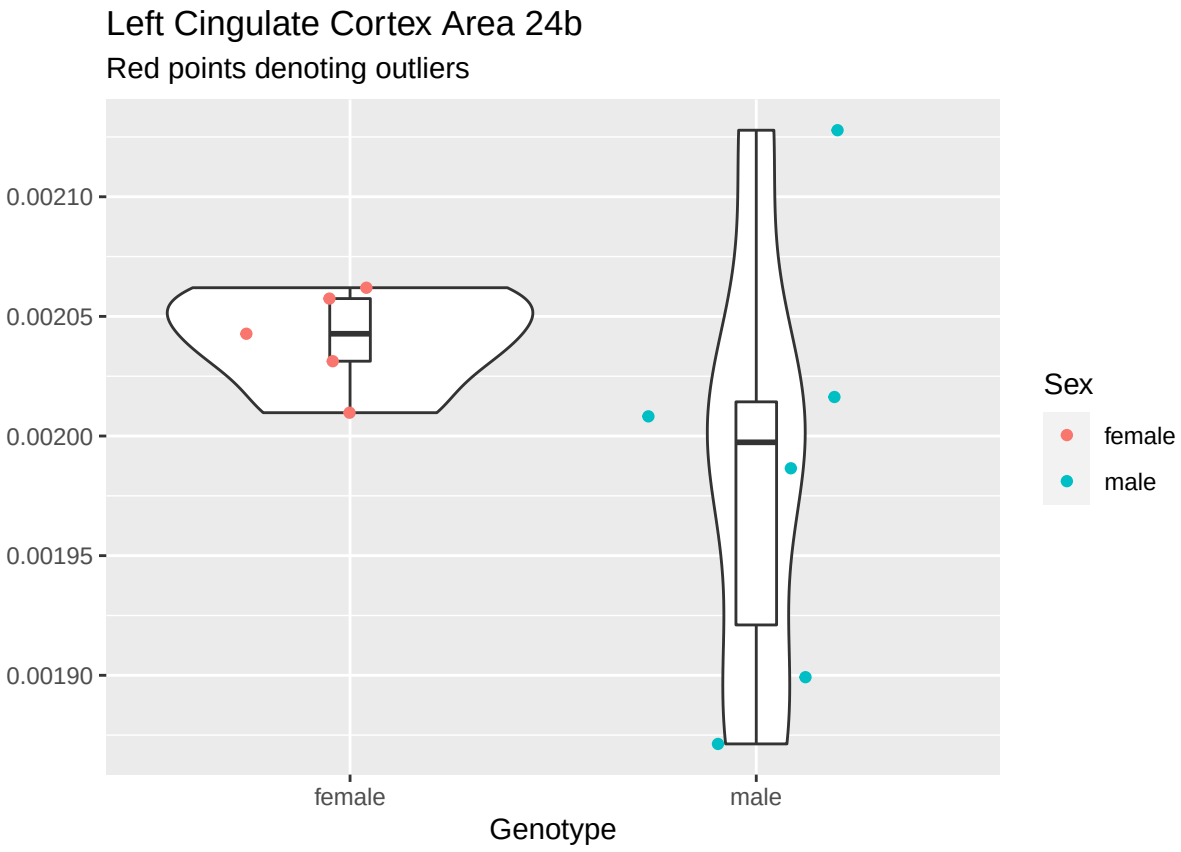

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.940e-08 3.940e-08   2.032  0.188
## Residuals    9 1.745e-07 1.939e-08
```



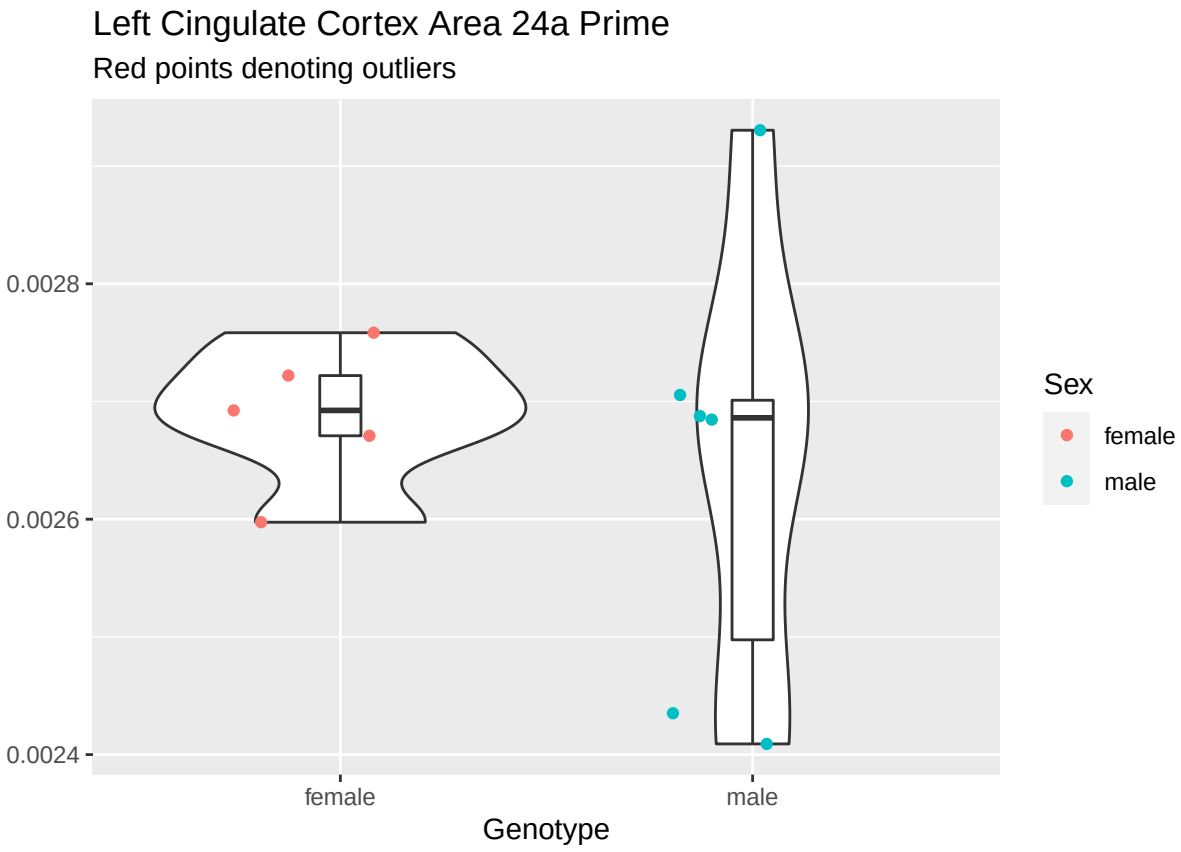

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.078e-08 1.078e-08   1.742  0.219
## Residuals    9 5.571e-08 6.190e-09
```



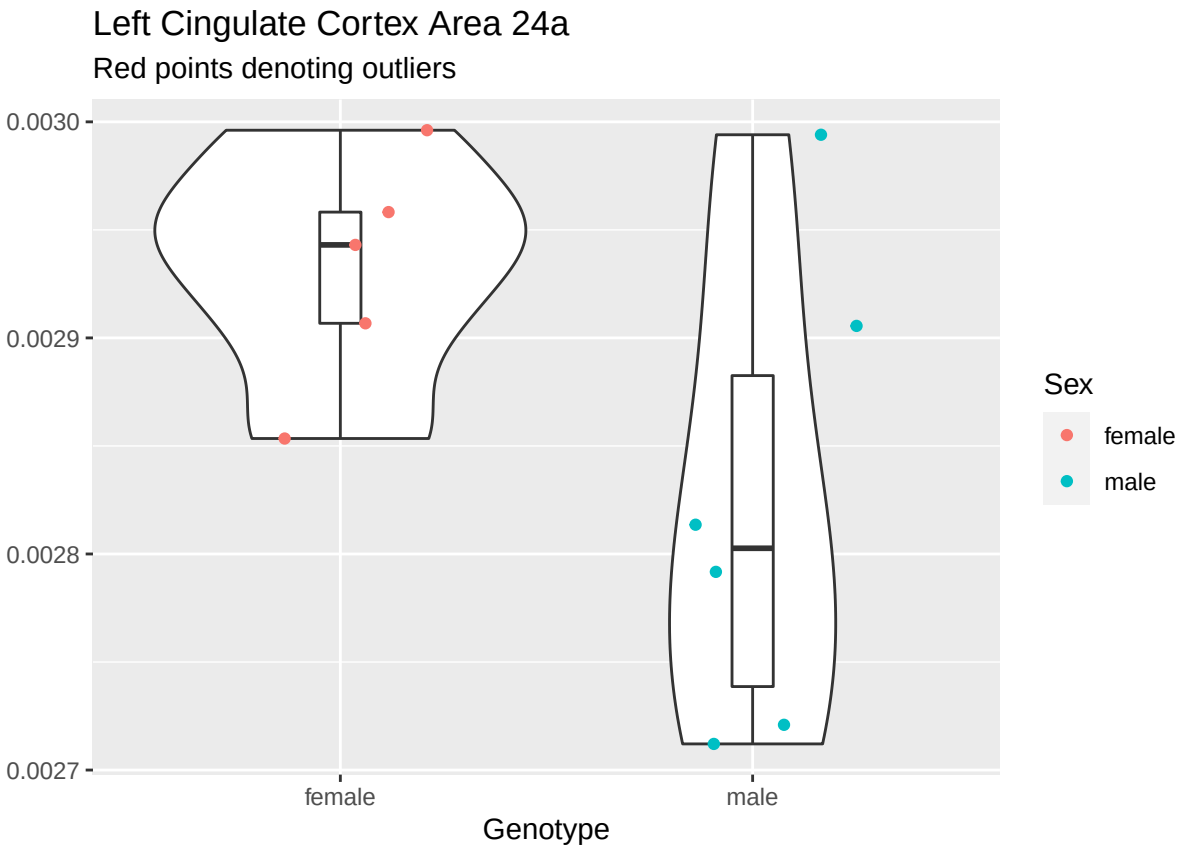

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.116e-08 1.116e-08   1.301  0.283
## Residuals    9 7.720e-08 8.578e-09
```



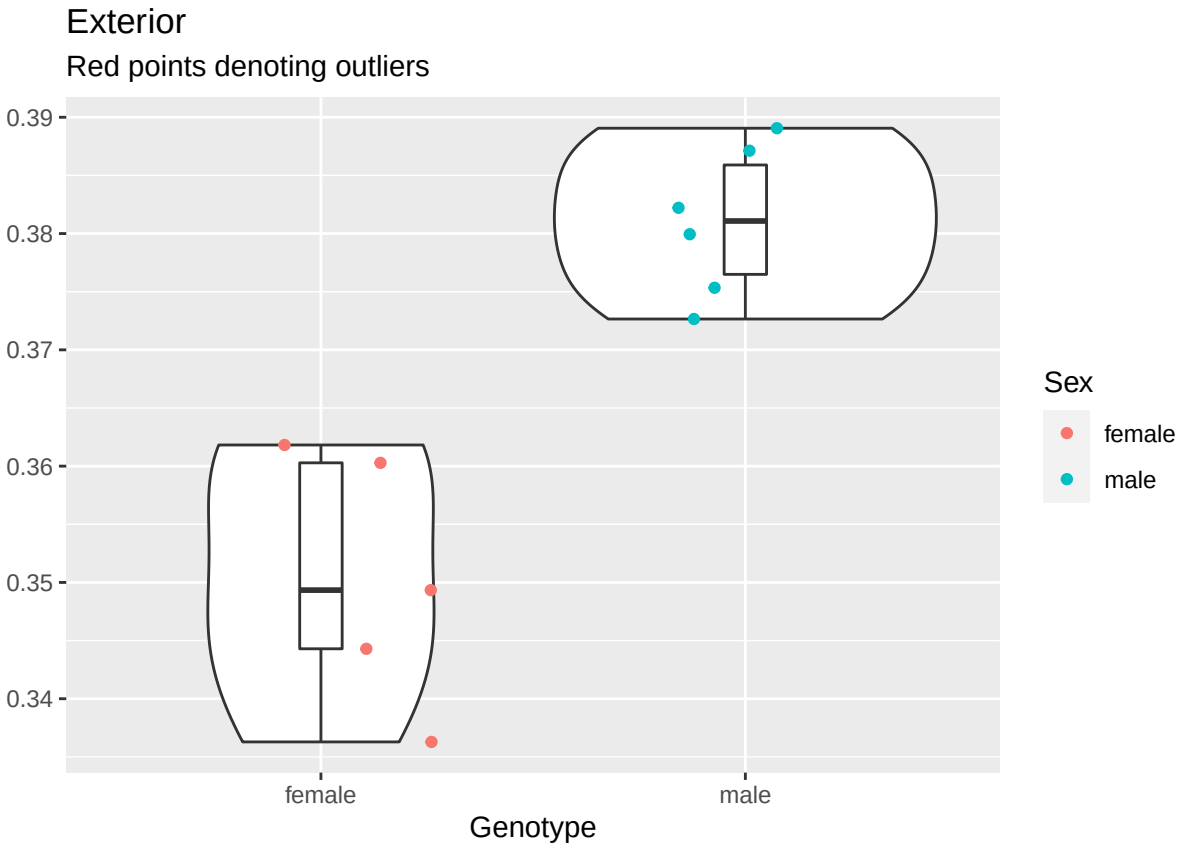

```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 8.470e-09 8.473e-09   1.734   0.22
## Residuals    9 4.399e-08 4.887e-09
```




```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 5.810e-09 5.809e-09   0.258  0.624
## Residuals    9 2.028e-07 2.254e-08
```




```
##             Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 3.213e-08 3.213e-08    4.04 0.0753 .
## Residuals    9 7.158e-08 7.950e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```




```
##             Df    Sum Sq   Mean Sq F value   Pr(>F)
## Sex          1 0.0025623 0.0025623   34.29 0.000242 ***
## Residuals    9 0.0006724 0.0000747
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```