

Left APOE4 Disaggregated by Sex

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3/21/2021

Interpeduncular Nucleus: apoe4

Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex      1 3.291e-08 3.291e-08   1.459  0.262
## Residuals 8 1.805e-07 2.256e-08
```

Cerebellar Cortex

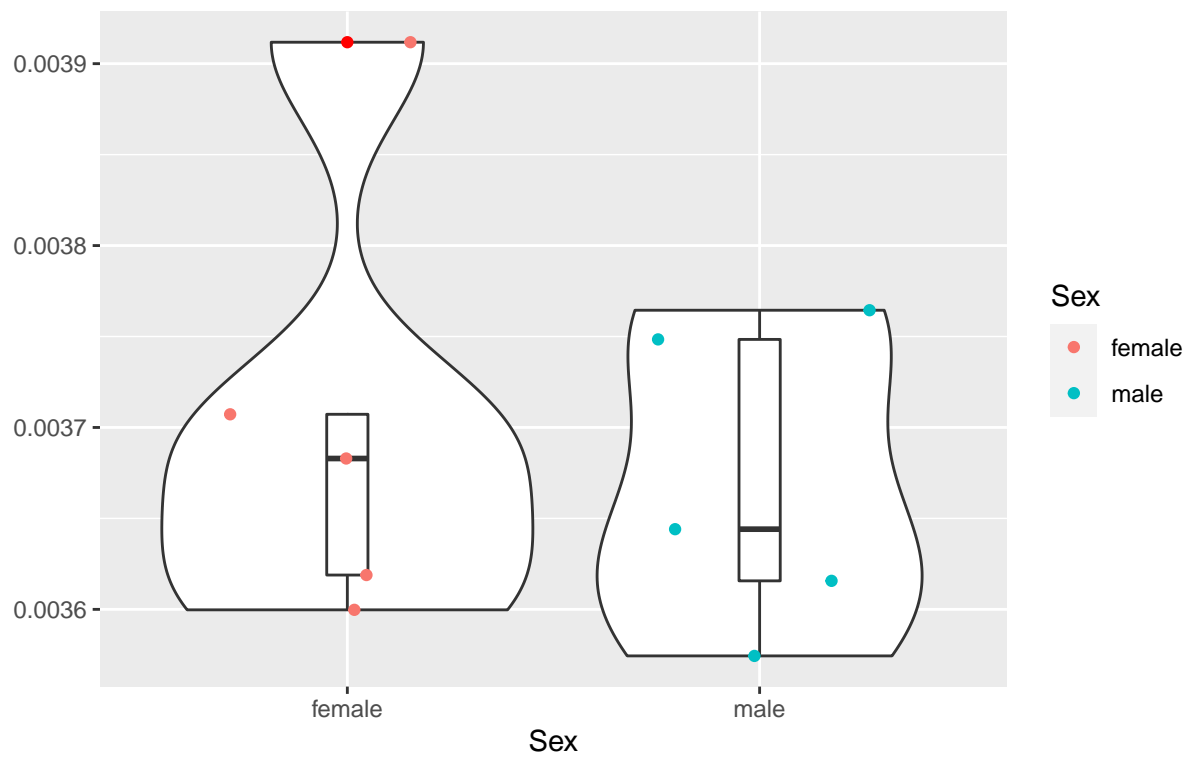
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 7.500e-11 | 7.500e-11 | 0.024 | 0.882 |
| ## Residuals | 8 | 2.545e-08 | 3.182e-09 | | |

Dentate (Lateral) Nucleus of Cerebellum

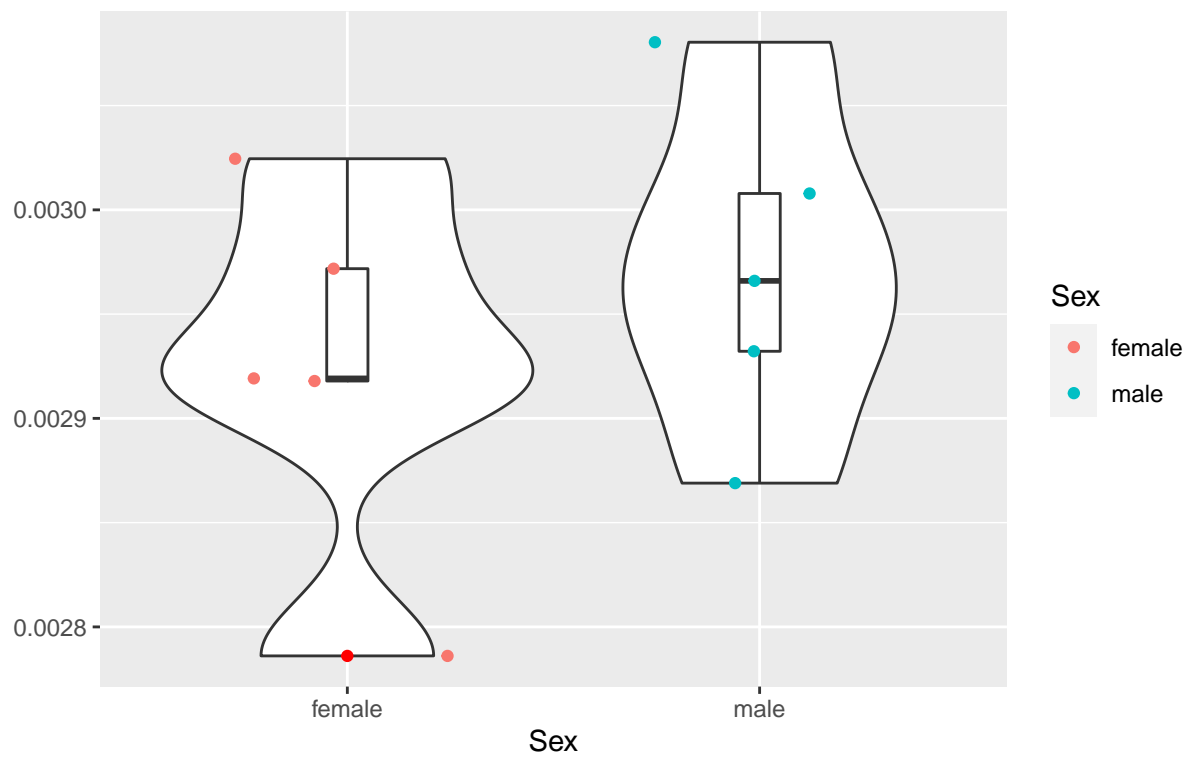
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 3.010e-09 | 3.012e-09 | 0.269 | 0.618 |
| ## Residuals | 8 | 8.958e-08 | 1.120e-08 | | |

Interposed Nucleus of Cerebellum

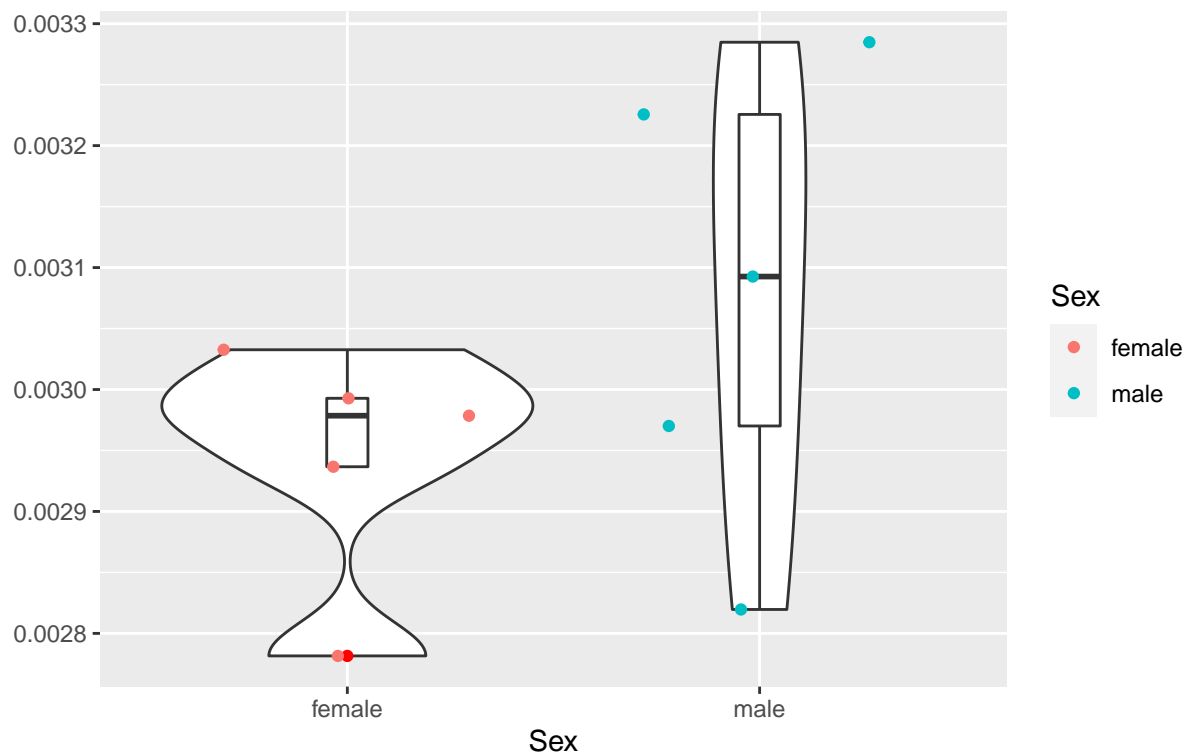
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 5.560e-09 | 5.562e-09 | 0.784 | 0.402 |
| ## Residuals | 8 | 5.673e-08 | 7.092e-09 | | |

Fastigial Medial Dorsolateral Nucleus of Cerebellum

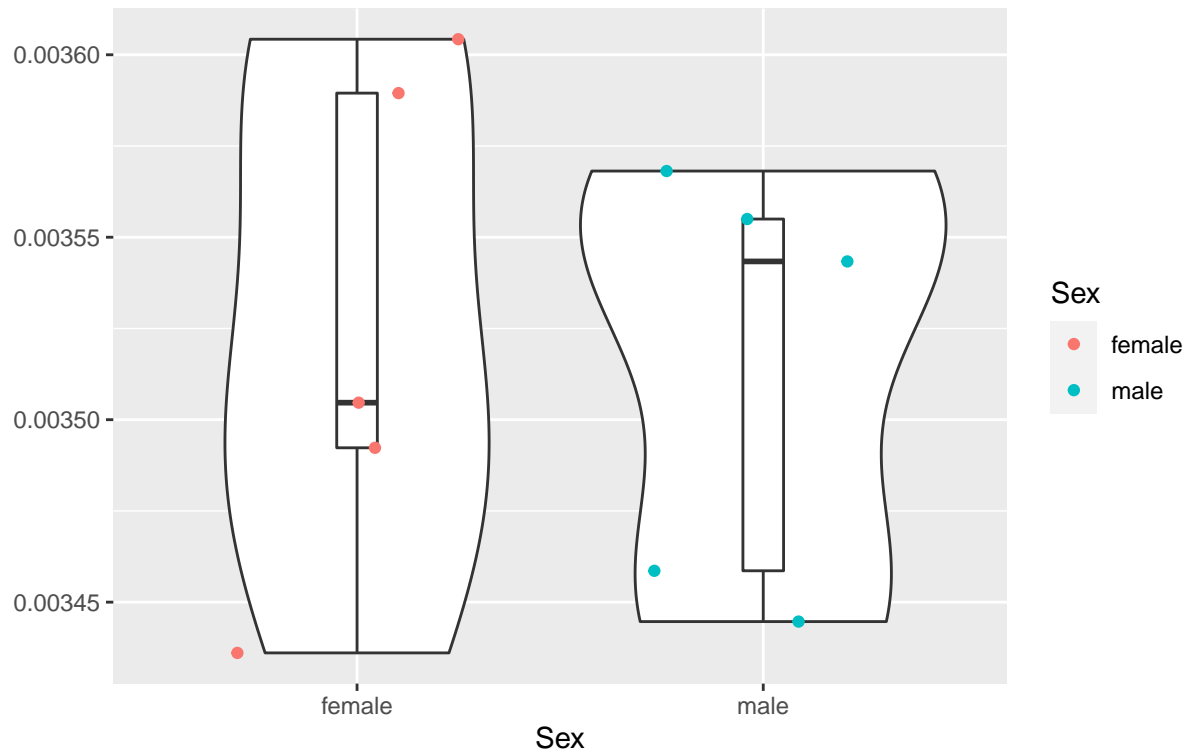
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 4.498e-08 | 4.498e-08 | 1.987 | 0.196 |
| ## Residuals | 8 | 1.810e-07 | 2.263e-08 | | |

Fastigial Medial Nucleus of Cerebellum

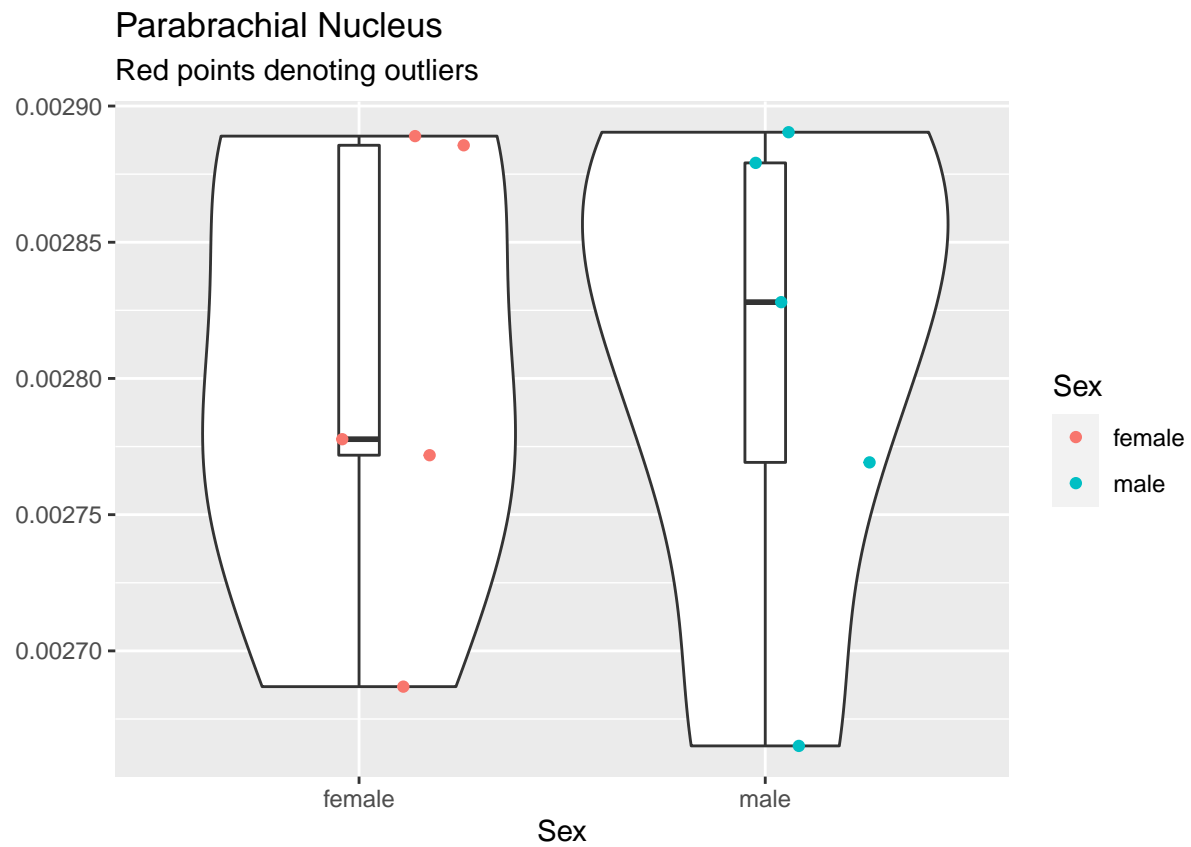
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex      1 3.300e-10 3.250e-10  0.078  0.786
## Residuals 8 3.318e-08 4.148e-09
```

```
#“{r VII, echo = FALSE} #ggplot(data = apoe4, aes(factor(Sex), VII)) + #geom_violin() +
#geom_boxplot(width = 0.1, outlier.color = “red”) + #geom_jitter(height = 0, width = 0.3) + #labs(x =
“Sex”, #y = “”, #title =”Ventral Lateral Lemniscus Nucleus“, #subtitle =”Red points denoting outliers”)
```

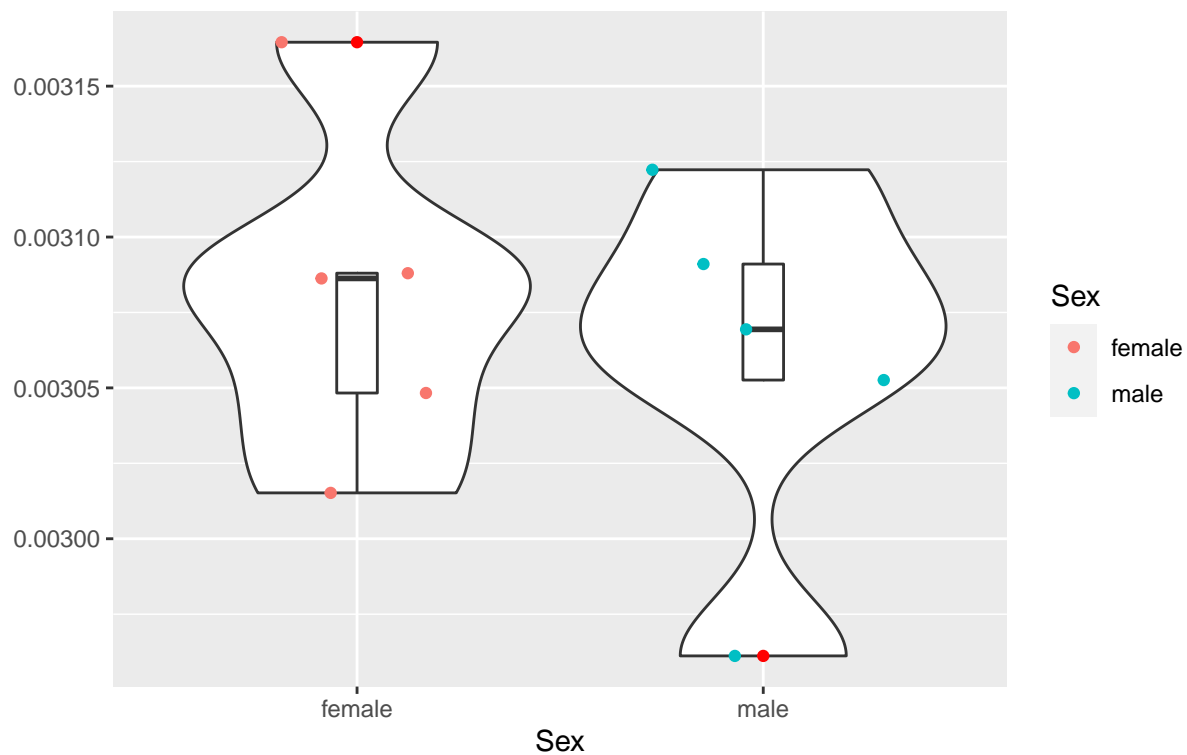
```
#res.aov <- aov(VII ~ Sex, data = apoe4) #summary(res.aov) #“
```



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex       1 4.000e-11 4.400e-11   0.005  0.943
## Residuals 8 6.346e-08 7.933e-09
```

Parabrachial Medial Nucleus and Koelliker Fuse Nucleus

Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.120e-09 | 1.120e-09 | 0.329 | 0.582 |
| ## Residuals | 8 | 2.721e-08 | 3.401e-09 | | |

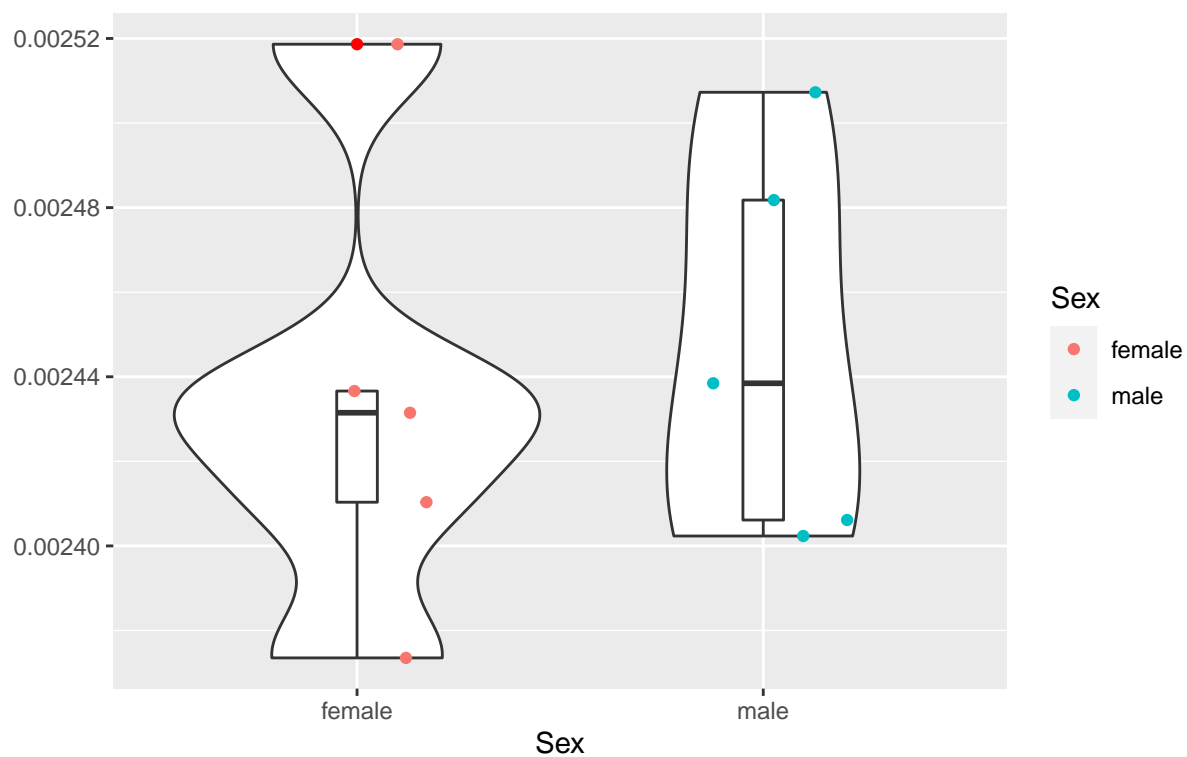
Parvicellular Reticular Nucleus and Principal Sensory Trigeminal Nucleu

Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.702e-09 | 1.702e-09 | 1.702 | 0.228 |
| ## Residuals | 8 | 7.999e-09 | 9.998e-10 | | |

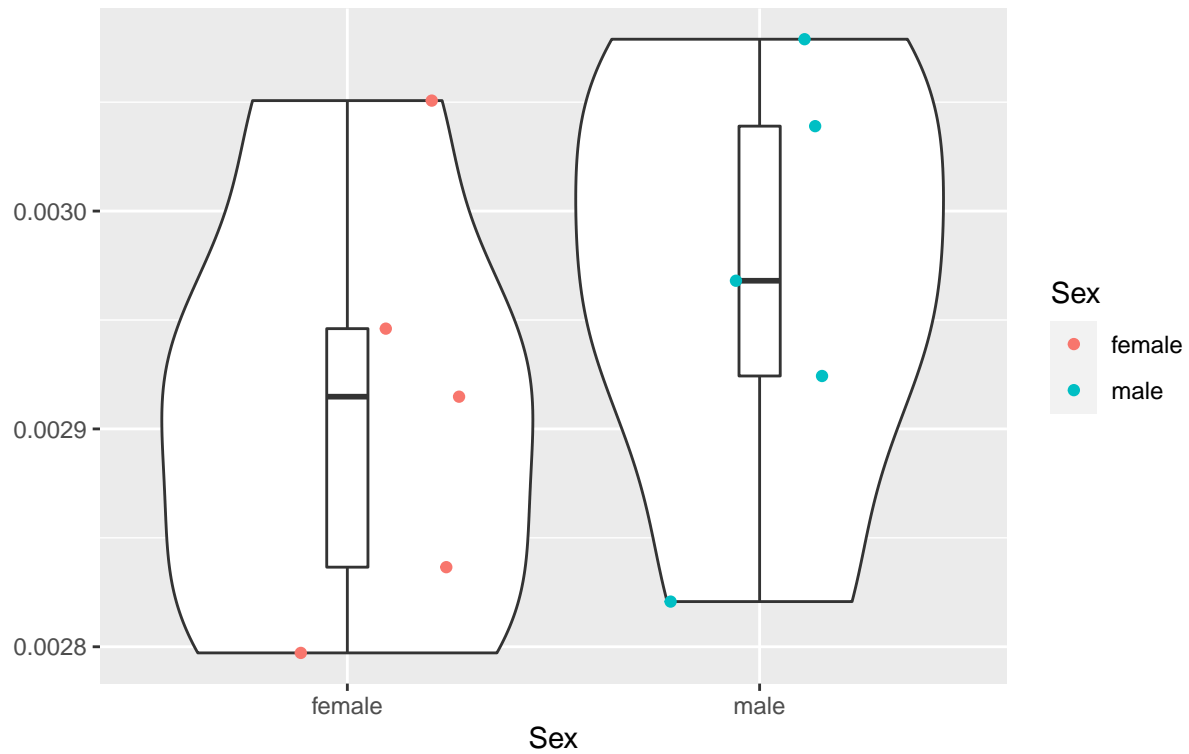
Central Gray
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 4.270e-10 | 4.275e-10 | 0.171 | 0.69 |
| ## Residuals | 8 | 1.997e-08 | 2.497e-09 | | |

Pedunculotegmental Medial Paralemniscial and Supratrigeminal Nuclei

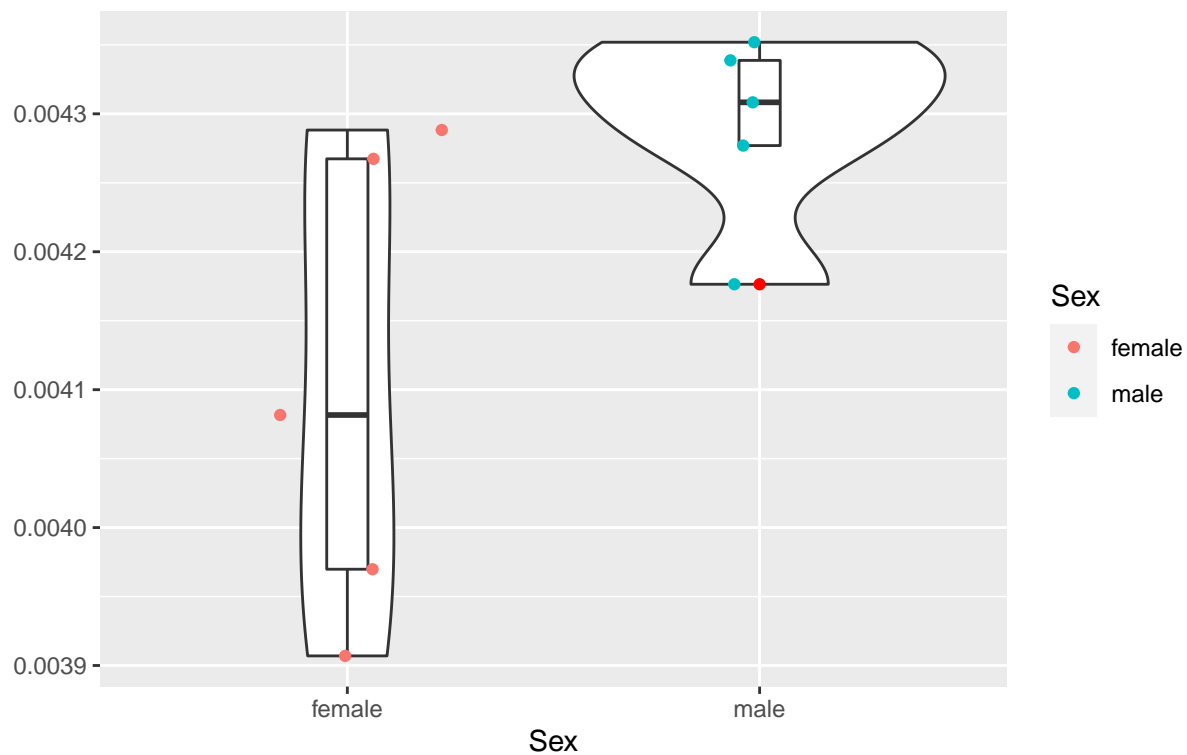
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex       1 8.160e-09 8.161e-09   0.814  0.393
## Residuals 8 8.016e-08 1.002e-08
```

Motor Root of Trigeminal Nerve

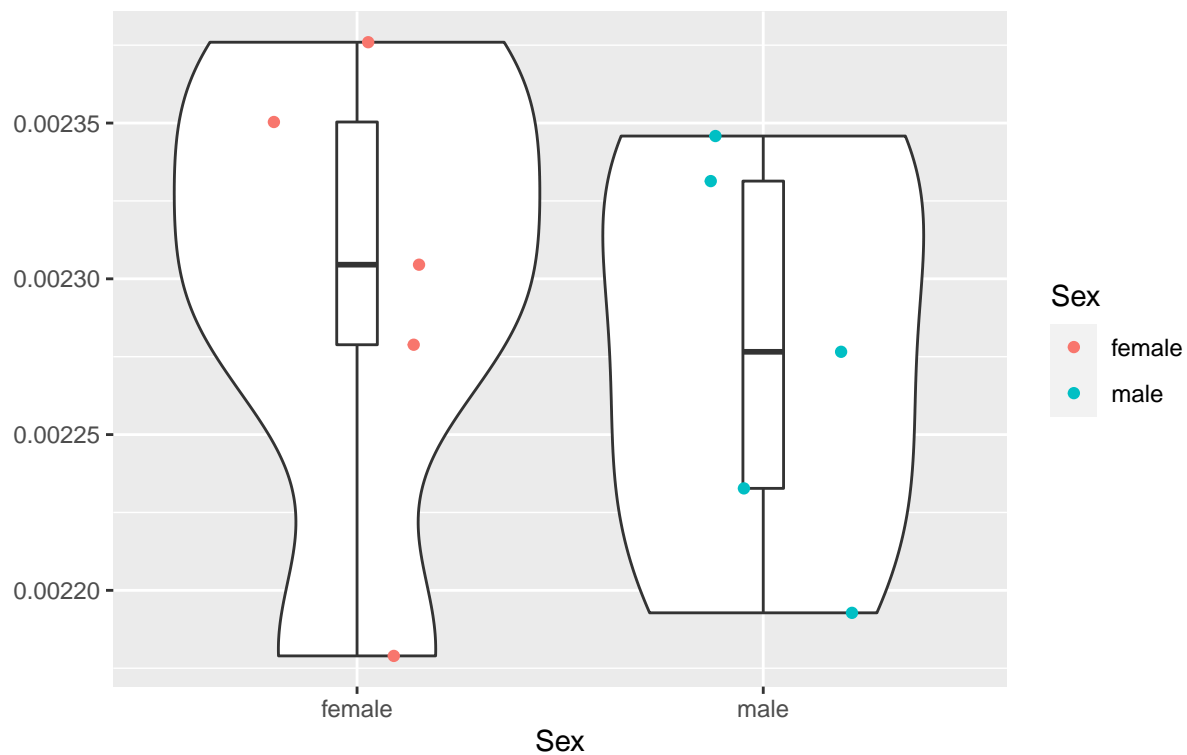
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 8.806e-08 8.806e-08    5.12 0.0535 .
## Residuals    8 1.376e-07 1.720e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Trigeminal Motor Nucleus

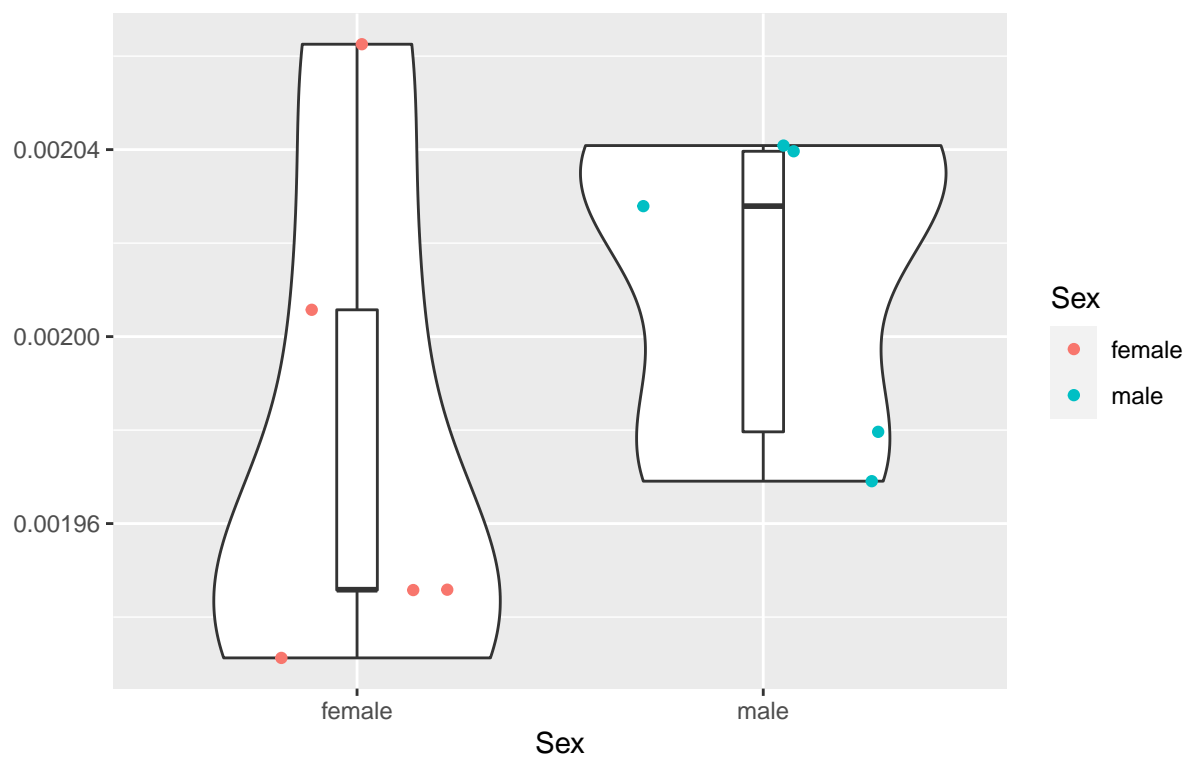
Red points denoting outliers



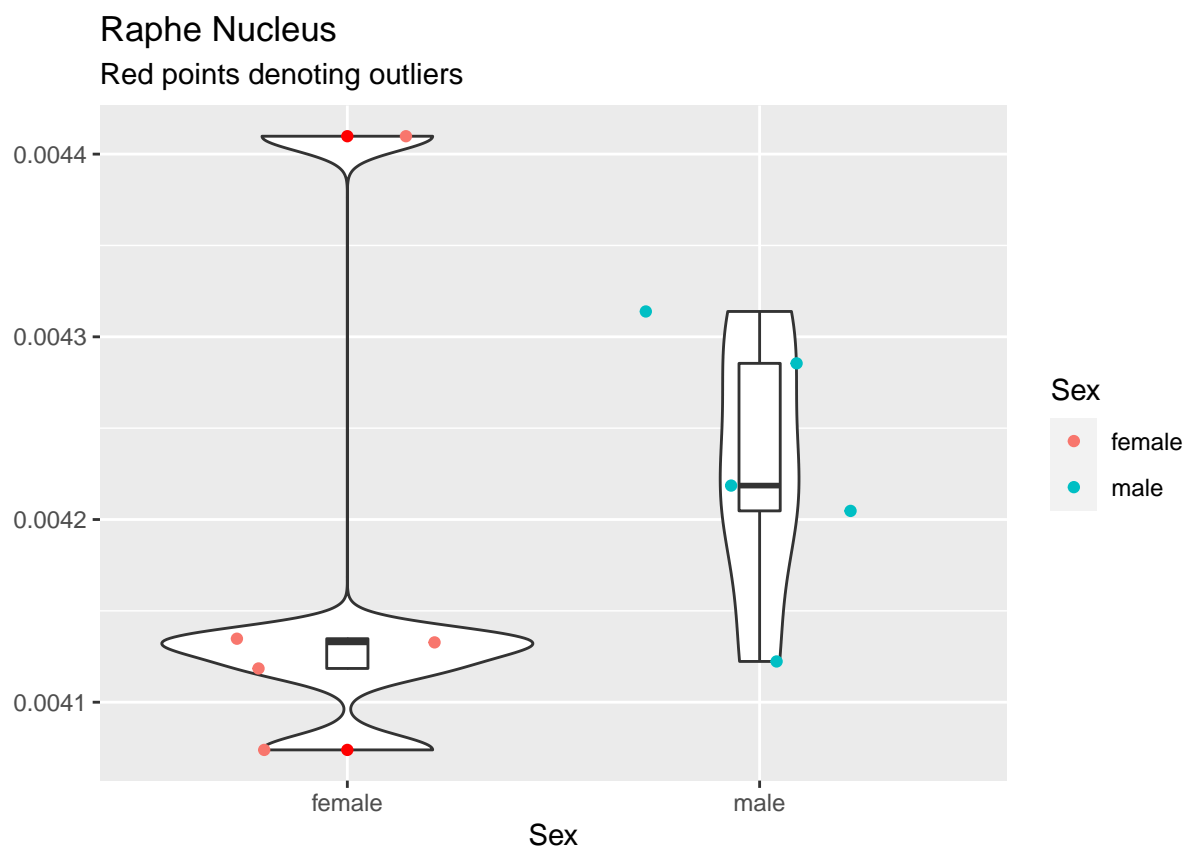
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.200e-09 | 1.195e-09 | 0.238 | 0.639 |
| ## Residuals | 8 | 4.014e-08 | 5.017e-09 | | |

Pontine Reticular Nucleus

Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.754e-09 | 2.754e-09 | 1.303 | 0.287 |
| ## Residuals | 8 | 1.691e-08 | 2.114e-09 | | |



Trigeminal Sensory Nucleus

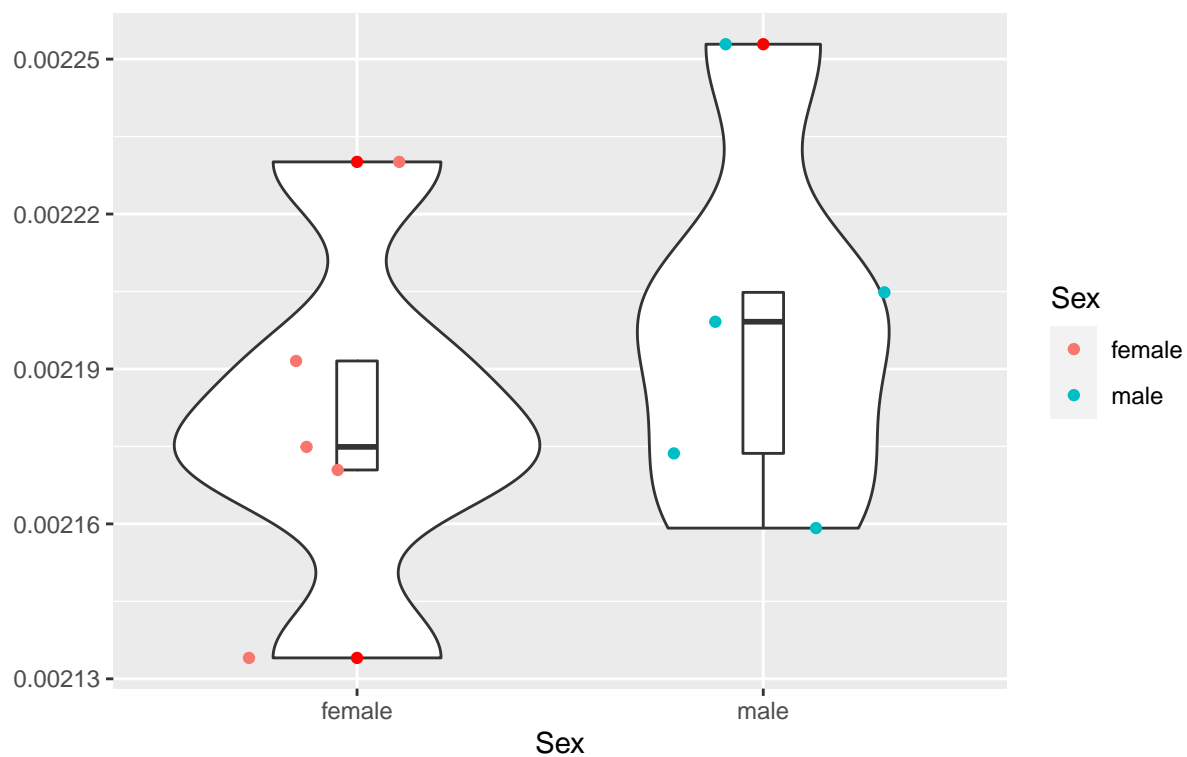
Red points denoting outliers



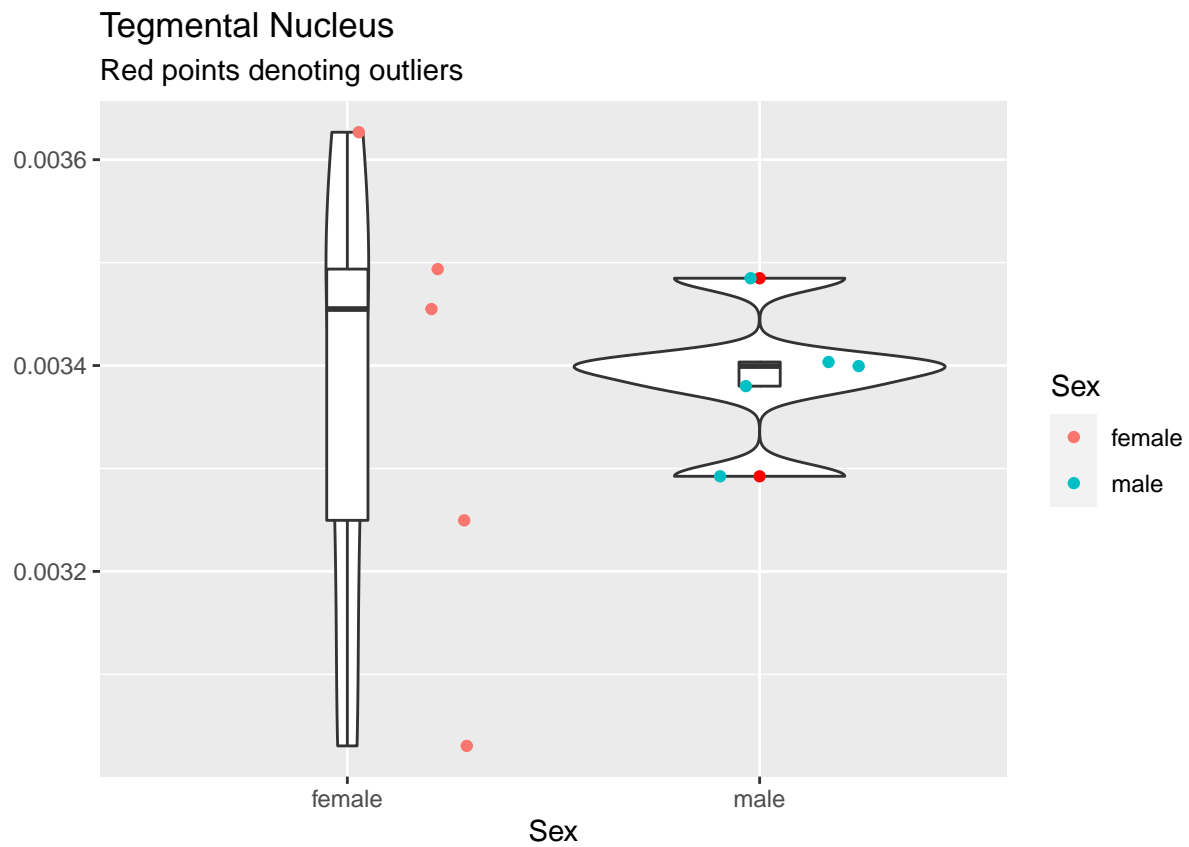
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 3.441e-09 | 3.441e-09 | 1.012 | 0.344 |
| ## Residuals | 8 | 2.721e-08 | 3.401e-09 | | |

Dorsal Tegmentum

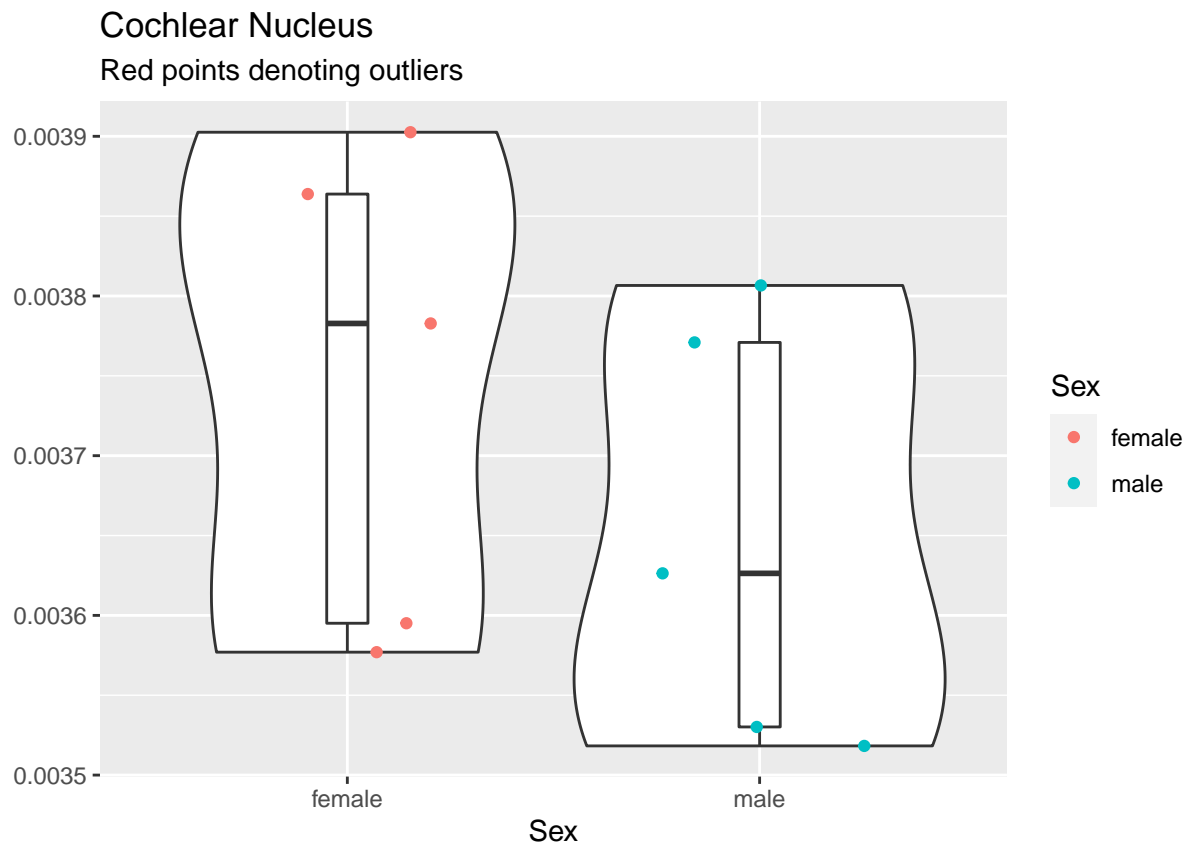
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 7.860e-10 | 7.859e-10 | 0.627 | 0.451 |
| ## Residuals | 8 | 1.003e-08 | 1.254e-09 | | |



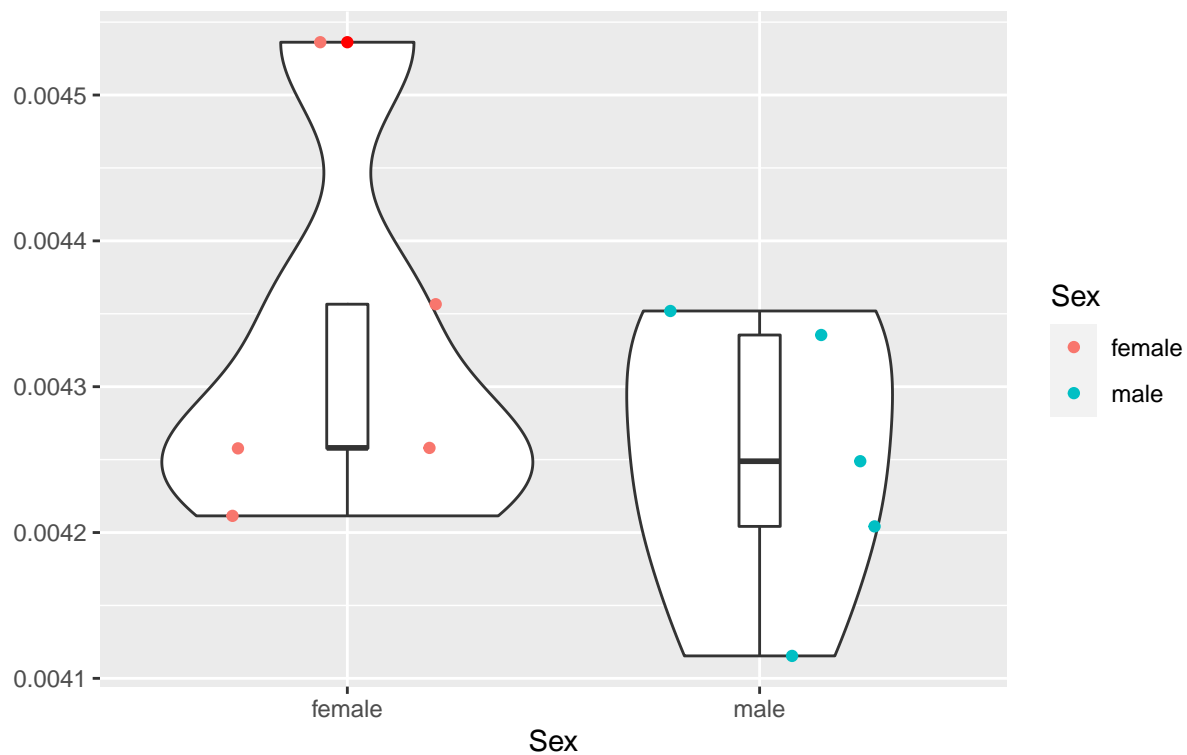
| | | | | | |
|--------------|----|----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.10e-09 | 1.097e-09 | 0.037 | 0.852 |
| ## Residuals | 8 | 2.37e-07 | 2.963e-08 | | |



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 2.199e-08 2.199e-08   1.083  0.329
## Residuals   8 1.625e-07 2.031e-08
```

Pontine Nucleus

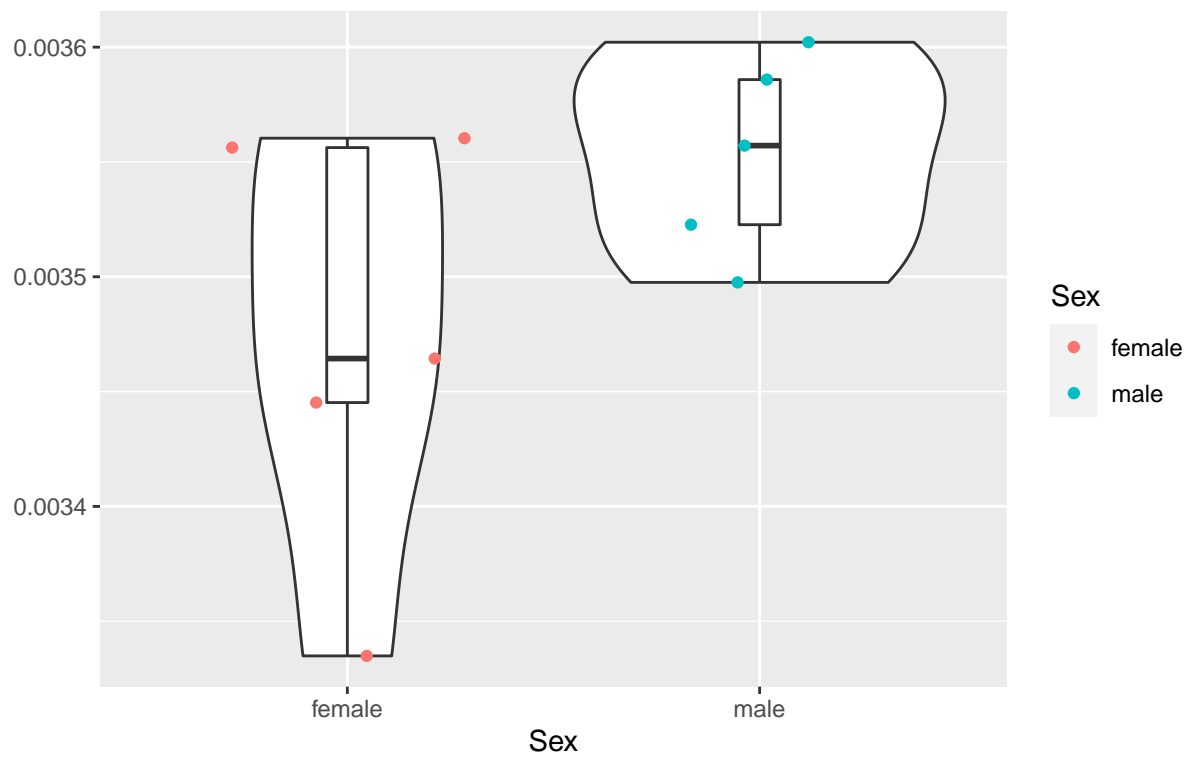
Red points denoting outliers



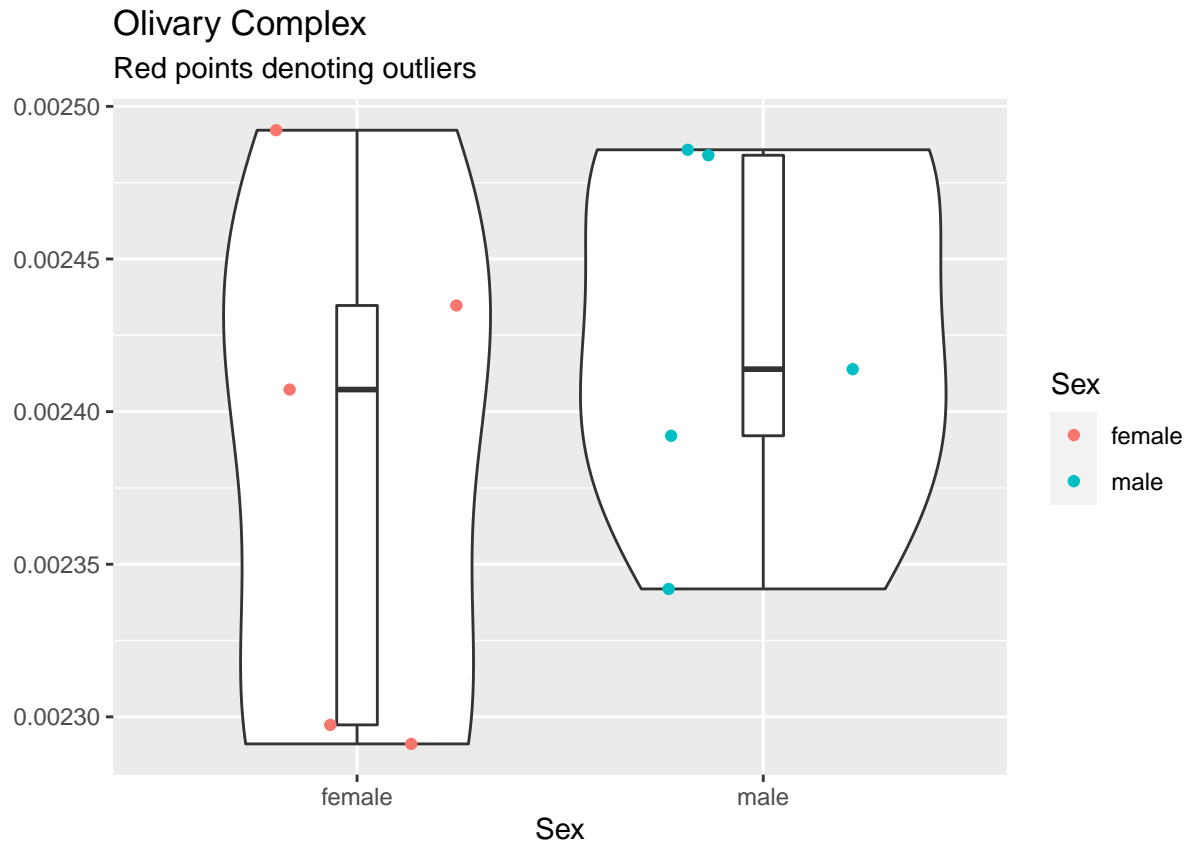
| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.326e-08 | 1.326e-08 | 1.006 | 0.345 |
| ## Residuals | 8 | 1.054e-07 | 1.318e-08 | | |

Reticulotegmental Nucleus of Pons

Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.634e-08 | 1.634e-08 | 3.114 | 0.116 |
| ## Residuals | 8 | 4.198e-08 | 5.248e-09 | | |



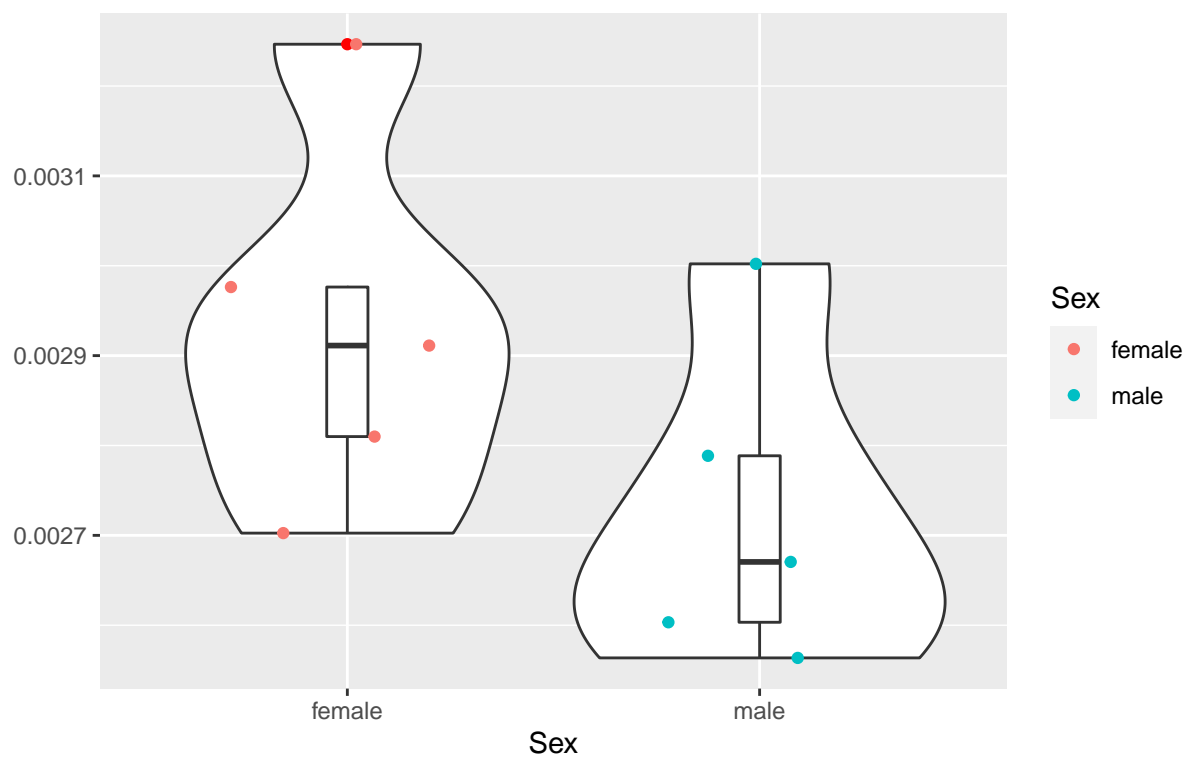
```
##           Df      Sum Sq   Mean Sq F value Pr(>F)
## Sex         1 3.800e-09 3.802e-09   0.658  0.441
## Residuals   8 4.622e-08 5.778e-09
```

```
##“{r PnRt, echo = FALSE} #ggplot(data = apoe4, aes(factor(Sex), PnRt)) + # geom_violin() + #
geom_boxplot(width = 0.1, outlier.color = “red”) + # geom_jitter(height = 0, width = 0.3) + # labs(x =
“Sex”, # y = “”, # title =”Pontine Reticular Nucleus“, # subtitle =”Red points denoting outliers”)
```

```
#res.aov <- aov(PnRt ~ Sex, data = apoe4) #summary(res.aov) #““
```

Spinal Trigeminal Nucleus

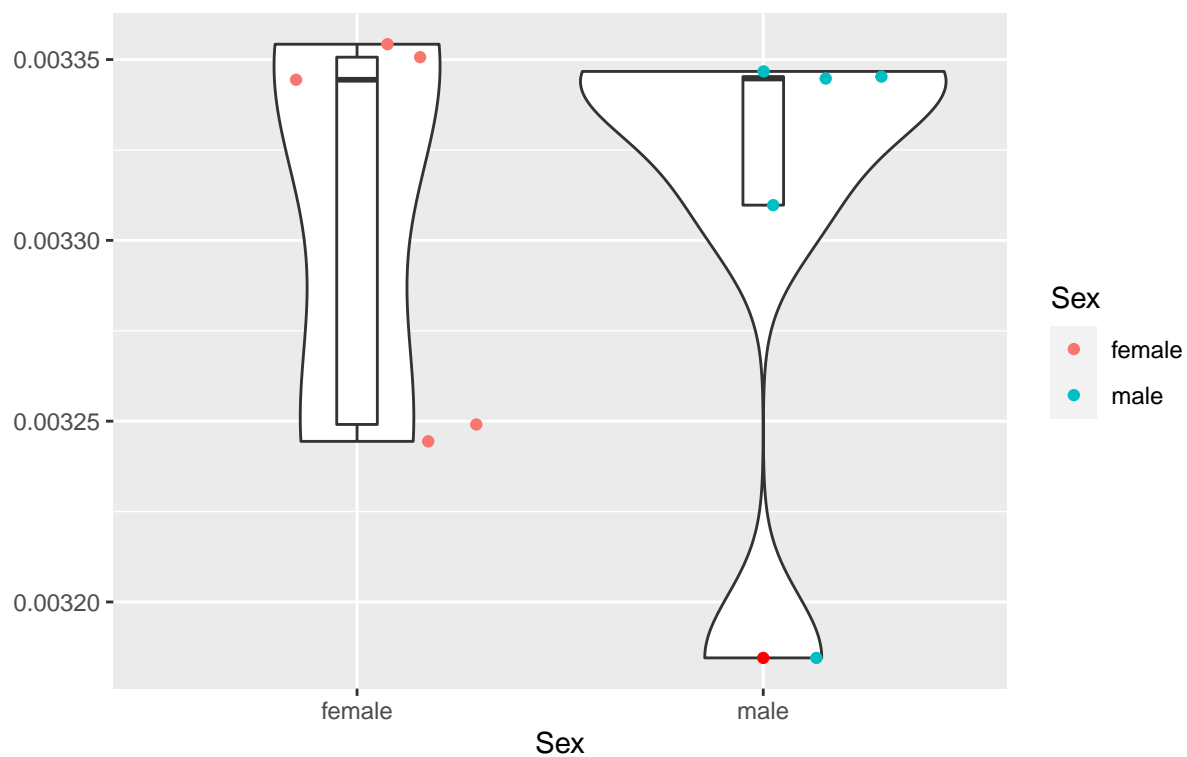
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.037e-07 | 1.037e-07 | 2.827 | 0.131 |
| ## Residuals | 8 | 2.935e-07 | 3.669e-08 | | |

Vestibular Nuclei

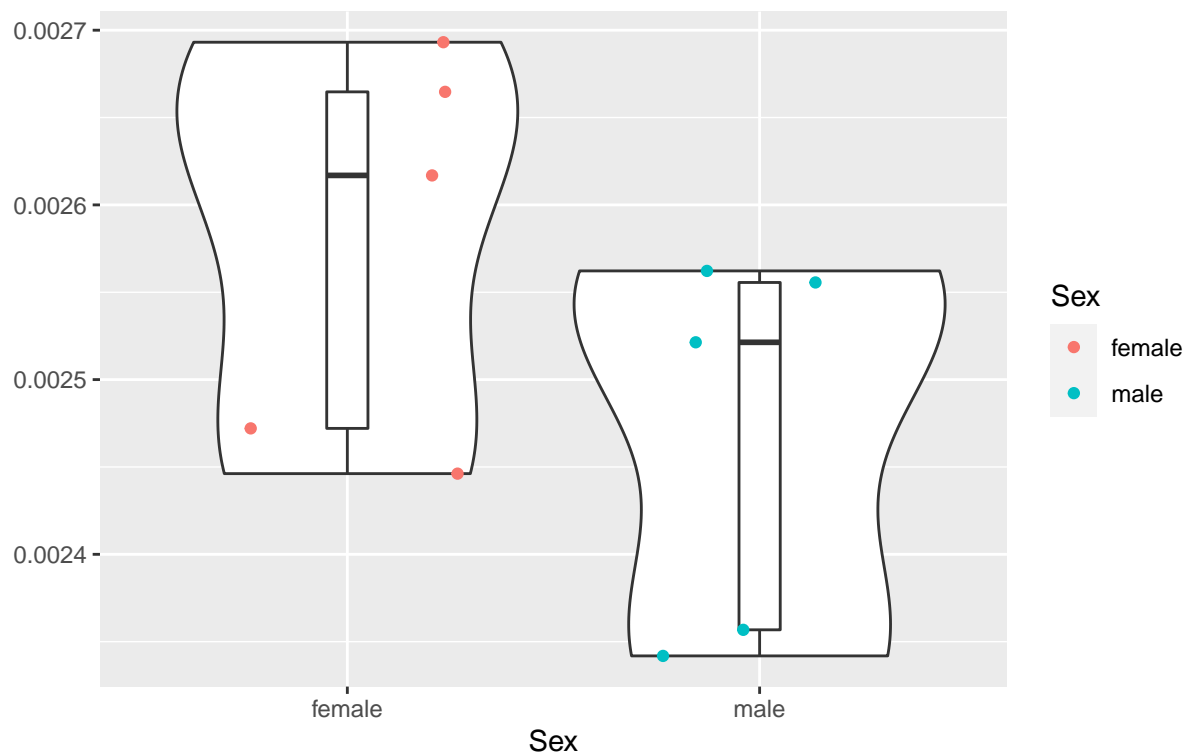
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.000e-11 | 1.400e-11 | 0.003 | 0.955 |
| ## Residuals | 8 | 3.226e-08 | 4.033e-09 | | |

Gigantocellular Reticular Nucleus

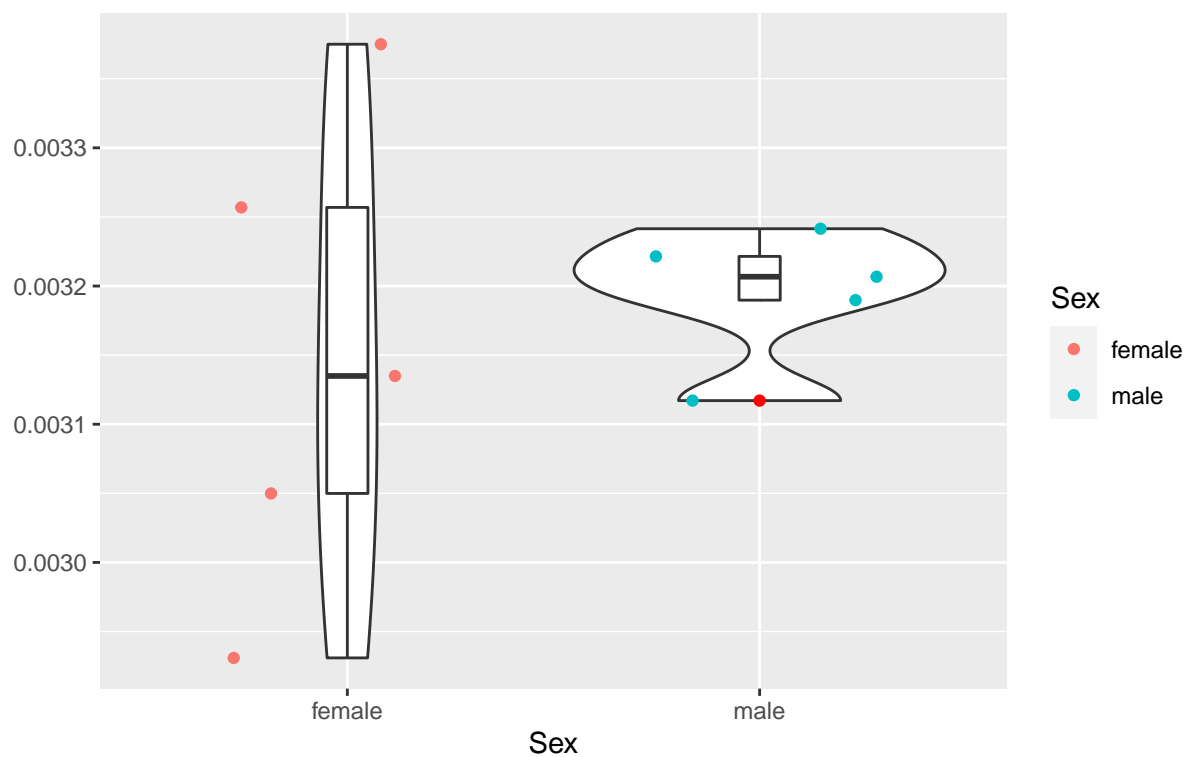
Red points denoting outliers



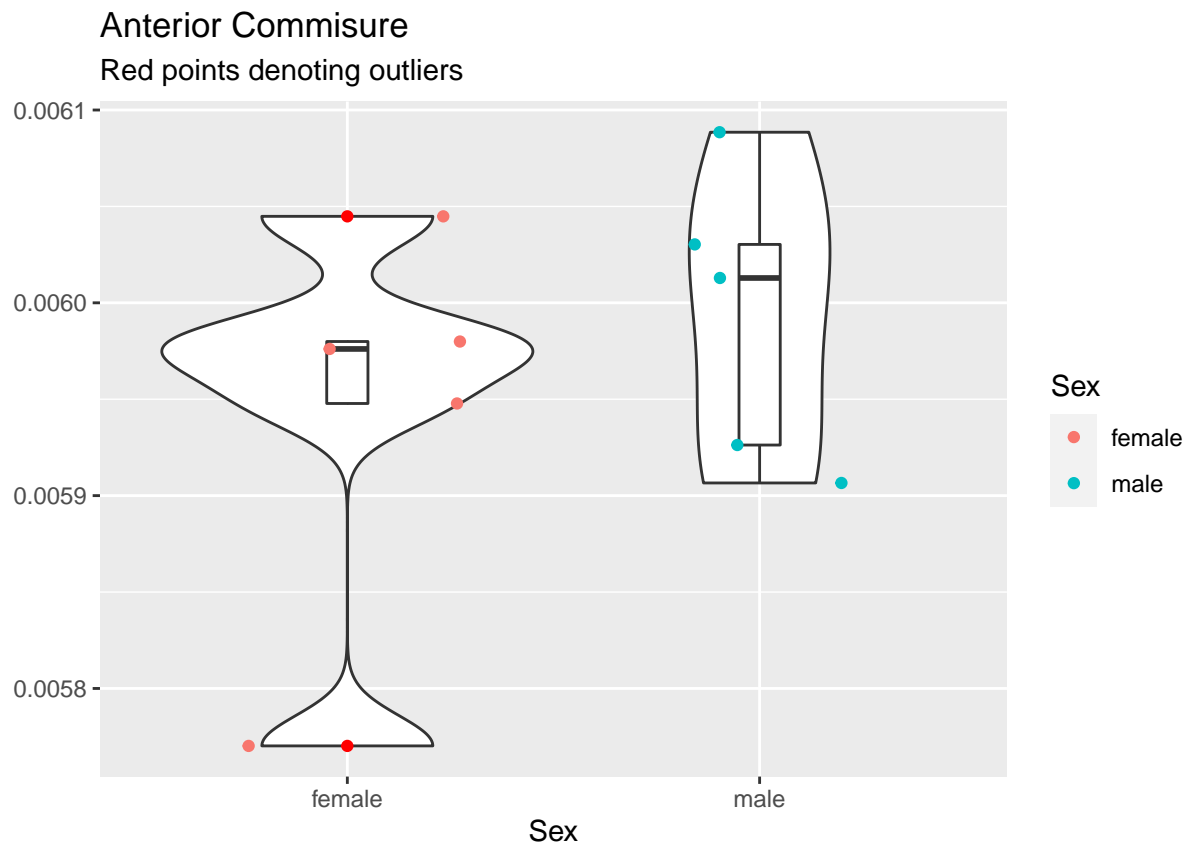
| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 3.082e-08 | 3.082e-08 | 2.502 | 0.152 |
| ## Residuals | 8 | 9.855e-08 | 1.232e-08 | | |

Cuneate Nucleus

Red points denoting outliers

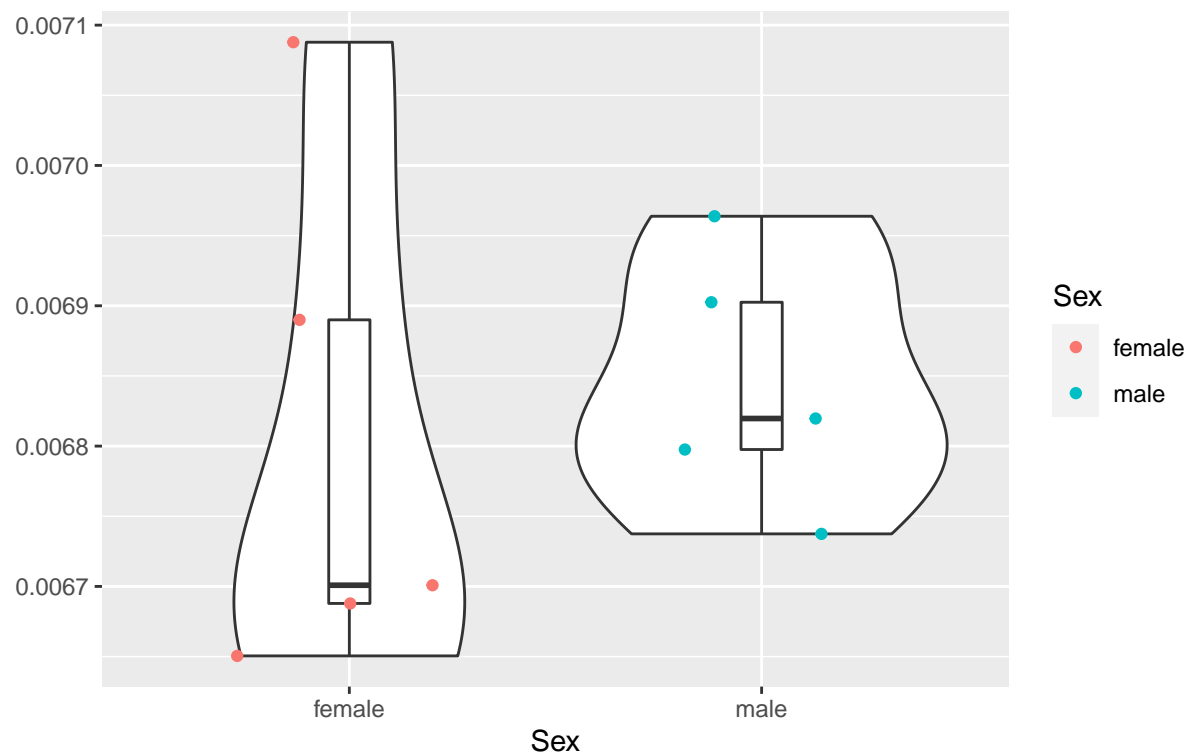


| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 5.240e-09 | 5.239e-09 | 0.324 | 0.585 |
| ## Residuals | 8 | 1.294e-07 | 1.617e-08 | | |



Optic Tracts

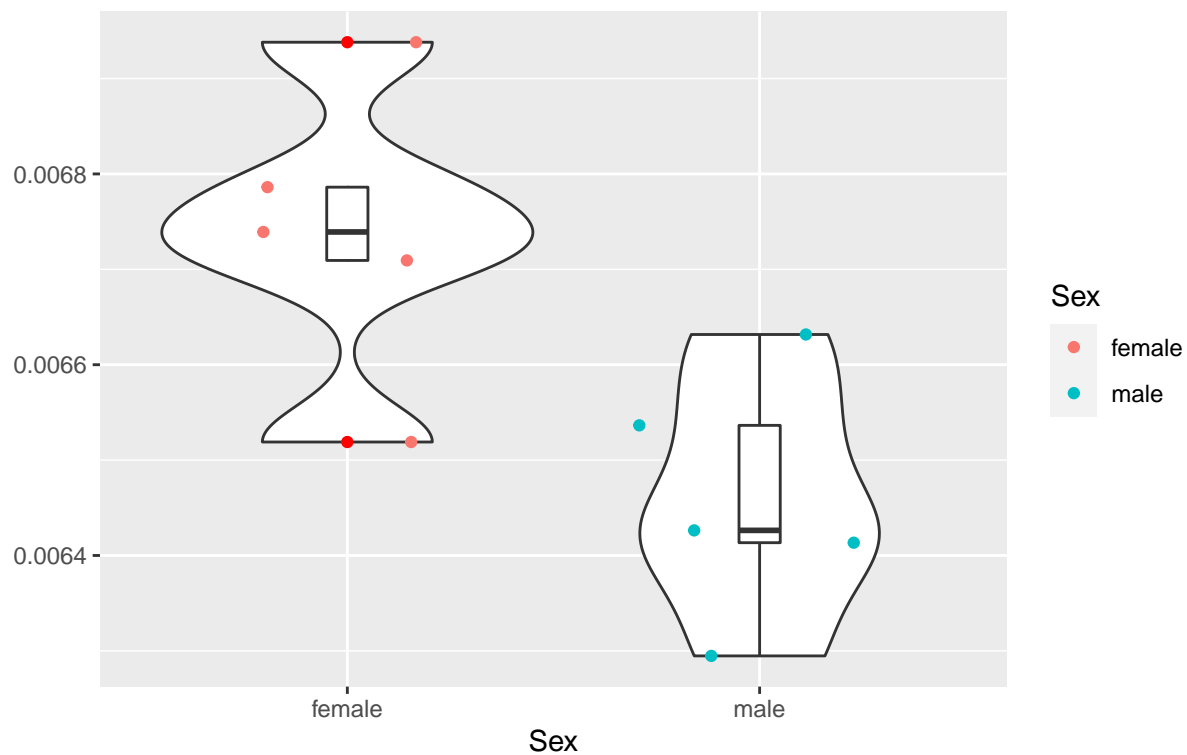
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex       1 4.160e-09 4.161e-09   0.199  0.668
## Residuals 8 1.675e-07 2.094e-08
```

Fimbria

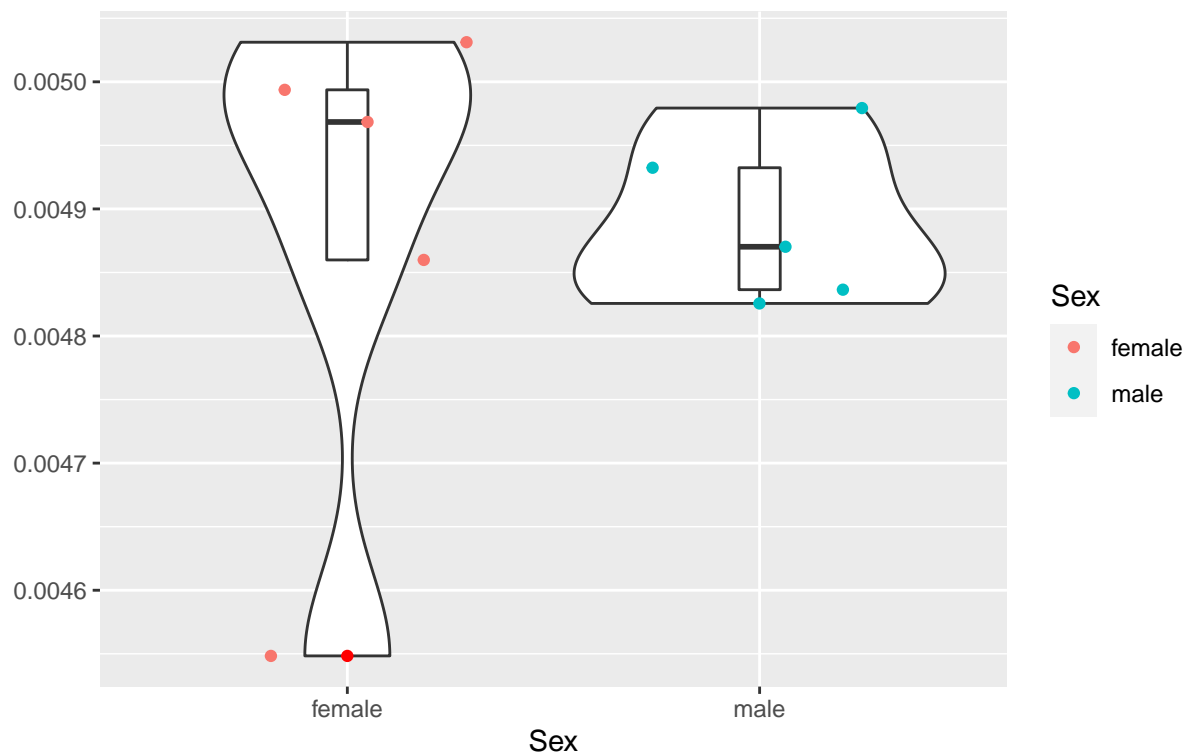
Red points denoting outliers



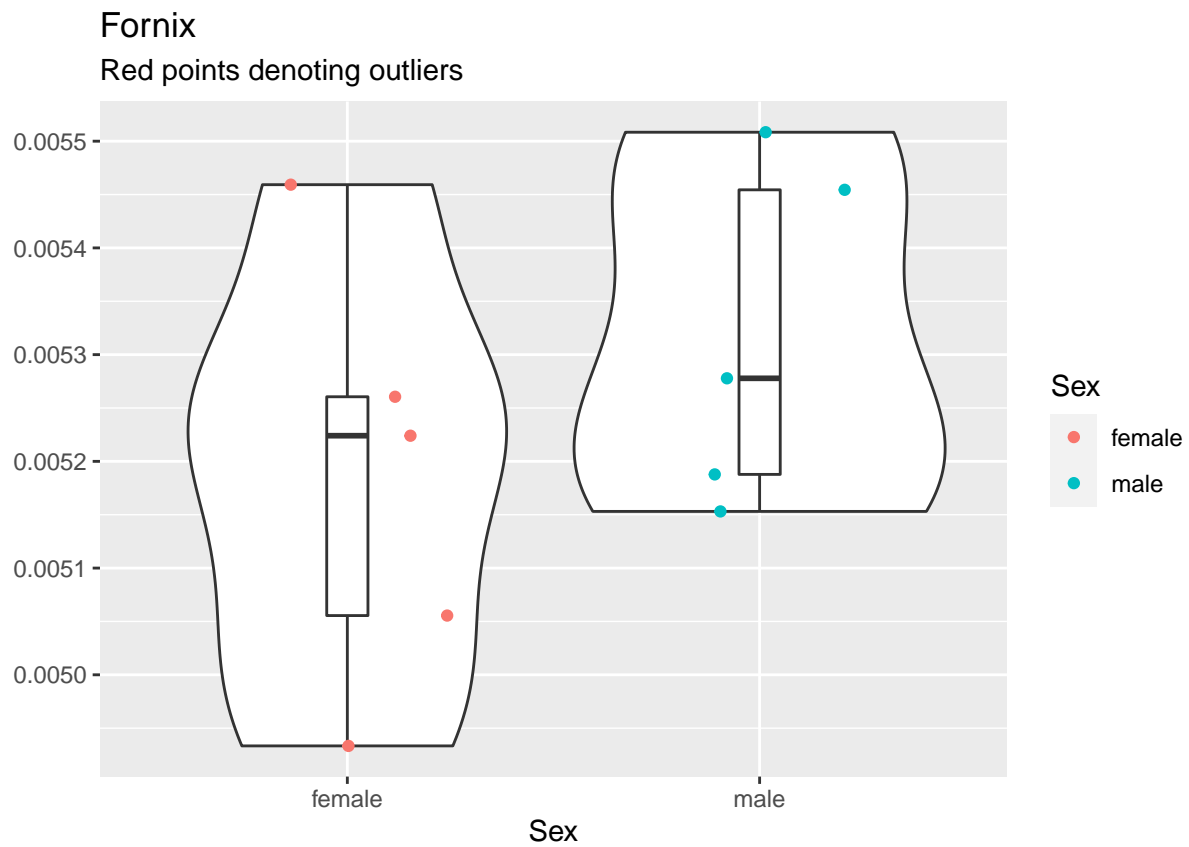
```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.930e-07 1.930e-07   9.828 0.0139 *
## Residuals    8 1.571e-07 1.964e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Corpus Callosum

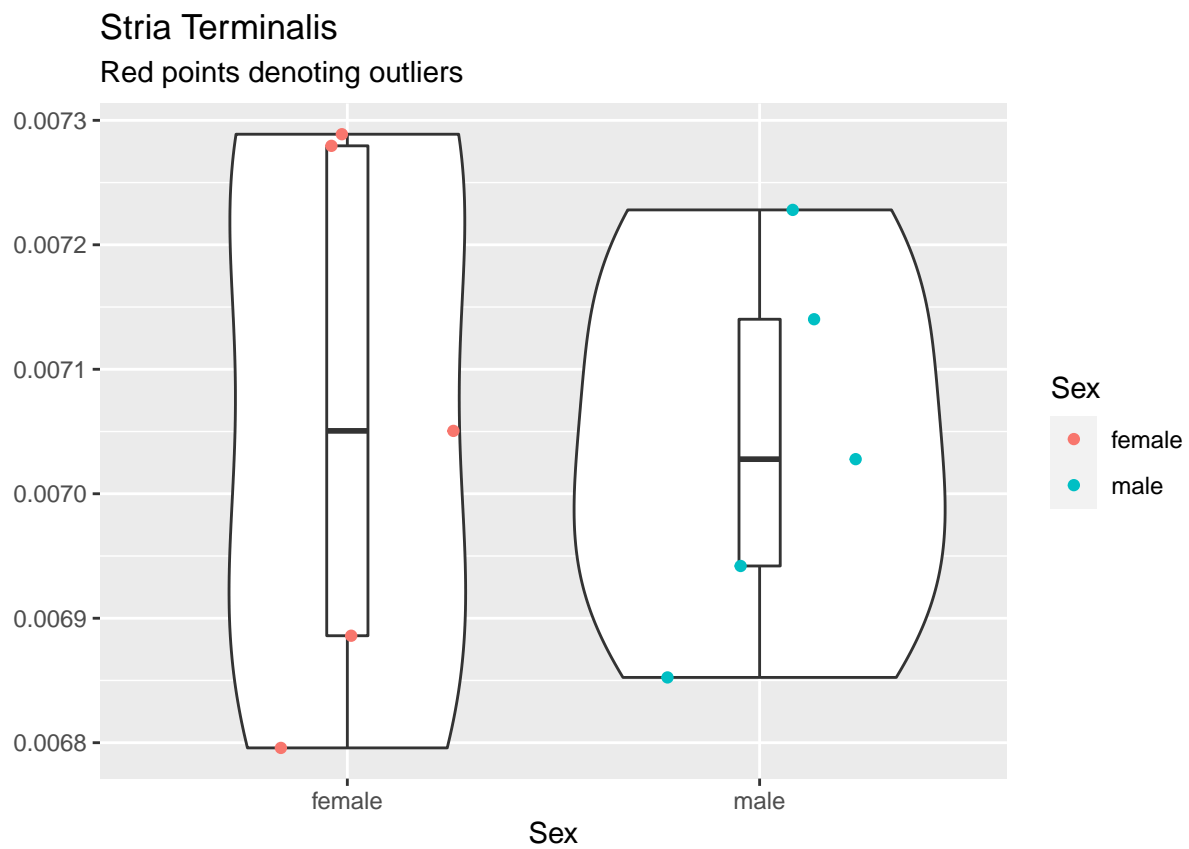
Red points denoting outliers



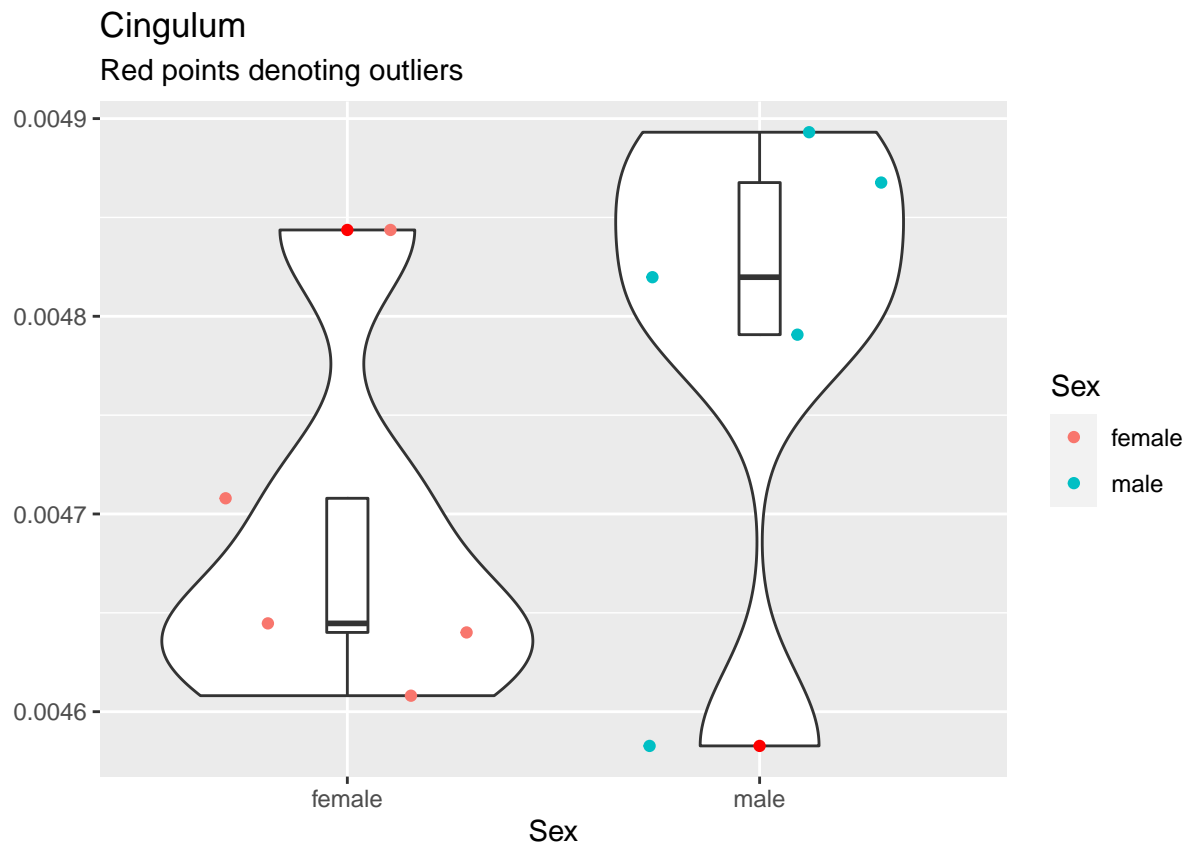
```
##          Df    Sum Sq Mean Sq F value Pr(>F)
## Sex      1 1.800e-10 1.82e-10   0.008  0.929
## Residuals 8 1.712e-07 2.14e-08
```



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 4.210e-08 4.210e-08    1.28  0.291
## Residuals   8 2.631e-07 3.289e-08
```



```
##          Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex        1  1.21e-09  1.210e-09   0.033   0.86
## Residuals   8  2.91e-07  3.638e-08
```

| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.596e-08 | 2.596e-08 | 2.17 | 0.179 |
| ## Residuals | 8 | 9.571e-08 | 1.196e-08 | | |

Lateral Olfactory Tract

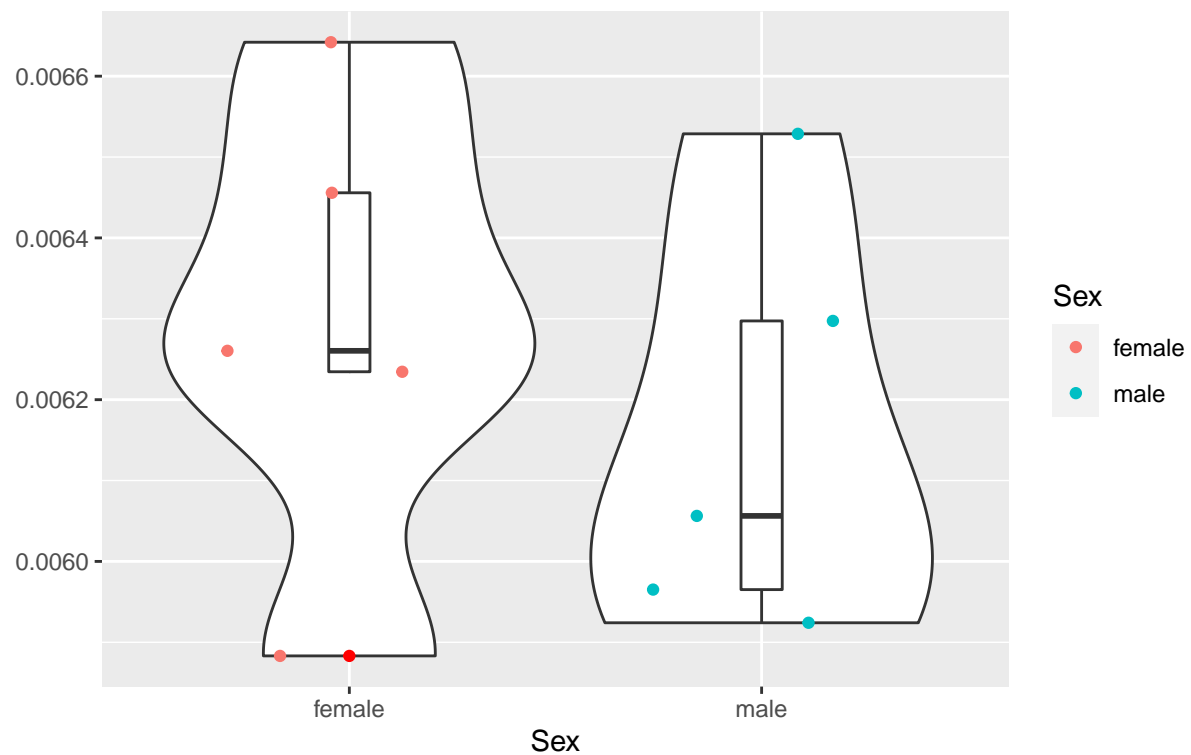
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.100e-09 | 1.050e-09 | 0.013 | 0.911 |
| ## Residuals | 8 | 6.341e-07 | 7.926e-08 | | |

Ventral Hippocampal Commissure

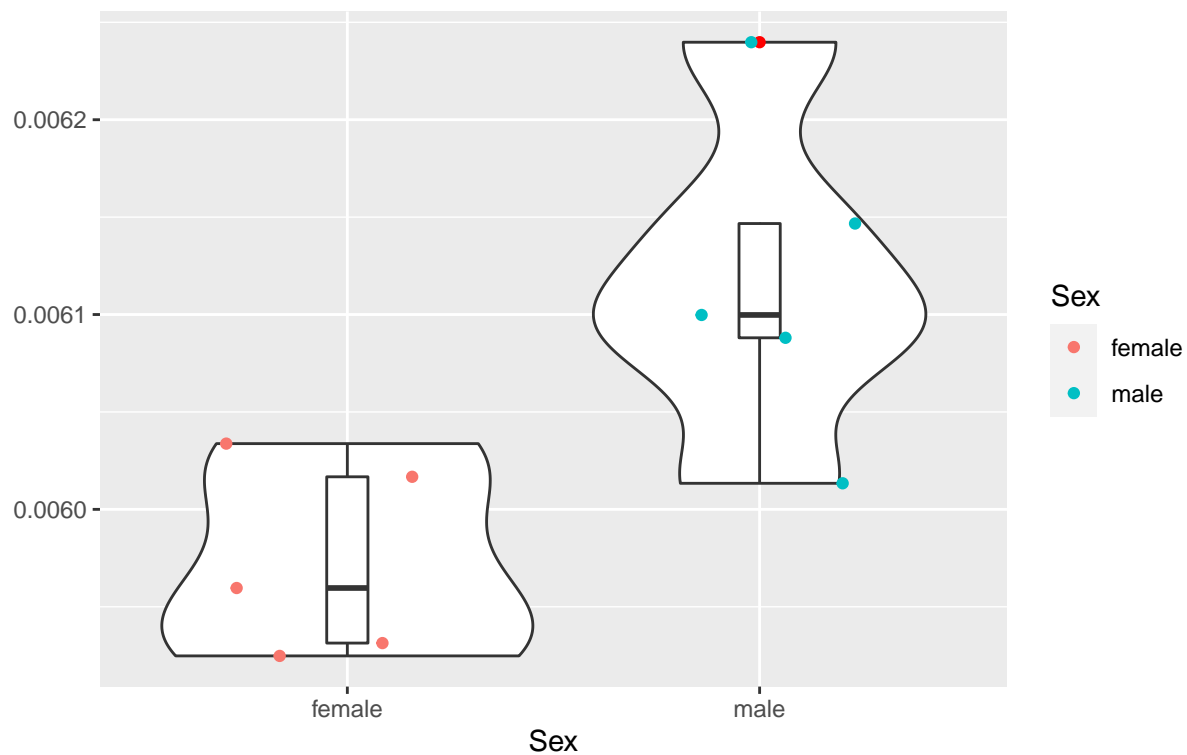
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 4.960e-08 | 4.959e-08 | 0.684 | 0.432 |
| ## Residuals | 8 | 5.798e-07 | 7.247e-08 | | |

Internal Capsule

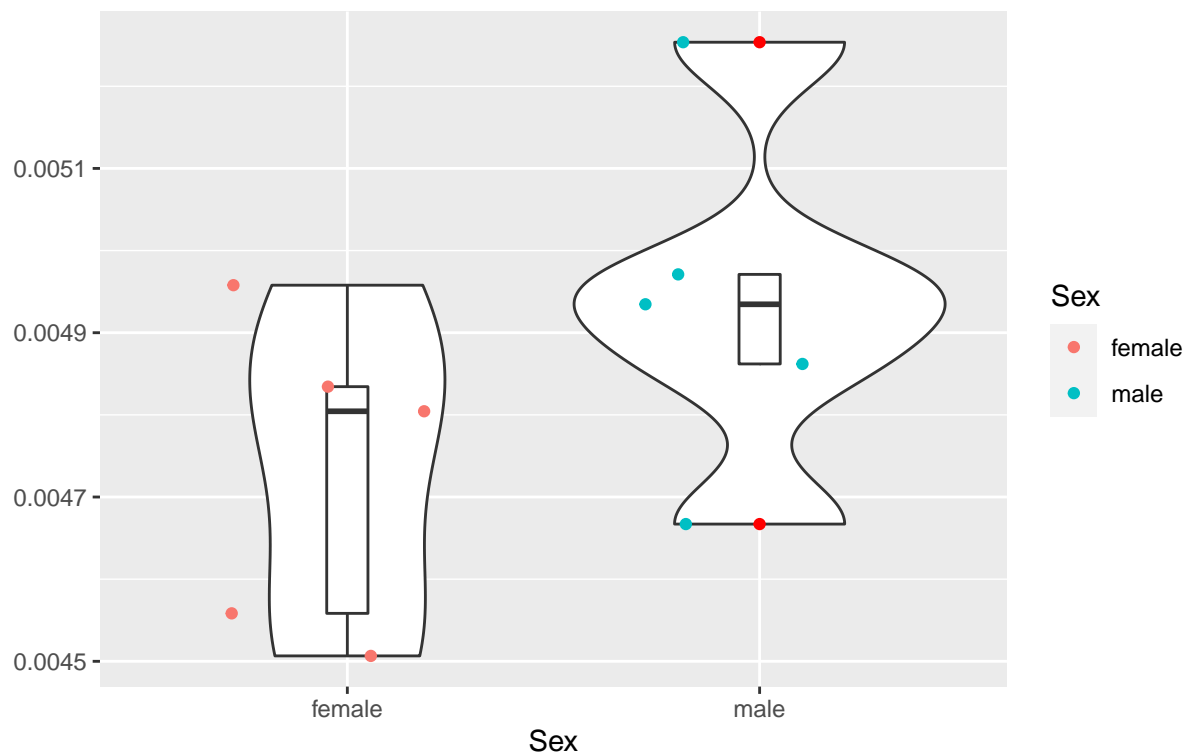
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 5.205e-08 5.205e-08   11.06 0.0105 *
## Residuals    8 3.766e-08 4.710e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Fasciculus Retroflexus

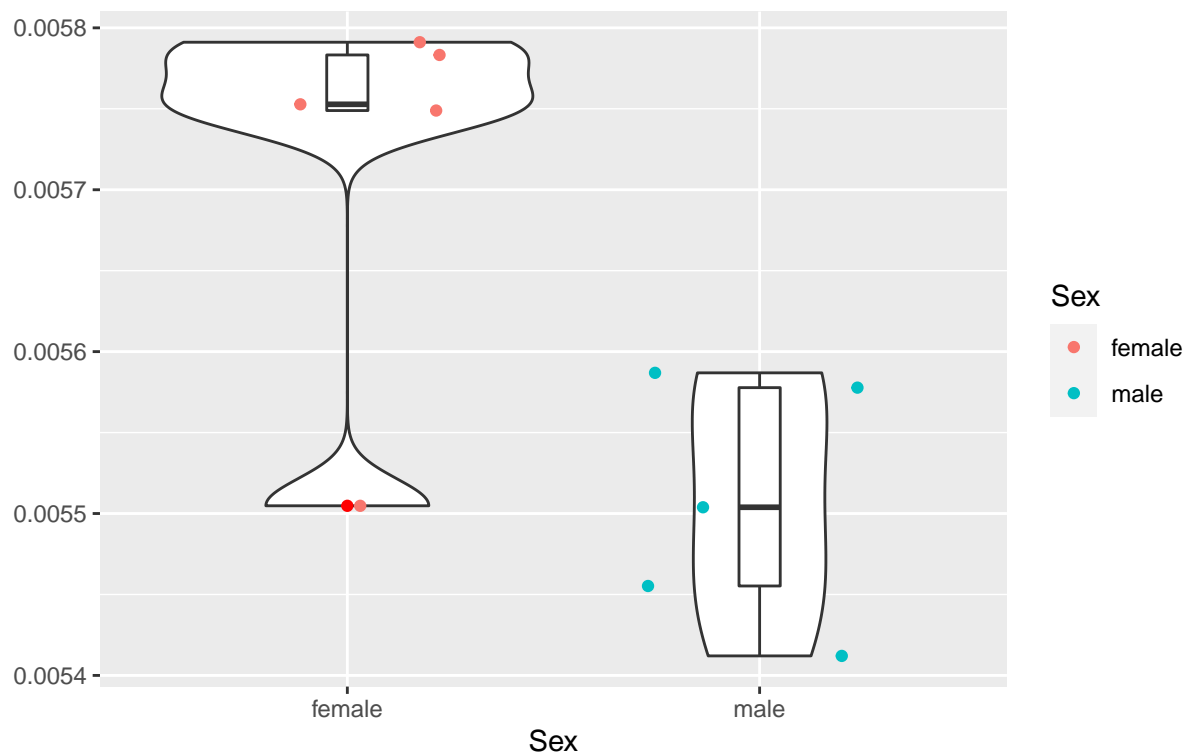
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.054e-07 | 1.054e-07 | 2.575 | 0.147 |
| ## Residuals | 8 | 3.276e-07 | 4.095e-08 | | |

Stria Medularis

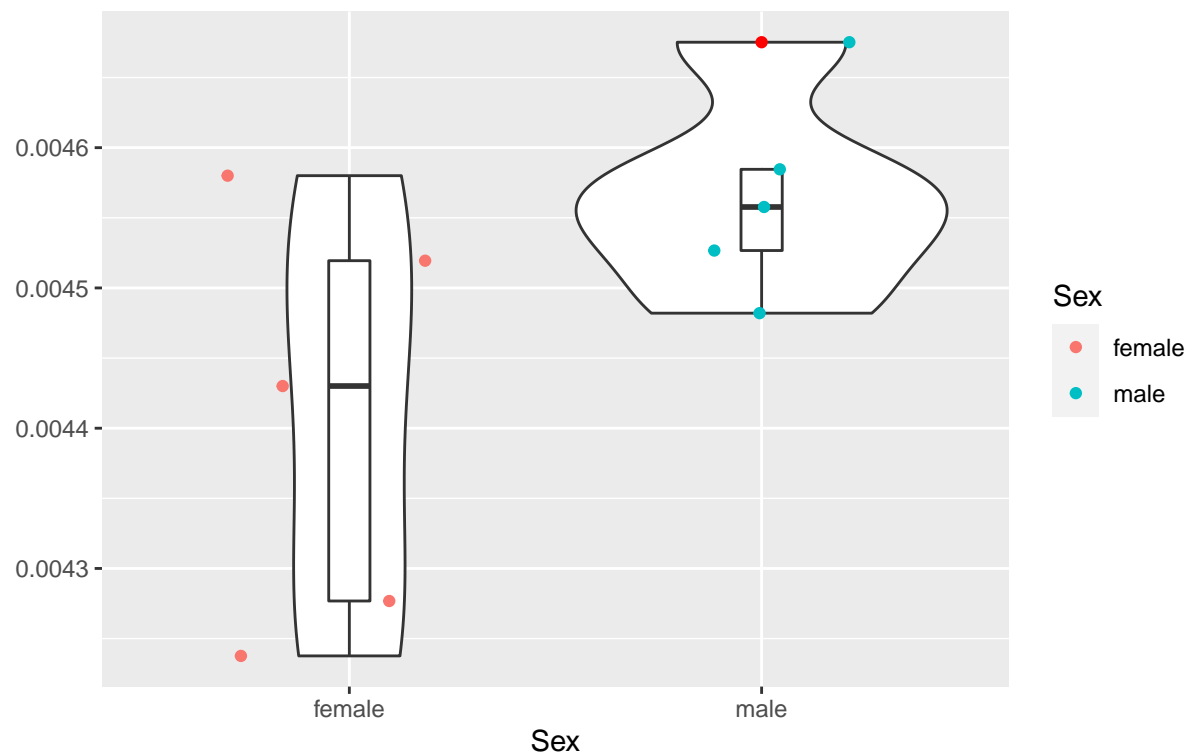
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.092e-07 1.092e-07   10.88 0.0109 *
## Residuals    8 8.031e-08 1.004e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Mammillothalamic Tract

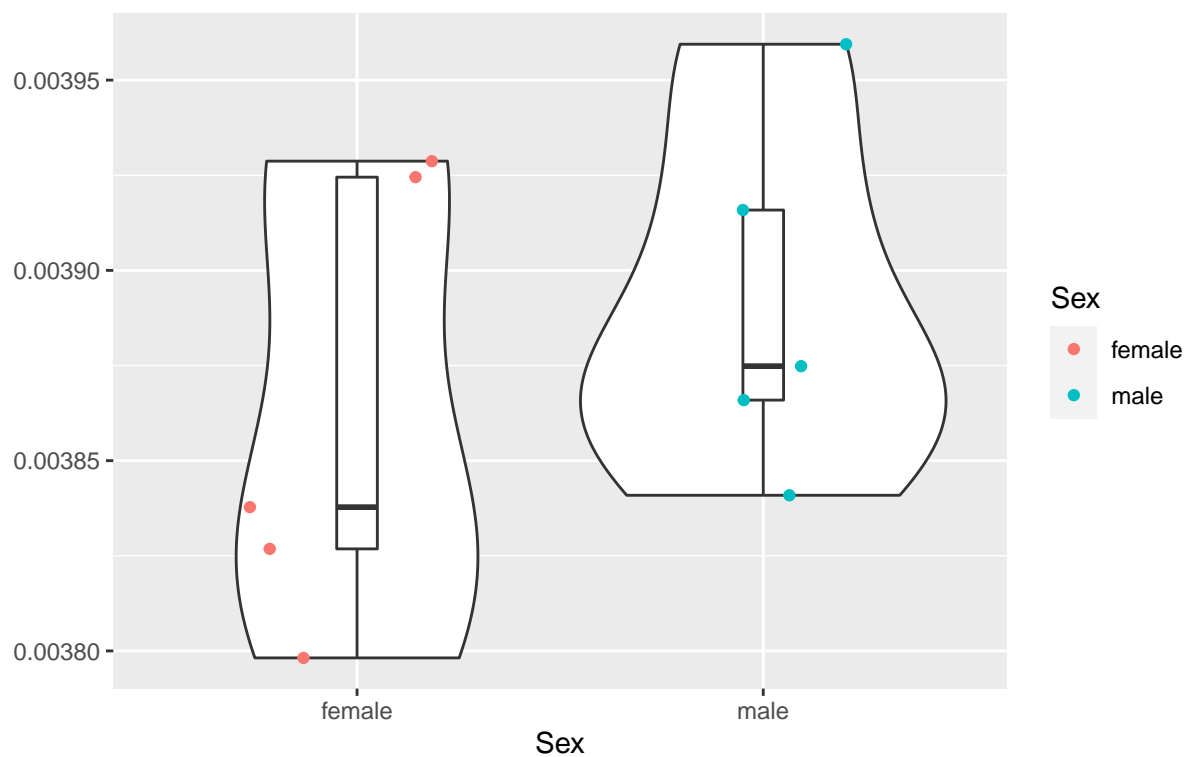
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 6.117e-08 6.117e-08   4.463 0.0676 .
## Residuals    8 1.097e-07 1.371e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Posterior Commissure

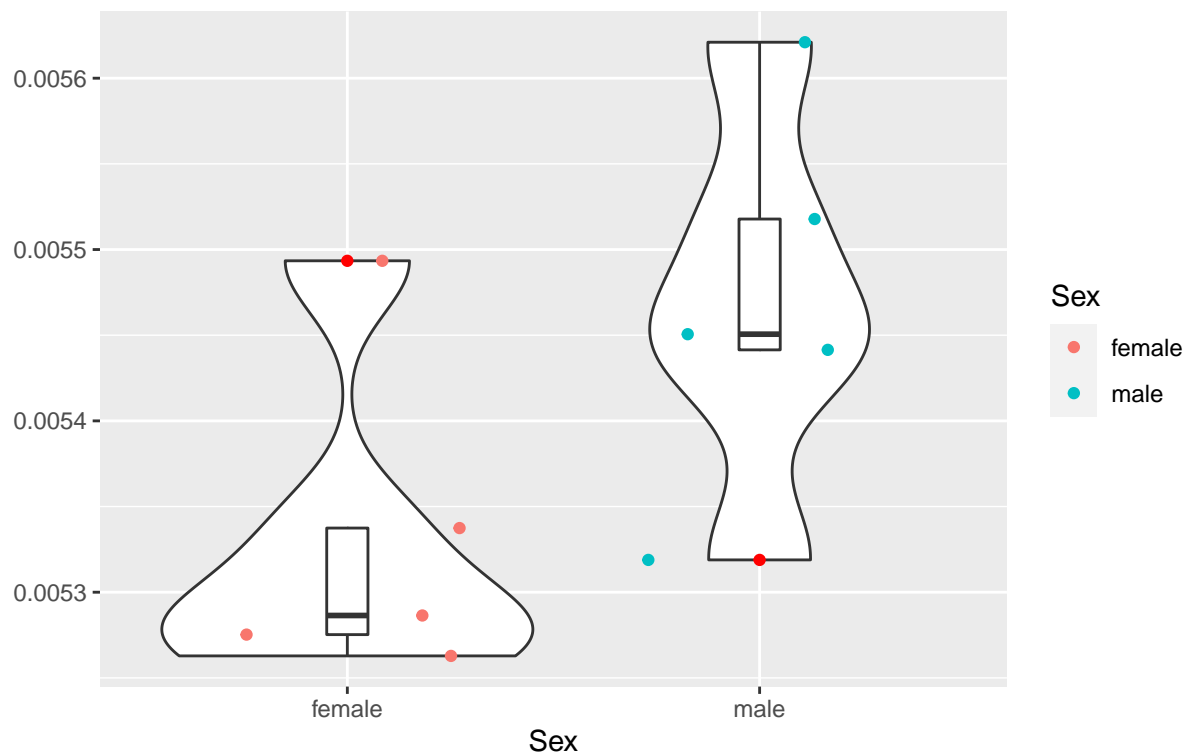
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.987e-09 | 1.987e-09 | 0.693 | 0.429 |
| ## Residuals | 8 | 2.295e-08 | 2.869e-09 | | |

Brachium of Superior Colliculus

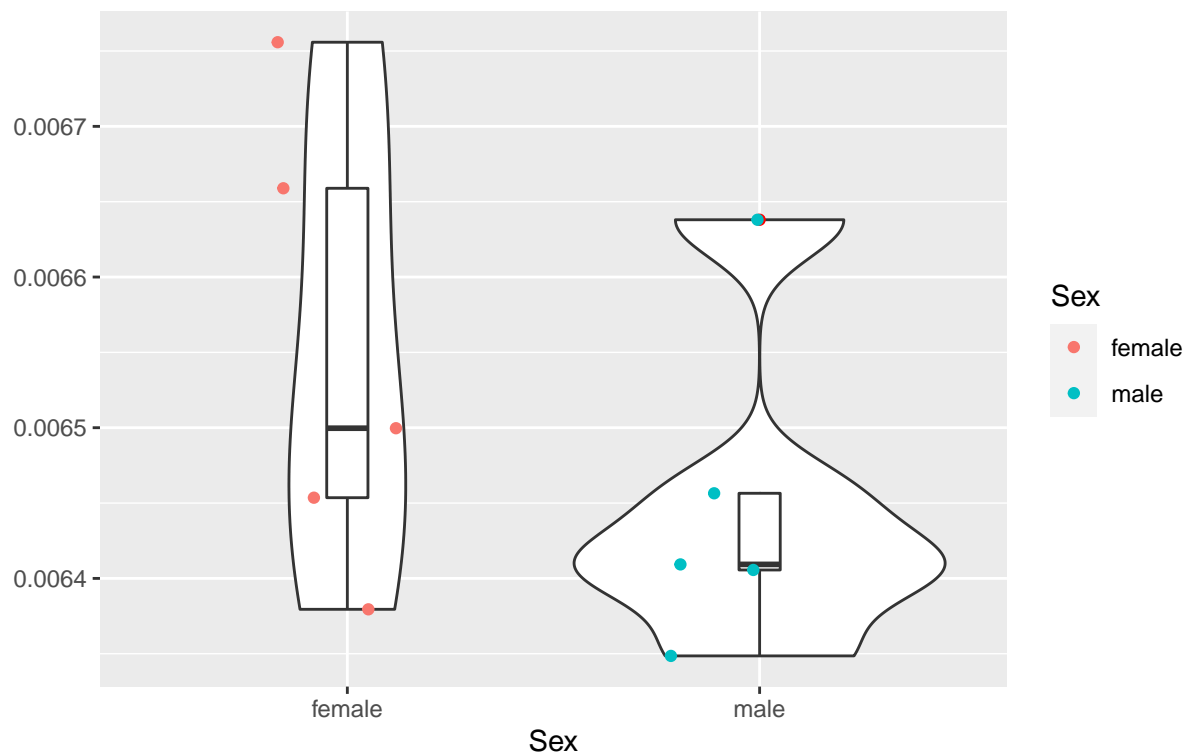
Red points denoting outliers



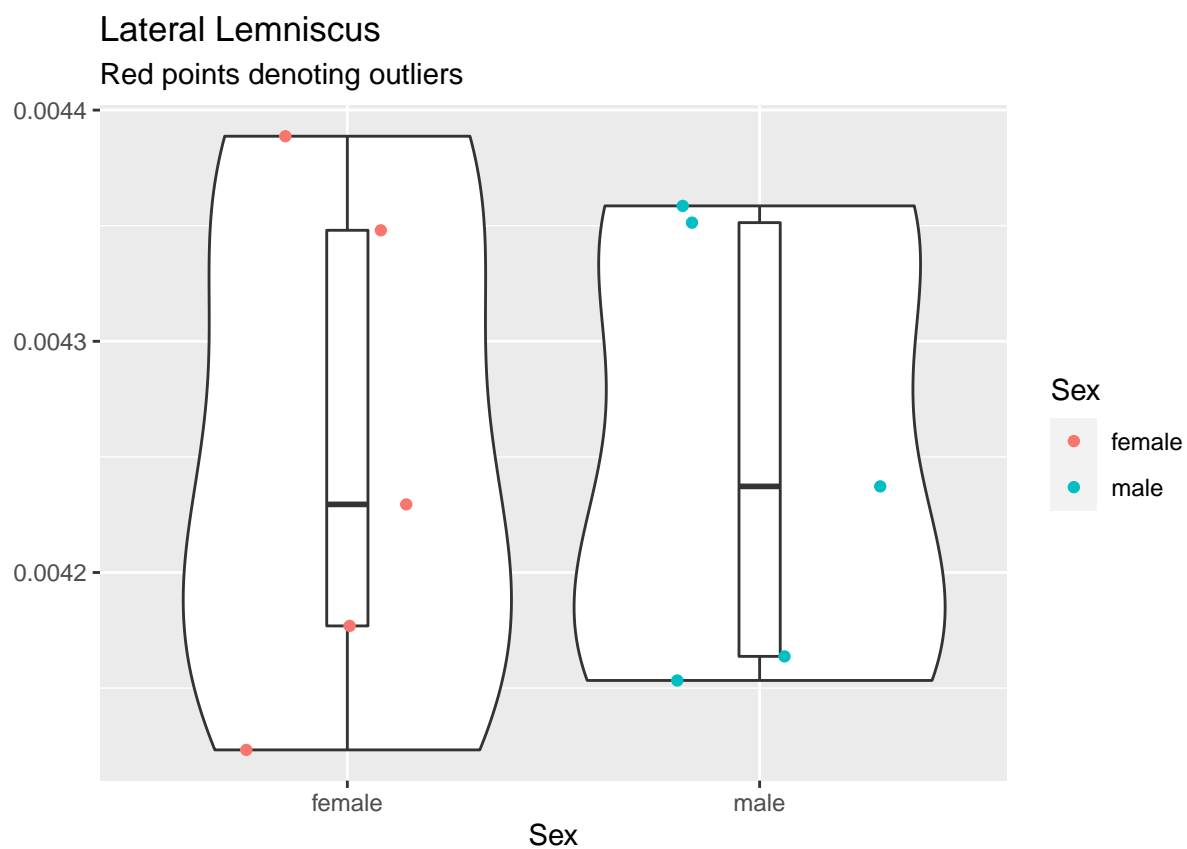
```
##          Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 4.821e-08 4.821e-08   4.522 0.0661 .
## Residuals    8 8.528e-08 1.066e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Cerebral Peduncle

Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.396e-08 | 2.396e-08 | 1.327 | 0.283 |
| ## Residuals | 8 | 1.444e-07 | 1.805e-08 | | |



```
##          Df    Sum Sq Mean Sq F value Pr(>F)
## Sex       1 0.000e+00 0.00e+00      0 0.995
## Residuals 8 8.958e-08 1.12e-08
```

Spinal Trigeminal Nerve

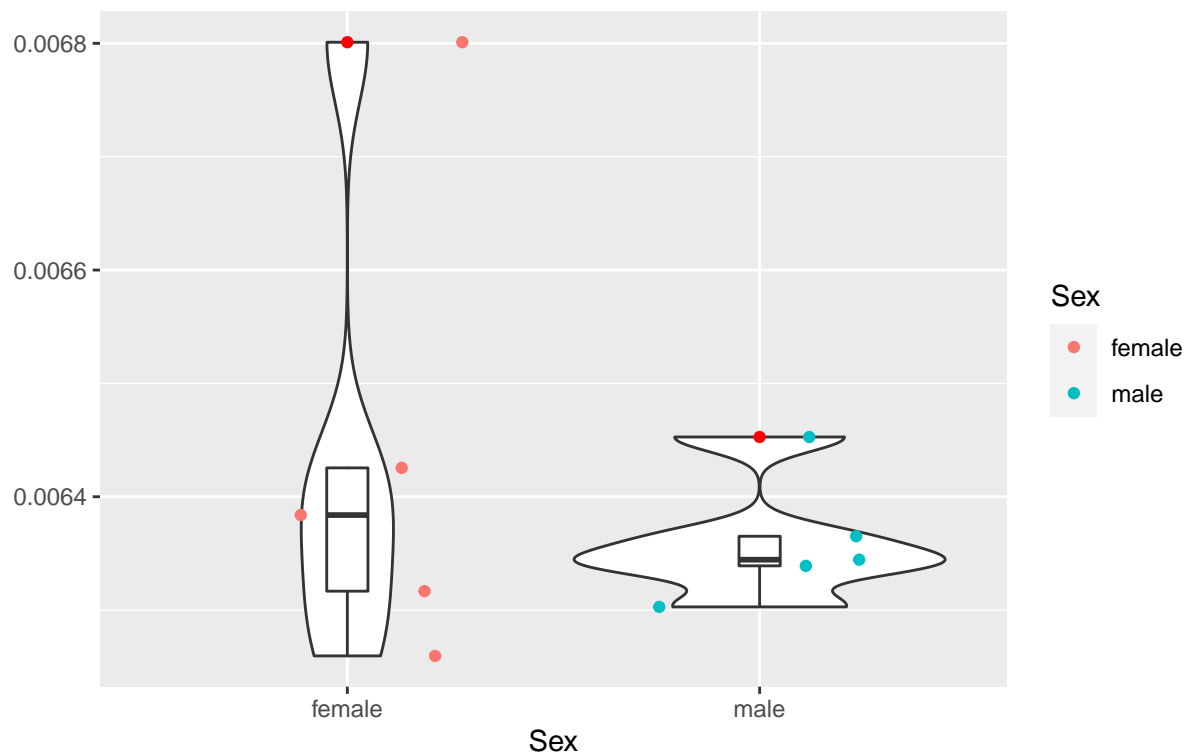
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 1.500e-09 1.505e-09   0.217  0.654
## Residuals   8 5.558e-08 6.948e-09
```

Pyramidal Tract

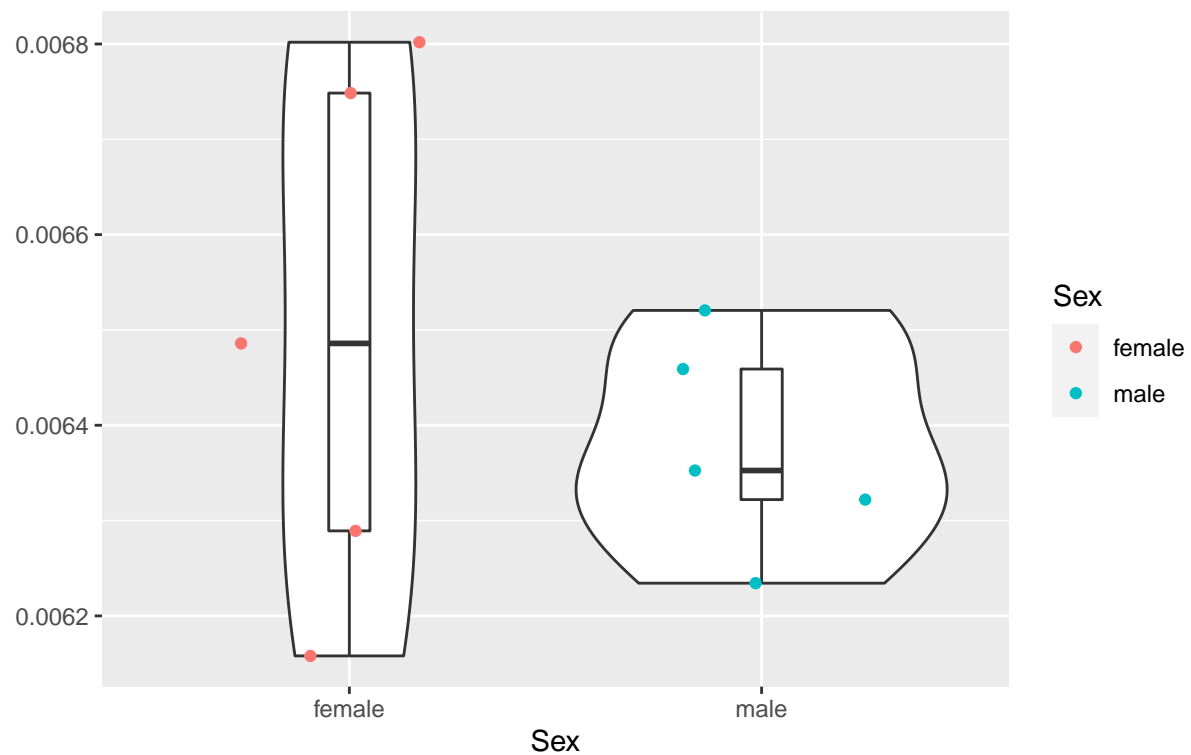
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.462e-08 | 1.462e-08 | 0.603 | 0.46 |
| ## Residuals | 8 | 1.940e-07 | 2.424e-08 | | |

Vestibulocochlear Nerve

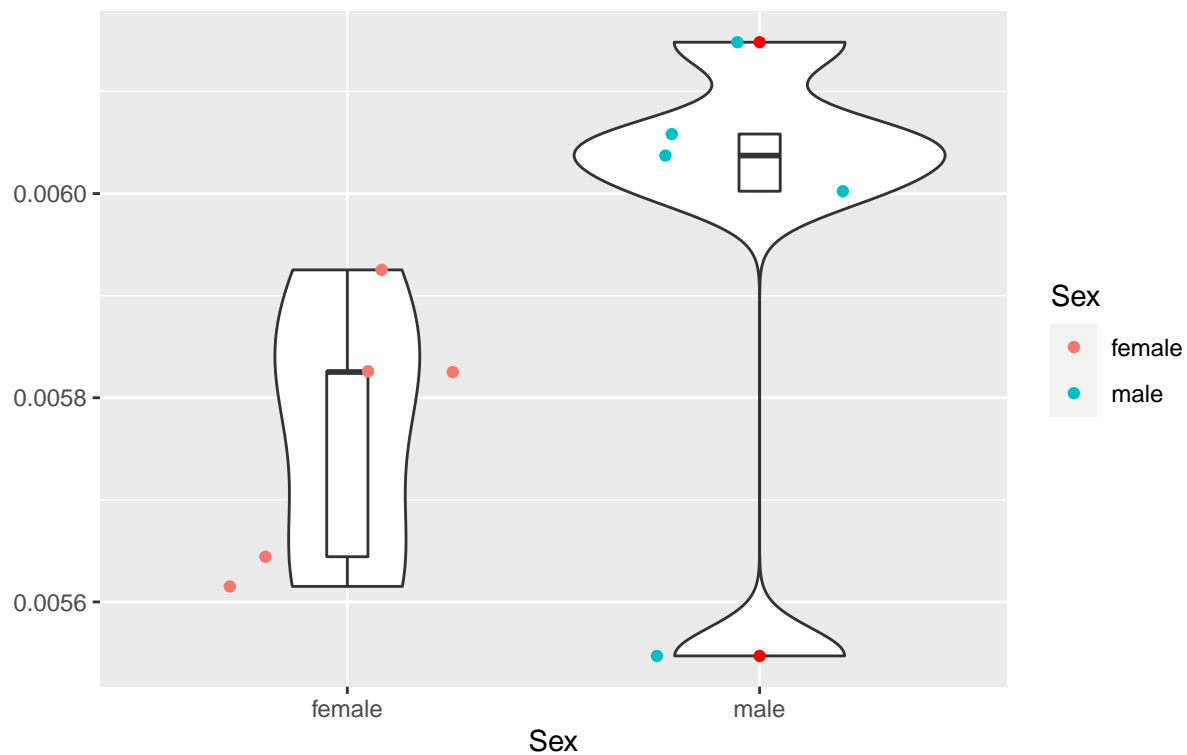
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 3.540e-08 | 3.542e-08 | 0.775 | 0.404 |
| ## Residuals | 8 | 3.657e-07 | 4.571e-08 | | |

Facial Nerve

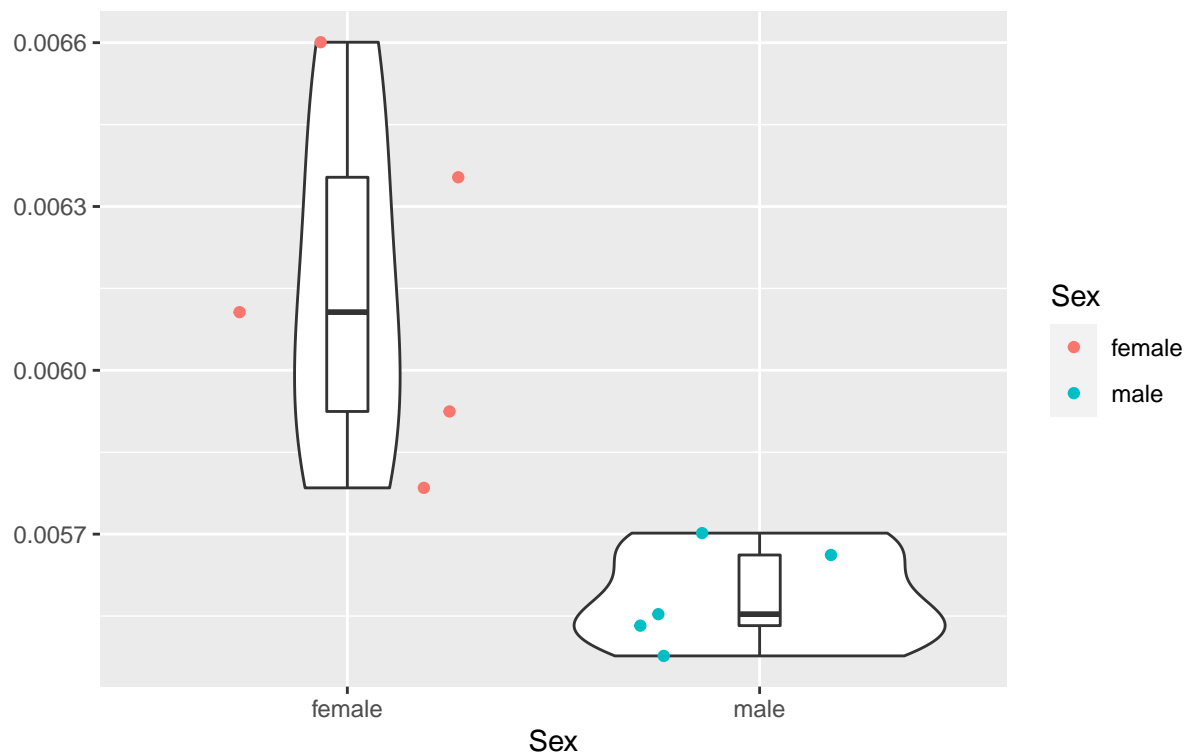
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 9.166e-08 | 9.166e-08 | 2.5 | 0.153 |
| ## Residuals | 8 | 2.933e-07 | 3.666e-08 | | |

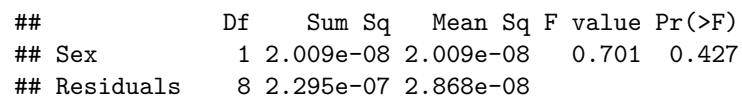
Longitudinal Fasciculus of Pons

Red points denoting outliers



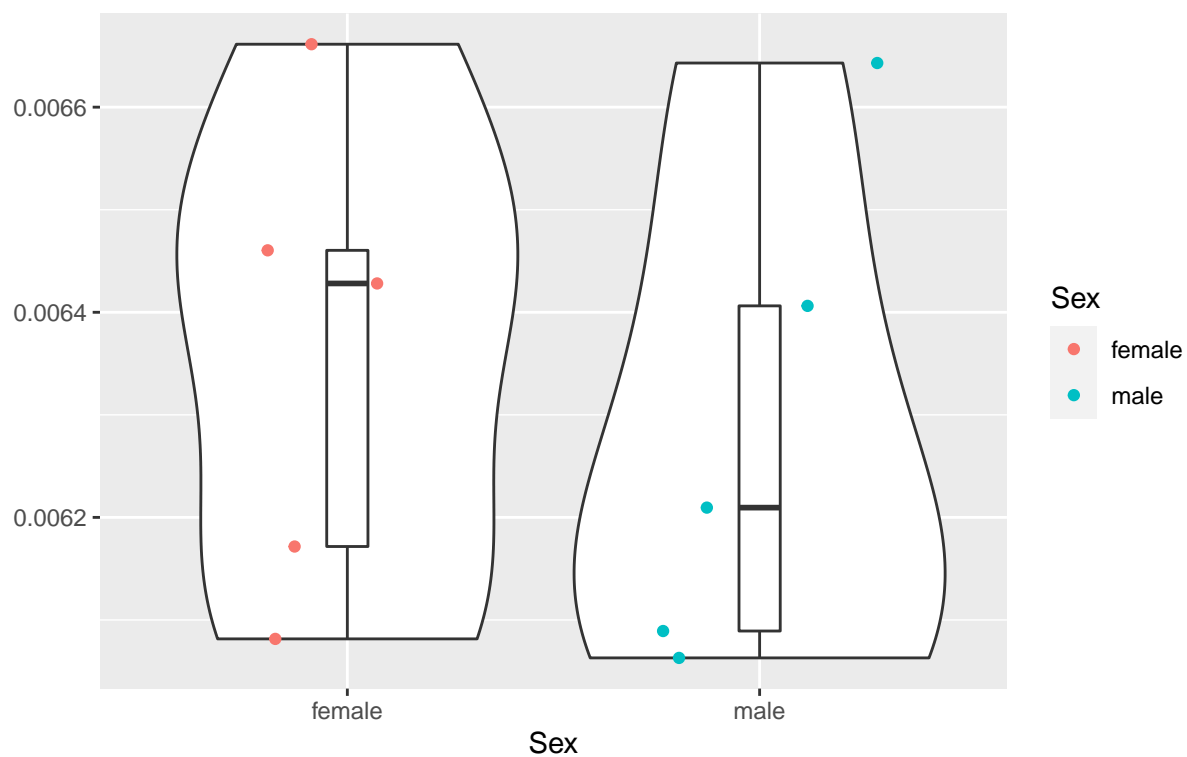
```
##          Df    Sum Sq  Mean Sq F value   Pr(>F)
## Sex          1 8.087e-07 8.087e-07   13.89 0.00581 **
## Residuals    8 4.656e-07 5.820e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```


Red points denoting outliers



Spinocerebellar Tract

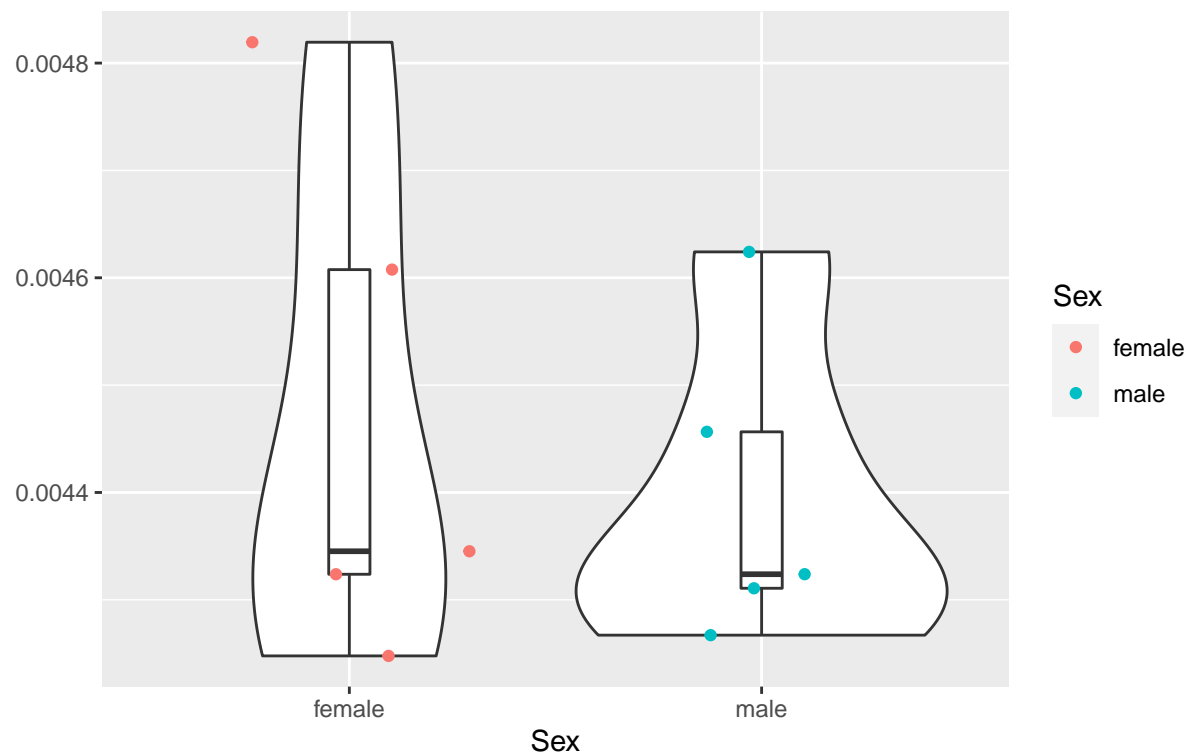
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.540e-08 | 1.537e-08 | 0.27 | 0.617 |
| ## Residuals | 8 | 4.547e-07 | 5.684e-08 | | |

Medial Lemniscus

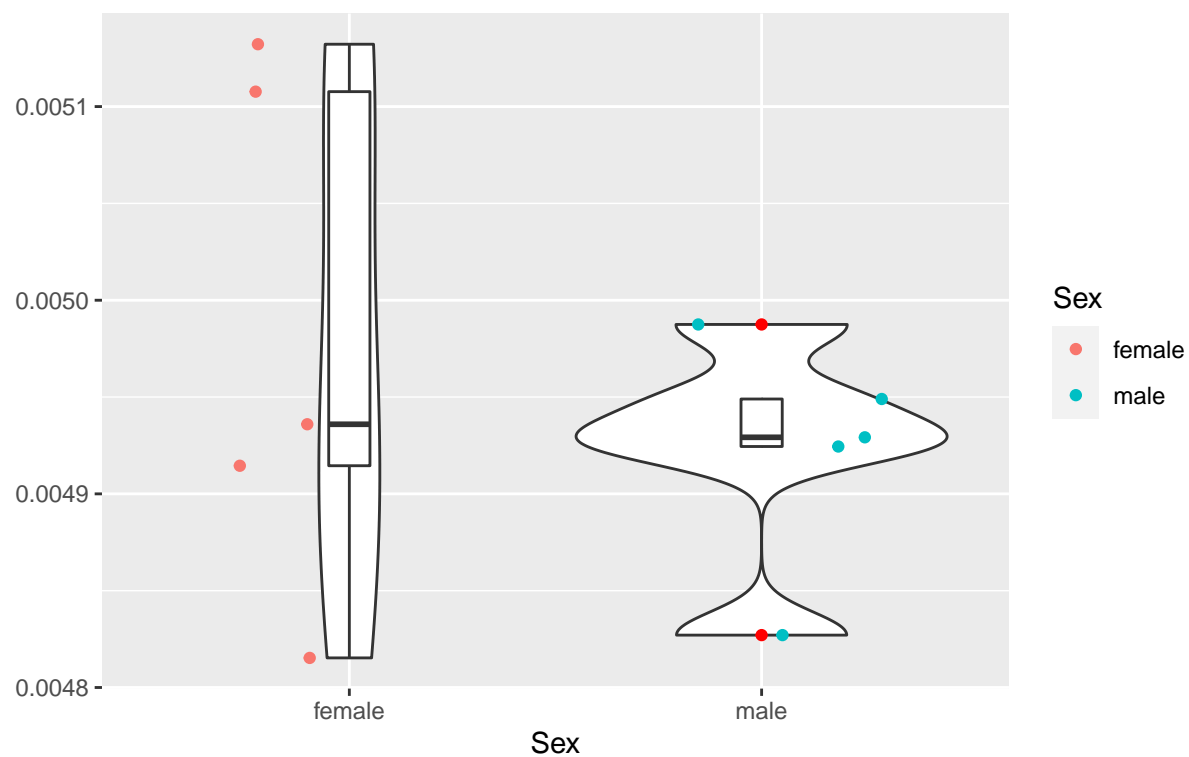
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.307e-08 | 1.307e-08 | 0.335 | 0.579 |
| ## Residuals | 8 | 3.121e-07 | 3.902e-08 | | |

Ventral Spinocerebellar Tract

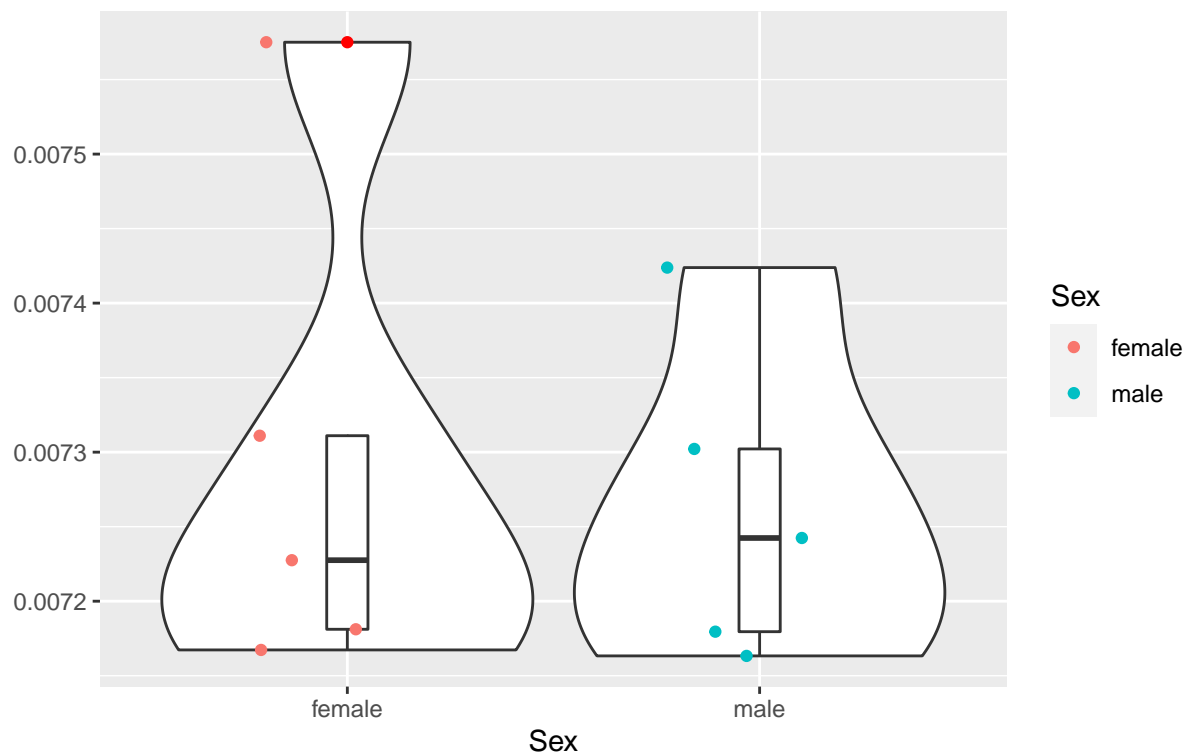
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 8.320e-09 | 8.322e-09 | 0.766 | 0.407 |
| ## Residuals | 8 | 8.691e-08 | 1.086e-08 | | |

Middle Cerebellar Peduncle

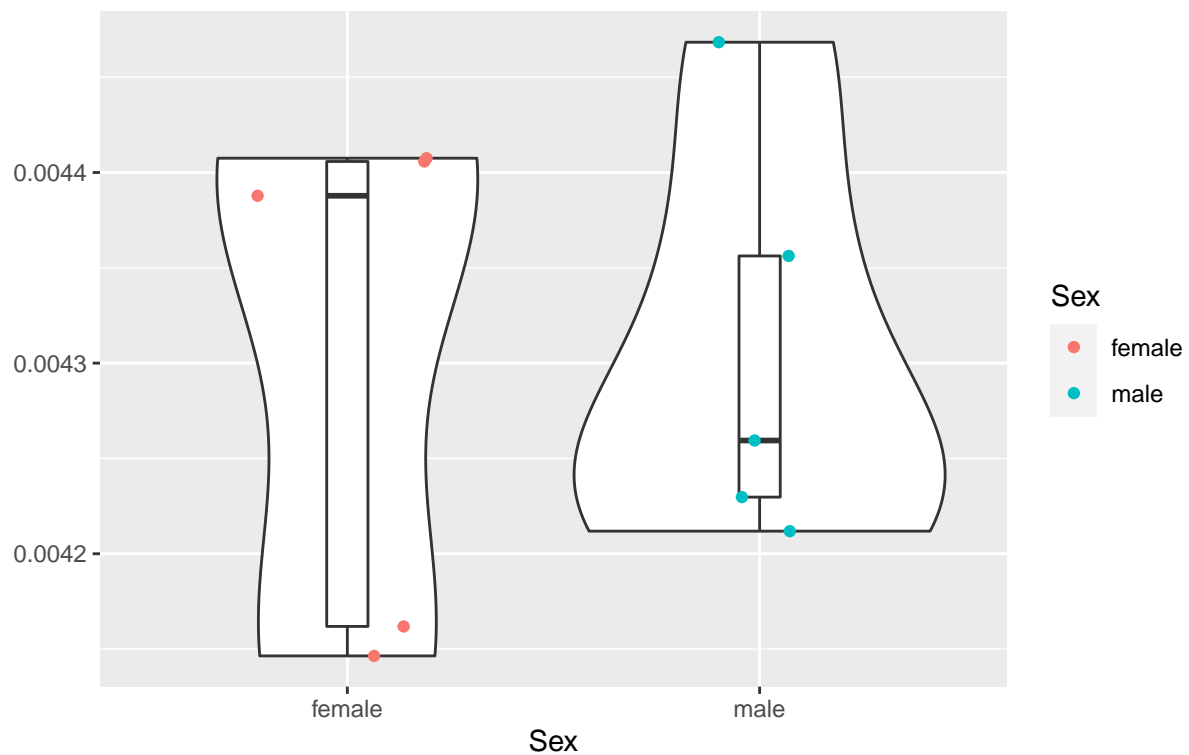
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.270e-09 | 2.274e-09 | 0.116 | 0.742 |
| ## Residuals | 8 | 1.572e-07 | 1.965e-08 | | |

Superior Cerebellar Peduncle

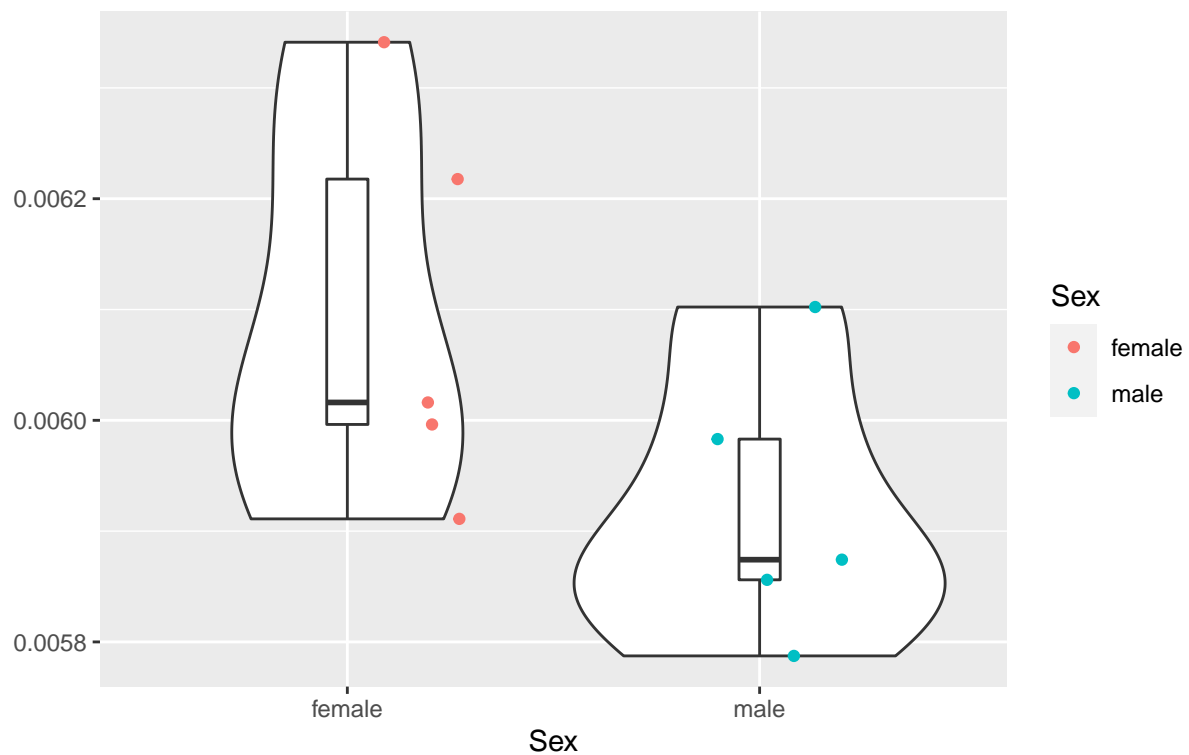
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 3.000e-11 | 2.600e-11 | 0.002 | 0.967 |
| ## Residuals | 8 | 1.188e-07 | 1.485e-08 | | |

Inferior Cerebellar Peduncle

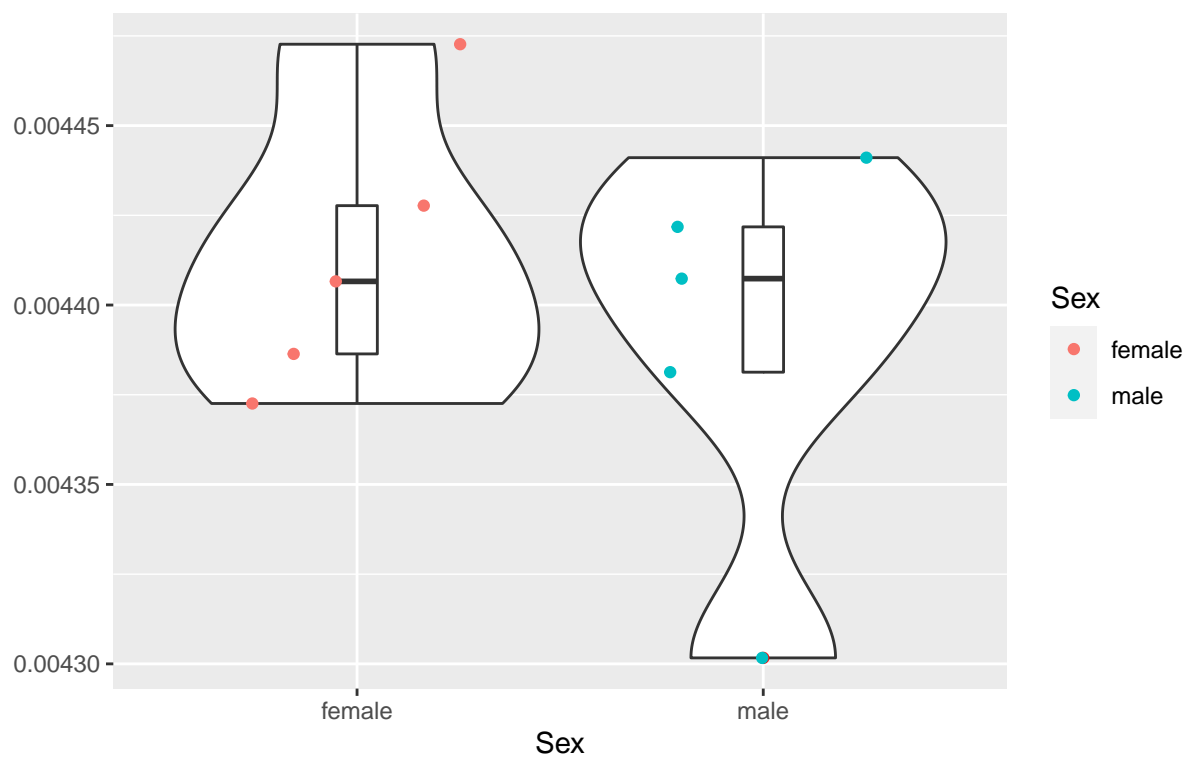
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 7.734e-08 | 7.734e-08 | 3.318 | 0.106 |
| ## Residuals | 8 | 1.865e-07 | 2.331e-08 | | |

Cerebellar White Matter

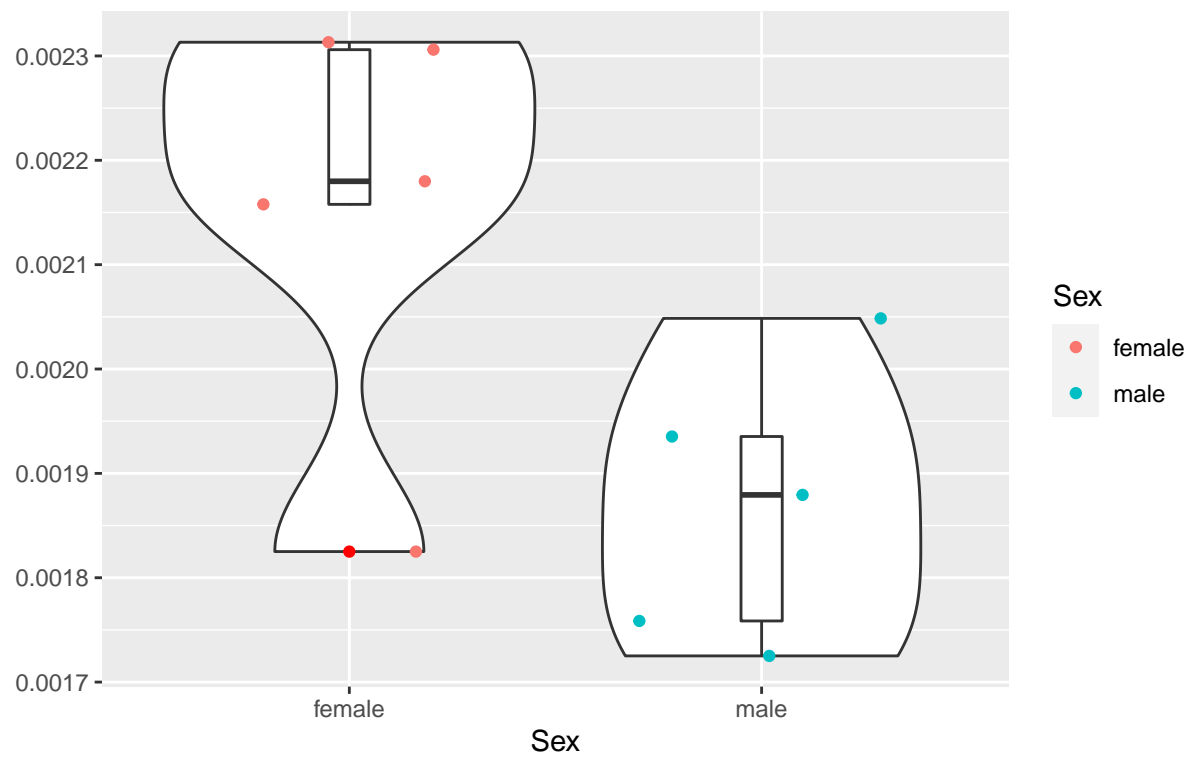
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 1.271e-09 1.271e-09   0.566  0.473
## Residuals   8 1.796e-08 2.245e-09
```


Lateral Ventricle

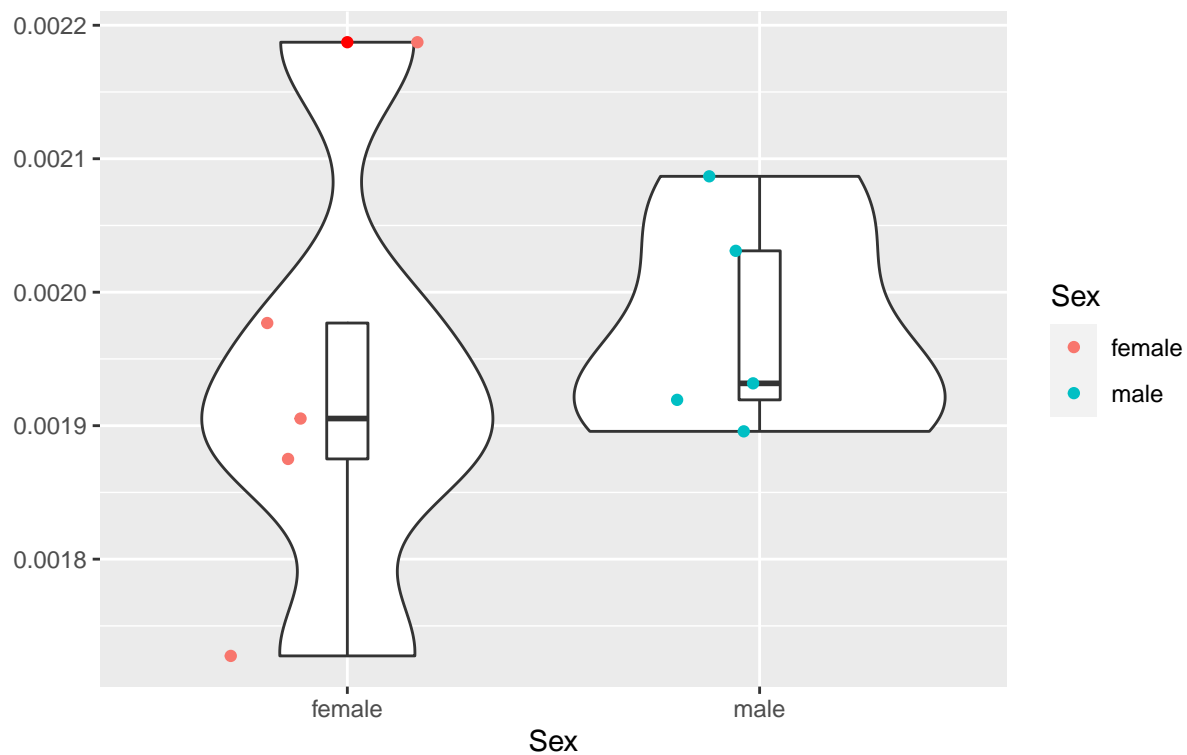
Red points denoting outliers



```
##          Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 2.059e-07 2.059e-07   7.259 0.0273 *
## Residuals    8 2.269e-07 2.837e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Cingulate Cortex Area 25

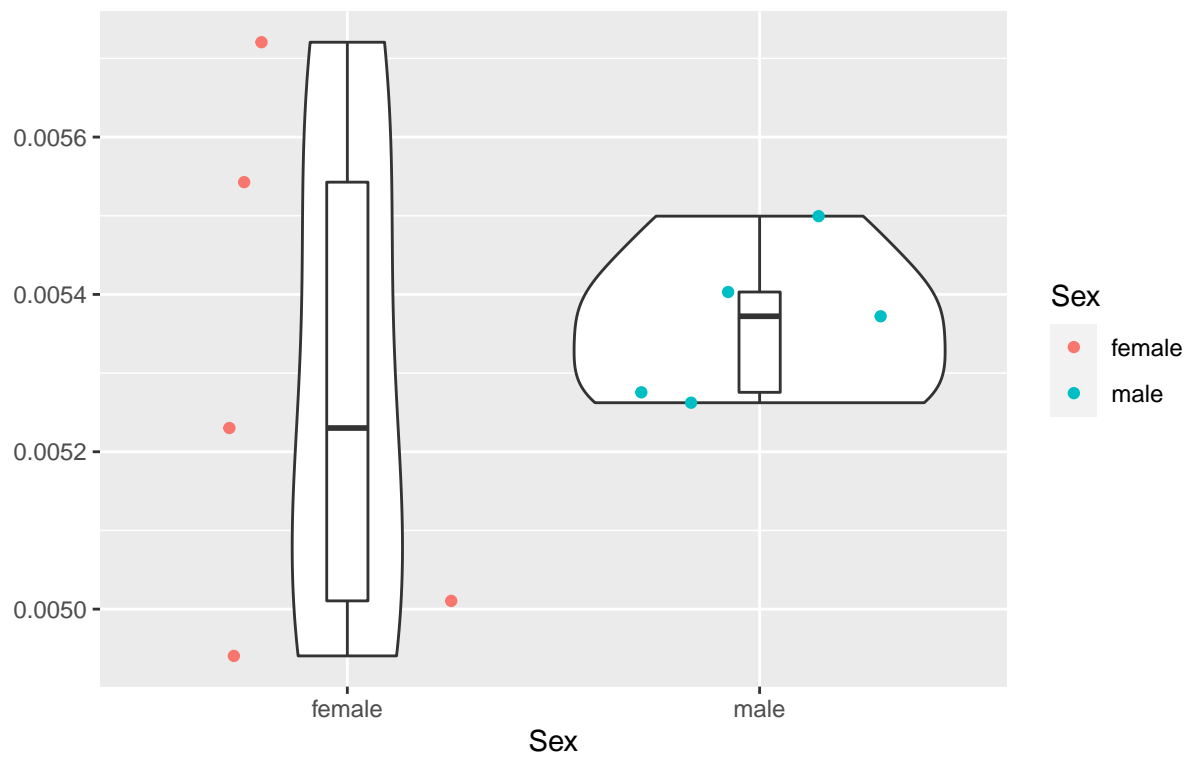
Red points denoting outliers



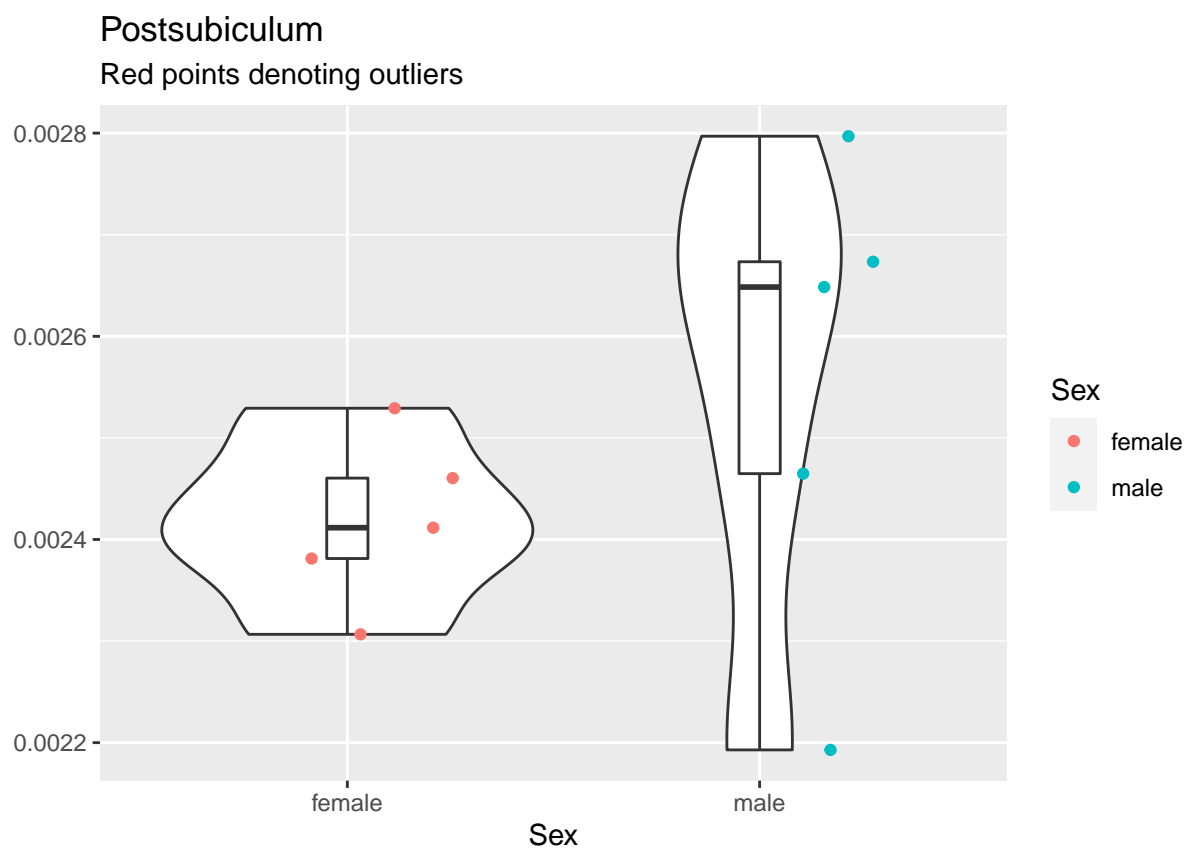
| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 3.700e-09 | 3.704e-09 | 0.212 | 0.657 |
| ## Residuals | 8 | 1.398e-07 | 1.747e-08 | | |

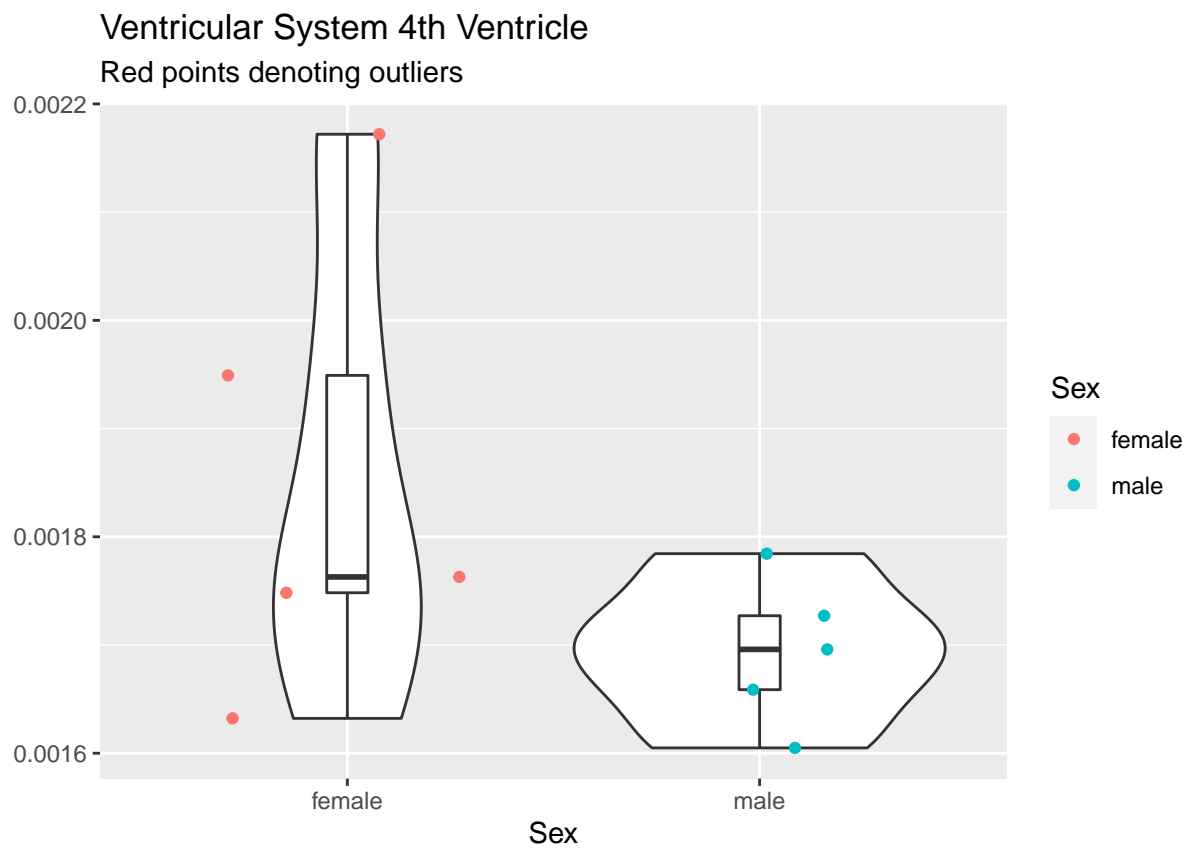
Dorsal Acoustic Stria

Red points denoting outliers

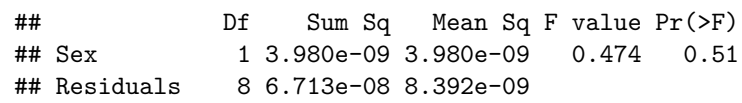


| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.360e-08 | 1.356e-08 | 0.221 | 0.651 |
| ## Residuals | 8 | 4.912e-07 | 6.140e-08 | | |



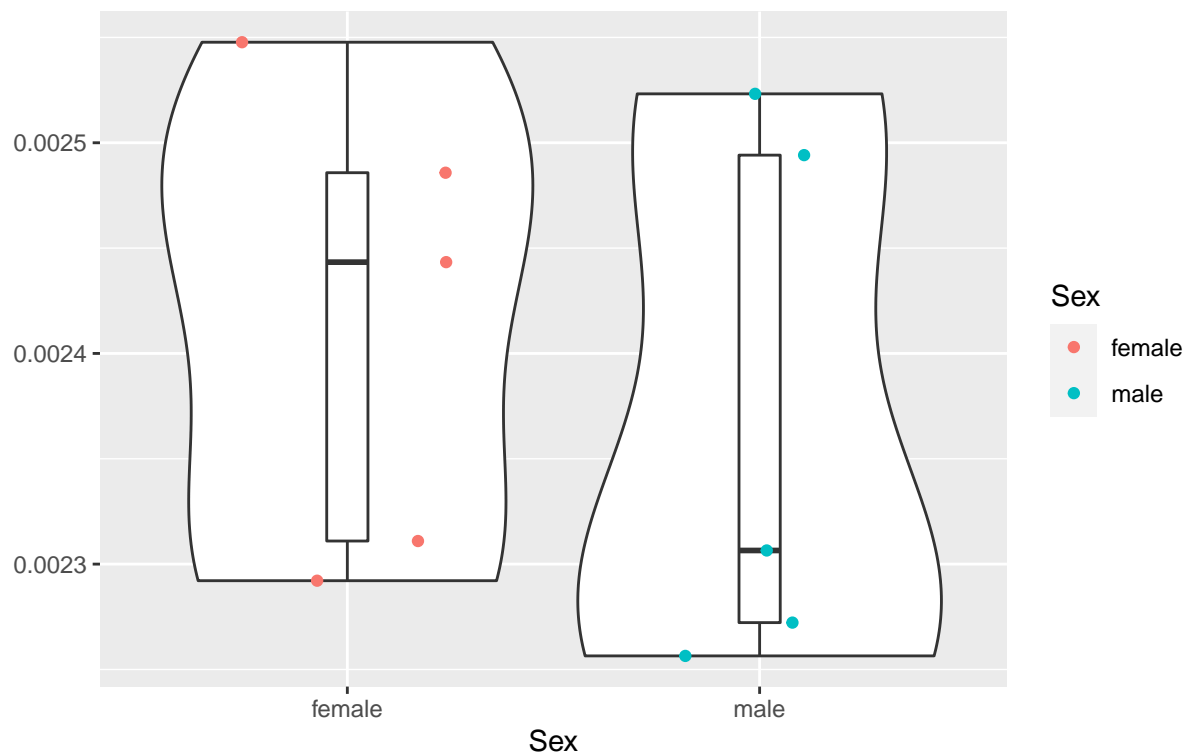


Red points denoting outliers



Pretectal Nucleus

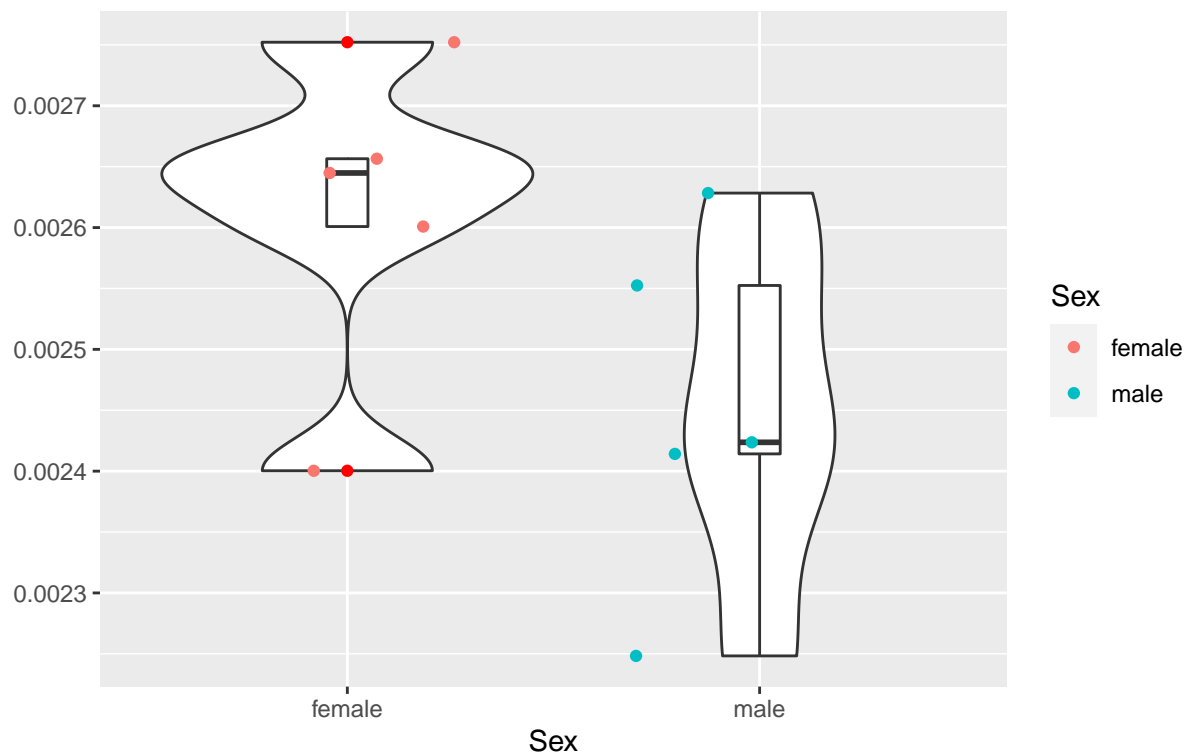
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 5.170e-09 | 5.173e-09 | 0.361 | 0.565 |
| ## Residuals | 8 | 1.147e-07 | 1.434e-08 | | |

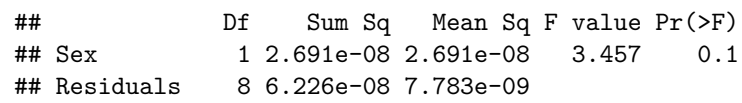
Latero Dorsal Thalamic Nucleus Ventro Lateral

Red points denoting outliers



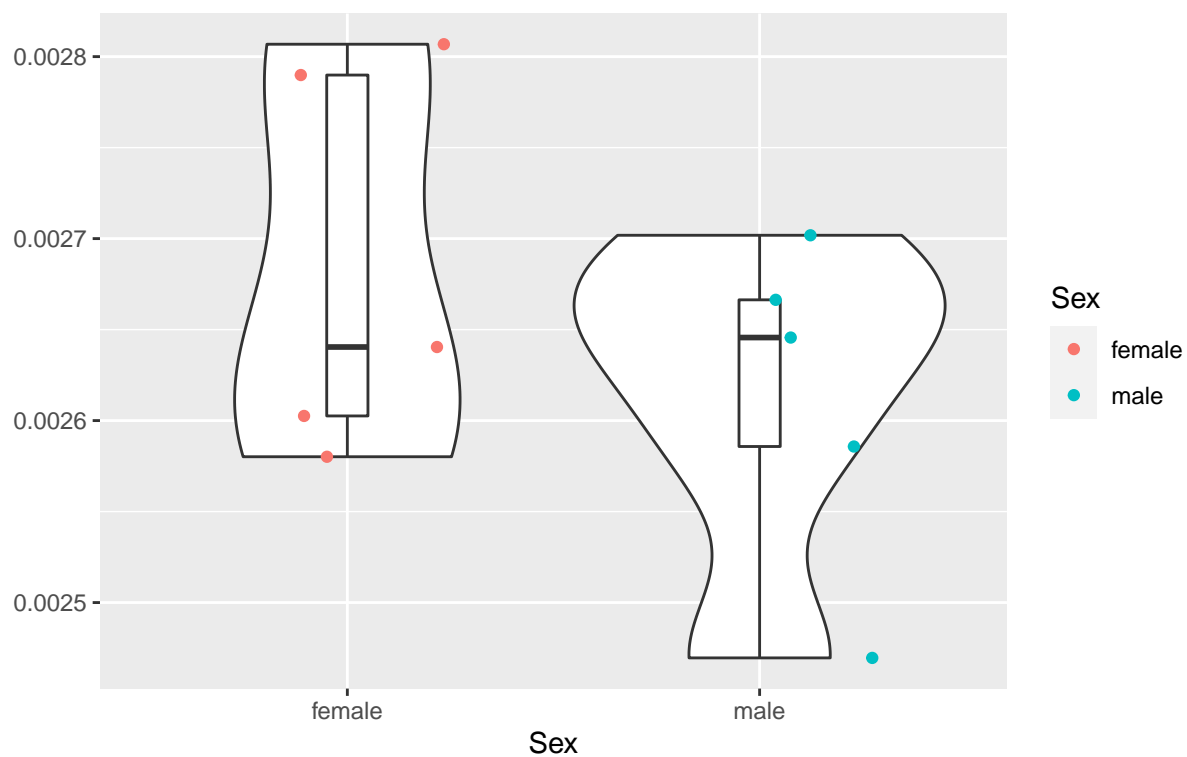
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 6.206e-08 | 6.206e-08 | 3.255 | 0.109 |
| ## Residuals | 8 | 1.525e-07 | 1.907e-08 | | |

Red points denoting outliers



Anterior Thalamic Nuclei

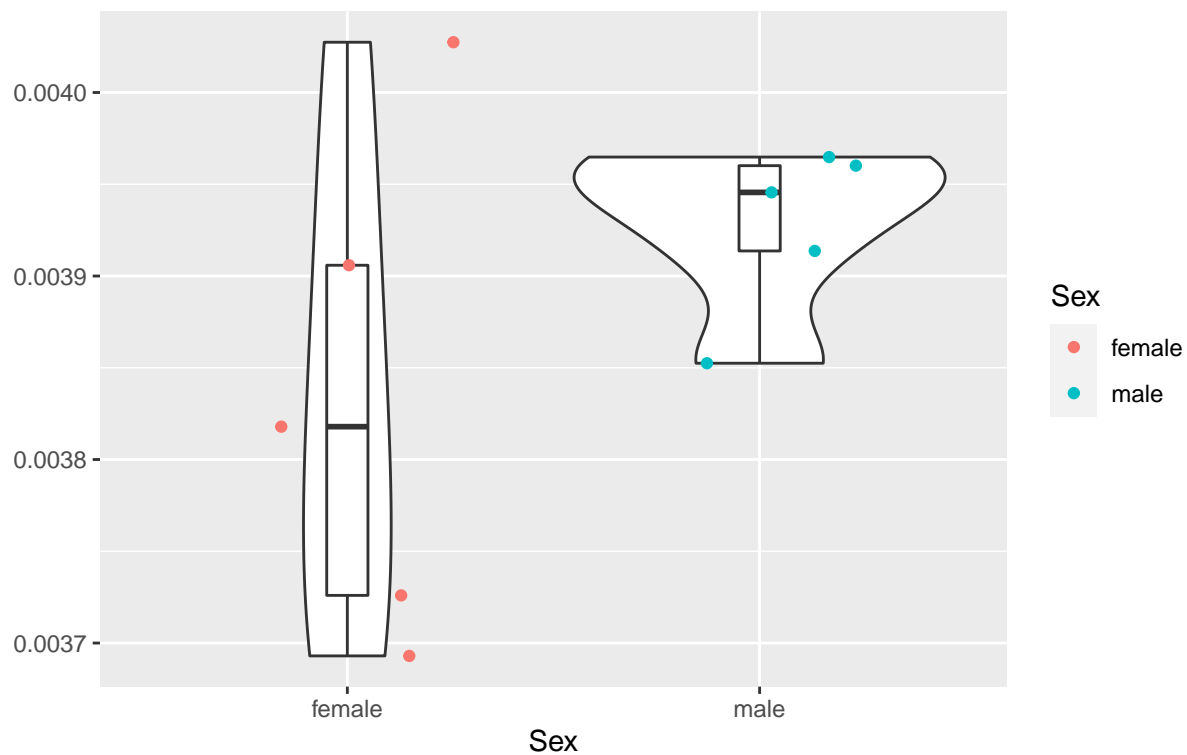
Red points denoting outliers



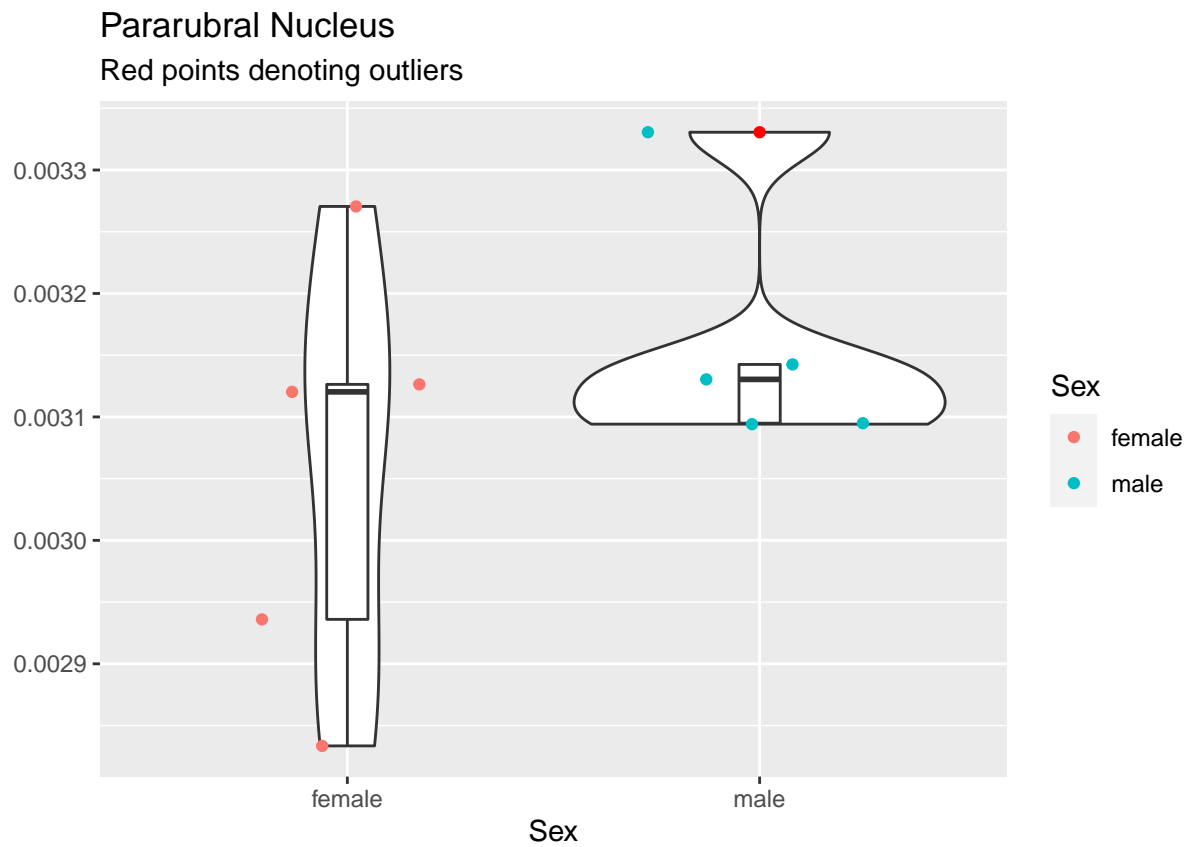
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.230e-08 | 1.230e-08 | 1.249 | 0.296 |
| ## Residuals | 8 | 7.873e-08 | 9.841e-09 | | |

Red Nucleus Magnocellular

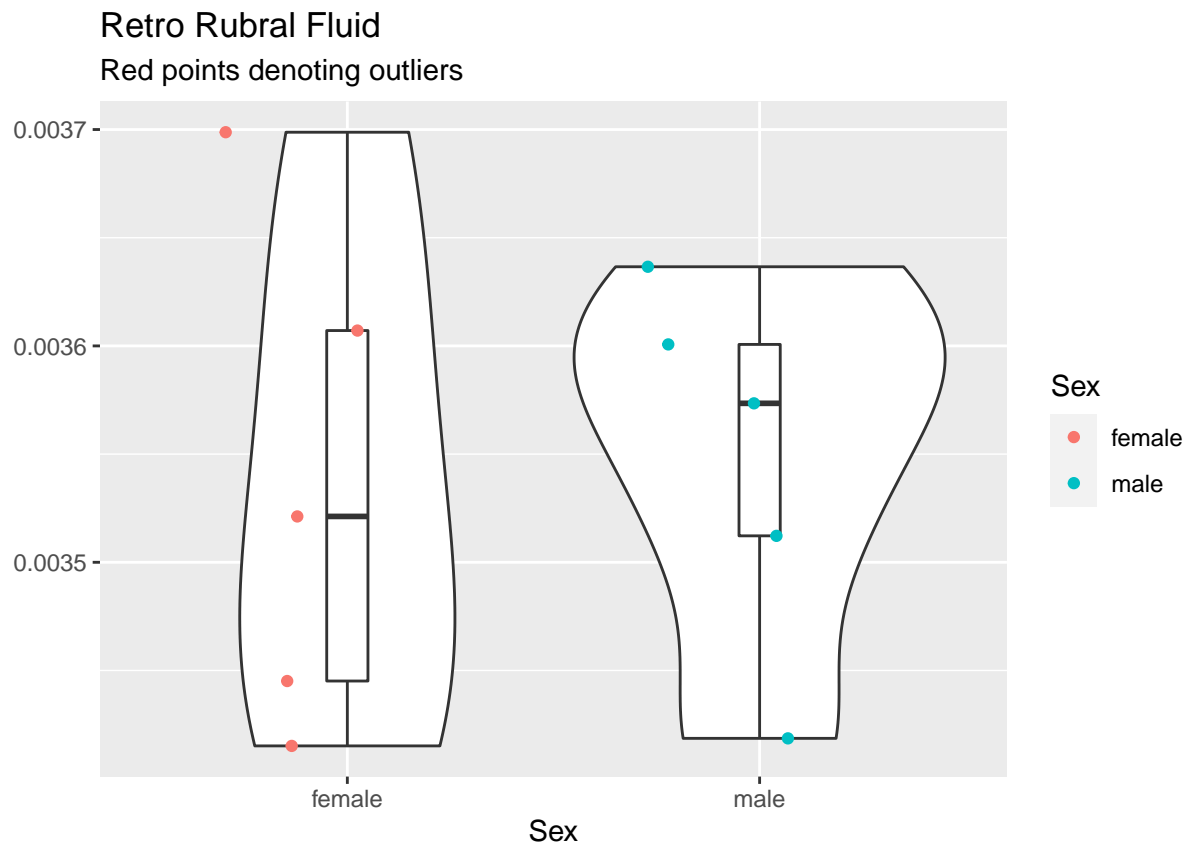
Red points denoting outliers

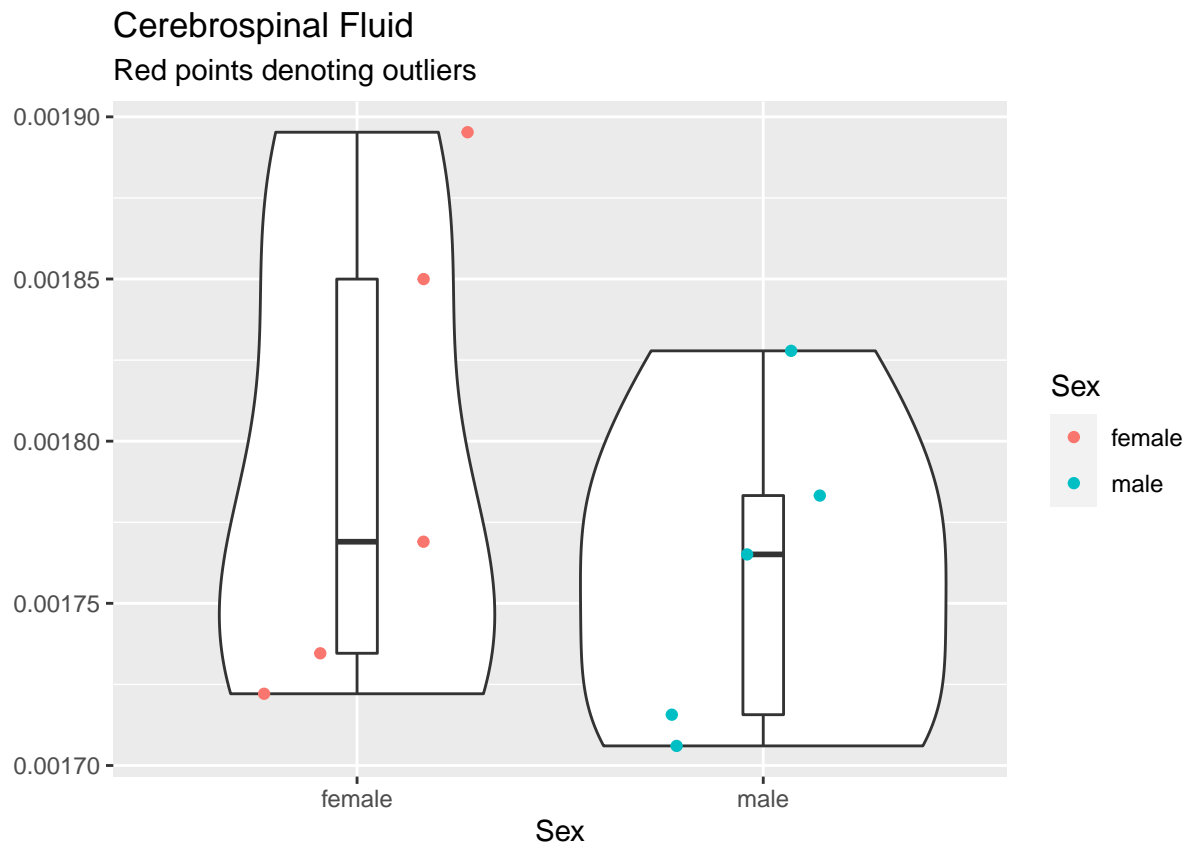


| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.176e-08 | 2.176e-08 | 2.098 | 0.186 |
| ## Residuals | 8 | 8.298e-08 | 1.037e-08 | | |



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 2.559e-08 | 2.559e-08 | 1.297 | 0.288 |
| ## Residuals | 8 | 1.578e-07 | 1.973e-08 | | |

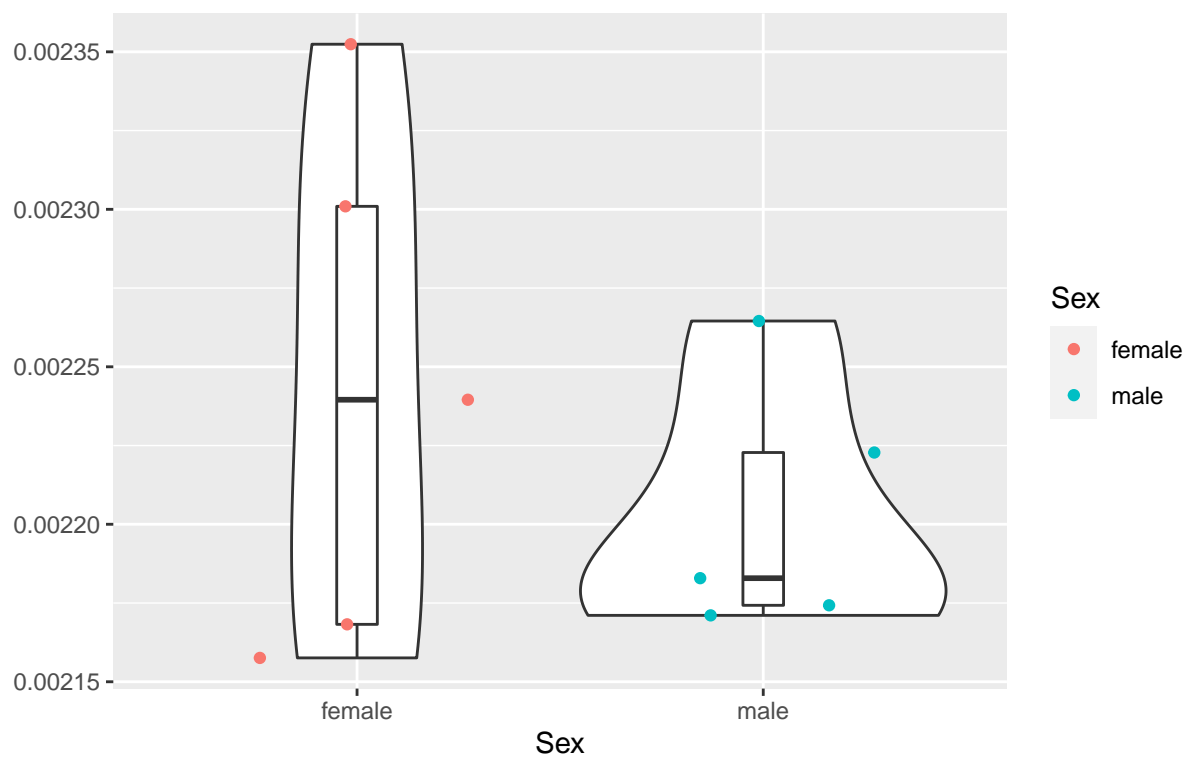




```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 3.000e-09 2.995e-09   0.732  0.417
## Residuals   8 3.275e-08 4.094e-09
```

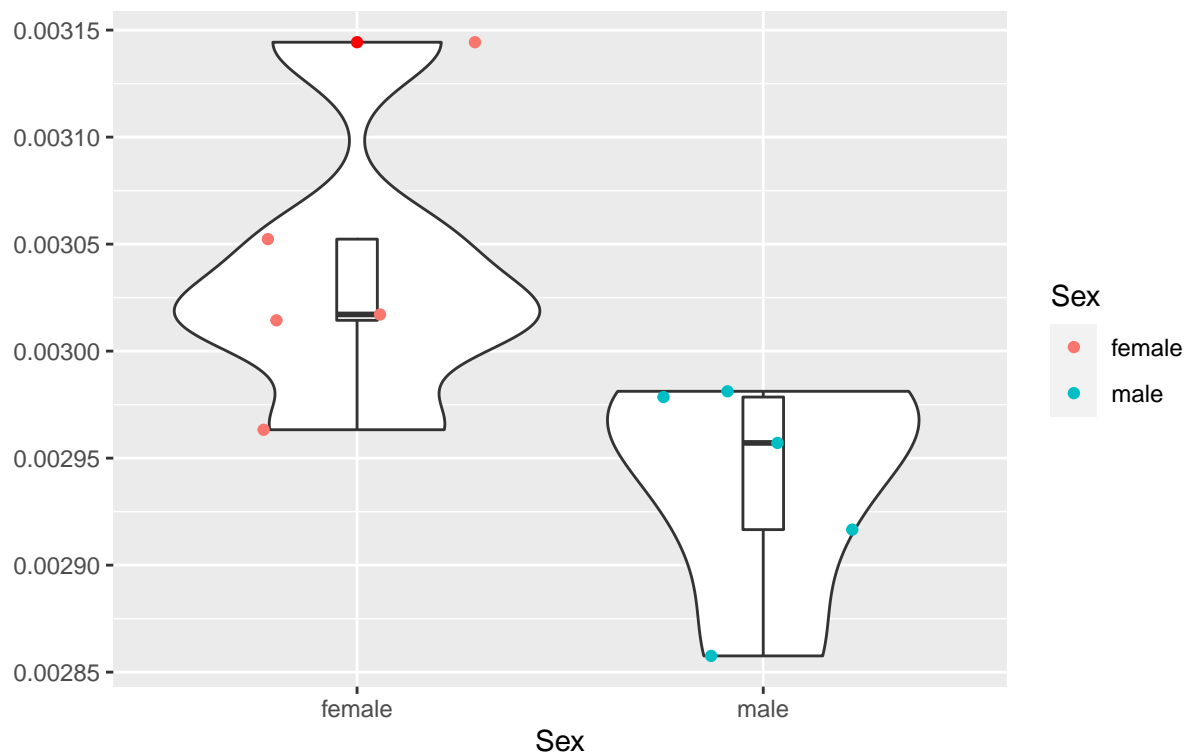
Intermediate Reticular Nucleus

Red points denoting outliers

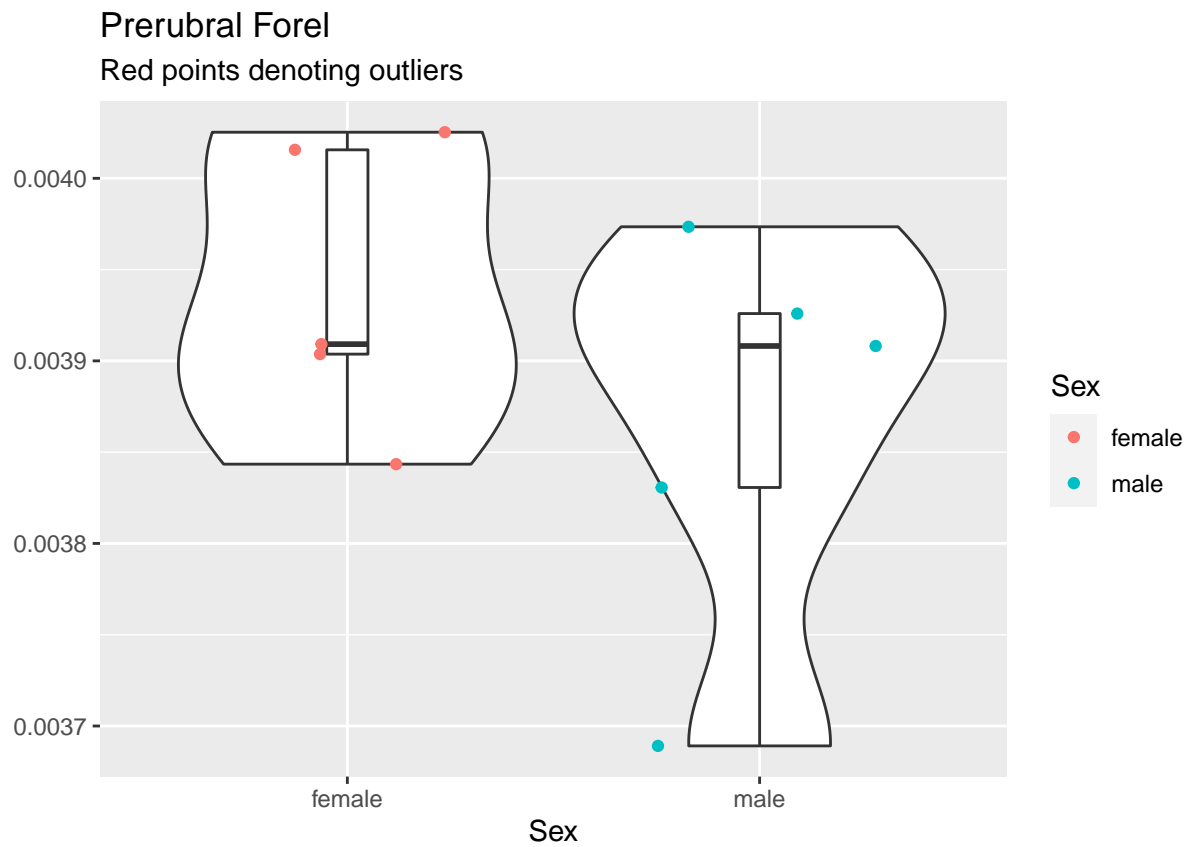


| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 4.130e-09 | 4.127e-09 | 0.953 | 0.358 |
| ## Residuals | 8 | 3.465e-08 | 4.332e-09 | | |

Posterior Dorsal Paraventricular Medial Parvicellular Posterior Lateral Hypothalamus
 Red points denoting outliers

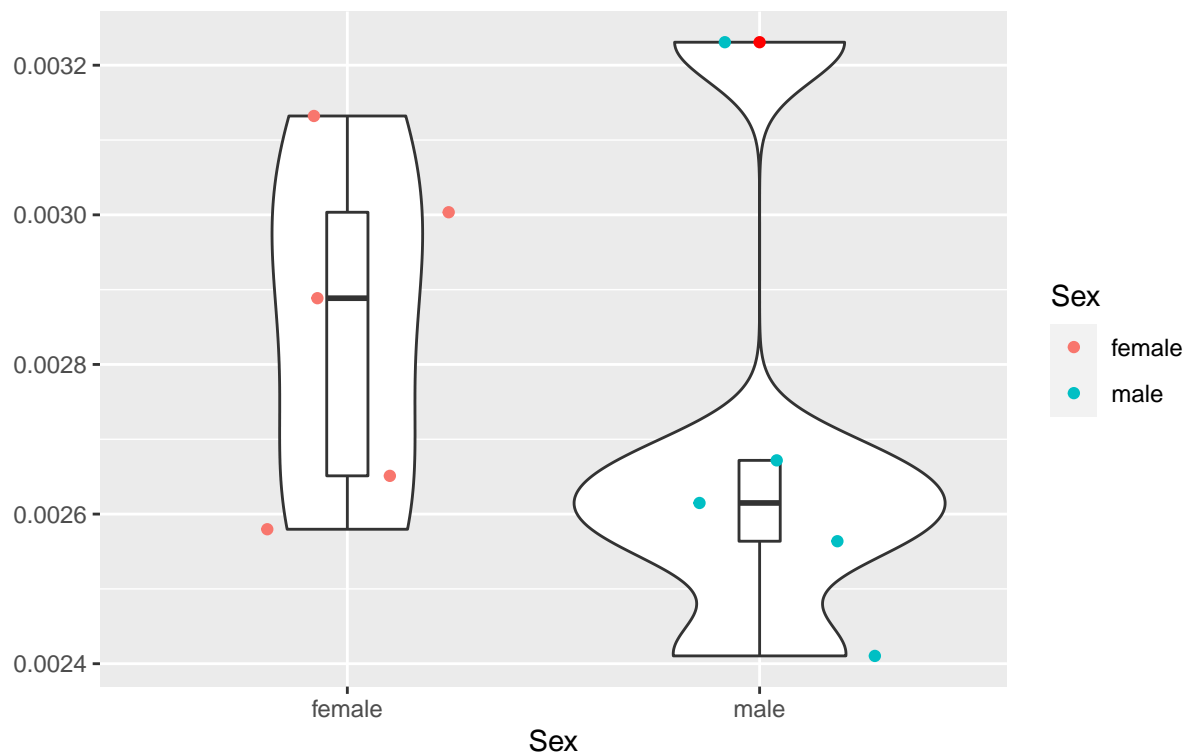


```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 2.504e-08 2.504e-08   6.933  0.03 *
## Residuals    8 2.889e-08 3.611e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

PVG of Hypothalamus

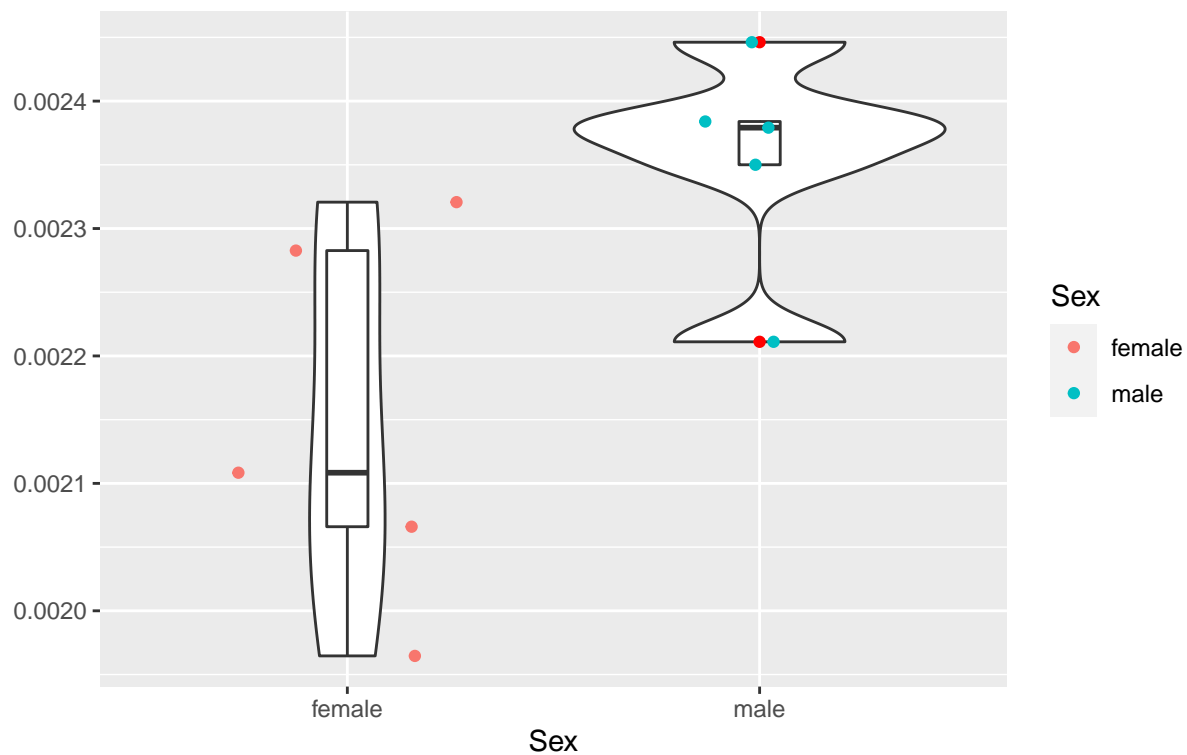
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 5.830e-08 | 5.828e-08 | 0.765 | 0.407 |
| ## Residuals | 8 | 6.093e-07 | 7.617e-08 | | |

Basal Lateral Amygdala

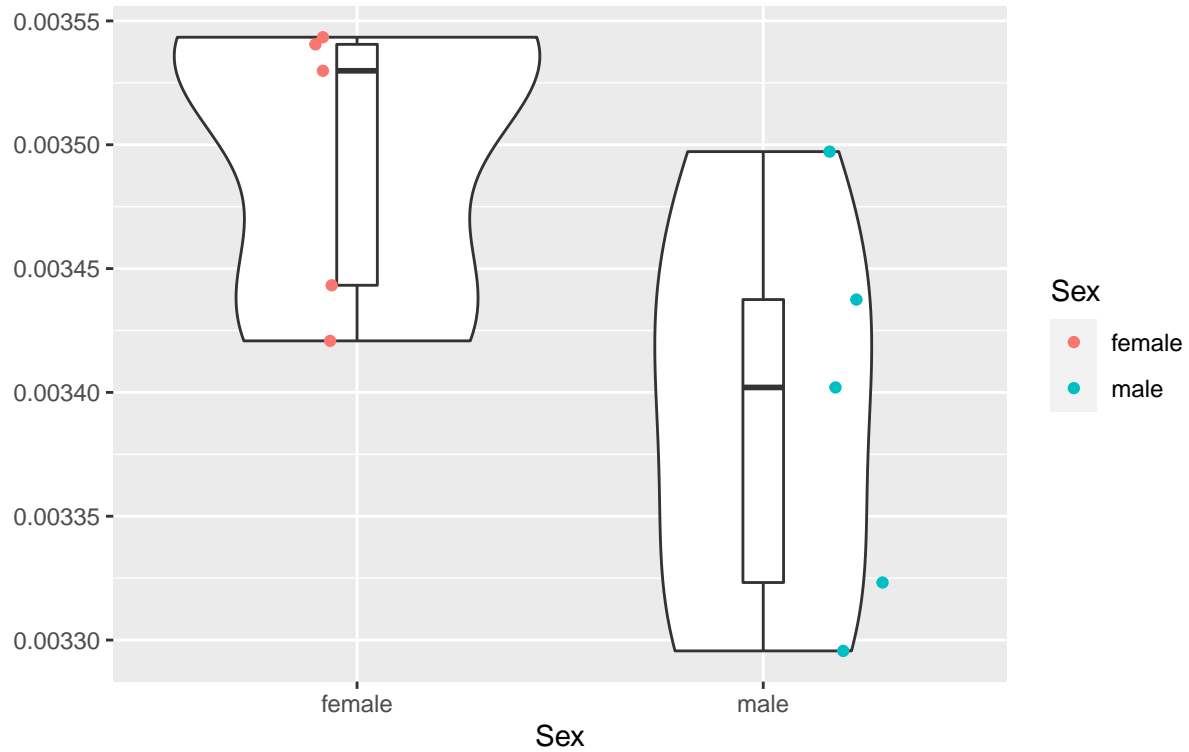
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.057e-07 1.057e-07   7.026 0.0292 *
## Residuals    8 1.204e-07 1.505e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

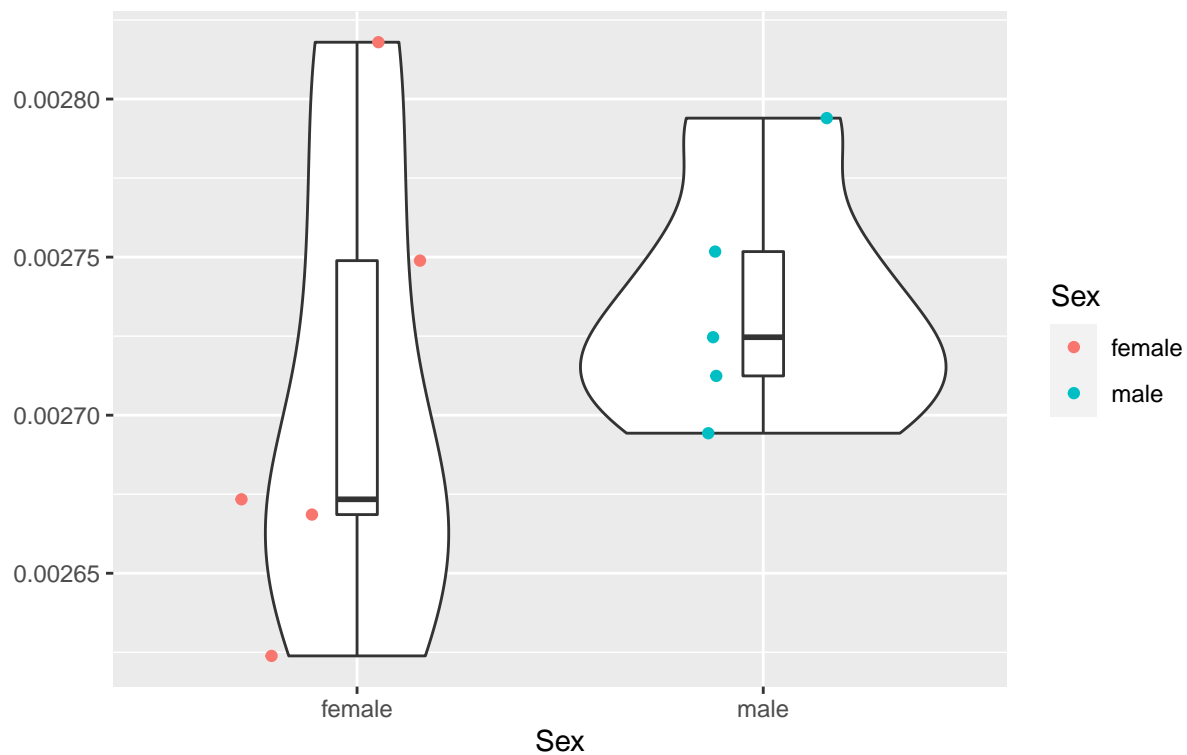
Brain Stem Rest

Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 2.728e-08 2.728e-08   5.314 0.0501 .
## Residuals    8 4.106e-08 5.133e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

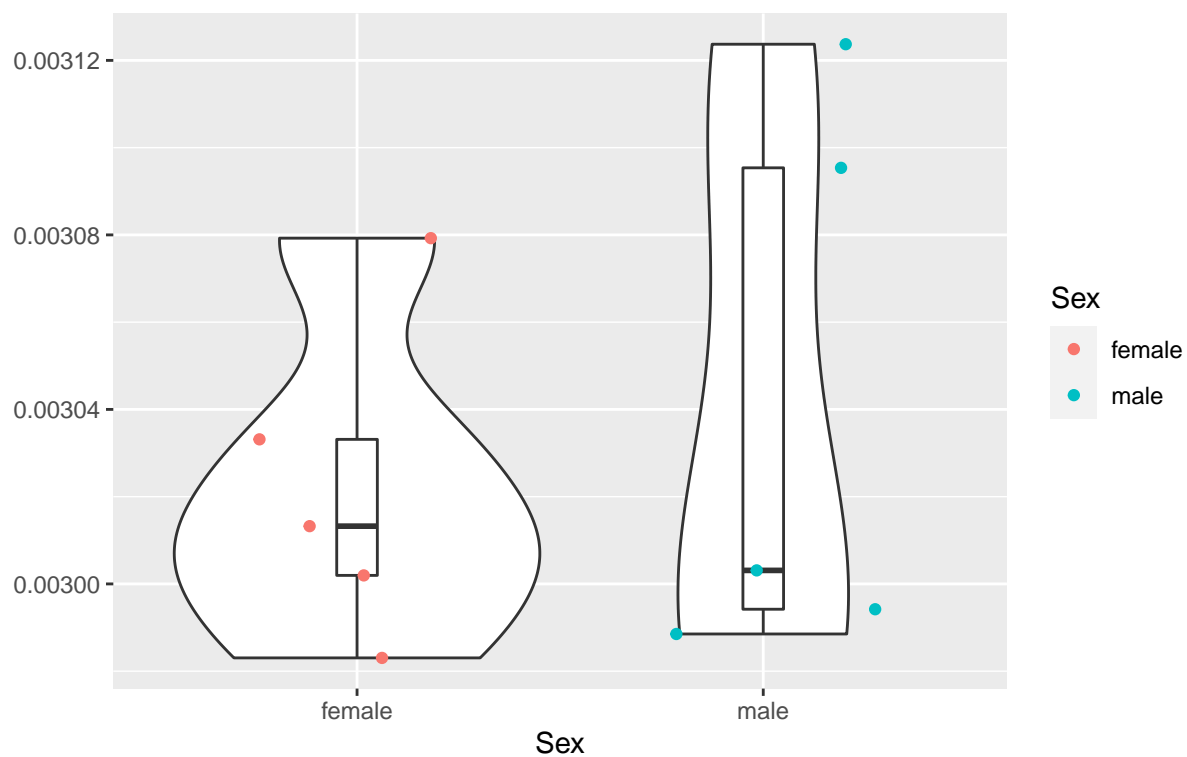
Precuneiform Nucleus Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.086e-09 | 2.086e-09 | 0.563 | 0.474 |
| ## Residuals | 8 | 2.962e-08 | 3.702e-09 | | |

Cuneiform Nucleus

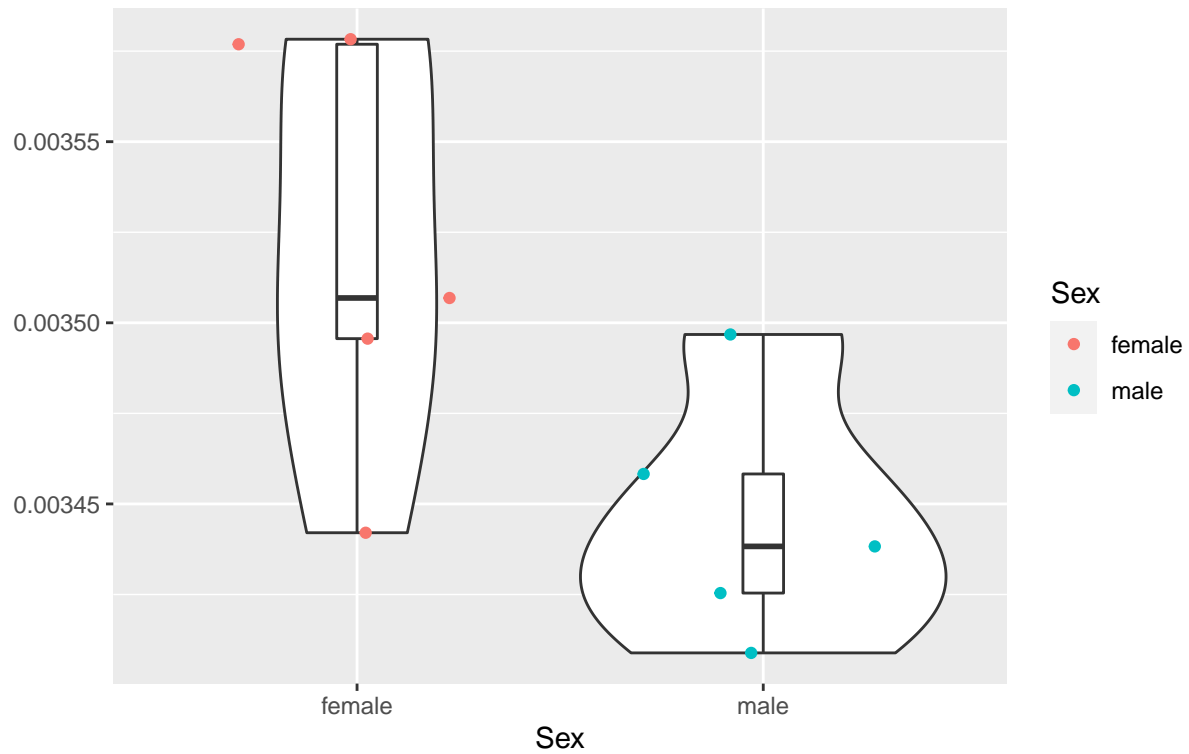
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 8.890e-10 | 8.887e-10 | 0.33 | 0.582 |
| ## Residuals | 8 | 2.157e-08 | 2.697e-09 | | |

Midbrain Linear Nucleus

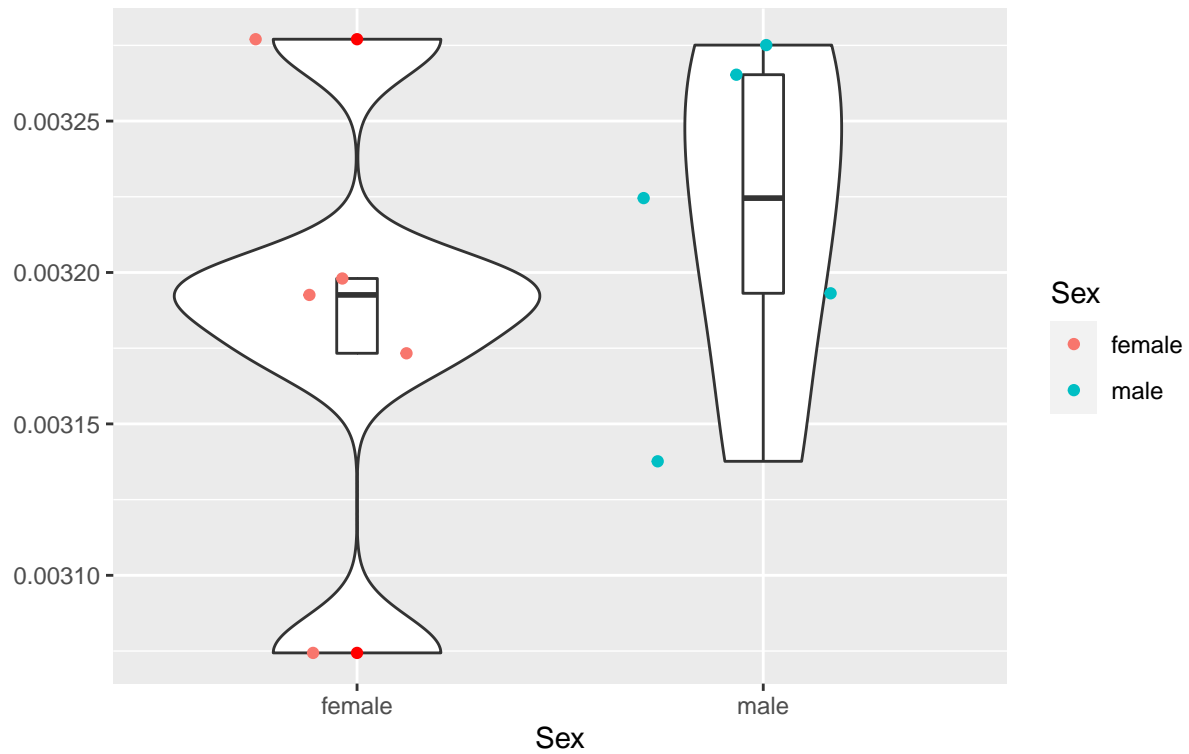
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex       1 1.385e-08 1.385e-08   6.131 0.0383 *
## Residuals 8 1.807e-08 2.259e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Midbrain Reticular Nucleus

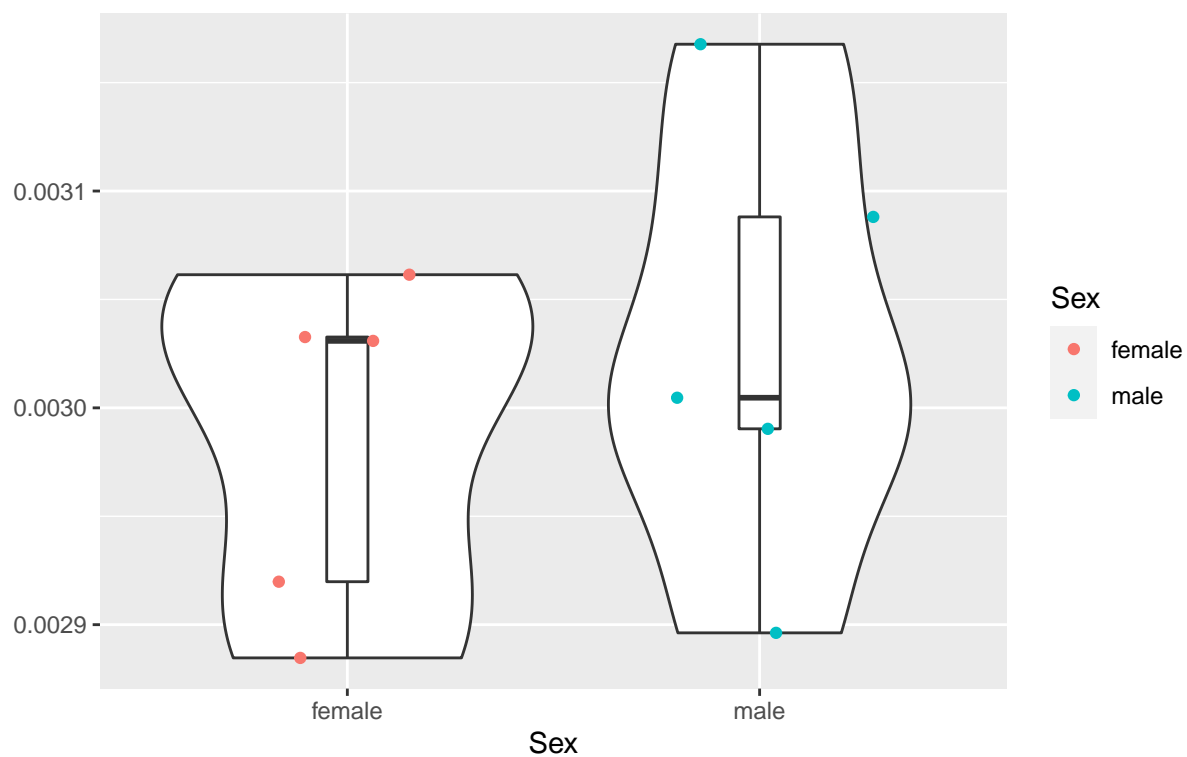
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 3.250e-09 | 3.255e-09 | 0.774 | 0.405 |
| ## Residuals | 8 | 3.366e-08 | 4.208e-09 | | |

Red Nucleus Parvicellular

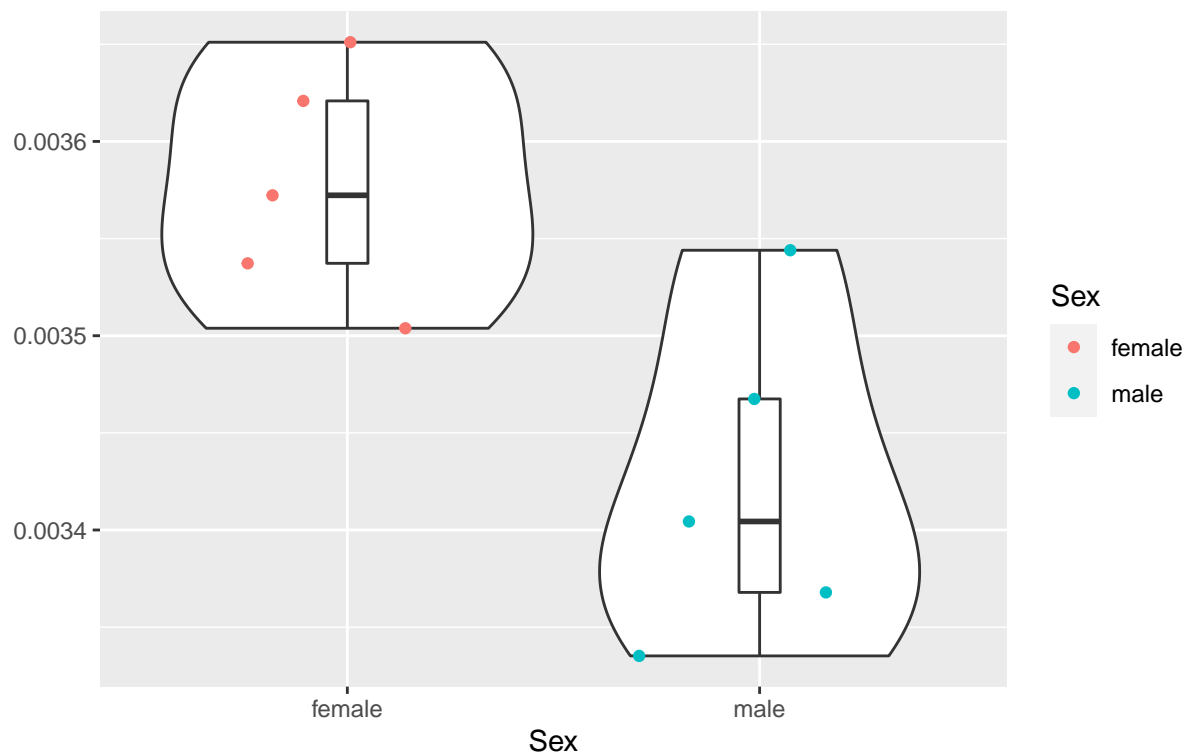
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 4.730e-09 | 4.733e-09 | 0.565 | 0.474 |
| ## Residuals | 8 | 6.697e-08 | 8.371e-09 | | |

Substantia Nigra

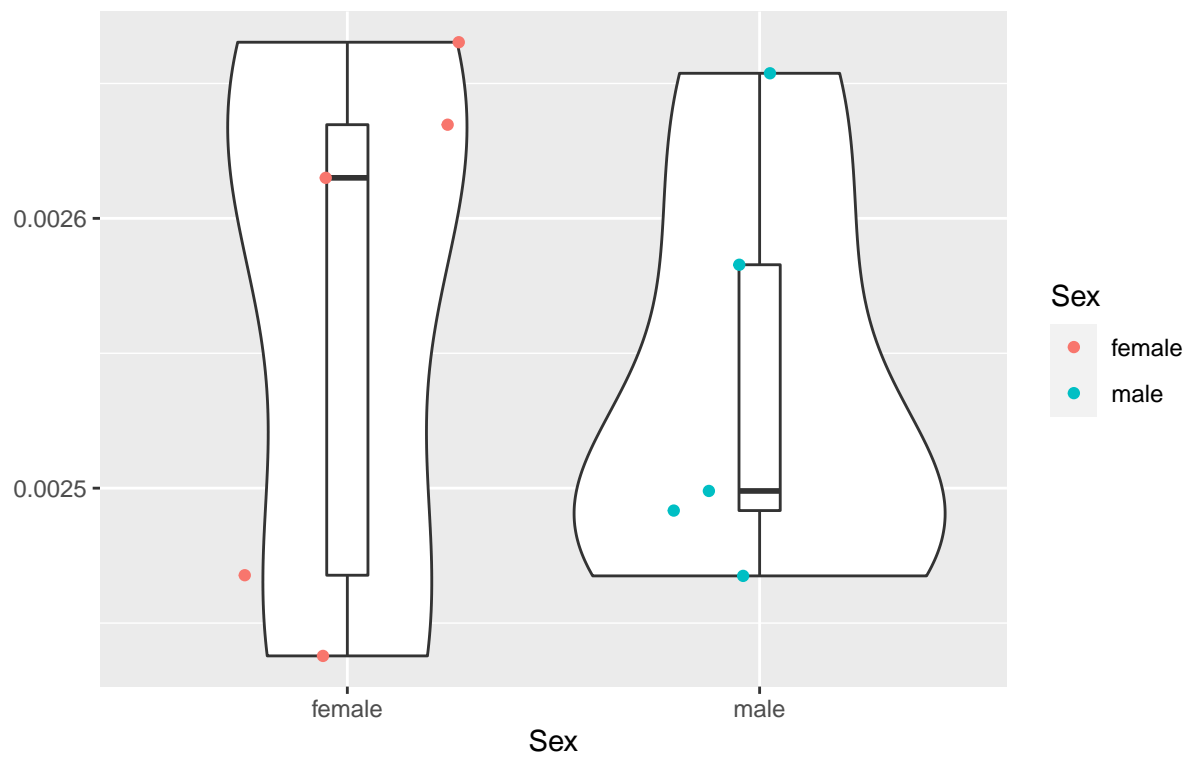
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 5.873e-08 5.873e-08   11.17 0.0102 *
## Residuals    8 4.207e-08 5.260e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Inferior Colliculus

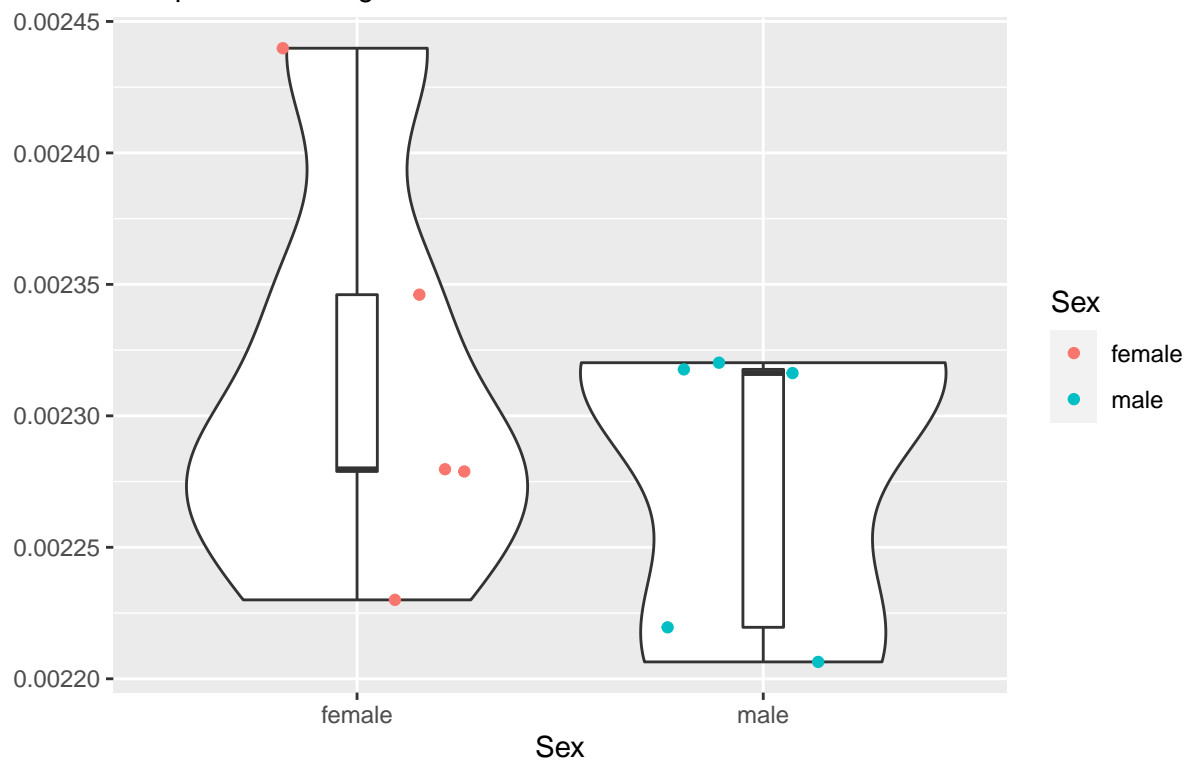
Red points denoting outliers



| | | | | | |
|--------------|----|----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.58e-09 | 1.584e-09 | 0.189 | 0.675 |
| ## Residuals | 8 | 6.71e-08 | 8.388e-09 | | |

Superior Colliculus

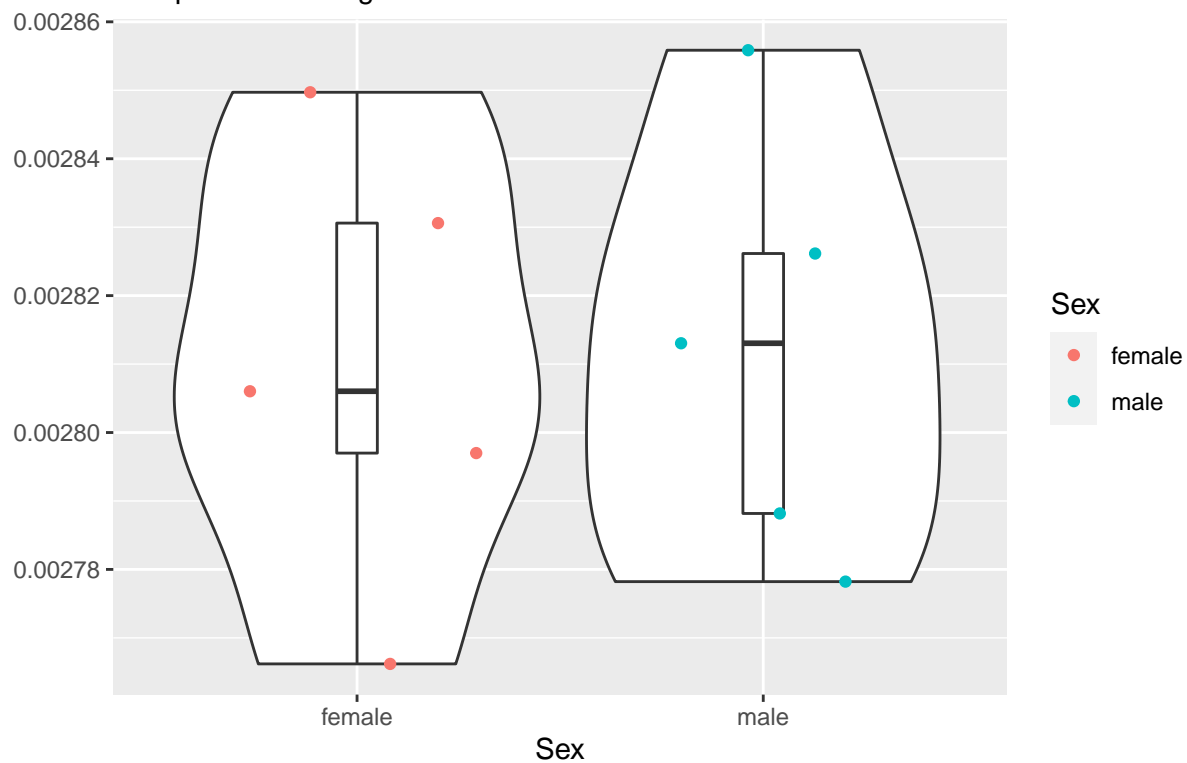
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 3.780e-09 | 3.777e-09 | 0.762 | 0.408 |
| ## Residuals | 8 | 3.966e-08 | 4.958e-09 | | |

Deep Mesencephalic Nuclei

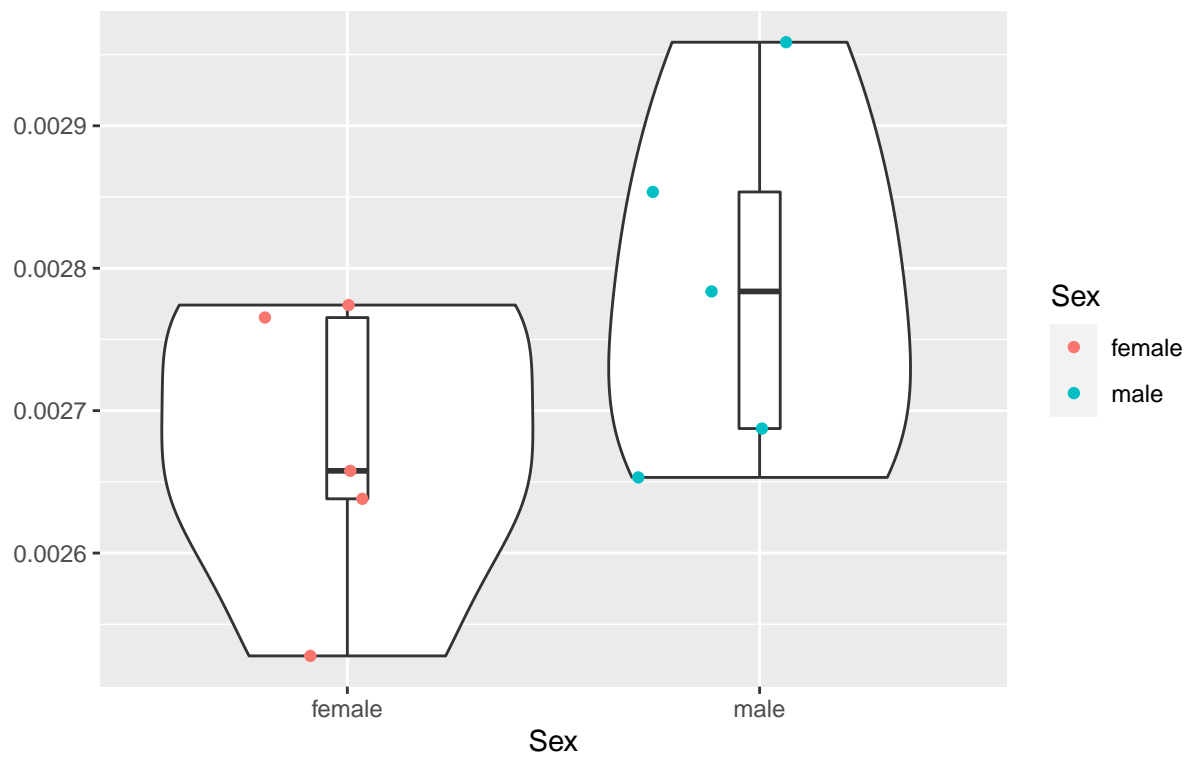
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.400e-11 | 1.420e-11 | 0.014 | 0.908 |
| ## Residuals | 8 | 7.938e-09 | 9.922e-10 | | |

Subbrachial Nucleus and Peripeduncular Nucleus

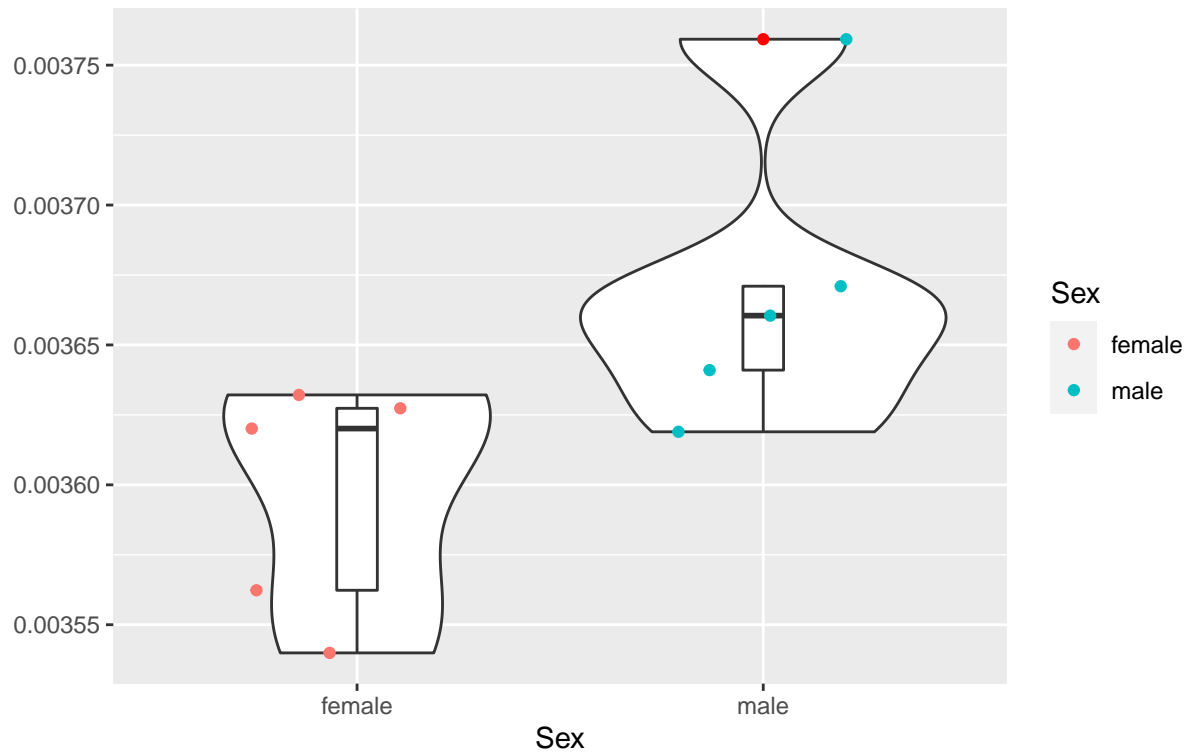
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 3.287e-08 | 3.287e-08 | 2.552 | 0.149 |
| ## Residuals | 8 | 1.030e-07 | 1.288e-08 | | |

Reticular Nucleus of Thalamus

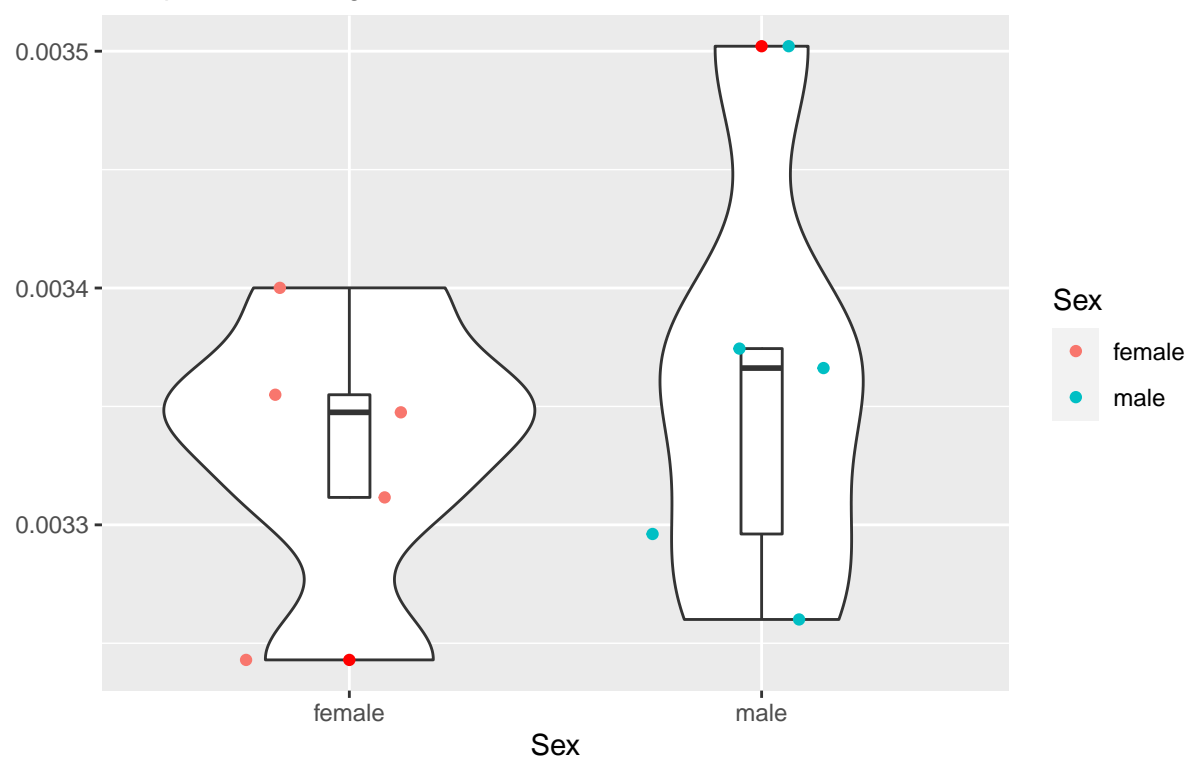
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.360e-08 1.360e-08   5.834 0.0422 *
## Residuals    8 1.865e-08 2.332e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Zona Incerta

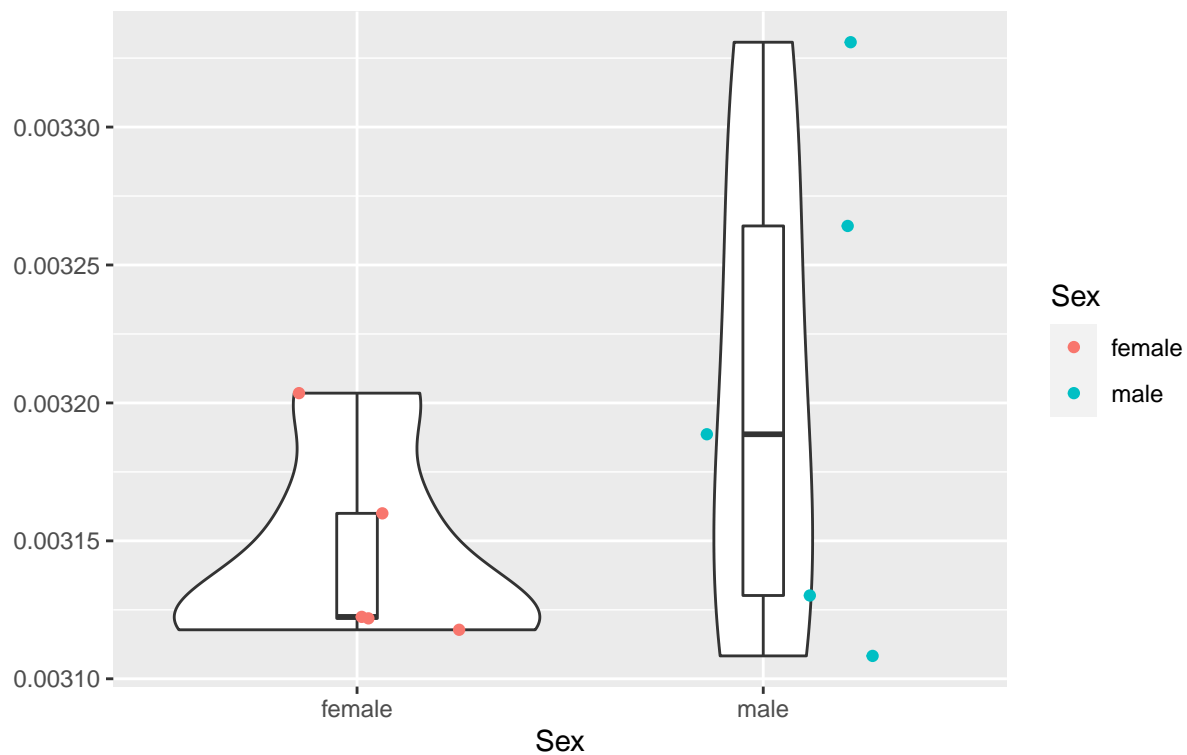
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.010e-09 | 2.012e-09 | 0.334 | 0.579 |
| ## Residuals | 8 | 4.825e-08 | 6.031e-09 | | |

Lateral Geniculate Nucleus

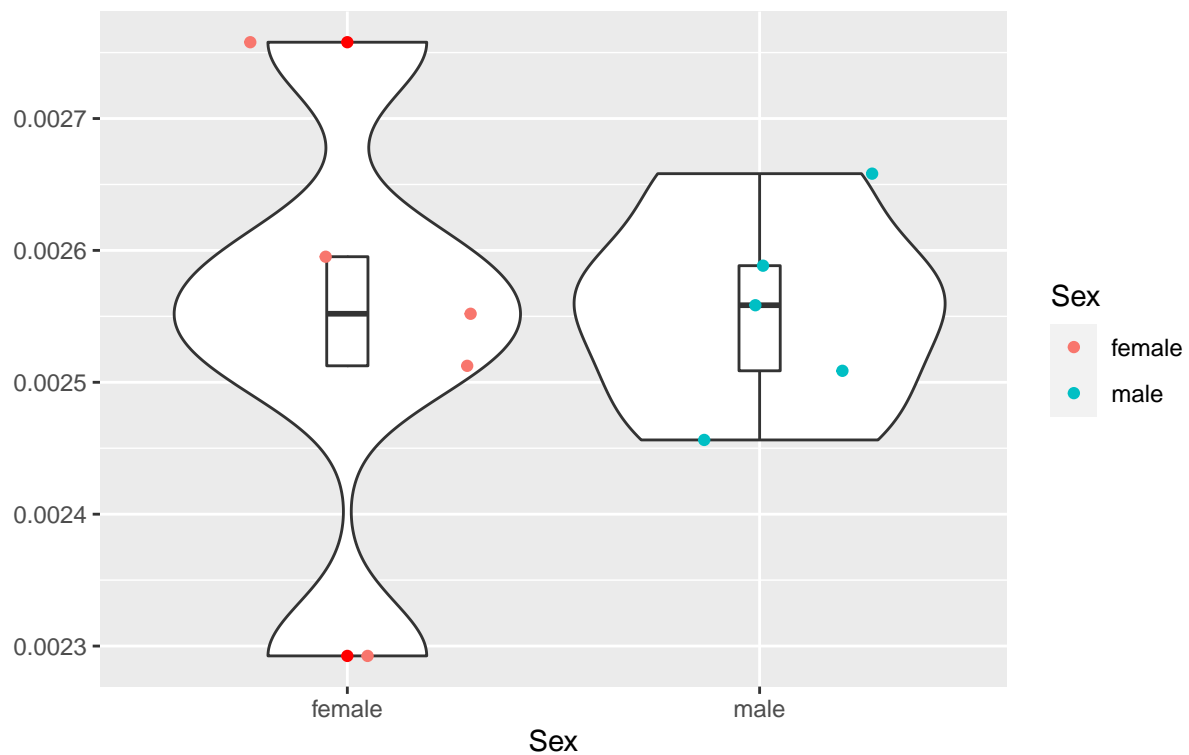
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 8.790e-09 | 8.786e-09 | 1.759 | 0.221 |
| ## Residuals | 8 | 3.996e-08 | 4.996e-09 | | |

Medial Geniculate Nucleus

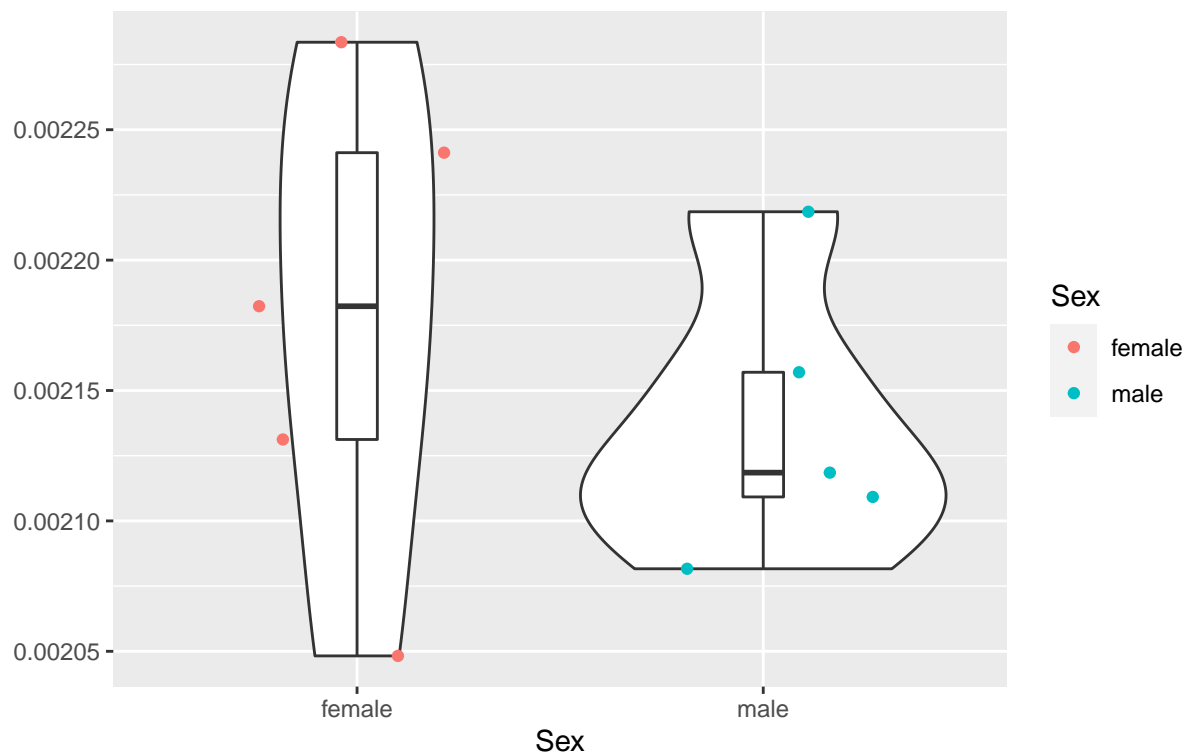
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 3.600e-10 | 3.600e-10 | 0.021 | 0.888 |
| ## Residuals | 8 | 1.363e-07 | 1.704e-08 | | |

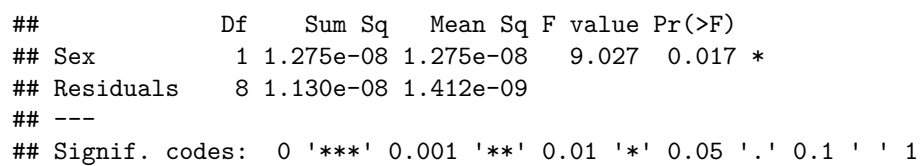
Latero Dorsal Nucleus of Thalamus

Red points denoting outliers



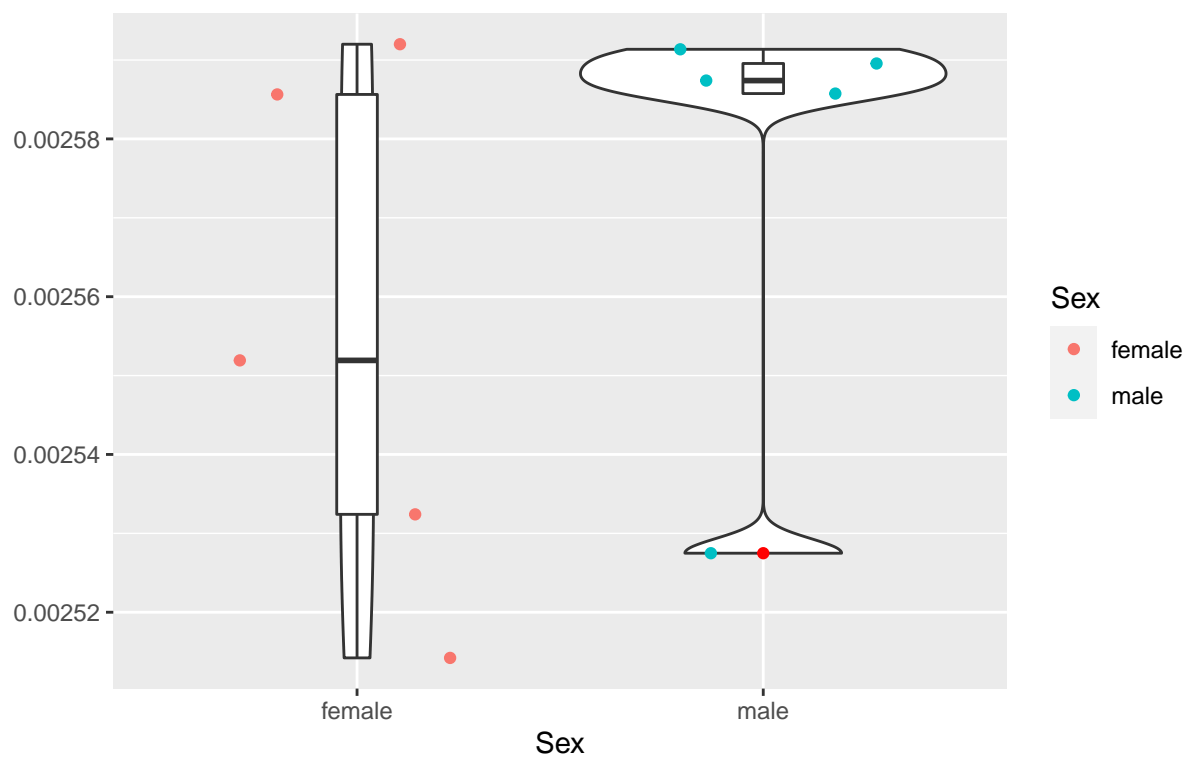
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 4.070e-09 | 4.066e-09 | 0.716 | 0.422 |
| ## Residuals | 8 | 4.541e-08 | 5.676e-09 | | |

Red points denoting outliers



Thalamus Rest

Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.110e-09 | 1.110e-09 | 1.186 | 0.308 |
| ## Residuals | 8 | 7.489e-09 | 9.361e-10 | | |

Ventral Tegmental Area

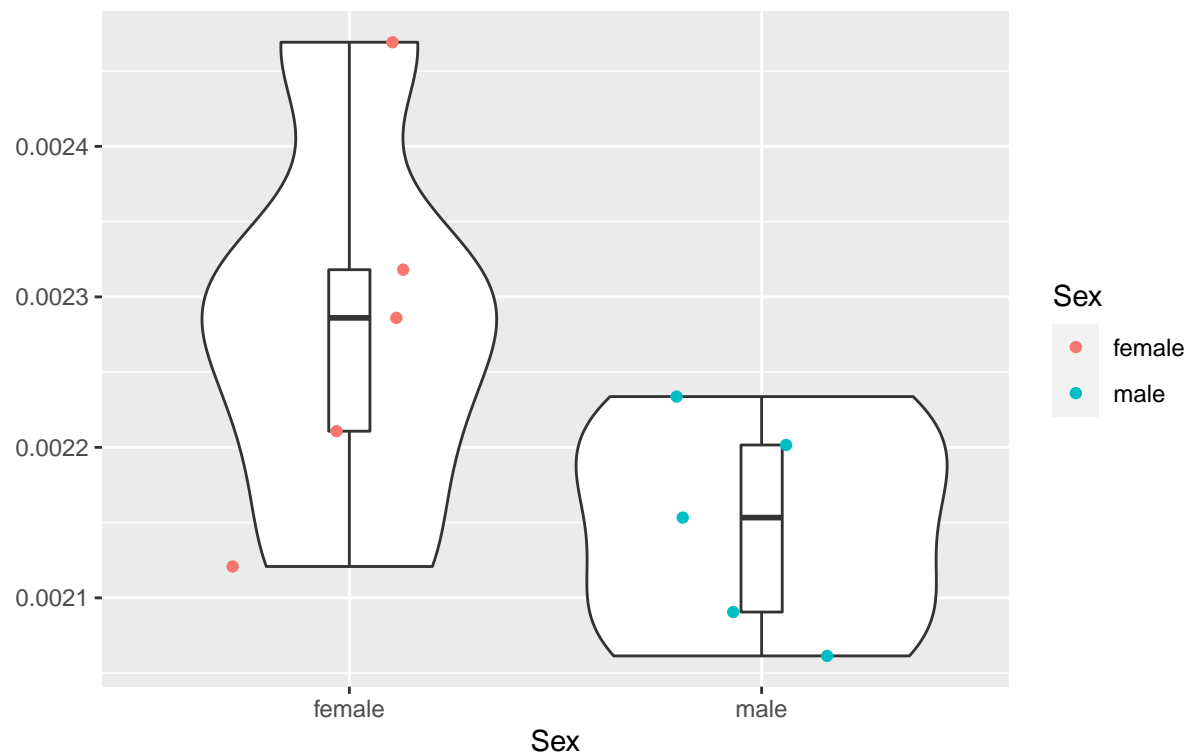
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.682e-08 | 1.683e-08 | 3.007 | 0.121 |
| ## Residuals | 8 | 4.476e-08 | 5.594e-09 | | |

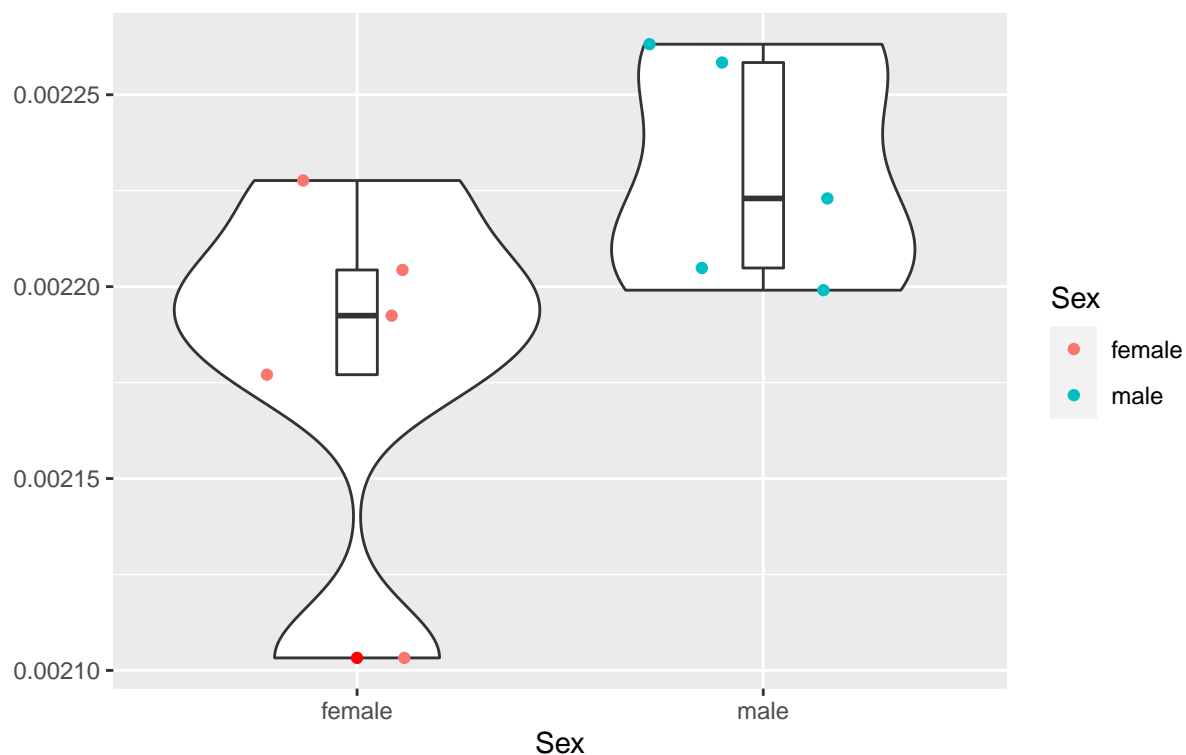
Anterior Pretectal Nucleus

Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 4.412e-08 4.412e-08   3.991 0.0808 .
## Residuals    8 8.845e-08 1.106e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

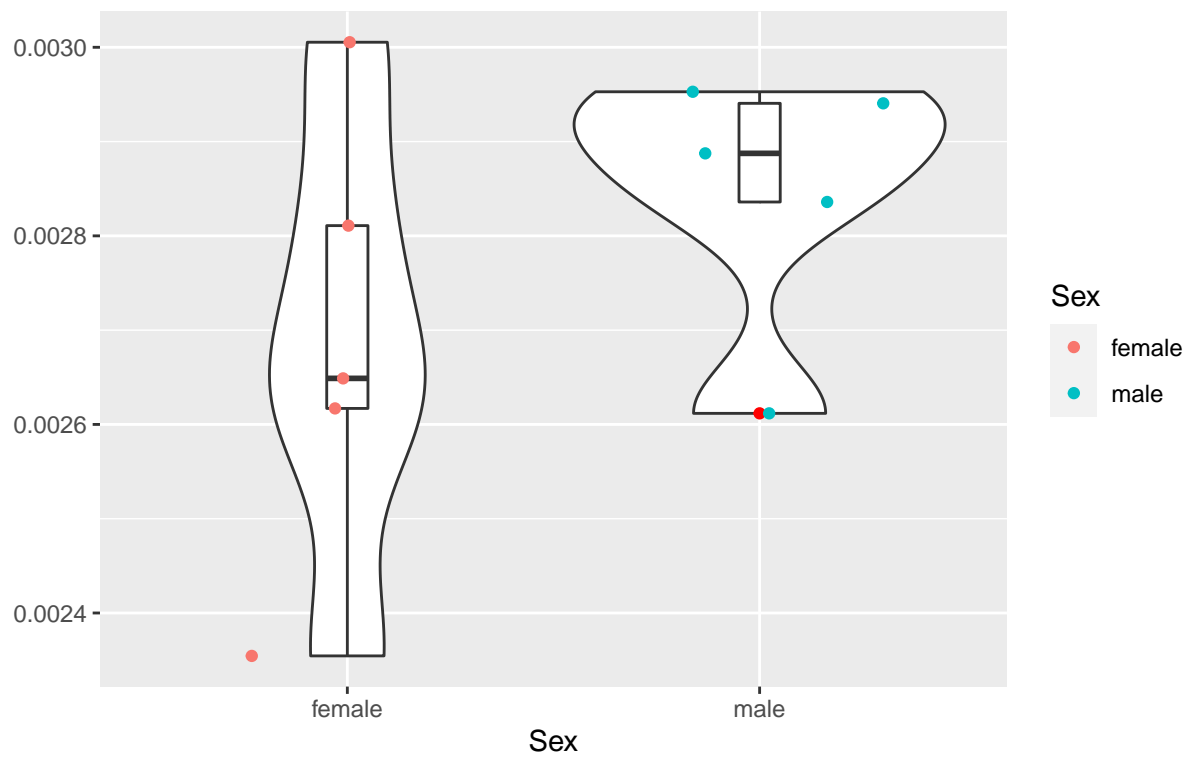
Periaqueductal Grey Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 5.940e-09 5.940e-09   3.816 0.0865 .
## Residuals    8 1.245e-08 1.557e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

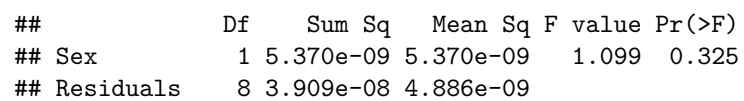

Ventral Pallidum

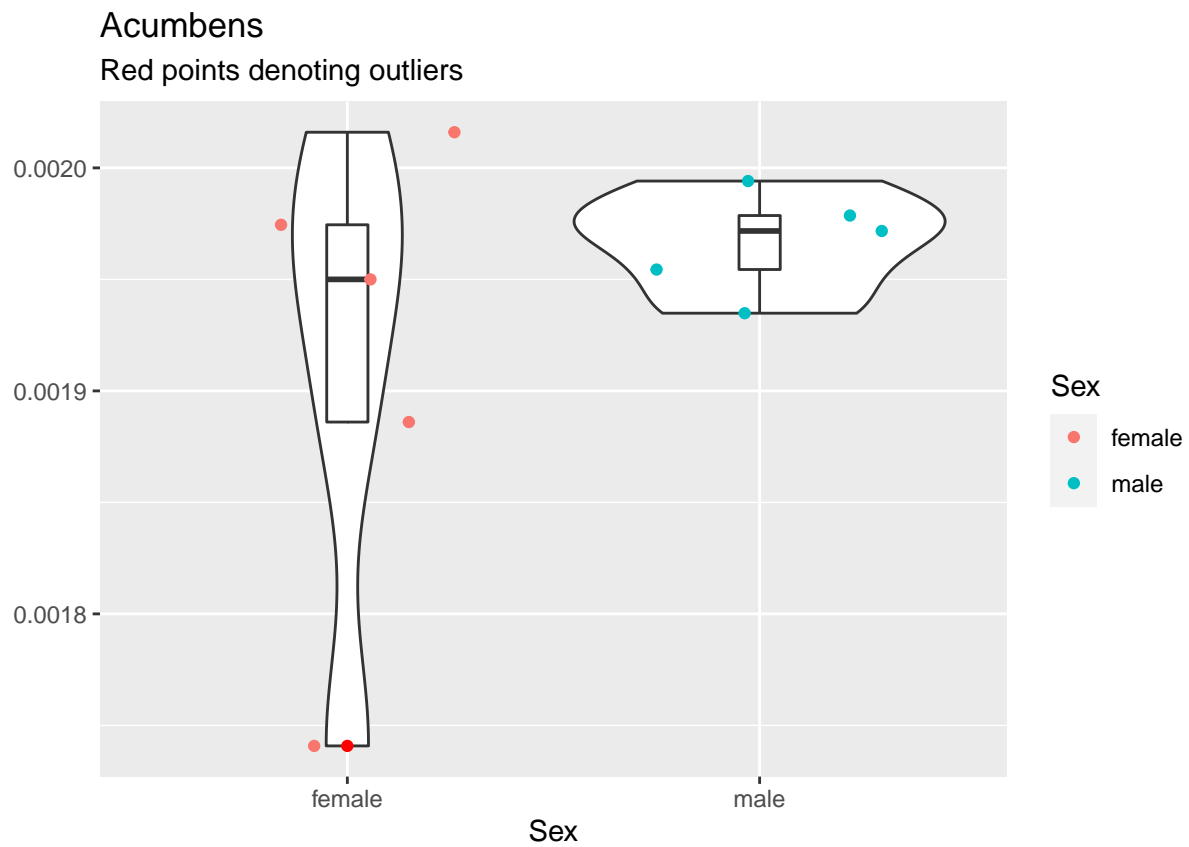
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 6.274e-08 | 6.274e-08 | 1.615 | 0.239 |
| ## Residuals | 8 | 3.107e-07 | 3.884e-08 | | |

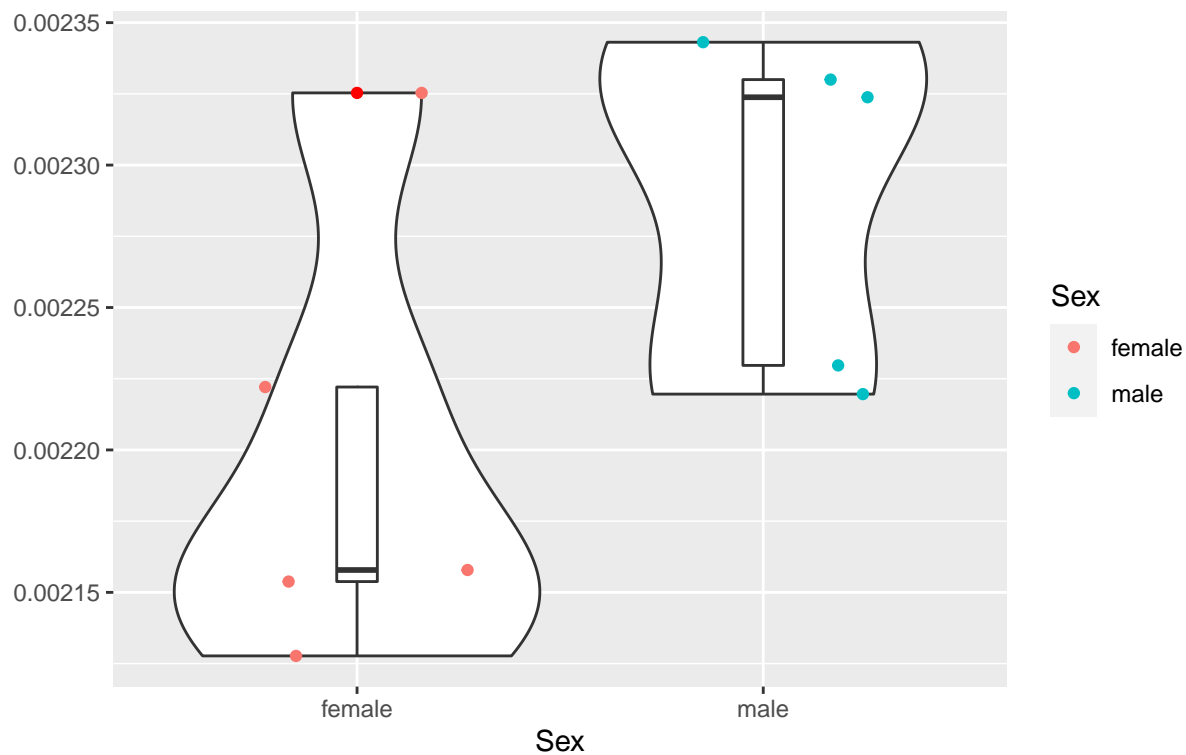
Red points denoting outliers





Amygdala

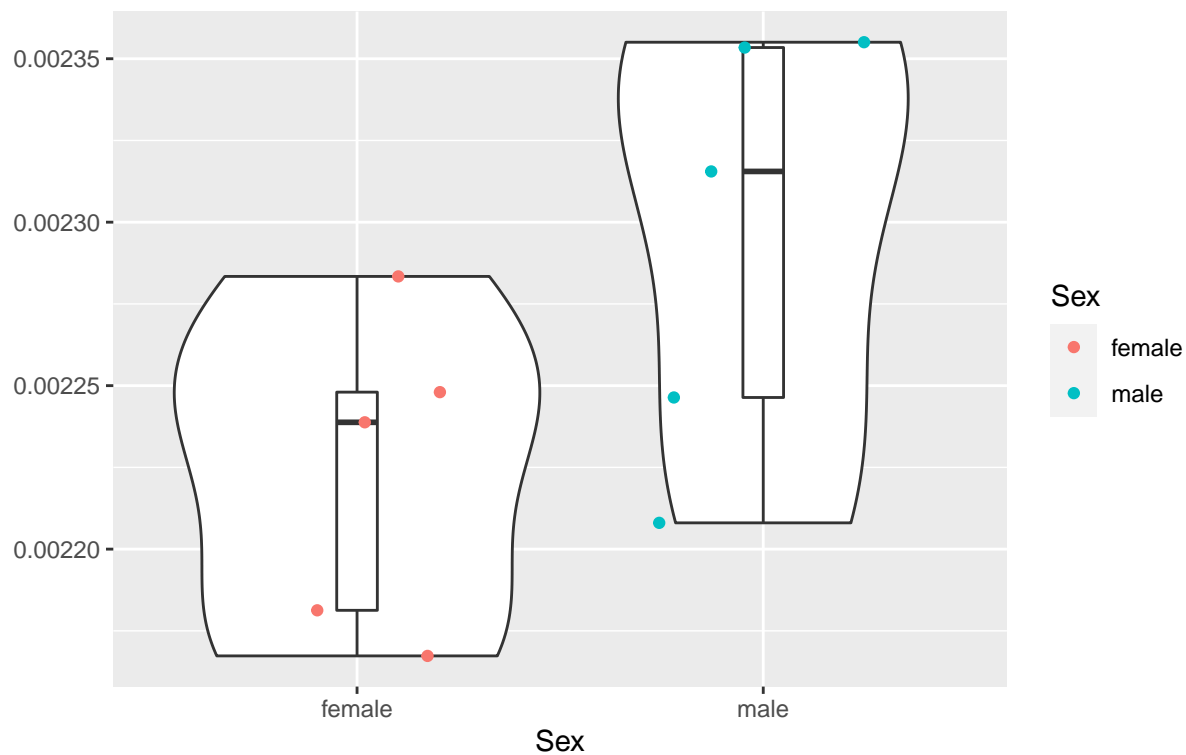
Red points denoting outliers



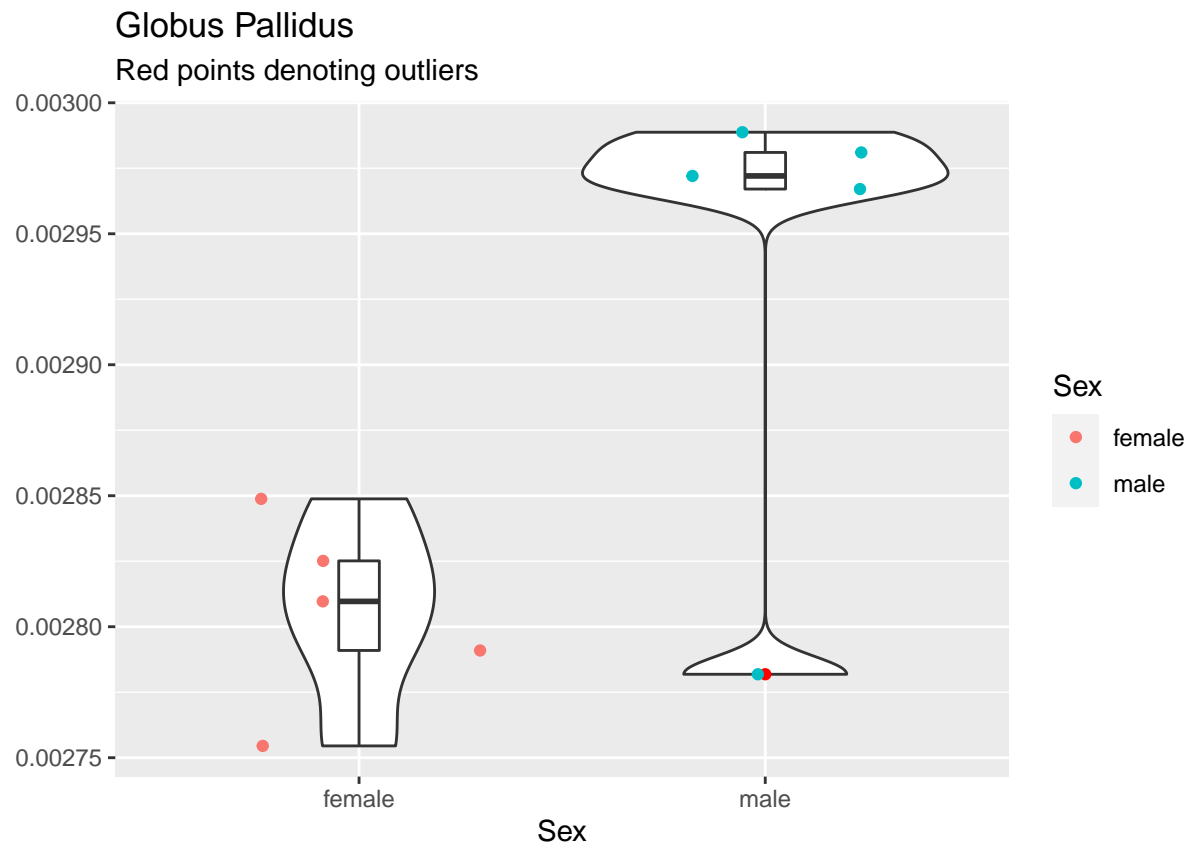
```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 2.111e-08 2.111e-08    4.28 0.0724 .
## Residuals    8 3.946e-08 4.932e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Striatum

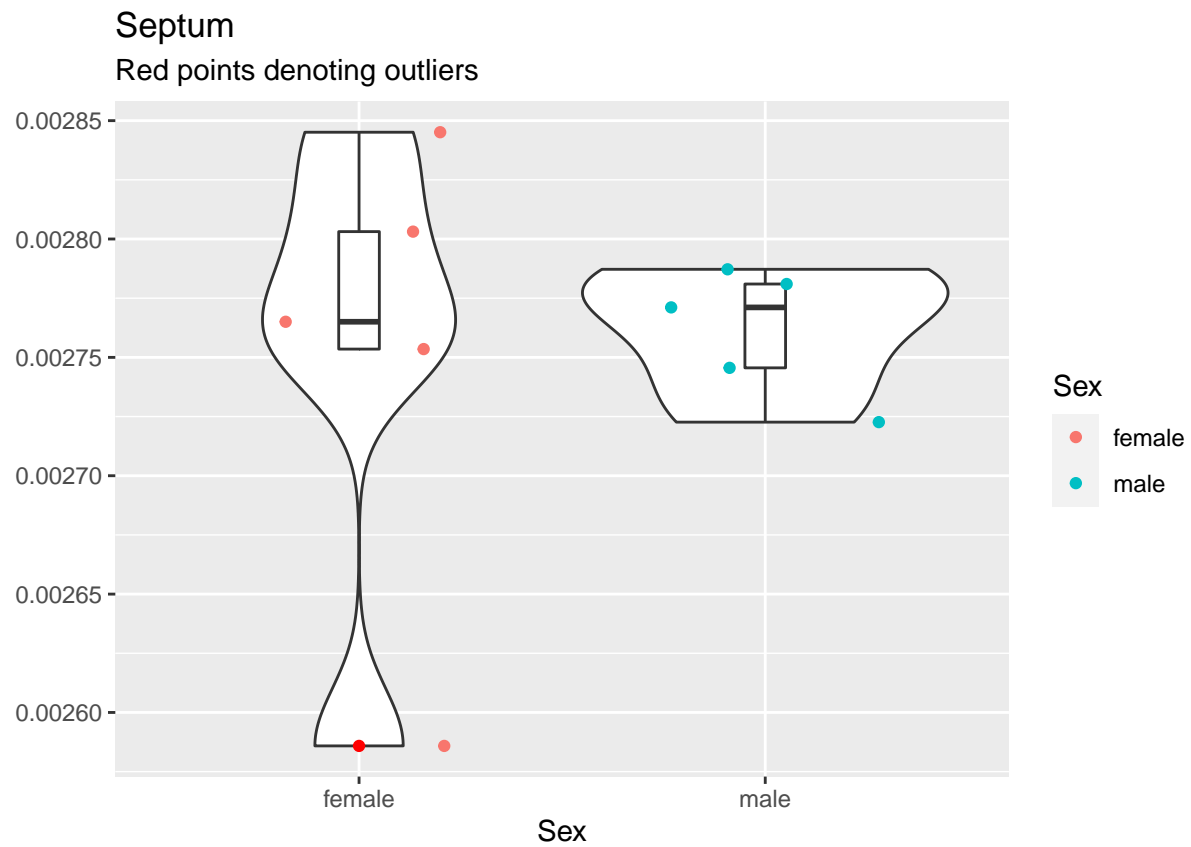
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.293e-08 1.293e-08   3.87 0.0847 .
## Residuals    8 2.673e-08 3.341e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

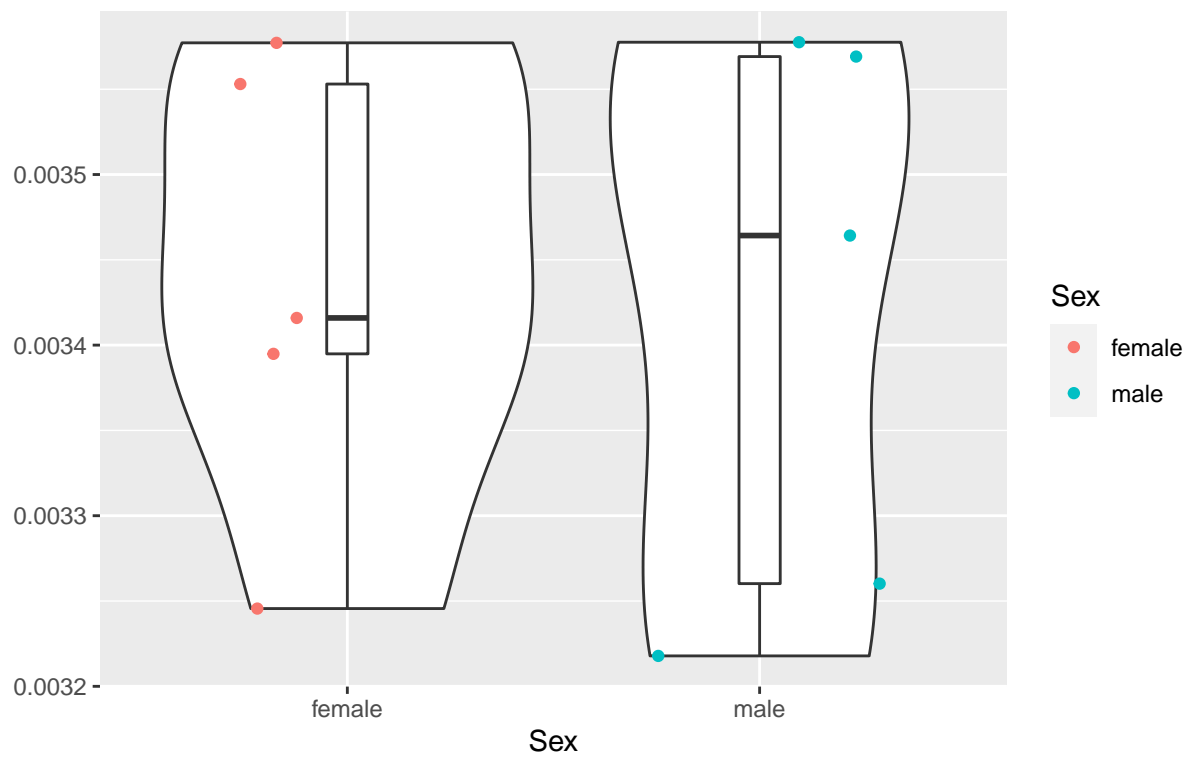


```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 4.379e-08 4.379e-08   9.756 0.0142 *
## Residuals    8 3.591e-08 4.490e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

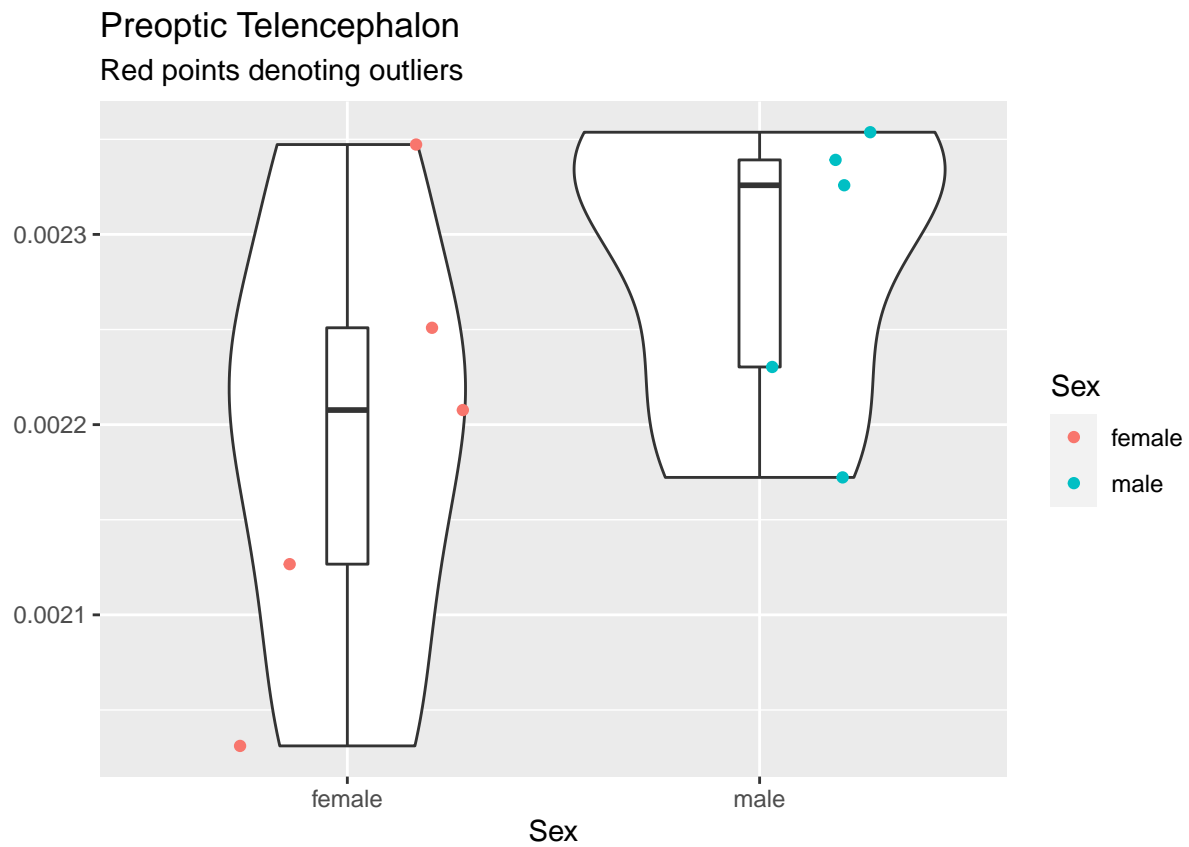


Subthalamic Nucleus

Red points denoting outliers



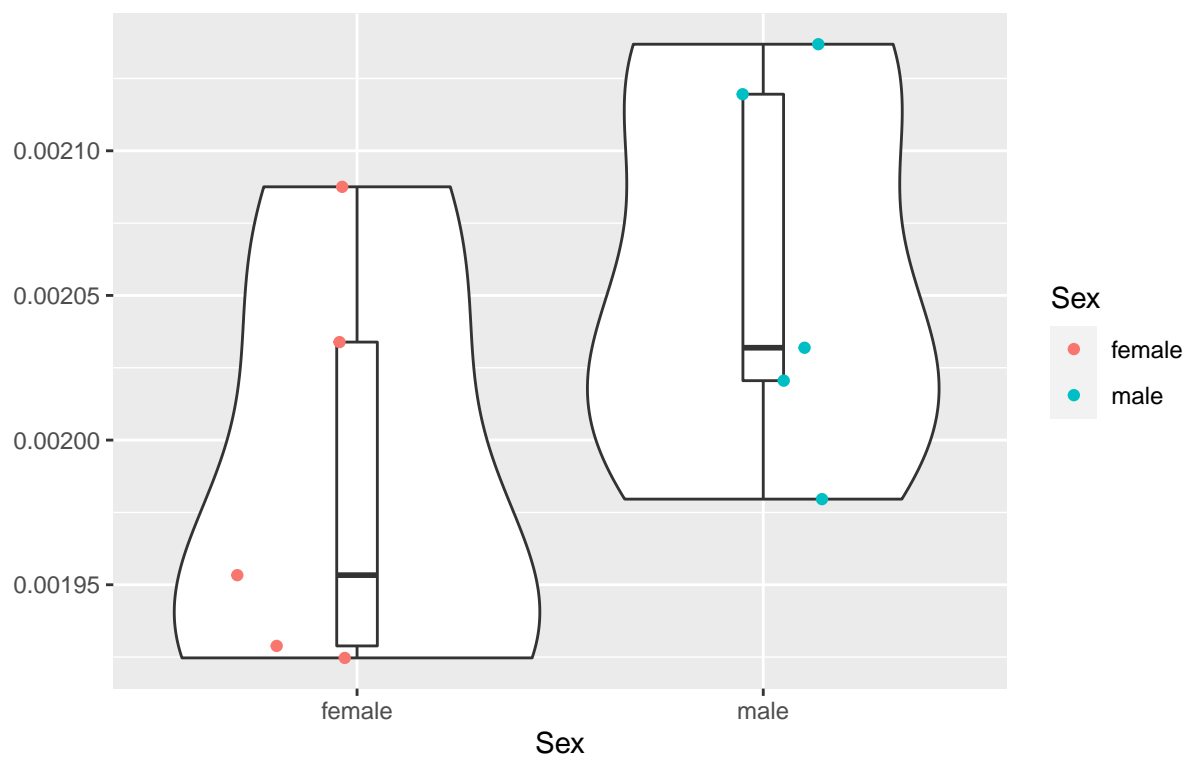
```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 9.500e-10 9.540e-10   0.041  0.845
## Residuals   8 1.874e-07 2.342e-08
```

| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 2.095e-08 | 2.095e-08 | 2.02 | 0.193 |
| ## Residuals | 8 | 8.300e-08 | 1.038e-08 | | |

Hypothalamus

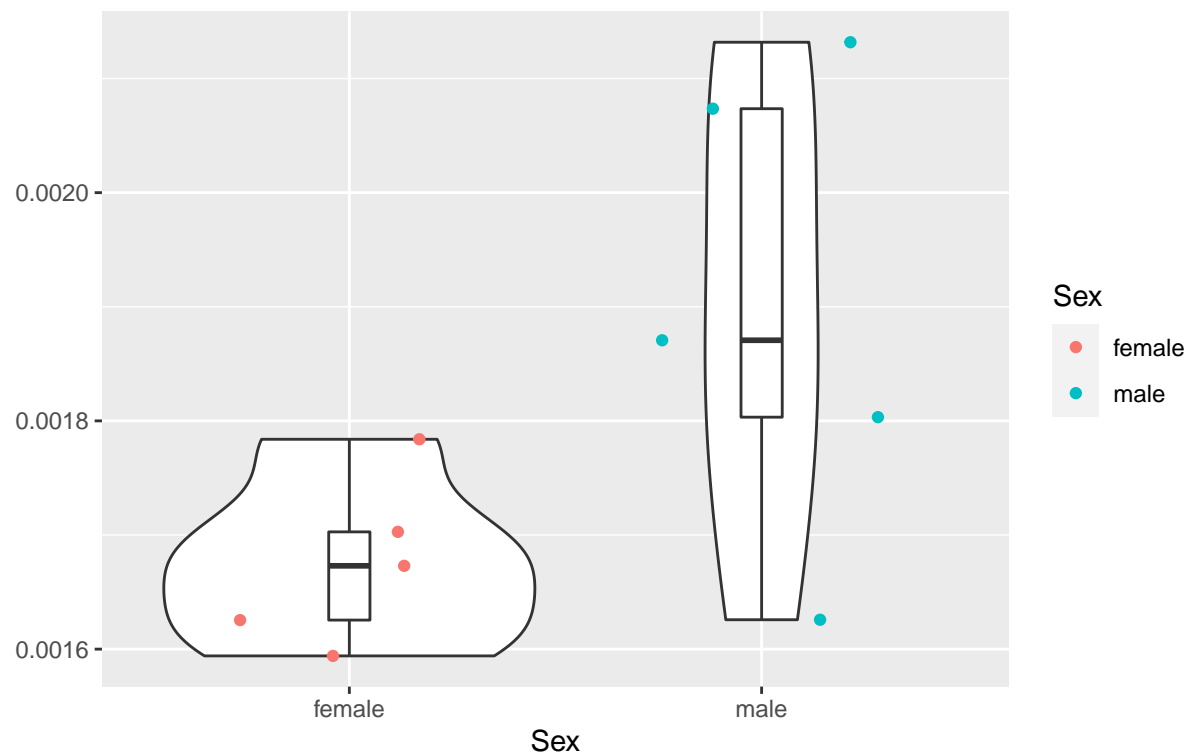
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.297e-08 | 1.297e-08 | 2.666 | 0.141 |
| ## Residuals | 8 | 3.893e-08 | 4.866e-09 | | |

Amygdalopiriform Transition Area

Red points denoting outliers



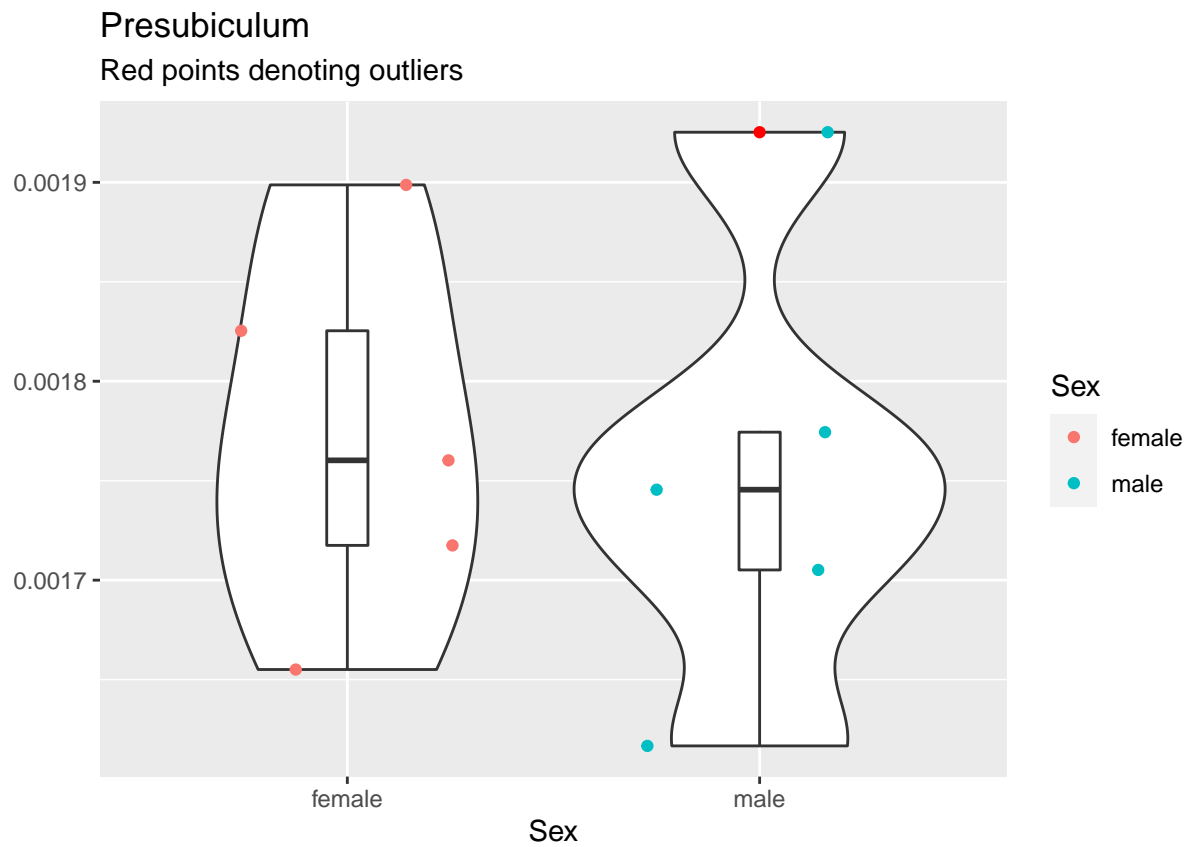
```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.268e-07 1.268e-07   5.311 0.0501 .
## Residuals    8 1.909e-07 2.387e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Periform Cortex

Red points denoting outliers



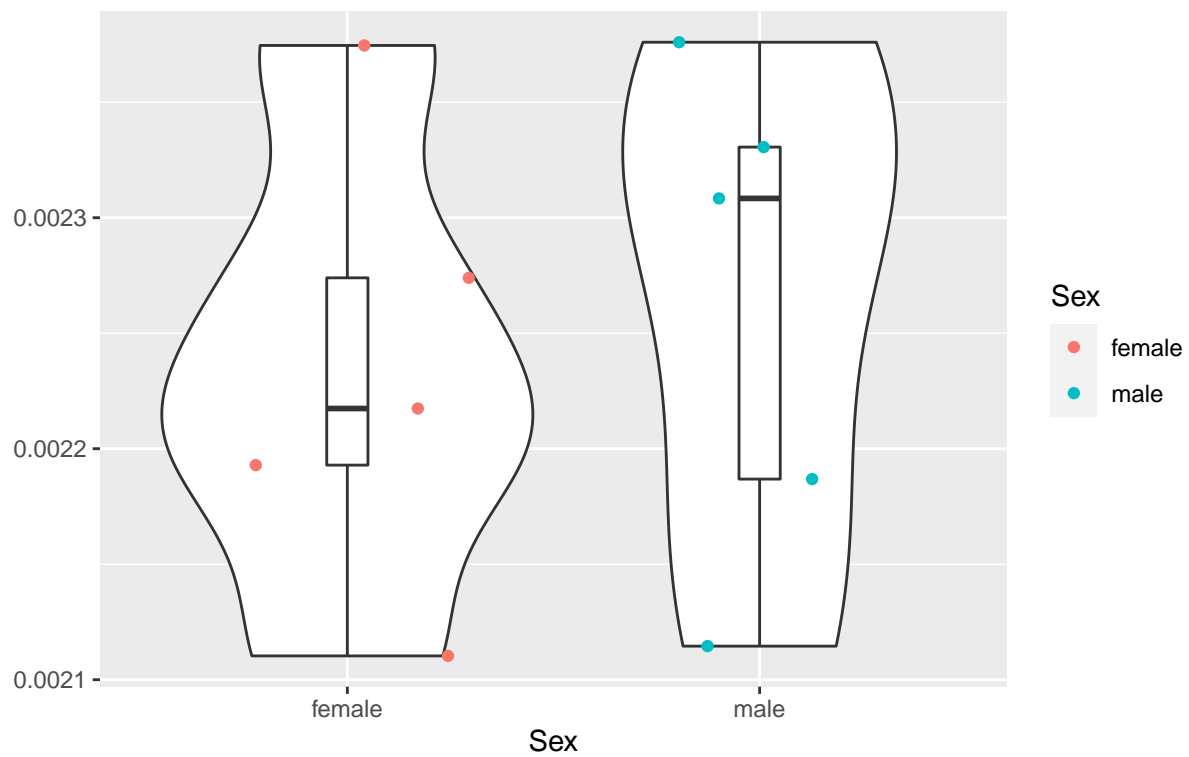
```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.924e-08 1.924e-08   10.23 0.0126 *
## Residuals    8 1.504e-08 1.880e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



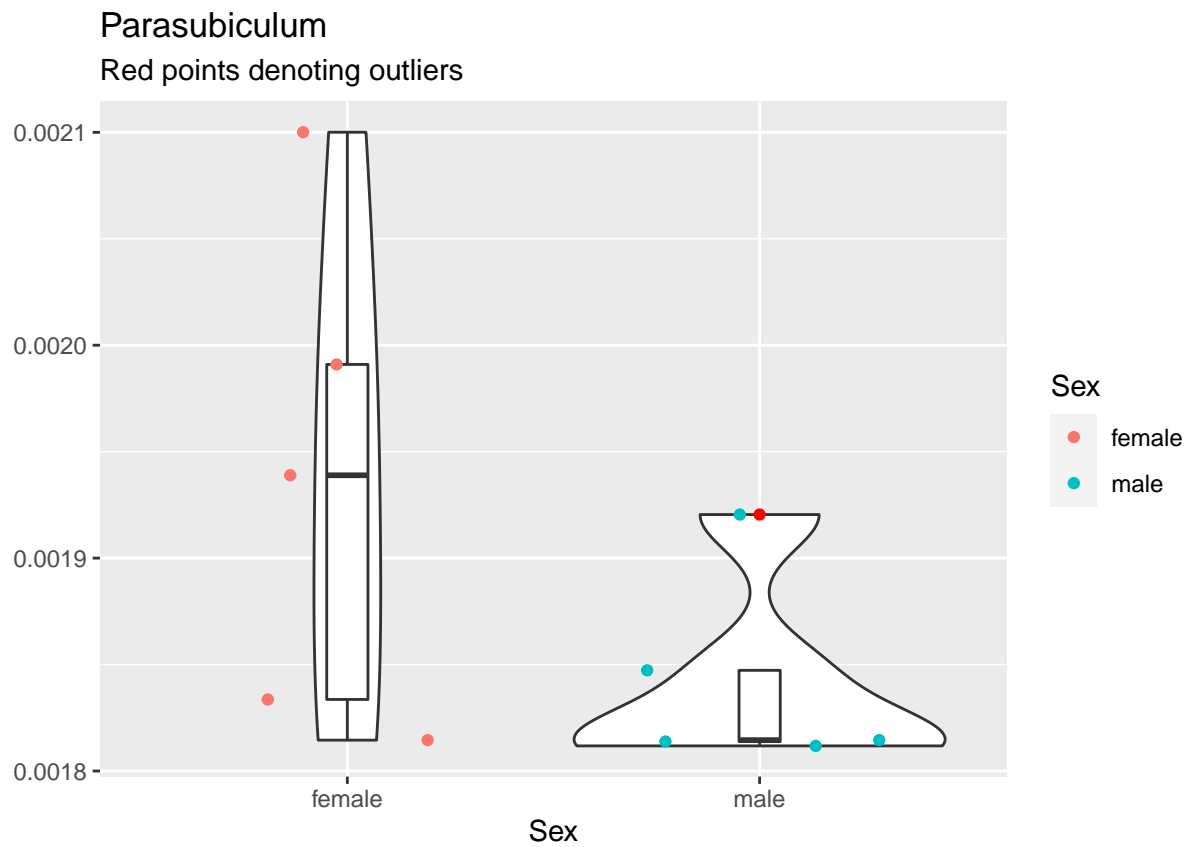
| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 8.100e-10 | 8.100e-10 | 0.075 | 0.792 |
| ## Residuals | 8 | 8.674e-08 | 1.084e-08 | | |

Perirhinal Cortex

Red points denoting outliers

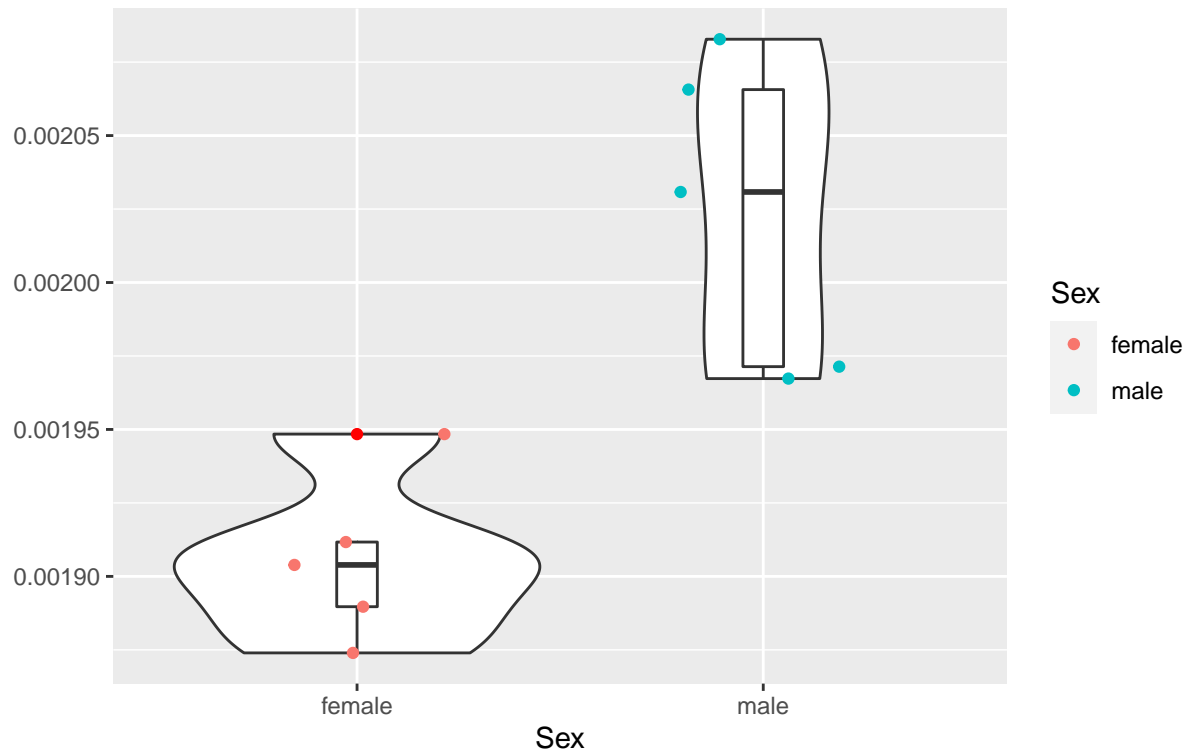


| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 2.160e-09 | 2.165e-09 | 0.202 | 0.665 |
| ## Residuals | 8 | 8.584e-08 | 1.073e-08 | | |



Red points denoting outliers

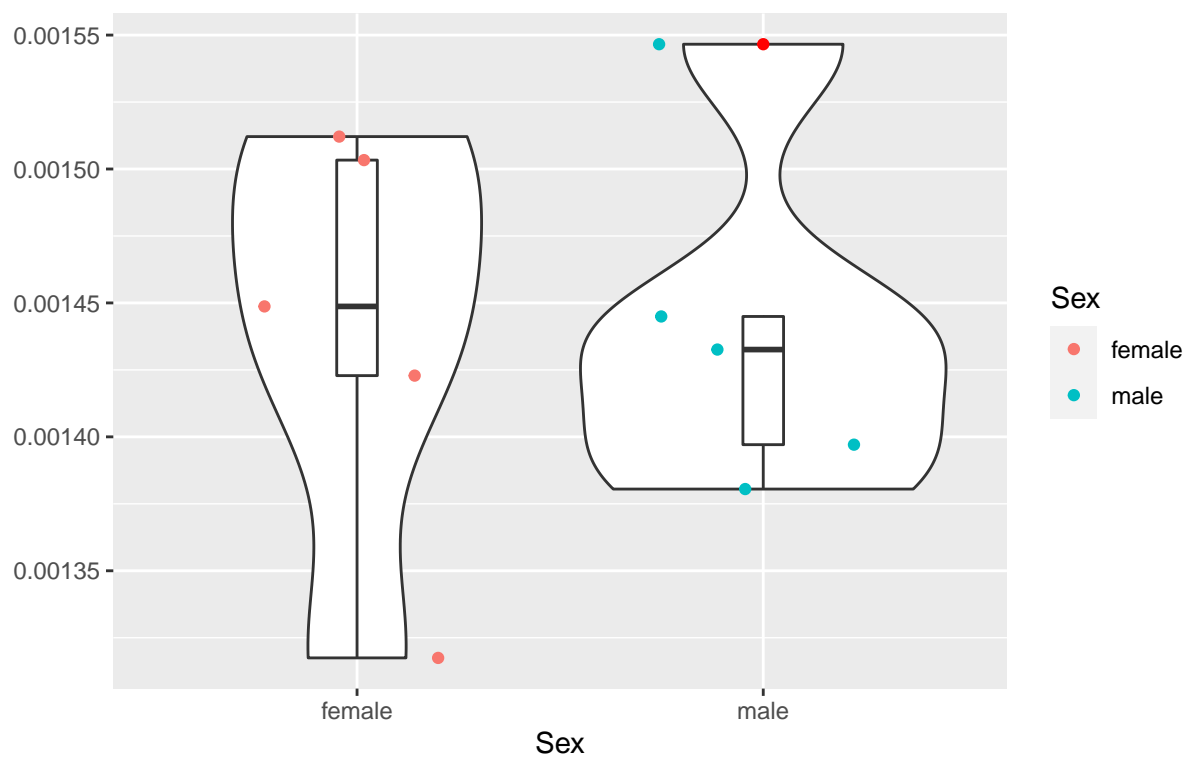
Red points denoting outliers



```
##          Df      Sum Sq   Mean Sq F value    Pr(>F)
## Sex          1 3.484e-08 3.484e-08   19.43 0.00226 **
## Residuals    8 1.435e-08 1.790e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

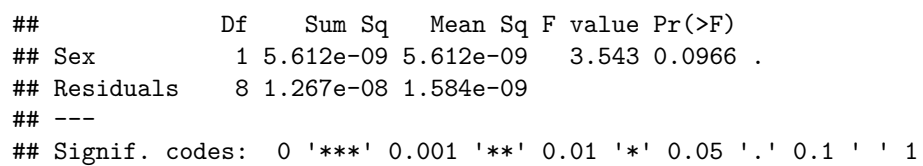

Dorsal Tenia Tecta

Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 0.000e+00 | 1.000e-12 | 0 | 0.991 |
| ## Residuals | 8 | 4.141e-08 | 5.176e-09 | | |

Red points denoting outliers



Ventral Claustrum

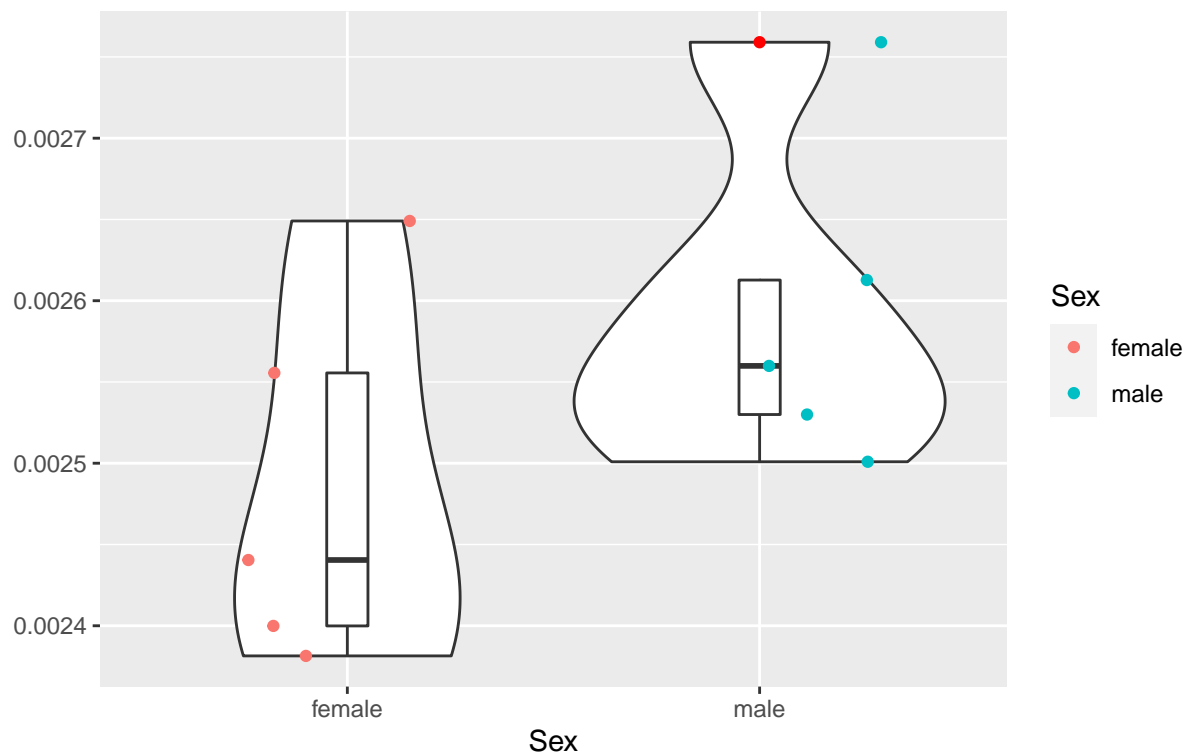
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 1.107e-07 1.107e-07   1.587  0.243
## Residuals   8 5.580e-07 6.975e-08
```

Posterolateral Cortical Amygdaloid Area

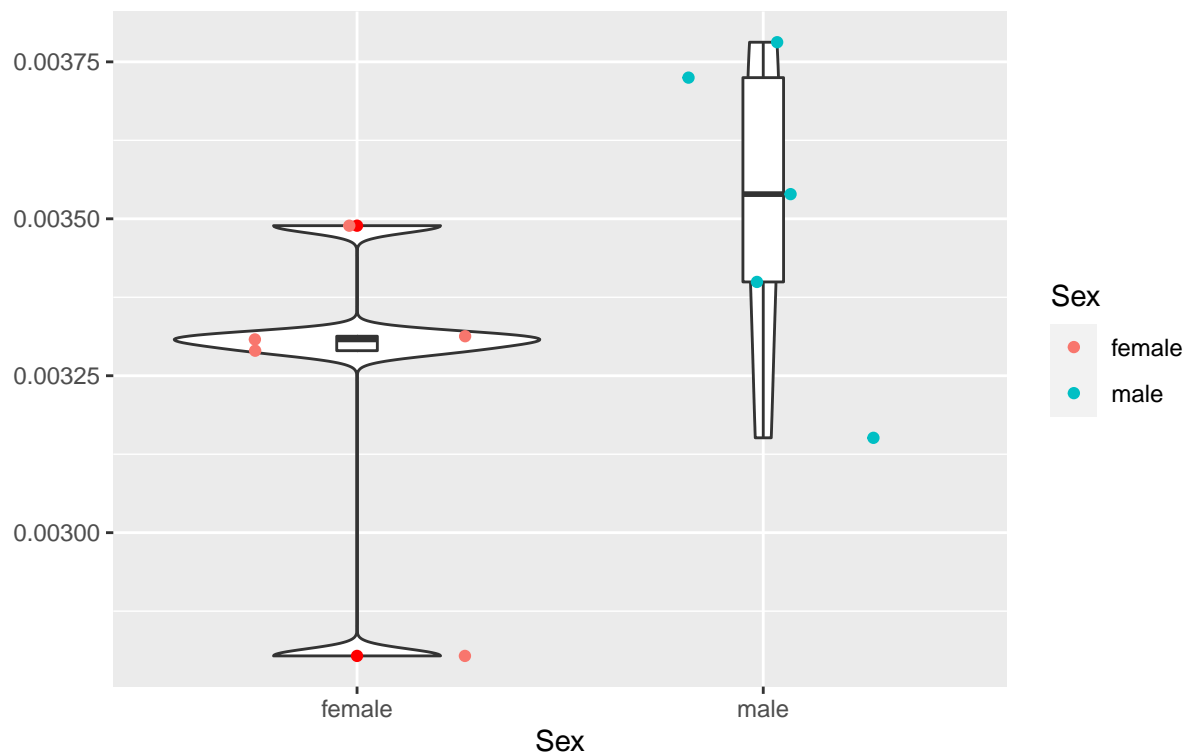
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.874e-08 | 2.874e-08 | 2.463 | 0.155 |
| ## Residuals | 8 | 9.336e-08 | 1.167e-08 | | |

Dorsal Claustrum

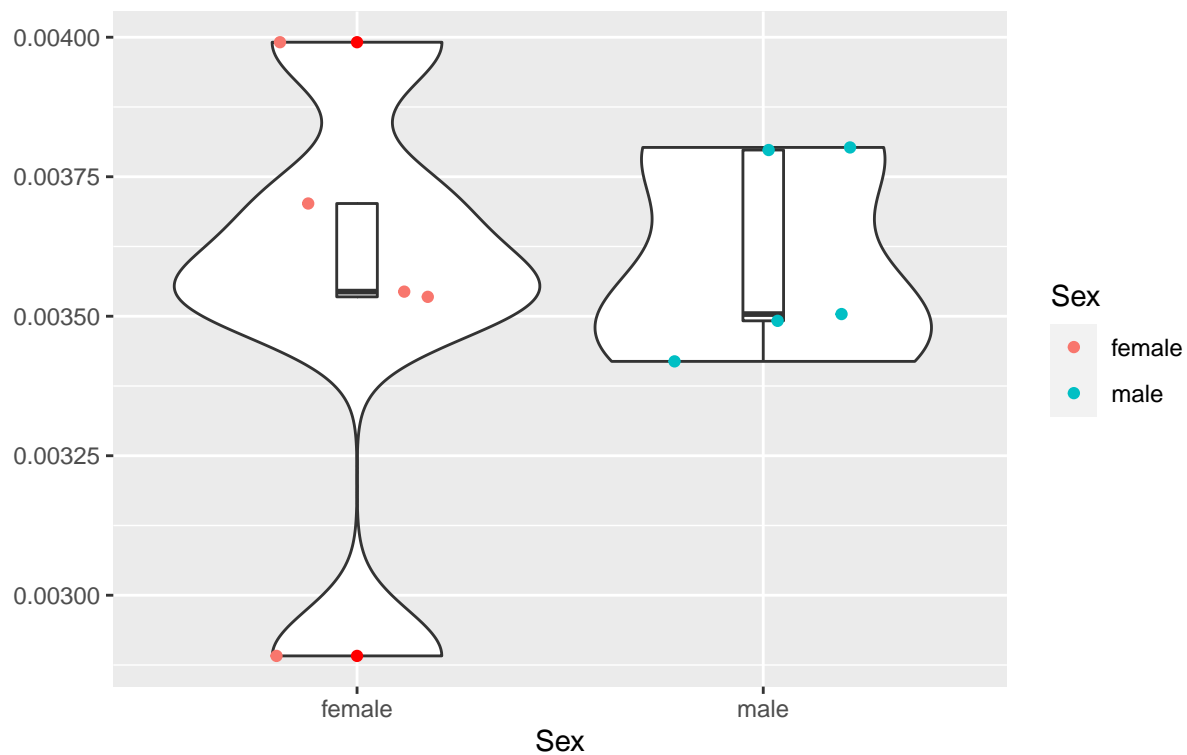
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 1.939e-07 1.939e-07   2.949  0.124
## Residuals   8 5.260e-07 6.575e-08
```

Claustrum

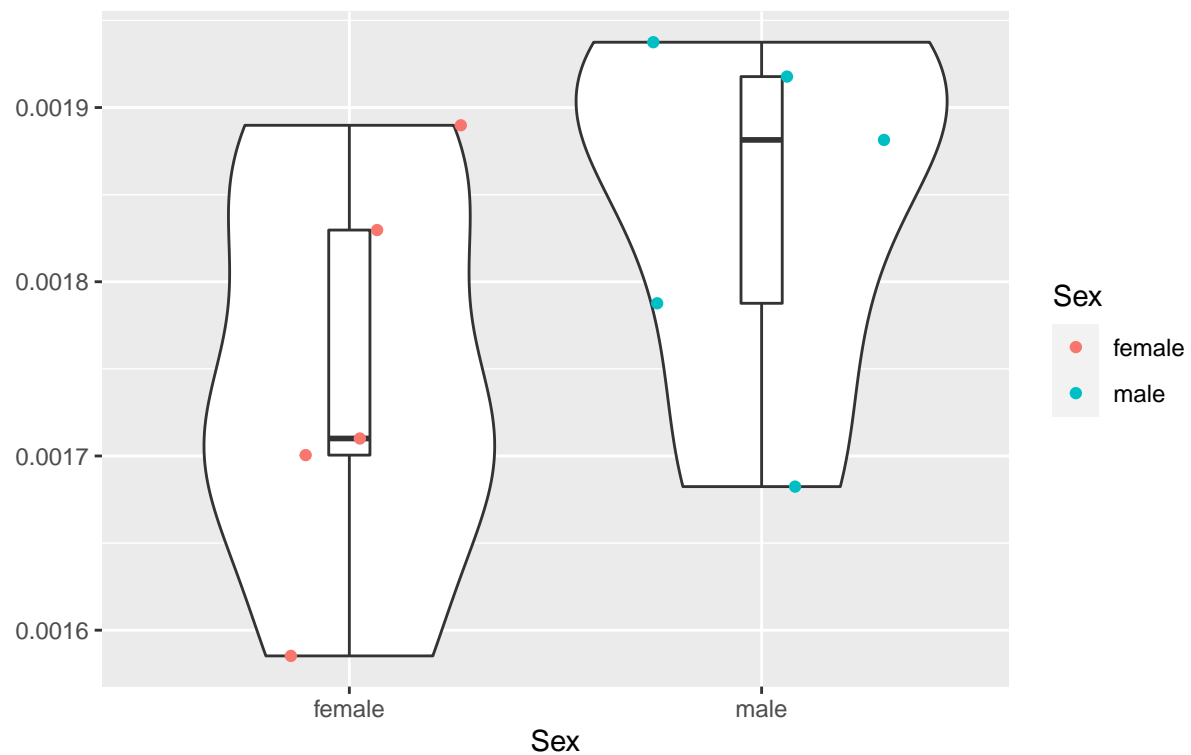
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.240e-08 | 1.238e-08 | 0.126 | 0.731 |
| ## Residuals | 8 | 7.841e-07 | 9.801e-08 | | |

Ventral Intermediate Entorhinal Cortex

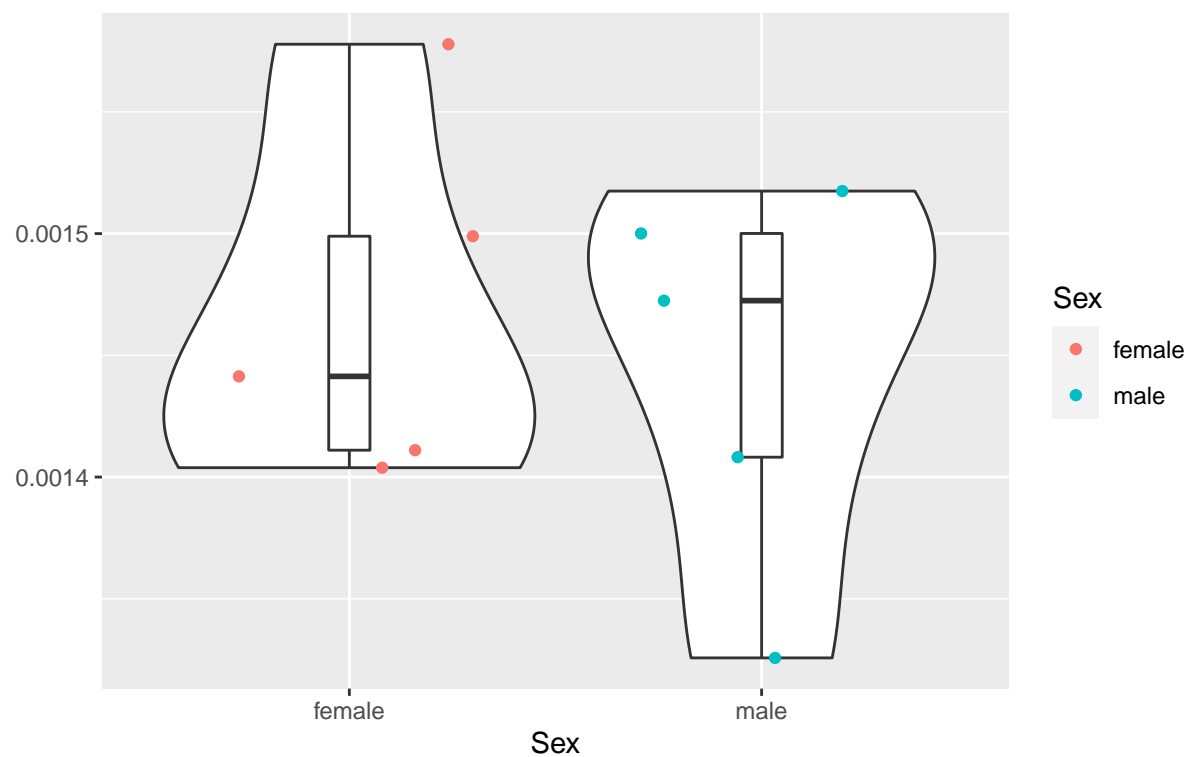
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.415e-08 | 2.415e-08 | 1.9 | 0.205 |
| ## Residuals | 8 | 1.017e-07 | 1.271e-08 | | |

Left Caudomedial Entorhinal Cortex

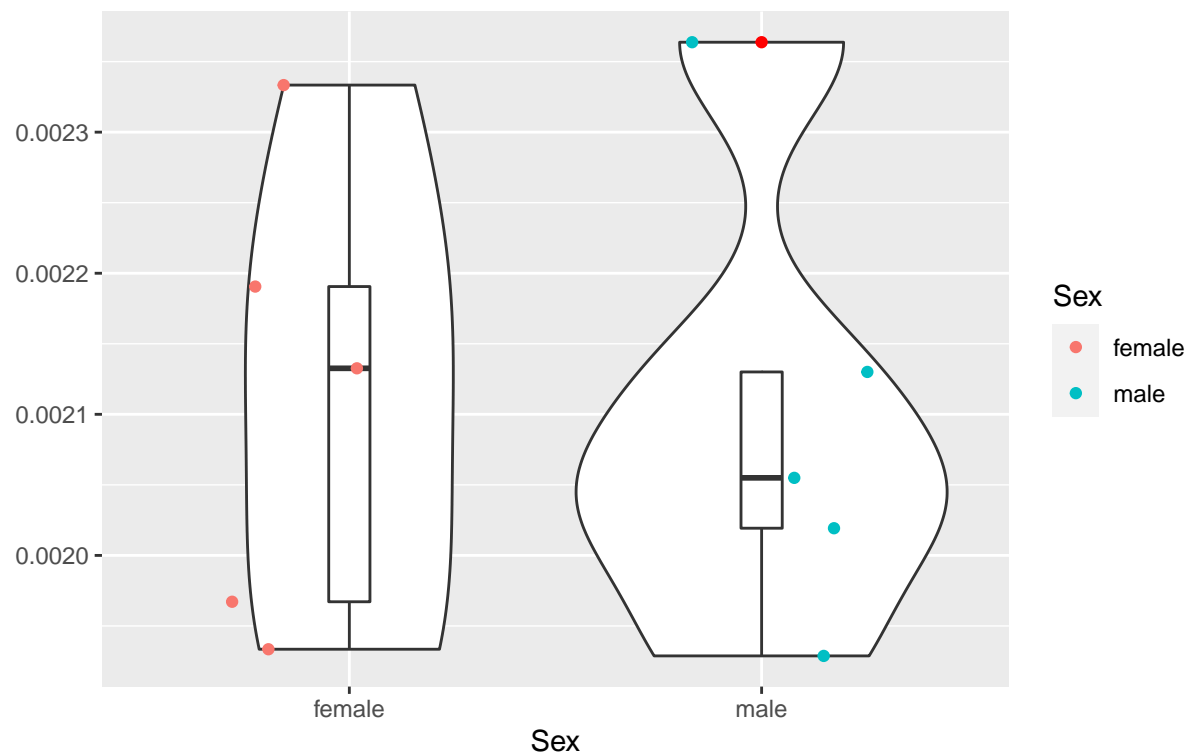
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.190e-09 | 1.190e-09 | 0.208 | 0.66 |
| ## Residuals | 8 | 4.569e-08 | 5.711e-09 | | |

Left Dorsolateral Entorhinal Cortex

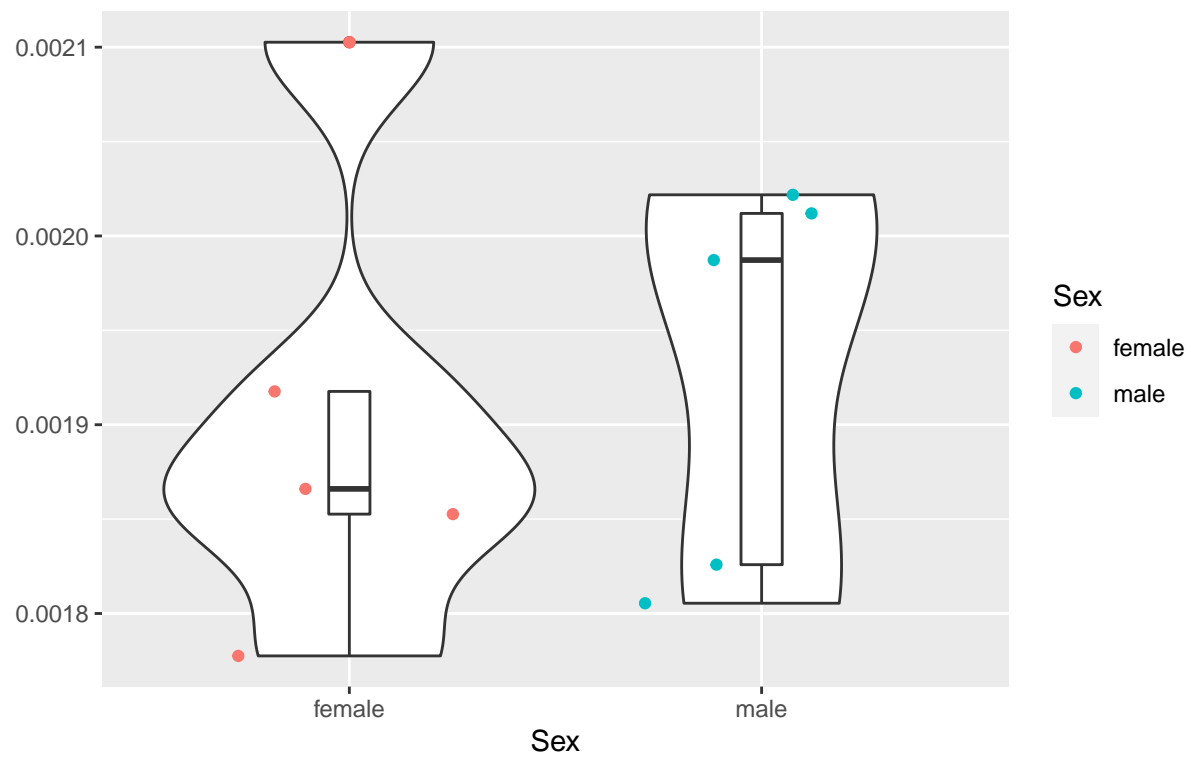
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 3.600e-10 | 3.640e-10 | 0.013 | 0.911 |
| ## Residuals | 8 | 2.168e-07 | 2.709e-08 | | |

Left Dorsal Intermediate Entorhinal Cortex

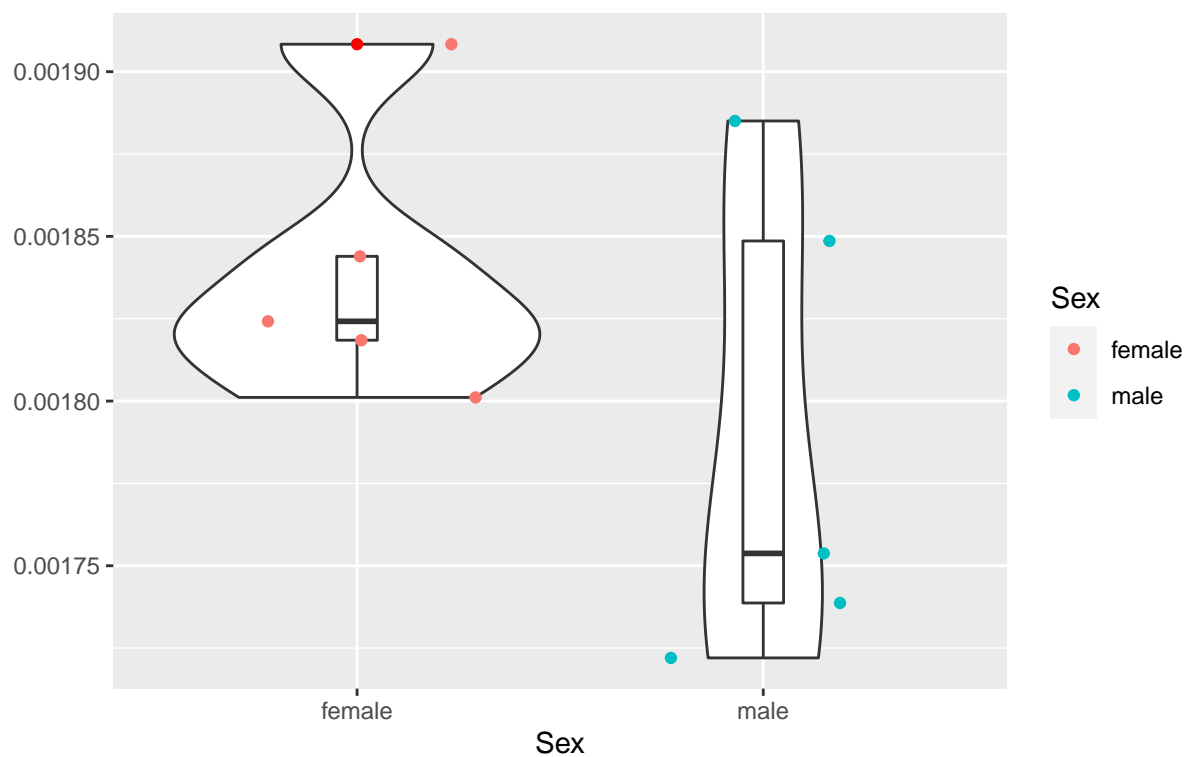
Red points denoting outliers



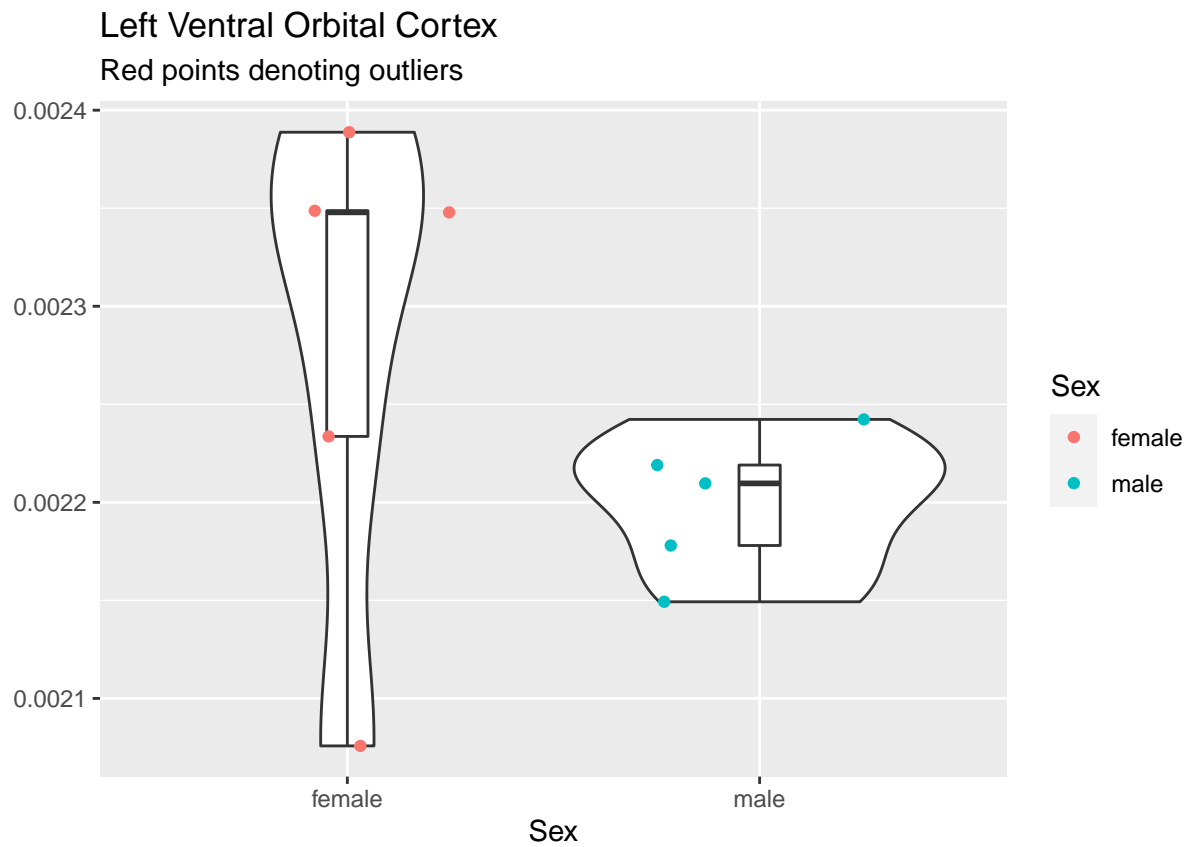
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.840e-09 | 1.844e-09 | 0.141 | 0.717 |
| ## Residuals | 8 | 1.045e-07 | 1.306e-08 | | |

Left Caudomedial Entorhinal Cortex

Red points denoting outliers



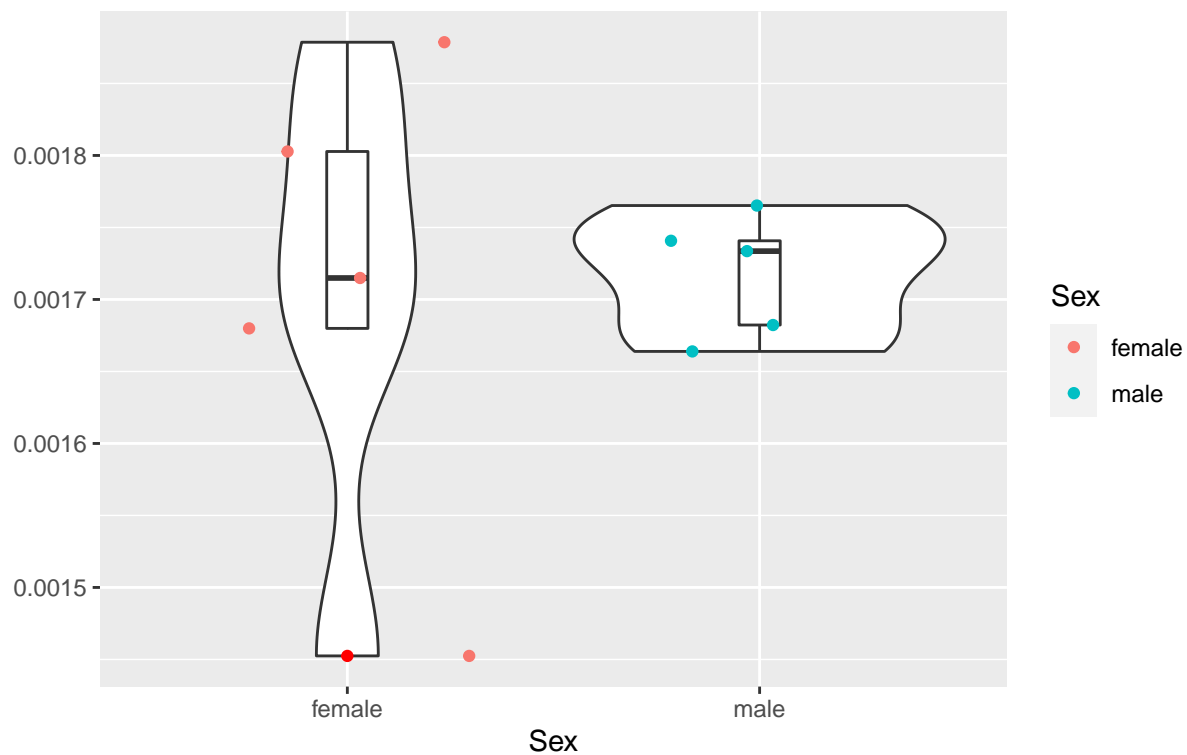
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 6.148e-09 | 6.148e-09 | 1.76 | 0.221 |
| ## Residuals | 8 | 2.794e-08 | 3.492e-09 | | |



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.572e-08 | 1.572e-08 | 1.789 | 0.218 |
| ## Residuals | 8 | 7.031e-08 | 8.789e-09 | | |

Left Secondary Visual Cortex Mediomedial Area

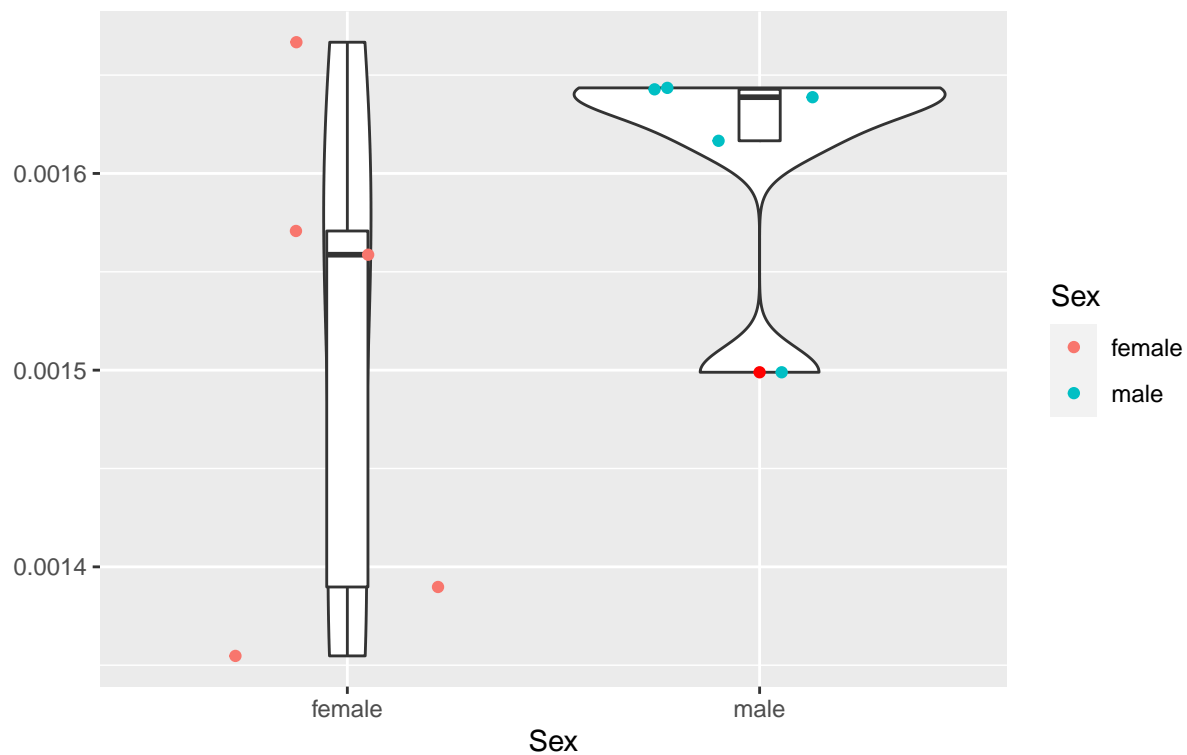
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 3.200e-10 | 3.250e-10 | 0.023 | 0.882 |
| ## Residuals | 8 | 1.114e-07 | 1.393e-08 | | |

Left Secondary Visual Cortex Mediolateral Area

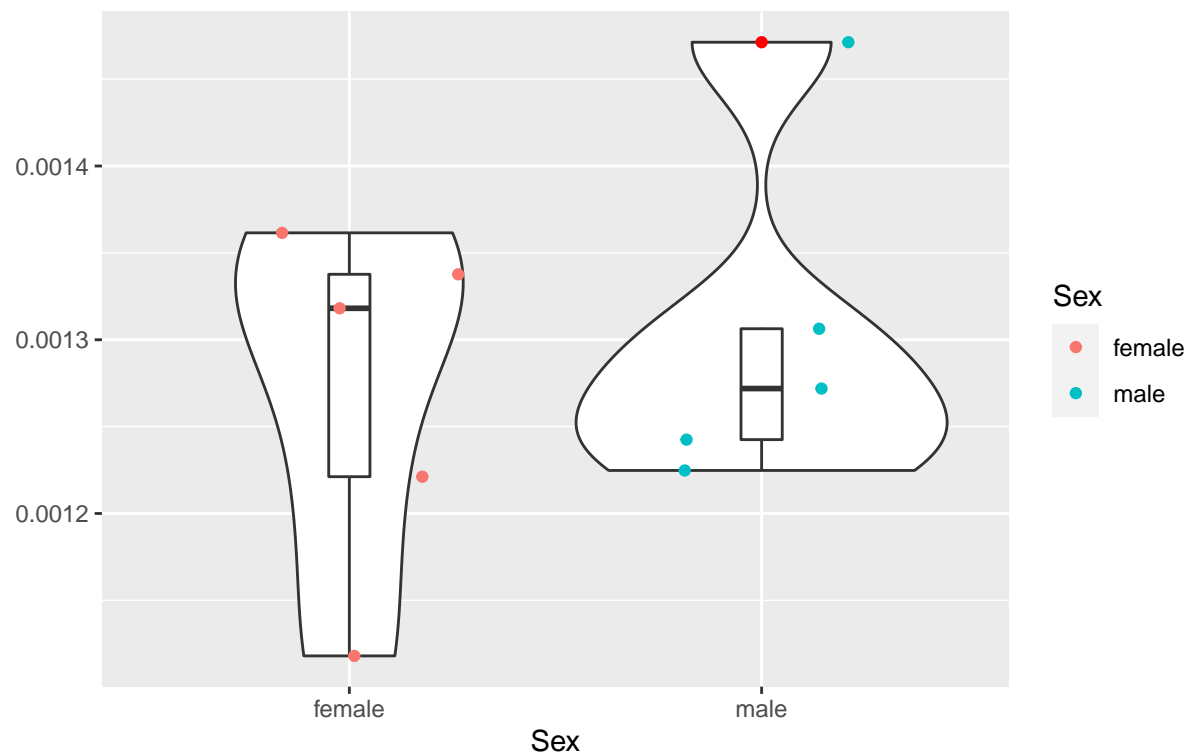
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.499e-08 | 2.499e-08 | 2.364 | 0.163 |
| ## Residuals | 8 | 8.456e-08 | 1.057e-08 | | |

Left Secondary Visual Cortex Lateral Area

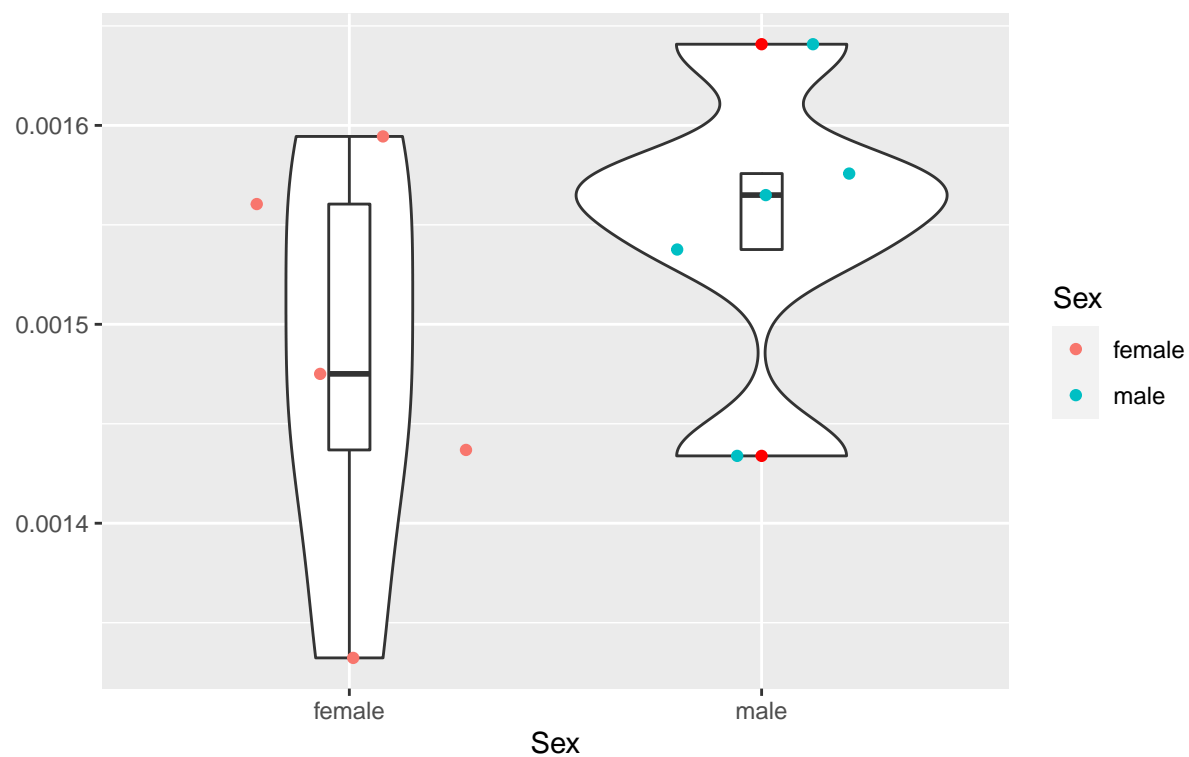
Red points denoting outliers



```
##          Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex        1  2.57e-09  2.567e-09   0.257  0.626
## Residuals   8  7.98e-08  9.975e-09
```

Left Primary Visual Cortex Monocular Area

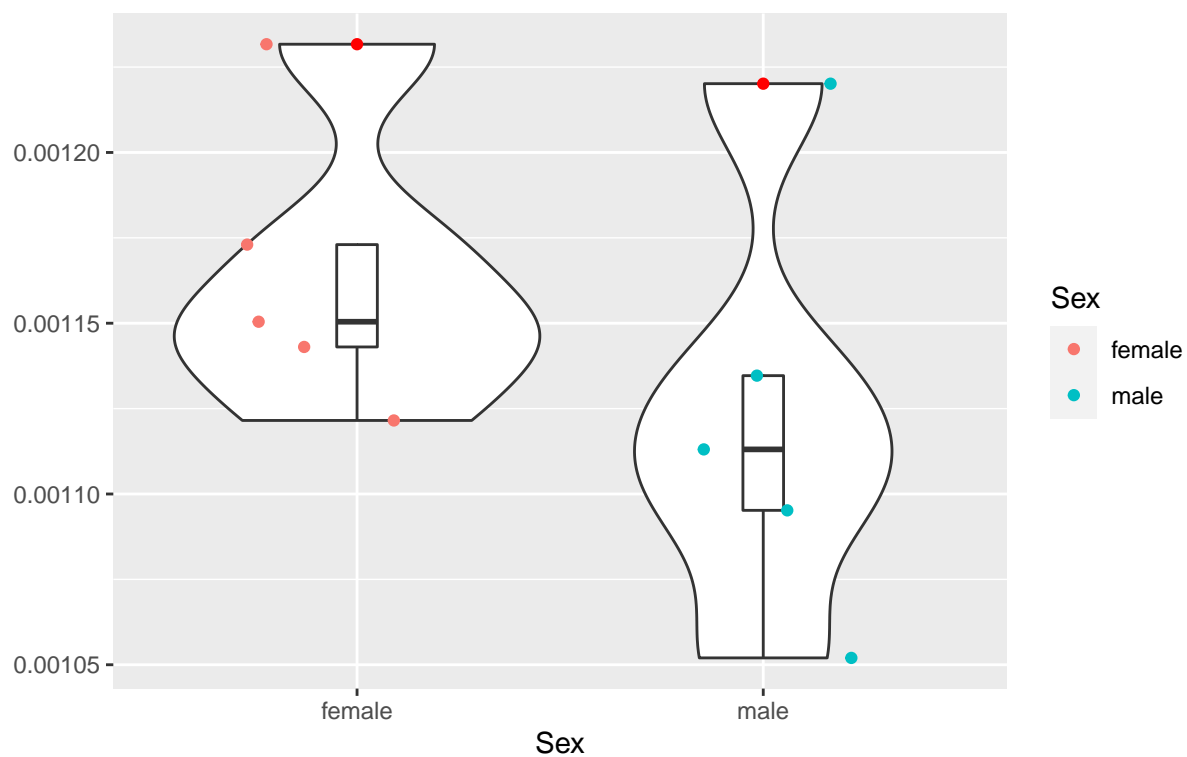
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.252e-08 | 1.252e-08 | 1.517 | 0.253 |
| ## Residuals | 8 | 6.605e-08 | 8.256e-09 | | |

Left Primary Visual Cortex Binocular Area

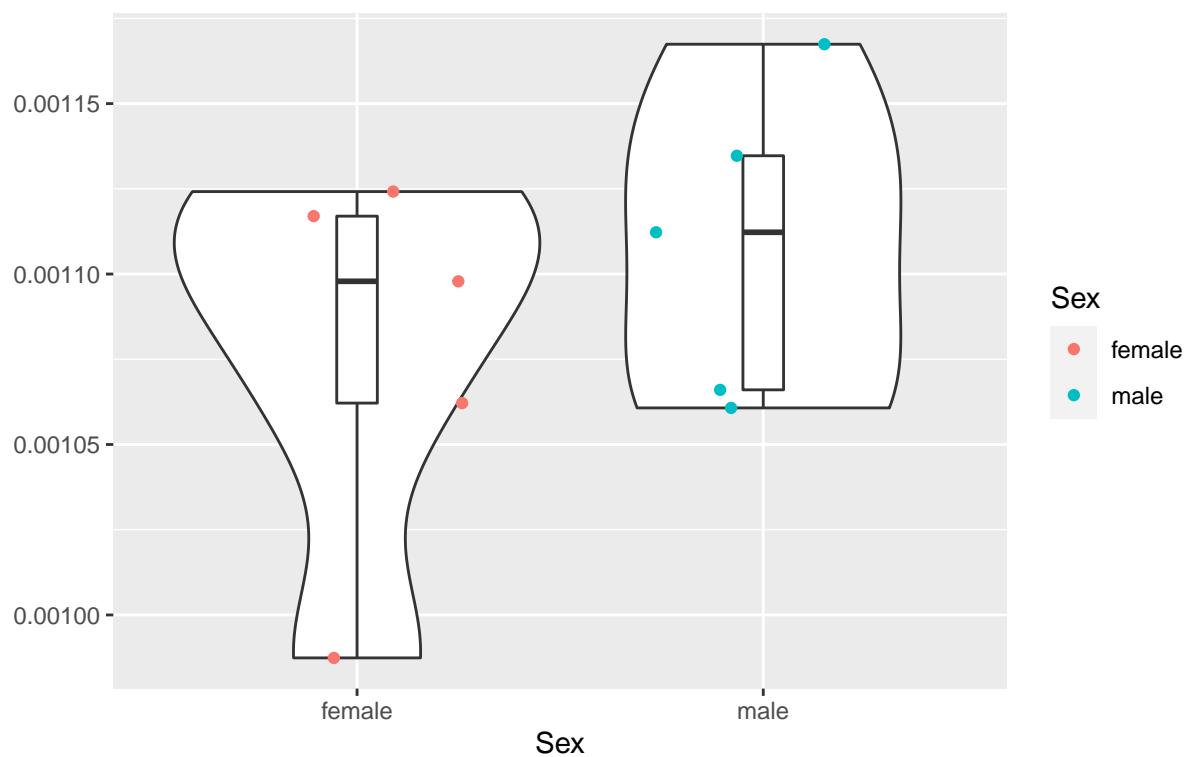
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 4.189e-09 | 4.189e-09 | 1.485 | 0.258 |
| ## Residuals | 8 | 2.257e-08 | 2.822e-09 | | |

Left Primary Visual Cortex

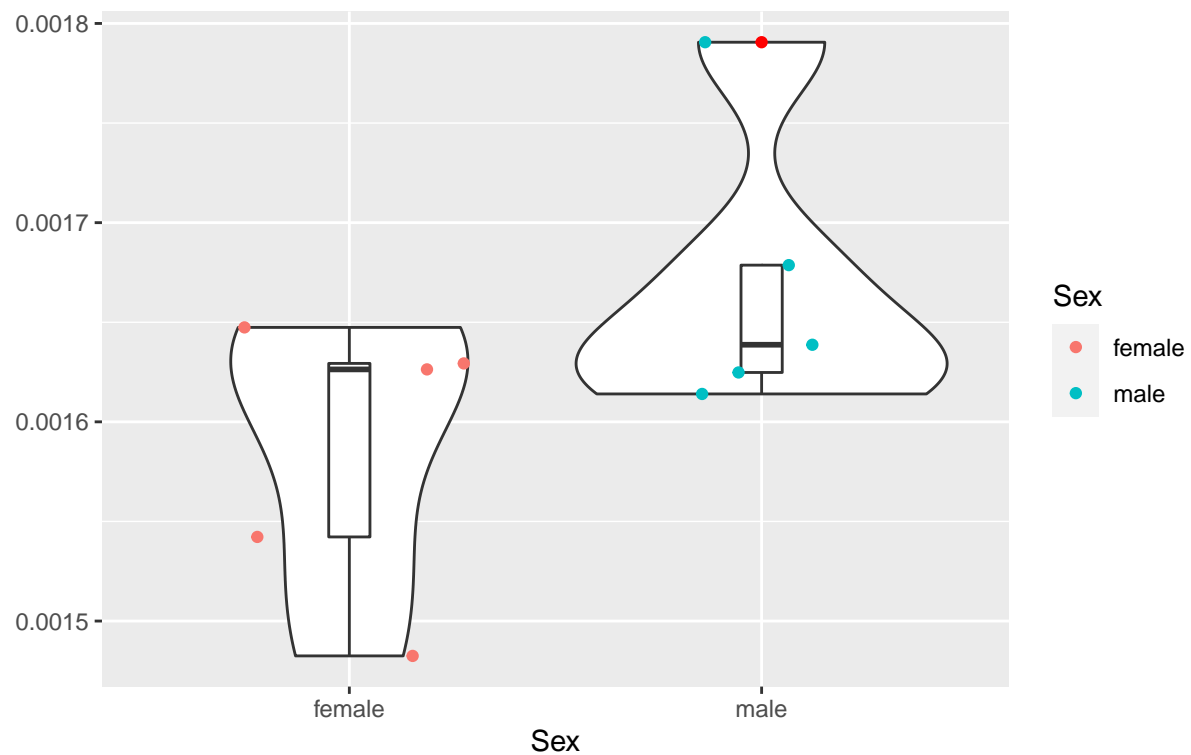
Red points denoting outliers



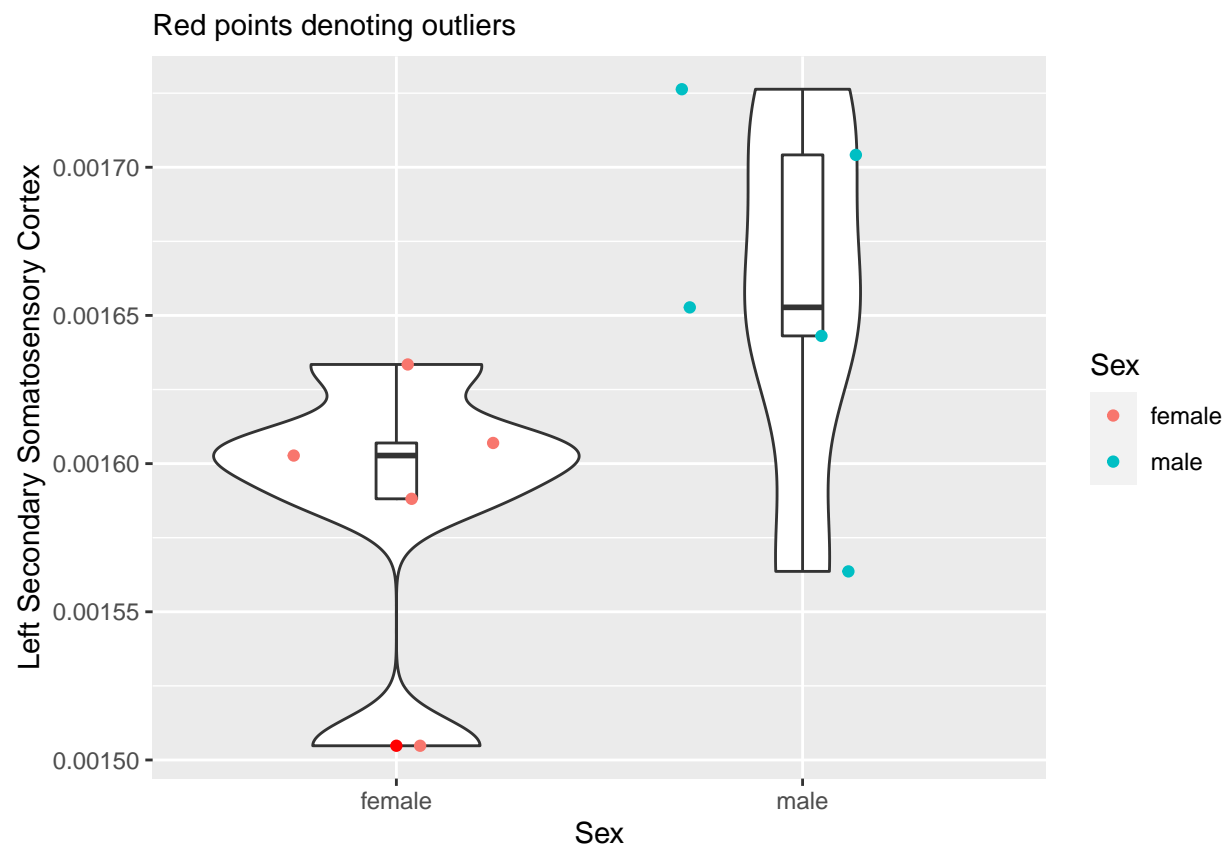
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.327e-09 | 2.327e-09 | 0.897 | 0.371 |
| ## Residuals | 8 | 2.076e-08 | 2.595e-09 | | |

Left Temporal Association Cortex

Red points denoting outliers



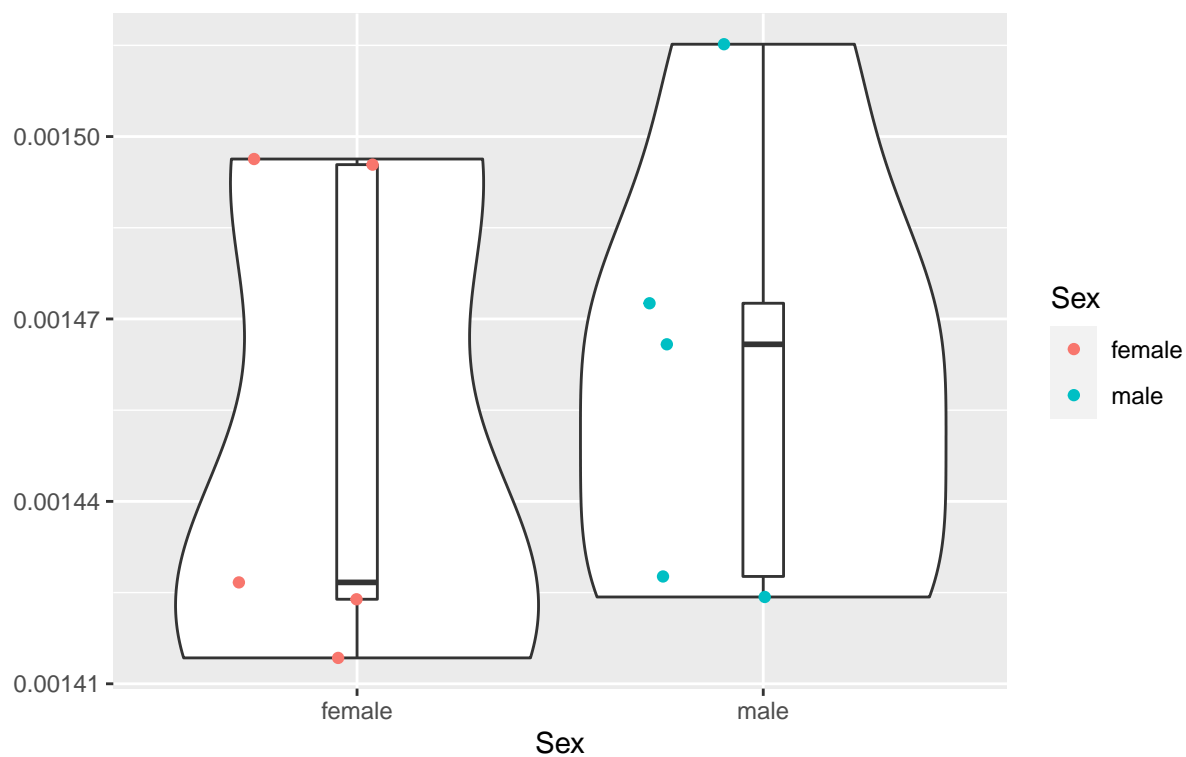
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.755e-08 | 1.755e-08 | 3.452 | 0.1 |
| ## Residuals | 8 | 4.068e-08 | 5.085e-09 | | |



```
##          Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.252e-08 1.252e-08   3.926 0.0829 .
## Residuals    8 2.552e-08 3.190e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Primary Somatosensory Cortex Upper Lip Region

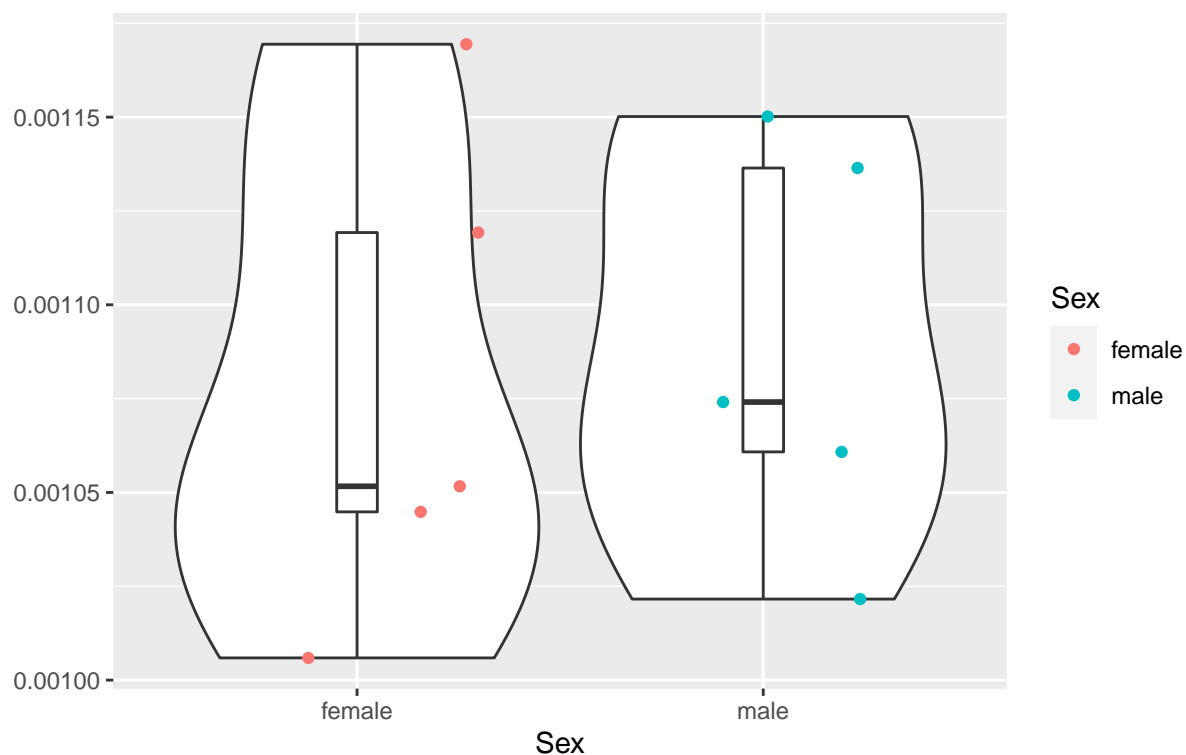
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.400e-10 | 2.402e-10 | 0.157 | 0.702 |
| ## Residuals | 8 | 1.225e-08 | 1.531e-09 | | |

Left Primary Somatosensory Cortex Trunk Region

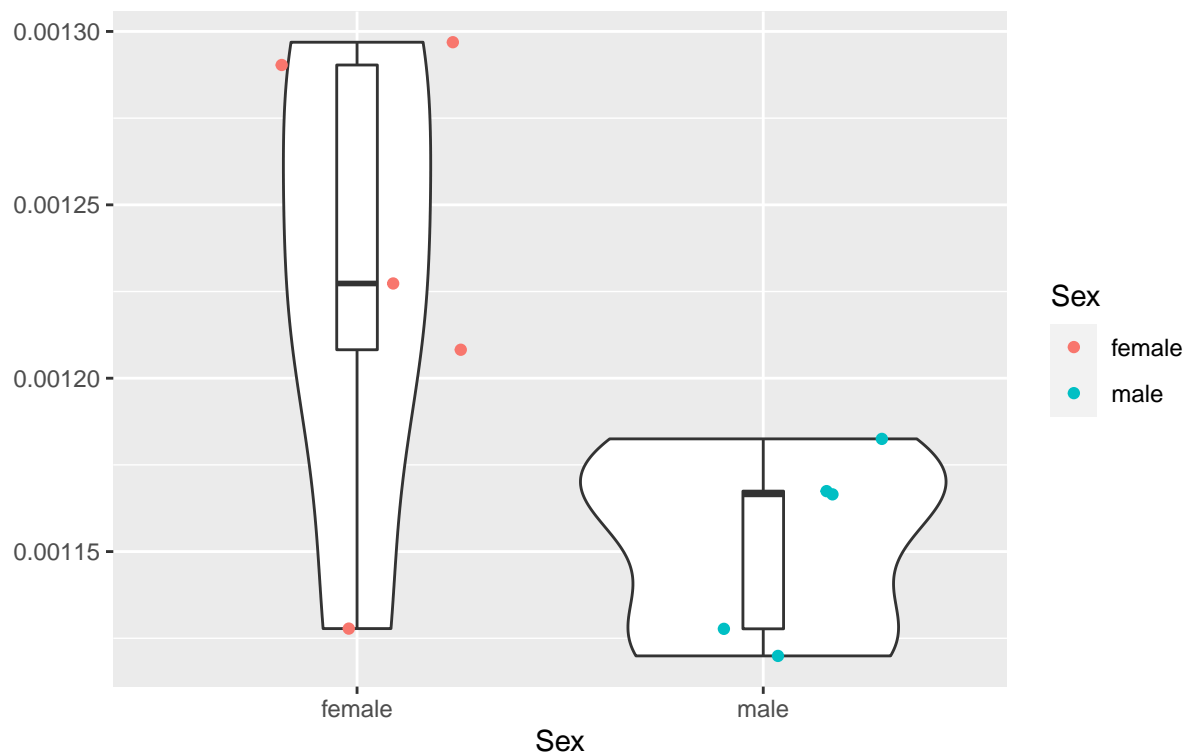
Red points denoting outliers



| | | | | | |
|--------------|----|----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 2.71e-10 | 2.710e-10 | 0.076 | 0.79 |
| ## Residuals | 8 | 2.86e-08 | 3.575e-09 | | |

Left Primary Somatosensory Cortex Shoulder Region

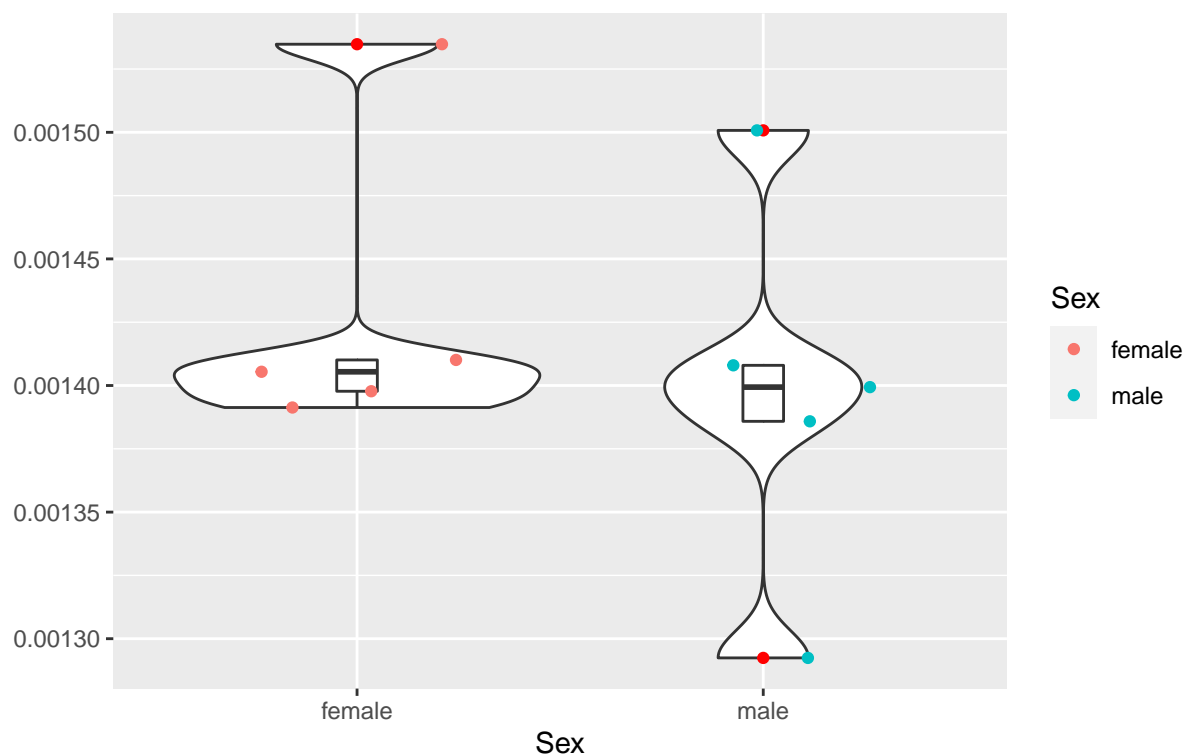
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.494e-08 1.494e-08   5.422 0.0483 *
## Residuals    8 2.204e-08 2.755e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Primary Somatosensory Cortex Jaw Region

Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.340e-09 | 2.341e-09 | 0.514 | 0.494 |
| ## Residuals | 8 | 3.645e-08 | 4.557e-09 | | |

Left Primary Somatosensory Cortex Hindlimb Region

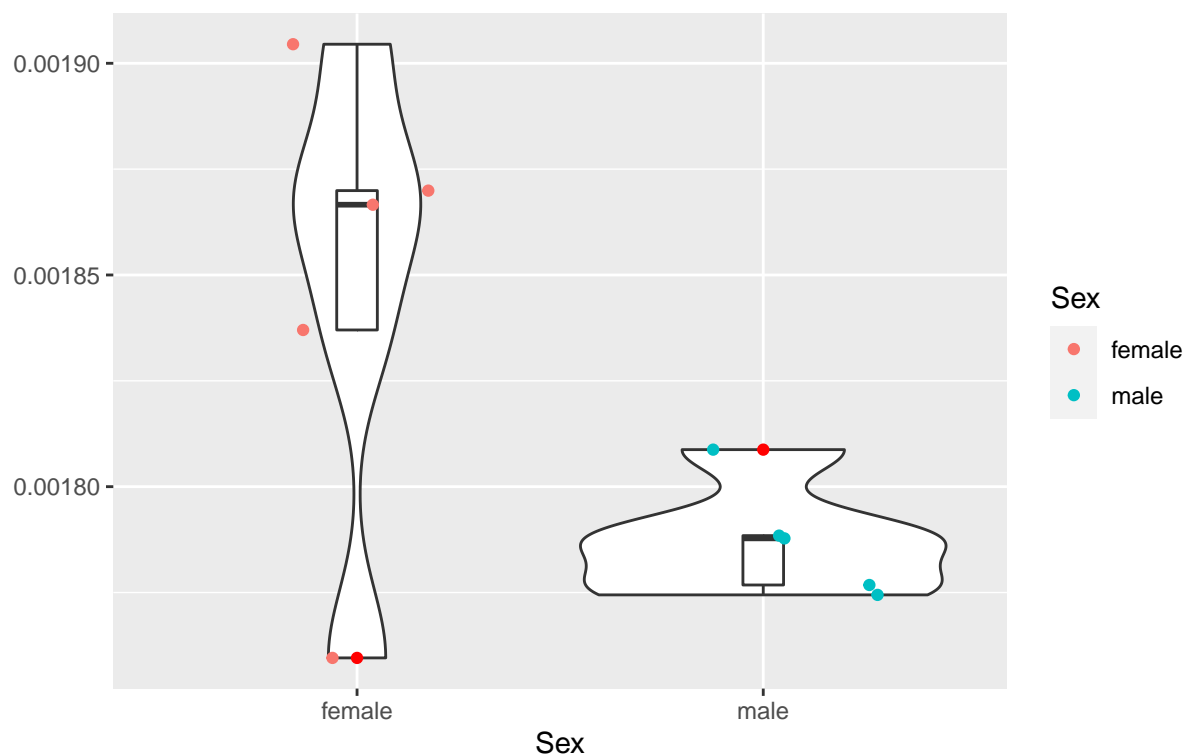
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 4.082e-09 | 4.082e-09 | 1.247 | 0.297 |
| ## Residuals | 8 | 2.619e-08 | 3.274e-09 | | |

Left Primary Somatosensory Cortex Forelimb Region

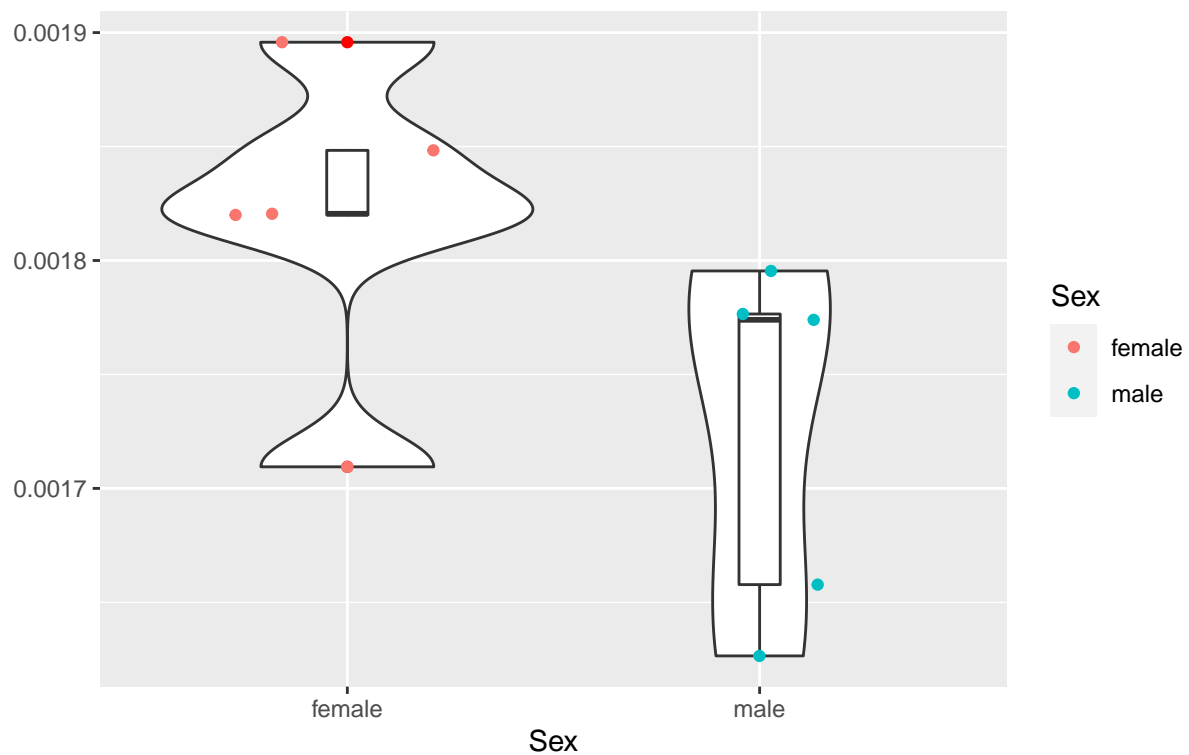
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 9.085e-09 9.085e-09   5.723 0.0437 *
## Residuals   8 1.270e-08 1.588e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Primary Somatosensory Cortex Dysgranular Zone

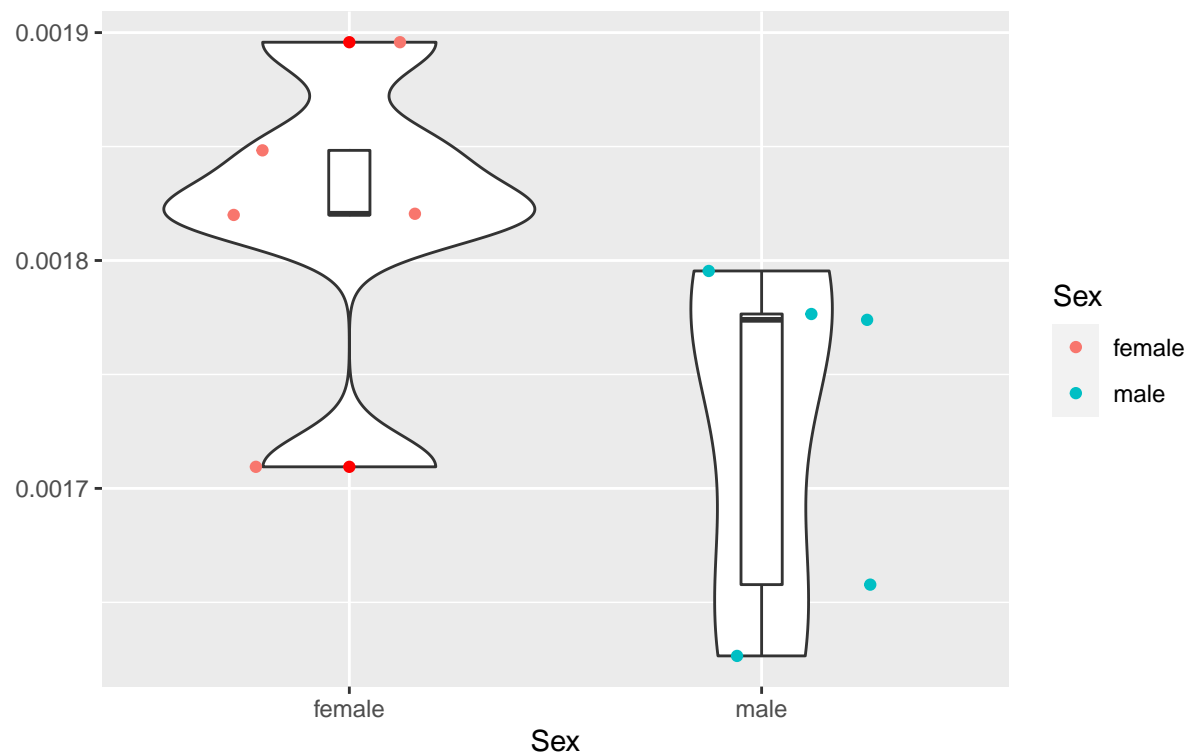
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.341e-08 1.341e-08   6.511 0.0341 *
## Residuals    8 1.648e-08 2.060e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Primary Somatosensory Cortex Barrel Field

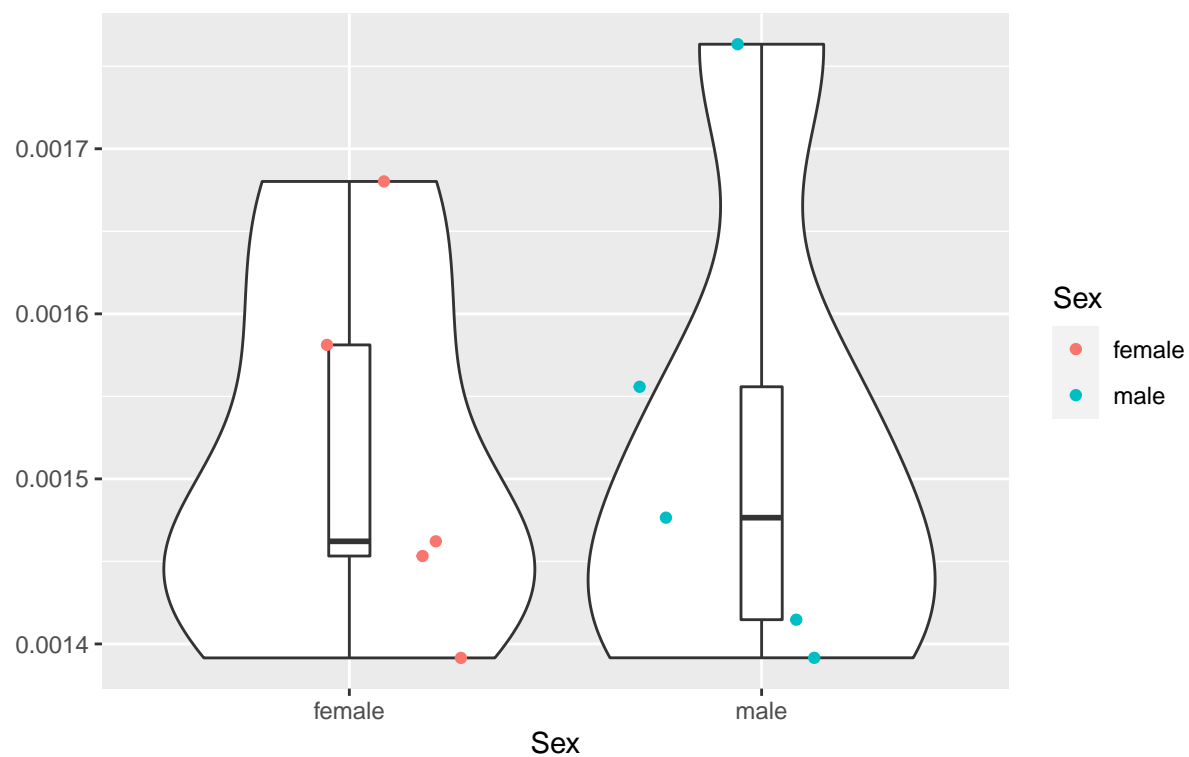
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 2.152e-08 2.152e-08   4.006 0.0803 .
## Residuals    8 4.298e-08 5.372e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Primary Somatosensory Cortex

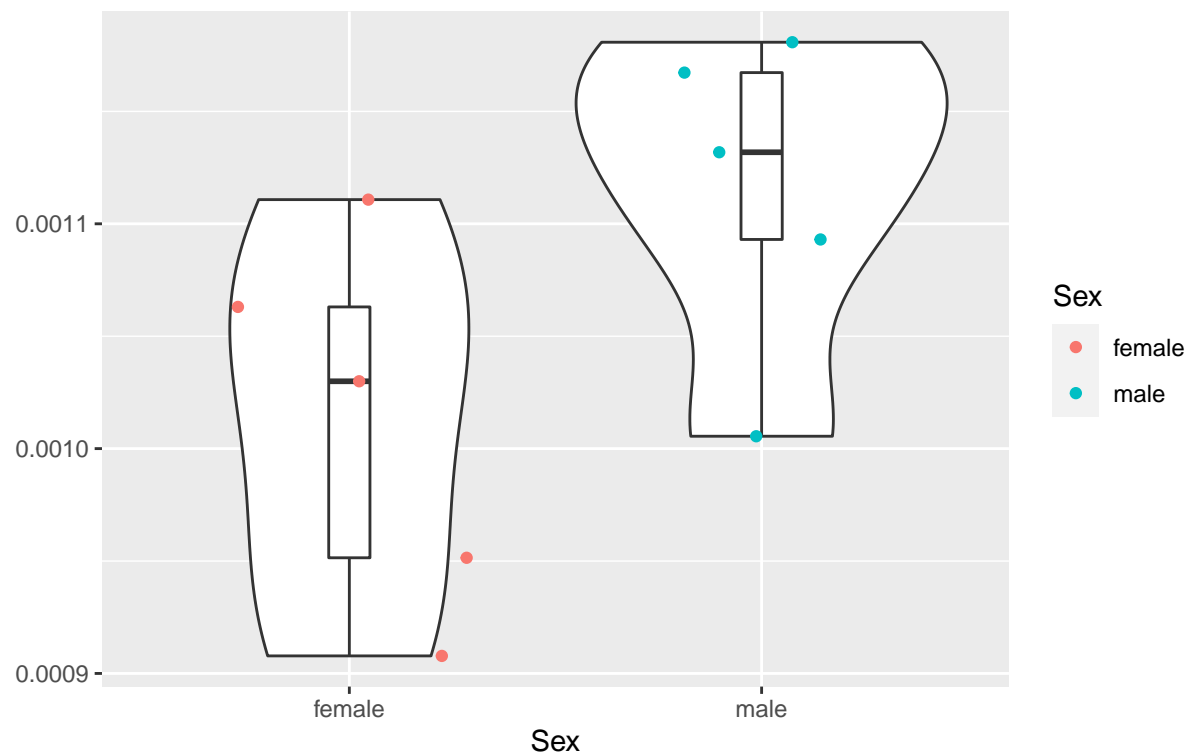
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.100e-10 | 1.130e-10 | 0.006 | 0.939 |
| ## Residuals | 8 | 1.435e-07 | 1.793e-08 | | |

Left Parietal Cortex Posterial Area Rostral Part

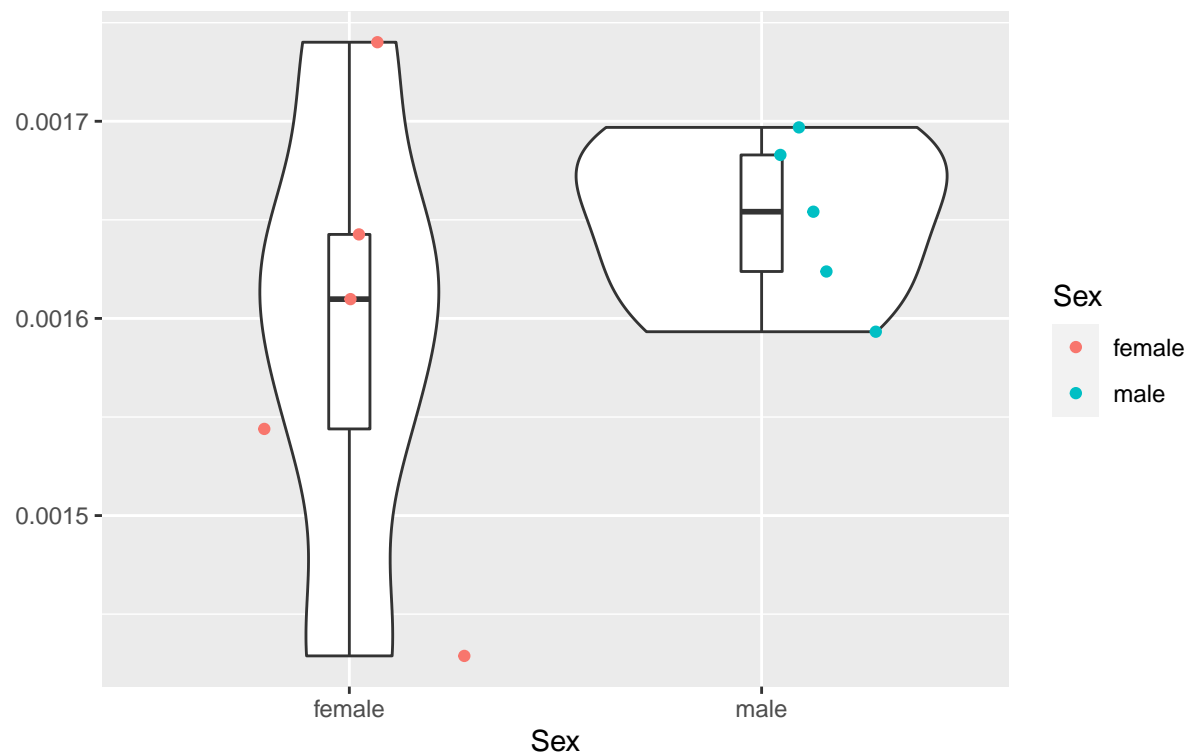
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 2.657e-08 2.656e-08    4.52 0.0662 .
## Residuals    8 4.701e-08 5.877e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Medial Parietal Association Cortex

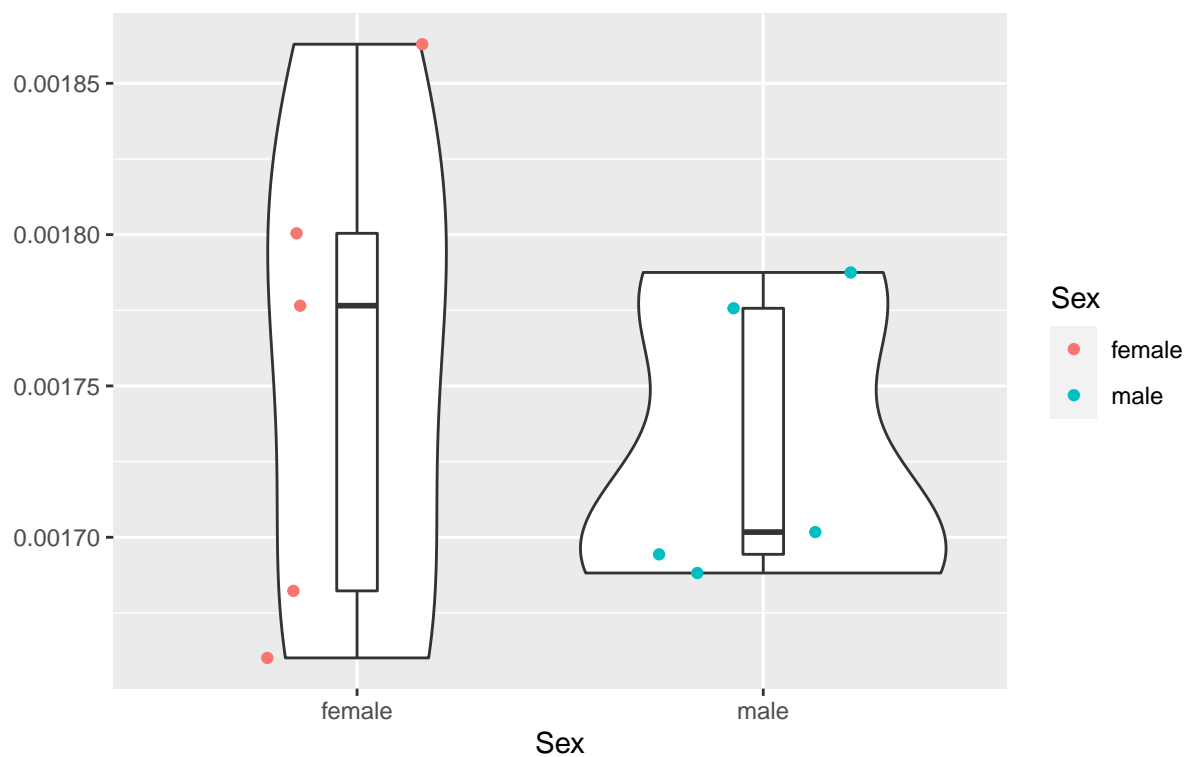
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 8.160e-09 | 8.165e-09 | 1.072 | 0.331 |
| ## Residuals | 8 | 6.095e-08 | 7.619e-09 | | |

Left Medial Orbital Cortex

Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.820e-09 | 1.819e-09 | 0.386 | 0.551 |
| ## Residuals | 8 | 3.765e-08 | 4.707e-09 | | |

Left Secondary Motor Cortex

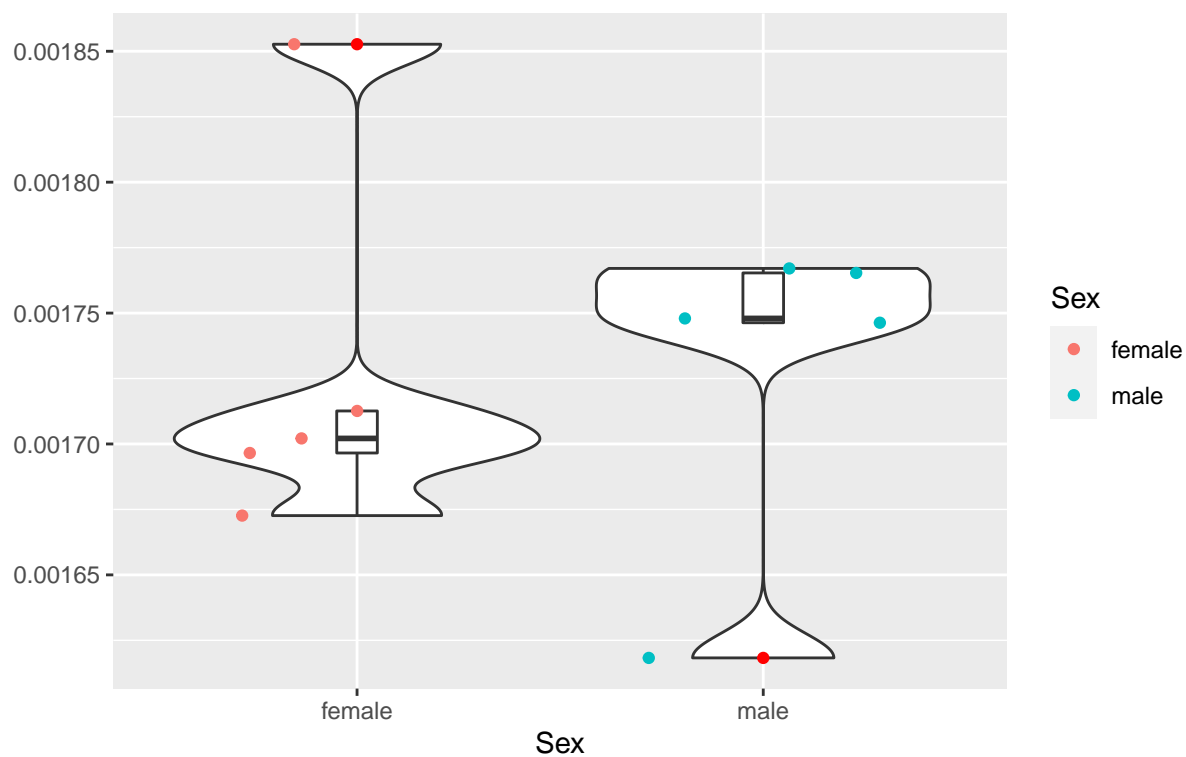
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 9.377e-09 | 9.377e-09 | 2.804 | 0.133 |
| ## Residuals | 8 | 2.676e-08 | 3.345e-09 | | |

Left Primary Motor Cortex

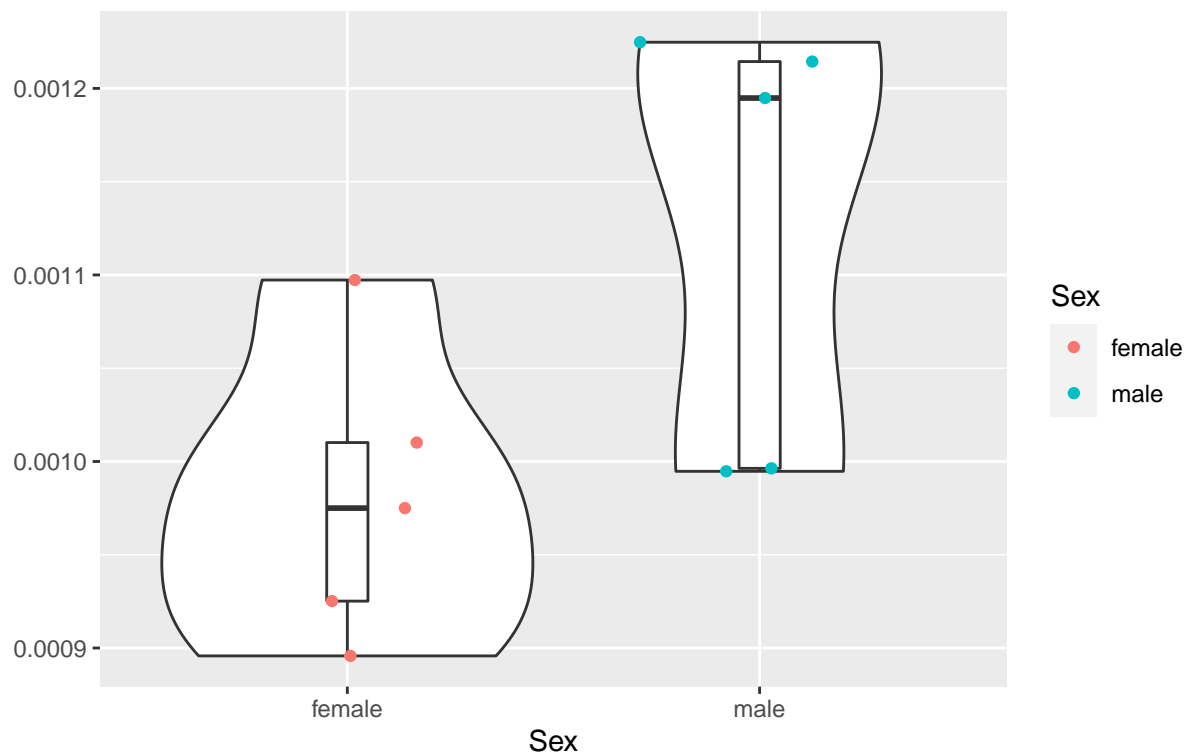
Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 1.000e-11 | 7.000e-12 | 0.002 | 0.97 |
| ## Residuals | 8 | 3.619e-08 | 4.524e-09 | | |

Left Lateral Parietal Association Cortex

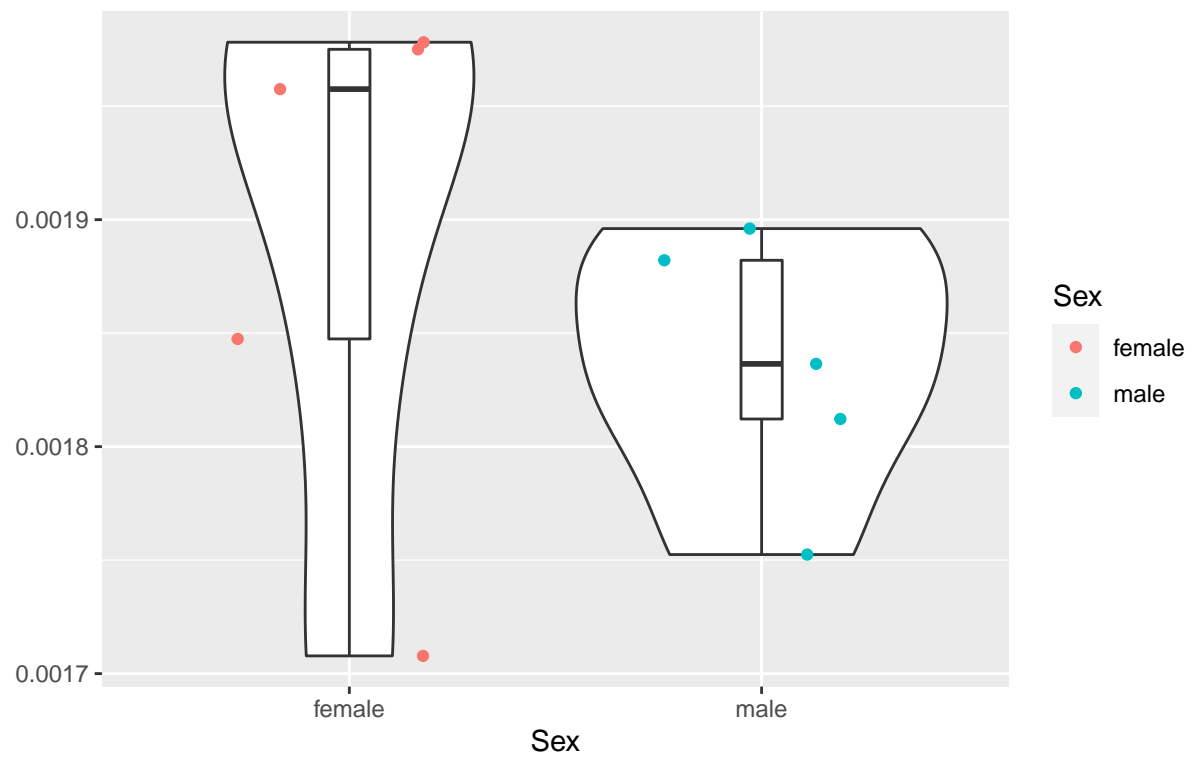
Red points denoting outliers



```
##          Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 5.209e-08 5.209e-08   5.137 0.0532 .
## Residuals    8 8.113e-08 1.014e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Lateral Orbital Cortex

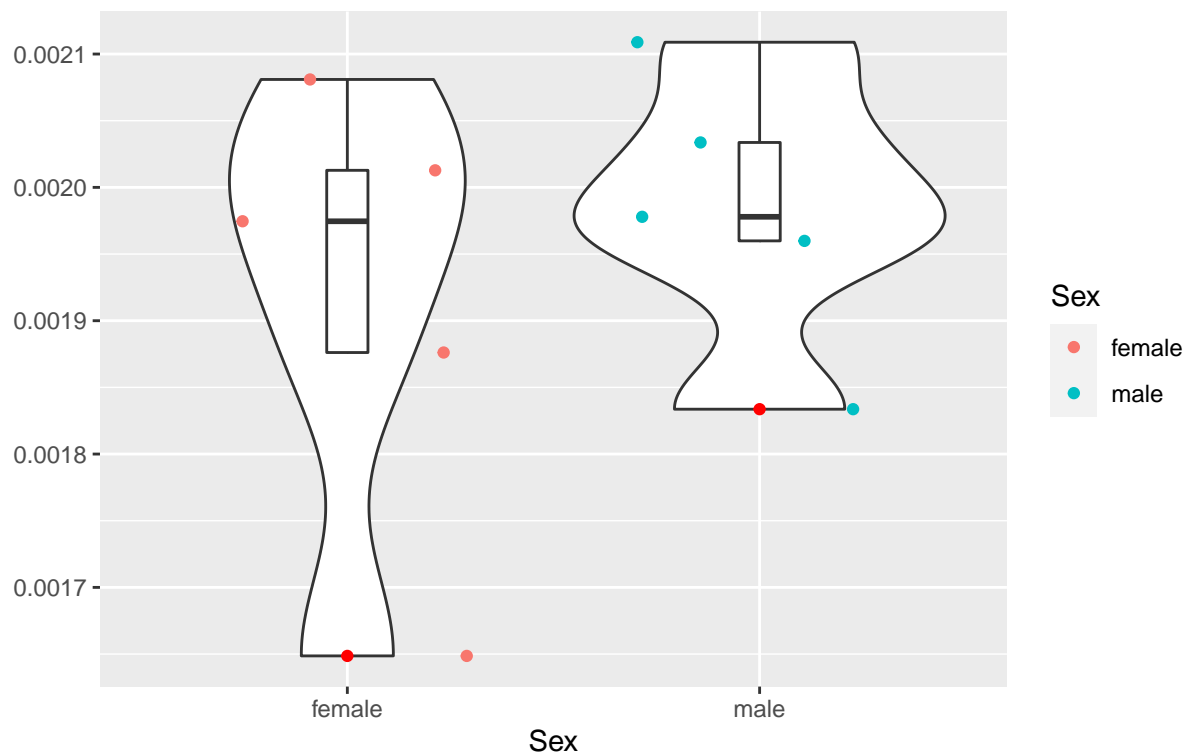
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 8.220e-09 | 8.220e-09 | 0.97 | 0.353 |
| ## Residuals | 8 | 6.778e-08 | 8.473e-09 | | |

Left Insular Cortex

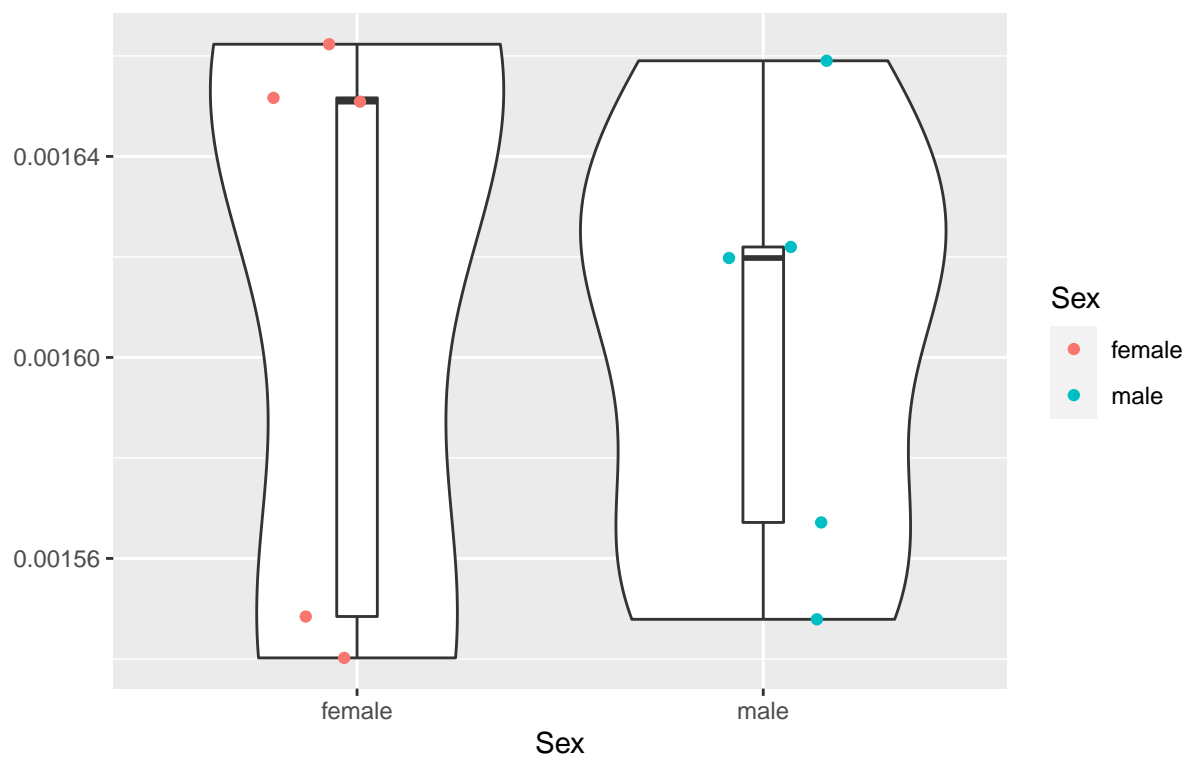
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.030e-08 | 1.030e-08 | 0.534 | 0.486 |
| ## Residuals | 8 | 1.543e-07 | 1.929e-08 | | |

Left Frontal Association Cortex

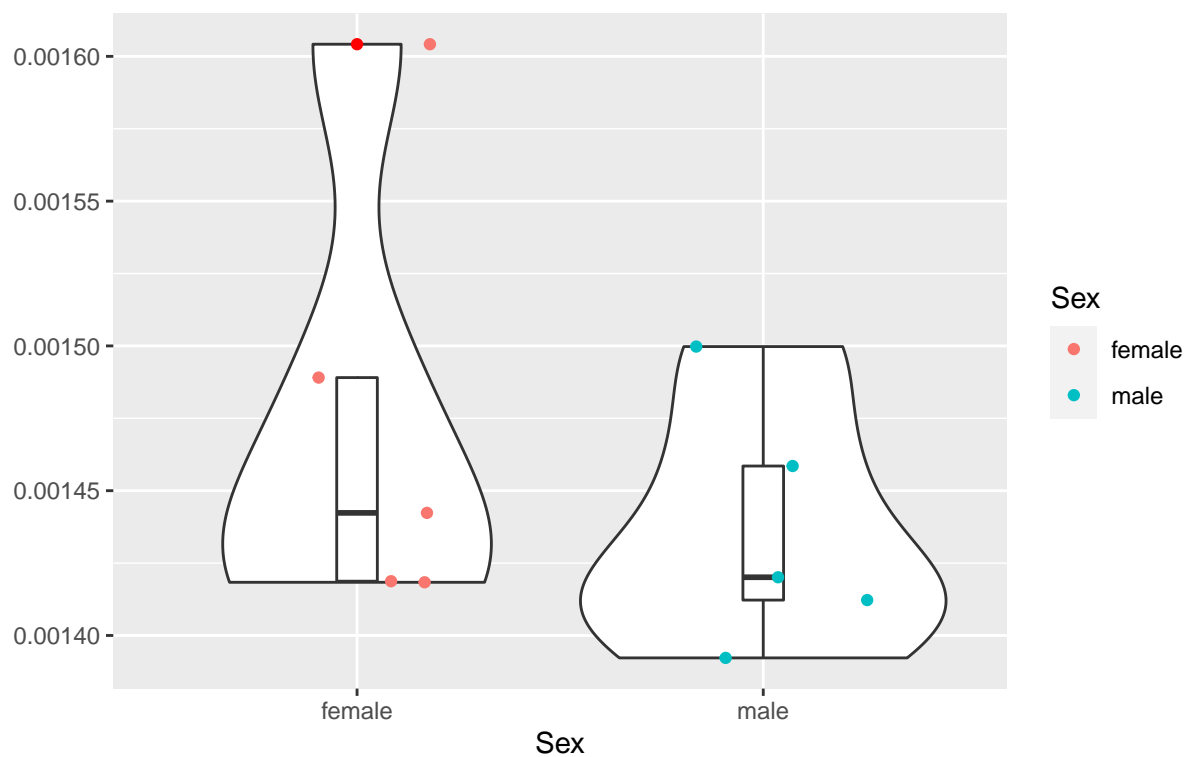
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.420e-10 | 1.420e-10 | 0.05 | 0.829 |
| ## Residuals | 8 | 2.291e-08 | 2.863e-09 | | |

Left Frontal Cortex Area 3

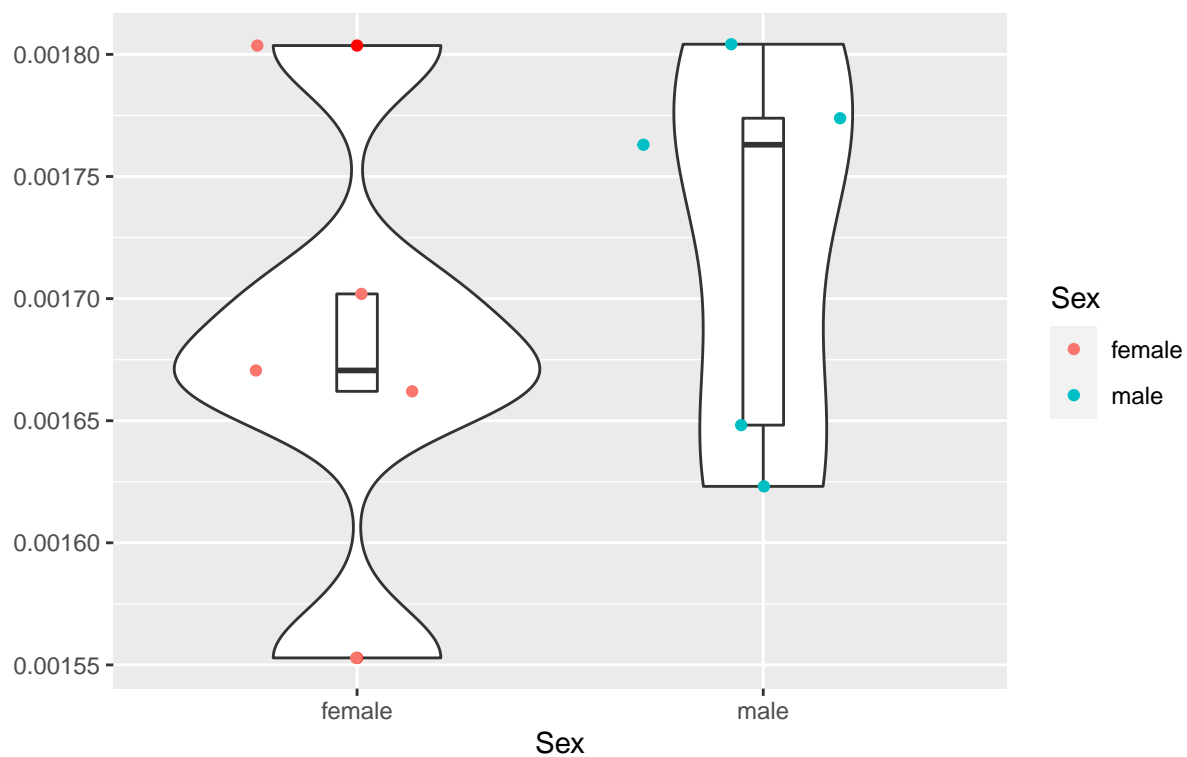
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 3.600e-09 | 3.603e-09 | 0.911 | 0.368 |
| ## Residuals | 8 | 3.163e-08 | 3.954e-09 | | |

Left Dorsolateral Orbital Cortex

Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 4.900e-09 | 4.899e-09 | 0.668 | 0.437 |
| ## Residuals | 8 | 5.867e-08 | 7.334e-09 | | |

Left Secondary Auditory Cortex Ventral Part

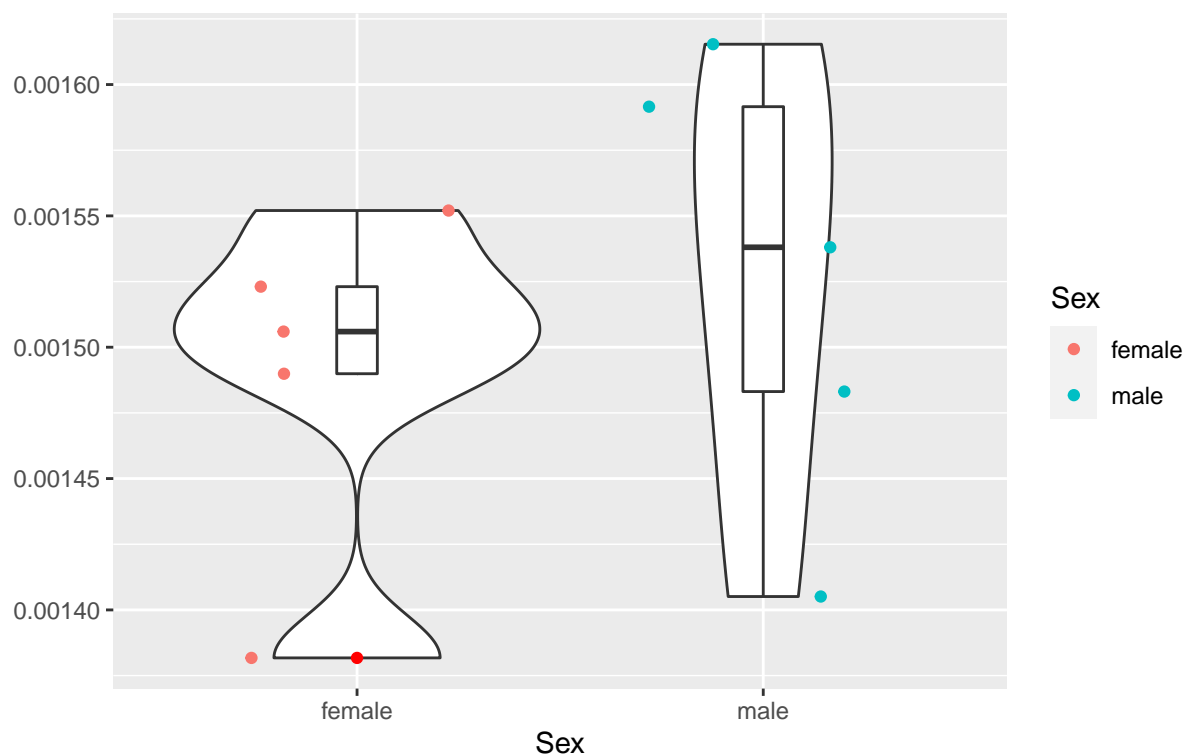
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 6.000e-11 | 5.800e-11 | 0.005 | 0.943 |
| ## Residuals | 8 | 8.623e-08 | 1.078e-08 | | |

Left Secondary Auditory Cortex Dorsal Part

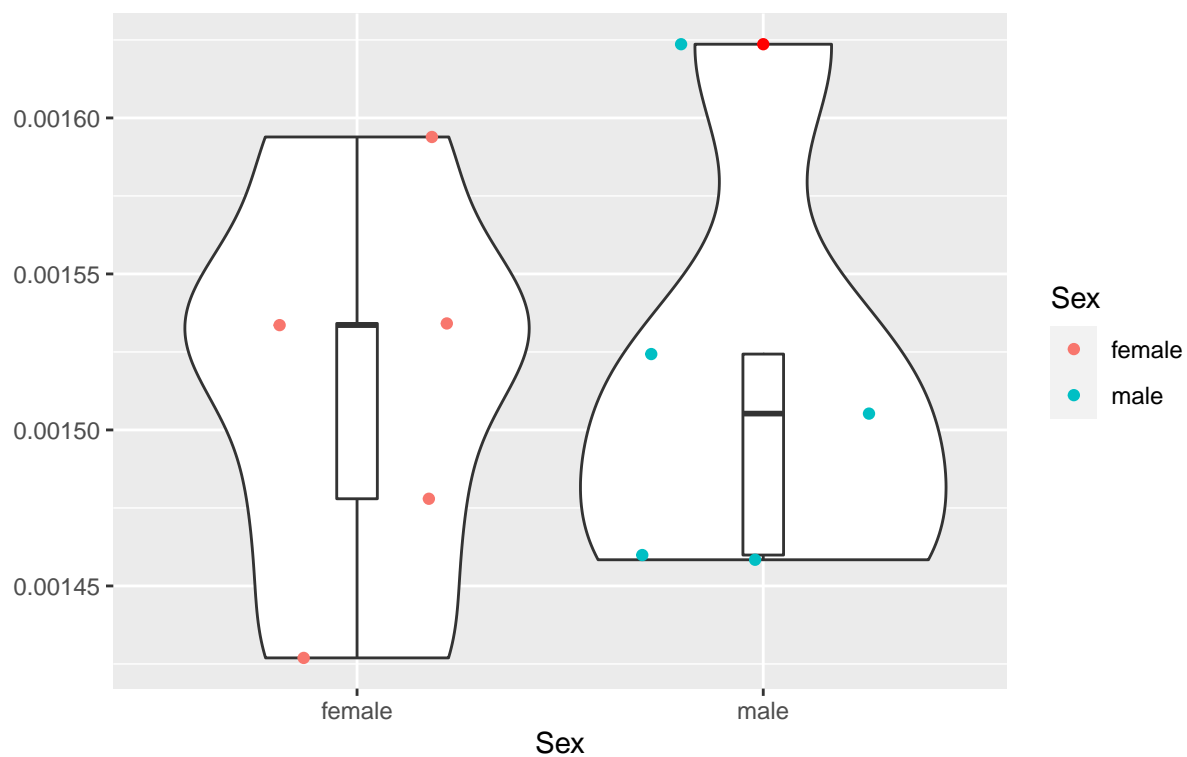
Red points denoting outliers



| | | | | | |
|--------------|----|----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 3.26e-09 | 3.258e-09 | 0.569 | 0.472 |
| ## Residuals | 8 | 4.58e-08 | 5.725e-09 | | |

Left Primary Auditory Cortex

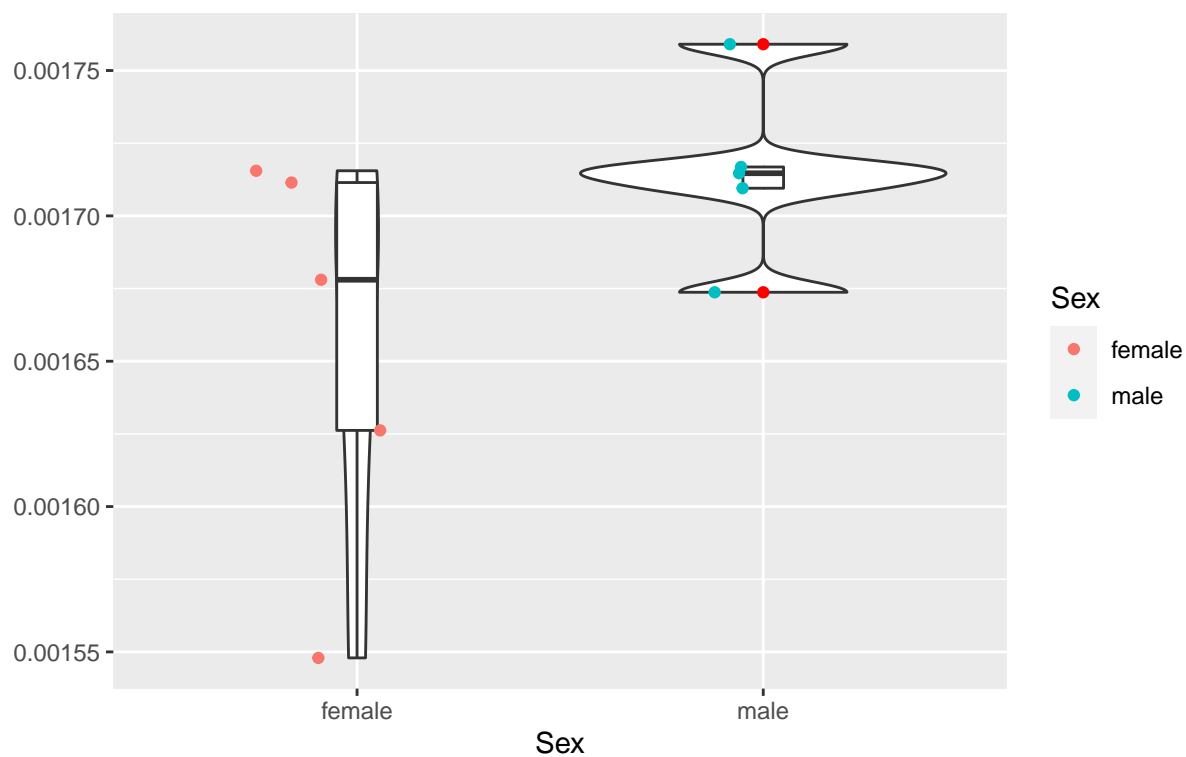
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 0.000e+00 | 2.000e-12 | 0.001 | 0.981 |
| ## Residuals | 8 | 3.427e-08 | 4.284e-09 | | |

Left Cingulate Cortex Area 32

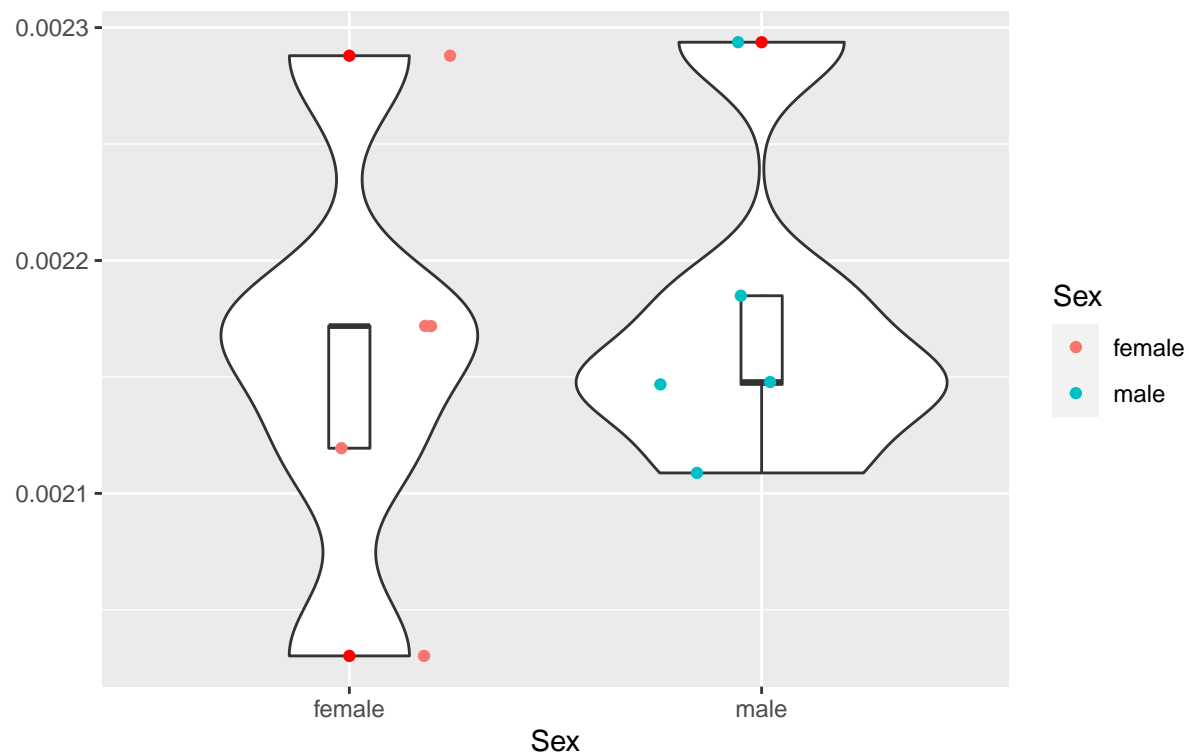
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 8.681e-09 | 8.681e-09 | 2.975 | 0.123 |
| ## Residuals | 8 | 2.335e-08 | 2.918e-09 | | |

Left Cingulate Cortex Area 30

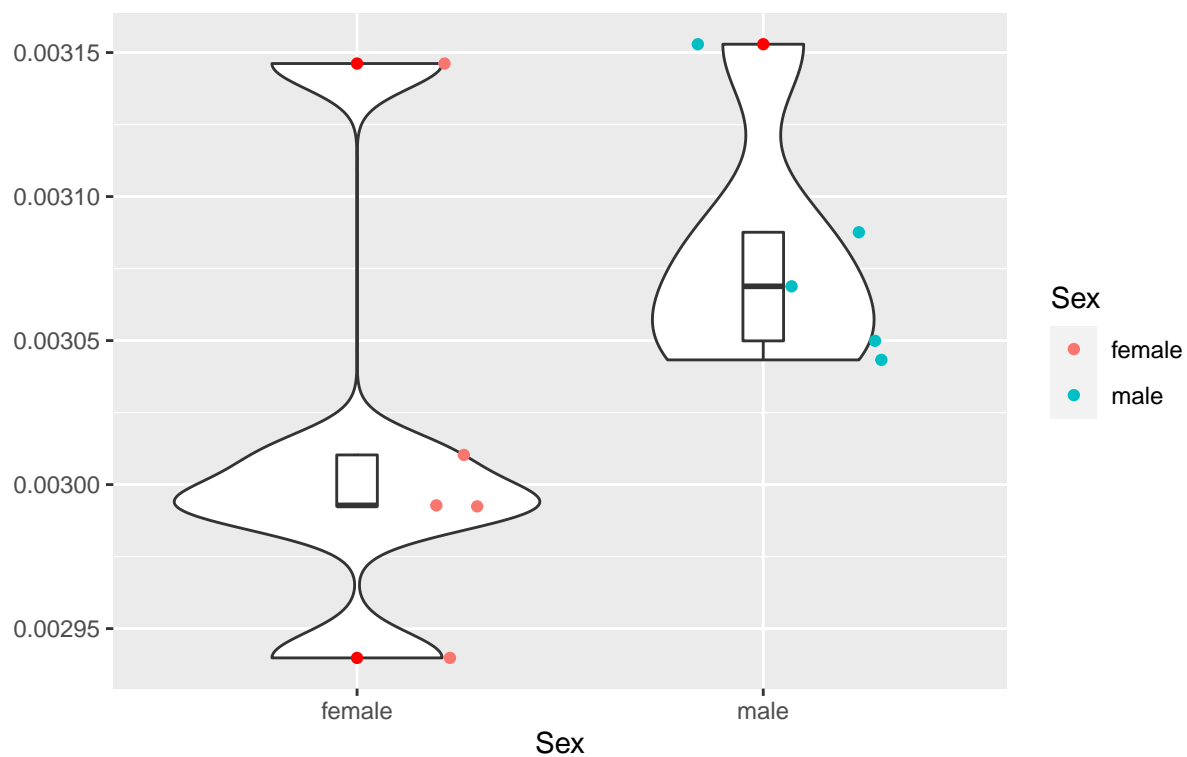
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.010e-09 | 1.014e-09 | 0.147 | 0.711 |
| ## Residuals | 8 | 5.517e-08 | 6.896e-09 | | |

Left Cingulate Cortex Area 29c

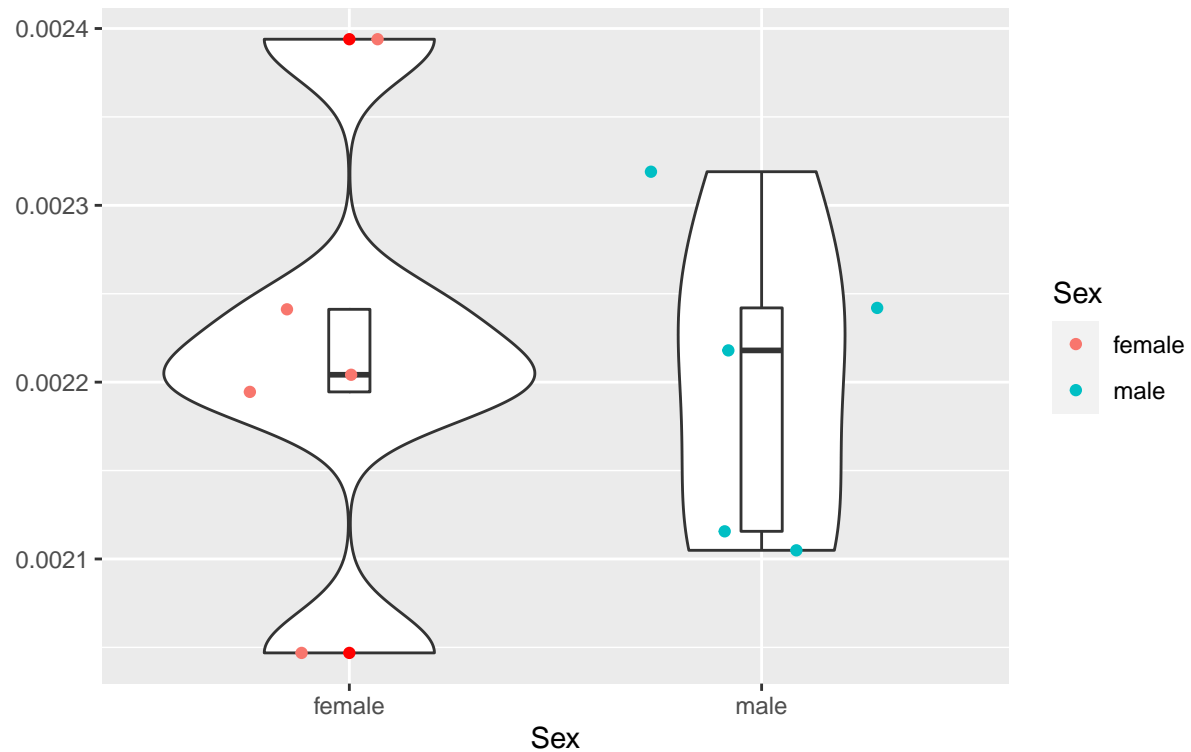
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.030e-08 | 1.030e-08 | 2.606 | 0.145 |
| ## Residuals | 8 | 3.162e-08 | 3.953e-09 | | |

Left Cingulate Cortex Area 29b

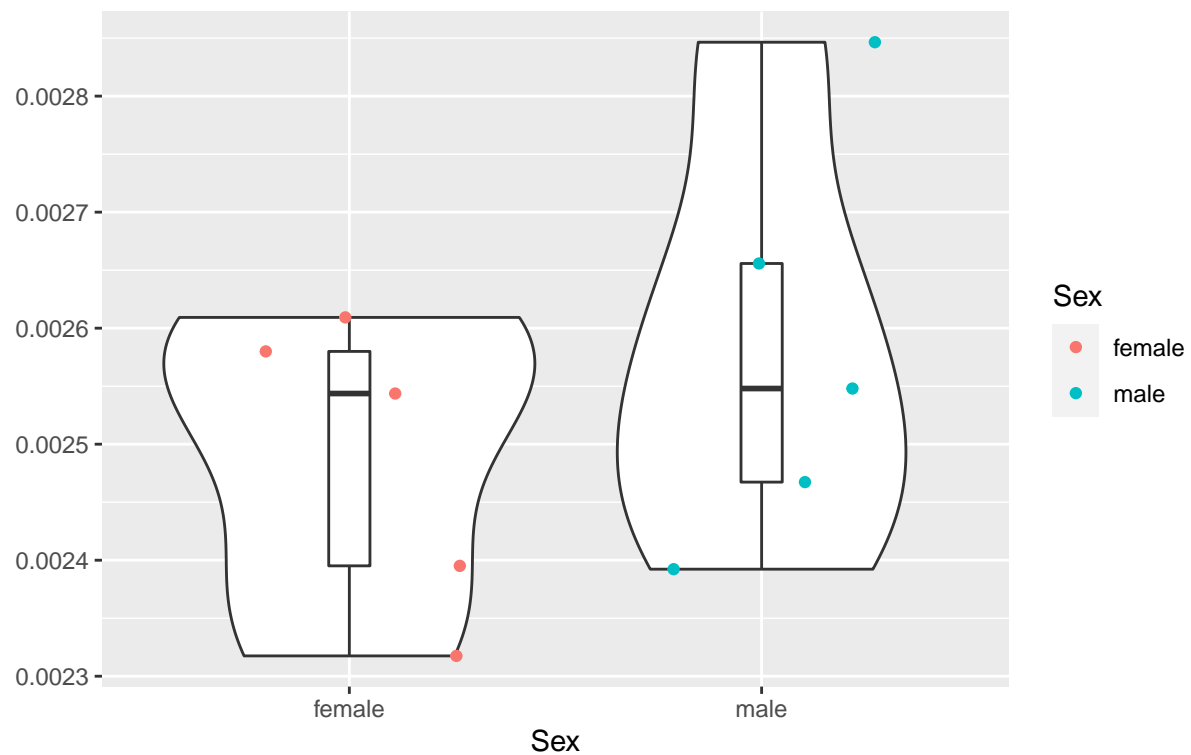
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 6.600e-10 | 6.590e-10 | 0.056 | 0.819 |
| ## Residuals | 8 | 9.392e-08 | 1.174e-08 | | |

Left Cingulate Cortex Area 29a

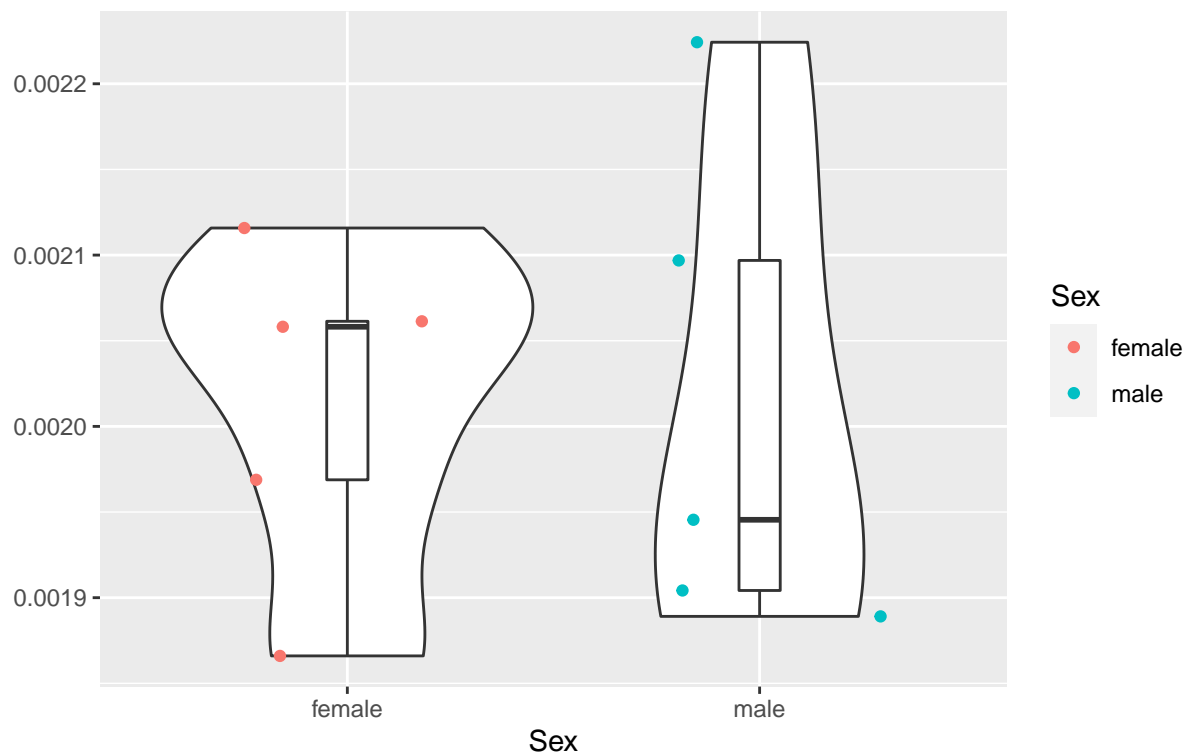
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 2.155e-08 | 2.155e-08 | 0.909 | 0.368 |
| ## Residuals | 8 | 1.897e-07 | 2.371e-08 | | |

Left Cingulate Cortex Area 24b Prime

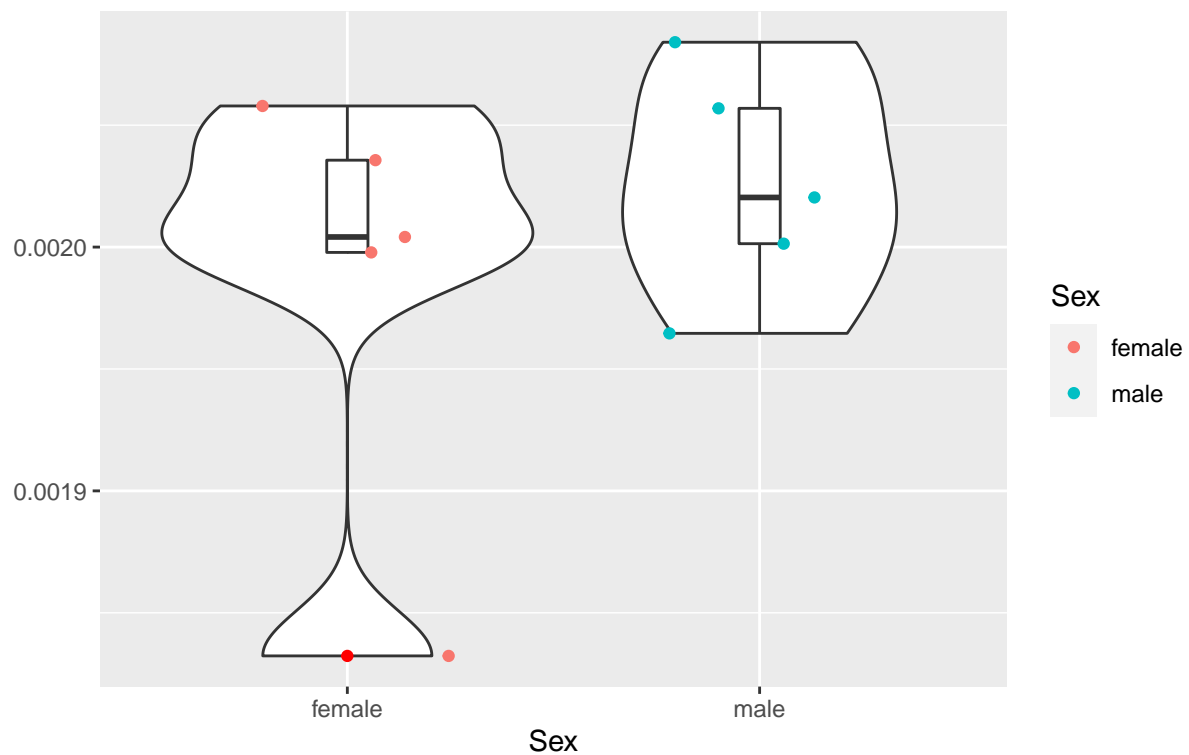
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 1.000e-11 | 1.000e-11 | 0.001 | 0.98 |
| ## Residuals | 8 | 1.219e-07 | 1.524e-08 | | |

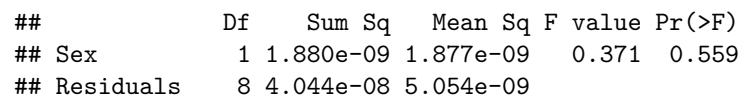
Left Cingulate Cortex Area 24b

Red points denoting outliers



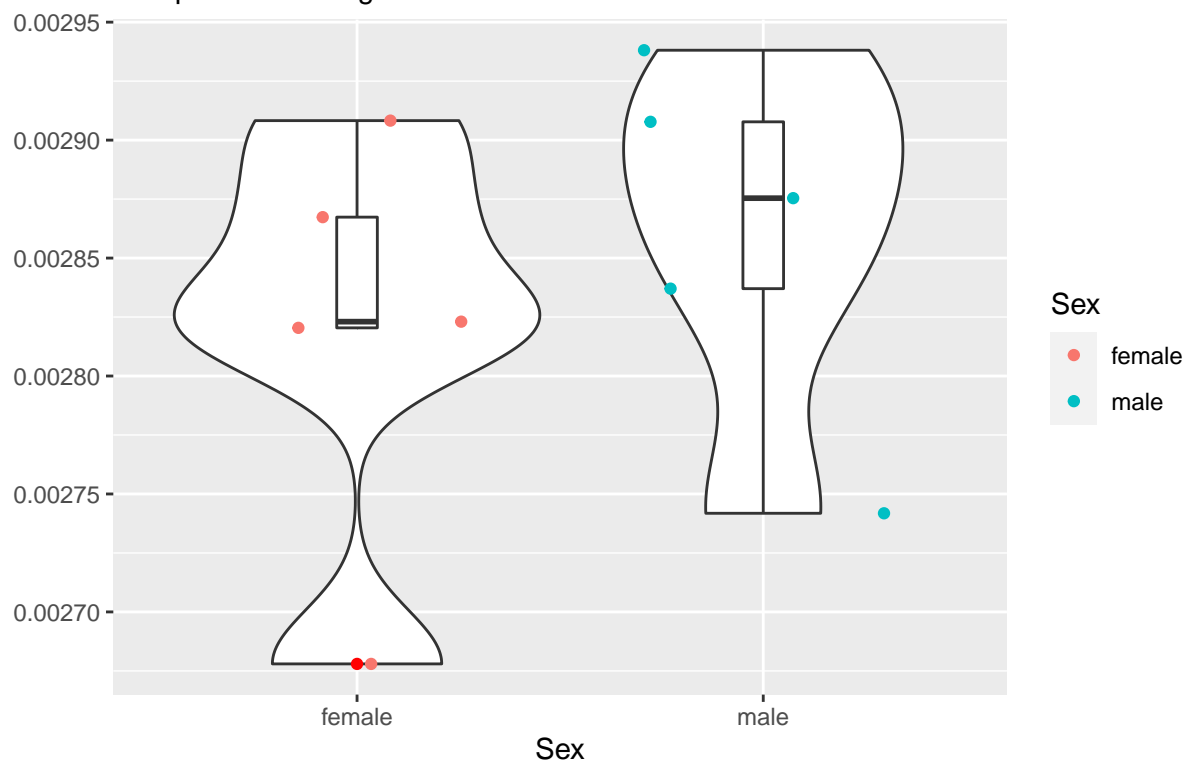
| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 3.980e-09 | 3.980e-09 | 0.787 | 0.401 |
| ## Residuals | 8 | 4.045e-08 | 5.056e-09 | | |

Red points denoting outliers



Left Cingulate Cortex Area 24a

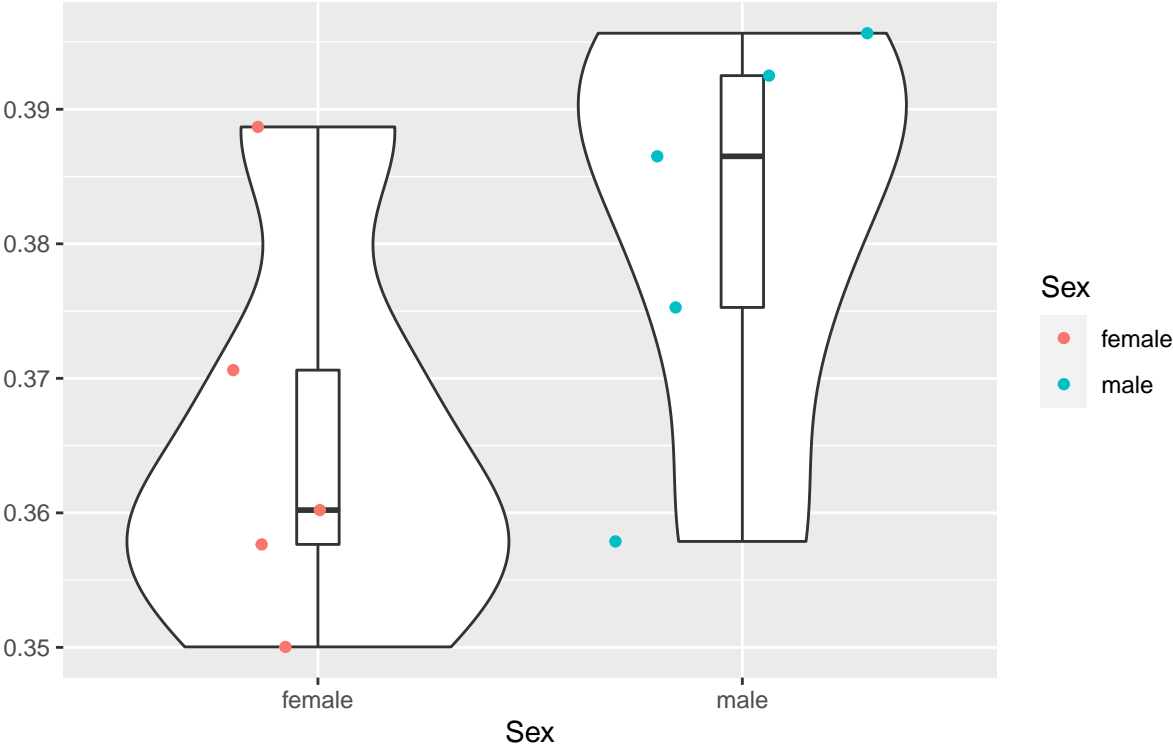
Red points denoting outliers



| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
|--------------|----|-----------|-----------|---------|--------|
| ## Sex | 1 | 4.120e-09 | 4.124e-09 | 0.619 | 0.454 |
| ## Residuals | 8 | 5.333e-08 | 6.666e-09 | | |

Exterior

Red points denoting outliers



| | | | | | |
|--------------|----|-----------|-----------|---------|--------|
| ## | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| ## Sex | 1 | 0.0006498 | 0.0006498 | 2.832 | 0.131 |
| ## Residuals | 8 | 0.0018359 | 0.0002295 | | |