

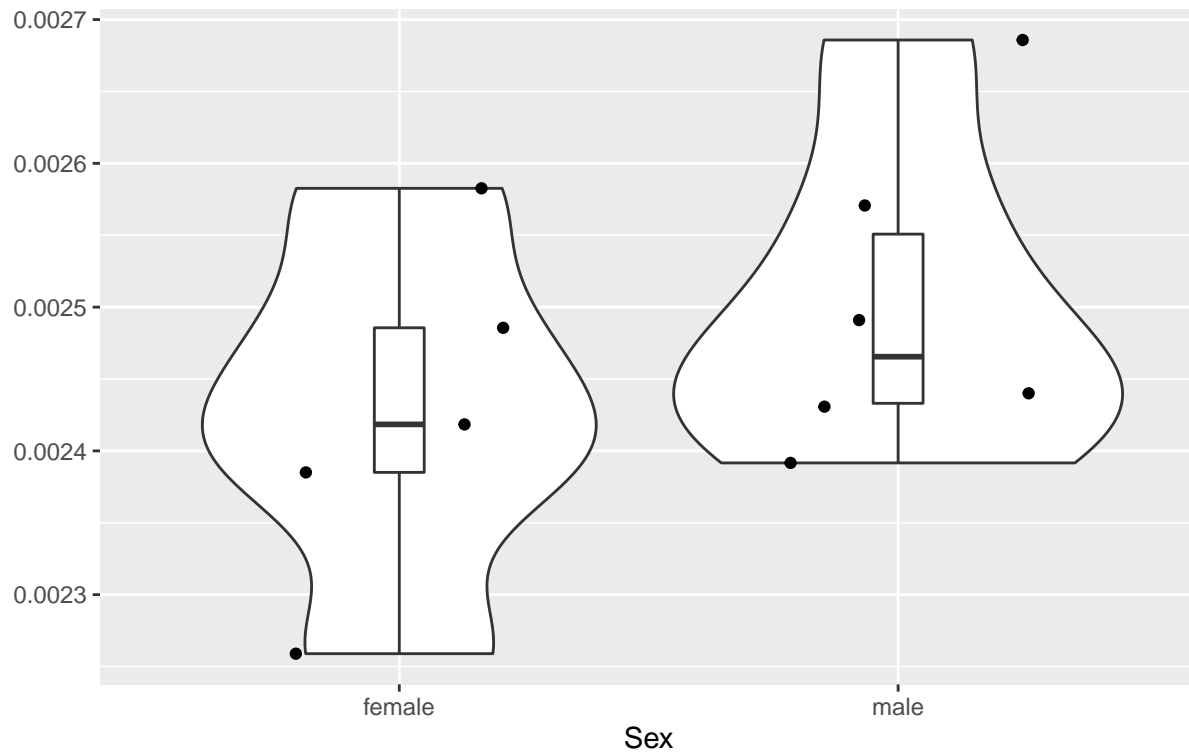
Left APOE2 Disaggregated by Sex

Anna MacFarlane

3/21/2021

Interpeduncular Nucleus: APOE2

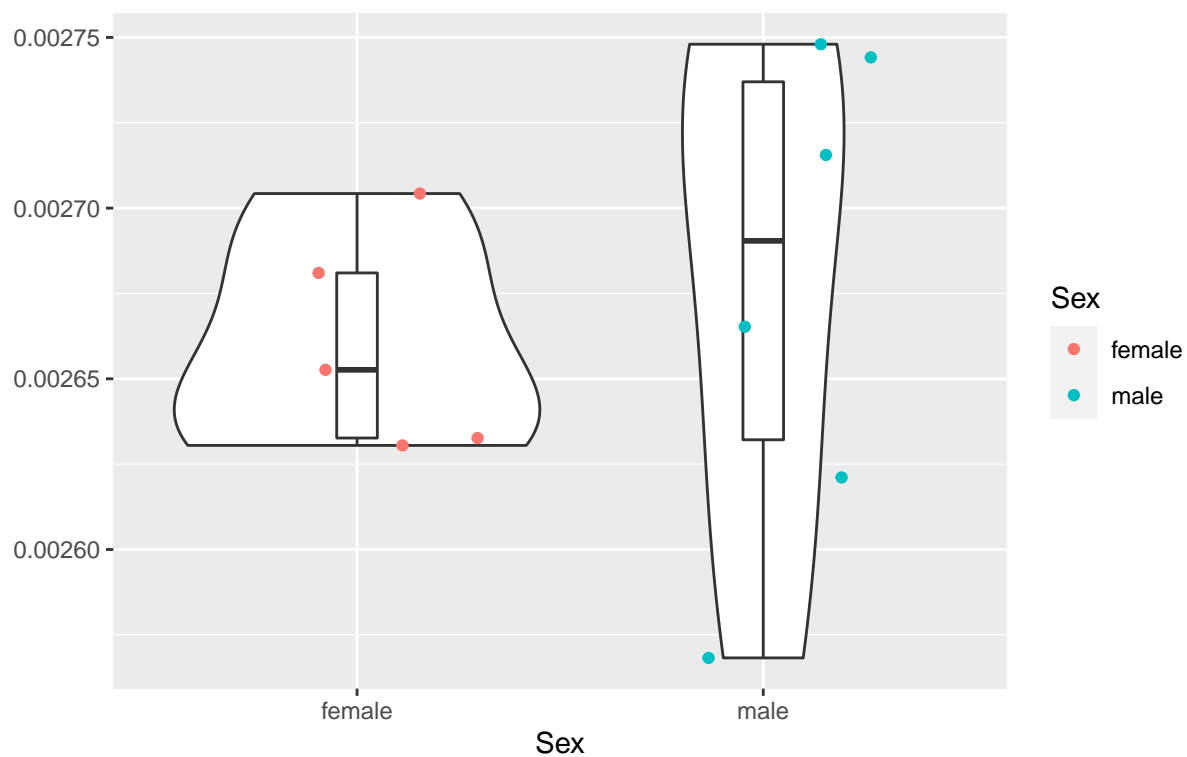
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex      1 1.555e-08 1.555e-08   1.192  0.303
## Residuals 9 1.174e-07 1.305e-08
```

Cerebellar Cortex

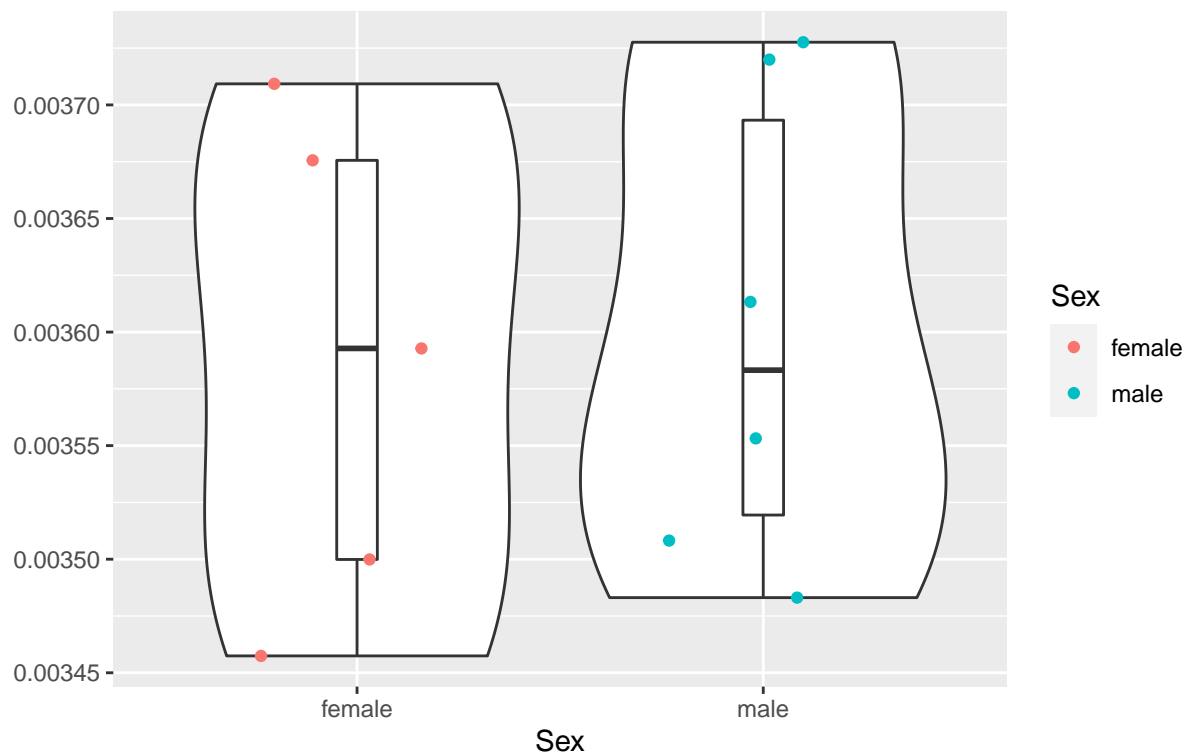
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 7.740e-10 7.740e-10   0.23  0.643
## Residuals   9 3.021e-08 3.356e-09
```

Dentate (Lateral) Nucleus of Cerebellum

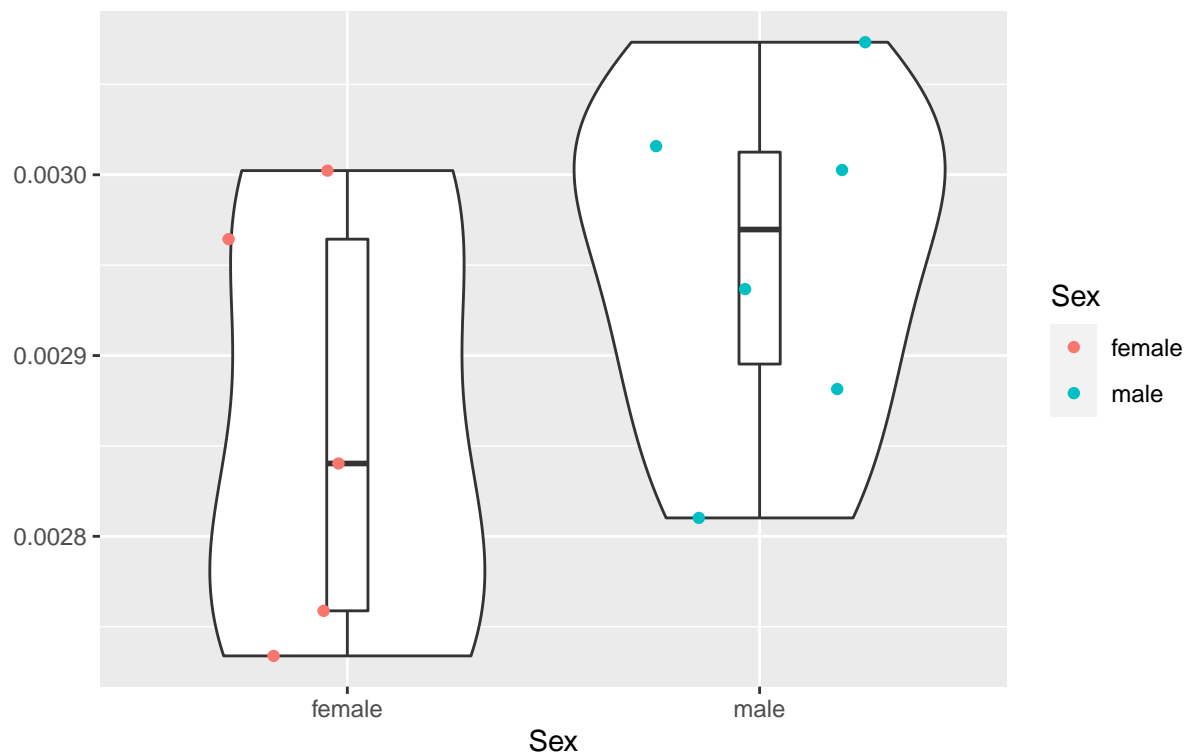
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	5.300e-10	5.260e-10	0.046	0.835
## Residuals	9	1.023e-07	1.137e-08		

Interposed Nucleus of Cerebellum

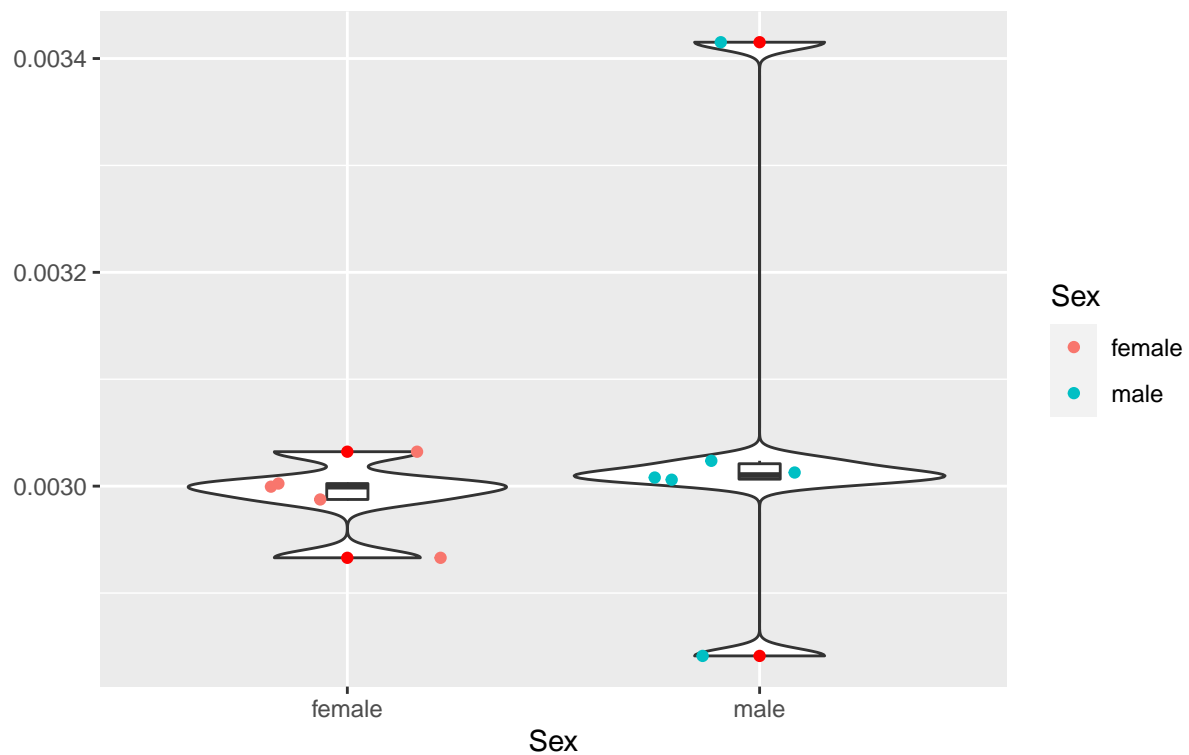
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 2.382e-08 2.382e-08   2.054  0.186
## Residuals   9 1.044e-07 1.160e-08
```

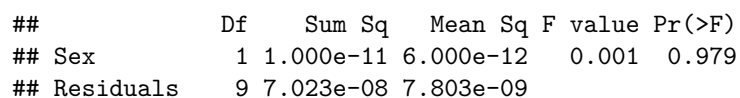
Fastigial Medial Dorsolateral Nucleus of Cerebellum

Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 9.890e-09 9.894e-09   0.473  0.509
## Residuals   9 1.881e-07 2.090e-08
```

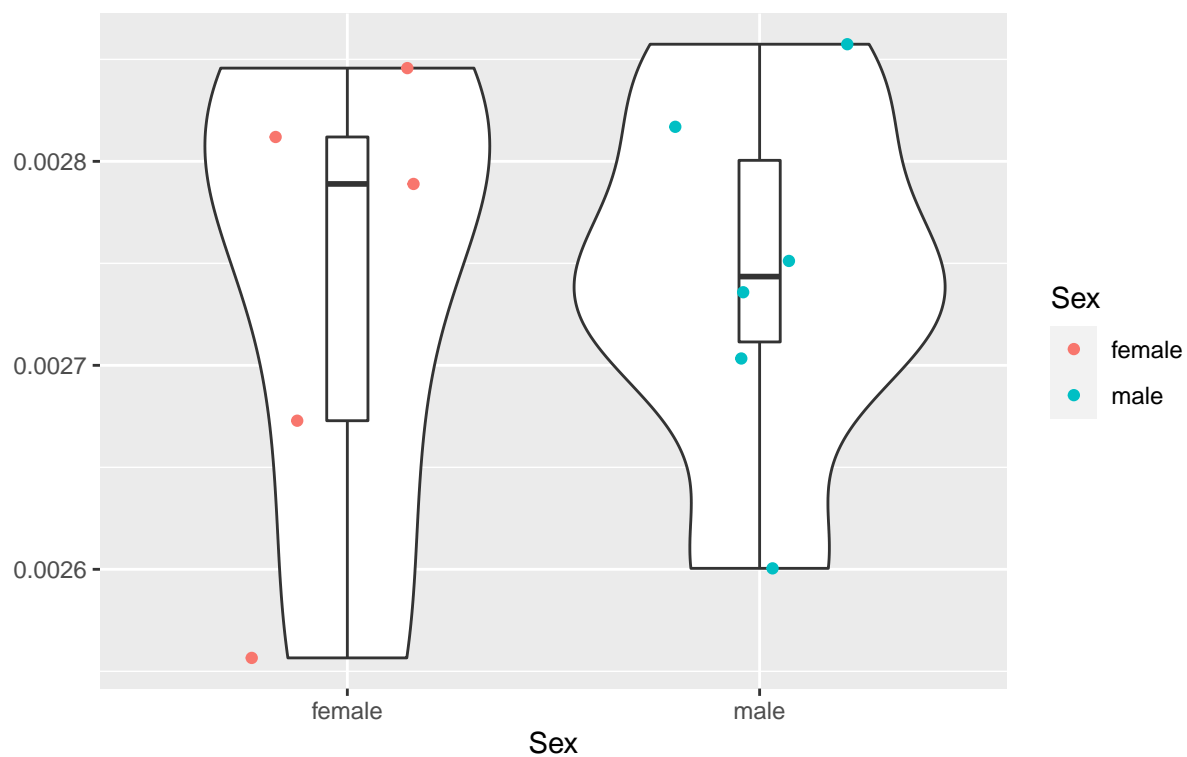
Red points denoting outliers



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Parabrachial Nucleus

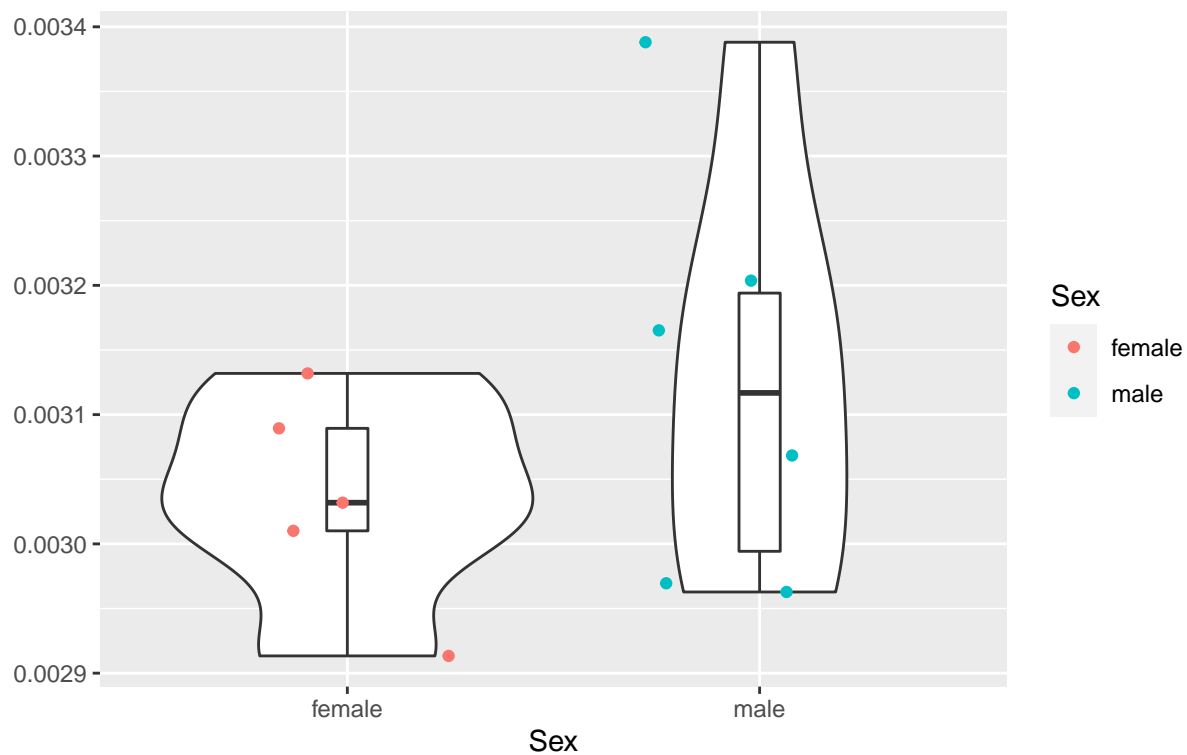
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.200e-10	2.210e-10	0.02	0.89
## Residuals	9	9.734e-08	1.081e-08		

Parabrachial Medial Nucleus and Koelliker Fuse Nucleus

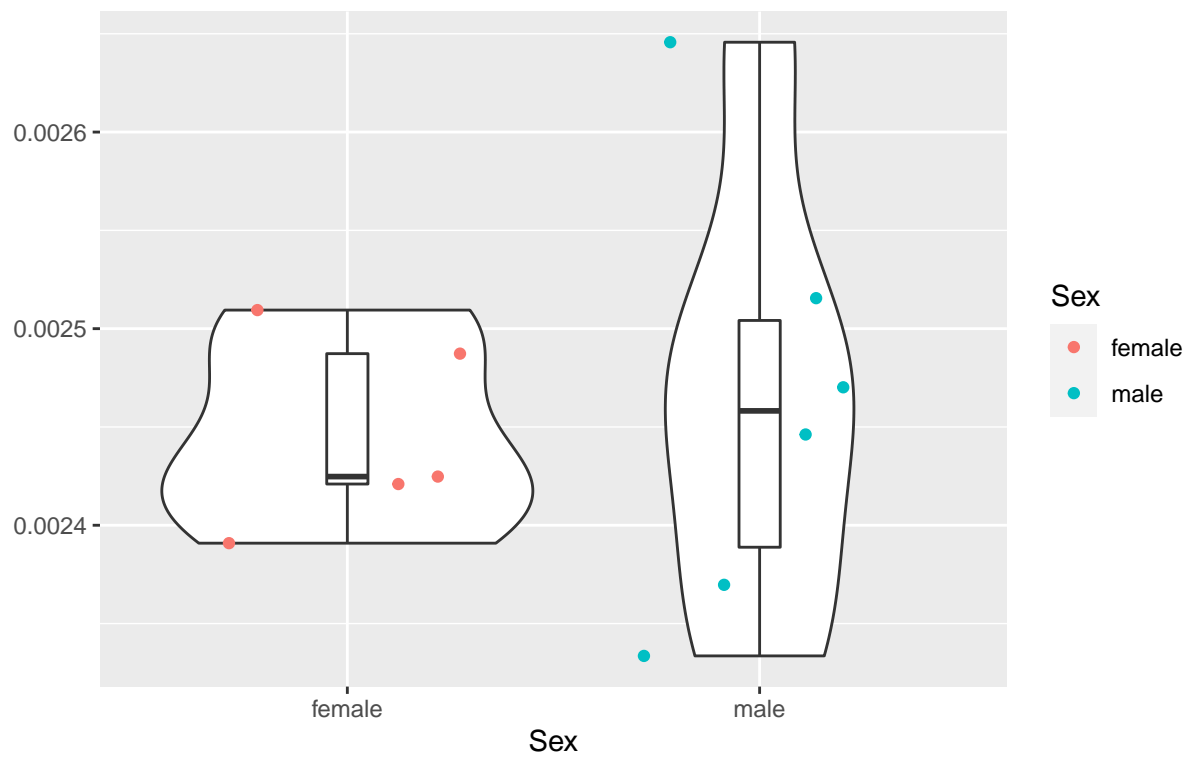
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.257e-08	2.257e-08	1.282	0.287
## Residuals	9	1.584e-07	1.761e-08		

Parvicellular Reticular Nucleus and Principal Sensory Trigeminal Nucleus

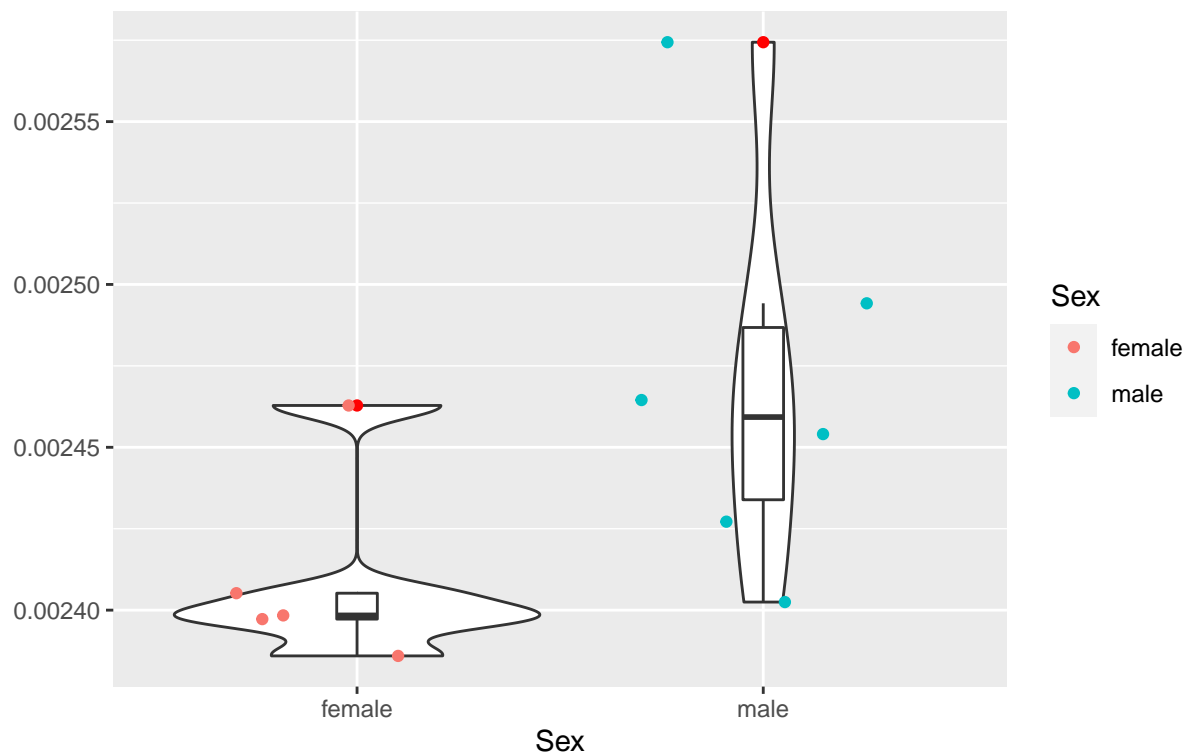
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	7.700e-10	7.690e-10	0.096	0.763
## Residuals	9	7.178e-08	7.975e-09		

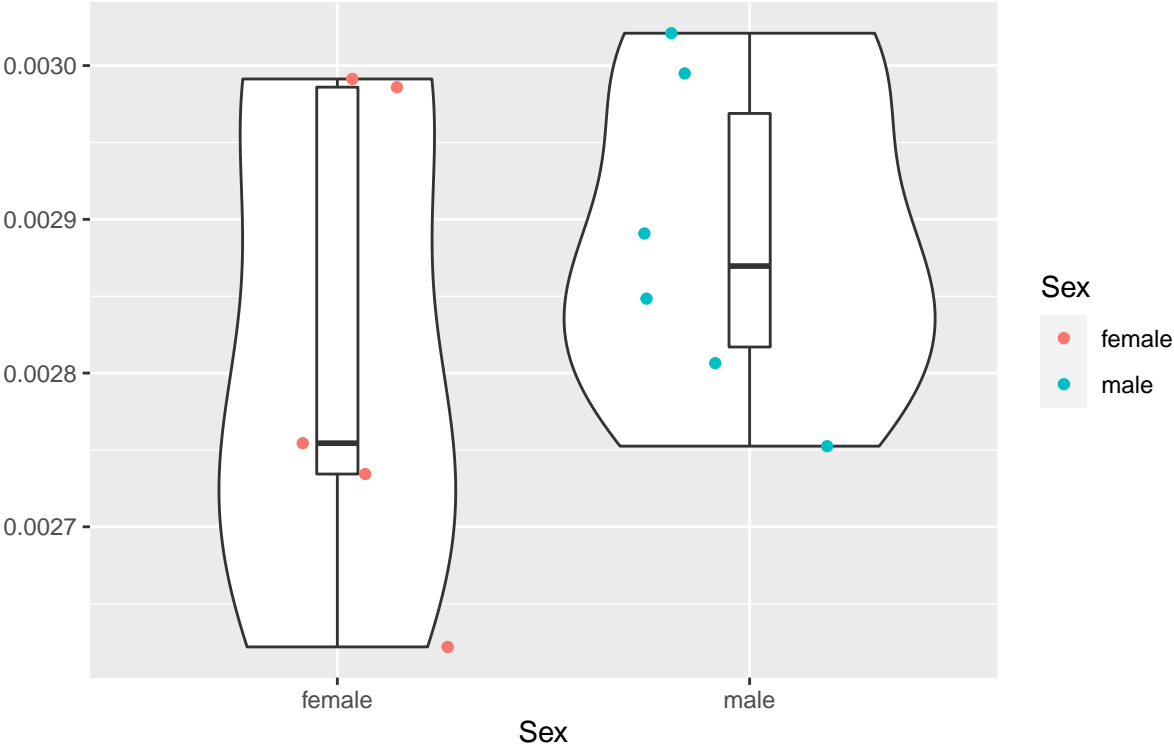
Central Gray

Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 9.670e-09 9.670e-09   3.983 0.0771 .
## Residuals    9 2.185e-08 2.428e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Pedunculotegmental Medial Paralemniscial and Supratrigeminal Nuclei
Red points denoting outliers



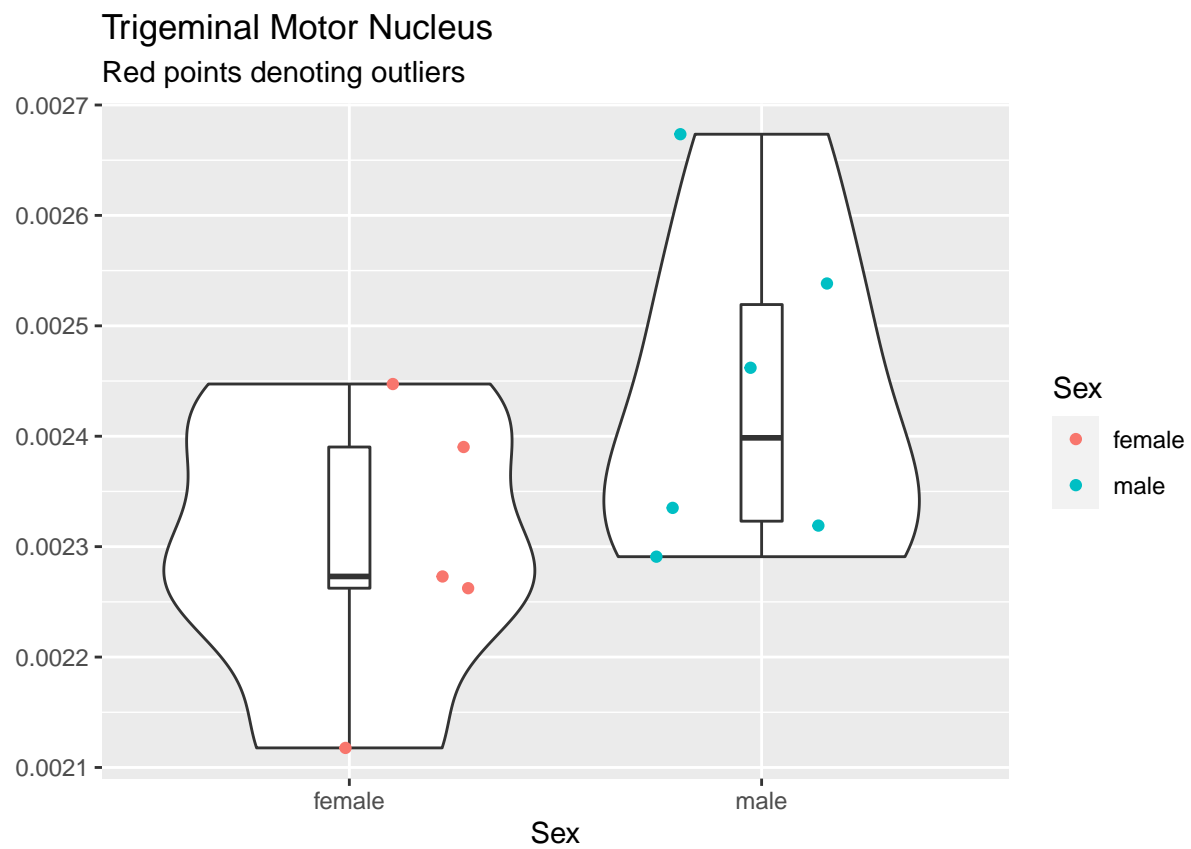
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.265e-08	1.265e-08	0.697	0.426
## Residuals	9	1.634e-07	1.816e-08		

Motor Root of Trigeminal Nerve

Red points denoting outliers



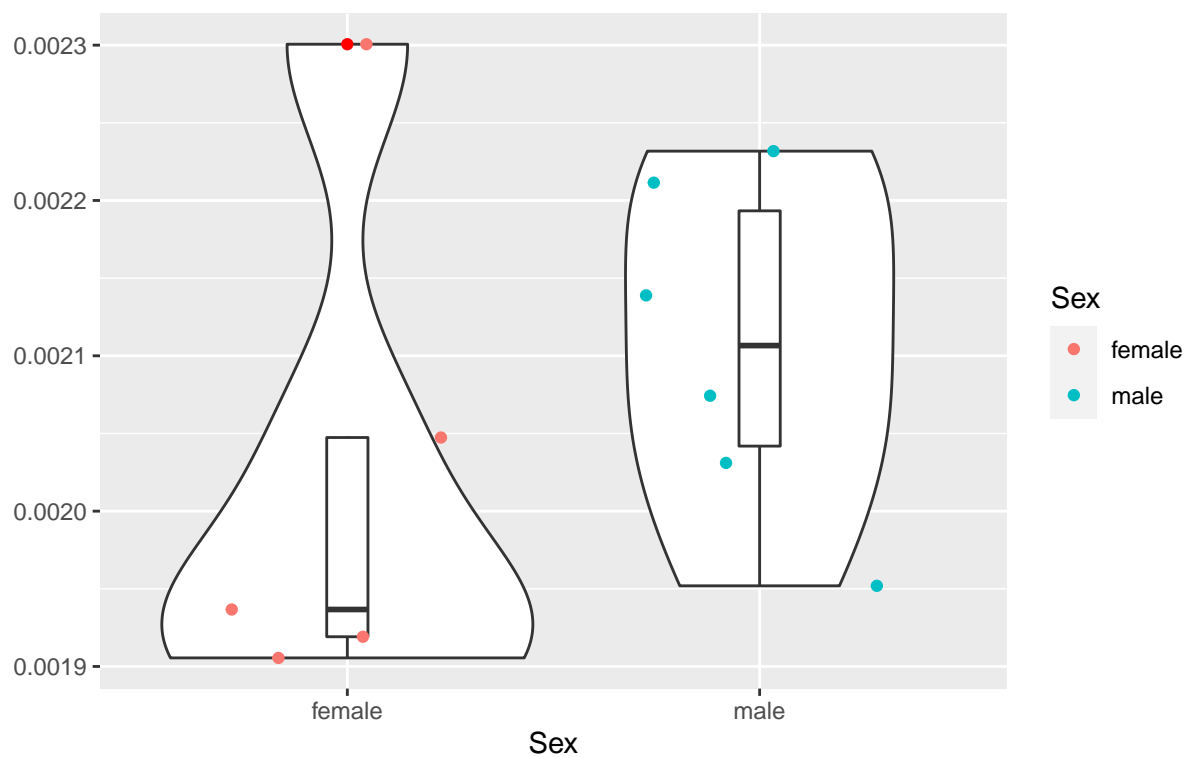
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.182e-07	1.182e-07	2.944	0.12
## Residuals	9	3.613e-07	4.015e-08		



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	5.222e-08	5.222e-08	2.645	0.138
## Residuals	9	1.777e-07	1.974e-08		

Pontine Reticular Nucleus

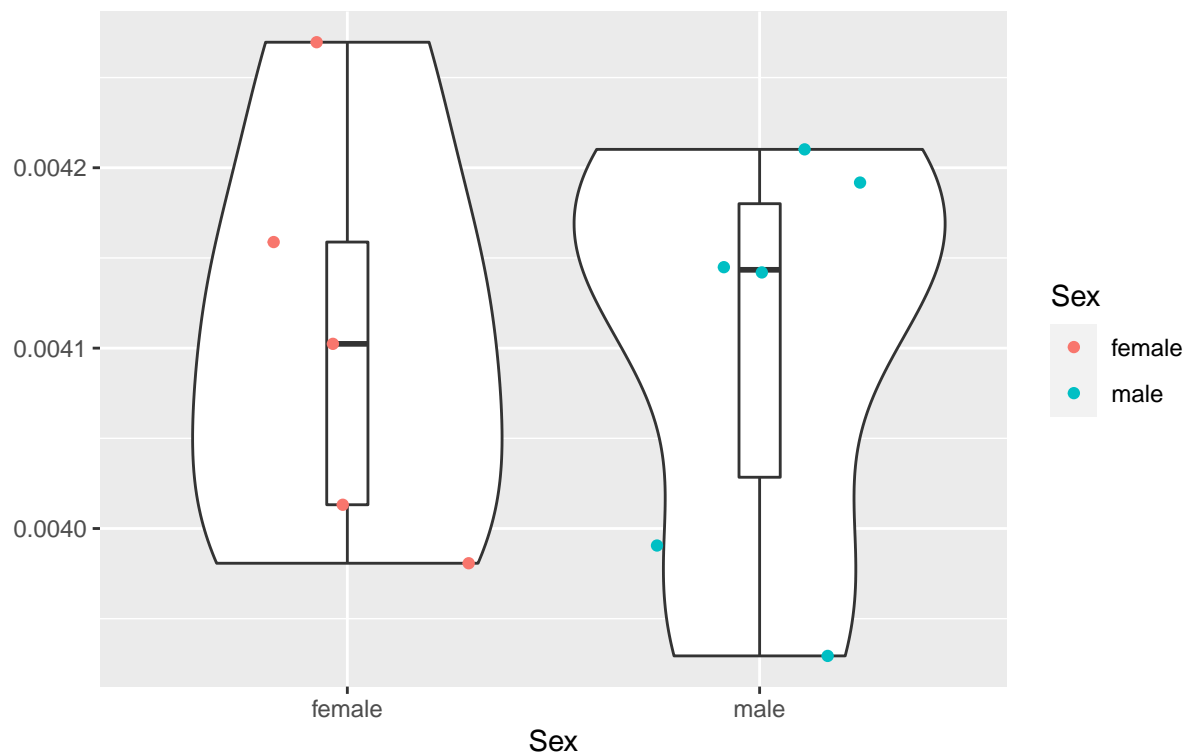
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.957e-08	1.957e-08	1.048	0.333
## Residuals	9	1.681e-07	1.868e-08		

Raphe Nucleus

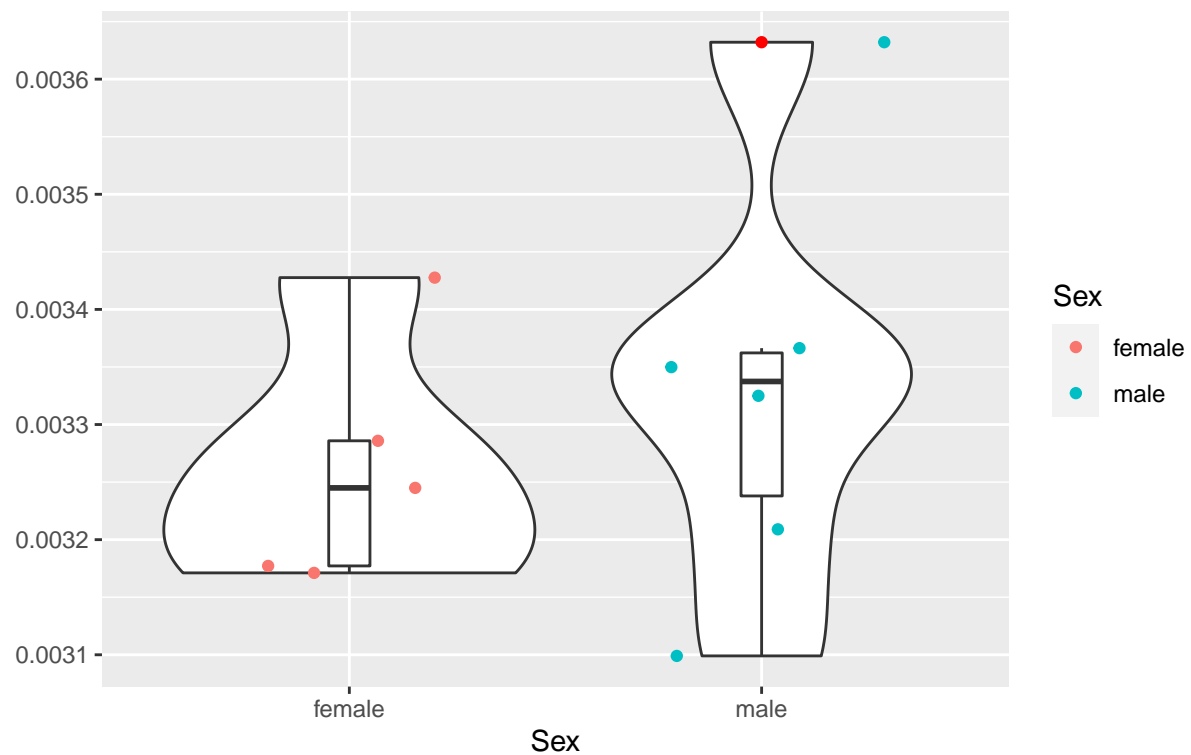
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.000e-11	3.300e-11	0.002	0.961
## Residuals	9	1.193e-07	1.326e-08		

Trigeminal Sensory Nucleus

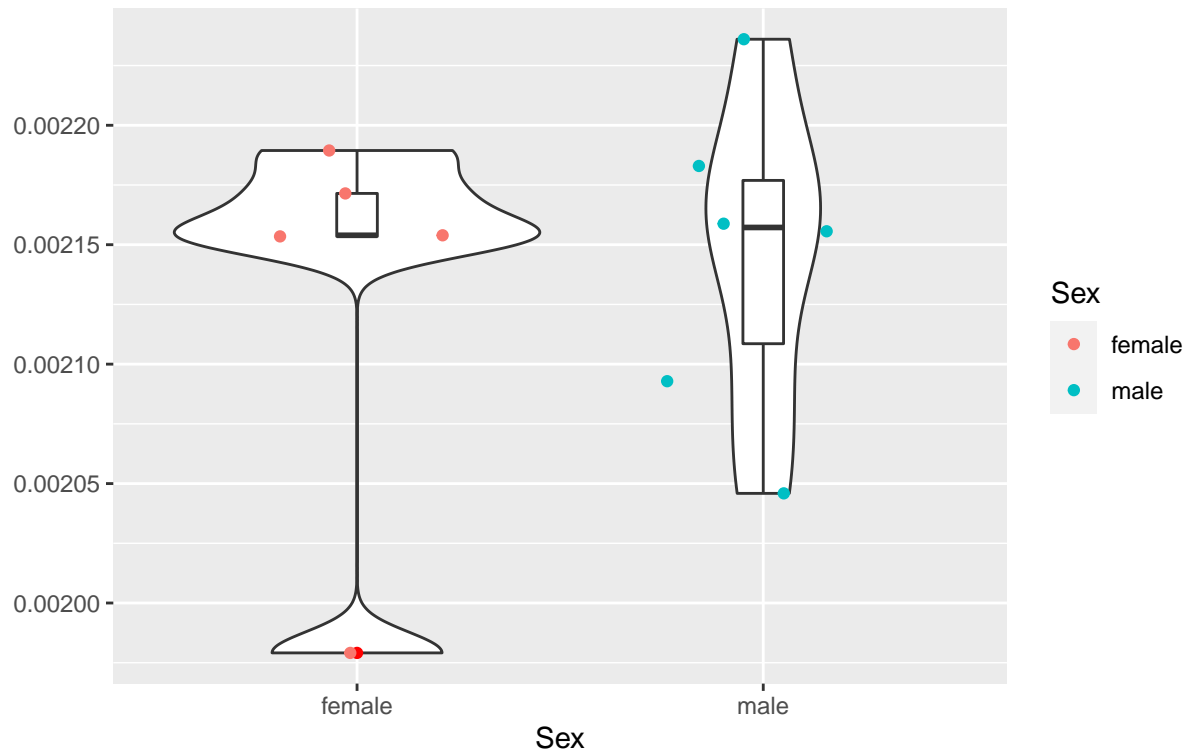
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.293e-08	1.293e-08	0.568	0.47
## Residuals	9	2.047e-07	2.275e-08		

Dorsal Tegmentum

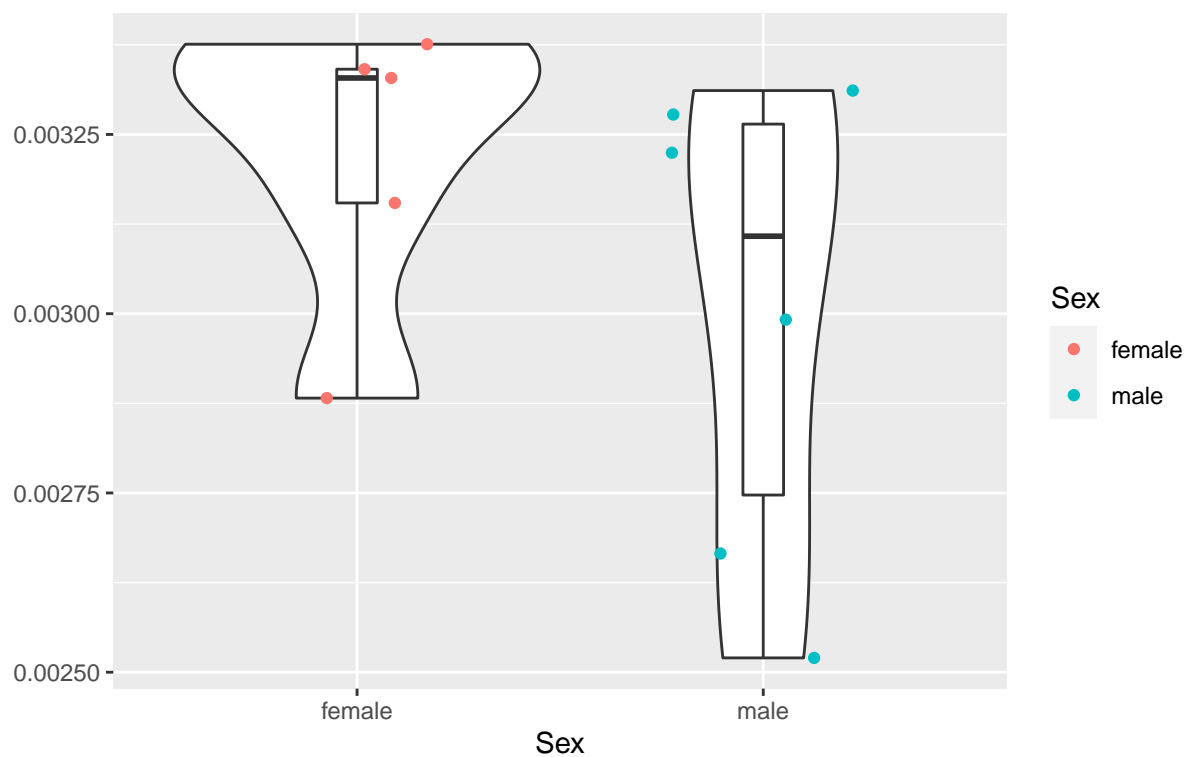
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.900e-10	6.870e-10	0.12	0.737
## Residuals	9	5.171e-08	5.746e-09		

Tegmental Nucleus

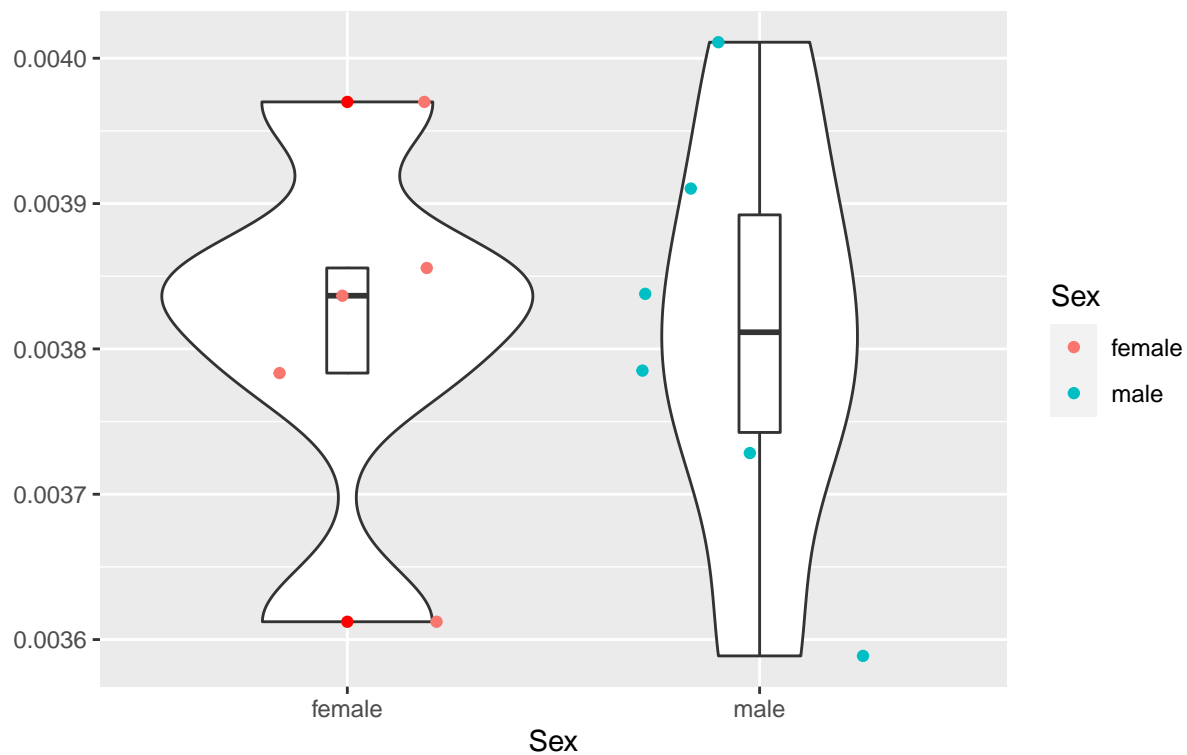
Red points denoting outliers



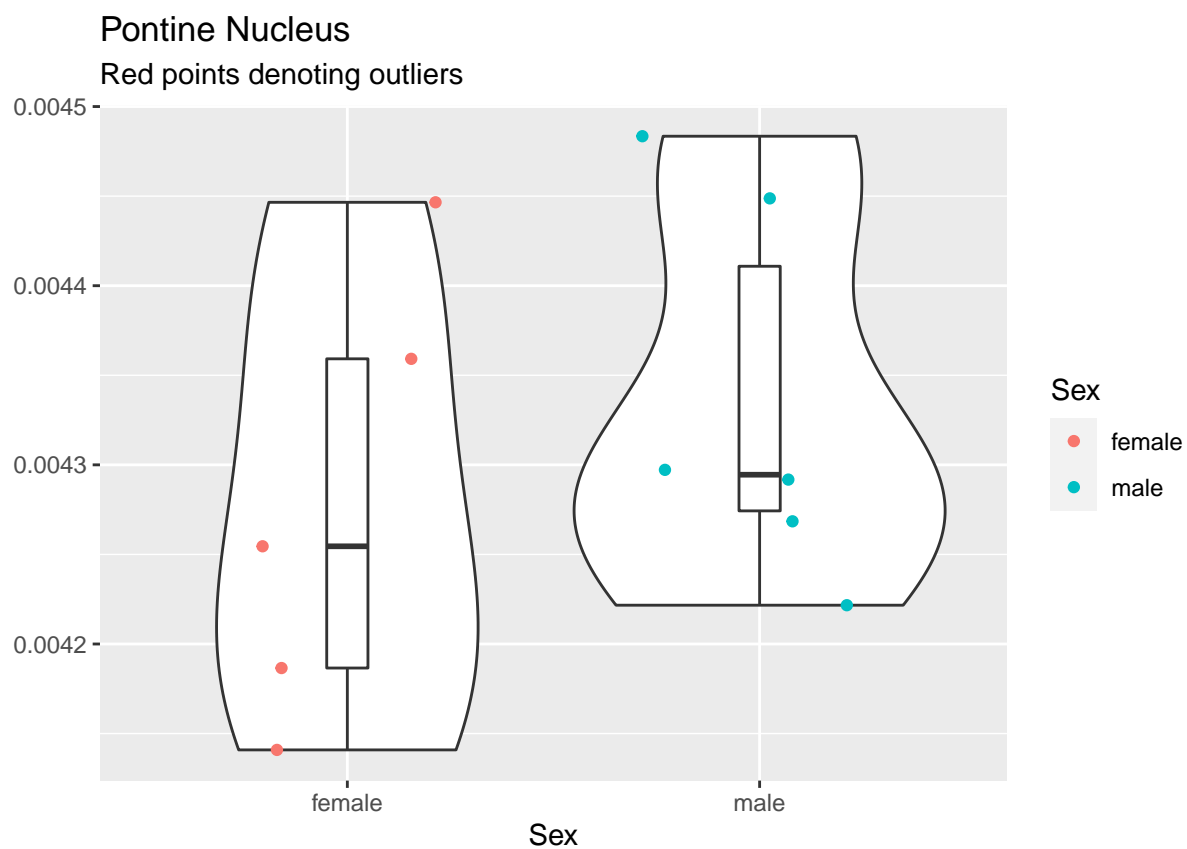
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.296e-07	1.296e-07	1.586	0.24
## Residuals	9	7.357e-07	8.175e-08		

Cochlear Nucleus

Red points denoting outliers



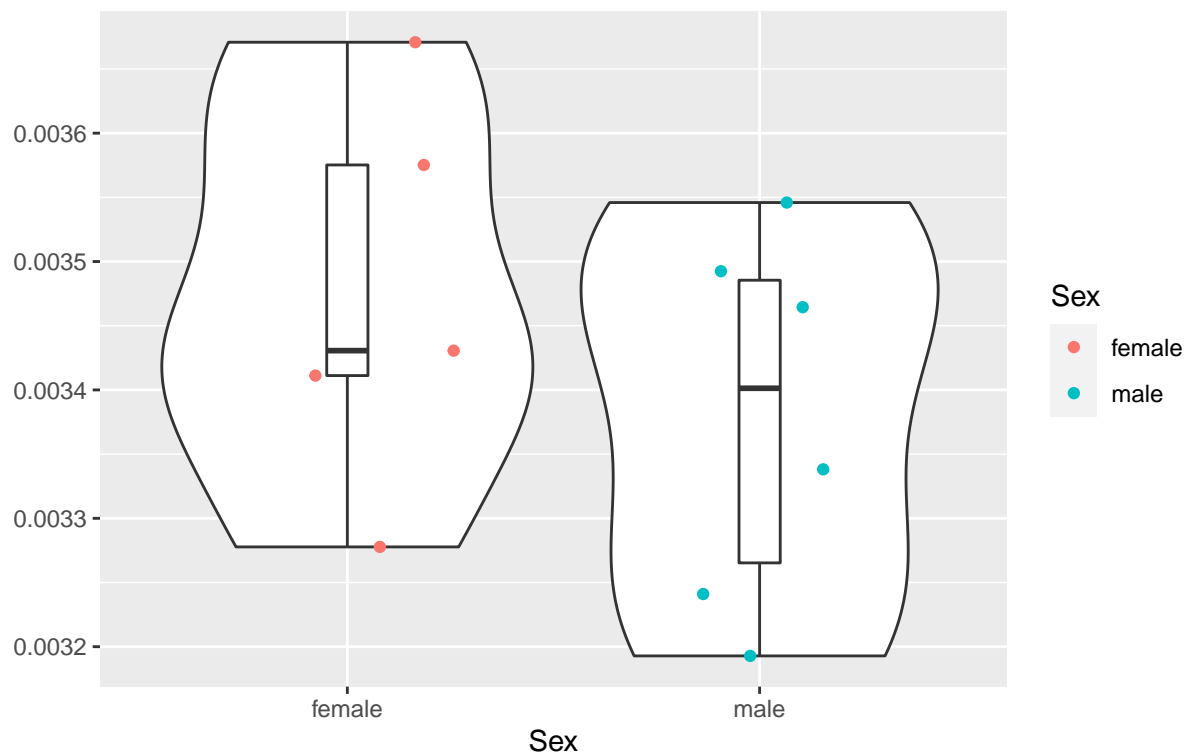
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	0.000e+00	5.000e-12	0	0.988
## Residuals	9	1.756e-07	1.952e-08		



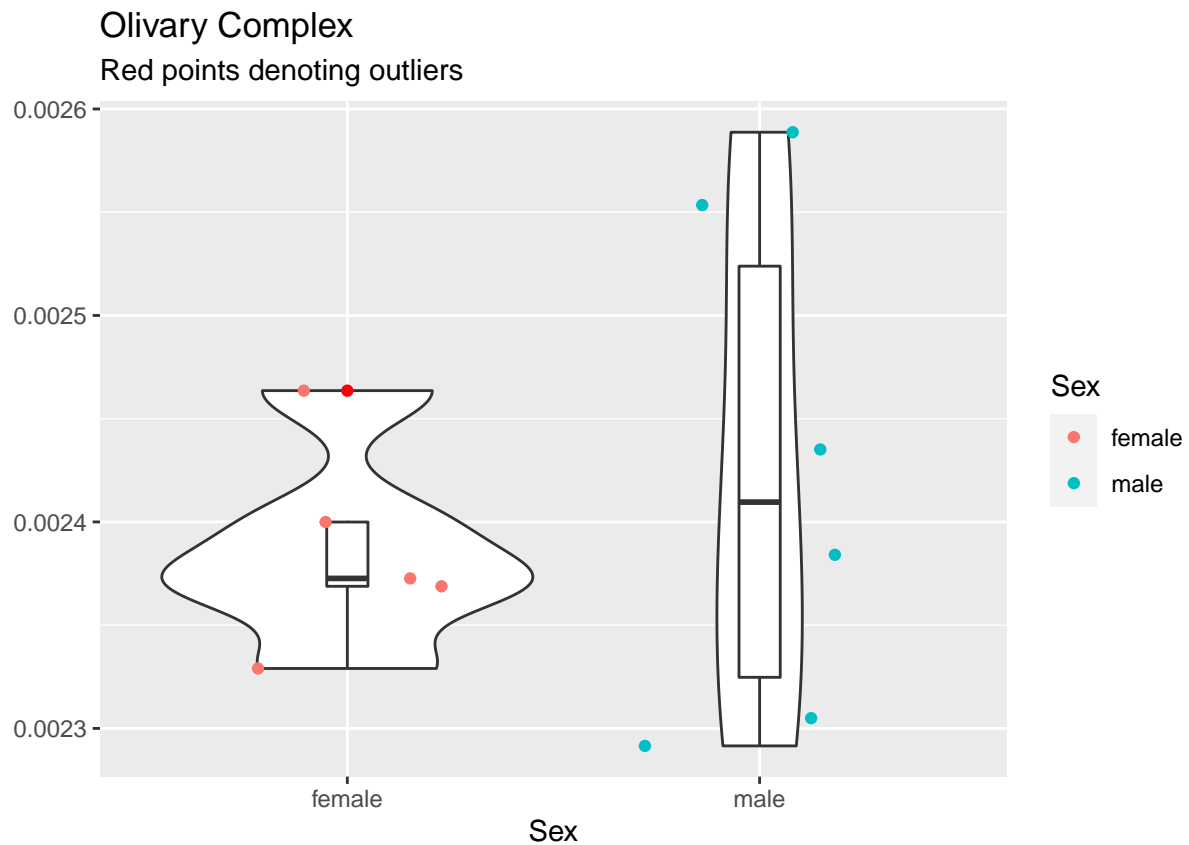
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	9.070e-09	9.070e-09	0.69	0.428
## Residuals	9	1.183e-07	1.314e-08		

Reticulotegmental Nucleus of Pons

Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 2.409e-08 2.409e-08   1.102  0.321
## Residuals   9 1.968e-07 2.186e-08
```



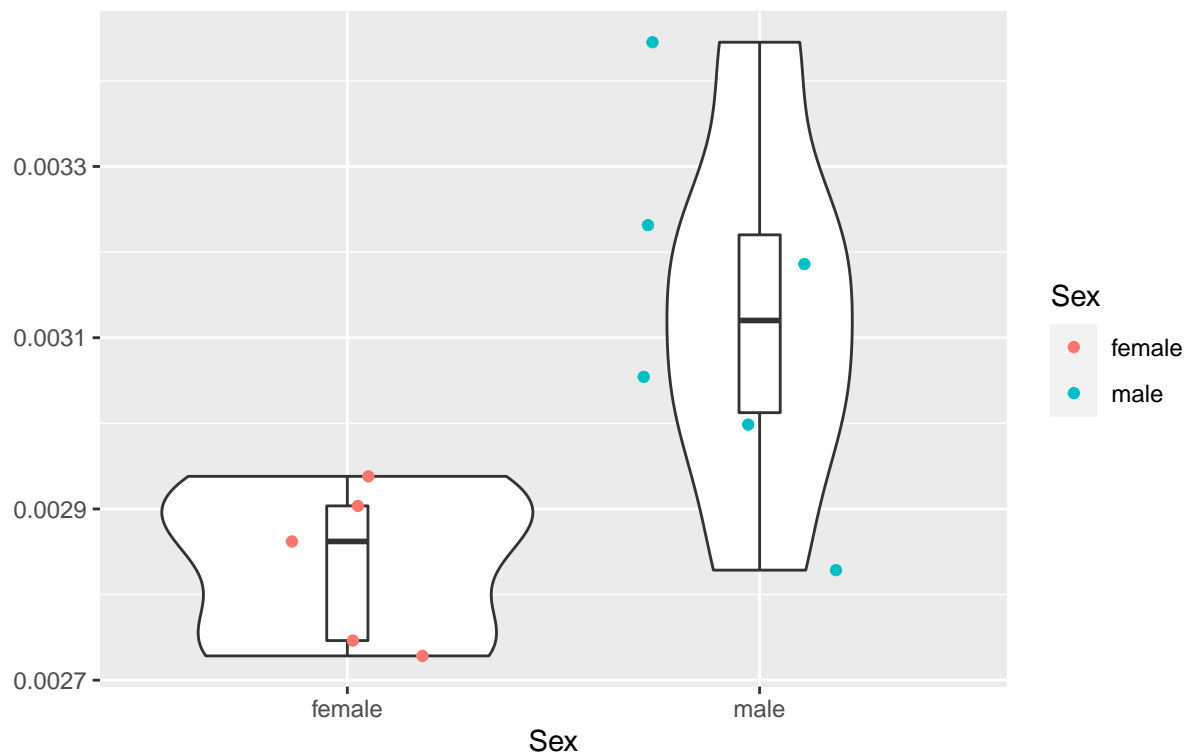
```
##           Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex           1 4.260e-09 4.258e-09   0.439  0.524
## Residuals     9 8.723e-08 9.693e-09
```

```
##“{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 =
“Sex”, # y = “”, # title =”Pontine Reticular Nucleus“, # subtitle =”Red points denoting outliers”)
```

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

Spinal Trigeminal Nucleus

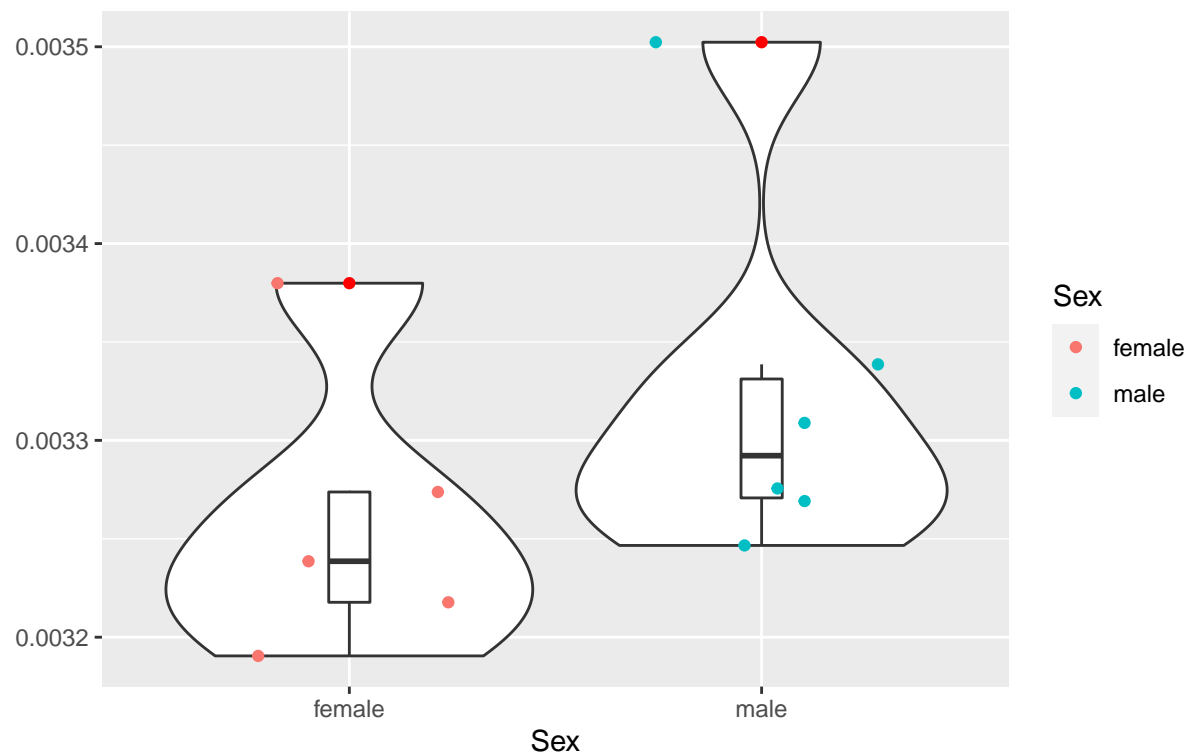
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 2.267e-07 2.267e-07   7.796  0.021 *
## Residuals    9 2.617e-07 2.908e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Vestibular Nuclei

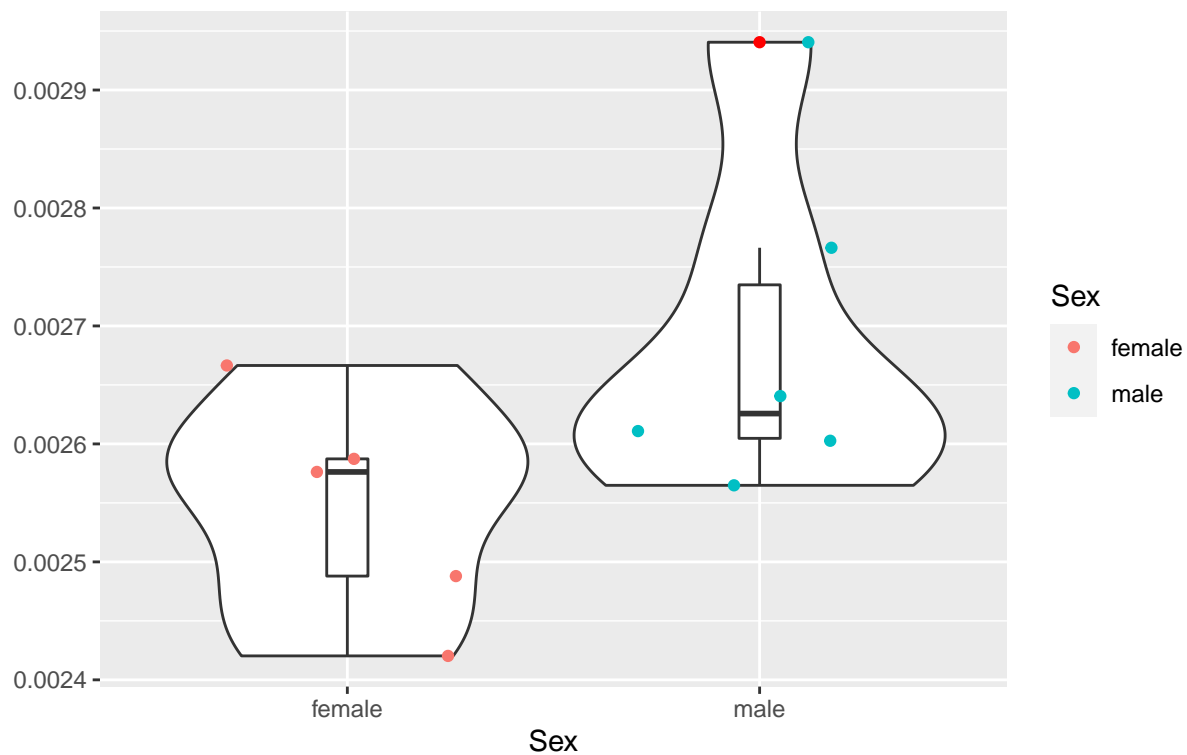
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.098e-08	1.098e-08	1.515	0.25
## Residuals	9	6.521e-08	7.245e-09		

Gigantocellular Reticular Nucleus

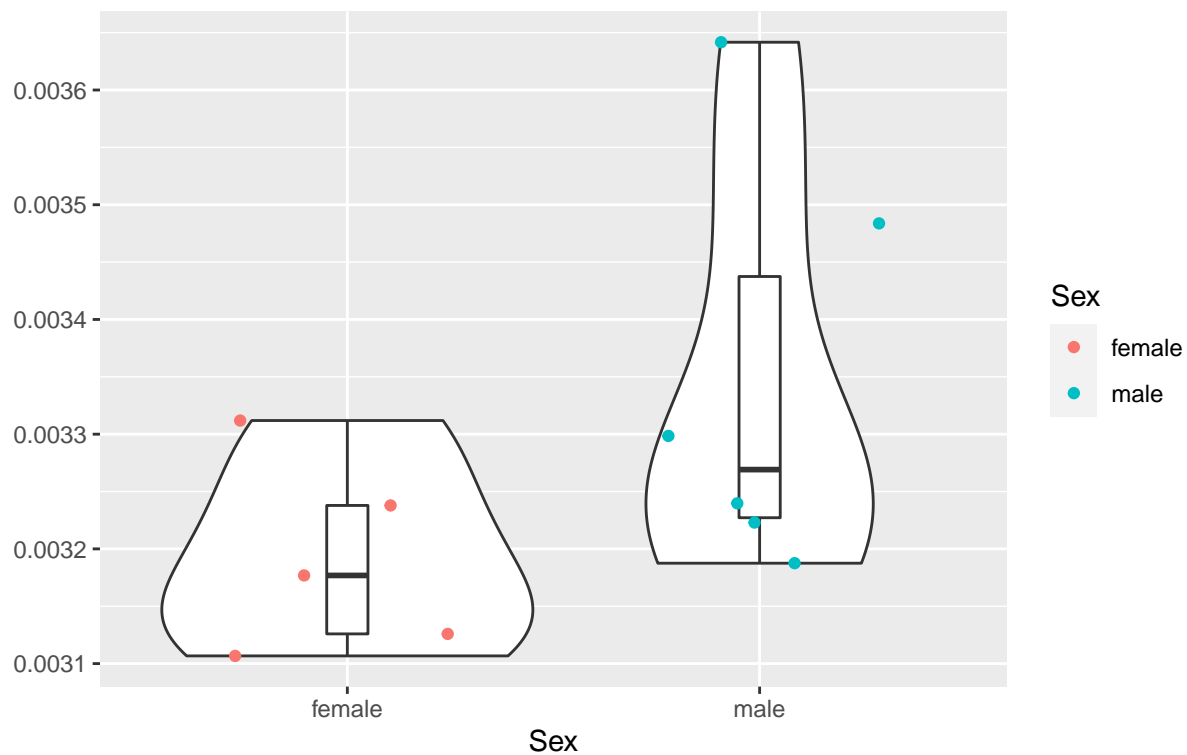
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 5.343e-08 5.343e-08   3.515 0.0936 .
## Residuals    9 1.368e-07 1.520e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Cuneate Nucleus

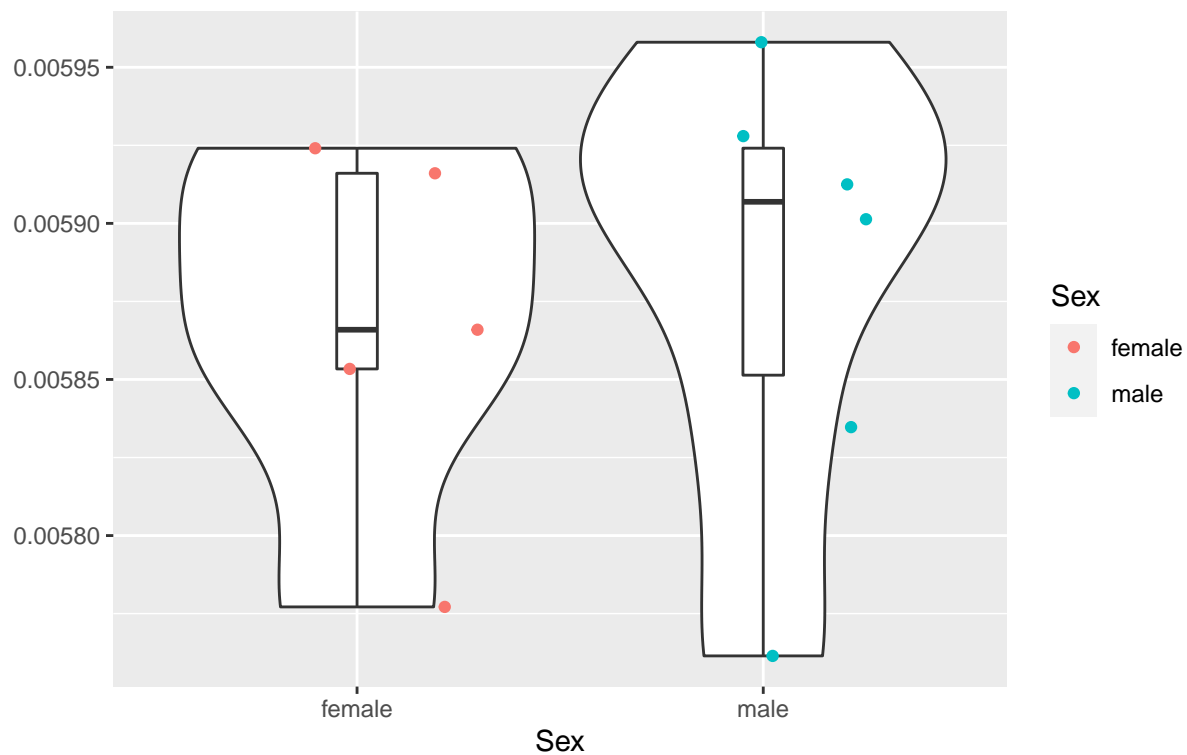
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.454e-08	6.454e-08	3.081	0.113
## Residuals	9	1.885e-07	2.095e-08		

Anterior Commissure

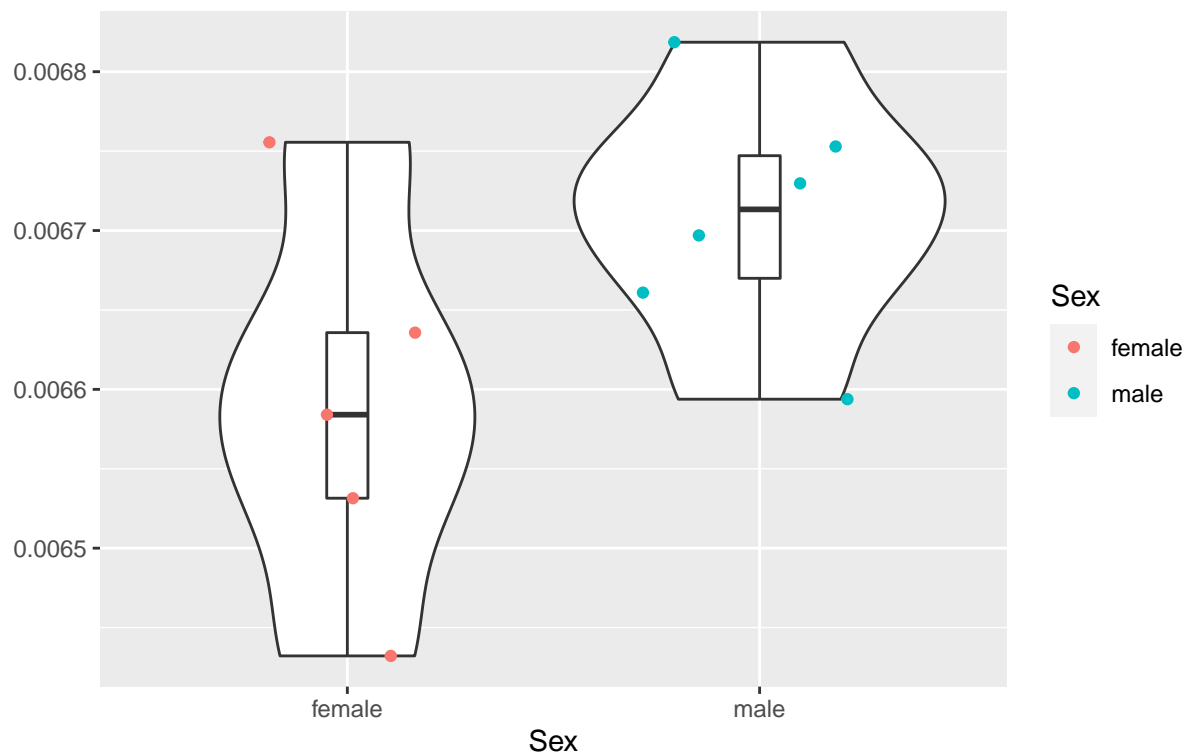
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 6.400e-10 6.430e-10   0.145  0.712
## Residuals   9 3.988e-08 4.431e-09
```

Optic Tracts

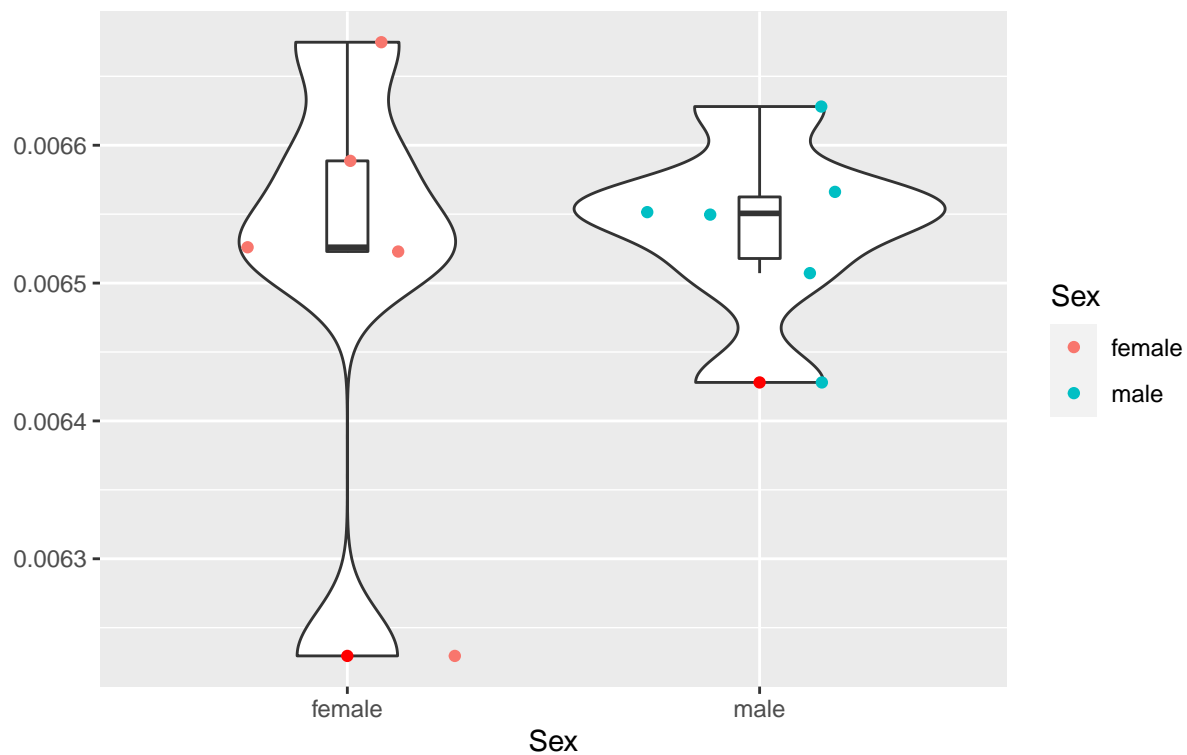
Red points denoting outliers



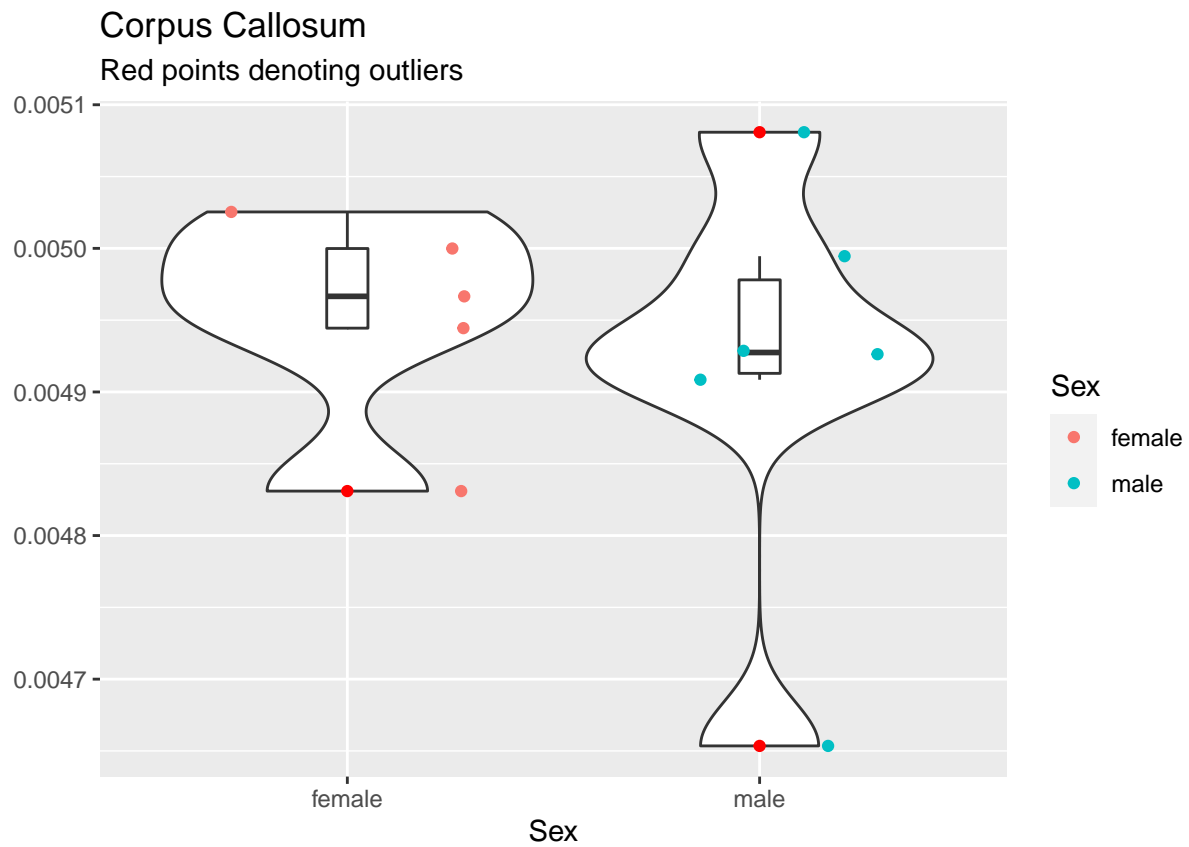
```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 3.994e-08 3.994e-08   4.088 0.0739 .
## Residuals    9 8.793e-08 9.770e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Fimbria

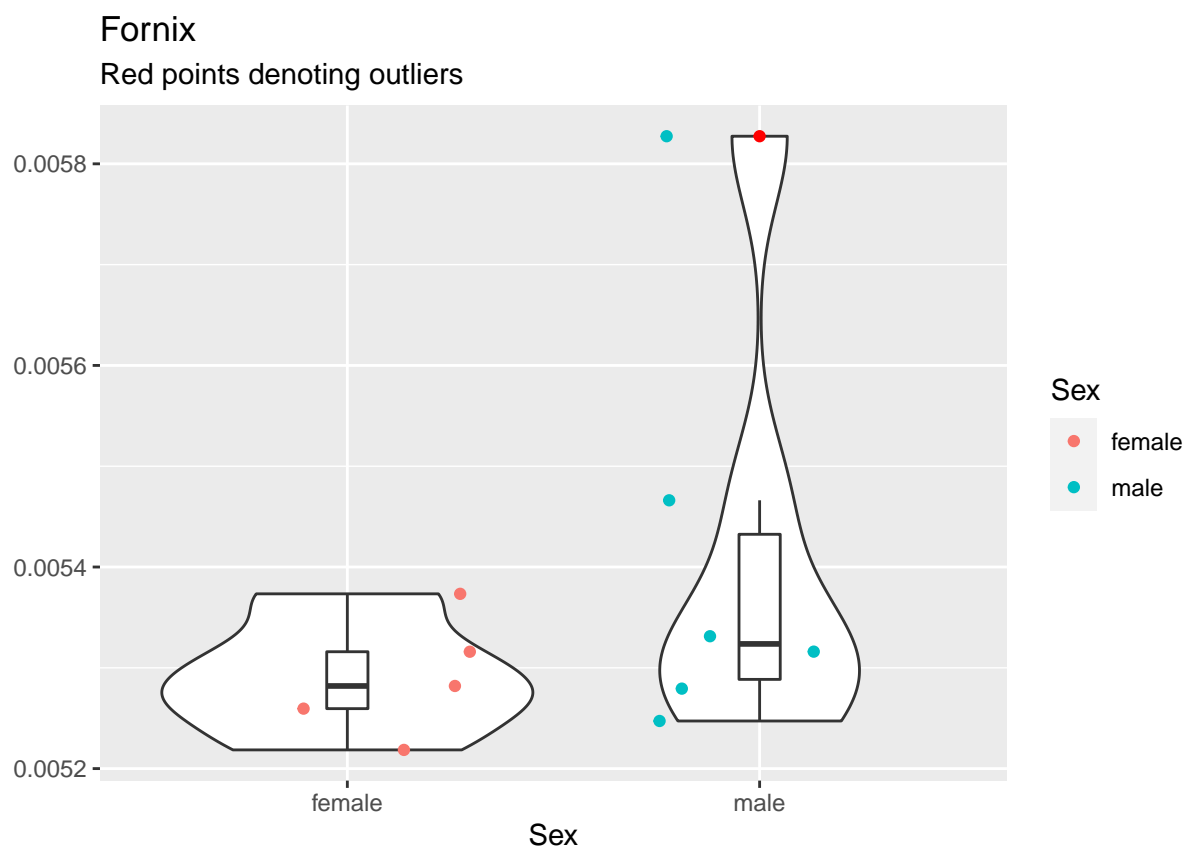
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.460e-09	2.463e-09	0.165	0.694
## Residuals	9	1.347e-07	1.496e-08		



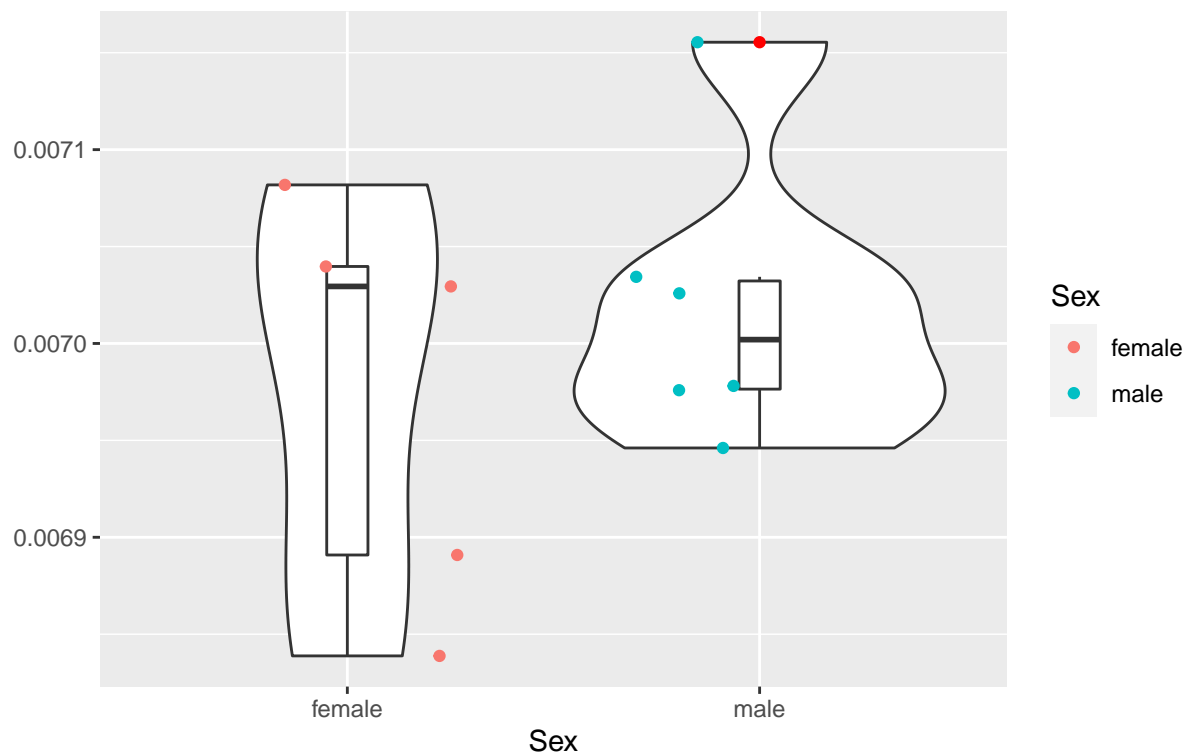
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.950e-09	3.949e-09	0.284	0.607
## Residuals	9	1.252e-07	1.391e-08		



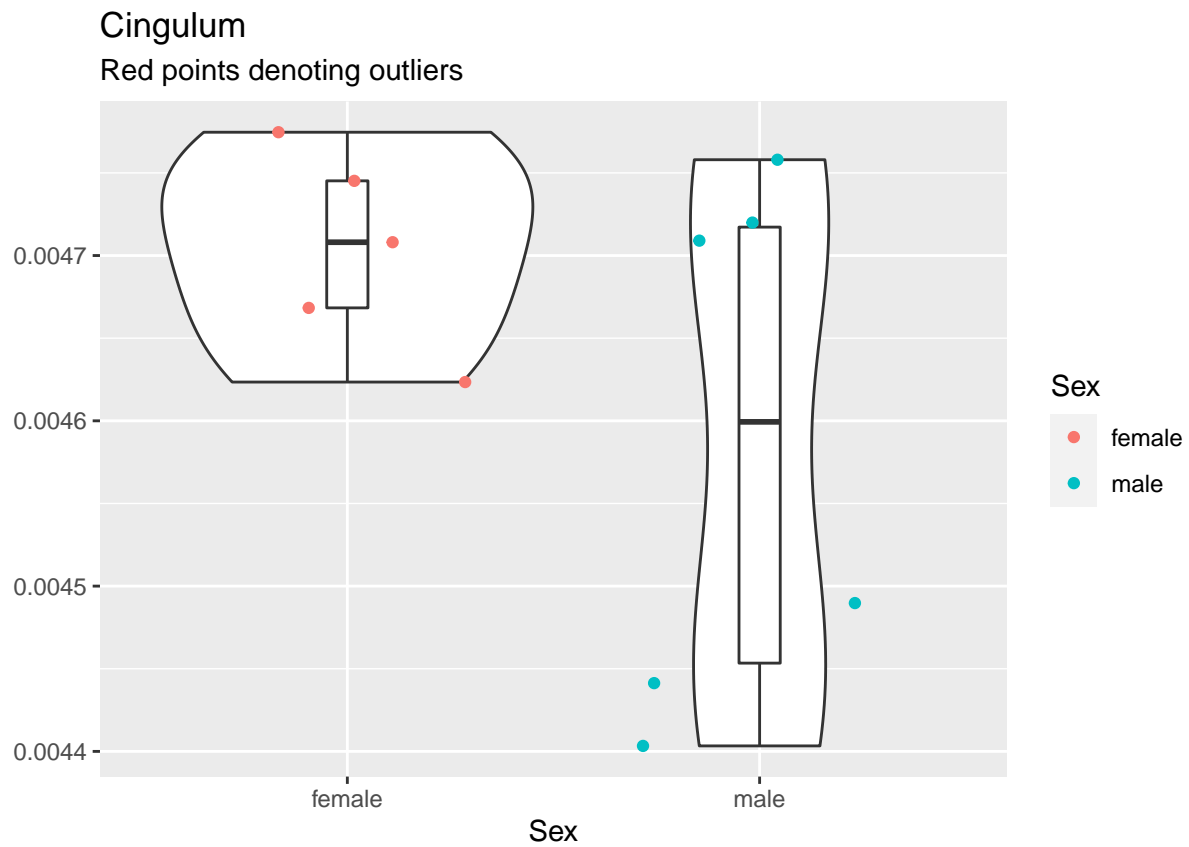
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	4.018e-08	4.018e-08	1.448	0.259
## Residuals	9	2.497e-07	2.774e-08		

Stria Terminalis

Red points denoting outliers

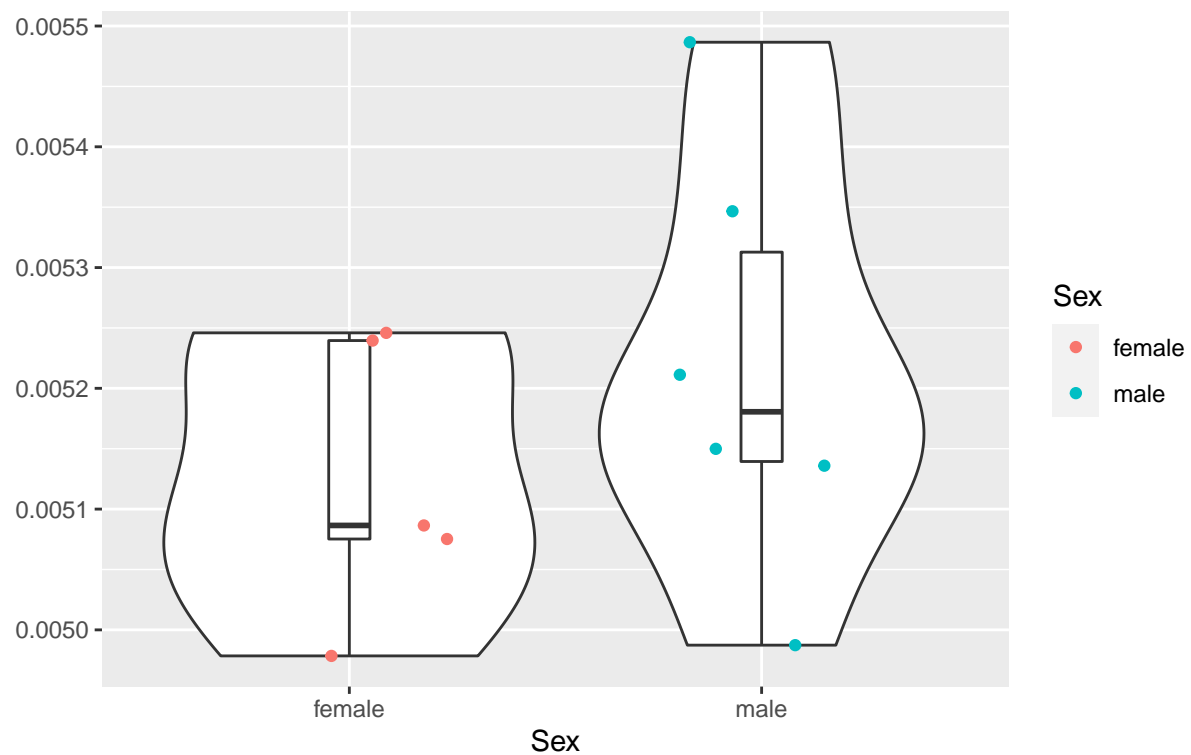


##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	5.080e-09	5.081e-09	0.636	0.446
## Residuals	9	7.193e-08	7.992e-09		



Lateral Olfactory Tract

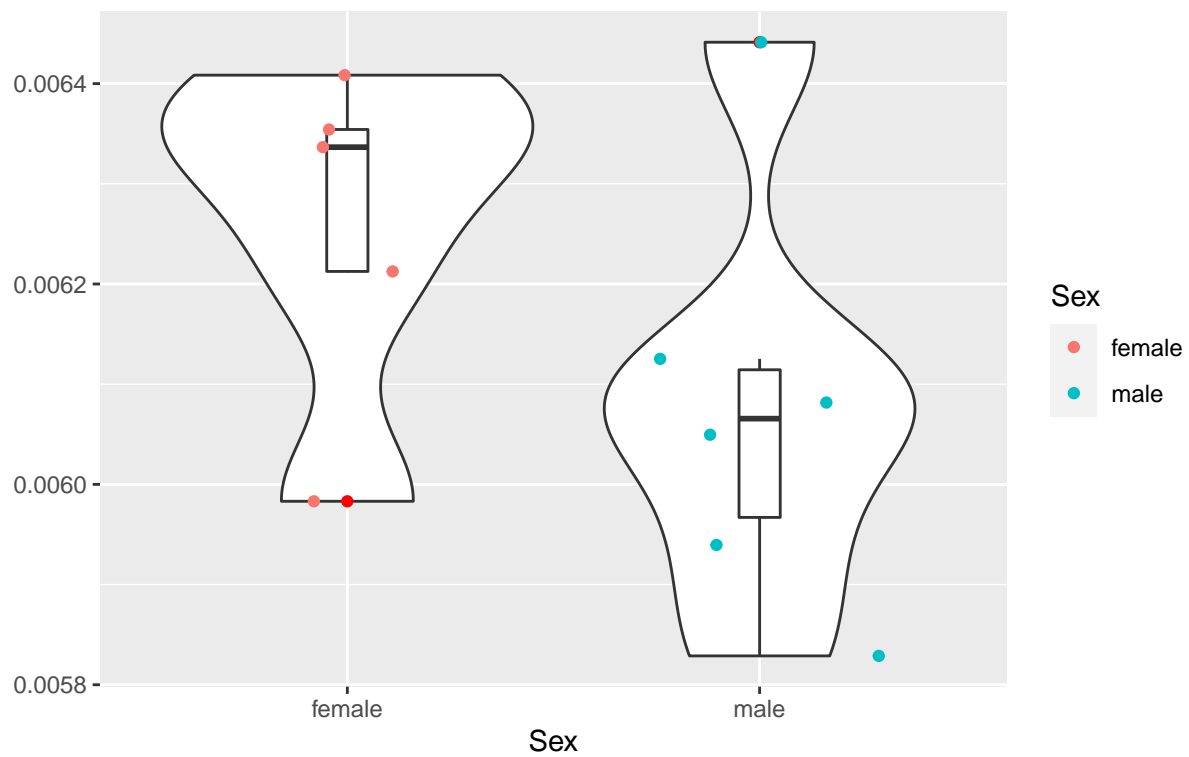
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.435e-08	2.435e-08	1.061	0.33
## Residuals	9	2.065e-07	2.294e-08		

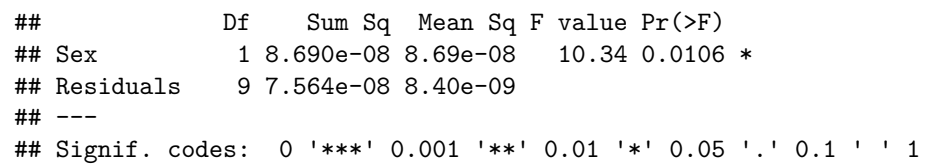
Ventral Hippocampal Commissure

Red points denoting outliers



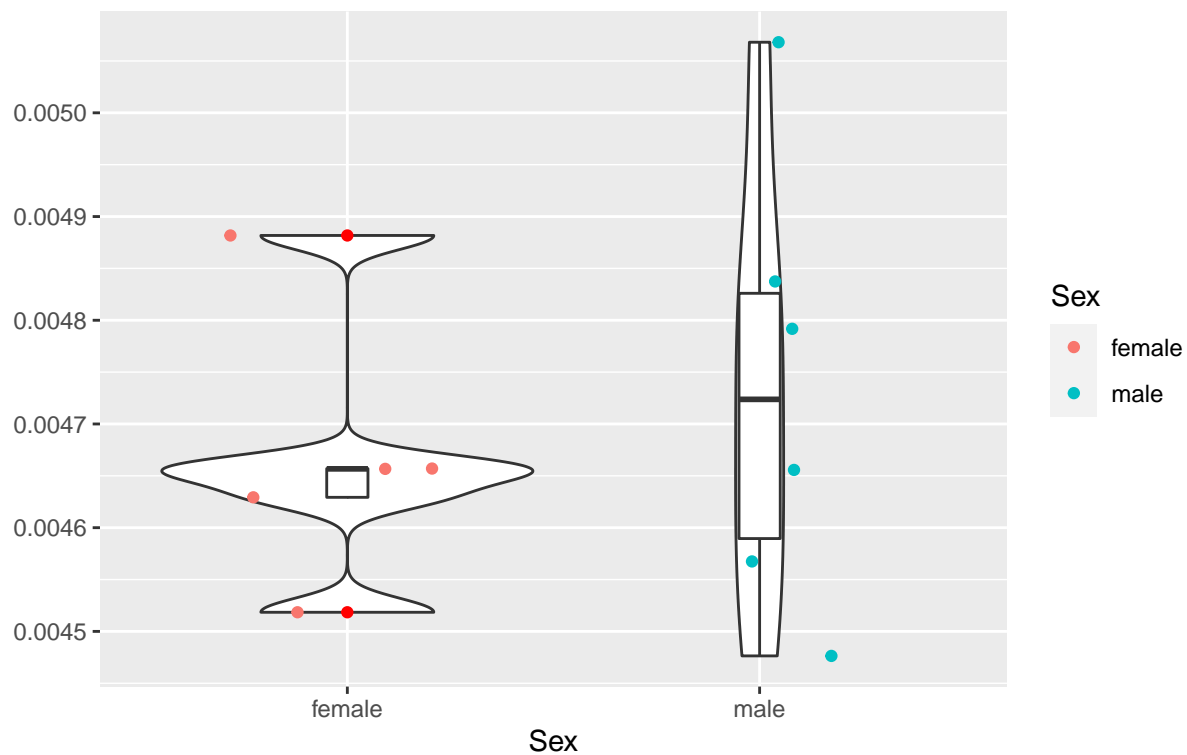
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	8.96e-08	8.964e-08	2.43	0.153
## Residuals	9	3.32e-07	3.689e-08		

Red points denoting outliers



Fasciculus Retroflexus

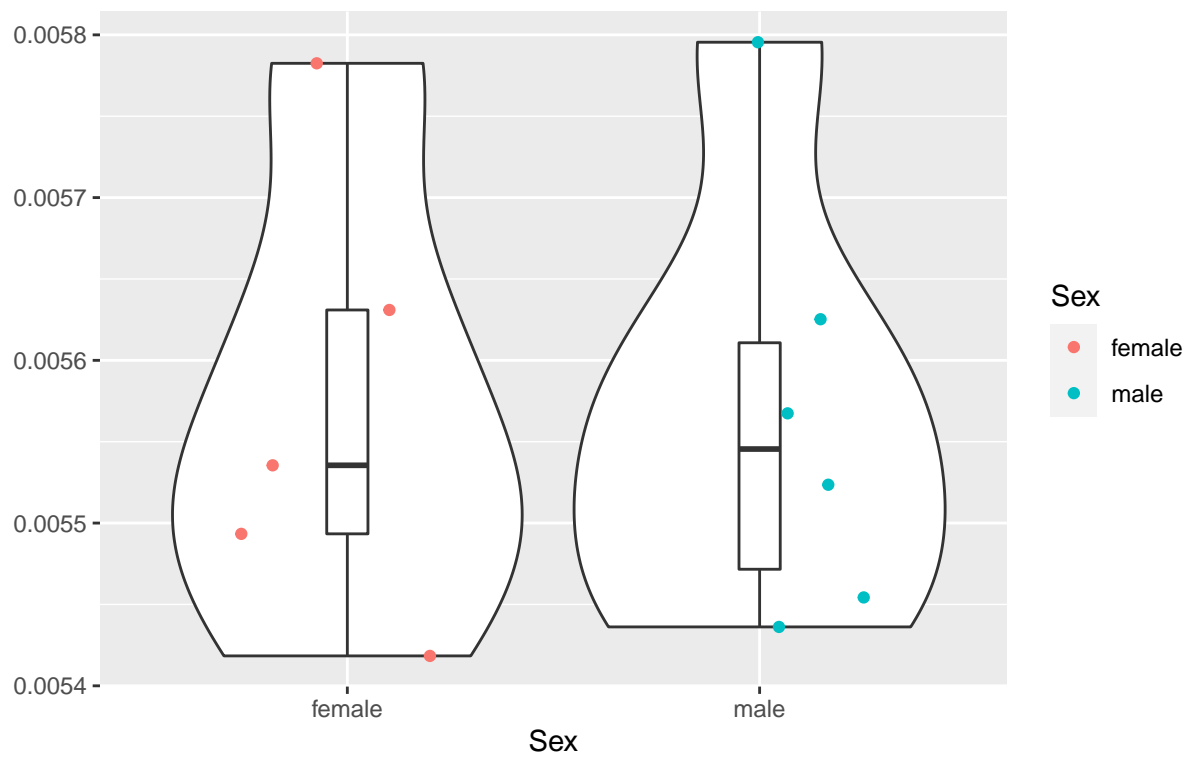
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.122e-08	1.122e-08	0.342	0.573
## Residuals	9	2.957e-07	3.285e-08		

Stria Medularis

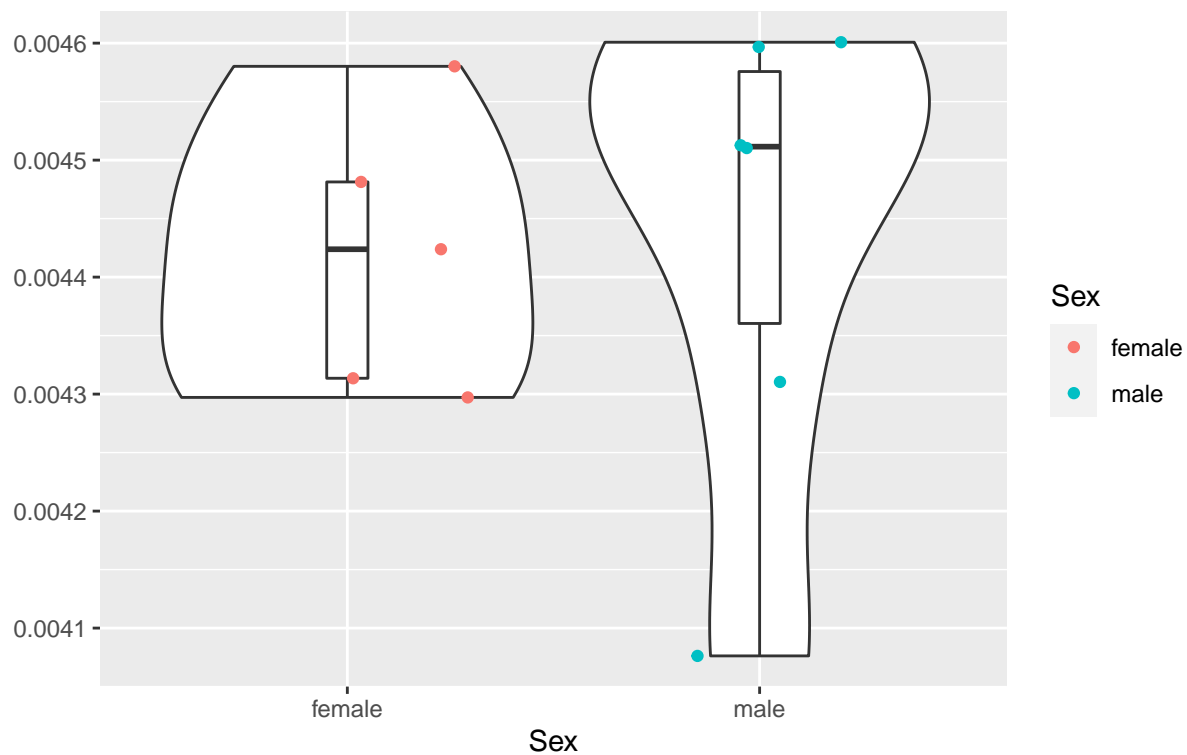
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	7.000e-11	7.100e-11	0.004	0.952
## Residuals	9	1.662e-07	1.847e-08		

Mammillothalamic Tract

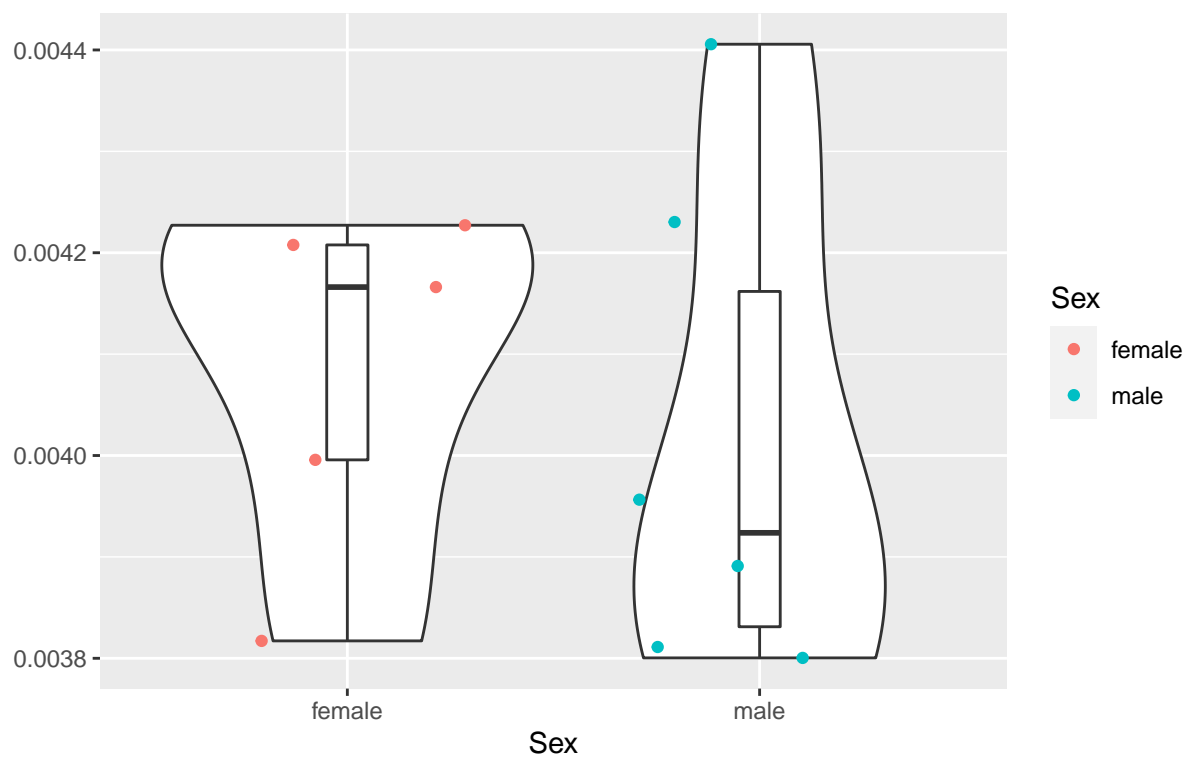
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.400e-10	6.39e-10	0.022	0.886
## Residuals	9	2.655e-07	2.95e-08		

Posterior Commissure

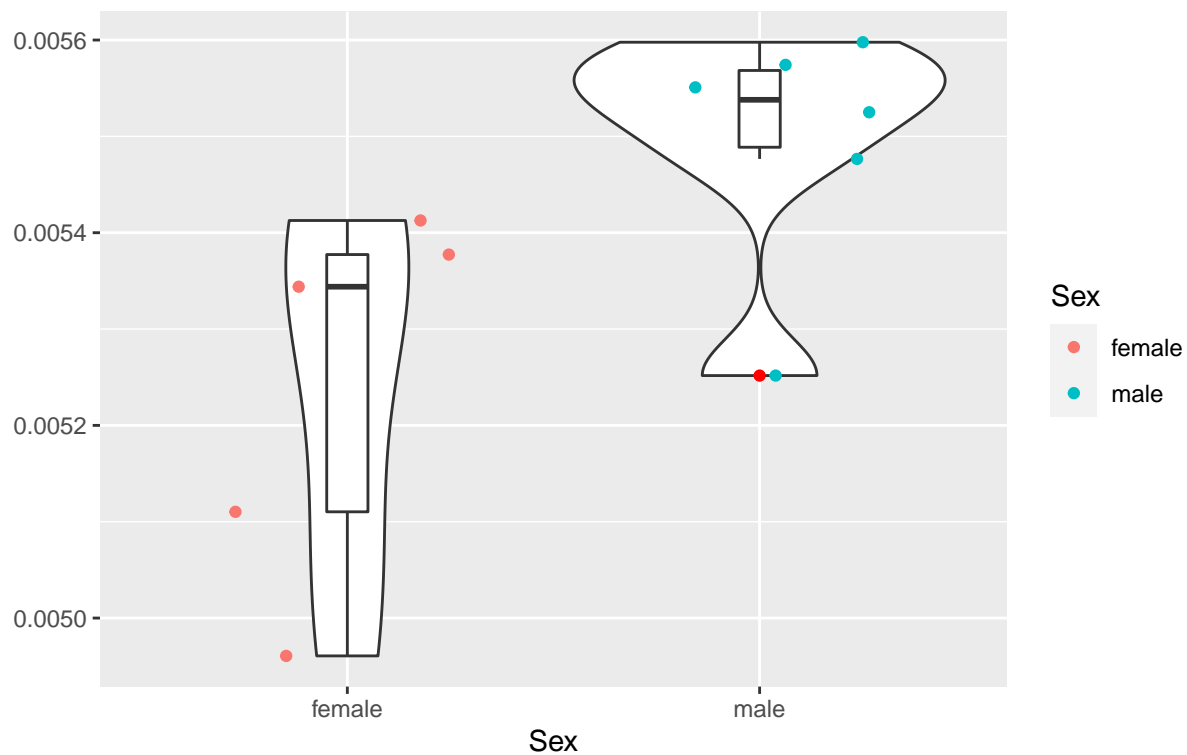
Red points denoting outliers



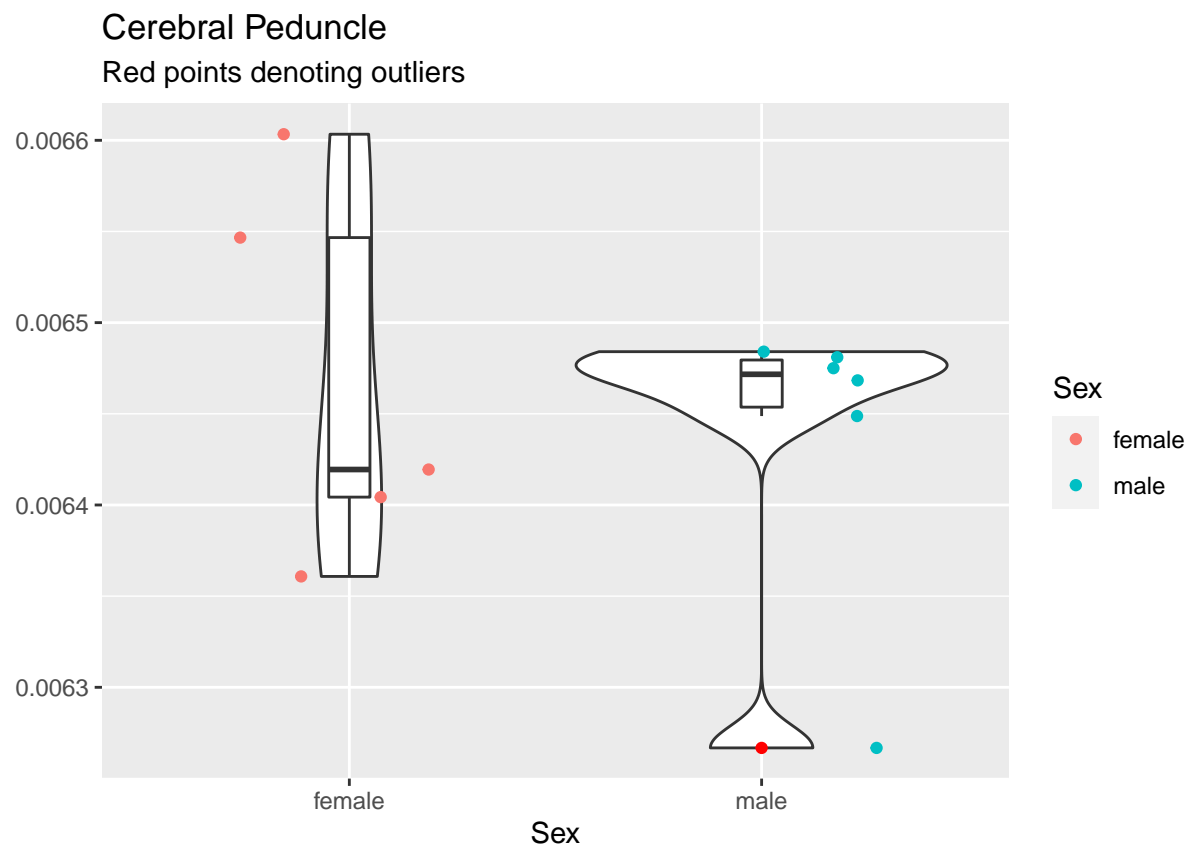
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.220e-08	1.222e-08	0.258	0.624
## Residuals	9	4.269e-07	4.743e-08		

Brachium of Superior Colliculus

Red points denoting outliers



```
##          Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.774e-07 1.774e-07   6.803 0.0283 *
## Residuals    9 2.347e-07 2.608e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.390e-09	2.386e-09	0.275	0.613
## Residuals	9	7.809e-08	8.677e-09		

Lateral Lemniscus

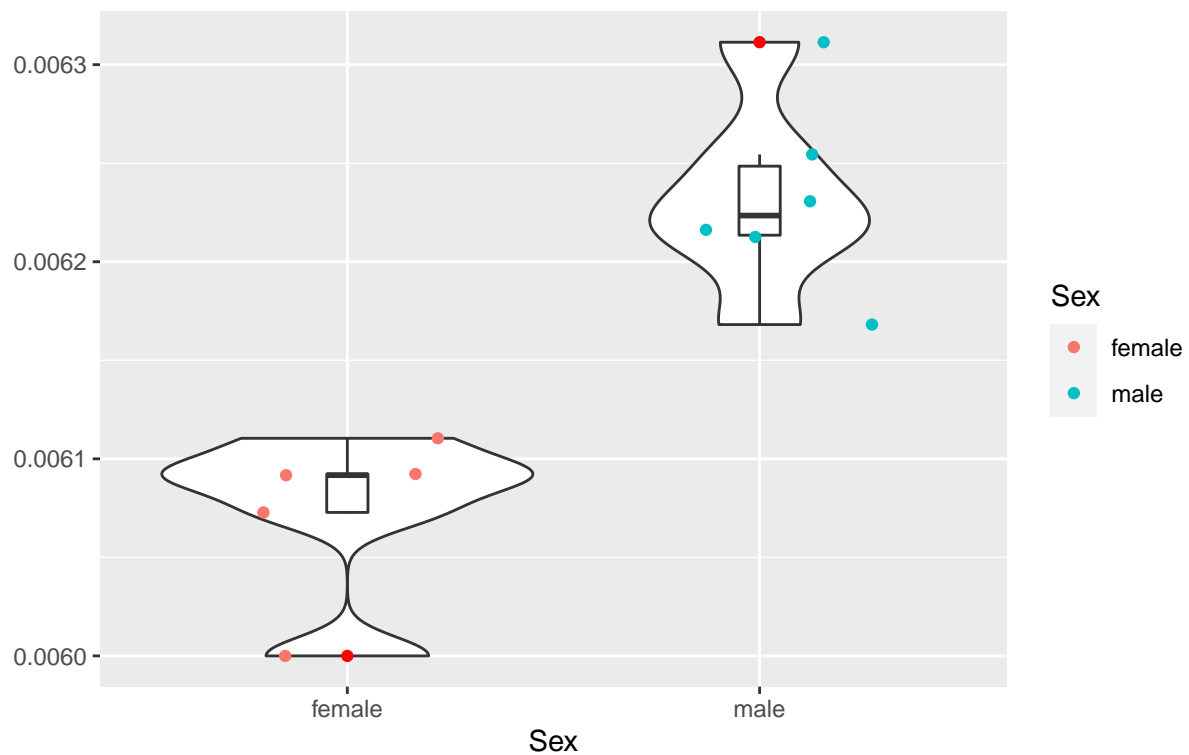
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.272e-07	2.272e-07	3.335	0.101
## Residuals	9	6.131e-07	6.812e-08		

Spinal Trigeminal Nerve

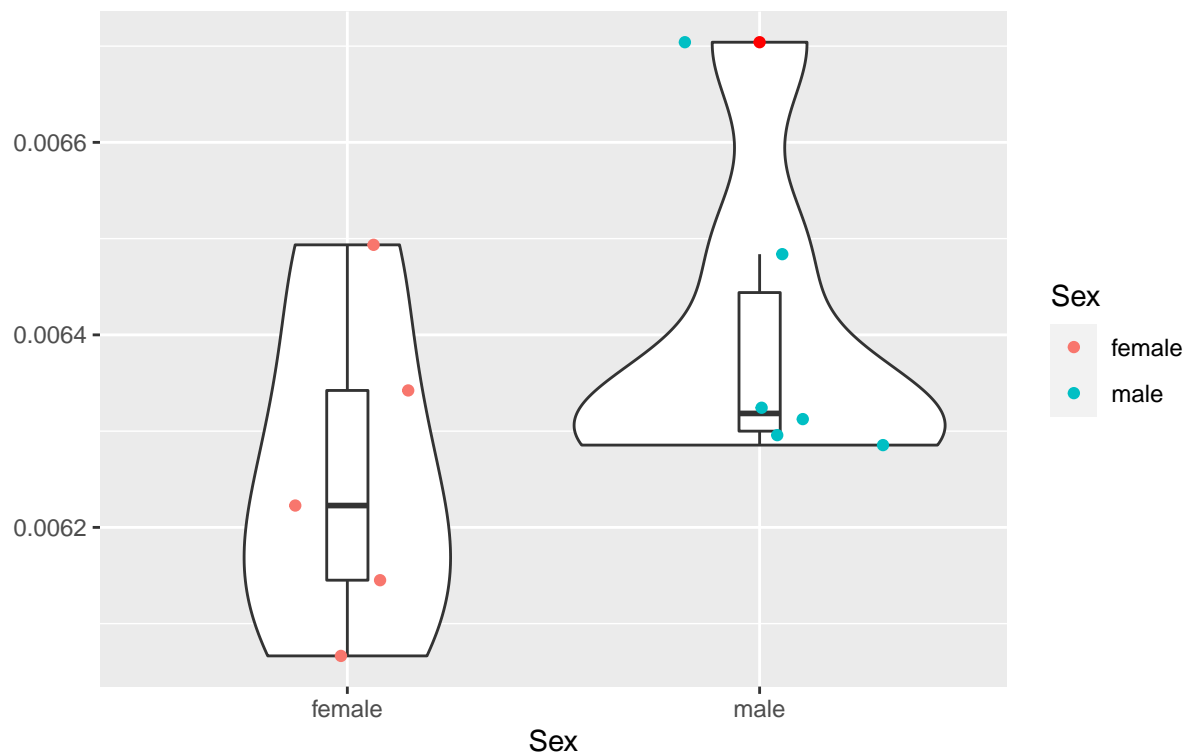
Red points denoting outliers



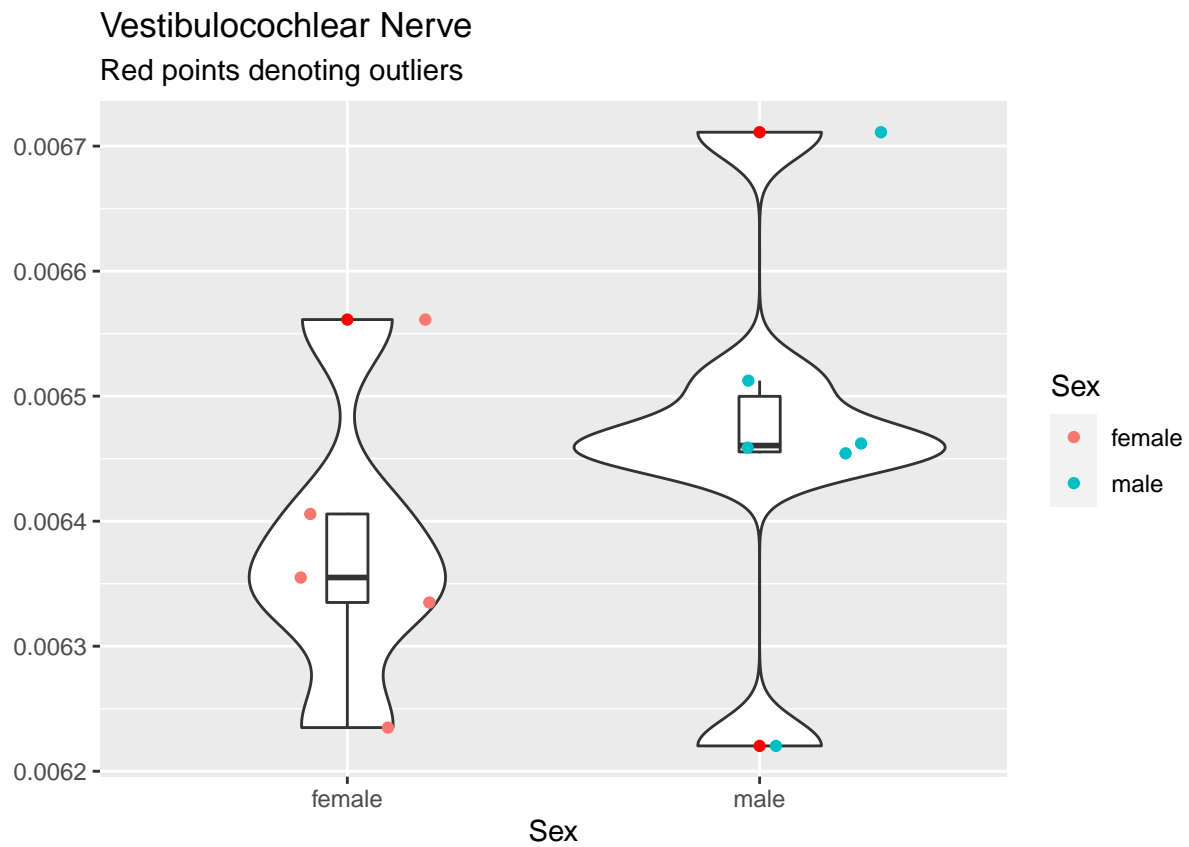
```
##          Df    Sum Sq  Mean Sq F value   Pr(>F)
## Sex          1 6.877e-08 6.877e-08   32.63 0.00029 ***
## Residuals    9 1.897e-08 2.110e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Pyramidal Tract

Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	5.891e-08	5.891e-08	2.121	0.179
## Residuals	9	2.500e-07	2.778e-08		



Facial Nerve

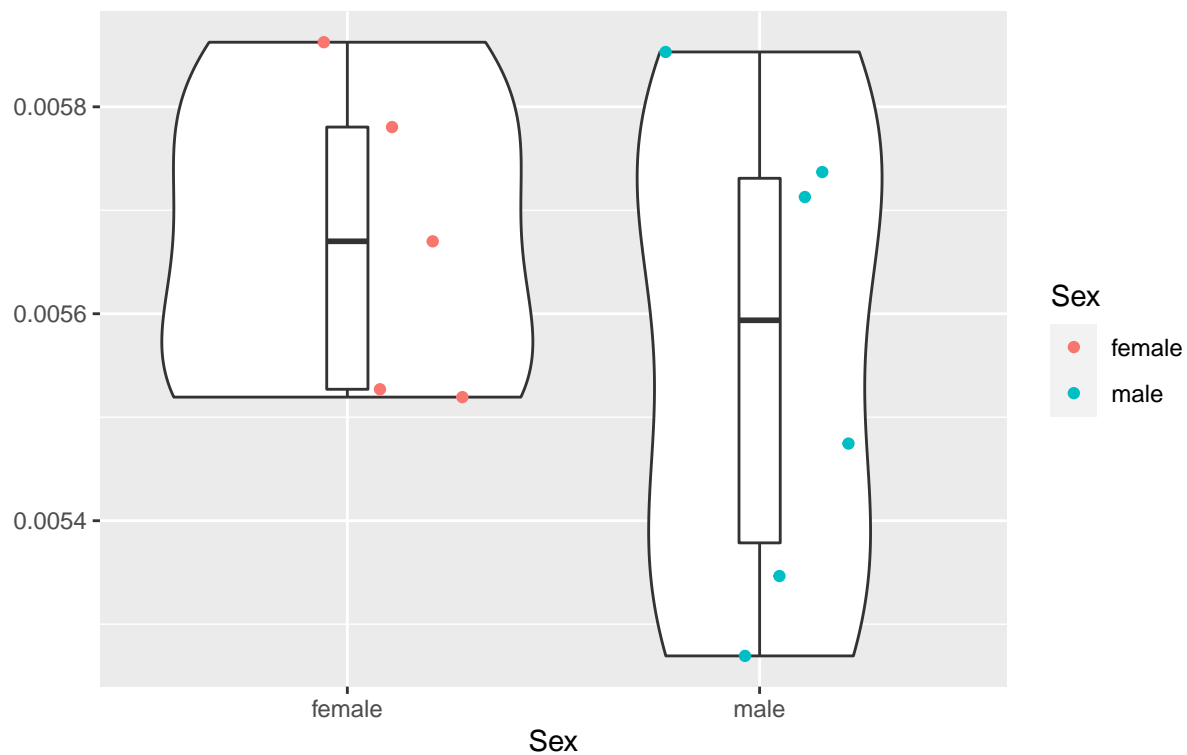
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.458e-07	2.458e-07	2.22	0.17
## Residuals	9	9.966e-07	1.107e-07		

Longitudinal Fasciculus of Pons

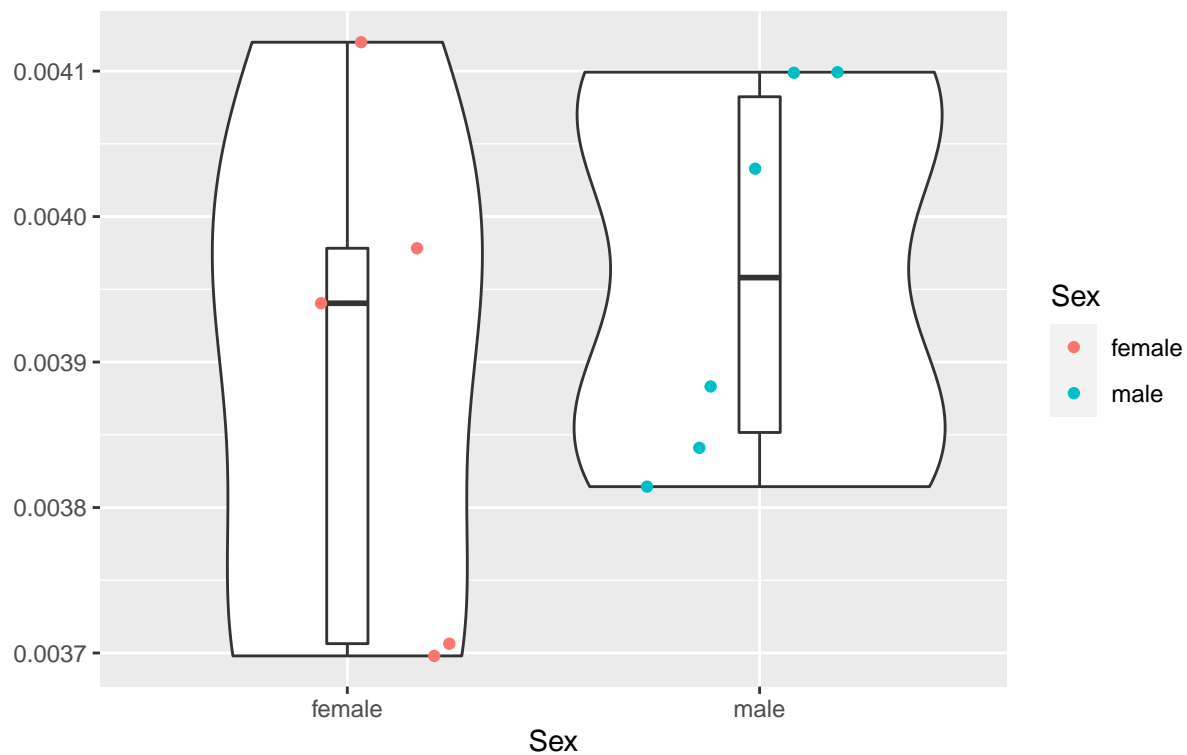
Red points denoting outliers



```
##          Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex        1 3.08e-08 3.083e-08    0.75  0.409
## Residuals   9 3.70e-07 4.111e-08
```


Medial Longitudinal Fasciculus and Tectospinal Tract

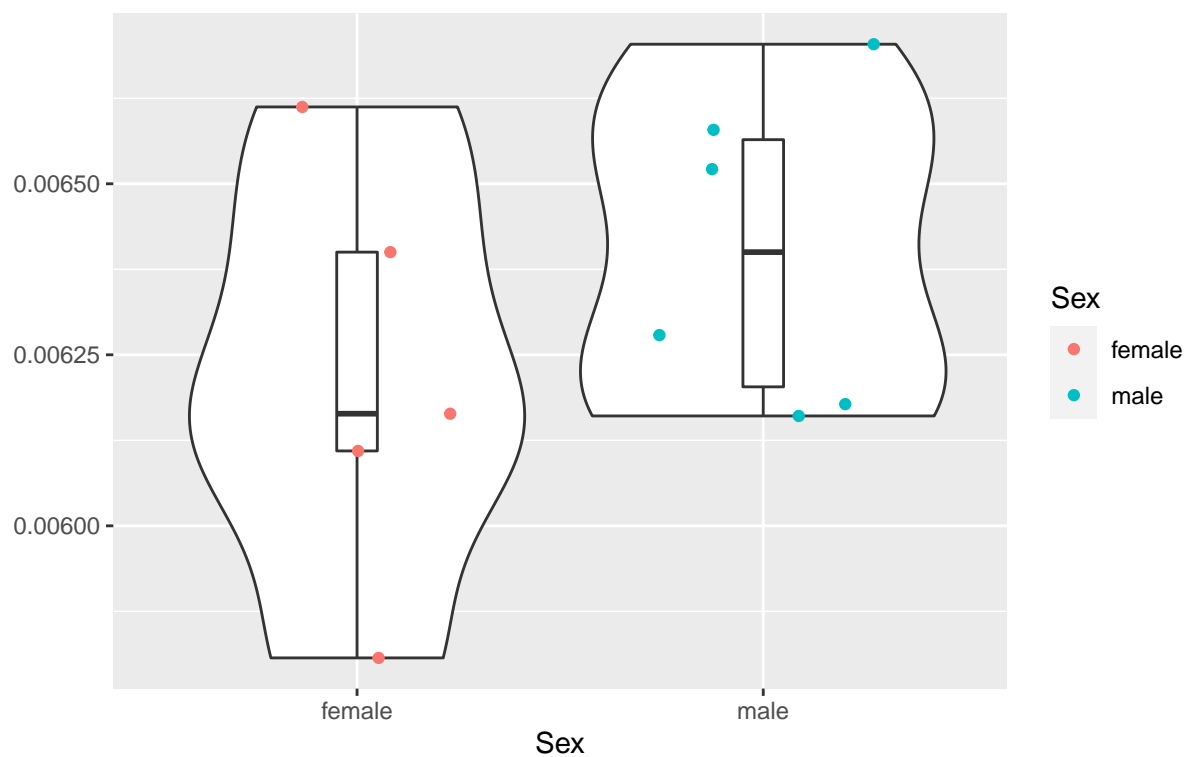
Red points denoting outliers



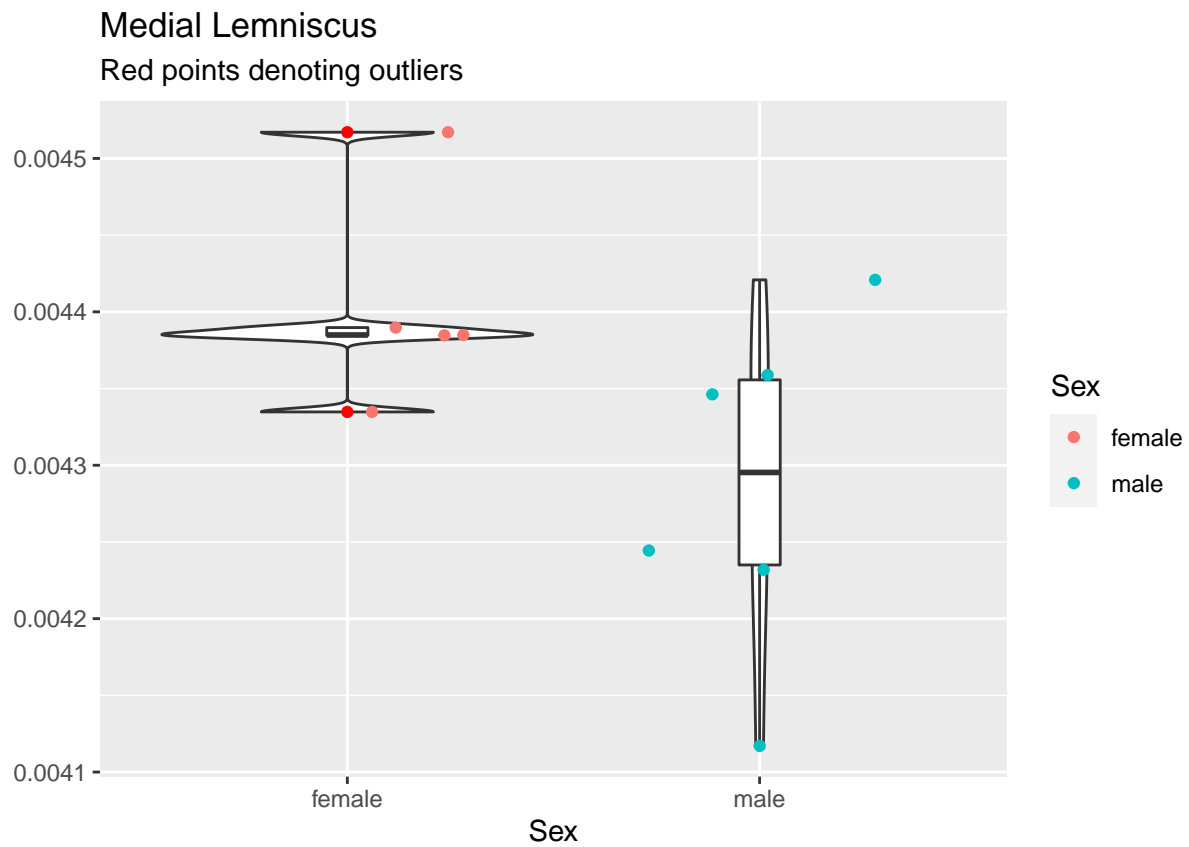
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.454e-08	1.454e-08	0.598	0.459
## Residuals	9	2.189e-07	2.433e-08		

Spinocerebellar Tract

Red points denoting outliers



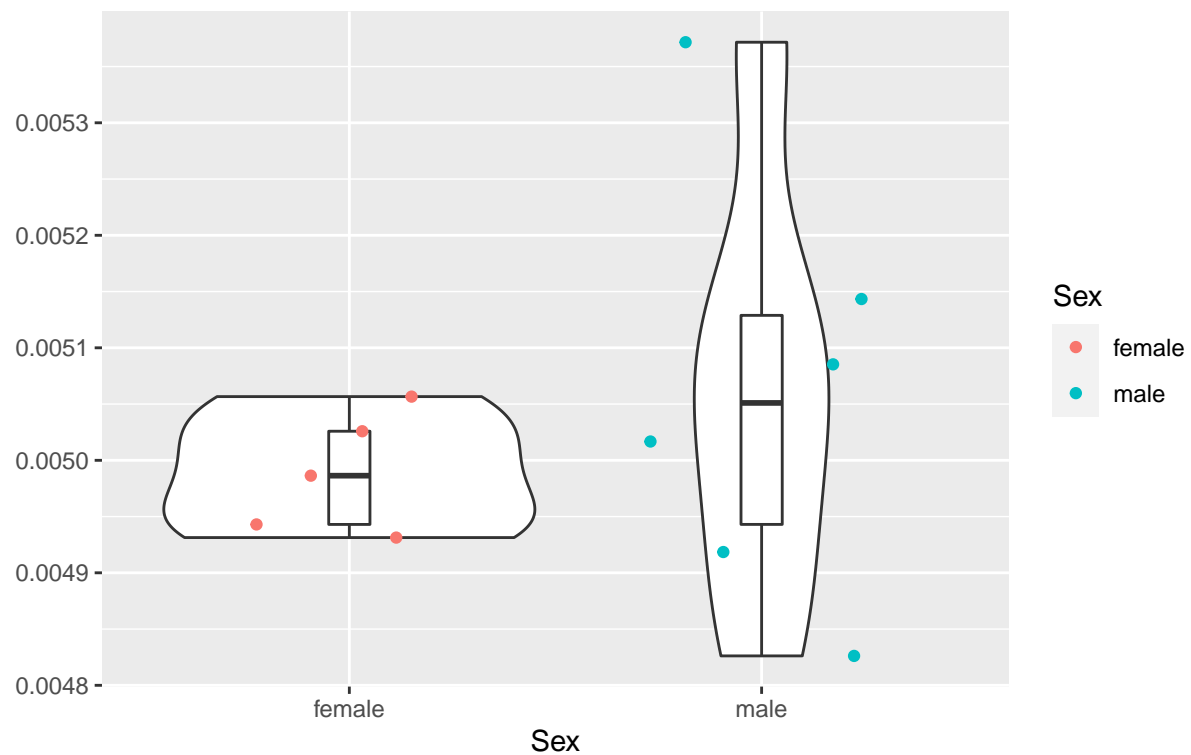
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	9.340e-08	9.339e-08	1.329	0.279
## Residuals	9	6.326e-07	7.029e-08		



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 3.651e-08 3.651e-08   4.169 0.0716 .
## Residuals    9 7.882e-08 8.760e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Ventral Spinocerebellar Tract

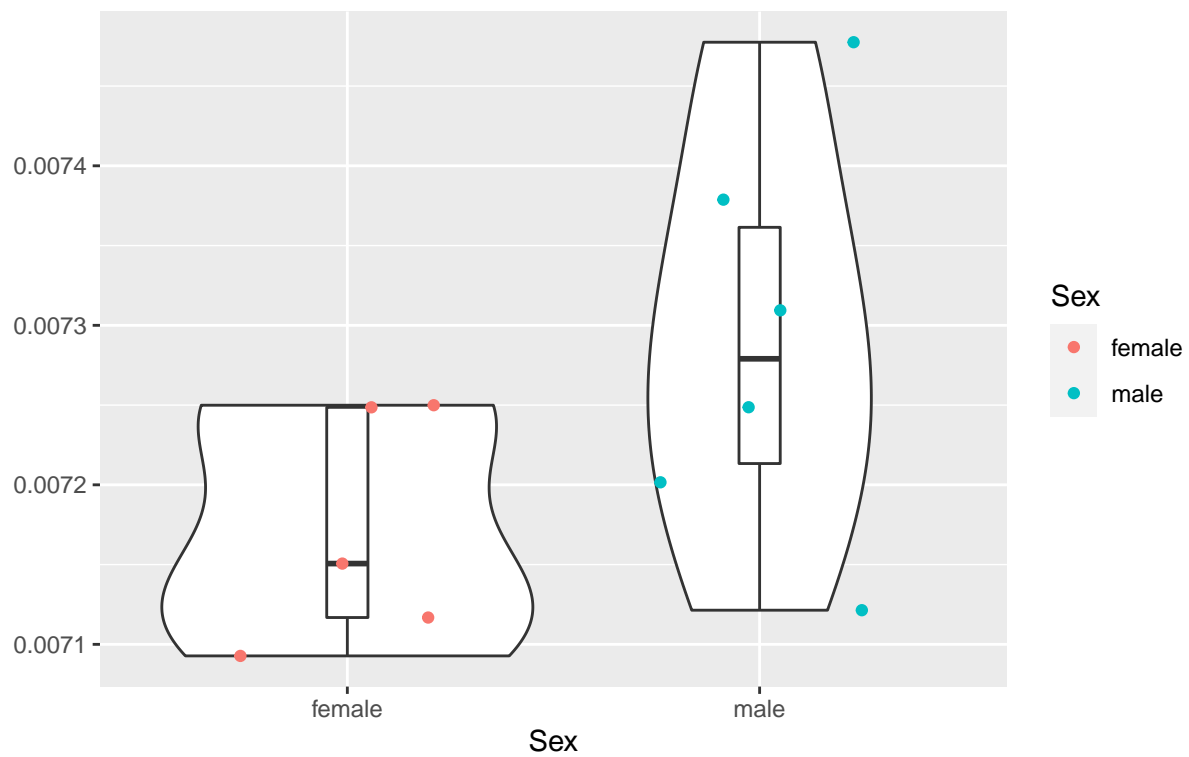
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.400e-08	1.400e-08	0.654	0.44
## Residuals	9	1.927e-07	2.141e-08		

Middle Cerebellar Peduncle

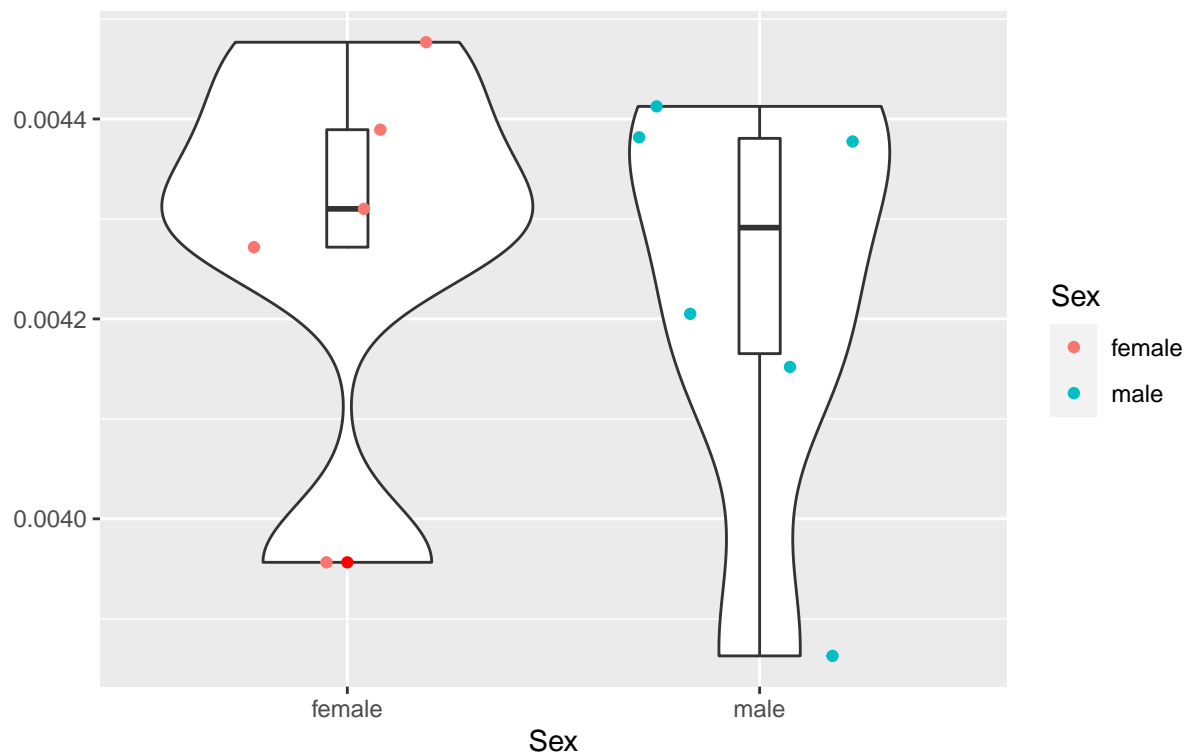
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.785e-08	3.785e-08	3.305	0.102
## Residuals	9	1.031e-07	1.145e-08		

Superior Cerebellar Peduncle

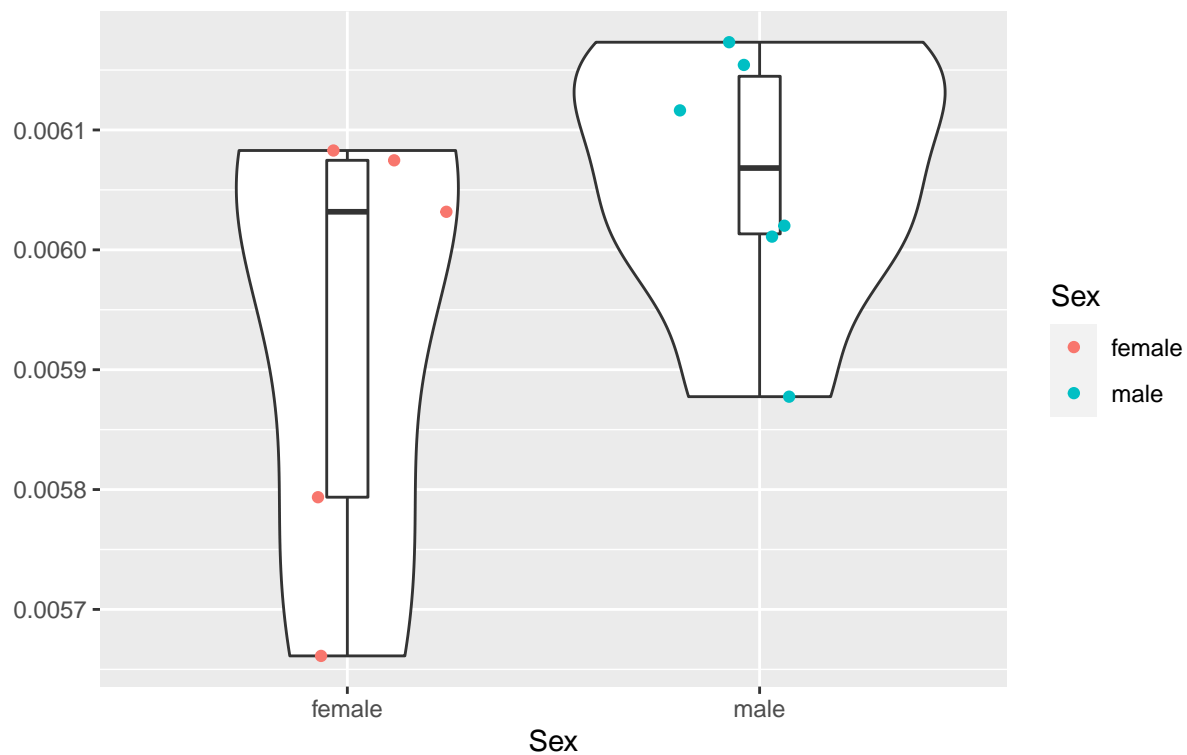
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.500e-09	6.530e-09	0.156	0.702
## Residuals	9	3.758e-07	4.176e-08		

Inferior Cerebellar Peduncle

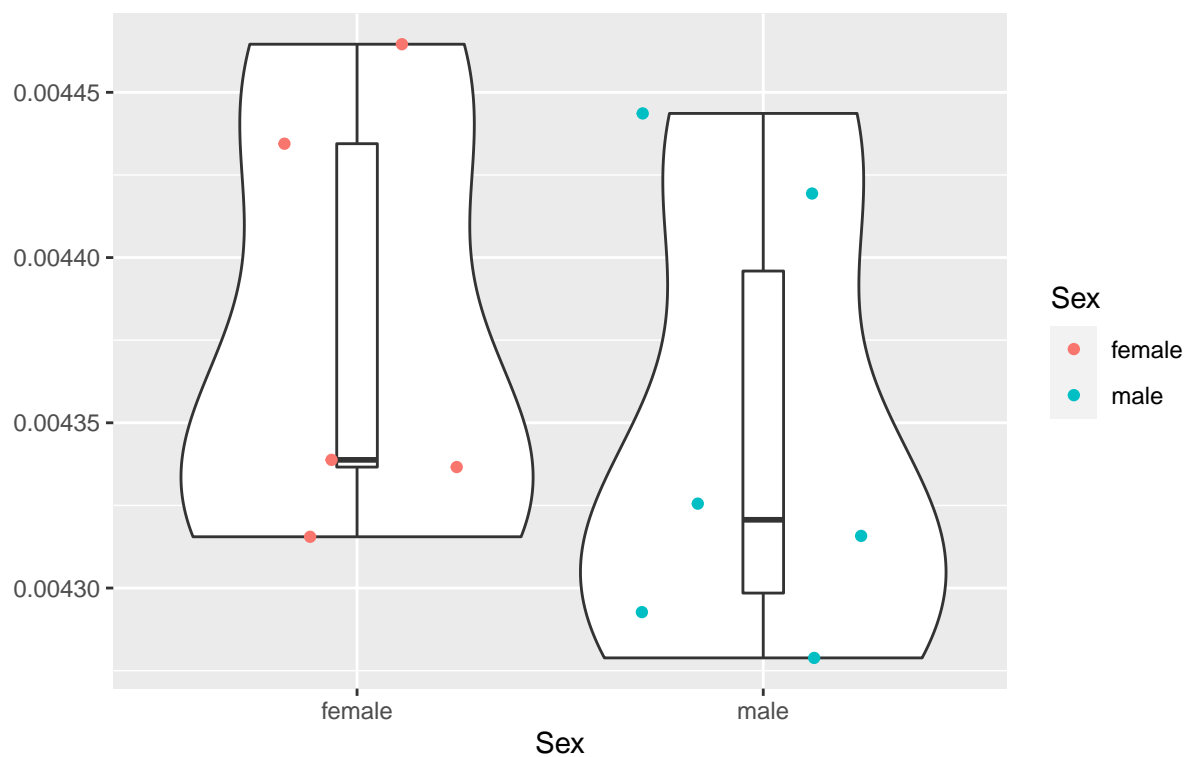
Red points denoting outliers



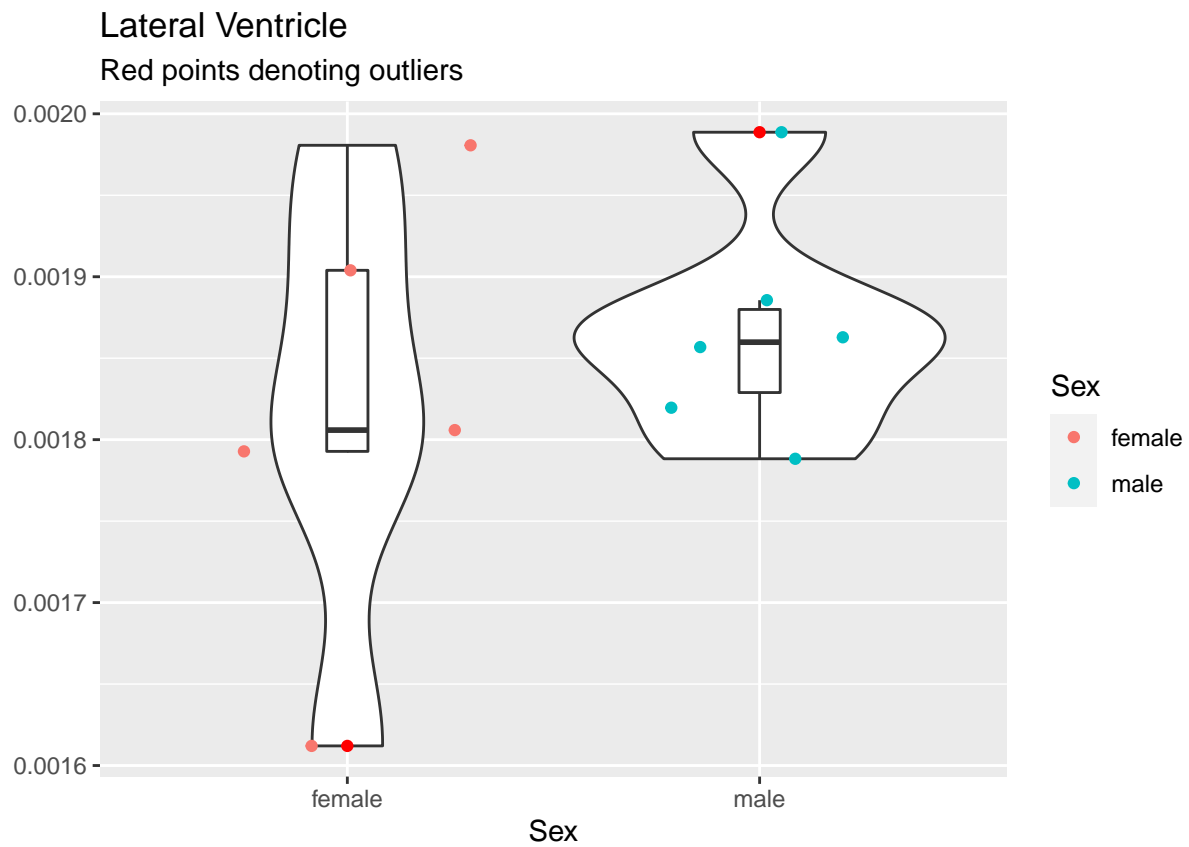
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	4.603e-08	4.603e-08	1.995	0.191
## Residuals	9	2.076e-07	2.307e-08		

Cerebellar White Matter

Red points denoting outliers



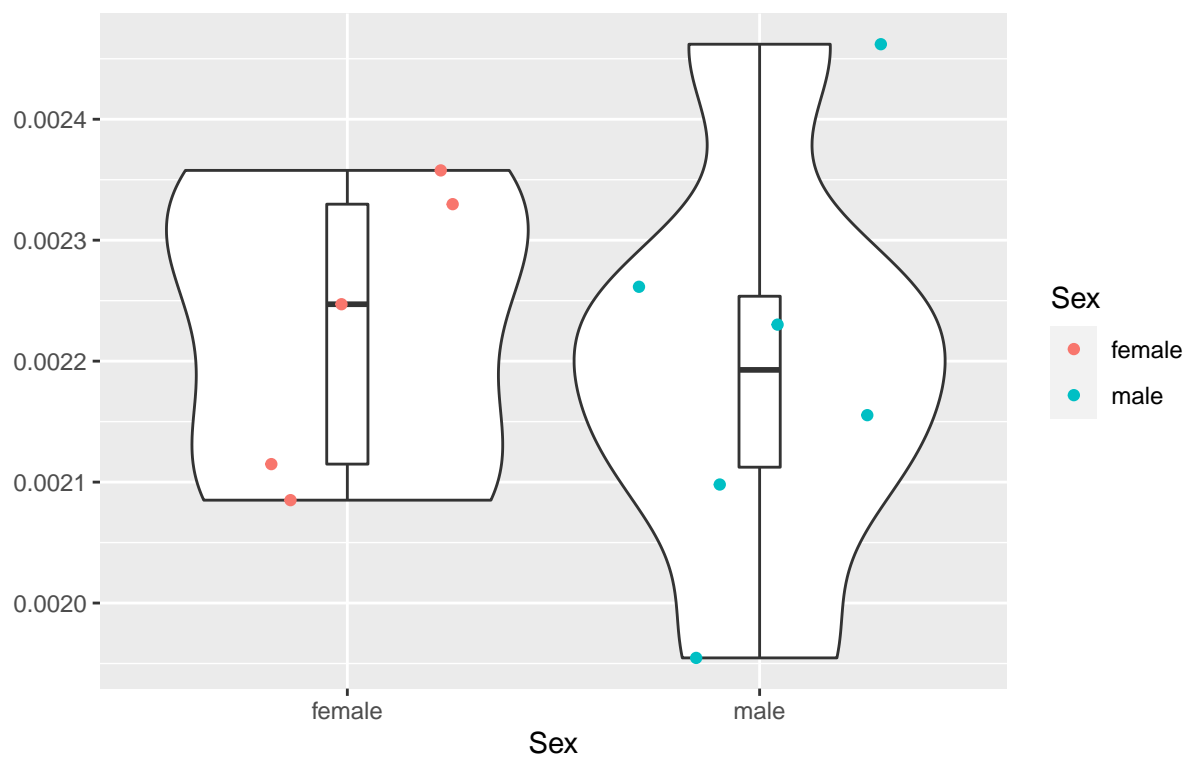
```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 2.790e-09 2.793e-09   0.607  0.456
## Residuals   9 4.143e-08 4.603e-09
```

##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.260e-09	6.26e-09	0.559	0.474
## Residuals	9	1.008e-07	1.12e-08		

Cingulate Cortex Area 25

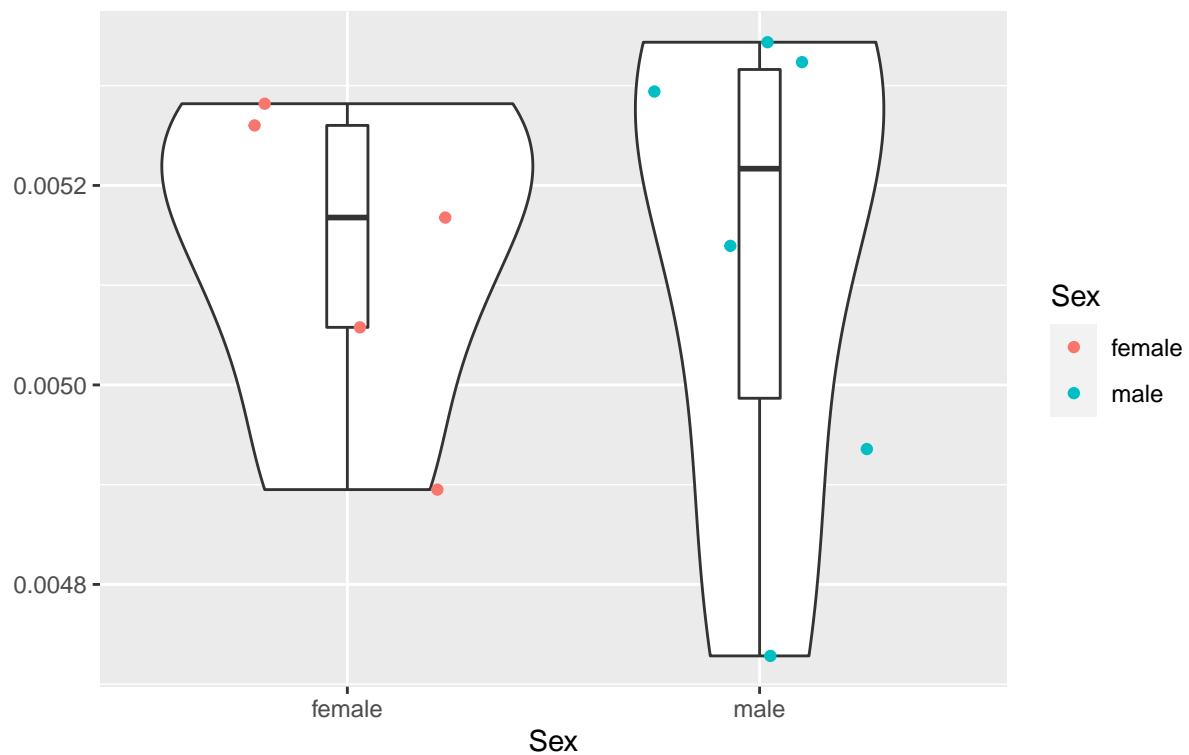
Red points denoting outliers



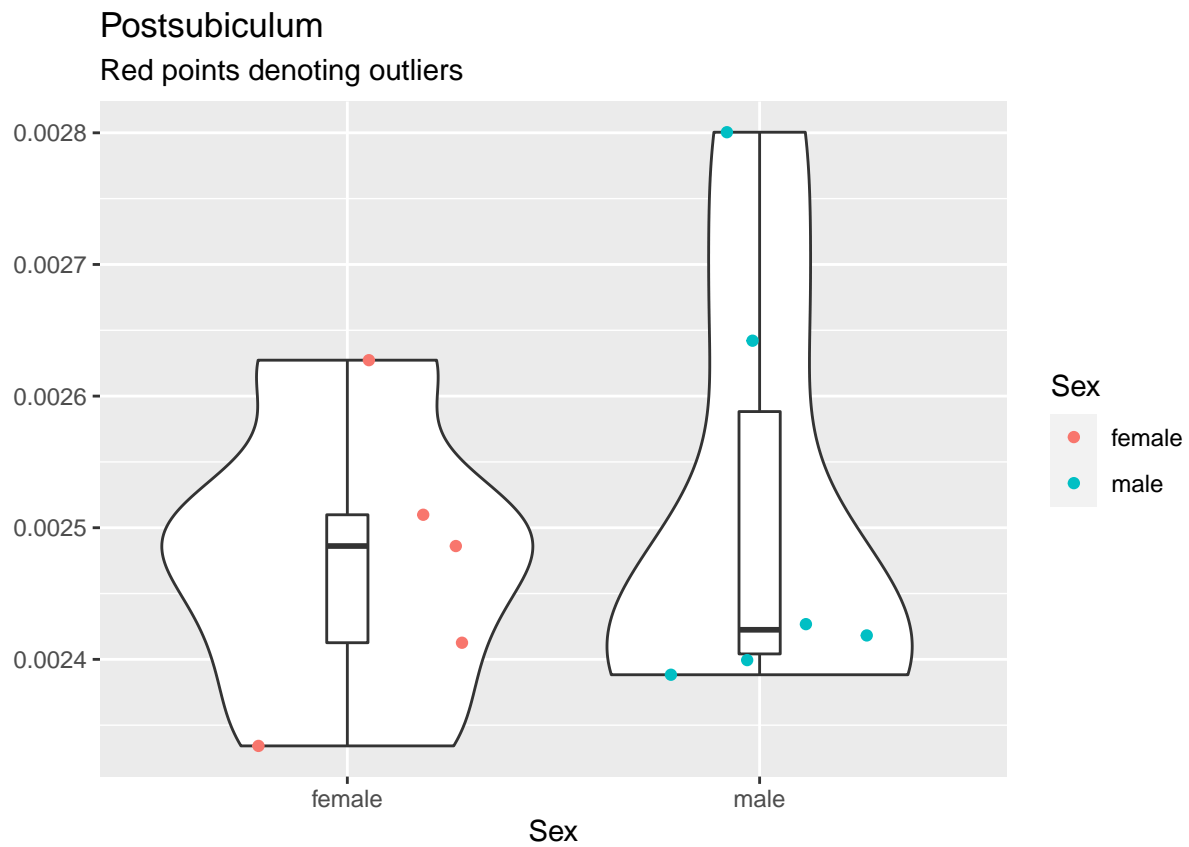
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.020e-09	3.022e-09	0.132	0.725
## Residuals	9	2.065e-07	2.294e-08		

Dorsal Acoustic Stria

Red points denoting outliers



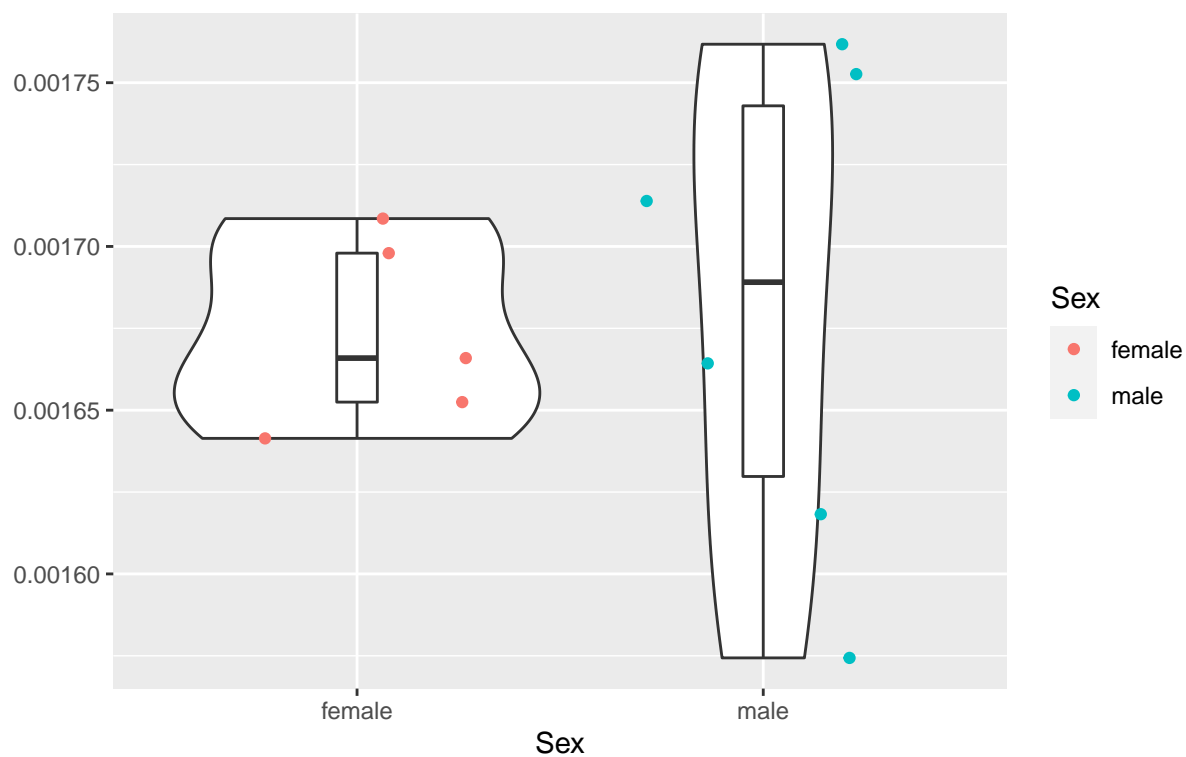
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.000e-10	7.000e-11	0.002	0.97
## Residuals	9	4.111e-07	4.568e-08		



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	4.050e-09	4.046e-09	0.189	0.674
## Residuals	9	1.924e-07	2.138e-08		

Ventricular System 4th Ventricle

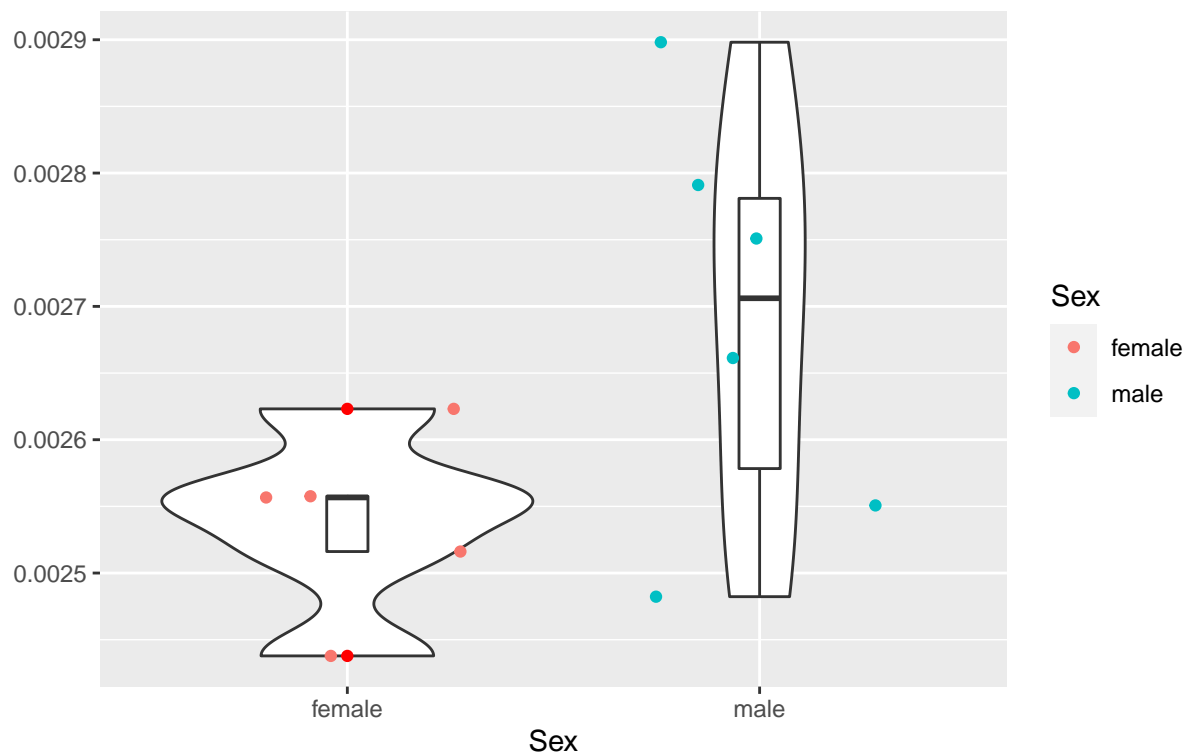
Red points denoting outliers



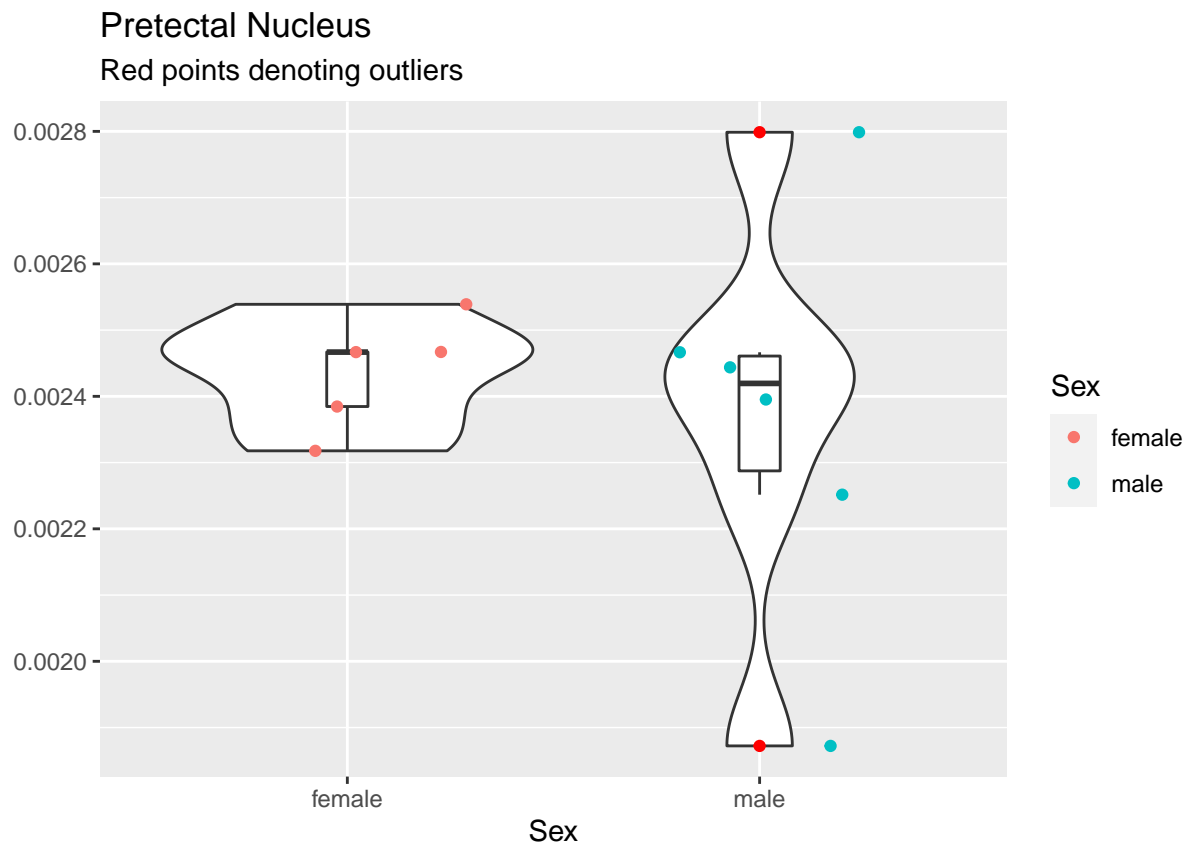
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.600e-10	1.58e-10	0.045	0.837
## Residuals	9	3.168e-08	3.52e-09		

Microcellular Tegmental Nucleus

Red points denoting outliers

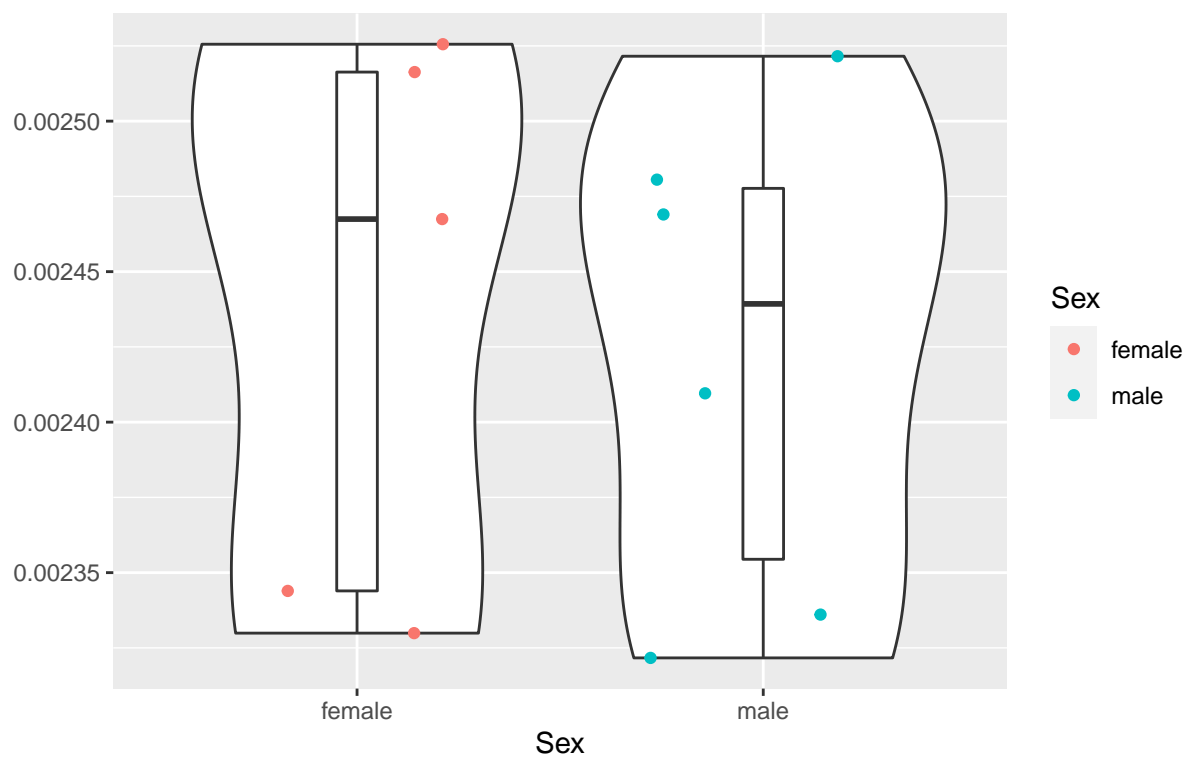


```
##           Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex           1 6.200e-08 6.200e-08   4.012 0.0762 .
## Residuals     9 1.391e-07 1.546e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



Latero Dorsal Thalamic Nucleus Ventro Lateral

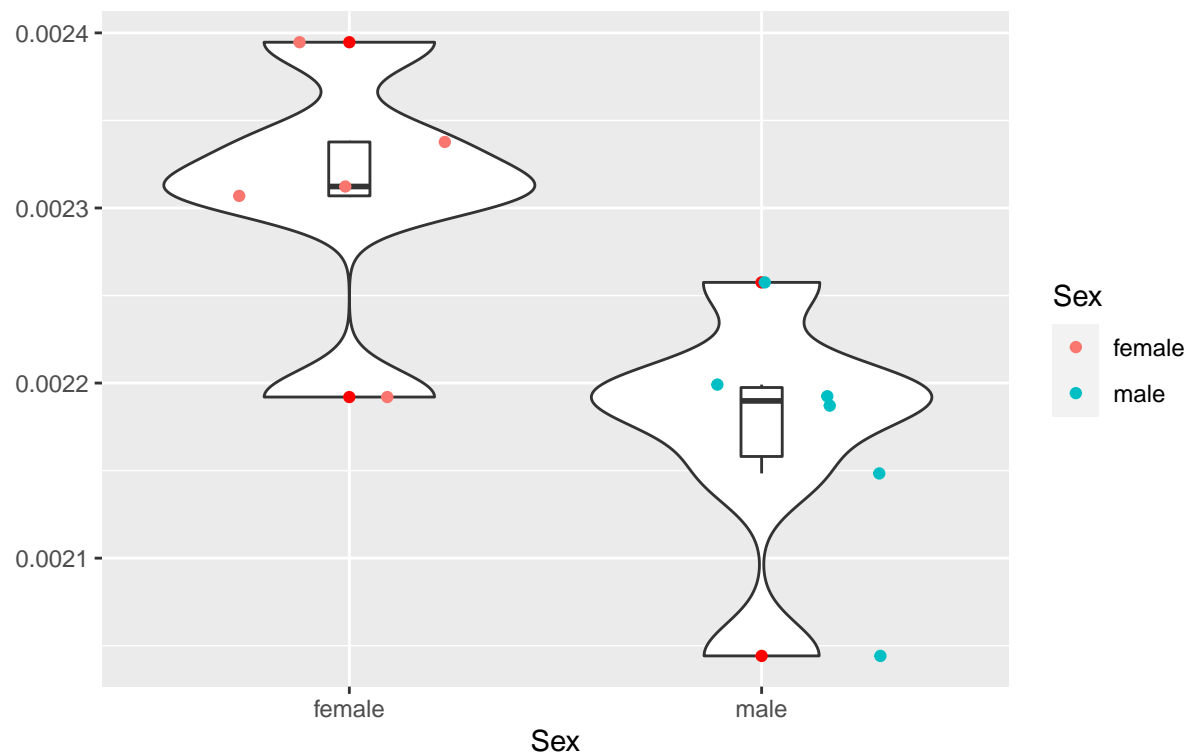
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	5.000e-10	5.010e-10	0.066	0.803
## Residuals	9	6.834e-08	7.594e-09		

Latero Posterior Nuclei of Thalamus

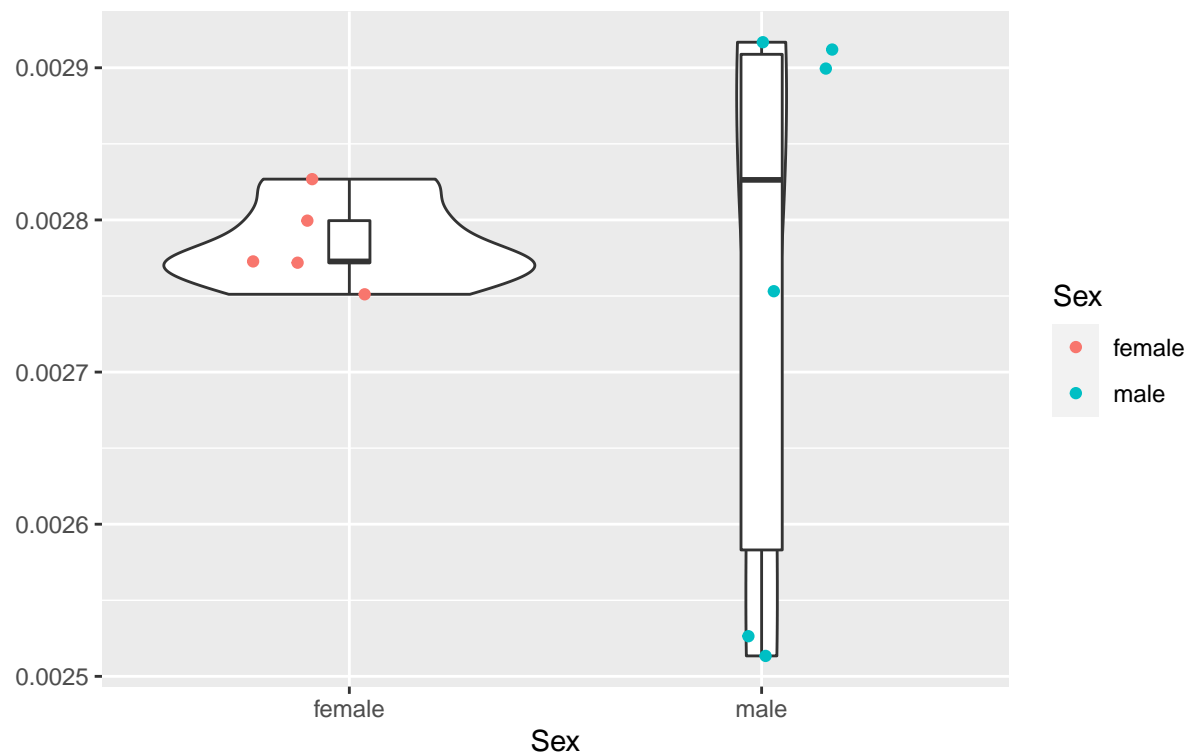
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 5.138e-08 5.138e-08   9.744 0.0123 *
## Residuals    9 4.745e-08 5.270e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Anterior Thalamic Nuclei

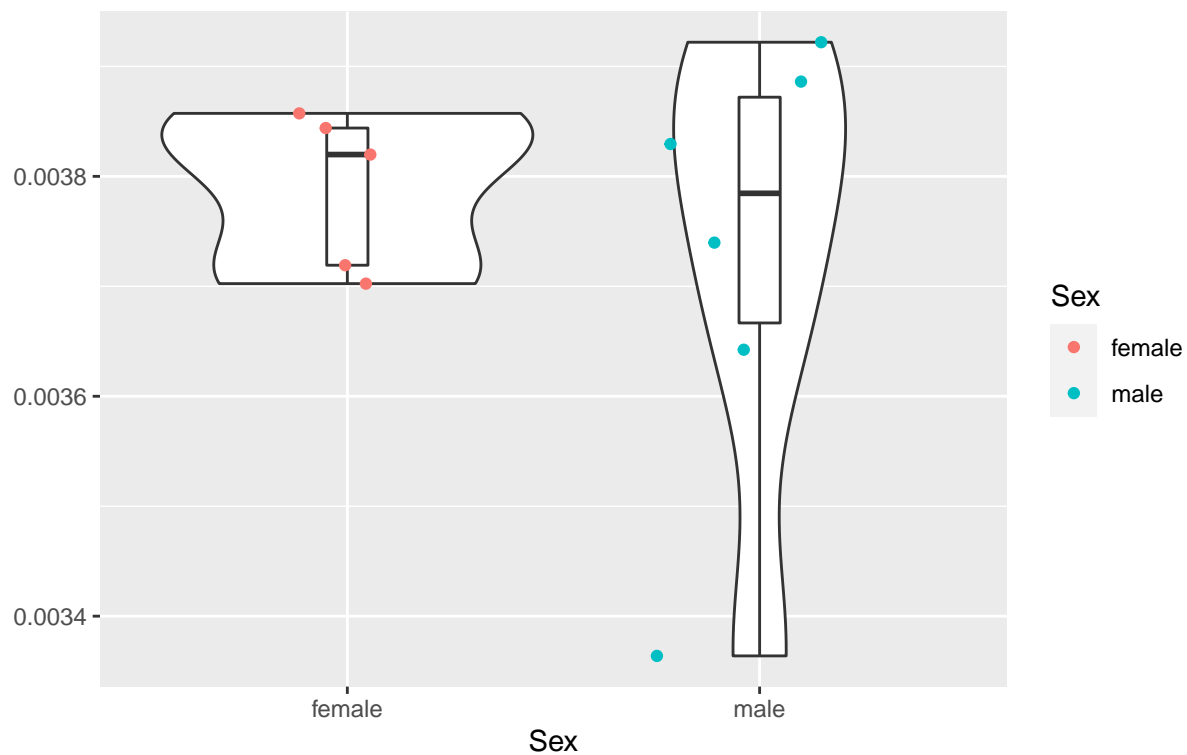
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.600e-09	2.599e-09	0.126	0.731
## Residuals	9	1.857e-07	2.064e-08		

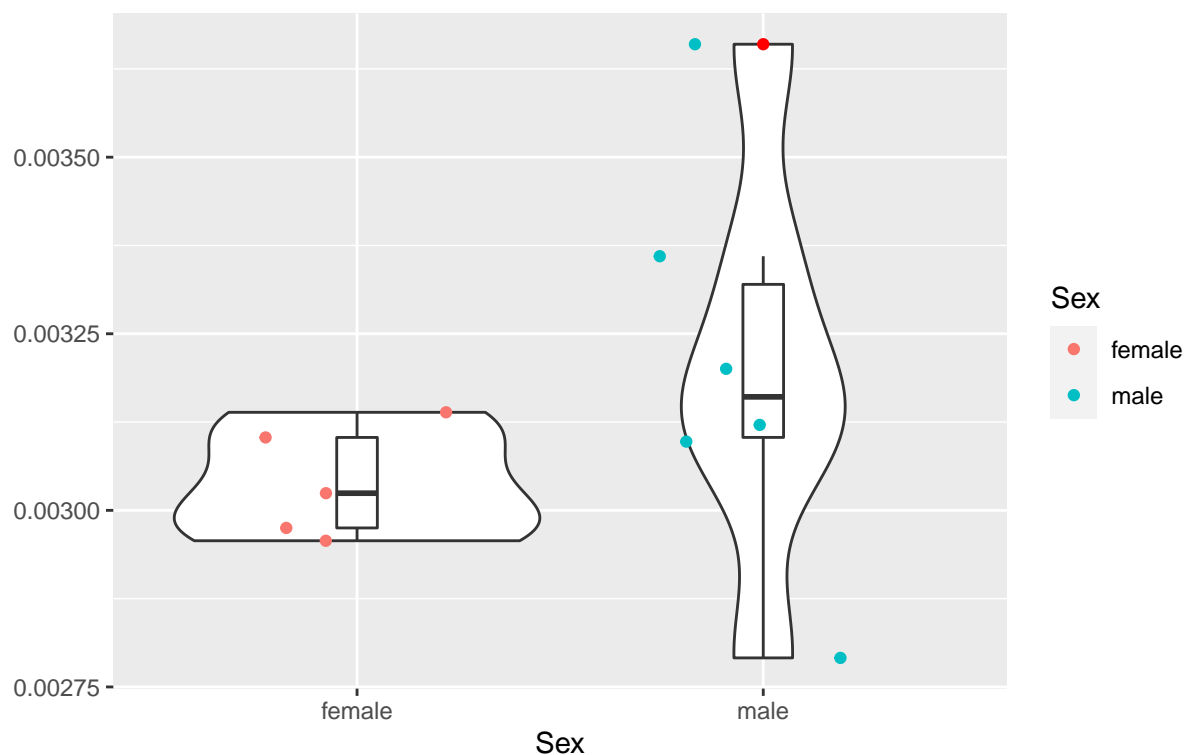
Red Nucleus Magnocellular

Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	9.16e-09	9.16e-09	0.352	0.567
## Residuals	9	2.34e-07	2.60e-08		

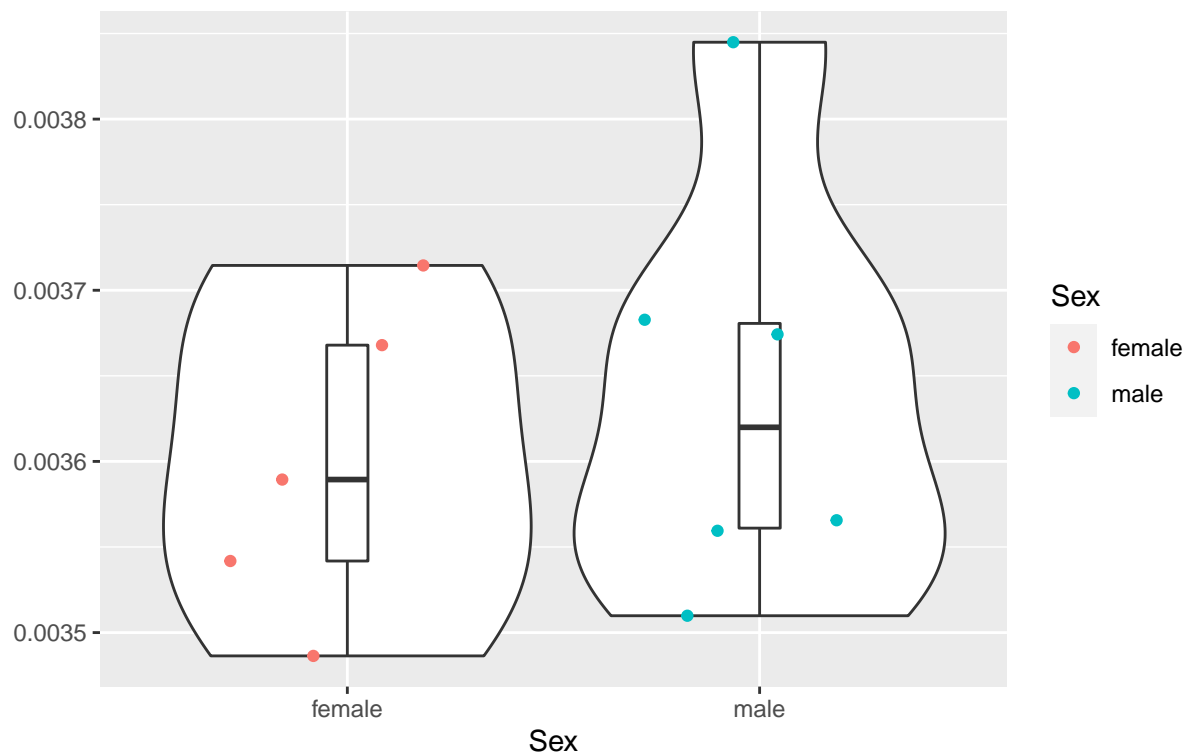
Pararubral Nucleus Red points denoting outliers



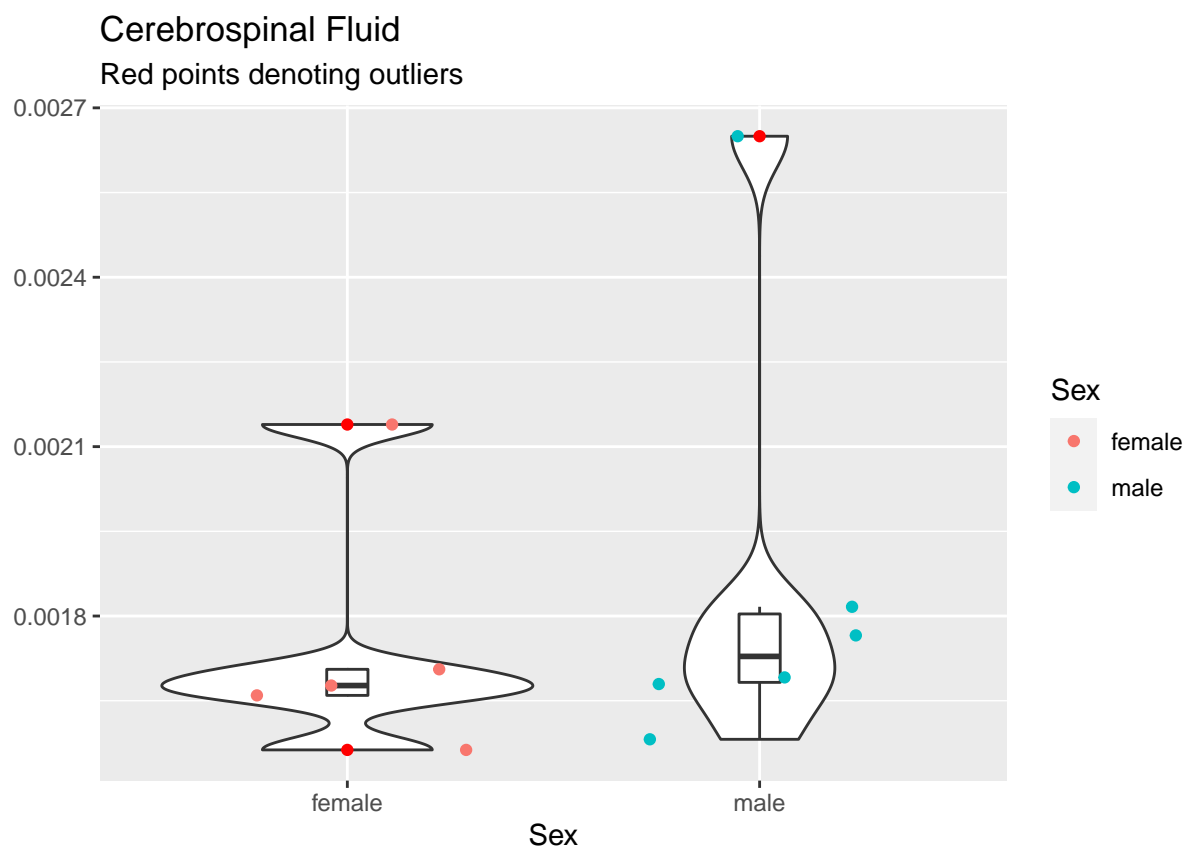
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	7.45e-08	7.446e-08	1.503	0.251
## Residuals	9	4.46e-07	4.955e-08		

Retro Rubral Fluid

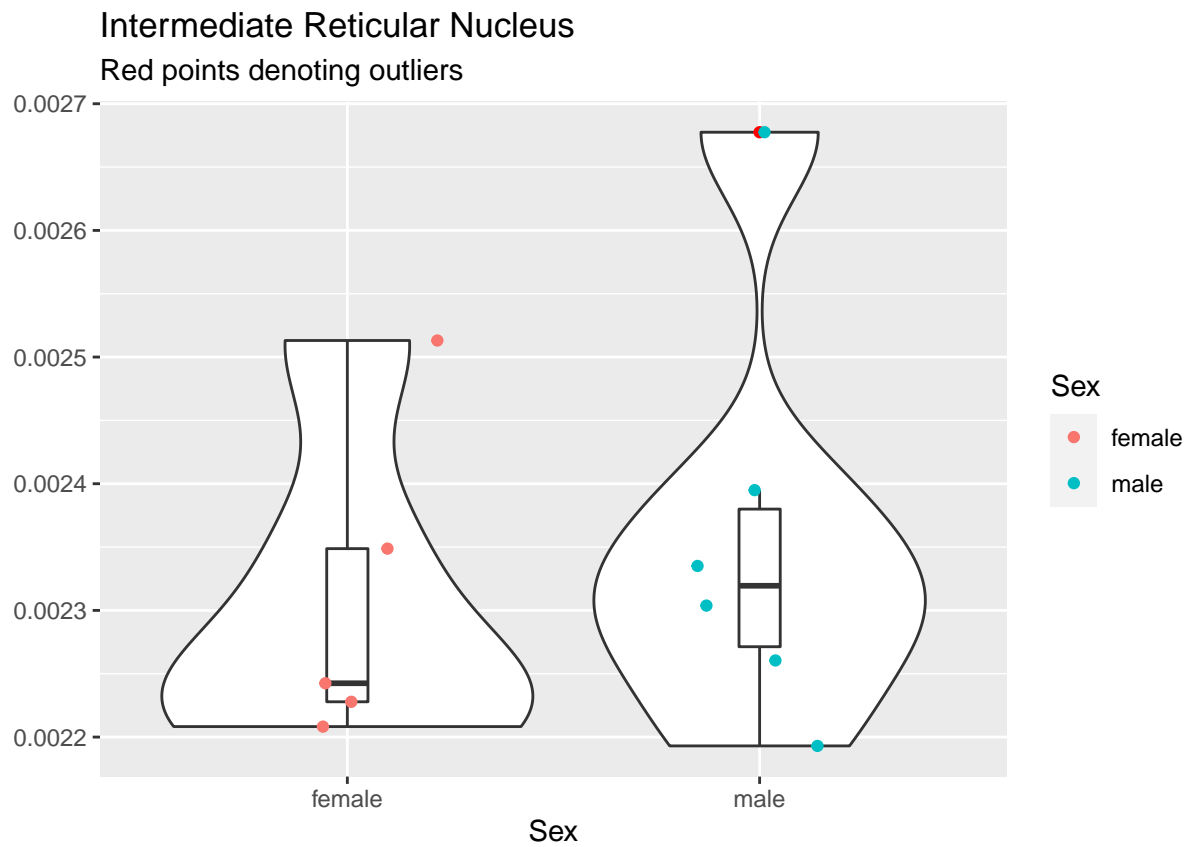
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	4.250e-09	4.249e-09	0.354	0.567
## Residuals	9	1.081e-07	1.201e-08		

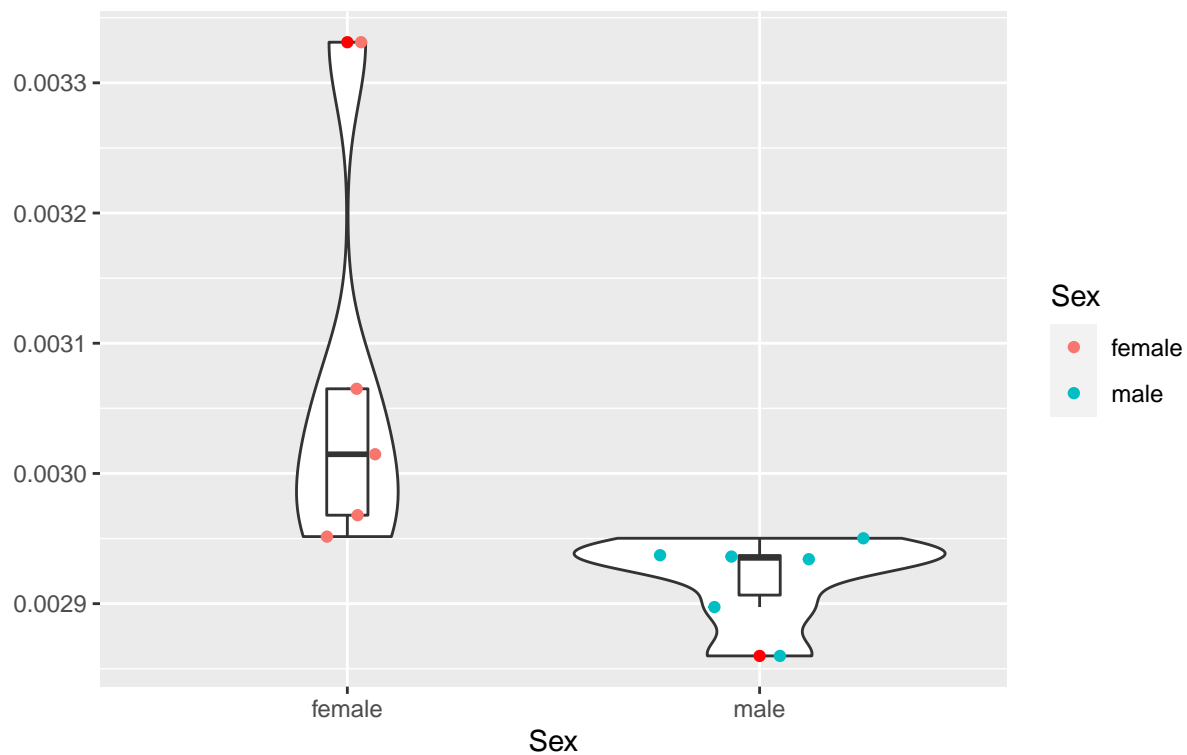


##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.620e-08	3.622e-08	0.334	0.577
## Residuals	9	9.749e-07	1.083e-07		



Posterior Dorsal Paraventricular Medial Parvicellular Posterior Lateral Hy

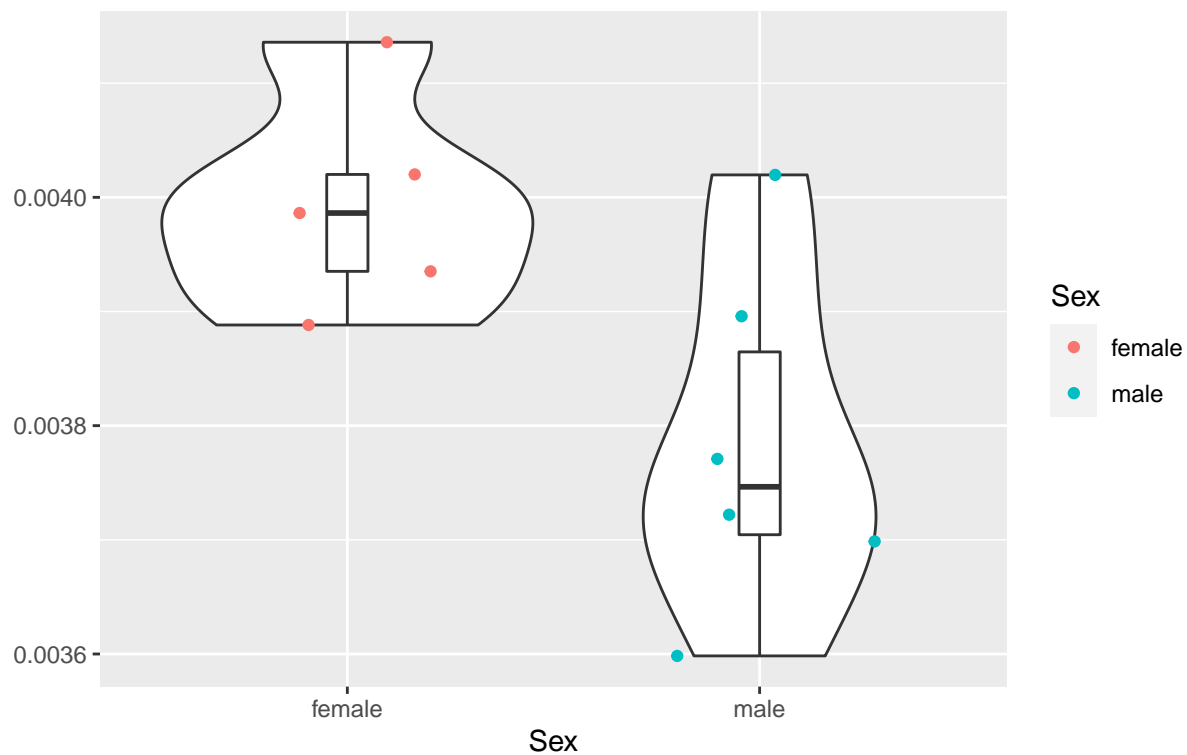
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 5.885e-08 5.885e-08    5.22 0.0482 *
## Residuals    9 1.015e-07 1.128e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```


Prerubral Forel

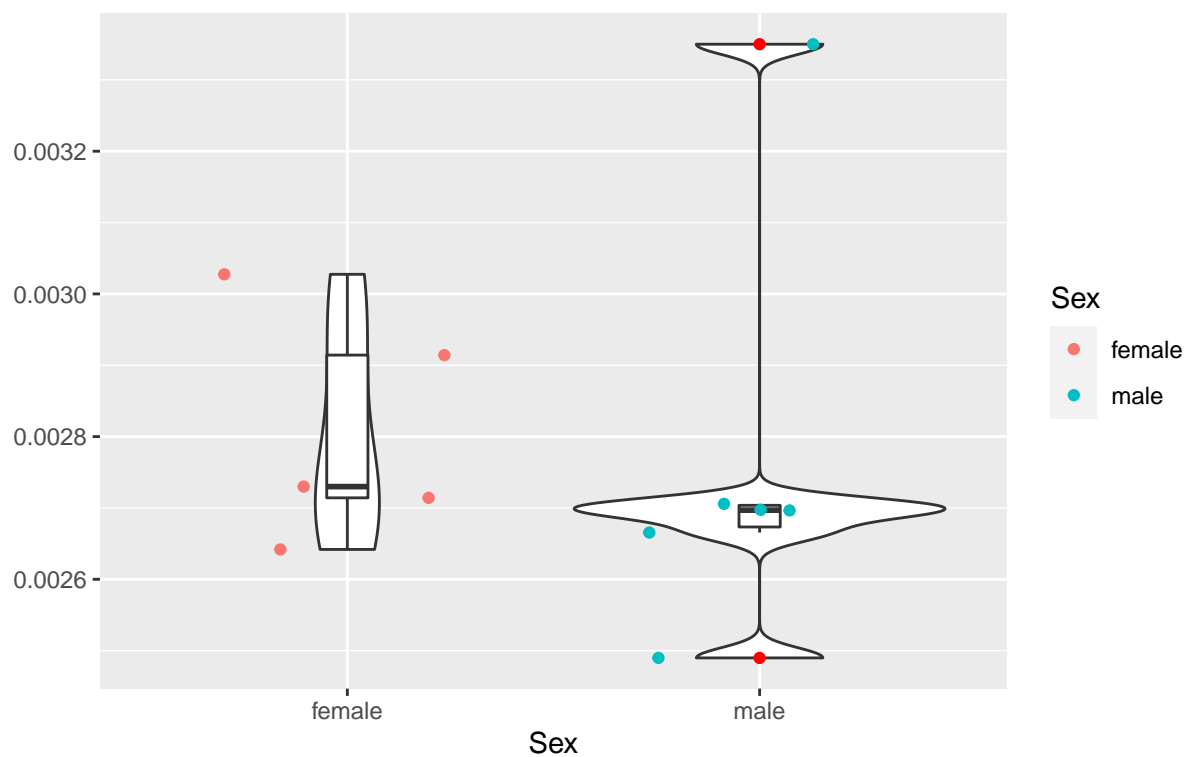
Red points denoting outliers



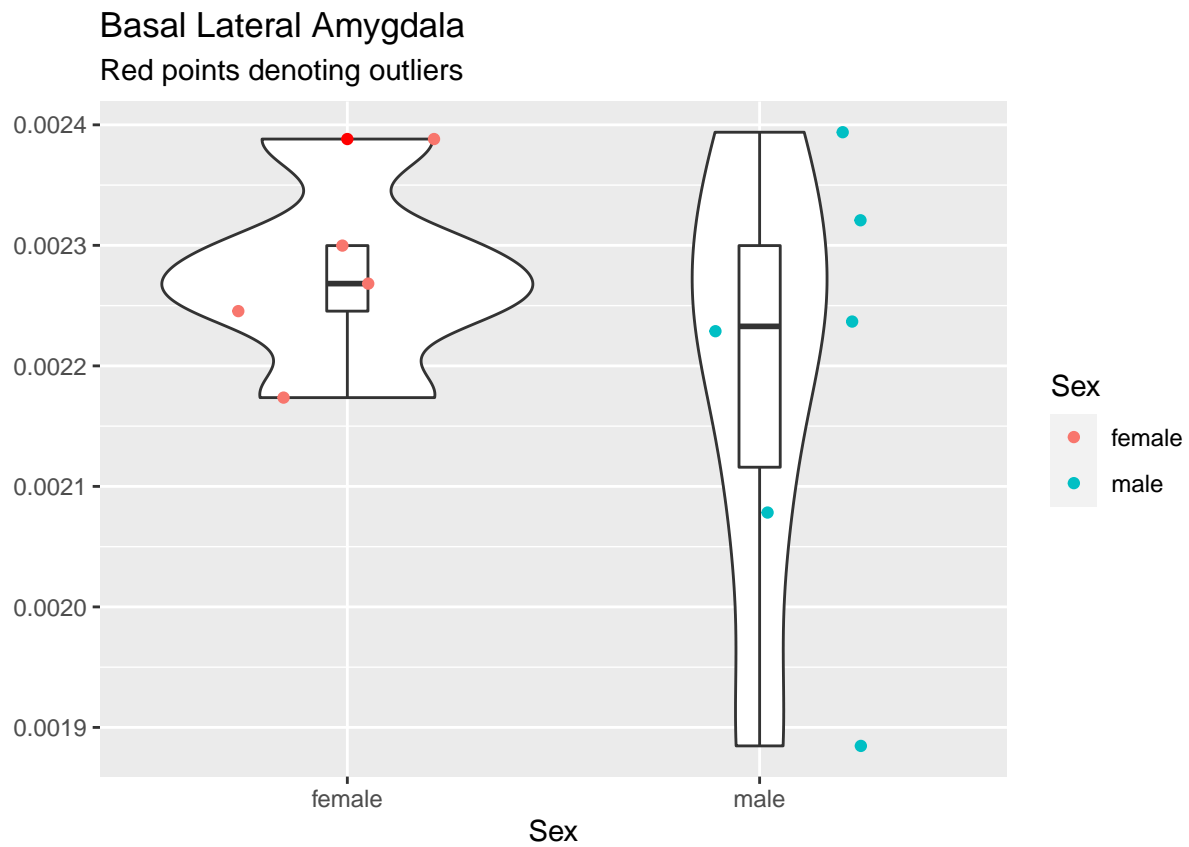
```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.190e-07 1.190e-07   7.172 0.0253 *
## Residuals    9 1.493e-07 1.659e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

PVG of Hypothalamus

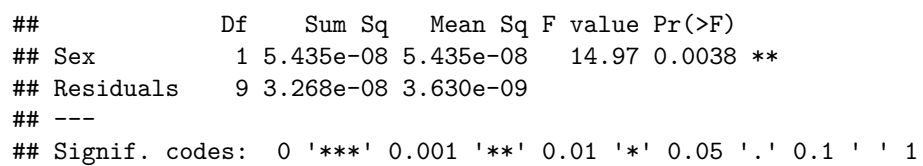
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.900e-09	3.950e-09	0.065	0.804
## Residuals	9	5.426e-07	6.028e-08		

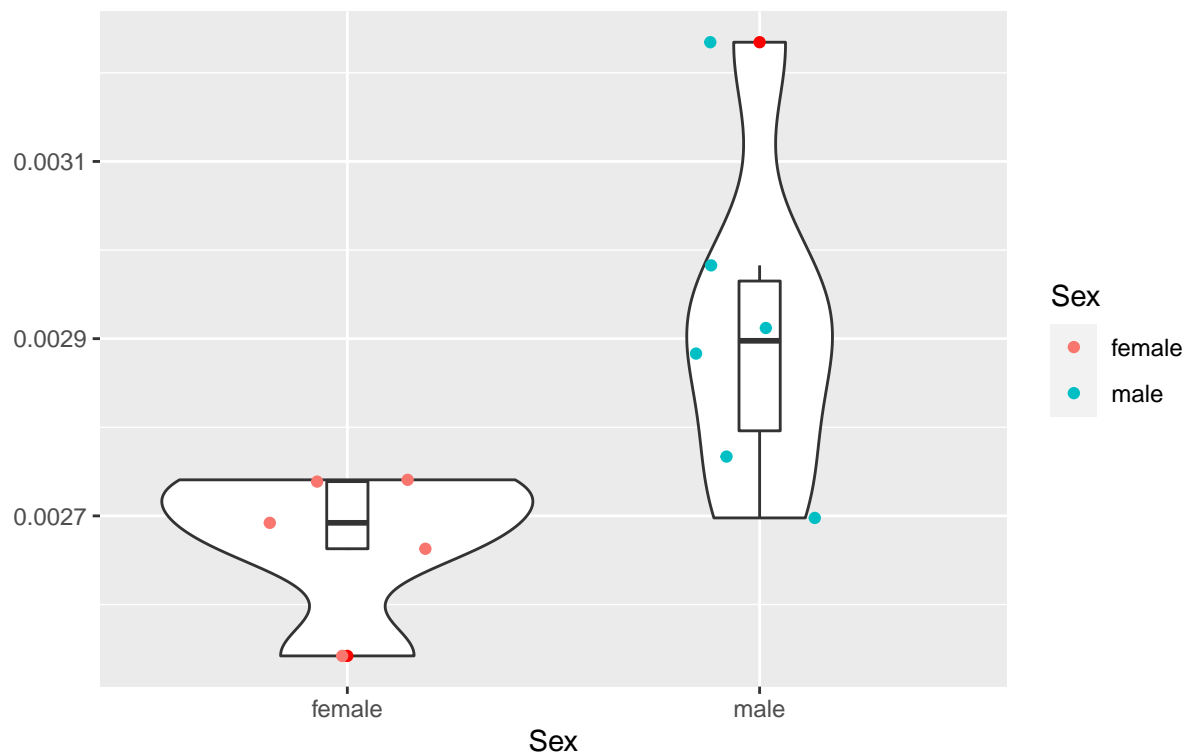


Red points denoting outliers



Precuneiform Nucleus

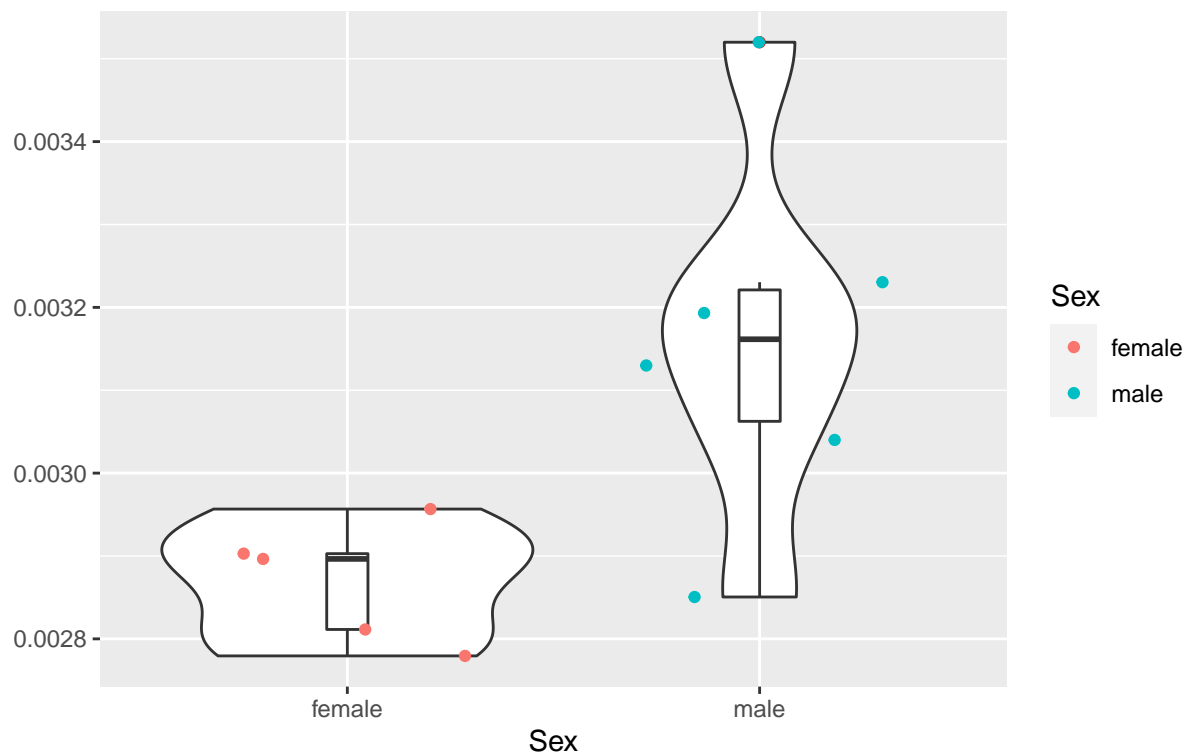
Red points denoting outliers



```
##           Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex         1 1.539e-07 1.539e-07   6.813 0.0283 *
## Residuals   9 2.033e-07 2.259e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Cuneiform Nucleus

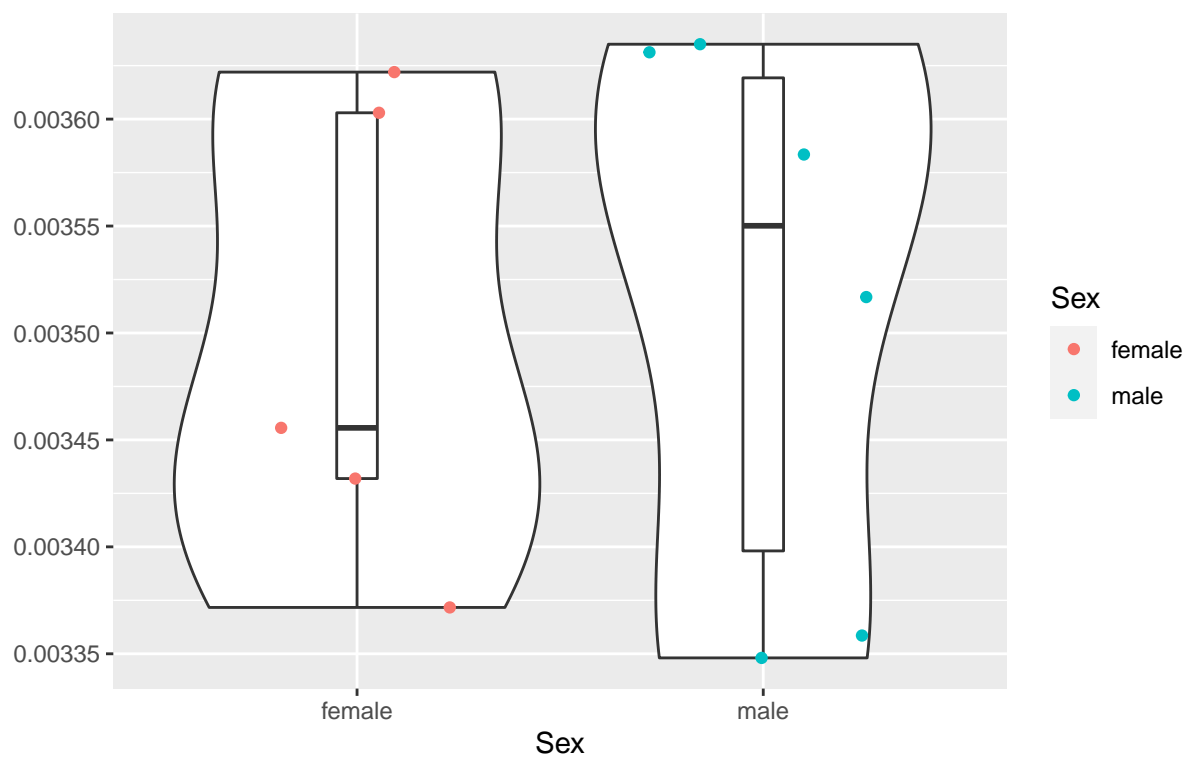
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 2.315e-07 2.315e-07   7.784 0.0211 *
## Residuals    9 2.676e-07 2.973e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Midbrain Linear Nucleus

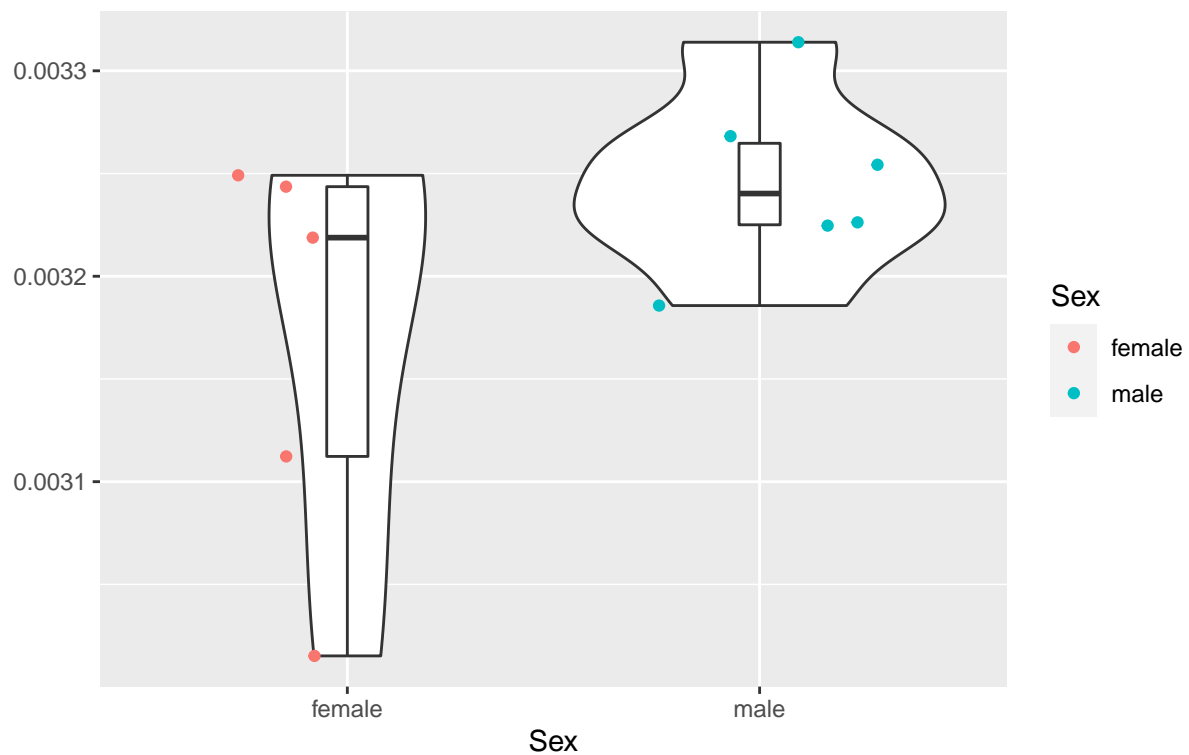
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.400e-10	6.430e-10	0.043	0.84
## Residuals	9	1.334e-07	1.482e-08		

Midbrain Reticular Nucleus

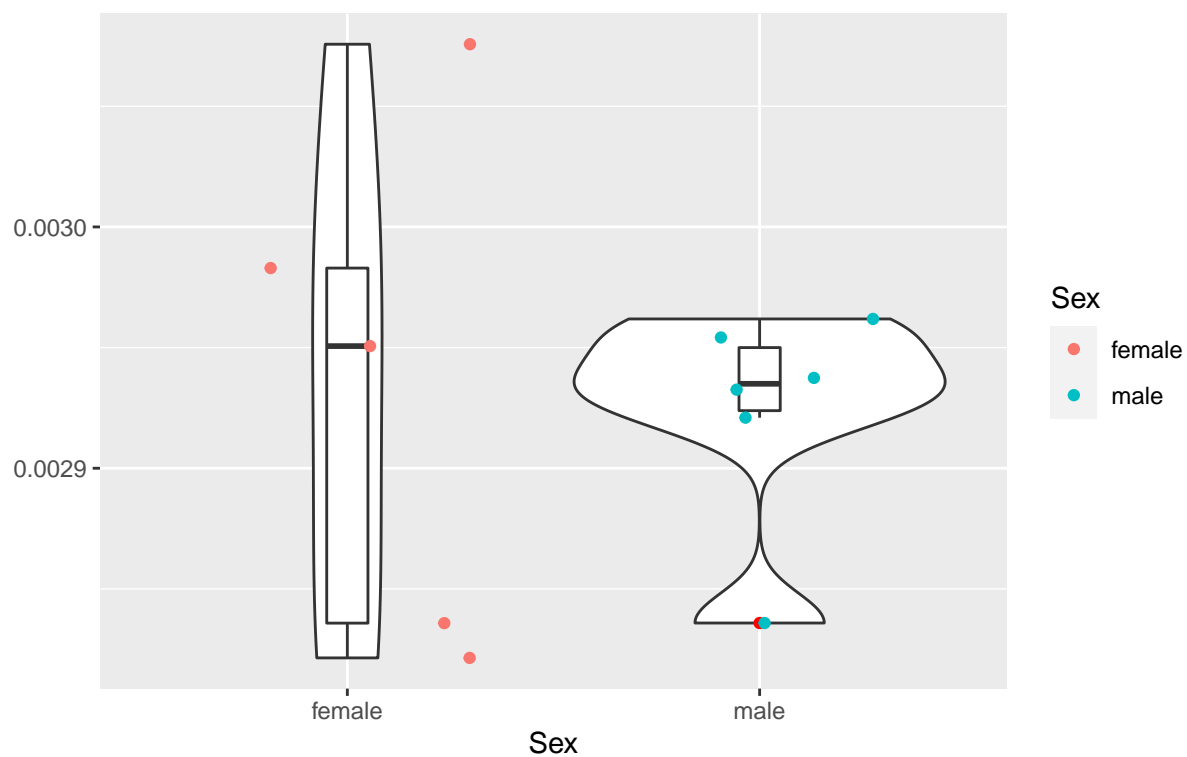
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.646e-08	1.646e-08	2.906	0.122
## Residuals	9	5.099e-08	5.666e-09		

Red Nucleus Parvicellular

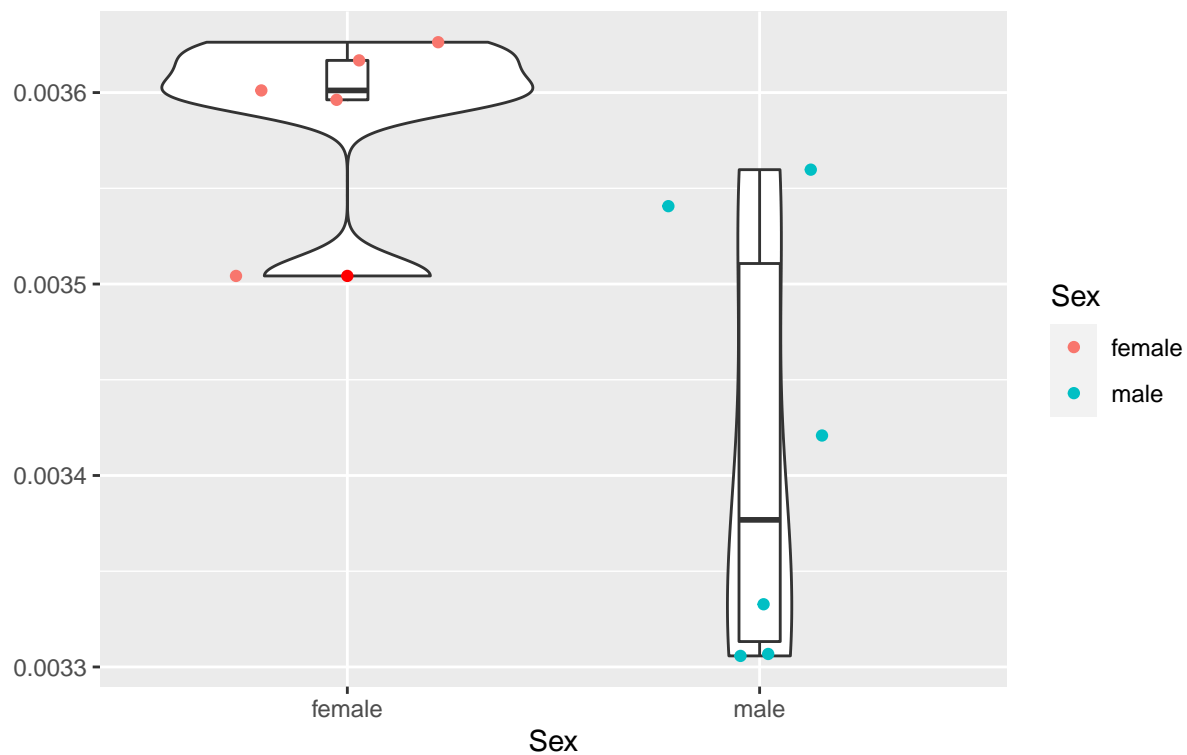
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.500e-10	2.460e-10	0.04	0.846
## Residuals	9	5.544e-08	6.161e-09		

Substantia Nigra

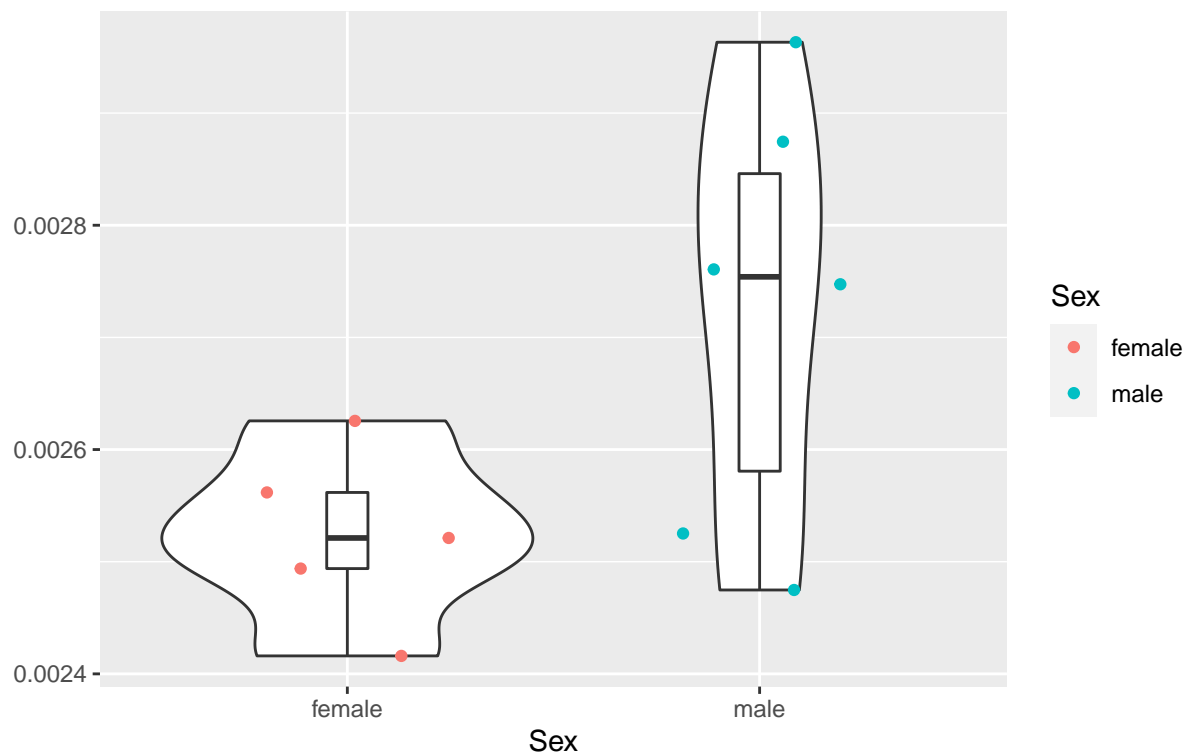
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 8.625e-08 8.625e-08   10.13 0.0111 *
## Residuals    9 7.664e-08 8.520e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Inferior Colliculus

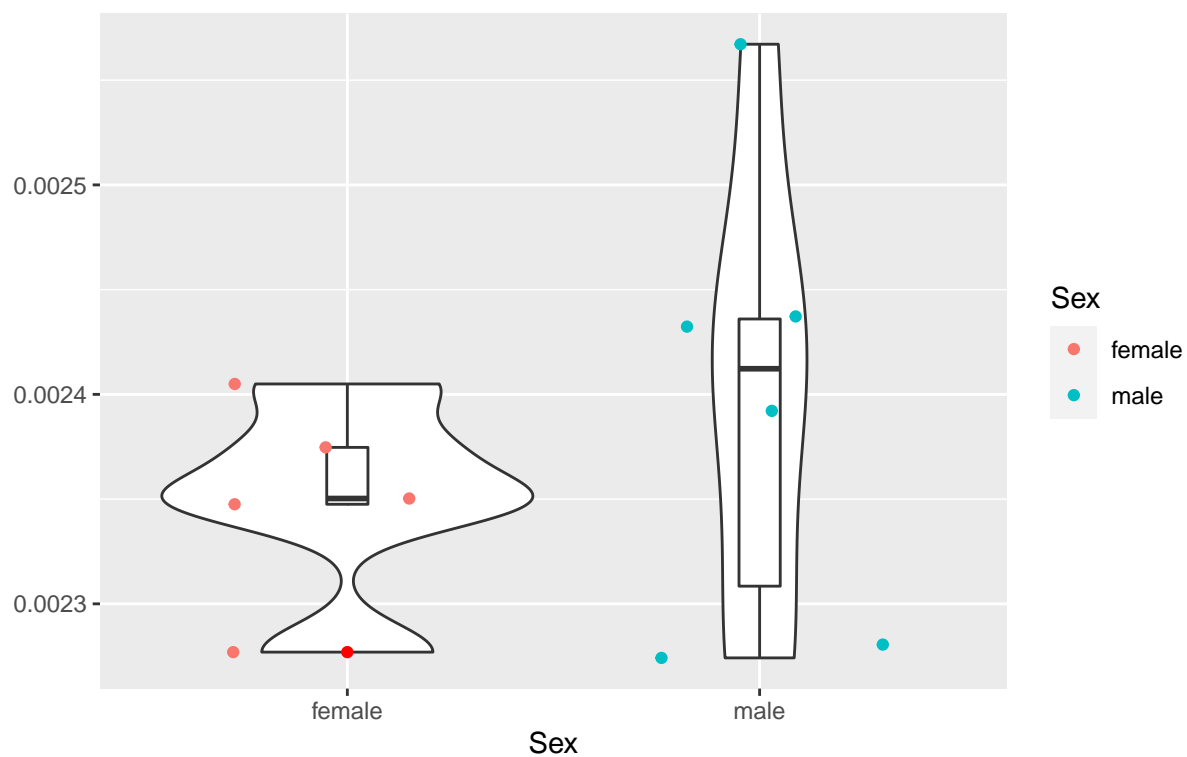
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.097e-07 1.097e-07   4.756 0.0571 .
## Residuals    9 2.077e-07 2.308e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Superior Colliculus

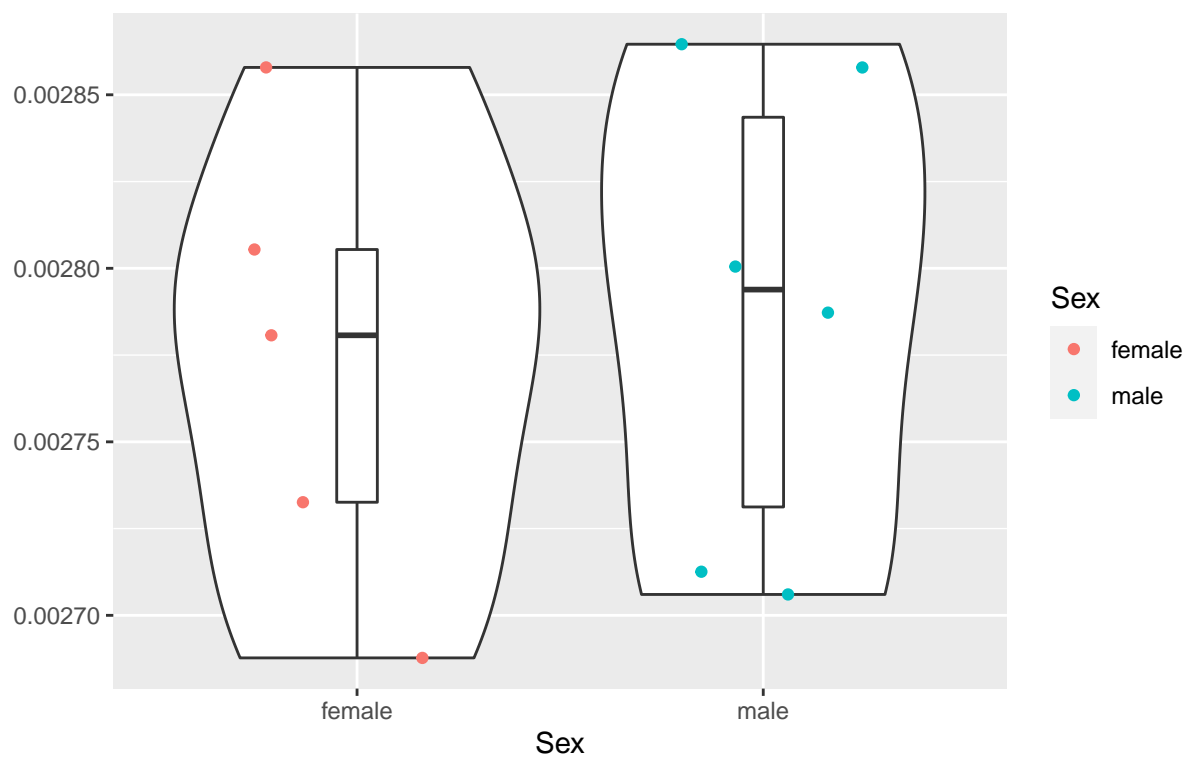
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	5.860e-09	5.865e-09	0.76	0.406
## Residuals	9	6.945e-08	7.717e-09		

Deep Mesencephalic Nuclei

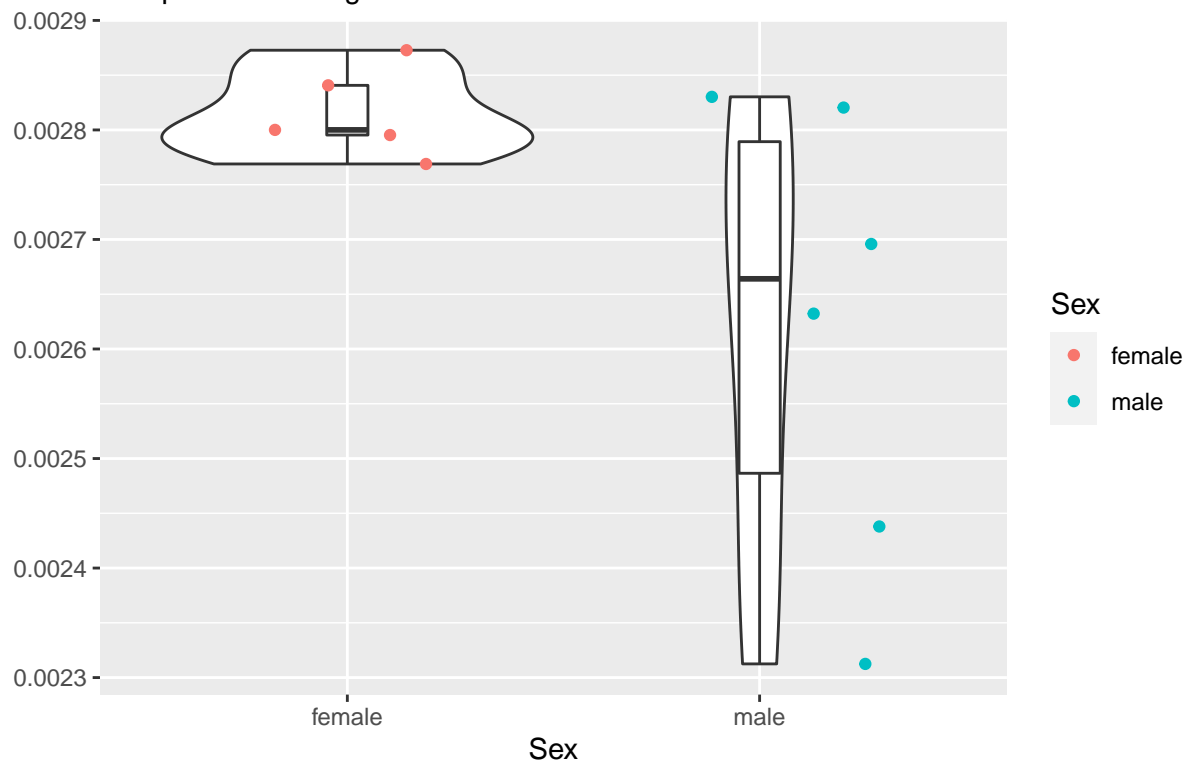
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 6.400e-10 6.350e-10   0.141  0.716
## Residuals   9 4.053e-08 4.504e-09
```

Subbrachial Nucleus and Peripeduncular Nucleus

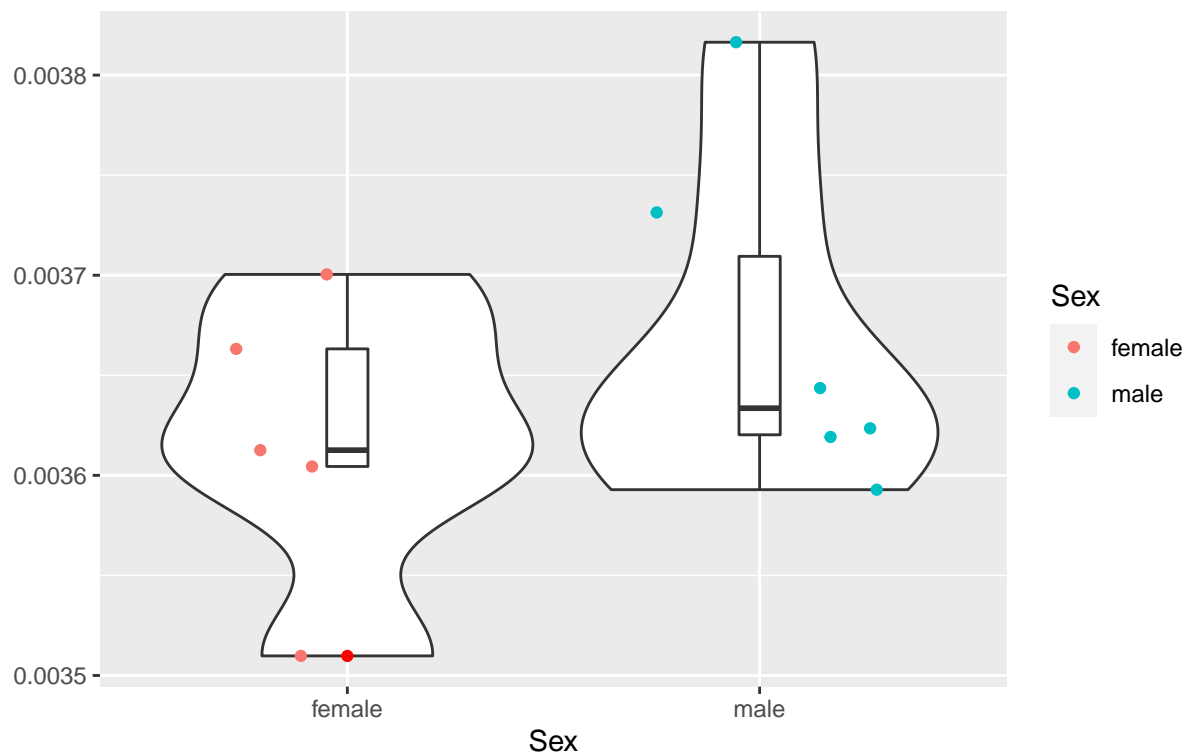
Red points denoting outliers



```
##          Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.027e-07 1.027e-07   4.112 0.0732 .
## Residuals    9 2.247e-07 2.497e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Reticular Nucleus of Thalamus

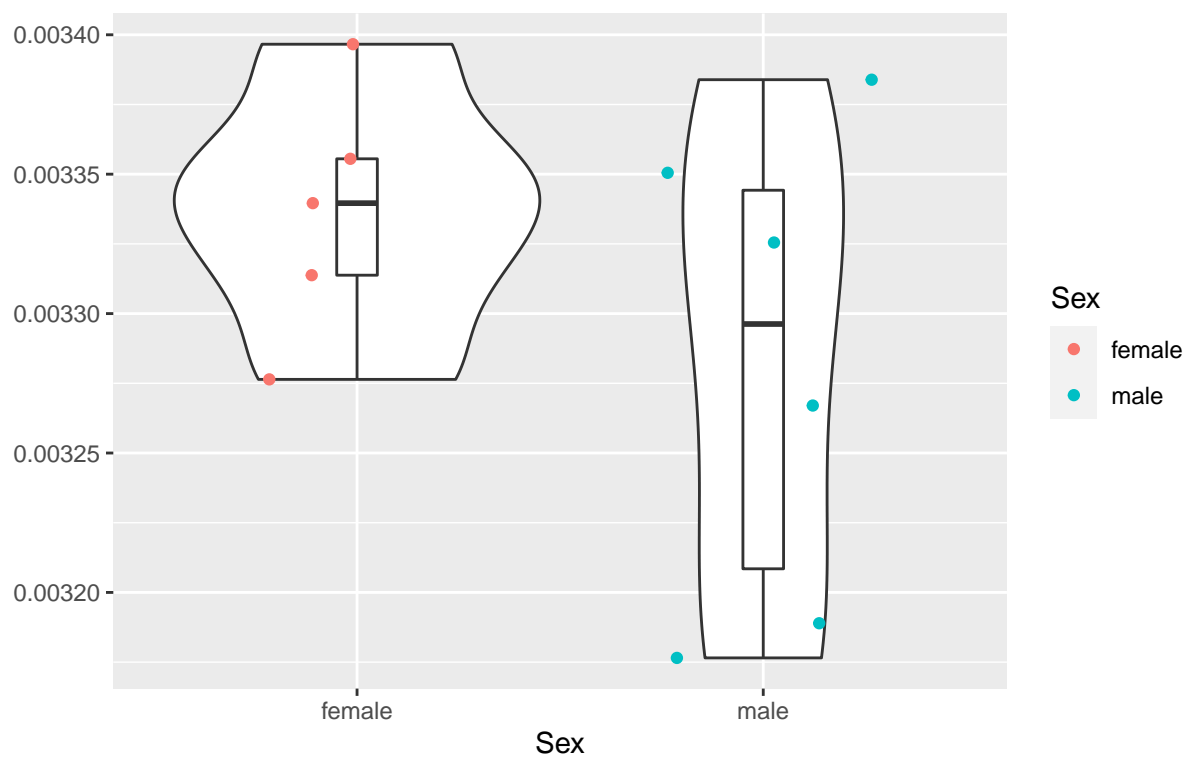
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	7.680e-09	7.685e-09	1.206	0.301
## Residuals	9	5.736e-08	6.373e-09		

Zona Incerta

Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	8.050e-09	8.048e-09	1.607	0.237
## Residuals	9	4.509e-08	5.010e-09		

Lateral Geniculate Nucleus

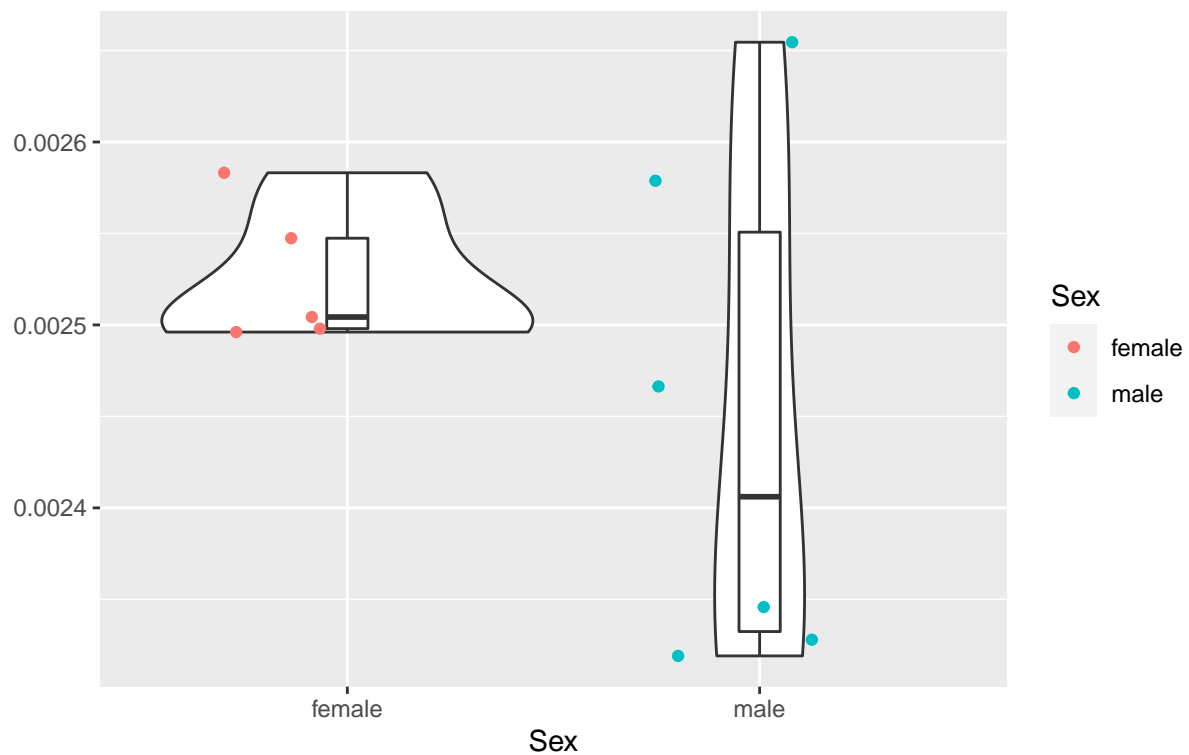
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.310e-09	2.309e-09	0.518	0.49
## Residuals	9	4.015e-08	4.461e-09		

Medial Geniculate Nucleus

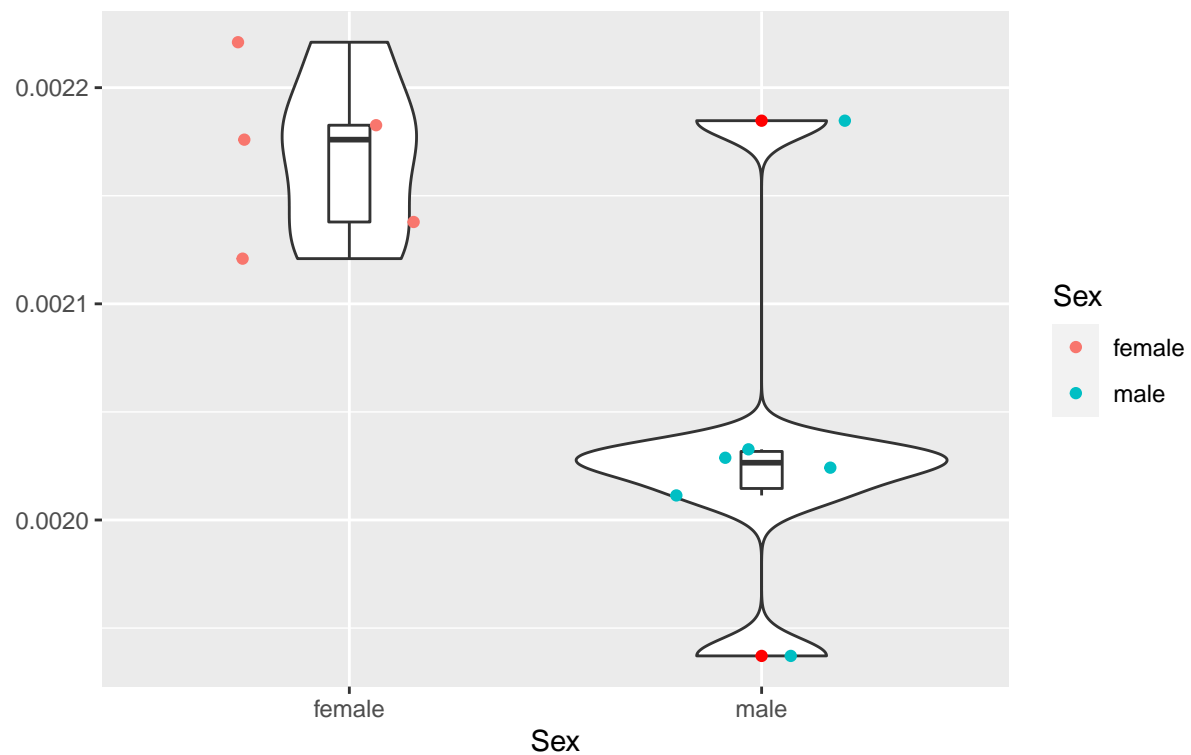
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.619e-08	1.619e-08	1.355	0.274
## Residuals	9	1.075e-07	1.194e-08		

Latero Dorsal Nucleus of Thalamus

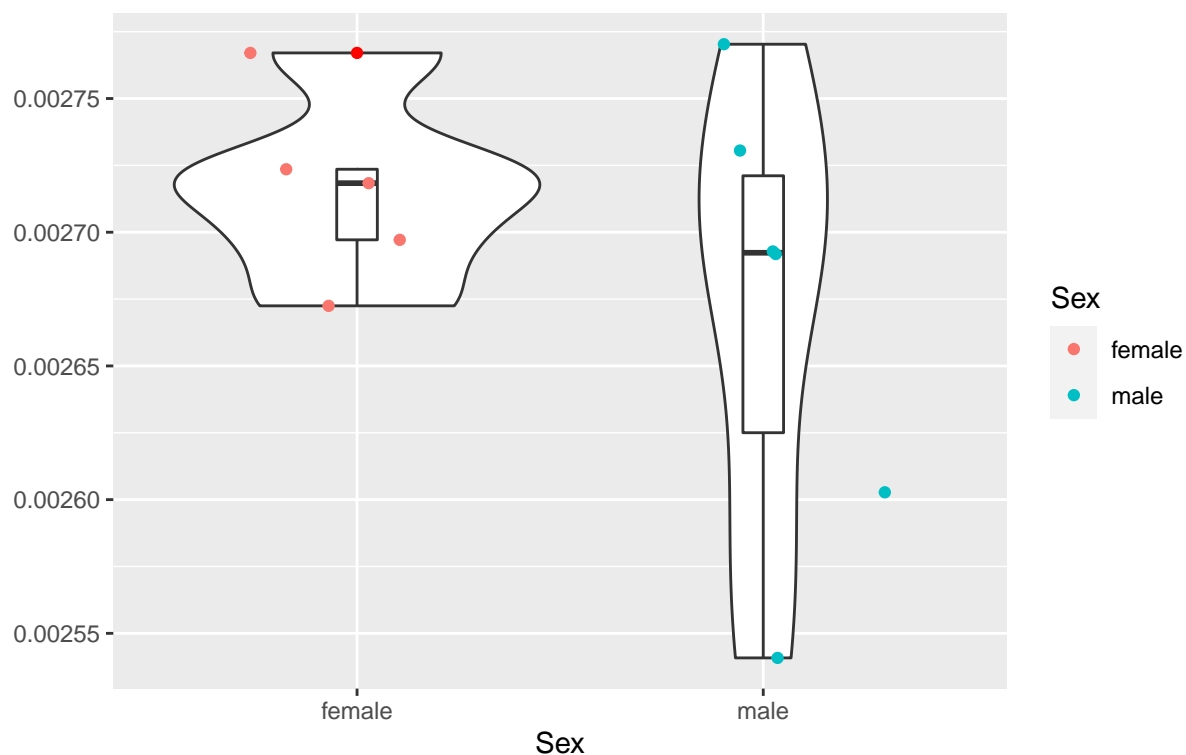
Red points denoting outliers



```
##          Df    Sum Sq   Mean Sq F value   Pr(>F)
## Sex          1 4.694e-08 4.694e-08    10.86 0.00931 **
## Residuals    9 3.892e-08 4.320e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Ventral Thalamic Nuclei

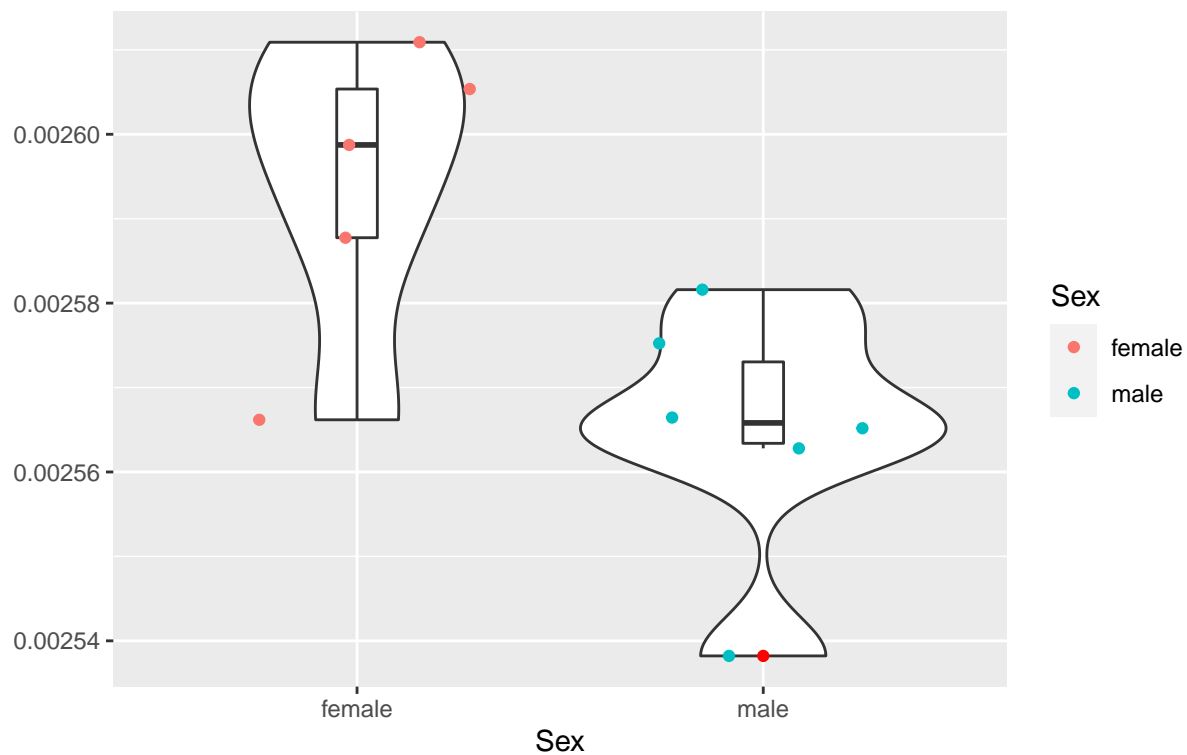
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	5.330e-09	5.329e-09	1.174	0.307
## Residuals	9	4.084e-08	4.538e-09		

Thalamus Rest

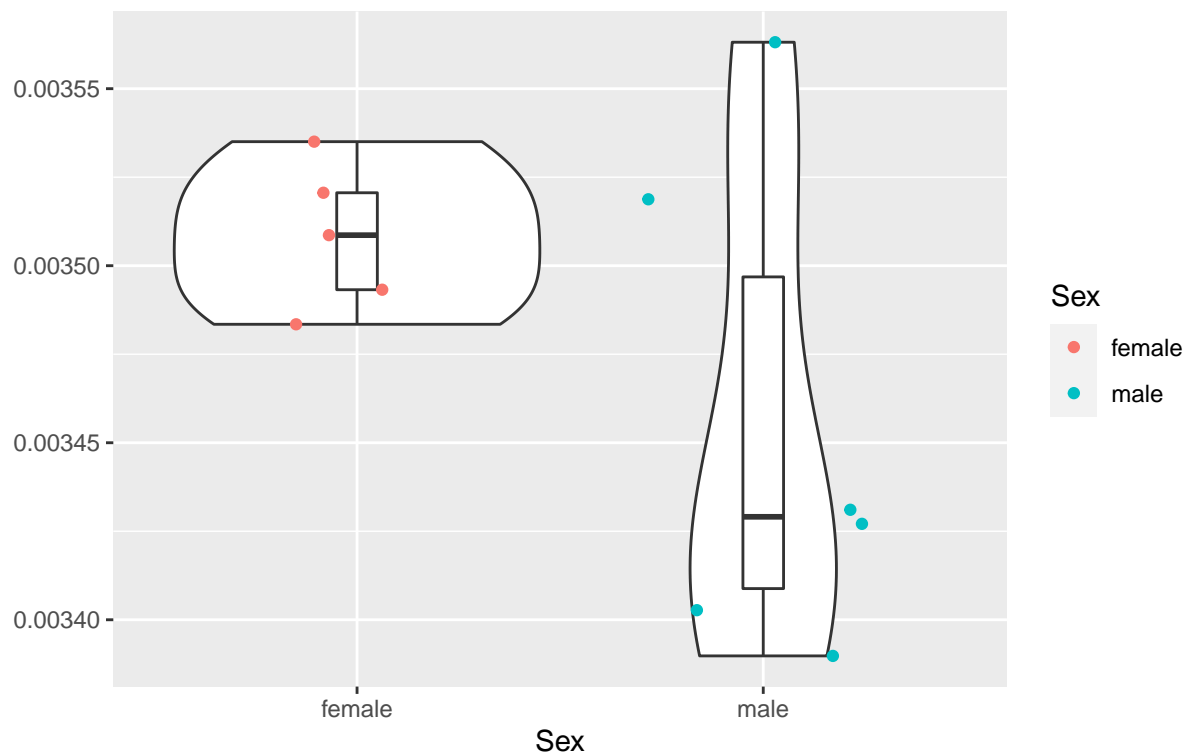
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 2.274e-09 2.274e-09   8.691 0.0163 *
## Residuals    9 2.355e-09 2.616e-10
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Ventral Tegmental Area

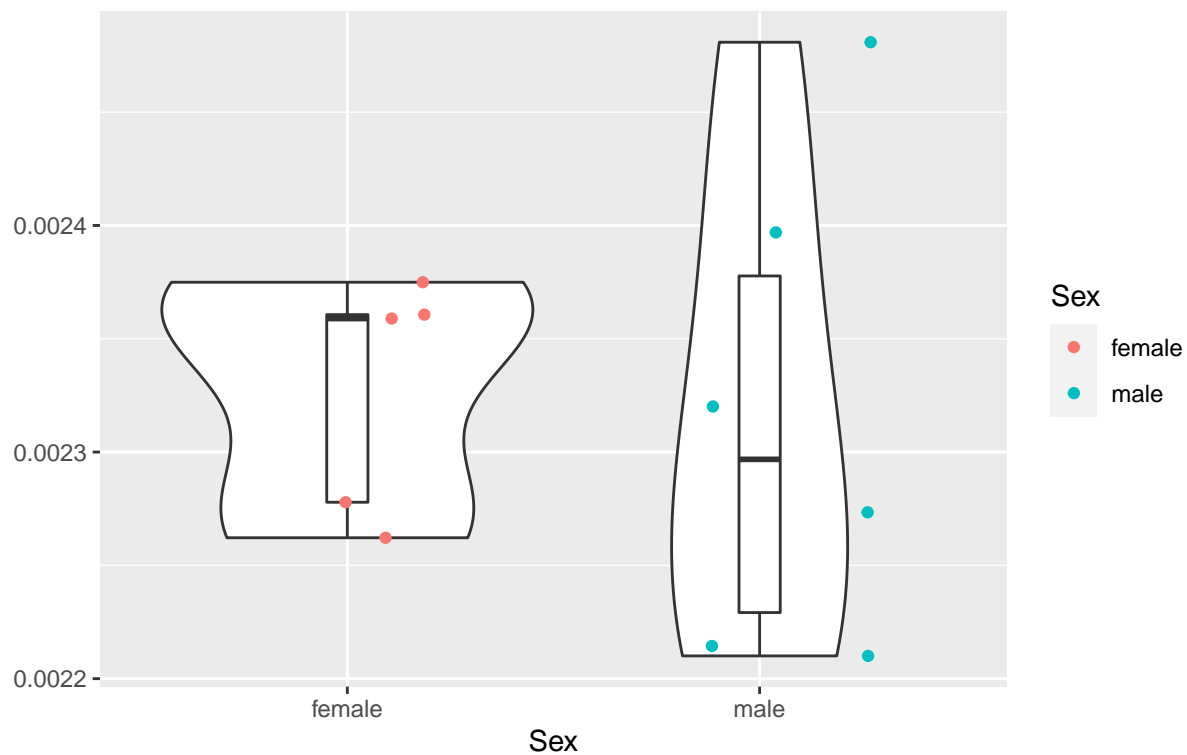
Red points denoting outliers



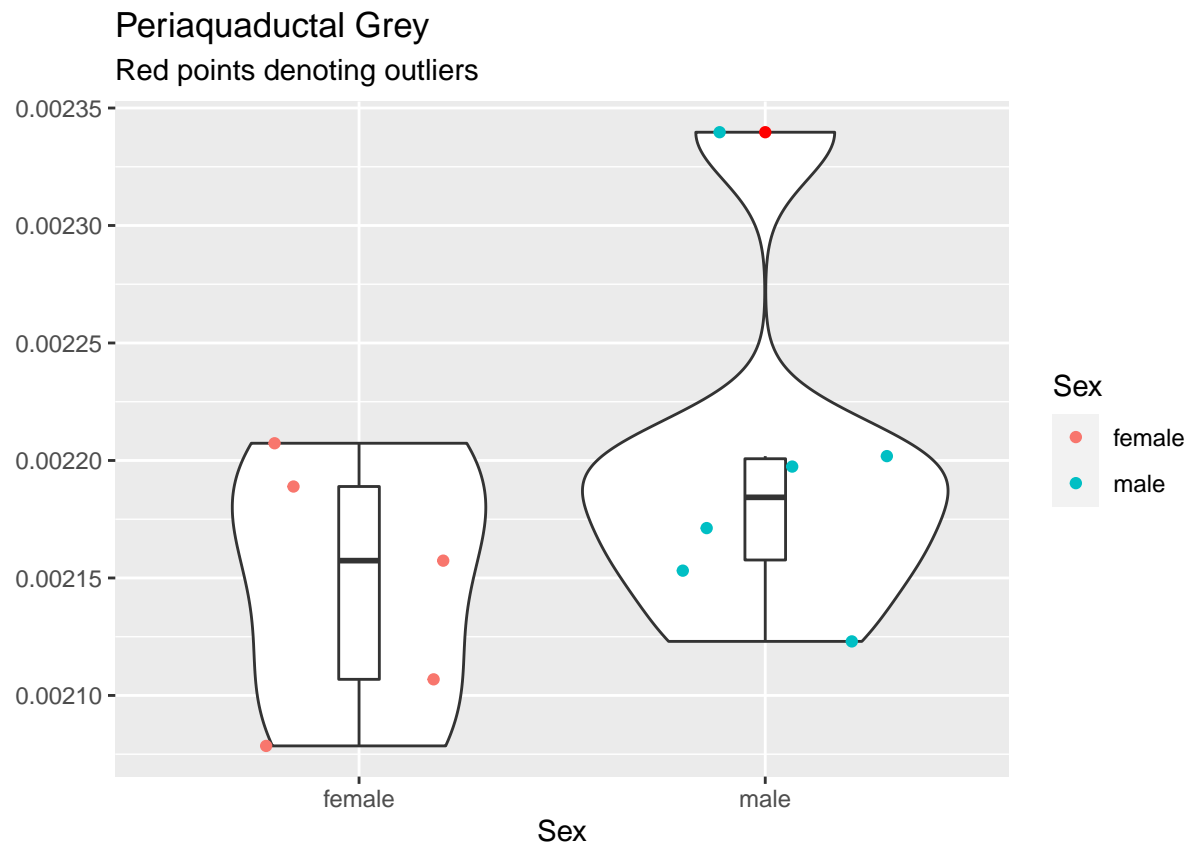
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	7.593e-09	7.593e-09	2.648	0.138
## Residuals	9	2.580e-08	2.867e-09		

Anterior Pretectal Nucleus

Red points denoting outliers

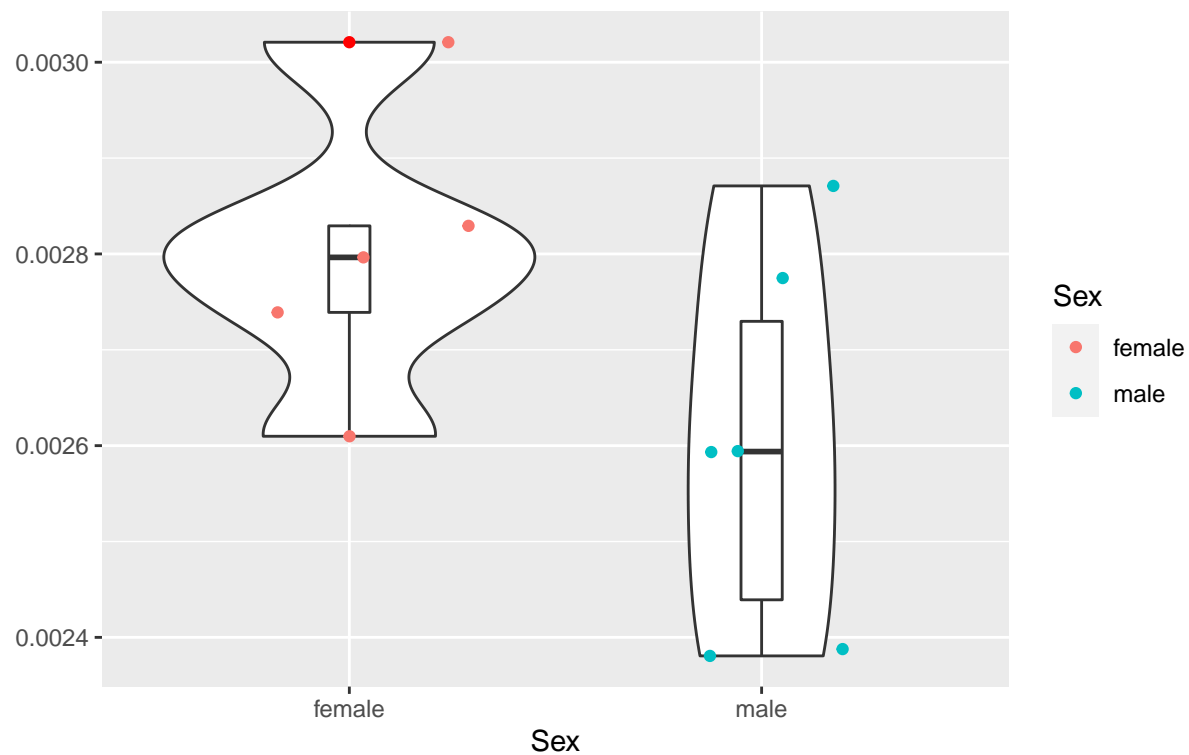


##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.300e-10	3.270e-10	0.043	0.84
## Residuals	9	6.818e-08	7.575e-09		



Ventral Pallidum

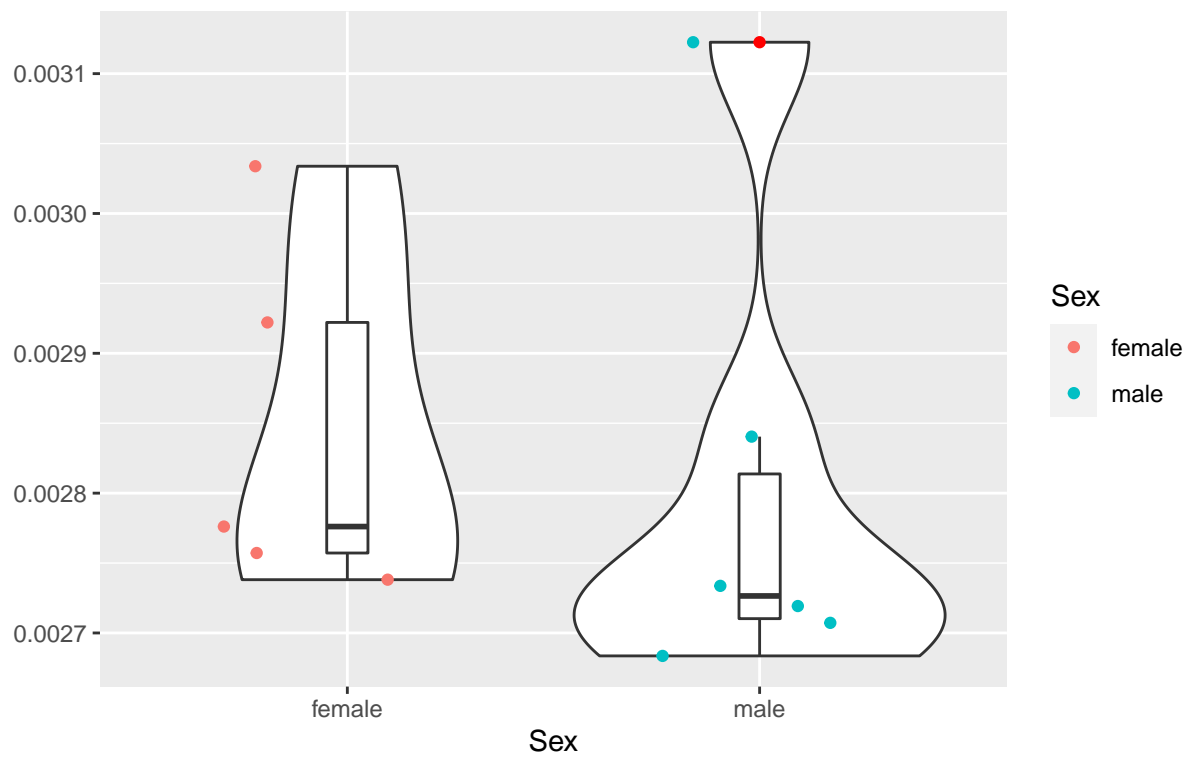
Red points denoting outliers



```
##          Df    Sum Sq   Mean Sq F value Pr(>F)
## Sex          1 1.077e-07 1.077e-07   3.382 0.0991 .
## Residuals    9 2.867e-07 3.186e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Bed Nucleus of the Stria Terminalis

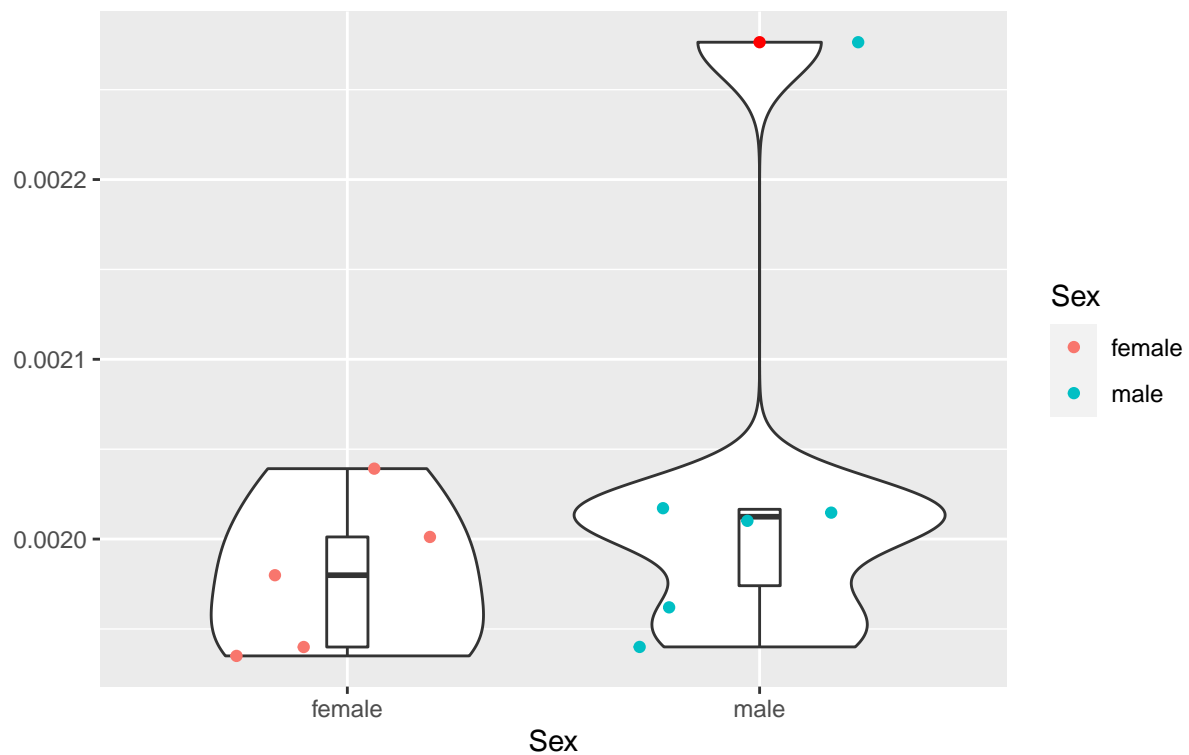
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	5.360e-09	5.363e-09	0.236	0.638
## Residuals	9	2.042e-07	2.268e-08		

Acumbens

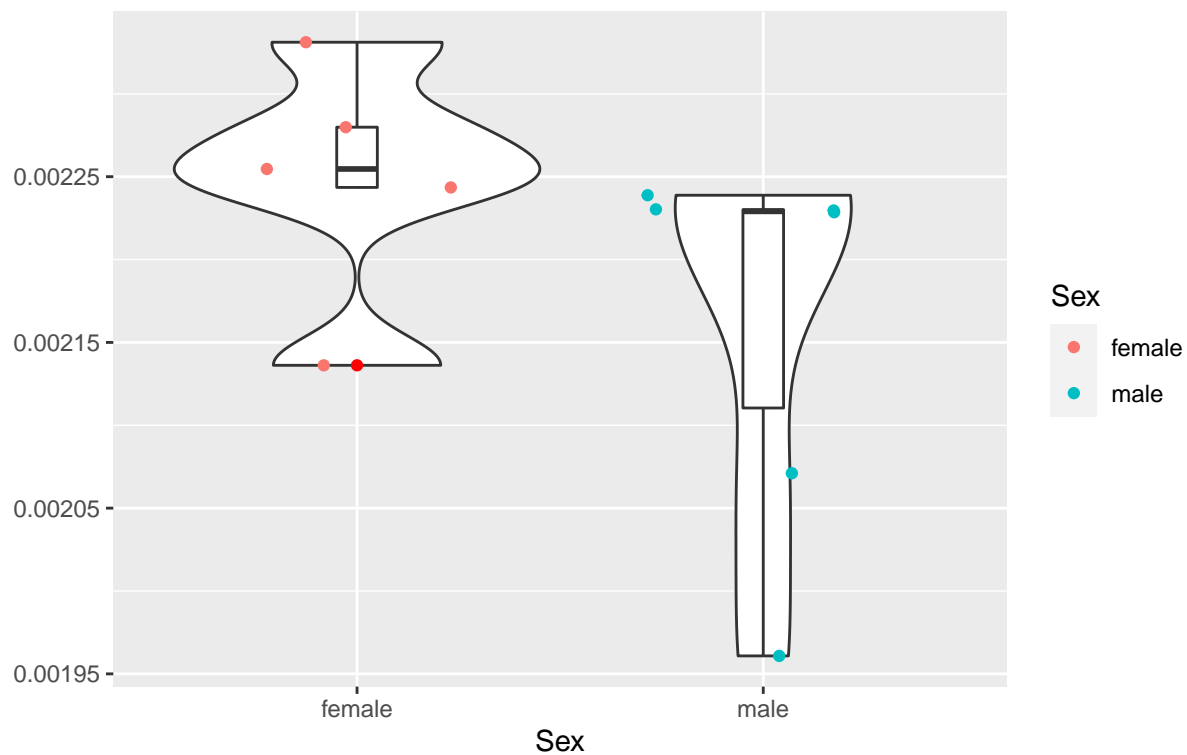
Red points denoting outliers



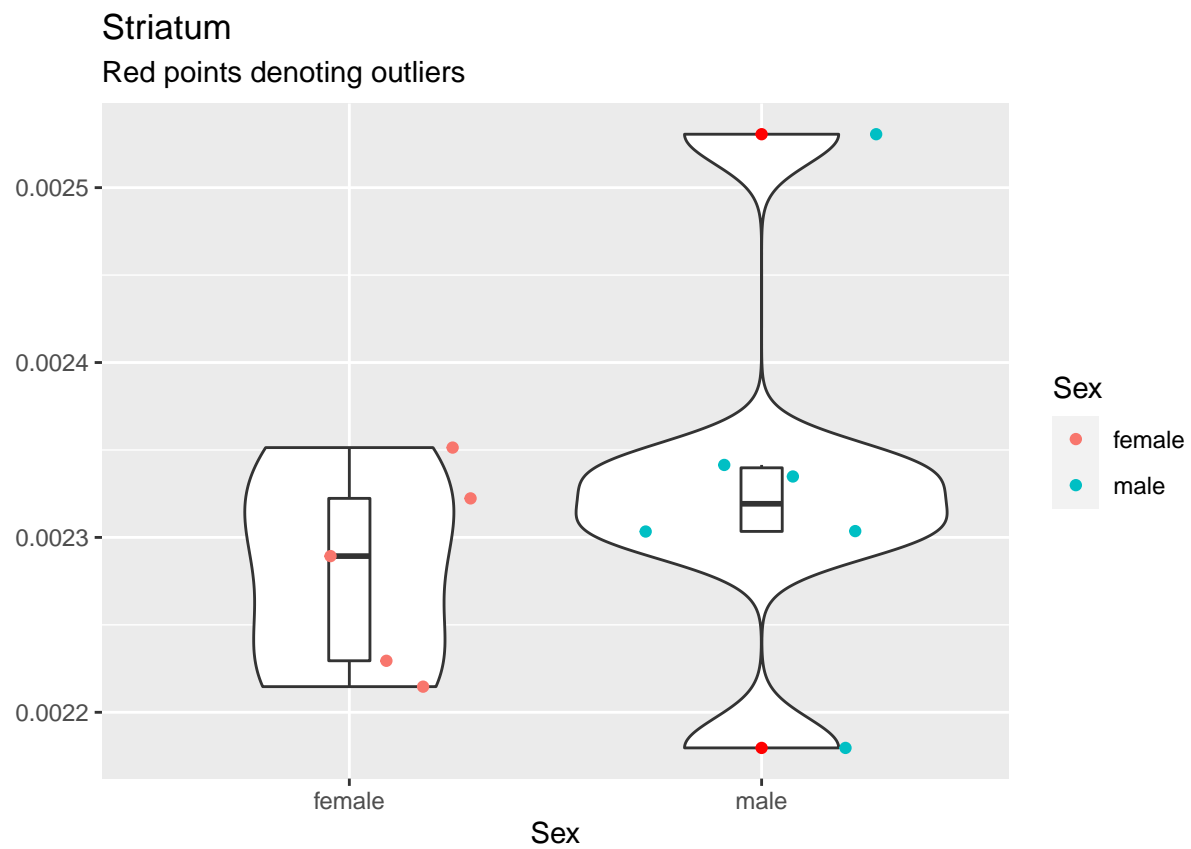
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	9.080e-09	9.079e-09	1.002	0.343
## Residuals	9	8.152e-08	9.058e-09		

Amygdala

Red points denoting outliers

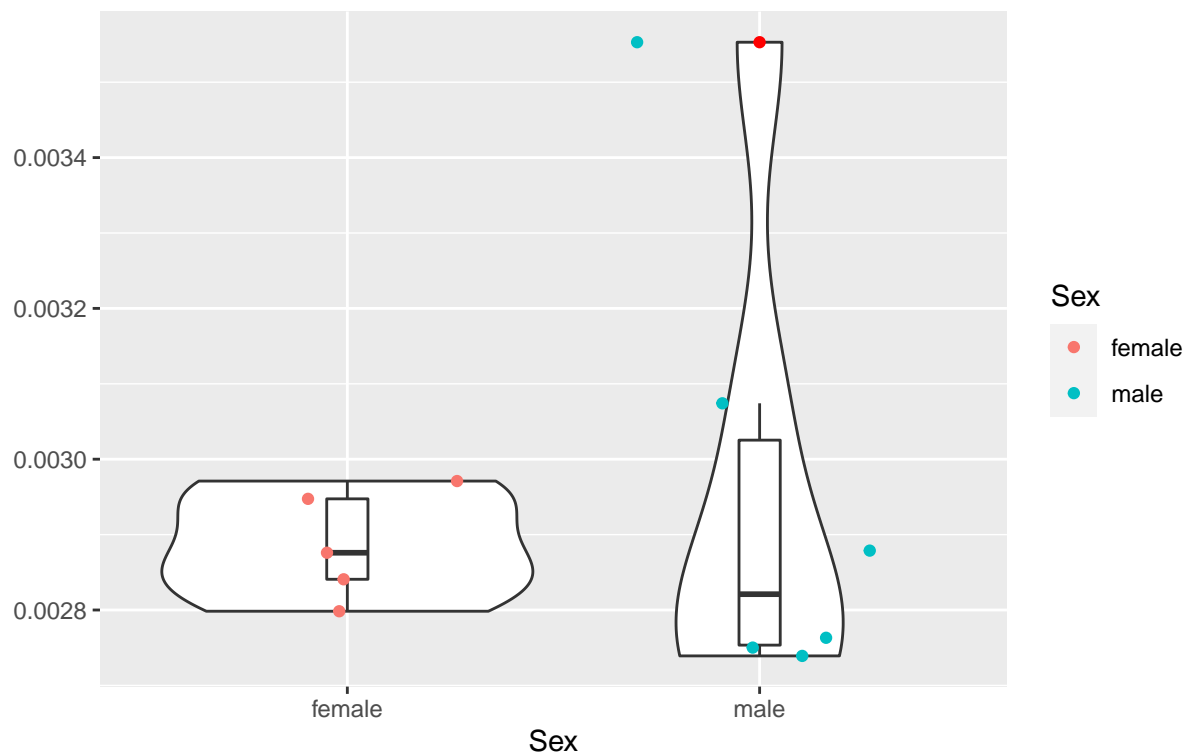


##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.170e-08	2.170e-08	2.201	0.172
## Residuals	9	8.876e-08	9.862e-09		



Globus Pallidus

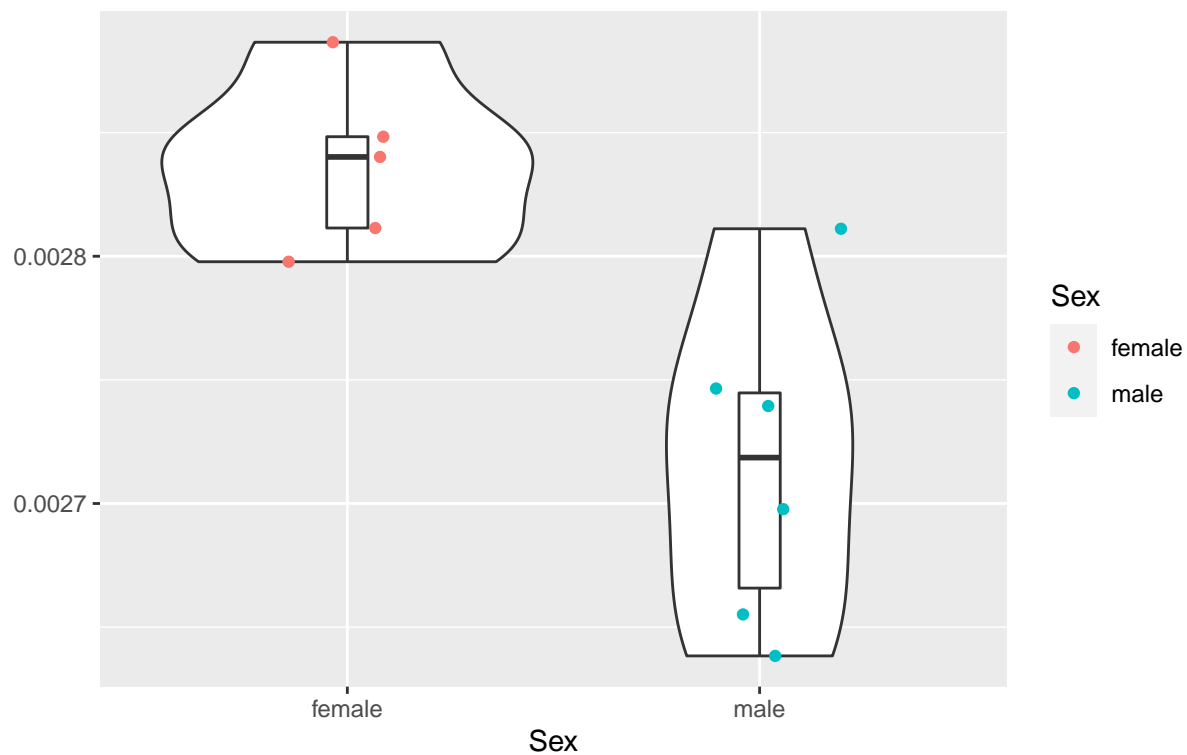
Red points denoting outliers



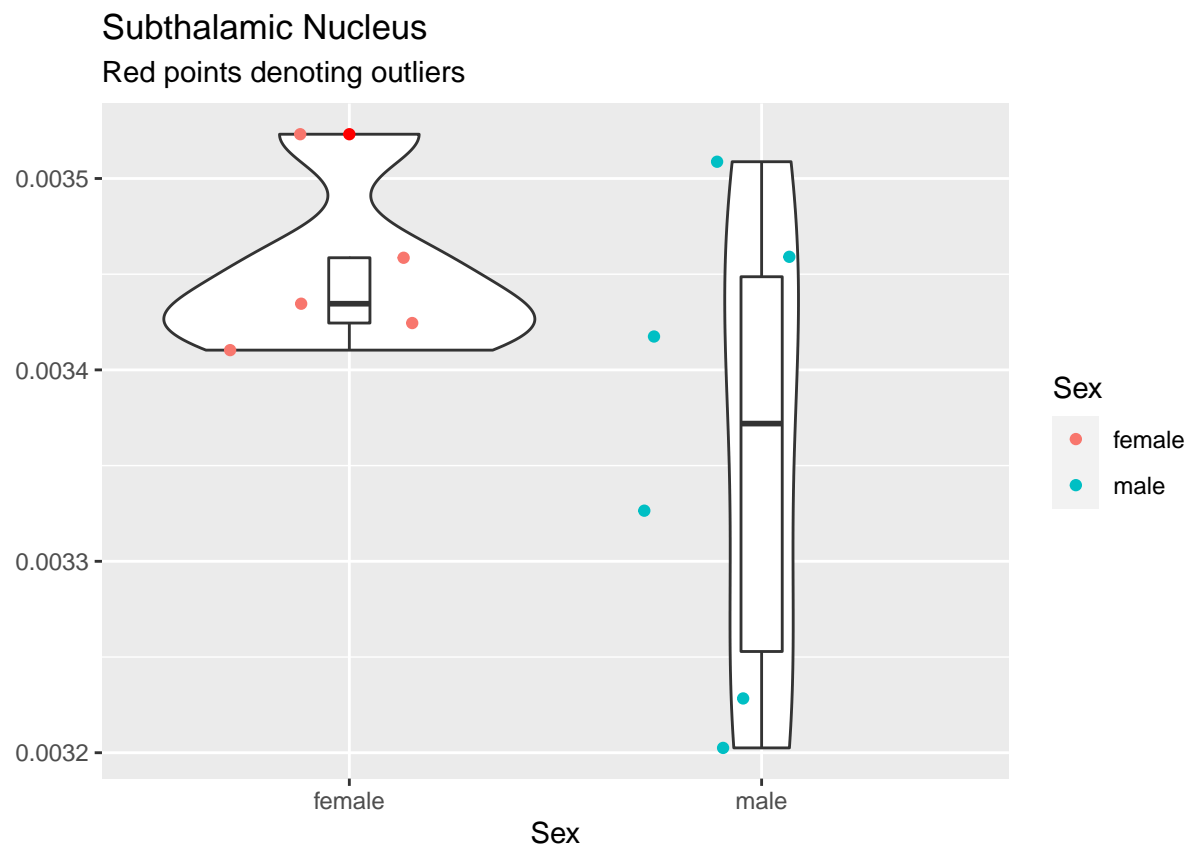
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.450e-08	1.455e-08	0.25	0.629
## Residuals	9	5.237e-07	5.818e-08		

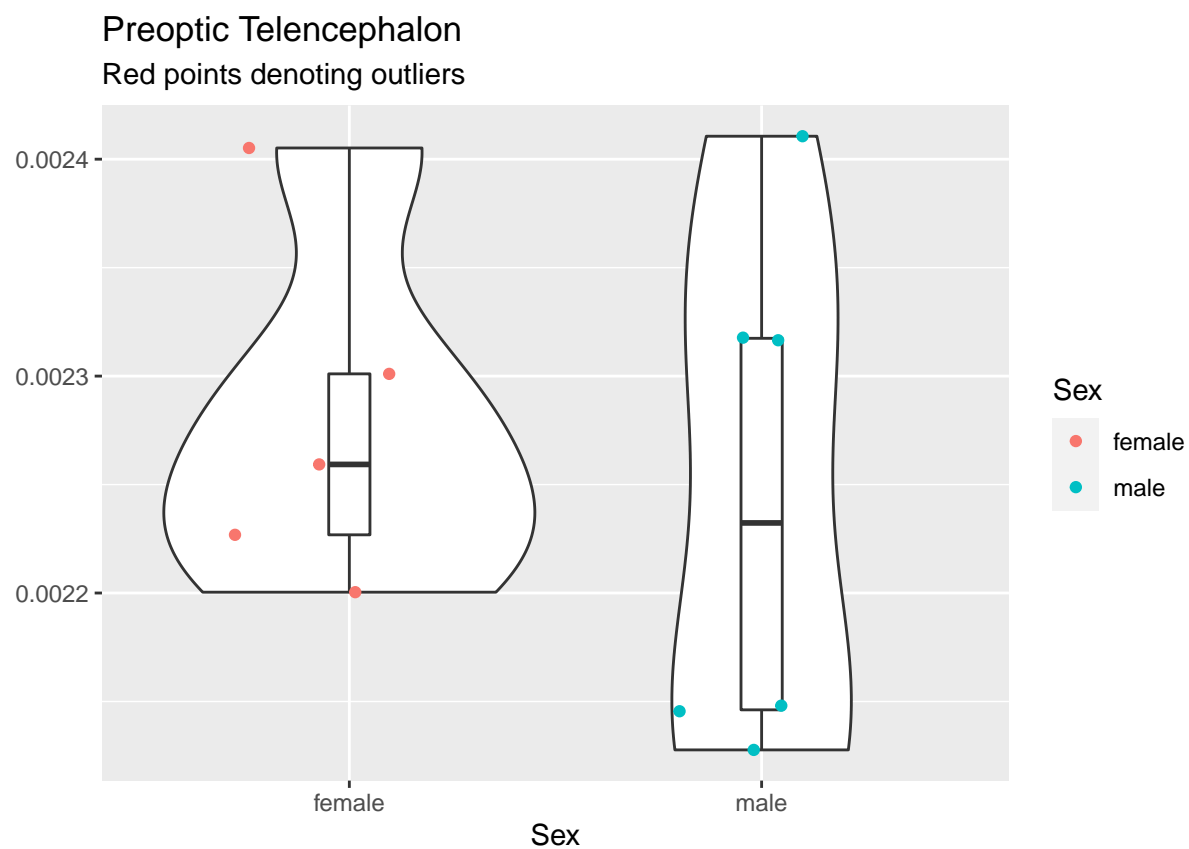
Septum

Red points denoting outliers



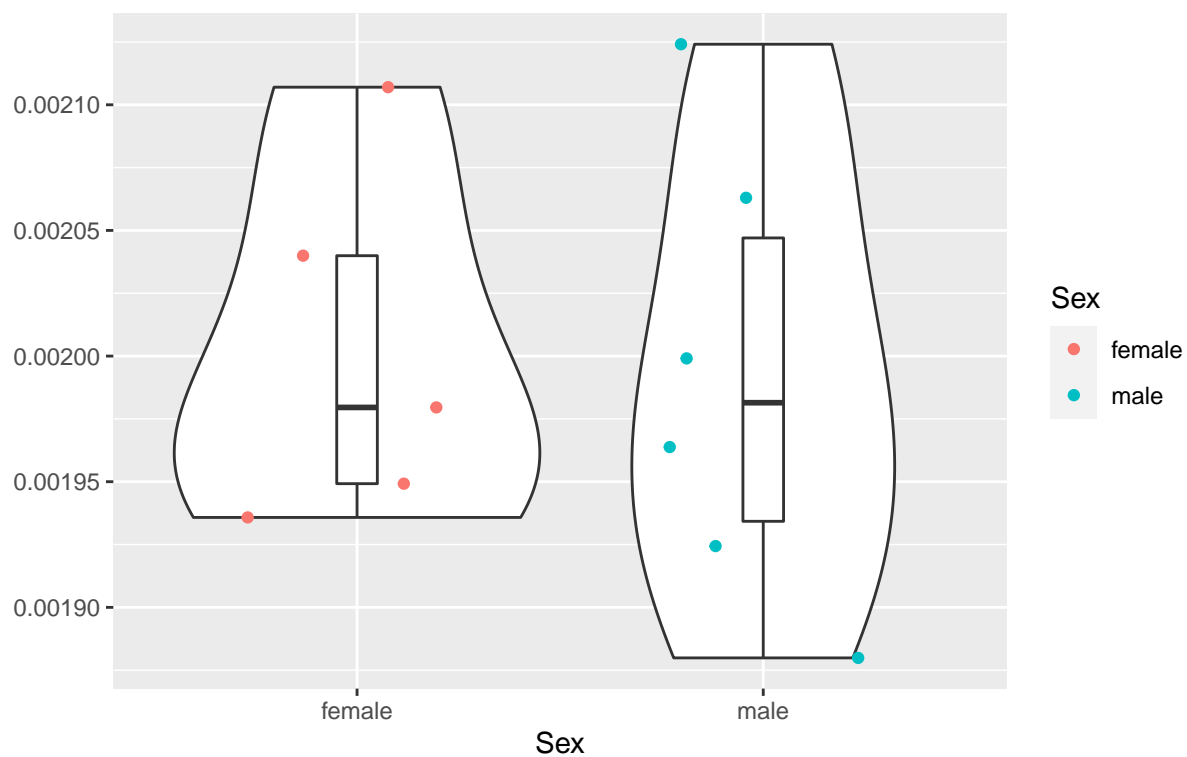
```
##           Df    Sum Sq Mean Sq F value Pr(>F)
## Sex         1 4.070e-08 4.07e-08   14.43 0.00422 **
## Residuals   9 2.537e-08 2.82e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```





Hypothalamus

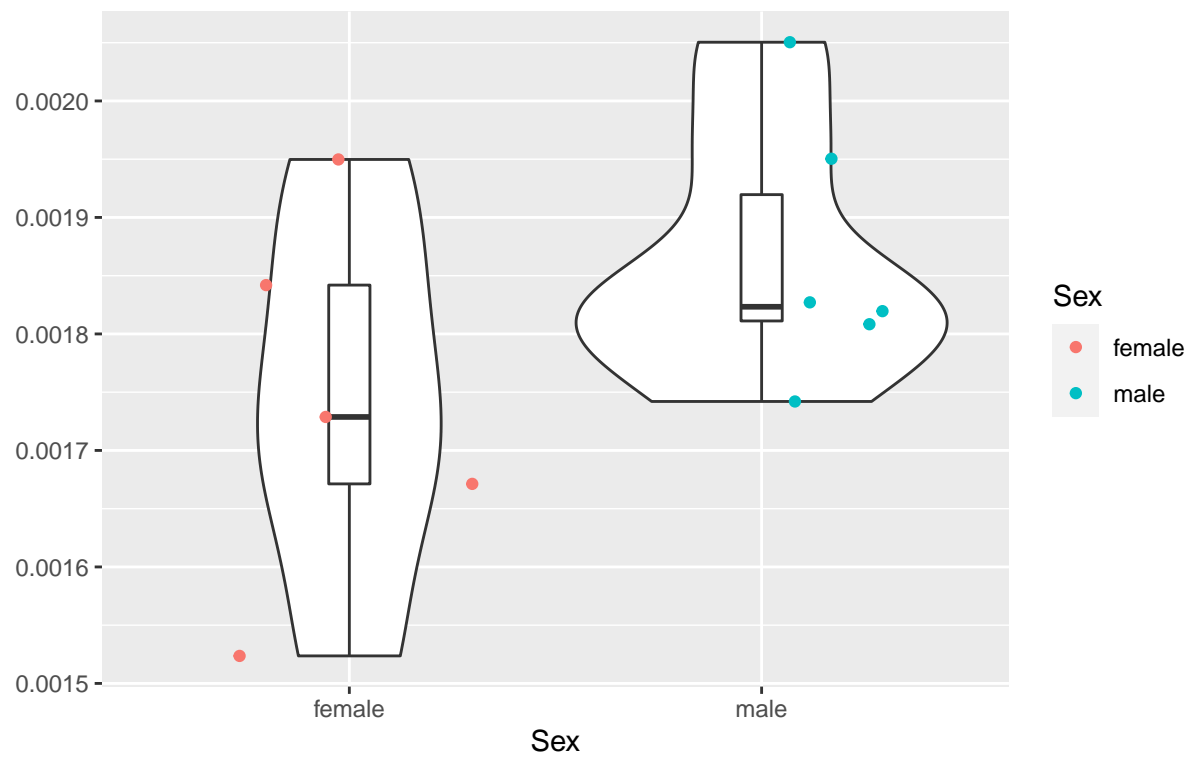
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.700e-10	2.690e-10	0.04	0.846
## Residuals	9	6.062e-08	6.735e-09		

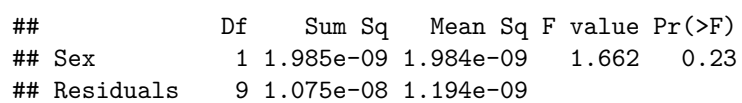
Amygdalopiriform Transition Area

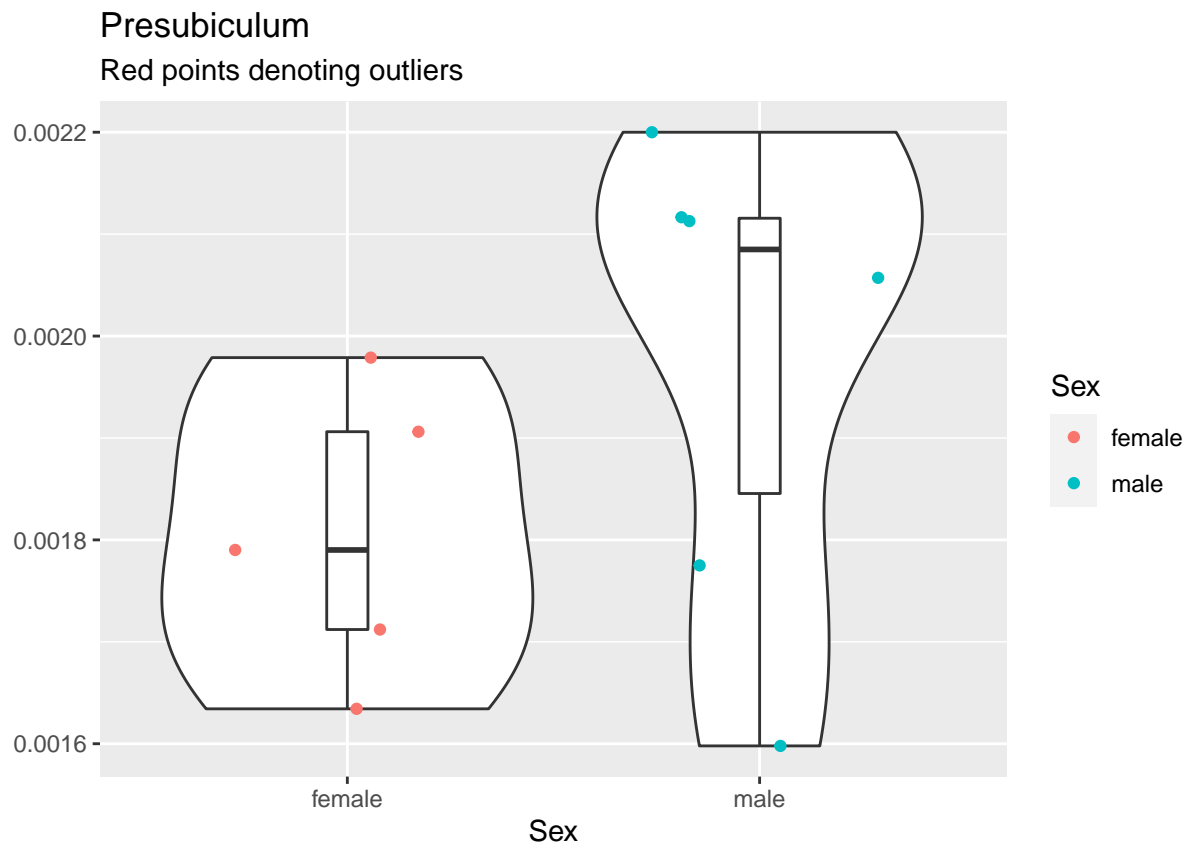
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	4.142e-08	4.142e-08	2.199	0.172
## Residuals	9	1.695e-07	1.883e-08		

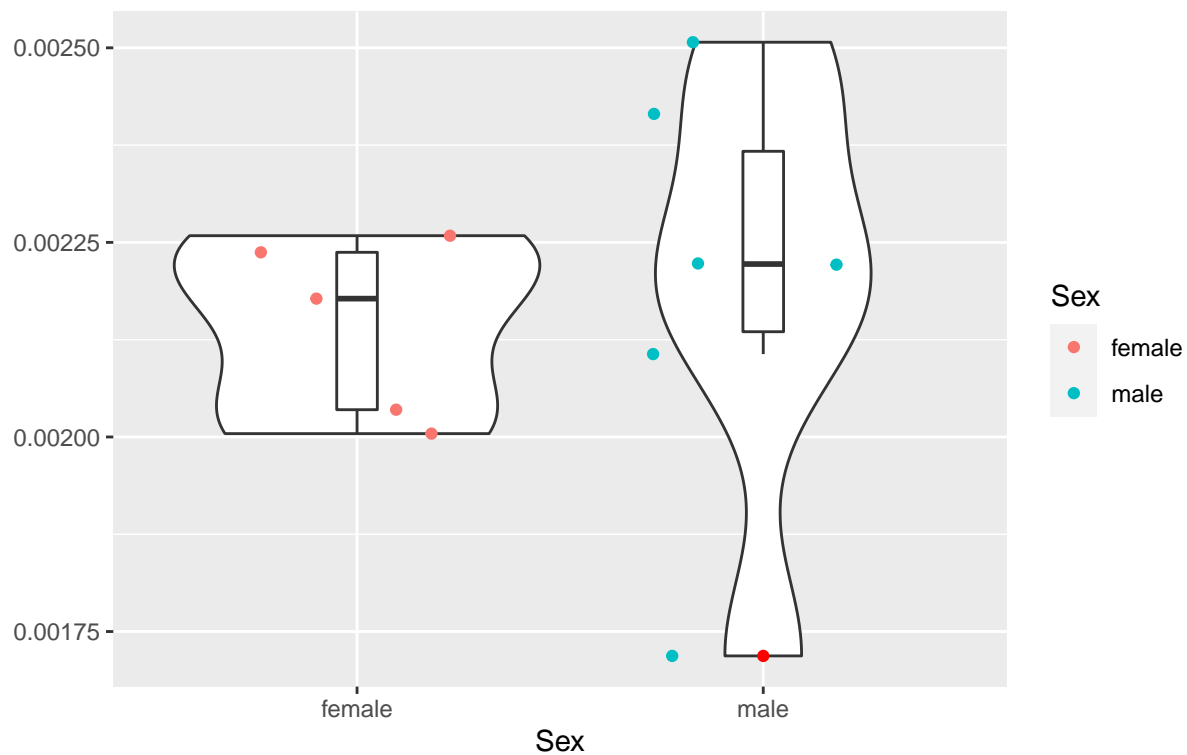
Red points denoting outliers



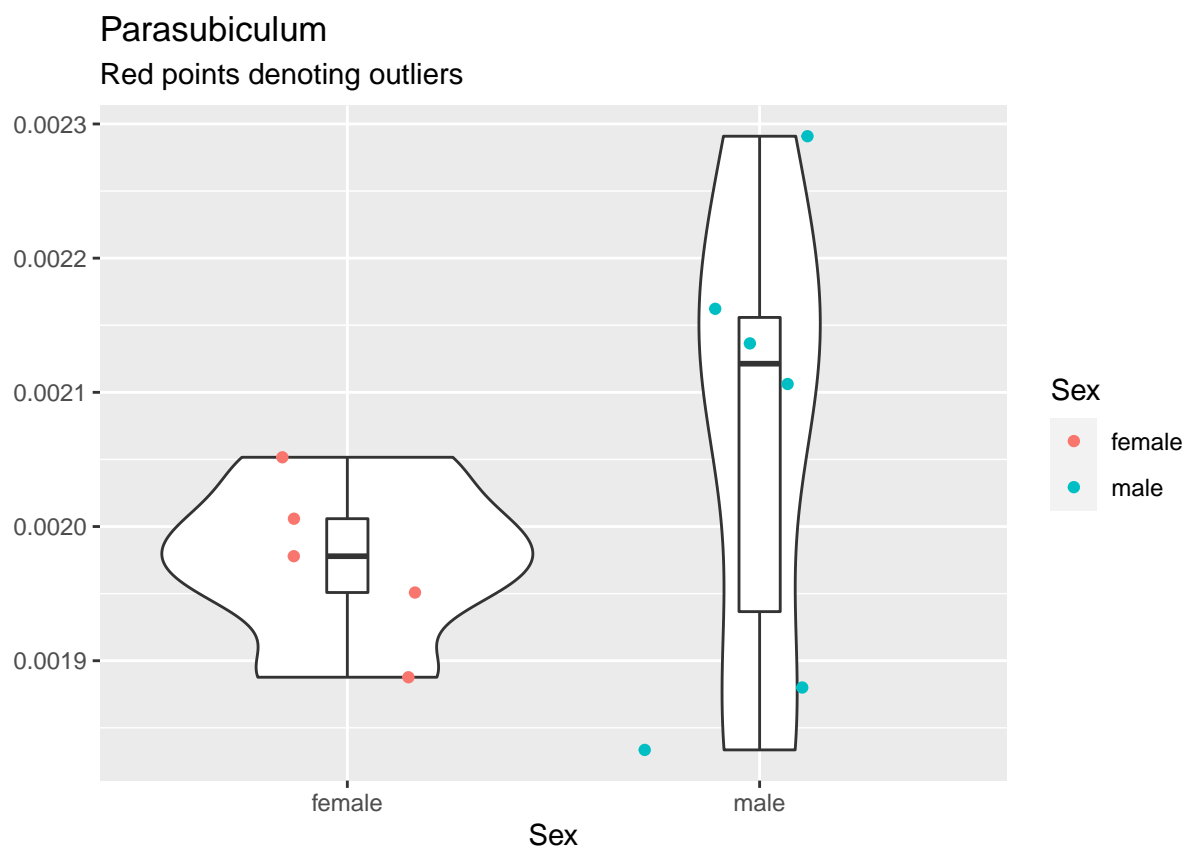


Perirhinal Cortex

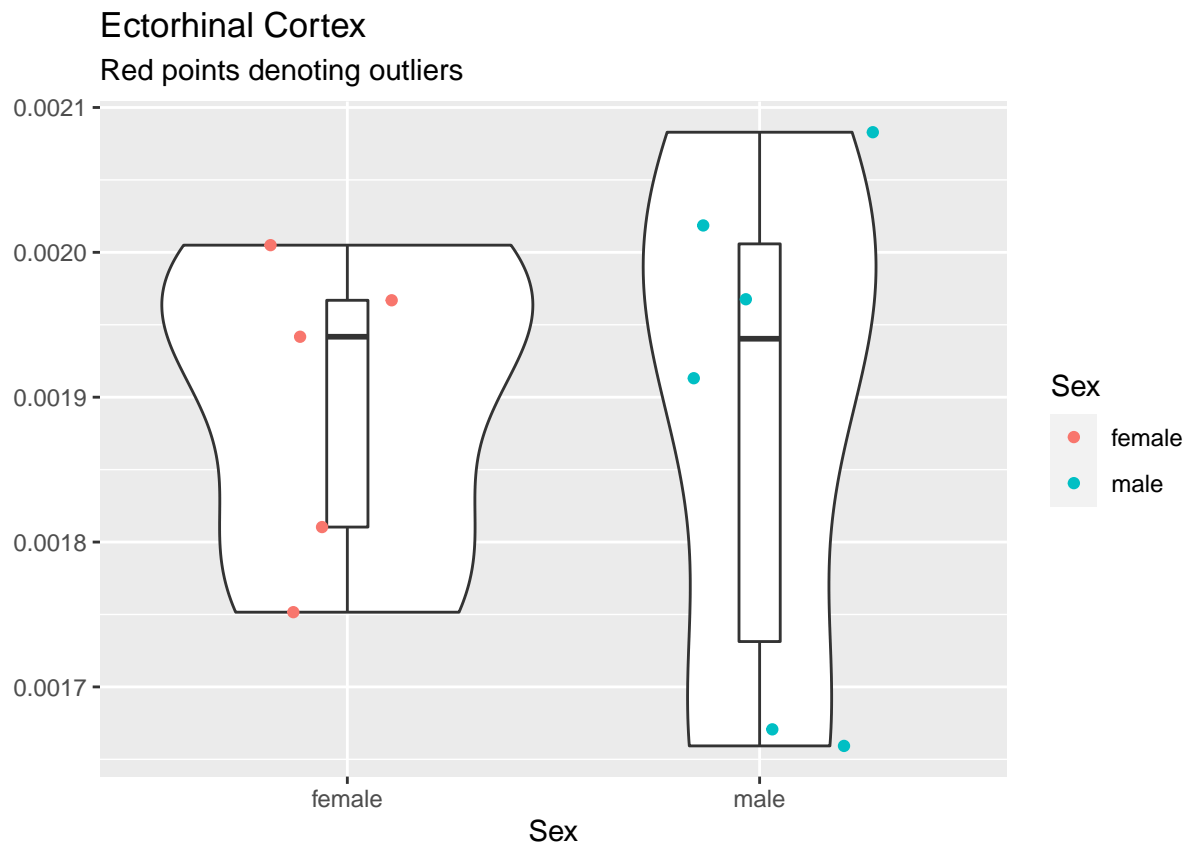
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	8.600e-09	8.570e-09	0.177	0.684
## Residuals	9	4.364e-07	4.849e-08		



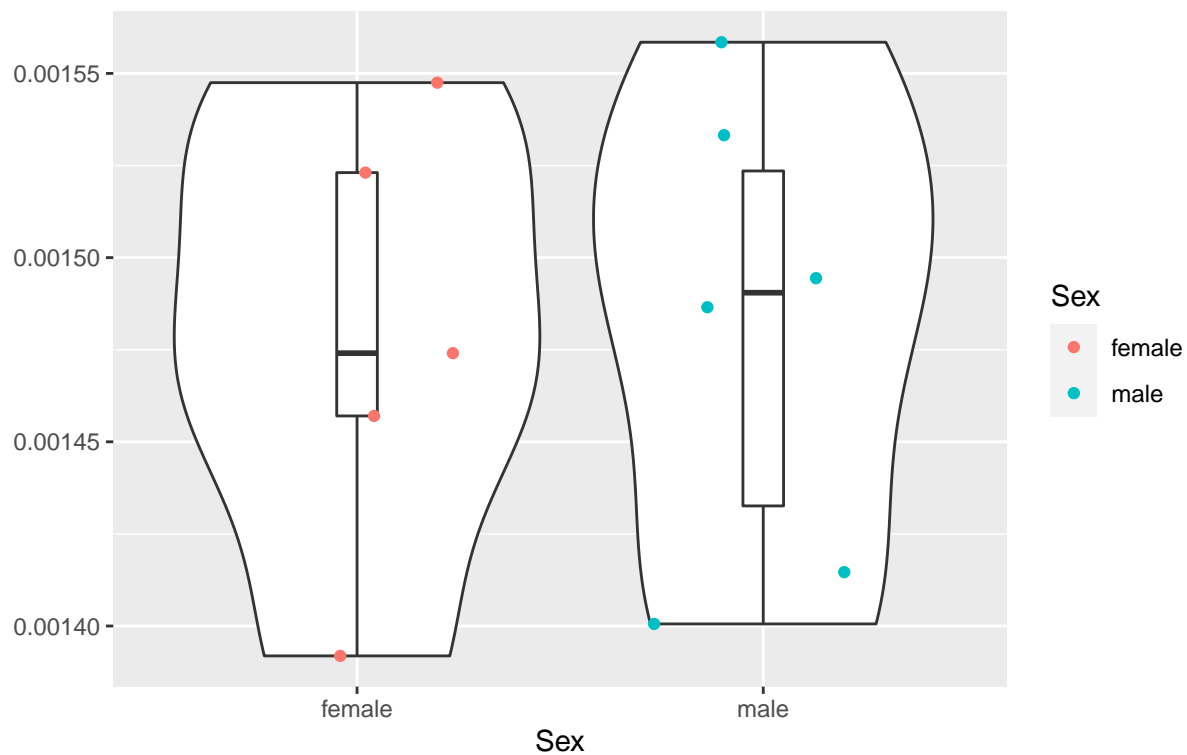
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.382e-08	2.382e-08	1.261	0.291
## Residuals	9	1.700e-07	1.889e-08		



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 2.600e-10 2.590e-10   0.011  0.918
## Residuals   9 2.087e-07 2.319e-08
```


Dorsal Tenia Tecta

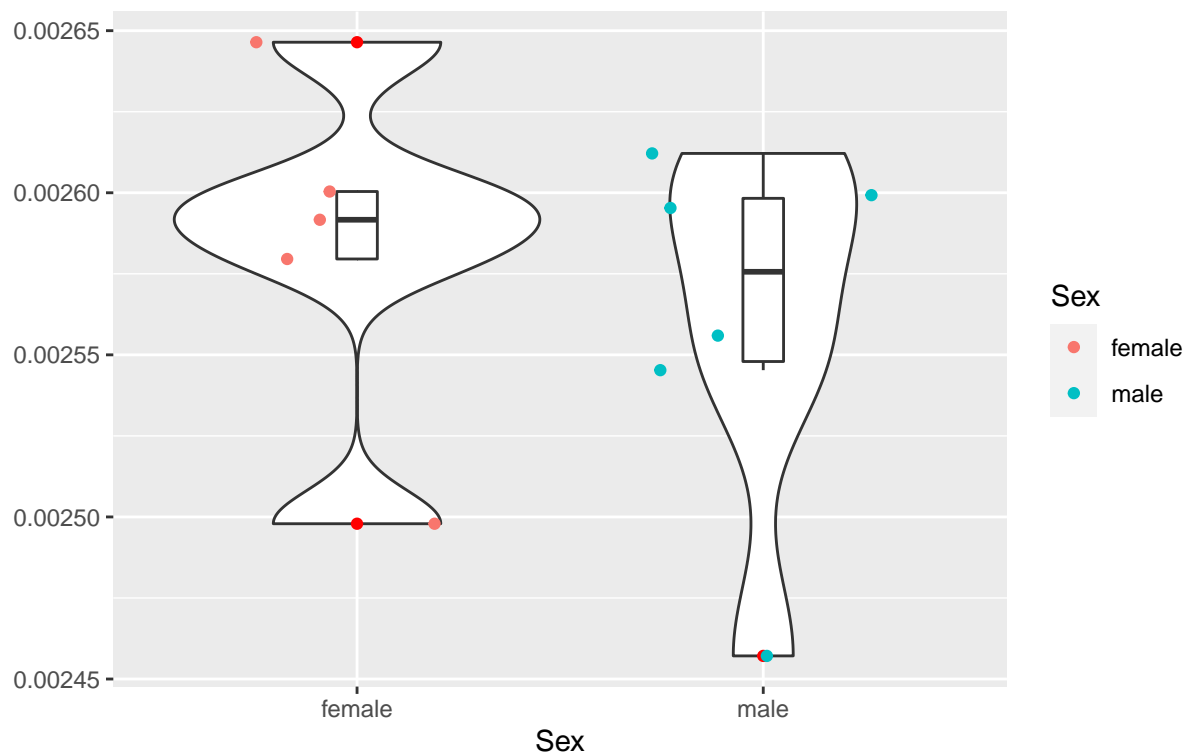
Red points denoting outliers



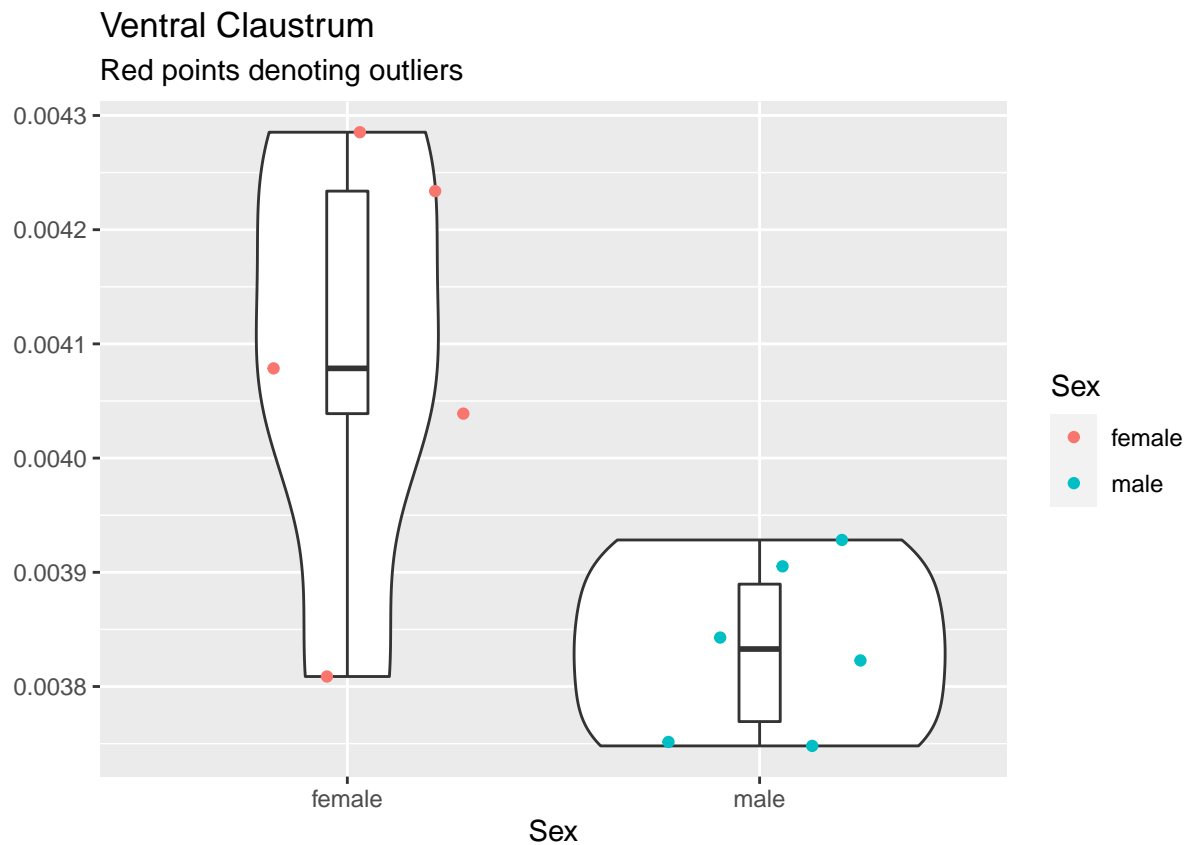
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.000e-11	1.800e-11	0.005	0.946
## Residuals	9	3.454e-08	3.838e-09		

Hippocampus

Red points denoting outliers



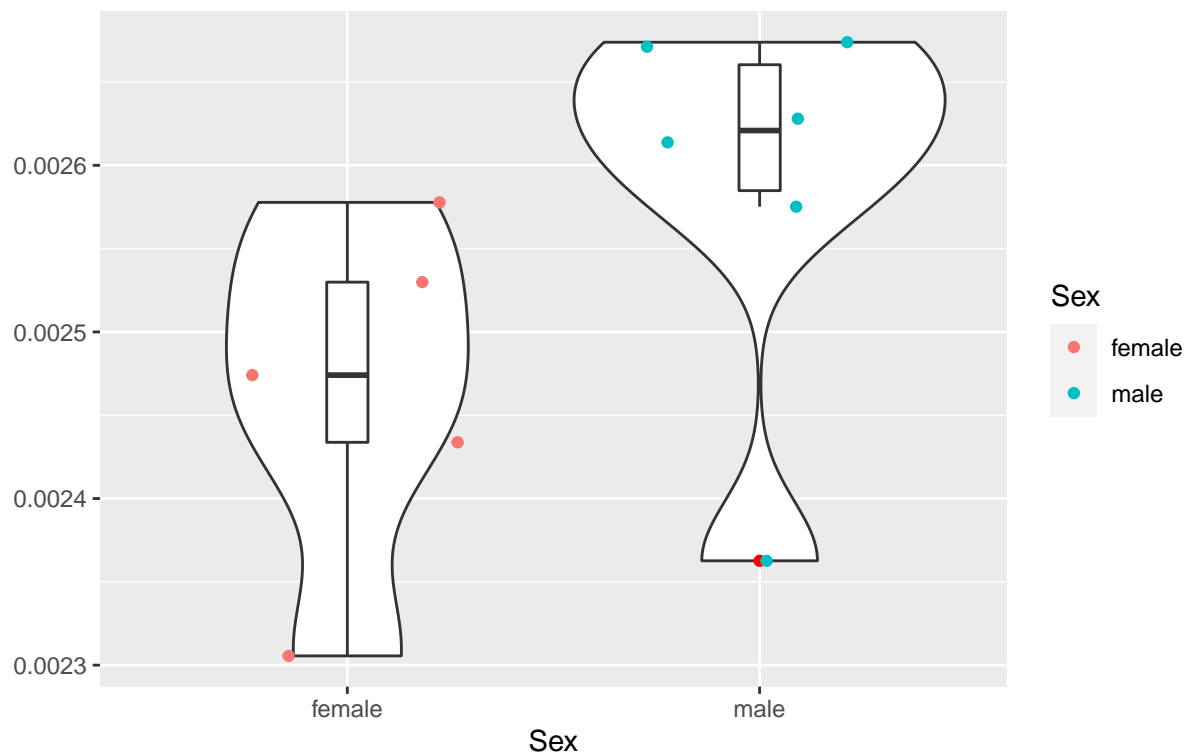
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.363e-09	1.363e-09	0.438	0.524
## Residuals	9	2.797e-08	3.108e-09		



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.787e-07 1.787e-07   9.514  0.013 *
## Residuals    9 1.690e-07 1.878e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Posterolateral Cortical Amygdaloid Area

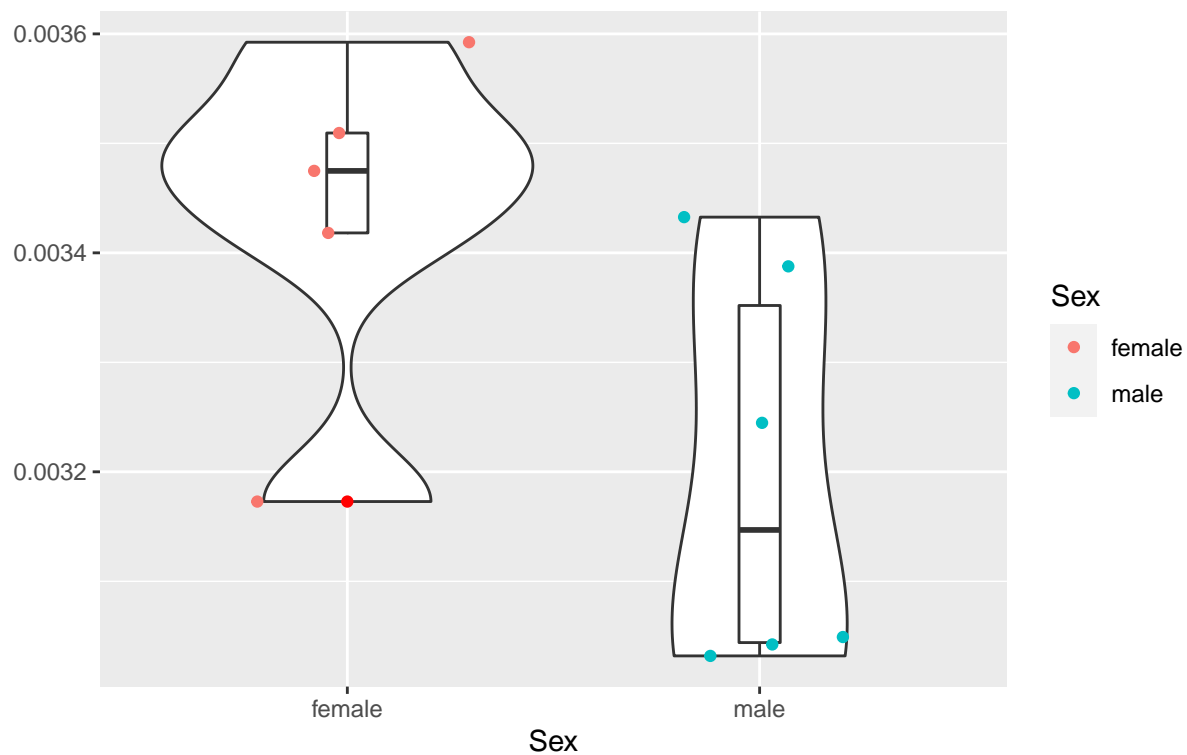
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 4.142e-08 4.142e-08   3.36   0.1 .
## Residuals    9 1.109e-07 1.233e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Dorsal Claustrum

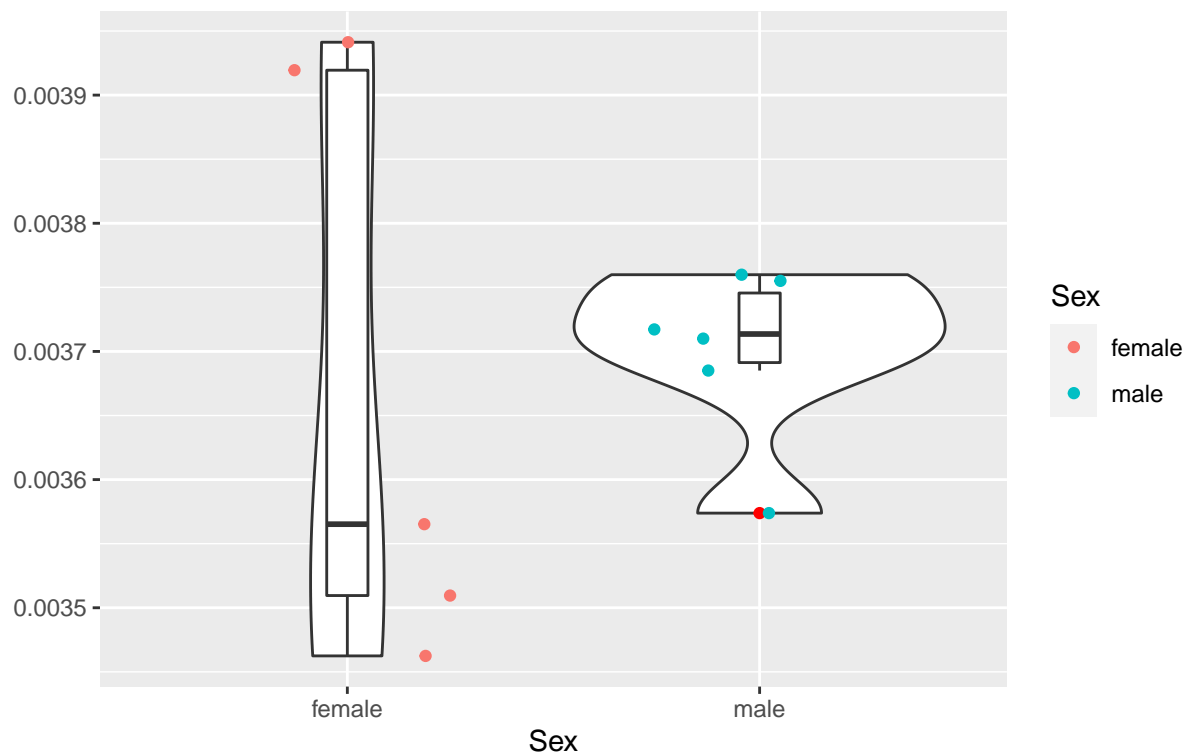
Red points denoting outliers



```
##           Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex           1 1.512e-07 1.512e-07   5.077 0.0507 .
## Residuals     9 2.681e-07 2.979e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Clastrum

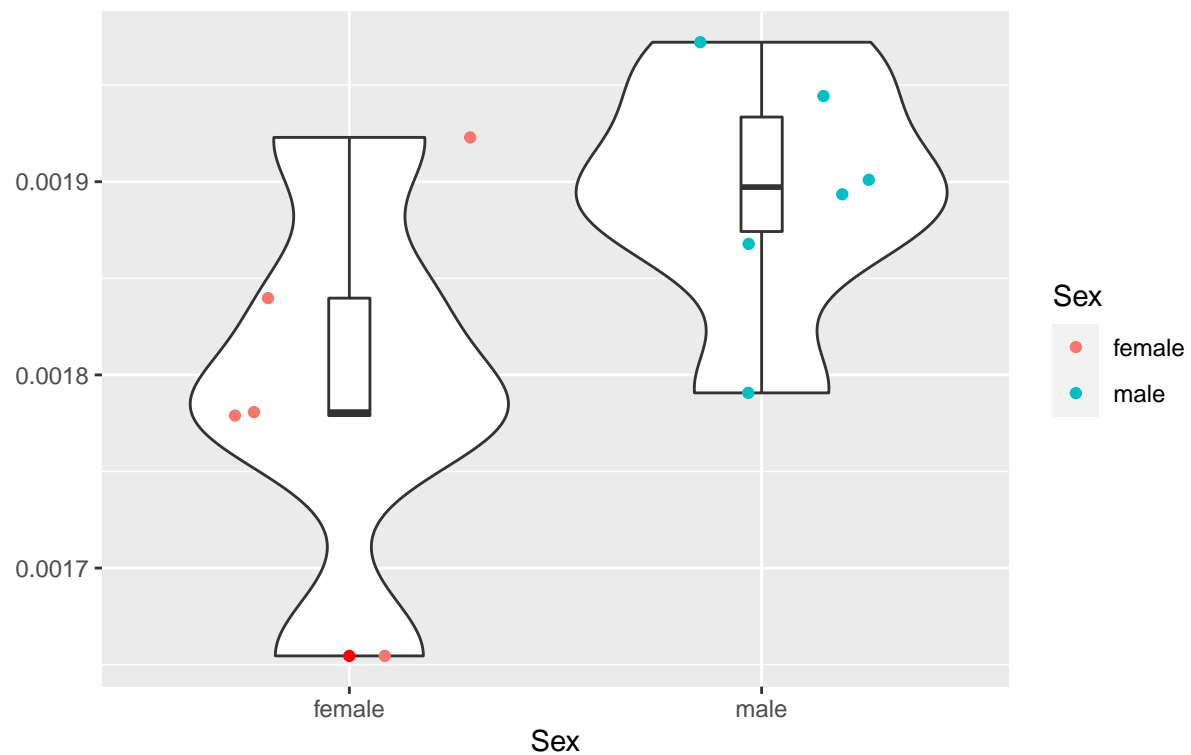
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.160e-09	1.157e-09	0.044	0.839
## Residuals	9	2.383e-07	2.648e-08		

Ventral Intermediate Entorhinal Cortex

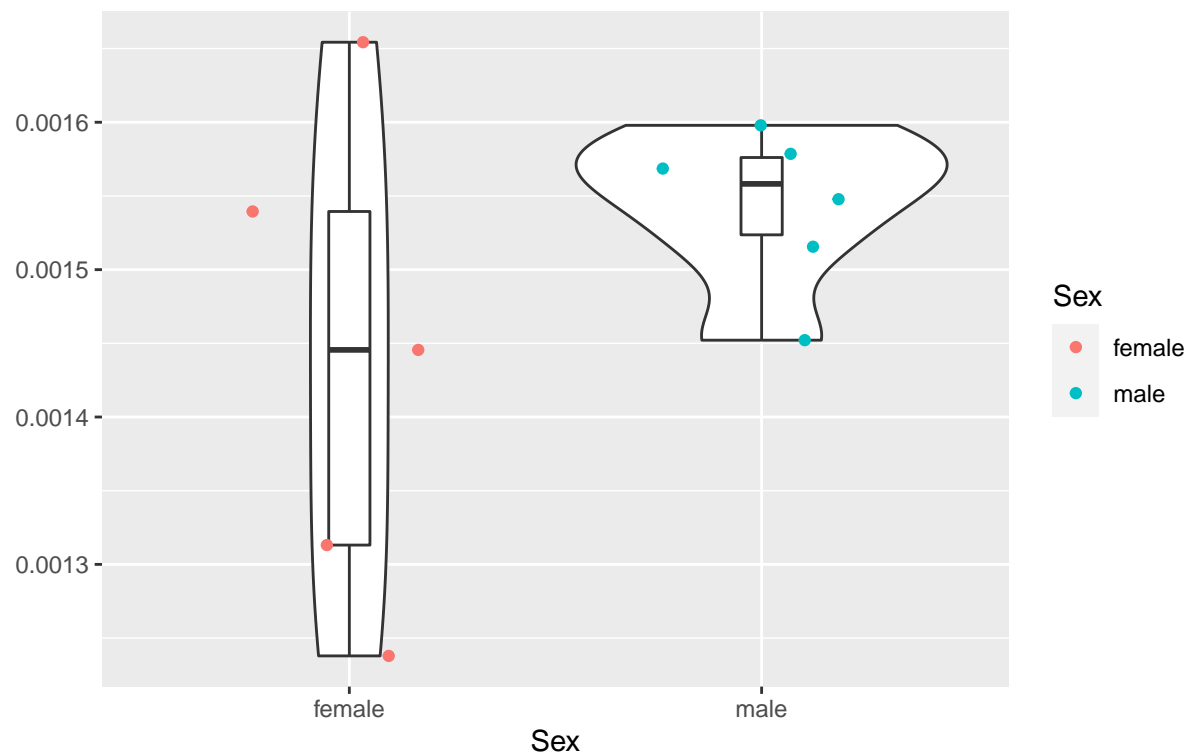
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 2.702e-08 2.702e-08   4.149  0.0721 .
## Residuals    9 5.861e-08 6.513e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Caudomedial Entorhinal Cortex

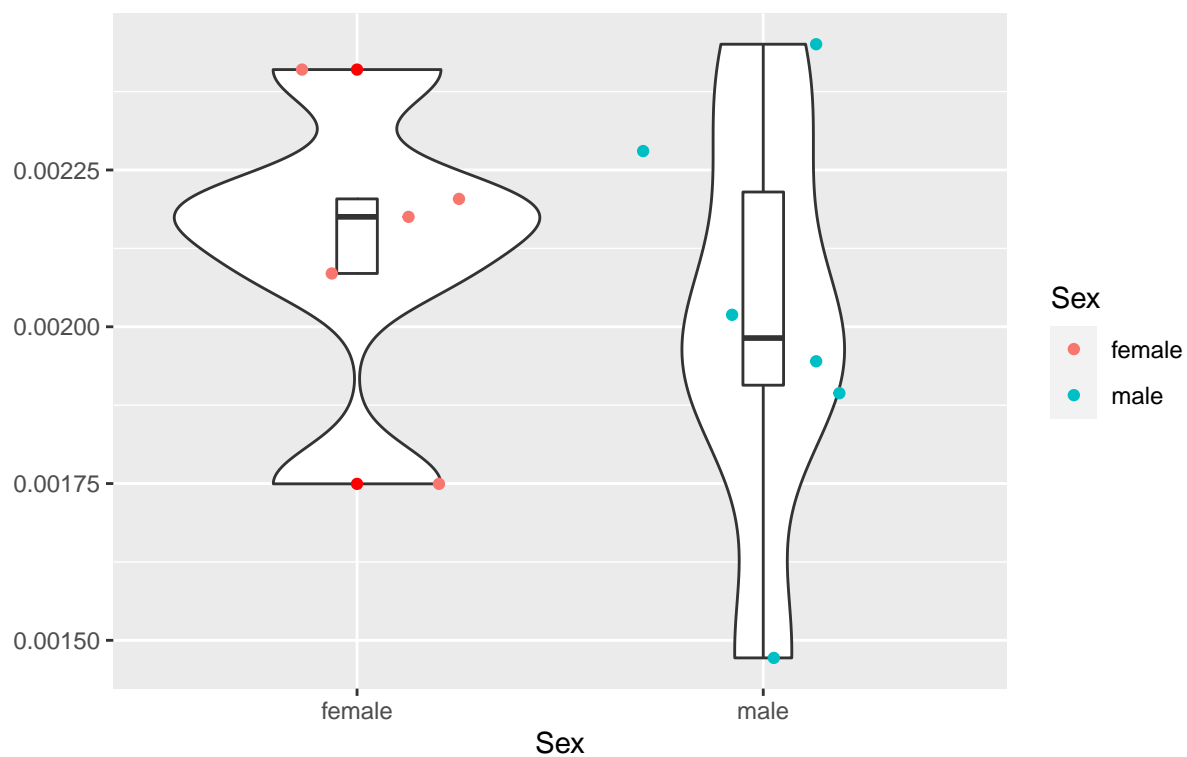
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.028e-08	3.028e-08	2.15	0.177
## Residuals	9	1.267e-07	1.408e-08		

Left Dorsolateral Entorhinal Cortex

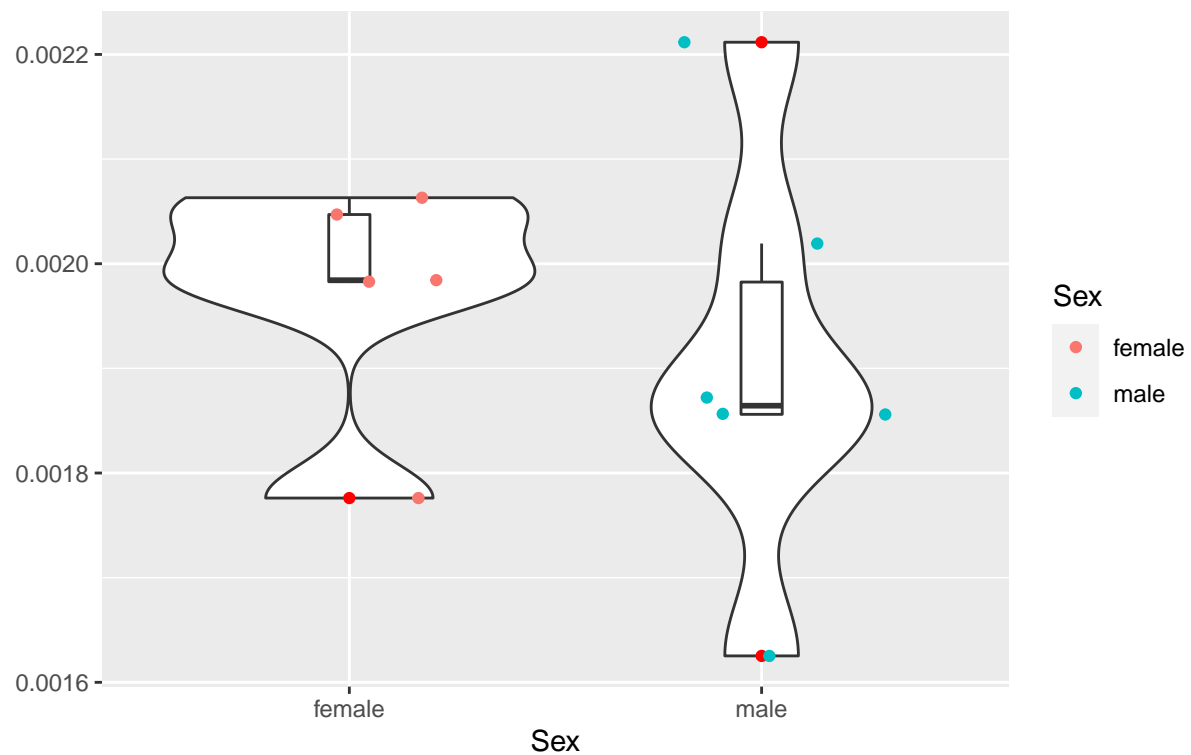
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.580e-08	3.583e-08	0.4	0.543
## Residuals	9	8.069e-07	8.965e-08		

Left Dorsal Intermediate Entorhinal Cortex

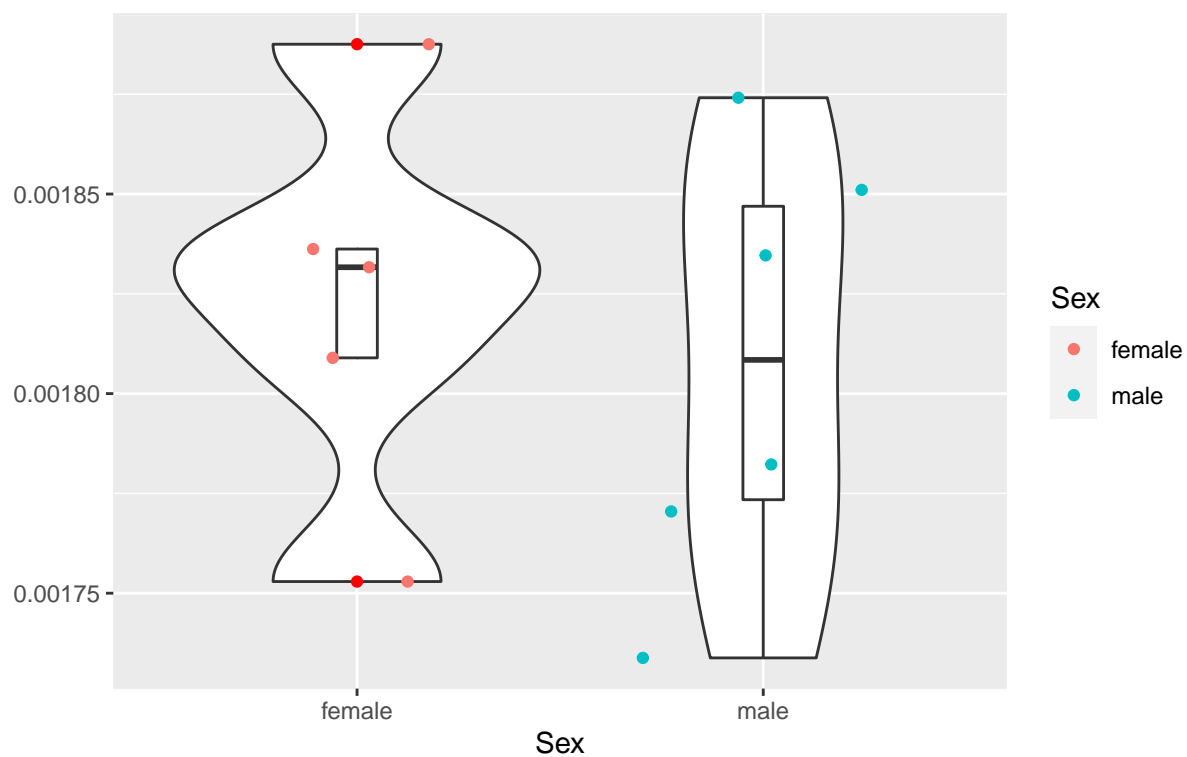
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.112e-08	1.112e-08	0.411	0.538
## Residuals	9	2.438e-07	2.709e-08		

Left Caudomedial Entorhinal Cortex

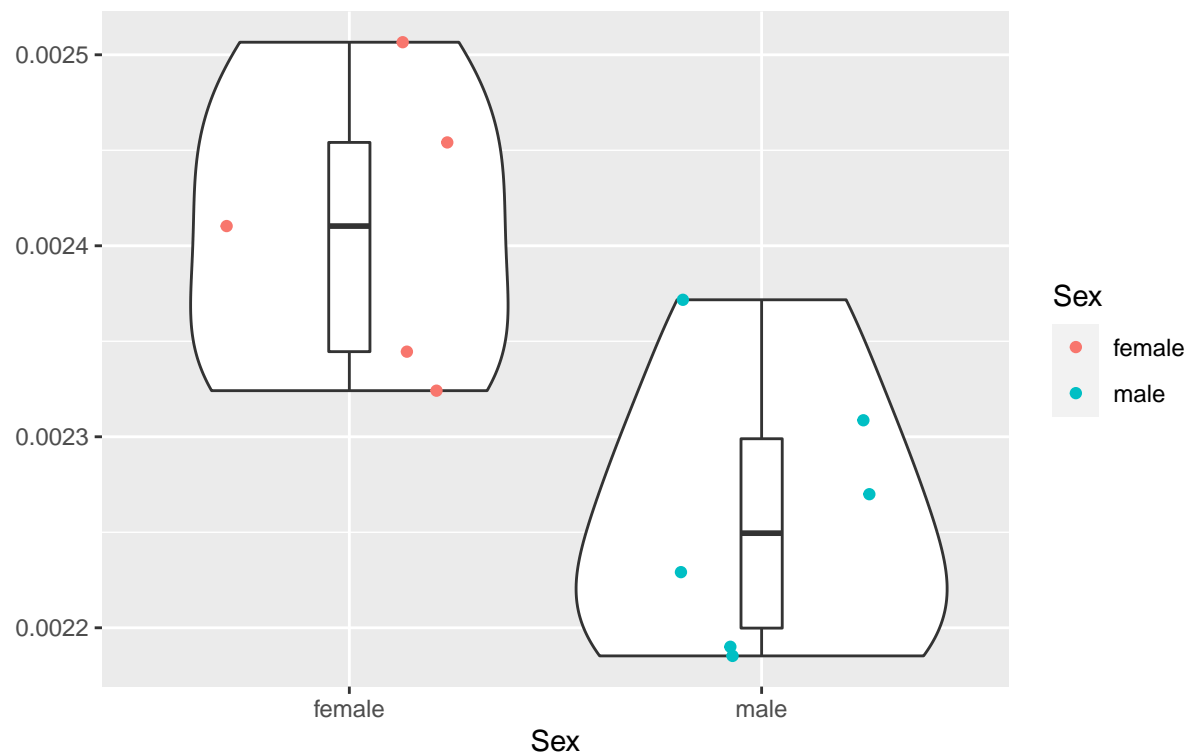
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.750e-10	6.754e-10	0.253	0.627
## Residuals	9	2.403e-08	2.670e-09		

Left Ventral Orbital Cortex

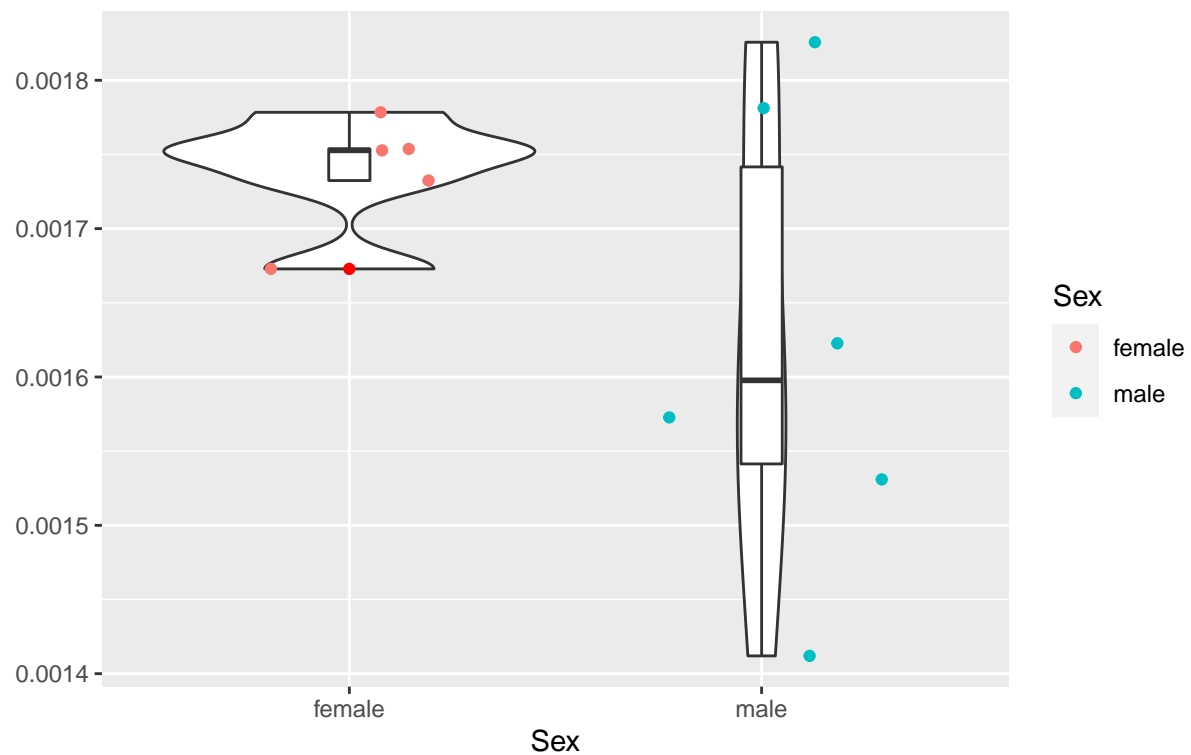
Red points denoting outliers



```
##          Df    Sum Sq Mean Sq F value    Pr(>F)
## Sex          1 6.040e-08 6.04e-08    11.03 0.00892 **
## Residuals    9 4.928e-08 5.48e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Secondary Visual Cortex Mediomedial Area

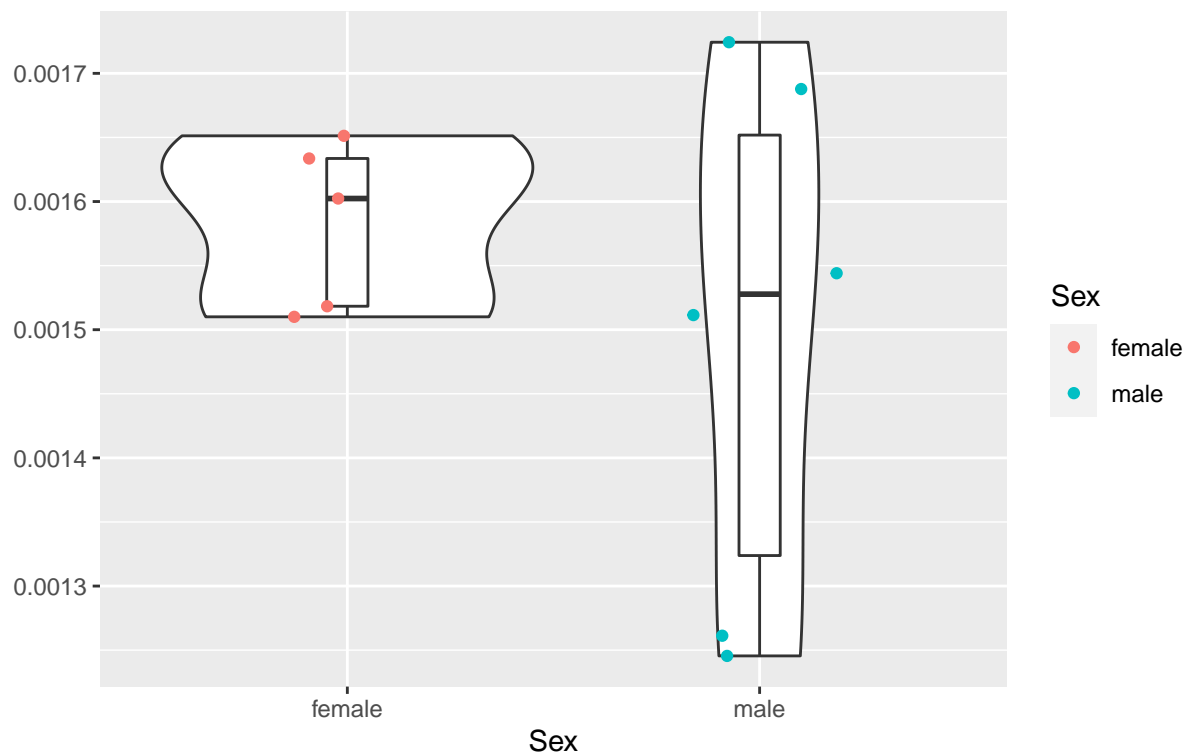
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.534e-08	3.534e-08	2.485	0.149
## Residuals	9	1.280e-07	1.422e-08		

Left Secondary Visual Cortex Mediolateral Area

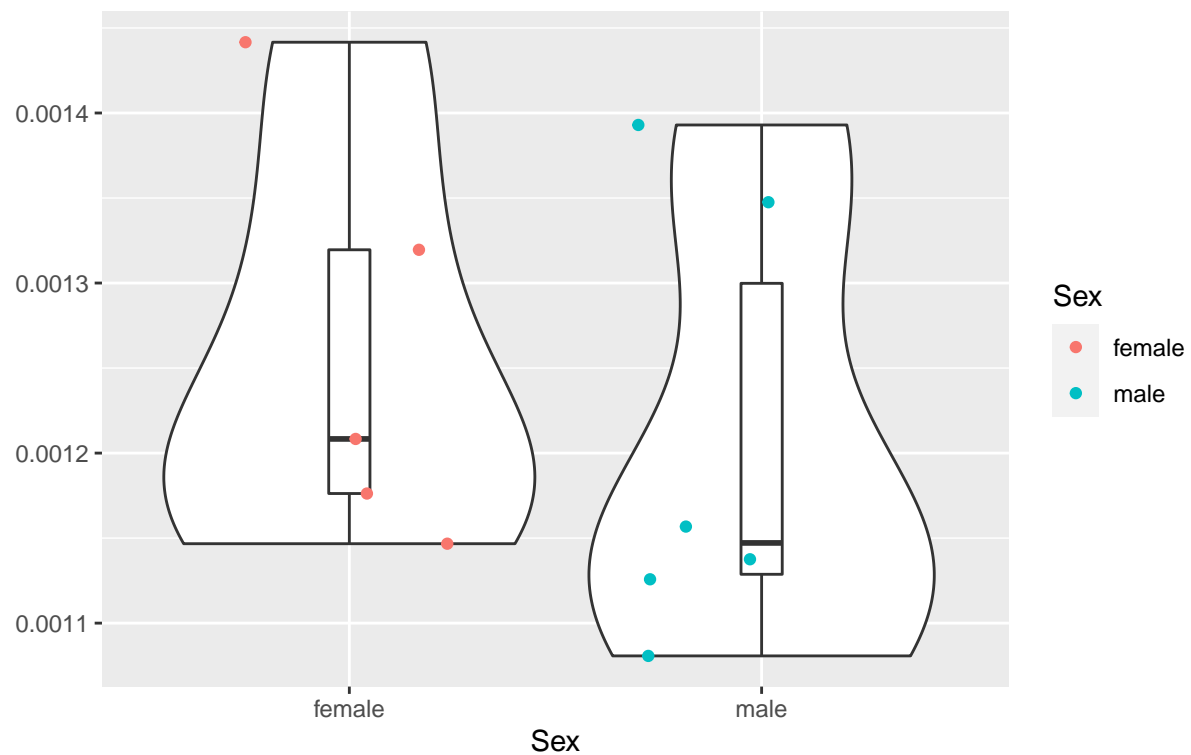
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.083e-08	2.083e-08	0.828	0.387
## Residuals	9	2.264e-07	2.515e-08		

Left Secondary Visual Cortex Lateral Area

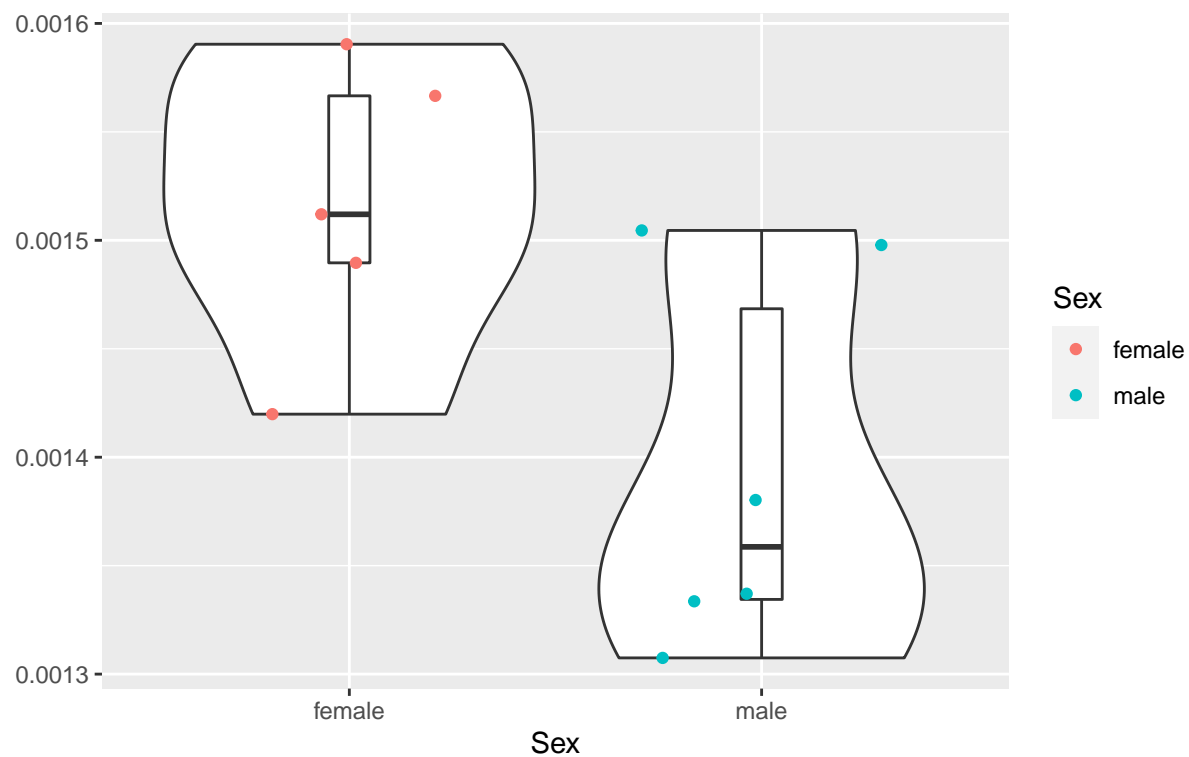
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	7.260e-09	7.261e-09	0.456	0.516
## Residuals	9	1.433e-07	1.592e-08		

Left Primary Visual Cortex Monocular Area

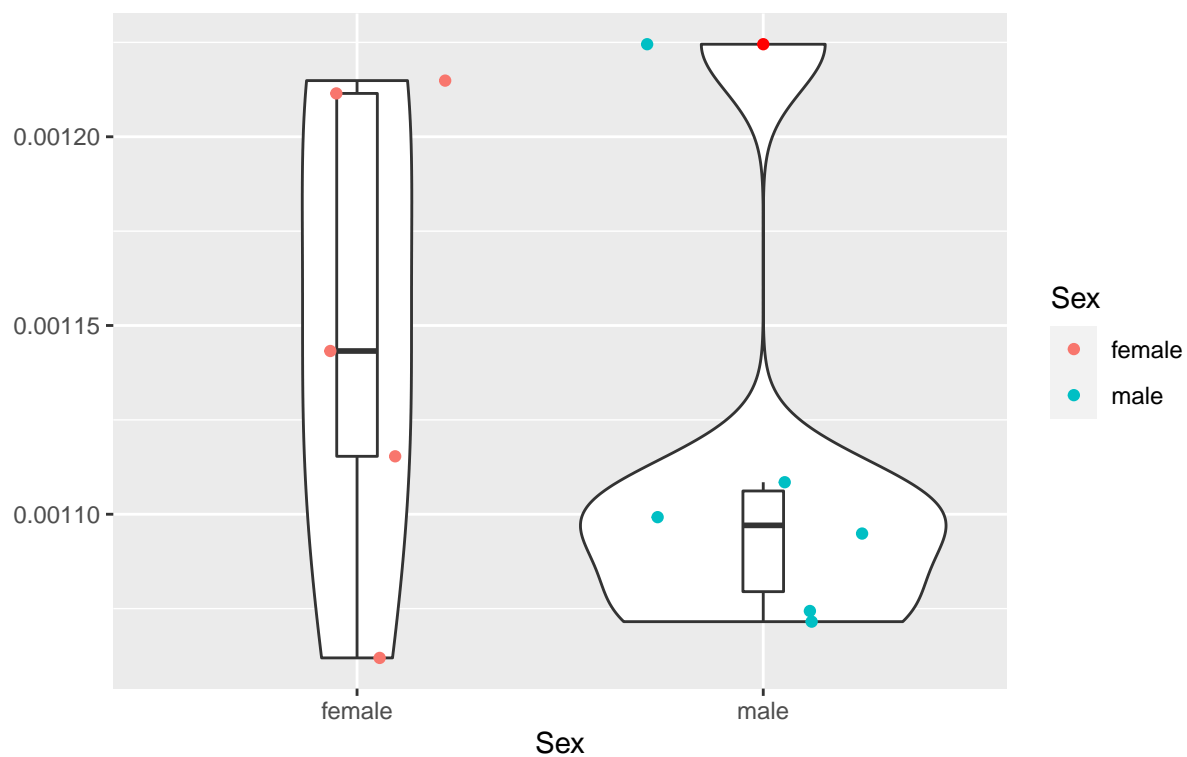
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 4.075e-08 4.075e-08   6.594 0.0303 *
## Residuals    9 5.563e-08 6.180e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```


Left Primary Visual Cortex Binocular Area

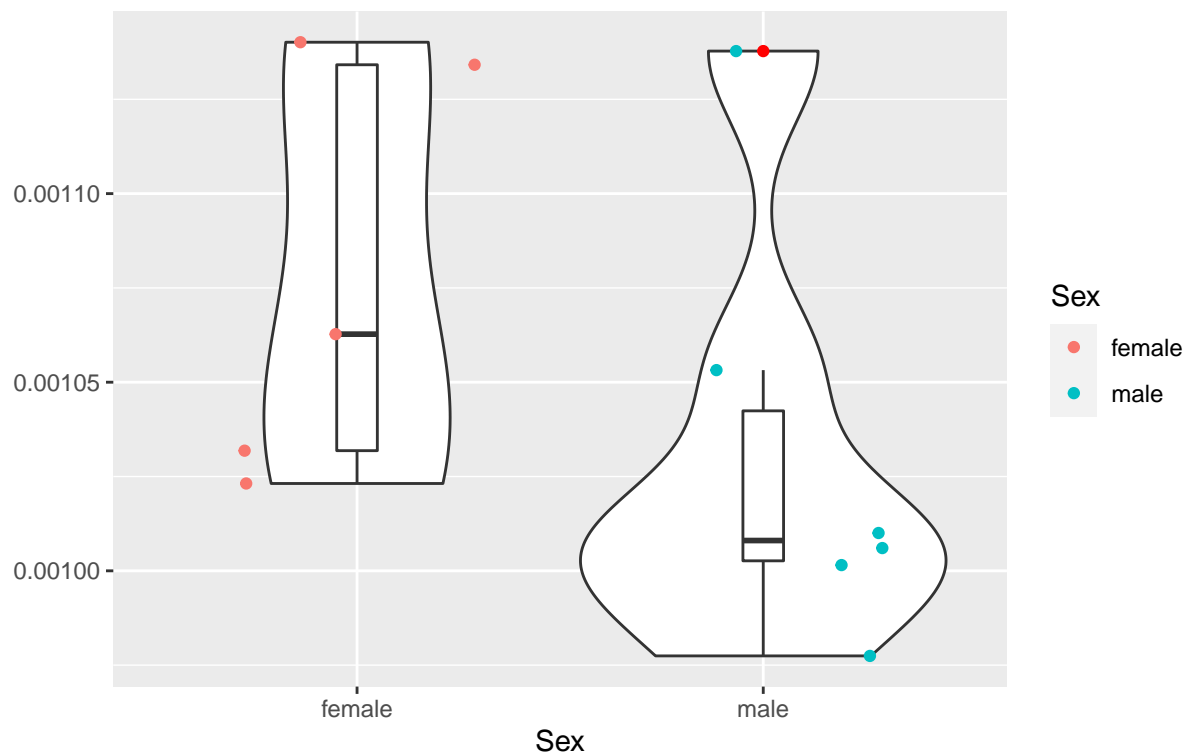
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.780e-09	3.776e-09	1.025	0.338
## Residuals	9	3.317e-08	3.685e-09		

Left Primary Visual Cortex

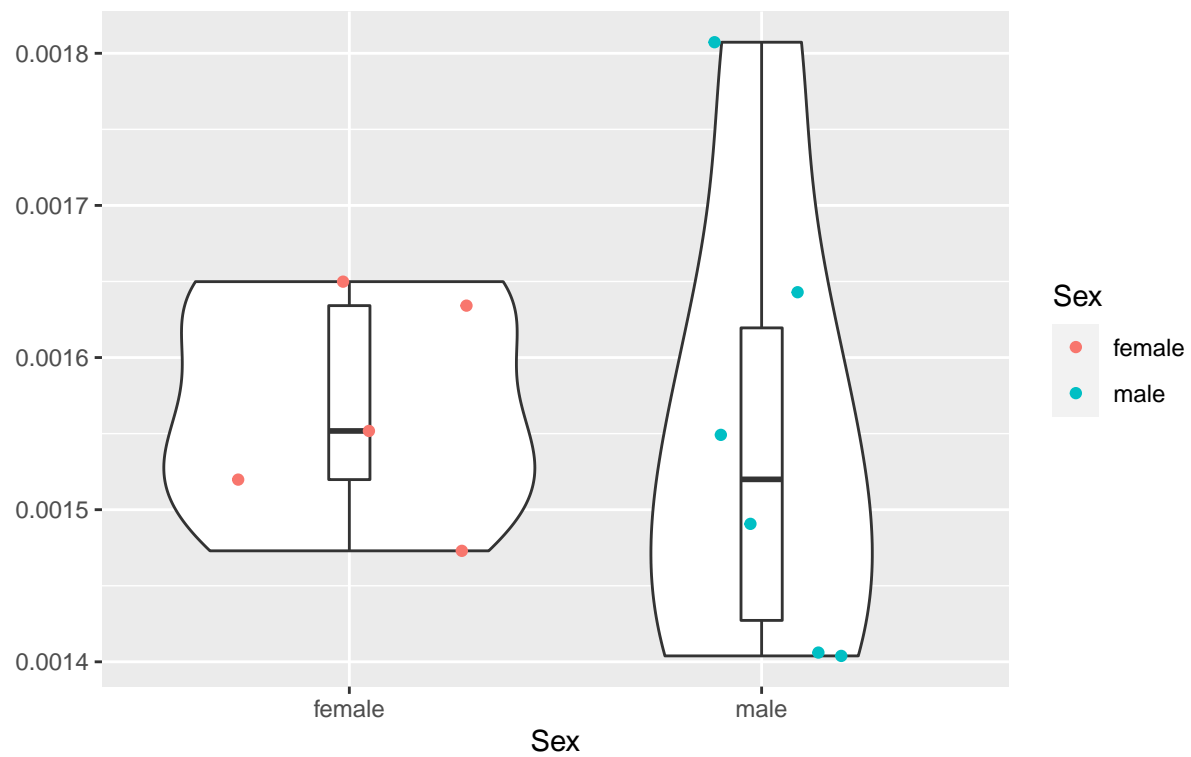
Red points denoting outliers



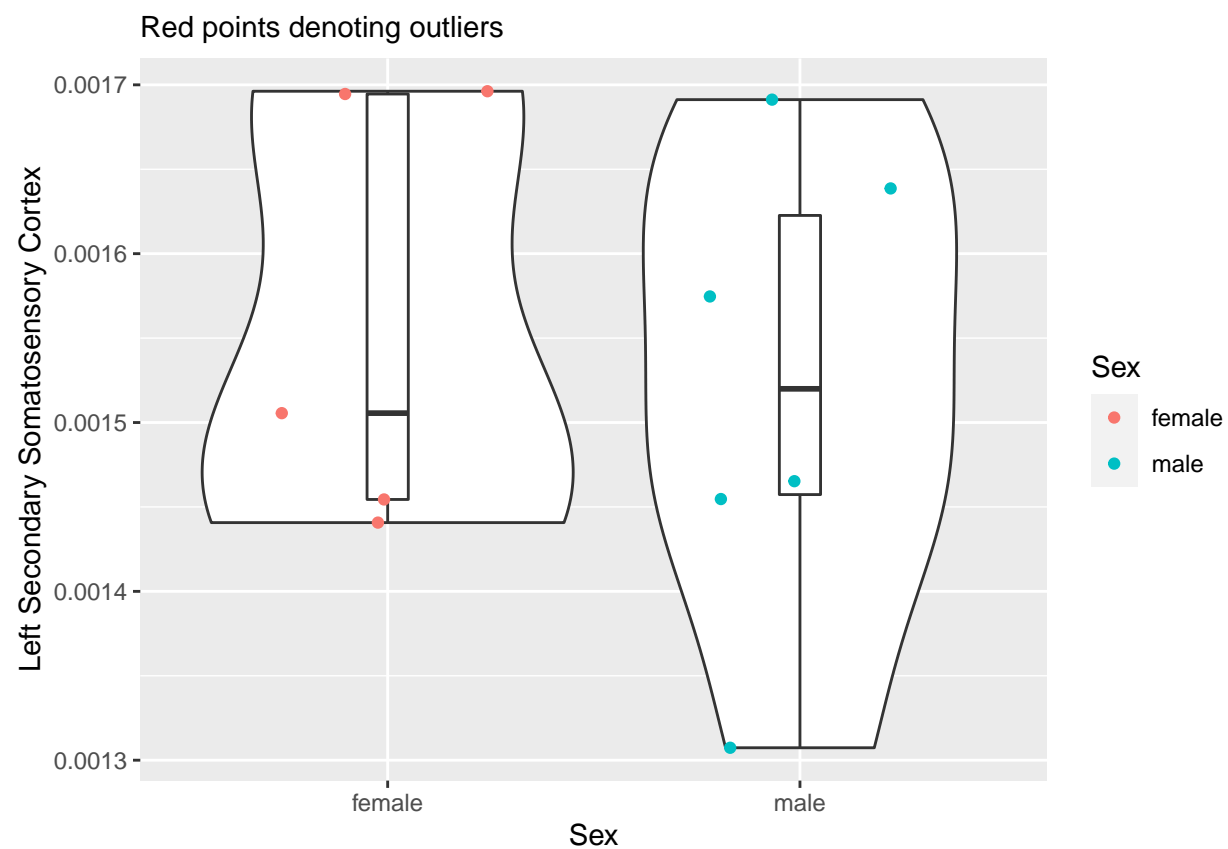
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.129e-09	6.129e-09	1.897	0.202
## Residuals	9	2.908e-08	3.231e-09		

Left Temporal Association Cortex

Red points denoting outliers



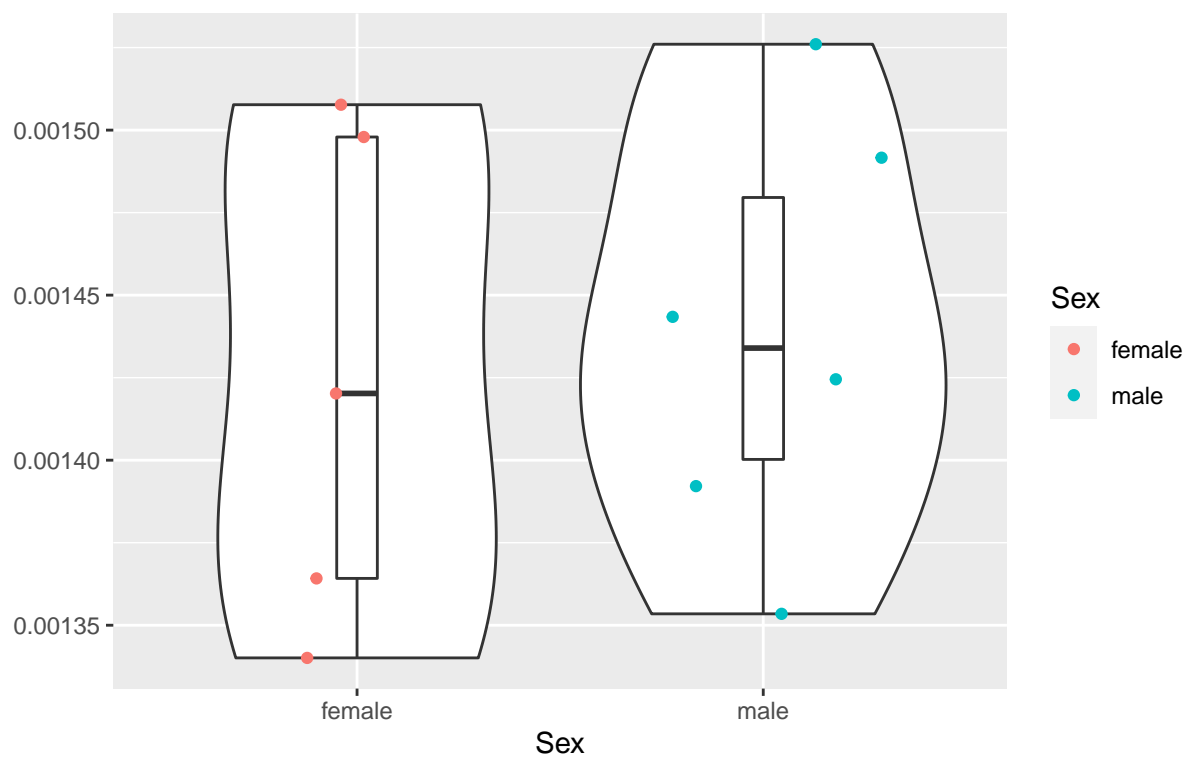
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.700e-10	6.72e-10	0.042	0.842
## Residuals	9	1.431e-07	1.59e-08		



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.600e-09	3.599e-09	0.198	0.667
## Residuals	9	1.638e-07	1.820e-08		

Left Primary Somatosensory Cortex Upper Lip Region

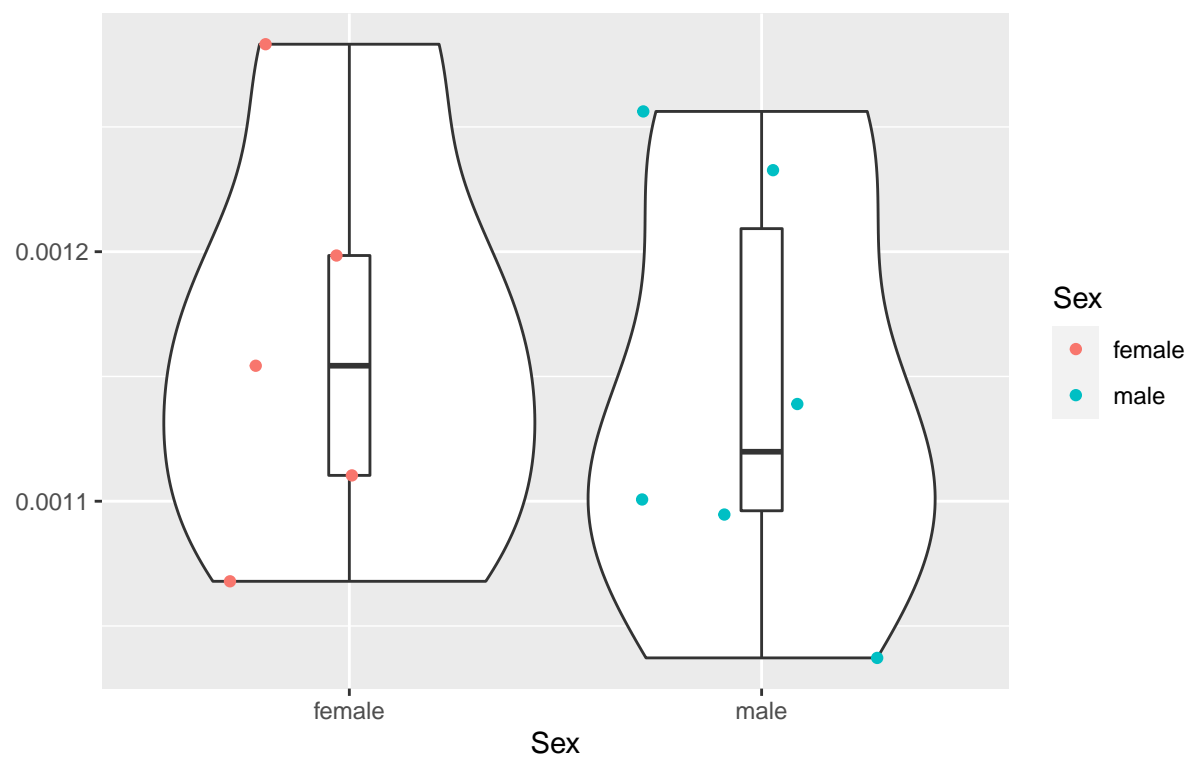
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	4.300e-10	4.270e-10	0.089	0.772
## Residuals	9	4.316e-08	4.796e-09		

Left Primary Somatosensory Cortex Trunk Region

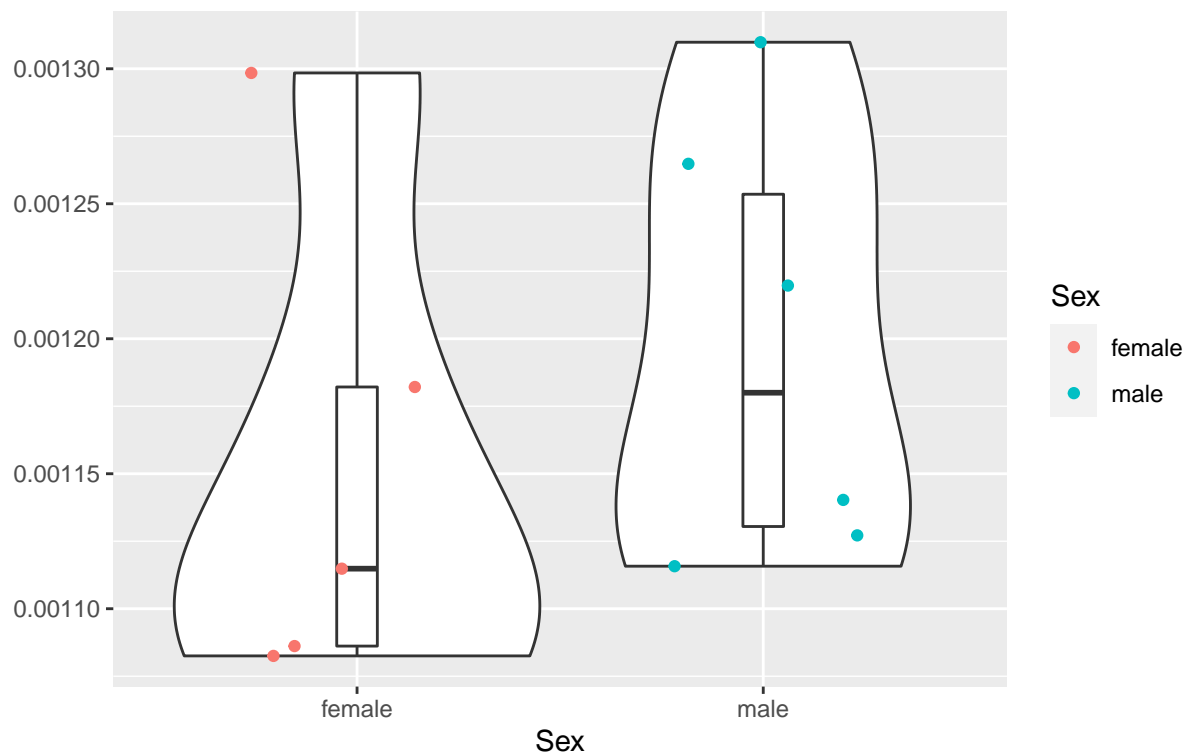
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.030e-09	1.030e-09	0.145	0.712
## Residuals	9	6.378e-08	7.086e-09		

Left Primary Somatosensory Cortex Shoulder Region

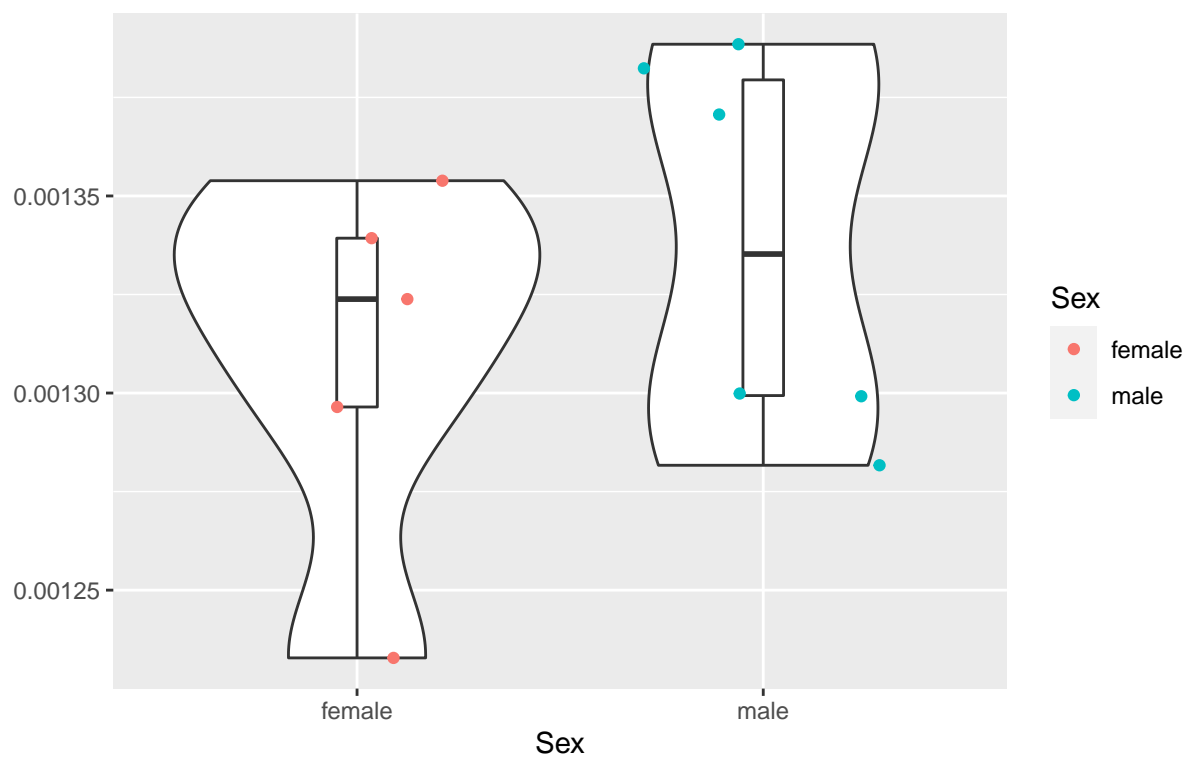
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	5.150e-09	5.146e-09	0.708	0.422
## Residuals	9	6.543e-08	7.270e-09		

Left Primary Somatosensory Cortex Jaw Region

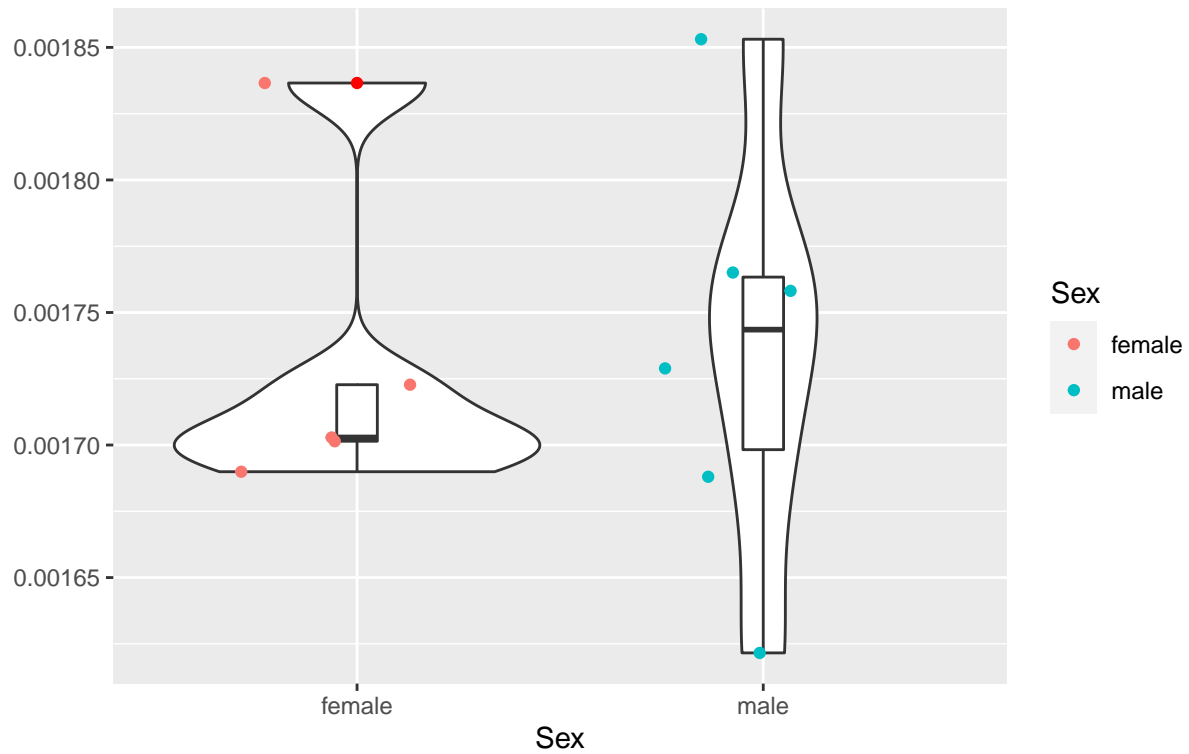
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.107e-09	2.107e-09	0.91	0.365
## Residuals	9	2.083e-08	2.314e-09		

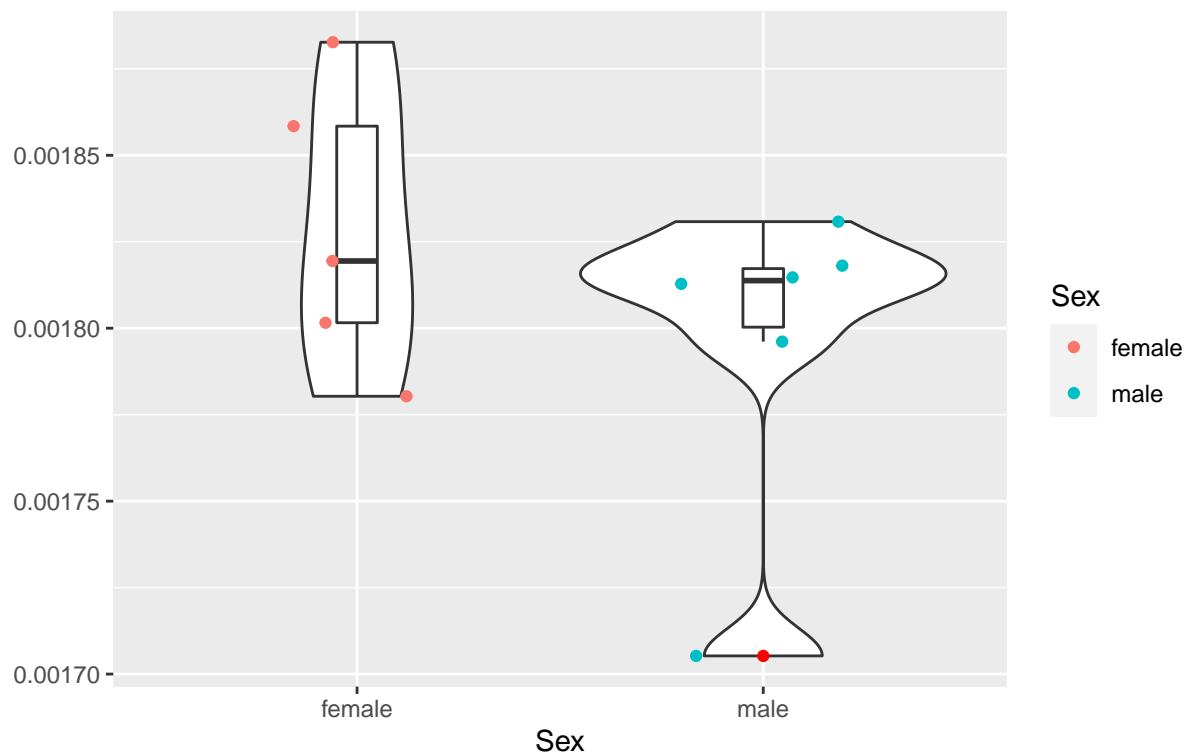
Left Primary Somatosensory Cortex Hindlimb Region

Red points denoting outliers



Left Primary Somatosensory Cortex Forelimb Region

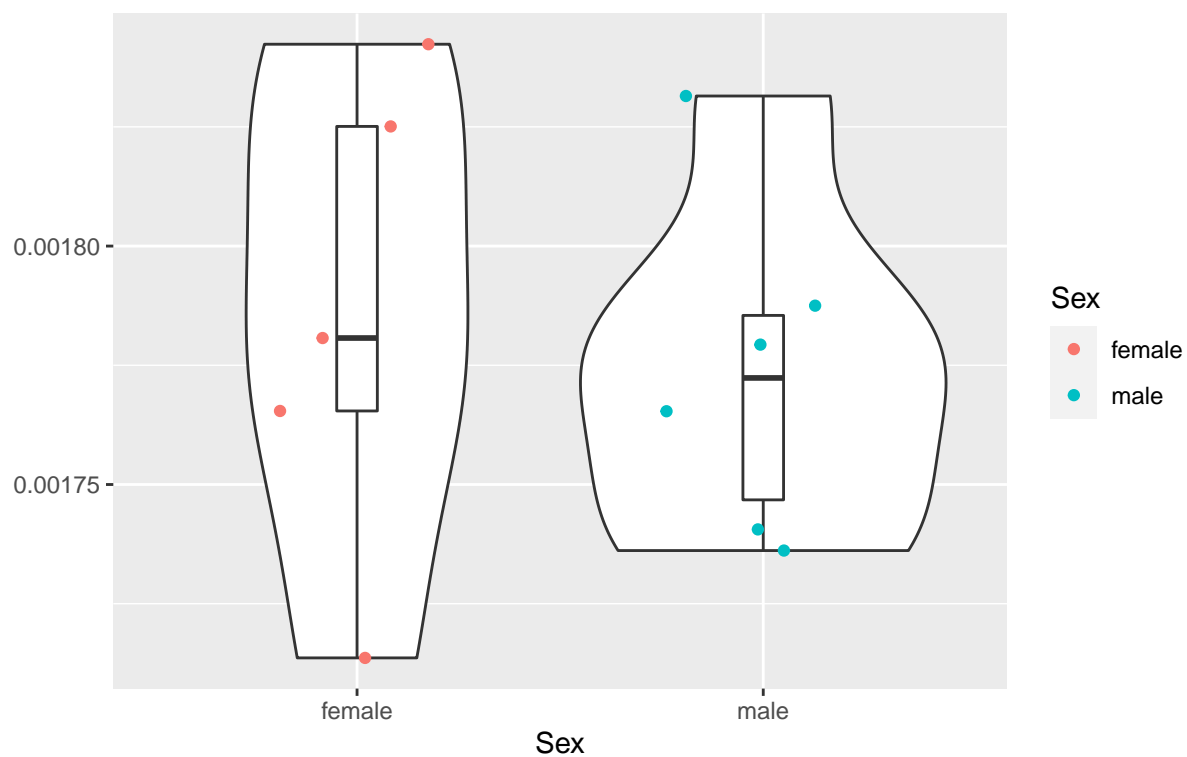
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.826e-09	2.826e-09	1.451	0.259
## Residuals	9	1.753e-08	1.947e-09		

Left Primary Somatosensory Cortex Dysgranular Zone

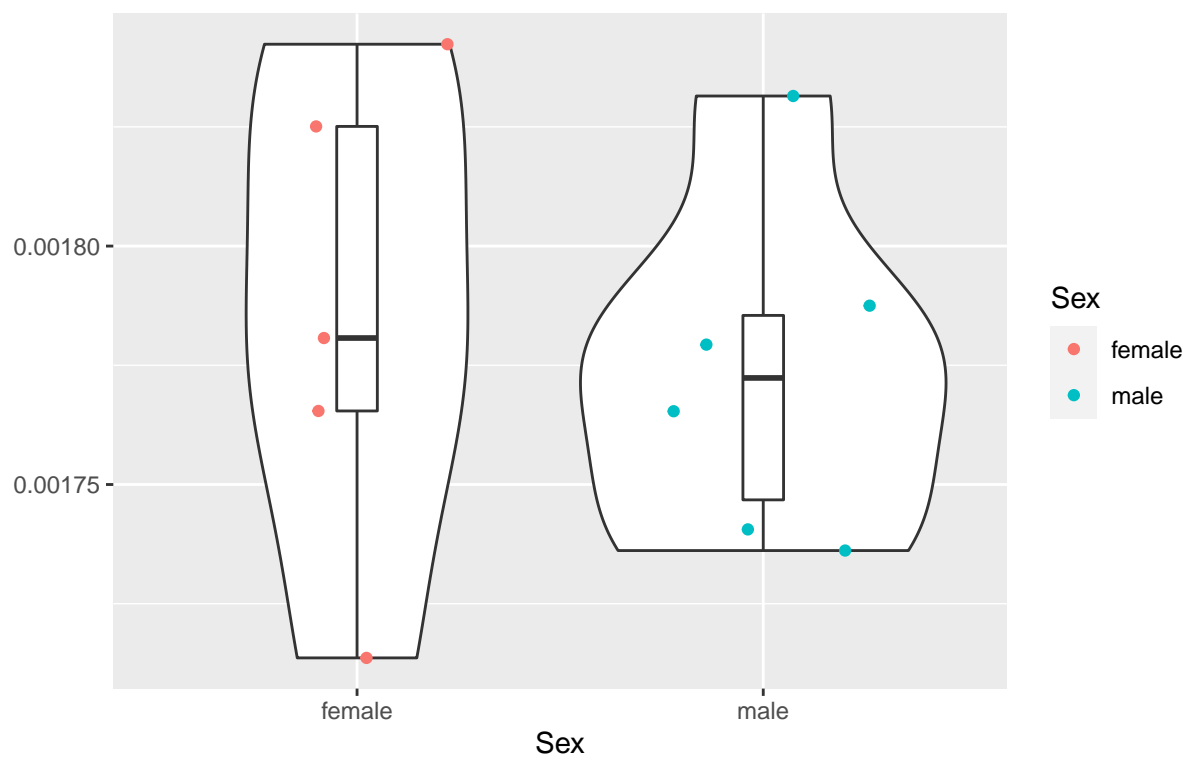
Red points denoting outliers



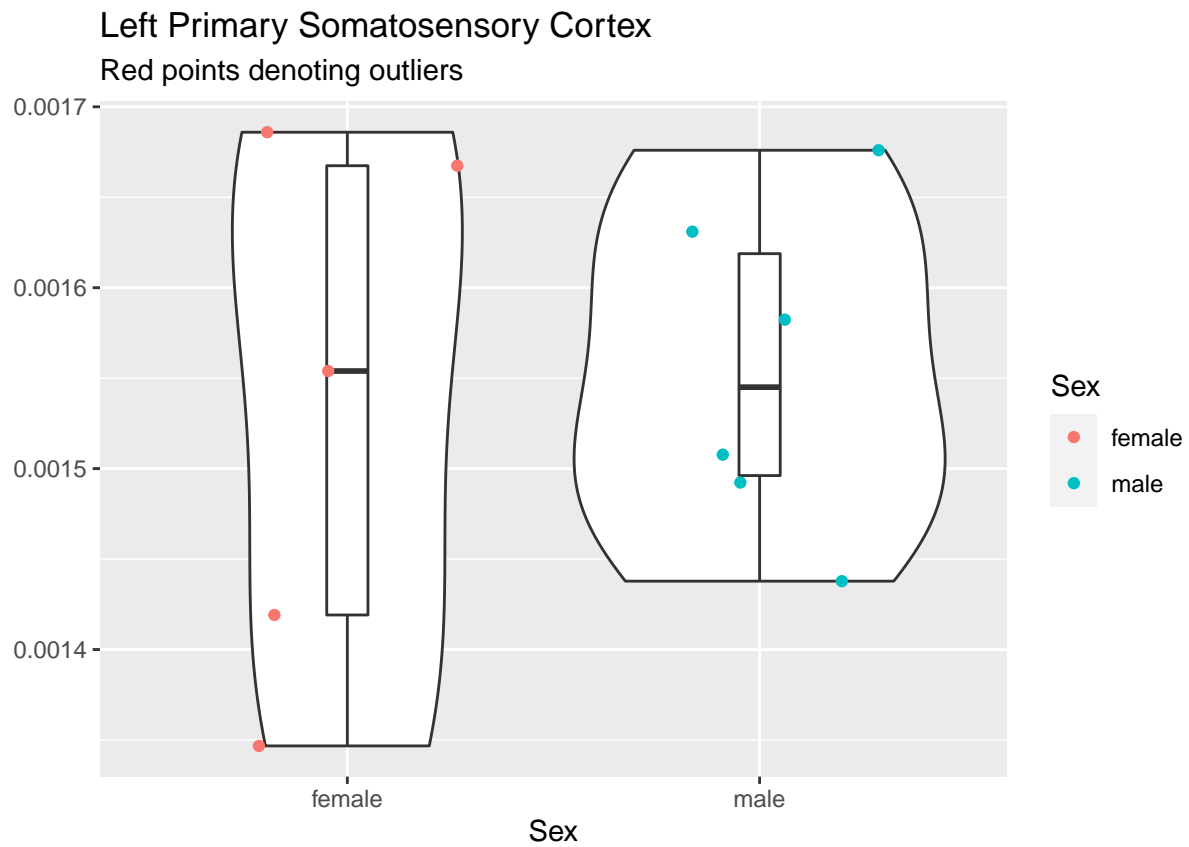
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.800e-10	1.840e-10	0.046	0.835
## Residuals	9	3.587e-08	3.986e-09		

Left Primary Somatosensory Cortex Barrel Field

Red points denoting outliers



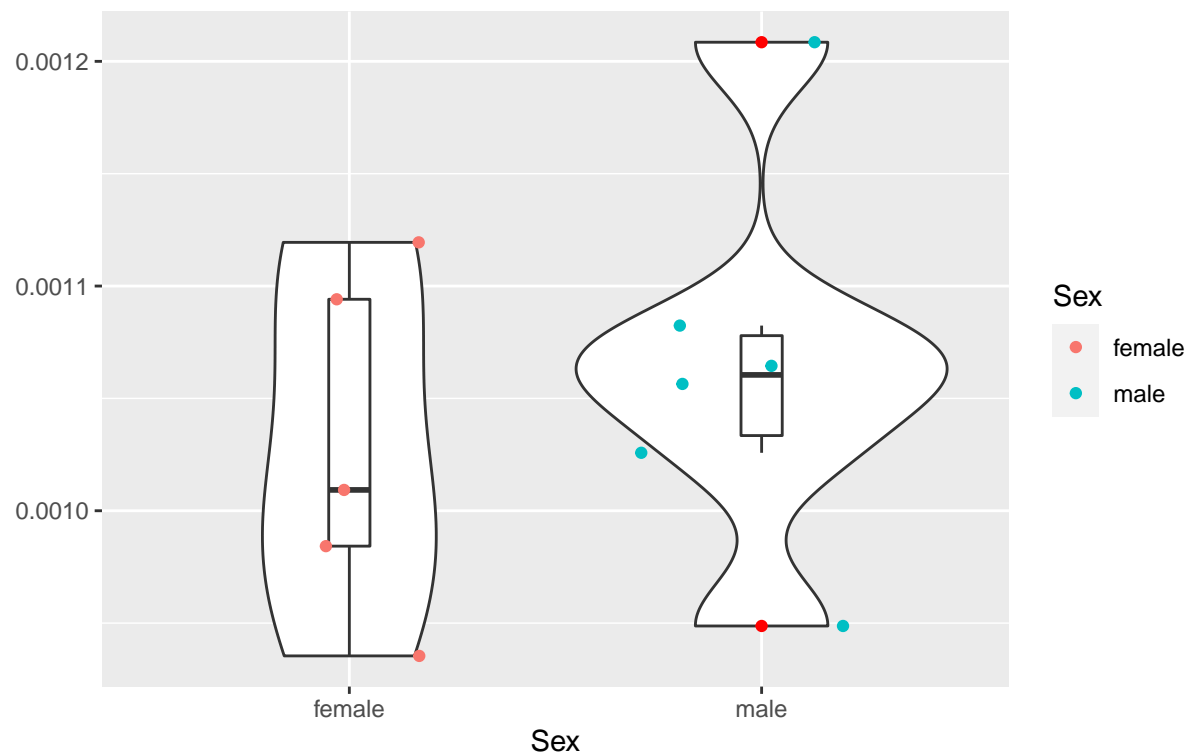
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.950e-10	3.953e-10	0.215	0.654
## Residuals	9	1.652e-08	1.836e-09		



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex       1 1.080e-09 1.079e-09   0.074  0.791
## Residuals 9 1.306e-07 1.452e-08
```

Left Parietal Cortex Posterial Area Rostral Part

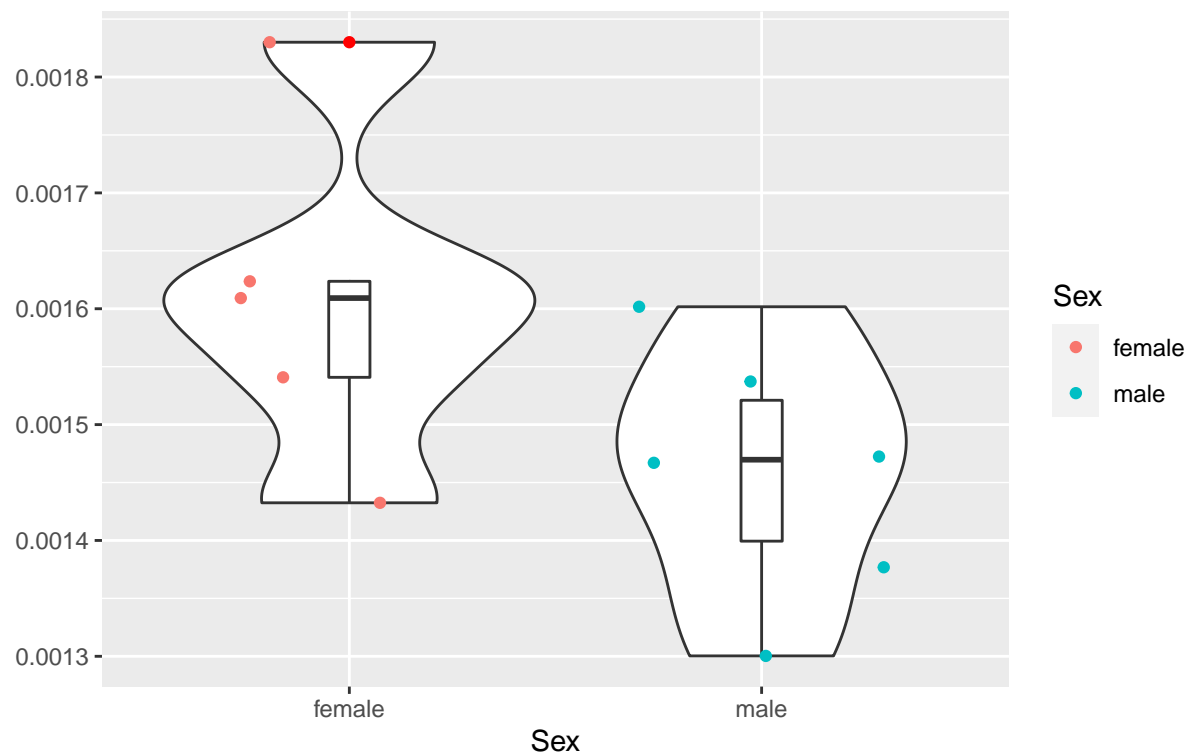
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	3.51e-09	3.515e-09	0.531	0.485
## Residuals	9	5.96e-08	6.622e-09		

Left Medial Parietal Association Cortex

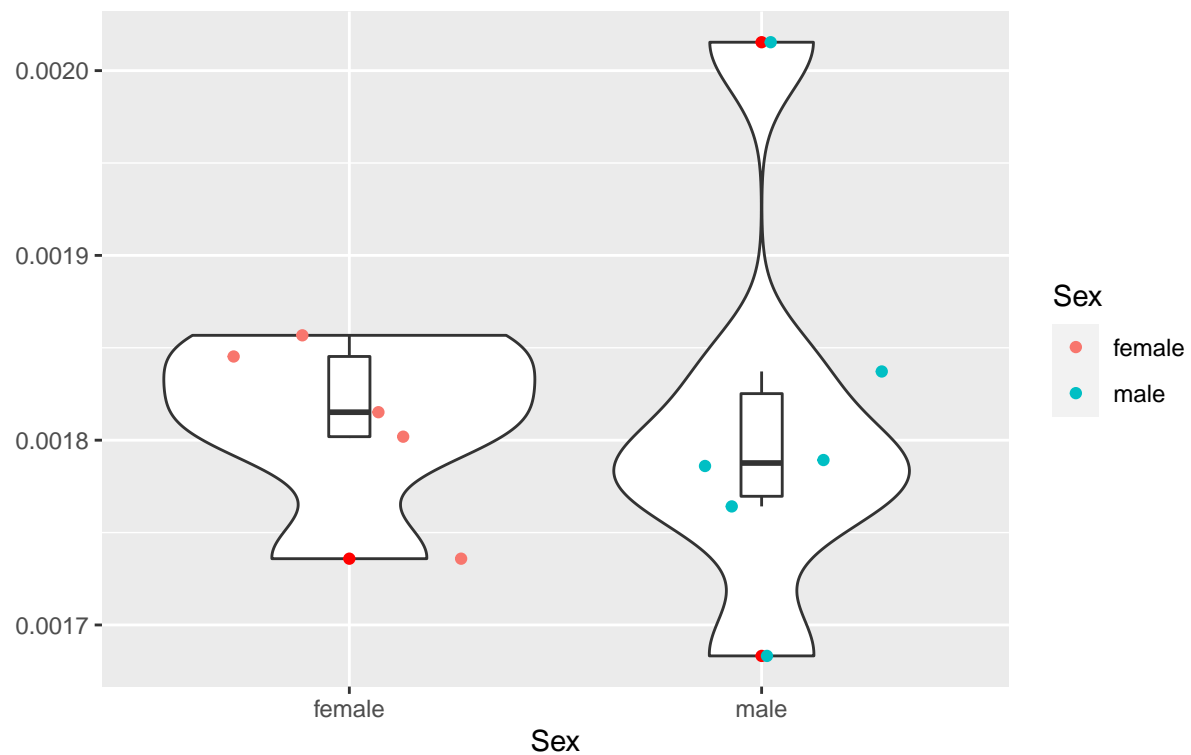
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 5.973e-08 5.973e-08   3.746 0.0849 .
## Residuals    9 1.435e-07 1.595e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Medial Orbital Cortex

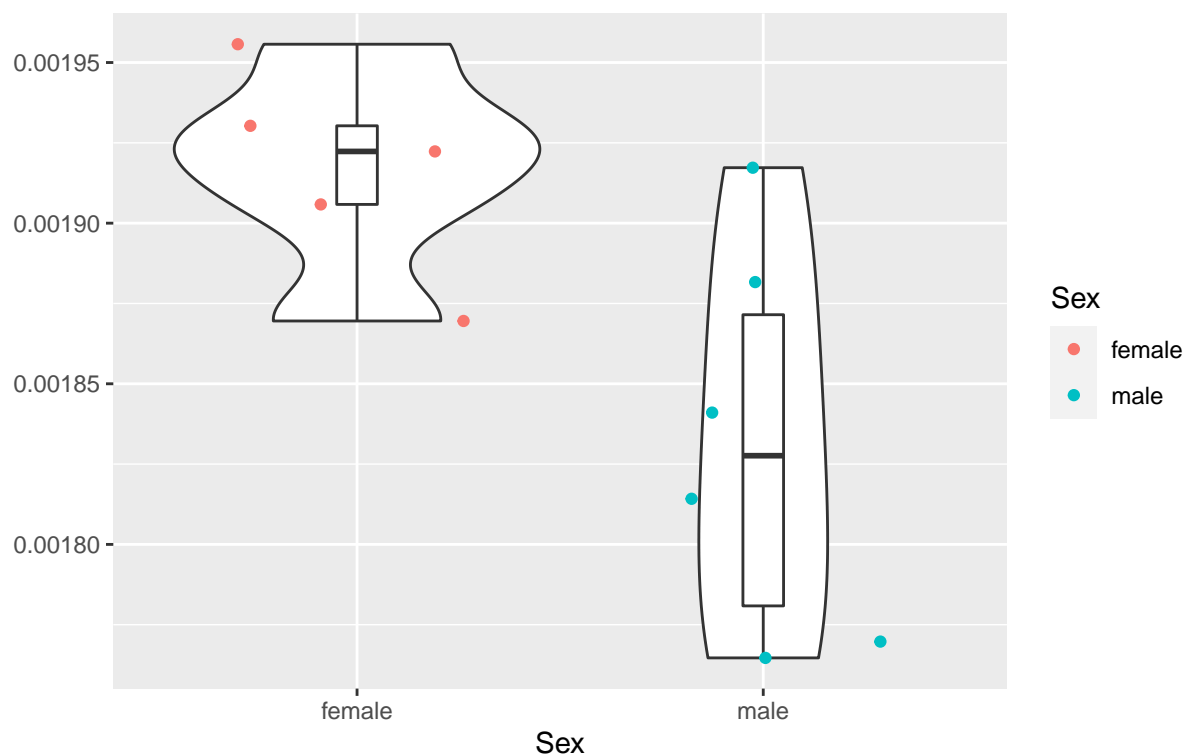
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.000e-11	7.000e-12	0.001	0.978
## Residuals	9	7.106e-08	7.896e-09		

Left Secondary Motor Cortex

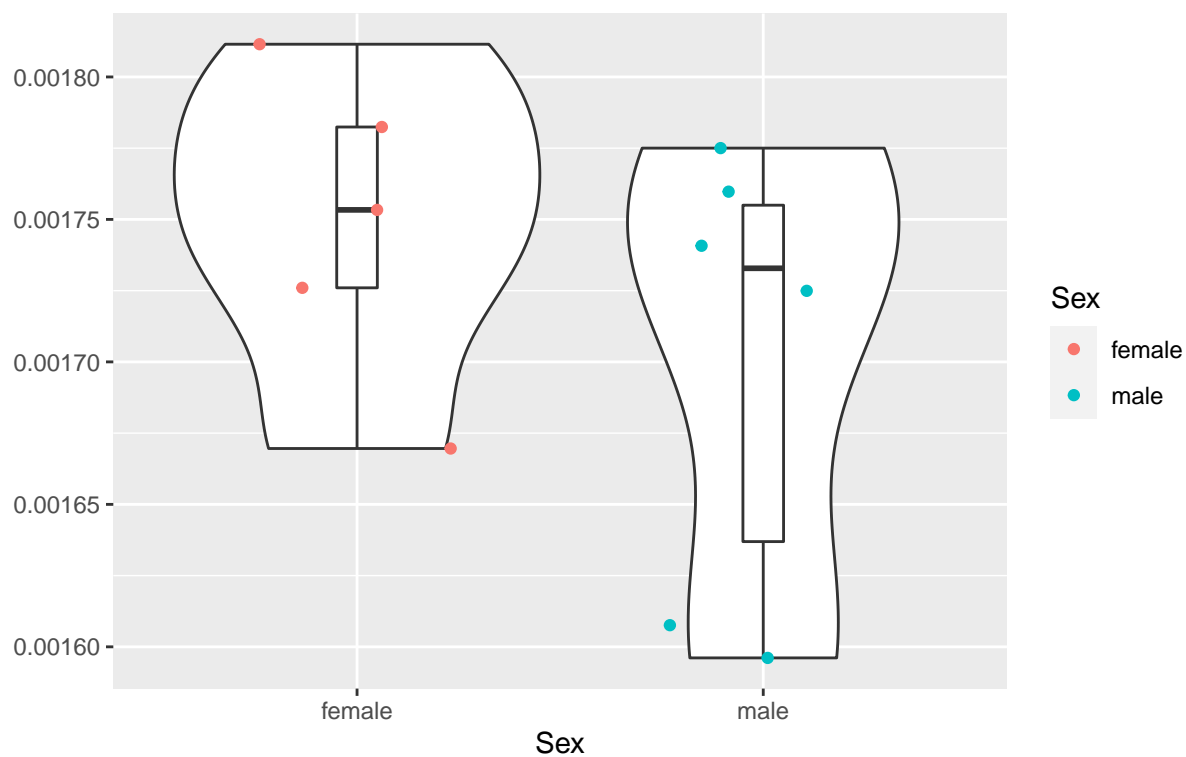
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.985e-08 1.985e-08   7.898 0.0204 *
## Residuals    9 2.262e-08 2.513e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Primary Motor Cortex

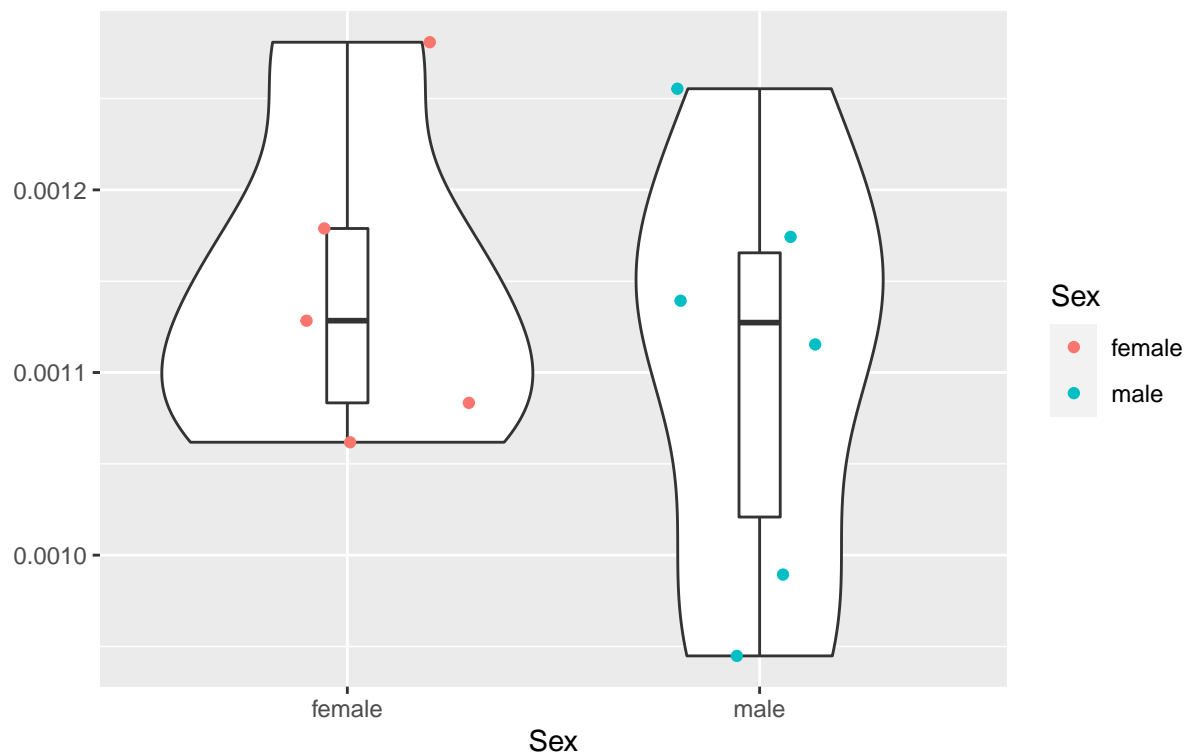
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.250e-09	6.251e-09	1.318	0.281
## Residuals	9	4.268e-08	4.742e-09		

Left Lateral Parietal Association Cortex

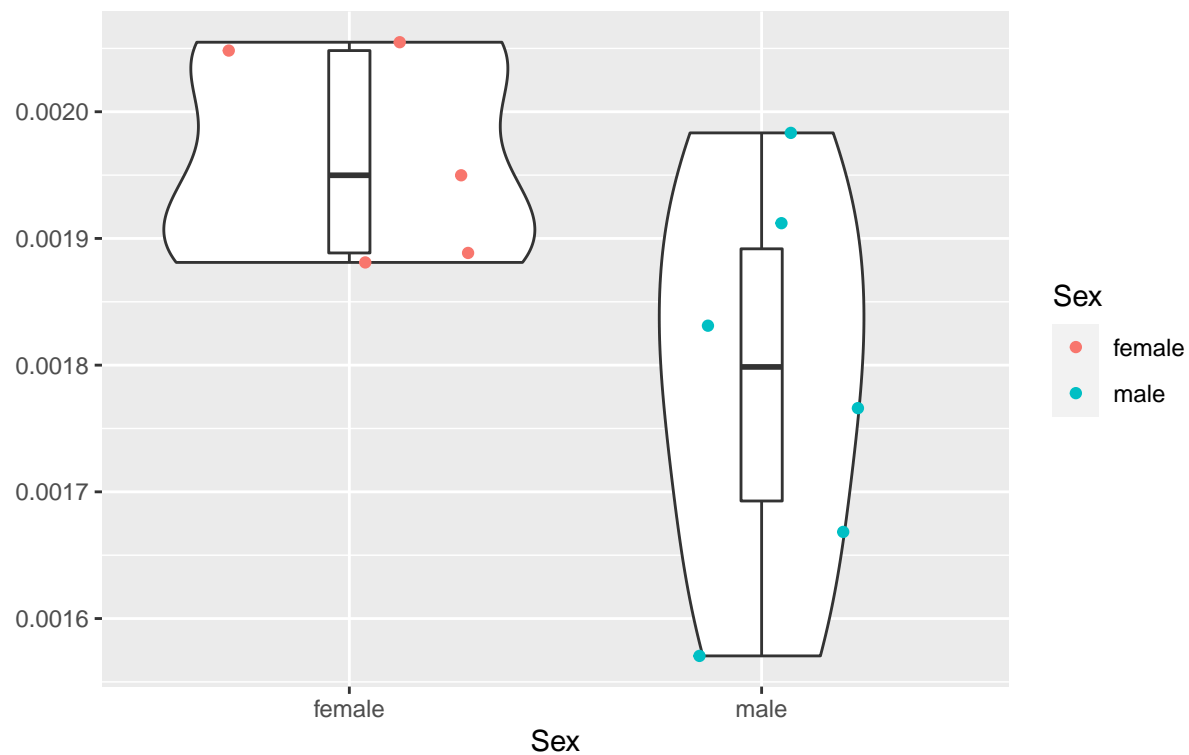
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	5.180e-09	5.177e-09	0.474	0.508
## Residuals	9	9.828e-08	1.092e-08		

Left Lateral Orbital Cortex

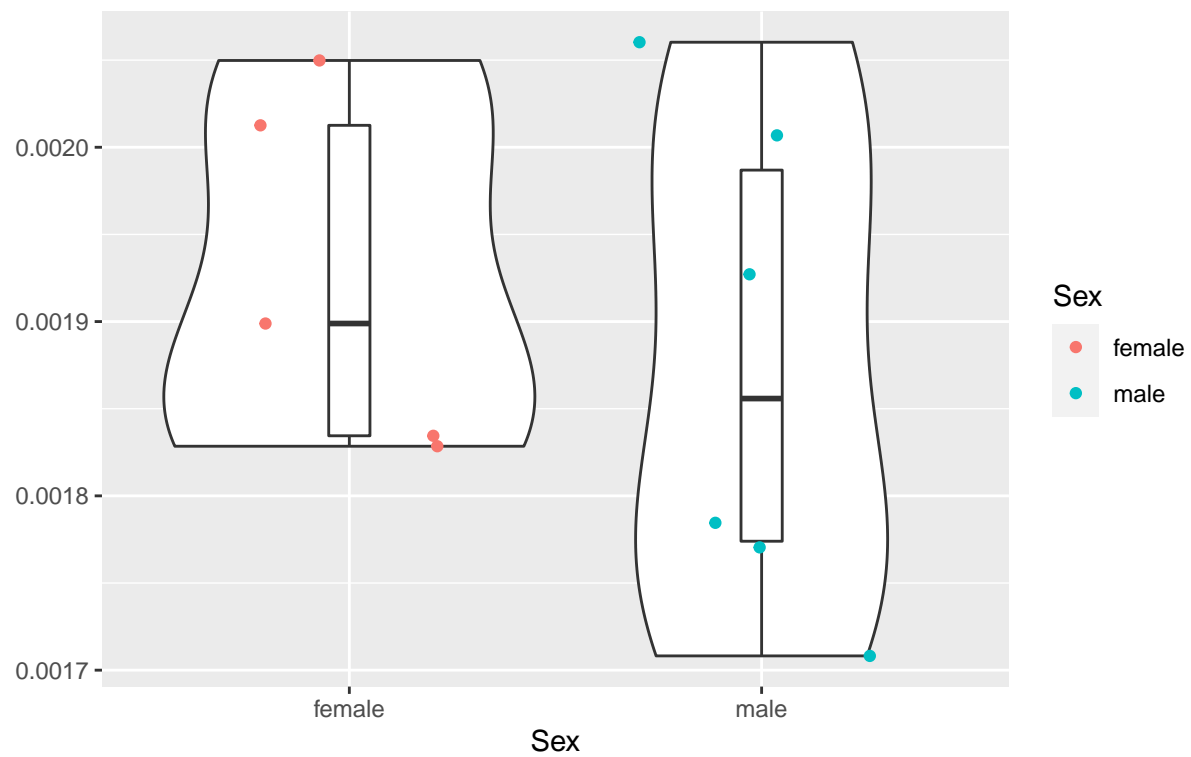
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 8.444e-08 8.444e-08   5.219 0.0482 *
## Residuals    9 1.456e-07 1.618e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Insular Cortex

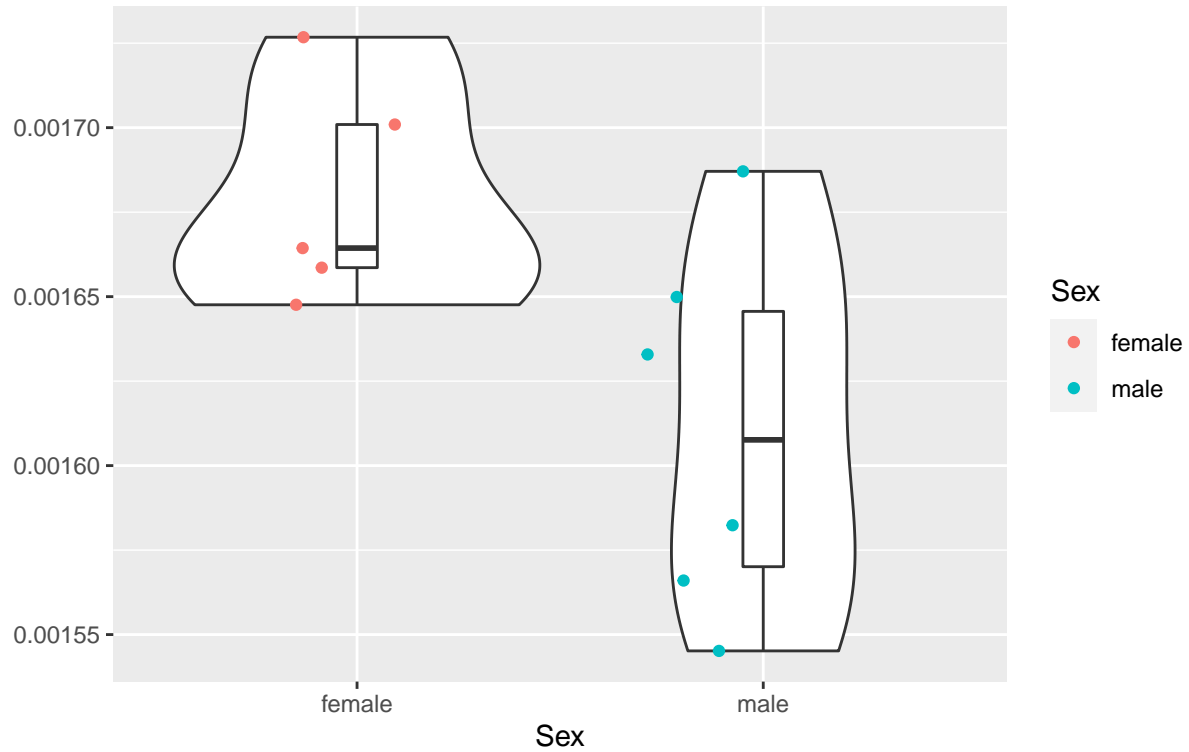
Red points denoting outliers



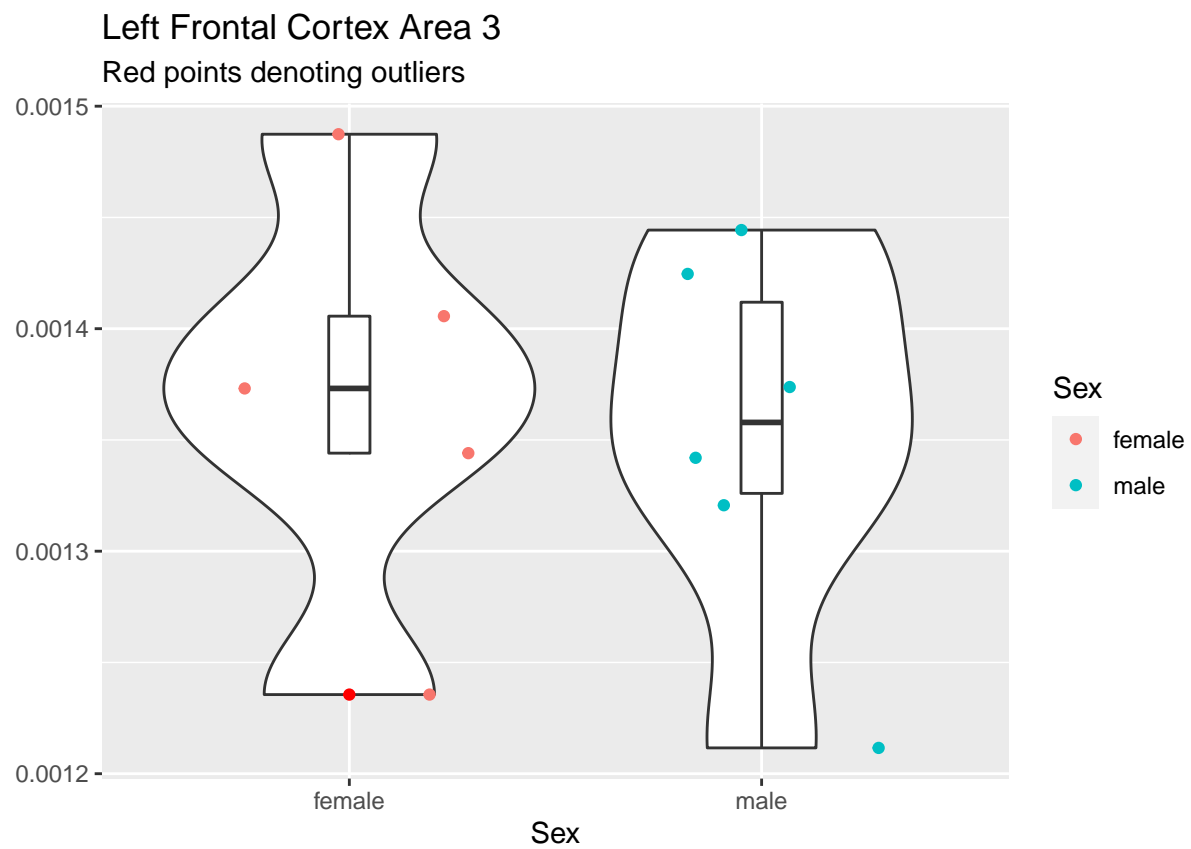
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.440e-09	6.444e-09	0.406	0.54
## Residuals	9	1.428e-07	1.587e-08		

Left Frontal Association Cortex

Red points denoting outliers

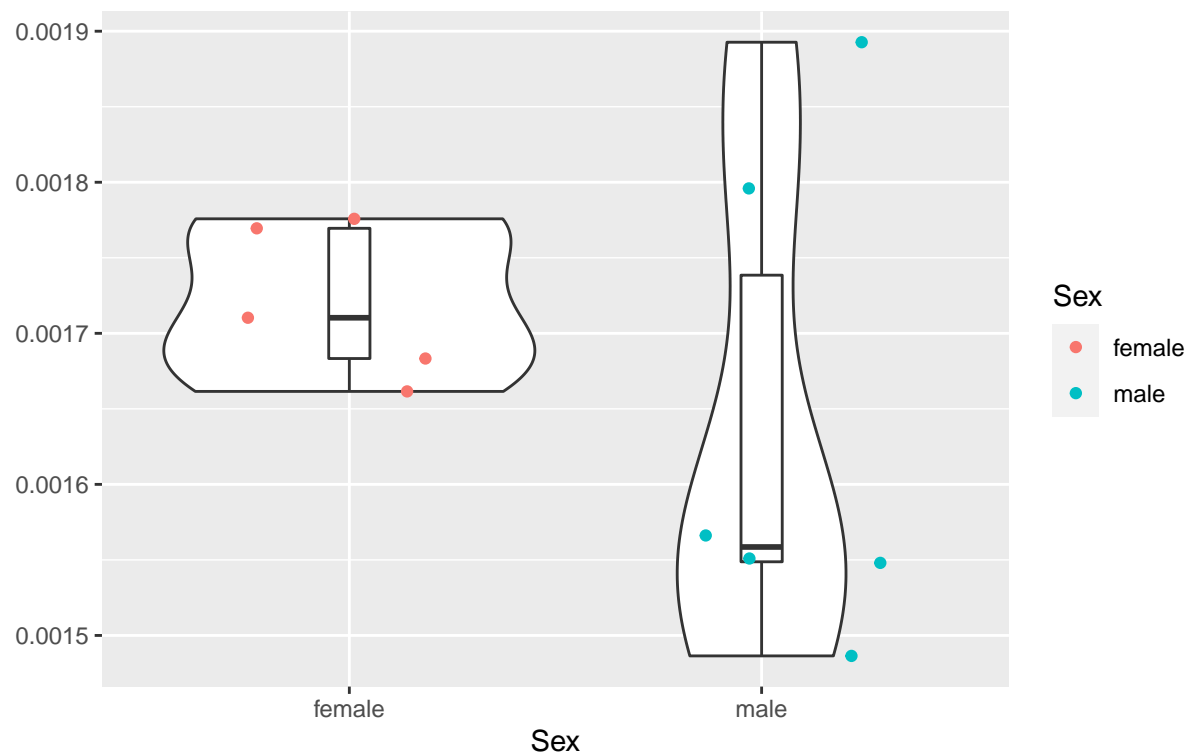


```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.302e-08 1.302e-08   6.058 0.0361 *
## Residuals    9 1.934e-08 2.149e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```



Left Dorsolateral Orbital Cortex

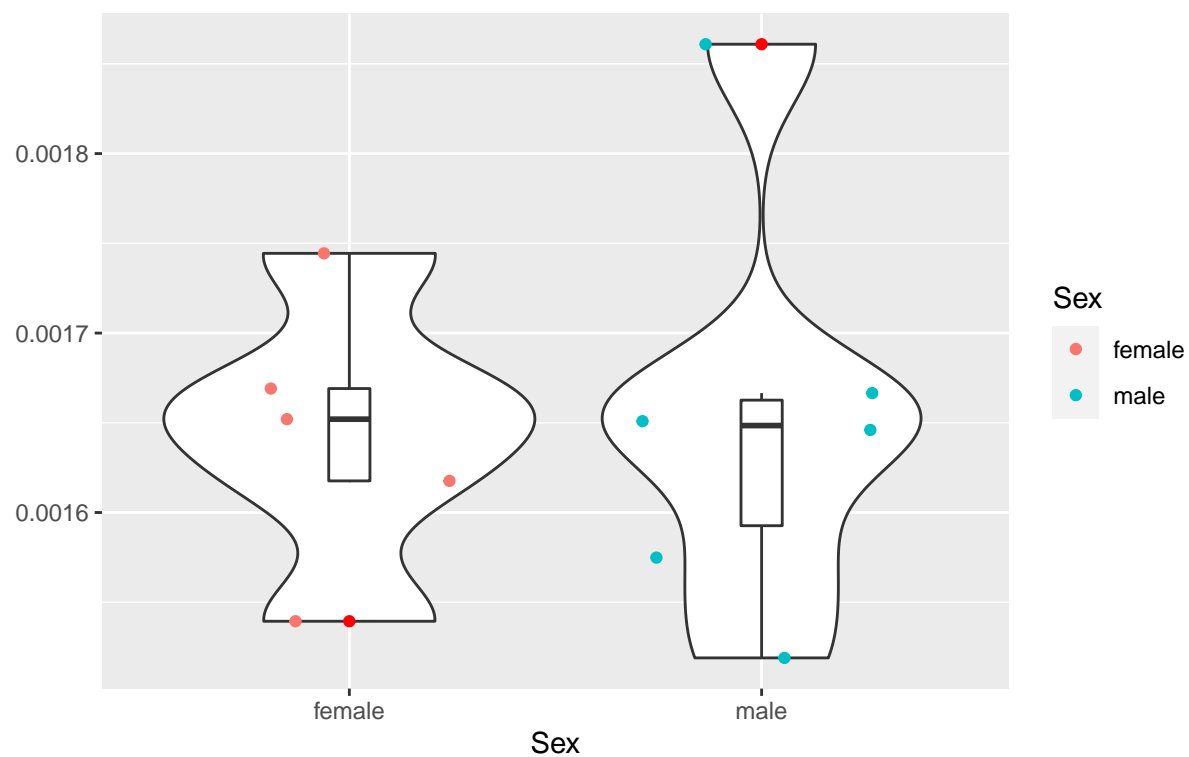
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	1.748e-08	1.748e-08	1.092	0.323
## Residuals	9	1.440e-07	1.600e-08		

Left Secondary Auditory Cortex Ventral Part

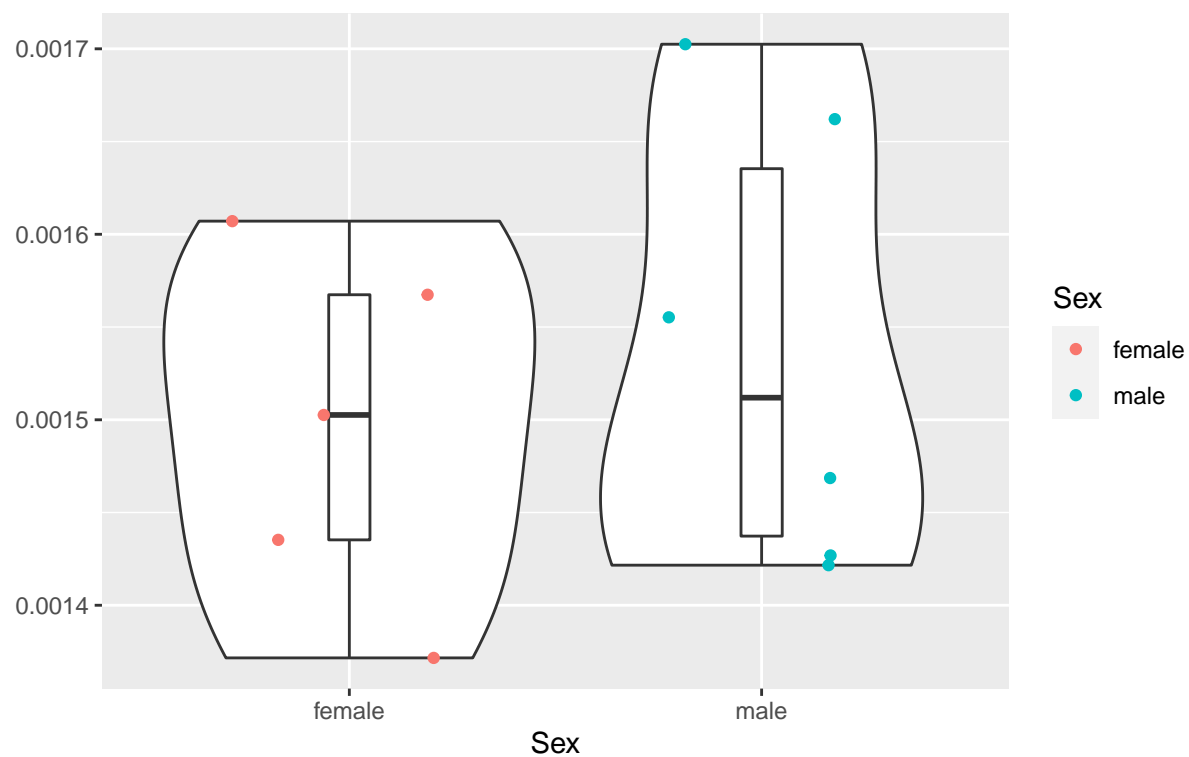
Red points denoting outliers



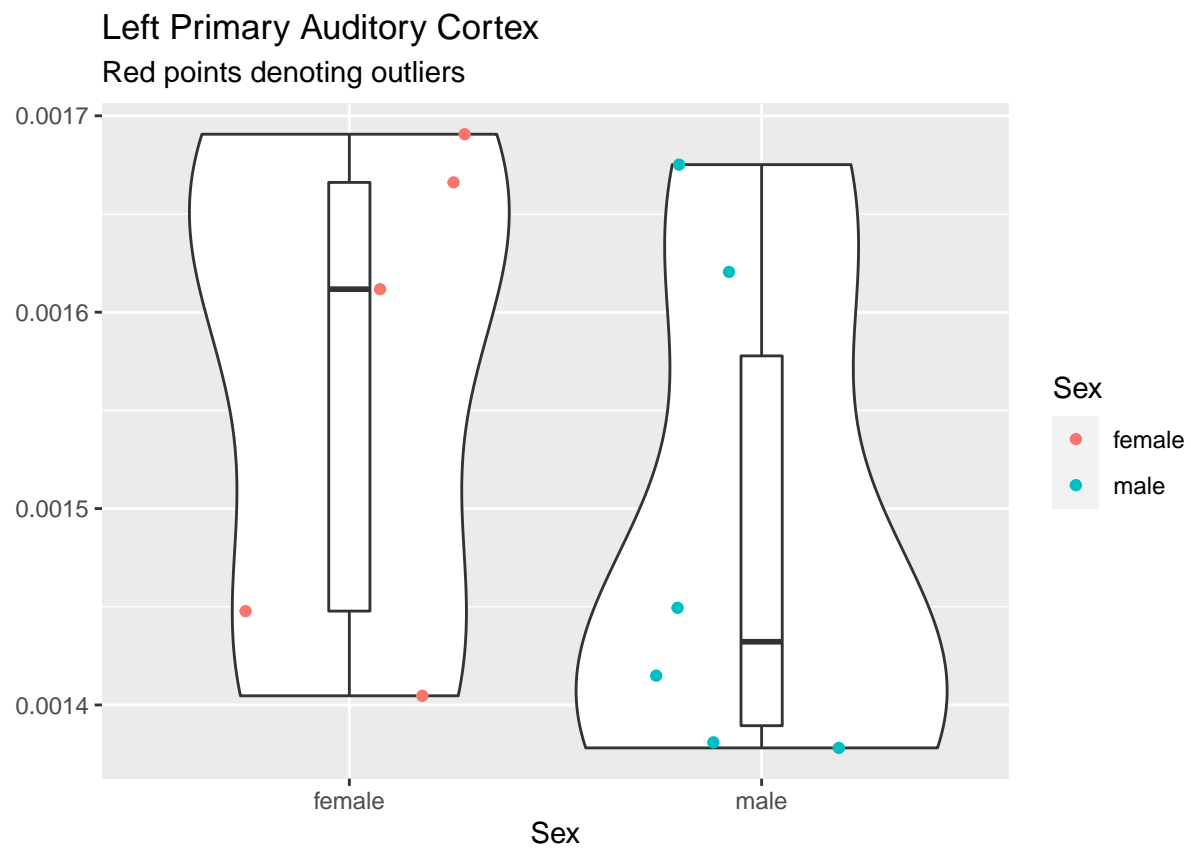
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.000e-10	1.990e-10	0.02	0.891
## Residuals	9	8.995e-08	9.995e-09		

Left Secondary Auditory Cortex Dorsal Part

Red points denoting outliers

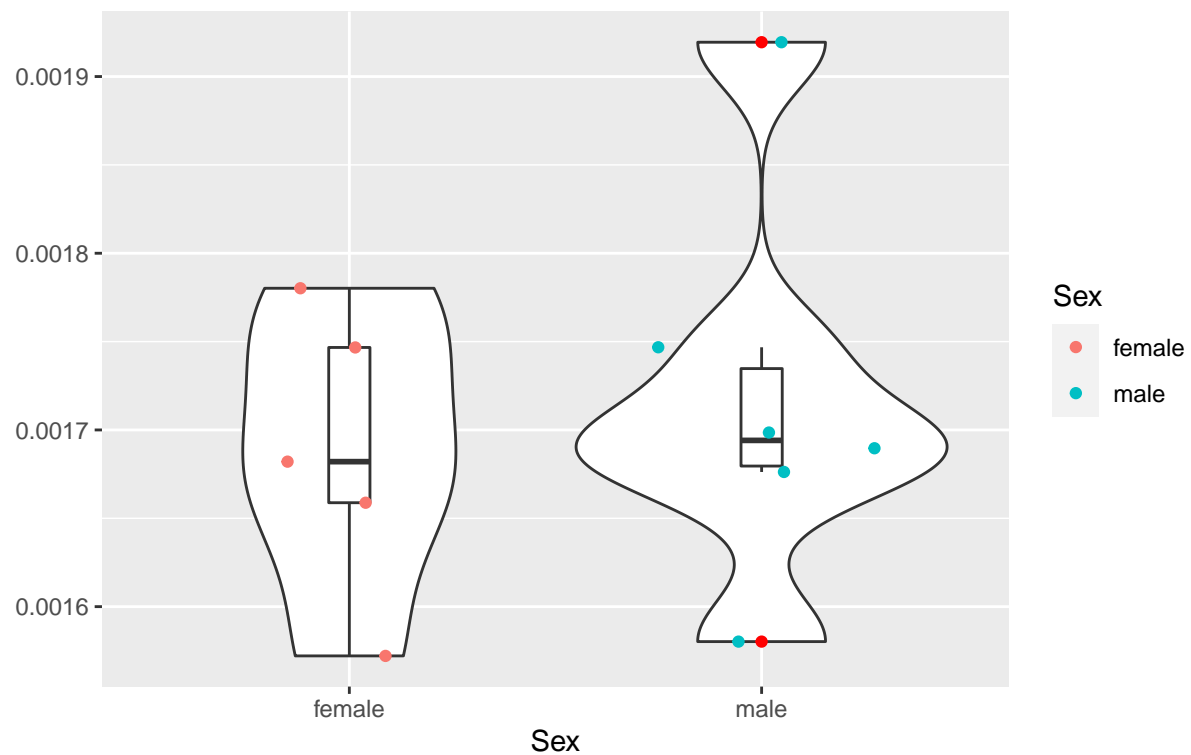


##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	4.970e-09	4.968e-09	0.406	0.54
## Residuals	9	1.101e-07	1.223e-08		



Left Cingulate Cortex Area 32

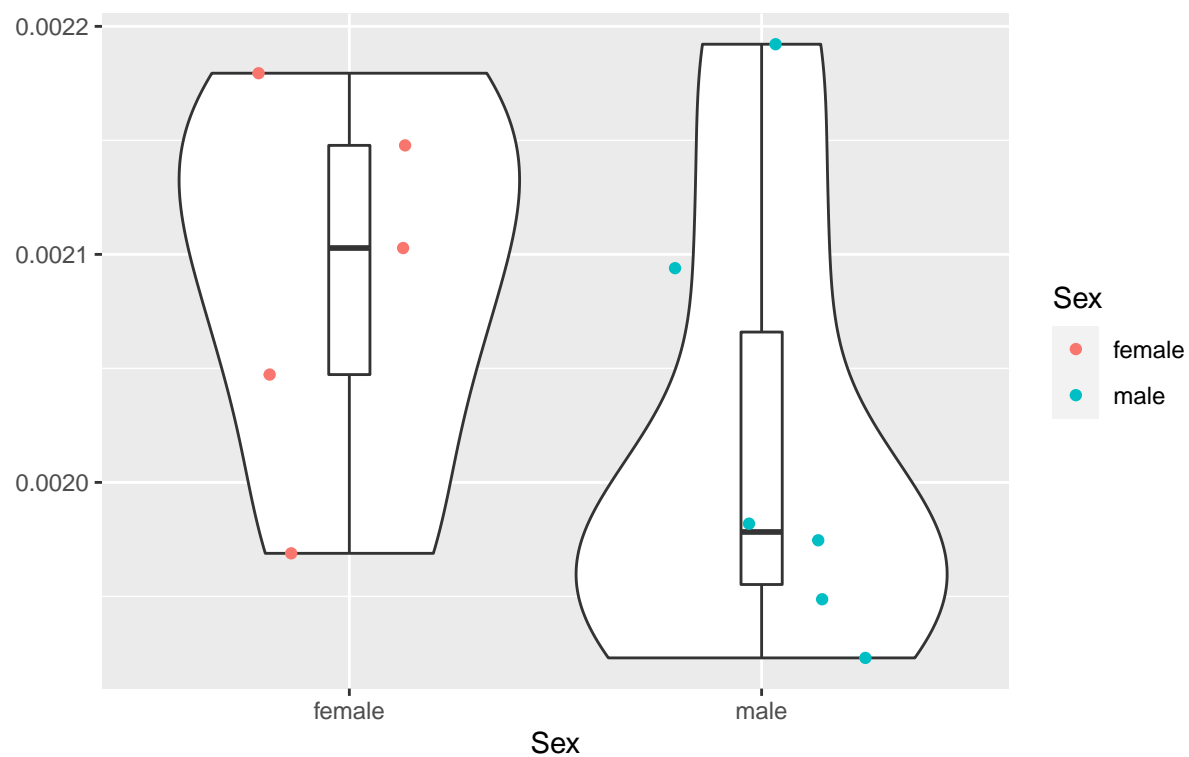
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	2.540e-09	2.537e-09	0.255	0.626
## Residuals	9	8.957e-08	9.953e-09		

Left Cingulate Cortex Area 30

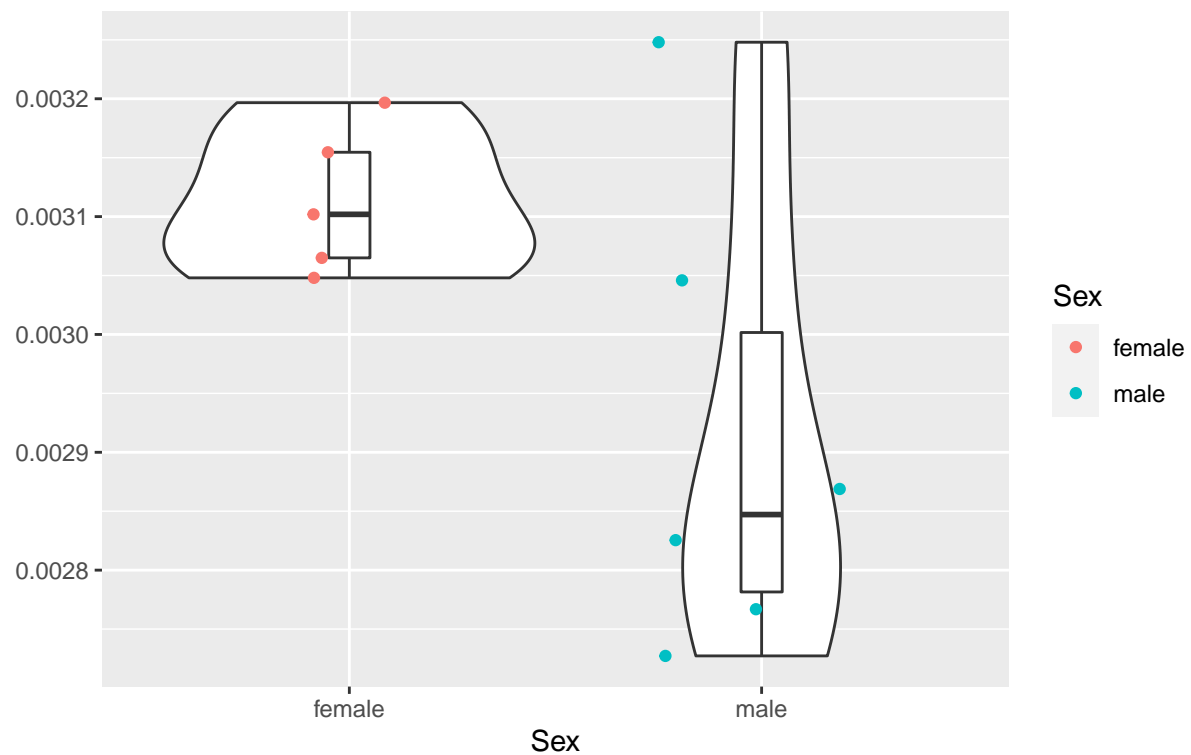
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex        1 1.343e-08 1.343e-08   1.491  0.253
## Residuals   9 8.109e-08 9.010e-09
```

Left Cingulate Cortex Area 29c

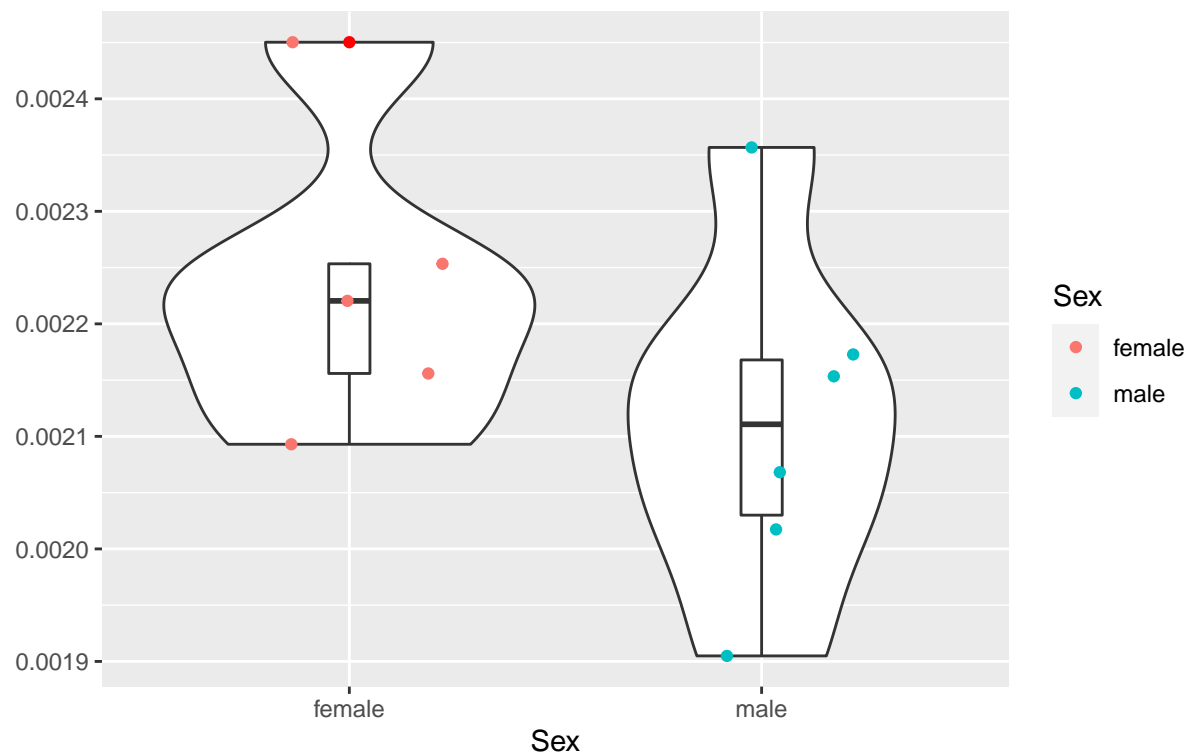
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 1.086e-07 1.086e-07   4.637 0.0597 .
## Residuals    9 2.108e-07 2.342e-08
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Left Cingulate Cortex Area 29b

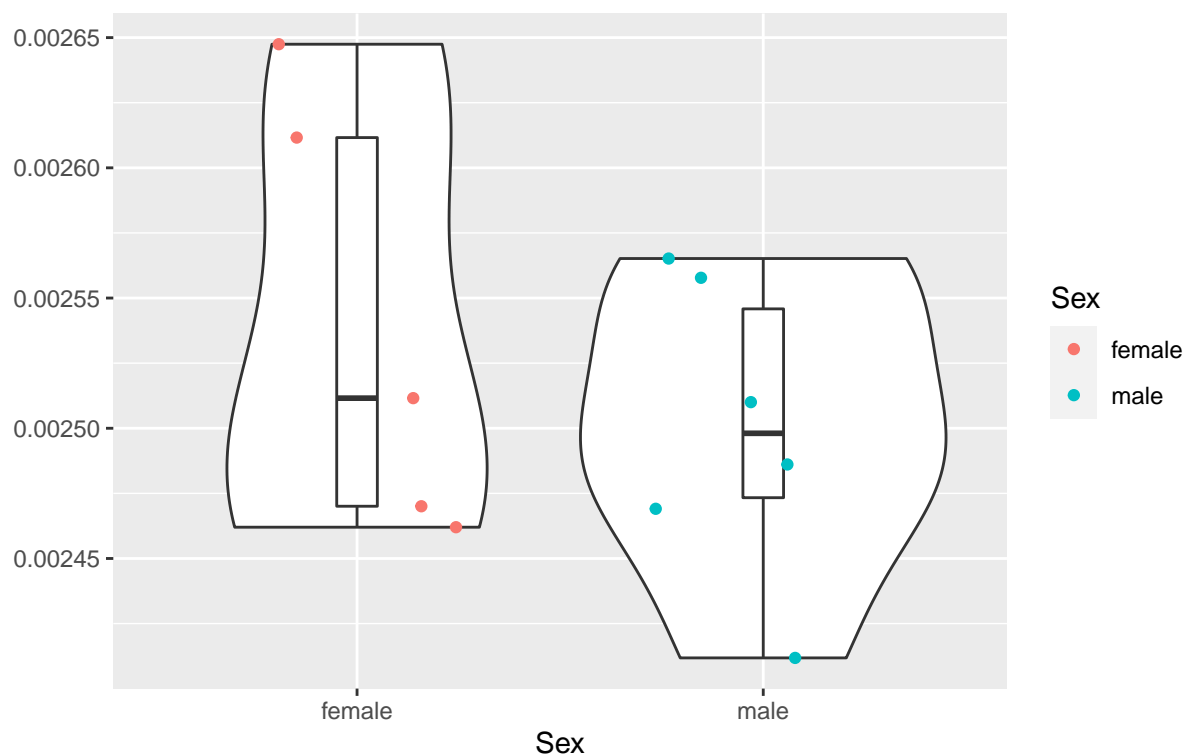
Red points denoting outliers



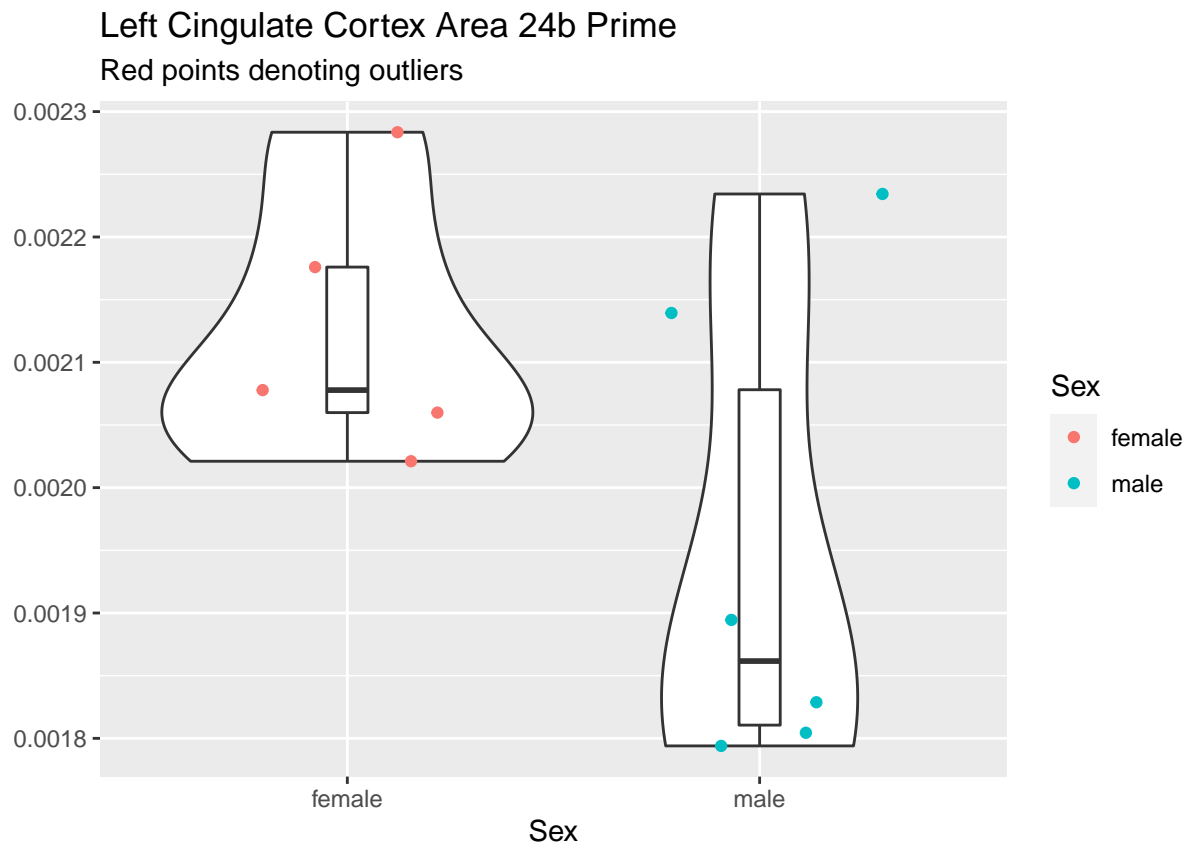
##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	4.085e-08	4.085e-08	1.91	0.2
## Residuals	9	1.924e-07	2.138e-08		

Left Cingulate Cortex Area 29a

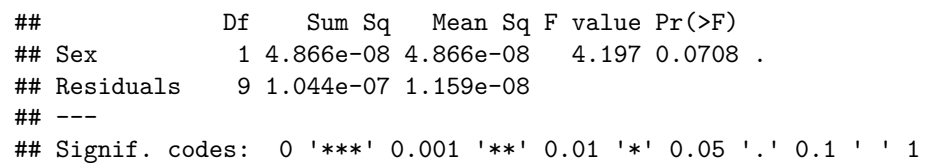
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	4.480e-09	4.483e-09	0.895	0.369
## Residuals	9	4.507e-08	5.008e-09		

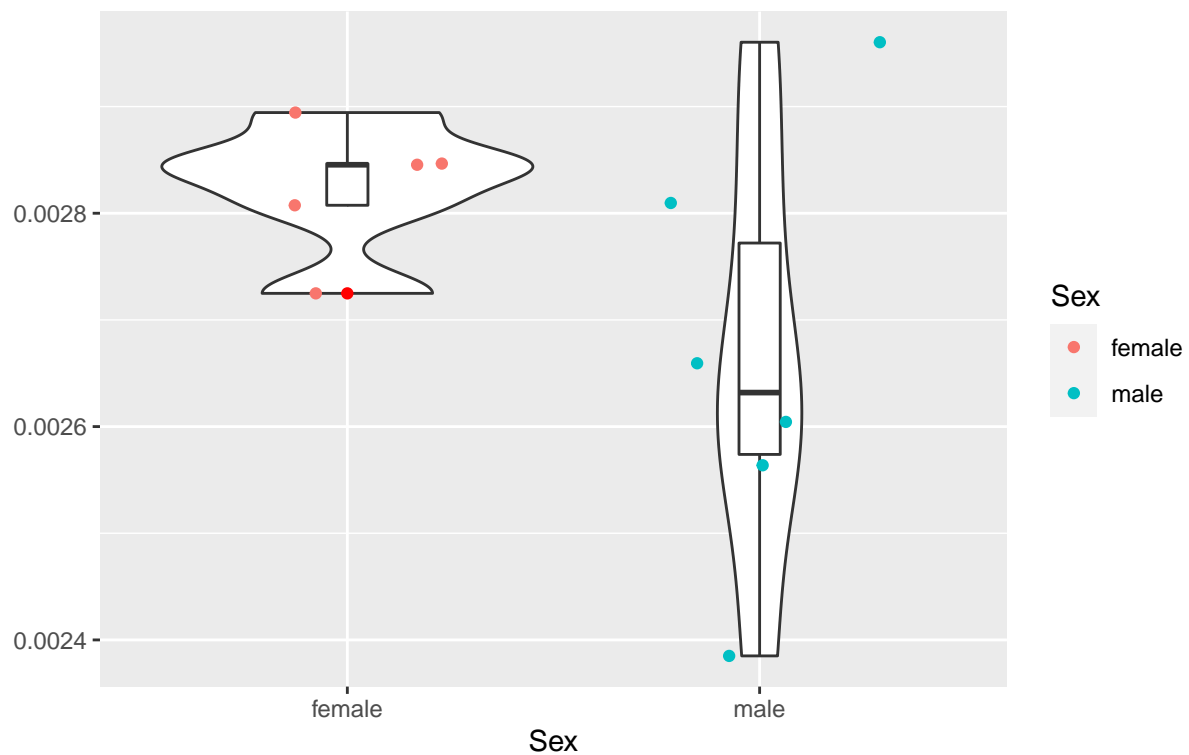


Red points denoting outliers



Left Cingulate Cortex Area 24a Prime

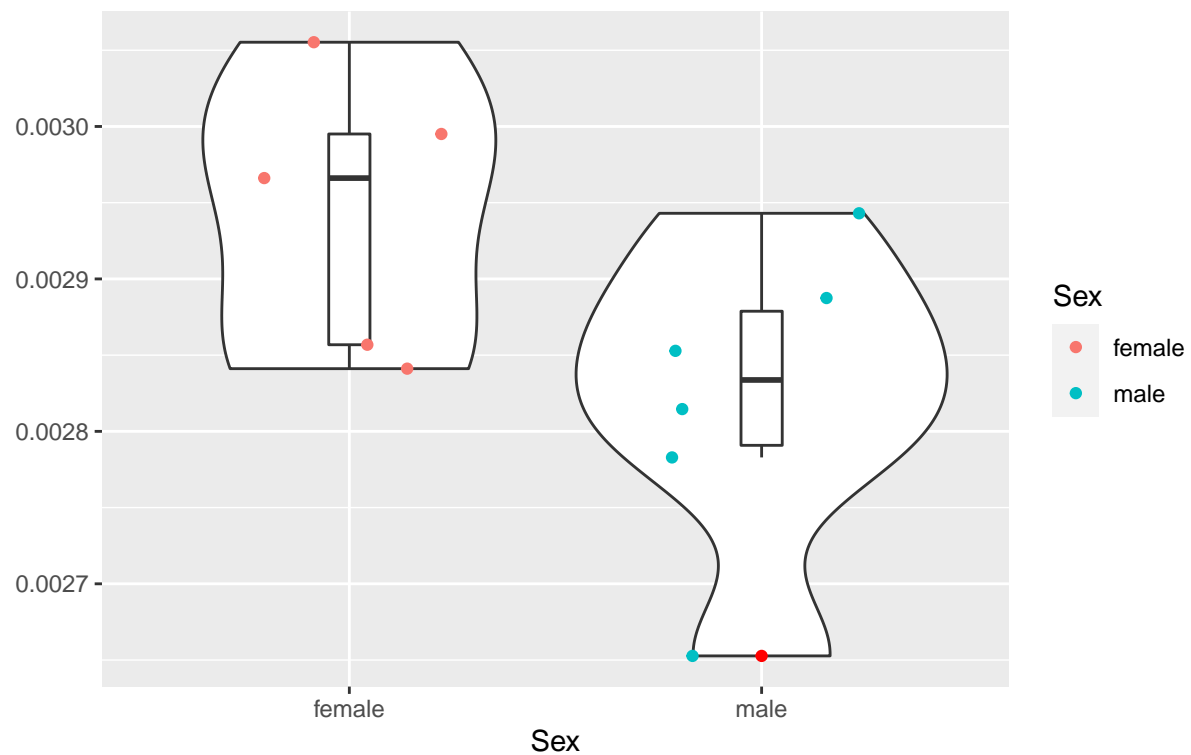
Red points denoting outliers



##	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## Sex	1	6.983e-08	6.983e-08	2.902	0.123
## Residuals	9	2.165e-07	2.406e-08		

Left Cingulate Cortex Area 24a

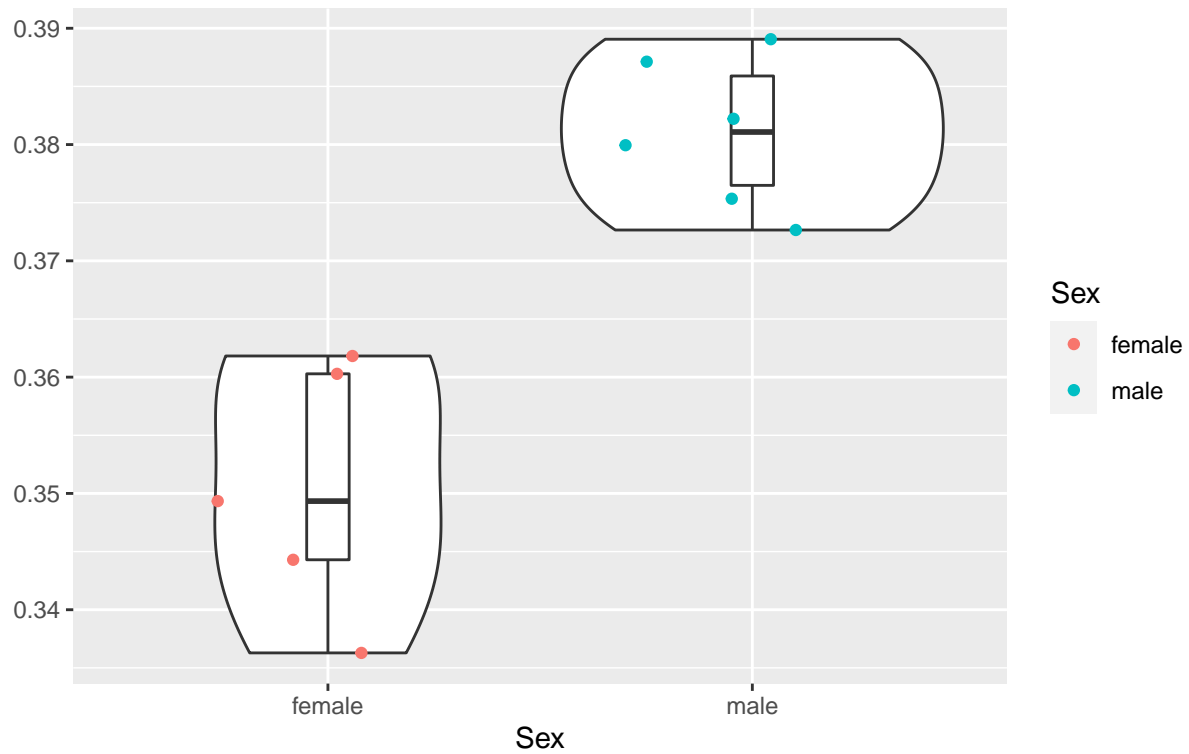
Red points denoting outliers



```
##          Df    Sum Sq  Mean Sq F value Pr(>F)
## Sex          1 3.969e-08 3.969e-08   4.263  0.069 .
## Residuals    9 8.379e-08 9.310e-09
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Exterior

Red points denoting outliers



```
##          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
```