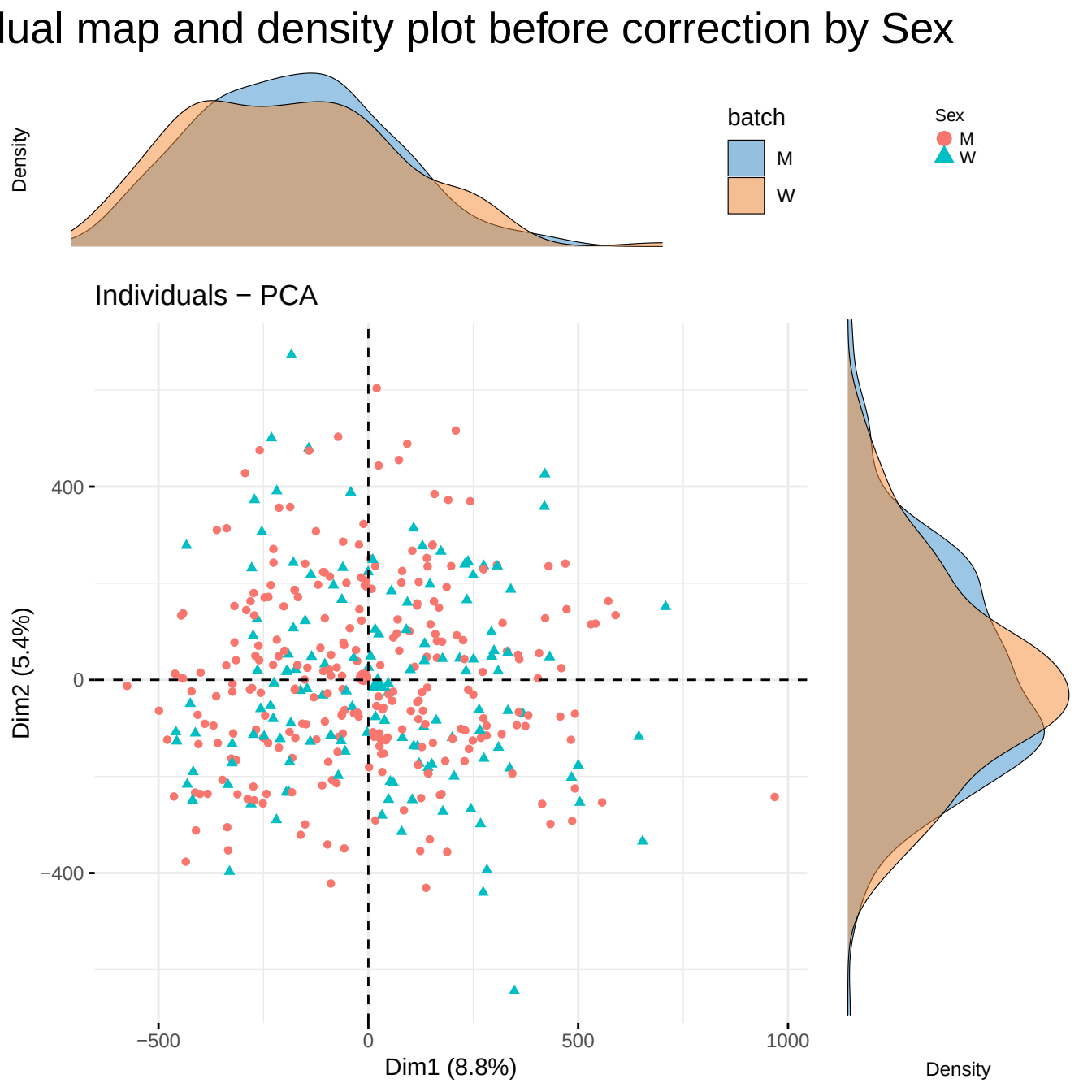
lual map and density plot before correction by Sex



Summary table of P−values for PCs before batch correction

	P_Plate	P_Slide	P_Array	P_DEX	P_Sex
PC1.Pr..F.	0.54207	0.94143	0.73818	0.06788	0.21251
PC2.Pr..F.	0.00000	0.00000	0.00000	0.84504	0.46059
PC3.Pr..F.	0.00000	0.00000	0.00001	0.75903	0.91300
PC4.Pr..F.	0.97917	0.00001	0.00147	0.97509	0.17027
PC5.Pr..F.	0.00000	0.00000	0.16026	0.92386	0.10236
PC6.Pr..F.	0.00014	0.00000	0.07470	0.92649	0.26453

ANOVA results for Plate before batch correction

```
$PC1
Analysis of Variance Table

Response: pc
                       Df   Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Plate   4   203341   50835  0.7748 0.5421
Residuals              398 26113161   65611

$PC2
Analysis of Variance Table

Response: pc
                       Df   Sum Sq Mean Sq F value    Pr(>F)
Prin.comp$Sample_Plate   4  1844092  461023  12.954 6.327e-10 ***
Residuals              398 14163944   35588
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC3
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value    Pr(>F)
Prin.comp$Sample_Plate   4  770089  192522  11.444 8.398e-09 ***
Residuals              398 6695598   16823
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC4
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Plate   4    7546  1886.6  0.1095 0.9792
Residuals              398 6856884 17228.4

$PC5
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value    Pr(>F)
Prin.comp$Sample_Plate   4  452102  113026  13.021 5.647e-10 ***
Residuals              398 3454663    8680
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC6
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value    Pr(>F)
Prin.comp$Sample_Plate   4  197778   49445  5.8353 0.0001428 ***
```

ANOVA results for Sample Group before batch correction

```
$PC1
Analysis of Variance Table

Response: pc
                       Df   Sum Sq Mean Sq F value  Pr(>F)
Prin.comp$Sample_Group   1   218130  218130  3.3516 0.06788 .
Residuals              401 26098372   65083
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC2
Analysis of Variance Table

Response: pc
                       Df   Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Group   1     1527    1527  0.0383  0.845
Residuals              401 16006508   39916

$PC3
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Group   1    1754  1753.9  0.0942  0.759
Residuals              401 7463933 18613.3

$PC4
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Group   1      17    16.7   0.001 0.9751
Residuals              401 6864414 17118.2

$PC5
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Group   1      89    89.1  0.0091 0.9239
Residuals              401 3906676  9742.3

$PC6
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Sample_Group   1      76    75.9  0.0085 0.9265
Residuals              401 3570107  8903.0
```