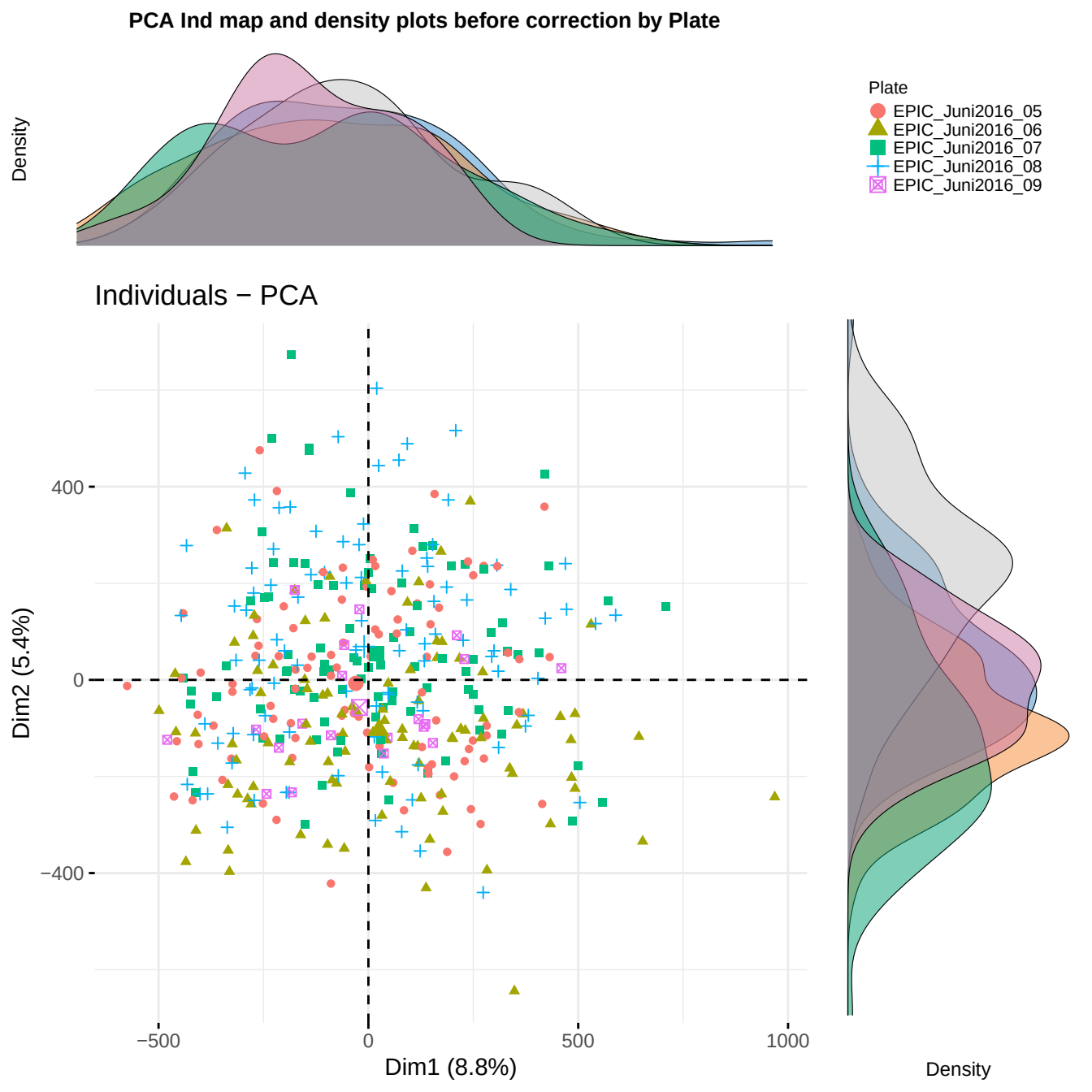
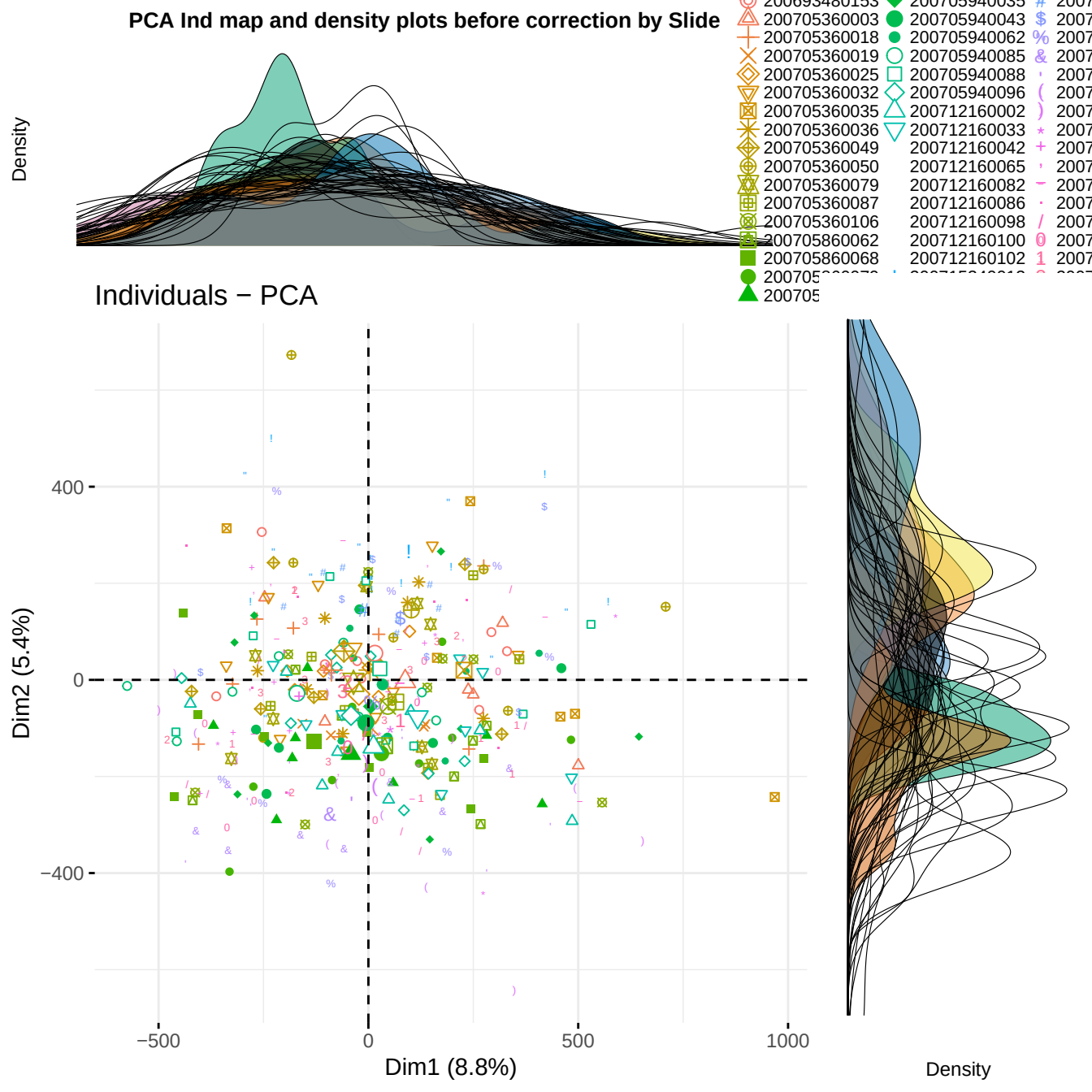
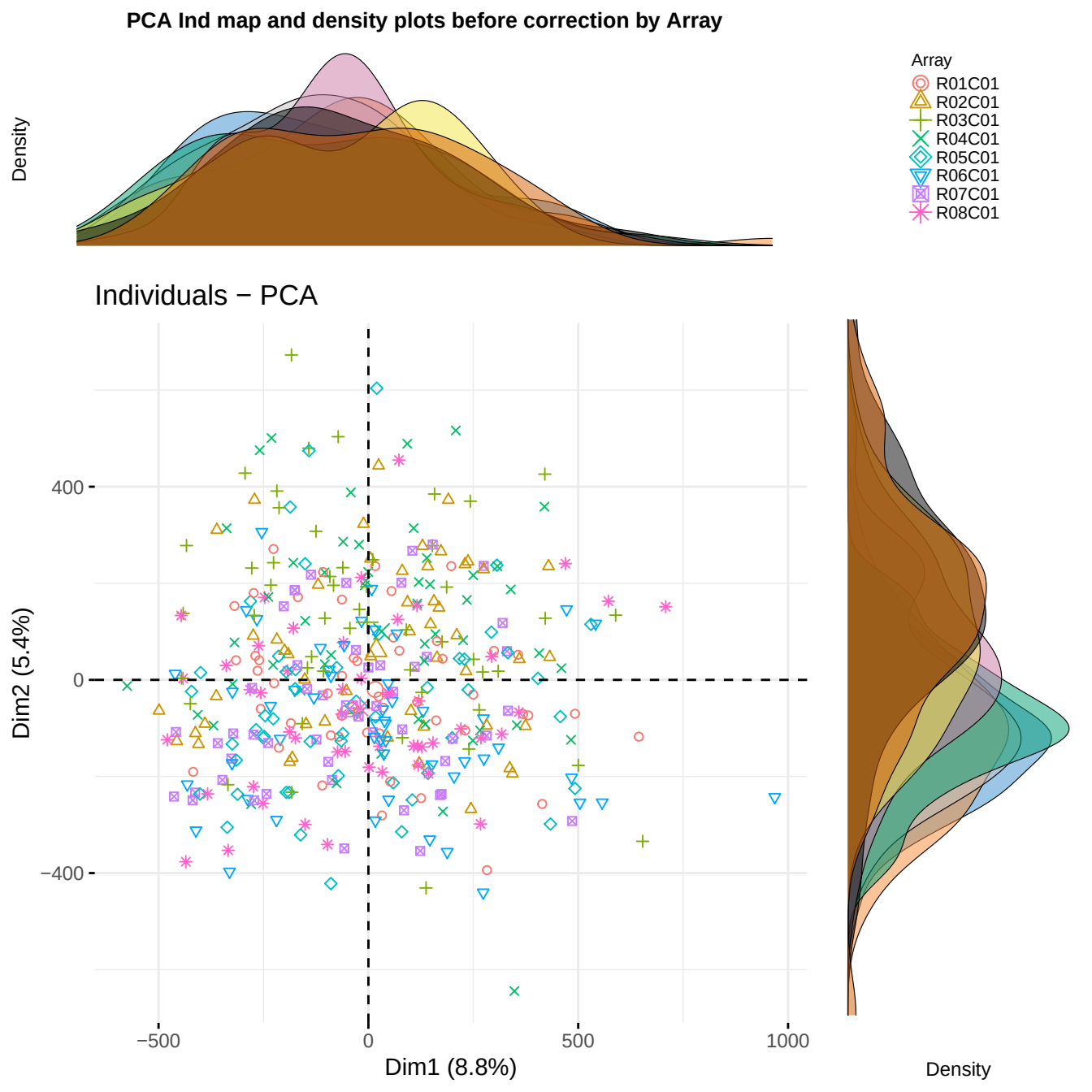
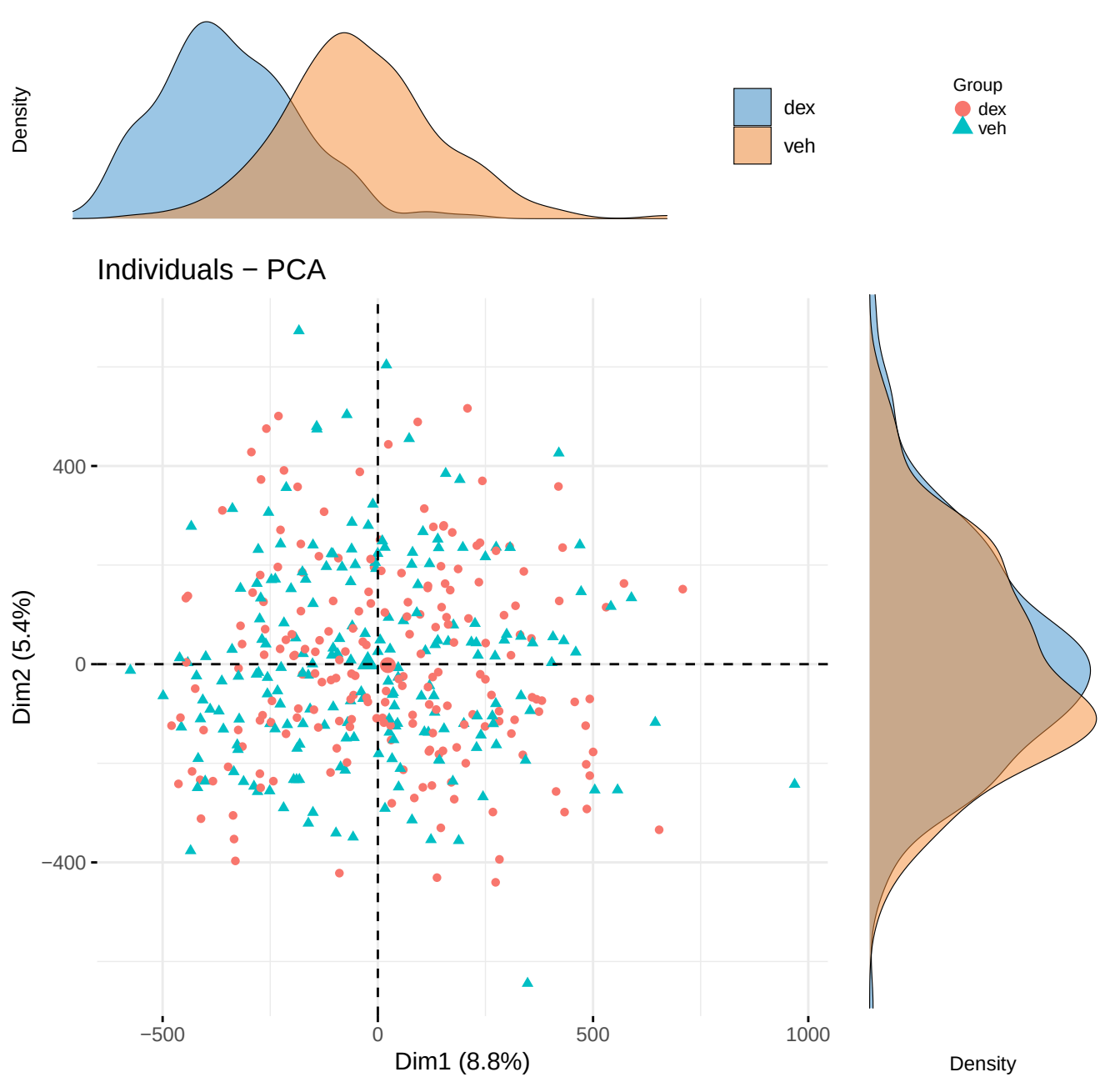
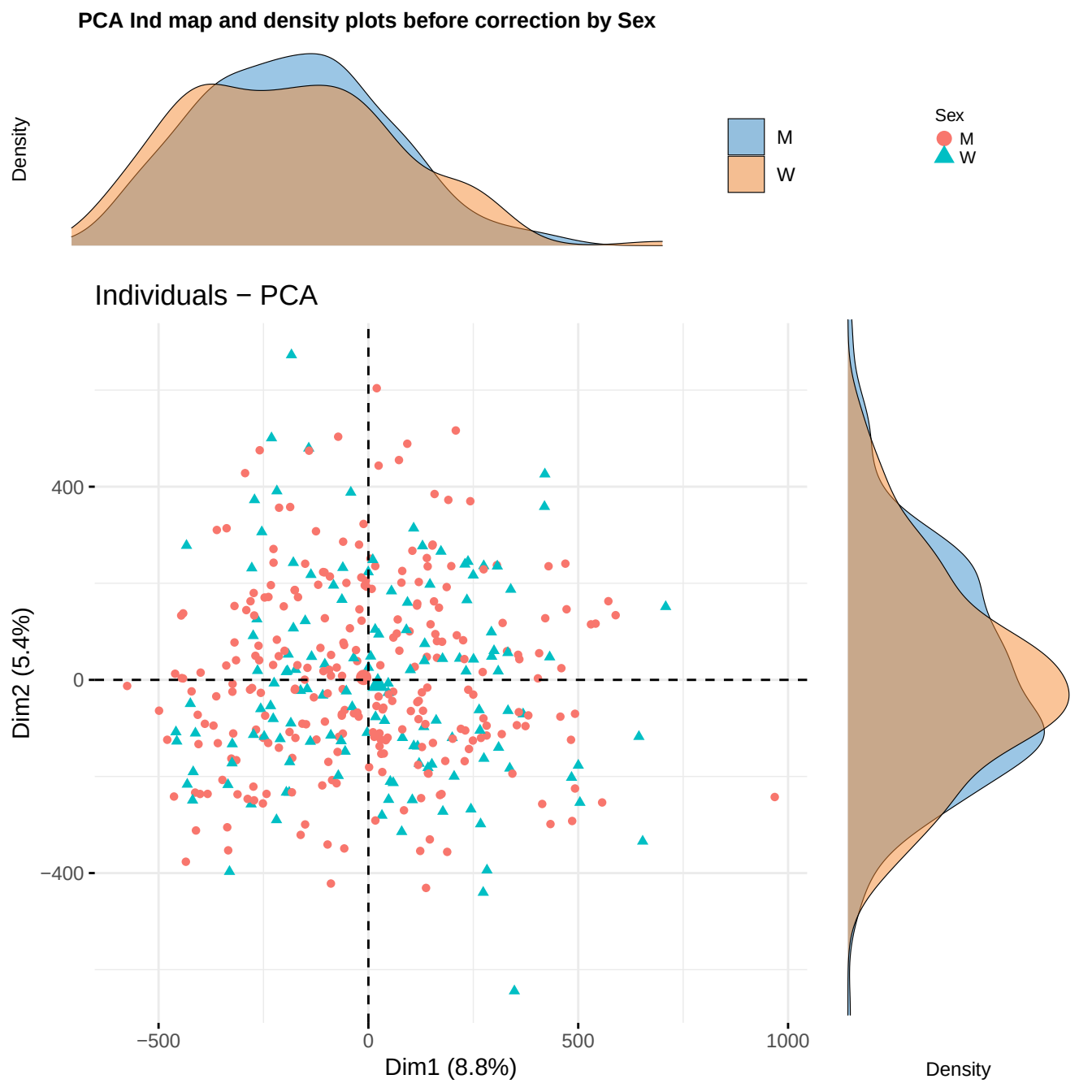

PCA Ind map and density plots before correction by Plate
Density
Plate
EPIC_Juni2016_05
EPIC_Juni2016_06
EPIC_Juni2016_07
EPIC_Juni2016_08
EPIC_Juni2016_09
Individuals − PCA
400
0
−400
Dim2 (5.4%)
−500
0
500
1000
Dim1 (8.8%)
Density


PCA Ind map and density plots before correction by Slide
Density
200705360003
200705360018
200705360019
200705360025
200705360032
200705360035
200705360036
200705360049
200705360050
200705360079
200705360087
200705360106
200705860062
200705860068
200705940043
200705940062
200705940085
200705940088
200705940096
200712160002
200712160033
200712160042
200712160065
200712160082
200712160086
200712160098
200712160100
200712160102
Individuals − PCA
400
0
−400
−500
0
500
1000
Dim2 (5.4%)
Dim1 (8.8%)
Density


PCA Ind map and density plots before correction by Array
Density
Array
R01C01
R02C01
R03C01
R04C01
R05C01
R06C01
R07C01
R08C01
Individuals − PCA
400
0
−400
Dim2 (5.4%)
−500
0
500
1000
Dim1 (8.8%)
Density

PCA Ind map and density plots before correction by Group (dex/veh)




PCA Ind map and density plots before correction by Sex
Density
M
W
Sex
M
W
Individuals − PCA
400
0
−400
Dim2 (5.4%)
−500
0
500
1000
Dim1 (8.8%)
Density

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 Slide before batch correction

```
$PC1
Analysis of Variance Table

Response: pc
                                      Df   Sum Sq Mean Sq F value Pr(>F)
as.factor(as.character(Prin.comp$Slide))  50  2366031   47321  0.6955 0.9414
Residuals                             352 23950471   68041

$PC2
Analysis of Variance Table

Response: pc
                                      Df  Sum Sq Mean Sq F value    Pr(>F)
as.factor(as.character(Prin.comp$Slide))  50 7440619  148812  6.1141 < 2.2e-16
Residuals                             352 8567416   24339

as.factor(as.character(Prin.comp$Slide)) ***
Residuals
---
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)
as.factor(as.character(Prin.comp$Slide))  50 4799877   95998  12.676 < 2.2e-16
Residuals                             352 2665809    7573

as.factor(as.character(Prin.comp$Slide)) ***
Residuals
---
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)
as.factor(as.character(Prin.comp$Slide))  50 1691450   33829  2.3019 6.411e-06
Residuals                             352 5172980   14696

as.factor(as.character(Prin.comp$Slide)) ***
Residuals
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC5
Analysis of Variance Table

Response: pc
                                      Df  Sum Sq Mean Sq F value    Pr(>F)
```

ANOVA results for Array before batch correction

```
$PC1
Analysis of Variance Table

Response: pc
                Df   Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Array   7   286711   40959  0.6215 0.7382
Residuals       395 26029791   65898

$PC2
Analysis of Variance Table

Response: pc
                Df   Sum Sq Mean Sq F value    Pr(>F)
Prin.comp$Array   7  2393835  341976   9.922 2.004e-11 ***
Residuals       395 13614200   34466
---
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$Array   7  631113   90159  5.2107 1.068e-05 ***
Residuals       395 6834573   17303
---
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$Array   7  391861   55980  3.4163 0.001473 **
Residuals       395 6472569   16386
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC5
Analysis of Variance Table

Response: pc
                Df  Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Array   7  102178 14596.8  1.5155 0.1603
Residuals       395 3804588  9631.9

$PC6
Analysis of Variance Table

Response: pc
                Df  Sum Sq Mean Sq F value Pr(>F)
Prin.comp$Array   7  113967 16281.0  1.8607 0.0747
```

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
```

ANOVA results for Sex before batch correction

```
$PC1
Analysis of Variance Table

Response: pc
               Df   Sum Sq Mean Sq F value Pr(>F)
Prin.comp$sex   1   101929  101929  1.5592 0.2125
Residuals     401 26214573   65373

$PC2
Analysis of Variance Table

Response: pc
               Df   Sum Sq Mean Sq F value Pr(>F)
Prin.comp$sex   1    21748   21748  0.5455 0.4606
Residuals     401 15986288   39866

$PC3
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
Prin.comp$sex   1     223   222.5   0.012  0.913
Residuals     401 7465464 18617.1

$PC4
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
Prin.comp$sex   1   32156   32156  1.8873 0.1703
Residuals     401 6832274   17038

$PC5
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
Prin.comp$sex   1   25943 25943.5  2.6807 0.1024
Residuals     401 3880822  9677.9

$PC6
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
Prin.comp$sex   1   11080 11080.3  1.2484 0.2645
Residuals     401 3559103  8875.6
```