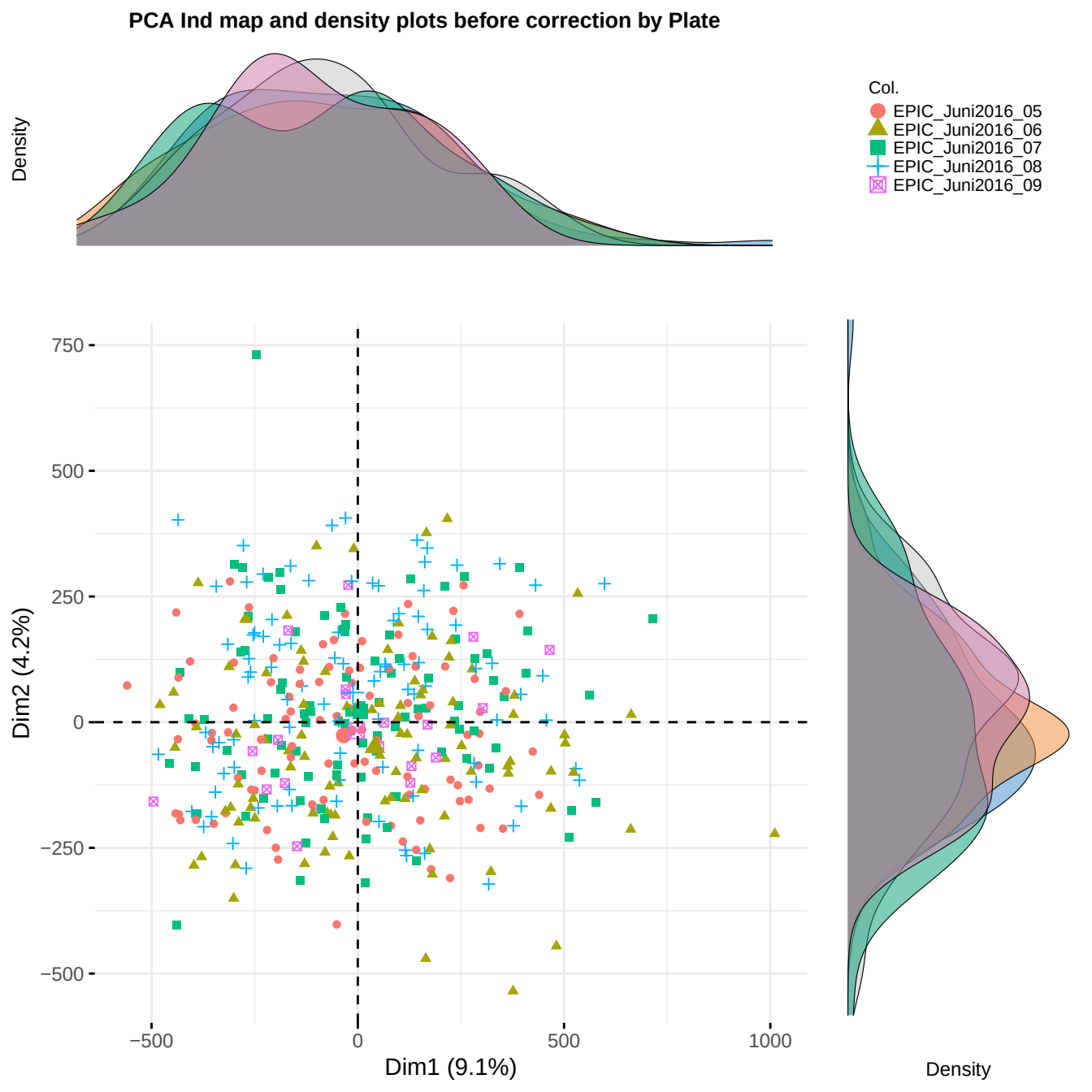
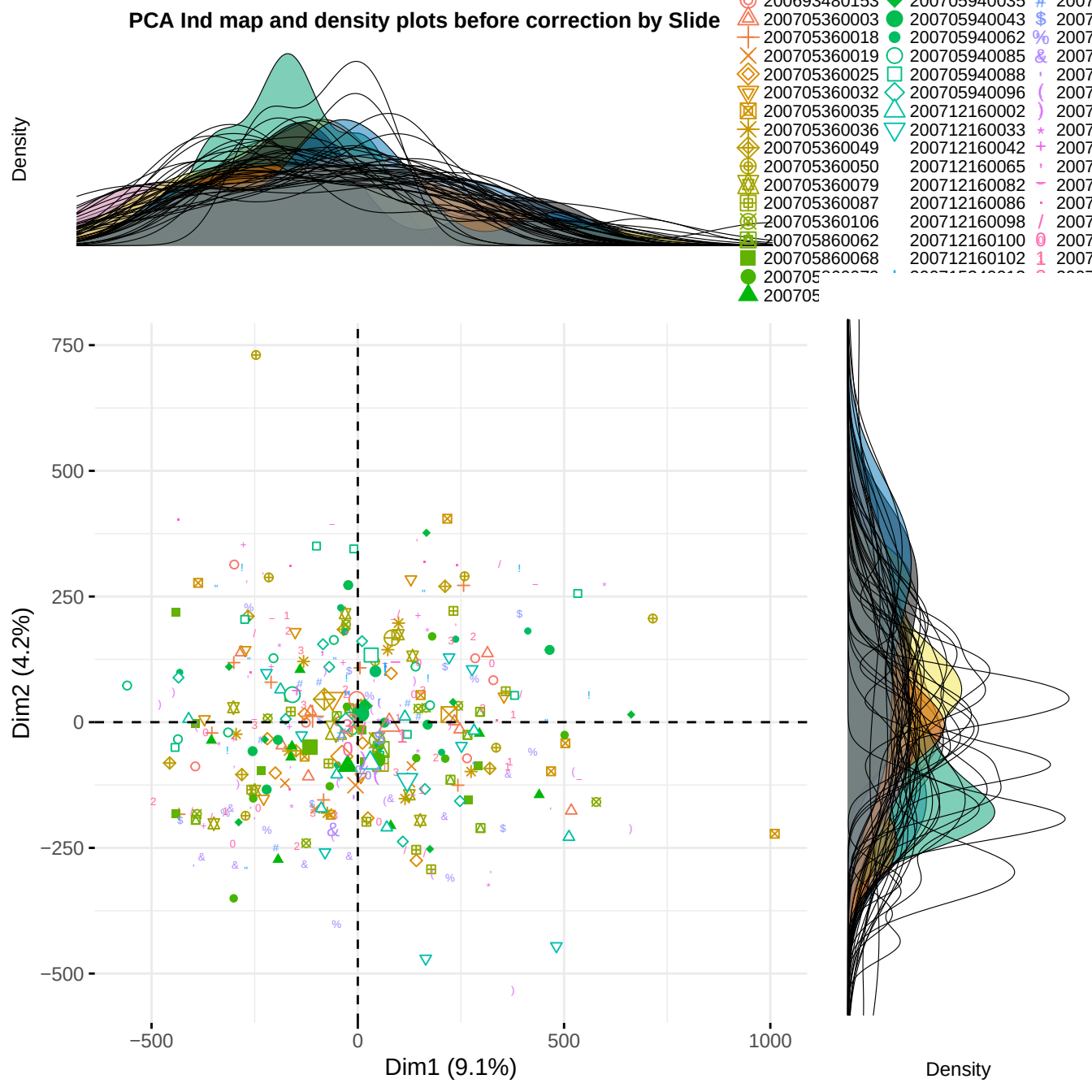
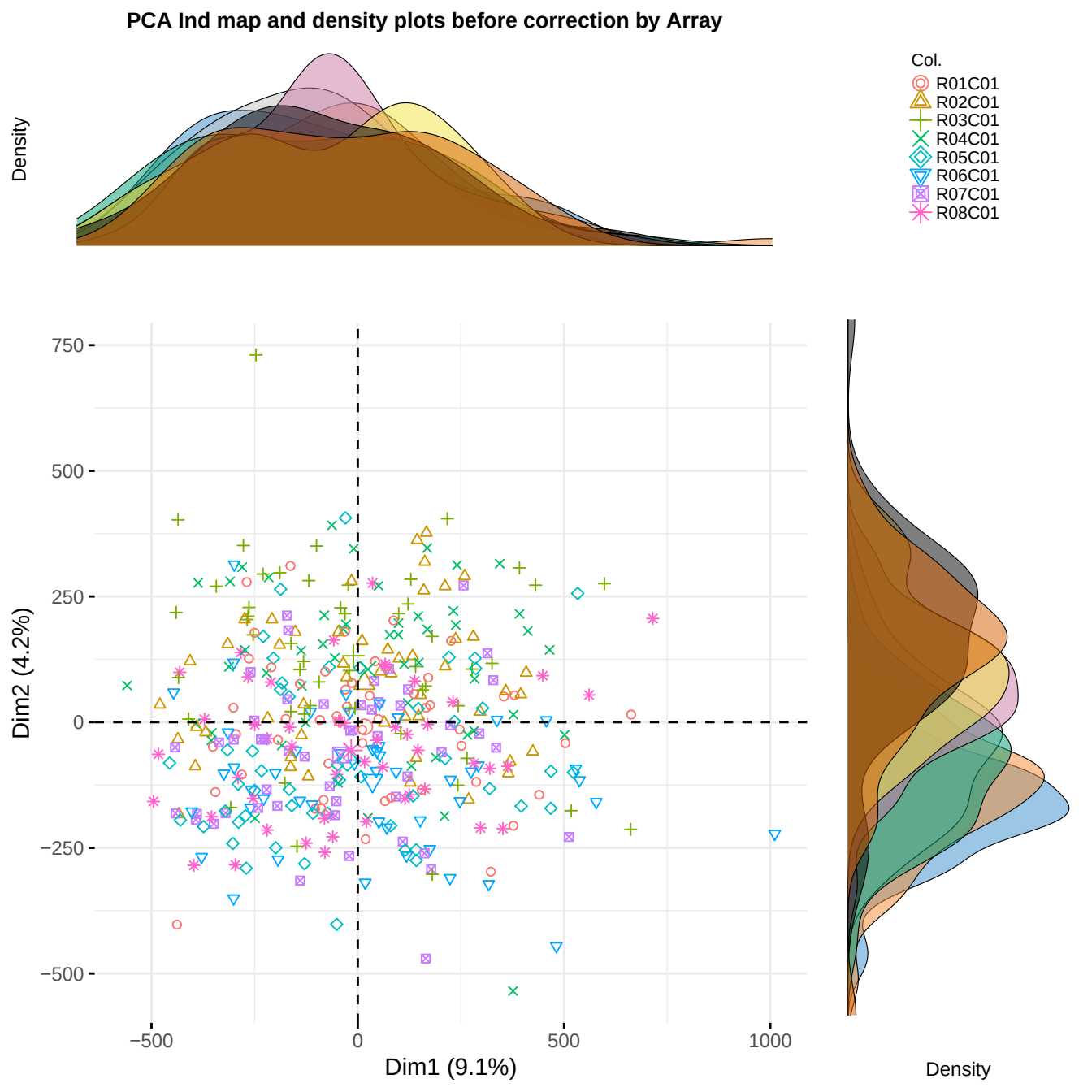
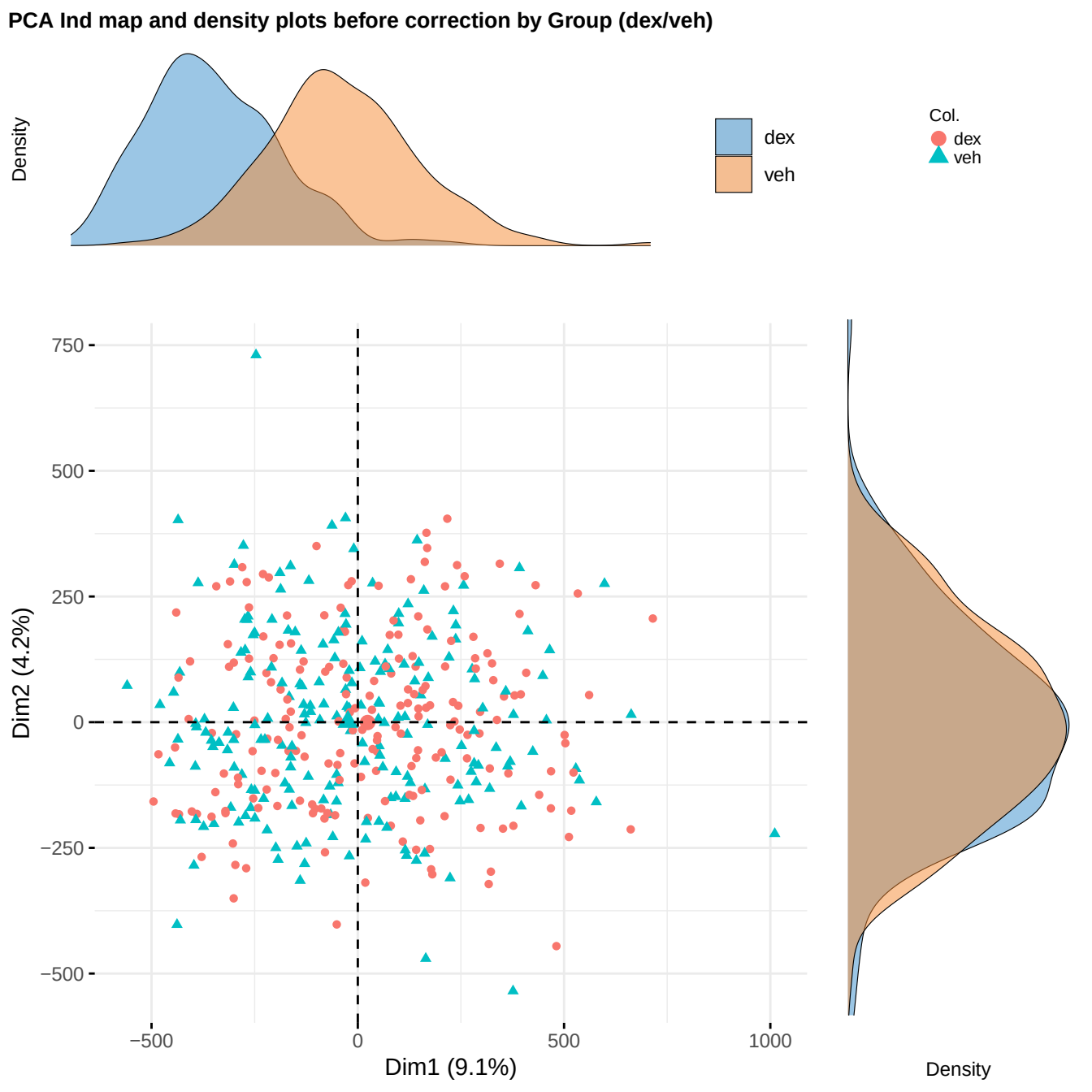
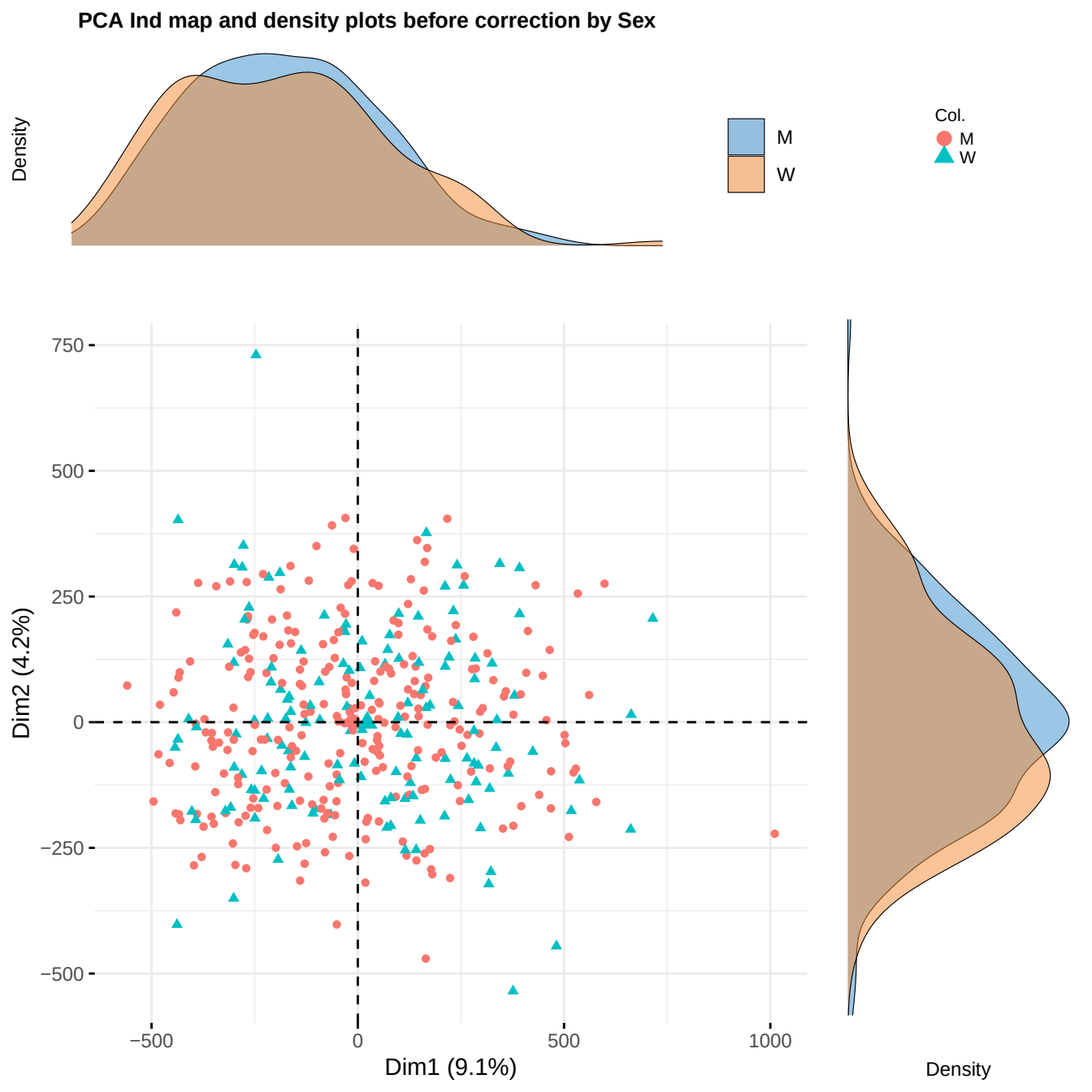

PCA Ind map and density plots before correction by Plate
Density
Col.
EPIC_Juni2016_05
EPIC_Juni2016_06
EPIC_Juni2016_07
EPIC_Juni2016_08
EPIC_Juni2016_09
750
500
250
0
−250
−500
Dim2 (4.2%)
−500
0
500
1000
Dim1 (9.1%)
Density


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
750
500
250
0
−250
−500
−500
0
500
1000
Dim2 (4.2%)
Dim1 (9.1%)
Density


PCA Ind map and density plots before correction by Array
Density
Col.
R01C01
R02C01
R03C01
R04C01
R05C01
R06C01
R07C01
R08C01
750
500
250
0
−250
−500
Dim2 (4.2%)
−500
0
500
1000
Dim1 (9.1%)
Density


PCA Ind map and density plots before correction by Group (dex/veh)
Density
dex
veh
Col.
dex
veh
750
500
250
0
−250
−500
Dim2 (4.2%)
−500
0
500
1000
Dim1 (9.1%)
Density


PCA Ind map and density plots before correction by Sex
Density
M
W
Col.
M
W
750
500
250
0
−250
−500
Dim2 (4.2%)
−500
0
500
1000
Dim1 (9.1%)
Density

Summary table of P−values for PCs before batch correction

	P_Plate	P_Slide	P_Array	P_DEX	P_Sex
PC1.Pr..F.	0.9953228	9.986590e−01	8.248444e−01	9.768054e−56	0.70463336
PC2.Pr..F.	0.5363231	1.293946e−06	9.977032e−43	8.681550e−01	0.23994564
PC3.Pr..F.	0.9897928	1.018913e−05	2.594093e−04	2.810230e−04	0.35226088
PC4.Pr..F.	0.3329909	1.002059e−69	2.407481e−12	2.692108e−01	0.03337598
PC5.Pr..F.	0.8656661	1.942206e−14	8.713195e−01	8.022871e−01	0.36576084
PC6.Pr..F.	0.5378307	1.471388e−12	2.100520e−02	3.703995e−02	0.58709252

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    13644    3411  0.0499 0.9953
Residuals               398 27217439   68386

$PC2
Analysis of Variance Table

Response: pc
                         Df   Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate    4    96929   24232  0.7836 0.5363
Residuals               398 12307924   30924

$PC3
Analysis of Variance Table

Response: pc
                         Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate    4    5148  1286.9  0.0749 0.9898
Residuals               398 6836231 17176.5

$PC4
Analysis of Variance Table

Response: pc
                         Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate    4   49793   12448  1.1491  0.333
Residuals               398 4311529   10833

$PC5
Analysis of Variance Table

Response: pc
                         Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate    4   11435  2858.9  0.3184 0.8657
Residuals               398 3573966  8979.8

$PC6
Analysis of Variance Table

Response: pc
                         Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate    4   26538  6634.5  0.7813 0.5378
Residuals               398 3379738  8491.8

$PC7
Analysis of Variance Table

Response: pc
```

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  1768607   35372   0.489 0.9987
Residuals                             352 25462477   72337

$PC2
Analysis of Variance Table

Response: pc
                                      Df  Sum Sq Mean Sq F value    Pr(>F)
as.factor(as.character(prin.comp$Slide))  50 3195185   63904  2.4424 1.294e-06
Residuals                             352 9209668   26164

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 1662880   33258  2.2606 1.019e-05
Residuals                             352 5178499   14712

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 3124977   62500  17.794 < 2.2e-16
Residuals                             352 1236345    3512

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   245310   35044   0.513 0.8248
Residuals       395 26985773   68318

$PC2
Analysis of Variance Table

Response: pc
                Df  Sum Sq Mean Sq F value    Pr(>F)
prin.comp$Array   7 5173291  739042  40.368 < 2.2e-16 ***
Residuals       395 7231561   18308
---
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  458983   65569   4.058 0.0002594 ***
Residuals       395 6382396   16158
---
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  694600   99229   10.69 2.407e-12 ***
Residuals       395 3666722    9283
---
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   28252  4036.0  0.4482 0.8713
Residuals       395 3557150  9005.4

$PC6
Analysis of Variance Table

Response: pc
                Df  Sum Sq Mean Sq F value  Pr(>F)
prin.comp$Array   7  138413 19773.3  2.3901 0.02101 *
```

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 12546928 12546928  342.64 < 2.2e-16 ***
Residuals              401 14684155    36619
---
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      853   853.5  0.0276 0.8682
Residuals              401 12403999 30932.7

$PC3
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value   Pr(>F)
prin.comp$Sample_Group   1  221689  221689  13.429 0.000281 ***
Residuals              401 6619690   16508
---
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_Group   1   13273   13274  1.2242 0.2692
Residuals              401 4348048   10843

$PC5
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Group   1     561   561.2  0.0628 0.8023
Residuals              401 3584840  8939.8

$PC6
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value  Pr(>F)
prin.comp$Sample_Group   1   36785   36785  4.3777 0.03704 *
Residuals              401 3369491    8403
---
```

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     9769    9769  0.1439 0.7046
Residuals     401 27221315   67884

$PC2
Analysis of Variance Table

Response: pc
               Df   Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1    42698   42698   1.385 0.2399
Residuals     401 12362154   30828

$PC3
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1   14765   14765  0.8673 0.3523
Residuals     401 6826614   17024

$PC4
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value  Pr(>F)
prin.comp$sex   1   49013   49013  4.5577 0.03338 *
Residuals     401 4312308   10754
---
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$sex   1    7316  7315.7  0.8199 0.3658
Residuals     401 3578086  8922.9

$PC6
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1    2507  2507.3  0.2954 0.5871
Residuals     401 3403769  8488.2

$PC7
Analysis of Variance Table
```