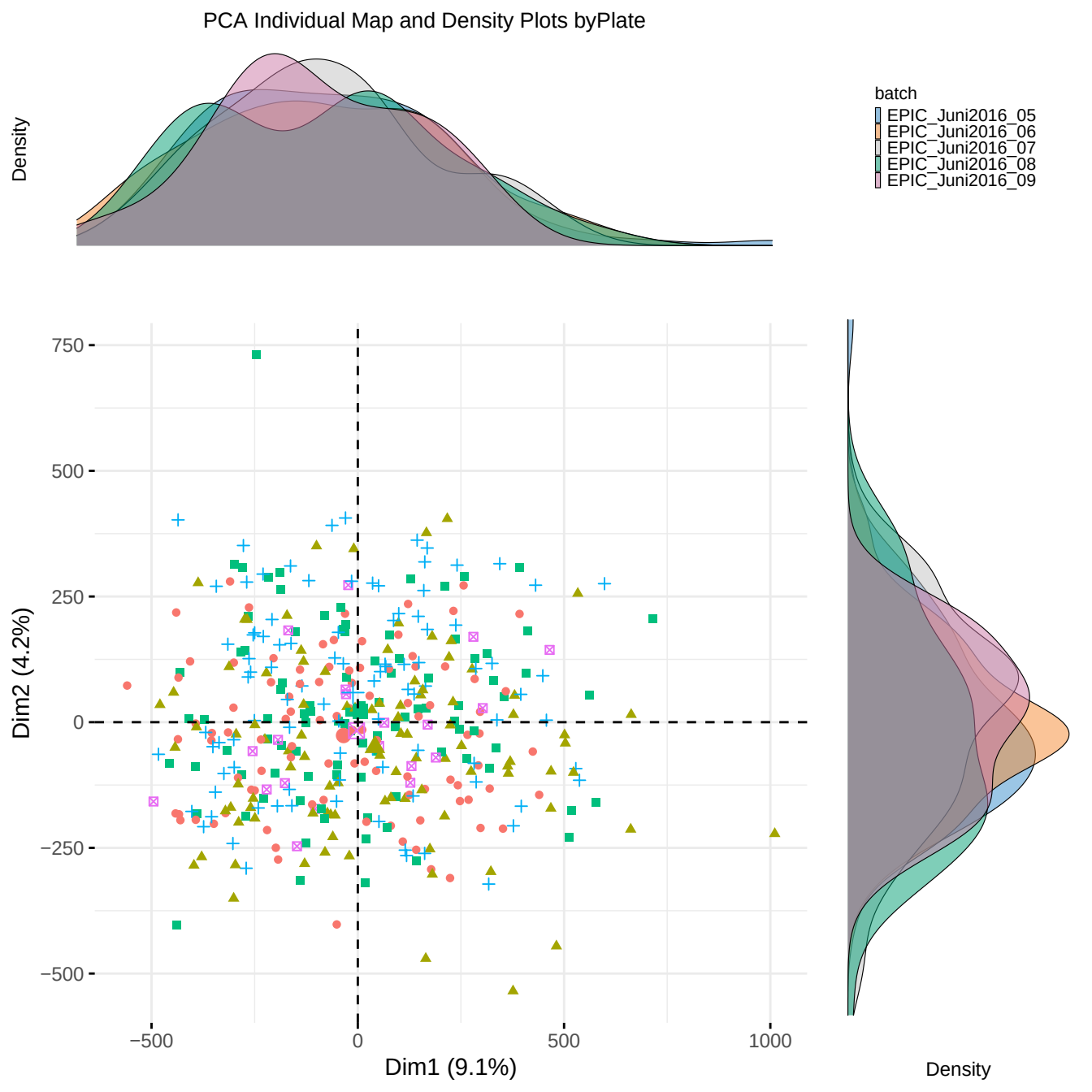
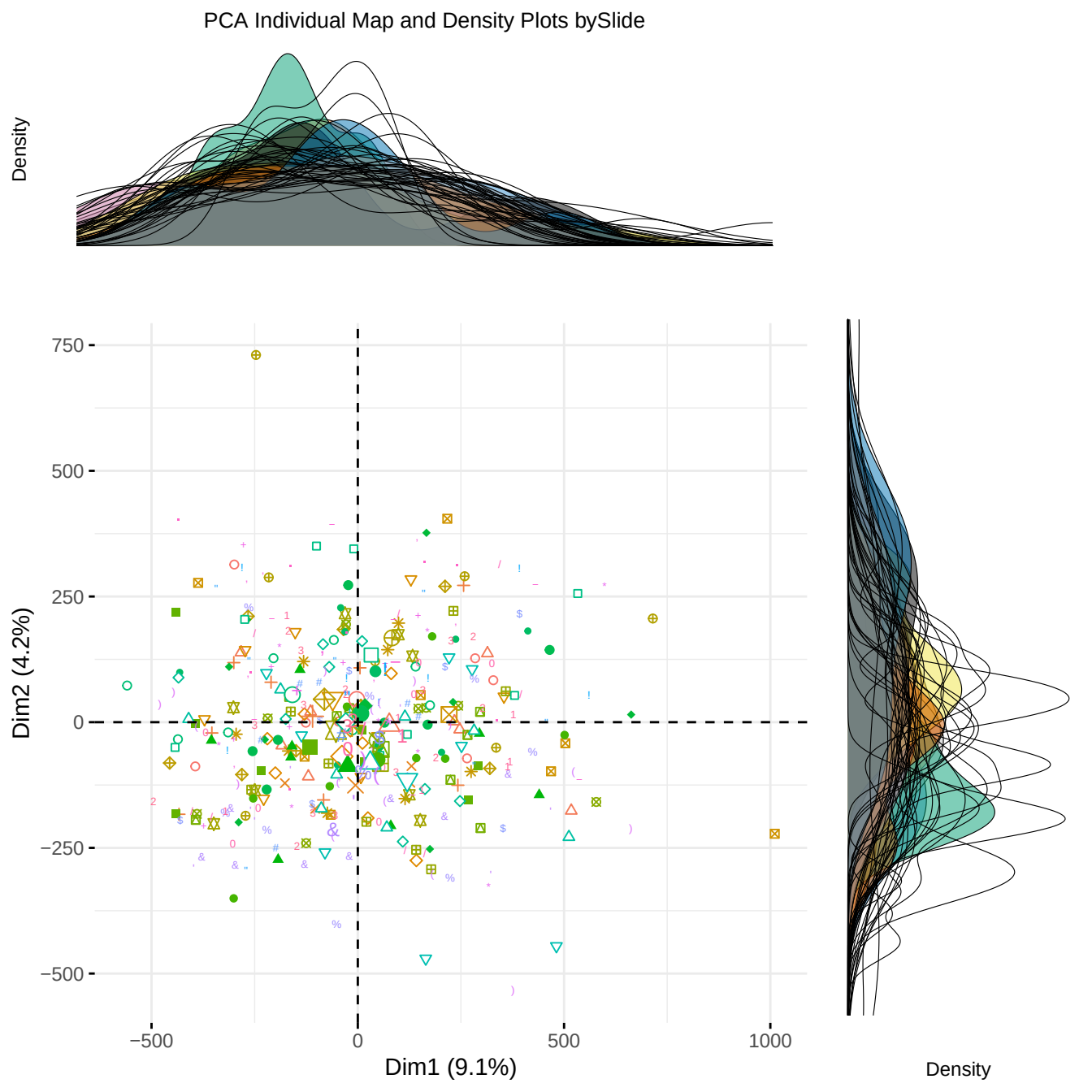
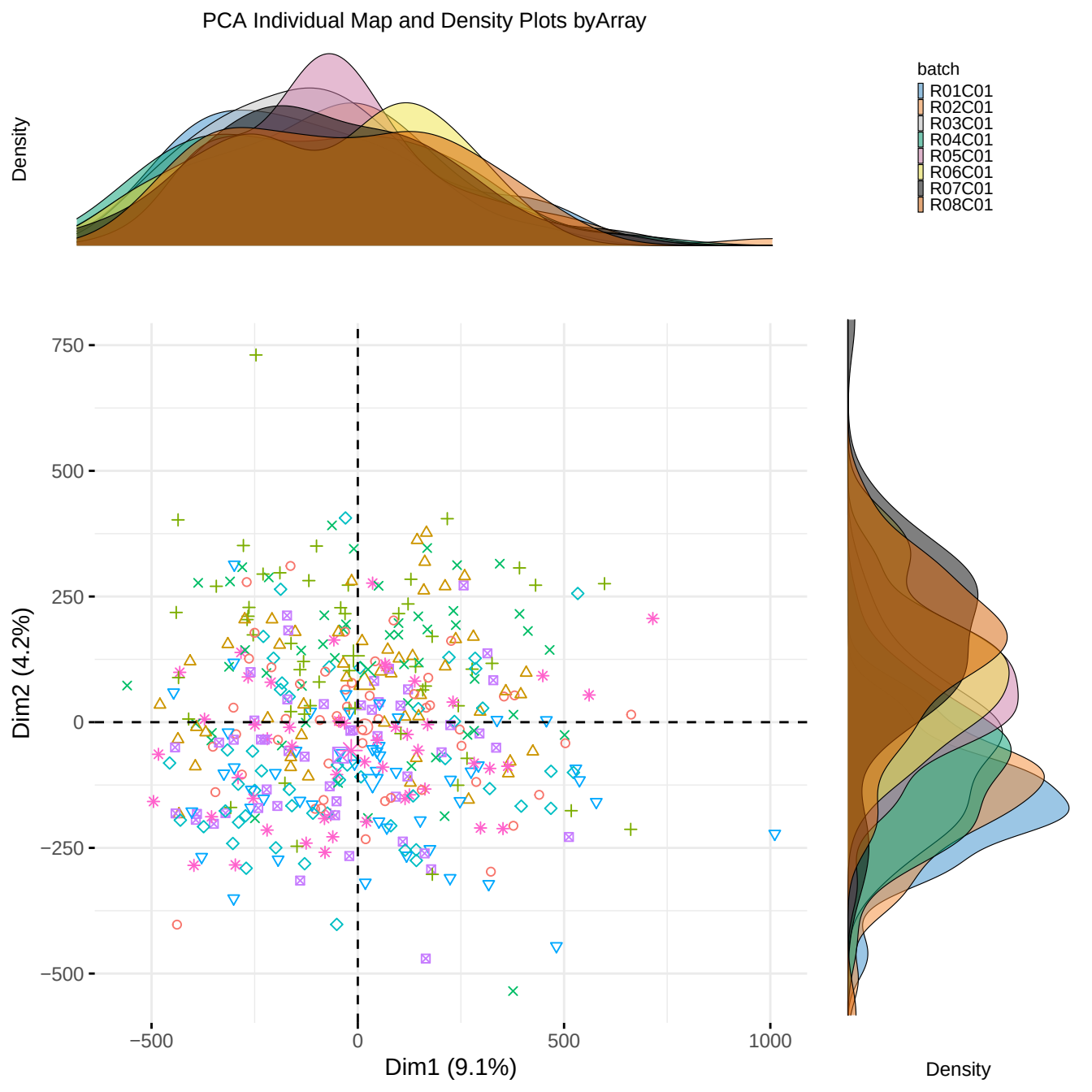
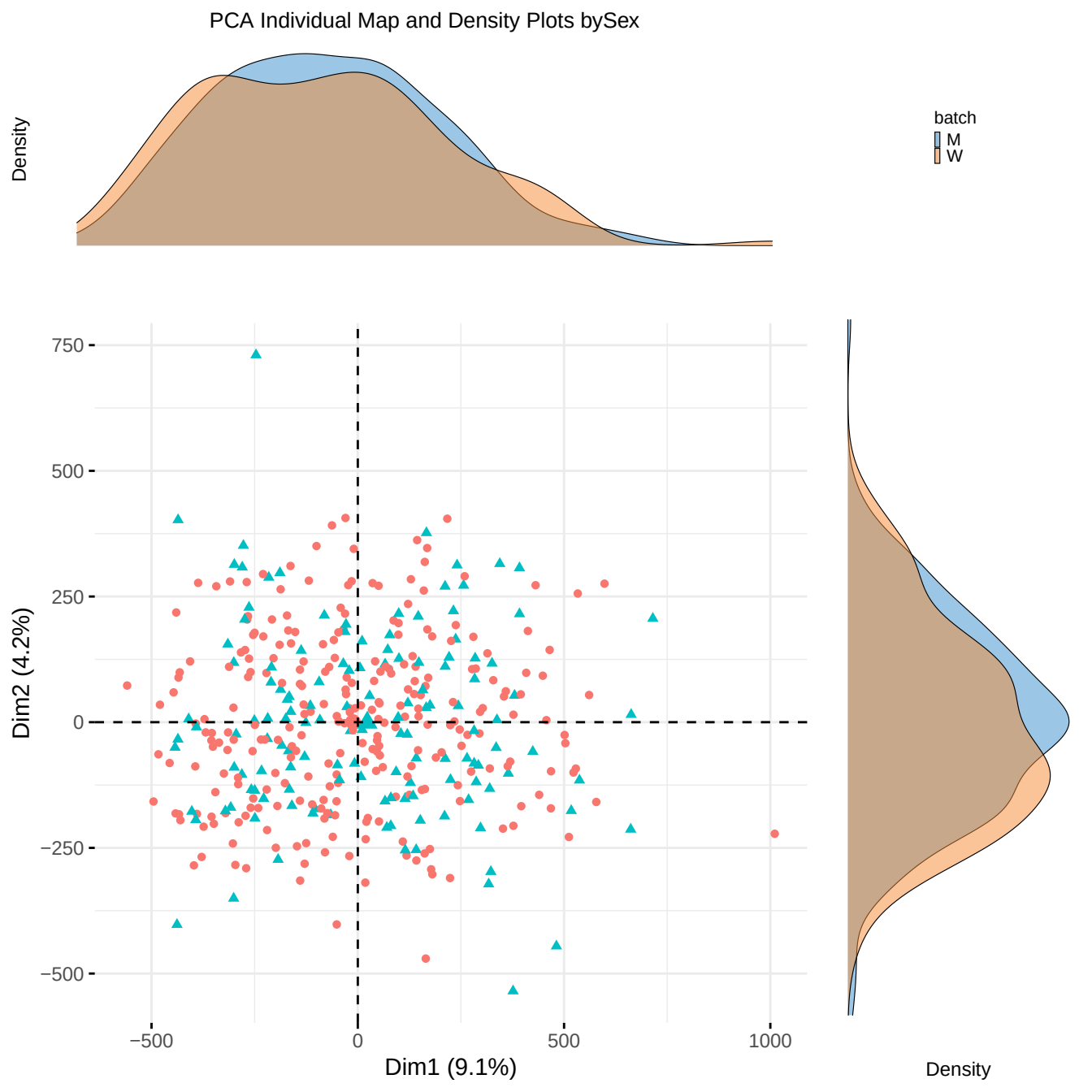
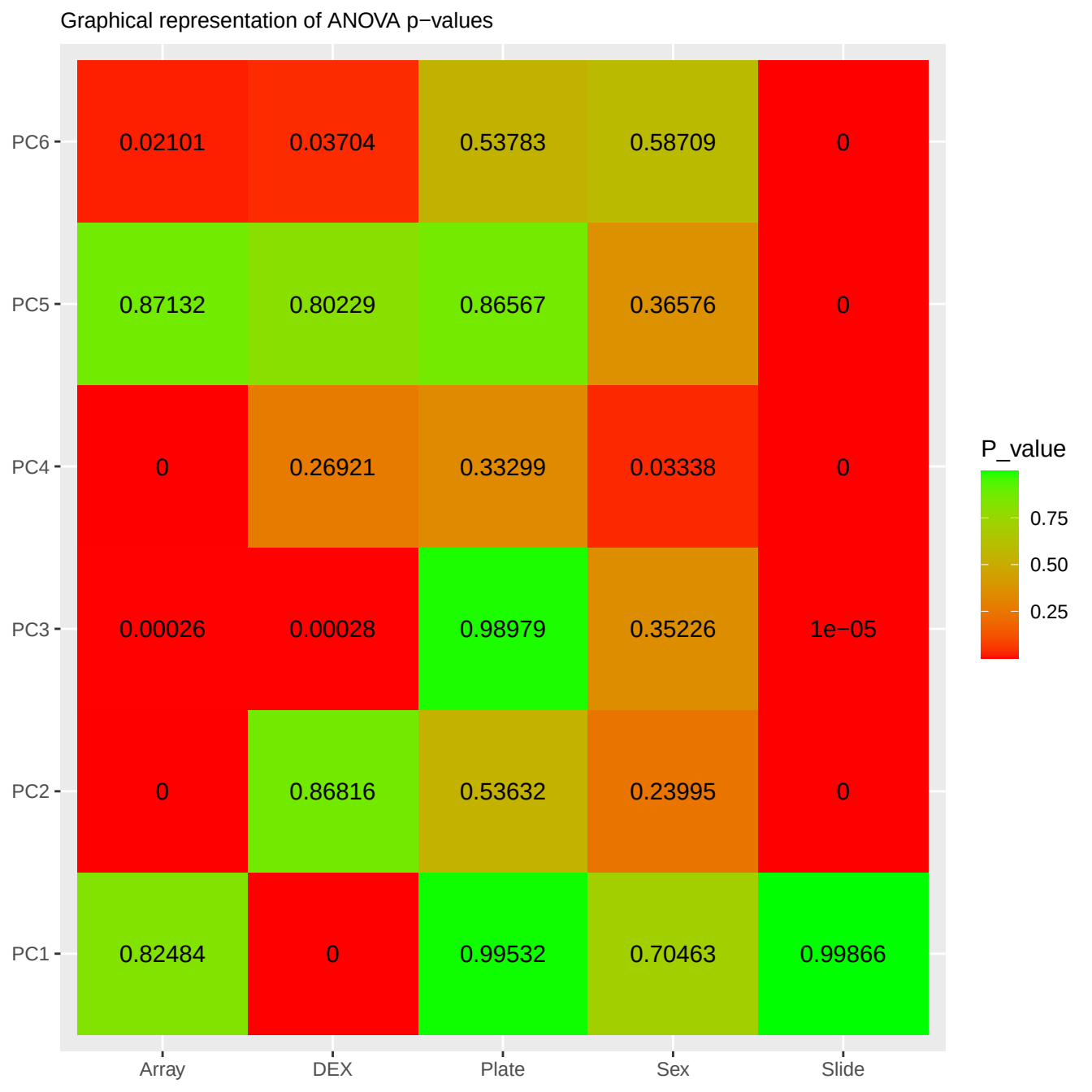

PCA Individual Map and Density Plots byPlate
Density
batch
EPIC_Juni2016_05
EPIC_Juni2016_06
EPIC_Juni2016_07
EPIC_Juni2016_08
EPIC_Juni2016_09
750
500
250
0
−250
−500
Dim2 (4.2%)
−500
0
500
1000
Dim1 (9.1%)
Density


PCA Individual Map and Density Plots bySlide
Density
750
500
250
0
−250
−500
Dim2 (4.2%)
−500
0
500
1000
Dim1 (9.1%)
Density


PCA Individual Map and Density Plots byArray
Density
batch
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 Individual Map and Density Plots byGroup (dex/veh)
Density
batch
dex
veh
750
500
250
0
−250
−500
Dim2 (4.2%)
−500
0
500
1000
Dim1 (9.1%)
Density


PCA Individual Map and Density Plots bySex
Density
batch
M
W
750
500
250
0
−250
−500
Dim2 (4.2%)
−500
0
500
1000
Dim1 (9.1%)
Density


Graphical representation of ANOVA p−values
PC6
PC5
PC4
PC3
PC2
PC1
0.02101
0.03704
0.53783
0.58709
0
0.87132
0.80229
0.86567
0.36576
0
0
0.26921
0.33299
0.03338
0
0.00026
0.00028
0.98979
0.35226
1e−05
0
0.86816
0.53632
0.23995
0
0.82484
0
0.99532
0.70463
0.99866
Array
DEX
Plate
Sex
Slide
P_value
0.75
0.50
0.25

Summary table of P−values for PCs

	Plate	Slide	Array	DEX	Sex
PC1	0.9953228	9.986590e−01	8.248444e−01	9.768054e−56	0.70463336
PC2	0.5363231	1.293946e−06	9.977032e−43	8.681550e−01	0.23994564
PC3	0.9897928	1.018913e−05	2.594093e−04	2.810230e−04	0.35226088
PC4	0.3329909	1.002059e−69	2.407481e−12	2.692108e−01	0.03337598
PC5	0.8656661	1.942206e−14	8.713195e−01	8.022871e−01	0.36576084
PC6	0.5378307	1.471388e−12	2.100520e−02	3.703995e−02	0.58709252

ANOVA results for Plate

```
$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
```

ANOVA results for Slide

```
$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

```
$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

```
$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

```
$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
```