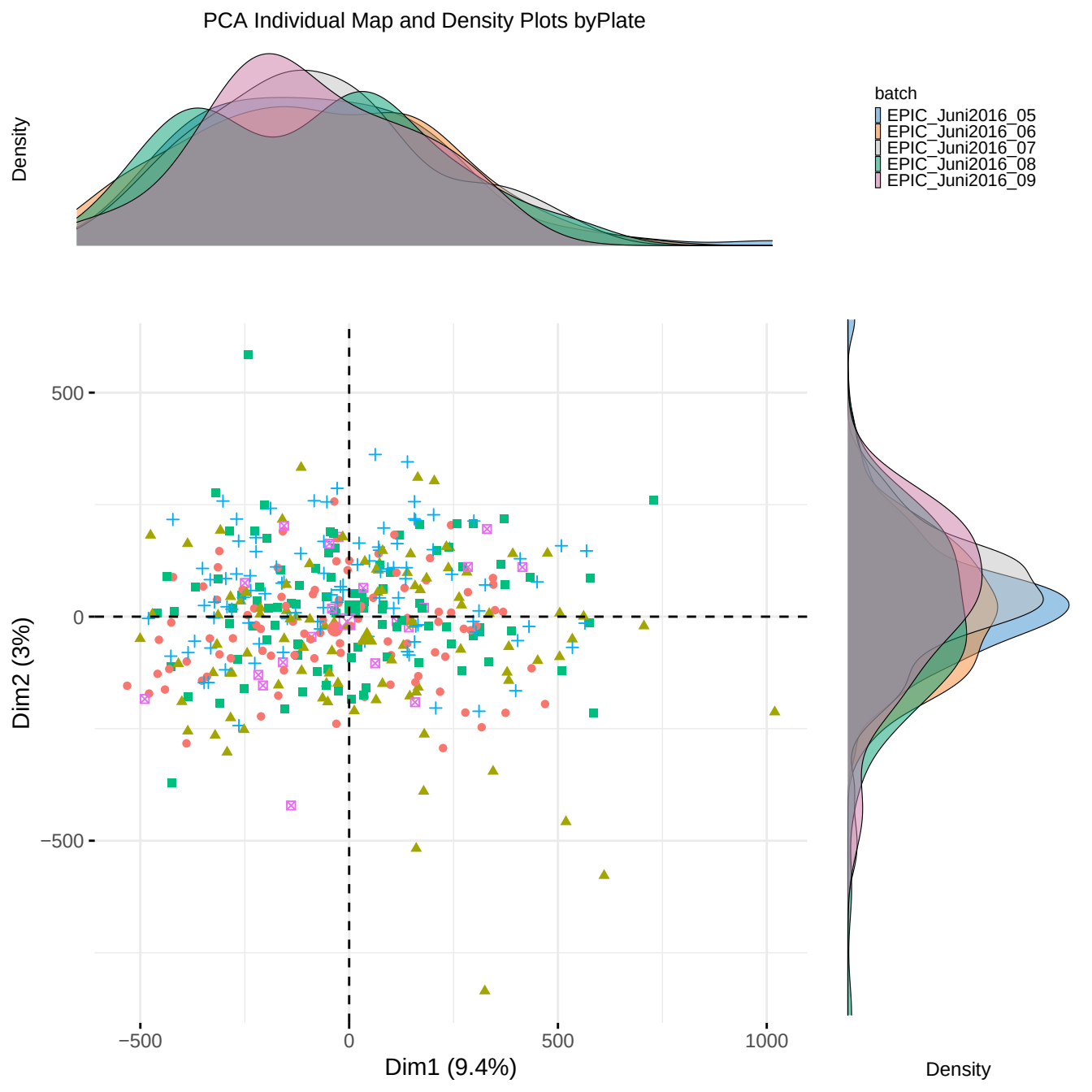
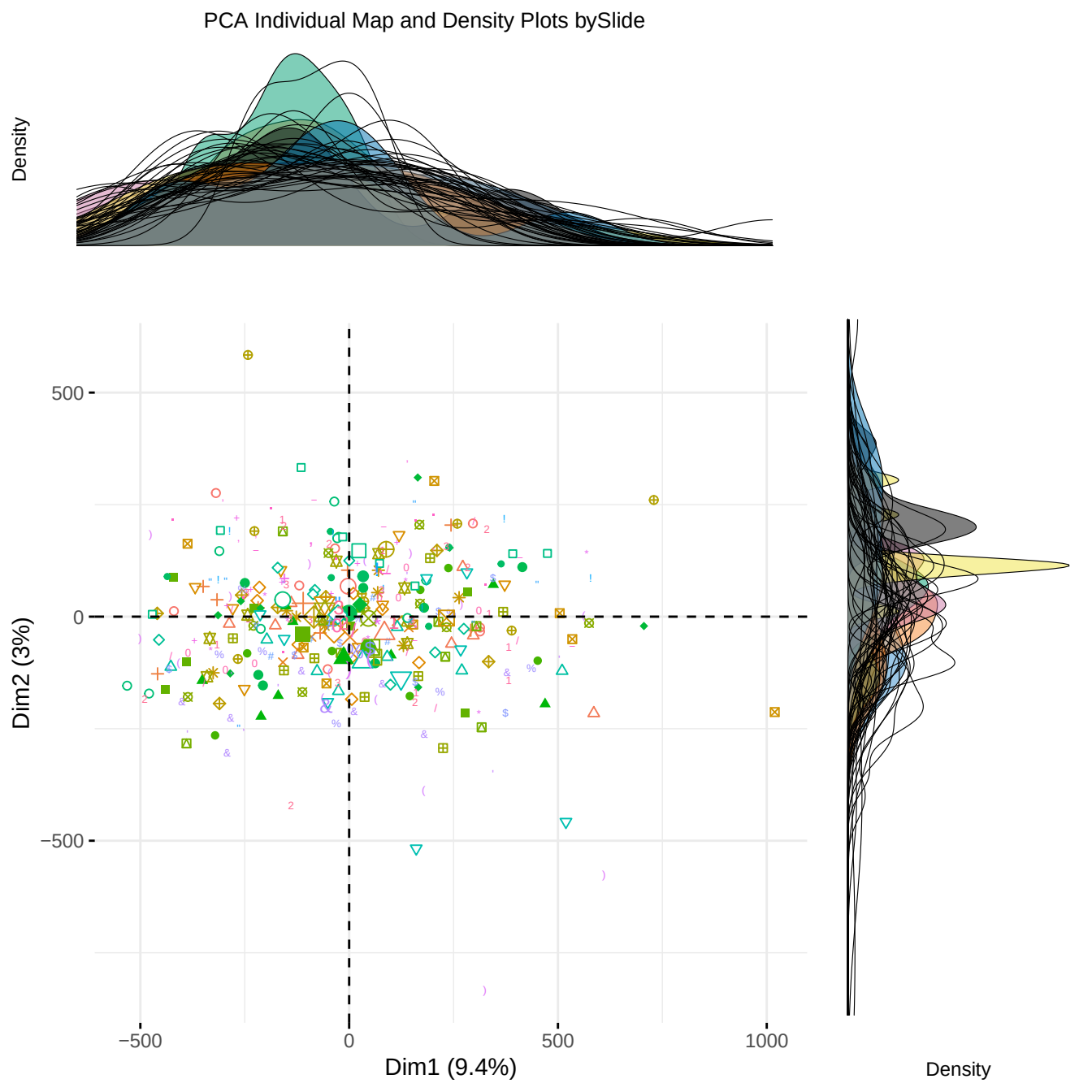
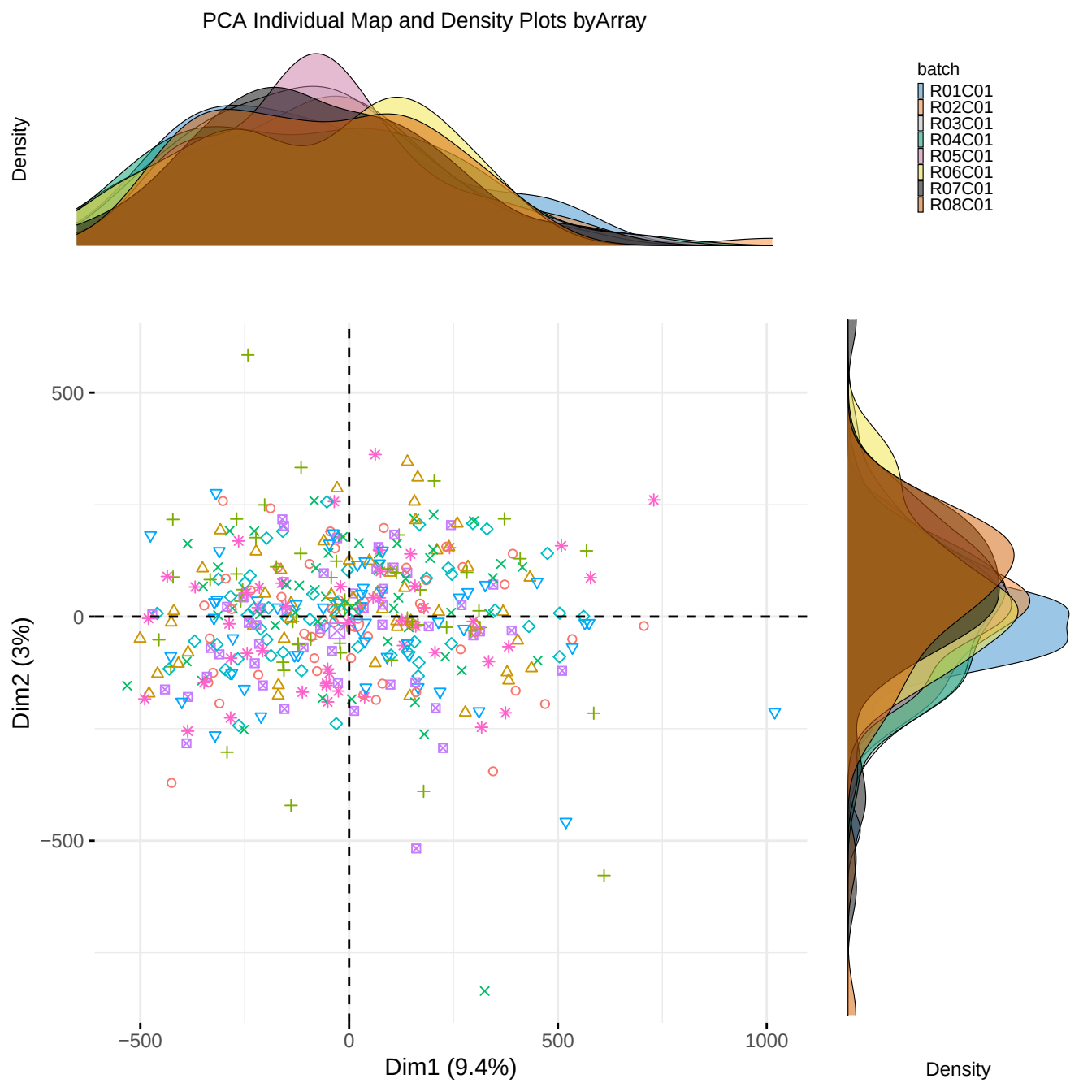
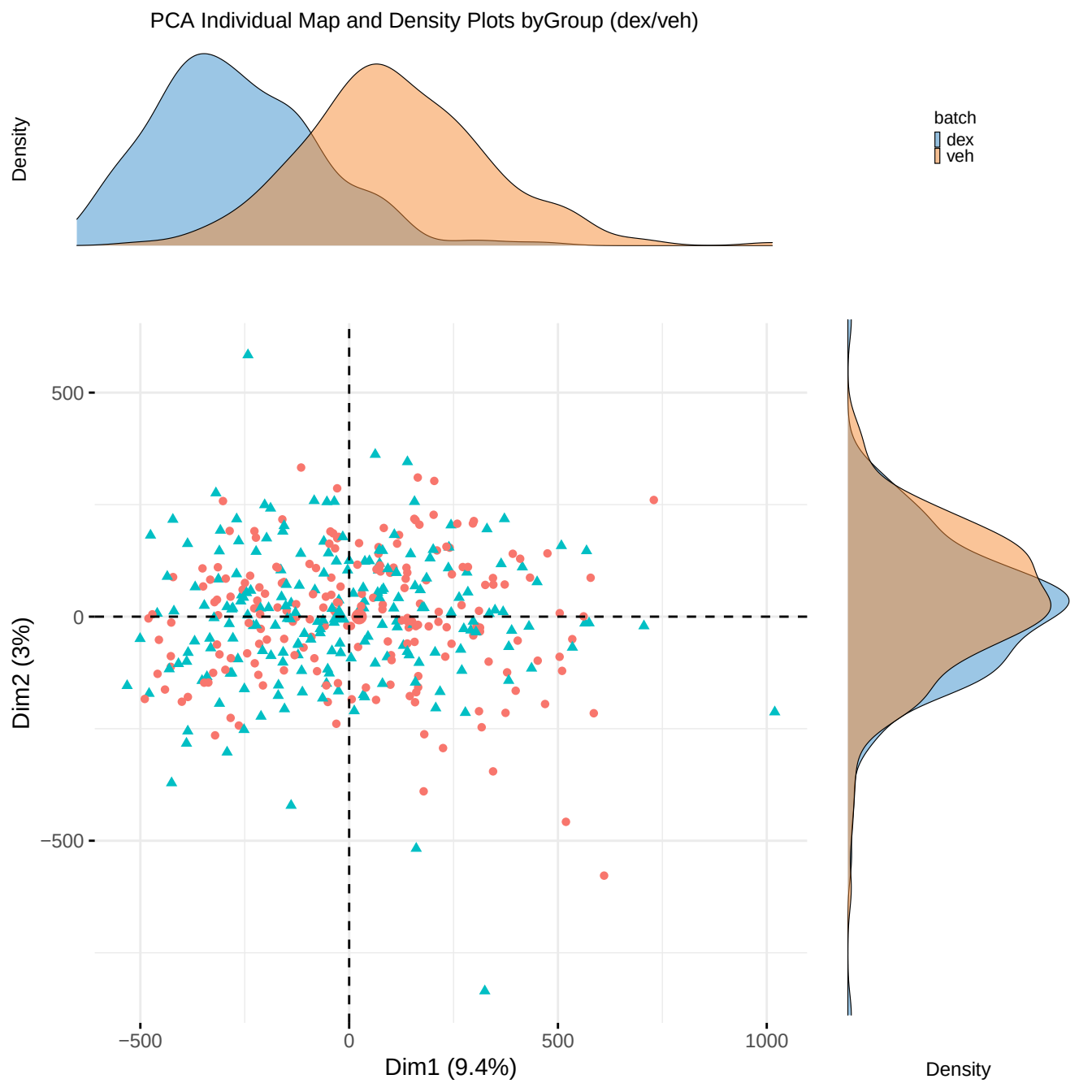
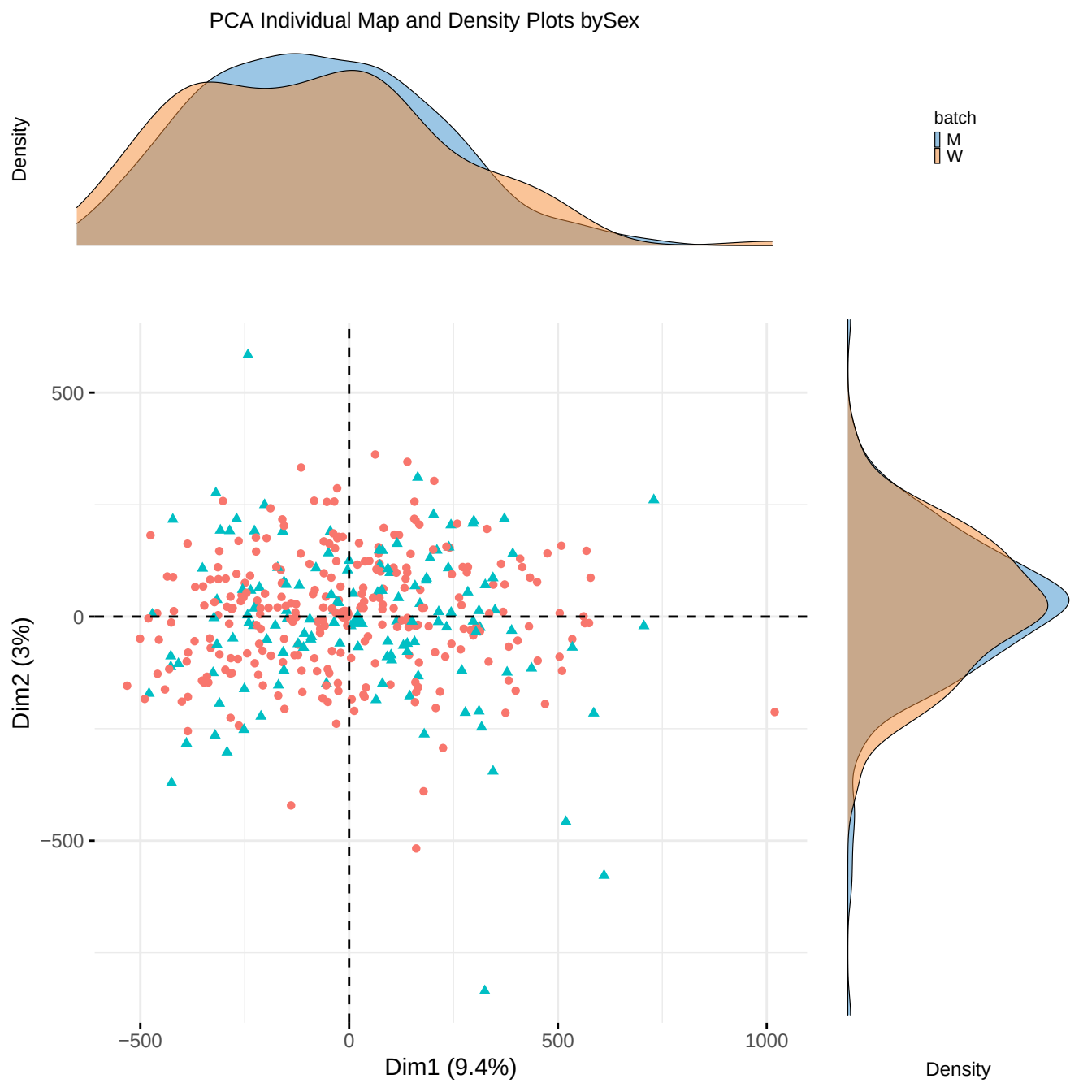
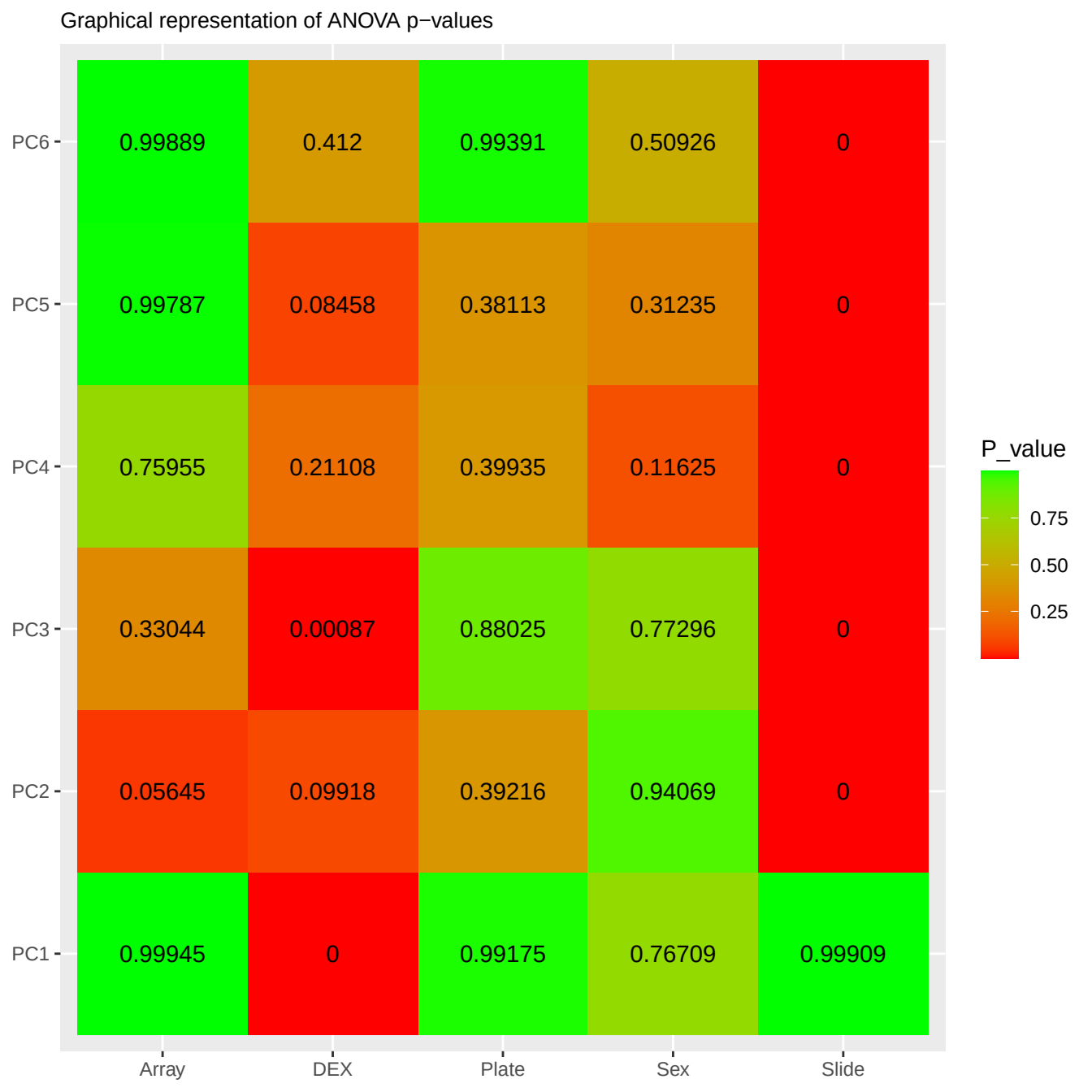

PCA Individual Map and Density Plots byPlate
Density
batch
EPIC_Juni2016_05
EPIC_Juni2016_06
EPIC_Juni2016_07
EPIC_Juni2016_08
EPIC_Juni2016_09
500
0
−500
Dim2 (3%)
−500
0
500
1000
Dim1 (9.4%)
Density


PCA Individual Map and Density Plots bySlide
Density
500
0
−500
Dim2 (3%)
−500
0
500
1000
Dim1 (9.4%)
Density


PCA Individual Map and Density Plots byArray
Density
batch
R01C01
R02C01
R03C01
R04C01
R05C01
R06C01
R07C01
R08C01
500
0
−500
Dim2 (3%)
−500
0
500
1000
Dim1 (9.4%)
Density


PCA Individual Map and Density Plots byGroup (dex/veh)
Density
batch
dex
veh
500
0
−500
Dim2 (3%)
−500
0
500
1000
Dim1 (9.4%)
Density


PCA Individual Map and Density Plots bySex
Density
batch
M
W
500
0
−500
Dim2 (3%)
−500
0
500
1000
Dim1 (9.4%)
Density


Graphical representation of ANOVA p−values
PC6
PC5
PC4
PC3
PC2
PC1
0.99889
0.412
0.99391
0.50926
0
0.99787
0.08458
0.38113
0.31235
0
0.75955
0.21108
0.39935
0.11625
0
0.33044
0.00087
0.88025
0.77296
0
0.05645
0.09918
0.39216
0.94069
0
0.99945
0
0.99175
0.76709
0.99909
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	0.9917515	9.990913e−01	0.99944647	5.968521e−56	0.7670946
PC2	0.3921612	1.042123e−12	0.05645145	9.917867e−02	0.9406909
PC3	0.8802535	5.041086e−18	0.33043800	8.711692e−04	0.7729645
PC4	0.3993451	1.497983e−113	0.75954692	2.110780e−01	0.1162546
PC5	0.3811272	3.247096e−35	0.99786683	8.457689e−02	0.3123548
PC6	0.9939091	1.461761e−08	0.99889383	4.119977e−01	0.5092612

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    18816    4704   0.067 0.9918
Residuals               398 27943379   70209

$PC2
Analysis of Variance Table

Response: pc
                         Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate    4   91330   22832  1.0286 0.3922
Residuals               398 8834463   22197

$PC3
Analysis of Variance Table

Response: pc
                         Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate    4   18148  4536.9  0.2964 0.8803
Residuals               398 6091705 15305.8

$PC4
Analysis of Variance Table

Response: pc
                         Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate    4   40985   10246   1.015 0.3993
Residuals               398 4017809   10095

$PC5
Analysis of Variance Table

Response: pc
                         Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate    4   37256  9314.1  1.0499 0.3811
Residuals               398 3530661  8871.0

$PC6
Analysis of Variance Table

Response: pc
                         Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Plate    4    1842   460.5  0.0572 0.9939
Residuals               398 3204575  8051.7
```

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  1765752   35315  0.4745 0.9991
Residuals                             352 26196443   74422

$PC2
Analysis of Variance Table

Response: pc
                                      Df  Sum Sq Mean Sq F value    Pr(>F)
as.factor(as.character(prin.comp$Slide))  50 3025938   60519  3.6107 1.042e-12
Residuals                             352 5899856   16761

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 2420210   48404  4.6179 < 2.2e-16
Residuals                             352 3689643   10482

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 3424478   68490  38.007 < 2.2e-16
Residuals                             352  634317    1802

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    35151    5022   0.071 0.9994
Residuals       395 27927044   70701

$PC2
Analysis of Variance Table

Response: pc
                Df  Sum Sq Mean Sq F value  Pr(>F)
prin.comp$Array  7  302766   43252  1.9813 0.05645 .
Residuals       395 8623027   21830
---
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  122108   17444  1.1508 0.3304
Residuals       395 5987744   15159

$PC4
Analysis of Variance Table

Response: pc
                Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array  7   42396  6056.6  0.5956 0.7595
Residuals       395 4016398 10168.1

$PC5
Analysis of Variance Table

Response: pc
                Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array  7    6780   968.6  0.1074 0.9979
Residuals       395 3561137  9015.5

$PC6
Analysis of Variance Table

Response: pc
                Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Array  7    4975   710.8  0.0877 0.9989
Residuals       395 3201441  8104.9
```

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 12920689 12920689  344.46 < 2.2e-16 ***
Residuals              401 15041506    37510
---
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   60385   60385  2.7314 0.09918 .
Residuals              401 8865408   22108
---
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_Group   1  166761  166761  11.252 0.0008712 ***
Residuals              401 5943092   14821
---
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   15819   15819   1.569 0.2111
Residuals              401 4042975   10082

$PC5
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value  Pr(>F)
prin.comp$Sample_Group   1   26402 26402.2  2.9895 0.08458 .
Residuals              401 3541515  8831.7
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC6
Analysis of Variance Table

Response: pc
```

ANOVA results for Sex

```
$PC1
Analysis of Variance Table

Response: pc
               Df   Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1     6124    6124  0.0878 0.7671
Residuals     401 27956071   69716

$PC2
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1     123   123.4  0.0055 0.9407
Residuals     401 8925670 22258.5

$PC3
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1    1270  1269.6  0.0833  0.773
Residuals     401 6108583 15233.4

$PC4
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1   24925   24925  2.4778 0.1163
Residuals     401 4033870   10060

$PC5
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1    9081  9081.4  1.0233 0.3124
Residuals     401 3558836  8874.9

$PC6
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1    3485  3485.4  0.4364 0.5093
Residuals     401 3202931  7987.4
```