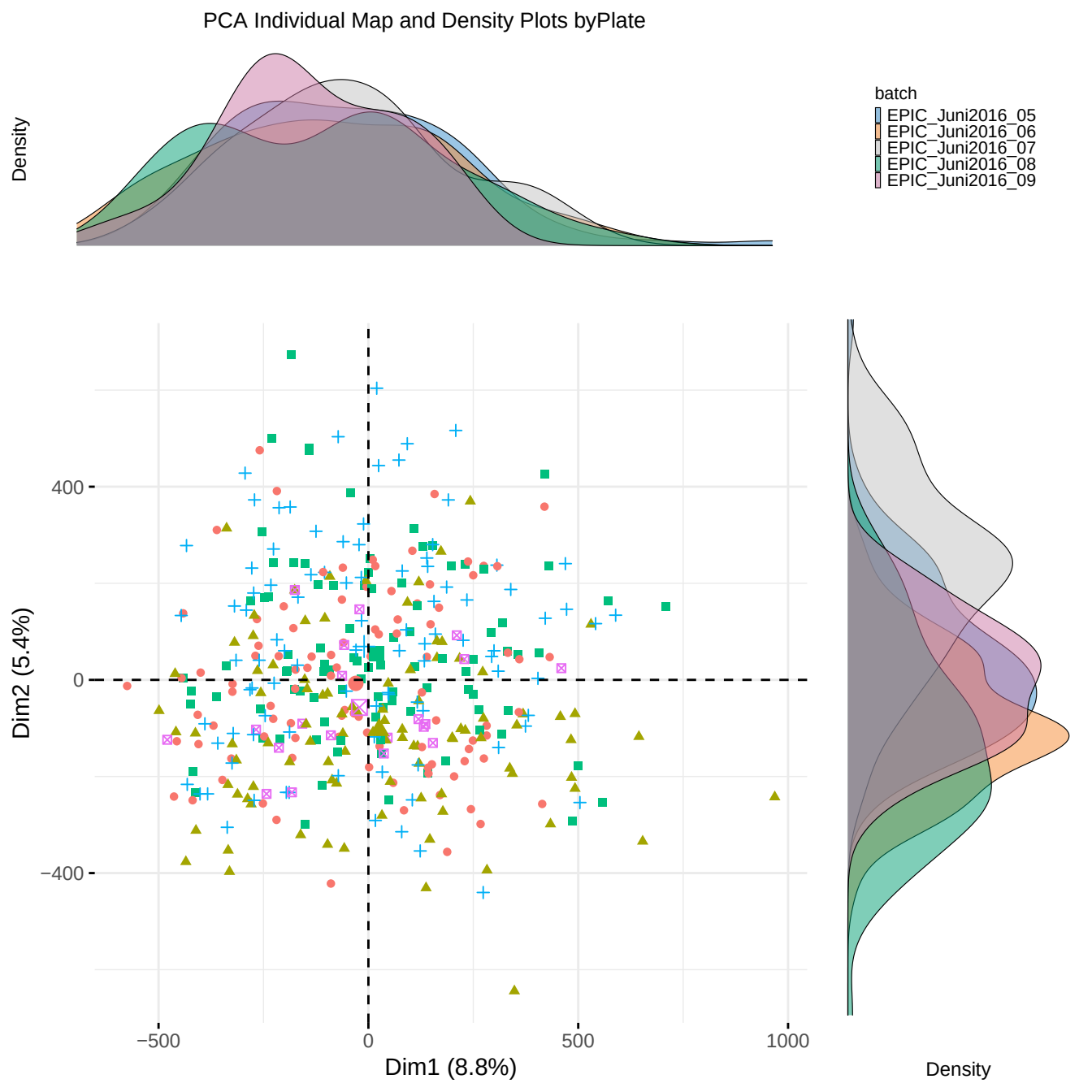
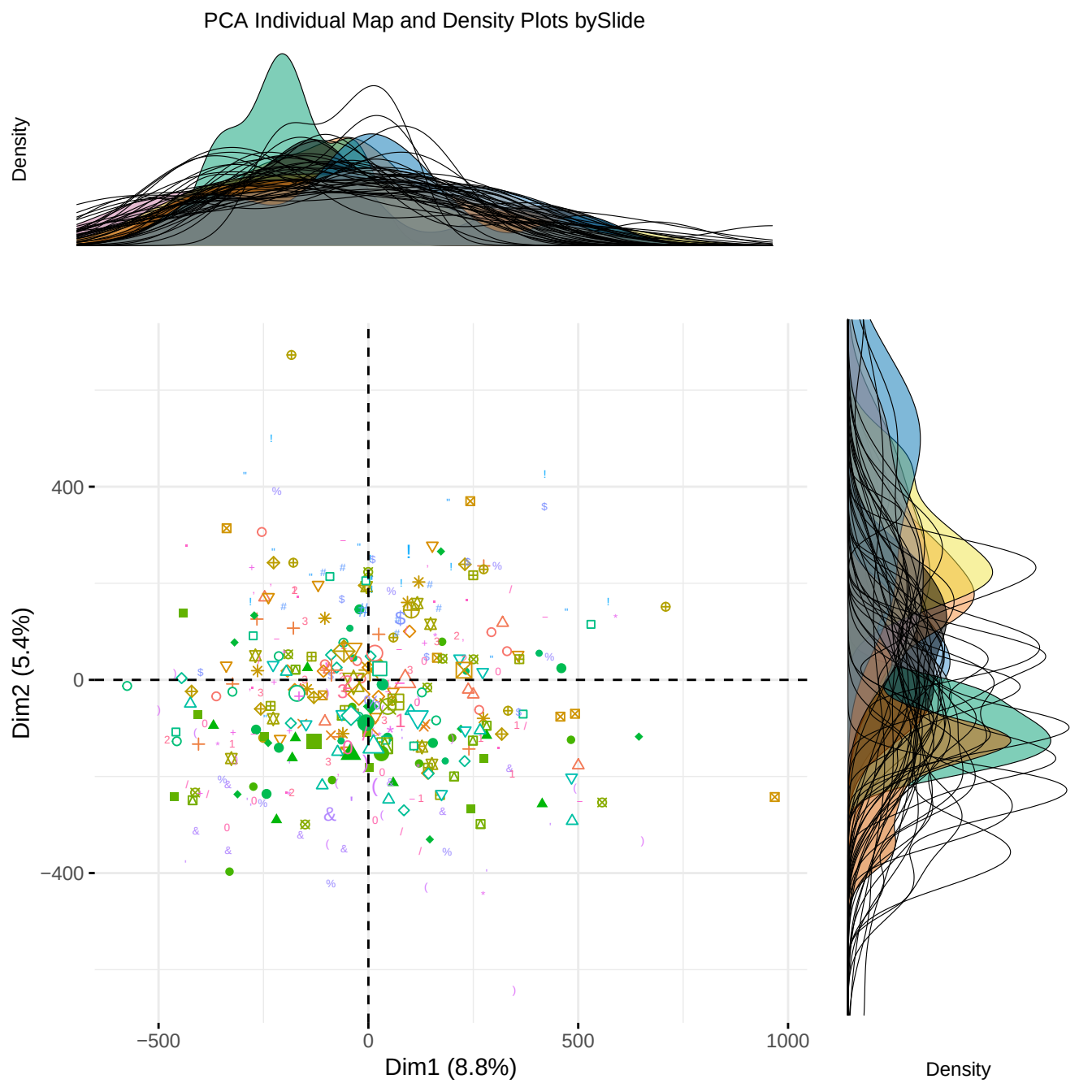
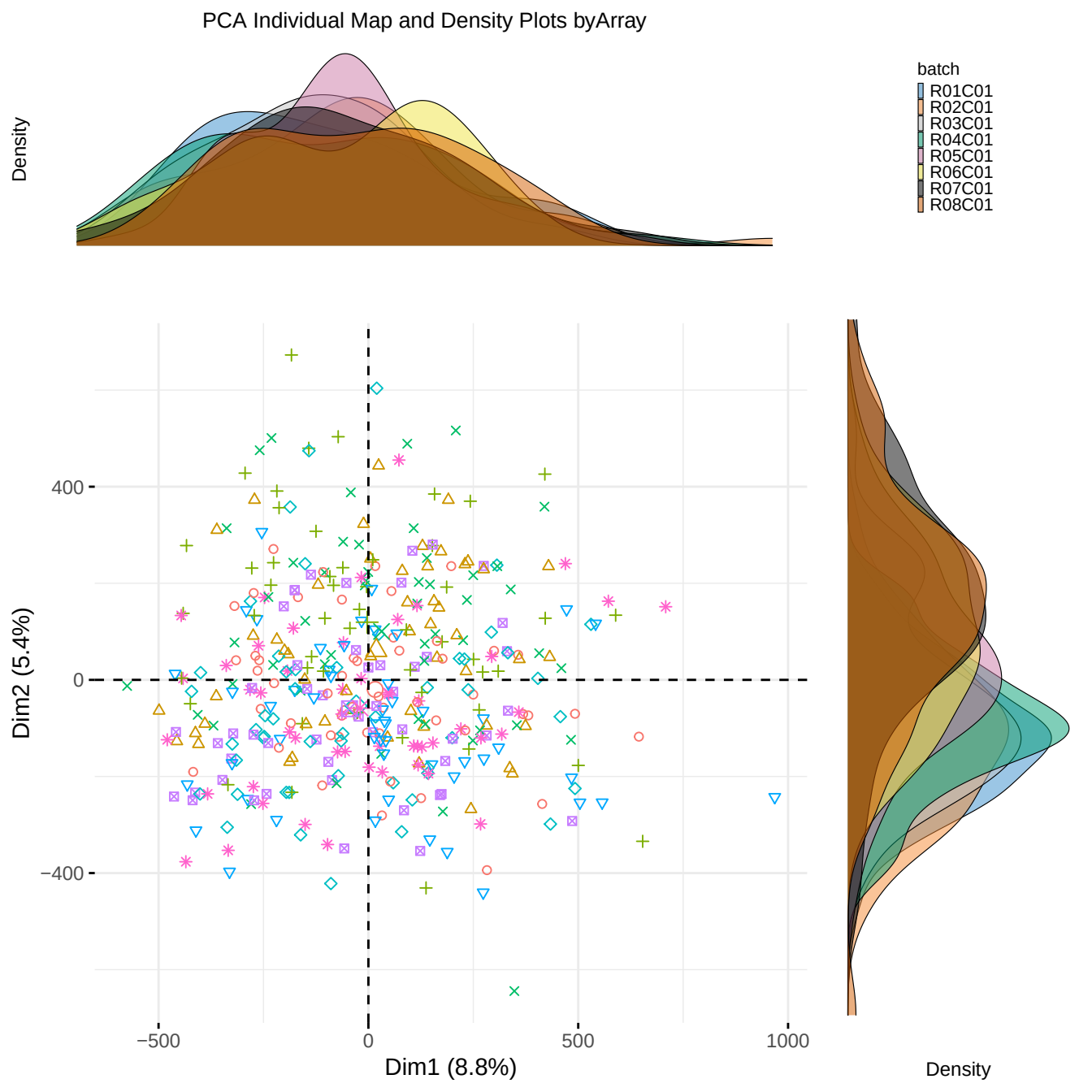
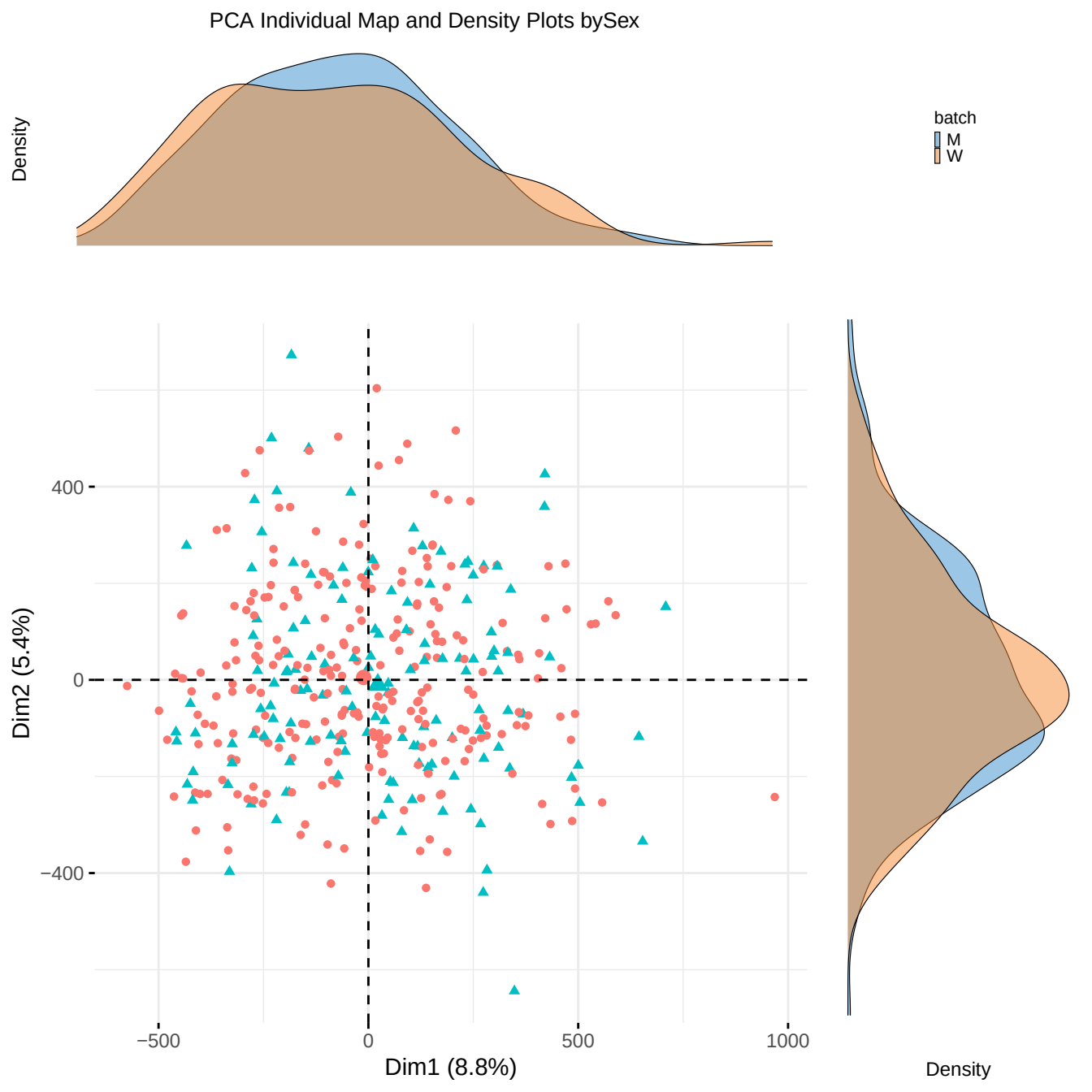

PCA Individual Map and Density Plots byPlate
Density
batch
EPIC_Juni2016_05
EPIC_Juni2016_06
EPIC_Juni2016_07
EPIC_Juni2016_08
EPIC_Juni2016_09
400
0
−400
Dim2 (5.4%)
−500
0
500
1000
Dim1 (8.8%)
Density


PCA Individual Map and Density Plots bySlide
Density
400
0
−400
Dim2 (5.4%)
−500
0
500
1000
Dim1 (8.8%)
Density


PCA Individual Map and Density Plots byArray
Density
batch
R01C01
R02C01
R03C01
R04C01
R05C01
R06C01
R07C01
R08C01
400
0
−400
Dim2 (5.4%)
−500
0
500
1000
Dim1 (8.8%)
Density


PCA Individual Map and Density Plots byGroup (dex/veh)
Density
batch
dex
veh
400
0
−400
Dim2 (5.4%)
−500
0
500
1000
Dim1 (8.8%)
Density


PCA Individual Map and Density Plots bySex
Density
batch
M
W
400
0
−400
Dim2 (5.4%)
−500
0
500
1000
Dim1 (8.8%)
Density

Summary table of P−values for PCs

	Plate	Slide	Array	DEX	Sex
PC1	3.584438e−01	9.911839e−01	7.085990e−01	3.491603e−54	0.7621092
PC2	7.263513e−37	3.182475e−32	5.787849e−21	2.709166e−01	0.6017284
PC3	1.995854e−61	4.116877e−82	1.162186e−11	1.648580e−01	0.1665054
PC4	1.035088e−01	9.843404e−07	4.540187e−05	3.805267e−04	0.4175180
PC5	8.744589e−17	2.289277e−46	2.193012e−02	2.511310e−01	0.1440686
PC6	1.884224e−02	9.600490e−12	1.049526e−01	1.415589e−01	0.6514740

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   286550   71637  1.0953 0.3584
Residuals              398 26029952   65402

$PC2
Analysis of Variance Table

Response: pc
                       Df   Sum Sq Mean Sq F value    Pr(>F)
prin.comp$Sample_Plate   4  5694470 1423618  54.937 < 2.2e-16 ***
Residuals              398 10313565   25913
---
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 3852286  963072  106.08 < 2.2e-16 ***
Residuals              398 3613400    9079
---
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  131078   32770   1.937 0.1035
Residuals              398 6733352   16918

$PC5
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value    Pr(>F)
prin.comp$Sample_Plate   4  721105  180276  22.523 < 2.2e-16 ***
Residuals              398 3185660    8004
---
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  104104 26026.0  2.9885 0.01884 *
```

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  1980144   39603  0.5728 0.9912
Residuals                           352 24336358   69137

$PC2
Analysis of Variance Table

Response: pc
                                     Df  Sum Sq Mean Sq F value    Pr(>F)
as.factor(as.character(prin.comp$Slide))  50 8260145  165203  7.5055 < 2.2e-16
Residuals                           352 7747890   22011

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 5680492  113610  22.401 < 2.2e-16
Residuals                           352 1785194    5072

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 1780830   35617  2.4662 9.843e-07
Residuals                           352 5083600   14442

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   302818   43260  0.6569 0.7086
Residuals       395 26013684   65857

$PC2
Analysis of Variance Table

Response: pc
                Df   Sum Sq Mean Sq F value    Pr(>F)
prin.comp$Array   7  3899786  557112  18.174 < 2.2e-16 ***
Residuals       395 12108249   30654
---
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 1135191  162170  10.119 1.162e-11 ***
Residuals       395 6330496   16027
---
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  526815   75259  4.6906 4.54e-05 ***
Residuals       395 6337615   16045
---
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  157642 22520.3  2.3727 0.02193 *
Residuals       395 3749123  9491.5
---
Signif. codes:  0 ...***... 0.001 ...**... 0.01 ...*... 0.05 ..... 0.1 ... ... 1

$PC6
Analysis of Variance Table

Response: pc
```

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 11870882 11870882  329.53 < 2.2e-16 ***
Residuals              401 14445620    36024
---
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    48374   48374  1.2155 0.2709
Residuals              401 15959661   39800

$PC3
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Group   1   35873   35873  1.9362 0.1649
Residuals              401 7429813   18528

$PC4
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value    Pr(>F)
prin.comp$Sample_Group   1  213020  213020  12.842 0.0003805 ***
Residuals              401 6651410   16587
---
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$Sample_Group   1   12826 12825.9  1.3208 0.2511
Residuals              401 3893940  9710.6

$PC6
Analysis of Variance Table

Response: pc
                       Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$Sample_Group   1   19211 19211.3  2.1695 0.1416
Residuals              401 3550972  8855.3
```

ANOVA results for Sex

```
$PC1
Analysis of Variance Table

Response: pc
               Df   Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1     6021    6021  0.0918 0.7621
Residuals     401 26310481   65612

$PC2
Analysis of Variance Table

Response: pc
               Df   Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1    10884   10884  0.2728 0.6017
Residuals     401 15997151   39893

$PC3
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1   35596   35596  1.9211 0.1665
Residuals     401 7430091   18529

$PC4
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1   11256   11256  0.6587 0.4175
Residuals     401 6853174   17090

$PC5
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1   20761 20760.8  2.1423 0.1441
Residuals     401 3886005  9690.8

$PC6
Analysis of Variance Table

Response: pc
               Df  Sum Sq Mean Sq F value Pr(>F)
prin.comp$sex   1    1818  1818.5  0.2044 0.6515
Residuals     401 3568365  8898.7
```