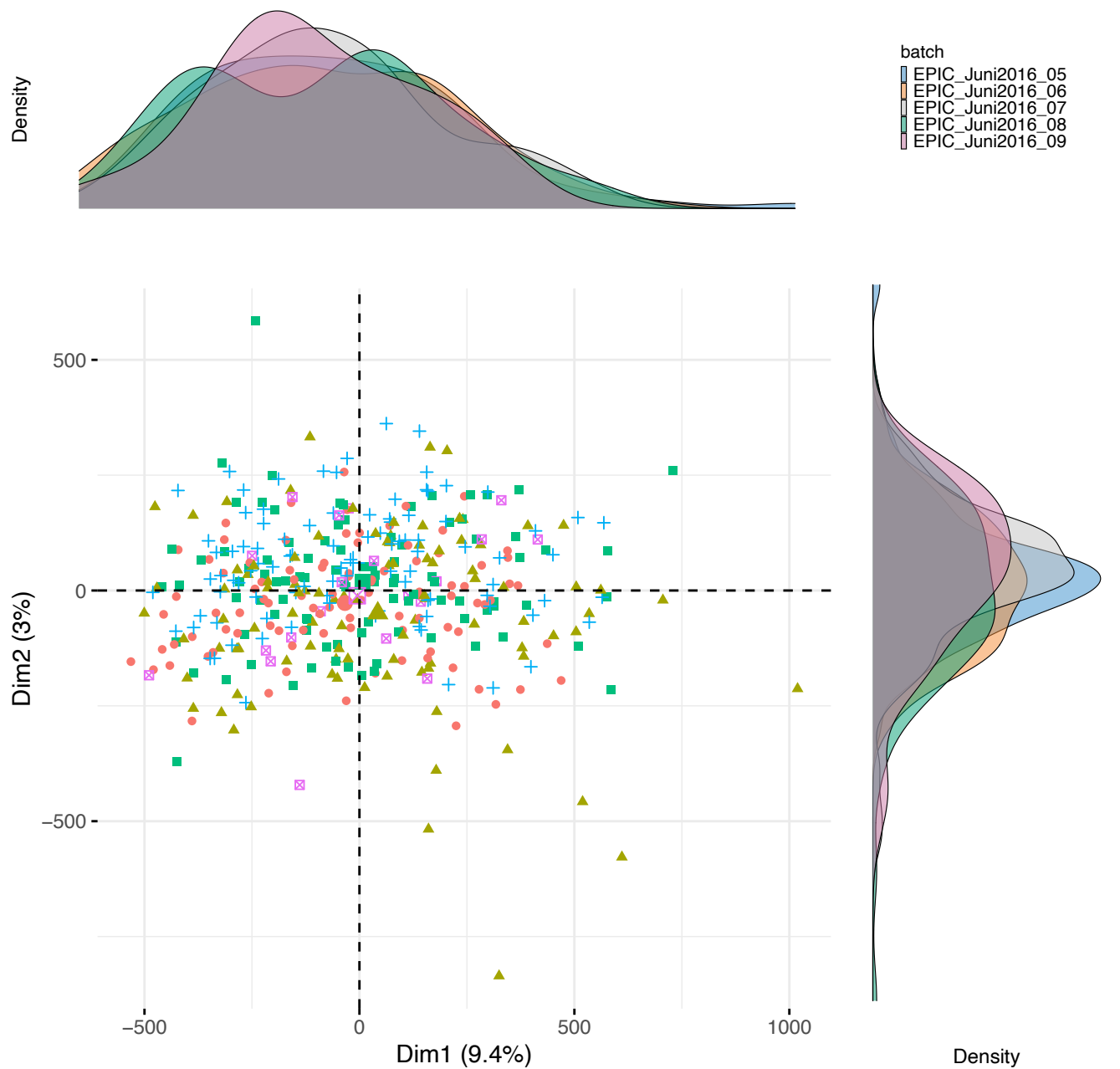
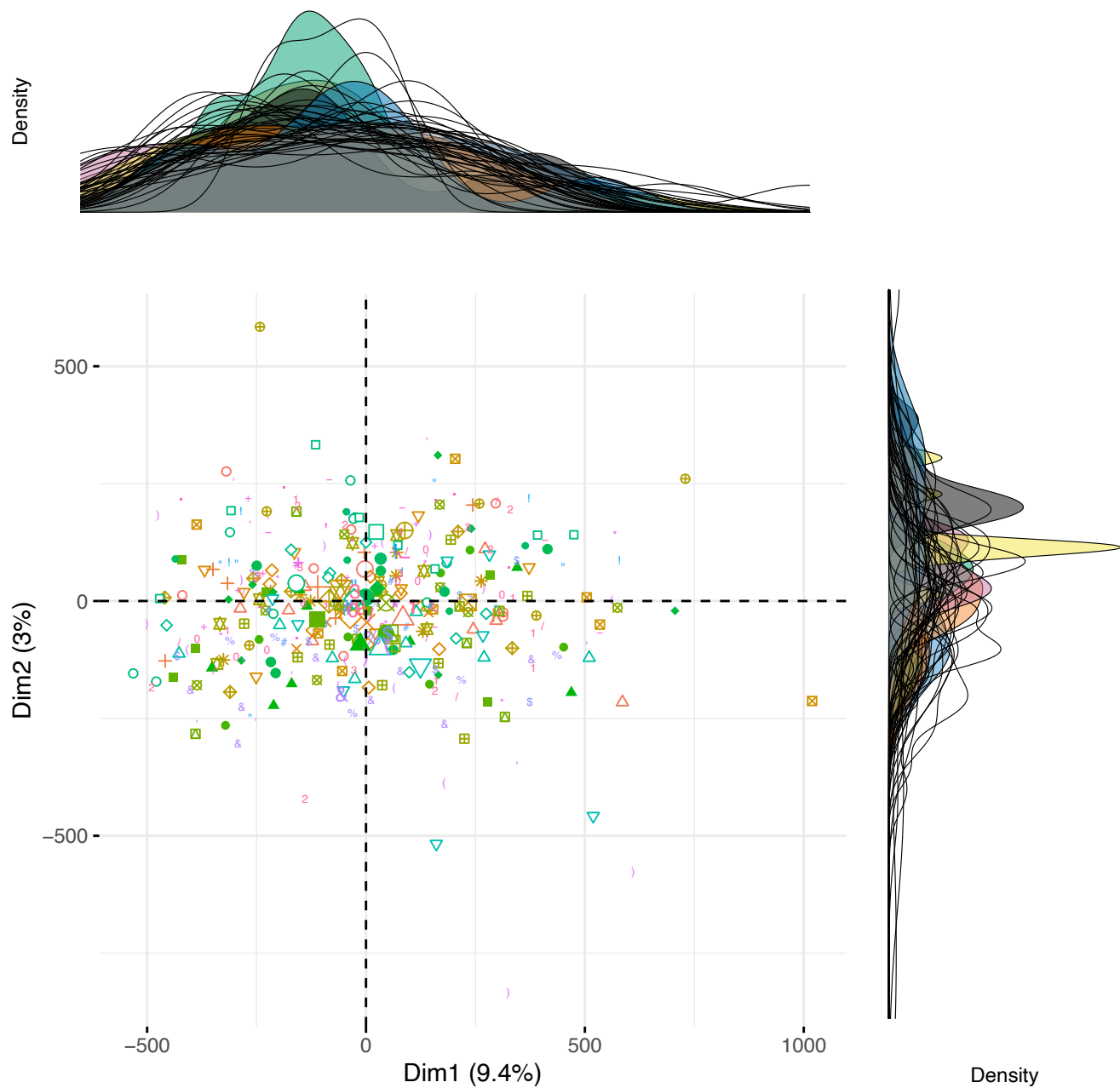


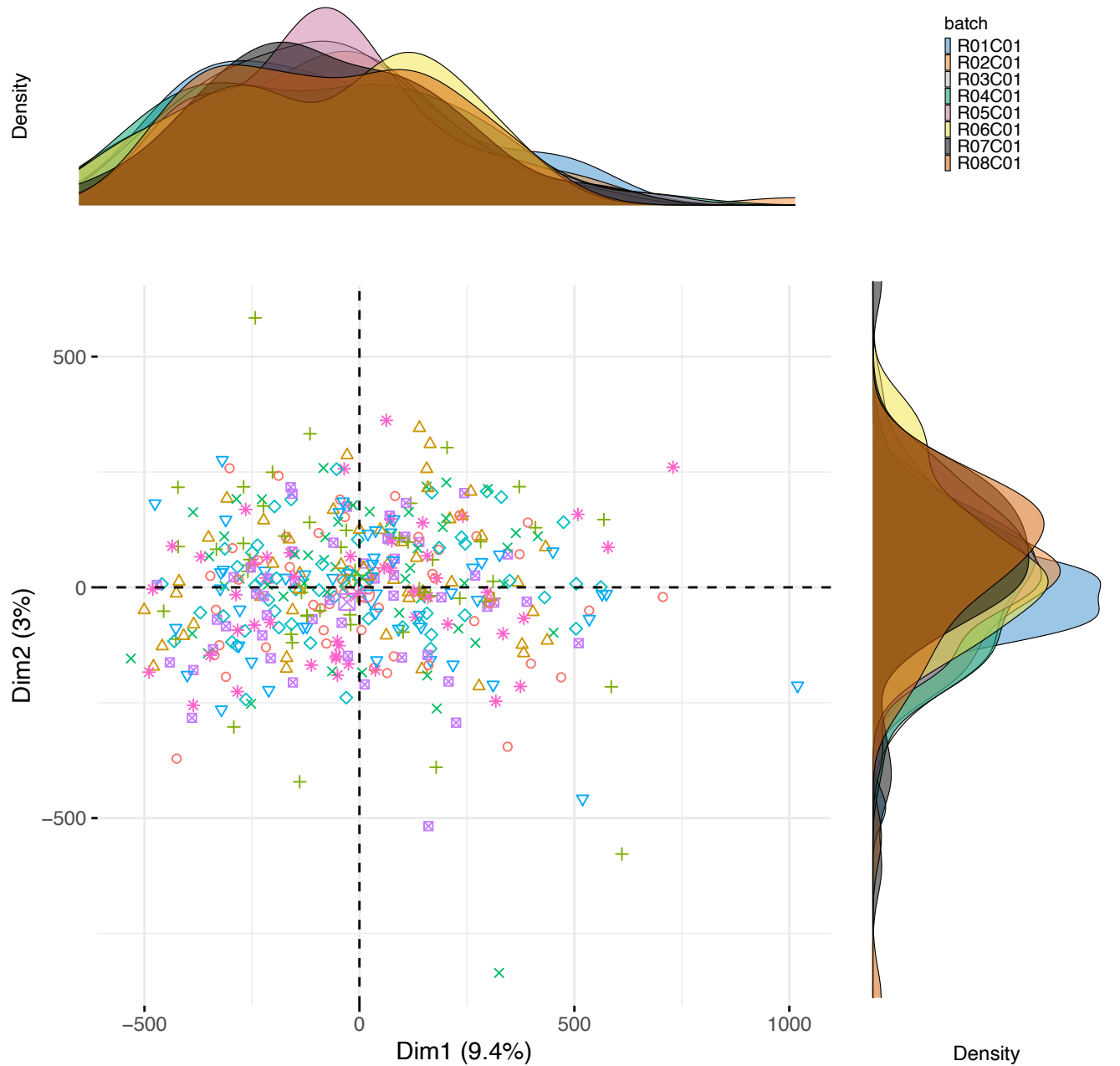
PCA Individual Map and Density Plots byPlate



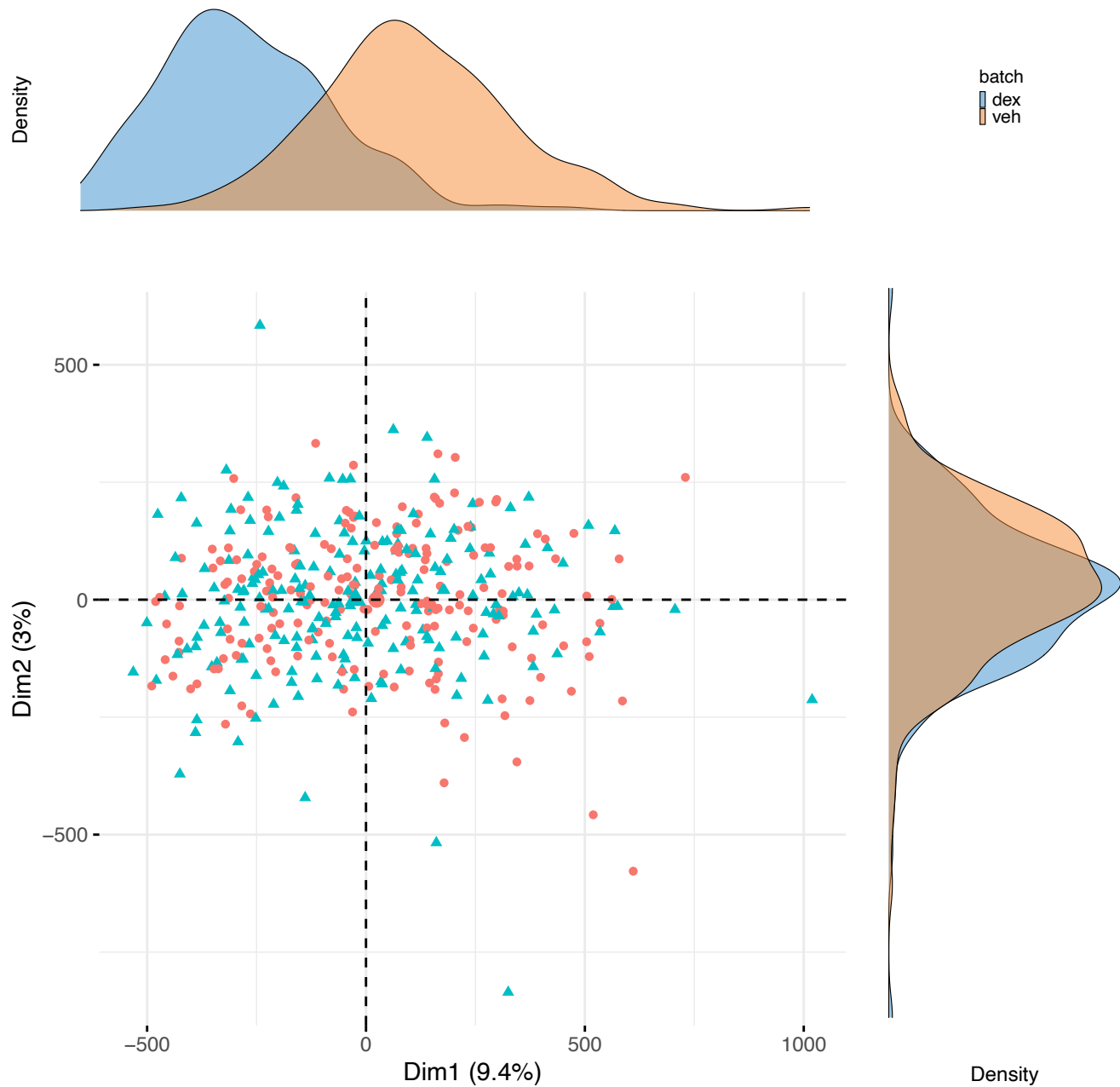
PCA Individual Map and Density Plots bySlide



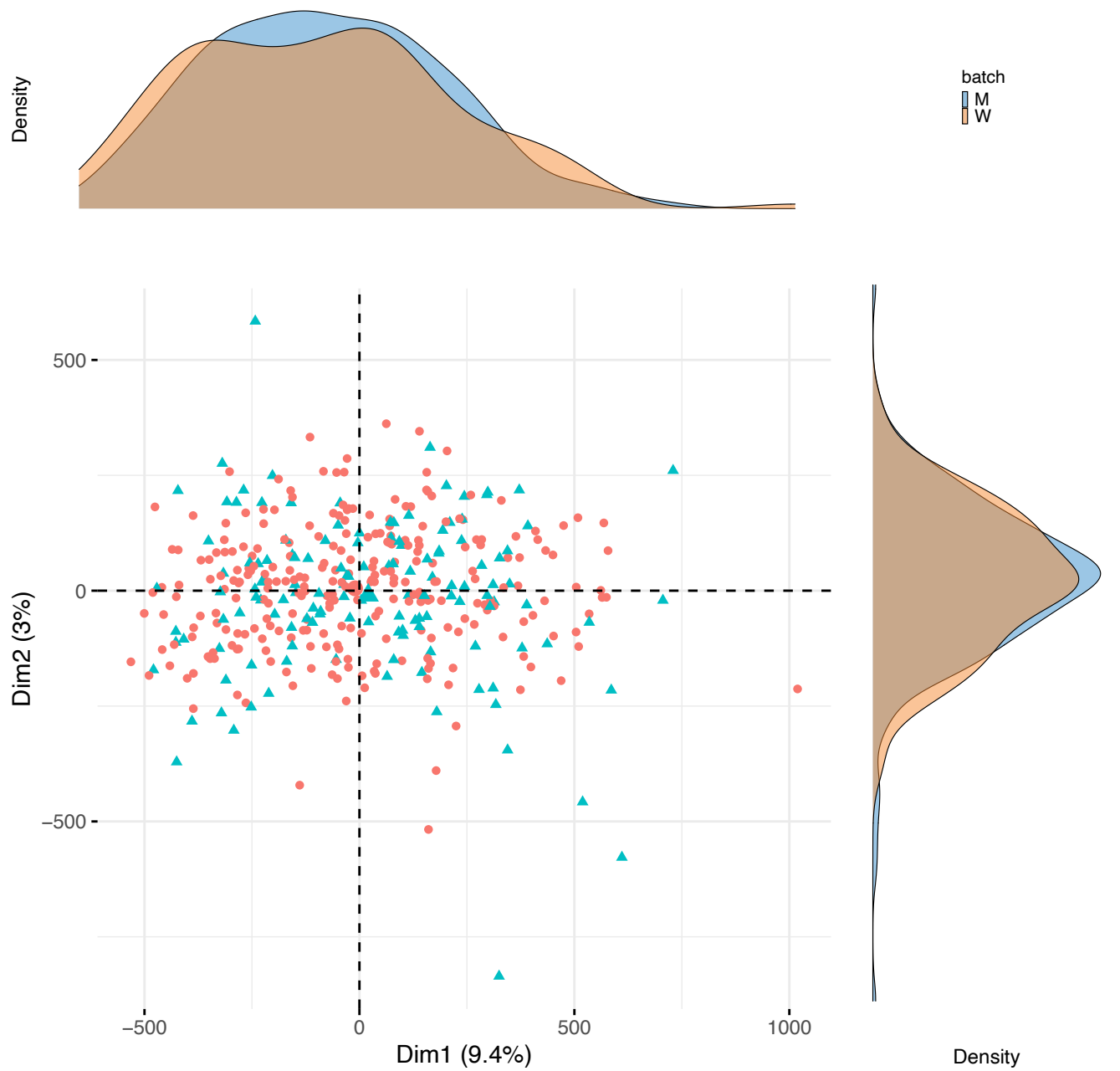
PCA Individual Map and Density Plots byArray



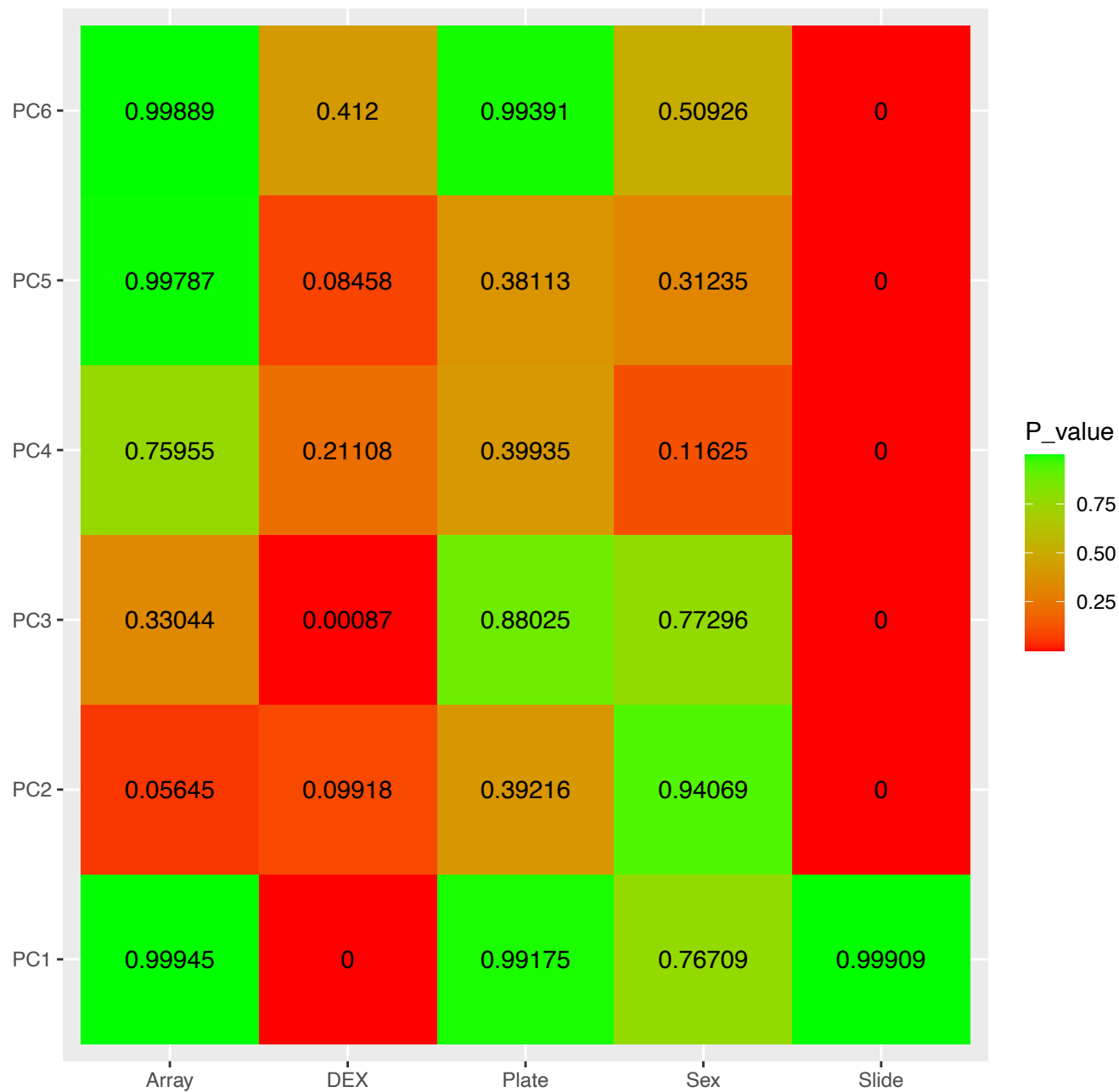
PCA Individual Map and Density Plots byGroup (dex/veh)



PCA Individual Map and Density Plots bySex



Graphical representation of ANOVA p-values



**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		