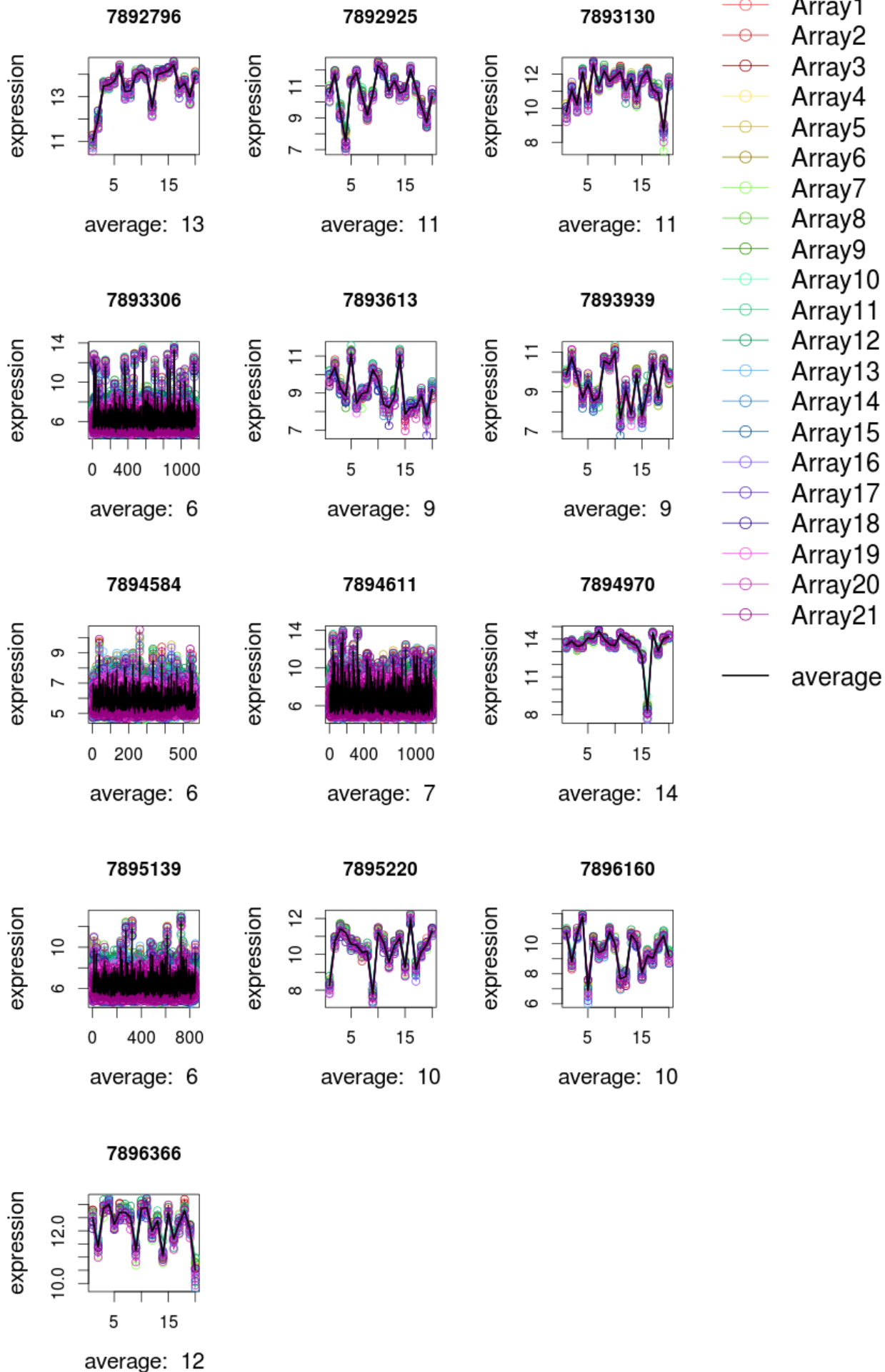


Quality Control & Pre-processing Evaluation
of
E-GEOD-21037.raw.1_0
REPORT

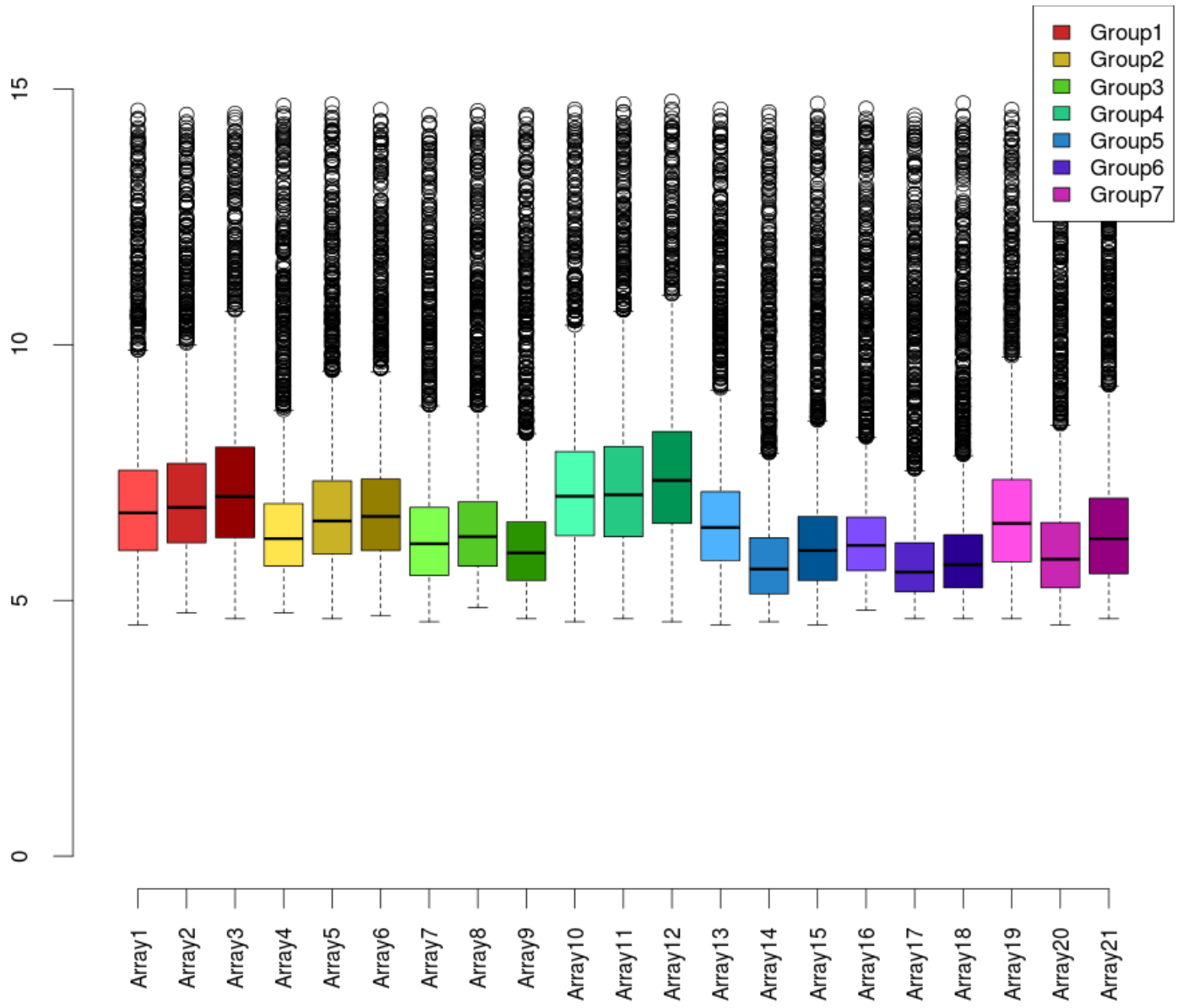
Array names and grouping

ArrayDataFile	SourceName	FactorValue
GSM525426.CEL	Array1	Group1
GSM525425.CEL	Array2	Group1
GSM525424.CEL	Array3	Group1
GSM525423.CEL	Array4	Group2
GSM525422.CEL	Array5	Group2
GSM525421.CEL	Array6	Group2
GSM525420.CEL	Array7	Group3
GSM525419.CEL	Array8	Group3
GSM525418.CEL	Array9	Group3
GSM525417.CEL	Array10	Group4
GSM525416.CEL	Array11	Group4
GSM525415.CEL	Array12	Group4
GSM525414.CEL	Array13	Group5
GSM525413.CEL	Array14	Group5
GSM525412.CEL	Array15	Group5
GSM525411.CEL	Array16	Group6
GSM525410.CEL	Array17	Group6
GSM525409.CEL	Array18	Group6
GSM525408.CEL	Array19	Group7
GSM525407.CEL	Array20	Group7
GSM525406.CEL	Array21	Group7

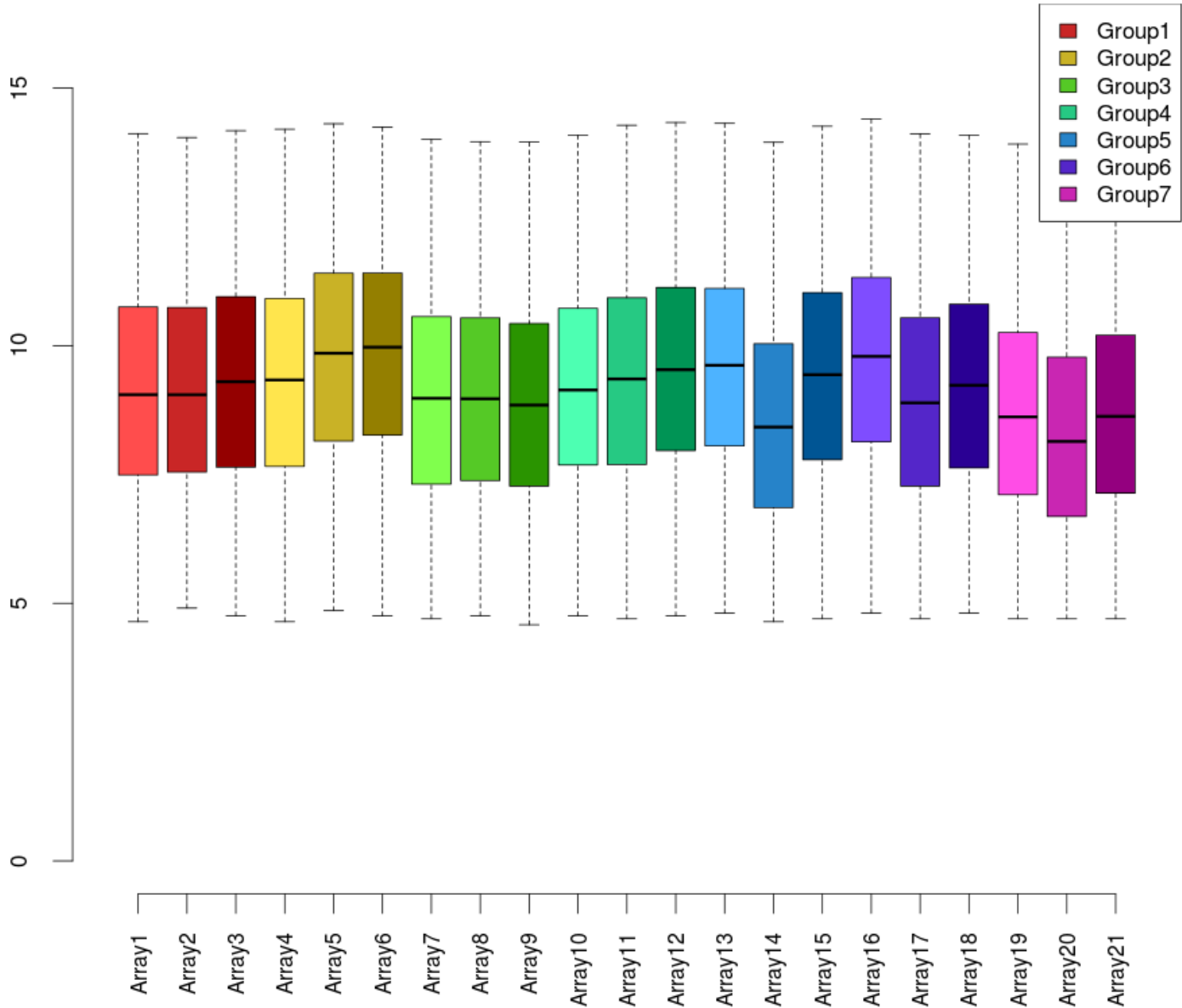
affx control profiles



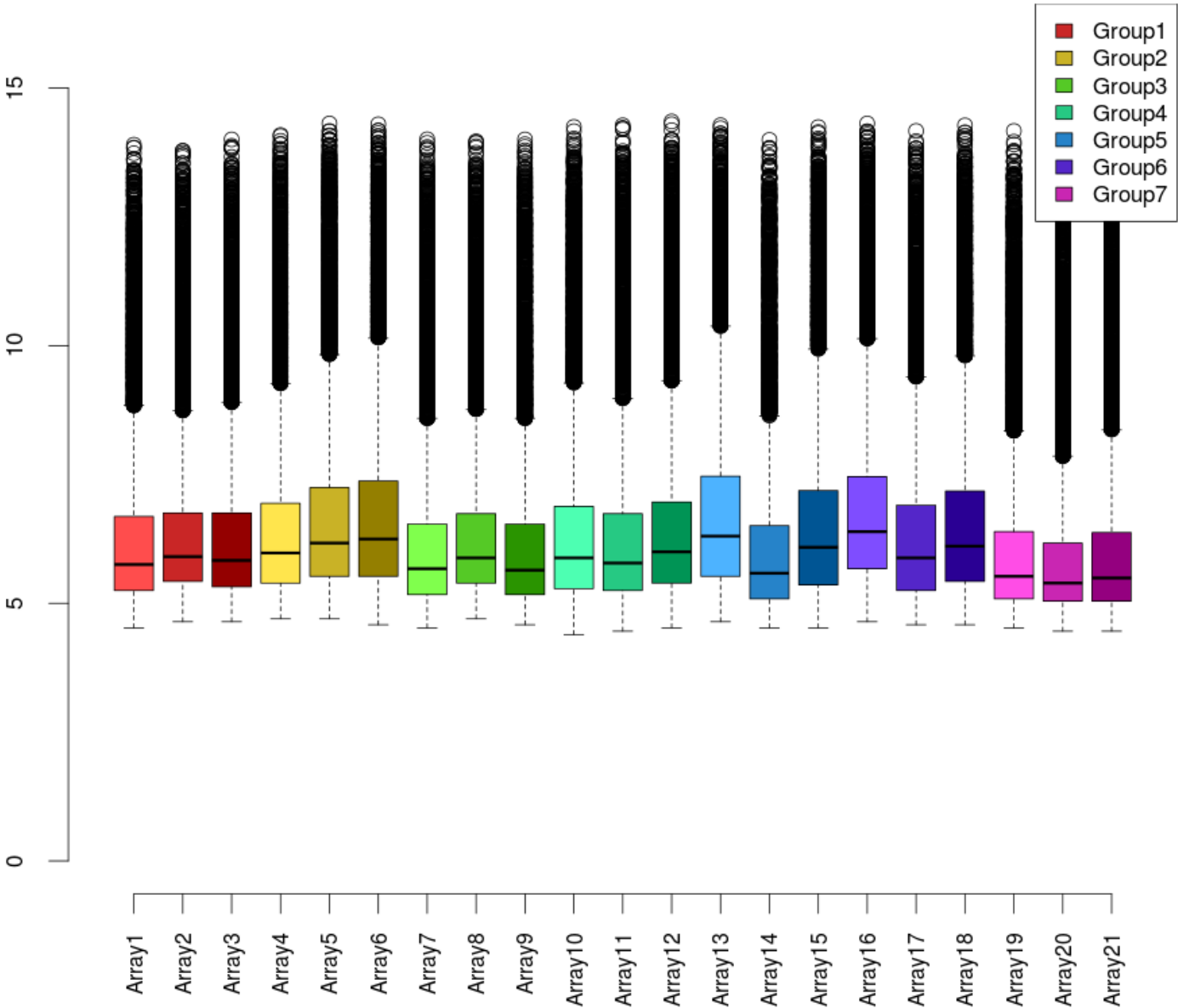
affx controls



exon controls

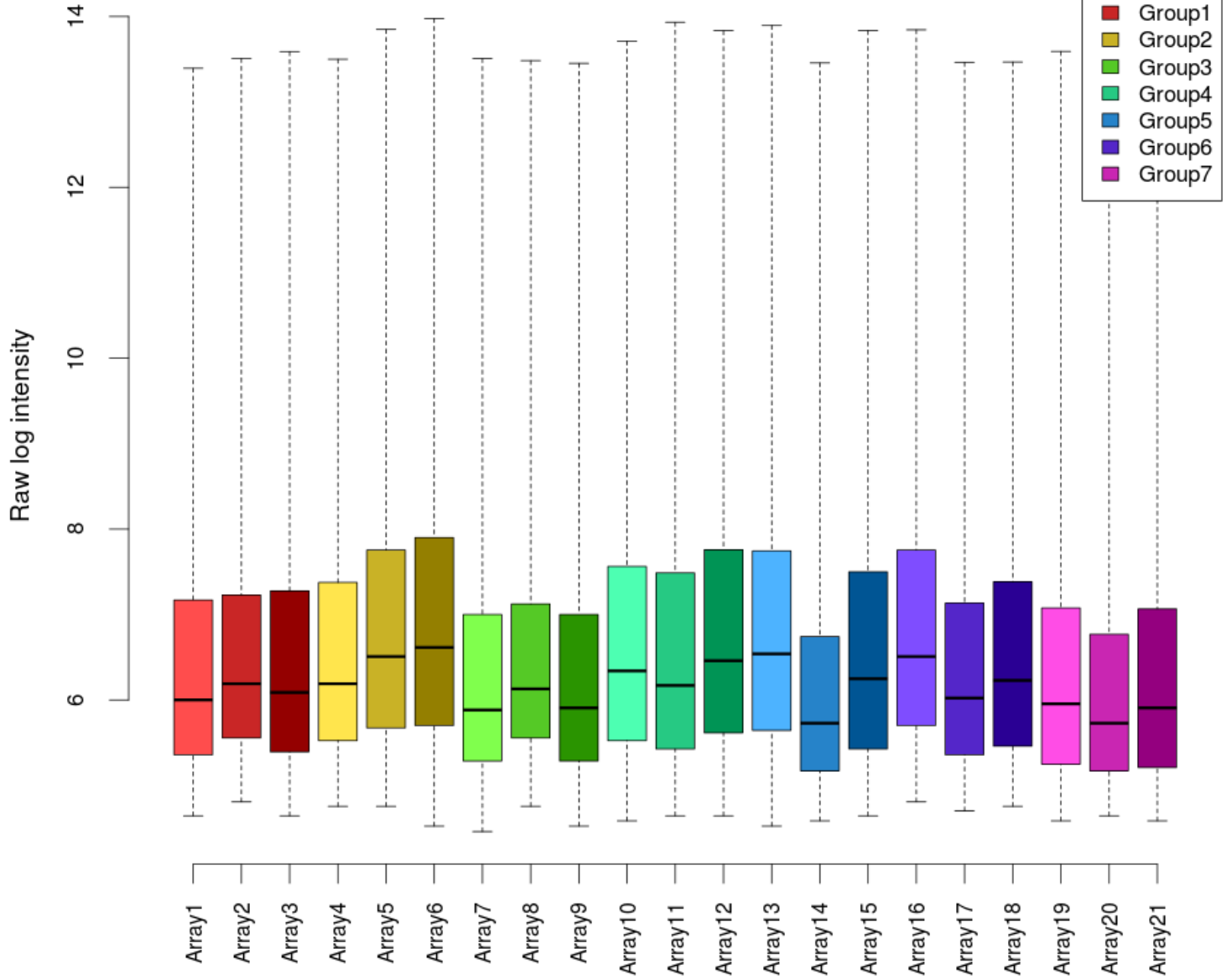


intron controls



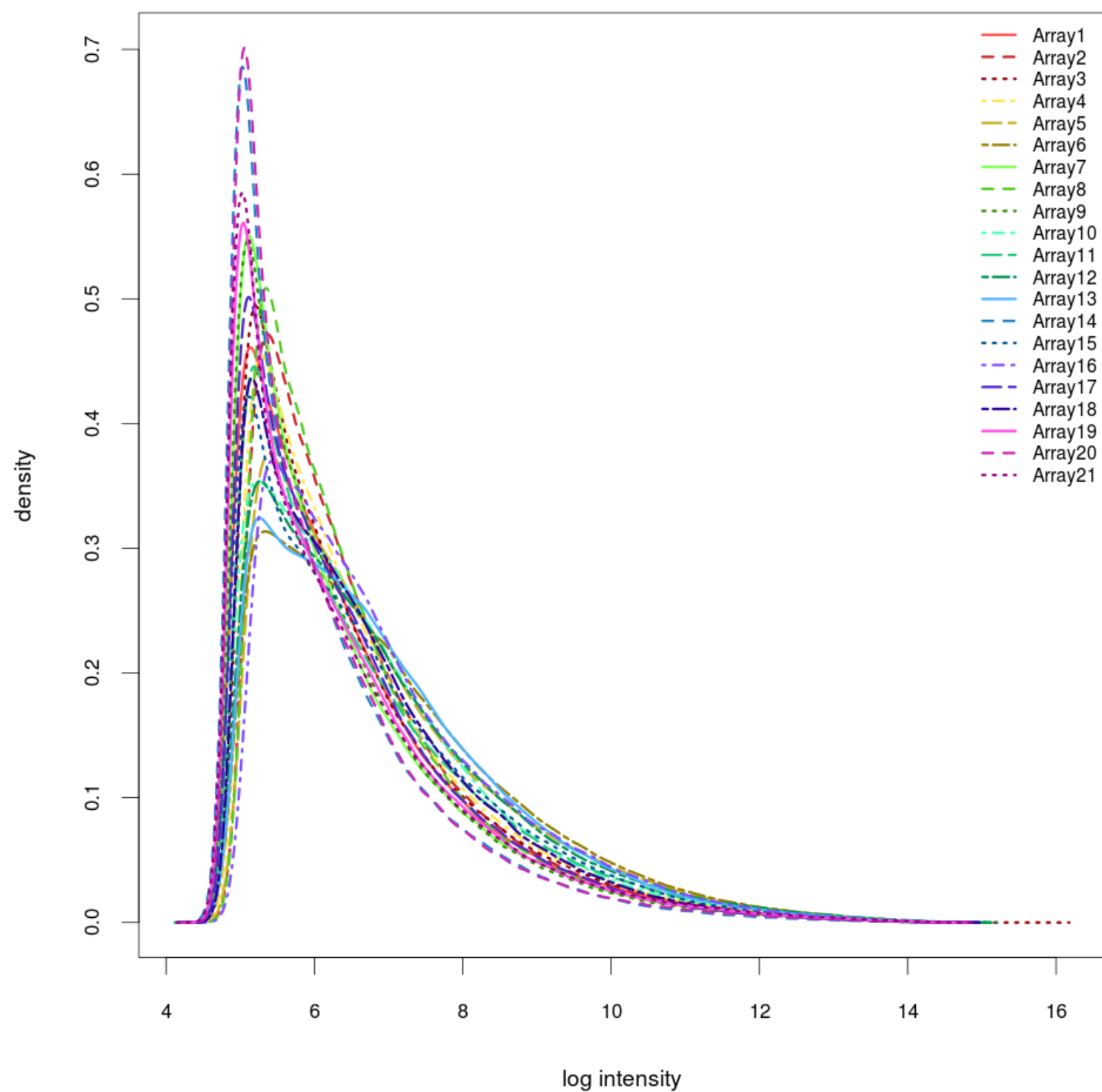
Boxplot of raw intensities

Distributions should be comparable between arrays



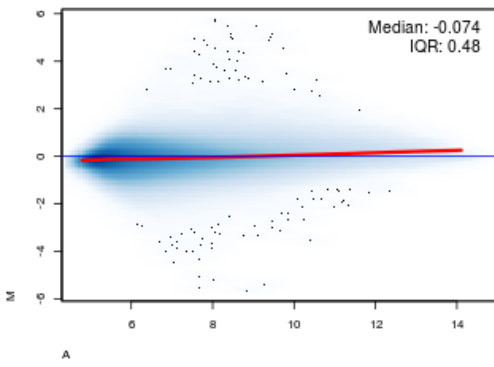
Density histogram of raw intensities

Curves should be comparable between arrays

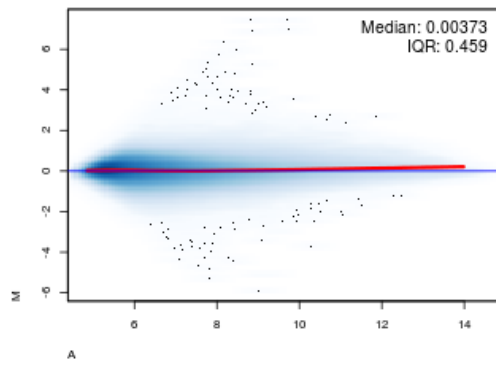


MA plots of raw data 1 / 2

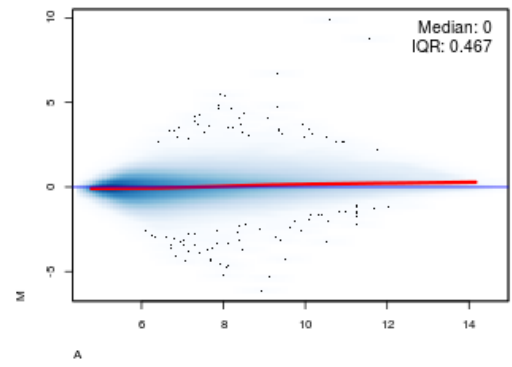
Array1 vs pseudo-median reference chip



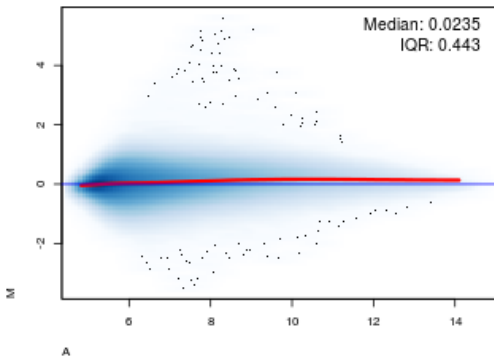
Array2 vs pseudo-median reference chip



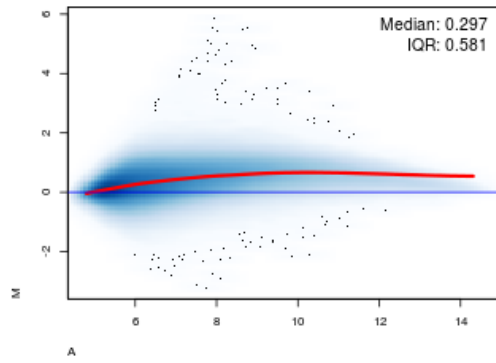
Array3 vs pseudo-median reference chip



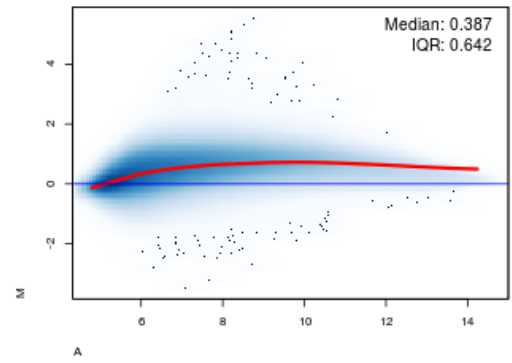
Array4 vs pseudo-median reference chip



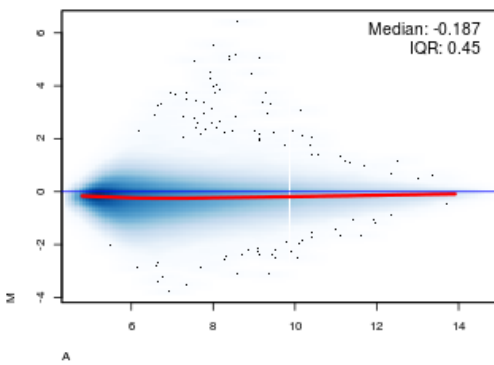
Array5 vs pseudo-median reference chip



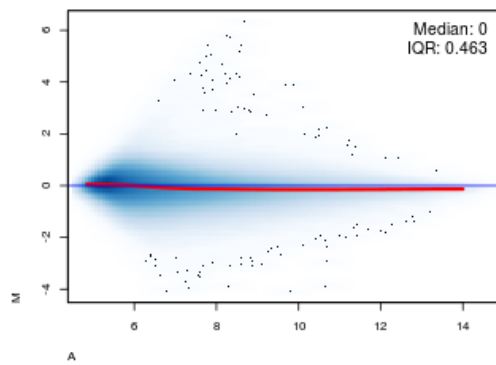
Array6 vs pseudo-median reference chip



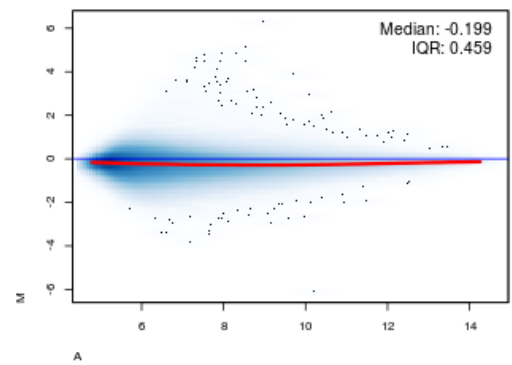
Array7 vs pseudo-median reference chip



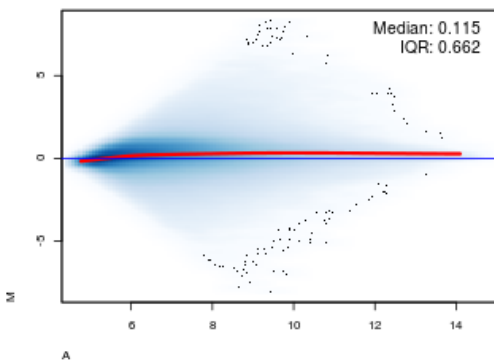
Array8 vs pseudo-median reference chip



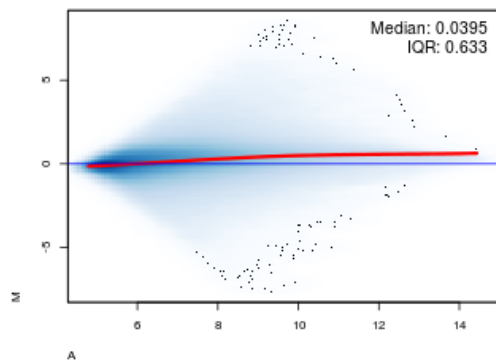
Array9 vs pseudo-median reference chip



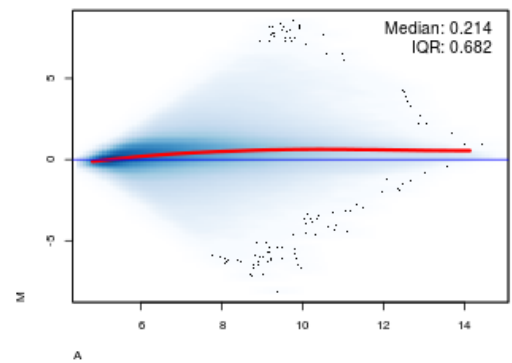
Array10 vs pseudo-median reference chip



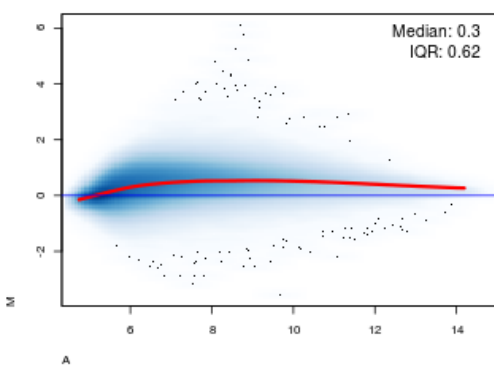
Array11 vs pseudo-median reference chip



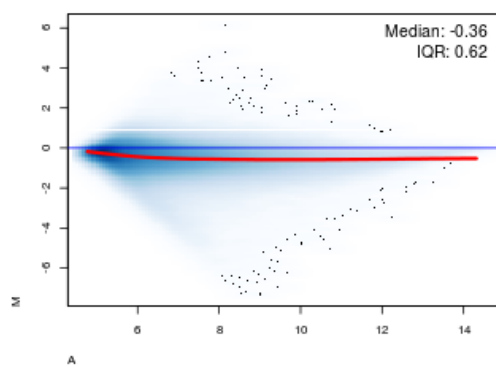
Array12 vs pseudo-median reference chip



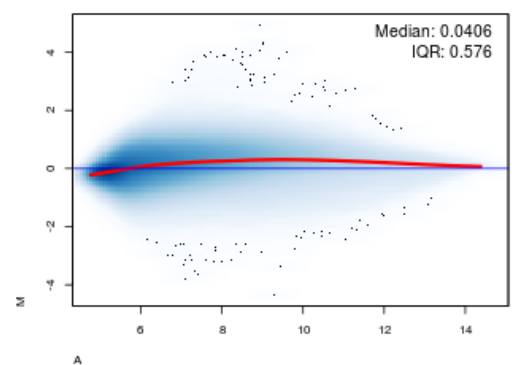
Array13 vs pseudo-median reference chip



Array14 vs pseudo-median reference chip

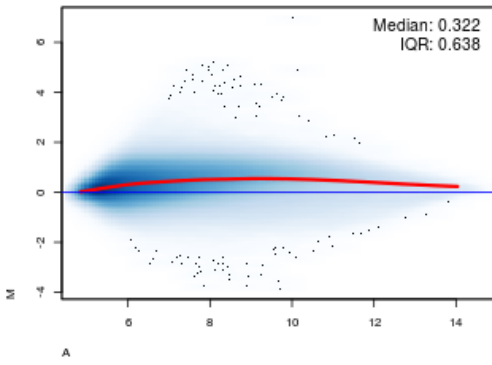


Array15 vs pseudo-median reference chip

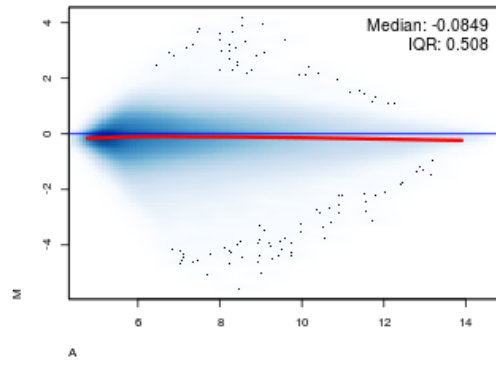


MA plots of raw data 2 / 2

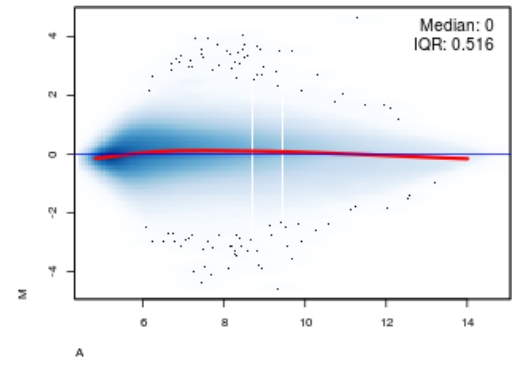
Array16 vs pseudo-median reference chip



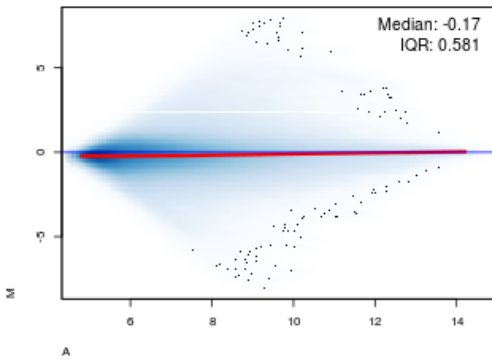
Array17 vs pseudo-median reference chip



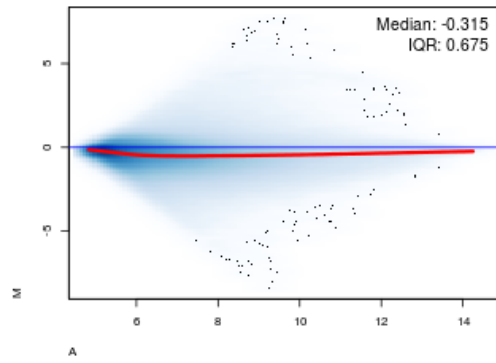
Array18 vs pseudo-median reference chip



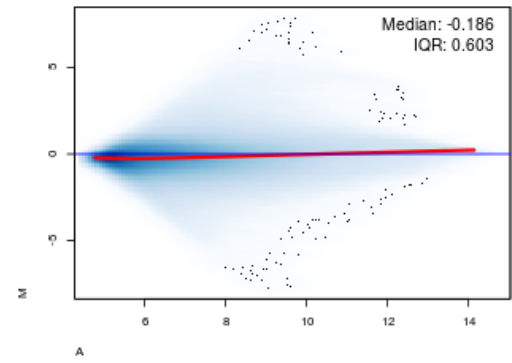
Array19 vs pseudo-median reference chip



Array20 vs pseudo-median reference chip

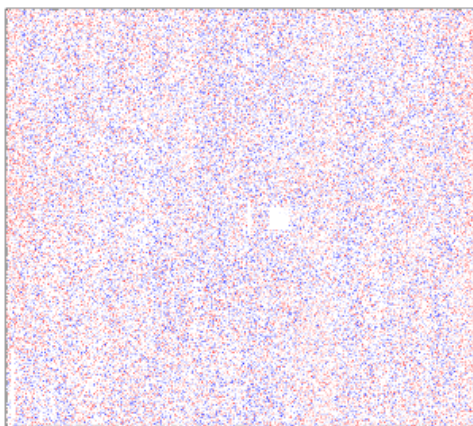


Array21 vs pseudo-median reference chip

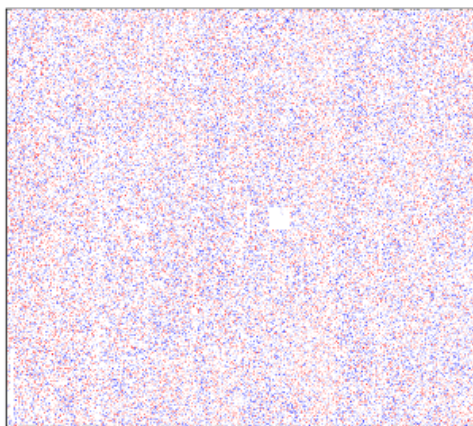


2D virtual PLM image for model characteristic: resid 1 / 2

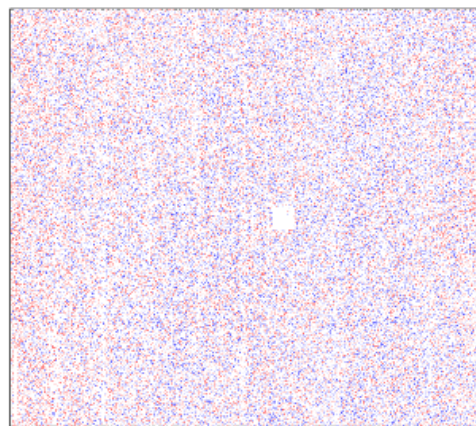
Array1



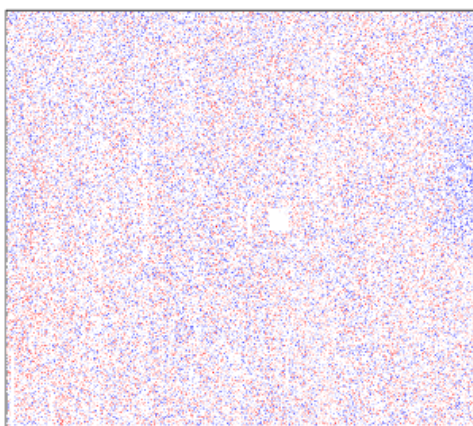
Array2



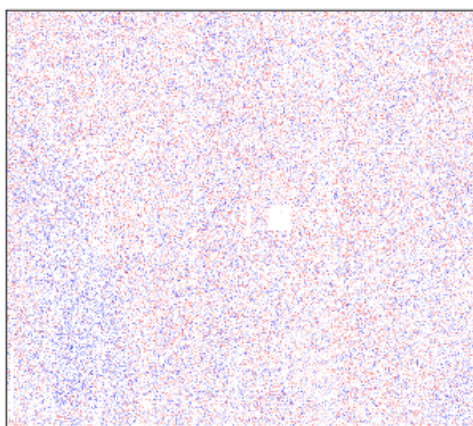
Array3



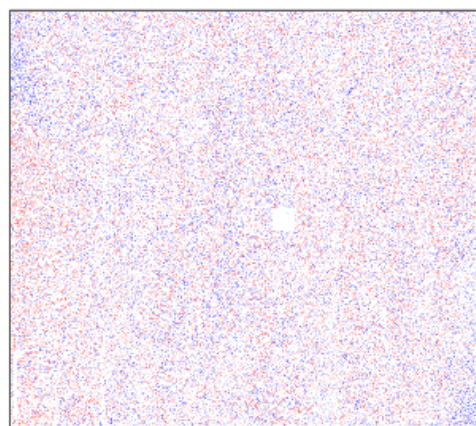
Array4



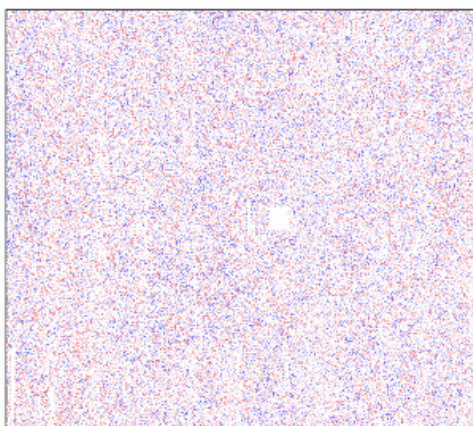
Array5



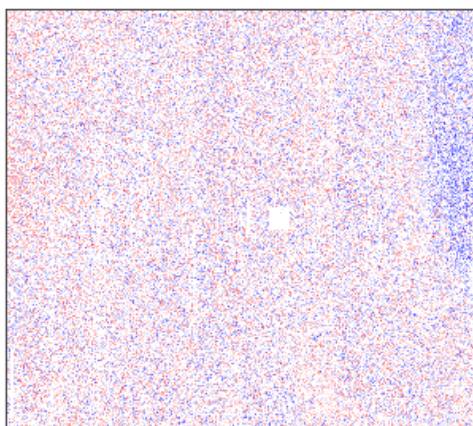
Array6



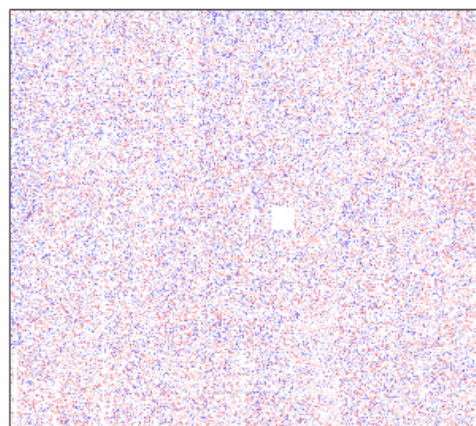
Array7



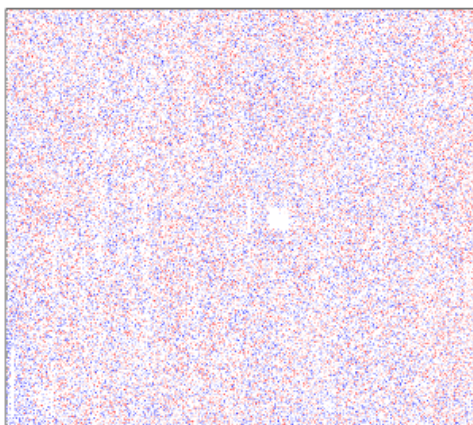
Array8



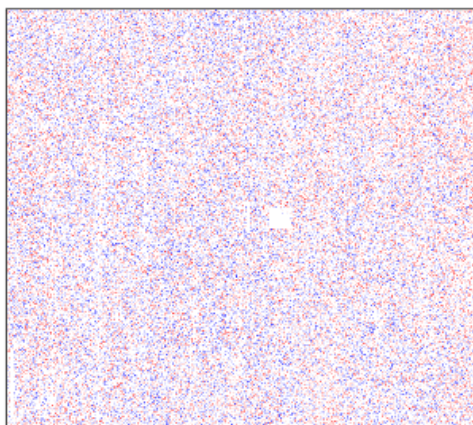
Array9



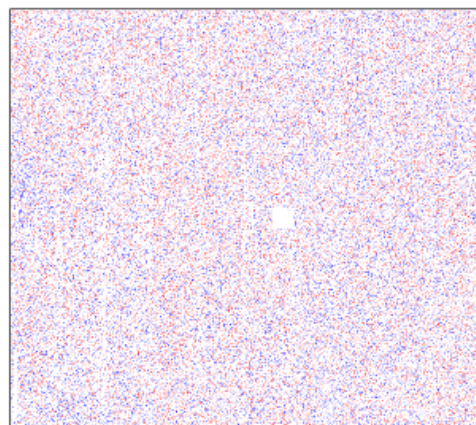
Array10



Array11

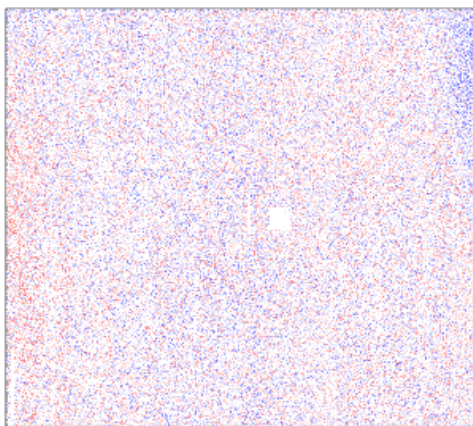


Array12

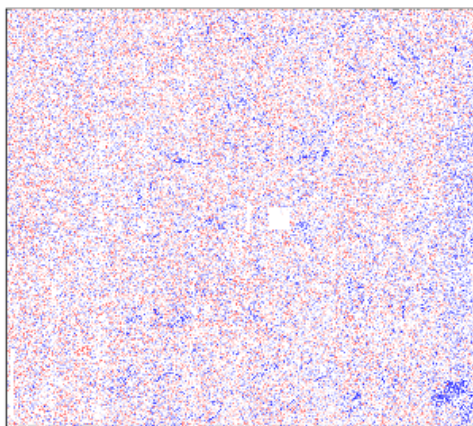


2D virtual PLM image for model characteristic: resids 2 / 2

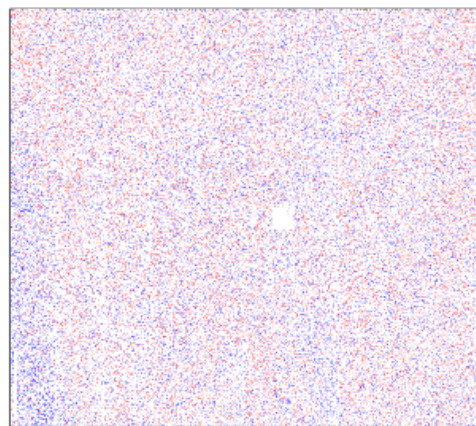
Array13



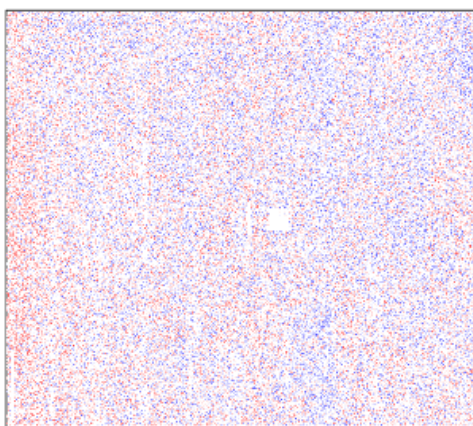
Array14



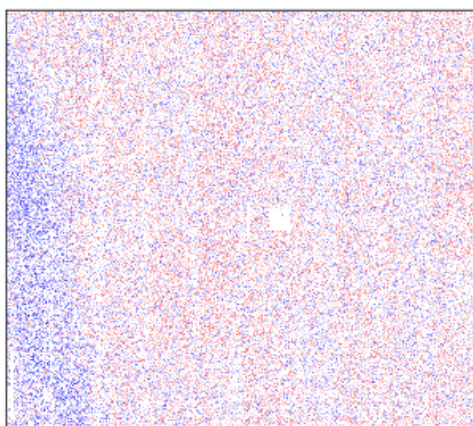
Array15



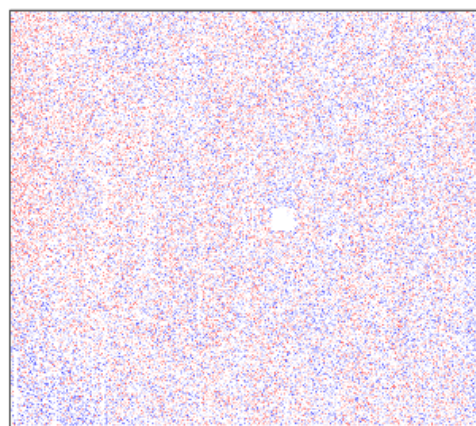
Array16



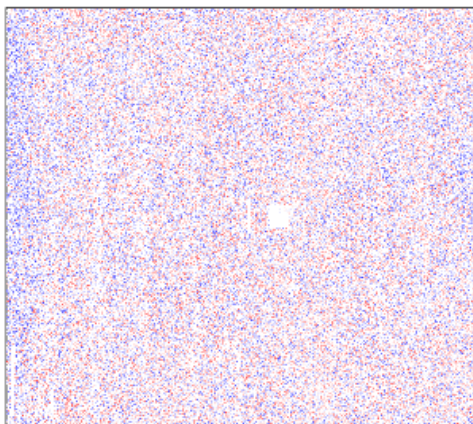
Array17



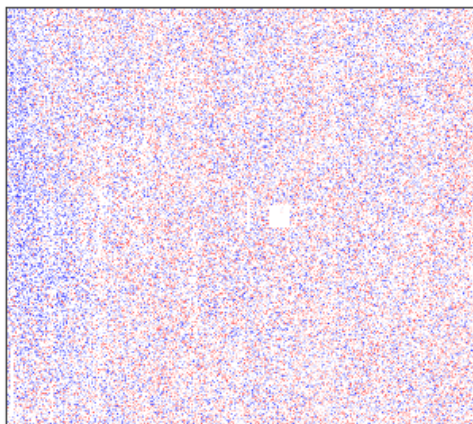
Array18



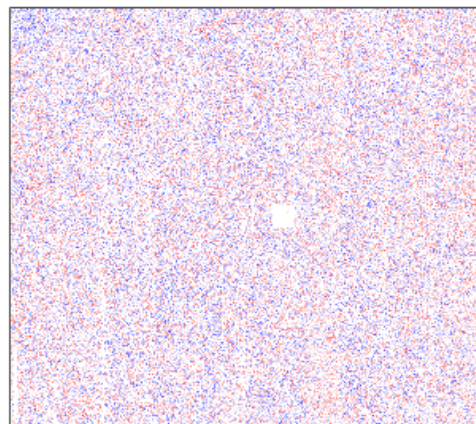
Array19



Array20

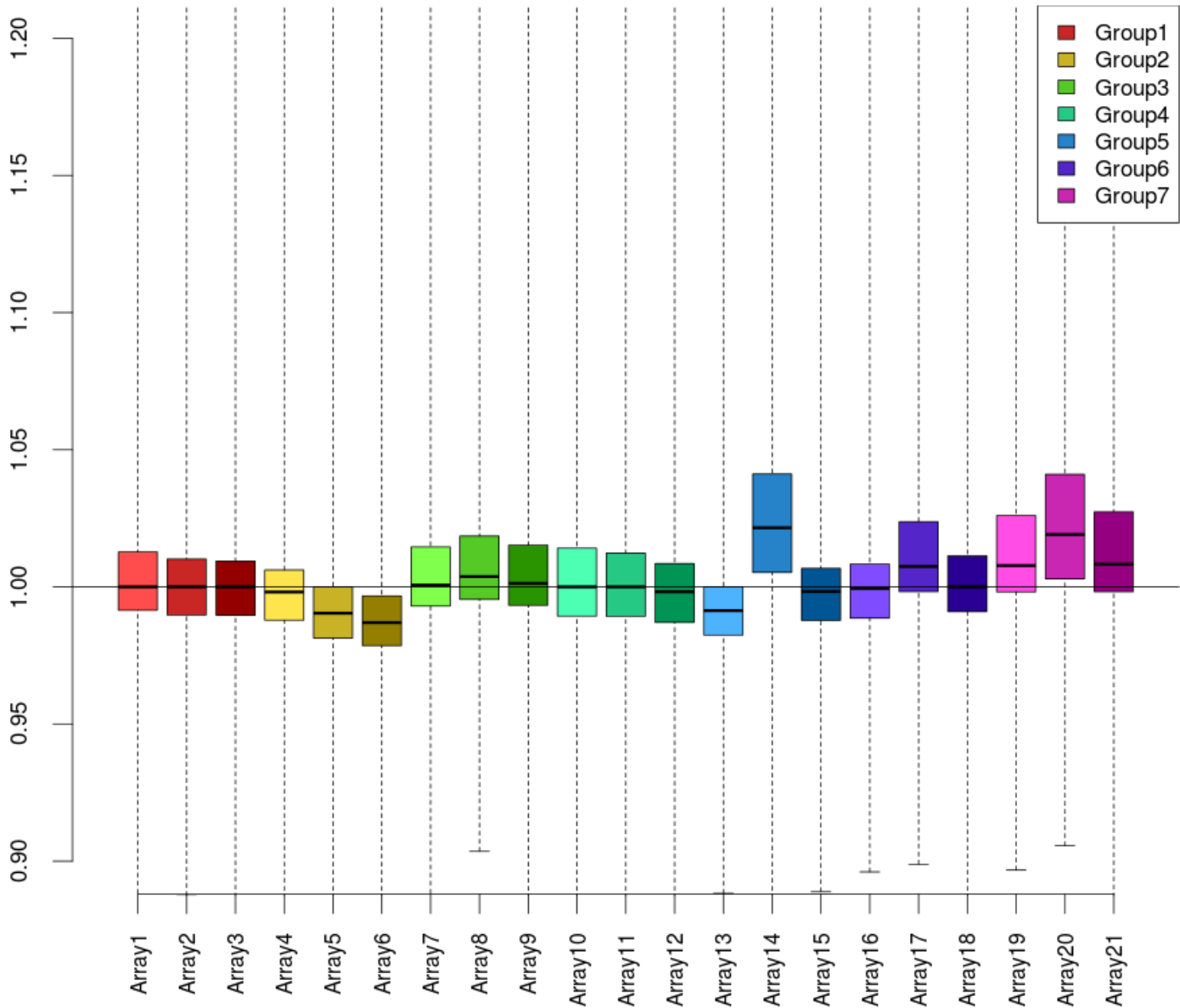


Array21



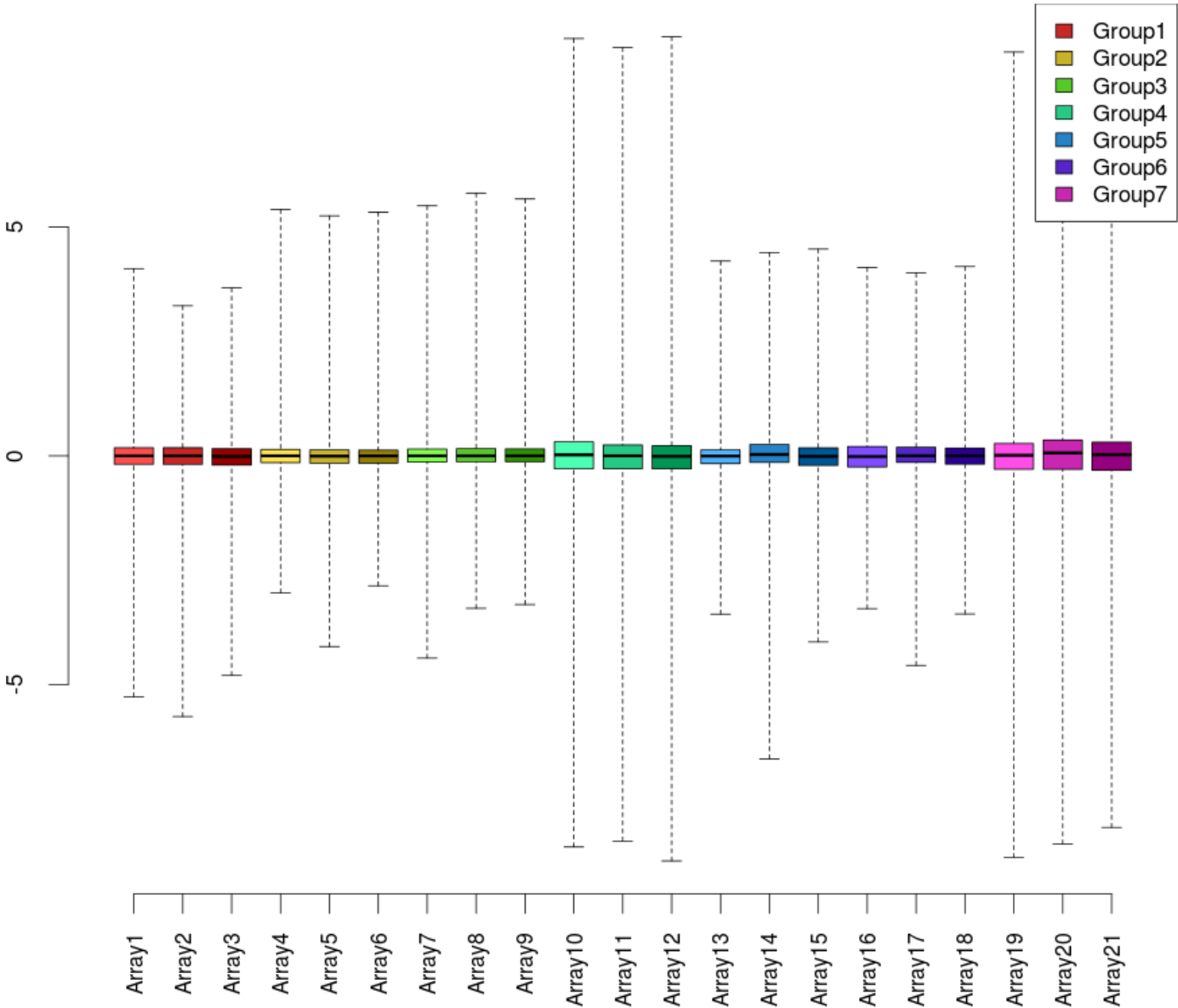
Normalized Unscaled Standard Errors (NUSE)

NUSE median value should be < 1.1

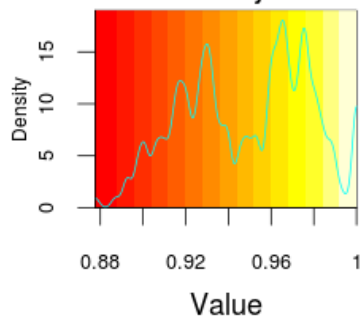


Relative Log Expression (RLE)

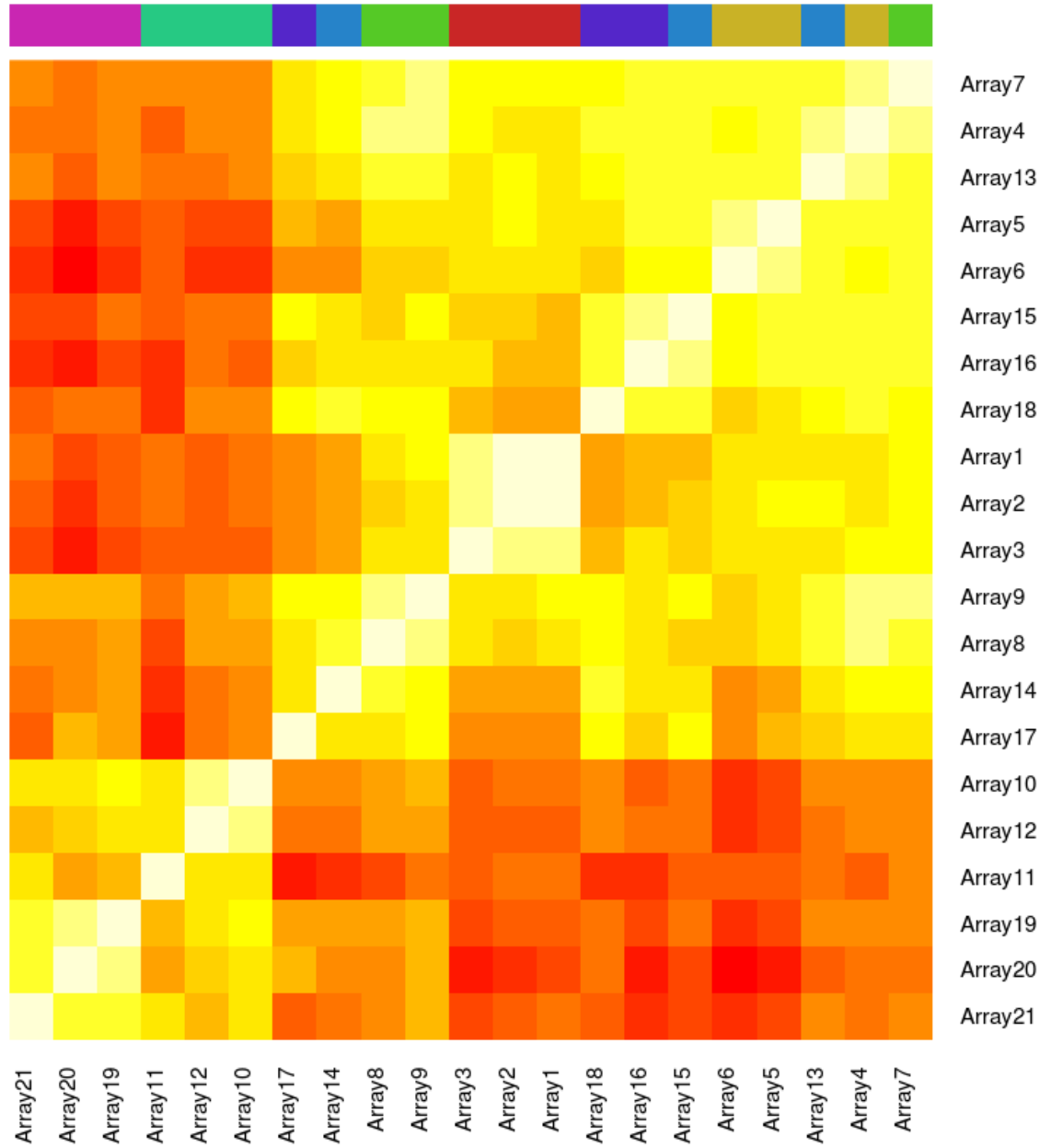
RLE distributions should be centered around 0



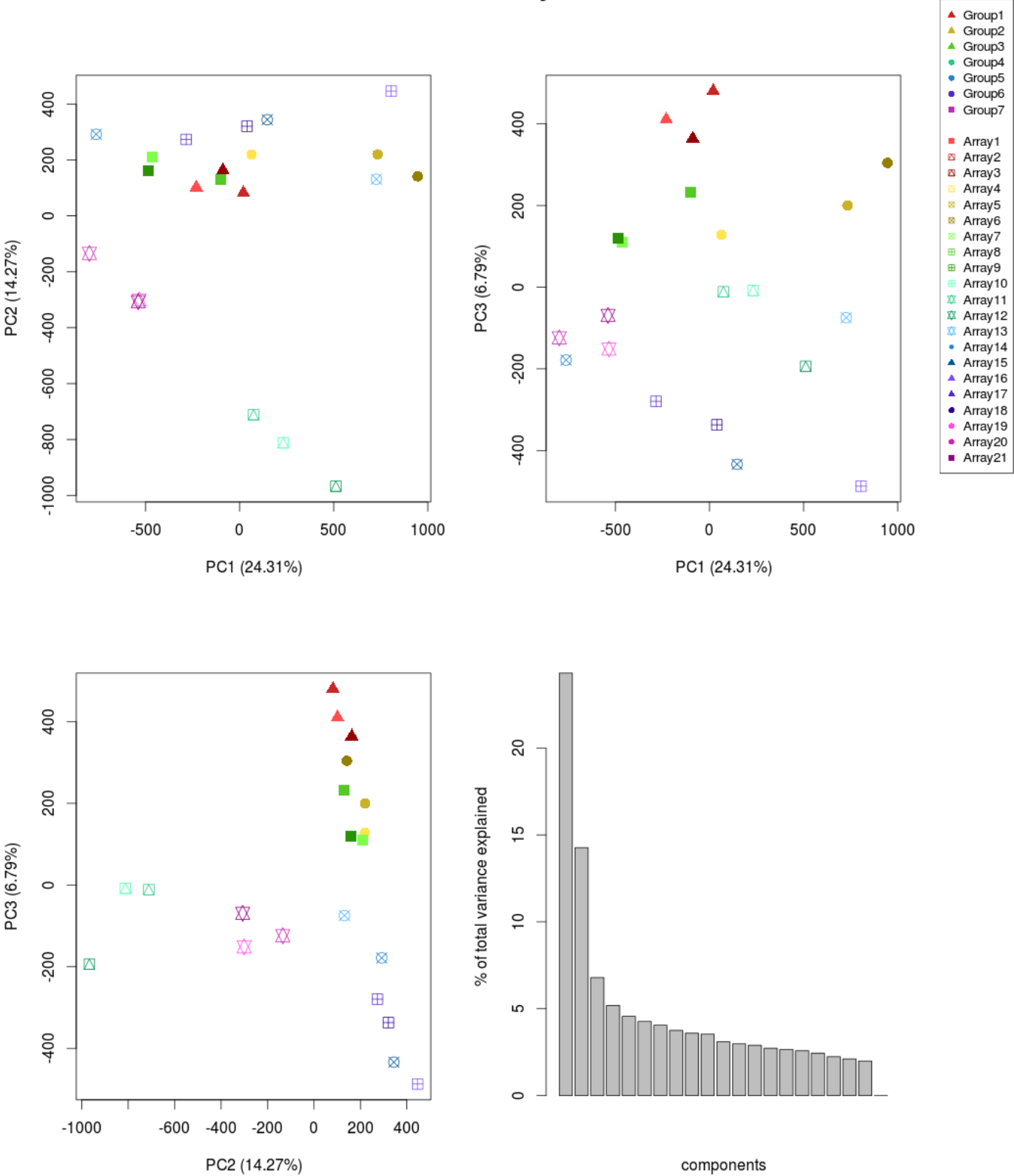
Color Key
and Density Plot



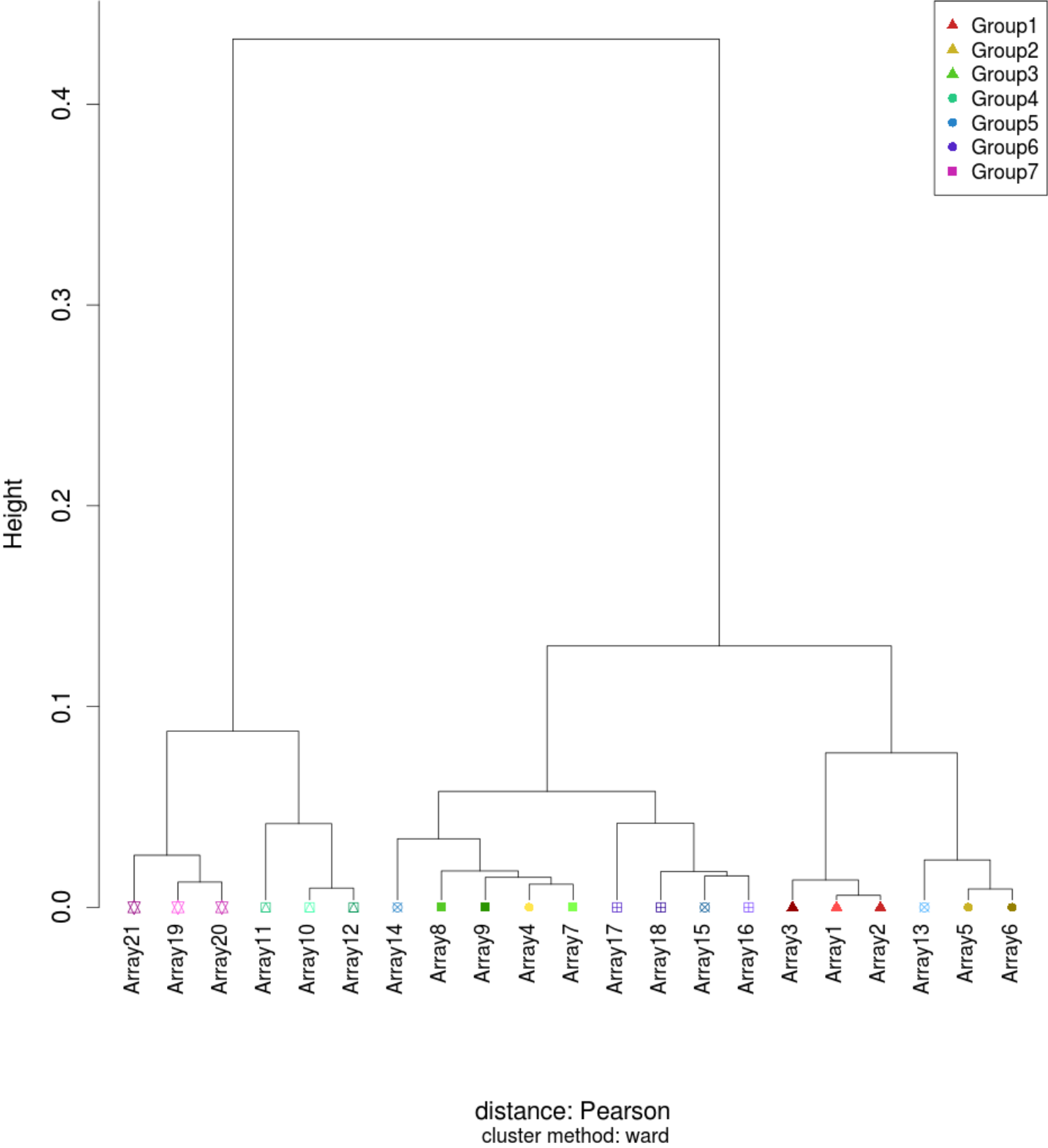
Raw data correlation plot
correlation method: pearson
cluster method: ward



PCA analysis of Raw data



Cluster dendrogram of raw data



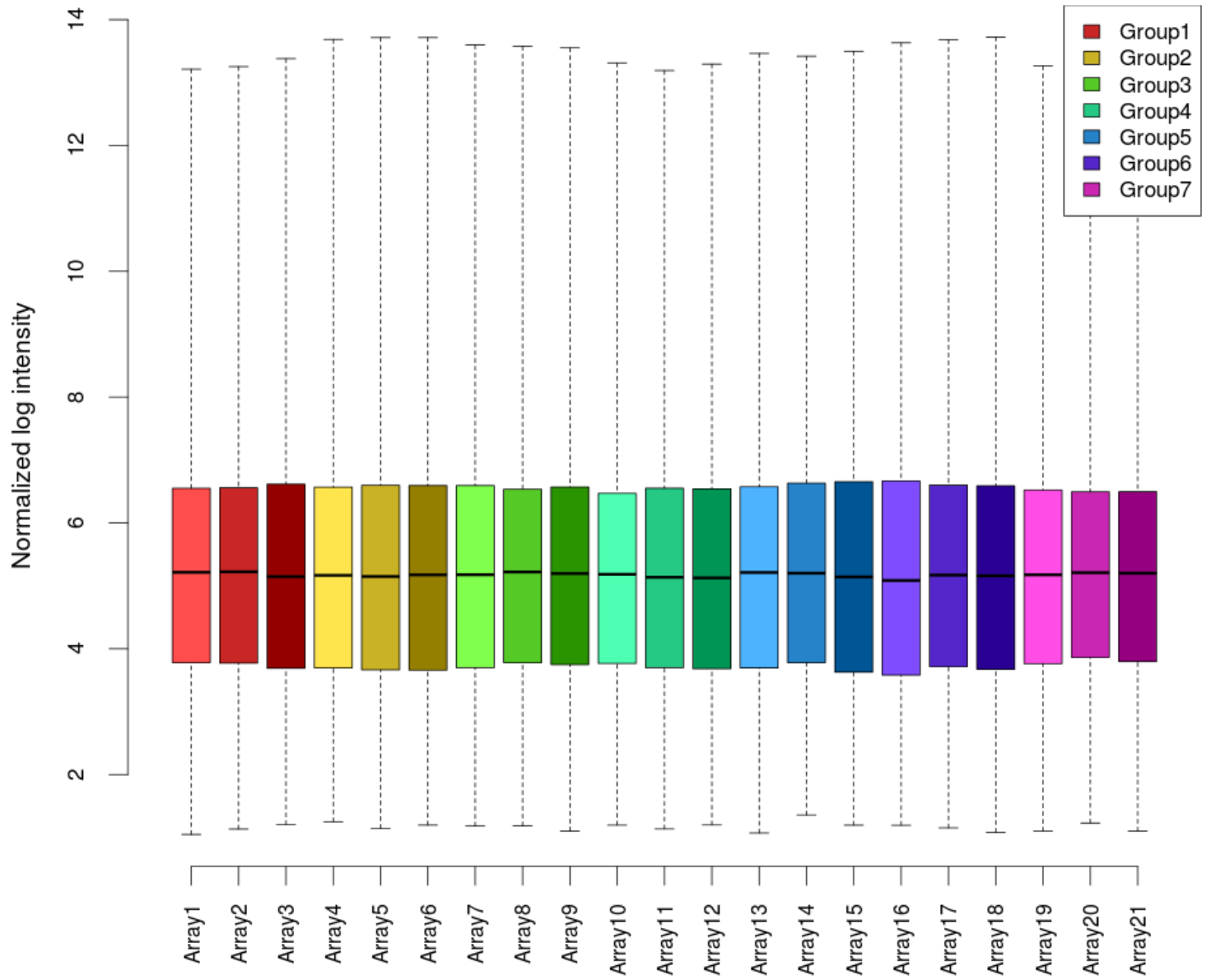
Pre-processing of Raw Data

Method: RMA

Annotation: hugene10st_Hs_ENSG

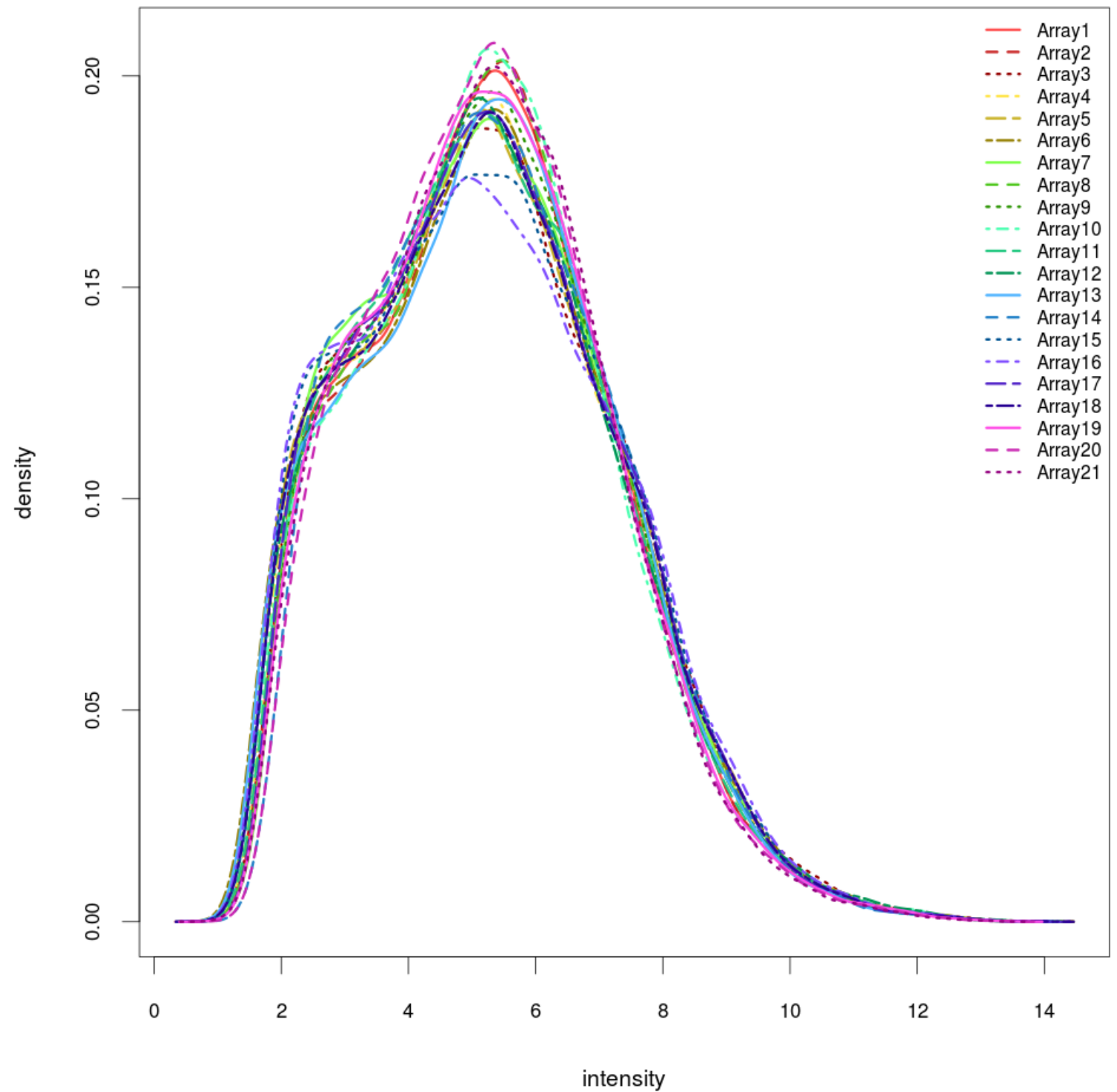
Boxplot after RMA

Distributions should be comparable between arrays



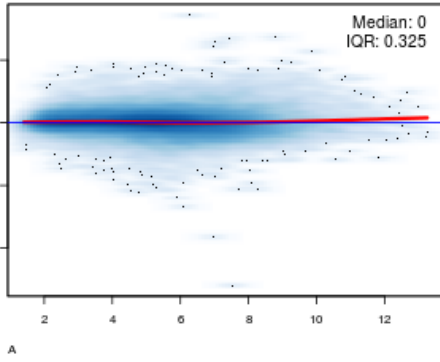
Density histogram after RMA

Curves should be comparable between arrays

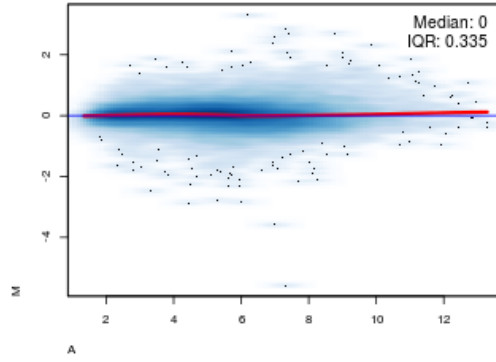


MA plots after RMA normalization 1 / 2

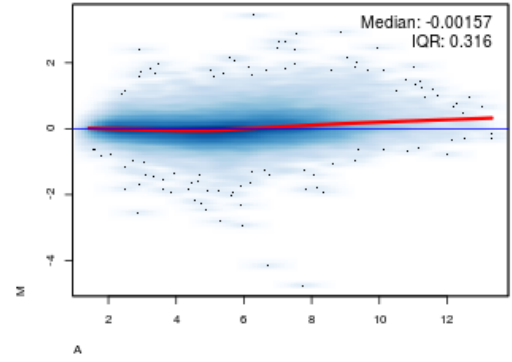
Array1 vs pseudo-median reference chip



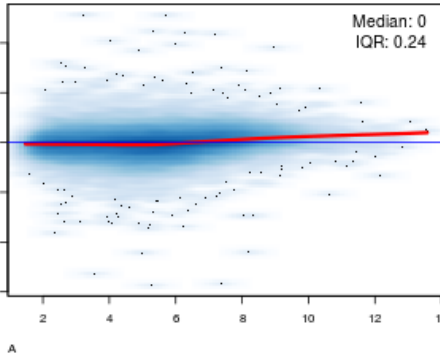
Array2 vs pseudo-median reference chip



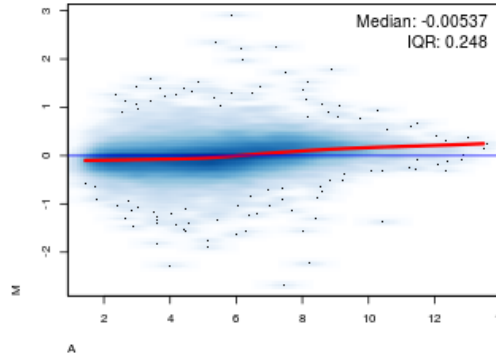
Array3 vs pseudo-median reference chip



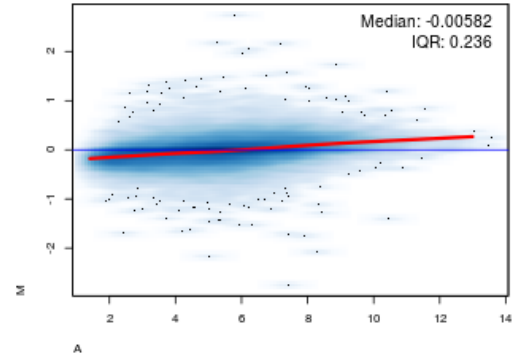
Array4 vs pseudo-median reference chip



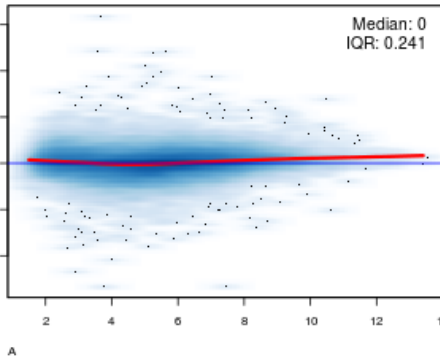
Array5 vs pseudo-median reference chip



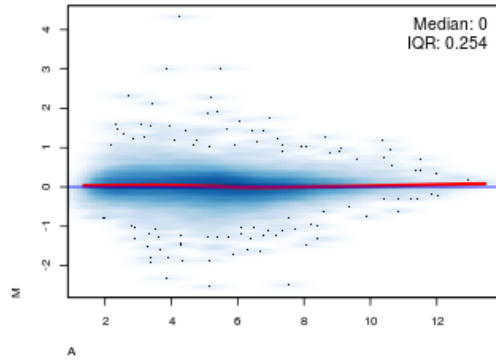
Array6 vs pseudo-median reference chip



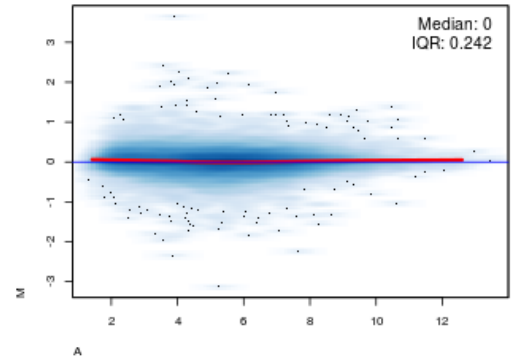
Array7 vs pseudo-median reference chip



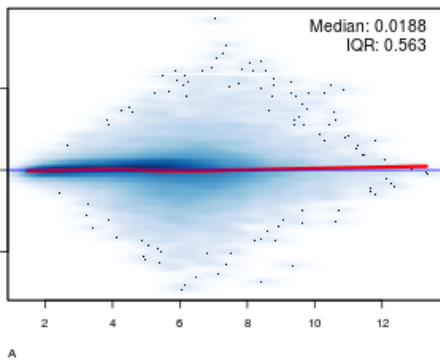
Array8 vs pseudo-median reference chip



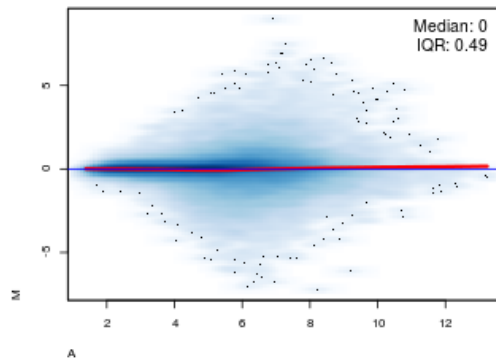
Array9 vs pseudo-median reference chip



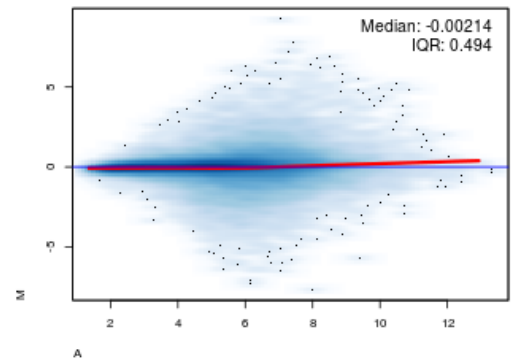
Array10 vs pseudo-median reference chip



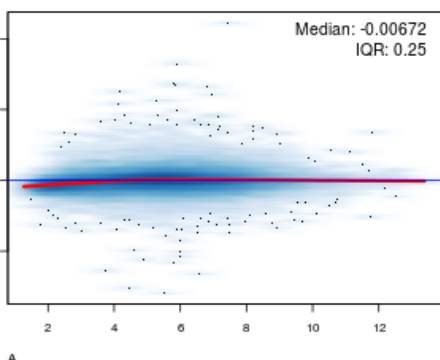
Array11 vs pseudo-median reference chip



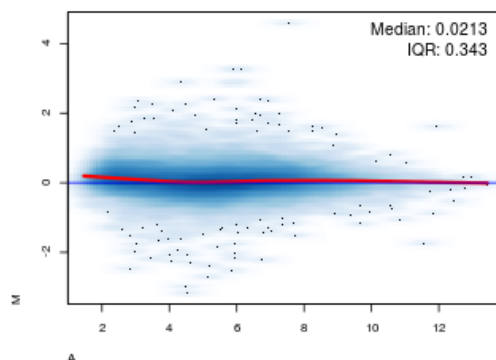
Array12 vs pseudo-median reference chip



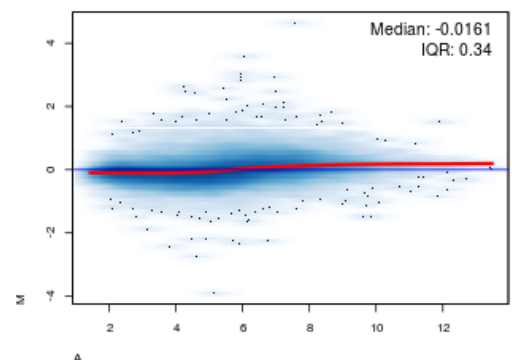
Array13 vs pseudo-median reference chip



Array14 vs pseudo-median reference chip

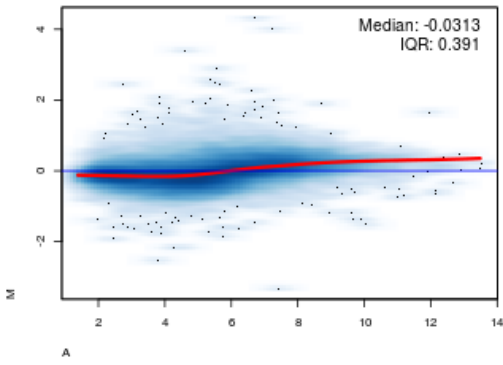


Array15 vs pseudo-median reference chip

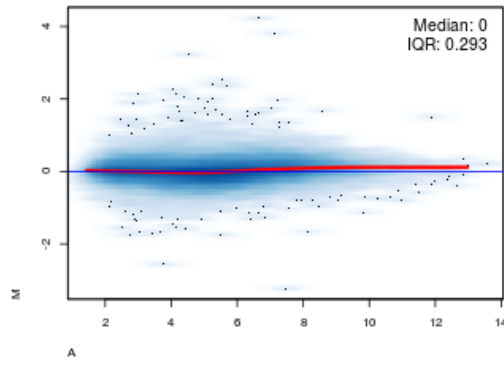


MA plots afterRMANormalization 2 / 2

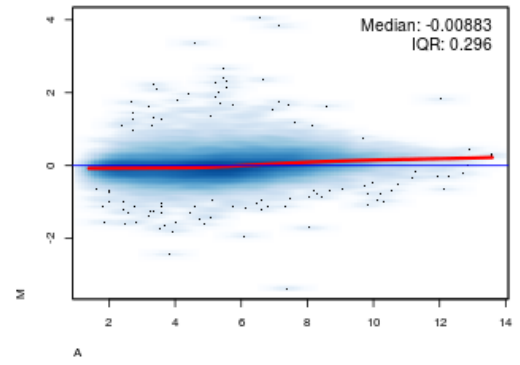
Array16 vs pseudo-median reference chip



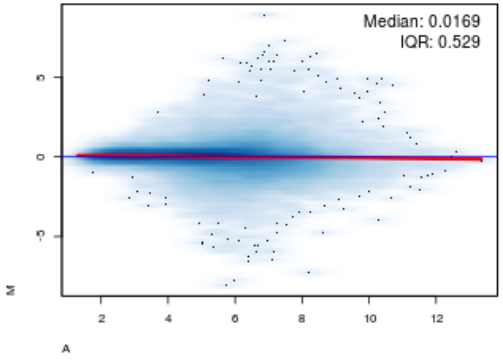
Array17 vs pseudo-median reference chip



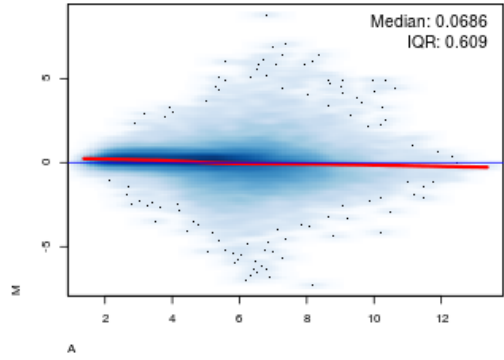
Array18 vs pseudo-median reference chip



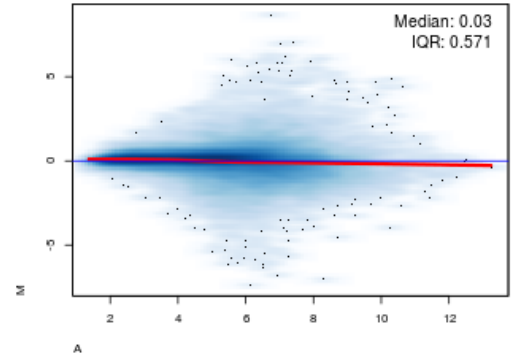
Array19 vs pseudo-median reference chip



Array20 vs pseudo-median reference chip



Array21 vs pseudo-median reference chip



Heatmap visualization showing the relationship between 21 arrays. The color scale ranges from red (high relationship) to yellow (low relationship). The arrays are labeled on the left and right sides of the heatmap.

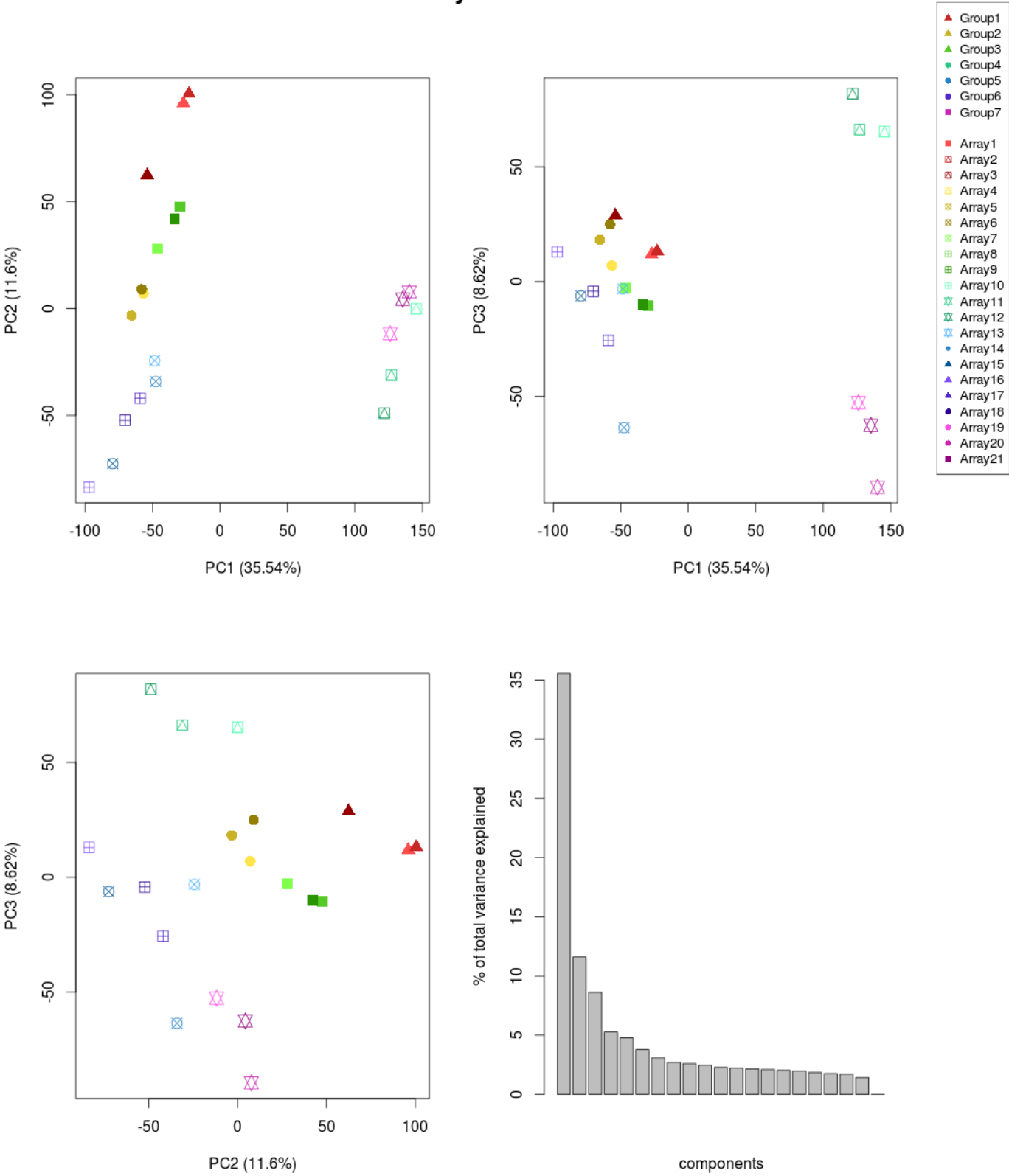
Arrays (Left to Right):

- Array10
- Array11
- Array12
- Array20
- Array21
- Array19
- Array14
- Array15
- Array13
- Array17
- Array16
- Array18
- Array3
- Array2
- Array1
- Array8
- Array7
- Array9
- Array4
- Array5
- Array6

Arrays (Top to Bottom):

- Array6
- Array5
- Array4
- Array9
- Array7
- Array8
- Array1
- Array2
- Array3
- Array18
- Array16
- Array17
- Array13
- Array15
- Array14
- Array19
- Array21
- Array20
- Array12
- Array11
- Array10

PCA analysis after RMA normalization



Cluster dendrogram of RMA normalized data

