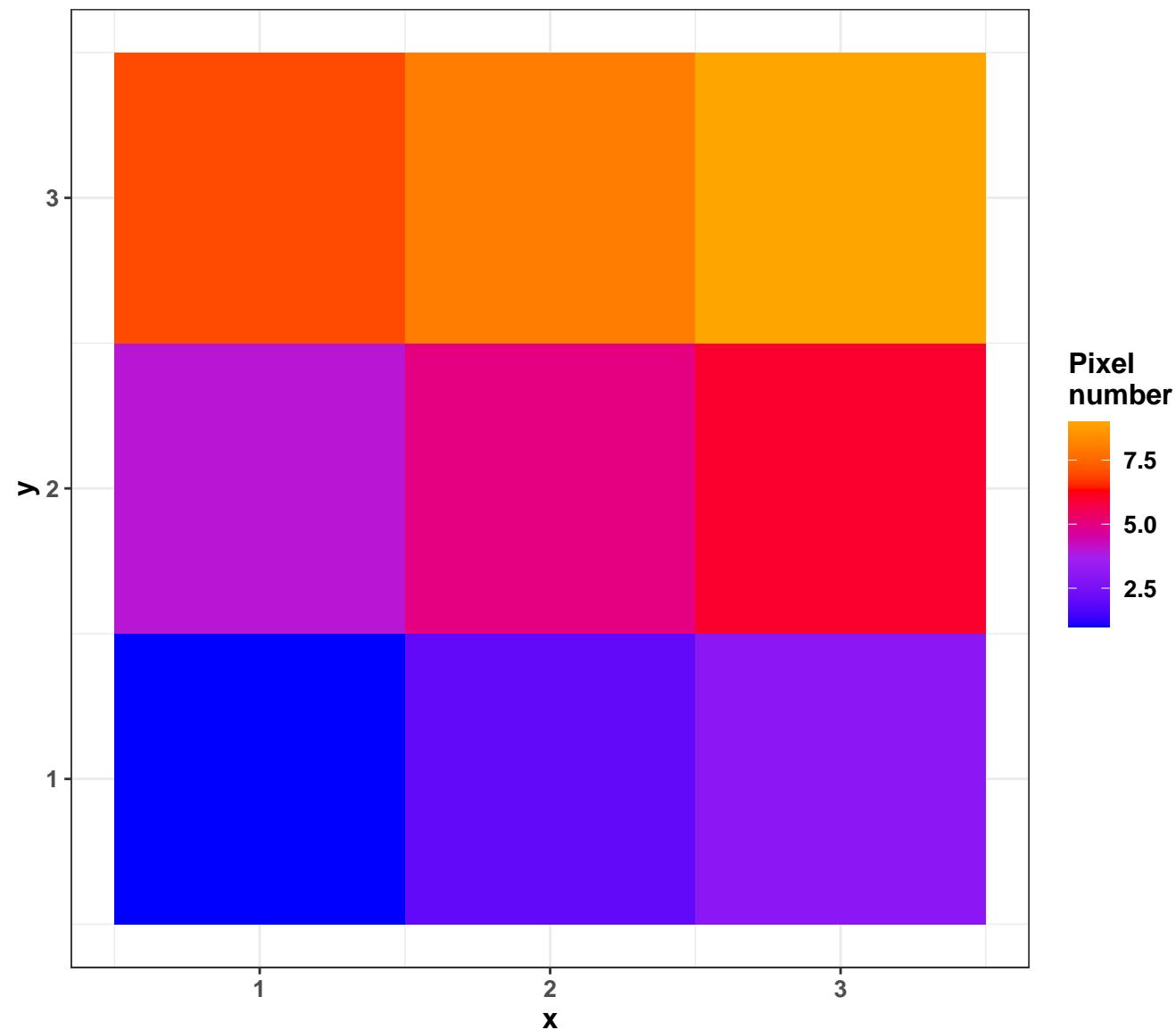


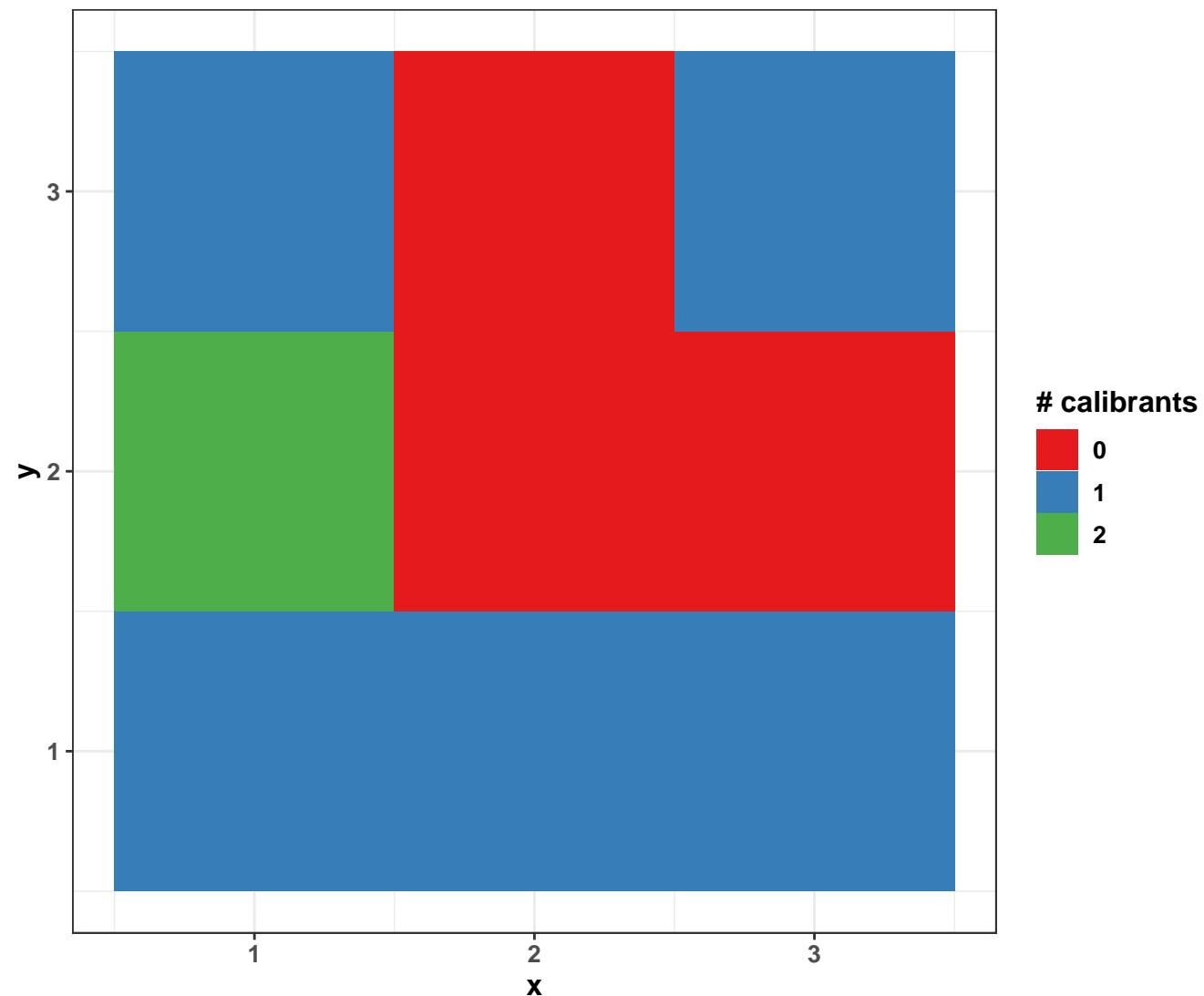
## Testfile\_imzml

properties	values
Number of m/z features	5199
Range of m/z values	100 – 799.81
Number of pixels	9
Range of x coordinates	1 – 3
Range of y coordinates	1 – 3
Range of intensities	0 – 9.24
Number of NA intensities	0
Number of Inf intensities	0
Number of duplicated coordinates	0
Median of intensities	0
Intensities > 0	35.16 %
Number of empty spectra	0
Median TIC ± sd	161.8 ± 43
Median # peaks per spectrum ± sd	1961 ± 260
Centroided	FALSE
input m/z (#valid/#input) in inputcalibrantfile1.tabular	3 / 3

**Pixel order**

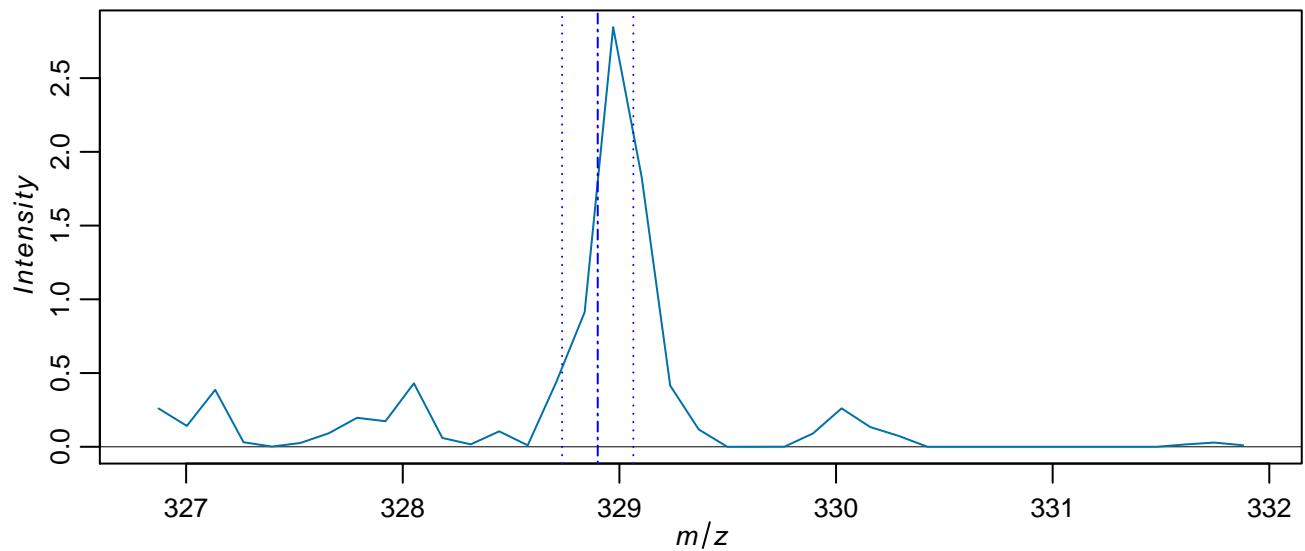


**Number of calibrants per pixel ( $\pm 100$  ppm)**

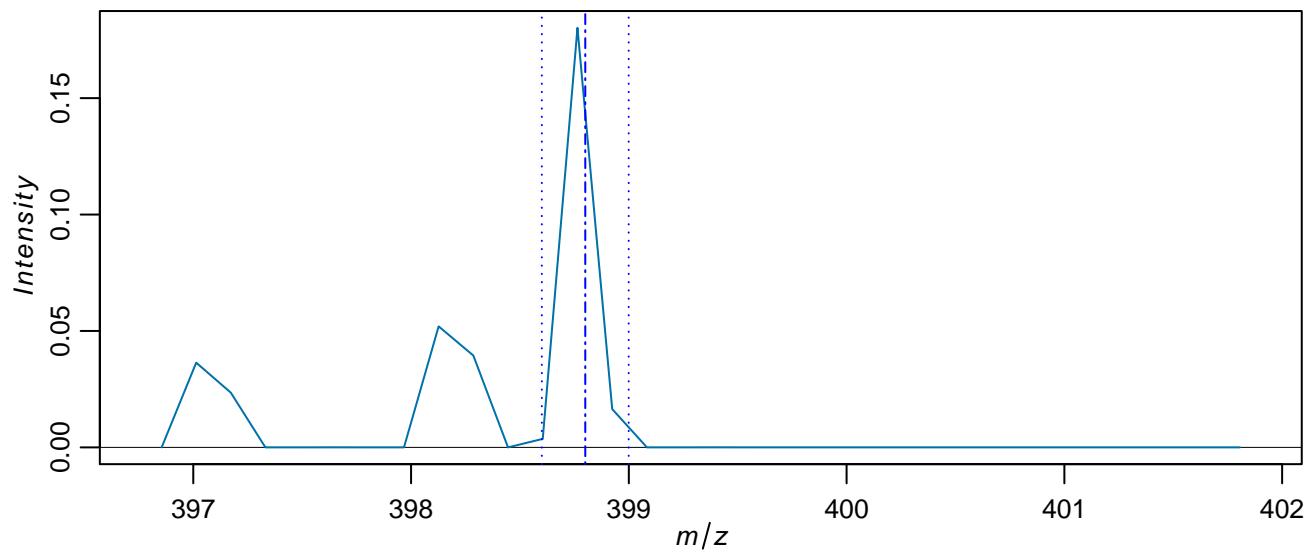


# Control of fold change plot

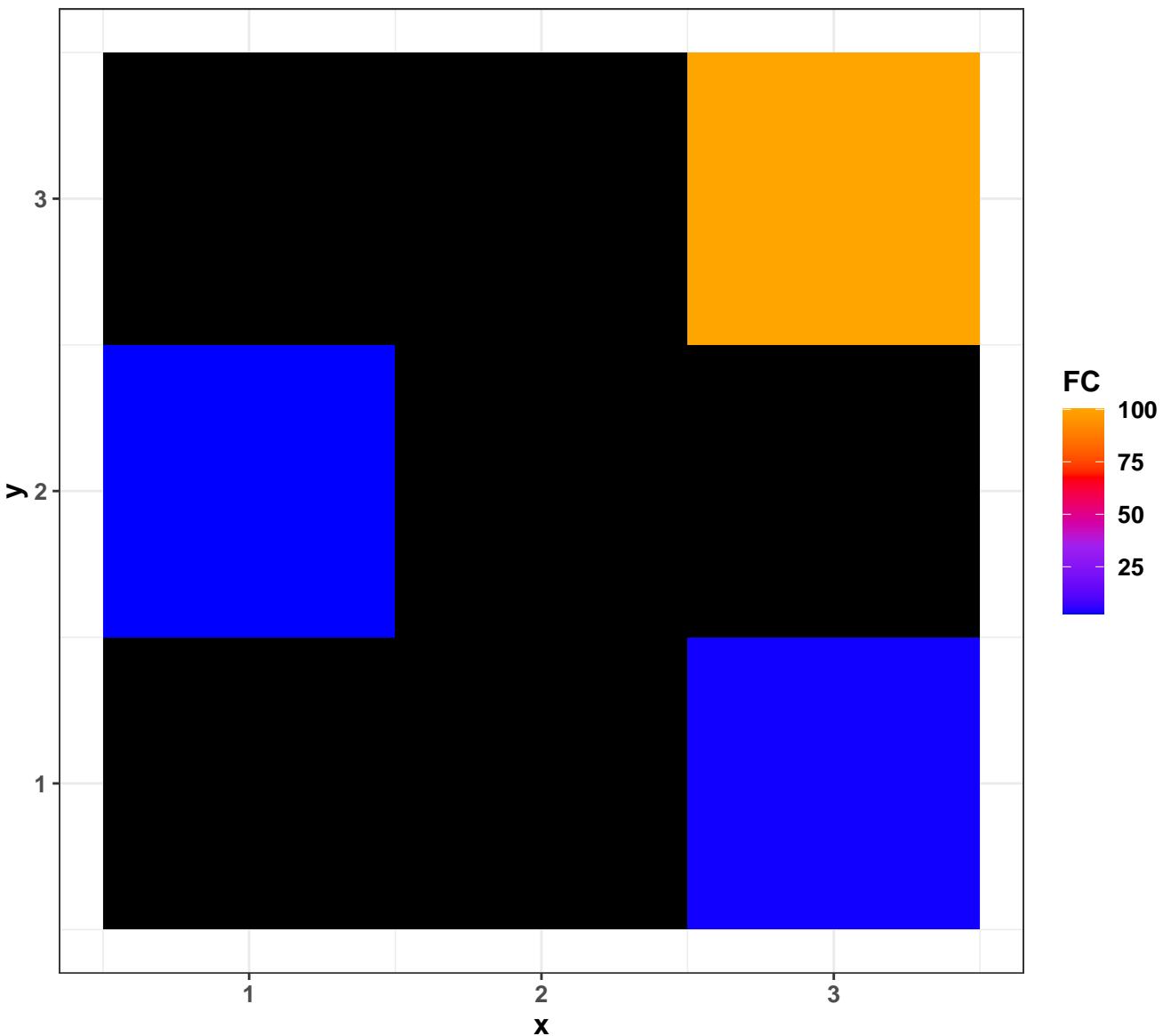
## Average spectrum 328.9 Da



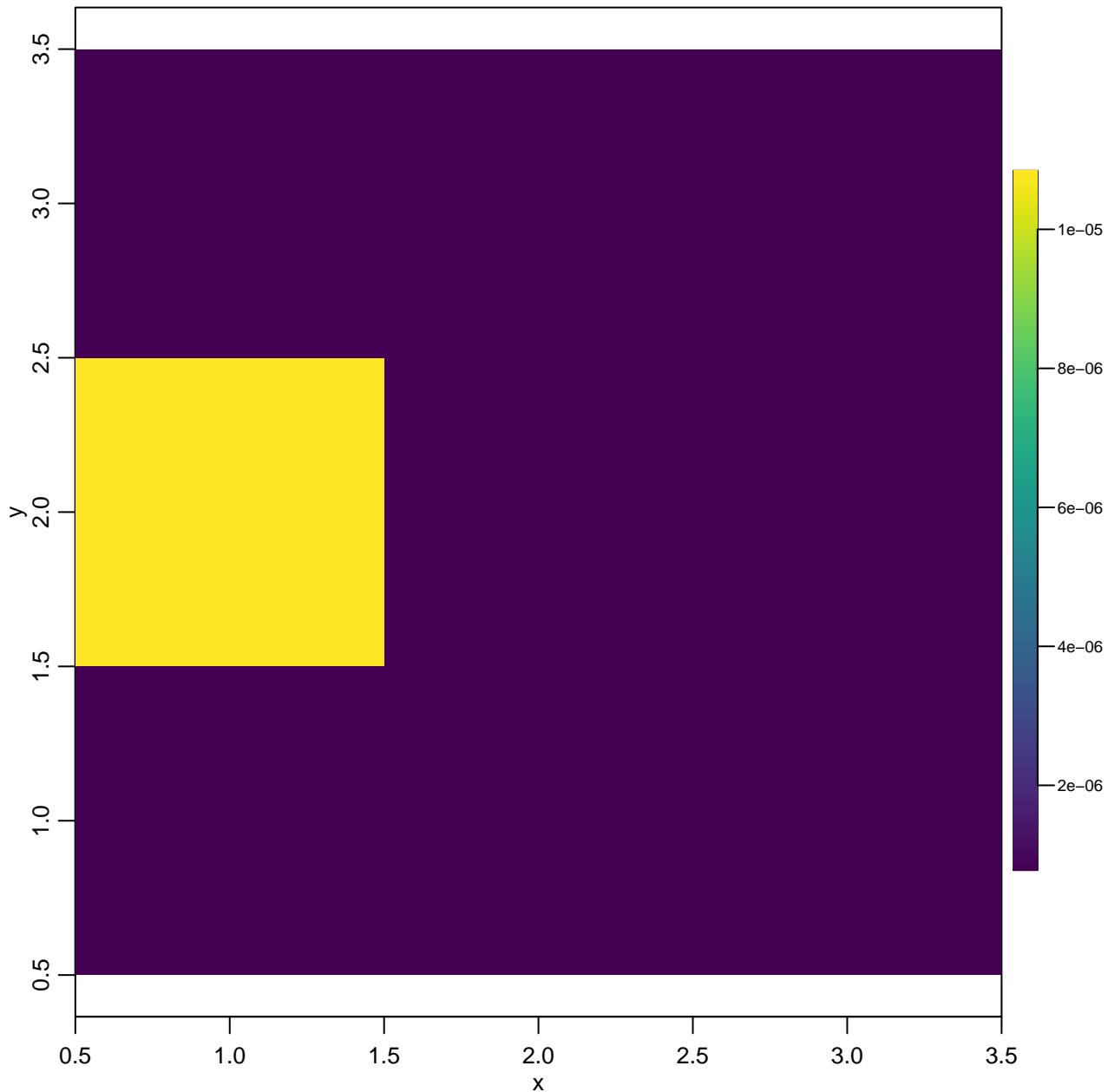
## Average spectrum 398.8 Da



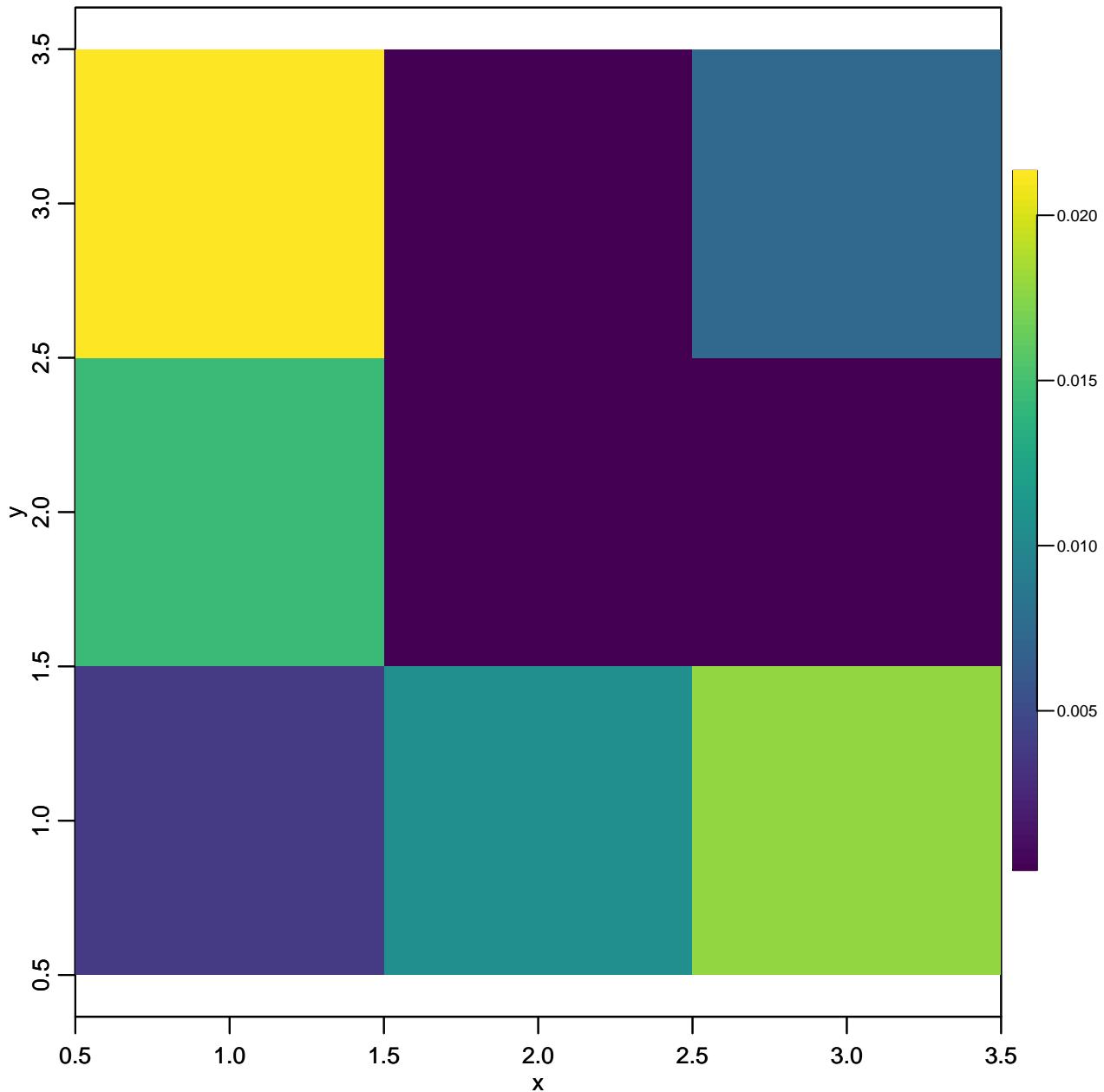
**Ratio of mz 3289 and mz 3988**



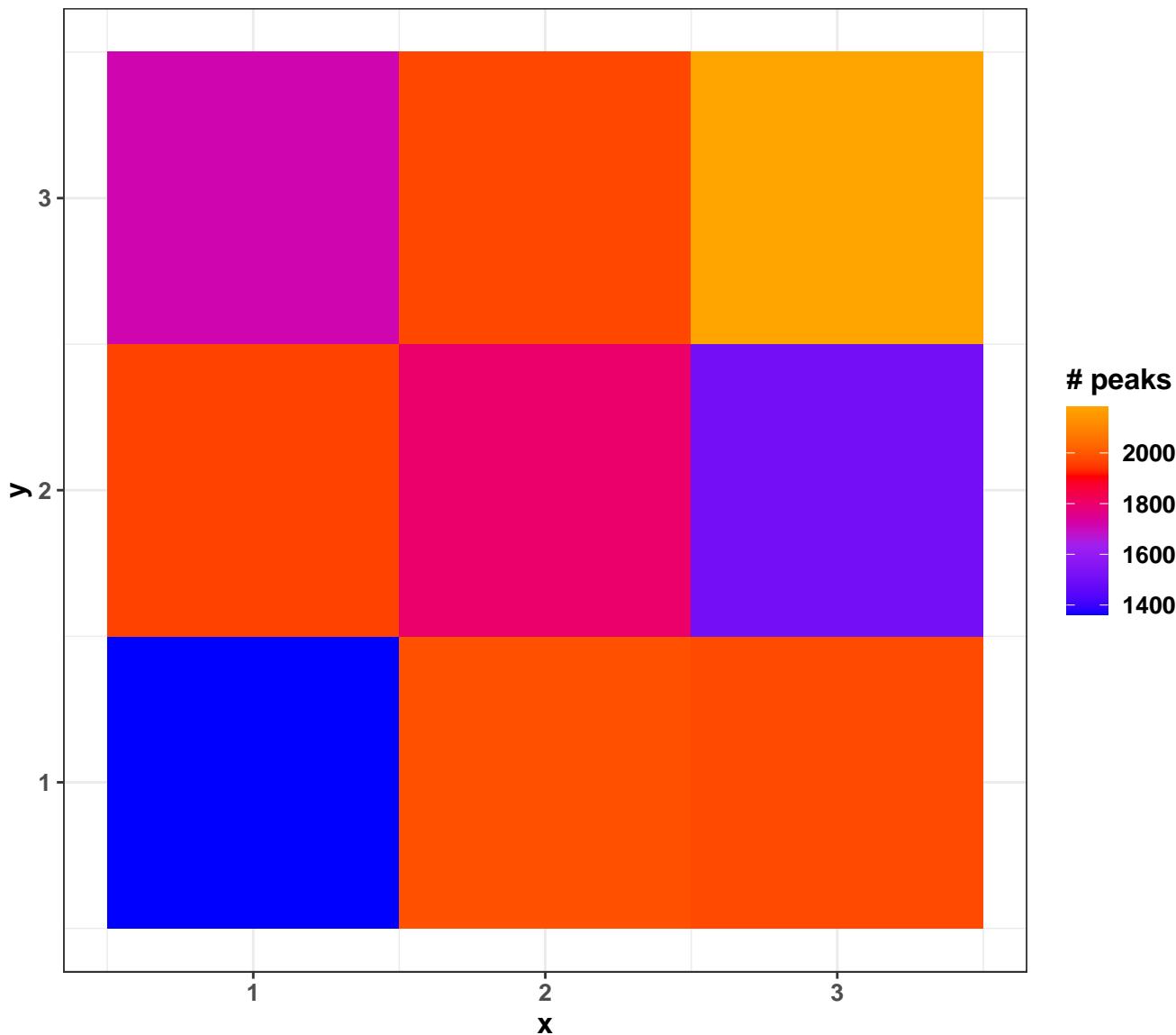
# 101.5: 101.5 ( $\pm 100$ ppm)



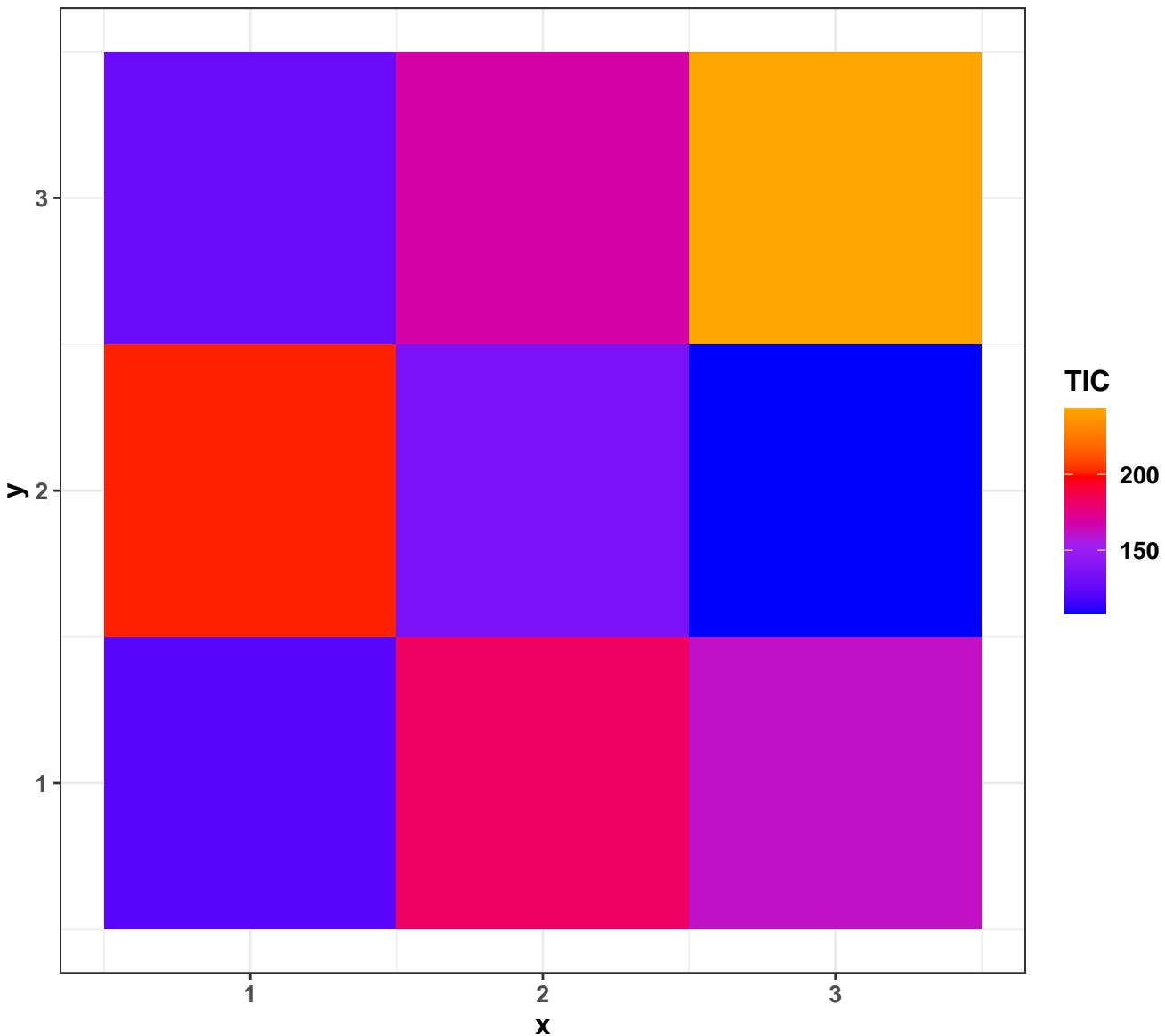
# **556.7: 556.7 ( $\pm 100$ ppm)**



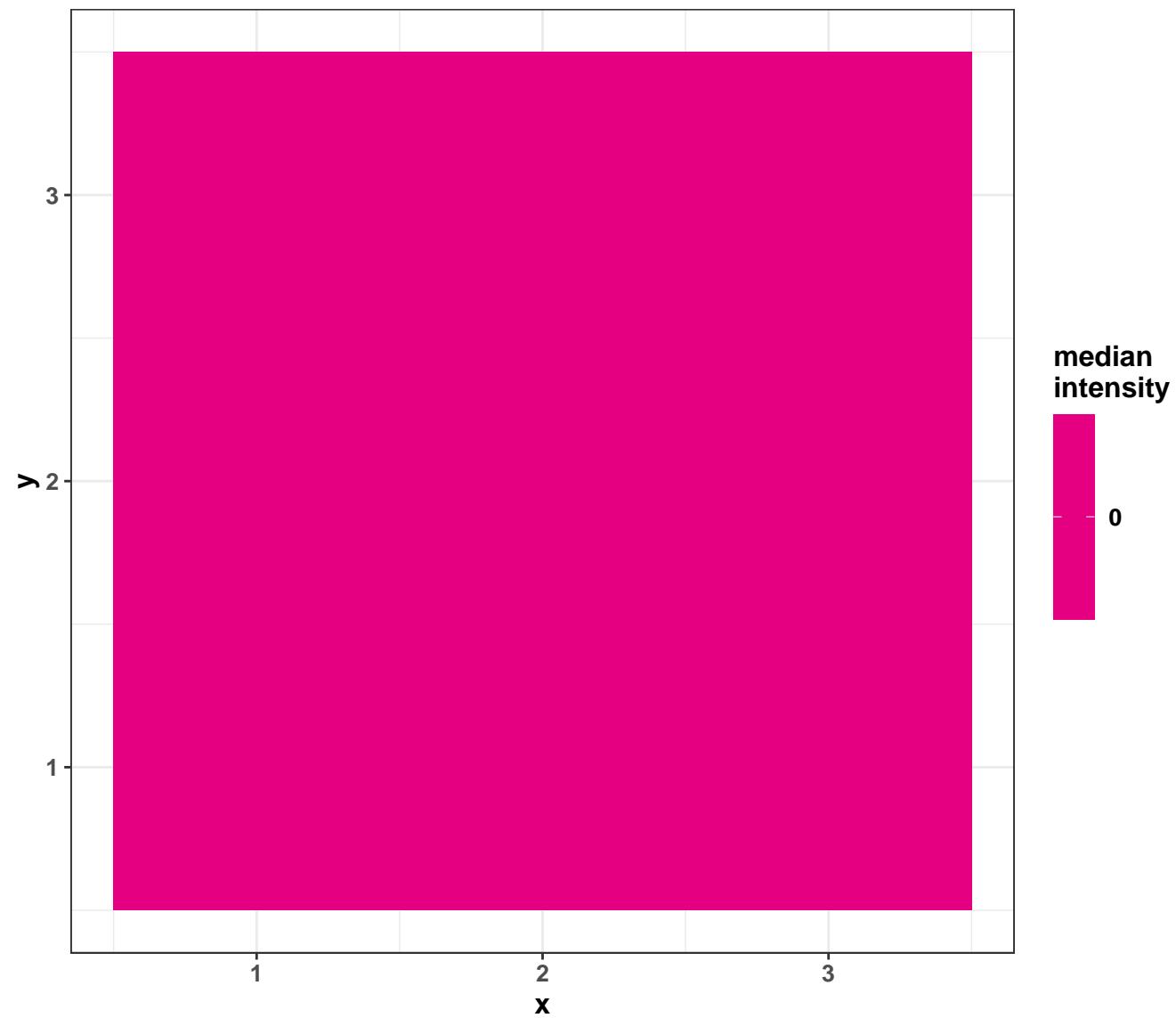
## Number of peaks per spectrum



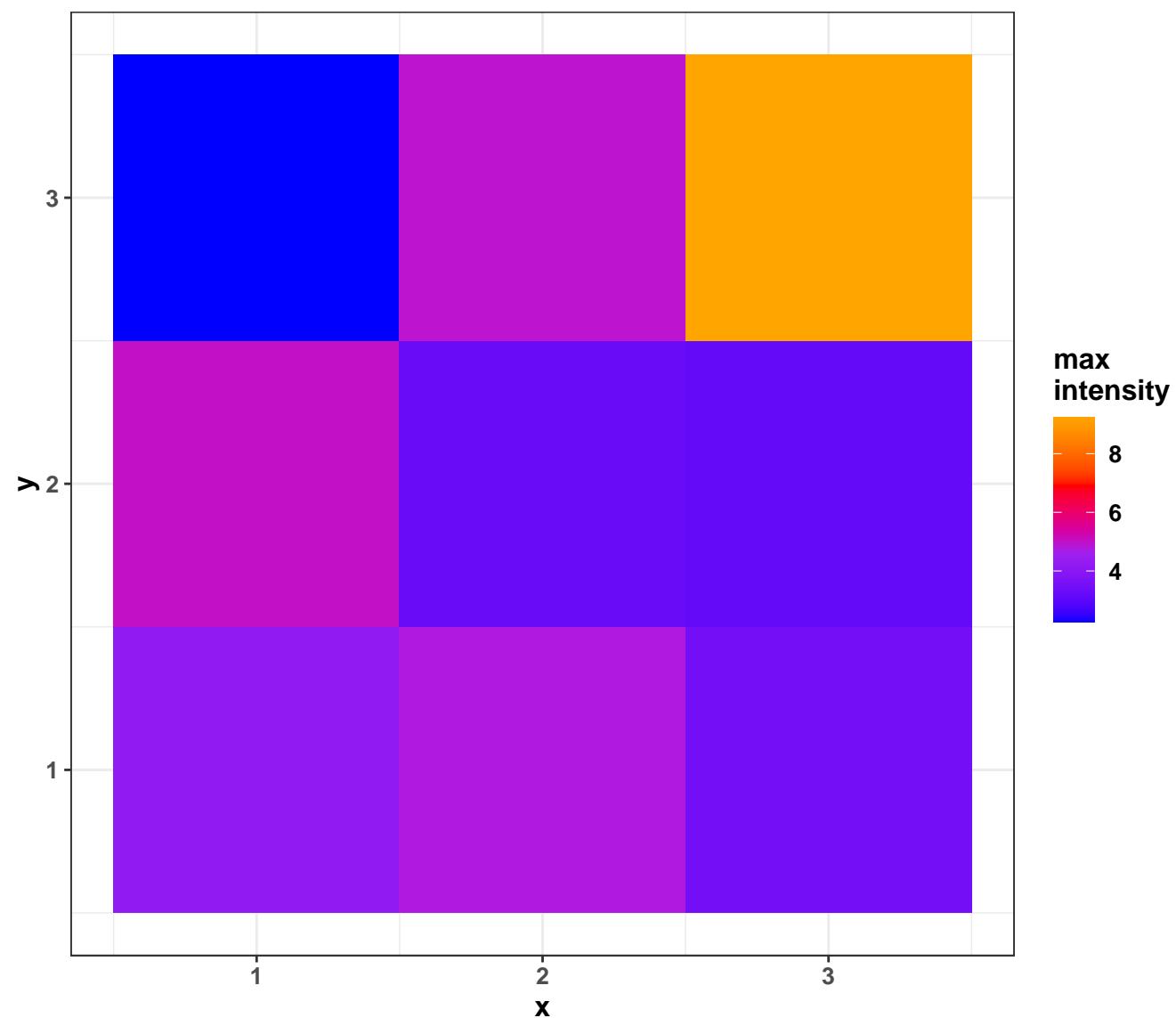
# Total Ion Current



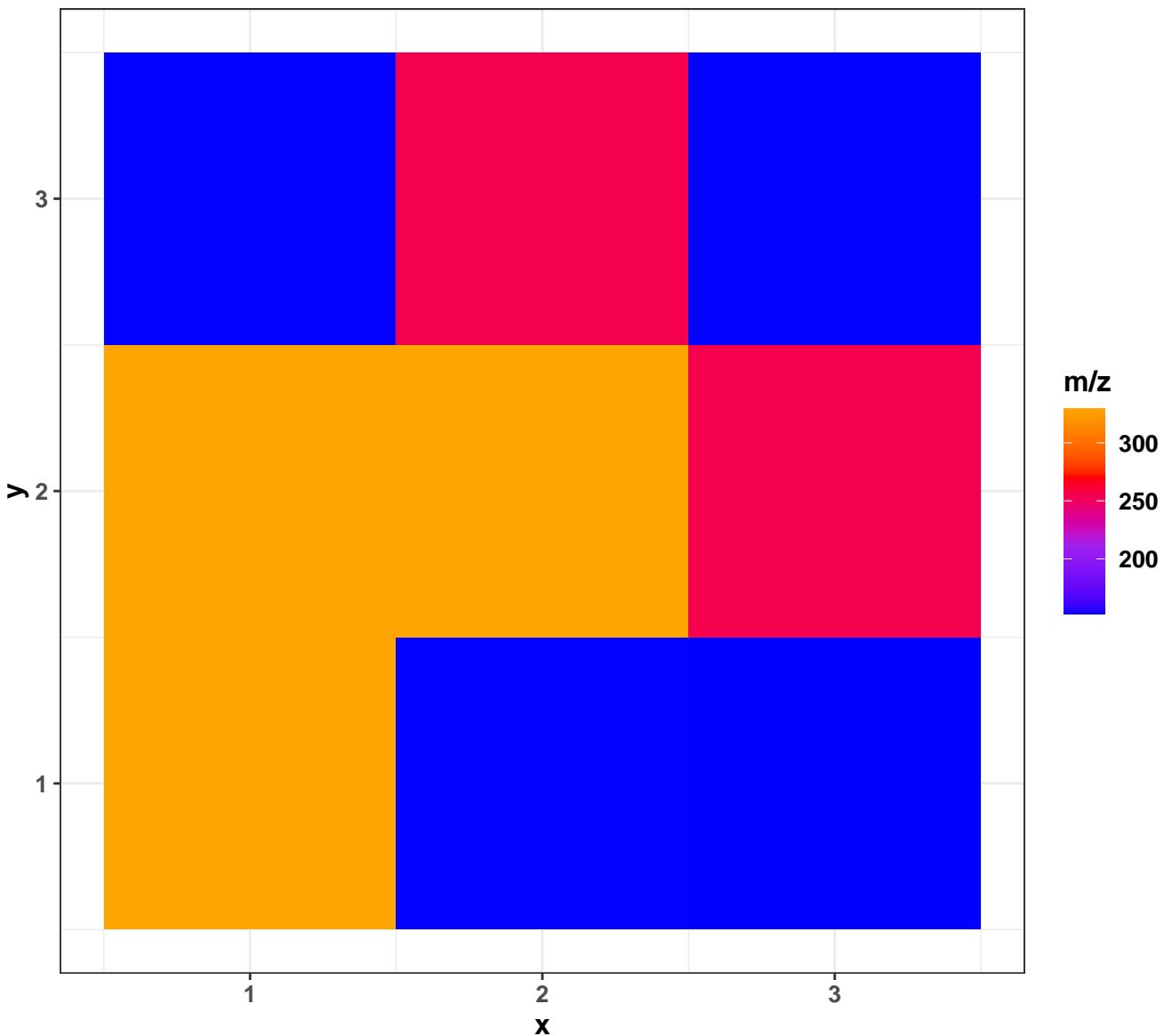
## Median intensity per spectrum



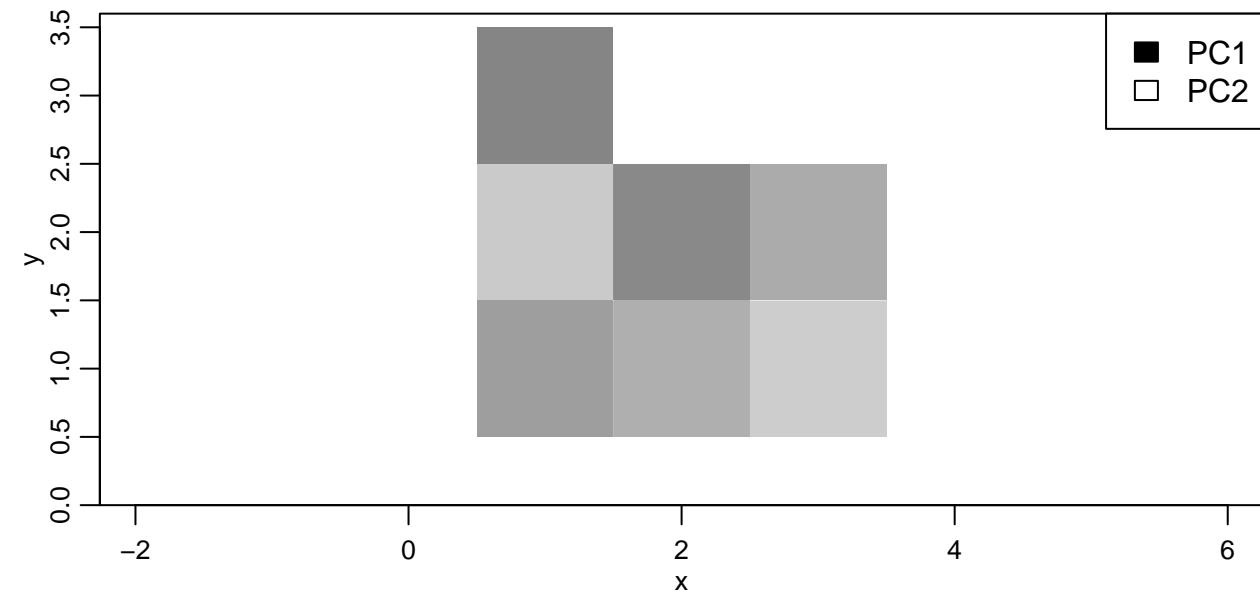
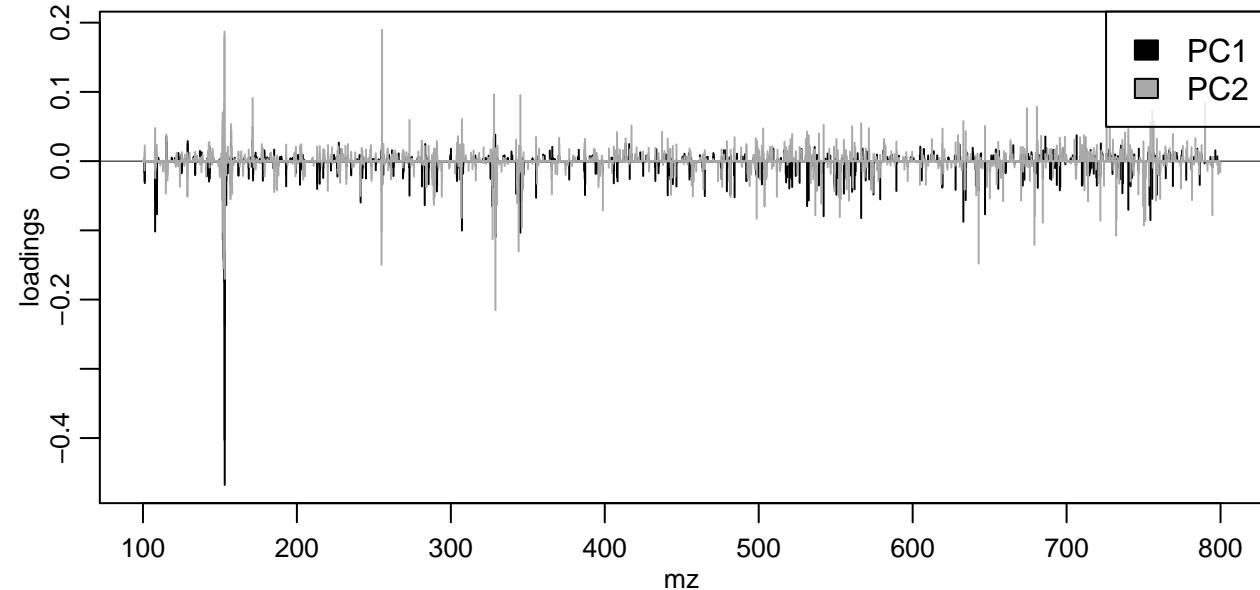
# Maximum intensity per spectrum



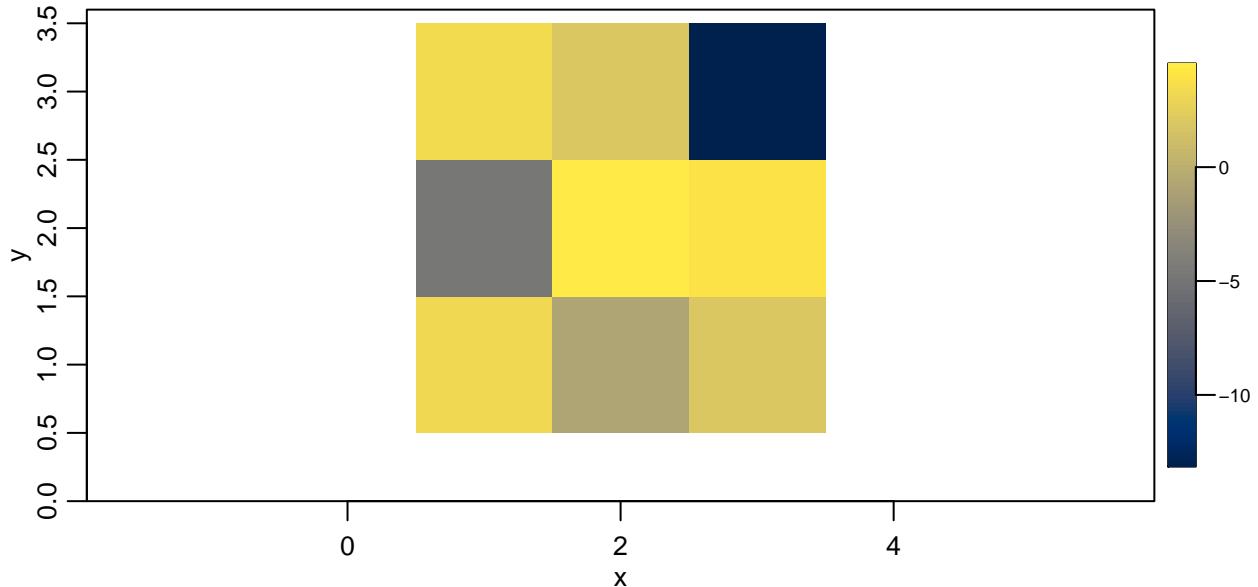
## Most abundant m/z in each spectrum



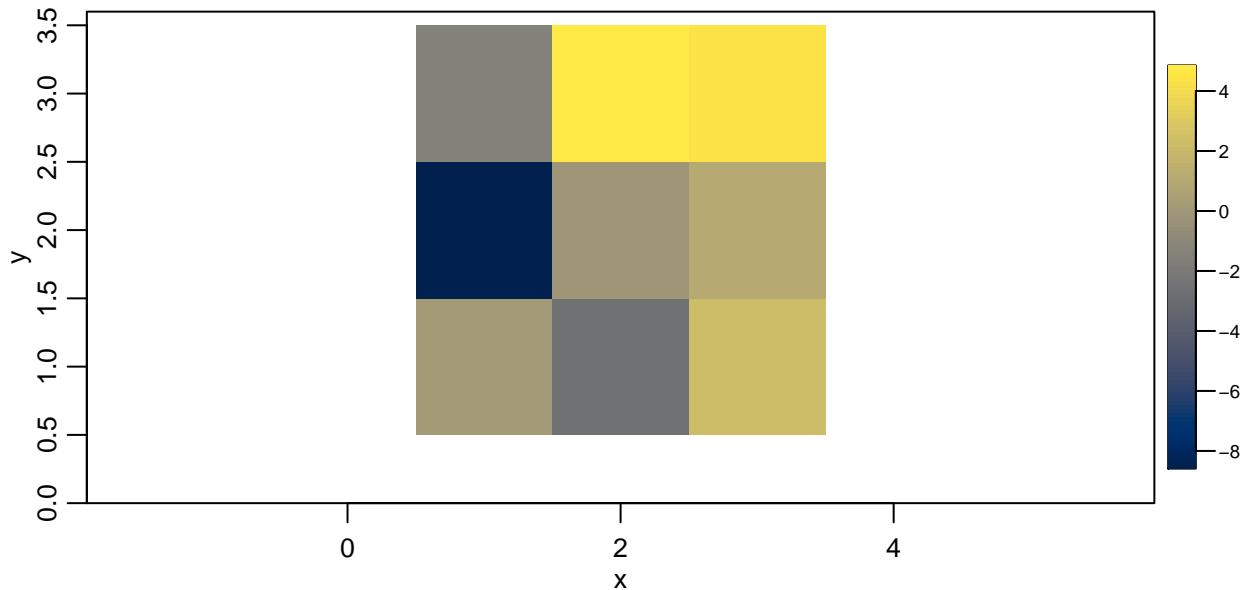
# PCA for two components



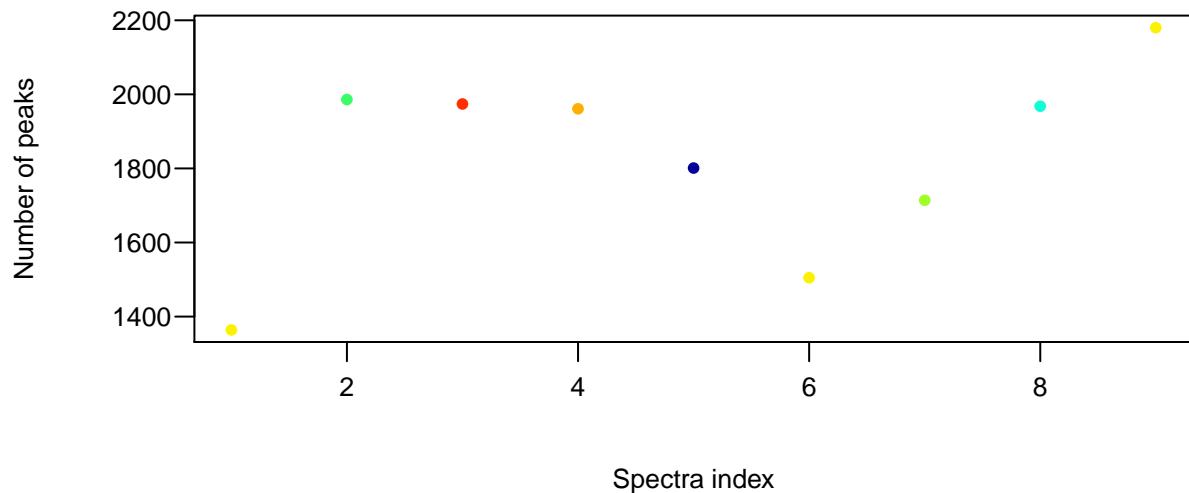
**PC1**



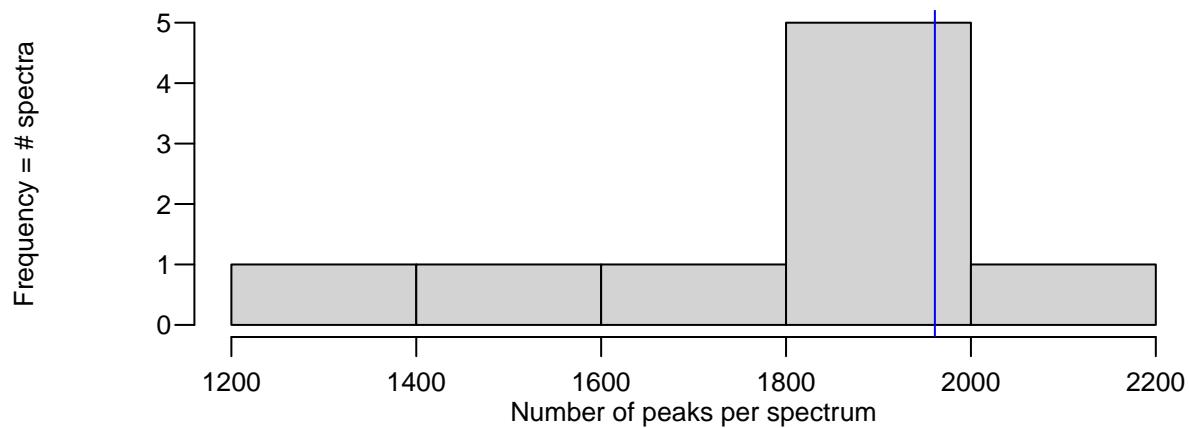
**PC2**



## Number of peaks per spectrum

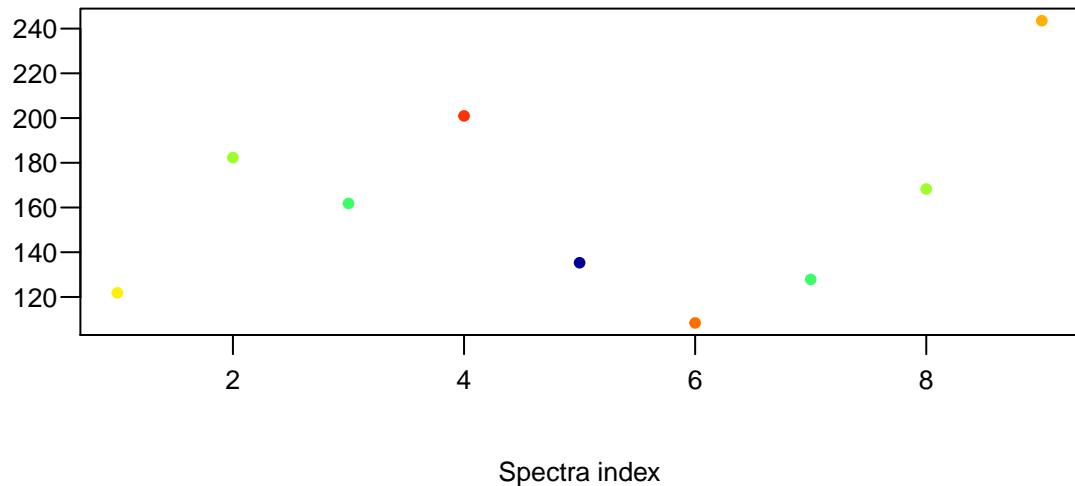


## Number of peaks per spectrum



## TIC per spectrum

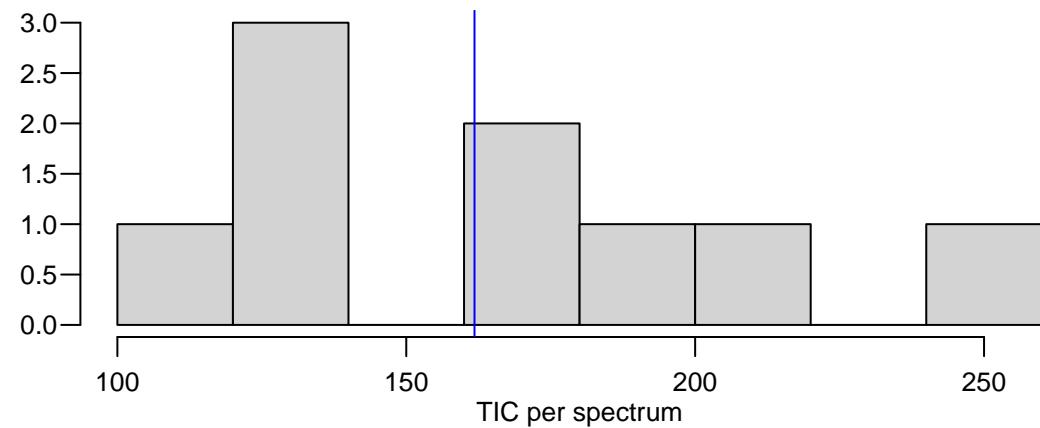
Total ion current intensity



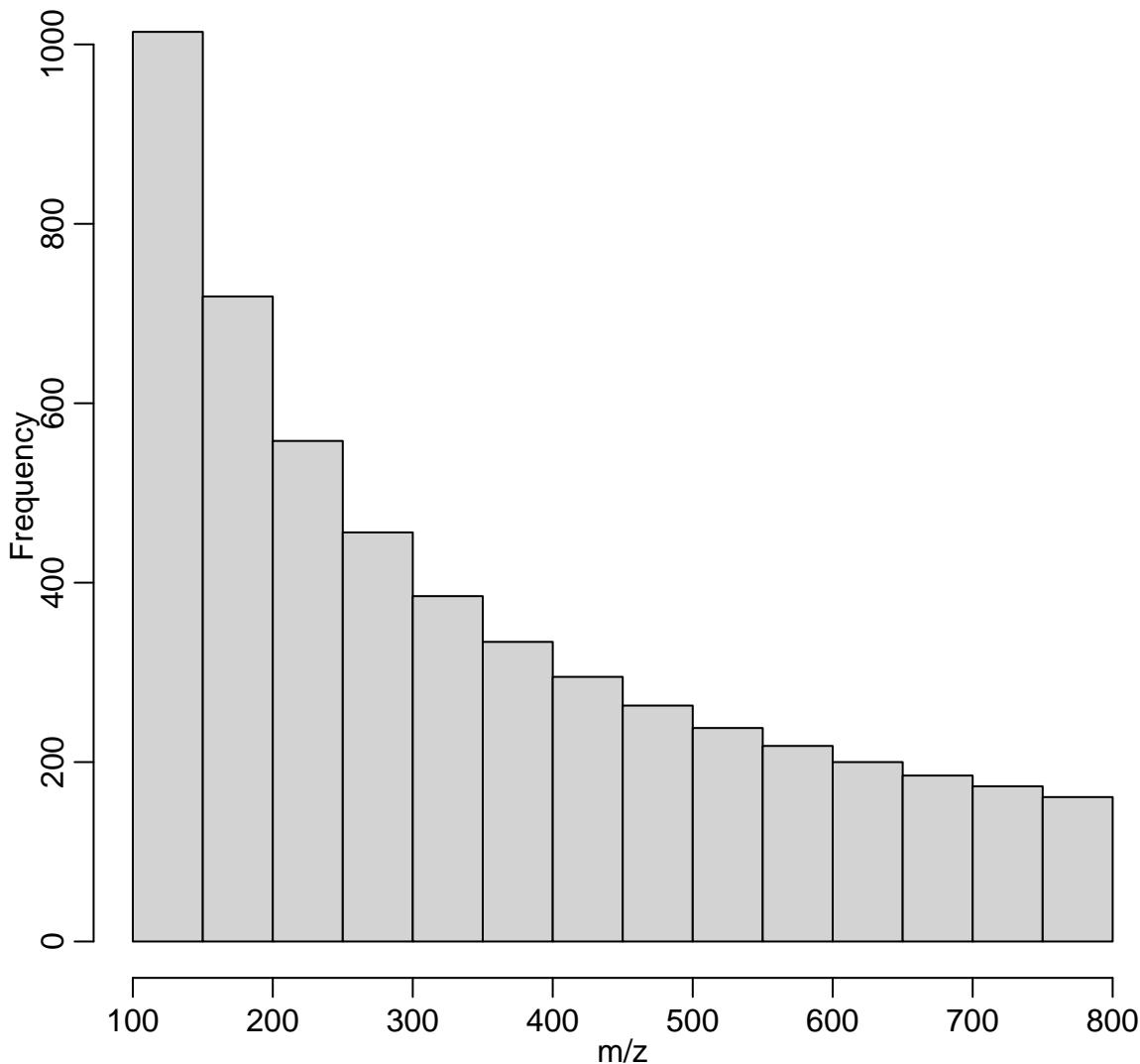
Spectra index

## TIC per spectrum

Frequency = # spectra

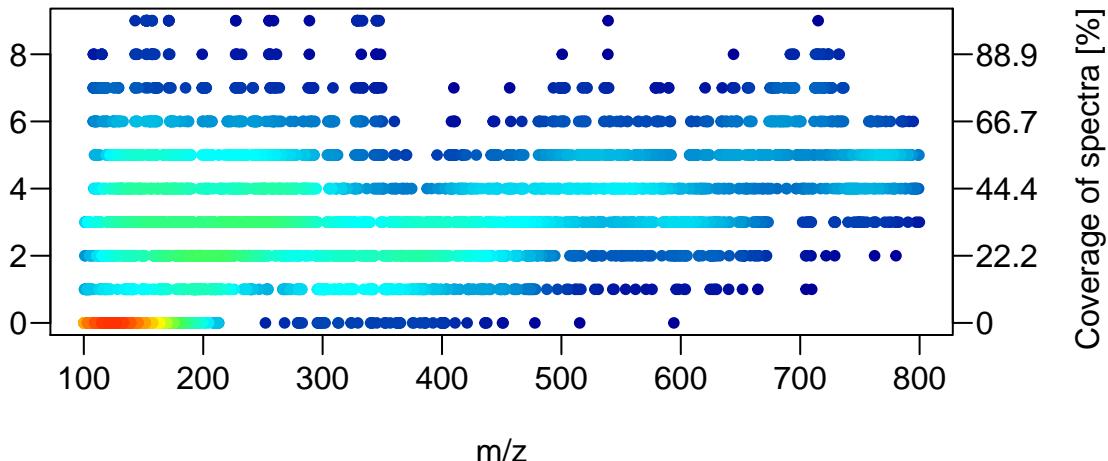


## Histogram of m/z values



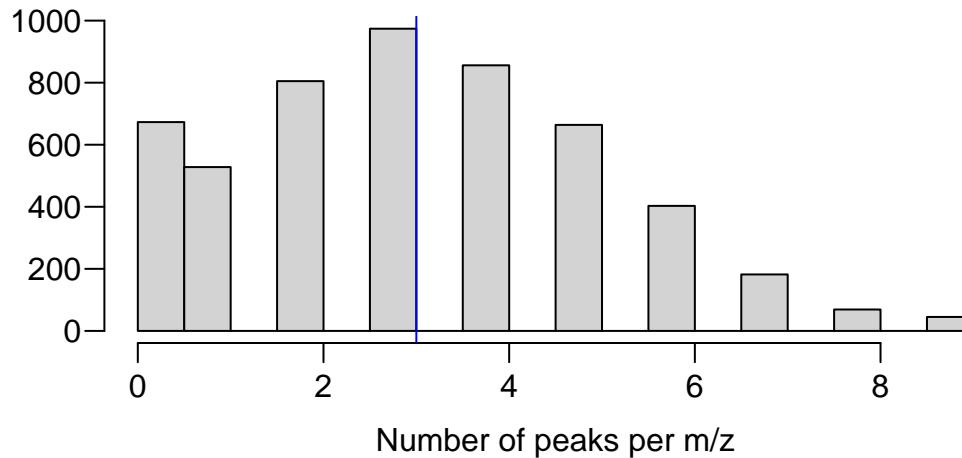
## Number of peaks per m/z

Number of peaks

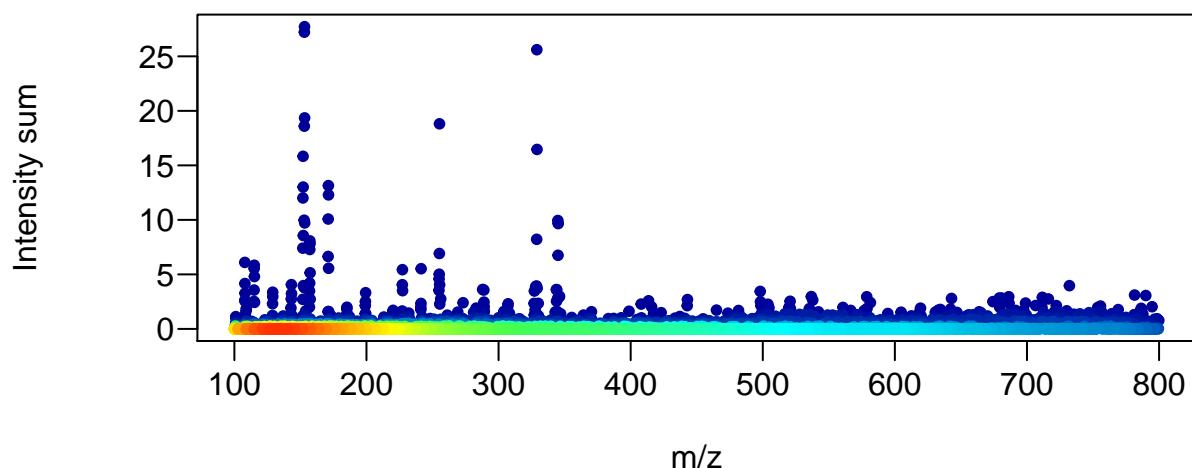


## Number of peaks per m/z

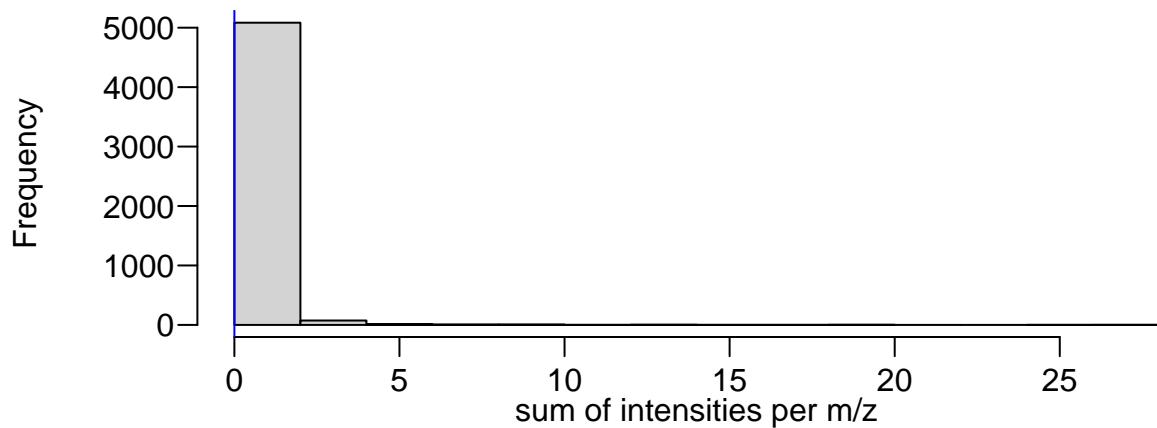
Frequency



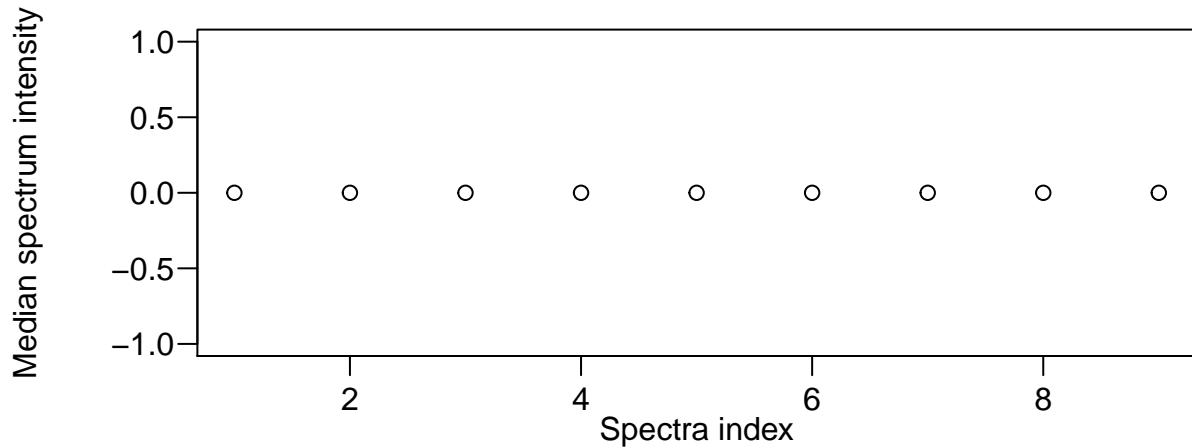
### Sum of intensities per m/z



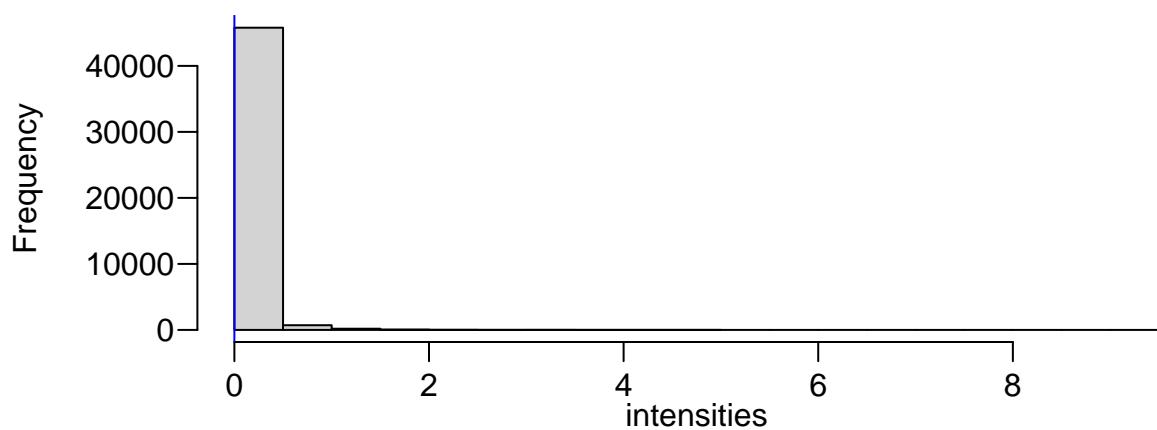
### Sum of intensities per m/z



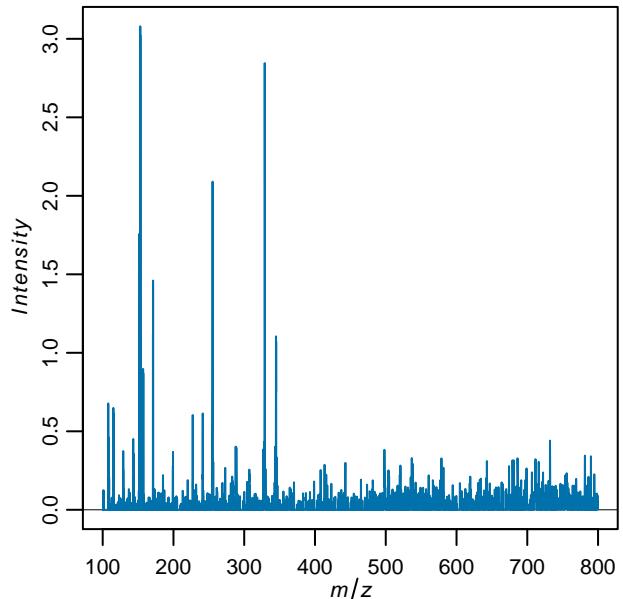
## Median intensity per spectrum



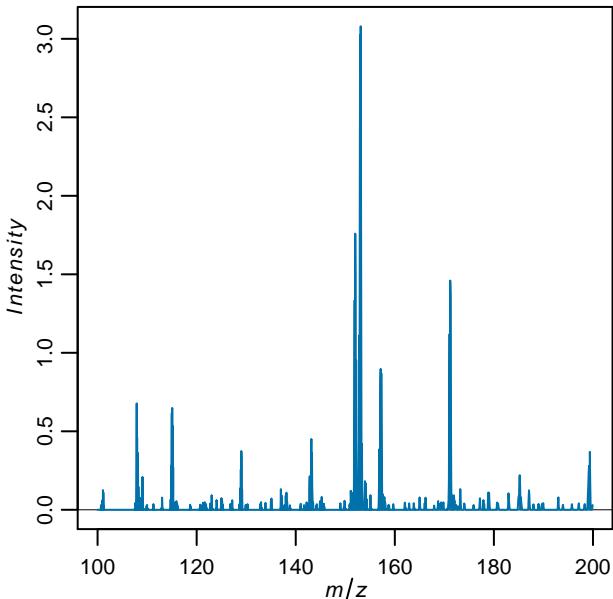
## Intensity histogram



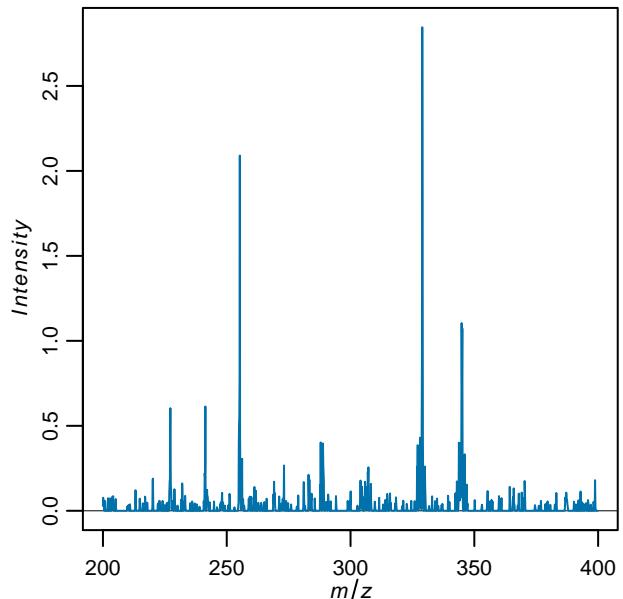
**Average spectrum**



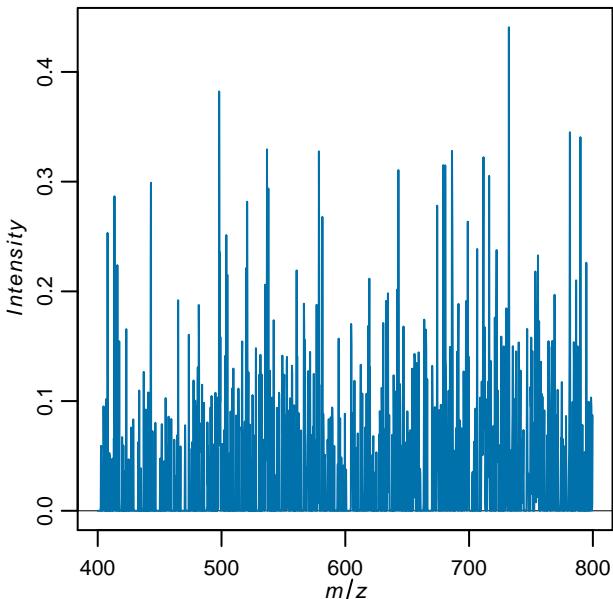
**Zoomed average spectrum**



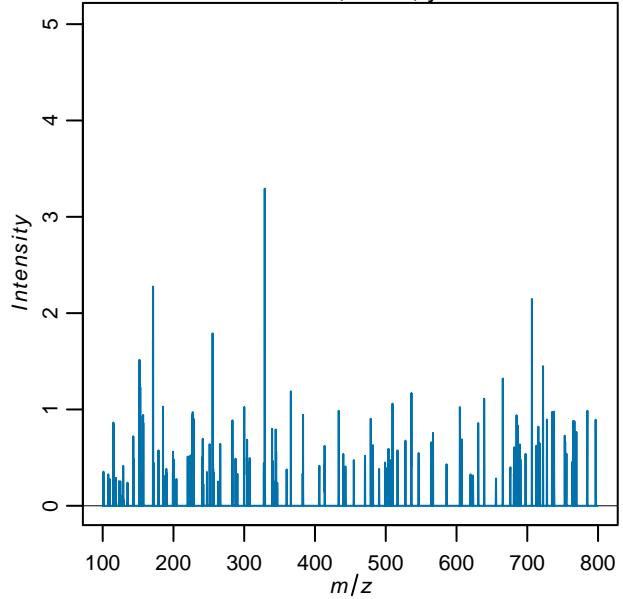
**Zoomed average spectrum**



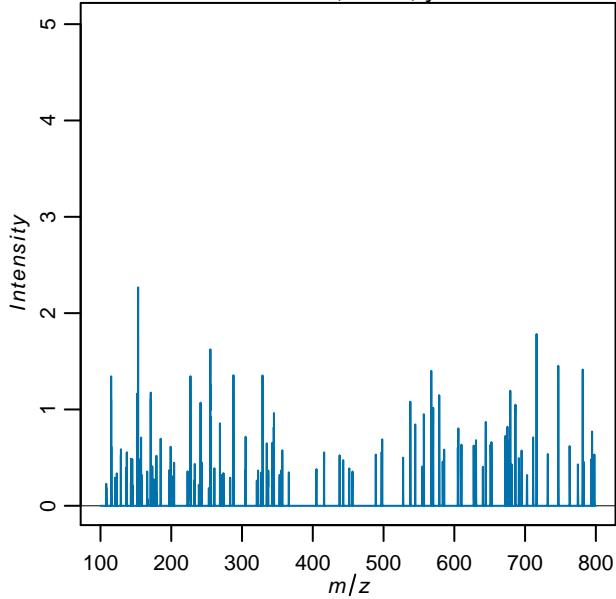
**Zoomed average spectrum**



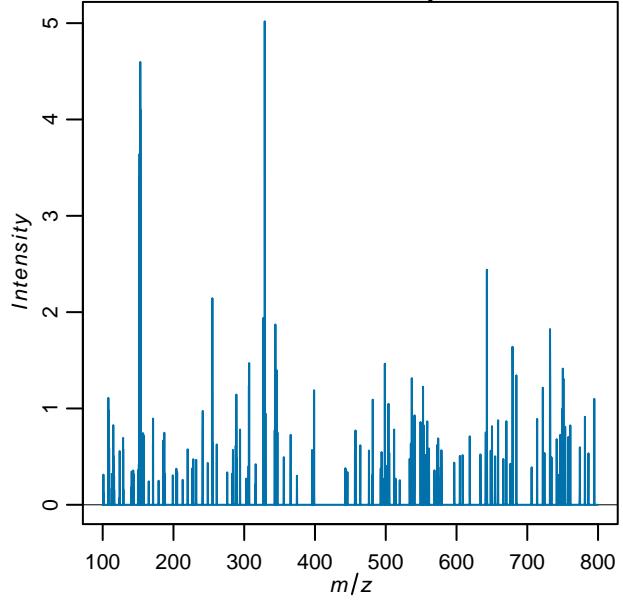
run = infile,  $x = 2, y = 2$



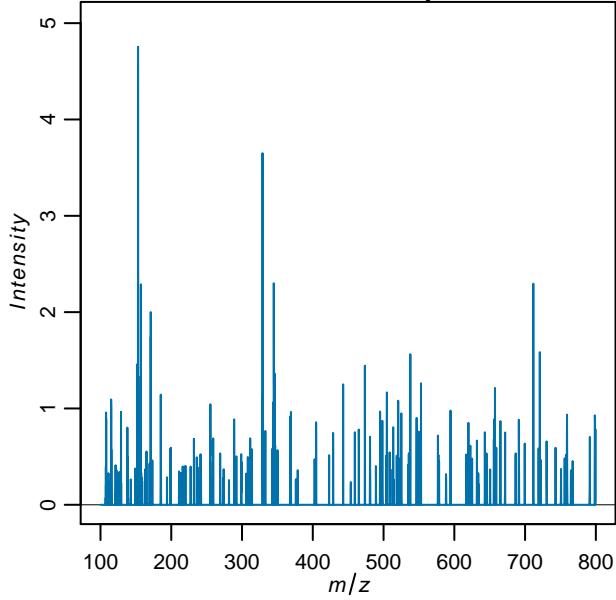
run = infile,  $x = 1, y = 3$



run = infile,  $x = 1, y = 2$



run = infile,  $x = 2, y = 1$

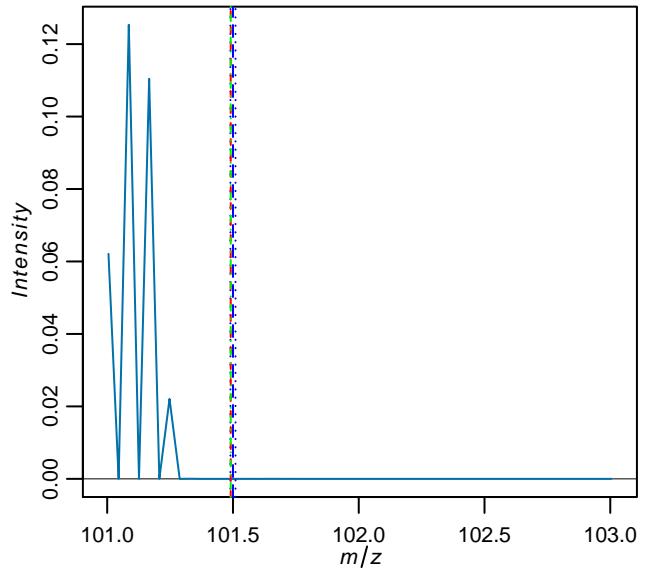


**theor. m/z: 101.5**

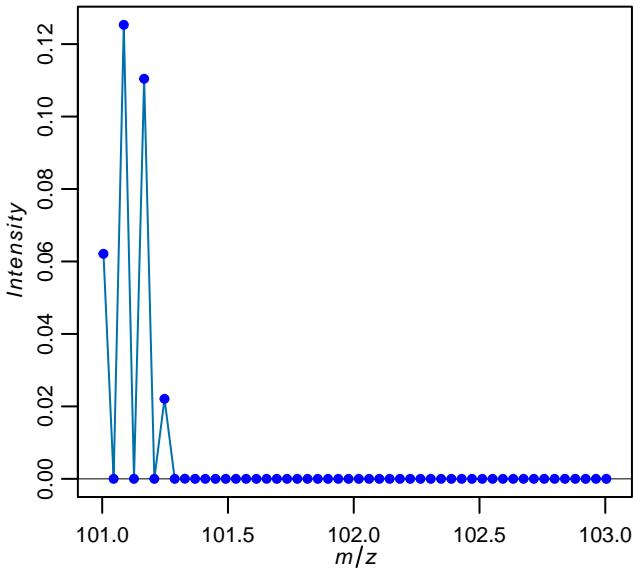
**most abundant m/z: 101.491**

**closest m/z: 101.491**

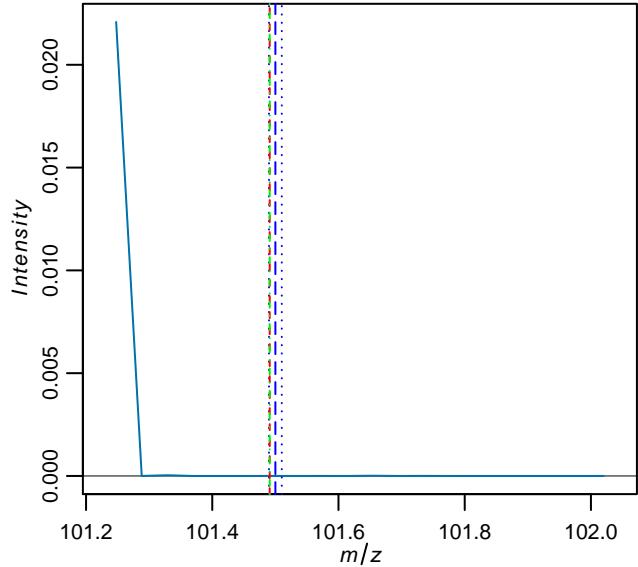
Average spectrum



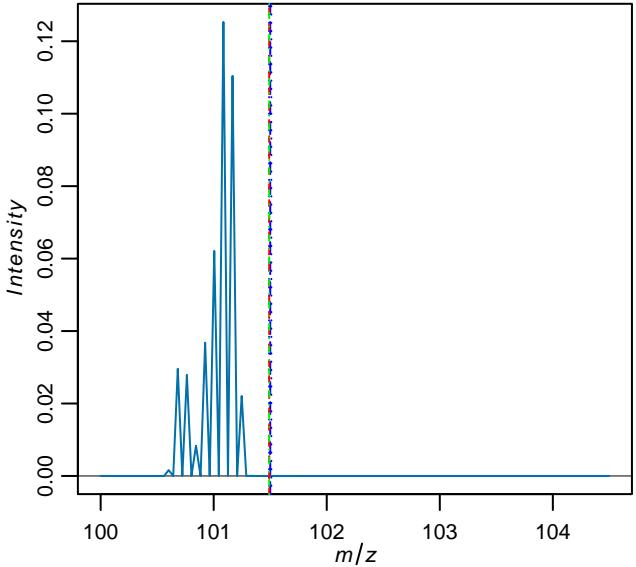
Average spectrum with data points



Average spectrum



Average spectrum

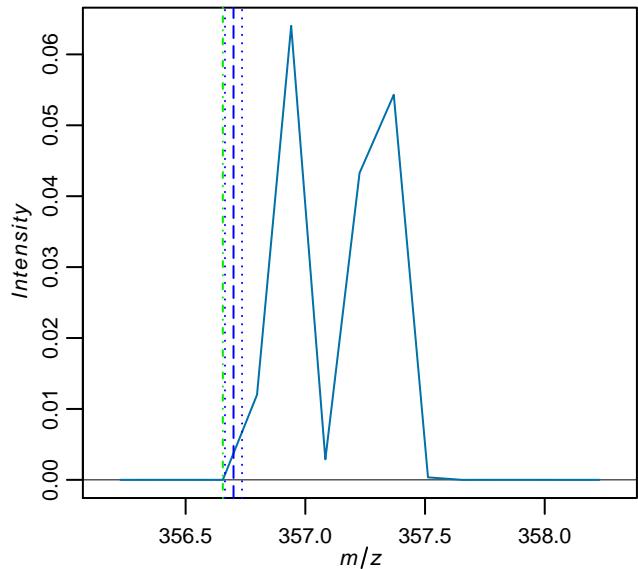


theor. m/z: 356.7

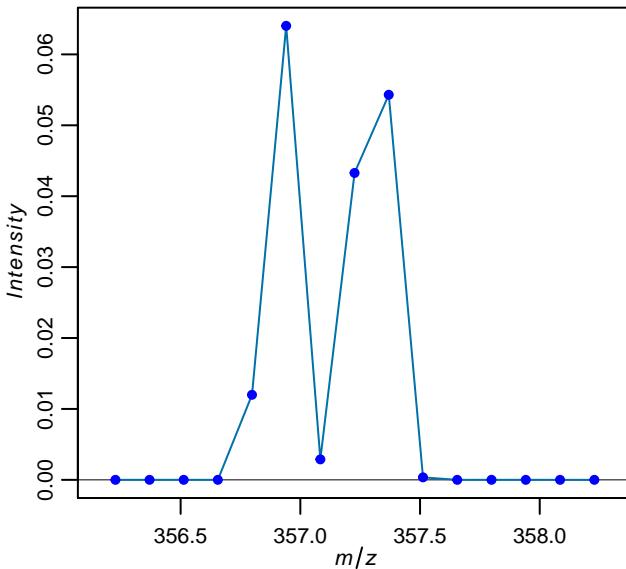
most abundant m/z: NA

closest m/z: 356.6555

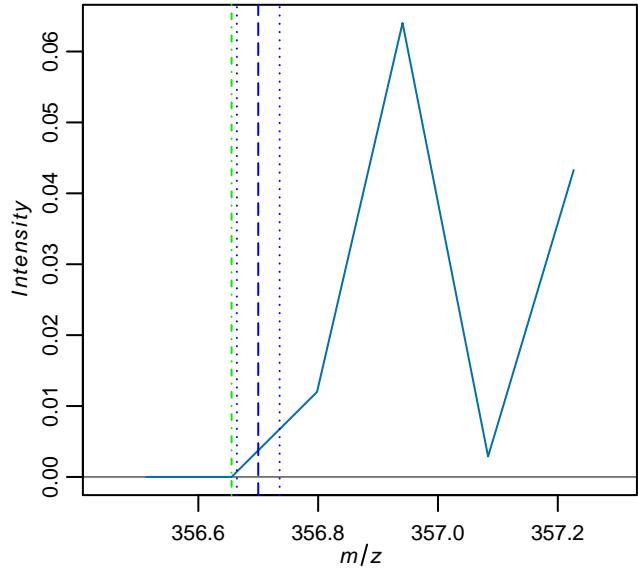
Average spectrum



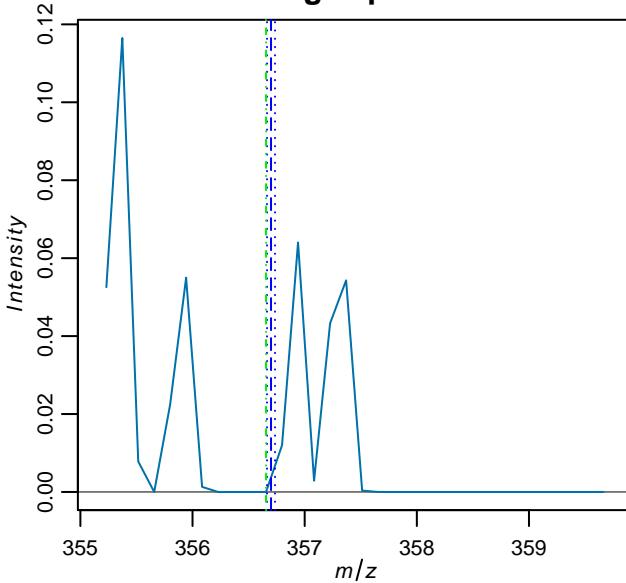
Average spectrum with data points



Average spectrum



Average spectrum

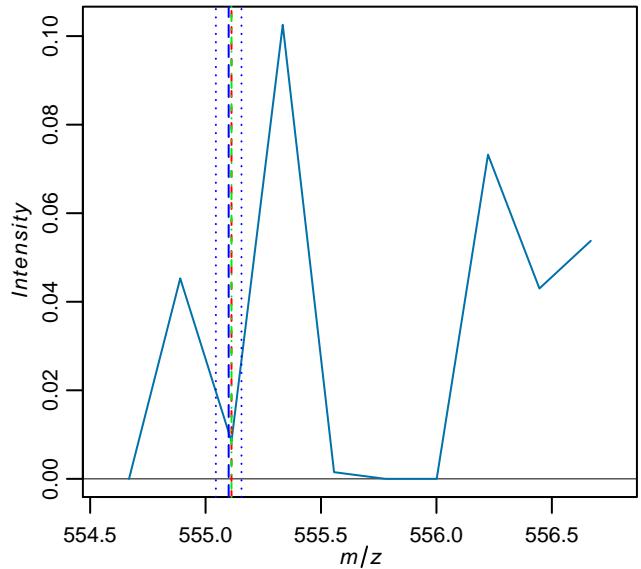


**theor. m/z: 555.1**

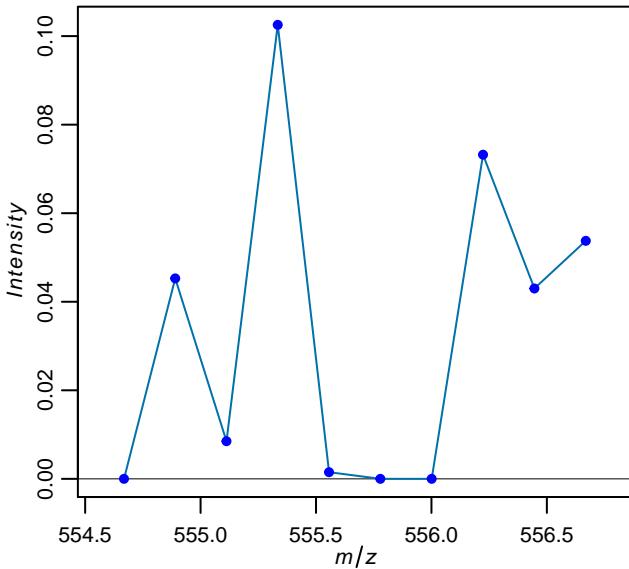
**most abundant m/z: 555.1122**

**closest m/z: 555.1122**

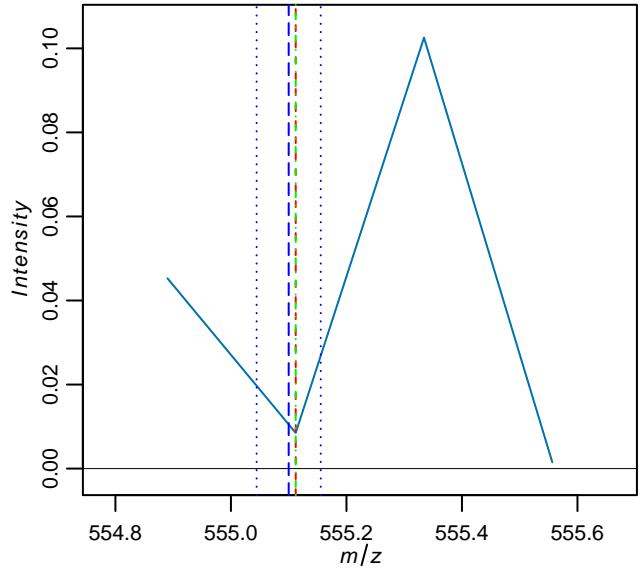
Average spectrum



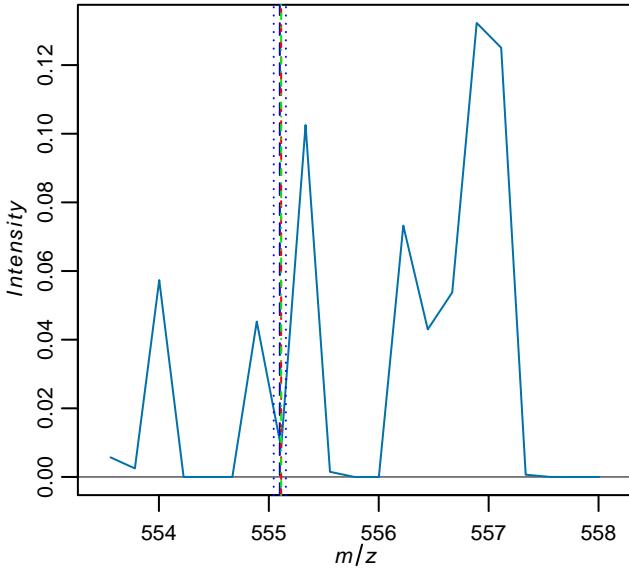
Average spectrum with data points



Average spectrum



Average spectrum



# Average m/z error (max. average intensity vs. theor. calibrant m/z)

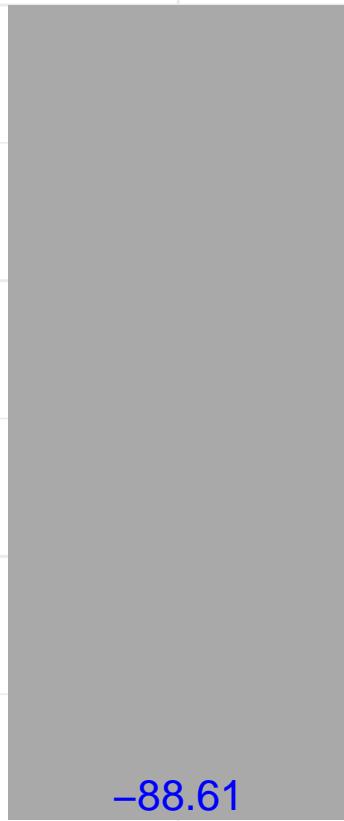
Average m/z error in ppm

0

-30

-60

-90



101.5

calibrants

356.7

555.1

21.93

# Average m/z error (closest measured m/z vs. theor. calibrant m/z)

Average m/z error in ppm

21.93

0

-50

-100

-88.61

-124.88

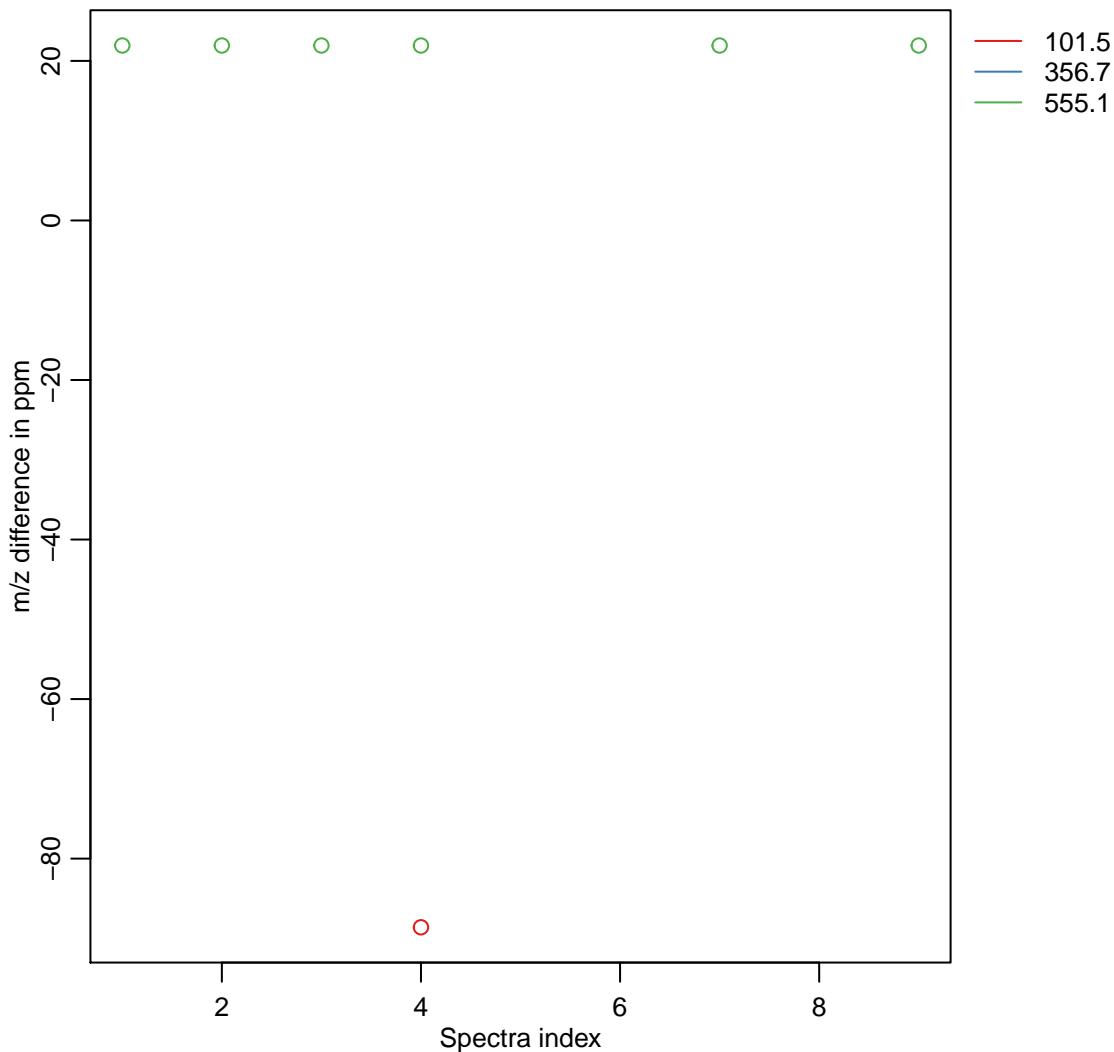
101.5

356.7

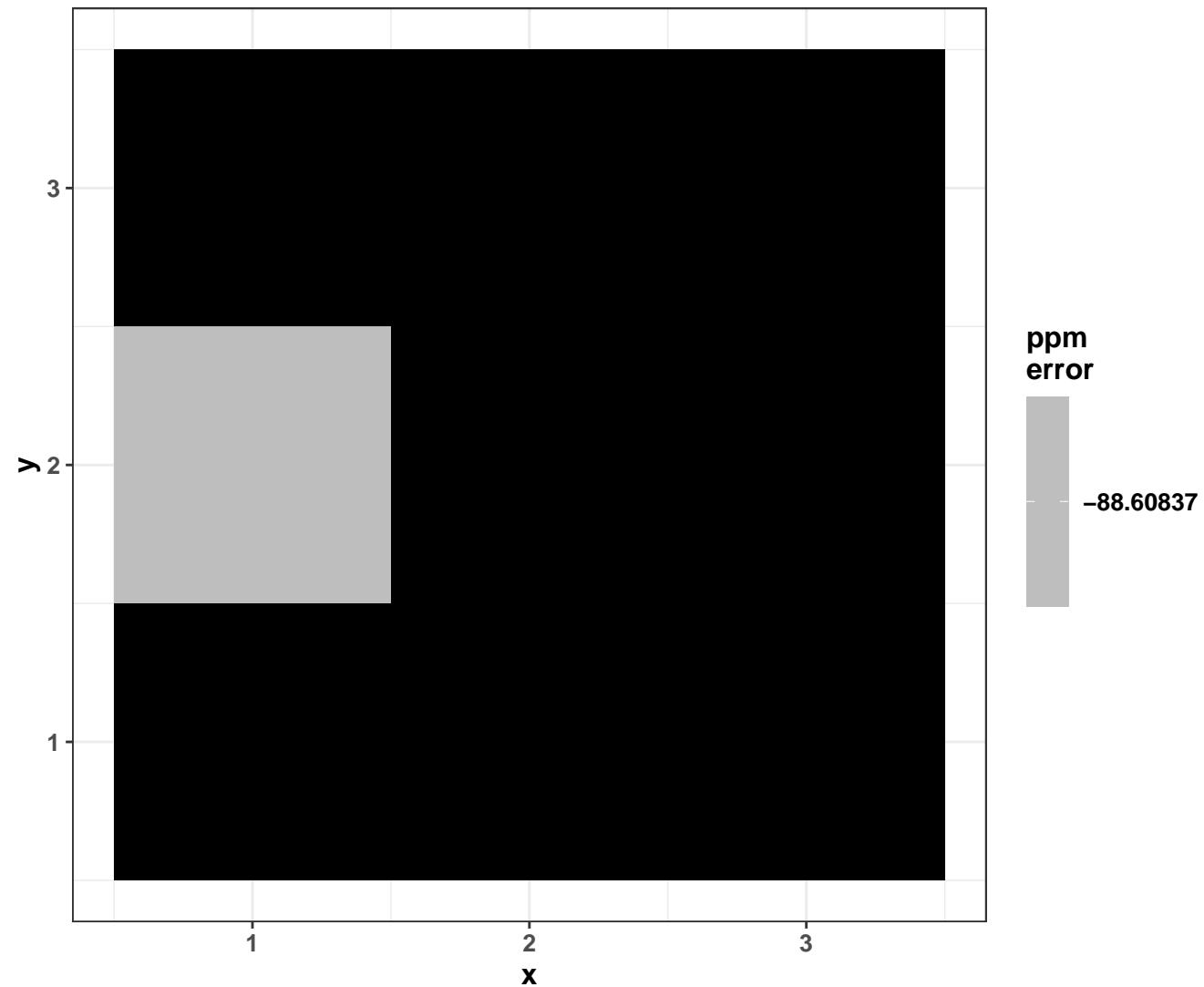
555.1

calibrants

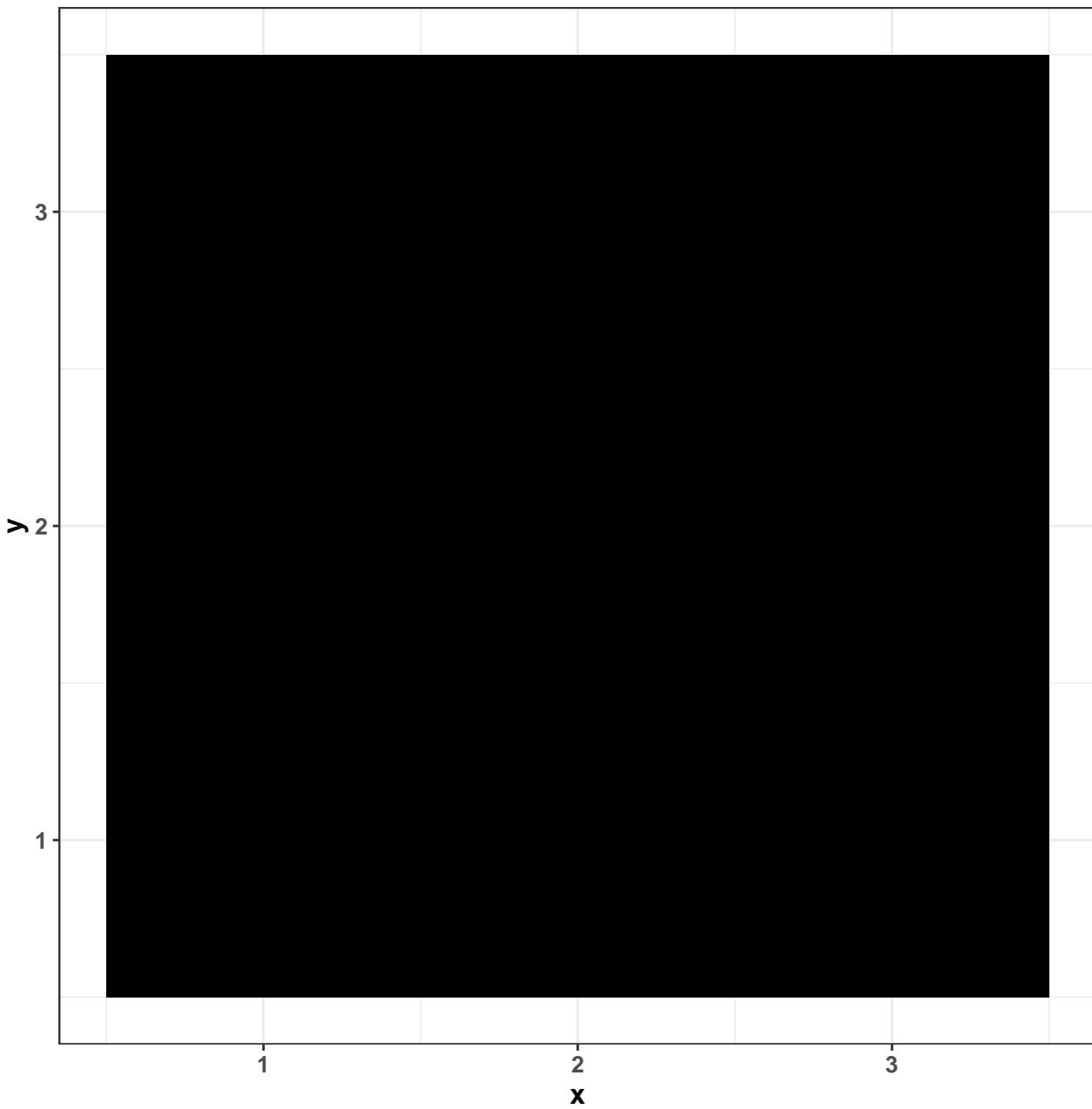
## Difference m/z with max. average intensity vs. theor. m/z (per spectrum)



## **m/z accuracy for 101.5**



# m/z accuracy for 356.7



## m/z accuracy for 555.1

