

## Bead 201

Date : Thu Jul 14 17:33:39 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

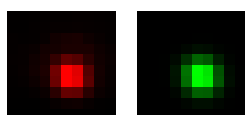
Coordinates : -18.2  $\mu\text{m}$  (x), 2.84  $\mu\text{m}$  (y), 15.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

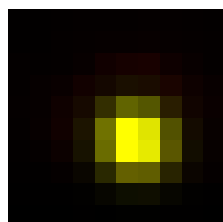
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	288 nm	295 nm	190 nm
z	875 nm	877 nm	642 nm
Asymmetry	0.956		
Theta	-34.1°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.990$



Parameters:

A = 8182.056 (brightness)

B = 264.915 (background)

a = 0.462 px

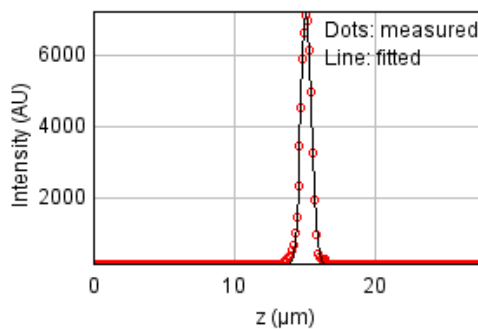
b = -0.020 px

c = 0.477 px

$x_c = 5.396$  px

$y_c = 5.503$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 997764.669

Standard deviation: 64.88434

$R^2 = 0.99636$

Parameters:

a = 119.62092

b = 7226.11147

c = 15.19337

d = 0.37156

## Bead 202

Date : Thu Jul 14 17:33:39 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

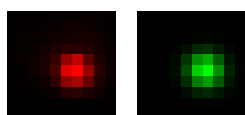
Coordinates : 11.8  $\mu\text{m}$  (x), -11.9  $\mu\text{m}$  (y), 15.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

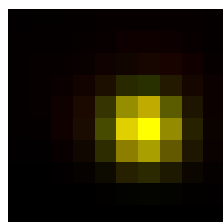
FWHM	Non corrected	Corrected	Theoretical
min	290 nm	296 nm	190 nm
max	304 nm	310 nm	190 nm
z	842 nm	844 nm	642 nm
Asymmetry	0.955		
Theta	-20.4°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.986$



Parameters:

$A = 10437.880$  (brightness)

$B = 338.542$  (background)

$a = 0.409$  px

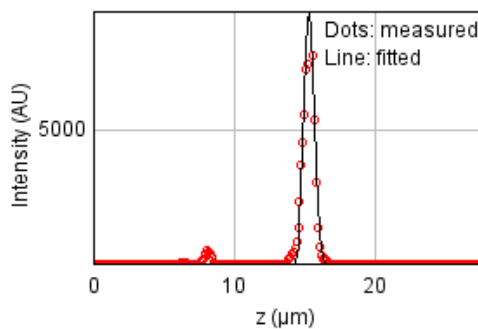
$b = -0.013$  px

$c = 0.438$  px

$x_c = 5.752$  px

$y_c = 4.952$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 11328618.8

Standard deviation: 218.63229

$R^2 = 0.97499$

Parameters:

$a = 147.61499$

$b = 9351.17461$

$c = 15.40529$

$d = 0.35760$

## Bead 203

Date : Thu Jul 14 17:33:39 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

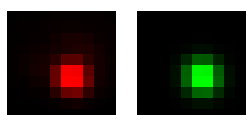
Coordinates : -8.99  $\mu\text{m}$  (x), -14.3  $\mu\text{m}$  (y), 15.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

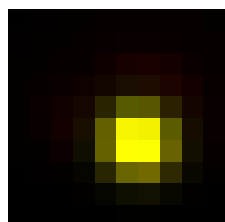
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	283 nm	289 nm	190 nm
z	880 nm	882 nm	642 nm
Asymmetry	0.976		
Theta	-43.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.988$



Parameters:

$A = 11137.078$  (brightness)

$B = 337.470$  (background)

$a = 0.479$  px

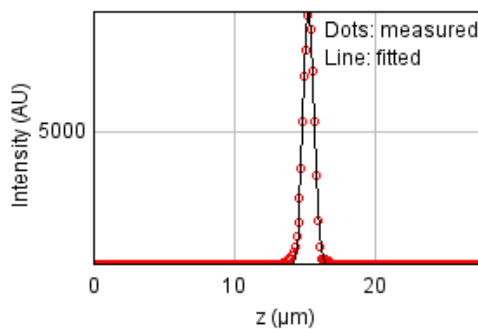
$b = -0.012$  px

$c = 0.480$  px

$x_c = 5.495$  px

$y_c = 5.548$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 2189788.38

Standard deviation: 96.12291

$R^2: 0.99545$

Parameters:

$a = 123.48659$

$b = 9511.24982$

$c = 15.36463$

$d = 0.37357$

## Bead 204

Date : Thu Jul 14 17:33:40 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

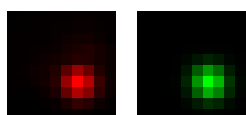
Coordinates : 33.8  $\mu\text{m}$  (x), 7.42  $\mu\text{m}$  (y), 15.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

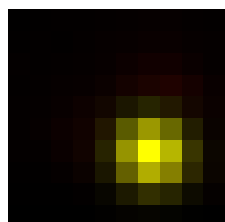
FWHM	Non corrected	Corrected	Theoretical
min	282 nm	288 nm	190 nm
max	294 nm	300 nm	190 nm
z	807 nm	809 nm	642 nm
Asymmetry	0.959		
Theta	-36.5°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.986$



Parameters:

A = 9593.560 (brightness)

B = 360.556 (background)

a = 0.446 px

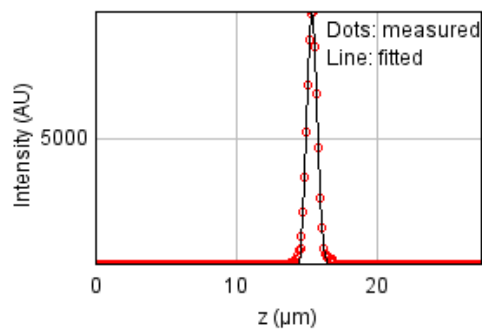
b = -0.018 px

c = 0.457 px

xc = 6.119 px

yc = 6.075 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1057089.75

Standard deviation: 66.78543

$R^2$ : 0.99783

Parameters:

a = 125.55899

b = 9985.84441

c = 15.46673

d = 0.34263

## Bead 205

Date : Thu Jul 14 17:33:40 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

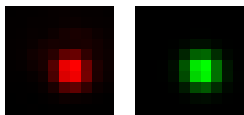
Coordinates : -5.38  $\mu\text{m}$  (x), -979 nm (y), 15.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

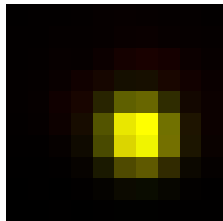
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	289 nm	295 nm	190 nm
z	886 nm	888 nm	642 nm
Asymmetry	0.953		
Theta	-27.8°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.989$



Parameters:

A = 7010.322 (brightness)

B = 255.257 (background)

a = 0.458 px

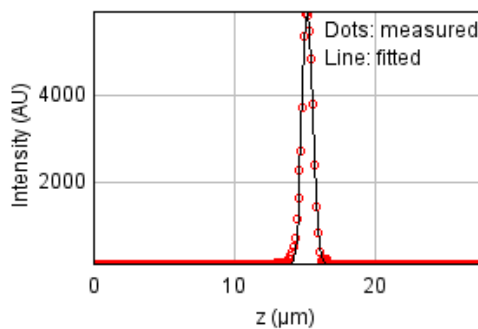
b = -0.019 px

c = 0.483 px

xc = 5.629 px

yc = 5.438 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1258760.29

Standard deviation: 72.87815

$R^2$ : 0.99326

Parameters:

a = 122.68435

b = 5944.04893

c = 15.28038

d = 0.37643

## Bead 206

Date : Thu Jul 14 17:33:40 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

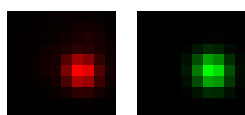
Coordinates : 24.3  $\mu\text{m}$  (x), -4.64  $\mu\text{m}$  (y), 15.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

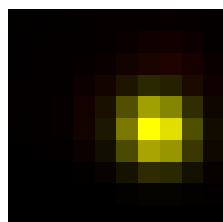
FWHM	Non corrected	Corrected	Theoretical
min	280 nm	286 nm	190 nm
max	295 nm	301 nm	190 nm
z	802 nm	804 nm	642 nm
Asymmetry	0.951		
Theta	-39.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.987$



Parameters:

$A = 10381.545$  (brightness)

$B = 332.877$  (background)

$a = 0.448$  px

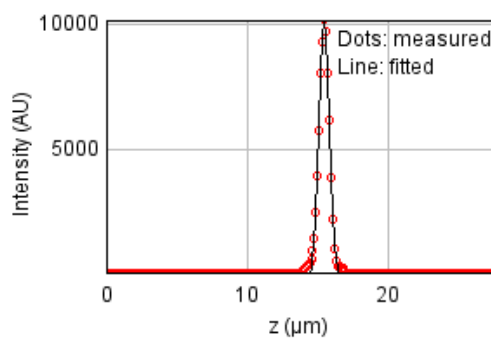
$b = -0.022$  px

$c = 0.456$  px

$x_c = 6.343$  px

$y_c = 5.030$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1223182.66

Standard deviation: 71.84085

$R^2: 0.99755$

Parameters:

$a = 127.95104$

$b = 10125.8443$

$c = 15.54485$

$d = 0.34062$

## Bead 207

Date : Thu Jul 14 17:33:40 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

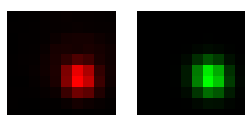
Coordinates : -44.8  $\mu\text{m}$  (x), 16.6  $\mu\text{m}$  (y), 15.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

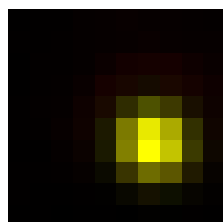
FWHM	Non corrected	Corrected	Theoretical
min	273 nm	279 nm	190 nm
max	286 nm	292 nm	190 nm
z	856 nm	858 nm	642 nm
Asymmetry	0.955		
Theta	-44.3°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.987$



Parameters:

A = 7019.116 (brightness)

B = 245.098 (background)

a = 0.479 px

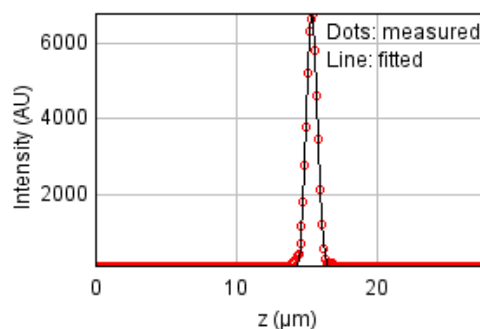
b = -0.022 px

c = 0.480 px

xc = 6.202 px

yc = 5.609 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 440064.378

Standard deviation: 43.09074

$R^2$ : 0.99814

Parameters:

a = 117.26045

b = 6798.11777

c = 15.45662

d = 0.36354

## Bead 208

Date : Thu Jul 14 17:33:40 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

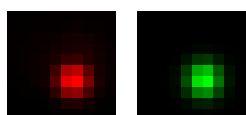
Coordinates : 190 nm (x), 10.7 um (y), 15.6 um (z)

Corresponding bead : Not found

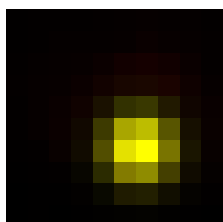
FWHM	Non corrected	Corrected	Theoretical
min	284 nm	290 nm	190 nm
max	287 nm	293 nm	190 nm
z	861 nm	863 nm	642 nm
Asymmetry	0.991		
Theta	-87.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.990$



Parameters:

A = 11798.849 (brightness)

B = 379.198 (background)

a = 0.462 px

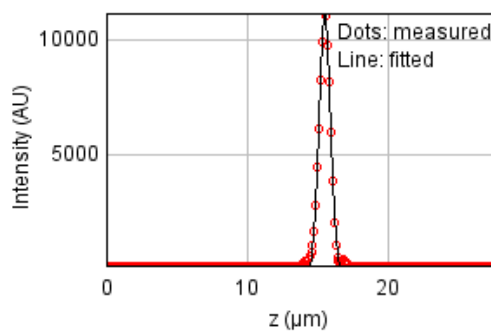
b = -0.000 px

c = 0.454 px

xc = 5.641 px

yc = 5.837 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1437726.74

Standard deviation: 77.88683

$R^2$ : 0.99782

Parameters:

a = 127.97803

b = 11241.2484

c = 15.58954

d = 0.36571



## Bead 209

Date : Thu Jul 14 17:33:41 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

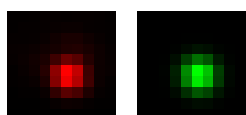
Coordinates : 718 nm (x), 6.8 um (y), 15.5 um (z)

Corresponding bead : Not found

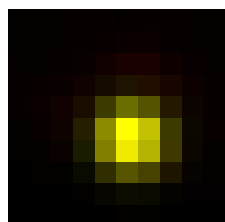
FWHM	Non corrected	Corrected	Theoretical
min	283 nm	289 nm	190 nm
max	289 nm	295 nm	190 nm
z	846 nm	848 nm	642 nm
Asymmetry	0.98		
Theta	-15.1°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.989$



Parameters:

A = 8247.820 (brightness)

B = 288.720 (background)

a = 0.447 px

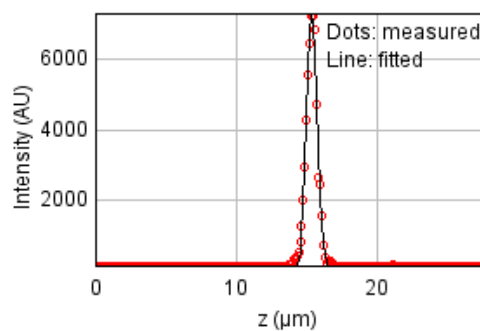
b = -0.005 px

c = 0.463 px

xc = 5.192 px

yc = 5.407 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1847233.45

Standard deviation: 88.28496

$R^2$ : 0.99323

Parameters:

a = 127.73601

b = 7320.55783

c = 15.45184

d = 0.35927

## Bead 210

Date : Thu Jul 14 17:33:41 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

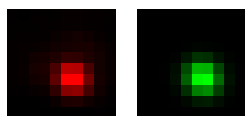
Coordinates : 13.3  $\mu\text{m}$  (x), 6.4  $\mu\text{m}$  (y), 15.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

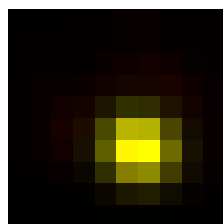
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	277 nm	190 nm
max	289 nm	295 nm	190 nm
z	862 nm	864 nm	642 nm
Asymmetry	0.937		
Theta	-28.2°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.988$



Parameters:

A = 9053.772 (brightness)

B = 317.631 (background)

a = 0.460 px

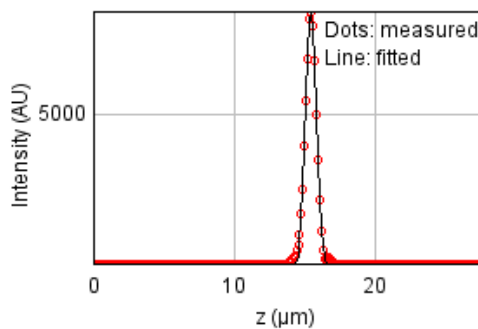
b = -0.026 px

c = 0.494 px

xc = 5.531 px

yc = 5.849 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 699825.090

Standard deviation: 54.34012

$R^2$ : 0.99806

Parameters:

a = 121.42527

b = 8329.83649

c = 15.52676

d = 0.36622

## Bead 211

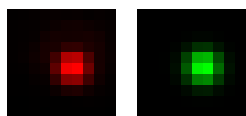
Date : Thu Jul 14 17:33:41 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -43.3  $\mu\text{m}$  (x), -14.7  $\mu\text{m}$  (y), 15.5  $\mu\text{m}$  (z)  
Corresponding bead : Not found

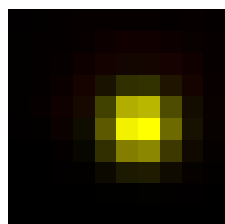
FWHM	Non corrected	Corrected	Theoretical
min	277 nm	283 nm	190 nm
max	282 nm	288 nm	190 nm
z	865 nm	867 nm	642 nm
Asymmetry	0.98		
Theta	-10.2°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.989$



Parameters:

A = 6586.018 (brightness)

B = 232.519 (background)

a = 0.469 px

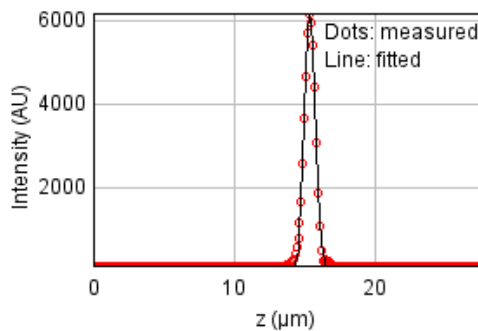
b = -0.003 px

c = 0.487 px

xc = 5.562 px

yc = 4.840 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 553266.758

Standard deviation: 48.31624

$R^2$ : 0.99719

Parameters:

a = 118.66566

b = 6175.14923

c = 15.45344

d = 0.36737

## Bead 212

Date : Thu Jul 14 17:33:41 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 12.1  $\mu\text{m}$  (x), -3.44  $\mu\text{m}$  (y), 15.6  $\mu\text{m}$  (z)

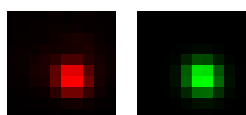
Corresponding bead : Not found



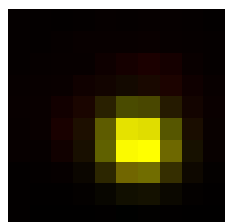
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	277 nm	190 nm
max	287 nm	294 nm	190 nm
z	881 nm	883 nm	642 nm
Asymmetry	0.942		
Theta	-23.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.987$



Parameters:

$A = 7184.744$  (brightness)

$B = 289.998$  (background)

$a = 0.461$  px

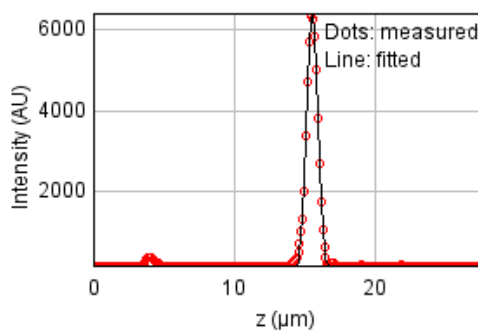
$b = -0.021$  px

$c = 0.499$  px

$x_c = 5.507$  px

$y_c = 5.624$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 833408.316

Standard deviation: 59.30001

$R^2: 0.99616$

Parameters:

$a = 138.10962$

$b = 6439.09665$

$c = 15.62320$

$d = 0.37400$

## Bead 213

Date : Thu Jul 14 17:33:41 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

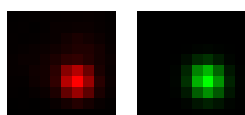
Coordinates : 35.1  $\mu\text{m}$  (x), -23.4  $\mu\text{m}$  (y), 15.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

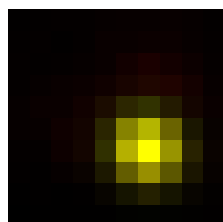
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	292 nm	298 nm	190 nm
z	853 nm	854 nm	642 nm
Asymmetry	0.946		
Theta	-43.8°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.982$



Parameters:

A = 6934.833 (brightness)

B = 312.446 (background)

a = 0.462 px

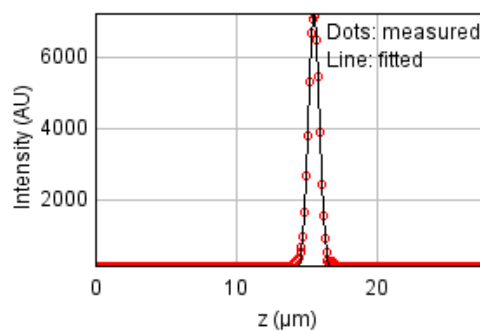
b = -0.026 px

c = 0.464 px

xc = 5.900 px

yc = 5.870 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 424065.985

Standard deviation: 42.30021

$R^2$ : 0.99846

Parameters:

a = 117.67198

b = 7336.80909

c = 15.59952

d = 0.36208

## Bead 214

Date : Thu Jul 14 17:33:41 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

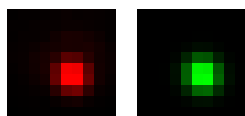
Coordinates : -17.3  $\mu\text{m}$  (x), 12.1  $\mu\text{m}$  (y), 15.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

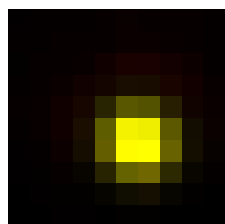
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	277 nm	190 nm
max	281 nm	287 nm	190 nm
z	893 nm	895 nm	642 nm
Asymmetry	0.964		
Theta	-41.4°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.990$



Parameters:

A = 8017.459 (brightness)

B = 275.071 (background)

a = 0.488 px

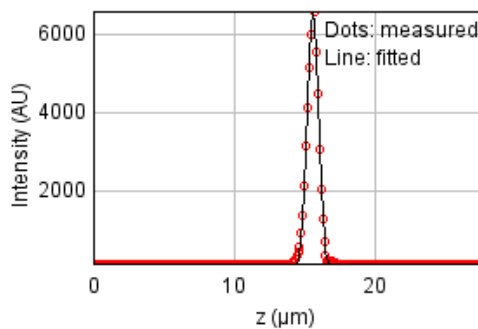
b = -0.018 px

c = 0.492 px

xc = 5.499 px

yc = 5.558 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 553960.705

Standard deviation: 48.34653

$R^2$ : 0.99759

Parameters:

a = 118.41277

b = 6569.06267

c = 15.66759

d = 0.37903

## Bead 215

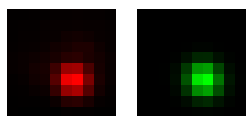
Date : Thu Jul 14 17:33:41 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 16.8  $\mu\text{m}$  (x), -16.0  $\mu\text{m}$  (y), 15.9  $\mu\text{m}$  (z)  
Corresponding bead : Not found

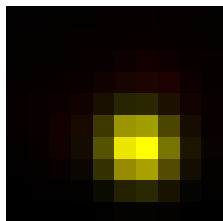
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	291 nm	298 nm	190 nm
z	852 nm	854 nm	642 nm
Asymmetry	0.954		
Theta	-32.2°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.987$



Parameters:

A = 11652.825 (brightness)

B = 395.744 (background)

a = 0.452 px

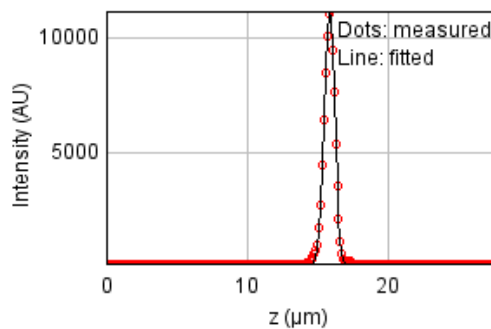
b = -0.019 px

c = 0.471 px

xc = 5.621 px

yc = 5.993 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 863174.280

Standard deviation: 60.34969

$R^2$ : 0.99867

Parameters:

a = 124.97820

b = 11208.7761

c = 15.92316

d = 0.36198

## Bead 216

Date : Thu Jul 14 17:33:42 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

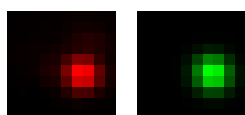
Coordinates : 36.1  $\mu\text{m}$  (x), 16.7  $\mu\text{m}$  (y), 16.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

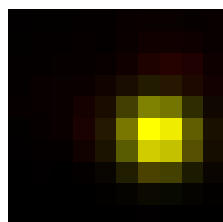
FWHM	Non corrected	Corrected	Theoretical
min	286 nm	292 nm	190 nm
max	300 nm	306 nm	190 nm
z	802 nm	804 nm	642 nm
Asymmetry	0.953		
Theta	-22.4°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.981$



Parameters:

$A = 10131.006$  (brightness)

$B = 380.697$  (background)

$a = 0.421$  px

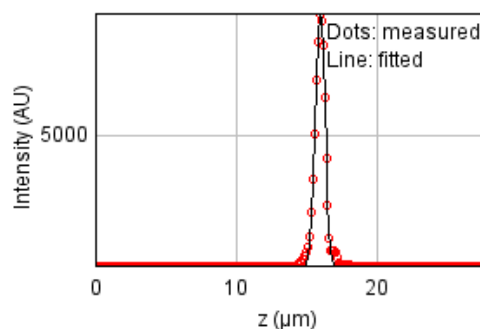
$b = -0.015$  px

$c = 0.451$  px

$x_c = 6.415$  px

$y_c = 5.262$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1935090.47

Standard deviation: 90.36005

$R^2: 0.99567$

Parameters:

$a = 127.99791$

$b = 9585.23354$

$c = 16.04002$

$d = 0.34075$



## Bead 217

Date : Thu Jul 14 17:33:42 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

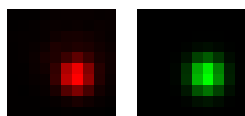
Coordinates : -53.0  $\mu\text{m}$  (x), -532 nm (y), 15.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

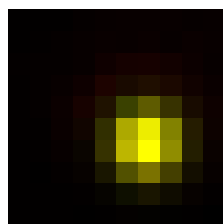
FWHM	Non corrected	Corrected	Theoretical
min	281 nm	287 nm	190 nm
max	291 nm	297 nm	190 nm
z	836 nm	838 nm	642 nm
Asymmetry	0.967		
Theta	-87.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.987$



Parameters:

$A = 3046.264$  (brightness)

$B = 176.836$  (background)

$a = 0.471$  px

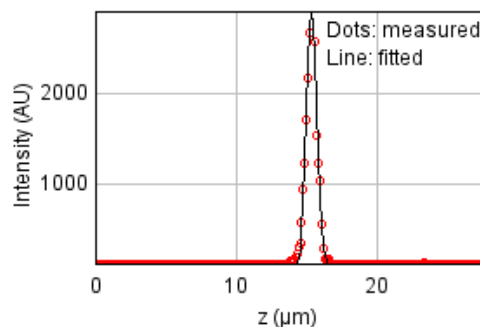
$b = -0.001$  px

$c = 0.441$  px

$x_c = 5.863$  px

$y_c = 5.586$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 320355.071

Standard deviation: 36.76560

$R^2 = 0.99218$

Parameters:

$a = 114.77067$

$b = 2916.00731$

$c = 15.43792$

$d = 0.35508$

## Bead 218

Date : Thu Jul 14 17:33:42 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

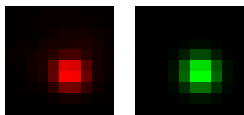
Coordinates : -10.8  $\mu\text{m}$  (x), -9.12  $\mu\text{m}$  (y), 16.1  $\mu\text{m}$  (z)  
Corresponding bead : Not found



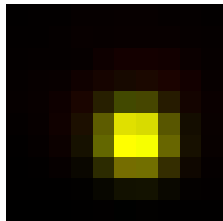
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	287 nm	293 nm	190 nm
z	917 nm	919 nm	642 nm
Asymmetry	0.958		
Theta	-15.5°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



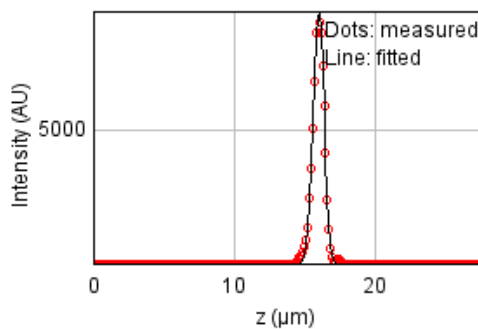
Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.988$



Parameters:  
 $A = 10419.920$  (brightness)  
 $B = 356.691$  (background)  
 $a = 0.457$  px  
 $b = -0.010$  px  
 $c = 0.491$  px

$x_c = 5.488$  px  
 $y_c = 5.645$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$   
Sum of residuals squared: 1135231.08  
Standard deviation: 69.20986  
 $R^2 = 0.99764$   
Parameters:  
 $a = 125.95668$   
 $b = 9329.38109$   
 $c = 16.07764$   
 $d = 0.38955$

## Bead 219

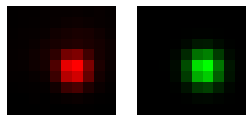
Date : Thu Jul 14 17:33:42 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -14.4  $\mu\text{m}$  (x), -9.89  $\mu\text{m}$  (y), 16.0  $\mu\text{m}$  (z)  
Corresponding bead : Not found

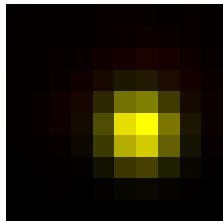
FWHM	Non corrected	Corrected	Theoretical
min	282 nm	288 nm	190 nm
max	288 nm	294 nm	190 nm
z	993 nm	995 nm	642 nm
Asymmetry	0.979		
Theta	-44.5°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.988$



Parameters:

A = 9407.243 (brightness)

B = 315.833 (background)

a = 0.461 px

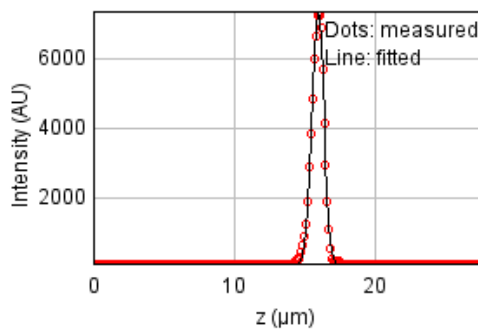
b = -0.010 px

c = 0.461 px

$x_c = 5.661$  px

$y_c = 5.245$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1010674.42

Standard deviation: 65.30275

$R^2$ : 0.99686

Parameters:

a = 118.10686

b = 7371.29207

c = 16.02784

d = 0.42161

## Bead 220

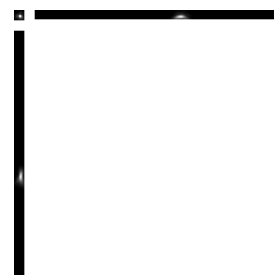
Date : Thu Jul 14 17:33:42 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 41.6  $\mu\text{m}$  (x), 22.4  $\mu\text{m}$  (y), 16.2  $\mu\text{m}$  (z)

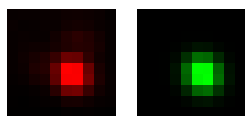
Corresponding bead : Not found



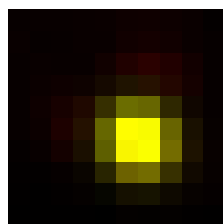
FWHM	Non corrected	Corrected	Theoretical
min	280 nm	286 nm	190 nm
max	298 nm	305 nm	190 nm
z	1.04 $\mu\text{m}$	1.04 $\mu\text{m}$	642 nm
Asymmetry	0.94		
Theta	-52.7°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.980$



Parameters:

$A = 5133.361$  (brightness)

$B = 274.244$  (background)

$a = 0.455$  px

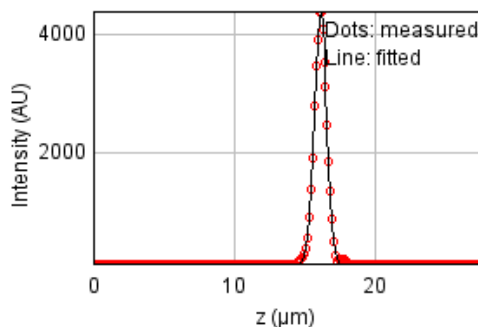
$b = -0.027$  px

$c = 0.440$  px

$x_c = 5.518$  px

$y_c = 5.494$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 180694.741

Standard deviation: 27.61205

$R^2 = 0.99845$

Parameters:

$a = 114.29954$

$b = 4384.81284$

$c = 16.21699$

$d = 0.44272$

## Bead 221

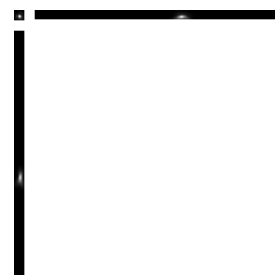
Date : Thu Jul 14 17:33:42 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 27.6  $\mu\text{m}$  (x), 11.3  $\mu\text{m}$  (y), 16.3  $\mu\text{m}$  (z)

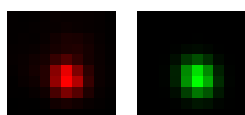
Corresponding bead : Not found



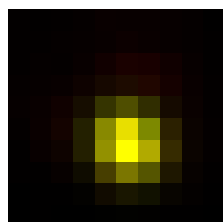
FWHM	Non corrected	Corrected	Theoretical
min	270 nm	275 nm	190 nm
max	295 nm	301 nm	190 nm
z	869 nm	871 nm	642 nm
Asymmetry	0.914		
Theta	-56.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.984$



Parameters:

A = 8834.196 (brightness)

B = 332.935 (background)

a = 0.488 px

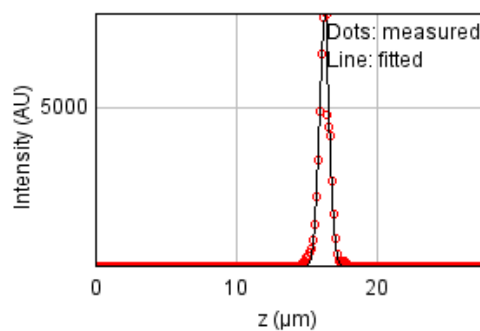
b = -0.039 px

c = 0.454 px

$x_c = 5.054$  px

$y_c = 5.655$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 5286588.01

Standard deviation: 149.35287

$R^2$ : 0.98392

Parameters:

a = 123.16251

b = 7883.13140

c = 16.34777

d = 0.36896

## Bead 222

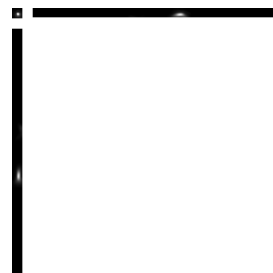
Date : Thu Jul 14 17:33:42 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : -44.7  $\mu\text{m}$  (x), 19.9  $\mu\text{m}$  (y), 16.4  $\mu\text{m}$  (z)

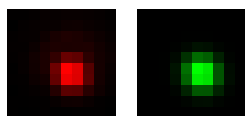
Corresponding bead : Not found



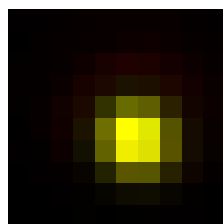
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	289 nm	295 nm	190 nm
z	941 nm	943 nm	642 nm
Asymmetry	0.954		
Theta	-43.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.984$



Parameters:

A = 6181.326 (brightness)

B = 273.514 (background)

a = 0.467 px

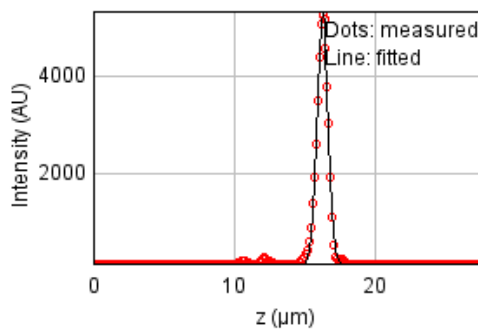
b = -0.022 px

c = 0.470 px

$x_c = 5.415$  px

$y_c = 5.438$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 622111.419

Standard deviation: 51.23419

$R^2$ : 0.99607

Parameters:

a = 127.44215

b = 5345.86148

c = 16.36246

d = 0.39946

## Bead 223

Date : Thu Jul 14 17:33:42 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

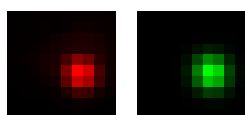
Coordinates : -12.6  $\mu\text{m}$  (x), 18.5  $\mu\text{m}$  (y), 16.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

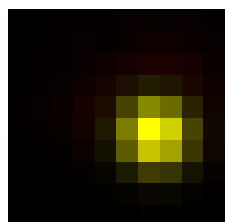
FWHM	Non corrected	Corrected	Theoretical
min	280 nm	286 nm	190 nm
max	290 nm	296 nm	190 nm
z	789 nm	790 nm	642 nm
Asymmetry	0.969		
Theta	-55.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.985$



Parameters:

$A = 11296.267$  (brightness)

$B = 364.328$  (background)

$a = 0.465$  px

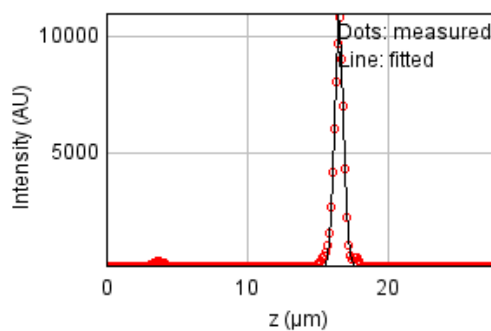
$b = -0.014$  px

$c = 0.454$  px

$x_c = 6.288$  px

$y_c = 5.208$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 3118913.75

Standard deviation: 114.71693

$R^2 = 0.99461$

Parameters:

$a = 150.49566$

$b = 10988.5827$

$c = 16.60206$

$d = 0.33495$

## Bead 224

Date : Thu Jul 14 17:33:43 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

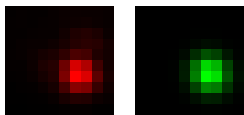
Coordinates : 55.0  $\mu\text{m}$  (x), 12.3  $\mu\text{m}$  (y), 16.3  $\mu\text{m}$  (z)  
Corresponding bead : Not found



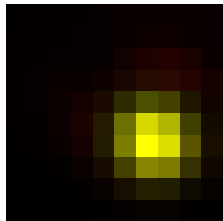
FWHM	Non corrected	Corrected	Theoretical
min	292 nm	299 nm	190 nm
max	308 nm	314 nm	190 nm
z	901 nm	903 nm	642 nm
Asymmetry	0.951		
Theta	-53.2°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.976$



Parameters:

$A = 5338.984$  (brightness)

$B = 289.197$  (background)

$a = 0.421$  px

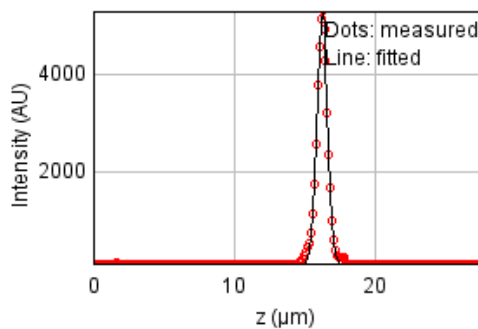
$b = -0.020$  px

$c = 0.409$  px

$x_c = 6.324$  px

$y_c = 5.725$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 389111.485

Standard deviation: 40.51939

$R^2: 0.99741$

Parameters:

$a = 120.94949$

$b = 5310.03512$

$c = 16.33506$

$d = 0.38271$



## Bead 225

Date : Thu Jul 14 17:33:43 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

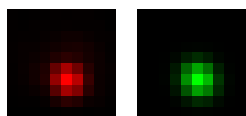
Coordinates : -1.03  $\mu\text{m}$  (x), 23.0  $\mu\text{m}$  (y), 16.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

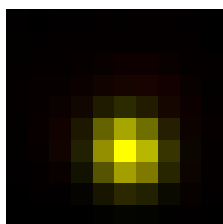
FWHM	Non corrected	Corrected	Theoretical
min	277 nm	282 nm	190 nm
max	295 nm	302 nm	190 nm
z	781 nm	783 nm	642 nm
Asymmetry	0.936		
Theta	-46.0°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.990$



Parameters:

A = 7562.660 (brightness)

B = 278.564 (background)

a = 0.459 px

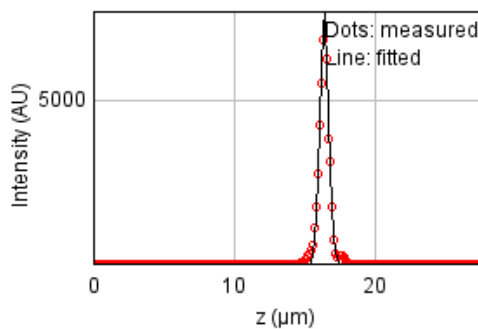
b = -0.030 px

c = 0.457 px

xc = 5.133 px

yc = 5.986 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1970544.25

Standard deviation: 91.18406

$R^2$ : 0.99290

Parameters:

a = 128.59476

b = 7664.73046

c = 16.48165

d = 0.33169

## Bead 226

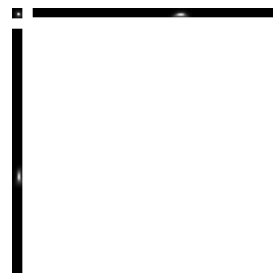
Date : Thu Jul 14 17:33:43 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : -45.6  $\mu\text{m}$  (x), -626 nm (y), 16.4  $\mu\text{m}$  (z)

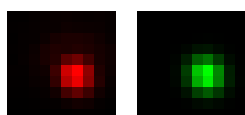
Corresponding bead : Not found



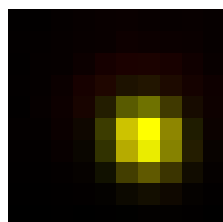
FWHM	Non corrected	Corrected	Theoretical
min	280 nm	286 nm	190 nm
max	296 nm	302 nm	190 nm
z	958 nm	960 nm	642 nm
Asymmetry	0.947		
Theta	-52.7°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.983$



Parameters:

A = 5646.058 (brightness)

B = 251.749 (background)

a = 0.457 px

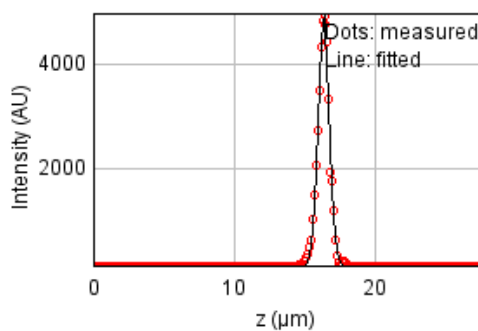
b = -0.024 px

c = 0.444 px

$x_c = 5.817$  px

$y_c = 5.398$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 687314.210

Standard deviation: 53.85220

$R^2$ : 0.99508

Parameters:

a = 117.61416

b = 4977.08869

c = 16.44484

d = 0.40686

## Bead 227

Date : Thu Jul 14 17:33:43 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

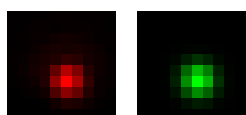
Coordinates : -36.8  $\mu\text{m}$  (x), -3.58  $\mu\text{m}$  (y), 16.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

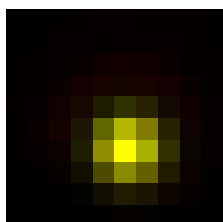
FWHM	Non corrected	Corrected	Theoretical
min	277 nm	282 nm	190 nm
max	280 nm	286 nm	190 nm
z	863 nm	865 nm	642 nm
Asymmetry	0.987		
Theta	-46.5°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.986$



Parameters:

A = 7127.248 (brightness)

B = 286.213 (background)

a = 0.482 px

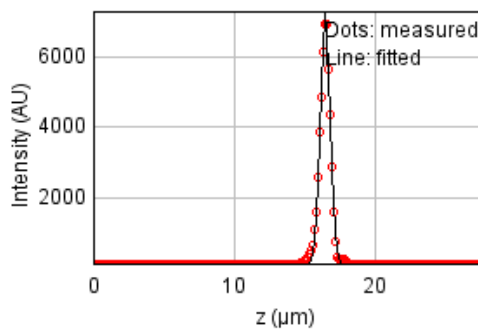
b = -0.006 px

c = 0.481 px

$x_c = 5.114$  px

$y_c = 5.857$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 902541.220

Standard deviation: 61.71054

$R^2$ : 0.99674

Parameters:

a = 119.52177

b = 7306.84634

c = 16.55035

d = 0.36643

## Bead 228

Date : Thu Jul 14 17:33:43 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

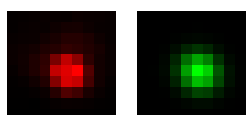
Coordinates : 10.2  $\mu\text{m}$  (x), -3.72  $\mu\text{m}$  (y), 16.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

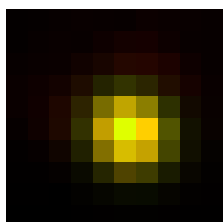
FWHM	Non corrected	Corrected	Theoretical
min	310 nm	317 nm	190 nm
max	337 nm	344 nm	190 nm
z	1.1 $\mu\text{m}$	1.1 $\mu\text{m}$	642 nm
Asymmetry	0.92		
Theta	-33.7°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.962$



Parameters:

$A = 7211.478$  (brightness)

$B = 303.078$  (background)

$a = 0.347$  px

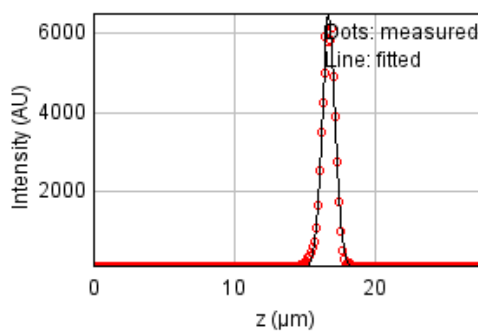
$b = -0.028$  px

$c = 0.370$  px

$x_c = 5.204$  px

$y_c = 5.109$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1860682.31

Standard deviation: 88.60576

$R^2 = 0.99325$

Parameters:

$a = 118.12407$

$b = 6514.20255$

$c = 16.78359$

$d = 0.46581$

## Bead 229

Date : Thu Jul 14 17:33:43 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

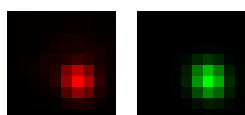
Coordinates : -28.8  $\mu\text{m}$  (x), 15.2  $\mu\text{m}$  (y), 16.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

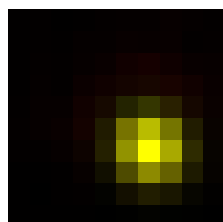
FWHM	Non corrected	Corrected	Theoretical
min	272 nm	278 nm	190 nm
max	291 nm	297 nm	190 nm
z	841 nm	843 nm	642 nm
Asymmetry	0.935		
Theta	-53.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.987$



Parameters:

$A = 4568.363$  (brightness)

$B = 215.857$  (background)

$a = 0.482$  px

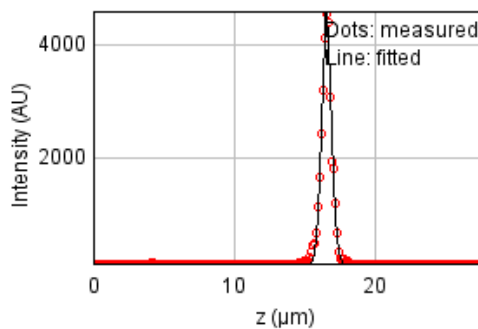
$b = -0.030$  px

$c = 0.463$  px

$x_c = 6.062$  px

$y_c = 5.839$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 780233.457

Standard deviation: 57.37704

$R^2 = 0.99271$

Parameters:

$a = 119.87040$

$b = 4637.04150$

$c = 16.63956$

$d = 0.35722$

## Bead 230

Date : Thu Jul 14 17:33:43 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

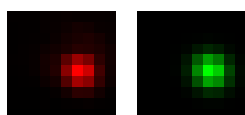
Coordinates : -1.94  $\mu\text{m}$  (x), -4.3  $\mu\text{m}$  (y), 17.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

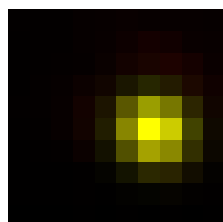
FWHM	Non corrected	Corrected	Theoretical
min	277 nm	283 nm	190 nm
max	296 nm	303 nm	190 nm
z	825 nm	827 nm	642 nm
Asymmetry	0.936		
Theta	-29.2°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.985$



Parameters:

A = 7069.956 (brightness)

B = 273.935 (background)

a = 0.439 px

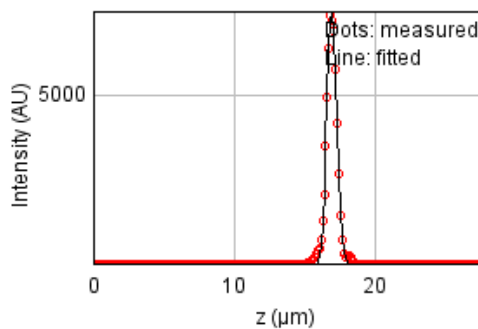
b = -0.026 px

c = 0.471 px

$x_c = 6.241$  px

$y_c = 5.028$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 769905.452

Standard deviation: 56.99602

$R^2$ : 0.99722

Parameters:

a = 124.41622

b = 7475.01823

c = 17.01889

d = 0.35026

## Bead 231

Date : Thu Jul 14 17:33:43 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

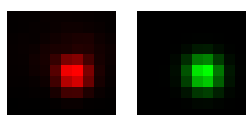
Coordinates : 6.22  $\mu\text{m}$  (x), -18.6  $\mu\text{m}$  (y), 17.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

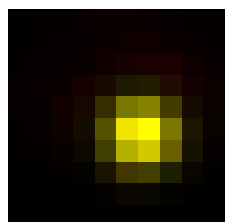
FWHM	Non corrected	Corrected	Theoretical
min	284 nm	290 nm	190 nm
max	291 nm	298 nm	190 nm
z	1.07 $\mu\text{m}$	1.07 $\mu\text{m}$	642 nm
Asymmetry	0.974		
Theta	-30.1°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.986$



Parameters:

A = 8847.661 (brightness)

B = 330.314 (background)

a = 0.445 px

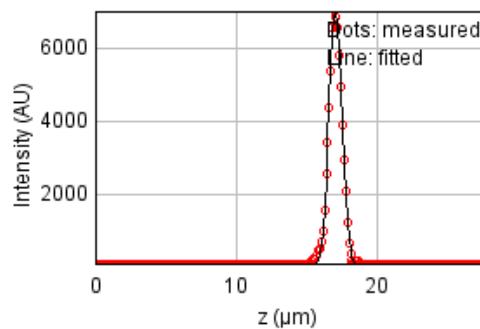
b = -0.010 px

c = 0.457 px

$x_c = 5.636$  px

$y_c = 5.229$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 446219.089

Standard deviation: 43.39102

$R^2 = 0.99856$

Parameters:

a = 118.95865

b = 6996.14947

c = 17.13432

d = 0.45460

## Bead 232

Date : Thu Jul 14 17:33:43 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : -25.2  $\mu\text{m}$  (x), -20.0  $\mu\text{m}$  (y), 17.2  $\mu\text{m}$  (z)

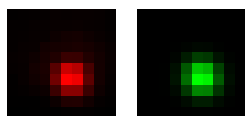
Corresponding bead : Not found



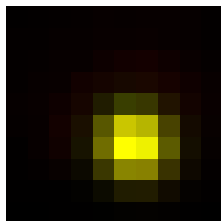
FWHM	Non corrected	Corrected	Theoretical
min	281 nm	287 nm	190 nm
max	291 nm	297 nm	190 nm
z	914 nm	916 nm	642 nm
Asymmetry	0.968		
Theta	-46.2°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.989$



Parameters:

$A = 10073.428$  (brightness)

$B = 373.744$  (background)

$a = 0.457$  px

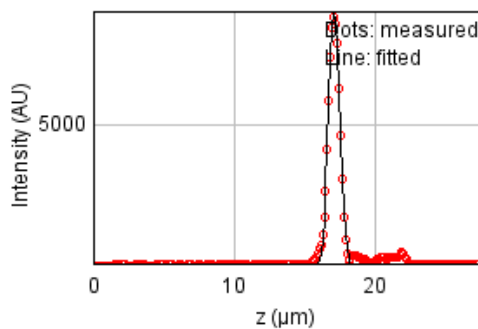
$b = -0.015$  px

$c = 0.456$  px

$x_c = 5.429$  px

$y_c = 5.797$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 3550065.22

Standard deviation: 122.38945

$R^2 = 0.99195$

Parameters:

$a = 169.17081$

$b = 8980.11482$

$c = 17.18175$

$d = 0.38835$



## Bead 233

Date : Thu Jul 14 17:33:44 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

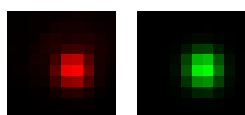
Coordinates : -51.6  $\mu\text{m}$  (x), -24.5  $\mu\text{m}$  (y), 17.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

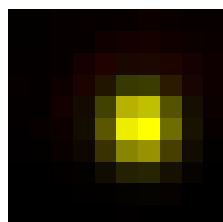
FWHM	Non corrected	Corrected	Theoretical
min	284 nm	290 nm	190 nm
max	297 nm	303 nm	190 nm
z	953 nm	955 nm	642 nm
Asymmetry	0.958		
Theta	-84.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.981$



Parameters:

A = 4846.310 (brightness)

B = 237.353 (background)

a = 0.462 px

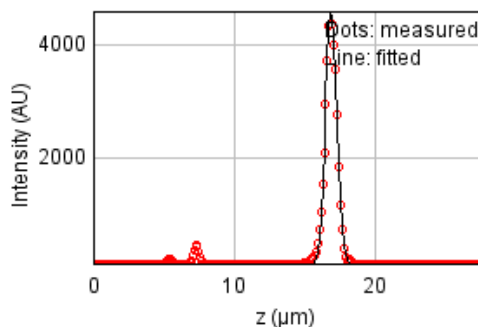
b = -0.003 px

c = 0.424 px

$x_c = 5.583$  px

$y_c = 4.838$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 691179.221

Standard deviation: 54.00341

$R^2$ : 0.99416

Parameters:

a = 125.54243

b = 4605.95860

c = 16.96763

d = 0.40478

## Bead 234

Date : Thu Jul 14 17:33:44 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

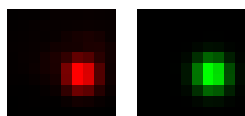
Coordinates : -7.27  $\mu\text{m}$  (x), -24.7  $\mu\text{m}$  (y), 17.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

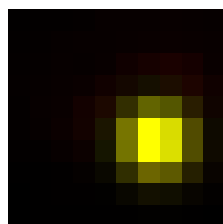
FWHM	Non corrected	Corrected	Theoretical
min	282 nm	288 nm	190 nm
max	284 nm	291 nm	190 nm
z	937 nm	939 nm	642 nm
Asymmetry	0.991		
Theta	-37.3°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.988$



Parameters:

A = 9551.875 (brightness)

B = 329.290 (background)

a = 0.464 px

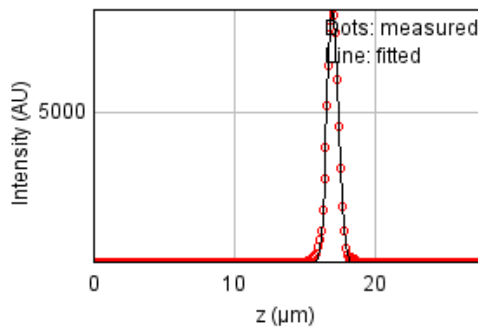
b = -0.004 px

c = 0.466 px

xc = 6.346 px

yc = 5.506 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 796836.474

Standard deviation: 57.98430

$R^2$ : 0.99798

Parameters:

a = 122.82155

b = 8376.36545

c = 17.07936

d = 0.39805

## Bead 235

Date : Thu Jul 14 17:33:44 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 38.8  $\mu\text{m}$  (x), -21.8  $\mu\text{m}$  (y), 17.1  $\mu\text{m}$  (z)

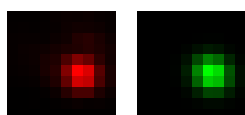
Corresponding bead : Not found



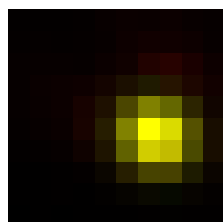
FWHM	Non corrected	Corrected	Theoretical
min	281 nm	287 nm	190 nm
max	306 nm	312 nm	190 nm
z	1.03 $\mu\text{m}$	1.03 $\mu\text{m}$	642 nm
Asymmetry	0.919		
Theta	-30.4°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.980$



Parameters:

$A = 6577.263$  (brightness)

$B = 300.804$  (background)

$a = 0.418$  px

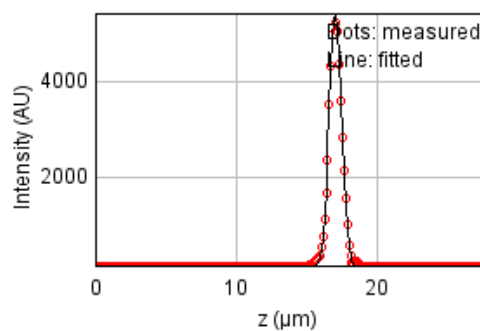
$b = -0.032$  px

$c = 0.454$  px

$x_c = 6.334$  px

$y_c = 5.282$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 364521.667

Standard deviation: 39.21819

$R^2 = 0.99798$

Parameters:

$a = 114.64802$

$b = 5473.67360$

$c = 17.12904$

$d = 0.43580$

## Bead 236

Date : Thu Jul 14 17:33:44 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

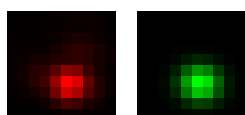
Coordinates : 54.7  $\mu\text{m}$  (x), 25.3  $\mu\text{m}$  (y), 17.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

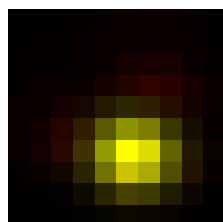
FWHM	Non corrected	Corrected	Theoretical
min	300 nm	307 nm	190 nm
max	338 nm	346 nm	190 nm
z	978 nm	980 nm	642 nm
Asymmetry	0.887		
Theta	-6.8°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.968$



Parameters:

A = 2822.065 (brightness)

B = 217.544 (background)

a = 0.327 px

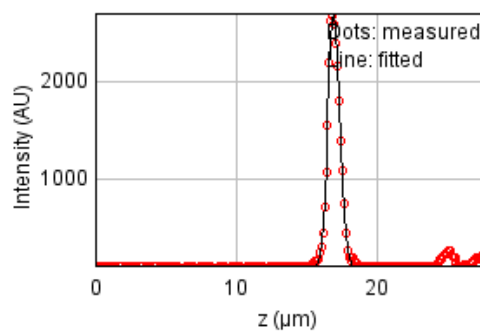
b = -0.010 px

c = 0.412 px

$x_c = 5.277$  px

$y_c = 6.168$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 442388.305

Standard deviation: 43.20437

$R^2$ : 0.98900

Parameters:

a = 122.64230

b = 2695.99706

c = 17.02120

d = 0.41534

## Bead 237

Date : Thu Jul 14 17:33:44 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

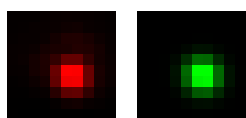
Coordinates : -2.96  $\mu\text{m}$  (x), 5.75  $\mu\text{m}$  (y), 17.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

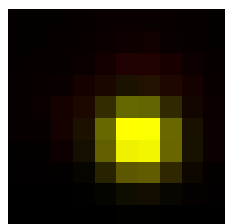
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	290 nm	296 nm	190 nm
z	1.01 $\mu\text{m}$	1.01 $\mu\text{m}$	642 nm
Asymmetry	0.96		
Theta	-25.4°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.985$



Parameters:

A = 9267.145 (brightness)

B = 355.286 (background)

a = 0.452 px

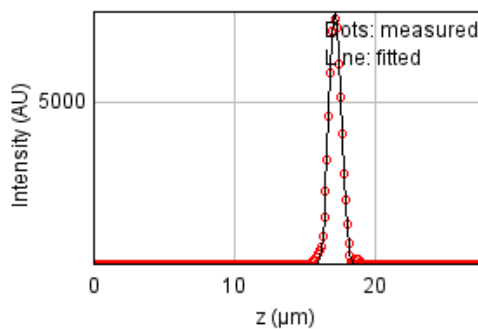
b = -0.015 px

c = 0.476 px

$x_c = 5.509$  px

$y_c = 5.451$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 740997.747

Standard deviation: 55.91576

$R^2 = 0.99796$

Parameters:

a = 125.11981

b = 7784.14109

c = 17.25049

d = 0.42849

## Bead 238

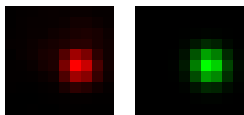
Date : Thu Jul 14 17:33:44 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 9.43  $\mu\text{m}$  (x), -14.4  $\mu\text{m}$  (y), 17.3  $\mu\text{m}$  (z)  
Corresponding bead : Not found

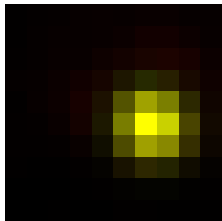
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	291 nm	297 nm	190 nm
z	855 nm	857 nm	642 nm
Asymmetry	0.954		
Theta	-41.0°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.983$



Parameters:

A = 6864.747 (brightness)

B = 287.255 (background)

a = 0.458 px

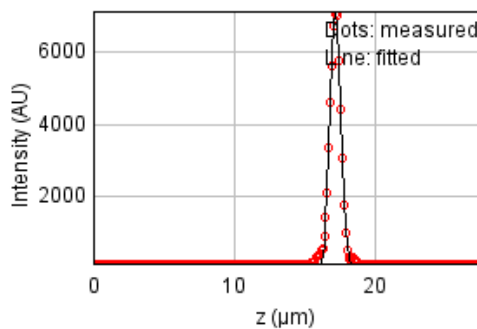
b = -0.021 px

c = 0.464 px

$x_c = 6.281$  px

$y_c = 5.004$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 852456.995

Standard deviation: 59.97387

$R^2$ : 0.99673

Parameters:

a = 125.58640

b = 7131.22055

c = 17.27428

d = 0.36307

## Bead 239

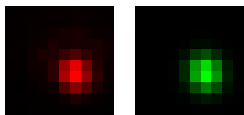
Date : Thu Jul 14 17:33:44 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -41.2  $\mu\text{m}$  (x), 5.96  $\mu\text{m}$  (y), 17.1  $\mu\text{m}$  (z)  
Corresponding bead : Not found

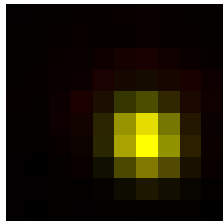
FWHM	Non corrected	Corrected	Theoretical
min	269 nm	274 nm	190 nm
max	292 nm	298 nm	190 nm
z	918 nm	920 nm	642 nm
Asymmetry	0.92		
Theta	-65.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.984$



Parameters:

A = 3221.993 (brightness)

B = 219.058 (background)

a = 0.504 px

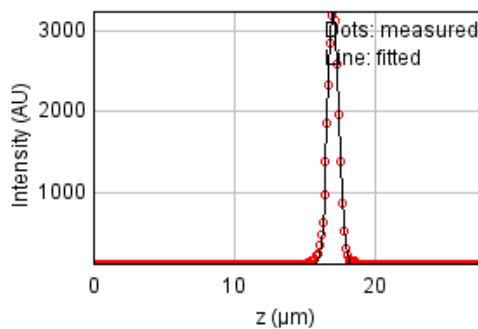
b = -0.030 px

c = 0.451 px

$x_c = 5.928$  px

$y_c = 5.663$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 157067.838

Standard deviation: 25.74361

$R^2$ : 0.99720

Parameters:

a = 114.21643

b = 3256.86565

c = 17.11829

d = 0.38994

## Bead 240

Date : Thu Jul 14 17:33:44 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

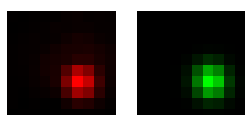
Coordinates : -38.5  $\mu\text{m}$  (x), 1.51  $\mu\text{m}$  (y), 17.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

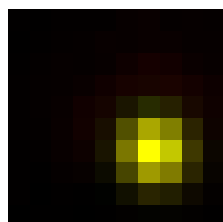
FWHM	Non corrected	Corrected	Theoretical
min	270 nm	276 nm	190 nm
max	284 nm	290 nm	190 nm
z	870 nm	872 nm	642 nm
Asymmetry	0.951		
Theta	-71.8°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.984$



Parameters:

A = 4384.100 (brightness)

B = 221.816 (background)

a = 0.508 px

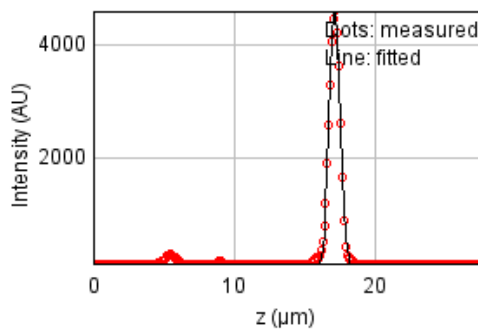
b = -0.015 px

c = 0.468 px

$x_c = 6.254$  px

$y_c = 5.962$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 677158.399

Standard deviation: 53.45286

$R^2$ : 0.99382

Parameters:

a = 129.95199

b = 4630.35818

c = 17.22250

d = 0.36933



## Bead 241

Date : Thu Jul 14 17:33:45 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

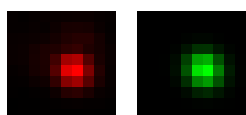
Coordinates : 37.4  $\mu\text{m}$  (x), -12.5  $\mu\text{m}$  (y), 17.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

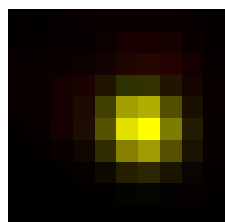
FWHM	Non corrected	Corrected	Theoretical
min	284 nm	290 nm	190 nm
max	302 nm	309 nm	190 nm
z	881 nm	883 nm	642 nm
Asymmetry	0.938		
Theta	-38.2°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.977$



Parameters:

A = 4150.190 (brightness)

B = 238.641 (background)

a = 0.429 px

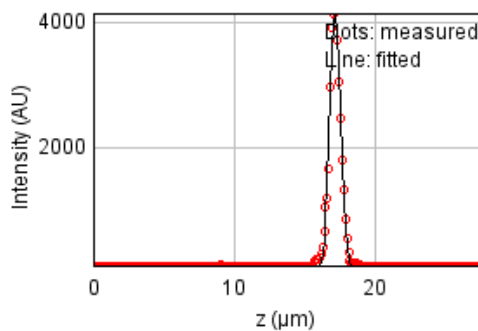
b = -0.027 px

c = 0.442 px

xc = 5.652 px

yc = 4.915 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 704092.460

Standard deviation: 54.50554

$R^2$ : 0.99214

Parameters:

a = 121.22039

b = 4160.60277

c = 17.25733

d = 0.37429

## Bead 242

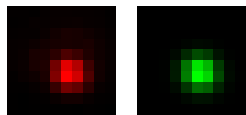
Date : Thu Jul 14 17:33:45 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 2.82  $\mu\text{m}$  (x), -14.7  $\mu\text{m}$  (y), 17.3  $\mu\text{m}$  (z)  
Corresponding bead : Not found

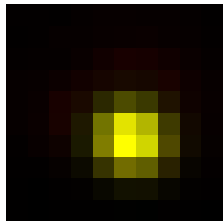
FWHM	Non corrected	Corrected	Theoretical
min	273 nm	279 nm	190 nm
max	291 nm	297 nm	190 nm
z	896 nm	898 nm	642 nm
Asymmetry	0.938		
Theta	-23.3°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.985$



Parameters:

A = 5651.184 (brightness)

B = 256.366 (background)

a = 0.450 px

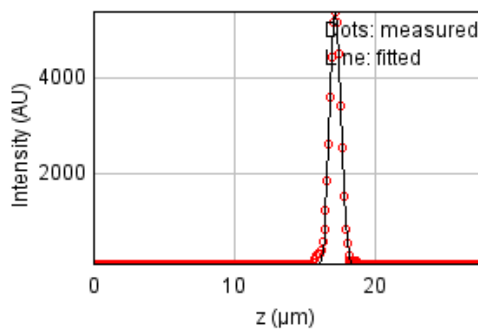
b = -0.022 px

c = 0.491 px

$x_c = 5.276$  px

$y_c = 5.634$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 385848.546

Standard deviation: 40.34914

$R^2$ : 0.99751

Parameters:

a = 118.23760

b = 5399.42507

c = 17.27077

d = 0.38062

## Bead 243

Date : Thu Jul 14 17:33:45 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

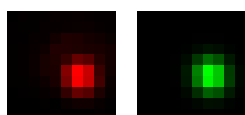
Coordinates : -48.8  $\mu\text{m}$  (x), 5.05  $\mu\text{m}$  (y), 17.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

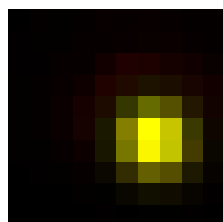
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	289 nm	295 nm	190 nm
z	972 nm	974 nm	642 nm
Asymmetry	0.956		
Theta	-65.3°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.981$



Parameters:

A = 3688.755 (brightness)

B = 204.633 (background)

a = 0.482 px

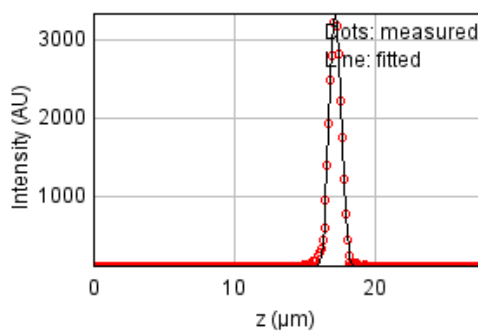
b = -0.016 px

c = 0.455 px

$x_c = 6.246$  px

$y_c = 5.466$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 118018.141

Standard deviation: 22.31517

$R^2$ : 0.99811

Parameters:

a = 113.09312

b = 3344.44400

c = 17.26144

d = 0.41274

## Bead 244

Date : Thu Jul 14 17:33:45 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

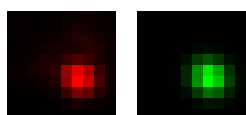
Coordinates : 41.8  $\mu\text{m}$  (x), 19.3  $\mu\text{m}$  (y), 17.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

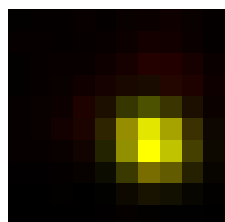
FWHM	Non corrected	Corrected	Theoretical
min	273 nm	279 nm	190 nm
max	305 nm	312 nm	190 nm
z	979 nm	981 nm	642 nm
Asymmetry	0.895		
Theta	-28.4°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.974$



Parameters:

A = 2736.956 (brightness)

B = 197.898 (background)

a = 0.422 px

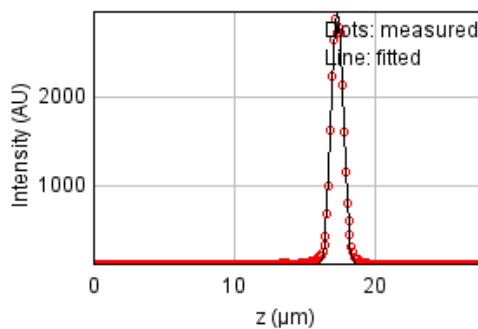
b = -0.041 px

c = 0.476 px

xc = 6.143 px

yc = 5.619 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 262968.175

Standard deviation: 33.31021

$R^2$ : 0.99466

Parameters:

a = 115.81065

b = 2969.92058

c = 17.40692

d = 0.41564

## Bead 245

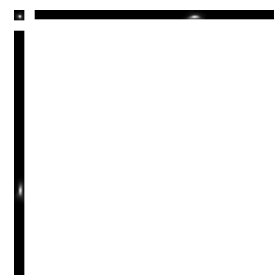
Date : Thu Jul 14 17:33:45 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 14.3  $\mu\text{m}$  (x), -19.6  $\mu\text{m}$  (y), 17.8  $\mu\text{m}$  (z)

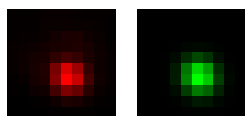
Corresponding bead : Not found



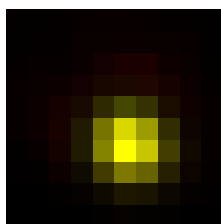
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	281 nm	190 nm
max	294 nm	300 nm	190 nm
z	898 nm	900 nm	642 nm
Asymmetry	0.937		
Theta	-43.0°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.984$



Parameters:

A = 8252.526 (brightness)

B = 357.111 (background)

a = 0.459 px

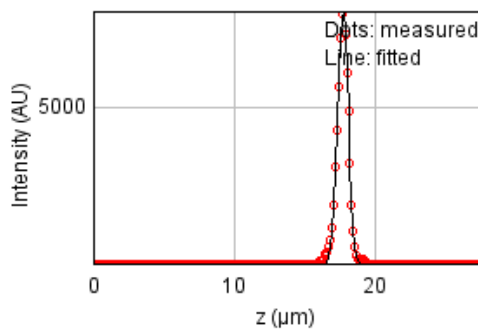
b = -0.030 px

c = 0.464 px

$x_c = 5.201$  px

$y_c = 5.703$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 879068.214

Standard deviation: 60.90278

$R^2$ : 0.99747

Parameters:

a = 125.14119

b = 8036.30170

c = 17.81639

d = 0.38130

## Bead 246

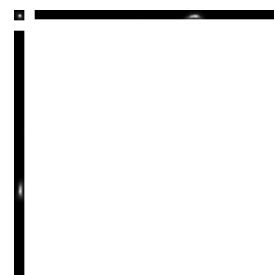
Date : Thu Jul 14 17:33:45 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : -41.2  $\mu\text{m}$  (x), -23.1  $\mu\text{m}$  (y), 17.8  $\mu\text{m}$  (z)

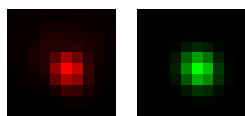
Corresponding bead : Not found



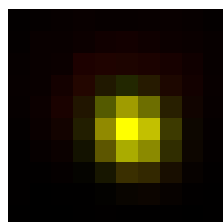
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	300 nm	306 nm	190 nm
z	930 nm	932 nm	642 nm
Asymmetry	0.927		
Theta	-47.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.974$



Parameters:

A = 6179.869 (brightness)

B = 302.446 (background)

a = 0.453 px

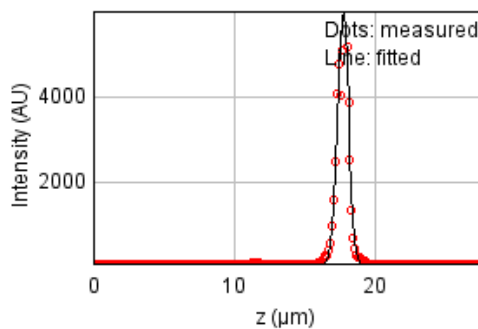
b = -0.034 px

c = 0.447 px

$x_c = 5.187$  px

$y_c = 5.066$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 4361227.44

Standard deviation: 135.65325

$R^2$ : 0.97826

Parameters:

a = 123.16218

b = 5976.44253

c = 17.82841

d = 0.39487

## Bead 247

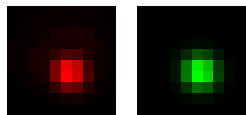
Date : Thu Jul 14 17:33:45 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -10.8  $\mu\text{m}$  (x), -24.5  $\mu\text{m}$  (y), 17.8  $\mu\text{m}$  (z)  
Corresponding bead : Not found

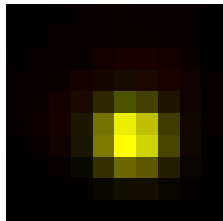
FWHM	Non corrected	Corrected	Theoretical
min	274 nm	279 nm	190 nm
max	284 nm	290 nm	190 nm
z	983 nm	985 nm	642 nm
Asymmetry	0.965		
Theta	-27.3°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.984$



Parameters:

A = 8486.632 (brightness)

B = 350.359 (background)

a = 0.471 px

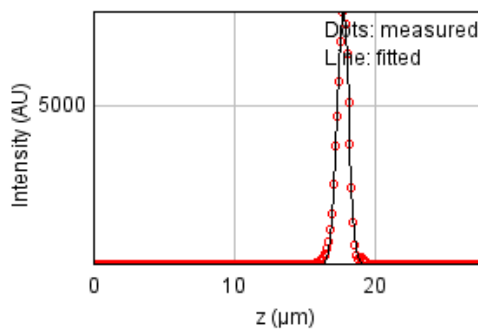
b = -0.014 px

c = 0.491 px

$x_c = 5.282$  px

$y_c = 5.582$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1252438.72

Standard deviation: 72.69492

$R^2$ : 0.99660

Parameters:

a = 123.67486

b = 7917.36048

c = 17.81546

d = 0.41746

## Bead 248

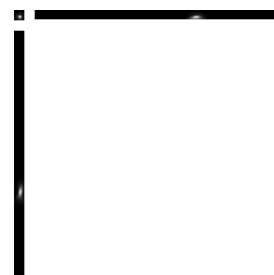
Date : Thu Jul 14 17:33:45 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 8.38  $\mu\text{m}$  (x), -22.3  $\mu\text{m}$  (y), 18.0  $\mu\text{m}$  (z)

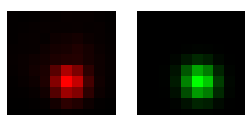
Corresponding bead : Not found



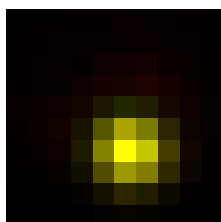
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	287 nm	294 nm	190 nm
z	843 nm	845 nm	642 nm
Asymmetry	0.962		
Theta	-34.4°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.986$



Parameters:

A = 8204.240 (brightness)

B = 335.148 (background)

a = 0.463 px

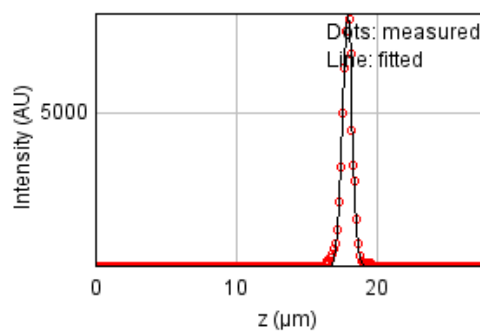
b = -0.017 px

c = 0.476 px

$x_c = 5.226$  px

$y_c = 5.978$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1769999.99

Standard deviation: 86.41964

$R^2$ : 0.99474

Parameters:

a = 124.98819

b = 8133.44471

c = 17.98710

d = 0.35800



## Bead 249

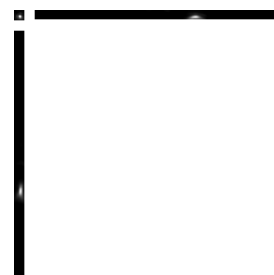
Date : Thu Jul 14 17:33:45 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 28.2  $\mu\text{m}$  (x), 23.1  $\mu\text{m}$  (y), 17.9  $\mu\text{m}$  (z)

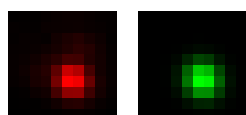
Corresponding bead : Not found



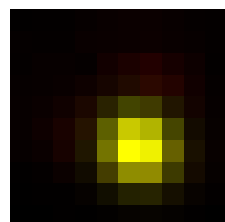
FWHM	Non corrected	Corrected	Theoretical
min	289 nm	295 nm	190 nm
max	306 nm	313 nm	190 nm
z	989 nm	991 nm	642 nm
Asymmetry	0.943		
Theta	-48.7°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.978$



Parameters:

$A = 5143.041$  (brightness)

$B = 280.503$  (background)

$a = 0.426$  px

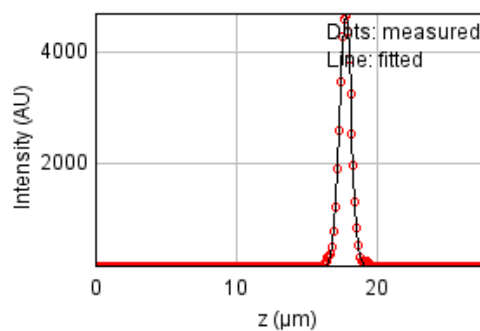
$b = -0.025$  px

$c = 0.420$  px

$x_c = 5.417$  px

$y_c = 5.811$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 224646.779

Standard deviation: 30.78761

$R^2 = 0.99825$

Parameters:

$a = 115.03539$

$b = 4713.71772$

$c = 17.85459$

$d = 0.42002$

## Bead 250

Date : Thu Jul 14 17:33:45 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : -27.9  $\mu\text{m}$  (x), 22.2  $\mu\text{m}$  (y), 18.0  $\mu\text{m}$  (z)

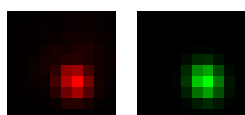
Corresponding bead : Not found



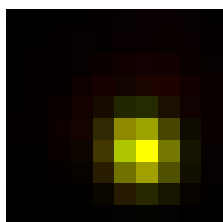
FWHM	Non corrected	Corrected	Theoretical
min	264 nm	270 nm	190 nm
max	292 nm	298 nm	190 nm
z	840 nm	842 nm	642 nm
Asymmetry	0.906		
Theta	-61.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.979$



Parameters:

A = 7623.999 (brightness)

B = 332.533 (background)

a = 0.512 px

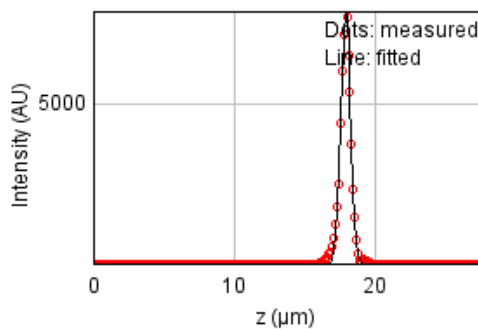
b = -0.040 px

c = 0.460 px

$x_c = 5.750$  px

$y_c = 5.966$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1132508.25

Standard deviation: 69.12681

$R^2 = 0.99633$

Parameters:

a = 126.78302

b = 7821.49595

c = 18.01307

d = 0.35659

## Bead 251

Date : Thu Jul 14 17:33:46 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : -8.72  $\mu\text{m}$  (x), -19.3  $\mu\text{m}$  (y), 17.9  $\mu\text{m}$  (z)

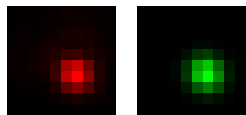
Corresponding bead : Not found



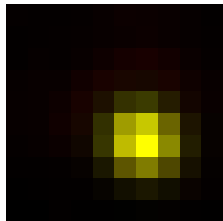
FWHM	Non corrected	Corrected	Theoretical
min	270 nm	276 nm	190 nm
max	290 nm	296 nm	190 nm
z	927 nm	929 nm	642 nm
Asymmetry	0.932		
Theta	-37.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.985$



Parameters:

$A = 5819.680$  (brightness)

$B = 275.806$  (background)

$a = 0.469$  px

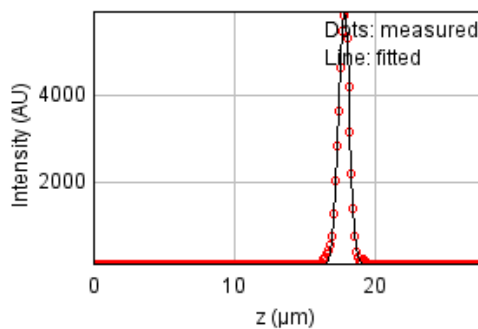
$b = -0.032$  px

$c = 0.486$  px

$x_c = 5.815$  px

$y_c = 5.742$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 441418.812

Standard deviation: 43.15700

$R^2: 0.99771$

Parameters:

$a = 118.67494$

$b = 5919.91805$

$c = 17.88892$

$d = 0.39368$

## Bead 252

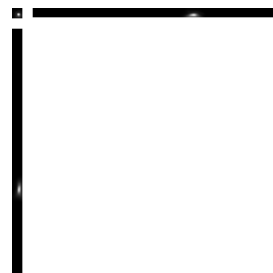
Date : Thu Jul 14 17:33:46 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : -22.3  $\mu\text{m}$  (x), 10.2  $\mu\text{m}$  (y), 17.9  $\mu\text{m}$  (z)

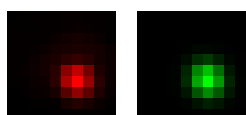
Corresponding bead : Not found



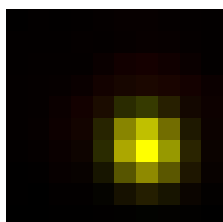
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	294 nm	300 nm	190 nm
z	852 nm	854 nm	642 nm
Asymmetry	0.938		
Theta	-52.0°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.986$



Parameters:

A = 4519.800 (brightness)

B = 225.640 (background)

a = 0.468 px

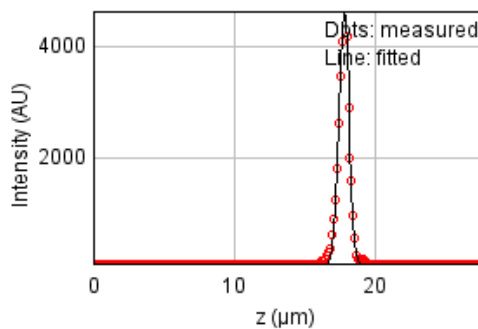
b = -0.028 px

c = 0.453 px

$x_c = 5.942$  px

$y_c = 5.813$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 603092.718

Standard deviation: 50.44497

$R^2 = 0.99439$

Parameters:

a = 120.99921

b = 4623.70253

c = 17.89193

d = 0.36187

## Bead 253

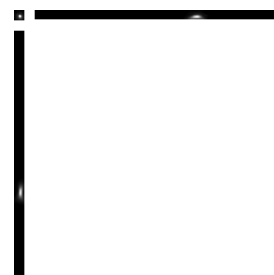
Date : Thu Jul 14 17:33:46 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : -25.2  $\mu\text{m}$  (x), 10.0  $\mu\text{m}$  (y), 18.0  $\mu\text{m}$  (z)

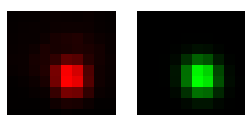
Corresponding bead : Not found



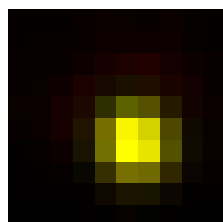
FWHM	Non corrected	Corrected	Theoretical
min	279 nm	285 nm	190 nm
max	295 nm	301 nm	190 nm
z	975 nm	978 nm	642 nm
Asymmetry	0.945		
Theta	-65.2°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.985$



Parameters:

A = 3944.600 (brightness)

B = 221.561 (background)

a = 0.470 px

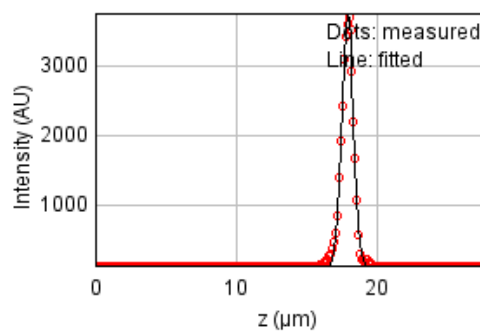
b = -0.019 px

c = 0.437 px

$x_c = 5.364$  px

$y_c = 5.571$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 261084.196

Standard deviation: 33.19068

$R^2 = 0.99671$

Parameters:

a = 114.40885

b = 3750.16495

c = 18.01407

d = 0.41423

## Bead 254

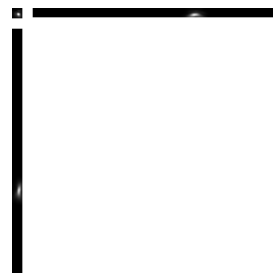
Date : Thu Jul 14 17:33:46 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 37.6  $\mu\text{m}$  (x), -4.47  $\mu\text{m}$  (y), 18.0  $\mu\text{m}$  (z)

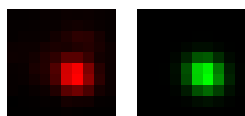
Corresponding bead : Not found



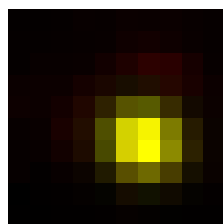
FWHM	Non corrected	Corrected	Theoretical
min	277 nm	283 nm	190 nm
max	306 nm	312 nm	190 nm
z	999 nm	1.0 $\mu\text{m}$	642 nm
Asymmetry	0.907		
Theta	-24.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.974$



Parameters:

$A = 4390.025$  (brightness)

$B = 252.080$  (background)

$a = 0.415$  px

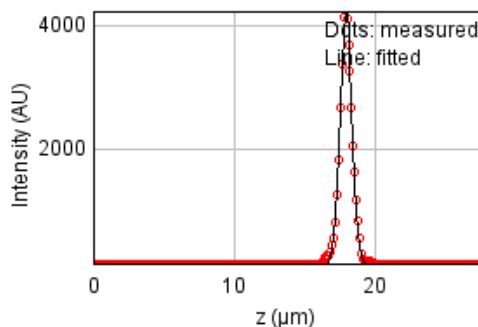
$b = -0.033$  px

$c = 0.471$  px

$x_c = 5.720$  px

$y_c = 5.534$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 560300.570

Standard deviation: 48.62240

$R^2 = 0.99469$

Parameters:

$a = 116.51887$

$b = 4256.30345$

$c = 18.04536$

$d = 0.42404$

## Bead 255

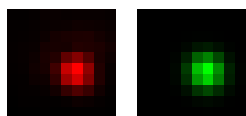
Date : Thu Jul 14 17:33:46 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -43.8  $\mu\text{m}$  (x), -11.9  $\mu\text{m}$  (y), 18.3  $\mu\text{m}$  (z)  
Corresponding bead : Not found

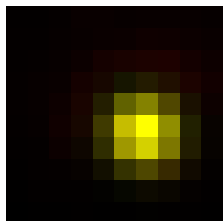
FWHM	Non corrected	Corrected	Theoretical
min	287 nm	293 nm	190 nm
max	294 nm	300 nm	190 nm
z	1.13 $\mu\text{m}$	1.13 $\mu\text{m}$	642 nm
Asymmetry	0.976		
Theta	-51.7°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.982$



Parameters:

A = 6952.034 (brightness)

B = 320.096 (background)

a = 0.445 px

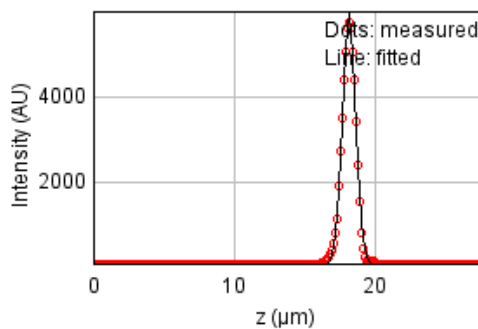
b = -0.010 px

c = 0.440 px

$x_c = 5.844$  px

$y_c = 5.268$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 652769.075

Standard deviation: 52.48142

$R^2$ : 0.99726

Parameters:

a = 115.88652

b = 5998.95105

c = 18.25577

d = 0.47918

## Bead 256

Date : Thu Jul 14 17:33:46 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

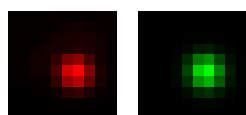
Coordinates : -611 nm (x), -7.09  $\mu\text{m}$  (y), 18.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

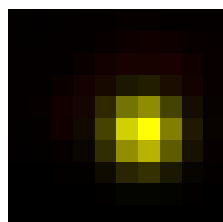
FWHM	Non corrected	Corrected	Theoretical
min	277 nm	283 nm	190 nm
max	287 nm	293 nm	190 nm
z	866 nm	868 nm	642 nm
Asymmetry	0.964		
Theta	-22.8°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.985$



Parameters:

A = 5342.181 (brightness)

B = 231.369 (background)

a = 0.458 px

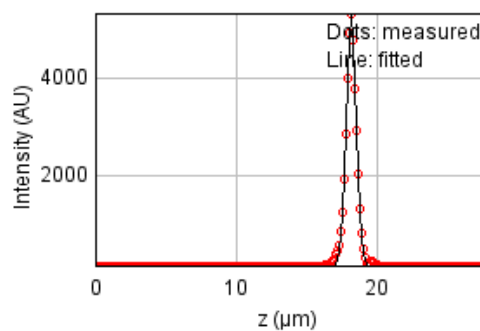
b = -0.012 px

c = 0.481 px

$x_c = 5.732$  px

$y_c = 5.121$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 343938.580

Standard deviation: 38.09485

$R^2$ : 0.99770

Parameters:

a = 119.92961

b = 5402.77597

c = 18.26801

d = 0.36765



## Bead 257

Date : Thu Jul 14 17:33:46 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

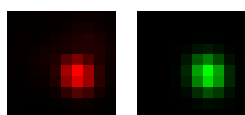
Coordinates : -3.01  $\mu\text{m}$  (x), 9.01  $\mu\text{m}$  (y), 18.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

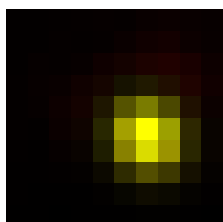
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	299 nm	305 nm	190 nm
z	1.04 $\mu\text{m}$	1.04 $\mu\text{m}$	642 nm
Asymmetry	0.922		
Theta	-57.3°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.980$



Parameters:

A = 6478.159 (brightness)

B = 290.135 (background)

a = 0.470 px

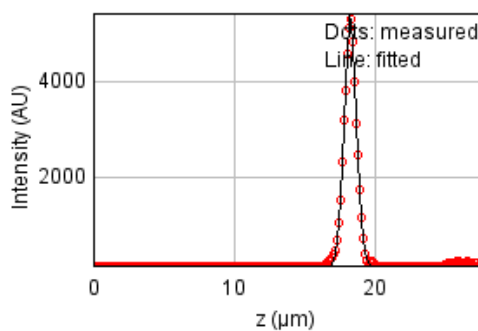
b = -0.034 px

c = 0.440 px

$x_c = 6.022$  px

$y_c = 5.329$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 440973.697

Standard deviation: 43.13524

$R^2$ : 0.99756

Parameters:

a = 129.75781

b = 5448.78467

c = 18.33854

d = 0.44182

## Bead 258

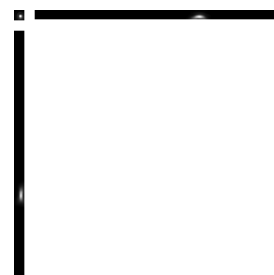
Date : Thu Jul 14 17:33:46 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : -42.2  $\mu\text{m}$  (x), 4.46  $\mu\text{m}$  (y), 18.3  $\mu\text{m}$  (z)

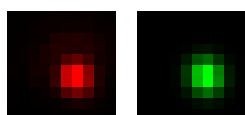
Corresponding bead : Not found



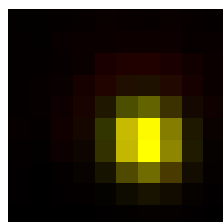
FWHM	Non corrected	Corrected	Theoretical
min	274 nm	279 nm	190 nm
max	293 nm	299 nm	190 nm
z	1.02 $\mu\text{m}$	1.03 $\mu\text{m}$	642 nm
Asymmetry	0.935		
Theta	-66.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.979$



Parameters:

A = 4055.844 (brightness)

B = 230.496 (background)

a = 0.489 px

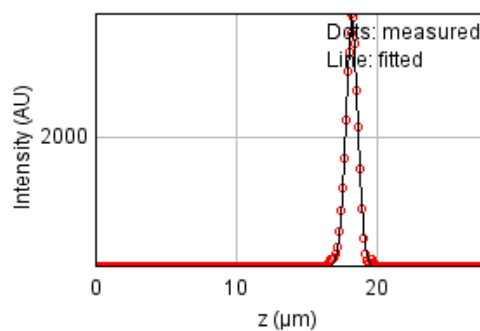
b = -0.023 px

c = 0.445 px

$x_c = 5.818$  px

$y_c = 5.517$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 257751.690

Standard deviation: 32.97817

$R^2$ : 0.99697

Parameters:

a = 113.66269

b = 3791.97890

c = 18.30765

d = 0.43488

## Bead 259

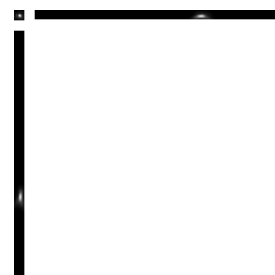
Date : Thu Jul 14 17:33:46 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 21.7  $\mu\text{m}$  (x), 15.4  $\mu\text{m}$  (y), 18.5  $\mu\text{m}$  (z)

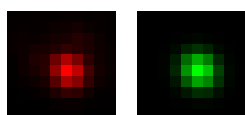
Corresponding bead : Not found



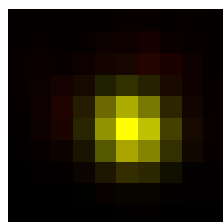
FWHM	Non corrected	Corrected	Theoretical
min	287 nm	293 nm	190 nm
max	311 nm	317 nm	190 nm
z	858 nm	860 nm	642 nm
Asymmetry	0.922		
Theta	-42.5°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.981$



Parameters:

A = 5678.790 (brightness)

B = 270.624 (background)

a = 0.417 px

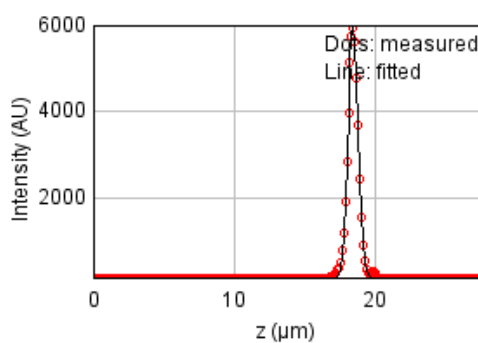
b = -0.034 px

c = 0.423 px

$x_c = 5.165$  px

$y_c = 4.984$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 321782.859

Standard deviation: 36.84744

$R^2 = 0.99826$

Parameters:

a = 118.67018

b = 6009.45174

c = 18.53950

d = 0.36438

## Bead 260

Date : Thu Jul 14 17:33:47 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

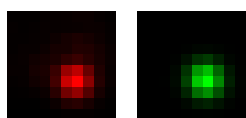
Coordinates : 22.6  $\mu\text{m}$  (x), 1.18  $\mu\text{m}$  (y), 18.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

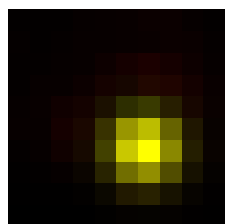
FWHM	Non corrected	Corrected	Theoretical
min	289 nm	295 nm	190 nm
max	293 nm	299 nm	190 nm
z	942 nm	944 nm	642 nm
Asymmetry	0.984		
Theta	-32.7°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.982$



Parameters:

A = 7090.981 (brightness)

B = 345.491 (background)

a = 0.438 px

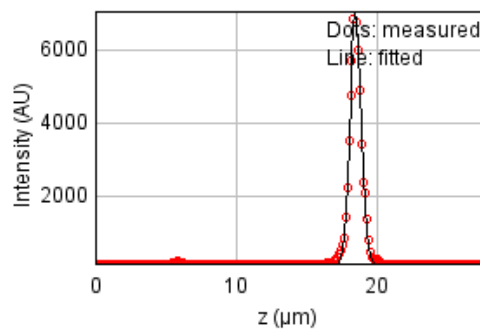
b = -0.007 px

c = 0.444 px

$x_c = 5.777$  px

$y_c = 5.835$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1036652.44

Standard deviation: 66.13668

$R^2 = 0.99631$

Parameters:

a = 129.52593

b = 7079.88194

c = 18.57277

d = 0.39983

## Bead 261

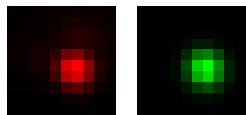
Date : Thu Jul 14 17:33:47 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 31.8  $\mu\text{m}$  (x), -19.8  $\mu\text{m}$  (y), 18.6  $\mu\text{m}$  (z)  
Corresponding bead : Not found

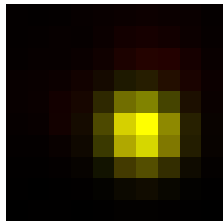
FWHM	Non corrected	Corrected	Theoretical
min	292 nm	298 nm	190 nm
max	305 nm	312 nm	190 nm
z	1.09 $\mu\text{m}$	1.09 $\mu\text{m}$	642 nm
Asymmetry	0.956		
Theta	-41.1°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.980$



Parameters:

A = 8271.466 (brightness)

B = 368.102 (background)

a = 0.417 px

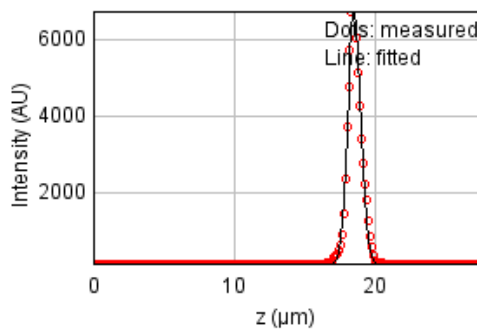
b = -0.019 px

c = 0.422 px

$x_c = 5.764$  px

$y_c = 5.283$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 2131149.88

Standard deviation: 94.82718

$R^2$ : 0.99283

Parameters:

a = 119.73737

b = 6771.93933

c = 18.61876

d = 0.46378

## Bead 262

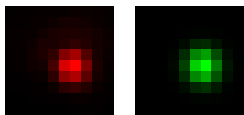
Date : Thu Jul 14 17:33:47 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -26.0  $\mu\text{m}$  (x), 19.1  $\mu\text{m}$  (y), 18.7  $\mu\text{m}$  (z)  
Corresponding bead : Not found

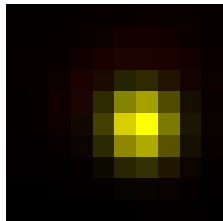
FWHM	Non corrected	Corrected	Theoretical
min	279 nm	285 nm	190 nm
max	292 nm	298 nm	190 nm
z	906 nm	908 nm	642 nm
Asymmetry	0.956		
Theta	-76.8°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.980$



Parameters:

A = 6187.305 (brightness)

B = 289.755 (background)

a = 0.478 px

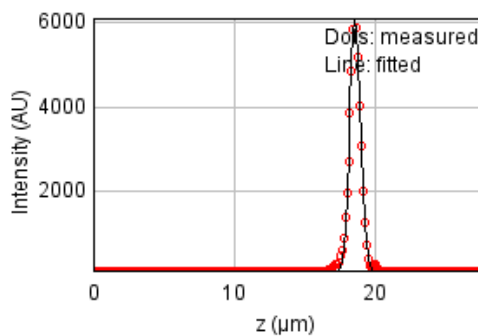
b = -0.009 px

c = 0.441 px

$x_c = 5.723$  px

$y_c = 5.028$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 507602.438

Standard deviation: 46.27940

$R^2$ : 0.99744

Parameters:

a = 121.97458

b = 6075.97979

c = 18.68525

d = 0.38457

## Bead 263

Date : Thu Jul 14 17:33:47 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

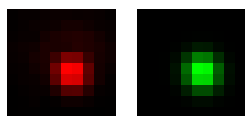
Coordinates : -26.2  $\mu\text{m}$  (x), 23.5  $\mu\text{m}$  (y), 18.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

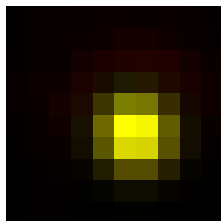
FWHM	Non corrected	Corrected	Theoretical
min	282 nm	288 nm	190 nm
max	292 nm	298 nm	190 nm
z	1.16 $\mu\text{m}$	1.17 $\mu\text{m}$	642 nm
Asymmetry	0.963		
Theta	-69.0°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.980$



Parameters:

A = 5318.390 (brightness)

B = 284.663 (background)

a = 0.466 px

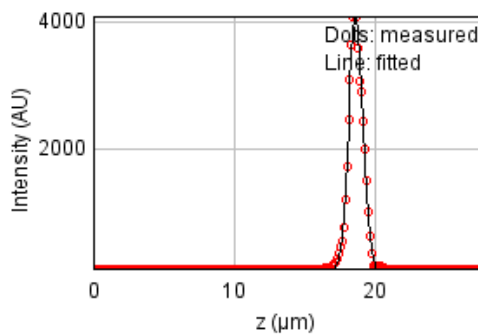
b = -0.011 px

c = 0.441 px

$x_c = 5.465$  px

$y_c = 5.316$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 511849.829

Standard deviation: 46.47261

$R^2 = 0.99548$

Parameters:

a = 113.96589

b = 4107.40832

c = 18.72720

d = 0.49394

## Bead 264

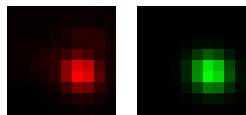
Date : Thu Jul 14 17:33:47 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 45.9  $\mu\text{m}$  (x), 9.44  $\mu\text{m}$  (y), 18.9  $\mu\text{m}$  (z)  
Corresponding bead : Not found

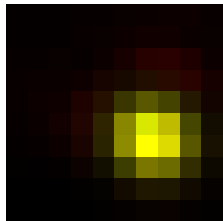
FWHM	Non corrected	Corrected	Theoretical
min	288 nm	294 nm	190 nm
max	318 nm	324 nm	190 nm
z	1.04 $\mu\text{m}$	1.04 $\mu\text{m}$	642 nm
Asymmetry	0.908		
Theta	-24.3°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.970$



Parameters:

$A = 5137.622$  (brightness)

$B = 305.353$  (background)

$a = 0.383$  px

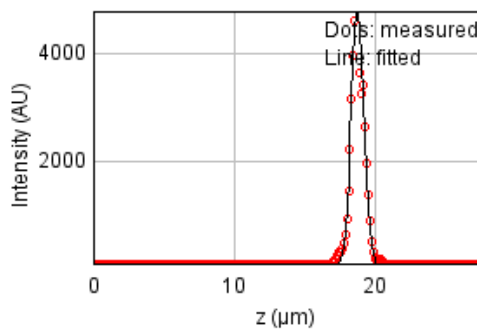
$b = -0.030$  px

$c = 0.435$  px

$x_c = 6.262$  px

$y_c = 5.629$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 2041590.94

Standard deviation: 92.81330

$R^2: 0.98564$

Parameters:

$a = 117.44697$

$b = 4805.20864$

$c = 18.85465$

$d = 0.44232$



## Bead 265

Date : Thu Jul 14 17:33:47 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

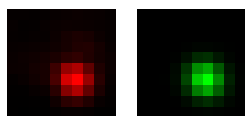
Coordinates : 35.9  $\mu\text{m}$  (x), -16.2  $\mu\text{m}$  (y), 18.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

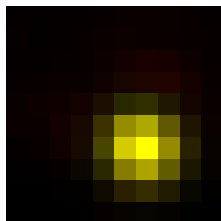
FWHM	Non corrected	Corrected	Theoretical
min	288 nm	294 nm	190 nm
max	304 nm	310 nm	190 nm
z	981 nm	983 nm	642 nm
Asymmetry	0.949		
Theta	-38.1°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.983$



Parameters:

A = 5945.031 (brightness)

B = 303.704 (background)

a = 0.422 px

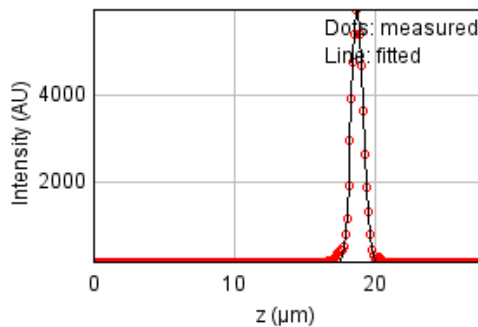
b = -0.021 px

c = 0.432 px

xc = 5.772 px

yc = 5.971 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 374209.626

Standard deviation: 39.73592

$R^2$ : 0.99822

Parameters:

a = 119.73435

b = 6026.22206

c = 18.84157

d = 0.41645

## Bead 266

Date : Thu Jul 14 17:33:47 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

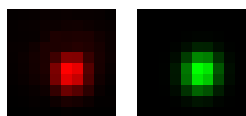
Coordinates : -30.6  $\mu\text{m}$  (x), 9.82  $\mu\text{m}$  (y), 18.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

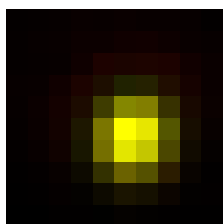
FWHM	Non corrected	Corrected	Theoretical
min	289 nm	296 nm	190 nm
max	319 nm	325 nm	190 nm
z	1.05 $\mu\text{m}$	1.05 $\mu\text{m}$	642 nm
Asymmetry	0.908		
Theta	74.0°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.984$



Parameters:

A = 4095.615 (brightness)

B = 235.475 (background)

a = 0.439 px

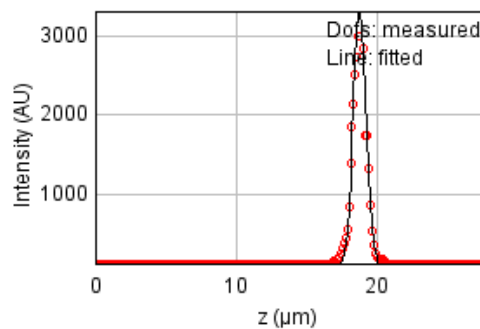
b = 0.021 px

c = 0.373 px

$x_c = 5.362$  px

$y_c = 5.335$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1122435.65

Standard deviation: 68.81871

$R^2$ : 0.98329

Parameters:

a = 116.13598

b = 3322.81588

c = 18.85983

d = 0.44581

## Bead 267

Date : Thu Jul 14 17:33:47 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

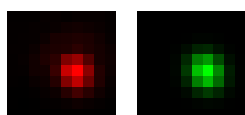
Coordinates : -21.5  $\mu\text{m}$  (x), 17.4  $\mu\text{m}$  (y), 19.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

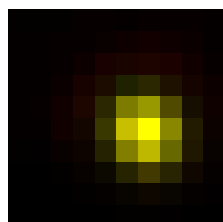
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	305 nm	311 nm	190 nm
z	862 nm	864 nm	642 nm
Asymmetry	0.904		
Theta	-60.1°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.981$



Parameters:

A = 6507.676 (brightness)

B = 294.618 (background)

a = 0.470 px

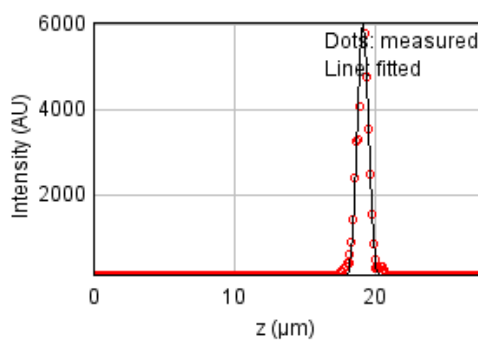
b = -0.039 px

c = 0.424 px

xc = 5.818 px

yc = 5.096 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 3236058.70

Standard deviation: 116.85143

$R^2$ : 0.98305

Parameters:

a = 123.80077

b = 6055.93856

c = 19.23930

d = 0.36627

## Bead 268

Date : Thu Jul 14 17:33:47 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

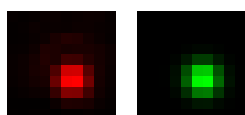
Coordinates : -42.4  $\mu\text{m}$  (x), 6.99  $\mu\text{m}$  (y), 18.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

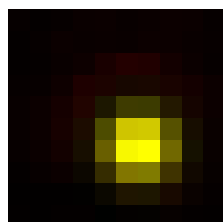
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	284 nm	290 nm	190 nm
z	1.07 $\mu\text{m}$	1.07 $\mu\text{m}$	642 nm
Asymmetry	0.974		
Theta	-15.1°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.980$



Parameters:

A = 2683.163 (brightness)

B = 202.485 (background)

a = 0.466 px

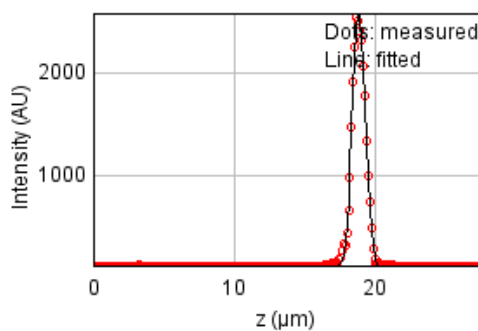
b = -0.006 px

c = 0.488 px

$x_c = 5.530$  px

$y_c = 5.743$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 141578.583

Standard deviation: 24.44132

$R^2 = 0.99650$

Parameters:

a = 111.60452

b = 2594.44399

c = 18.94791

d = 0.45388

## Bead 269

Date : Thu Jul 14 17:33:47 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

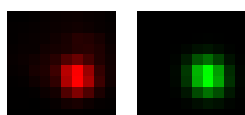
Coordinates : 26.8  $\mu\text{m}$  (x), -4.35  $\mu\text{m}$  (y), 19.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

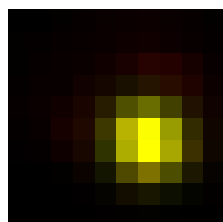
FWHM	Non corrected	Corrected	Theoretical
min	292 nm	299 nm	190 nm
max	310 nm	317 nm	190 nm
z	969 nm	971 nm	642 nm
Asymmetry	0.943		
Theta	-43.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.975$



Parameters:

$A = 5827.867$  (brightness)

$B = 319.717$  (background)

$a = 0.411$  px

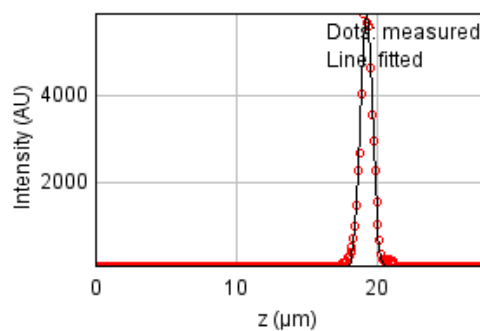
$b = -0.024$  px

$c = 0.413$  px

$x_c = 5.948$  px

$y_c = 5.513$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1937988.64

Standard deviation: 90.42769

$R^2: 0.99017$

Parameters:

$a = 126.11294$

$b = 5851.97052$

$c = 19.35328$

$d = 0.41150$

## Bead 270

Date : Thu Jul 14 17:33:48 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

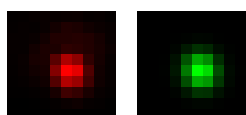
Coordinates : -28.1  $\mu\text{m}$  (x), 5.68  $\mu\text{m}$  (y), 19.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

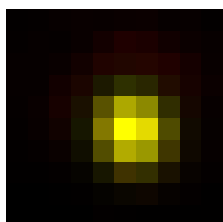
FWHM	Non corrected	Corrected	Theoretical
min	283 nm	289 nm	190 nm
max	304 nm	311 nm	190 nm
z	909 nm	911 nm	642 nm
Asymmetry	0.93		
Theta	-68.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.974$



Parameters:

A = 4652.620 (brightness)

B = 254.818 (background)

a = 0.458 px

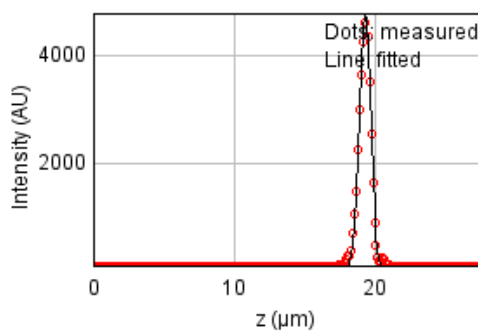
b = -0.021 px

c = 0.412 px

$x_c = 5.328$  px

$y_c = 5.028$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 564066.363

Standard deviation: 48.78552

$R^2$ : 0.99537

Parameters:

a = 120.00737

b = 4772.61915

c = 19.39920

d = 0.38613

## Bead 271

Date : Thu Jul 14 17:33:48 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

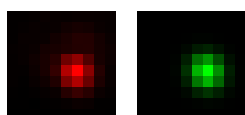
Coordinates : -15.2  $\mu\text{m}$  (x), 10.1  $\mu\text{m}$  (y), 19.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

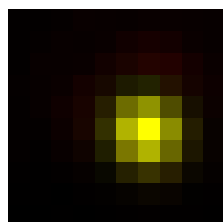
FWHM	Non corrected	Corrected	Theoretical
min	274 nm	280 nm	190 nm
max	291 nm	297 nm	190 nm
z	897 nm	899 nm	642 nm
Asymmetry	0.944		
Theta	-58.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.977$



Parameters:

$A = 4547.372$  (brightness)

$B = 247.642$  (background)

$a = 0.482$  px

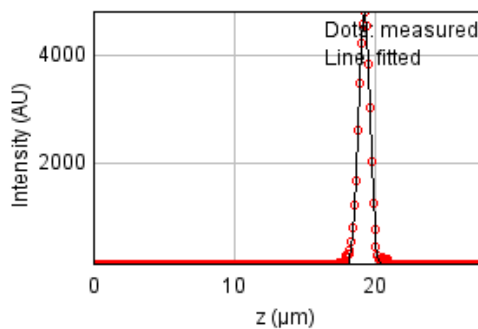
$b = -0.024$  px

$c = 0.456$  px

$x_c = 5.876$  px

$y_c = 5.101$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 321322.683

Standard deviation: 36.82108

$R^2: 0.99739$

Parameters:

$a = 119.07090$

$b = 4825.25758$

$c = 19.33584$

$d = 0.38077$

## Bead 272

Date : Thu Jul 14 17:33:48 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

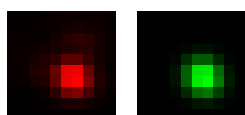
Coordinates : 37.2  $\mu\text{m}$  (x), 23.0  $\mu\text{m}$  (y), 19.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

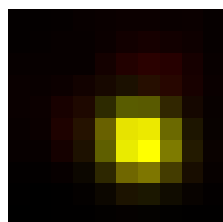
FWHM	Non corrected	Corrected	Theoretical
min	287 nm	293 nm	190 nm
max	309 nm	316 nm	190 nm
z	1.13 $\mu\text{m}$	1.13 $\mu\text{m}$	642 nm
Asymmetry	0.93		
Theta	-34.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.974$



Parameters:

A = 5185.559 (brightness)

B = 297.931 (background)

a = 0.411 px

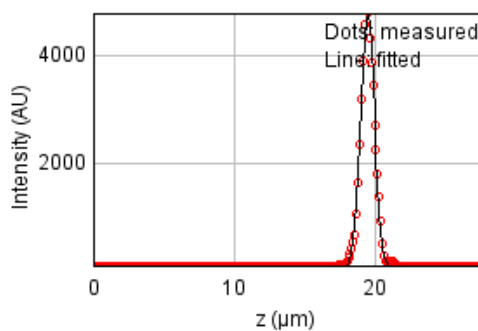
b = -0.029 px

c = 0.433 px

$x_c = 5.574$  px

$y_c = 5.579$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 719100.664

Standard deviation: 55.08339

$R^2$ : 0.99521

Parameters:

a = 114.11250

b = 4777.58063

c = 19.58174

d = 0.47910



## Bead 273

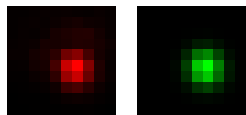
Date : Thu Jul 14 17:33:48 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 1.48  $\mu\text{m}$  (x), -2.58  $\mu\text{m}$  (y), 19.7  $\mu\text{m}$  (z)  
Corresponding bead : Not found

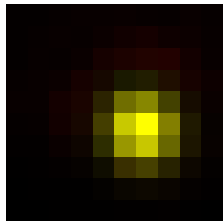
FWHM	Non corrected	Corrected	Theoretical
min	279 nm	285 nm	190 nm
max	293 nm	299 nm	190 nm
z	1.12 $\mu\text{m}$	1.12 $\mu\text{m}$	642 nm
Asymmetry	0.953		
Theta	-62.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.978$



Parameters:

A = 6653.076 (brightness)

B = 317.287 (background)

a = 0.469 px

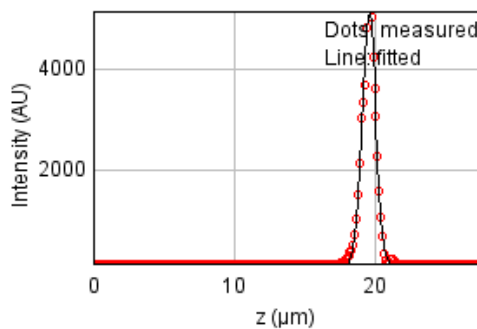
b = -0.018 px

c = 0.444 px

xc = 5.764 px

yc = 5.208 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 686647.014

Standard deviation: 53.82606

$R^2$ : 0.99610

Parameters:

a = 115.32563

b = 5184.52965

c = 19.67730

d = 0.47515

## Bead 274 (Rejected)

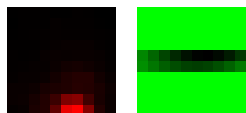
Date : Thu Jul 14 17:33:48 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 31.7  $\mu\text{m}$  (x), -19.2  $\mu\text{m}$  (y), 18.8  $\mu\text{m}$  (z)  
Corresponding bead : Not found  
Reason of rejection : R or C parameter off limits.

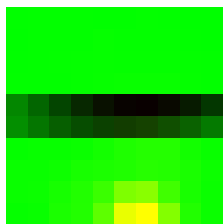
FWHM	Non corrected	Corrected	Theoretical
min	70.9 nm	72.5 nm	190 nm
max	1.28 $\mu\text{m}$	1.31 $\mu\text{m}$	190 nm
z	1.24 $\mu\text{m}$	1.24 $\mu\text{m}$	642 nm
Asymmetry	0.055		
Theta	0.1°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.024$



Parameters:

A = -2279.612 (brightness)

B = 843.875 (background)

a = -0.023 px

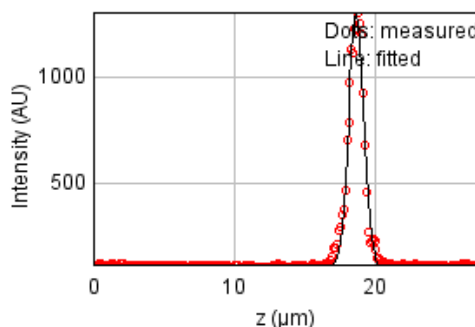
b = 0.019 px

c = 7.412 px

xc = 5.348 px

yc = 4.481 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 182637.226

Standard deviation: 27.76006

$R^2$ : 0.98328

Parameters:

a = 112.57907

b = 1311.40269

c = 18.75654

d = 0.52446

## Bead 275

Date : Thu Jul 14 17:33:48 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

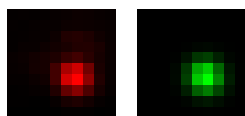
Coordinates : 18.1  $\mu\text{m}$  (x), -2.75  $\mu\text{m}$  (y), 19.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

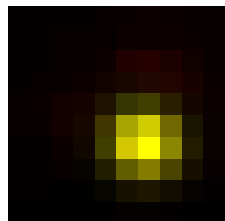
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	291 nm	297 nm	190 nm
z	1000 nm	1.0 $\mu\text{m}$	642 nm
Asymmetry	0.957		
Theta	-25.3°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.976$



Parameters:

$A = 5770.737$  (brightness)

$B = 296.486$  (background)

$a = 0.449$  px

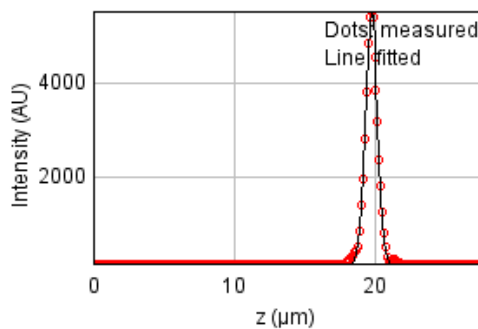
$b = -0.016$  px

$c = 0.475$  px

$x_c = 5.766$  px

$y_c = 5.728$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 615491.918

Standard deviation: 50.96089

$R^2: 0.99658$

Parameters:

$a = 118.79310$

$b = 5528.88076$

$c = 19.85248$

$d = 0.42461$

## Bead 276

Date : Thu Jul 14 17:33:48 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 49.4  $\mu\text{m}$  (x), -24.5  $\mu\text{m}$  (y), 19.7  $\mu\text{m}$  (z)

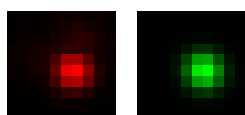
Corresponding bead : Not found



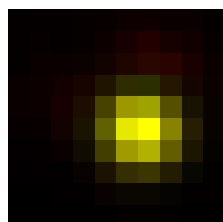
FWHM	Non corrected	Corrected	Theoretical
min	298 nm	305 nm	190 nm
max	314 nm	320 nm	190 nm
z	970 nm	972 nm	642 nm
Asymmetry	0.951		
Theta	-29.1°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.975$



Parameters:

$A = 4731.240$  (brightness)

$B = 260.236$  (background)

$a = 0.389$  px

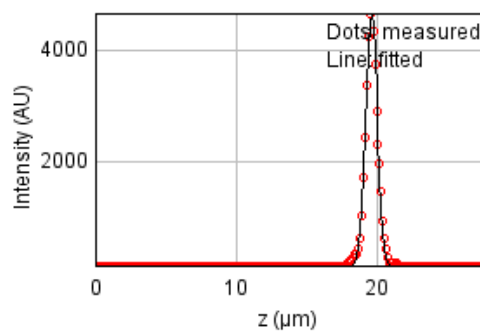
$b = -0.017$  px

$c = 0.410$  px

$x_c = 5.629$  px

$y_c = 5.032$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 741488.848

Standard deviation: 55.93429

$R^2: 0.99401$

Parameters:

$a = 118.89678$

$b = 4662.42791$

$c = 19.71299$

$d = 0.41203$

## Bead 277

Date : Thu Jul 14 17:33:48 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

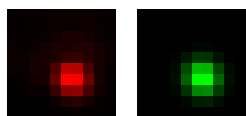
Coordinates : -6.67  $\mu\text{m}$  (x), -10.2  $\mu\text{m}$  (y), 20.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

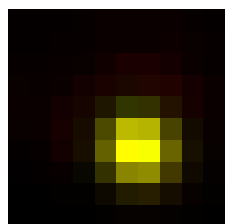
FWHM	Non corrected	Corrected	Theoretical
min	274 nm	280 nm	190 nm
max	286 nm	292 nm	190 nm
z	945 nm	948 nm	642 nm
Asymmetry	0.958		
Theta	-44.3°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.981$



Parameters:

A = 8764.560 (brightness)

B = 408.175 (background)

a = 0.475 px

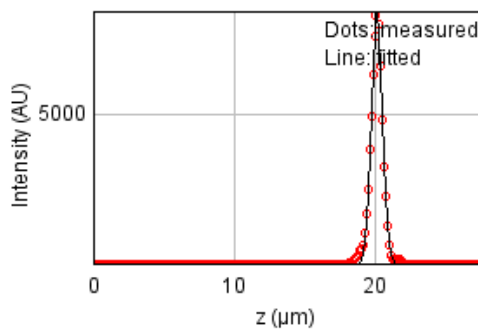
b = -0.021 px

c = 0.476 px

$x_c = 5.507$  px

$y_c = 5.847$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1257367.74

Standard deviation: 72.83783

$R^2$ : 0.99686

Parameters:

a = 129.39858

b = 8407.23600

c = 20.23517

d = 0.40151

## Bead 278

Date : Thu Jul 14 17:33:48 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

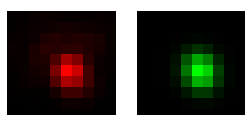
Coordinates : -46.9  $\mu\text{m}$  (x), -13.2  $\mu\text{m}$  (y), 20.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

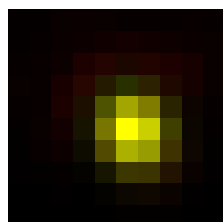
FWHM	Non corrected	Corrected	Theoretical
min	270 nm	276 nm	190 nm
max	311 nm	318 nm	190 nm
z	956 nm	958 nm	642 nm
Asymmetry	0.869		
Theta	-68.8°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.969$



Parameters:

A = 5103.427 (brightness)

B = 294.861 (background)

a = 0.495 px

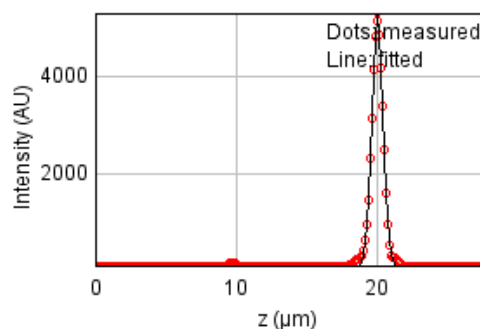
b = -0.042 px

c = 0.402 px

$x_c = 5.296$  px

$y_c = 5.066$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 296334.692

Standard deviation: 35.36039

$R^2$ : 0.99814

Parameters:

a = 122.57253

b = 5316.83804

c = 20.13443

d = 0.40608

## Bead 279

Date : Thu Jul 14 17:33:49 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 49.5  $\mu\text{m}$  (x), -14.9  $\mu\text{m}$  (y), 19.9  $\mu\text{m}$  (z)

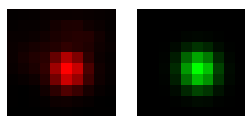
Corresponding bead : Not found



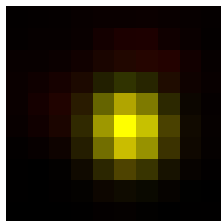
FWHM	Non corrected	Corrected	Theoretical
min	304 nm	310 nm	190 nm
max	319 nm	325 nm	190 nm
z	946 nm	948 nm	642 nm
Asymmetry	0.954		
Theta	-73.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.974$



Parameters:

A = 3939.025 (brightness)

B = 242.628 (background)

a = 0.401 px

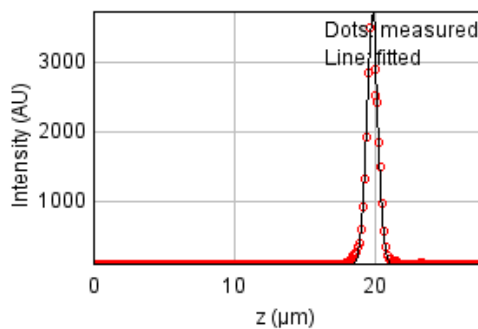
b = -0.010 px

c = 0.370 px

$x_c = 5.150$  px

$y_c = 5.098$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1232559.77

Standard deviation: 72.11570

$R^2$ : 0.98408

Parameters:

a = 116.78441

b = 3734.08321

c = 19.91492

d = 0.40169

## Bead 280

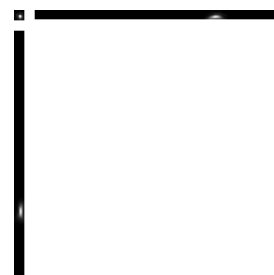
Date : Thu Jul 14 17:33:49 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : -14.3  $\mu\text{m}$  (x), -17.0  $\mu\text{m}$  (y), 20.1  $\mu\text{m}$  (z)

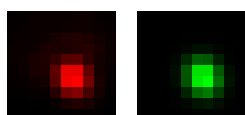
Corresponding bead : Not found



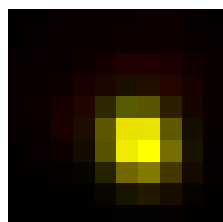
FWHM	Non corrected	Corrected	Theoretical
min	274 nm	280 nm	190 nm
max	304 nm	311 nm	190 nm
z	1.06 $\mu\text{m}$	1.07 $\mu\text{m}$	642 nm
Asymmetry	0.902		
Theta	-58.5°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.980$



Parameters:

A = 6388.102 (brightness)

B = 326.959 (background)

a = 0.470 px

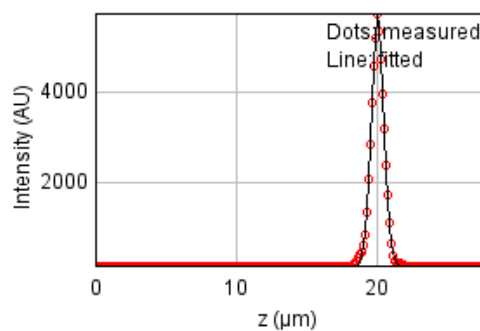
b = -0.041 px

c = 0.428 px

$x_c = 5.562$  px

$y_c = 5.599$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 188117.763

Standard deviation: 28.17350

$R^2$ : 0.99910

Parameters:

a = 116.09709

b = 5790.26491

c = 20.14481

d = 0.45220



## Bead 281

Date : Thu Jul 14 17:33:49 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

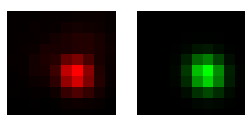
Coordinates : 7.99  $\mu\text{m}$  (x), 17.7  $\mu\text{m}$  (y), 20.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

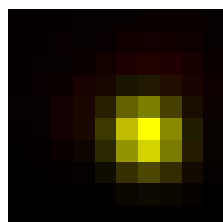
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	297 nm	303 nm	190 nm
z	1.11 $\mu\text{m}$	1.11 $\mu\text{m}$	642 nm
Asymmetry	0.935		
Theta	-48.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.976$



Parameters:

$A = 5824.629$  (brightness)

$B = 306.570$  (background)

$a = 0.458$  px

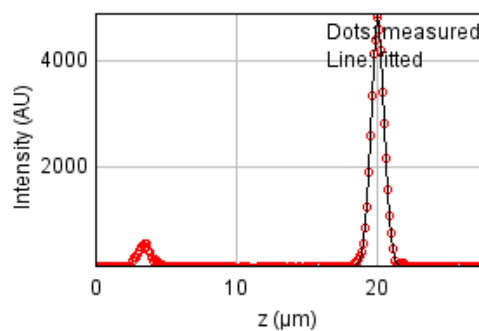
$b = -0.030$  px

$c = 0.449$  px

$x_c = 5.847$  px

$y_c = 5.277$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1607245.26

Standard deviation: 82.35063

$R^2: 0.98960$

Parameters:

$a = 142.16459$

$b = 4899.61316$

$c = 20.14447$

$d = 0.47051$

## Bead 282

Date : Thu Jul 14 17:33:49 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

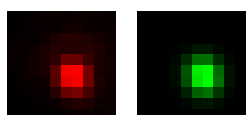
Coordinates : -25.6  $\mu\text{m}$  (x), -19.7  $\mu\text{m}$  (y), 20.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

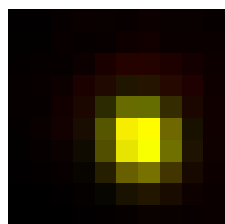
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	305 nm	312 nm	190 nm
z	1.15 $\mu\text{m}$	1.16 $\mu\text{m}$	642 nm
Asymmetry	0.91		
Theta	-69.7°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.978$



Parameters:

A = 4688.358 (brightness)

B = 328.352 (background)

a = 0.474 px

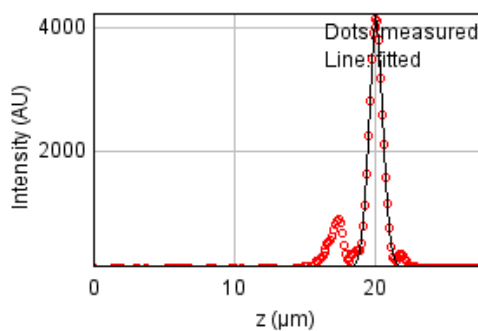
b = -0.027 px

c = 0.411 px

xc = 5.595 px

yc = 5.491 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 4999357.98

Standard deviation: 145.23890

$R^2$ : 0.95839

Parameters:

a = 167.80228

b = 4219.31884

c = 20.16813

d = 0.48990

## Bead 283

Date : Thu Jul 14 17:33:49 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : 31.3  $\mu\text{m}$  (x), 16.0  $\mu\text{m}$  (y), 20.3  $\mu\text{m}$  (z)

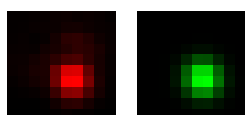
Corresponding bead : Not found



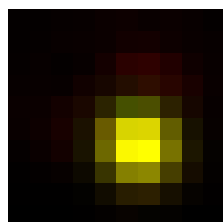
FWHM	Non corrected	Corrected	Theoretical
min	295 nm	301 nm	190 nm
max	305 nm	311 nm	190 nm
z	1.13 $\mu\text{m}$	1.13 $\mu\text{m}$	642 nm
Asymmetry	0.968		
Theta	-53.3°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.971$



Parameters:

$A = 5546.735$  (brightness)

$B = 322.917$  (background)

$a = 0.419$  px

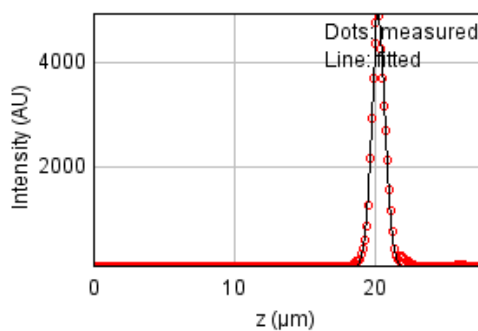
$b = -0.013$  px

$c = 0.411$  px

$x_c = 5.528$  px

$y_c = 5.707$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 834824.328

Standard deviation: 59.35036

$R^2: 0.99483$

Parameters:

$a = 121.47626$

$b = 4956.02839$

$c = 20.33877$

$d = 0.47896$

## Bead 284

Date : Thu Jul 14 17:33:49 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

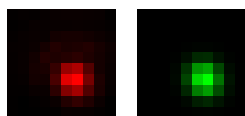
Coordinates : -36.6  $\mu\text{m}$  (x), 5.11  $\mu\text{m}$  (y), 20.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

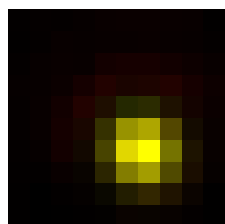
FWHM	Non corrected	Corrected	Theoretical
min	272 nm	278 nm	190 nm
max	289 nm	295 nm	190 nm
z	968 nm	970 nm	642 nm
Asymmetry	0.94		
Theta	-59.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.975$



Parameters:

A = 3337.654 (brightness)

B = 224.819 (background)

a = 0.489 px

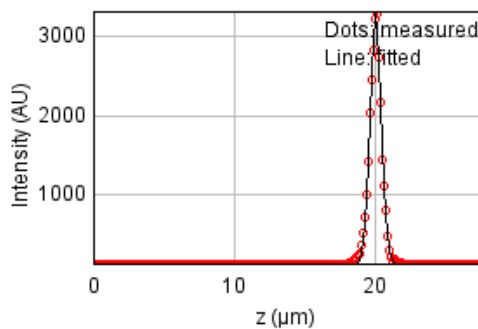
b = -0.026 px

c = 0.461 px

xc = 5.676 px

yc = 5.950 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 192140.858

Standard deviation: 28.47316

$R^2$ : 0.99688

Parameters:

a = 114.49962

b = 3328.95157

c = 20.14648

d = 0.41087

## Bead 285

Date : Thu Jul 14 17:33:49 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

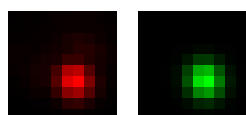
Coordinates : 16.9  $\mu\text{m}$  (x), 3.84  $\mu\text{m}$  (y), 20.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

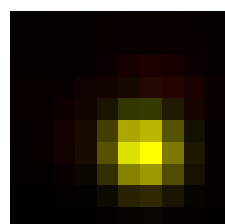
FWHM	Non corrected	Corrected	Theoretical
min	287 nm	293 nm	190 nm
max	302 nm	309 nm	190 nm
z	1.01 $\mu\text{m}$	1.01 $\mu\text{m}$	642 nm
Asymmetry	0.948		
Theta	-60.8°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.981$



Parameters:

A = 5964.175 (brightness)

B = 304.049 (background)

a = 0.443 px

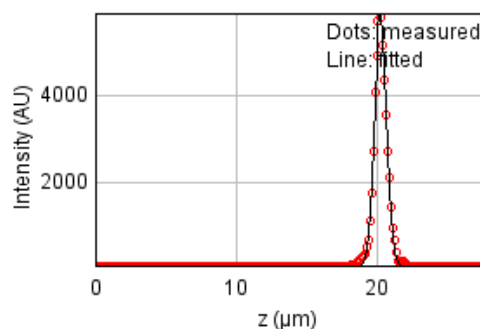
b = -0.019 px

c = 0.419 px

xc = 5.645 px

yc = 5.881 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 807875.022

Standard deviation: 58.38455

$R^2$ : 0.99607

Parameters:

a = 119.71598

b = 5874.33345

c = 20.34743

d = 0.42772

## Bead 286

Date : Thu Jul 14 17:33:49 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

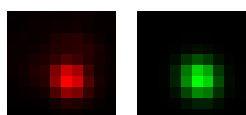
Coordinates : 12.7  $\mu\text{m}$  (x), -2.76  $\mu\text{m}$  (y), 20.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

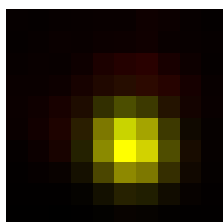
FWHM	Non corrected	Corrected	Theoretical
min	293 nm	299 nm	190 nm
max	314 nm	320 nm	190 nm
z	1.01 $\mu\text{m}$	1.01 $\mu\text{m}$	642 nm
Asymmetry	0.933		
Theta	-45.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.968$



Parameters:

$A = 4024.248$  (brightness)

$B = 277.956$  (background)

$a = 0.408$  px

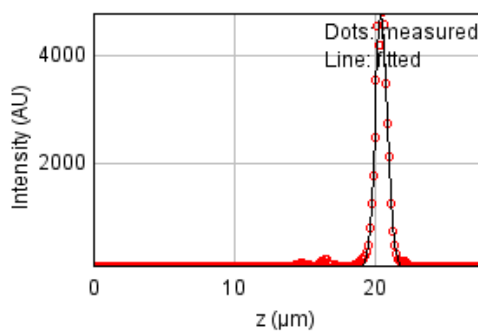
$b = -0.028$  px

$c = 0.406$  px

$x_c = 5.243$  px

$y_c = 5.751$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1284653.73

Standard deviation: 73.62391

$R^2 = 0.99038$

Parameters:

$a = 130.84232$

$b = 4755.17241$

$c = 20.54539$

$d = 0.42826$

## Bead 287

Date : Thu Jul 14 17:33:50 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

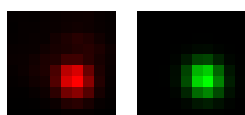
Coordinates : 26.9  $\mu\text{m}$  (x), -6.35  $\mu\text{m}$  (y), 20.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

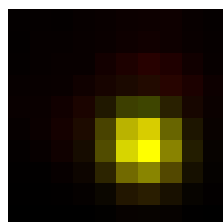
FWHM	Non corrected	Corrected	Theoretical
min	287 nm	293 nm	190 nm
max	303 nm	309 nm	190 nm
z	1.07 $\mu\text{m}$	1.07 $\mu\text{m}$	642 nm
Asymmetry	0.948		
Theta	-38.0°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.974$



Parameters:

A = 5184.200 (brightness)

B = 303.885 (background)

a = 0.425 px

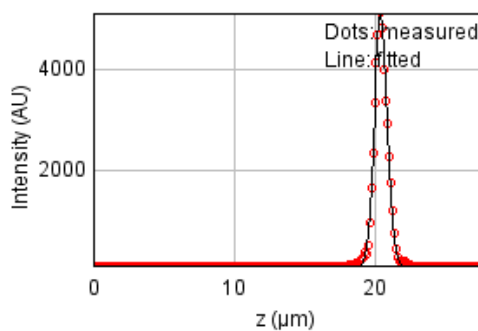
b = -0.022 px

c = 0.436 px

xc = 5.701 px

yc = 5.737 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 728740.545

Standard deviation: 55.45137

$R^2$ : 0.99553

Parameters:

a = 119.90997

b = 5105.02771

c = 20.50779

d = 0.45436

## Bead 288

Date : Thu Jul 14 17:33:50 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

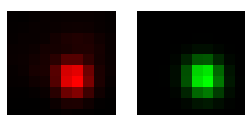
Coordinates : 13.2  $\mu\text{m}$  (x), -21.0  $\mu\text{m}$  (y), 20.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

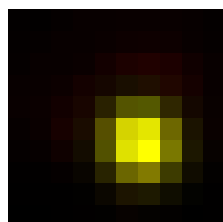
FWHM	Non corrected	Corrected	Theoretical
min	285 nm	291 nm	190 nm
max	301 nm	307 nm	190 nm
z	1.04 $\mu\text{m}$	1.04 $\mu\text{m}$	642 nm
Asymmetry	0.948		
Theta	-57.4°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.983$



Parameters:

A = 5521.243 (brightness)

B = 286.370 (background)

a = 0.446 px

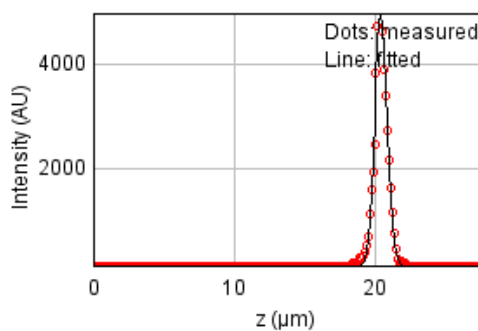
b = -0.021 px

c = 0.426 px

$x_c = 5.627$  px

$y_c = 5.607$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1101765.43

Standard deviation: 68.18210

$R^2$ : 0.99270

Parameters:

a = 120.36765

b = 4975.49389

c = 20.51949

d = 0.44092



## Bead 289

Date : Thu Jul 14 17:33:50 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

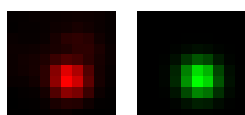
Coordinates : 55.0  $\mu\text{m}$  (x), -21.1  $\mu\text{m}$  (y), 20.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

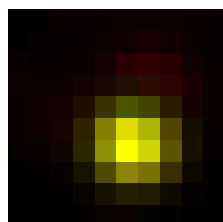
FWHM	Non corrected	Corrected	Theoretical
min	303 nm	309 nm	190 nm
max	318 nm	324 nm	190 nm
z	1.05 $\mu\text{m}$	1.05 $\mu\text{m}$	642 nm
Asymmetry	0.954		
Theta	-22.9°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.965$



Parameters:

A = 3435.163 (brightness)

B = 249.076 (background)

a = 0.375 px

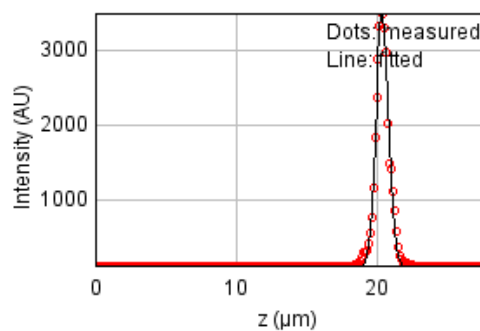
b = -0.013 px

c = 0.401 px

$x_c = 5.250$  px

$y_c = 5.693$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 550560.000

Standard deviation: 48.19790

$R^2$ : 0.99265

Parameters:

a = 116.44152

b = 3522.49330

c = 20.47334

d = 0.44506

## Bead 290

Date : Thu Jul 14 17:33:50 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

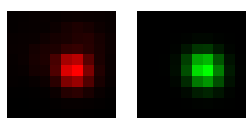
Coordinates : 11.7  $\mu\text{m}$  (x), -16.3  $\mu\text{m}$  (y), 20.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

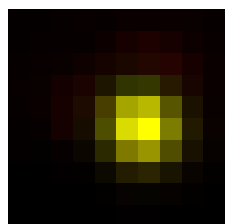
FWHM	Non corrected	Corrected	Theoretical
min	284 nm	290 nm	190 nm
max	301 nm	308 nm	190 nm
z	979 nm	981 nm	642 nm
Asymmetry	0.944		
Theta	-45.3°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.976$



Parameters:

A = 6377.445 (brightness)

B = 320.042 (background)

a = 0.437 px

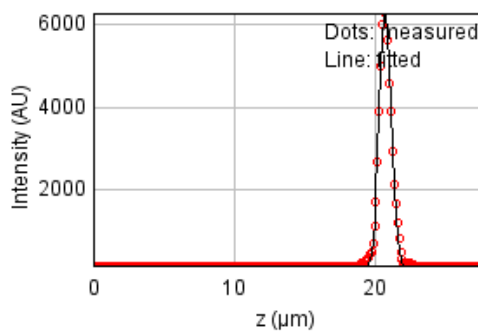
b = -0.025 px

c = 0.436 px

xc = 5.671 px

yc = 4.862 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1060054.23

Standard deviation: 66.87902

$R^2$ : 0.99543

Parameters:

a = 121.78939

b = 6316.29986

c = 20.82925

d = 0.41566

## Bead 291

Date : Thu Jul 14 17:33:50 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

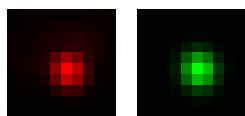
Coordinates : -16.8  $\mu\text{m}$  (x), -16.6  $\mu\text{m}$  (y), 20.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

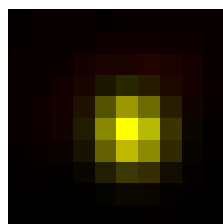
FWHM	Non corrected	Corrected	Theoretical
min	279 nm	284 nm	190 nm
max	299 nm	305 nm	190 nm
z	991 nm	993 nm	642 nm
Asymmetry	0.931		
Theta	-77.0°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.979$



Parameters:

A = 4943.349 (brightness)

B = 267.965 (background)

a = 0.478 px

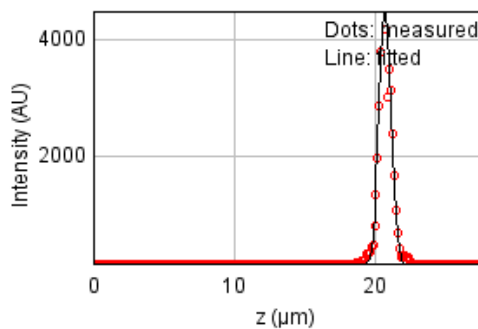
b = -0.014 px

c = 0.420 px

$x_c = 5.169$  px

$y_c = 5.117$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 2612944.23

Standard deviation: 105.00039

$R^2$ : 0.97840

Parameters:

a = 118.43666

b = 4529.10980

c = 20.81683

d = 0.42088

## Bead 292

Date : Thu Jul 14 17:33:50 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

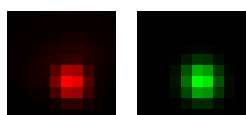
Coordinates : -13.9  $\mu\text{m}$  (x), -24.4  $\mu\text{m}$  (y), 20.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

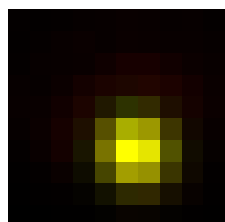
FWHM	Non corrected	Corrected	Theoretical
min	283 nm	289 nm	190 nm
max	295 nm	302 nm	190 nm
z	1.06 $\mu\text{m}$	1.07 $\mu\text{m}$	642 nm
Asymmetry	0.96		
Theta	-64.8°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.980$



Parameters:

A = 6676.641 (brightness)

B = 336.437 (background)

a = 0.458 px

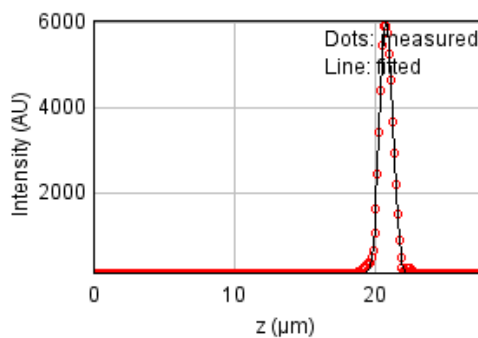
b = -0.014 px

c = 0.435 px

$x_c = 5.377$  px

$y_c = 5.955$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 504274.941

Standard deviation: 46.12746

$R^2$ : 0.99780

Parameters:

a = 121.88368

b = 6053.23476

c = 20.89991

d = 0.45165

## Bead 293

Date : Thu Jul 14 17:33:50 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

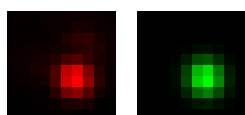
Coordinates : 42.1  $\mu\text{m}$  (x), 7.35  $\mu\text{m}$  (y), 20.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

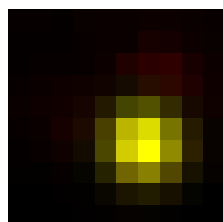
FWHM	Non corrected	Corrected	Theoretical
min	294 nm	300 nm	190 nm
max	303 nm	309 nm	190 nm
z	1.11 $\mu\text{m}$	1.11 $\mu\text{m}$	642 nm
Asymmetry	0.971		
Theta	-41.7°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.970$



Parameters:

A = 3762.041 (brightness)

B = 252.821 (background)

a = 0.418 px

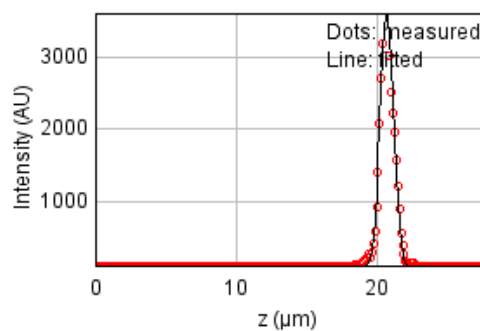
b = -0.012 px

c = 0.421 px

$x_c = 5.754$  px

$y_c = 5.673$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 731151.994

Standard deviation: 55.54304

$R^2$ : 0.99119

Parameters:

a = 114.23706

b = 3606.11220

c = 20.80106

d = 0.46960

## Bead 294

Date : Thu Jul 14 17:33:50 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

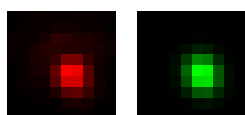
Coordinates : -48.8  $\mu\text{m}$  (x), -1.66  $\mu\text{m}$  (y), 20.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

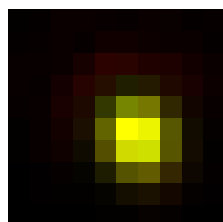
FWHM	Non corrected	Corrected	Theoretical
min	272 nm	278 nm	190 nm
max	309 nm	315 nm	190 nm
z	1.28 $\mu\text{m}$	1.29 $\mu\text{m}$	642 nm
Asymmetry	0.88		
Theta	-70.6°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.970$



Parameters:

$A = 3386.370$  (brightness)

$B = 235.770$  (background)

$a = 0.493$  px

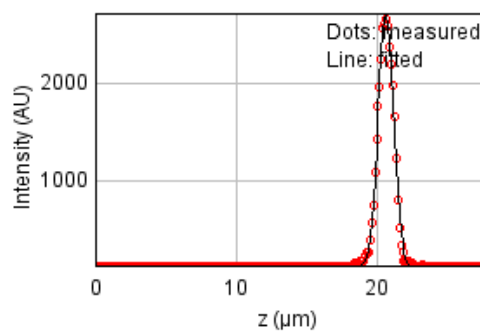
$b = -0.036$  px

$c = 0.404$  px

$x_c = 5.477$  px

$y_c = 5.344$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 186780.663

Standard deviation: 28.07319

$R^2: 0.99651$

Parameters:

$a = 109.35886$

$b = 2733.64774$

$c = 20.73102$

$d = 0.54537$

## Bead 295

Date : Thu Jul 14 17:33:50 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

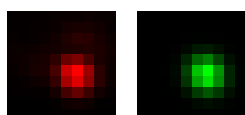
Coordinates : 36.2  $\mu\text{m}$  (x), -7.23  $\mu\text{m}$  (y), 21.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

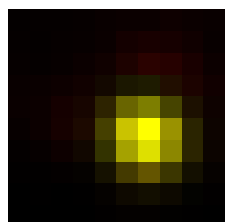
FWHM	Non corrected	Corrected	Theoretical
min	289 nm	296 nm	190 nm
max	309 nm	315 nm	190 nm
z	1.23 $\mu\text{m}$	1.23 $\mu\text{m}$	642 nm
Asymmetry	0.938		
Theta	-42.4°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.974$



Parameters:

A = 5882.125 (brightness)

B = 329.750 (background)

a = 0.416 px

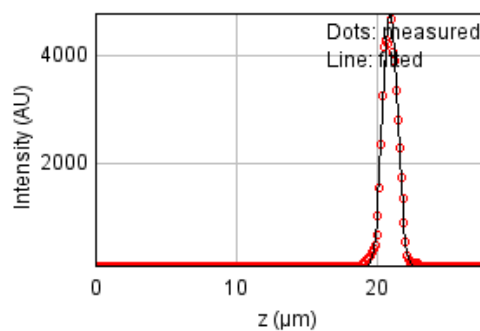
b = -0.027 px

c = 0.421 px

$x_c = 5.850$  px

$y_c = 5.334$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1127693.12

Standard deviation: 68.97970

$R^2$ : 0.99307

Parameters:

a = 115.09551

b = 4779.84157

c = 21.03235

d = 0.52069

## Bead 296

Date : Thu Jul 14 17:33:51 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

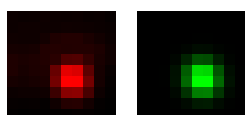
Coordinates : -24.7  $\mu\text{m}$  (x), -19.9  $\mu\text{m}$  (y), 21.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

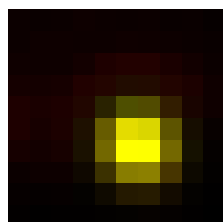
FWHM	Non corrected	Corrected	Theoretical
min	285 nm	291 nm	190 nm
max	295 nm	302 nm	190 nm
z	1.12 $\mu\text{m}$	1.12 $\mu\text{m}$	642 nm
Asymmetry	0.964		
Theta	-60.0°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.971$



Parameters:

A = 7362.702 (brightness)

B = 477.694 (background)

a = 0.452 px

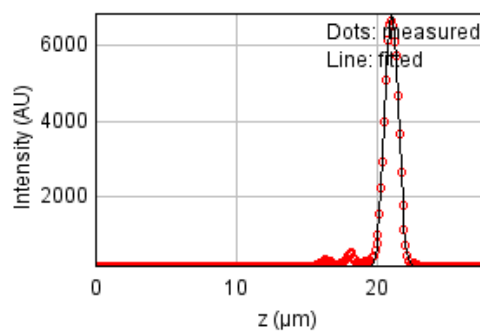
b = -0.014 px

c = 0.435 px

$x_c = 5.490$  px

$y_c = 5.689$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 1659607.89

Standard deviation: 83.68133

$R^2$ : 0.99464

Parameters:

a = 146.11751

b = 6866.25028

c = 21.14135

d = 0.47559



## Bead 297

Date : Thu Jul 14 17:33:51 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

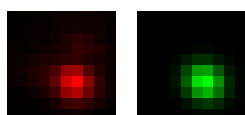
Coordinates : 58.1  $\mu\text{m}$  (x), 24.0  $\mu\text{m}$  (y), 20.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

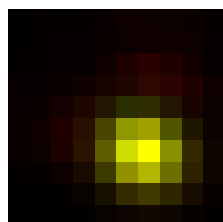
FWHM	Non corrected	Corrected	Theoretical
min	297 nm	303 nm	190 nm
max	333 nm	340 nm	190 nm
z	1.03 $\mu\text{m}$	1.04 $\mu\text{m}$	642 nm
Asymmetry	0.891		
Theta	-29.4°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.961$



Parameters:

A = 2231.366 (brightness)

B = 228.175 (background)

a = 0.357 px

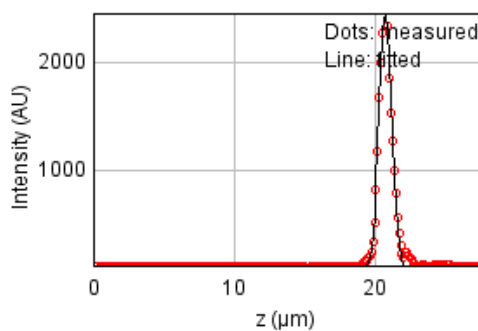
b = -0.037 px

c = 0.402 px

$x_c = 5.706$  px

$y_c = 6.047$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 239999.794

Standard deviation: 31.82228

$R^2$ : 0.99315

Parameters:

a = 115.40461

b = 2459.36720

c = 20.83498

d = 0.43928

## Bead 298

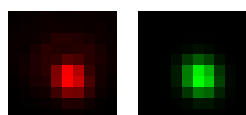
Date : Thu Jul 14 17:33:51 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -28.6  $\mu\text{m}$  (x), -11.2  $\mu\text{m}$  (y), 21.1  $\mu\text{m}$  (z)  
Corresponding bead : Not found

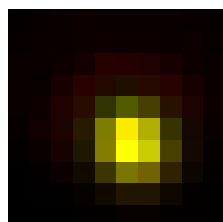
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	302 nm	308 nm	190 nm
z	1.06 $\mu\text{m}$	1.07 $\mu\text{m}$	642 nm
Asymmetry	0.911		
Theta	-56.8°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.963$



Parameters:

A = 4120.382 (brightness)

B = 290.448 (background)

a = 0.468 px

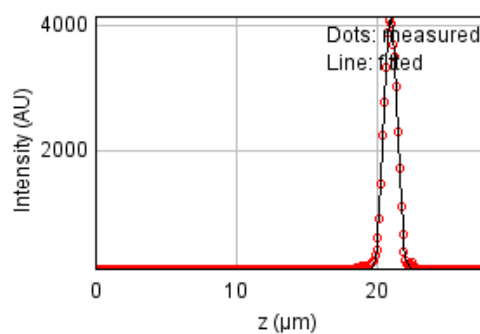
b = -0.038 px

c = 0.435 px

xc = 5.228 px

yc = 5.612 px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 250038.920

Standard deviation: 32.48102

$R^2$ : 0.99766

Parameters:

a = 113.73490

b = 4165.86688

c = 21.06711

d = 0.45190

## Bead 299

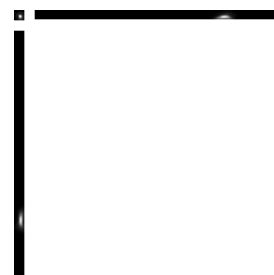
Date : Thu Jul 14 17:33:51 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

Coordinates : -31.1  $\mu\text{m}$  (x), -24.9  $\mu\text{m}$  (y), 21.1  $\mu\text{m}$  (z)

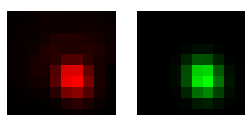
Corresponding bead : Not found



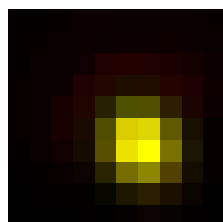
FWHM	Non corrected	Corrected	Theoretical
min	277 nm	282 nm	190 nm
max	310 nm	316 nm	190 nm
z	1.15 $\mu\text{m}$	1.16 $\mu\text{m}$	642 nm
Asymmetry	0.893		
Theta	-61.8°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.975$



Parameters:

$A = 5327.161$  (brightness)

$B = 333.939$  (background)

$a = 0.466$  px

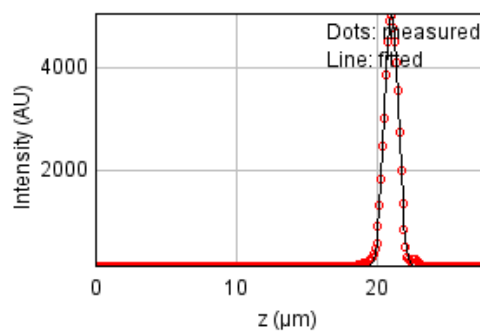
$b = -0.041$  px

$c = 0.411$  px

$x_c = 5.607$  px

$y_c = 5.680$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 348523.084

Standard deviation: 38.34790

$R^2: 0.99797$

Parameters:

$a = 117.67191$

$b = 5058.00337$

$c = 21.12763$

$d = 0.48975$

## Bead 300

Date : Thu Jul 14 17:33:51 PDT 2022

Origin : data\_traditional.tif ( 100x1.35 Sil )

Frame size : 10 pixels

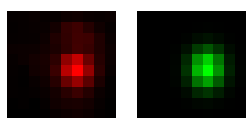
Coordinates : 9.38  $\mu\text{m}$  (x), -7.75  $\mu\text{m}$  (y), 21.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

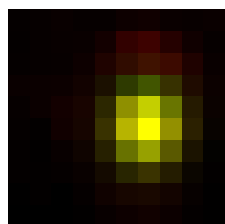
FWHM	Non corrected	Corrected	Theoretical
min	283 nm	289 nm	190 nm
max	332 nm	339 nm	190 nm
z	905 nm	907 nm	642 nm
Asymmetry	0.854		
Theta	87.4°		

### XY profile & fitting parameters :

(red : the original data, green : the fit, yellow : the two merged)



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.937$



Parameters:

$A = 2727.734$  (brightness)

$B = 249.979$  (background)

$a = 0.465$  px

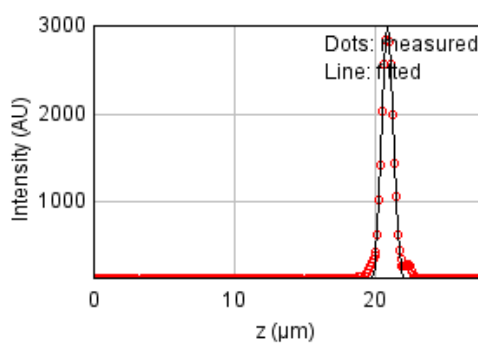
$b = 0.006$  px

$c = 0.340$  px

$x_c = 5.882$  px

$y_c = 4.815$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$

Sum of residuals squared: 299686.768

Standard deviation: 35.55982

$R^2: 0.99359$

Parameters:

$a = 122.96205$

$b = 3008.88914$

$c = 20.99544$

$d = 0.38412$