

## Bead 101

Date : Thu Jul 14 17:33:26 PDT 2022

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

Frame size : 10 pixels

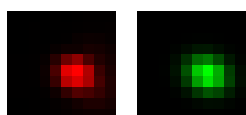
Coordinates : -20.9  $\mu\text{m}$  (x), 1.0  $\mu\text{m}$  (y), 7.53  $\mu\text{m}$  (z)

Corresponding bead : Not found

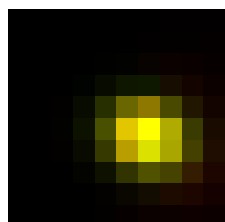
FWHM	Non corrected	Corrected	Theoretical
min	284 nm	290 nm	190 nm
max	347 nm	355 nm	190 nm
z	746 nm	747 nm	642 nm
Asymmetry	0.819		
Theta	-21.0°		

### 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:

$A = 13081.328$  (brightness)

$B = 257.521$  (background)

$a = 0.329$  px

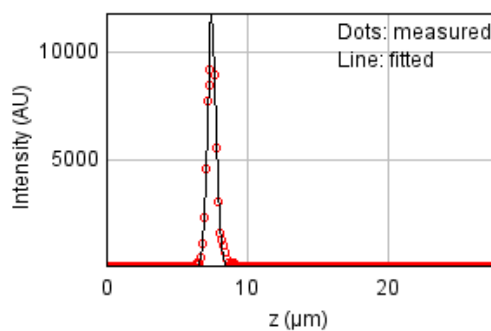
$b = -0.051$  px

$c = 0.442$  px

$x_c = 5.940$  px

$y_c = 5.347$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 14351808.3

Standard deviation: 246.08160

$R^2: 0.97781$

Parameters:

$a = 122.41064$

$b = 11795.1256$

$c = 7.53033$

$d = 0.31669$

## Bead 102

Date : Thu Jul 14 17:33:27 PDT 2022

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

Frame size : 10 pixels

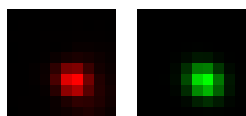
Coordinates : 8.32  $\mu\text{m}$  (x), -9.41  $\mu\text{m}$  (y), 7.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

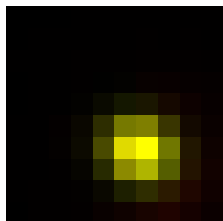
FWHM	Non corrected	Corrected	Theoretical
min	259 nm	265 nm	190 nm
max	294 nm	300 nm	190 nm
z	607 nm	608 nm	642 nm
Asymmetry	0.88		
Theta	-30.1°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 13460.445$  (brightness)

$B = 304.783$  (background)

$a = 0.462$  px

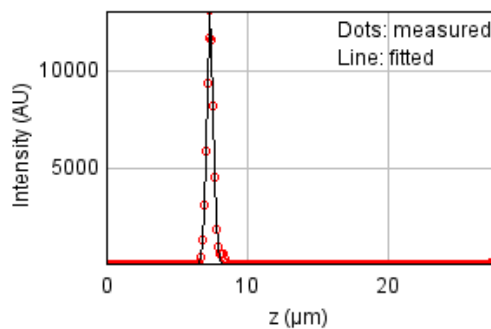
$b = -0.054$  px

$c = 0.524$  px

$x_c = 5.689$  px

$y_c = 6.137$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1500498.65

Standard deviation: 79.56895

$R^2: 0.99766$

Parameters:

$a = 132.85455$

$b = 13104.7464$

$c = 7.40433$

$d = 0.25777$

## Bead 103

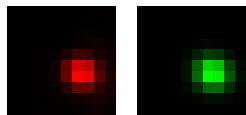
Date : Thu Jul 14 17:33:27 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 11.4  $\mu\text{m}$  (x), -1.82  $\mu\text{m}$  (y), 7.56  $\mu\text{m}$  (z)  
Corresponding bead : Not found

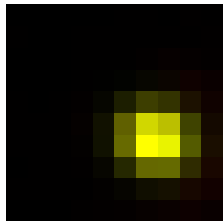
FWHM	Non corrected	Corrected	Theoretical
min	260 nm	266 nm	190 nm
max	288 nm	294 nm	190 nm
z	667 nm	669 nm	642 nm
Asymmetry	0.904		
Theta	-22.2°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.992$



Parameters:

A = 12291.548 (brightness)

B = 221.895 (background)

a = 0.464 px

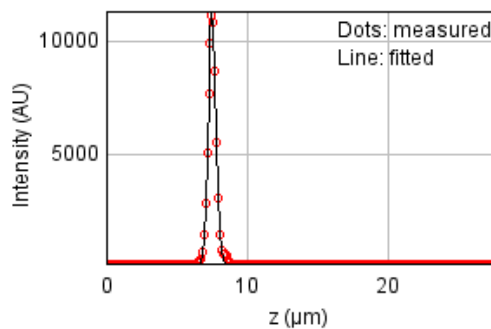
b = -0.035 px

c = 0.537 px

xc = 6.421 px

yc = 5.688 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 952753.697

Standard deviation: 63.40393

$R^2$ : 0.99819

Parameters:

a = 126.63855

b = 11352.8066

c = 7.55554

d = 0.28330

## Bead 104

Date : Thu Jul 14 17:33:27 PDT 2022

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

Frame size : 10 pixels

Coordinates : 54.4  $\mu\text{m}$  (x), 16.3  $\mu\text{m}$  (y), 7.55  $\mu\text{m}$  (z)

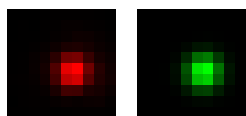
Corresponding bead : Not found



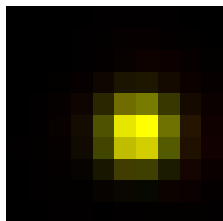
FWHM	Non corrected	Corrected	Theoretical
min	279 nm	285 nm	190 nm
max	286 nm	292 nm	190 nm
z	612 nm	613 nm	642 nm
Asymmetry	0.976		
Theta	24.5°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.992$



Parameters:

A = 8572.132 (brightness)

B = 248.313 (background)

a = 0.460 px

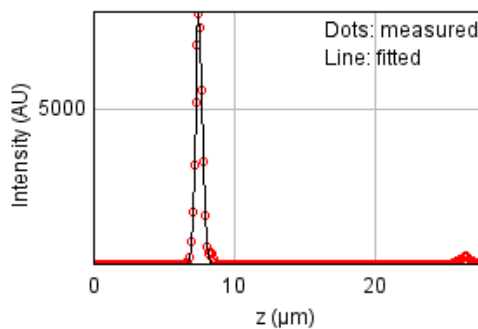
b = 0.009 px

c = 0.475 px

xc = 5.612 px

yc = 5.279 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 976263.542

Standard deviation: 64.18143

$R^2$ : 0.99594

Parameters:

a = 128.15215

b = 8029.62813

c = 7.54748

d = 0.25991

## Bead 105

Date : Thu Jul 14 17:33:27 PDT 2022

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

Frame size : 10 pixels

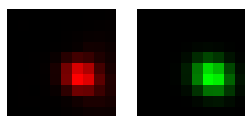
Coordinates : -17.4  $\mu\text{m}$  (x), 16.2  $\mu\text{m}$  (y), 7.94  $\mu\text{m}$  (z)

Corresponding bead : Not found

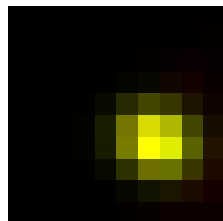
FWHM	Non corrected	Corrected	Theoretical
min	270 nm	275 nm	190 nm
max	314 nm	321 nm	190 nm
z	712 nm	713 nm	642 nm
Asymmetry	0.858		
Theta	-23.5°		

### 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:

$A = 16700.809$  (brightness)

$B = 277.040$  (background)

$a = 0.399$  px

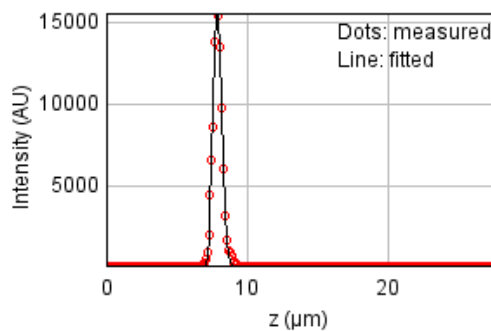
$b = -0.050$  px

$c = 0.492$  px

$x_c = 6.367$  px

$y_c = 5.694$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 4819068.68

Standard deviation: 142.59601

$R^2: 0.99557$

Parameters:

$a = 127.78955$

$b = 15751.4686$

$c = 7.94346$

$d = 0.30225$

## Bead 106

Date : Thu Jul 14 17:33:27 PDT 2022

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

Frame size : 10 pixels

Coordinates : -36.7  $\mu\text{m}$  (x), -24.4  $\mu\text{m}$  (y), 7.85  $\mu\text{m}$  (z)

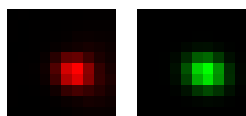
Corresponding bead : Not found



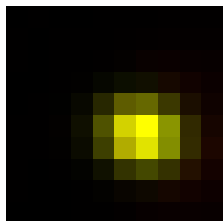
FWHM	Non corrected	Corrected	Theoretical
min	267 nm	273 nm	190 nm
max	322 nm	329 nm	190 nm
z	663 nm	665 nm	642 nm
Asymmetry	0.83		
Theta	-14.1°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 12320.006$  (brightness)

$B = 282.589$  (background)

$a = 0.369$  px

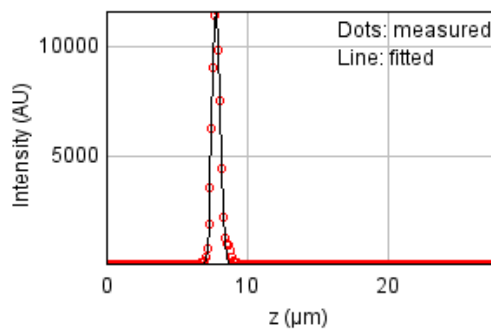
$b = -0.038$  px

$c = 0.513$  px

$x_c = 5.805$  px

$y_c = 5.367$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2019902.27

Standard deviation: 92.31898

$R^2: 0.99638$

Parameters:

$a = 126.34528$

$b = 11695.7252$

$c = 7.85200$

$d = 0.28168$

## Bead 107

Date : Thu Jul 14 17:33:27 PDT 2022

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

Frame size : 10 pixels

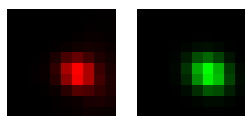
Coordinates : -15.6  $\mu\text{m}$  (x), 6.1  $\mu\text{m}$  (y), 8.08  $\mu\text{m}$  (z)

Corresponding bead : Not found

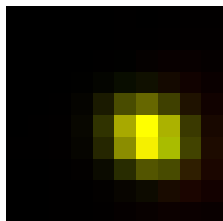
FWHM	Non corrected	Corrected	Theoretical
min	269 nm	275 nm	190 nm
max	321 nm	328 nm	190 nm
z	655 nm	656 nm	642 nm
Asymmetry	0.839		
Theta	-25.3°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 14647.007$  (brightness)

$B = 288.209$  (background)

$a = 0.390$  px

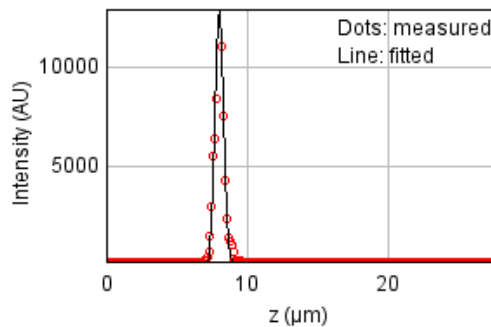
$b = -0.059$  px

$c = 0.487$  px

$x_c = 6.102$  px

$y_c = 5.447$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 11439486.4

Standard deviation: 219.69951

$R^2: 0.98346$

Parameters:

$a = 135.48948$

$b = 13020.4232$

$c = 8.07633$

$d = 0.27801$

## Bead 108

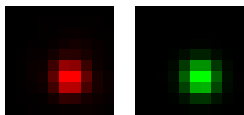
Date : Thu Jul 14 17:33:27 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 51.9  $\mu\text{m}$  (x), -592 nm (y), 8.02  $\mu\text{m}$  (z)  
Corresponding bead : Not found

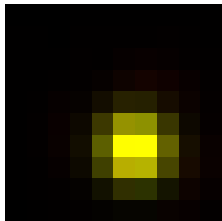
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	285 nm	291 nm	190 nm
z	636 nm	638 nm	642 nm
Asymmetry	0.969		
Theta	-70.0°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.995$



Parameters:

$A = 14017.307$  (brightness)

$B = 292.384$  (background)

$a = 0.487$  px

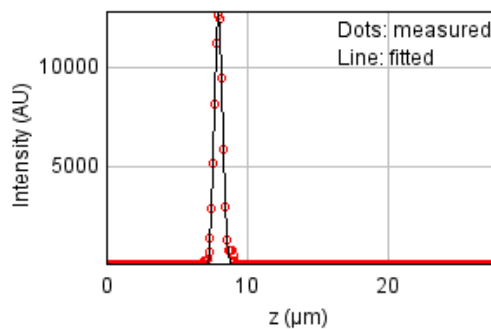
$b = -0.009$  px

$c = 0.464$  px

$x_c = 5.510$  px

$y_c = 6.105$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2027550.45

Standard deviation: 92.49360

$R^2: 0.99686$

Parameters:

$a = 125.65930$

$b = 12822.3989$

$c = 8.02150$

$d = 0.27029$



## Bead 109

Date : Thu Jul 14 17:33:27 PDT 2022

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

Frame size : 10 pixels

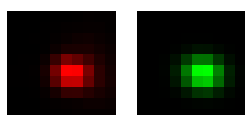
Coordinates : -45.3  $\mu\text{m}$  (x), -24.9  $\mu\text{m}$  (y), 8.12  $\mu\text{m}$  (z)

Corresponding bead : Not found

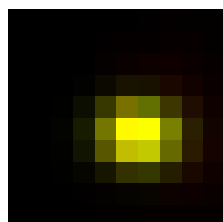
FWHM	Non corrected	Corrected	Theoretical
min	264 nm	270 nm	190 nm
max	324 nm	331 nm	190 nm
z	738 nm	740 nm	642 nm
Asymmetry	0.816		
Theta	-5.9°		

### 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:

$A = 13602.287$  (brightness)

$B = 299.710$  (background)

$a = 0.358$  px

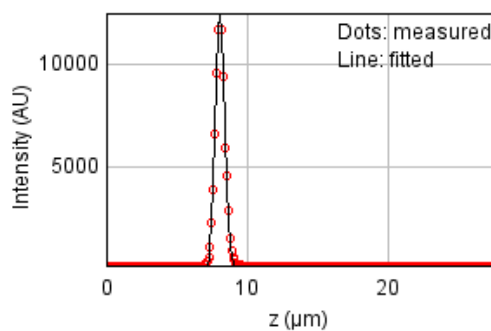
$b = -0.018$  px

$c = 0.533$  px

$x_c = 5.548$  px

$y_c = 5.259$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1876255.99

Standard deviation: 88.97579

$R^2: 0.99731$

Parameters:

$a = 121.57606$

$b = 12426.8239$

$c = 8.12179$

$d = 0.31352$

## Bead 110

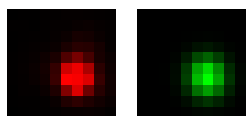
Date : Thu Jul 14 17:33:28 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 57.5  $\mu\text{m}$  (x), -9.83  $\mu\text{m}$  (y), 8.17  $\mu\text{m}$  (z)  
Corresponding bead : Not found

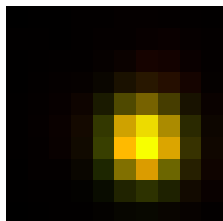
FWHM	Non corrected	Corrected	Theoretical
min	313 nm	320 nm	190 nm
max	339 nm	346 nm	190 nm
z	734 nm	735 nm	642 nm
Asymmetry	0.924		
Theta	-83.3°		

### 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:

$A = 7350.170$  (brightness)

$B = 206.471$  (background)

$a = 0.379$  px

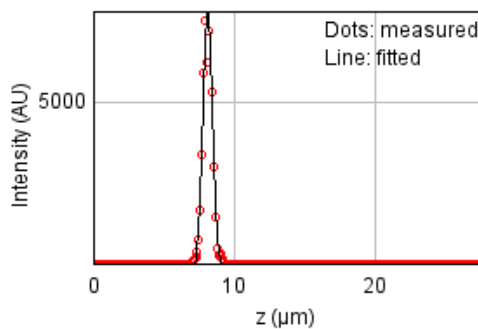
$b = -0.006$  px

$c = 0.325$  px

$x_c = 5.915$  px

$y_c = 5.737$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 6020364.91

Standard deviation: 159.38125

$R^2: 0.97841$

Parameters:

$a = 112.91812$

$b = 7839.21096$

$c = 8.17259$

$d = 0.31155$

## Bead 111

Date : Thu Jul 14 17:33:28 PDT 2022

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

Frame size : 10 pixels

Coordinates : -38.8  $\mu\text{m}$  (x), 2.39  $\mu\text{m}$  (y), 8.35  $\mu\text{m}$  (z)

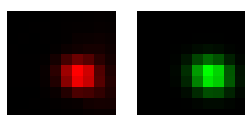
Corresponding bead : Not found



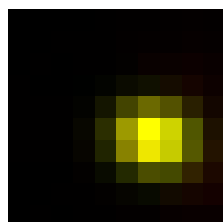
FWHM	Non corrected	Corrected	Theoretical
min	272 nm	278 nm	190 nm
max	329 nm	336 nm	190 nm
z	701 nm	703 nm	642 nm
Asymmetry	0.828		
Theta	-12.5°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 6907.255$  (brightness)

$B = 183.713$  (background)

$a = 0.352$  px

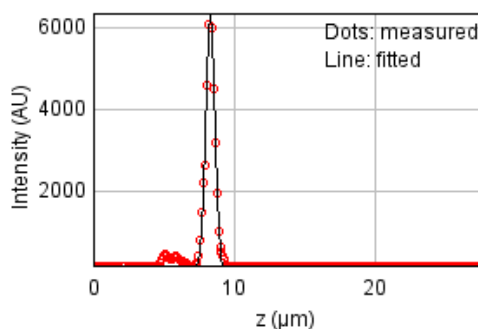
$b = -0.034$  px

$c = 0.496$  px

$x_c = 6.263$  px

$y_c = 5.414$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1958653.66

Standard deviation: 90.90853

$R^2: 0.98853$

Parameters:

$a = 143.50984$

$b = 6353.95908$

$c = 8.35108$

$d = 0.29778$

## Bead 112

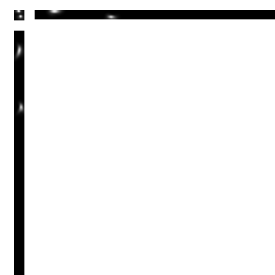
Date : Thu Jul 14 17:33:28 PDT 2022

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

Frame size : 10 pixels

Coordinates : 22.0  $\mu\text{m}$  (x), -2.06  $\mu\text{m}$  (y), 8.45  $\mu\text{m}$  (z)

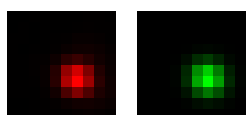
Corresponding bead : Not found



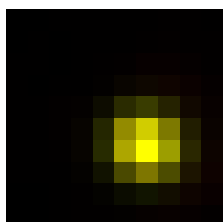
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	276 nm	190 nm
max	289 nm	295 nm	190 nm
z	626 nm	627 nm	642 nm
Asymmetry	0.937		
Theta	-23.7°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.995$



Parameters:

$A = 14685.090$  (brightness)

$B = 248.719$  (background)

$a = 0.458$  px

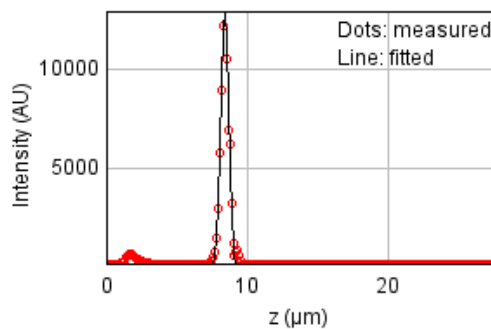
$b = -0.023$  px

$c = 0.500$  px

$x_c = 5.959$  px

$y_c = 5.720$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 10221531.5

Standard deviation: 207.67481

$R^2 = 0.98421$

Parameters:

$a = 161.10347$

$b = 12908.7784$

$c = 8.45212$

$d = 0.26563$

## Bead 113

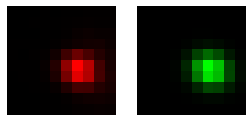
Date : Thu Jul 14 17:33:28 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -21.4  $\mu\text{m}$  (x), -10.6  $\mu\text{m}$  (y), 8.55  $\mu\text{m}$  (z)  
Corresponding bead : Not found

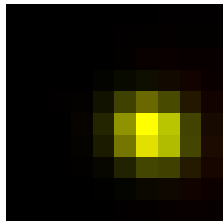
FWHM	Non corrected	Corrected	Theoretical
min	266 nm	272 nm	190 nm
max	307 nm	314 nm	190 nm
z	630 nm	631 nm	642 nm
Asymmetry	0.865		
Theta	-19.3°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 11342.717$  (brightness)

$B = 235.124$  (background)

$a = 0.409$  px

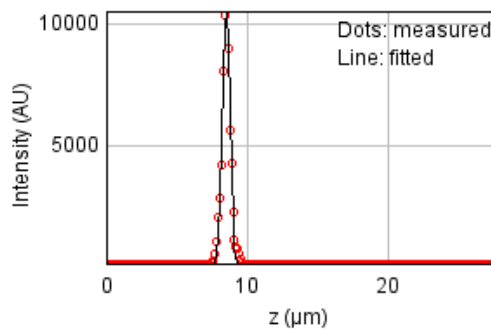
$b = -0.041$  px

$c = 0.513$  px

$x_c = 6.220$  px

$y_c = 5.388$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 4326933.28

Standard deviation: 135.11885

$R^2: 0.99007$

Parameters:

$a = 127.62750$

$b = 10582.8737$

$c = 8.55476$

$d = 0.26751$

## Bead 114

Date : Thu Jul 14 17:33:28 PDT 2022

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

Frame size : 10 pixels

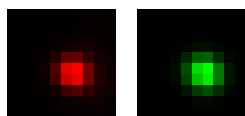
Coordinates : -3.75  $\mu\text{m}$  (x), -163 nm (y), 8.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

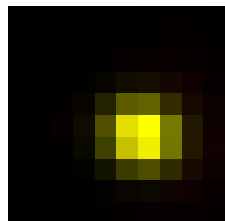
FWHM	Non corrected	Corrected	Theoretical
min	265 nm	271 nm	190 nm
max	293 nm	299 nm	190 nm
z	622 nm	623 nm	642 nm
Asymmetry	0.906		
Theta	-21.8°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:

A = 16989.886 (brightness)

B = 314.090 (background)

a = 0.448 px

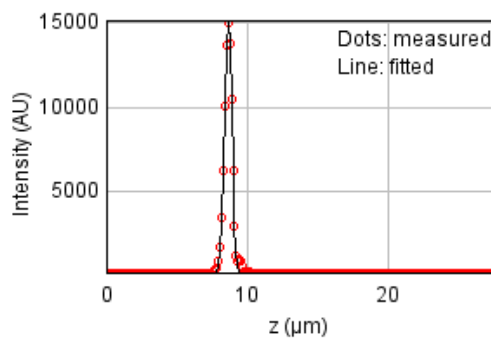
b = -0.033 px

c = 0.517 px

xc = 5.687 px

yc = 5.406 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2205003.83

Standard deviation: 96.45628

$R^2$ : 0.99750

Parameters:

a = 134.74624

b = 15152.7001

c = 8.69971

d = 0.26402

## Bead 115

Date : Thu Jul 14 17:33:28 PDT 2022

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

Frame size : 10 pixels

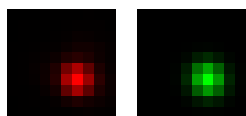
Coordinates : 40.2  $\mu\text{m}$  (x), -9.27  $\mu\text{m}$  (y), 8.74  $\mu\text{m}$  (z)

Corresponding bead : Not found

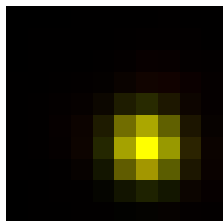
FWHM	Non corrected	Corrected	Theoretical
min	273 nm	279 nm	190 nm
max	283 nm	289 nm	190 nm
z	641 nm	643 nm	642 nm
Asymmetry	0.965		
Theta	-49.2°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.994$



Parameters:

$A = 16867.671$  (brightness)

$B = 316.224$  (background)

$a = 0.485$  px

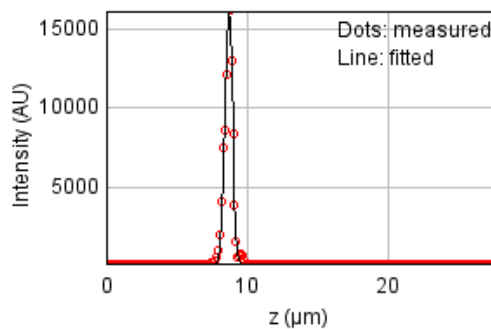
$b = -0.017$  px

$c = 0.480$  px

$x_c = 5.967$  px

$y_c = 5.946$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 13314009.9

Standard deviation: 237.01742

$R^2: 0.98741$

Parameters:

$a = 130.14437$

$b = 16252.3056$

$c = 8.73620$

$d = 0.27234$

## Bead 116

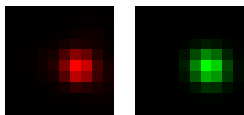
Date : Thu Jul 14 17:33:28 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 33.6  $\mu\text{m}$  (x), 19.0  $\mu\text{m}$  (y), 8.88  $\mu\text{m}$  (z)  
Corresponding bead : Not found

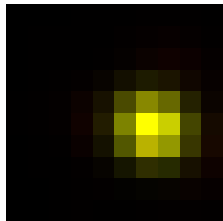
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	277 nm	190 nm
max	295 nm	301 nm	190 nm
z	643 nm	645 nm	642 nm
Asymmetry	0.92		
Theta	-22.5°		

### XY profile & fitting parameters :

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



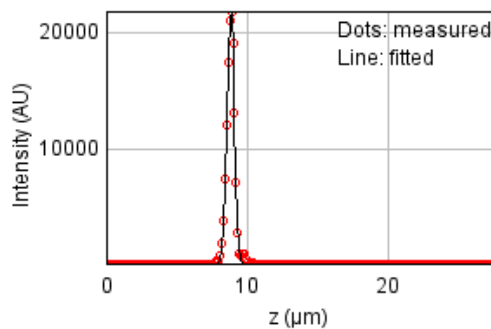
Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:  
 $A = 22011.247$  (brightness)  
 $B = 393.633$  (background)  
 $a = 0.441$  px  
 $b = -0.027$  px  
 $c = 0.496$  px

$x_c = 6.267$  px  
 $y_c = 5.150$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$   
Sum of residuals squared: 5964545.42  
Standard deviation: 158.64066  
 $R^2: 0.99696$   
Parameters:  
 $a = 132.17894$   
 $b = 22185.8049$   
 $c = 8.88045$   
 $d = 0.27320$



## Bead 117

Date : Thu Jul 14 17:33:29 PDT 2022

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

Frame size : 10 pixels

Coordinates : -46.3  $\mu\text{m}$  (x), -13.7  $\mu\text{m}$  (y), 8.71  $\mu\text{m}$  (z)

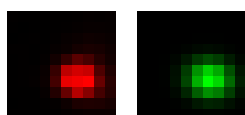
Corresponding bead : Not found



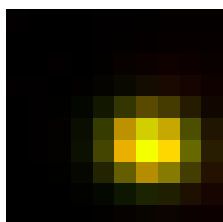
FWHM	Non corrected	Corrected	Theoretical
min	304 nm	310 nm	190 nm
max	369 nm	377 nm	190 nm
z	797 nm	798 nm	642 nm
Asymmetry	0.824		
Theta	-6.7°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 4347.538$  (brightness)

$B = 142.216$  (background)

$a = 0.276$  px

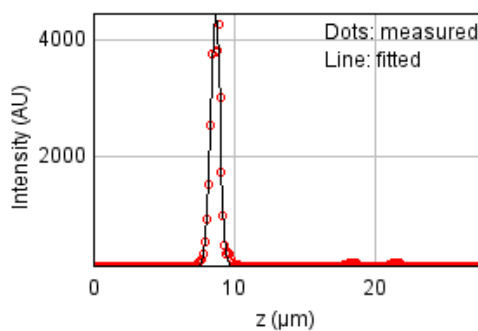
$b = -0.015$  px

$c = 0.403$  px

$x_c = 6.169$  px

$y_c = 5.773$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1672730.81

Standard deviation: 84.01152

$R^2 = 0.98213$

Parameters:

$a = 122.85900$

$b = 4434.57496$

$c = 8.71412$

$d = 0.33833$

## Bead 118

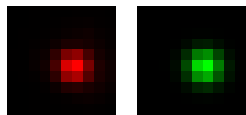
Date : Thu Jul 14 17:33:29 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 22.4  $\mu\text{m}$  (x), -10.1  $\mu\text{m}$  (y), 9.35  $\mu\text{m}$  (z)  
Corresponding bead : Not found

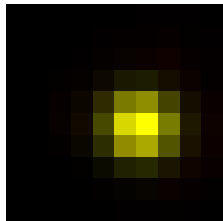
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	277 nm	190 nm
max	288 nm	294 nm	190 nm
z	629 nm	630 nm	642 nm
Asymmetry	0.941		
Theta	-11.0°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.995$



Parameters:

A = 18419.588 (brightness)

B = 349.305 (background)

a = 0.451 px

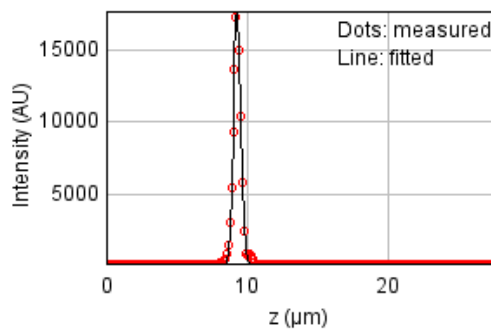
b = -0.011 px

c = 0.505 px

xc = 5.696 px

yc = 5.083 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 3203402.46

Standard deviation: 116.26034

$R^2$ : 0.99744

Parameters:

a = 132.97163

b = 17921.1458

c = 9.34888

d = 0.26697

## Bead 119

Date : Thu Jul 14 17:33:29 PDT 2022

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

Frame size : 10 pixels

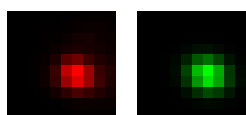
Coordinates : -50.5  $\mu\text{m}$  (x), 23.3  $\mu\text{m}$  (y), 9.35  $\mu\text{m}$  (z)

Corresponding bead : Not found

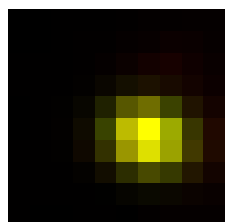
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	277 nm	190 nm
max	327 nm	334 nm	190 nm
z	702 nm	704 nm	642 nm
Asymmetry	0.829		
Theta	-16.3°		

### 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 = 5959.932 (brightness)

B = 209.276 (background)

a = 0.362 px

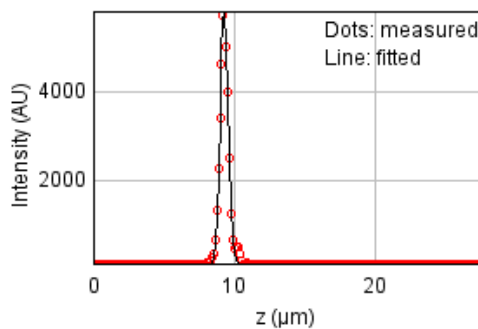
b = -0.043 px

c = 0.496 px

$x_c = 5.974$  px

$y_c = 5.362$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 522906.999

Standard deviation: 46.97189

$R^2$ : 0.99641

Parameters:

a = 116.28127

b = 5867.42447

c = 9.35430

d = 0.29830

## Bead 120

Date : Thu Jul 14 17:33:29 PDT 2022

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

Frame size : 10 pixels

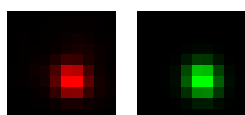
Coordinates : 42.4  $\mu\text{m}$  (x), 15.3  $\mu\text{m}$  (y), 9.55  $\mu\text{m}$  (z)

Corresponding bead : Not found

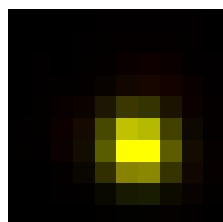
FWHM	Non corrected	Corrected	Theoretical
min	269 nm	275 nm	190 nm
max	283 nm	289 nm	190 nm
z	692 nm	693 nm	642 nm
Asymmetry	0.953		
Theta	-62.6°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.994$



Parameters:

$A = 13601.759$  (brightness)

$B = 314.357$  (background)

$a = 0.504$  px

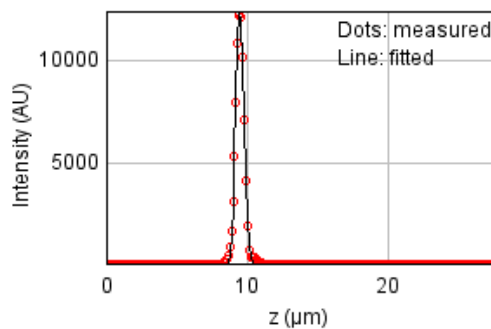
$b = -0.019$  px

$c = 0.477$  px

$x_c = 5.494$  px

$y_c = 5.816$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1304949.60

Standard deviation: 74.20321

$R^2 = 0.99803$

Parameters:

$a = 130.64724$

$b = 12490.5502$

$c = 9.54632$

$d = 0.29384$

## Bead 121

Date : Thu Jul 14 17:33:29 PDT 2022

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

Frame size : 10 pixels

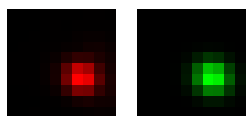
Coordinates : -7.03  $\mu\text{m}$  (x), 2.81  $\mu\text{m}$  (y), 9.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

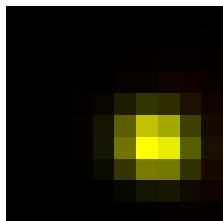
FWHM	Non corrected	Corrected	Theoretical
min	268 nm	274 nm	190 nm
max	297 nm	303 nm	190 nm
z	697 nm	698 nm	642 nm
Asymmetry	0.904		
Theta	-17.1°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.994$



Parameters:

A = 12600.131 (brightness)

B = 231.959 (background)

a = 0.432 px

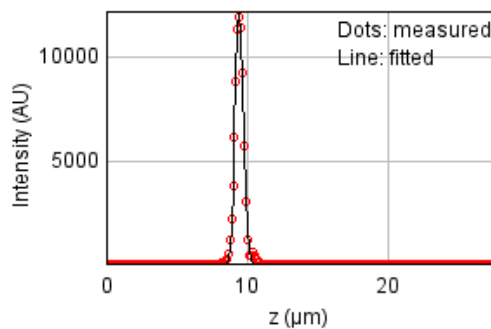
b = -0.027 px

c = 0.510 px

xc = 6.399 px

yc = 5.791 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1997831.30

Standard deviation: 91.81322

$R^2$ : 0.99684

Parameters:

a = 123.56433

b = 12164.3468

c = 9.50390

d = 0.29597

## Bead 122

Date : Thu Jul 14 17:33:29 PDT 2022

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

Frame size : 10 pixels

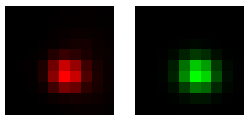
Coordinates : -35.5  $\mu\text{m}$  (x), -436 nm (y), 9.42  $\mu\text{m}$  (z)

Corresponding bead : Not found

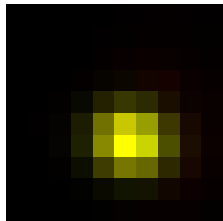
FWHM	Non corrected	Corrected	Theoretical
min	269 nm	275 nm	190 nm
max	306 nm	313 nm	190 nm
z	718 nm	720 nm	642 nm
Asymmetry	0.879		
Theta	-12.6°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.991$



Parameters:

A = 8800.215 (brightness)

B = 233.360 (background)

a = 0.403 px

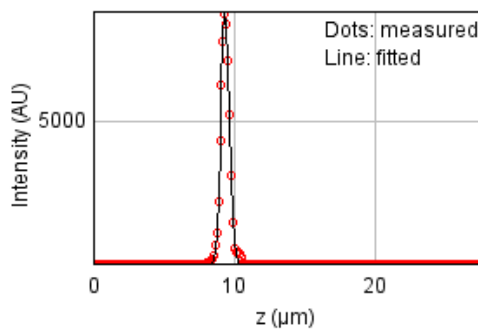
b = -0.025 px

c = 0.509 px

xc = 5.256 px

yc = 5.755 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 675543.668

Standard deviation: 53.38909

$R^2$ : 0.99798

Parameters:

a = 117.94891

b = 8760.84082

c = 9.42232

d = 0.30501

## Bead 123

Date : Thu Jul 14 17:33:29 PDT 2022

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

Frame size : 10 pixels

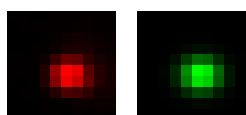
Coordinates : -50.3  $\mu\text{m}$  (x), -14.8  $\mu\text{m}$  (y), 9.18  $\mu\text{m}$  (z)

Corresponding bead : Not found

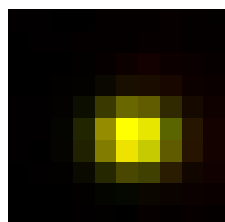
FWHM	Non corrected	Corrected	Theoretical
min	269 nm	275 nm	190 nm
max	325 nm	331 nm	190 nm
z	749 nm	751 nm	642 nm
Asymmetry	0.829		
Theta	-0.4°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 3749.891 (brightness)

B = 158.892 (background)

a = 0.354 px

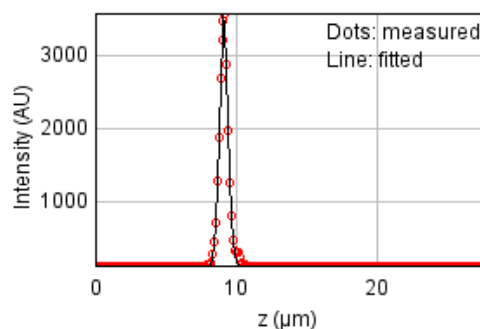
b = -0.001 px

c = 0.516 px

$x_c = 5.348$  px

$y_c = 5.380$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 174899.626

Standard deviation: 27.16566

$R^2$ : 0.99686

Parameters:

a = 112.67451

b = 3563.44079

c = 9.17660

d = 0.31806

## Bead 124

Date : Thu Jul 14 17:33:30 PDT 2022

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

Frame size : 10 pixels

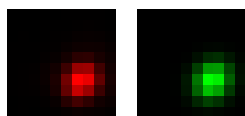
Coordinates : 26.7  $\mu\text{m}$  (x), 13.4  $\mu\text{m}$  (y), 9.64  $\mu\text{m}$  (z)

Corresponding bead : Not found

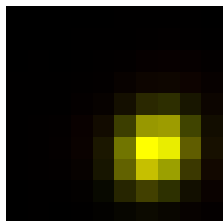
FWHM	Non corrected	Corrected	Theoretical
min	281 nm	287 nm	190 nm
max	321 nm	328 nm	190 nm
z	592 nm	594 nm	642 nm
Asymmetry	0.874		
Theta	51.1°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.997$



Parameters:

$A = 15336.927$  (brightness)

$B = 278.481$  (background)

$a = 0.428$  px

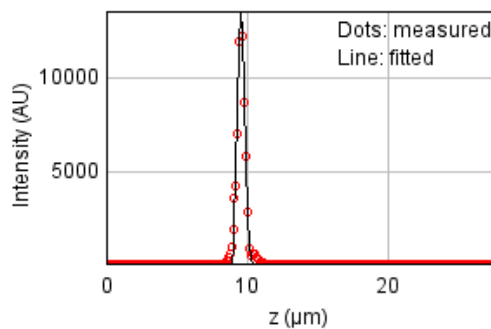
$b = 0.054$  px

$c = 0.405$  px

$x_c = 6.397$  px

$y_c = 6.094$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 9075020.07

Standard deviation: 195.68143

$R^2: 0.98664$

Parameters:

$a = 140.22589$

$b = 13564.1000$

$c = 9.64256$

$d = 0.25155$



## Bead 125

Date : Thu Jul 14 17:33:30 PDT 2022

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

Frame size : 10 pixels

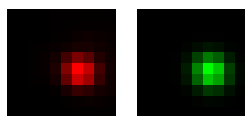
Coordinates : -1.36  $\mu\text{m}$  (x), -9.77  $\mu\text{m}$  (y), 9.77  $\mu\text{m}$  (z)

Corresponding bead : Not found

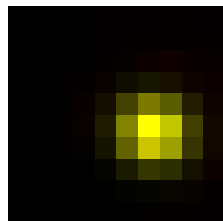
FWHM	Non corrected	Corrected	Theoretical
min	270 nm	276 nm	190 nm
max	288 nm	294 nm	190 nm
z	679 nm	680 nm	642 nm
Asymmetry	0.937		
Theta	-16.9°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.995$



Parameters:

A = 12109.198 (brightness)

B = 238.461 (background)

a = 0.454 px

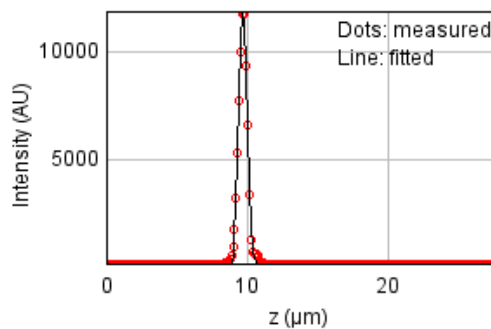
b = -0.017 px

c = 0.506 px

xc = 6.239 px

yc = 5.247 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2374557.59

Standard deviation: 100.09611

$R^2$ : 0.99596

Parameters:

a = 125.73883

b = 11872.4645

c = 9.76912

d = 0.28835

## Bead 126

Date : Thu Jul 14 17:33:30 PDT 2022

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

Frame size : 10 pixels

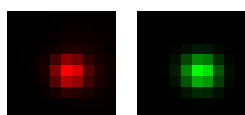
Coordinates : -37.7  $\mu\text{m}$  (x), -23.0  $\mu\text{m}$  (y), 9.95  $\mu\text{m}$  (z)

Corresponding bead : Not found

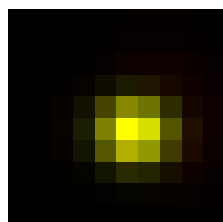
FWHM	Non corrected	Corrected	Theoretical
min	269 nm	274 nm	190 nm
max	301 nm	307 nm	190 nm
z	738 nm	739 nm	642 nm
Asymmetry	0.893		
Theta	-4.3°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.991$



Parameters:

A = 10895.207 (brightness)

B = 289.240 (background)

a = 0.412 px

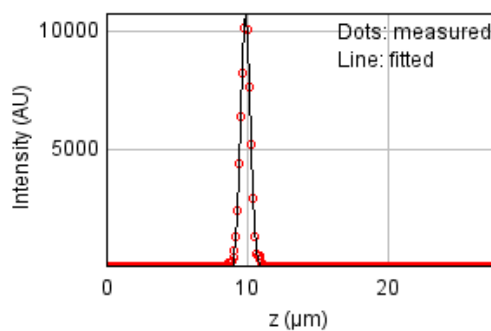
b = -0.008 px

c = 0.516 px

xc = 5.330 px

yc = 5.123 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1339659.61

Standard deviation: 75.18359

$R^2$ : 0.99742

Parameters:

a = 124.75421

b = 10738.2279

c = 9.94761

d = 0.31332

## Bead 127

Date : Thu Jul 14 17:33:30 PDT 2022

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

Frame size : 10 pixels

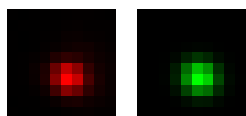
Coordinates : -23.1  $\mu\text{m}$  (x), 3.62  $\mu\text{m}$  (y), 10.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

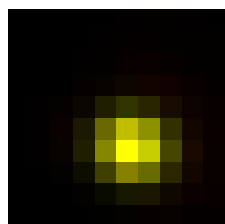
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	277 nm	190 nm
max	298 nm	304 nm	190 nm
z	715 nm	717 nm	642 nm
Asymmetry	0.91		
Theta	-17.5°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.992$



Parameters:

A = 9212.321 (brightness)

B = 237.422 (background)

a = 0.429 px

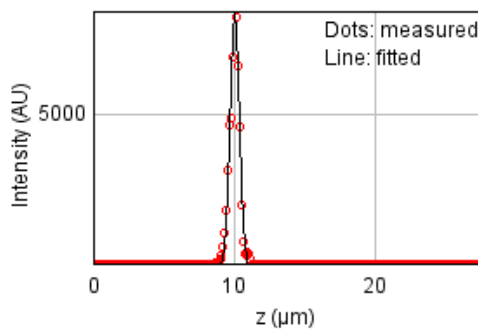
b = -0.025 px

c = 0.501 px

$x_c = 5.233$  px

$y_c = 5.812$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 5636685.26

Standard deviation: 154.21894

$R^2$ : 0.98176

Parameters:

a = 129.55114

b = 8377.82659

c = 10.09865

d = 0.30362

## Bead 128

Date : Thu Jul 14 17:33:30 PDT 2022

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

Frame size : 10 pixels

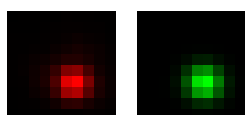
Coordinates : 48.3  $\mu\text{m}$  (x), -360 nm (y), 10.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

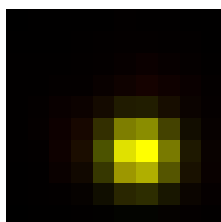
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	293 nm	300 nm	190 nm
z	697 nm	698 nm	642 nm
Asymmetry	0.941		
Theta	-9.8°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.992$



Parameters:

$A = 12247.745$  (brightness)

$B = 328.961$  (background)

$a = 0.435$  px

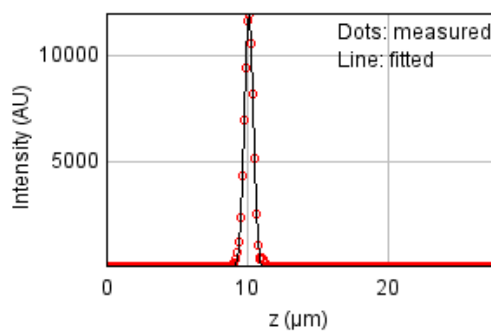
$b = -0.009$  px

$c = 0.488$  px

$xc = 5.649$  px

$yc = 6.105$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1013454.95

Standard deviation: 65.39252

$R^2: 0.99837$

Parameters:

$a = 126.93942$

$b = 12059.6673$

$c = 10.16947$

$d = 0.29580$

## Bead 129

Date : Thu Jul 14 17:33:30 PDT 2022

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

Frame size : 10 pixels

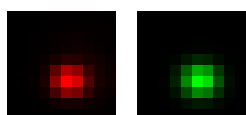
Coordinates : -40.0  $\mu\text{m}$  (x), -23.8  $\mu\text{m}$  (y), 10.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

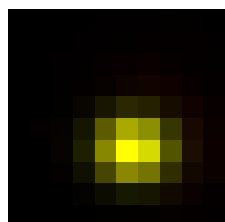
FWHM	Non corrected	Corrected	Theoretical
min	267 nm	272 nm	190 nm
max	305 nm	312 nm	190 nm
z	737 nm	739 nm	642 nm
Asymmetry	0.873		
Theta	-2.9°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:

$A = 13844.782$  (brightness)

$B = 312.615$  (background)

$a = 0.400$  px

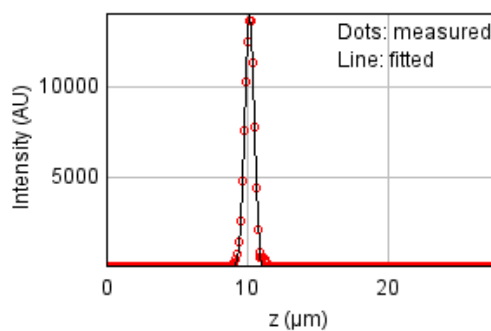
$b = -0.006$  px

$c = 0.524$  px

$x_c = 5.302$  px

$y_c = 5.892$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2748580.41

Standard deviation: 107.69116

$R^2 = 0.99693$

Parameters:

$a = 128.85135$

$b = 14078.1455$

$c = 10.21396$

$d = 0.31315$

## Bead 130

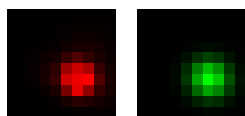
Date : Thu Jul 14 17:33:31 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 17.8 um (x), 18.7 um (y), 10.4 um (z)  
Corresponding bead : Not found

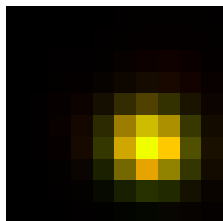
FWHM	Non corrected	Corrected	Theoretical
min	314 nm	320 nm	190 nm
max	334 nm	341 nm	190 nm
z	796 nm	798 nm	642 nm
Asymmetry	0.94		
Theta	-15.6°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 15279.180 (brightness)

B = 276.447 (background)

a = 0.338 px

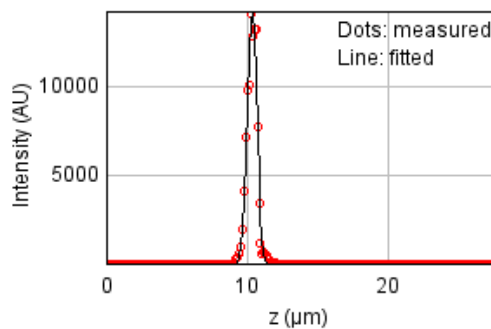
b = -0.011 px

c = 0.376 px

xc = 6.137 px

yc = 5.911 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 18971546.2

Standard deviation: 282.92882

$R^2$ : 0.98098

Parameters:

a = 117.59575

b = 14189.3957

c = 10.40932

d = 0.33804

## Bead 131

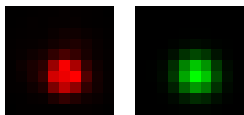
Date : Thu Jul 14 17:33:31 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 40.0  $\mu\text{m}$  (x), 7.56  $\mu\text{m}$  (y), 10.3  $\mu\text{m}$  (z)  
Corresponding bead : Not found

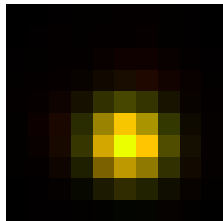
FWHM	Non corrected	Corrected	Theoretical
min	310 nm	316 nm	190 nm
max	329 nm	336 nm	190 nm
z	791 nm	792 nm	642 nm
Asymmetry	0.94		
Theta	-15.6°		

### 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 = 10158.466 (brightness)

B = 254.912 (background)

a = 0.347 px

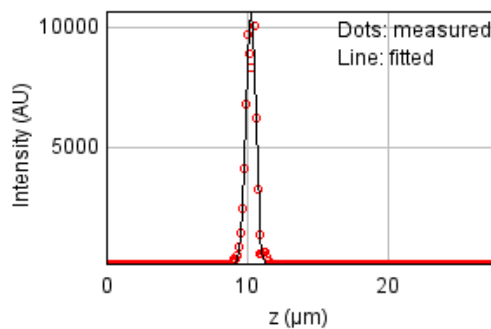
b = -0.012 px

c = 0.385 px

$x_c = 5.117$  px

$y_c = 5.840$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 16404888.4

Standard deviation: 263.09492

$R^2$ : 0.97092

Parameters:

a = 118.09437

b = 10682.4036

c = 10.31783

d = 0.33570

## Bead 132

Date : Thu Jul 14 17:33:31 PDT 2022

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

Frame size : 10 pixels

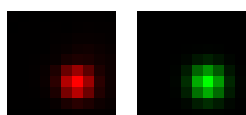
Coordinates : -18.9  $\mu\text{m}$  (x), 6.37  $\mu\text{m}$  (y), 10.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

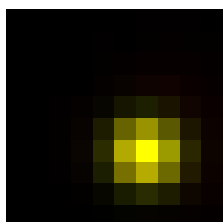
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	287 nm	293 nm	190 nm
z	696 nm	698 nm	642 nm
Asymmetry	0.97		
Theta	-12.7°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.994$



Parameters:

A = 11049.422 (brightness)

B = 233.163 (background)

a = 0.455 px

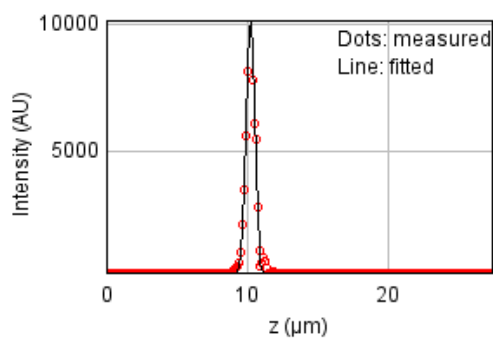
b = -0.006 px

c = 0.481 px

xc = 5.951 px

yc = 6.079 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 5085581.26

Standard deviation: 146.48600

$R^2$ : 0.98871

Parameters:

a = 127.51800

b = 10248.3371

c = 10.28698

d = 0.29574



## Bead 133

Date : Thu Jul 14 17:33:31 PDT 2022

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

Frame size : 10 pixels

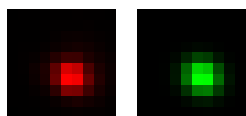
Coordinates : 4.0  $\mu\text{m}$  (x), 22.3  $\mu\text{m}$  (y), 10.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

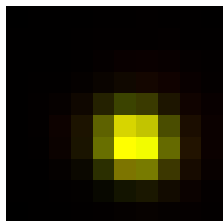
FWHM	Non corrected	Corrected	Theoretical
min	273 nm	279 nm	190 nm
max	301 nm	308 nm	190 nm
z	755 nm	756 nm	642 nm
Asymmetry	0.906		
Theta	-24.8°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:

$A = 14076.085$  (brightness)

$B = 316.132$  (background)

$a = 0.427$  px

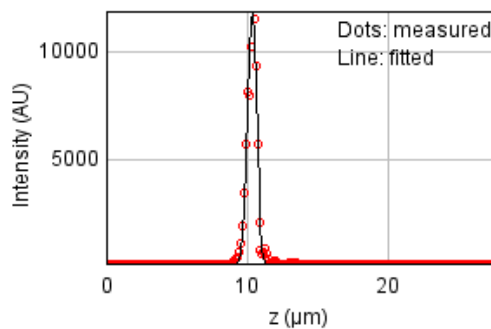
$b = -0.034$  px

$c = 0.485$  px

$x_c = 5.460$  px

$y_c = 5.724$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 14973294.4

Standard deviation: 251.35325

$R^2: 0.97749$

Parameters:

$a = 132.31265$

$b = 11899.9442$

$c = 10.40263$

$d = 0.32045$

## Bead 134

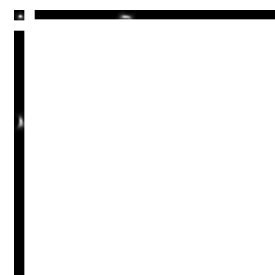
Date : Thu Jul 14 17:33:31 PDT 2022

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

Frame size : 10 pixels

Coordinates : -54.8  $\mu\text{m}$  (x), 2.12  $\mu\text{m}$  (y), 10.1  $\mu\text{m}$  (z)

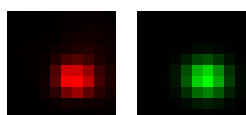
Corresponding bead : Not found



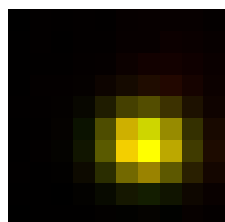
FWHM	Non corrected	Corrected	Theoretical
min	296 nm	303 nm	190 nm
max	345 nm	352 nm	190 nm
z	864 nm	866 nm	642 nm
Asymmetry	0.86		
Theta	-3.8°		

### 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:

$A = 2561.537$  (brightness)

$B = 143.358$  (background)

$a = 0.314$  px

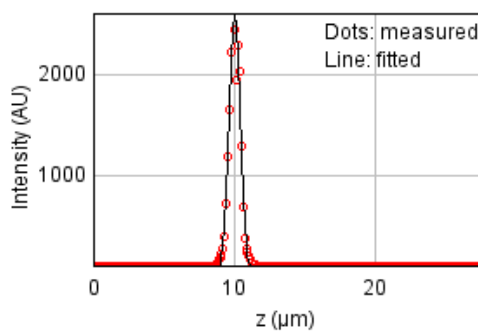
$b = -0.007$  px

$c = 0.424$  px

$x_c = 5.828$  px

$y_c = 5.709$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 649288.323

Standard deviation: 52.34131

$R^2: 0.98076$

Parameters:

$a = 108.02598$

$b = 2596.87611$

$c = 10.09430$

$d = 0.36691$

## Bead 135

Date : Thu Jul 14 17:33:31 PDT 2022

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

Frame size : 10 pixels

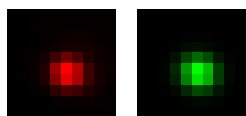
Coordinates : -25.6  $\mu\text{m}$  (x), 536 nm (y), 10.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

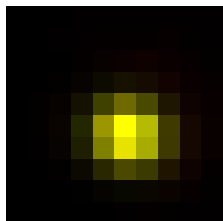
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	277 nm	190 nm
max	300 nm	306 nm	190 nm
z	762 nm	763 nm	642 nm
Asymmetry	0.903		
Theta	-13.7°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.994$



Parameters:

A = 8829.267 (brightness)

B = 231.936 (background)

a = 0.420 px

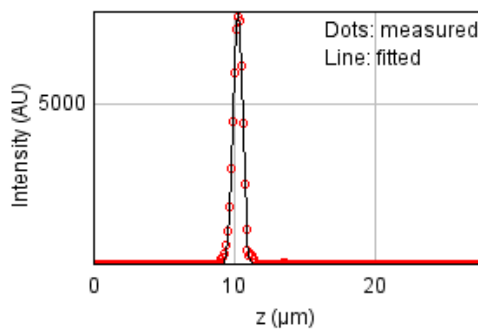
b = -0.022 px

c = 0.503 px

xc = 5.147 px

yc = 5.382 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1005050.47

Standard deviation: 65.12081

$R^2$ : 0.99639

Parameters:

a = 125.24500

b = 7773.57981

c = 10.31599

d = 0.32347

## Bead 136

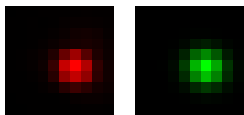
Date : Thu Jul 14 17:33:31 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -14.2  $\mu\text{m}$  (x), 17.5  $\mu\text{m}$  (y), 10.6  $\mu\text{m}$  (z)  
Corresponding bead : Not found

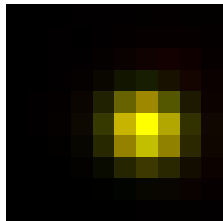
FWHM	Non corrected	Corrected	Theoretical
min	283 nm	289 nm	190 nm
max	311 nm	317 nm	190 nm
z	724 nm	725 nm	642 nm
Asymmetry	0.909		
Theta	-13.2°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.991$



Parameters:

$A = 14527.994$  (brightness)

$B = 269.342$  (background)

$a = 0.391$  px

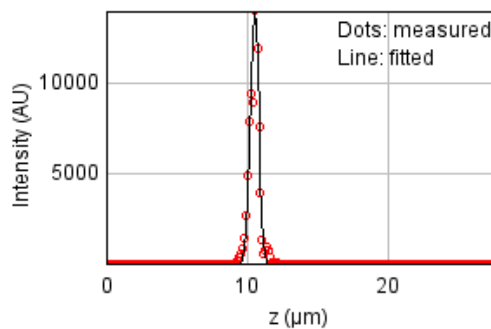
$b = -0.018$  px

$c = 0.463$  px

$x_c = 5.961$  px

$y_c = 5.179$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 30376981.5

Standard deviation: 358.01245

$R^2: 0.96557$

Parameters:

$a = 134.94775$

$b = 13878.3196$

$c = 10.58129$

$d = 0.30732$

## Bead 137

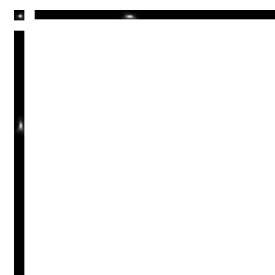
Date : Thu Jul 14 17:33:31 PDT 2022

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

Frame size : 10 pixels

Coordinates : 36.8  $\mu\text{m}$  (x), -11.3  $\mu\text{m}$  (y), 10.5  $\mu\text{m}$  (z)

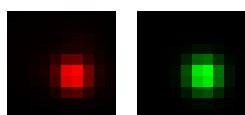
Corresponding bead : Not found



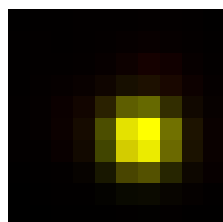
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	283 nm	289 nm	190 nm
z	685 nm	687 nm	642 nm
Asymmetry	0.972		
Theta	-22.1°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:

$A = 14577.358$  (brightness)

$B = 347.196$  (background)

$a = 0.471$  px

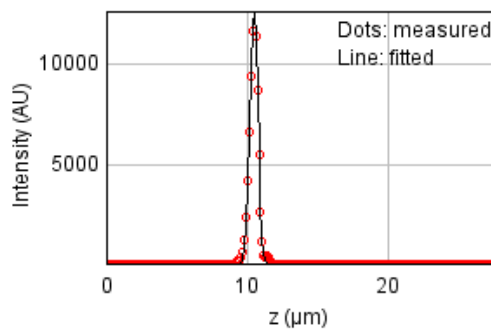
$b = -0.010$  px

$c = 0.490$  px

$x_c = 5.638$  px

$y_c = 5.404$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1814685.54

Standard deviation: 87.50372

$R^2: 0.99728$

Parameters:

$a = 127.15567$

$b = 12597.7480$

$c = 10.53248$

$d = 0.29090$

## Bead 138

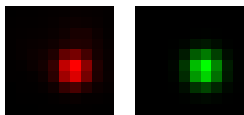
Date : Thu Jul 14 17:33:31 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 53.8  $\mu\text{m}$  (x), -15.2  $\mu\text{m}$  (y), 10.7  $\mu\text{m}$  (z)  
Corresponding bead : Not found

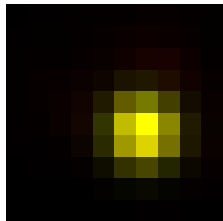
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	284 nm	291 nm	190 nm
z	824 nm	826 nm	642 nm
Asymmetry	0.977		
Theta	-63.5°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 9930.300 (brightness)

B = 299.163 (background)

a = 0.478 px

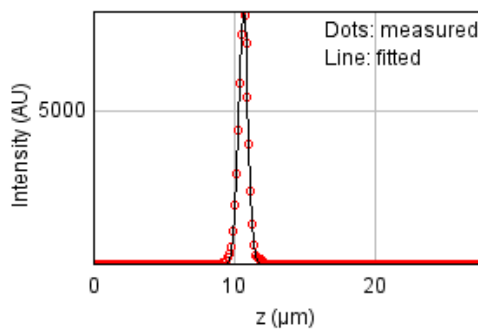
b = -0.009 px

c = 0.465 px

$x_c = 5.829$  px

$y_c = 5.290$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 416150.197

Standard deviation: 41.90356

$R^2$ : 0.99876

Parameters:

a = 116.68153

b = 8200.92242

c = 10.70975

d = 0.35009

## Bead 139

Date : Thu Jul 14 17:33:32 PDT 2022

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

Frame size : 10 pixels

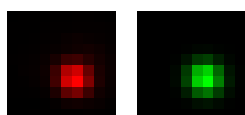
Coordinates : -2.82  $\mu\text{m}$  (x), -23.6  $\mu\text{m}$  (y), 10.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

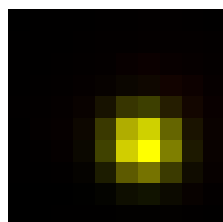
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	277 nm	190 nm
max	286 nm	292 nm	190 nm
z	701 nm	702 nm	642 nm
Asymmetry	0.949		
Theta	-15.7°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.996$



Parameters:

$A = 14015.108$  (brightness)

$B = 278.397$  (background)

$a = 0.460$  px

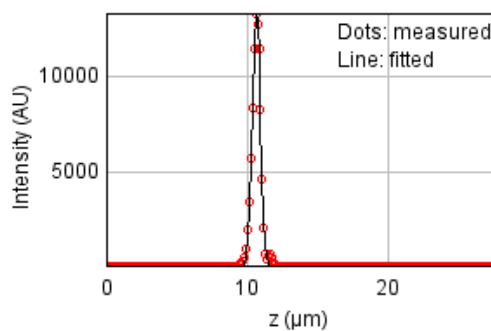
$b = -0.013$  px

$c = 0.503$  px

$x_c = 5.728$  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: 2927819.30

Standard deviation: 111.14706

$R^2: 0.99618$

Parameters:

$a = 128.75654$

$b = 13347.3579$

$c = 10.71417$

$d = 0.29760$

## Bead 140

Date : Thu Jul 14 17:33:32 PDT 2022

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

Frame size : 10 pixels

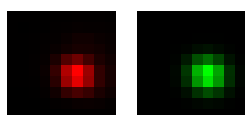
Coordinates : -33.2  $\mu\text{m}$  (x), 7.5  $\mu\text{m}$  (y), 10.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

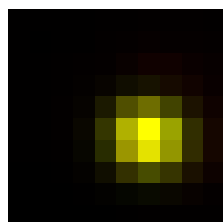
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	304 nm	310 nm	190 nm
z	733 nm	735 nm	642 nm
Asymmetry	0.907		
Theta	-13.7°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.992$



Parameters:

A = 7643.269 (brightness)

B = 206.642 (background)

a = 0.410 px

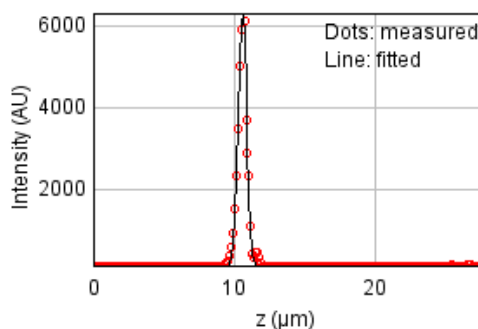
b = -0.020 px

c = 0.487 px

$x_c = 5.968$  px

$y_c = 5.373$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1752129.08

Standard deviation: 85.98226

$R^2$ : 0.99003

Parameters:

a = 124.02742

b = 6298.55275

c = 10.64543

d = 0.31124



## Bead 141

Date : Thu Jul 14 17:33:32 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

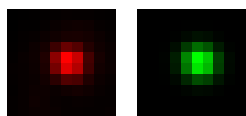
Coordinates : -3.68  $\mu\text{m}$  (x), -1.44  $\mu\text{m}$  (y), 11.6  $\mu\text{m}$  (z)  
Corresponding bead : Not found



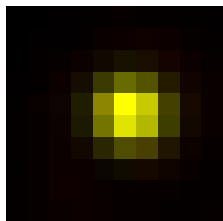
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	291 nm	297 nm	190 nm
z	705 nm	706 nm	642 nm
Asymmetry	0.945		
Theta	-13.8°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.994$



Parameters:

$A = 12675.020$  (brightness)

$B = 518.682$  (background)

$a = 0.443$  px

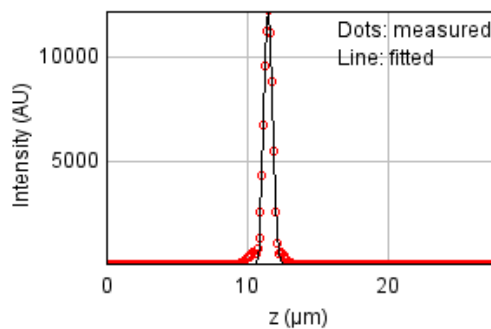
$b = -0.012$  px

$c = 0.490$  px

$x_c = 5.239$  px

$y_c = 4.390$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 3792616.67

Standard deviation: 126.50139

$R^2 = 0.99407$

Parameters:

$a = 143.21289$

$b = 12171.5275$

$c = 11.57203$

$d = 0.29932$

## Bead 142

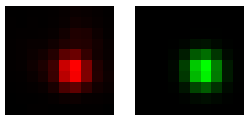
Date : Thu Jul 14 17:33:32 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 58.4 um (x), 15.1 um (y), 11.0 um (z)  
Corresponding bead : Not found

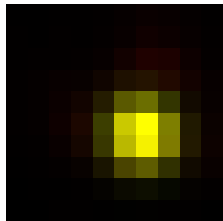
FWHM	Non corrected	Corrected	Theoretical
min	279 nm	285 nm	190 nm
max	290 nm	296 nm	190 nm
z	834 nm	836 nm	642 nm
Asymmetry	0.963		
Theta	-59.4°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 8133.468 (brightness)

B = 287.943 (background)

a = 0.470 px

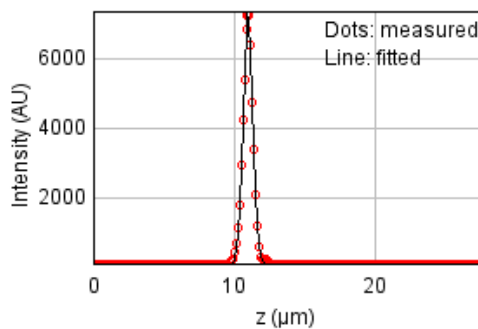
b = -0.015 px

c = 0.453 px

xc = 5.769 px

yc = 5.426 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 363905.766

Standard deviation: 39.18504

$R^2$ : 0.99867

Parameters:

a = 114.63626

b = 7373.97248

c = 11.04347

d = 0.35431

## Bead 143

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

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

Frame size : 10 pixels

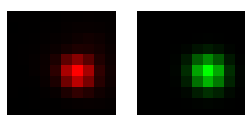
Coordinates : -10.9  $\mu\text{m}$  (x), 12.5  $\mu\text{m}$  (y), 11.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

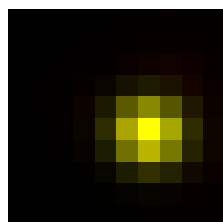
FWHM	Non corrected	Corrected	Theoretical
min	274 nm	280 nm	190 nm
max	293 nm	299 nm	190 nm
z	709 nm	710 nm	642 nm
Asymmetry	0.936		
Theta	-14.4°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.994$



Parameters:

$A = 16054.705$  (brightness)

$B = 322.398$  (background)

$a = 0.438$  px

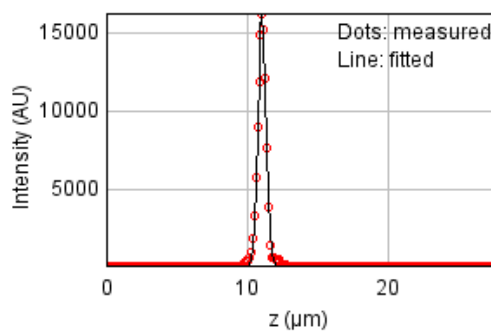
$b = -0.015$  px

$c = 0.491$  px

$x_c = 6.014$  px

$y_c = 5.140$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 4938025.17

Standard deviation: 144.34524

$R^2: 0.99571$

Parameters:

$a = 129.50142$

$b = 16227.9832$

$c = 11.11796$

$d = 0.30101$

## Bead 144

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

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

Frame size : 10 pixels

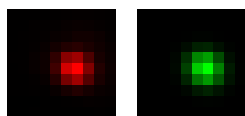
Coordinates : -5.6  $\mu\text{m}$  (x), 25.2  $\mu\text{m}$  (y), 11.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

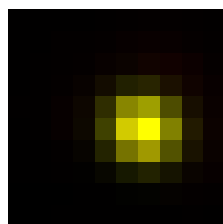
FWHM	Non corrected	Corrected	Theoretical
min	270 nm	276 nm	190 nm
max	291 nm	297 nm	190 nm
z	696 nm	698 nm	642 nm
Asymmetry	0.928		
Theta	-27.6°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.994$



Parameters:

A = 17660.103 (brightness)

B = 354.763 (background)

a = 0.456 px

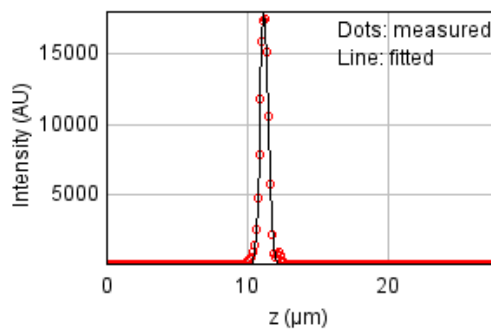
b = -0.029 px

c = 0.497 px

$x_c = 5.750$  px

$y_c = 4.967$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 6162438.11

Standard deviation: 161.25089

$R^2$ : 0.99561

Parameters:

a = 135.26988

b = 18060.7614

c = 11.28285

d = 0.29573

## Bead 145

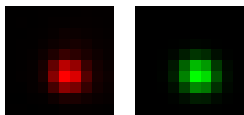
Date : Thu Jul 14 17:33:33 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -36.5  $\mu\text{m}$  (x), 14.9  $\mu\text{m}$  (y), 11.0  $\mu\text{m}$  (z)  
Corresponding bead : Not found

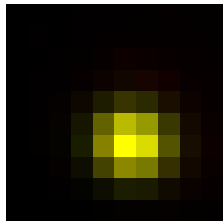
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	302 nm	308 nm	190 nm
z	749 nm	751 nm	642 nm
Asymmetry	0.922		
Theta	-15.7°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:

A = 8918.833 (brightness)

B = 239.729 (background)

a = 0.415 px

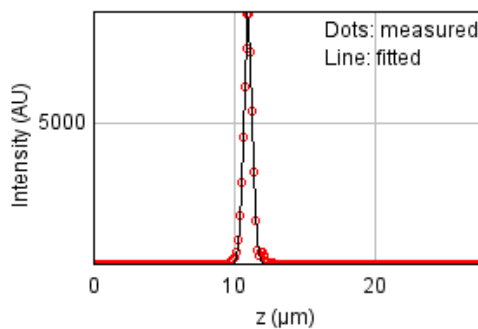
b = -0.019 px

c = 0.477 px

xc = 5.312 px

yc = 5.847 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1365897.68

Standard deviation: 75.91628

$R^2$ : 0.99616

Parameters:

a = 119.64686

b = 8833.93460

c = 11.04460

d = 0.31824

## Bead 146

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

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

Frame size : 10 pixels

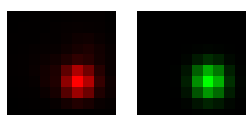
Coordinates : 51.5  $\mu\text{m}$  (x), 3.6  $\mu\text{m}$  (y), 11.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

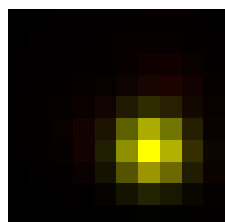
FWHM	Non corrected	Corrected	Theoretical
min	279 nm	285 nm	190 nm
max	282 nm	288 nm	190 nm
z	691 nm	692 nm	642 nm
Asymmetry	0.989		
Theta	-75.5°		

### 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 = 9507.181 (brightness)

B = 305.929 (background)

a = 0.478 px

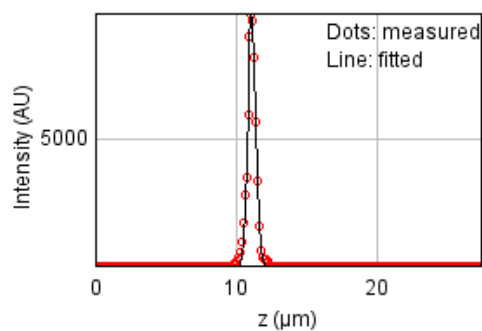
b = -0.003 px

c = 0.469 px

xc = 6.118 px

yc = 5.932 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2604450.15

Standard deviation: 104.82958

$R^2$ : 0.99368

Parameters:

a = 122.68285

b = 9865.27076

c = 11.17517

d = 0.29330

## Bead 147

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

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

Frame size : 10 pixels

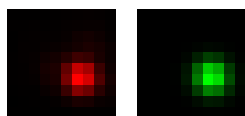
Coordinates : 42.5  $\mu\text{m}$  (x), 9.66  $\mu\text{m}$  (y), 11.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

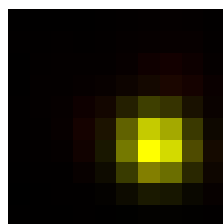
FWHM	Non corrected	Corrected	Theoretical
min	281 nm	287 nm	190 nm
max	289 nm	295 nm	190 nm
z	721 nm	723 nm	642 nm
Asymmetry	0.971		
Theta	-26.4°		

### 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 = 8584.957 (brightness)

B = 269.645 (background)

a = 0.453 px

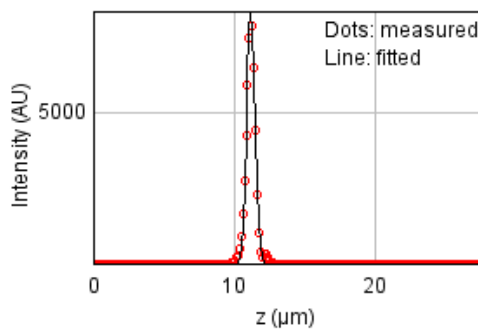
b = -0.011 px

c = 0.469 px

xc = 6.318 px

yc = 5.756 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1290738.61

Standard deviation: 73.79807

$R^2$ : 0.99570

Parameters:

a = 121.86713

b = 8272.80294

c = 11.25262

d = 0.30635

## Bead 148

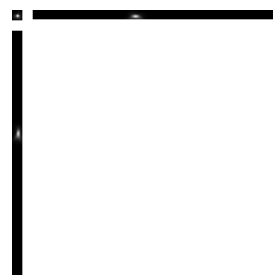
Date : Thu Jul 14 17:33:33 PDT 2022

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

Frame size : 10 pixels

Coordinates : 34.1  $\mu\text{m}$  (x), -7.68  $\mu\text{m}$  (y), 11.4  $\mu\text{m}$  (z)

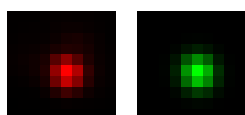
Corresponding bead : Not found



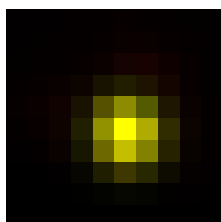
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	288 nm	294 nm	190 nm
z	722 nm	723 nm	642 nm
Asymmetry	0.959		
Theta	-67.3°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.991$



Parameters:

$A = 14601.604$  (brightness)

$B = 386.474$  (background)

$a = 0.483$  px

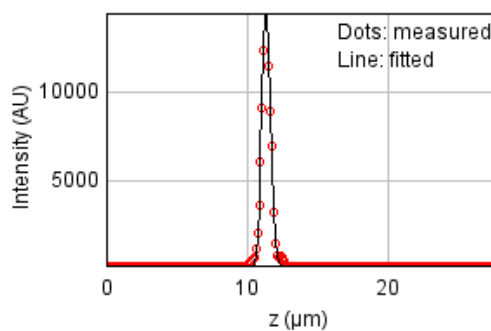
$b = -0.014$  px

$c = 0.455$  px

$x_c = 5.090$  px

$y_c = 5.173$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 4399580.16

Standard deviation: 136.24841

$R^2 = 0.99539$

Parameters:

$a = 128.97276$

$b = 14657.5687$

$c = 11.42261$

$d = 0.30647$



## Bead 149

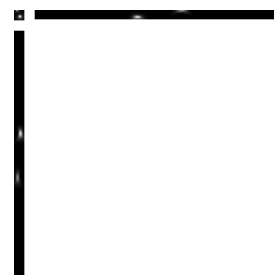
Date : Thu Jul 14 17:33:33 PDT 2022

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

Frame size : 10 pixels

Coordinates : -44.4  $\mu\text{m}$  (x), 19.2  $\mu\text{m}$  (y), 11.4  $\mu\text{m}$  (z)

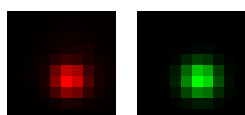
Corresponding bead : Not found



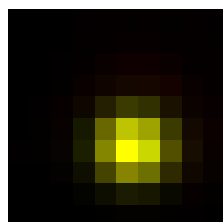
FWHM	Non corrected	Corrected	Theoretical
min	283 nm	289 nm	190 nm
max	301 nm	307 nm	190 nm
z	748 nm	750 nm	642 nm
Asymmetry	0.939		
Theta	-5.1°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.992$



Parameters:

$A = 9171.000$  (brightness)

$B = 249.464$  (background)

$a = 0.412$  px

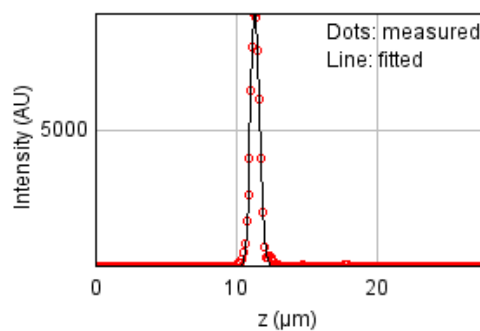
$b = -0.005$  px

$c = 0.467$  px

$x_c = 5.284$  px

$y_c = 5.790$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1214062.43

Standard deviation: 71.57252

$R^2 = 0.99687$

Parameters:

$a = 130.26044$

$b = 9238.27464$

$c = 11.41420$

$d = 0.31780$

## Bead 150

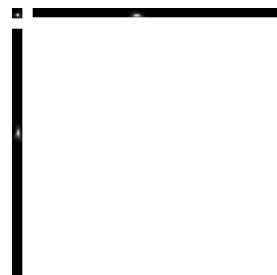
Date : Thu Jul 14 17:33:34 PDT 2022

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

Frame size : 10 pixels

Coordinates : 43.7  $\mu\text{m}$  (x), 15.1  $\mu\text{m}$  (y), 11.6  $\mu\text{m}$  (z)

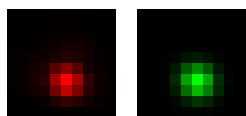
Corresponding bead : Not found



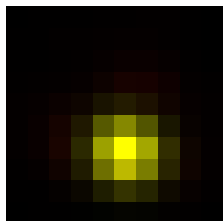
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	292 nm	298 nm	190 nm
z	678 nm	679 nm	642 nm
Asymmetry	0.943		
Theta	-25.2°		

### 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:

$A = 12404.797$  (brightness)

$B = 383.138$  (background)

$a = 0.447$  px

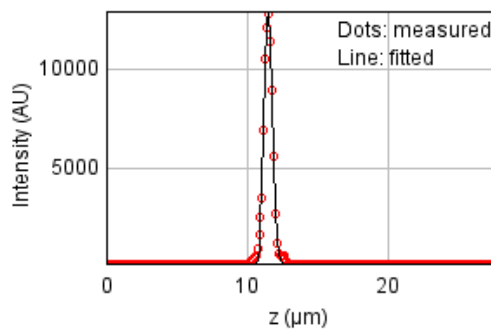
$b = -0.021$  px

$c = 0.481$  px

$x_c = 5.028$  px

$y_c = 6.162$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 3006194.82

Standard deviation: 112.62489

$R^2 = 0.99569$

Parameters:

$a = 135.08016$

$b = 12943.9744$

$c = 11.57070$

$d = 0.28782$

## Bead 151

Date : Thu Jul 14 17:33:34 PDT 2022

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

Frame size : 10 pixels

Coordinates : 49.7  $\mu\text{m}$  (x), 12.3  $\mu\text{m}$  (y), 11.5  $\mu\text{m}$  (z)

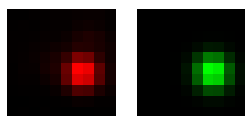
Corresponding bead : Not found



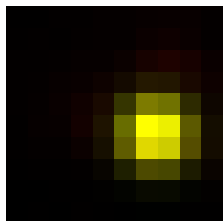
FWHM	Non corrected	Corrected	Theoretical
min	284 nm	291 nm	190 nm
max	288 nm	294 nm	190 nm
z	703 nm	704 nm	642 nm
Asymmetry	0.987		
Theta	-65.0°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 10283.275$  (brightness)

$B = 311.149$  (background)

$a = 0.459$  px

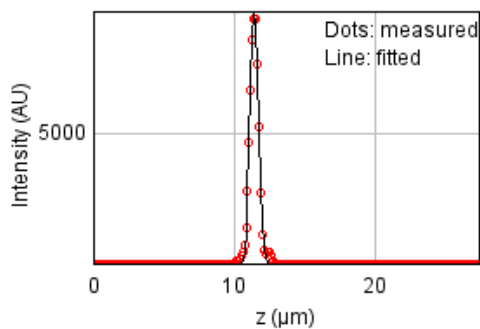
$b = -0.005$  px

$c = 0.451$  px

$x_c = 6.430$  px

$y_c = 5.318$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1603056.41

Standard deviation: 82.24324

$R^2 = 0.99594$

Parameters:

$a = 122.48160$

$b = 9596.28310$

$c = 11.49919$

$d = 0.29842$

## Bead 152

Date : Thu Jul 14 17:33:34 PDT 2022

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

Frame size : 10 pixels

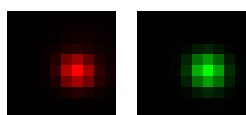
Coordinates : -34.7  $\mu\text{m}$  (x), 23.9  $\mu\text{m}$  (y), 11.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

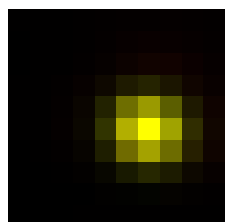
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	302 nm	309 nm	190 nm
z	719 nm	721 nm	642 nm
Asymmetry	0.914		
Theta	-15.8°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.994$



Parameters:

$A = 13131.075$  (brightness)

$B = 282.082$  (background)

$a = 0.415$  px

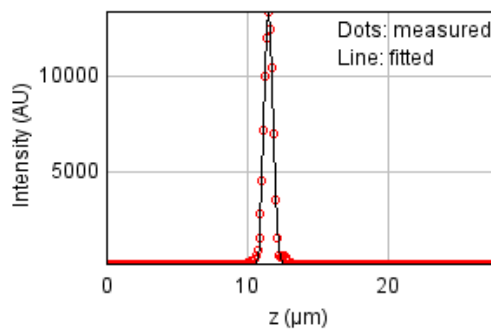
$b = -0.021$  px

$c = 0.483$  px

$x_c = 5.959$  px

$y_c = 5.027$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 3009957.23

Standard deviation: 112.69535

$R^2 = 0.99623$

Parameters:

$a = 126.21758$

$b = 13447.3945$

$c = 11.59296$

$d = 0.30539$

## Bead 153

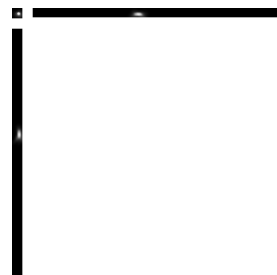
Date : Thu Jul 14 17:33:34 PDT 2022

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

Frame size : 10 pixels

Coordinates : 1.05  $\mu\text{m}$  (x), 17.5  $\mu\text{m}$  (y), 11.7  $\mu\text{m}$  (z)

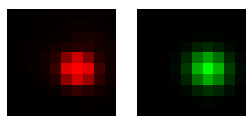
Corresponding bead : Not found



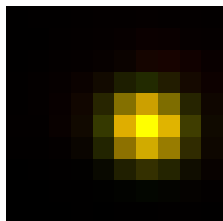
FWHM	Non corrected	Corrected	Theoretical
min	291 nm	298 nm	190 nm
max	319 nm	326 nm	190 nm
z	844 nm	846 nm	642 nm
Asymmetry	0.912		
Theta	-11.7°		

### 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:

$A = 10835.965$  (brightness)

$B = 242.271$  (background)

$a = 0.369$  px

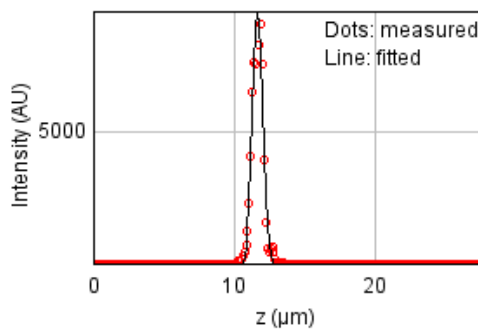
$b = -0.015$  px

$c = 0.437$  px

$x_c = 6.024$  px

$y_c = 5.042$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 9613338.05

Standard deviation: 201.40161

$R^2: 0.97945$

Parameters:

$a = 122.17480$

$b = 9487.98682$

$c = 11.72956$

$d = 0.35838$

## Bead 154

Date : Thu Jul 14 17:33:34 PDT 2022

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

Frame size : 10 pixels

Coordinates : 46.1  $\mu\text{m}$  (x), 14.0  $\mu\text{m}$  (y), 11.7  $\mu\text{m}$  (z)

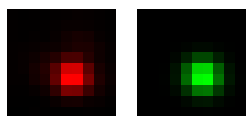
Corresponding bead : Not found



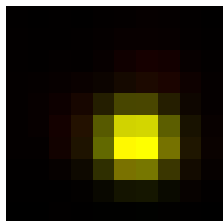
FWHM	Non corrected	Corrected	Theoretical
min	281 nm	287 nm	190 nm
max	299 nm	305 nm	190 nm
z	801 nm	802 nm	642 nm
Asymmetry	0.939		
Theta	-7.9°		

### 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 = 8513.330 (brightness)

B = 291.155 (background)

a = 0.418 px

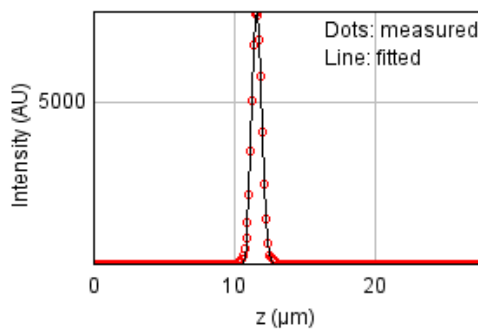
b = -0.008 px

c = 0.472 px

xc = 5.528 px

yc = 5.683 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 375632.186

Standard deviation: 39.81138

$R^2$ : 0.99872

Parameters:

a = 119.20391

b = 7798.11220

c = 11.67492

d = 0.34004

## Bead 155

Date : Thu Jul 14 17:33:34 PDT 2022

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

Frame size : 10 pixels

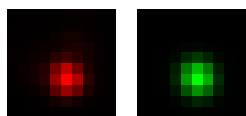
Coordinates : 46.6  $\mu\text{m}$  (x), 20.7  $\mu\text{m}$  (y), 11.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

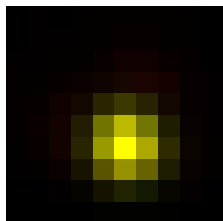
FWHM	Non corrected	Corrected	Theoretical
min	280 nm	286 nm	190 nm
max	294 nm	300 nm	190 nm
z	752 nm	754 nm	642 nm
Asymmetry	0.952		
Theta	-61.3°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 8936.983 (brightness)

B = 292.783 (background)

a = 0.466 px

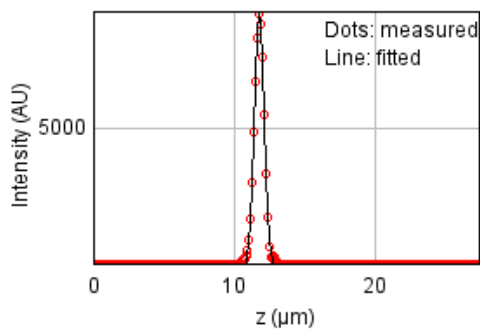
b = -0.019 px

c = 0.442 px

xc = 5.041 px

yc = 5.862 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 727859.349

Standard deviation: 55.41784

$R^2$ : 0.99813

Parameters:

a = 121.25821

b = 9222.67500

c = 11.84859

d = 0.31936

## Bead 156

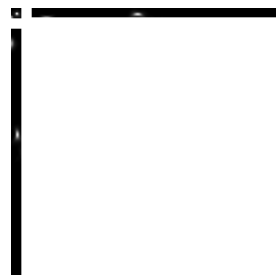
Date : Thu Jul 14 17:33:35 PDT 2022

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

Frame size : 10 pixels

Coordinates : -42.9  $\mu\text{m}$  (x), -23.8  $\mu\text{m}$  (y), 11.8  $\mu\text{m}$  (z)

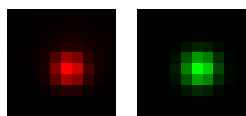
Corresponding bead : Not found



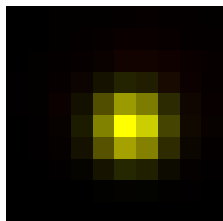
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	290 nm	296 nm	190 nm
z	755 nm	756 nm	642 nm
Asymmetry	0.959		
Theta	3.1°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:

$A = 7917.525$  (brightness)

$B = 228.142$  (background)

$a = 0.445$  px

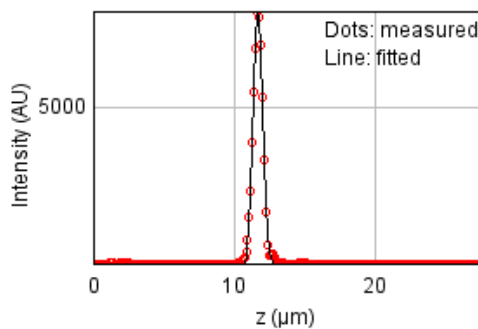
$b = 0.002$  px

$c = 0.484$  px

$x_c = 5.258$  px

$y_c = 5.021$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1078739.11

Standard deviation: 67.46586

$R^2: 0.99630$

Parameters:

$a = 134.75540$

$b = 8000.51057$

$c = 11.75769$

$d = 0.32047$



## Bead 157

Date : Thu Jul 14 17:33:35 PDT 2022

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

Frame size : 10 pixels

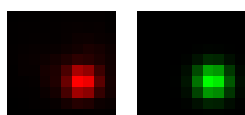
Coordinates : 46.0  $\mu\text{m}$  (x), -23.8  $\mu\text{m}$  (y), 11.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

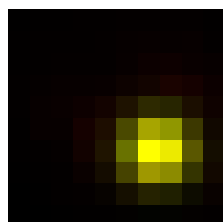
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	288 nm	294 nm	190 nm
z	735 nm	737 nm	642 nm
Asymmetry	0.968		
Theta	-1.4°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 8780.972 (brightness)

B = 308.906 (background)

a = 0.451 px

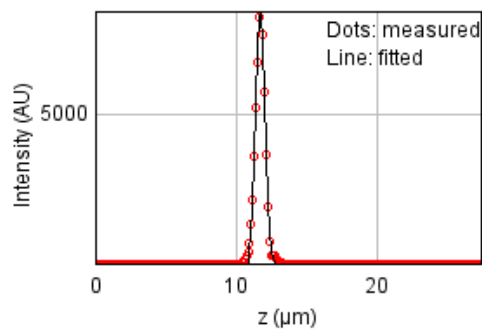
b = -0.001 px

c = 0.481 px

xc = 6.401 px

yc = 5.957 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1238183.26

Standard deviation: 72.28002

$R^2$ : 0.99611

Parameters:

a = 121.00773

b = 8440.68649

c = 11.78140

d = 0.31232

## Bead 158

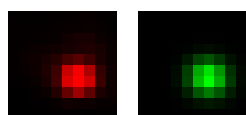
Date : Thu Jul 14 17:33:35 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : 47.6  $\mu\text{m}$  (x), -25.0  $\mu\text{m}$  (y), 12.0  $\mu\text{m}$  (z)  
Corresponding bead : Not found

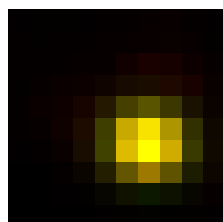
FWHM	Non corrected	Corrected	Theoretical
min	292 nm	298 nm	190 nm
max	325 nm	332 nm	190 nm
z	929 nm	931 nm	642 nm
Asymmetry	0.899		
Theta	-8.1°		

### 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 = 9020.872 (brightness)

B = 311.849 (background)

a = 0.355 px

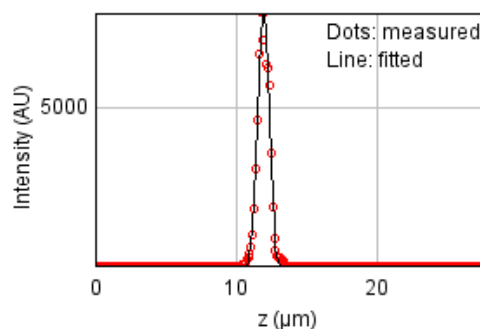
b = -0.012 px

c = 0.436 px

xc = 5.930 px

yc = 5.640 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 4165714.41

Standard deviation: 132.57773

$R^2$ : 0.98848

Parameters:

a = 115.66470

b = 8019.69454

c = 12.00792

d = 0.39440

## Bead 159

Date : Thu Jul 14 17:33:35 PDT 2022

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

Frame size : 10 pixels

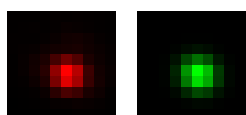
Coordinates : 4.77  $\mu\text{m}$  (x), 21.7  $\mu\text{m}$  (y), 12.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

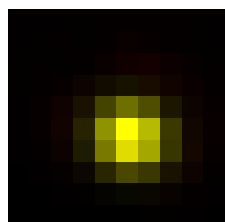
FWHM	Non corrected	Corrected	Theoretical
min	273 nm	279 nm	190 nm
max	294 nm	301 nm	190 nm
z	805 nm	807 nm	642 nm
Asymmetry	0.928		
Theta	-19.4°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:

$A = 13966.707$  (brightness)

$B = 370.659$  (background)

$a = 0.438$  px

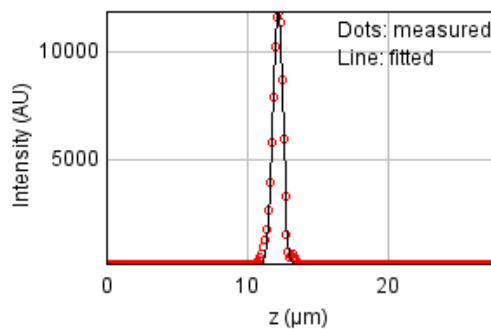
$b = -0.022$  px

$c = 0.493$  px

$x_c = 5.152$  px

$y_c = 5.353$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 4767861.18

Standard deviation: 141.83638

$R^2 = 0.99329$

Parameters:

$a = 131.81474$

$b = 12017.4303$

$c = 12.23975$

$d = 0.34182$

## Bead 160

Date : Thu Jul 14 17:33:35 PDT 2022

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

Frame size : 10 pixels

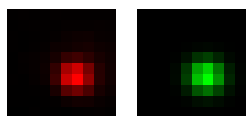
Coordinates : -41.8  $\mu\text{m}$  (x), -8.2  $\mu\text{m}$  (y), 11.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

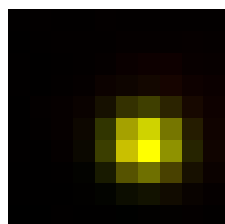
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	276 nm	190 nm
max	297 nm	303 nm	190 nm
z	754 nm	756 nm	642 nm
Asymmetry	0.913		
Theta	-6.6°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.992$



Parameters:

A = 5155.543 (brightness)

B = 187.597 (background)

a = 0.425 px

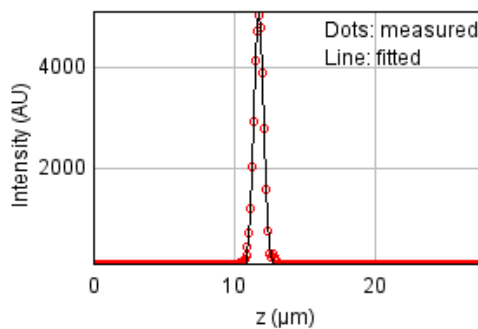
b = -0.010 px

c = 0.508 px

$x_c = 5.831$  px

$y_c = 5.687$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 360137.292

Standard deviation: 38.98162

$R^2$ : 0.99694

Parameters:

a = 116.32152

b = 5119.45960

c = 11.81455

d = 0.32033

## Bead 161

Date : Thu Jul 14 17:33:35 PDT 2022

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

Frame size : 10 pixels

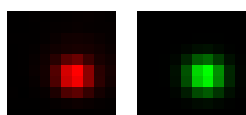
Coordinates : -52.0  $\mu\text{m}$  (x), 8.76  $\mu\text{m}$  (y), 12.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

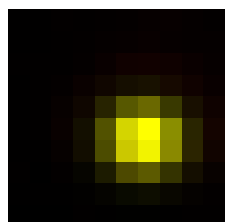
FWHM	Non corrected	Corrected	Theoretical
min	281 nm	287 nm	190 nm
max	312 nm	318 nm	190 nm
z	825 nm	827 nm	642 nm
Asymmetry	0.9		
Theta	-4.7°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:

$A = 4775.397$  (brightness)

$B = 175.908$  (background)

$a = 0.385$  px

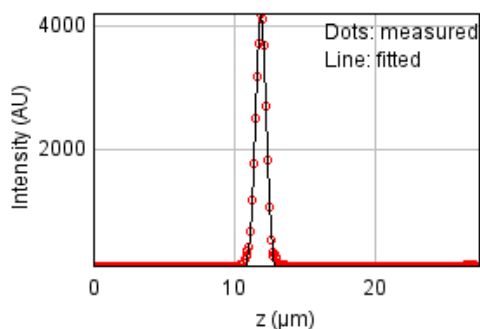
$b = -0.007$  px

$c = 0.473$  px

$x_c = 5.746$  px

$y_c = 5.443$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 342495.747

Standard deviation: 38.01486

$R^2 = 0.99600$

Parameters:

$a = 116.43236$

$b = 4202.38898$

$c = 11.96180$

$d = 0.35030$

## Bead 162

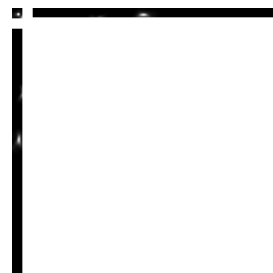
Date : Thu Jul 14 17:33:36 PDT 2022

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

Frame size : 10 pixels

Coordinates : 43.3  $\mu\text{m}$  (x), -7.37  $\mu\text{m}$  (y), 12.3  $\mu\text{m}$  (z)

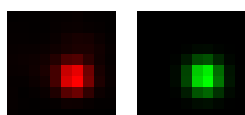
Corresponding bead : Not found



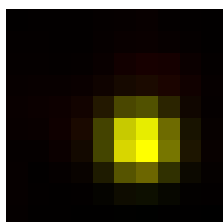
FWHM	Non corrected	Corrected	Theoretical
min	273 nm	279 nm	190 nm
max	281 nm	287 nm	190 nm
z	835 nm	837 nm	642 nm
Asymmetry	0.971		
Theta	-21.4°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 10354.244$  (brightness)

$B = 360.233$  (background)

$a = 0.476$  px

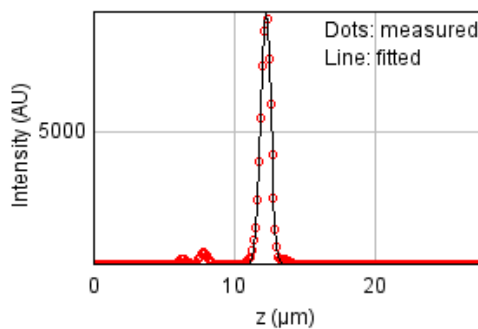
$b = -0.010$  px

$c = 0.497$  px

$x_c = 5.678$  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: 1952276.65

Standard deviation: 90.76042

$R^2 = 0.99559$

Parameters:

$a = 145.97352$

$b = 9377.43392$

$c = 12.30557$

$d = 0.35448$

## Bead 163

Date : Thu Jul 14 17:33:36 PDT 2022

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

Frame size : 10 pixels

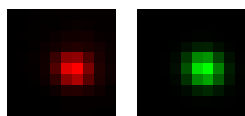
Coordinates : -38.8  $\mu\text{m}$  (x), -10.1  $\mu\text{m}$  (y), 12.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

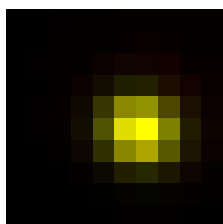
FWHM	Non corrected	Corrected	Theoretical
min	273 nm	278 nm	190 nm
max	302 nm	308 nm	190 nm
z	757 nm	759 nm	642 nm
Asymmetry	0.903		
Theta	-17.9°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.992$



Parameters:

A = 6664.431 (brightness)

B = 204.258 (background)

a = 0.418 px

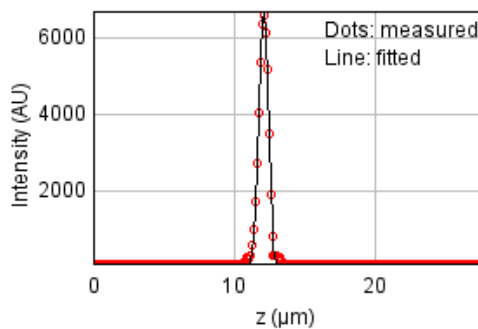
b = -0.027 px

c = 0.493 px

$x_c = 5.680$  px

$y_c = 5.039$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 745759.552

Standard deviation: 56.09514

$R^2$ : 0.99635

Parameters:

a = 116.40118

b = 6686.63365

c = 12.15177

d = 0.32148

## Bead 164

Date : Thu Jul 14 17:33:36 PDT 2022

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

Frame size : 10 pixels

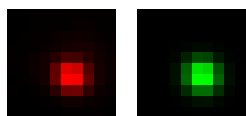
Coordinates : -9.46  $\mu\text{m}$  (x), -5.41  $\mu\text{m}$  (y), 12.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

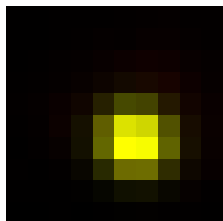
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	277 nm	190 nm
max	286 nm	292 nm	190 nm
z	784 nm	786 nm	642 nm
Asymmetry	0.947		
Theta	-21.8°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:

$A = 10403.596$  (brightness)

$B = 276.342$  (background)

$a = 0.462$  px

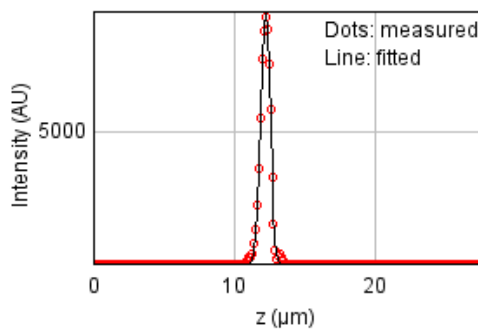
$b = -0.018$  px

$c = 0.501$  px

$x_c = 5.470$  px

$y_c = 5.644$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1548882.78

Standard deviation: 80.84164

$R^2 = 0.99632$

Parameters:

$a = 124.96586$

$b = 9402.37504$

$c = 12.28778$

$d = 0.33286$



## Bead 165

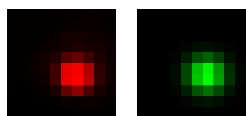
Date : Thu Jul 14 17:33:36 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -26.7  $\mu\text{m}$  (x), -64.3 nm (y), 12.3  $\mu\text{m}$  (z)  
Corresponding bead : Not found

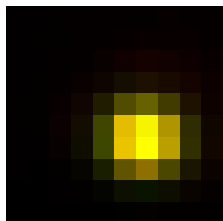
FWHM	Non corrected	Corrected	Theoretical
min	292 nm	298 nm	190 nm
max	317 nm	324 nm	190 nm
z	878 nm	880 nm	642 nm
Asymmetry	0.919		
Theta	-5.9°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 6298.308 (brightness)

B = 193.223 (background)

a = 0.371 px

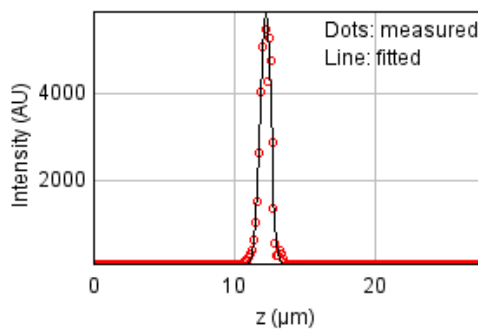
b = -0.007 px

c = 0.438 px

xc = 5.855 px

yc = 5.554 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 4312417.72

Standard deviation: 134.89201

$R^2$ : 0.97653

Parameters:

a = 115.60815

b = 5866.50022

c = 12.29107

d = 0.37283

## Bead 166

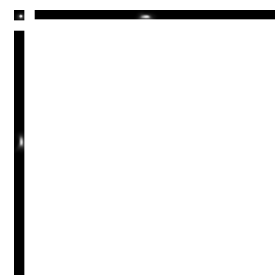
Date : Thu Jul 14 17:33:36 PDT 2022

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

Frame size : 10 pixels

Coordinates : -22.8  $\mu\text{m}$  (x), -19.8  $\mu\text{m}$  (y), 12.3  $\mu\text{m}$  (z)

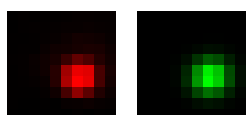
Corresponding bead : Not found



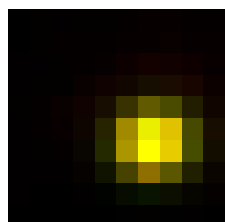
FWHM	Non corrected	Corrected	Theoretical
min	287 nm	293 nm	190 nm
max	313 nm	320 nm	190 nm
z	904 nm	906 nm	642 nm
Asymmetry	0.915		
Theta	8.5°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 7077.753$  (brightness)

$B = 204.669$  (background)

$a = 0.382$  px

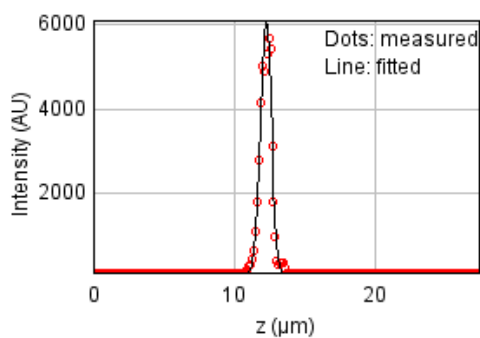
$b = 0.011$  px

$c = 0.452$  px

$x_c = 6.213$  px

$y_c = 5.574$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 3294919.12

Standard deviation: 117.90934

$R^2: 0.98373$

Parameters:

$a = 119.59093$

$b = 6097.15051$

$c = 12.32515$

$d = 0.38381$

## Bead 167

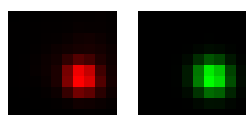
Date : Thu Jul 14 17:33:36 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -19.5  $\mu\text{m}$  (x), 24.9  $\mu\text{m}$  (y), 12.7  $\mu\text{m}$  (z)  
Corresponding bead : Not found

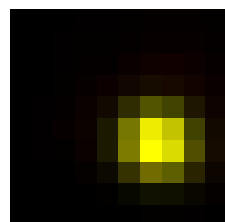
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	294 nm	300 nm	190 nm
z	790 nm	792 nm	642 nm
Asymmetry	0.946		
Theta	-23.4°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:

$A = 15179.309$  (brightness)

$B = 332.057$  (background)

$a = 0.441$  px

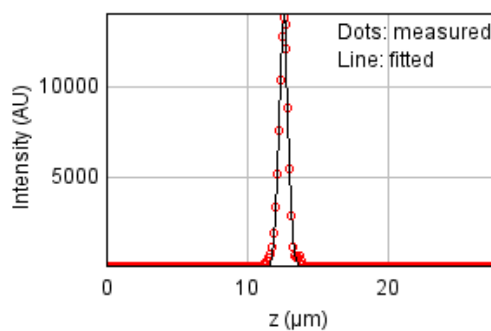
$b = -0.019$  px

$c = 0.476$  px

$x_c = 6.308$  px

$y_c = 5.596$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 3678264.07

Standard deviation: 124.57970

$R^2: 0.99613$

Parameters:

$a = 129.45546$

$b = 14022.8342$

$c = 12.65940$

$d = 0.33567$

## Bead 168

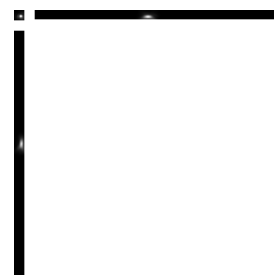
Date : Thu Jul 14 17:33:36 PDT 2022

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

Frame size : 10 pixels

Coordinates : 42.3  $\mu\text{m}$  (x), -7.83  $\mu\text{m}$  (y), 12.6  $\mu\text{m}$  (z)

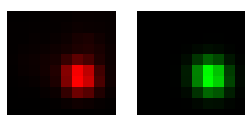
Corresponding bead : Not found



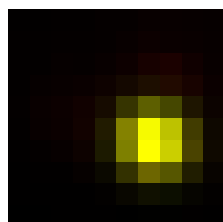
FWHM	Non corrected	Corrected	Theoretical
min	277 nm	283 nm	190 nm
max	291 nm	297 nm	190 nm
z	831 nm	833 nm	642 nm
Asymmetry	0.953		
Theta	-33.3°		

### 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:

$A = 10745.560$  (brightness)

$B = 350.762$  (background)

$a = 0.454$  px

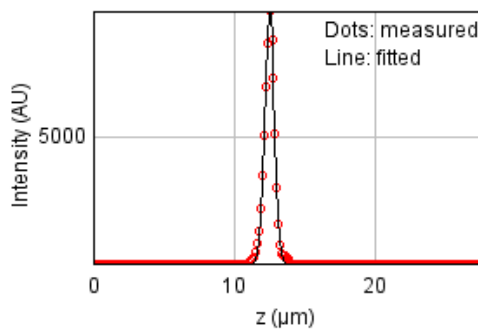
$b = -0.021$  px

$c = 0.472$  px

$x_c = 6.242$  px

$y_c = 5.536$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1233012.78

Standard deviation: 72.12895

$R^2 = 0.99751$

Parameters:

$a = 126.26205$

$b = 9919.90968$

$c = 12.58176$

$d = 0.35287$

## Bead 169

Date : Thu Jul 14 17:33:36 PDT 2022

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

Frame size : 10 pixels

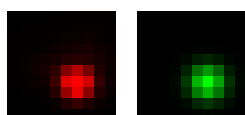
Coordinates : 8.46  $\mu\text{m}$  (x), -12.5  $\mu\text{m}$  (y), 12.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

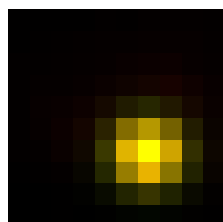
FWHM	Non corrected	Corrected	Theoretical
min	292 nm	298 nm	190 nm
max	306 nm	313 nm	190 nm
z	773 nm	775 nm	642 nm
Asymmetry	0.952		
Theta	-5.9°		

### 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 = 13352.115 (brightness)

B = 319.163 (background)

a = 0.398 px

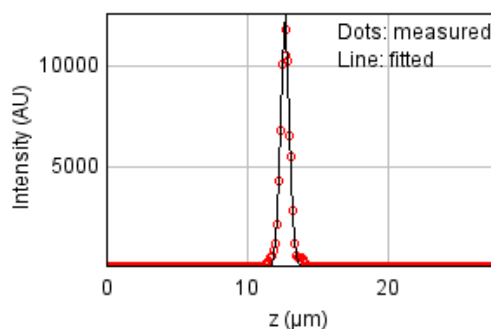
b = -0.004 px

c = 0.439 px

xc = 5.943 px

yc = 6.094 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 8413234.75

Standard deviation: 188.41147

$R^2$ : 0.98884

Parameters:

a = 130.05182

b = 12584.8779

c = 12.75752

d = 0.32827

## Bead 170

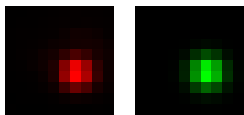
Date : Thu Jul 14 17:33:36 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -685 nm (x), -23.3  $\mu\text{m}$  (y), 13.1  $\mu\text{m}$  (z)  
Corresponding bead : Not found

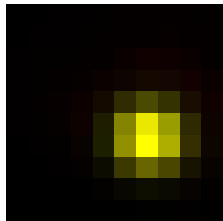
FWHM	Non corrected	Corrected	Theoretical
min	269 nm	275 nm	190 nm
max	280 nm	286 nm	190 nm
z	782 nm	783 nm	642 nm
Asymmetry	0.961		
Theta	-11.9°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.993$



Parameters:

$A = 12235.300$  (brightness)

$B = 294.466$  (background)

$a = 0.478$  px

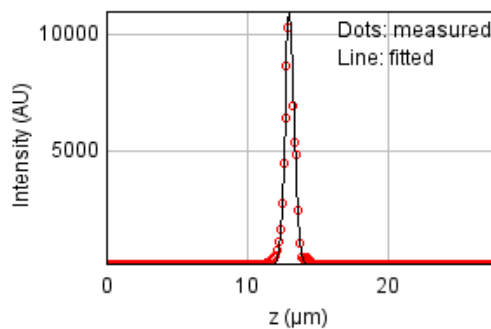
$b = -0.008$  px

$c = 0.514$  px

$x_c = 6.098$  px

$y_c = 5.597$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 5876328.93

Standard deviation: 157.46313

$R^2: 0.98977$

Parameters:

$a = 130.15575$

$b = 10950.9607$

$c = 13.08985$

$d = 0.33190$

## Bead 171

Date : Thu Jul 14 17:33:36 PDT 2022

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

Frame size : 10 pixels

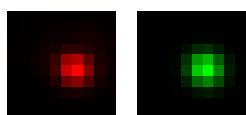
Coordinates : 1.48  $\mu\text{m}$  (x), -20.7  $\mu\text{m}$  (y), 13.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

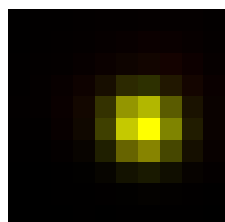
FWHM	Non corrected	Corrected	Theoretical
min	272 nm	278 nm	190 nm
max	290 nm	296 nm	190 nm
z	757 nm	759 nm	642 nm
Asymmetry	0.938		
Theta	-19.1°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.992$



Parameters:

$A = 13455.656$  (brightness)

$B = 337.726$  (background)

$a = 0.450$  px

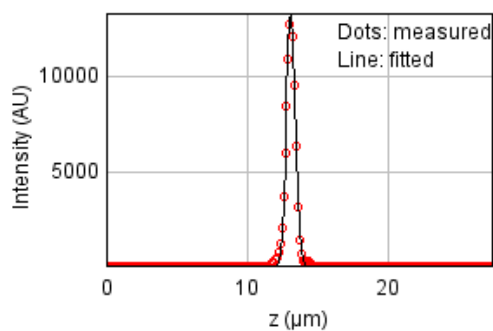
$b = -0.019$  px

$c = 0.497$  px

$x_c = 5.759$  px

$y_c = 4.828$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2790498.87

Standard deviation: 108.50925

$R^2 = 0.99663$

Parameters:

$a = 127.41711$

$b = 13358.9413$

$c = 13.17627$

$d = 0.32145$

## Bead 172

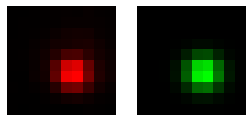
Date : Thu Jul 14 17:33:37 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -42.0  $\mu\text{m}$  (x), 854 nm (y), 13.1  $\mu\text{m}$  (z)  
Corresponding bead : Not found

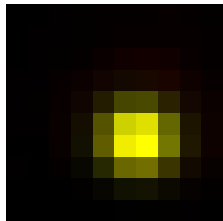
FWHM	Non corrected	Corrected	Theoretical
min	277 nm	283 nm	190 nm
max	296 nm	302 nm	190 nm
z	778 nm	779 nm	642 nm
Asymmetry	0.938		
Theta	-5.3°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.991$



Parameters:

$A = 7507.129$  (brightness)

$B = 235.446$  (background)

$a = 0.427$  px

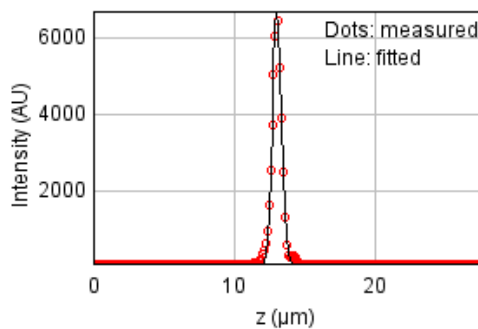
$b = -0.005$  px

$c = 0.485$  px

$x_c = 5.587$  px

$y_c = 5.637$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 685105.686

Standard deviation: 53.76561

$R^2 = 0.99671$

Parameters:

$a = 119.52531$

$b = 6671.39240$

$c = 13.10969$

$d = 0.33023$



## Bead 173

Date : Thu Jul 14 17:33:37 PDT 2022

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

Frame size : 10 pixels

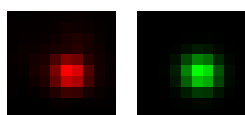
Coordinates : 51.7  $\mu\text{m}$  (x), -13.0  $\mu\text{m}$  (y), 13.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

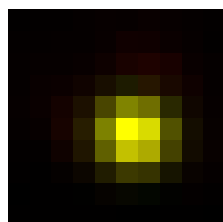
FWHM	Non corrected	Corrected	Theoretical
min	281 nm	287 nm	190 nm
max	301 nm	307 nm	190 nm
z	939 nm	941 nm	642 nm
Asymmetry	0.935		
Theta	-12.5°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 6617.633$  (brightness)

$B = 271.417$  (background)

$a = 0.416$  px

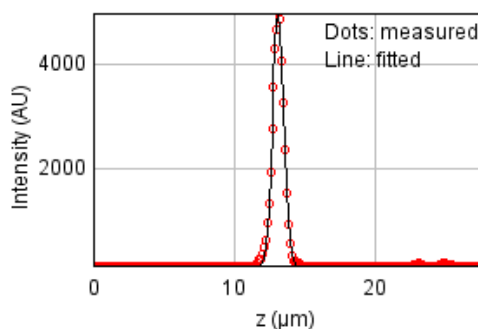
$b = -0.013$  px

$c = 0.470$  px

$x_c = 5.318$  px

$y_c = 5.210$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 361777.672

Standard deviation: 39.07030

$R^2: 0.99737$

Parameters:

$a = 121.88346$

$b = 4994.37166$

$c = 13.19646$

$d = 0.39893$

## Bead 174

Date : Thu Jul 14 17:33:37 PDT 2022

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

Frame size : 10 pixels

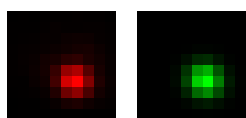
Coordinates : 19.2  $\mu\text{m}$  (x), -19.9  $\mu\text{m}$  (y), 13.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

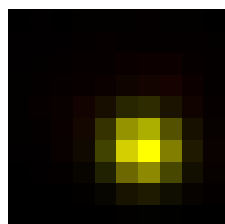
FWHM	Non corrected	Corrected	Theoretical
min	269 nm	274 nm	190 nm
max	288 nm	294 nm	190 nm
z	777 nm	779 nm	642 nm
Asymmetry	0.932		
Theta	-21.9°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.992$



Parameters:

$A = 13686.513$  (brightness)

$B = 366.507$  (background)

$a = 0.458$  px

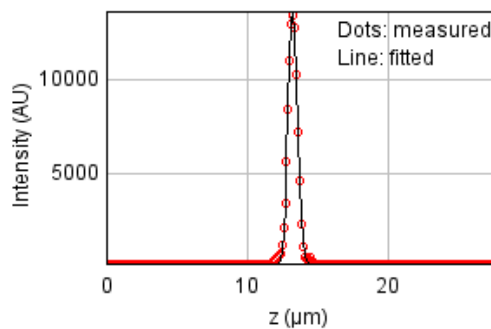
$b = -0.024$  px

$c = 0.508$  px

$x_c = 5.724$  px

$y_c = 5.869$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1540990.33

Standard deviation: 80.63541

$R^2: 0.99826$

Parameters:

$a = 125.95672$

$b = 13655.4499$

$c = 13.31571$

$d = 0.32994$

## Bead 175

Date : Thu Jul 14 17:33:37 PDT 2022

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

Frame size : 10 pixels

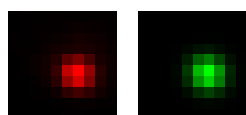
Coordinates : -3.49  $\mu\text{m}$  (x), 10.6  $\mu\text{m}$  (y), 13.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

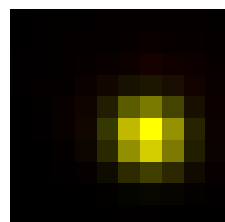
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	294 nm	300 nm	190 nm
z	864 nm	866 nm	642 nm
Asymmetry	0.941		
Theta	-22.3°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.992$



Parameters:

A = 9980.932 (brightness)

B = 280.114 (background)

a = 0.441 px

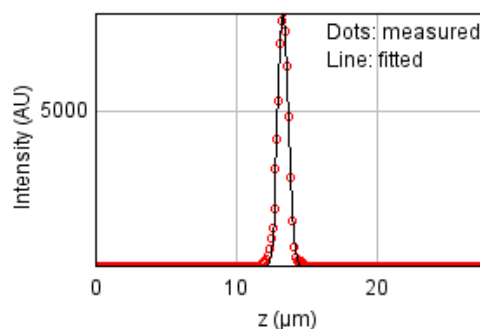
b = -0.019 px

c = 0.481 px

xc = 5.878 px

yc = 5.267 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1814713.52

Standard deviation: 87.50439

$R^2$ : 0.99467

Parameters:

a = 126.54916

b = 8090.24001

c = 13.40893

d = 0.36684

## Bead 176

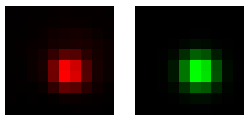
Date : Thu Jul 14 17:33:37 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -40.4  $\mu\text{m}$  (x), -5.4  $\mu\text{m}$  (y), 13.2  $\mu\text{m}$  (z)  
Corresponding bead : Not found

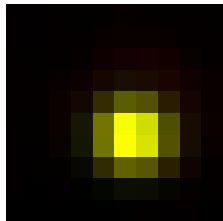
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	288 nm	294 nm	190 nm
z	835 nm	837 nm	642 nm
Asymmetry	0.957		
Theta	-10.6°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 5902.603 (brightness)

B = 212.367 (background)

a = 0.452 px

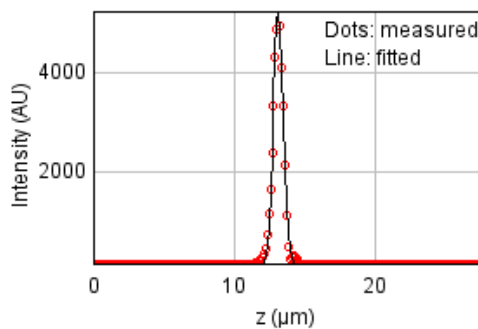
b = -0.007 px

c = 0.490 px

$x_c = 5.360$  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: 518471.477

Standard deviation: 46.77225

$R^2$ : 0.99624

Parameters:

a = 114.69291

b = 5264.84488

c = 13.20485

d = 0.35466

## Bead 177

Date : Thu Jul 14 17:33:37 PDT 2022

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

Frame size : 10 pixels

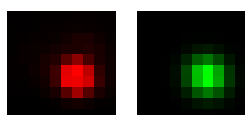
Coordinates : 27.4  $\mu\text{m}$  (x), -8.53  $\mu\text{m}$  (y), 13.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

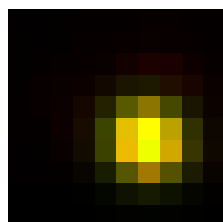
FWHM	Non corrected	Corrected	Theoretical
min	309 nm	315 nm	190 nm
max	323 nm	330 nm	190 nm
z	910 nm	912 nm	642 nm
Asymmetry	0.955		
Theta	-30.3°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.972$



Parameters:

A = 9062.384 (brightness)

B = 264.128 (background)

a = 0.366 px

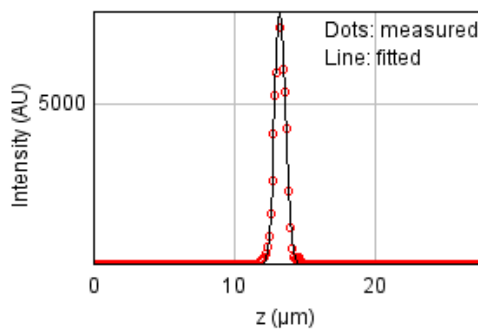
b = -0.015 px

c = 0.383 px

xc = 5.908 px

yc = 5.510 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2079884.42

Standard deviation: 93.67969

$R^2$ : 0.99377

Parameters:

a = 116.65502

b = 7805.64556

c = 13.33585

d = 0.38641

## Bead 178

Date : Thu Jul 14 17:33:37 PDT 2022

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

Frame size : 10 pixels

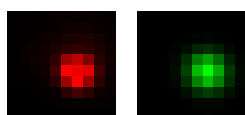
Coordinates : -8.82  $\mu\text{m}$  (x), -21.7  $\mu\text{m}$  (y), 13.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

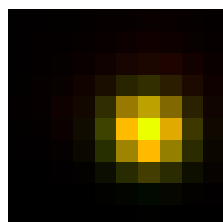
FWHM	Non corrected	Corrected	Theoretical
min	306 nm	313 nm	190 nm
max	325 nm	332 nm	190 nm
z	868 nm	870 nm	642 nm
Asymmetry	0.943		
Theta	-21.5°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 10049.929$  (brightness)

$B = 270.083$  (background)

$a = 0.360$  px

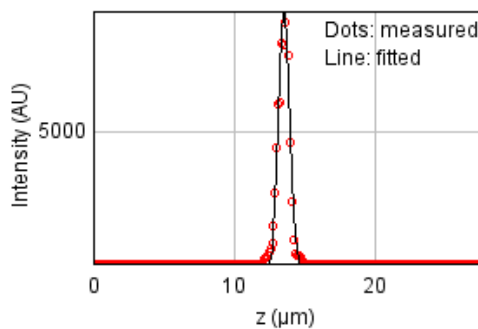
$b = -0.015$  px

$c = 0.392$  px

$x_c = 5.938$  px

$y_c = 5.088$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 13010158.4

Standard deviation: 234.29721

$R^2: 0.97310$

Parameters:

$a = 122.37743$

$b = 9485.28914$

$c = 13.61790$

$d = 0.36876$

## Bead 179

Date : Thu Jul 14 17:33:37 PDT 2022

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

Frame size : 10 pixels

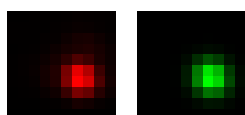
Coordinates : 28.2  $\mu\text{m}$  (x), 24.4  $\mu\text{m}$  (y), 13.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

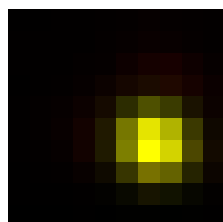
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	295 nm	301 nm	190 nm
z	792 nm	794 nm	642 nm
Asymmetry	0.942		
Theta	-34.9°		

### 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:

$A = 9317.033$  (brightness)

$B = 296.295$  (background)

$a = 0.447$  px

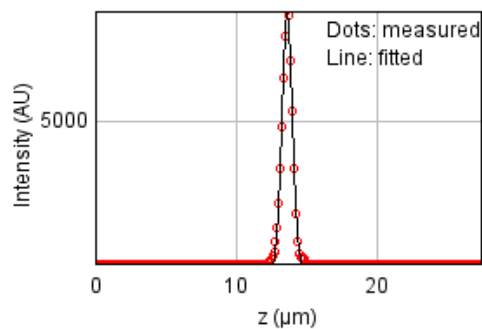
$b = -0.025$  px

$c = 0.466$  px

$x_c = 6.264$  px

$y_c = 5.640$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1187129.54

Standard deviation: 70.77419

$R^2: 0.99676$

Parameters:

$a = 123.47834$

$b = 8739.14014$

$c = 13.69698$

$d = 0.33631$

## Bead 180

Date : Thu Jul 14 17:33:37 PDT 2022

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

Frame size : 10 pixels

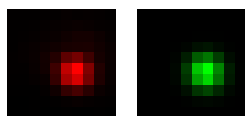
Coordinates : 11.3  $\mu\text{m}$  (x), 21.3  $\mu\text{m}$  (y), 13.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

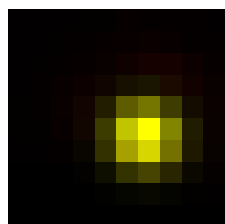
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	286 nm	293 nm	190 nm
z	734 nm	736 nm	642 nm
Asymmetry	0.97		
Theta	-19.9°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.991$



Parameters:

$A = 11110.234$  (brightness)

$B = 300.390$  (background)

$a = 0.458$  px

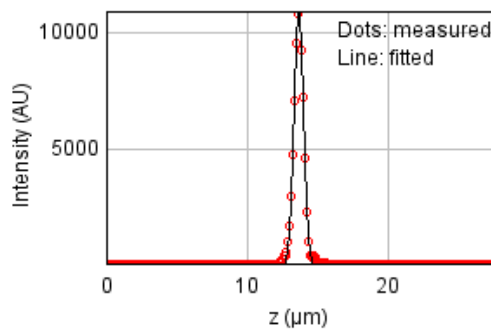
$b = -0.009$  px

$c = 0.479$  px

$x_c = 5.794$  px

$y_c = 5.307$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1638832.86

Standard deviation: 83.15592

$R^2: 0.99698$

Parameters:

$a = 128.65872$

$b = 10997.0846$

$c = 13.73855$

$d = 0.31175$



## Bead 181

Date : Thu Jul 14 17:33:37 PDT 2022

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

Frame size : 10 pixels

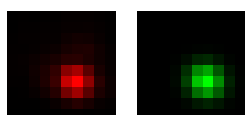
Coordinates : 42.5  $\mu\text{m}$  (x), 18.0  $\mu\text{m}$  (y), 13.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

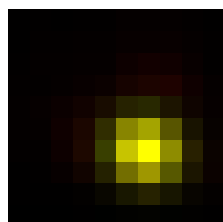
FWHM	Non corrected	Corrected	Theoretical
min	274 nm	280 nm	190 nm
max	298 nm	304 nm	190 nm
z	823 nm	825 nm	642 nm
Asymmetry	0.921		
Theta	-24.3°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 8743.888 (brightness)

B = 334.558 (background)

a = 0.434 px

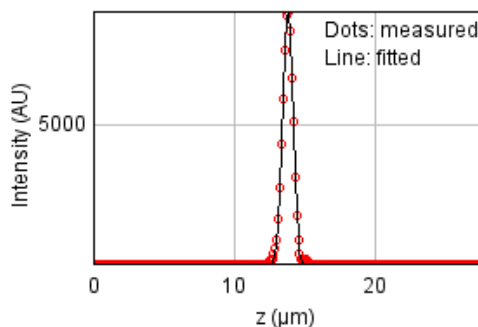
b = -0.028 px

c = 0.484 px

$x_c = 5.803$  px

$y_c = 5.946$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 509248.061

Standard deviation: 46.35435

$R^2$ : 0.99872

Parameters:

a = 122.38372

b = 8963.43622

c = 13.88250

d = 0.34938

## Bead 182

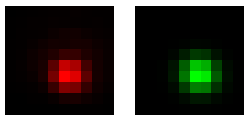
Date : Thu Jul 14 17:33:38 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -42.5  $\mu\text{m}$  (x), -24.7  $\mu\text{m}$  (y), 13.9  $\mu\text{m}$  (z)  
Corresponding bead : Not found

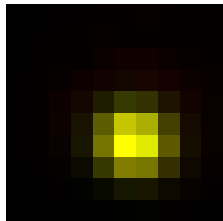
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	294 nm	300 nm	190 nm
z	879 nm	881 nm	642 nm
Asymmetry	0.936		
Theta	-16.0°		

### 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 = 9158.364 (brightness)

B = 286.234 (background)

a = 0.436 px

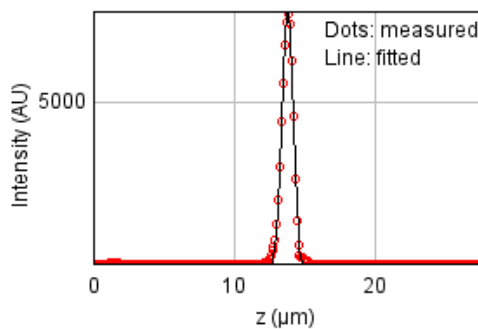
b = -0.016 px

c = 0.488 px

xc = 5.387 px

yc = 5.780 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1865609.50

Standard deviation: 88.72300

$R^2$ : 0.99421

Parameters:

a = 127.65644

b = 7810.77805

c = 13.86441

d = 0.37325

## Bead 183

Date : Thu Jul 14 17:33:38 PDT 2022

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

Frame size : 10 pixels

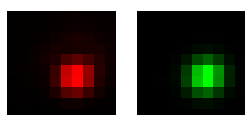
Coordinates : -54.8  $\mu\text{m}$  (x), -18.3  $\mu\text{m}$  (y), 13.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

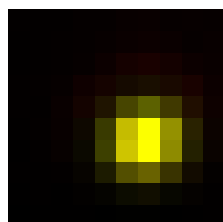
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	296 nm	302 nm	190 nm
z	815 nm	817 nm	642 nm
Asymmetry	0.934		
Theta	20.8°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 4551.497 (brightness)

B = 196.033 (background)

a = 0.435 px

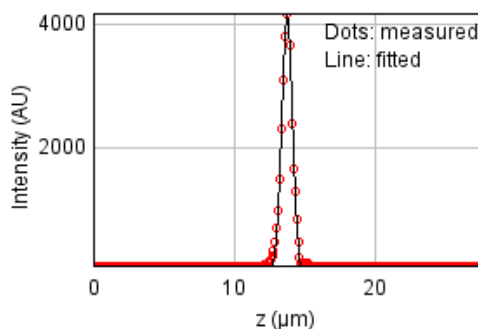
b = 0.021 px

c = 0.481 px

xc = 5.824 px

yc = 5.512 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 476655.887

Standard deviation: 44.84647

$R^2$ : 0.99429

Parameters:

a = 115.59459

b = 4167.31203

c = 13.82758

d = 0.34598

## Bead 184

Date : Thu Jul 14 17:33:38 PDT 2022

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

Frame size : 10 pixels

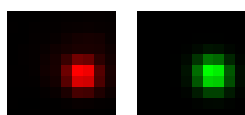
Coordinates : -4.13  $\mu\text{m}$  (x), 23.7  $\mu\text{m}$  (y), 14.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

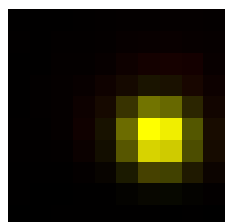
FWHM	Non corrected	Corrected	Theoretical
min	273 nm	278 nm	190 nm
max	285 nm	292 nm	190 nm
z	747 nm	749 nm	642 nm
Asymmetry	0.955		
Theta	-26.6°		

### 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:

$A = 10694.161$  (brightness)

$B = 296.816$  (background)

$a = 0.467$  px

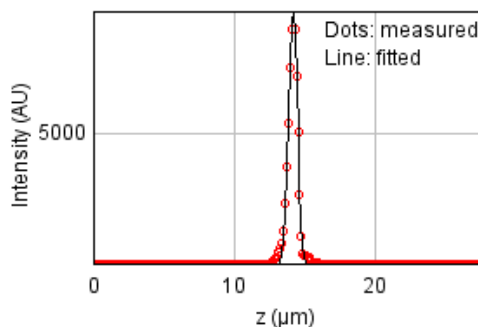
$b = -0.018$  px

$c = 0.493$  px

$x_c = 6.432$  px

$y_c = 5.319$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1973510.18

Standard deviation: 91.25266

$R^2: 0.99521$

Parameters:

$a = 132.11178$

$b = 9518.13339$

$c = 14.24643$

$d = 0.31737$

## Bead 185

Date : Thu Jul 14 17:33:38 PDT 2022

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

Frame size : 10 pixels

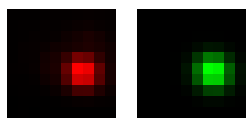
Coordinates : 18.3  $\mu\text{m}$  (x), 9.48  $\mu\text{m}$  (y), 14.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

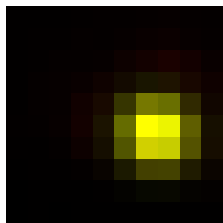
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	290 nm	296 nm	190 nm
z	717 nm	719 nm	642 nm
Asymmetry	0.952		
Theta	-24.7°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 11489.124 (brightness)

B = 320.928 (background)

a = 0.453 px

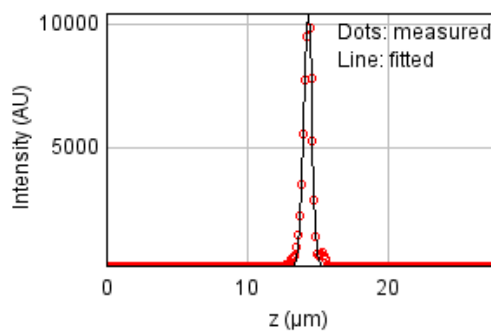
b = -0.017 px

c = 0.483 px

xc = 6.459 px

yc = 5.301 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2568753.21

Standard deviation: 104.10870

$R^2$ : 0.99464

Parameters:

a = 132.52300

b = 10461.6861

c = 14.37480

d = 0.30456

## Bead 186

Date : Thu Jul 14 17:33:38 PDT 2022

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

Frame size : 10 pixels

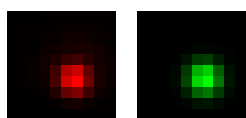
Coordinates : -21.0  $\mu\text{m}$  (x), -2.4  $\mu\text{m}$  (y), 14.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

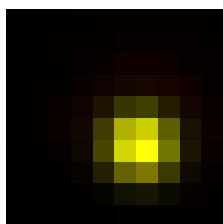
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	282 nm	288 nm	190 nm
z	807 nm	808 nm	642 nm
Asymmetry	0.977		
Theta	-36.0°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.991$



Parameters:

$A = 8967.379$  (brightness)

$B = 274.708$  (background)

$a = 0.477$  px

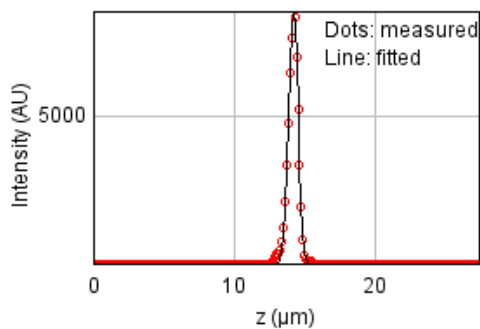
$b = -0.011$  px

$c = 0.484$  px

$x_c = 5.682$  px

$y_c = 5.713$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1098208.67

Standard deviation: 68.07196

$R^2: 0.99688$

Parameters:

$a = 121.35093$

$b = 8490.35190$

$c = 14.27565$

$d = 0.34256$

## Bead 187

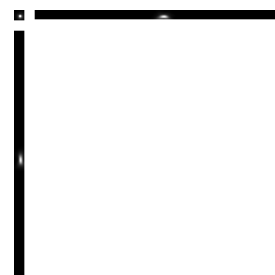
Date : Thu Jul 14 17:33:38 PDT 2022

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

Frame size : 10 pixels

Coordinates : -37.8  $\mu\text{m}$  (x), -20.2  $\mu\text{m}$  (y), 14.4  $\mu\text{m}$  (z)

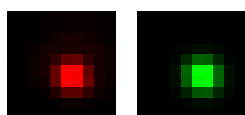
Corresponding bead : Not found



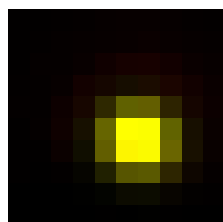
FWHM	Non corrected	Corrected	Theoretical
min	270 nm	276 nm	190 nm
max	284 nm	290 nm	190 nm
z	879 nm	880 nm	642 nm
Asymmetry	0.95		
Theta	-18.0°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 10201.505$  (brightness)

$B = 310.706$  (background)

$a = 0.467$  px

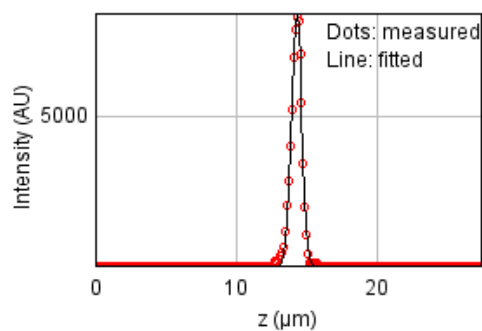
$b = -0.015$  px

$c = 0.508$  px

$x_c = 5.507$  px

$y_c = 5.470$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1615826.59

Standard deviation: 82.57017

$R^2: 0.99564$

Parameters:

$a = 120.80654$

$b = 8367.99758$

$c = 14.36788$

$d = 0.37308$

## Bead 188

Date : Thu Jul 14 17:33:38 PDT 2022

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

Frame size : 10 pixels

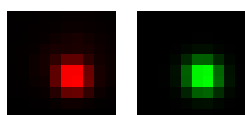
Coordinates : -29.9  $\mu\text{m}$  (x), 24.1  $\mu\text{m}$  (y), 14.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

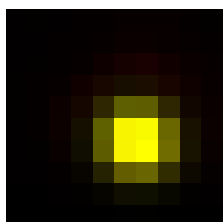
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	288 nm	294 nm	190 nm
z	867 nm	869 nm	642 nm
Asymmetry	0.964		
Theta	-27.2°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.991$



Parameters:

$A = 12809.603$  (brightness)

$B = 349.117$  (background)

$a = 0.456$  px

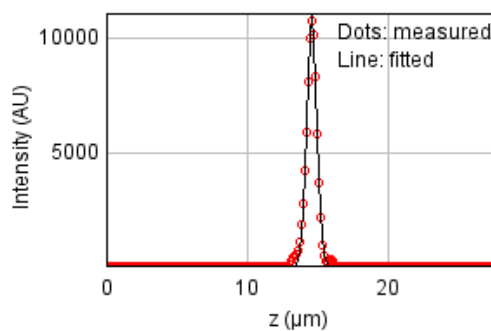
$b = -0.014$  px

$c = 0.476$  px

$x_c = 5.543$  px

$y_c = 5.510$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2247117.46

Standard deviation: 97.37304

$R^2: 0.99656$

Parameters:

$a = 133.43556$

$b = 11147.0396$

$c = 14.66657$

$d = 0.36826$



## Bead 189

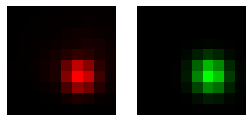
Date : Thu Jul 14 17:33:38 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -10.1  $\mu\text{m}$  (x), 15.7  $\mu\text{m}$  (y), 14.7  $\mu\text{m}$  (z)  
Corresponding bead : Not found

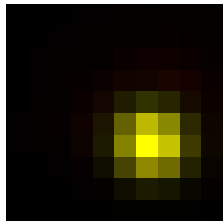
FWHM	Non corrected	Corrected	Theoretical
min	275 nm	281 nm	190 nm
max	286 nm	292 nm	190 nm
z	788 nm	789 nm	642 nm
Asymmetry	0.962		
Theta	-33.0°		

### XY profile & fitting parameters :

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



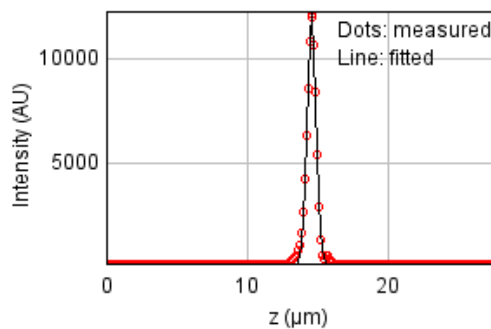
Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.990$



Parameters:  
 $A = 12319.093$  (brightness)  
 $B = 332.870$  (background)  
 $a = 0.468$  px  
 $b = -0.017$  px  
 $c = 0.483$  px

$x_c = 6.212$  px  
 $y_c = 5.848$  px

### Z profile & fitting parameters:



Fitted on  $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$   
Sum of residuals squared: 2825767.56  
Standard deviation: 109.19281  
 $R^2: 0.99611$   
Parameters:  
 $a = 129.52837$   
 $b = 12297.3237$   
 $c = 14.65242$   
 $d = 0.33448$

## Bead 190

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

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

Frame size : 10 pixels

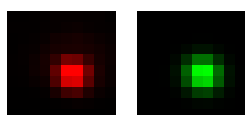
Coordinates : -25.7  $\mu\text{m}$  (x), -7.92  $\mu\text{m}$  (y), 14.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

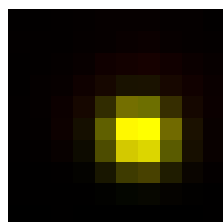
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	276 nm	190 nm
max	286 nm	293 nm	190 nm
z	907 nm	909 nm	642 nm
Asymmetry	0.944		
Theta	-15.4°		

### 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:

$A = 7771.375$  (brightness)

$B = 247.097$  (background)

$a = 0.458$  px

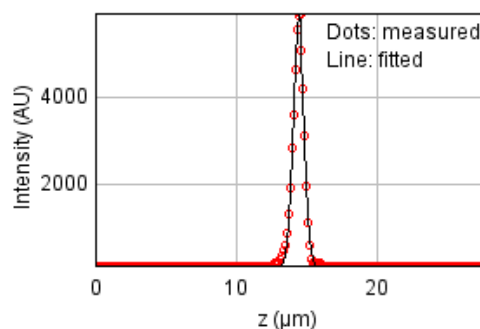
$b = -0.014$  px

$c = 0.506$  px

$x_c = 5.545$  px

$y_c = 5.310$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 587651.209

Standard deviation: 49.79499

$R^2: 0.99691$

Parameters:

$a = 116.92420$

$b = 5938.85131$

$c = 14.51455$

$d = 0.38526$

## Bead 191

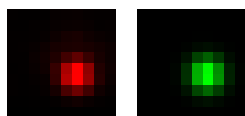
Date : Thu Jul 14 17:33:39 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -43.2  $\mu\text{m}$  (x), 19.0  $\mu\text{m}$  (y), 14.5  $\mu\text{m}$  (z)  
Corresponding bead : Not found

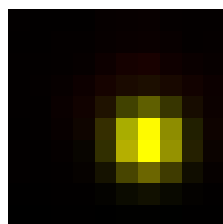
FWHM	Non corrected	Corrected	Theoretical
min	280 nm	286 nm	190 nm
max	283 nm	289 nm	190 nm
z	853 nm	854 nm	642 nm
Asymmetry	0.991		
Theta	-47.4°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 5476.047$  (brightness)

$B = 220.855$  (background)

$a = 0.472$  px

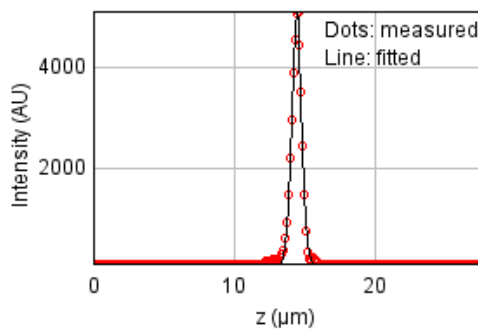
$b = -0.004$  px

$c = 0.471$  px

$x_c = 5.898$  px

$y_c = 5.523$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 496178.164

Standard deviation: 45.75564

$R^2: 0.99627$

Parameters:

$a = 119.70466$

$b = 5128.78746$

$c = 14.52026$

$d = 0.36207$

## Bead 192

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

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

Frame size : 10 pixels

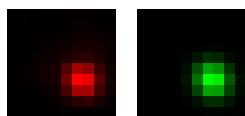
Coordinates : 1.56  $\mu\text{m}$  (x), 1.62  $\mu\text{m}$  (y), 14.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

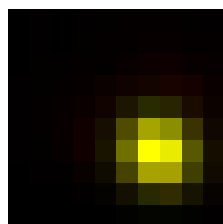
FWHM	Non corrected	Corrected	Theoretical
min	278 nm	284 nm	190 nm
max	298 nm	304 nm	190 nm
z	803 nm	804 nm	642 nm
Asymmetry	0.933		
Theta	-46.0°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.991$



Parameters:

A = 8495.819 (brightness)

B = 272.863 (background)

a = 0.452 px

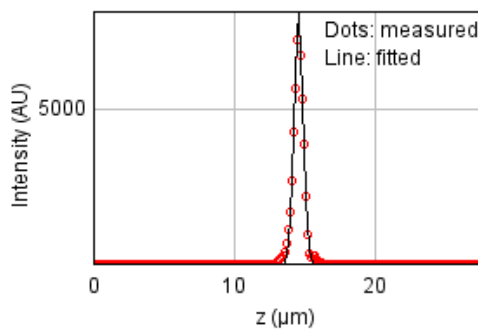
b = -0.031 px

c = 0.450 px

xc = 6.412 px

yc = 6.025 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1095617.77

Standard deviation: 67.99162

$R^2$ : 0.99654

Parameters:

a = 121.93538

b = 8081.42209

c = 14.65169

d = 0.34080

## Bead 193

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

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

Frame size : 10 pixels

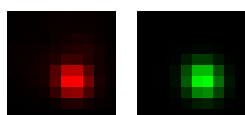
Coordinates : 36.4  $\mu\text{m}$  (x), -14.1  $\mu\text{m}$  (y), 14.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

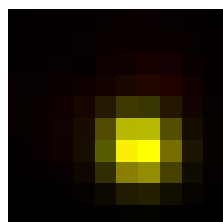
FWHM	Non corrected	Corrected	Theoretical
min	280 nm	286 nm	190 nm
max	297 nm	303 nm	190 nm
z	877 nm	879 nm	642 nm
Asymmetry	0.945		
Theta	-43.2°		

### 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 = 7066.350 (brightness)

B = 294.968 (background)

a = 0.448 px

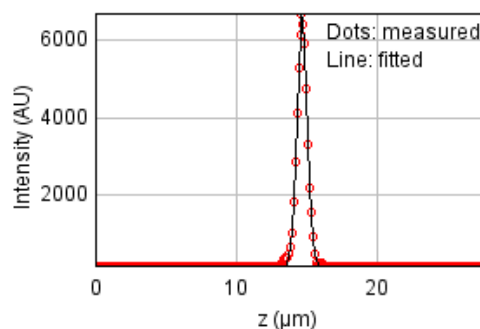
b = -0.025 px

c = 0.451 px

xc = 5.561 px

yc = 5.825 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 283507.704

Standard deviation: 34.58663

$R^2$ : 0.99880

Parameters:

a = 118.15135

b = 6722.29227

c = 14.76065

d = 0.37259

## Bead 194

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

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

Frame size : 10 pixels

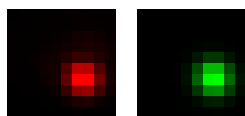
Coordinates : -171 nm (x), 25.4 um (y), 15.0 um (z)

Corresponding bead : Not found

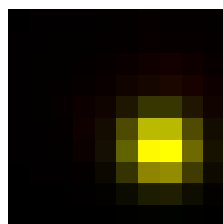
FWHM	Non corrected	Corrected	Theoretical
min	281 nm	287 nm	190 nm
max	289 nm	295 nm	190 nm
z	807 nm	809 nm	642 nm
Asymmetry	0.973		
Theta	-35.6°		

### 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 = 12404.411 (brightness)

B = 339.760 (background)

a = 0.454 px

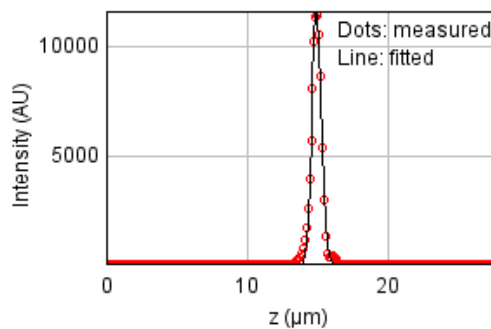
b = -0.012 px

c = 0.462 px

xc = 6.525 px

yc = 5.836 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 4041355.79

Standard deviation: 130.58382

$R^2$ : 0.99395

Parameters:

a = 132.62473

b = 11653.4027

c = 15.01154

d = 0.34268

## Bead 195

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

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

Frame size : 10 pixels

Coordinates : 43.4  $\mu\text{m}$  (x), -1.21  $\mu\text{m}$  (y), 14.9  $\mu\text{m}$  (z)

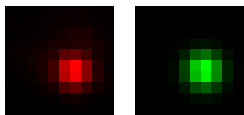
Corresponding bead : Not found



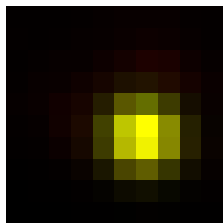
FWHM	Non corrected	Corrected	Theoretical
min	286 nm	293 nm	190 nm
max	296 nm	302 nm	190 nm
z	914 nm	916 nm	642 nm
Asymmetry	0.969		
Theta	-24.8°		

### 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:

$A = 7180.174$  (brightness)

$B = 295.032$  (background)

$a = 0.432$  px

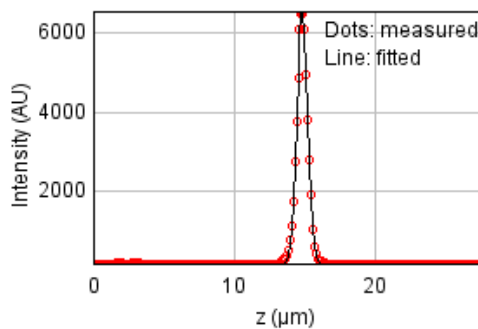
$b = -0.011$  px

$c = 0.450$  px

$x_c = 5.806$  px

$y_c = 5.434$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 289296.888

Standard deviation: 34.93797

$R^2: 0.99878$

Parameters:

$a = 122.58700$

$b = 6617.15668$

$c = 14.90804$

$d = 0.38799$

## Bead 196

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

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

Frame size : 10 pixels

Coordinates : 41.2  $\mu\text{m}$  (x), 23.9  $\mu\text{m}$  (y), 15.1  $\mu\text{m}$  (z)

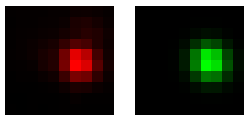
Corresponding bead : Not found



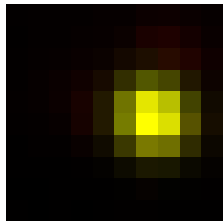
FWHM	Non corrected	Corrected	Theoretical
min	287 nm	293 nm	190 nm
max	303 nm	309 nm	190 nm
z	858 nm	860 nm	642 nm
Asymmetry	0.947		
Theta	-47.3°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 8237.653 (brightness)

B = 321.222 (background)

a = 0.433 px

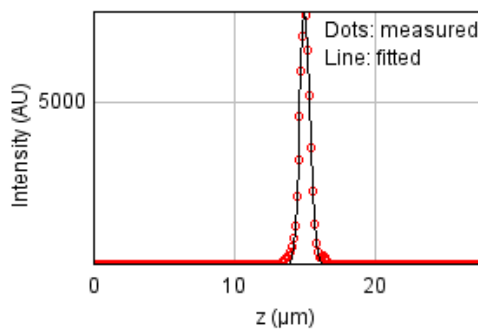
b = -0.023 px

c = 0.429 px

xc = 6.323 px

yc = 4.644 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 844083.873

Standard deviation: 59.67860

$R^2$ : 0.99729

Parameters:

a = 121.89640

b = 7763.55596

c = 15.10038

d = 0.36457



## Bead 197

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

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

Frame size : 10 pixels

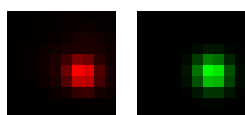
Coordinates : 278 nm (x), 19.0 um (y), 15.1 um (z)

Corresponding bead : Not found

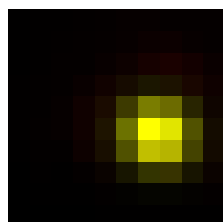
FWHM	Non corrected	Corrected	Theoretical
min	269 nm	275 nm	190 nm
max	288 nm	294 nm	190 nm
z	743 nm	744 nm	642 nm
Asymmetry	0.934		
Theta	-24.3°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 11618.004 (brightness)

B = 340.698 (background)

a = 0.461 px

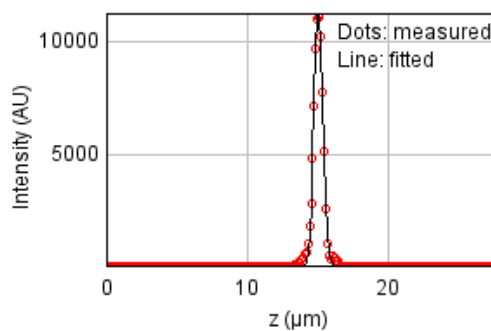
b = -0.025 px

c = 0.505 px

xc = 6.393 px

yc = 5.228 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2287767.49

Standard deviation: 98.24982

$R^2$ : 0.99609

Parameters:

a = 133.74874

b = 11362.9994

c = 15.14281

d = 0.31532

## Bead 198

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

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

Frame size : 10 pixels

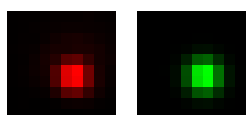
Coordinates : -43.3  $\mu\text{m}$  (x), -10.7  $\mu\text{m}$  (y), 15.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

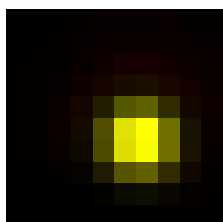
FWHM	Non corrected	Corrected	Theoretical
min	277 nm	283 nm	190 nm
max	281 nm	287 nm	190 nm
z	891 nm	893 nm	642 nm
Asymmetry	0.987		
Theta	-21.3°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 8080.790 (brightness)

B = 266.910 (background)

a = 0.474 px

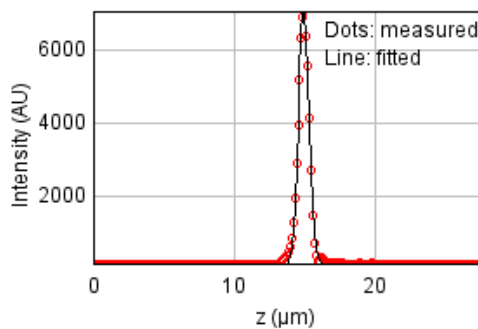
b = -0.004 px

c = 0.484 px

$x_c = 5.637$  px

$y_c = 5.486$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 994364.280

Standard deviation: 64.77368

$R^2 = 0.99632$

Parameters:

a = 126.95521

b = 7120.72451

c = 15.01863

d = 0.37832

## Bead 199

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

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

Frame size : 10 pixels

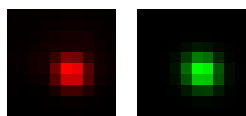
Coordinates : -4.7  $\mu\text{m}$  (x), -23.9  $\mu\text{m}$  (y), 15.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

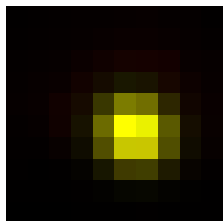
FWHM	Non corrected	Corrected	Theoretical
min	271 nm	277 nm	190 nm
max	289 nm	295 nm	190 nm
z	950 nm	952 nm	642 nm
Asymmetry	0.938		
Theta	-35.5°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.991$



Parameters:

A = 11293.100 (brightness)

B = 336.926 (background)

a = 0.467 px

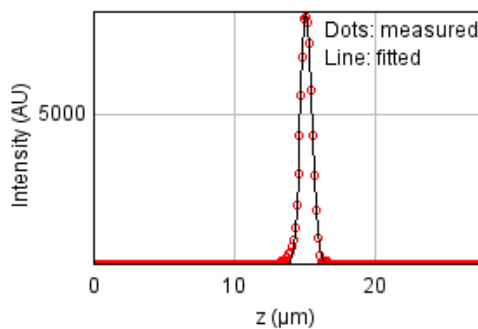
b = -0.029 px

c = 0.487 px

xc = 5.450 px

yc = 5.268 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 847390.063

Standard deviation: 59.79536

$R^2$ : 0.99786

Parameters:

a = 121.95894

b = 8337.54037

c = 15.19535

d = 0.40329

## Bead 200

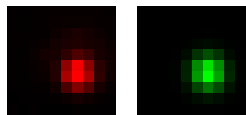
Date : Thu Jul 14 17:33:40 PDT 2022  
Origin : data\_traditional.tif ( 100x1.35 Sil )  
Frame size : 10 pixels

Coordinates : -43.1  $\mu\text{m}$  (x), 10.9  $\mu\text{m}$  (y), 15.0  $\mu\text{m}$  (z)  
Corresponding bead : Not found

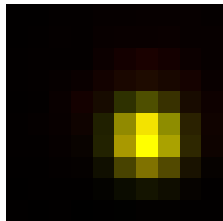
FWHM	Non corrected	Corrected	Theoretical
min	276 nm	282 nm	190 nm
max	284 nm	290 nm	190 nm
z	851 nm	853 nm	642 nm
Asymmetry	0.971		
Theta	-72.1°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 4289.793 (brightness)

B = 189.312 (background)

a = 0.487 px

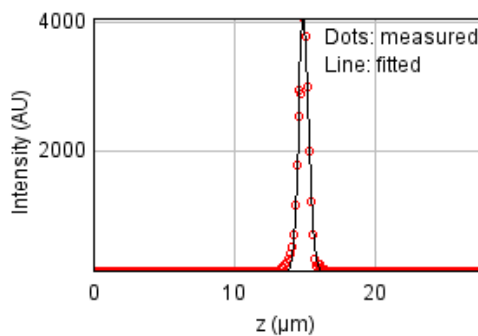
b = -0.008 px

c = 0.465 px

xc = 6.023 px

yc = 5.630 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1377614.98

Standard deviation: 76.24121

$R^2$ : 0.98365

Parameters:

a = 114.41012

b = 4082.72507

c = 15.00774

d = 0.36128