

## Bead 2601

Date : Mon Oct 17 13:30:02 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

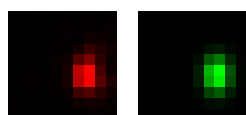
Coordinates : 20.2  $\mu\text{m}$  (x), -13.1  $\mu\text{m}$  (y), 57.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

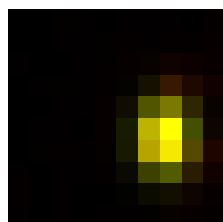
FWHM	Non corrected	Corrected	Theoretical
min	421 nm	435 nm	223 nm
max	565 nm	584 nm	223 nm
z	1.11 $\mu\text{m}$	1.11 $\mu\text{m}$	885 nm
Asymmetry	0.745		
Theta	89.8°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1646.565 (brightness)

B = 126.849 (background)

a = 0.758 px

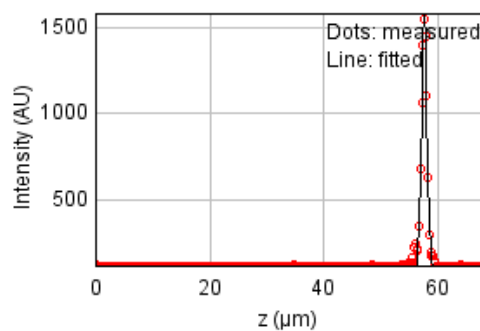
b = 0.001 px

c = 0.421 px

xc = 6.731 px

yc = 5.389 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 71759.5125

Standard deviation: 15.28870

$R^2$ : 0.99104

Parameters:

a = 114.92017

b = 1579.02776

c = 57.64000

d = 0.47121

## Bead 2602

Date : Mon Oct 17 13:30:02 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

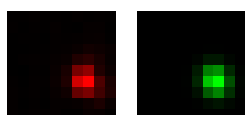
Coordinates : 74.1  $\mu\text{m}$  (x), -49.3  $\mu\text{m}$  (y), 57.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

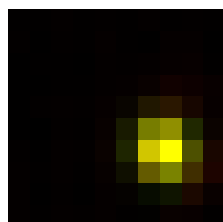
FWHM	Non corrected	Corrected	Theoretical
min	426 nm	440 nm	223 nm
max	475 nm	491 nm	223 nm
z	1.17 $\mu\text{m}$	1.18 $\mu\text{m}$	885 nm
Asymmetry	0.896		
Theta	-63.2°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1498.866$  (brightness)

$B = 123.373$  (background)

$a = 0.711$  px

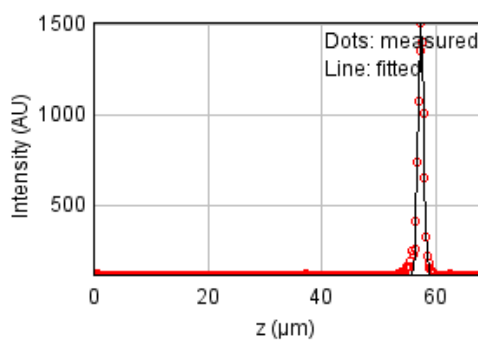
$b = -0.059$  px

$c = 0.624$  px

$x_c = 6.674$  px

$y_c = 5.935$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 63464.3339

Standard deviation: 14.37791

$R^2: 0.99171$

Parameters:

$a = 114.72124$

$b = 1508.56065$

$c = 57.39937$

$d = 0.49788$

## Bead 2603 (Rejected)

Date : Mon Oct 17 13:30:02 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

Coordinates : -146  $\mu\text{m}$  (x), -67.4  $\mu\text{m}$  (y), 56.8  $\mu\text{m}$  (z)

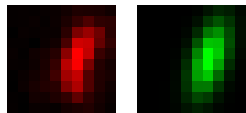
Corresponding bead : Not found

Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

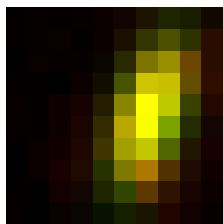
FWHM	Non corrected	Corrected	Theoretical
min	531 nm	549 nm	223 nm
max	1.19 $\mu\text{m}$	1.23 $\mu\text{m}$	223 nm
z	1.13 $\mu\text{m}$	1.13 $\mu\text{m}$	885 nm
Asymmetry	0.446		
Theta	73.0°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 530.082 (brightness)

B = 125.554 (background)

a = 0.444 px

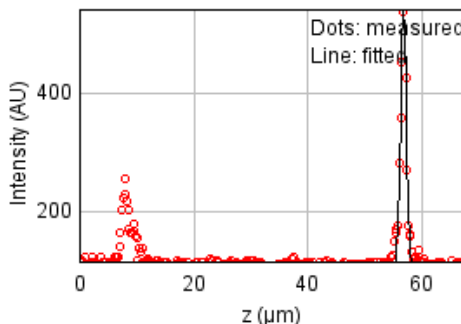
b = 0.107 px

c = 0.128 px

xc = 6.133 px

yc = 4.408 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 125503.823

Standard deviation: 20.21898

$R^2$ : 0.84472

Parameters:

a = 115.72847

b = 541.92176

c = 56.80141

d = 0.47851

## Bead 2604

Date : Mon Oct 17 13:30:02 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

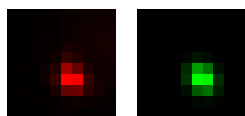
Coordinates : 110  $\mu\text{m}$  (x), -80.5  $\mu\text{m}$  (y), 57.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

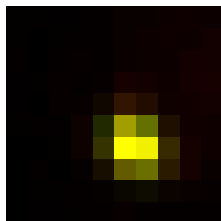
FWHM	Non corrected	Corrected	Theoretical
min	378 nm	391 nm	223 nm
max	451 nm	466 nm	223 nm
z	1.49 $\mu\text{m}$	1.49 $\mu\text{m}$	885 nm
Asymmetry	0.838		
Theta	-53.2°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1637.693 (brightness)

B = 143.479 (background)

a = 0.839 px

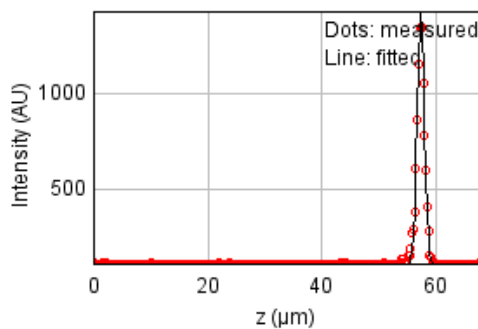
b = -0.134 px

c = 0.760 px

$x_c = 5.446$  px

$y_c = 5.897$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 49824.2878

Standard deviation: 12.73947

$R^2$ : 0.99419

Parameters:

a = 112.53373

b = 1429.48706

c = 57.39786

d = 0.63129

## Bead 2605

Date : Mon Oct 17 13:30:02 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

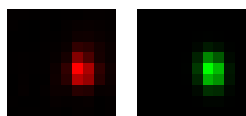
Coordinates : -126  $\mu\text{m}$  (x), -80.1  $\mu\text{m}$  (y), 57.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

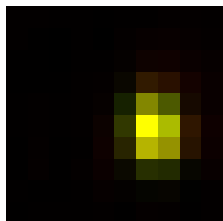
FWHM	Non corrected	Corrected	Theoretical
min	382 nm	395 nm	223 nm
max	523 nm	541 nm	223 nm
z	1.23 $\mu\text{m}$	1.24 $\mu\text{m}$	885 nm
Asymmetry	0.73		
Theta	-83.0°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1378.341$  (brightness)

$B = 126.402$  (background)

$a = 0.914$  px

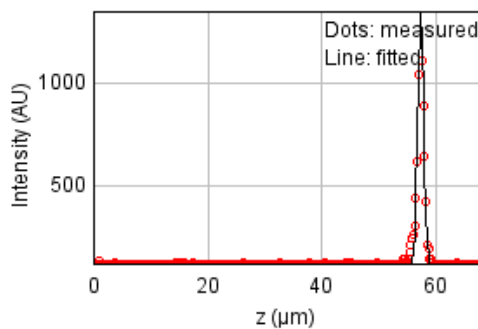
$b = -0.052$  px

$c = 0.497$  px

$x_c = 6.339$  px

$y_c = 5.182$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 87115.7257

Standard deviation: 16.84531

$R^2: 0.98650$

Parameters:

$a = 113.16239$

$b = 1358.29585$

$c = 57.37584$

$d = 0.52387$

## Bead 2606

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

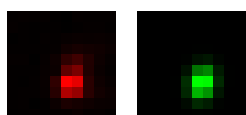
Coordinates : 15.1  $\mu\text{m}$  (x), -83.2  $\mu\text{m}$  (y), 57.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

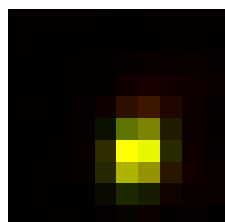
FWHM	Non corrected	Corrected	Theoretical
min	385 nm	398 nm	223 nm
max	493 nm	510 nm	223 nm
z	1.52 $\mu\text{m}$	1.53 $\mu\text{m}$	885 nm
Asymmetry	0.781		
Theta	75.5°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1492.487$  (brightness)

$B = 128.794$  (background)

$a = 0.882$  px

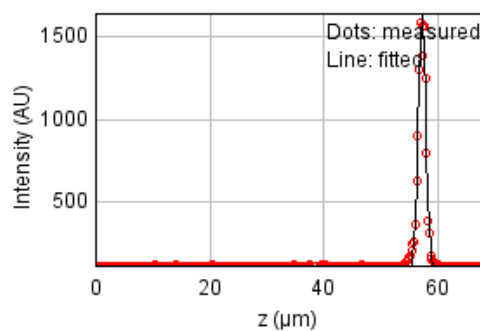
$b = 0.085$  px

$c = 0.574$  px

$x_c = 5.469$  px

$y_c = 6.126$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 171642.415

Standard deviation: 23.64521

$R^2: 0.98574$

Parameters:

$a = 114.90979$

$b = 1650.30276$

$c = 57.27271$

$d = 0.64673$

## Bead 2607

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

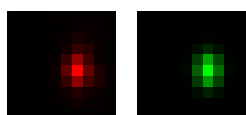
Coordinates : -5.05  $\mu\text{m}$  (x), -93.9  $\mu\text{m}$  (y), 57.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

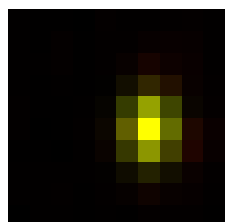
FWHM	Non corrected	Corrected	Theoretical
min	380 nm	393 nm	223 nm
max	522 nm	540 nm	223 nm
z	1.18 $\mu\text{m}$	1.18 $\mu\text{m}$	885 nm
Asymmetry	0.729		
Theta	89.8°		

### 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 = 1756.317 (brightness)

B = 132.684 (background)

a = 0.927 px

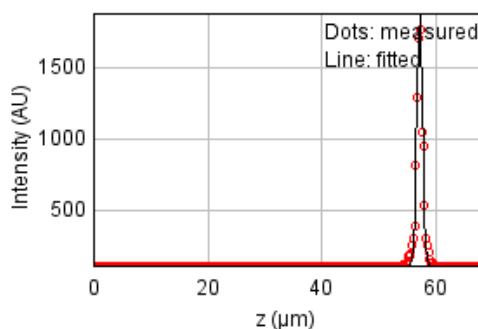
b = 0.002 px

c = 0.493 px

xc = 6.034 px

yc = 4.961 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 162563.362

Standard deviation: 23.01135

$R^2$ : 0.98686

Parameters:

a = 115.18359

b = 1877.87616

c = 57.20129

d = 0.50068

## Bead 2608

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

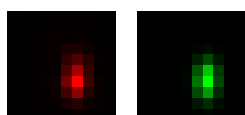
Coordinates : -124  $\mu\text{m}$  (x), 88.3  $\mu\text{m}$  (y), 57.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

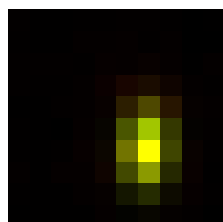
FWHM	Non corrected	Corrected	Theoretical
min	357 nm	370 nm	223 nm
max	595 nm	615 nm	223 nm
z	1.15 $\mu\text{m}$	1.16 $\mu\text{m}$	885 nm
Asymmetry	0.601		
Theta	88.1°		

### 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 = 1488.110 (brightness)

B = 129.733 (background)

a = 1.050 px

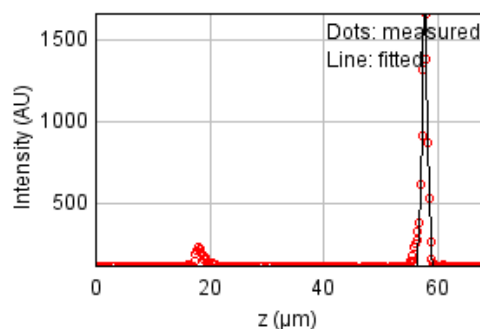
b = 0.022 px

c = 0.380 px

$x_c = 5.879$  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: 195119.254

Standard deviation: 25.21047

$R^2$ : 0.97974

Parameters:

a = 118.03934

b = 1683.99145

c = 57.73499

d = 0.49007



## Bead 2609

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

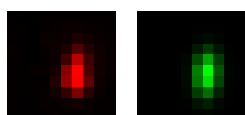
Coordinates : -117  $\mu\text{m}$  (x), 75.0  $\mu\text{m}$  (y), 57.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

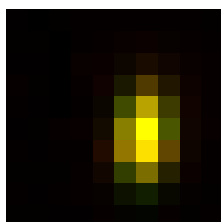
FWHM	Non corrected	Corrected	Theoretical
min	385 nm	398 nm	223 nm
max	680 nm	703 nm	223 nm
z	1.22 $\mu\text{m}$	1.23 $\mu\text{m}$	885 nm
Asymmetry	0.567		
Theta	86.7°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1025.808 (brightness)

B = 123.137 (background)

a = 0.902 px

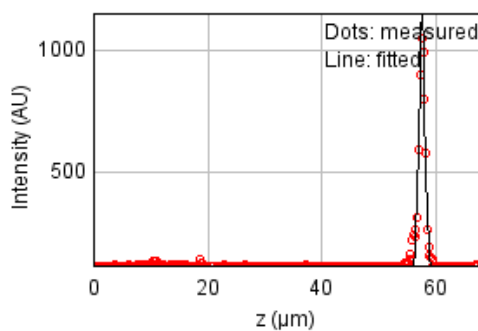
b = 0.036 px

c = 0.292 px

$x_c = 5.882$  px

$y_c = 5.288$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 100623.360

Standard deviation: 18.10424

$R^2$ : 0.97748

Parameters:

a = 115.88751

b = 1152.53405

c = 57.59261

d = 0.51846

## Bead 2610 (Rejected)

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

Coordinates : -154  $\mu\text{m}$  (x), 65.3  $\mu\text{m}$  (y), 57.1  $\mu\text{m}$  (z)

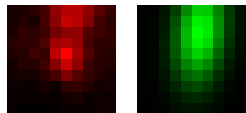
Corresponding bead : Not found

Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

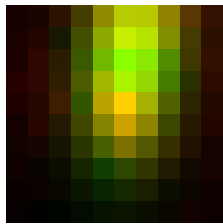
FWHM	Non corrected	Corrected	Theoretical
min	802 nm	829 nm	223 nm
max	1.63 $\mu\text{m}$	1.69 $\mu\text{m}$	223 nm
z	3.3 $\mu\text{m}$	3.31 $\mu\text{m}$	885 nm
Asymmetry	0.492		
Theta	83.3°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.887$



Parameters:

A = 311.224 (brightness)

B = 126.207 (background)

a = 0.207 px

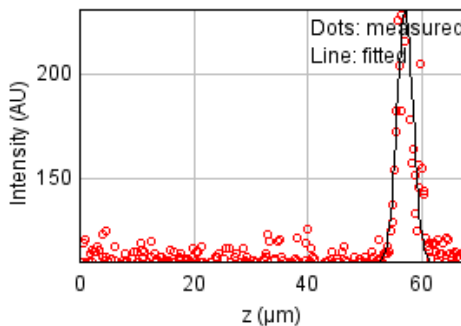
b = 0.018 px

c = 0.053 px

xc = 5.276 px

yc = 1.959 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 26552.3416

Standard deviation: 9.29998

$R^2$ : 0.84968

Parameters:

a = 110.76497

b = 230.58548

c = 57.10343

d = 1.40007

## Bead 2611

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

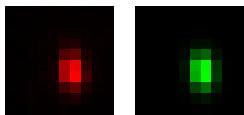
Coordinates : -80.1  $\mu\text{m}$  (x), 24.3  $\mu\text{m}$  (y), 57.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

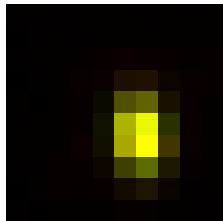
FWHM	Non corrected	Corrected	Theoretical
min	369 nm	381 nm	223 nm
max	551 nm	569 nm	223 nm
z	1.08 $\mu\text{m}$	1.09 $\mu\text{m}$	885 nm
Asymmetry	0.669		
Theta	-84.7°		

### 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 = 1327.888 (brightness)

B = 123.024 (background)

a = 0.983 px

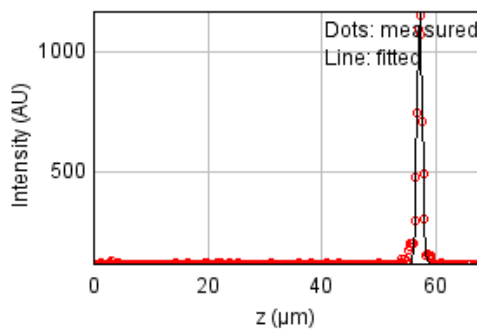
b = -0.051 px

c = 0.447 px

$x_c = 5.686$  px

$y_c = 5.501$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 50512.7695

Standard deviation: 12.82719

$R^2$ : 0.98747

Parameters:

a = 115.42010

b = 1163.95978

c = 57.19306

d = 0.46034

## Bead 2612

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

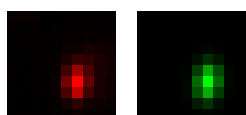
Coordinates : 147 um (x), 23.8 um (y), 57.7 um (z)

Corresponding bead : Not found

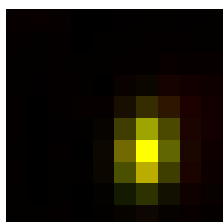
FWHM	Non corrected	Corrected	Theoretical
min	385 nm	398 nm	223 nm
max	569 nm	588 nm	223 nm
z	1.29 um	1.3 um	885 nm
Asymmetry	0.676		
Theta	83.8°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1108.308 (brightness)

B = 122.284 (background)

a = 0.902 px

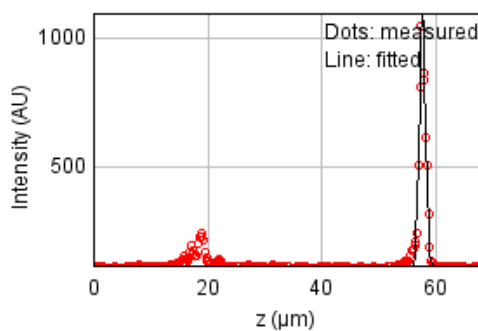
b = 0.053 px

c = 0.420 px

xc = 5.991 px

yc = 6.032 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 232335.264

Standard deviation: 27.50986

$R^2$ : 0.94625

Parameters:

a = 118.19839

b = 1093.20968

c = 57.67880

d = 0.54981

## Bead 2613

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

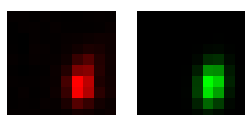
Coordinates : 42.5  $\mu\text{m}$  (x), -5.77  $\mu\text{m}$  (y), 57.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

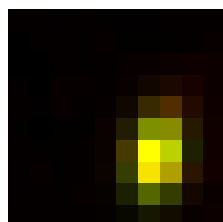
FWHM	Non corrected	Corrected	Theoretical
min	398 nm	412 nm	223 nm
max	636 nm	658 nm	223 nm
z	1.35 $\mu\text{m}$	1.36 $\mu\text{m}$	885 nm
Asymmetry	0.626		
Theta	80.9°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.973$



Parameters:

A = 1001.271 (brightness)

B = 121.574 (background)

a = 0.834 px

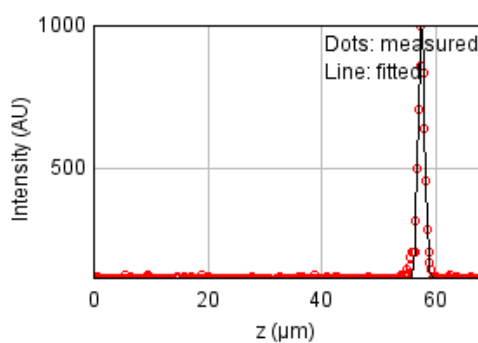
b = 0.080 px

c = 0.344 px

xc = 6.359 px

yc = 6.246 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 32400.3879

Standard deviation: 10.27320

$R^2$ : 0.99111

Parameters:

a = 114.23278

b = 1011.16831

c = 57.50529

d = 0.57472

## Bead 2614

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

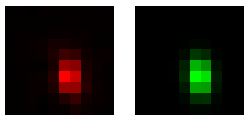
Coordinates : -75.8  $\mu\text{m}$  (x), -22.2  $\mu\text{m}$  (y), 57.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

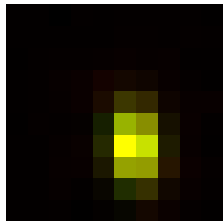
FWHM	Non corrected	Corrected	Theoretical
min	368 nm	380 nm	223 nm
max	575 nm	595 nm	223 nm
z	1.13 $\mu\text{m}$	1.14 $\mu\text{m}$	885 nm
Asymmetry	0.64		
Theta	-85.2°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1978.406 (brightness)

B = 131.371 (background)

a = 0.986 px

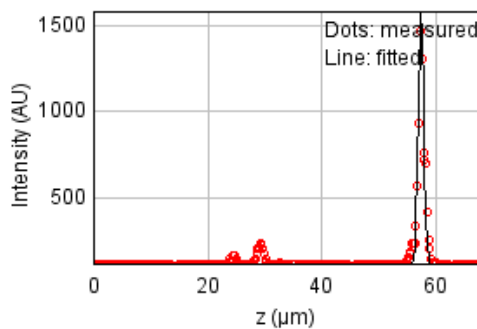
b = -0.049 px

c = 0.409 px

xc = 5.434 px

yc = 5.991 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 557052.343

Standard deviation: 42.59698

$R^2$ : 0.93486

Parameters:

a = 120.59630

b = 1576.05192

c = 57.43151

d = 0.48051

## Bead 2615

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

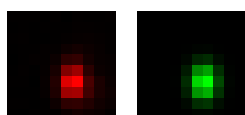
Coordinates : 47.9  $\mu\text{m}$  (x), -52.8  $\mu\text{m}$  (y), 58.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

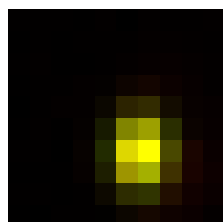
FWHM	Non corrected	Corrected	Theoretical
min	432 nm	447 nm	223 nm
max	563 nm	582 nm	223 nm
z	951 nm	955 nm	885 nm
Asymmetry	0.768		
Theta	89.0°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 2170.894$  (brightness)

$B = 134.680$  (background)

$a = 0.718$  px

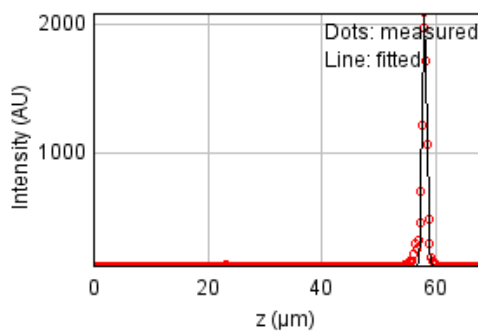
$b = 0.005$  px

$c = 0.423$  px

$x_c = 5.620$  px

$y_c = 6.060$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 182484.822

Standard deviation: 24.38059

$R^2: 0.98559$

Parameters:

$a = 116.92152$

$b = 2096.59175$

$c = 58.03606$

$d = 0.40385$

## Bead 2616

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

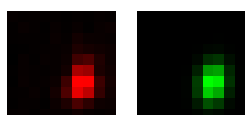
Coordinates : -136  $\mu\text{m}$  (x), -63.4  $\mu\text{m}$  (y), 57.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

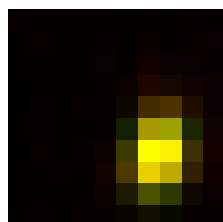
FWHM	Non corrected	Corrected	Theoretical
min	418 nm	432 nm	223 nm
max	613 nm	634 nm	223 nm
z	1.47 $\mu\text{m}$	1.47 $\mu\text{m}$	885 nm
Asymmetry	0.683		
Theta	80.6°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 999.255 (brightness)

B = 120.699 (background)

a = 0.756 px

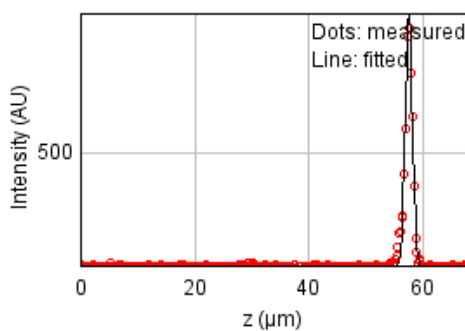
b = 0.066 px

c = 0.368 px

xc = 6.443 px

yc = 6.133 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 86616.3220

Standard deviation: 16.79696

$R^2$ : 0.97706

Parameters:

a = 112.36727

b = 984.35393

c = 57.57265

d = 0.62242



## Bead 2617

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

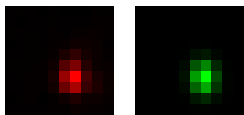
Coordinates : 77.8  $\mu\text{m}$  (x), -65.6  $\mu\text{m}$  (y), 57.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

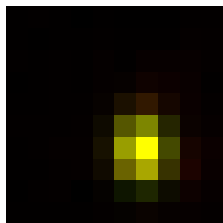
FWHM	Non corrected	Corrected	Theoretical
min	392 nm	406 nm	223 nm
max	502 nm	519 nm	223 nm
z	1.13 $\mu\text{m}$	1.14 $\mu\text{m}$	885 nm
Asymmetry	0.782		
Theta	-86.4°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1880.235 (brightness)

B = 130.102 (background)

a = 0.870 px

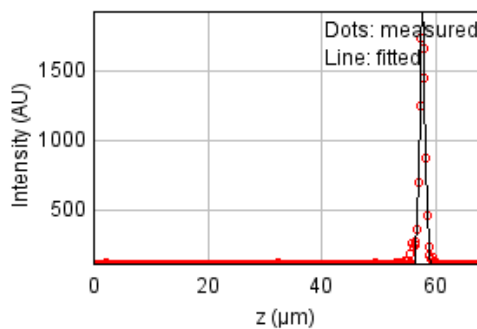
b = -0.021 px

c = 0.535 px

xc = 5.780 px

yc = 6.095 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 114581.679

Standard deviation: 19.31917

$R^2$ : 0.99084

Parameters:

a = 115.40293

b = 1928.44570

c = 57.66778

d = 0.48021

## Bead 2618

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

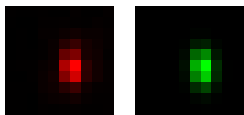
Coordinates : -119  $\mu\text{m}$  (x), -67.8  $\mu\text{m}$  (y), 57.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

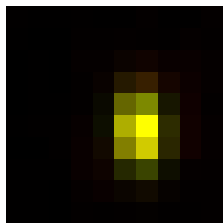
FWHM	Non corrected	Corrected	Theoretical
min	353 nm	365 nm	223 nm
max	562 nm	581 nm	223 nm
z	1.19 $\mu\text{m}$	1.19 $\mu\text{m}$	885 nm
Asymmetry	0.628		
Theta	-86.4°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1830.468 (brightness)

B = 130.315 (background)

a = 1.073 px

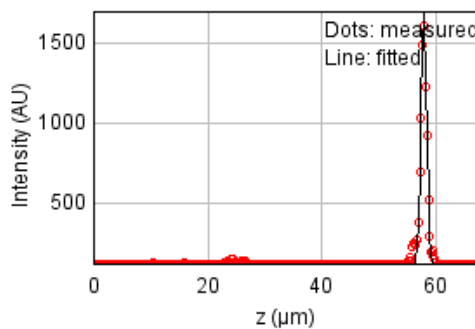
b = -0.041 px

c = 0.427 px

xc = 5.686 px

yc = 5.197 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 108179.189

Standard deviation: 18.77166

$R^2$ : 0.98922

Parameters:

a = 115.89709

b = 1699.64368

c = 57.91452

d = 0.50456

## Bead 2619

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

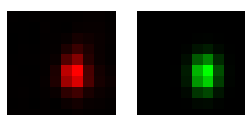
Coordinates : -18.1  $\mu\text{m}$  (x), -85.2  $\mu\text{m}$  (y), 57.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

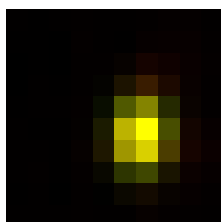
FWHM	Non corrected	Corrected	Theoretical
min	416 nm	430 nm	223 nm
max	555 nm	574 nm	223 nm
z	1.1 $\mu\text{m}$	1.1 $\mu\text{m}$	885 nm
Asymmetry	0.749		
Theta	87.4°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 2001.128 (brightness)

B = 130.725 (background)

a = 0.775 px

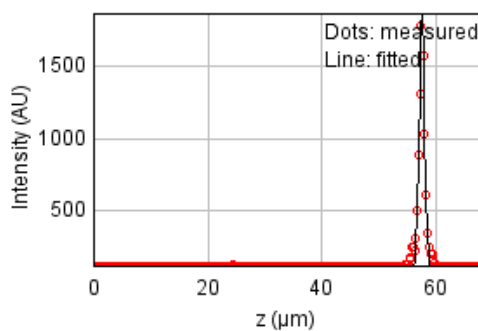
b = 0.015 px

c = 0.436 px

$x_c = 5.725$  px

$y_c = 5.272$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 117140.389

Standard deviation: 19.53368

$R^2$ : 0.98978

Parameters:

a = 116.08017

b = 1877.27349

c = 57.57568

d = 0.46517

## Bead 2620

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

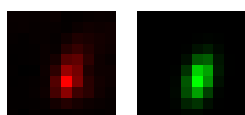
Coordinates : 73.1  $\mu\text{m}$  (x), 56.4  $\mu\text{m}$  (y), 57.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

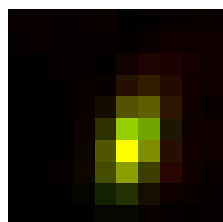
FWHM	Non corrected	Corrected	Theoretical
min	387 nm	400 nm	223 nm
max	683 nm	707 nm	223 nm
z	1.49 $\mu\text{m}$	1.49 $\mu\text{m}$	885 nm
Asymmetry	0.566		
Theta	72.5°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.939$



Parameters:

A = 794.298 (brightness)

B = 132.873 (background)

a = 0.843 px

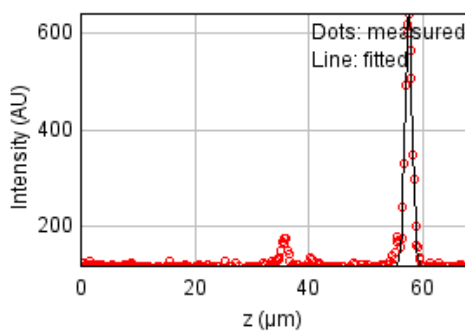
b = 0.175 px

c = 0.343 px

$x_c = 5.211$  px

$y_c = 5.702$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 42891.7666

Standard deviation: 11.82001

$R^2$ : 0.96976

Parameters:

a = 117.04553

b = 646.13712

c = 57.54722

d = 0.63068

## Bead 2621

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

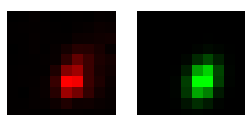
Coordinates : 137  $\mu\text{m}$  (x), 50.8  $\mu\text{m}$  (y), 58.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

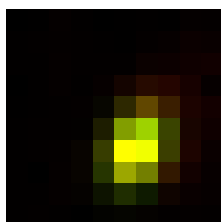
FWHM	Non corrected	Corrected	Theoretical
min	417 nm	431 nm	223 nm
max	589 nm	609 nm	223 nm
z	1.6 $\mu\text{m}$	1.61 $\mu\text{m}$	885 nm
Asymmetry	0.709		
Theta	66.7°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.954$



Parameters:

A = 1231.224 (brightness)

B = 128.480 (background)

a = 0.711 px

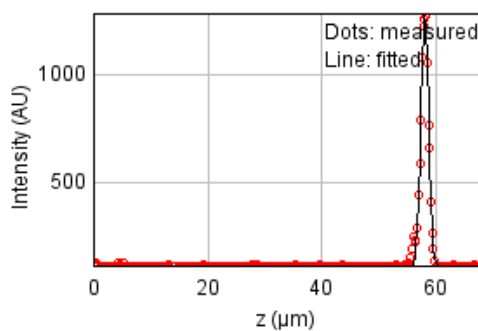
b = 0.139 px

c = 0.447 px

$x_c = 5.533$  px

$y_c = 5.864$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 61471.3081

Standard deviation: 14.15035

$R^2$ : 0.99158

Parameters:

a = 112.08321

b = 1283.20227

c = 58.07702

d = 0.67969

## Bead 2622

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

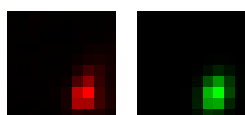
Coordinates : 86.4  $\mu\text{m}$  (x), 33.0  $\mu\text{m}$  (y), 58.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

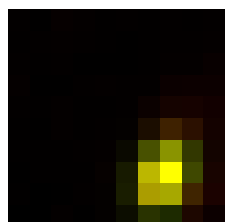
FWHM	Non corrected	Corrected	Theoretical
min	397 nm	410 nm	223 nm
max	556 nm	575 nm	223 nm
z	1.04 $\mu\text{m}$	1.04 $\mu\text{m}$	885 nm
Asymmetry	0.713		
Theta	69.9°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1559.254 (brightness)

B = 132.905 (background)

a = 0.804 px

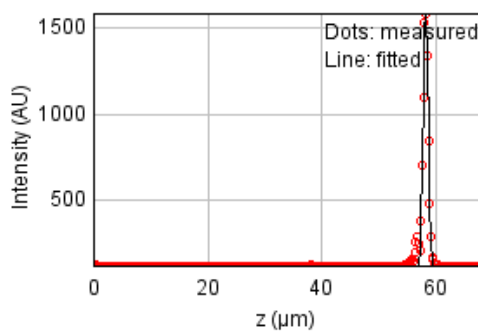
b = 0.136 px

c = 0.483 px

xc = 6.684 px

yc = 7.152 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 93764.0389

Standard deviation: 17.47628

$R^2$ : 0.98787

Parameters:

a = 115.46021

b = 1598.60547

c = 58.23622

d = 0.44088

## Bead 2623

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

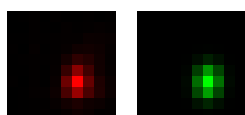
Coordinates : 10.6  $\mu\text{m}$  (x), 9.67  $\mu\text{m}$  (y), 58.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

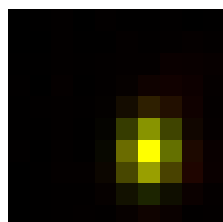
FWHM	Non corrected	Corrected	Theoretical
min	399 nm	412 nm	223 nm
max	513 nm	531 nm	223 nm
z	1.23 $\mu\text{m}$	1.23 $\mu\text{m}$	885 nm
Asymmetry	0.777		
Theta	85.8°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1547.029 (brightness)

B = 130.094 (background)

a = 0.843 px

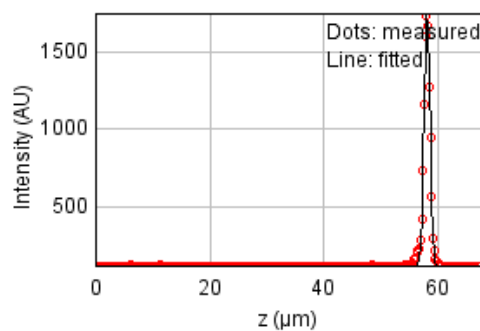
b = 0.024 px

c = 0.511 px

$x_c = 6.010$  px

$y_c = 6.035$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 54656.3565

Standard deviation: 13.34293

$R^2$ : 0.99501

Parameters:

a = 115.98900

b = 1751.14146

c = 58.12100

d = 0.52056

## Bead 2624

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

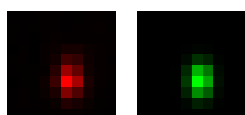
Coordinates : -95.9  $\mu\text{m}$  (x), 6.41  $\mu\text{m}$  (y), 57.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

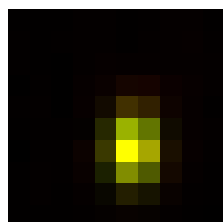
FWHM	Non corrected	Corrected	Theoretical
min	373 nm	386 nm	223 nm
max	530 nm	548 nm	223 nm
z	1.2 $\mu\text{m}$	1.21 $\mu\text{m}$	885 nm
Asymmetry	0.704		
Theta	89.4°		

### 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 = 1434.137 (brightness)

B = 123.634 (background)

a = 0.964 px

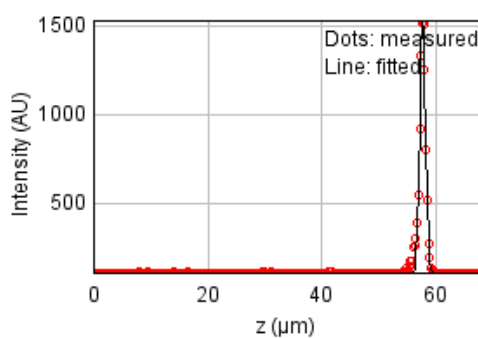
b = 0.005 px

c = 0.478 px

$x_c = 5.275$  px

$y_c = 5.875$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 82017.3668

Standard deviation: 16.34495

$R^2$ : 0.99006

Parameters:

a = 115.17773

b = 1542.14059

c = 57.71637

d = 0.51163



## Bead 2625

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

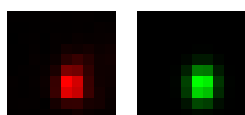
Coordinates : 126  $\mu\text{m}$  (x), -1.38  $\mu\text{m}$  (y), 58.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

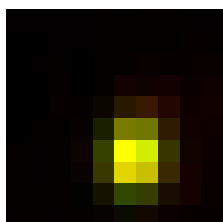
FWHM	Non corrected	Corrected	Theoretical
min	432 nm	446 nm	223 nm
max	542 nm	560 nm	223 nm
z	1.36 $\mu\text{m}$	1.37 $\mu\text{m}$	885 nm
Asymmetry	0.796		
Theta	86.9°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.973$



Parameters:

$A = 1317.982$  (brightness)

$B = 128.074$  (background)

$a = 0.719$  px

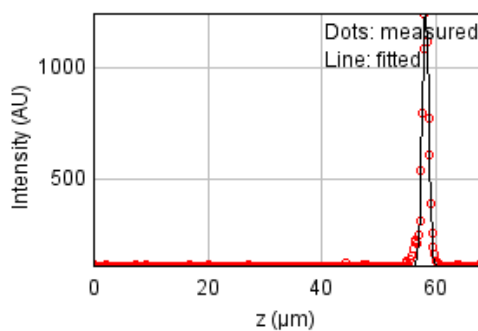
$b = 0.014$  px

$c = 0.457$  px

$x_c = 5.445$  px

$y_c = 6.283$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 63955.8078

Standard deviation: 14.43347

$R^2: 0.98933$

Parameters:

$a = 113.52853$

$b = 1259.57898$

$c = 58.20532$

$d = 0.57783$

## Bead 2626

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

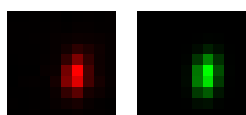
Coordinates : -42.3  $\mu\text{m}$  (x), -23.2  $\mu\text{m}$  (y), 58.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

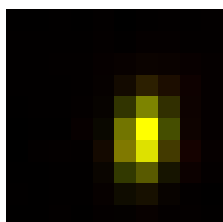
FWHM	Non corrected	Corrected	Theoretical
min	367 nm	379 nm	223 nm
max	592 nm	612 nm	223 nm
z	1.08 $\mu\text{m}$	1.08 $\mu\text{m}$	885 nm
Asymmetry	0.62		
Theta	82.4°		

### 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 = 1983.810 (brightness)

B = 131.114 (background)

a = 0.985 px

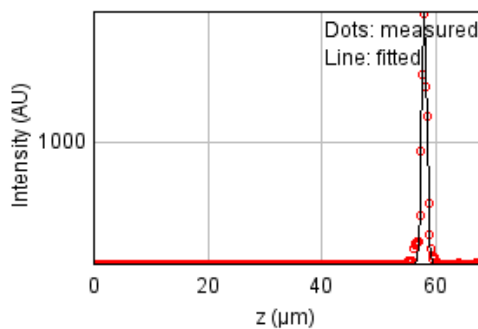
b = 0.080 px

c = 0.394 px

$x_c = 5.866$  px

$y_c = 5.364$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 165270.724

Standard deviation: 23.20218

$R^2$ : 0.98686

Parameters:

a = 115.60128

b = 1972.24725

c = 57.99099

d = 0.45782

## Bead 2627

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

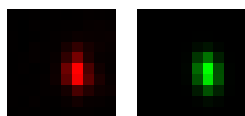
Coordinates : -33.2  $\mu\text{m}$  (x), -39.9  $\mu\text{m}$  (y), 57.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

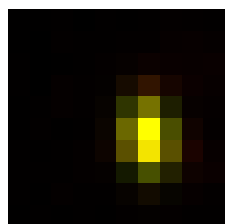
FWHM	Non corrected	Corrected	Theoretical
min	357 nm	369 nm	223 nm
max	542 nm	561 nm	223 nm
z	1.17 $\mu\text{m}$	1.18 $\mu\text{m}$	885 nm
Asymmetry	0.657		
Theta	-83.4°		

### 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 = 1932.868 (brightness)

B = 132.140 (background)

a = 1.048 px

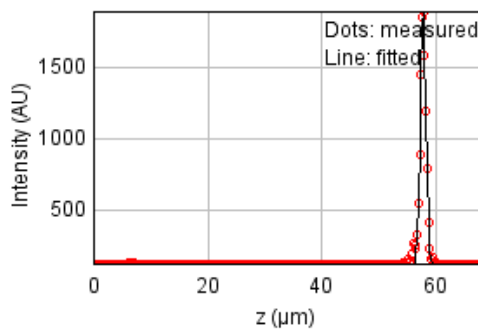
b = -0.069 px

c = 0.464 px

$x_c = 5.956$  px

$y_c = 5.369$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 79829.4749

Standard deviation: 16.12547

$R^2$ : 0.99368

Parameters:

a = 115.70876

b = 1907.45830

c = 57.80535

d = 0.49840

## Bead 2628

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

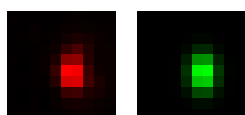
Coordinates : 74.3  $\mu\text{m}$  (x), -72.9  $\mu\text{m}$  (y), 57.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

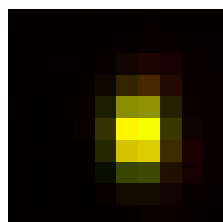
FWHM	Non corrected	Corrected	Theoretical
min	414 nm	428 nm	223 nm
max	585 nm	605 nm	223 nm
z	1.43 $\mu\text{m}$	1.43 $\mu\text{m}$	885 nm
Asymmetry	0.708		
Theta	-89.3°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1551.055 (brightness)

B = 127.370 (background)

a = 0.781 px

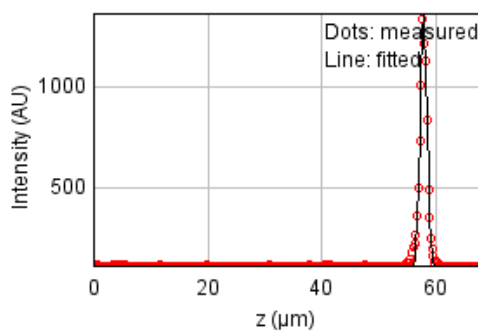
b = -0.005 px

c = 0.392 px

xc = 5.528 px

yc = 5.206 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 59695.2932

Standard deviation: 13.94443

$R^2$ : 0.99194

Parameters:

a = 114.56217

b = 1360.87241

c = 57.87521

d = 0.60611

## Bead 2629

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

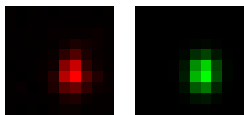
Coordinates : -15.9  $\mu\text{m}$  (x), -78.7  $\mu\text{m}$  (y), 57.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

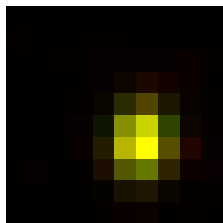
FWHM	Non corrected	Corrected	Theoretical
min	419 nm	434 nm	223 nm
max	532 nm	550 nm	223 nm
z	1.17 $\mu\text{m}$	1.18 $\mu\text{m}$	885 nm
Asymmetry	0.789		
Theta	85.9°		

### 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:

$A = 1247.081$  (brightness)

$B = 124.157$  (background)

$a = 0.762$  px

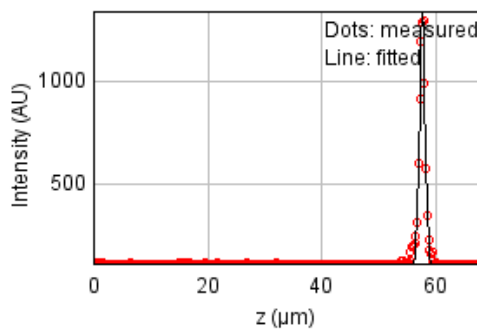
$b = 0.021$  px

$c = 0.476$  px

$x_c = 5.734$  px

$y_c = 5.714$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 57901.2904

Standard deviation: 13.73330

$R^2: 0.99021$

Parameters:

$a = 115.26986$

$b = 1339.90814$

$c = 57.65410$

$d = 0.49787$

## Bead 2630

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

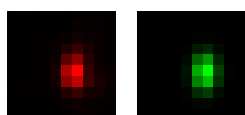
Coordinates : 49.2  $\mu\text{m}$  (x), -90.9  $\mu\text{m}$  (y), 57.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

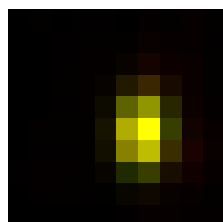
FWHM	Non corrected	Corrected	Theoretical
min	387 nm	400 nm	223 nm
max	567 nm	586 nm	223 nm
z	1.09 $\mu\text{m}$	1.09 $\mu\text{m}$	885 nm
Asymmetry	0.683		
Theta	89.1°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1838.372 (brightness)

B = 133.652 (background)

a = 0.897 px

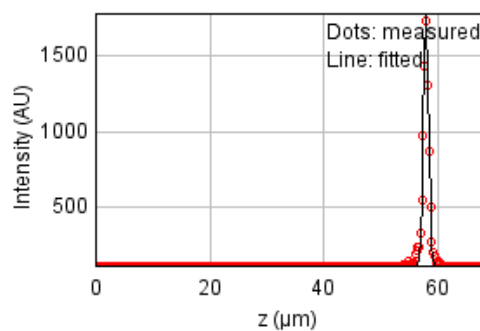
b = 0.007 px

c = 0.418 px

$x_c = 5.721$  px

$y_c = 5.143$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 79416.4566

Standard deviation: 16.08370

$R^2$ : 0.99239

Parameters:

a = 115.93101

b = 1803.91657

c = 57.94134

d = 0.46241

## Bead 2631

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

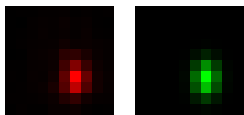
Coordinates : -140  $\mu\text{m}$  (x), 91.9  $\mu\text{m}$  (y), 58.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

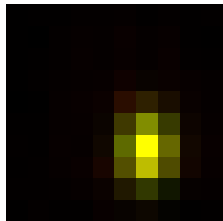
FWHM	Non corrected	Corrected	Theoretical
min	387 nm	400 nm	223 nm
max	546 nm	565 nm	223 nm
z	1.12 $\mu\text{m}$	1.13 $\mu\text{m}$	885 nm
Asymmetry	0.709		
Theta	89.3°		

### 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 = 1220.816 (brightness)

B = 126.638 (background)

a = 0.896 px

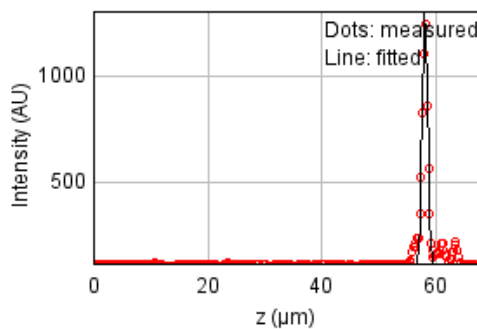
b = 0.006 px

c = 0.450 px

xc = 5.993 px

yc = 6.161 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 164758.039

Standard deviation: 23.16616

$R^2$ : 0.96963

Parameters:

a = 117.49251

b = 1301.79995

c = 58.09940

d = 0.47743

## Bead 2632

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

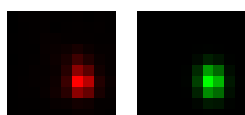
Coordinates : -154  $\mu\text{m}$  (x), 65.1  $\mu\text{m}$  (y), 58.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

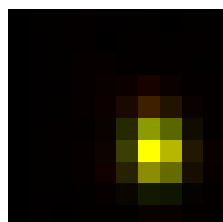
FWHM	Non corrected	Corrected	Theoretical
min	393 nm	406 nm	223 nm
max	494 nm	510 nm	223 nm
z	1.23 $\mu\text{m}$	1.24 $\mu\text{m}$	885 nm
Asymmetry	0.796		
Theta	-84.1°		

### 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 = 2346.122 (brightness)

B = 135.209 (background)

a = 0.866 px

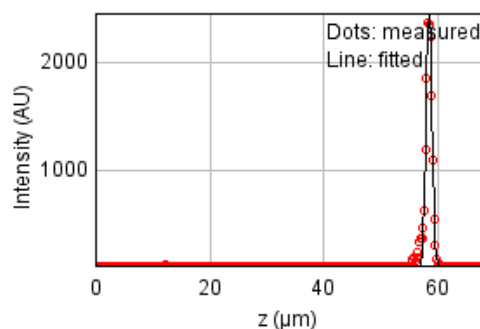
b = -0.032 px

c = 0.554 px

xc = 6.304 px

yc = 5.973 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 218564.860

Standard deviation: 26.68216

$R^2$ : 0.99038

Parameters:

a = 113.94723

b = 2455.92256

c = 58.48718

d = 0.52336



## Bead 2633

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

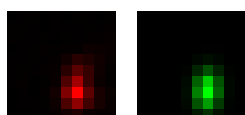
Coordinates : -13.2  $\mu\text{m}$  (x), 60.1  $\mu\text{m}$  (y), 58.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	402 nm	416 nm	223 nm
max	610 nm	631 nm	223 nm
z	1.16 $\mu\text{m}$	1.16 $\mu\text{m}$	885 nm
Asymmetry	0.659		
Theta	87.5°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.967$



Parameters:

$A = 1700.225$  (brightness)

$B = 134.684$  (background)

$a = 0.828$  px

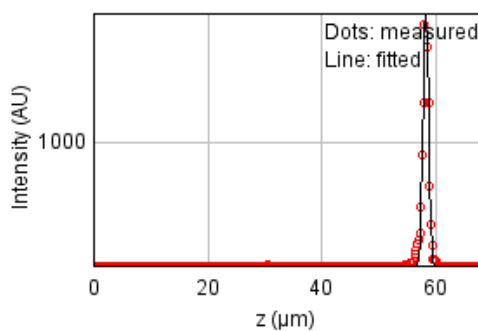
$b = 0.020$  px

$c = 0.361$  px

$x_c = 5.926$  px

$y_c = 6.829$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 111498.413

Standard deviation: 19.05747

$R^2: 0.99137$

Parameters:

$a = 115.73368$

$b = 1936.21792$

$c = 58.26452$

$d = 0.49262$

## Bead 2634

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

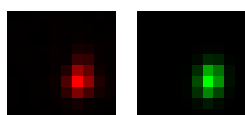
Coordinates : -99.8  $\mu\text{m}$  (x), 29.5  $\mu\text{m}$  (y), 58.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

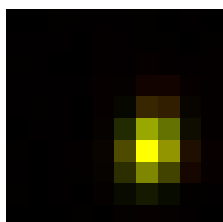
FWHM	Non corrected	Corrected	Theoretical
min	386 nm	399 nm	223 nm
max	511 nm	528 nm	223 nm
z	1.18 $\mu\text{m}$	1.19 $\mu\text{m}$	885 nm
Asymmetry	0.756		
Theta	78.3°		

### 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 = 1791.755 (brightness)

B = 123.110 (background)

a = 0.885 px

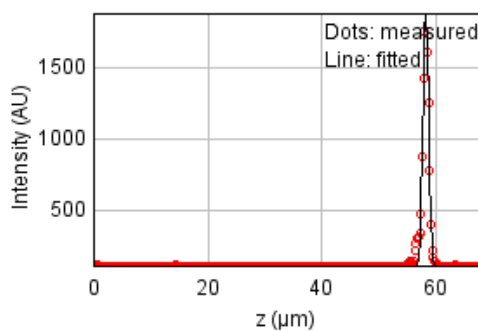
b = 0.077 px

c = 0.531 px

$x_c = 6.207$  px

$y_c = 5.866$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 125174.062

Standard deviation: 20.19240

$R^2$ : 0.98988

Parameters:

a = 114.70391

b = 1876.93194

c = 58.25999

d = 0.50269

## Bead 2635

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

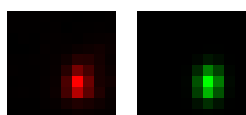
Coordinates : 100 µm (x), -7.08 µm (y), 58.0 µm (z)

Corresponding bead : Not found

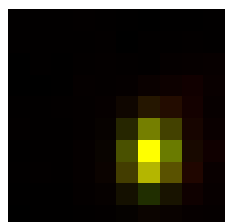
FWHM	Non corrected	Corrected	Theoretical
min	376 nm	389 nm	223 nm
max	509 nm	527 nm	223 nm
z	1.16 µm	1.16 µm	885 nm
Asymmetry	0.739		
Theta	85.6°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1479.824 (brightness)

B = 131.287 (background)

a = 0.944 px

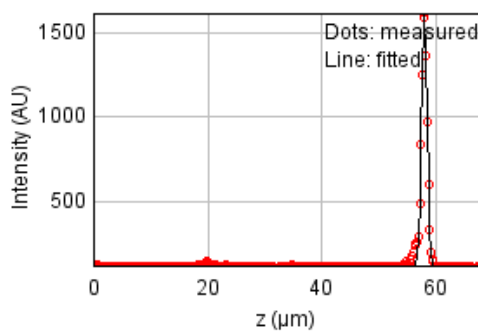
b = 0.033 px

c = 0.520 px

xc = 6.106 px

yc = 6.166 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 75395.5293

Standard deviation: 15.67125

$R^2$ : 0.99152

Parameters:

a = 115.47546

b = 1627.07582

c = 58.00208

d = 0.49147

## Bead 2636

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

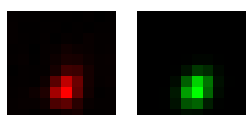
Coordinates : -143  $\mu\text{m}$  (x), -55.4  $\mu\text{m}$  (y), 57.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

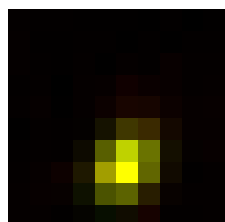
FWHM	Non corrected	Corrected	Theoretical
min	408 nm	422 nm	223 nm
max	535 nm	553 nm	223 nm
z	1.35 $\mu\text{m}$	1.36 $\mu\text{m}$	885 nm
Asymmetry	0.763		
Theta	56.0°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1018.525 (brightness)

B = 118.692 (background)

a = 0.699 px

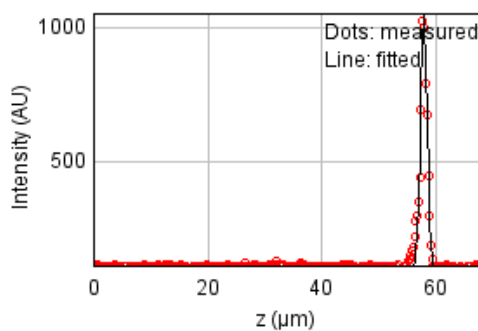
b = 0.156 px

c = 0.574 px

$x_c = 4.914$  px

$y_c = 6.693$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 80075.7791

Standard deviation: 16.15033

$R^2$ : 0.98042

Parameters:

a = 113.13182

b = 1059.02254

c = 57.91530

d = 0.57356

## Bead 2637

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

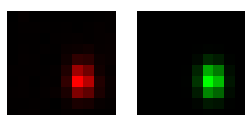
Coordinates : -92.5  $\mu\text{m}$  (x), -55.9  $\mu\text{m}$  (y), 58.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

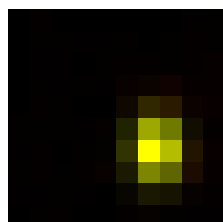
FWHM	Non corrected	Corrected	Theoretical
min	376 nm	388 nm	223 nm
max	503 nm	520 nm	223 nm
z	1.19 $\mu\text{m}$	1.2 $\mu\text{m}$	885 nm
Asymmetry	0.747		
Theta	-88.5°		

### 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 = 1493.135 (brightness)

B = 123.145 (background)

a = 0.951 px

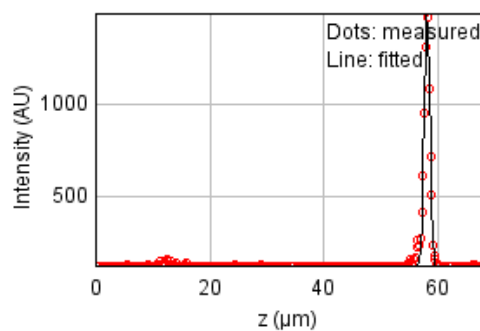
b = -0.011 px

c = 0.532 px

$x_c = 6.340$  px

$y_c = 5.895$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 86658.2909

Standard deviation: 16.80103

$R^2$ : 0.98871

Parameters:

a = 115.84138

b = 1498.74859

c = 58.12118

d = 0.50588

## Bead 2638

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

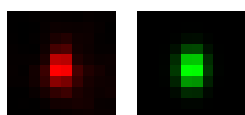
Coordinates : -110  $\mu\text{m}$  (x), -94.8  $\mu\text{m}$  (y), 59.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

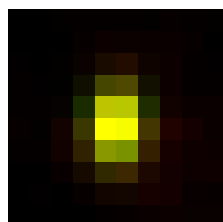
FWHM	Non corrected	Corrected	Theoretical
min	419 nm	433 nm	223 nm
max	586 nm	606 nm	223 nm
z	1.49 $\mu\text{m}$	1.49 $\mu\text{m}$	885 nm
Asymmetry	0.715		
Theta	88.3°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.973$



Parameters:

A = 1464.485 (brightness)

B = 148.249 (background)

a = 0.764 px

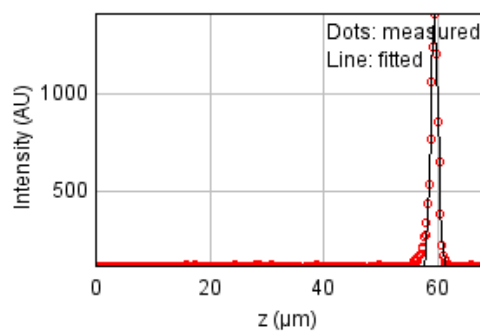
b = 0.011 px

c = 0.391 px

$x_c = 4.494$  px

$y_c = 4.821$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 117476.553

Standard deviation: 19.56169

$R^2$ : 0.98609

Parameters:

a = 114.19975

b = 1414.23943

c = 59.43787

d = 0.63234

## Bead 2639

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

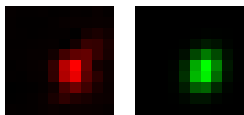
Coordinates : 23.5  $\mu\text{m}$  (x), 64.8  $\mu\text{m}$  (y), 58.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

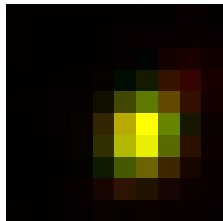
FWHM	Non corrected	Corrected	Theoretical
min	485 nm	502 nm	223 nm
max	603 nm	623 nm	223 nm
z	1.23 $\mu\text{m}$	1.23 $\mu\text{m}$	885 nm
Asymmetry	0.806		
Theta	66.4°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.948$



Parameters:

$A = 1161.214$  (brightness)

$B = 133.253$  (background)

$a = 0.537$  px

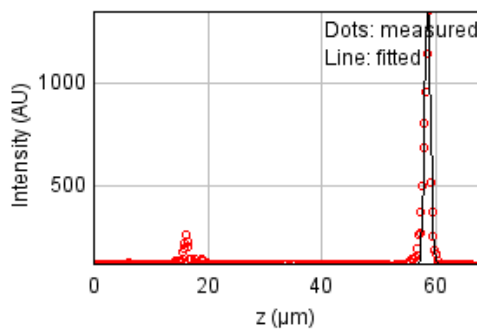
$b = 0.073$  px

$c = 0.401$  px

$x_c = 5.821$  px

$y_c = 5.450$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 553675.543

Standard deviation: 42.46767

$R^2: 0.91929$

Parameters:

$a = 120.09365$

$b = 1363.15811$

$c = 58.60346$

$d = 0.52073$

## Bead 2640

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

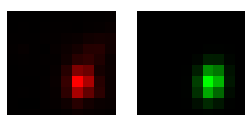
Coordinates : 21.6  $\mu\text{m}$  (x), 47.7  $\mu\text{m}$  (y), 58.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

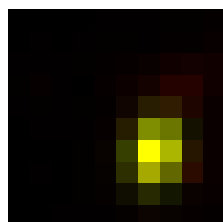
FWHM	Non corrected	Corrected	Theoretical
min	387 nm	400 nm	223 nm
max	527 nm	544 nm	223 nm
z	1.25 $\mu\text{m}$	1.26 $\mu\text{m}$	885 nm
Asymmetry	0.734		
Theta	79.2°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1582.847 (brightness)

B = 135.839 (background)

a = 0.883 px

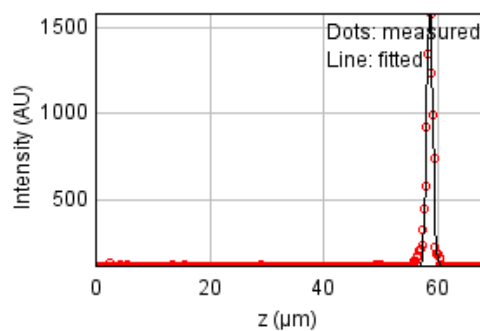
b = 0.077 px

c = 0.498 px

$x_c = 6.303$  px

$y_c = 6.041$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 126673.255

Standard deviation: 20.31296

$R^2$ : 0.98654

Parameters:

a = 115.52647

b = 1607.12160

c = 58.62272

d = 0.53280



## Bead 2641

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

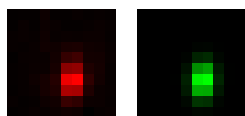
Coordinates : -159  $\mu\text{m}$  (x), 19.8  $\mu\text{m}$  (y), 57.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

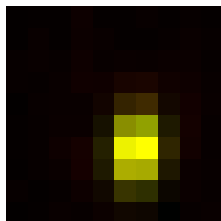
FWHM	Non corrected	Corrected	Theoretical
min	368 nm	380 nm	223 nm
max	557 nm	576 nm	223 nm
z	1.24 $\mu\text{m}$	1.24 $\mu\text{m}$	885 nm
Asymmetry	0.66		
Theta	86.3°		

### 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:

$A = 767.224$  (brightness)

$B = 117.259$  (background)

$a = 0.991$  px

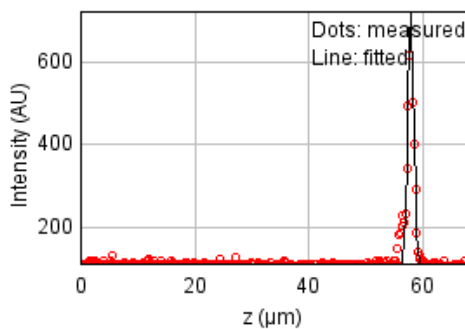
$b = 0.036$  px

$c = 0.435$  px

$x_c = 5.525$  px

$y_c = 6.071$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 55362.0582

Standard deviation: 13.42879

$R^2: 0.96507$

Parameters:

$a = 112.30395$

$b = 721.68955$

$c = 57.89966$

$d = 0.52575$

## Bead 2642

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

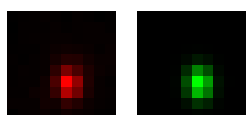
Coordinates : -134  $\mu\text{m}$  (x), -21.4  $\mu\text{m}$  (y), 58.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

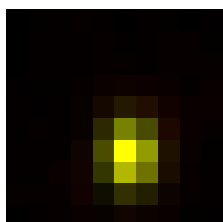
FWHM	Non corrected	Corrected	Theoretical
min	397 nm	410 nm	223 nm
max	516 nm	533 nm	223 nm
z	1.19 $\mu\text{m}$	1.19 $\mu\text{m}$	885 nm
Asymmetry	0.769		
Theta	-87.5°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1054.732 (brightness)

B = 121.410 (background)

a = 0.853 px

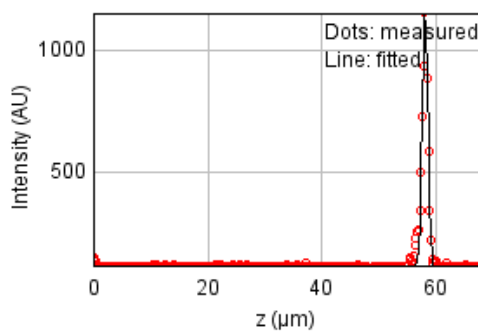
b = -0.015 px

c = 0.505 px

xc = 5.208 px

yc = 6.175 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 79882.3943

Standard deviation: 16.13082

$R^2$ : 0.98177

Parameters:

a = 113.81093

b = 1155.84105

c = 58.13313

d = 0.50521

## Bead 2643

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

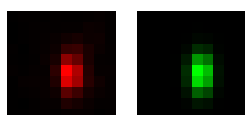
Coordinates : -29.0  $\mu\text{m}$  (x), -51.8  $\mu\text{m}$  (y), 58.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

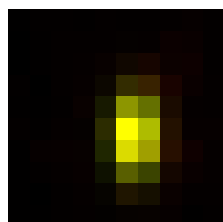
FWHM	Non corrected	Corrected	Theoretical
min	359 nm	372 nm	223 nm
max	625 nm	646 nm	223 nm
z	1.26 $\mu\text{m}$	1.26 $\mu\text{m}$	885 nm
Asymmetry	0.575		
Theta	89.4°		

### 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 = 1541.838 (brightness)

B = 131.465 (background)

a = 1.039 px

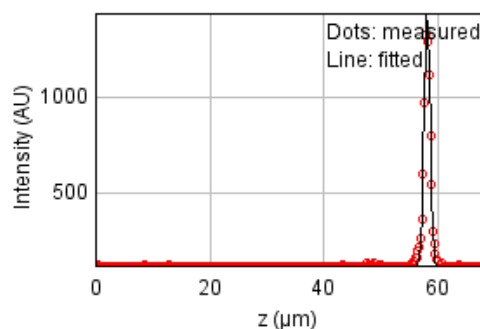
b = 0.008 px

c = 0.344 px

$x_c = 5.351$  px

$y_c = 5.269$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 53842.7675

Standard deviation: 13.24325

$R^2$ : 0.99271

Parameters:

a = 114.46379

b = 1437.78767

c = 58.13178

d = 0.53444

## Bead 2644

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

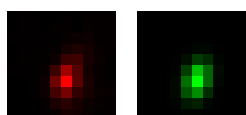
Coordinates : 11.2  $\mu\text{m}$  (x), -79.8  $\mu\text{m}$  (y), 58.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

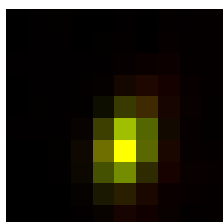
FWHM	Non corrected	Corrected	Theoretical
min	383 nm	396 nm	223 nm
max	576 nm	596 nm	223 nm
z	1.44 $\mu\text{m}$	1.44 $\mu\text{m}$	885 nm
Asymmetry	0.666		
Theta	73.1°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.967$



Parameters:

A = 1712.803 (brightness)

B = 136.570 (background)

a = 0.870 px

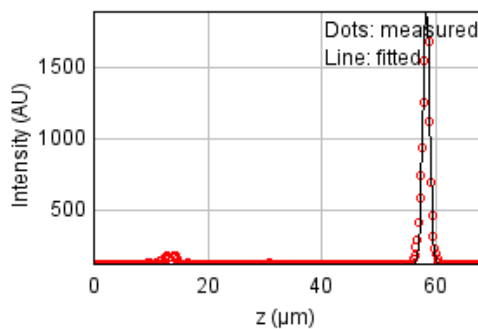
b = 0.141 px

c = 0.447 px

xc = 5.007 px

yc = 5.828 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 270840.080

Standard deviation: 29.70211

$R^2$ : 0.98241

Parameters:

a = 118.93219

b = 1902.40863

c = 58.35561

d = 0.60982

## Bead 2645

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

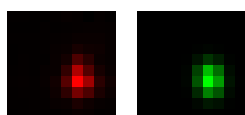
Coordinates : -100 µm (x), -88.6 µm (y), 58.3 µm (z)

Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	406 nm	419 nm	223 nm
max	519 nm	536 nm	223 nm
z	1.32 µm	1.33 µm	885 nm
Asymmetry	0.782		
Theta	-84.7°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1510.311 (brightness)

B = 125.083 (background)

a = 0.813 px

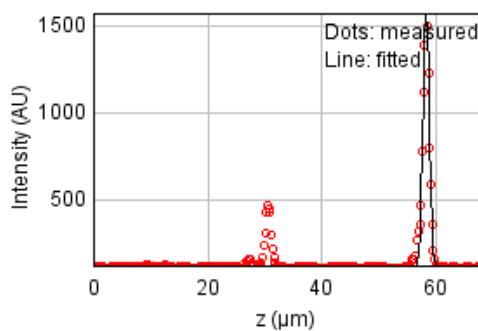
b = -0.029 px

c = 0.501 px

xc = 6.189 px

yc = 5.820 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 645175.704

Standard deviation: 45.84266

$R^2$ : 0.93396

Parameters:

a = 123.33038

b = 1566.10171

c = 58.32434

d = 0.56046

## Bead 2646

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

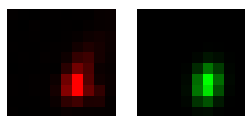
Coordinates : 53.5  $\mu\text{m}$  (x), 93.6  $\mu\text{m}$  (y), 58.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

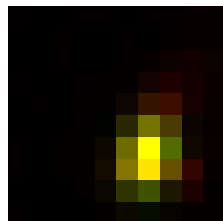
FWHM	Non corrected	Corrected	Theoretical
min	390 nm	403 nm	223 nm
max	557 nm	576 nm	223 nm
z	1.28 $\mu\text{m}$	1.28 $\mu\text{m}$	885 nm
Asymmetry	0.7		
Theta	77.4°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.946$



Parameters:

A = 1608.344 (brightness)

B = 140.014 (background)

a = 0.860 px

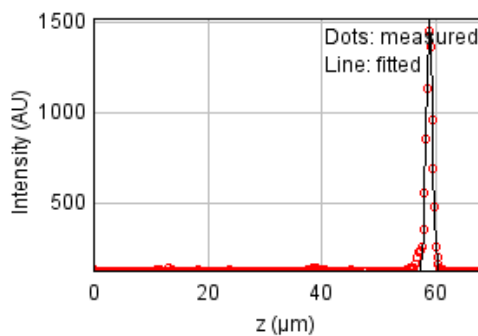
b = 0.096 px

c = 0.454 px

xc = 5.956 px

yc = 6.384 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 89644.5014

Standard deviation: 17.08806

$R^2$ : 0.98947

Parameters:

a = 118.19597

b = 1527.36983

c = 58.90790

d = 0.54196

## Bead 2647

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

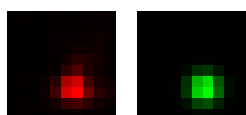
Coordinates : -22.3  $\mu\text{m}$  (x), 84.1  $\mu\text{m}$  (y), 58.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

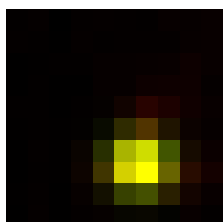
FWHM	Non corrected	Corrected	Theoretical
min	453 nm	469 nm	223 nm
max	483 nm	499 nm	223 nm
z	1.32 $\mu\text{m}$	1.33 $\mu\text{m}$	885 nm
Asymmetry	0.939		
Theta	-2.4°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1563.457$  (brightness)

$B = 132.096$  (background)

$a = 0.576$  px

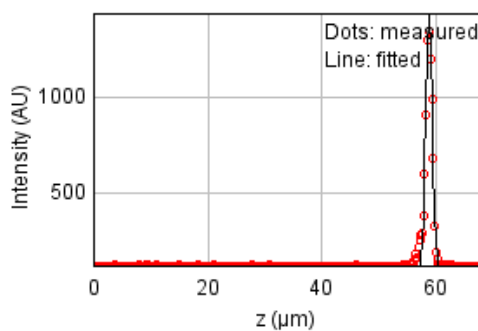
$b = -0.003$  px

$c = 0.653$  px

$x_c = 5.679$  px

$y_c = 6.611$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 95118.7068

Standard deviation: 17.60207

$R^2: 0.98829$

Parameters:

$a = 115.44941$

$b = 1468.37085$

$c = 58.85189$

$d = 0.56099$

## Bead 2648

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

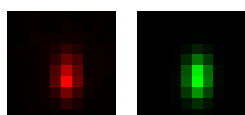
Coordinates : -128  $\mu\text{m}$  (x), 58.8  $\mu\text{m}$  (y), 58.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

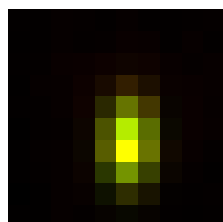
FWHM	Non corrected	Corrected	Theoretical
min	384 nm	397 nm	223 nm
max	653 nm	675 nm	223 nm
z	1.32 $\mu\text{m}$	1.32 $\mu\text{m}$	885 nm
Asymmetry	0.588		
Theta	88.6°		

### 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 = 1095.714 (brightness)

B = 125.400 (background)

a = 0.910 px

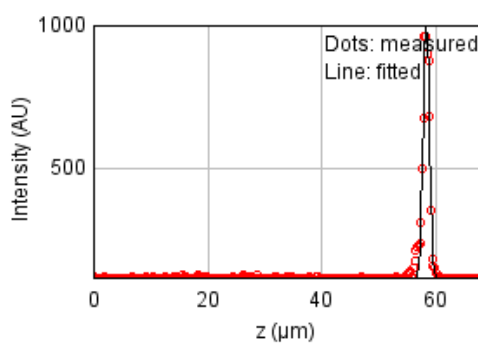
b = 0.015 px

c = 0.315 px

$x_c = 5.065$  px

$y_c = 5.625$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 74466.7467

Standard deviation: 15.57442

$R^2$ : 0.97904

Parameters:

a = 113.35944

b = 1005.41581

c = 58.35221

d = 0.55877



## Bead 2649

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

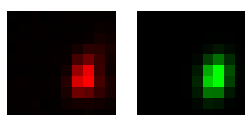
Coordinates : 30.5  $\mu\text{m}$  (x), 30.0  $\mu\text{m}$  (y), 58.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

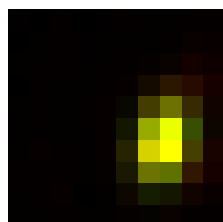
FWHM	Non corrected	Corrected	Theoretical
min	404 nm	418 nm	223 nm
max	593 nm	613 nm	223 nm
z	1.2 $\mu\text{m}$	1.21 $\mu\text{m}$	885 nm
Asymmetry	0.681		
Theta	75.9°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1347.057$  (brightness)

$B = 126.302$  (background)

$a = 0.795$  px

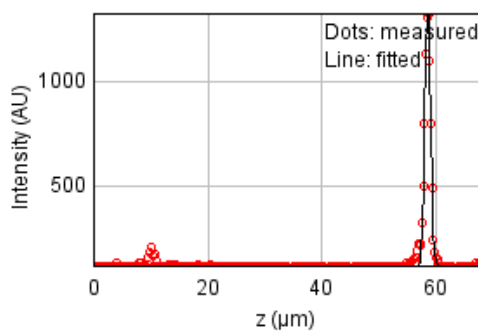
$b = 0.104$  px

$c = 0.407$  px

$x_c = 6.679$  px

$y_c = 5.586$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 86075.8171

Standard deviation: 16.74447

$R^2: 0.98604$

Parameters:

$a = 117.40377$

$b = 1349.82079$

$c = 58.62024$

$d = 0.51031$

## Bead 2650

Date : Mon Oct 17 13:30:03 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

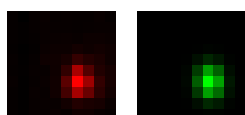
Coordinates : 140  $\mu\text{m}$  (x), -8.36  $\mu\text{m}$  (y), 58.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

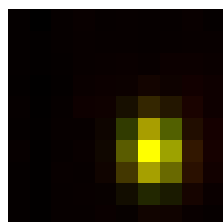
FWHM	Non corrected	Corrected	Theoretical
min	425 nm	439 nm	223 nm
max	533 nm	551 nm	223 nm
z	1.49 $\mu\text{m}$	1.5 $\mu\text{m}$	885 nm
Asymmetry	0.798		
Theta	-86.0°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 882.582 (brightness)

B = 115.885 (background)

a = 0.742 px

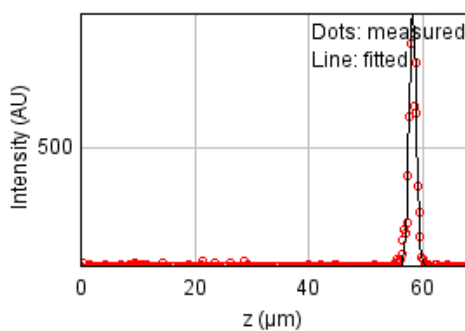
b = -0.019 px

c = 0.474 px

$x_c = 6.192$  px

$y_c = 6.013$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 107097.178

Standard deviation: 18.67755

$R^2$ : 0.96940

Parameters:

a = 110.87701

b = 940.70844

c = 58.24776

d = 0.63257

## Bead 2651

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

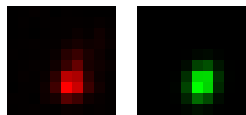
Coordinates : -119  $\mu\text{m}$  (x), -44.8  $\mu\text{m}$  (y), 58.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

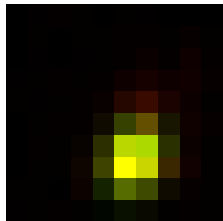
FWHM	Non corrected	Corrected	Theoretical
min	411 nm	425 nm	223 nm
max	527 nm	545 nm	223 nm
z	1.08 $\mu\text{m}$	1.09 $\mu\text{m}$	885 nm
Asymmetry	0.78		
Theta	70.8°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.958$



Parameters:

A = 960.408 (brightness)

B = 124.565 (background)

a = 0.761 px

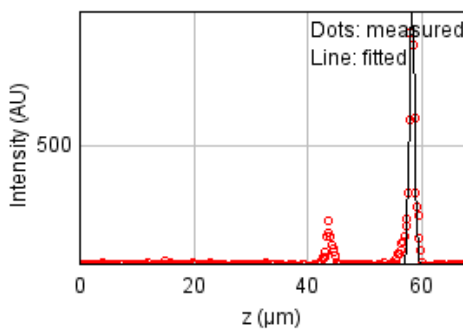
b = 0.097 px

c = 0.517 px

xc = 5.431 px

yc = 6.583 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 147478.731

Standard deviation: 21.91773

$R^2$ : 0.94277

Parameters:

a = 117.47705

b = 937.48806

c = 58.30061

d = 0.45950

## Bead 2652

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

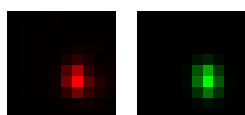
Coordinates : 89.7  $\mu\text{m}$  (x), -88.0  $\mu\text{m}$  (y), 58.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

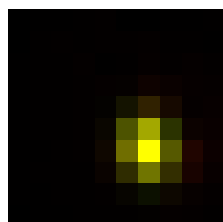
FWHM	Non corrected	Corrected	Theoretical
min	374 nm	386 nm	223 nm
max	477 nm	493 nm	223 nm
z	1.23 $\mu\text{m}$	1.24 $\mu\text{m}$	885 nm
Asymmetry	0.783		
Theta	-79.9°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 2051.247 (brightness)

B = 130.251 (background)

a = 0.950 px

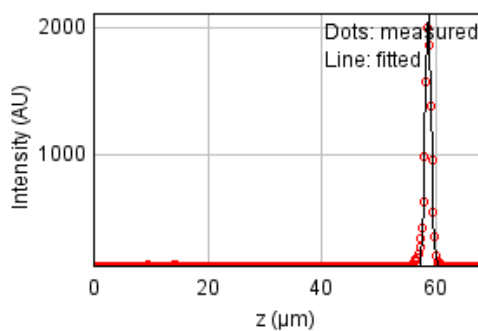
b = -0.064 px

c = 0.601 px

xc = 5.931 px

yc = 5.842 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 98962.2202

Standard deviation: 17.95418

$R^2$ : 0.99397

Parameters:

a = 116.32563

b = 2112.20338

c = 58.70944

d = 0.52267

## Bead 2653

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

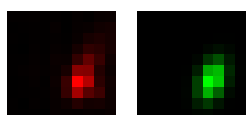
Coordinates : 71.6  $\mu\text{m}$  (x), 81.9  $\mu\text{m}$  (y), 58.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

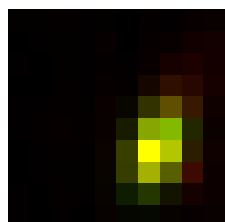
FWHM	Non corrected	Corrected	Theoretical
min	386 nm	399 nm	223 nm
max	636 nm	657 nm	223 nm
z	1.53 $\mu\text{m}$	1.54 $\mu\text{m}$	885 nm
Asymmetry	0.608		
Theta	70.0°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.933$



Parameters:

A = 1208.264 (brightness)

B = 130.035 (background)

a = 0.833 px

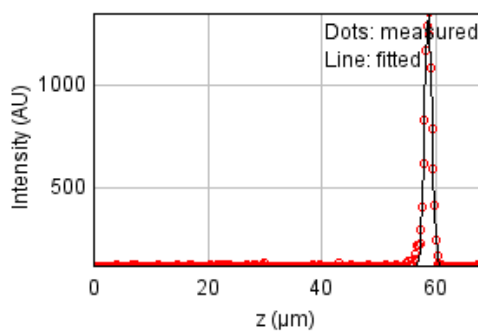
b = 0.182 px

c = 0.398 px

$x_c = 6.376$  px

$y_c = 5.864$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 41732.1197

Standard deviation: 11.65913

$R^2$ : 0.99460

Parameters:

a = 114.43423

b = 1347.19690

c = 58.71445

d = 0.65018

## Bead 2654 (Rejected)

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

Coordinates : 142  $\mu\text{m}$  (x), -61.3  $\mu\text{m}$  (y), 2.22  $\mu\text{m}$  (z)

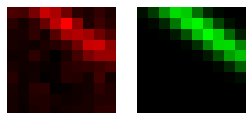
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

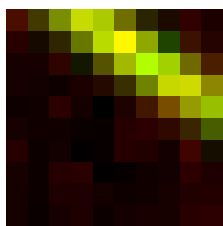
FWHM	Non corrected	Corrected	Theoretical
min	416 nm	430 nm	223 nm
max	2.87 $\mu\text{m}$	2.96 $\mu\text{m}$	223 nm
z	1.44 $\mu\text{m}$	1.45 $\mu\text{m}$	885 nm
Asymmetry	0.145		
Theta	-33.9°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.921$



Parameters:

A = 90.236 (brightness)

B = 113.857 (background)

a = 0.252 px

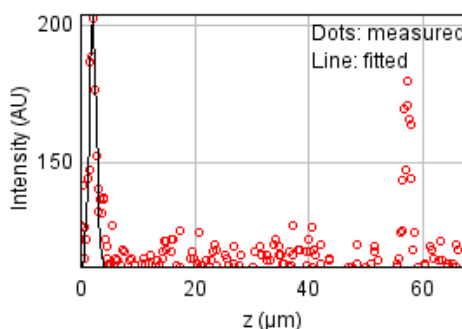
b = -0.351 px

c = 0.540 px

xc = 5.560 px

yc = 1.597 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 37657.2796

Standard deviation: 11.07529

$R^2$ : 0.51492

Parameters:

a = 112.28715

b = 203.74286

c = 2.22033

d = 0.61285

## Bead 2655

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

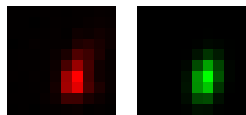
Coordinates : 2.82  $\mu\text{m}$  (x), 94.3  $\mu\text{m}$  (y), 59.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

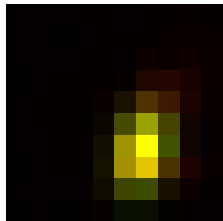
FWHM	Non corrected	Corrected	Theoretical
min	393 nm	406 nm	223 nm
max	641 nm	662 nm	223 nm
z	1.18 $\mu\text{m}$	1.19 $\mu\text{m}$	885 nm
Asymmetry	0.614		
Theta	77.2°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1749.132 (brightness)

B = 136.585 (background)

a = 0.842 px

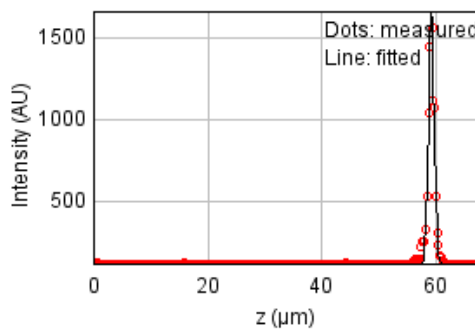
b = 0.117 px

c = 0.354 px

xc = 5.801 px

yc = 6.203 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 165979.943

Standard deviation: 23.25191

$R^2$ : 0.98303

Parameters:

a = 116.51711

b = 1677.98599

c = 59.25569

d = 0.50282

## Bead 2656

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

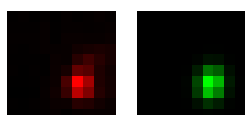
Coordinates : 155  $\mu\text{m}$  (x), 52.3  $\mu\text{m}$  (y), 58.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

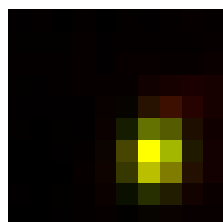
FWHM	Non corrected	Corrected	Theoretical
min	402 nm	416 nm	223 nm
max	499 nm	516 nm	223 nm
z	1.34 $\mu\text{m}$	1.34 $\mu\text{m}$	885 nm
Asymmetry	0.806		
Theta	80.4°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.957$



Parameters:

$A = 955.658$  (brightness)

$B = 125.570$  (background)

$a = 0.822$  px

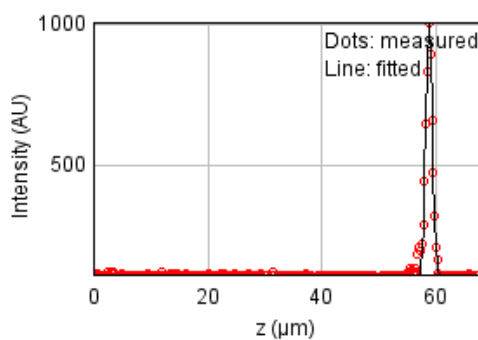
$b = 0.048$  px

$c = 0.548$  px

$x_c = 6.286$  px

$y_c = 6.208$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 41089.2914

Standard deviation: 11.56898

$R^2: 0.98879$

Parameters:

$a = 112.34400$

$b = 1015.62105$

$c = 58.86768$

$d = 0.56823$



## Bead 2657

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

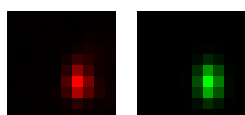
Coordinates : 8.83  $\mu\text{m}$  (x), 34.7  $\mu\text{m}$  (y), 58.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

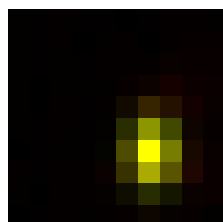
FWHM	Non corrected	Corrected	Theoretical
min	372 nm	385 nm	223 nm
max	537 nm	555 nm	223 nm
z	1.22 $\mu\text{m}$	1.22 $\mu\text{m}$	885 nm
Asymmetry	0.693		
Theta	-89.7°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1654.112 (brightness)

B = 128.439 (background)

a = 0.970 px

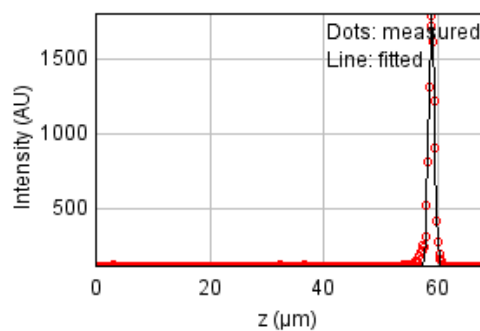
b = -0.003 px

c = 0.466 px

$x_c = 6.129$  px

$y_c = 6.071$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 85976.5980

Standard deviation: 16.73482

$R^2$ : 0.99262

Parameters:

a = 115.40949

b = 1804.15264

c = 58.94528

d = 0.51711

## Bead 2658

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

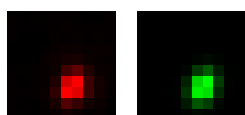
Coordinates : -60.6  $\mu\text{m}$  (x), 34.7  $\mu\text{m}$  (y), 59.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

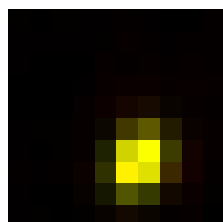
FWHM	Non corrected	Corrected	Theoretical
min	389 nm	402 nm	223 nm
max	503 nm	520 nm	223 nm
z	1.43 $\mu\text{m}$	1.43 $\mu\text{m}$	885 nm
Asymmetry	0.774		
Theta	65.0°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 2051.700 (brightness)

B = 139.304 (background)

a = 0.823 px

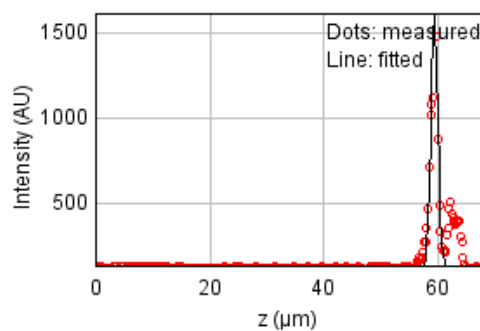
b = 0.136 px

c = 0.595 px

xc = 5.536 px

yc = 6.491 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1470748.25

Standard deviation: 69.21496

$R^2$ : 0.87584

Parameters:

a = 128.70627

b = 1610.28915

c = 59.42839

d = 0.60586

## Bead 2659

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

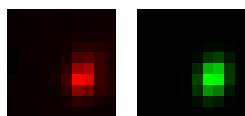
Coordinates : 136  $\mu\text{m}$  (x), 27.8  $\mu\text{m}$  (y), 59.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

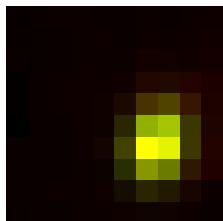
FWHM	Non corrected	Corrected	Theoretical
min	430 nm	444 nm	223 nm
max	564 nm	583 nm	223 nm
z	1.49 $\mu\text{m}$	1.5 $\mu\text{m}$	885 nm
Asymmetry	0.762		
Theta	73.5°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1058.875 (brightness)

B = 121.082 (background)

a = 0.702 px

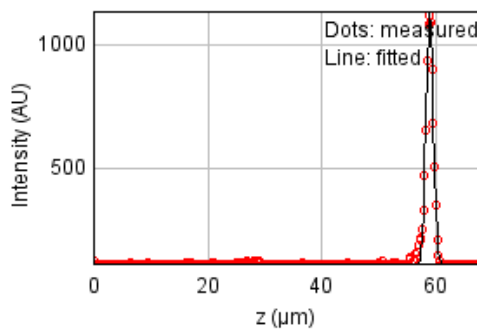
b = 0.083 px

c = 0.446 px

xc = 6.486 px

yc = 5.821 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 39852.3246

Standard deviation: 11.39351

$R^2$ : 0.99232

Parameters:

a = 112.94597

b = 1133.79687

c = 58.96066

d = 0.63463

## Bead 2660

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

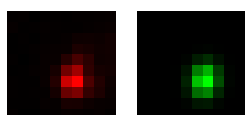
Coordinates : 110 um (x), 16.1 um (y), 58.9 um (z)

Corresponding bead : Not found

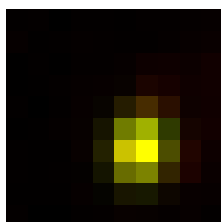
FWHM	Non corrected	Corrected	Theoretical
min	423 nm	438 nm	223 nm
max	513 nm	530 nm	223 nm
z	1.73 um	1.74 um	885 nm
Asymmetry	0.826		
Theta	79.7°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1203.649 (brightness)

B = 127.586 (background)

a = 0.741 px

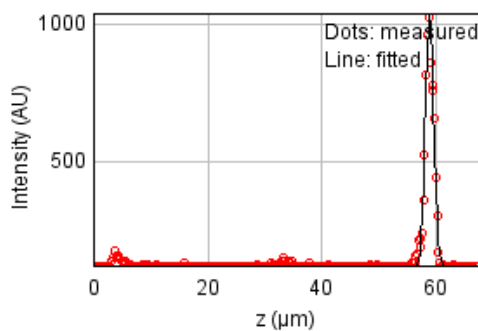
b = 0.042 px

c = 0.518 px

xc = 5.693 px

yc = 5.879 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 117610.976

Standard deviation: 19.57288

$R^2$ : 0.97634

Parameters:

a = 115.65700

b = 1038.85047

c = 58.94093

d = 0.73504

## Bead 2661

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

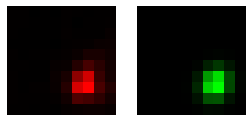
Coordinates : 94.5  $\mu\text{m}$  (x), 2.94  $\mu\text{m}$  (y), 59.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

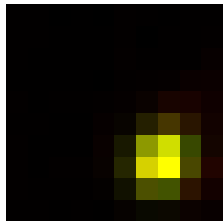
FWHM	Non corrected	Corrected	Theoretical
min	412 nm	426 nm	223 nm
max	477 nm	493 nm	223 nm
z	1.16 $\mu\text{m}$	1.16 $\mu\text{m}$	885 nm
Asymmetry	0.864		
Theta	61.5°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1772.538 (brightness)

B = 127.915 (background)

a = 0.744 px

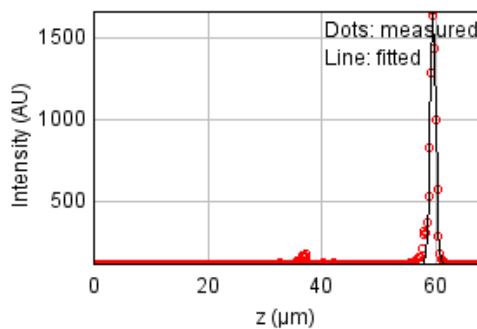
b = 0.084 px

c = 0.636 px

xc = 6.675 px

yc = 6.656 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 159176.024

Standard deviation: 22.77035

$R^2$ : 0.98335

Parameters:

a = 117.65907

b = 1679.71370

c = 59.53534

d = 0.49091

## Bead 2662

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

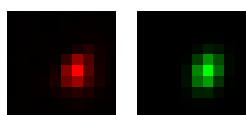
Coordinates : -110  $\mu\text{m}$  (x), -43.1  $\mu\text{m}$  (y), 59.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

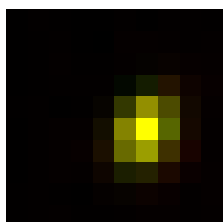
FWHM	Non corrected	Corrected	Theoretical
min	397 nm	410 nm	223 nm
max	532 nm	550 nm	223 nm
z	1.23 $\mu\text{m}$	1.23 $\mu\text{m}$	885 nm
Asymmetry	0.746		
Theta	66.9°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1325.108 (brightness)

B = 122.852 (background)

a = 0.794 px

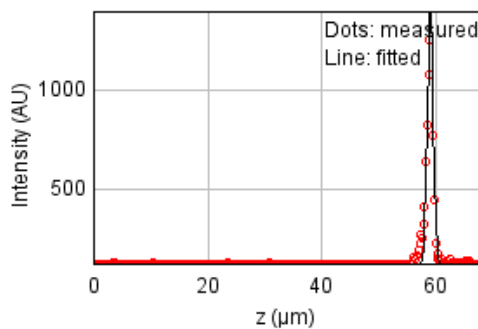
b = 0.136 px

c = 0.532 px

xc = 5.910 px

yc = 5.068 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 245834.262

Standard deviation: 28.29776

$R^2$ : 0.96606

Parameters:

a = 115.57071

b = 1425.14114

c = 59.07415

d = 0.52069

## Bead 2663

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

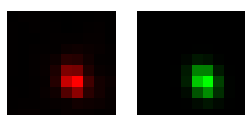
Coordinates : 111  $\mu\text{m}$  (x), -79.4  $\mu\text{m}$  (y), 59.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

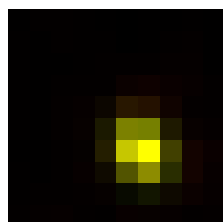
FWHM	Non corrected	Corrected	Theoretical
min	389 nm	402 nm	223 nm
max	482 nm	498 nm	223 nm
z	1.12 $\mu\text{m}$	1.13 $\mu\text{m}$	885 nm
Asymmetry	0.808		
Theta	-61.3°		

### 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 = 2050.262 (brightness)

B = 134.615 (background)

a = 0.815 px

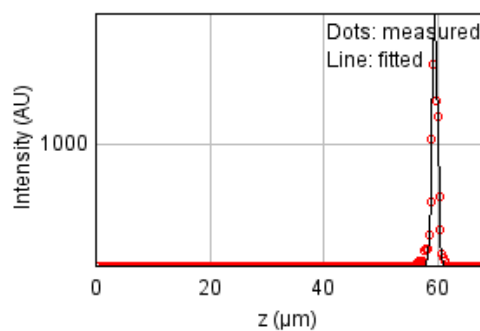
b = -0.129 px

c = 0.649 px

xc = 5.648 px

yc = 5.963 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 178516.742

Standard deviation: 24.11406

$R^2$ : 0.98674

Parameters:

a = 114.99166

b = 1996.51595

c = 59.50622

d = 0.47769

## Bead 2664

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

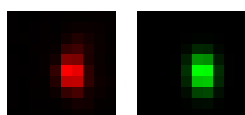
Coordinates : 5.83  $\mu\text{m}$  (x), -94.2  $\mu\text{m}$  (y), 59.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

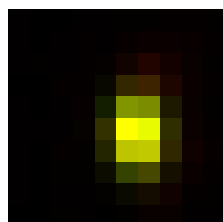
FWHM	Non corrected	Corrected	Theoretical
min	400 nm	413 nm	223 nm
max	578 nm	597 nm	223 nm
z	1.5 $\mu\text{m}$	1.51 $\mu\text{m}$	885 nm
Asymmetry	0.692		
Theta	-87.0°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 2145.105 (brightness)

B = 137.654 (background)

a = 0.838 px

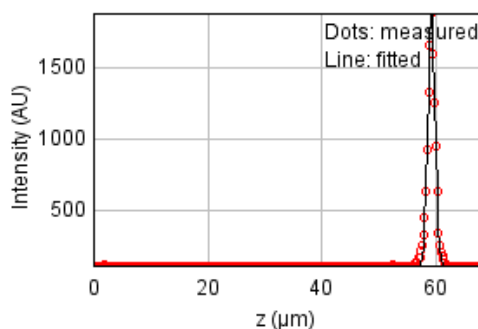
b = -0.023 px

c = 0.403 px

xc = 5.495 px

yc = 5.197 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 77208.1329

Standard deviation: 15.85851

$R^2$ : 0.99509

Parameters:

a = 115.24669

b = 1890.70264

c = 59.27419

d = 0.63745



## Bead 2665

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

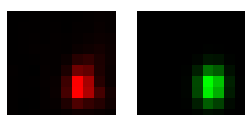
Coordinates : 69.4  $\mu\text{m}$  (x), 26.1  $\mu\text{m}$  (y), 59.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

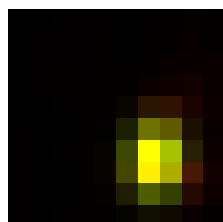
FWHM	Non corrected	Corrected	Theoretical
min	416 nm	430 nm	223 nm
max	553 nm	572 nm	223 nm
z	1.48 $\mu\text{m}$	1.49 $\mu\text{m}$	885 nm
Asymmetry	0.751		
Theta	85.7°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1834.354 (brightness)

B = 129.016 (background)

a = 0.775 px

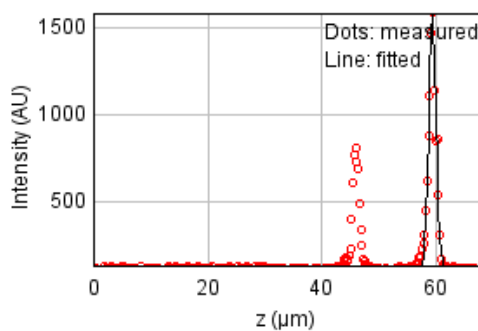
b = 0.025 px

c = 0.440 px

$x_c = 6.310$  px

$y_c = 6.405$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 2338082.82

Standard deviation: 87.26915

$R^2$ : 0.81466

Parameters:

a = 132.11687

b = 1580.17794

c = 59.43029

d = 0.62901

## Bead 2666

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

Coordinates : -38.2  $\mu\text{m}$  (x), -33.1  $\mu\text{m}$  (y), 48.1  $\mu\text{m}$  (z)

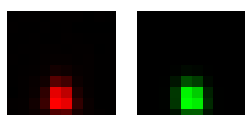
Corresponding bead : Not found



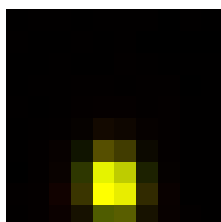
FWHM	Non corrected	Corrected	Theoretical
min	401 nm	414 nm	223 nm
max	504 nm	521 nm	223 nm
z	1.28 $\mu\text{m}$	1.28 $\mu\text{m}$	885 nm
Asymmetry	0.796		
Theta	-80.8°		

### 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:

$A = 2458.753$  (brightness)

$B = 122.649$  (background)

$a = 0.827$  px

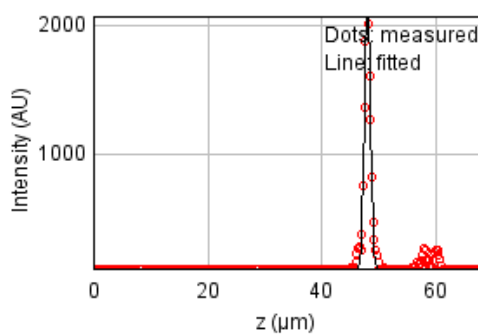
$b = -0.049$  px

$c = 0.536$  px

$x_c = 4.429$  px

$y_c = 7.589$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 378743.766

Standard deviation: 35.12397

$R^2: 0.97747$

Parameters:

$a = 122.99015$

$b = 2088.57401$

$c = 48.05270$

$d = 0.54333$

## Bead 2667

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

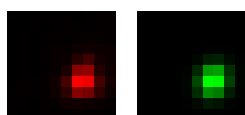
Coordinates : -138  $\mu\text{m}$  (x), -55.9  $\mu\text{m}$  (y), 59.3  $\mu\text{m}$  (z)

Corresponding bead : Not found

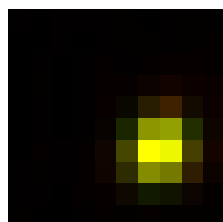
FWHM	Non corrected	Corrected	Theoretical
min	444 nm	459 nm	223 nm
max	497 nm	513 nm	223 nm
z	1.32 $\mu\text{m}$	1.32 $\mu\text{m}$	885 nm
Asymmetry	0.895		
Theta	65.8°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1521.088 (brightness)

B = 125.948 (background)

a = 0.657 px

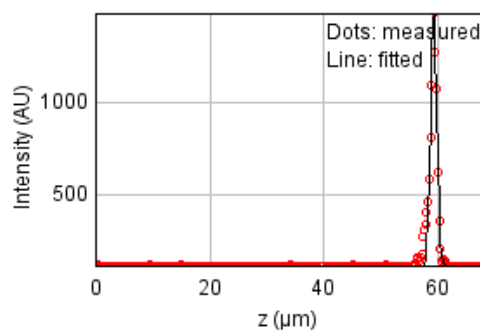
b = 0.051 px

c = 0.567 px

$x_c = 6.480$  px

$y_c = 5.924$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 239787.063

Standard deviation: 27.94755

$R^2$ : 0.97198

Parameters:

a = 114.03038

b = 1493.11205

c = 59.31452

d = 0.55926

## Bead 2668

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

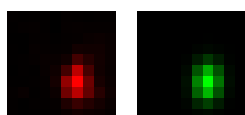
Coordinates : 40.3  $\mu\text{m}$  (x), -57.7  $\mu\text{m}$  (y), 59.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

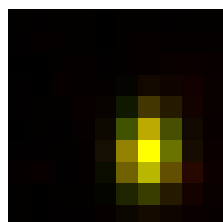
FWHM	Non corrected	Corrected	Theoretical
min	426 nm	440 nm	223 nm
max	602 nm	622 nm	223 nm
z	1.31 $\mu\text{m}$	1.32 $\mu\text{m}$	885 nm
Asymmetry	0.708		
Theta	86.6°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1181.461 (brightness)

B = 126.303 (background)

a = 0.738 px

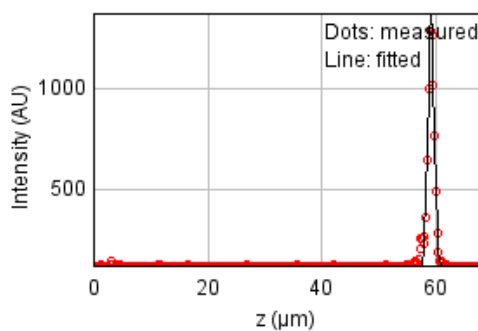
b = 0.022 px

c = 0.372 px

$x_c = 5.955$  px

$y_c = 6.051$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 277050.673

Standard deviation: 30.04073

$R^2$ : 0.96153

Parameters:

a = 114.76582

b = 1374.18139

c = 59.19754

d = 0.55822

## Bead 2669

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

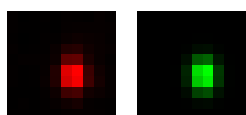
Coordinates : -69.4  $\mu\text{m}$  (x), -76.2  $\mu\text{m}$  (y), 59.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

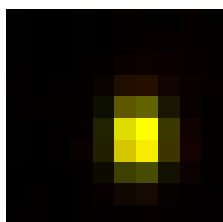
FWHM	Non corrected	Corrected	Theoretical
min	399 nm	412 nm	223 nm
max	510 nm	527 nm	223 nm
z	1.16 $\mu\text{m}$	1.17 $\mu\text{m}$	885 nm
Asymmetry	0.782		
Theta	-88.2°		

### 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 = 2187.694 (brightness)

B = 128.964 (background)

a = 0.844 px

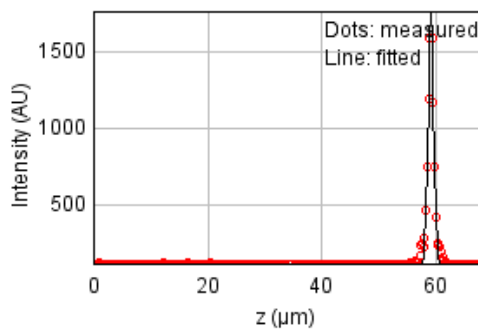
b = -0.010 px

c = 0.516 px

xc = 5.593 px

yc = 5.412 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 96947.8951

Standard deviation: 17.77051

$R^2$ : 0.99079

Parameters:

a = 115.01691

b = 1757.19019

c = 59.17533

d = 0.49292

## Bead 2670 (Rejected)

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

Coordinates : -127  $\mu\text{m}$  (x), -77.0  $\mu\text{m}$  (y), 52.1  $\mu\text{m}$  (z)

Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	263 nm	264 nm	885 nm
Asymmetry	0.0		
Theta	0.0°		

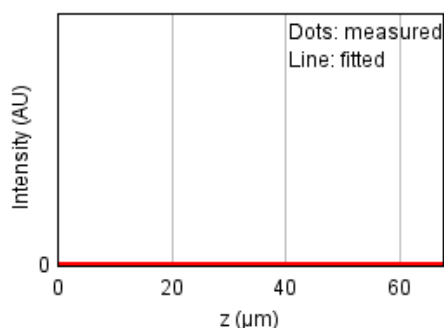
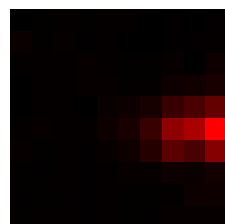
### XY profile & fitting parameters :

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



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

### Z profile & fitting parameters:



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

Sum of residuals squared: 0.00000E0

Standard deviation: 0.00000E0

R<sup>2</sup>: 0.00000

Parameters:

a = 0.00000E0

b = 0.00000E0

c = -0.11115

d = 0.11151

## Bead 2671

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

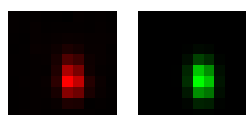
Coordinates : -87.7  $\mu\text{m}$  (x), 84.3  $\mu\text{m}$  (y), 59.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

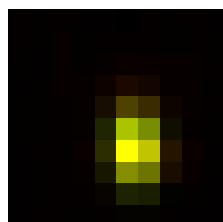
FWHM	Non corrected	Corrected	Theoretical
min	365 nm	377 nm	223 nm
max	563 nm	582 nm	223 nm
z	1.24 $\mu\text{m}$	1.24 $\mu\text{m}$	885 nm
Asymmetry	0.648		
Theta	-86.7°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1879.197$  (brightness)

$B = 125.532$  (background)

$a = 1.005$  px

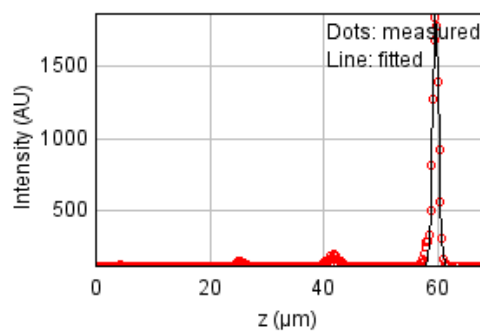
$b = -0.033$  px

$c = 0.425$  px

$x_c = 5.363$  px

$y_c = 5.837$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 145655.495

Standard deviation: 21.78182

$R^2: 0.98851$

Parameters:

$a = 120.36007$

$b = 1866.05956$

$c = 59.64444$

$d = 0.52459$

## Bead 2672

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

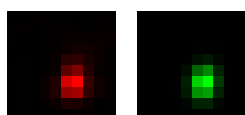
Coordinates : -40.6  $\mu\text{m}$  (x), 36.1  $\mu\text{m}$  (y), 59.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

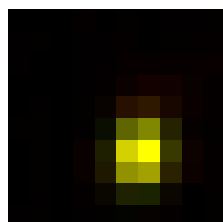
FWHM	Non corrected	Corrected	Theoretical
min	395 nm	408 nm	223 nm
max	499 nm	516 nm	223 nm
z	1.12 $\mu\text{m}$	1.13 $\mu\text{m}$	885 nm
Asymmetry	0.791		
Theta	81.0°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1564.614 (brightness)

B = 127.334 (background)

a = 0.854 px

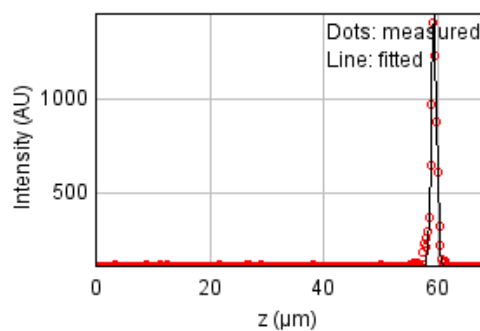
b = 0.050 px

c = 0.546 px

xc = 5.614 px

yc = 6.112 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 89120.4517

Standard deviation: 17.03803

$R^2$ : 0.98694

Parameters:

a = 114.69005

b = 1454.73994

c = 59.36678

d = 0.47743



## Bead 2673

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

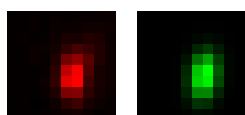
Coordinates : -2.06  $\mu\text{m}$  (x), 34.4  $\mu\text{m}$  (y), 59.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

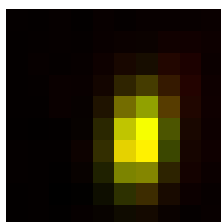
FWHM	Non corrected	Corrected	Theoretical
min	440 nm	455 nm	223 nm
max	728 nm	753 nm	223 nm
z	1.43 $\mu\text{m}$	1.44 $\mu\text{m}$	885 nm
Asymmetry	0.605		
Theta	81.8°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1174.744 (brightness)

B = 132.724 (background)

a = 0.683 px

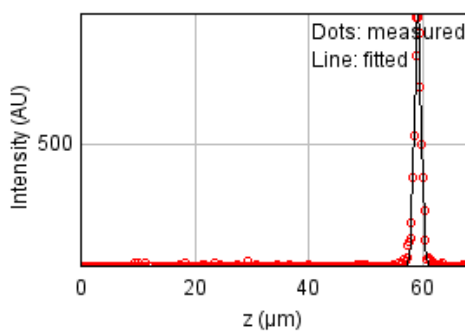
b = 0.062 px

c = 0.262 px

$x_c = 5.650$  px

$y_c = 5.467$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 27374.4170

Standard deviation: 9.44285

$R^2$ : 0.99115

Parameters:

a = 114.10915

b = 918.18680

c = 59.15563

d = 0.60770

## Bead 2674

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

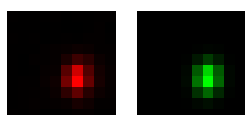
Coordinates : -104  $\mu\text{m}$  (x), -17.1  $\mu\text{m}$  (y), 59.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

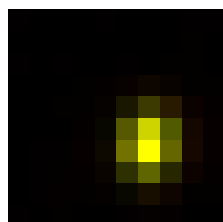
FWHM	Non corrected	Corrected	Theoretical
min	393 nm	407 nm	223 nm
max	495 nm	511 nm	223 nm
z	1.12 $\mu\text{m}$	1.13 $\mu\text{m}$	885 nm
Asymmetry	0.795		
Theta	84.4°		

### 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 = 1684.509 (brightness)

B = 123.380 (background)

a = 0.864 px

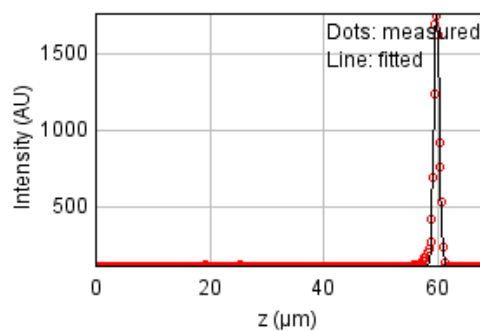
b = 0.031 px

c = 0.552 px

xc = 5.981 px

yc = 5.670 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 131594.082

Standard deviation: 20.70375

$R^2$ : 0.98715

Parameters:

a = 115.23173

b = 1756.66064

c = 59.81650

d = 0.47757

## Bead 2675

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

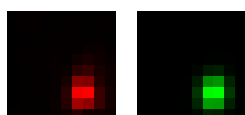
Coordinates : 53.4  $\mu\text{m}$  (x), -17.6  $\mu\text{m}$  (y), 59.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

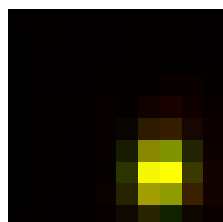
FWHM	Non corrected	Corrected	Theoretical
min	418 nm	432 nm	223 nm
max	508 nm	525 nm	223 nm
z	1.05 $\mu\text{m}$	1.06 $\mu\text{m}$	885 nm
Asymmetry	0.822		
Theta	83.6°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1761.532$  (brightness)

$B = 122.981$  (background)

$a = 0.766$  px

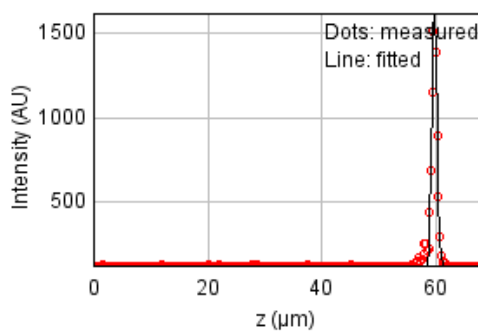
$b = 0.028$  px

$c = 0.523$  px

$x_c = 6.519$  px

$y_c = 7.047$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 80213.9740

Standard deviation: 16.16426

$R^2: 0.99016$

Parameters:

$a = 116.51442$

$b = 1630.05416$

$c = 59.78434$

$d = 0.44799$

## Bead 2676

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

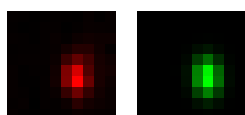
Coordinates : 132  $\mu\text{m}$  (x), -22.8  $\mu\text{m}$  (y), 59.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

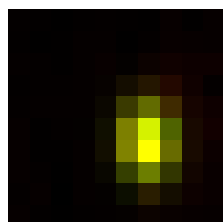
FWHM	Non corrected	Corrected	Theoretical
min	418 nm	432 nm	223 nm
max	593 nm	613 nm	223 nm
z	1.17 $\mu\text{m}$	1.17 $\mu\text{m}$	885 nm
Asymmetry	0.705		
Theta	-87.8°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 989.604 (brightness)

B = 121.208 (background)

a = 0.768 px

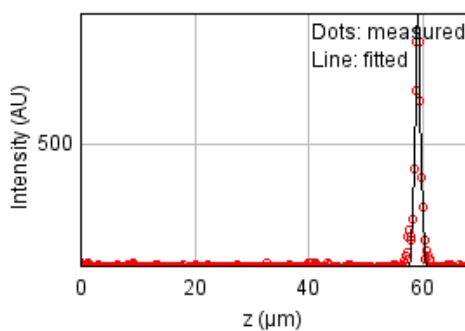
b = -0.015 px

c = 0.382 px

$x_c = 5.925$  px

$y_c = 5.568$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 51568.7338

Standard deviation: 12.96057

$R^2$ : 0.97967

Parameters:

a = 113.00707

b = 912.31779

c = 59.17174

d = 0.49563

## Bead 2677

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

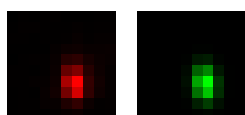
Coordinates : -120  $\mu\text{m}$  (x), -32.4  $\mu\text{m}$  (y), 59.6  $\mu\text{m}$  (z)

Corresponding bead : Not found

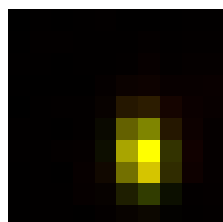
FWHM	Non corrected	Corrected	Theoretical
min	360 nm	373 nm	223 nm
max	545 nm	563 nm	223 nm
z	1.24 $\mu\text{m}$	1.24 $\mu\text{m}$	885 nm
Asymmetry	0.662		
Theta	-83.8°		

### 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 = 1947.378 (brightness)

B = 129.891 (background)

a = 1.027 px

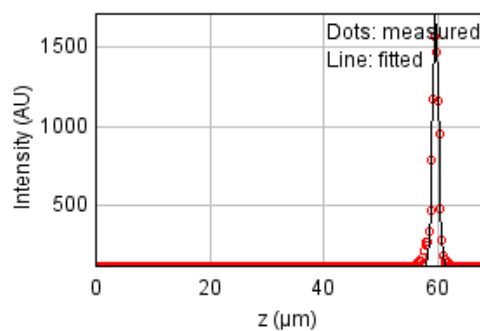
b = -0.062 px

c = 0.459 px

$x_c = 5.725$  px

$y_c = 6.176$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 143641.831

Standard deviation: 21.63074

$R^2$ : 0.98649

Parameters:

a = 114.26768

b = 1711.32850

c = 59.62334

d = 0.52497

## Bead 2678

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

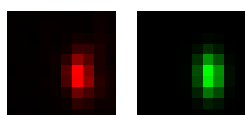
Coordinates : 22.5  $\mu\text{m}$  (x), -42.1  $\mu\text{m}$  (y), 59.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

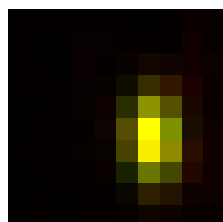
FWHM	Non corrected	Corrected	Theoretical
min	388 nm	401 nm	223 nm
max	653 nm	675 nm	223 nm
z	1.18 $\mu\text{m}$	1.19 $\mu\text{m}$	885 nm
Asymmetry	0.594		
Theta	-88.2°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1199.754$  (brightness)

$B = 127.737$  (background)

$a = 0.892$  px

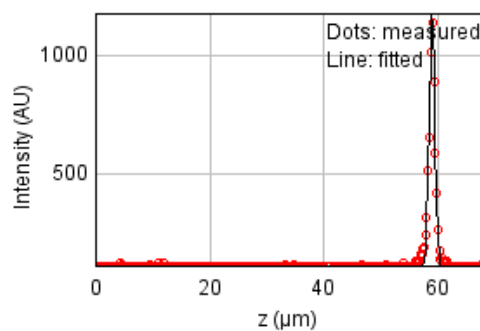
$b = -0.018$  px

$c = 0.315$  px

$x_c = 6.185$  px

$y_c = 5.395$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 59641.8416

Standard deviation: 13.93819

$R^2: 0.98685$

Parameters:

$a = 114.92992$

$b = 1180.55802$

$c = 59.02352$

$d = 0.50262$

## Bead 2679

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

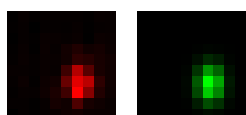
Coordinates : -145  $\mu\text{m}$  (x), -42.5  $\mu\text{m}$  (y), 59.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

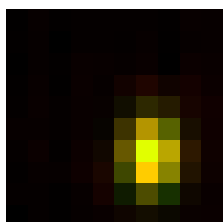
FWHM	Non corrected	Corrected	Theoretical
min	423 nm	438 nm	223 nm
max	592 nm	612 nm	223 nm
z	1.48 $\mu\text{m}$	1.48 $\mu\text{m}$	885 nm
Asymmetry	0.715		
Theta	88.8°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.958$



Parameters:

A = 854.407 (brightness)

B = 117.927 (background)

a = 0.748 px

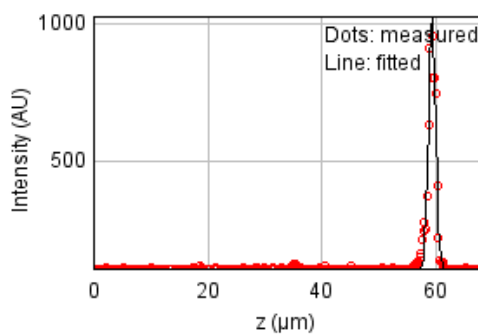
b = 0.007 px

c = 0.383 px

xc = 6.210 px

yc = 6.202 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 160815.623

Standard deviation: 22.88732

$R^2$ : 0.96189

Parameters:

a = 112.49738

b = 1023.87501

c = 59.37462

d = 0.62710

## Bead 2680

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

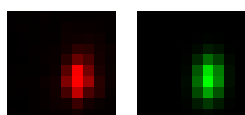
Coordinates : -112  $\mu\text{m}$  (x), -74.7  $\mu\text{m}$  (y), 59.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

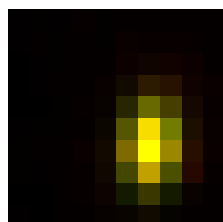
FWHM	Non corrected	Corrected	Theoretical
min	420 nm	434 nm	223 nm
max	667 nm	689 nm	223 nm
z	1.51 $\mu\text{m}$	1.51 $\mu\text{m}$	885 nm
Asymmetry	0.629		
Theta	86.1°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1292.088 (brightness)

B = 124.060 (background)

a = 0.760 px

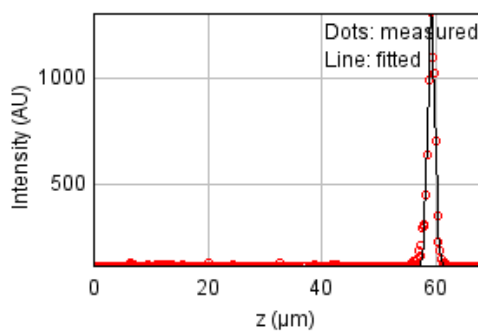
b = 0.031 px

c = 0.304 px

xc = 6.089 px

yc = 5.727 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 160400.029

Standard deviation: 22.85773

$R^2$ : 0.97805

Parameters:

a = 113.62213

b = 1310.51284

c = 59.24635

d = 0.64071



## Bead 2681

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

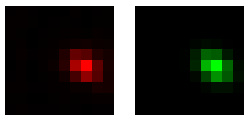
Coordinates : 163  $\mu\text{m}$  (x), -91.1  $\mu\text{m}$  (y), 60.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

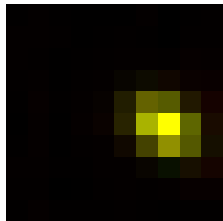
FWHM	Non corrected	Corrected	Theoretical
min	377 nm	390 nm	223 nm
max	523 nm	540 nm	223 nm
z	2.99 $\mu\text{m}$	3.0 $\mu\text{m}$	885 nm
Asymmetry	0.721		
Theta	-34.5°		

### 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 = 1148.714 (brightness)

B = 117.733 (background)

a = 0.636 px

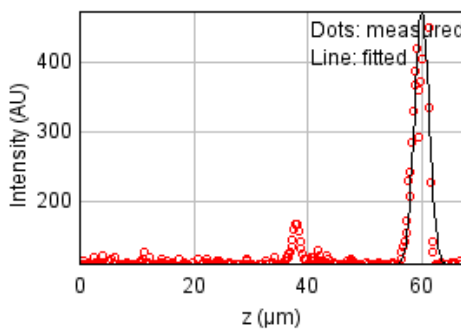
b = -0.212 px

c = 0.800 px

xc = 6.811 px

yc = 5.092 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 166674.045

Standard deviation: 23.30048

$R^2$ : 0.88241

Parameters:

a = 111.38973

b = 473.25159

c = 60.01711

d = 1.26995

## Bead 2682

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

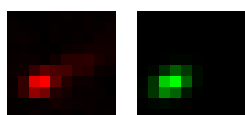
Coordinates : 161  $\mu\text{m}$  (x), 94.4  $\mu\text{m}$  (y), 33.4  $\mu\text{m}$  (z)

Corresponding bead : Not found

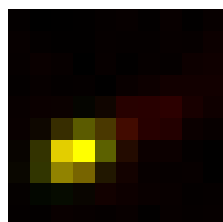
FWHM	Non corrected	Corrected	Theoretical
min	349 nm	361 nm	223 nm
max	531 nm	549 nm	223 nm
z	1.57 $\mu\text{m}$	1.57 $\mu\text{m}$	885 nm
Asymmetry	0.657		
Theta	25.5°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.935$



Parameters:

A = 669.496 (brightness)

B = 124.737 (background)

a = 0.591 px

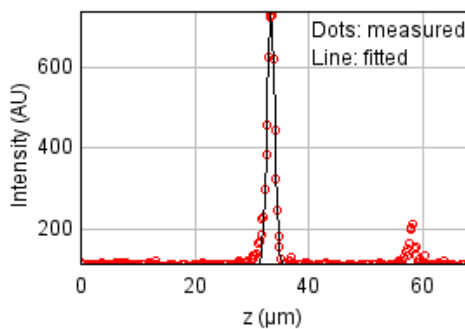
b = 0.243 px

c = 0.985 px

xc = 2.636 px

yc = 6.114 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 76034.4346

Standard deviation: 15.73751

$R^2$ : 0.96356

Parameters:

a = 113.52925

b = 736.73763

c = 33.40179

d = 0.66571

## Bead 2683

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

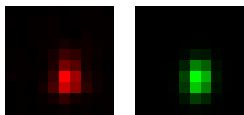
Coordinates : -117  $\mu\text{m}$  (x), 92.1  $\mu\text{m}$  (y), 59.5  $\mu\text{m}$  (z)

Corresponding bead : Not found

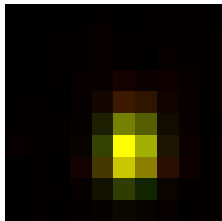
FWHM	Non corrected	Corrected	Theoretical
min	392 nm	406 nm	223 nm
max	535 nm	553 nm	223 nm
z	1.19 $\mu\text{m}$	1.19 $\mu\text{m}$	885 nm
Asymmetry	0.734		
Theta	85.0°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1096.699 (brightness)

B = 124.486 (background)

a = 0.869 px

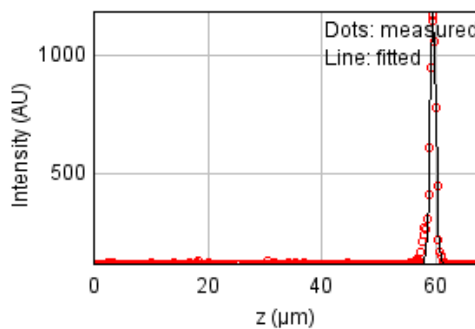
b = 0.035 px

c = 0.473 px

$x_c = 5.272$  px

$y_c = 6.213$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 91593.5887

Standard deviation: 17.27282

$R^2$ : 0.98074

Parameters:

a = 113.08237

b = 1199.42545

c = 59.53910

d = 0.50379

## Bead 2684

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

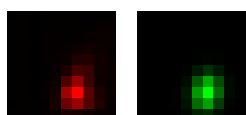
Coordinates : 40.9  $\mu\text{m}$  (x), 81.8  $\mu\text{m}$  (y), 60.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

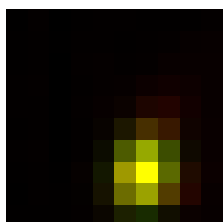
FWHM	Non corrected	Corrected	Theoretical
min	434 nm	449 nm	223 nm
max	562 nm	581 nm	223 nm
z	1.13 $\mu\text{m}$	1.13 $\mu\text{m}$	885 nm
Asymmetry	0.772		
Theta	79.3°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.959$



Parameters:

A = 1565.734 (brightness)

B = 130.715 (background)

a = 0.702 px

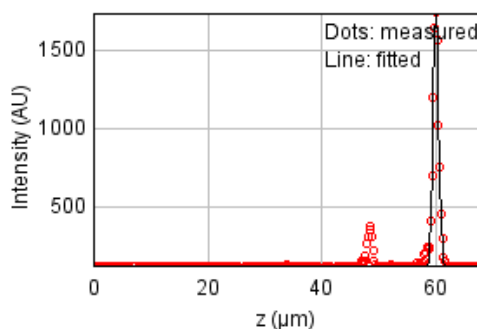
b = 0.052 px

c = 0.434 px

$x_c = 5.867$  px

$y_c = 6.990$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 345480.809

Standard deviation: 33.54616

$R^2$ : 0.96584

Parameters:

a = 121.58761

b = 1733.57869

c = 60.04650

d = 0.47859

## Bead 2685

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

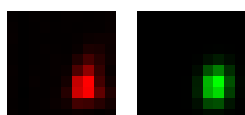
Coordinates : 8.29  $\mu\text{m}$  (x), 60.2  $\mu\text{m}$  (y), 59.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

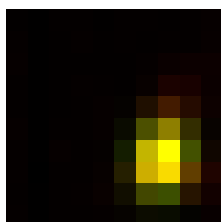
FWHM	Non corrected	Corrected	Theoretical
min	421 nm	435 nm	223 nm
max	567 nm	587 nm	223 nm
z	1.13 $\mu\text{m}$	1.13 $\mu\text{m}$	885 nm
Asymmetry	0.742		
Theta	80.1°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.967$



Parameters:

A = 1392.575 (brightness)

B = 122.519 (background)

a = 0.748 px

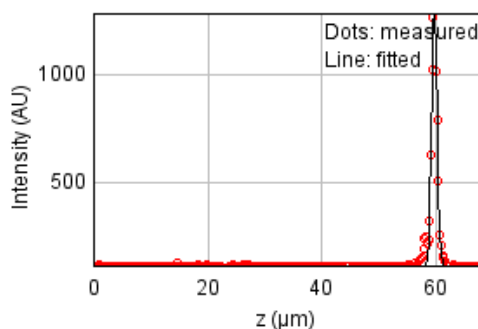
b = 0.058 px

c = 0.427 px

$x_c = 6.704$  px

$y_c = 6.356$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 85085.5804

Standard deviation: 16.64787

$R^2$ : 0.98391

Parameters:

a = 115.27105

b = 1291.69063

c = 59.76831

d = 0.47848

## Bead 2686

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

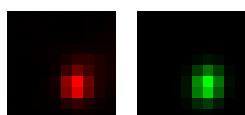
Coordinates : 160  $\mu\text{m}$  (x), 33.4  $\mu\text{m}$  (y), 60.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

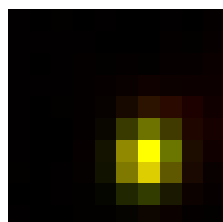
FWHM	Non corrected	Corrected	Theoretical
min	437 nm	452 nm	223 nm
max	519 nm	536 nm	223 nm
z	1.25 $\mu\text{m}$	1.26 $\mu\text{m}$	885 nm
Asymmetry	0.843		
Theta	78.4°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.973$



Parameters:

A = 1647.941 (brightness)

B = 129.638 (background)

a = 0.694 px

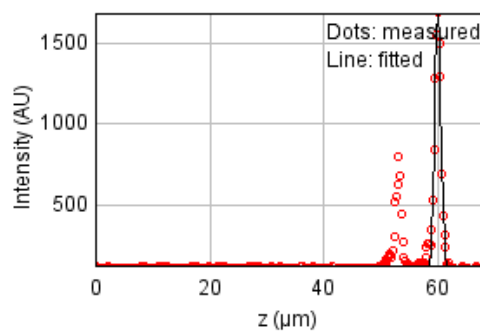
b = 0.040 px

c = 0.507 px

$x_c = 5.925$  px

$y_c = 6.291$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 1756007.90

Standard deviation: 75.62999

$R^2$ : 0.85119

Parameters:

a = 127.96713

b = 1680.65840

c = 60.03470

d = 0.53192

## Bead 2687

Date : Mon Oct 17 13:30:04 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

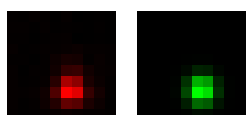
Coordinates : -141 um (x), 17.0 um (y), 59.8 um (z)

Corresponding bead : Not found

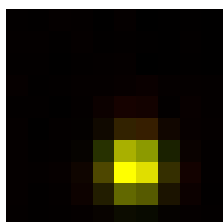
FWHM	Non corrected	Corrected	Theoretical
min	435 nm	450 nm	223 nm
max	459 nm	475 nm	223 nm
z	1.31 um	1.31 um	885 nm
Asymmetry	0.947		
Theta	87.2°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1064.127 (brightness)

B = 117.830 (background)

a = 0.709 px

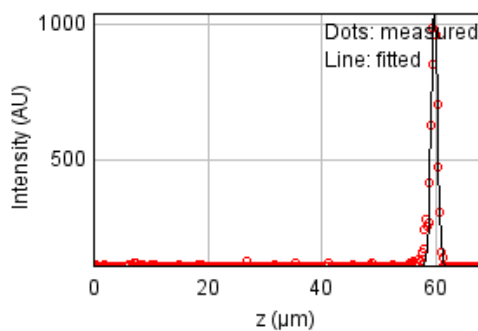
b = 0.004 px

c = 0.636 px

xc = 5.401 px

yc = 6.792 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 71961.7794

Standard deviation: 15.31023

$R^2$ : 0.98129

Parameters:

a = 113.08792

b = 1045.04531

c = 59.76331

d = 0.55553

## Bead 2688

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

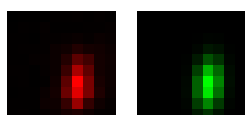
Coordinates : -152  $\mu\text{m}$  (x), 3.24  $\mu\text{m}$  (y), 59.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

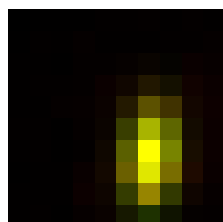
FWHM	Non corrected	Corrected	Theoretical
min	404 nm	418 nm	223 nm
max	778 nm	804 nm	223 nm
z	1.25 $\mu\text{m}$	1.25 $\mu\text{m}$	885 nm
Asymmetry	0.519		
Theta	85.5°		

### 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:

$A = 1371.606$  (brightness)

$B = 130.767$  (background)

$a = 0.819$  px

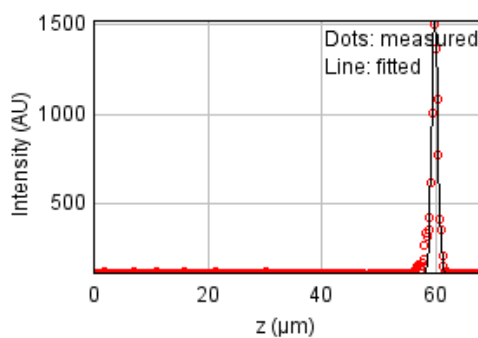
$b = 0.047$  px

$c = 0.226$  px

$x_c = 6.081$  px

$y_c = 6.258$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 210189.960

Standard deviation: 26.16597

$R^2: 0.97502$

Parameters:

$a = 115.29209$

$b = 1522.33995$

$c = 59.84316$

$d = 0.52896$



## Bead 2689

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

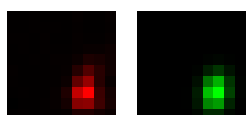
Coordinates : 14.7  $\mu\text{m}$  (x), -215 nm (y), 59.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

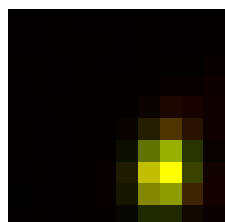
FWHM	Non corrected	Corrected	Theoretical
min	400 nm	413 nm	223 nm
max	566 nm	585 nm	223 nm
z	1.12 $\mu\text{m}$	1.12 $\mu\text{m}$	885 nm
Asymmetry	0.706		
Theta	80.1°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1716.397$  (brightness)

$B = 126.845$  (background)

$a = 0.827$  px

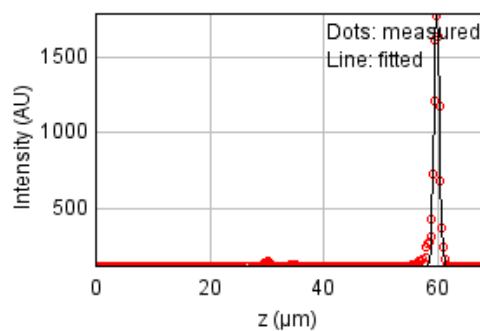
$b = 0.071$  px

$c = 0.431$  px

$x_c = 6.680$  px

$y_c = 6.978$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 104333.299

Standard deviation: 18.43496

$R^2: 0.99006$

Parameters:

$a = 117.52604$

$b = 1787.50210$

$c = 59.82882$

$d = 0.47447$

## Bead 2690

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

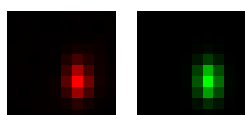
Coordinates : -126  $\mu\text{m}$  (x), -8.34  $\mu\text{m}$  (y), 59.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

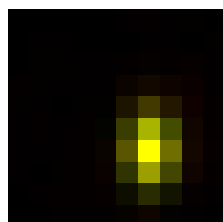
FWHM	Non corrected	Corrected	Theoretical
min	372 nm	385 nm	223 nm
max	572 nm	591 nm	223 nm
z	1.17 $\mu\text{m}$	1.17 $\mu\text{m}$	885 nm
Asymmetry	0.651		
Theta	-88.9°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1450.577$  (brightness)

$B = 125.131$  (background)

$a = 0.968$  px

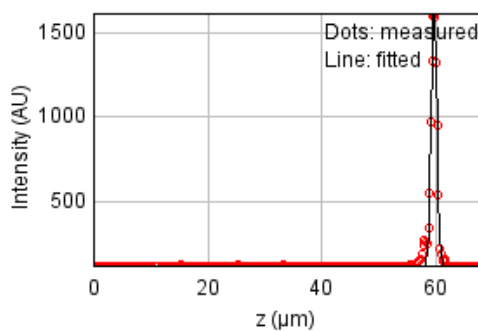
$b = -0.010$  px

$c = 0.410$  px

$x_c = 6.066$  px

$y_c = 5.920$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 99780.3586

Standard deviation: 18.02824

$R^2: 0.98916$

Parameters:

$a = 113.41172$

$b = 1641.76168$

$c = 59.71813$

$d = 0.49663$

## Bead 2691

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

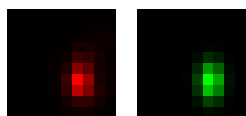
Coordinates : 57.5  $\mu\text{m}$  (x), -20.5  $\mu\text{m}$  (y), 59.9  $\mu\text{m}$  (z)

Corresponding bead : Not found

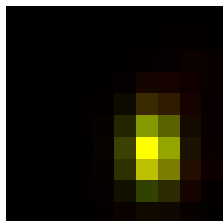
FWHM	Non corrected	Corrected	Theoretical
min	384 nm	397 nm	223 nm
max	581 nm	601 nm	223 nm
z	1.19 $\mu\text{m}$	1.19 $\mu\text{m}$	885 nm
Asymmetry	0.66		
Theta	-89.9°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1896.206 (brightness)

B = 133.187 (background)

a = 0.911 px

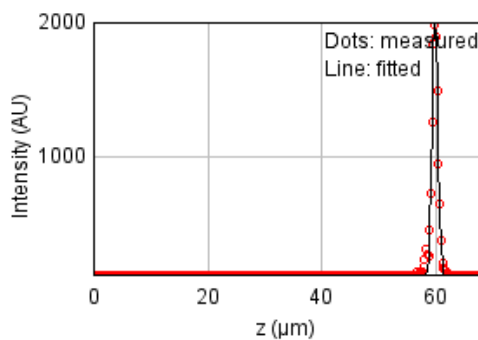
b = -0.001 px

c = 0.397 px

$x_c = 6.261$  px

$y_c = 6.140$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 114411.013

Standard deviation: 19.30477

$R^2$ : 0.99204

Parameters:

a = 115.02713

b = 2014.83070

c = 59.88952

d = 0.50391

## Bead 2692

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

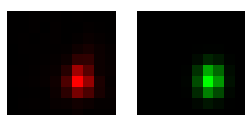
Coordinates : -152  $\mu\text{m}$  (x), -34.1  $\mu\text{m}$  (y), 59.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

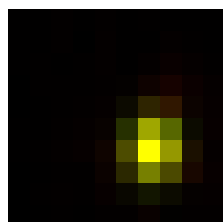
FWHM	Non corrected	Corrected	Theoretical
min	393 nm	406 nm	223 nm
max	490 nm	506 nm	223 nm
z	1.2 $\mu\text{m}$	1.21 $\mu\text{m}$	885 nm
Asymmetry	0.802		
Theta	86.4°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1728.625$  (brightness)

$B = 126.204$  (background)

$a = 0.867$  px

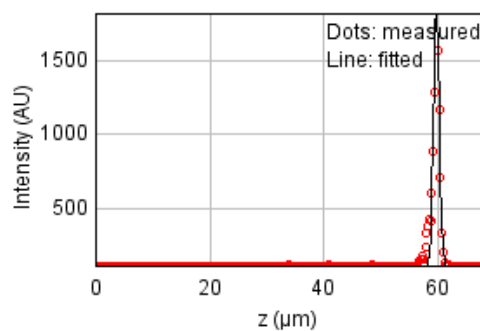
$b = 0.019$  px

$c = 0.560$  px

$x_c = 6.203$  px

$y_c = 5.874$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 268192.595

Standard deviation: 29.55658

$R^2: 0.97767$

Parameters:

$a = 114.14120$

$b = 1825.54651$

$c = 59.77240$

$d = 0.51133$

## Bead 2693

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

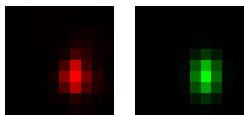
Coordinates : -53.5  $\mu\text{m}$  (x), -90.0  $\mu\text{m}$  (y), 59.7  $\mu\text{m}$  (z)

Corresponding bead : Not found

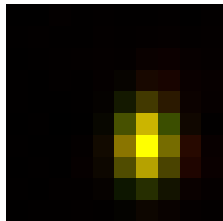
FWHM	Non corrected	Corrected	Theoretical
min	405 nm	418 nm	223 nm
max	578 nm	597 nm	223 nm
z	1.31 $\mu\text{m}$	1.32 $\mu\text{m}$	885 nm
Asymmetry	0.7		
Theta	88.6°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1893.543 (brightness)

B = 130.057 (background)

a = 0.819 px

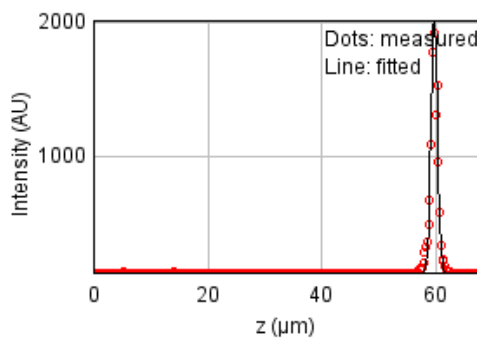
b = 0.010 px

c = 0.402 px

$x_c = 5.976$  px

$y_c = 5.931$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 532479.593

Standard deviation: 41.64686

$R^2$ : 0.96832

Parameters:

a = 115.77627

b = 2046.41569

c = 59.74666

d = 0.55829

## Bead 2694

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

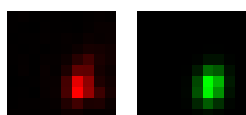
Coordinates : 68.3  $\mu\text{m}$  (x), 69.7  $\mu\text{m}$  (y), 60.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

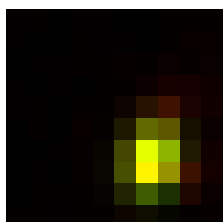
FWHM	Non corrected	Corrected	Theoretical
min	402 nm	415 nm	223 nm
max	549 nm	568 nm	223 nm
z	1.47 $\mu\text{m}$	1.48 $\mu\text{m}$	885 nm
Asymmetry	0.732		
Theta	77.3°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.946$



Parameters:

$A = 1192.630$  (brightness)

$B = 127.632$  (background)

$a = 0.812$  px

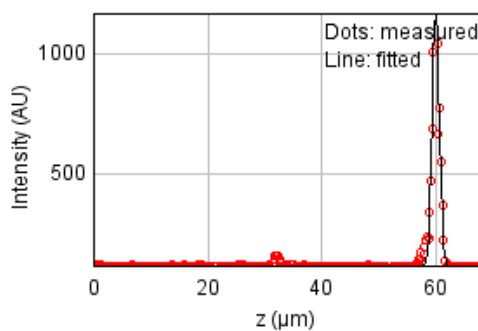
$b = 0.083$  px

$c = 0.464$  px

$x_c = 6.246$  px

$y_c = 6.405$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 150078.485

Standard deviation: 22.11007

$R^2: 0.97288$

Parameters:

$a = 115.01697$

$b = 1165.48303$

$c = 60.02332$

$d = 0.62619$

## Bead 2695

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

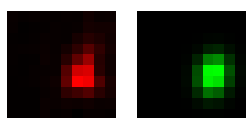
Coordinates : -11.3  $\mu\text{m}$  (x), 65.5  $\mu\text{m}$  (y), 59.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

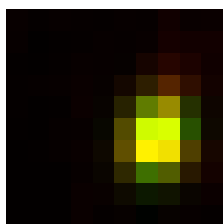
FWHM	Non corrected	Corrected	Theoretical
min	472 nm	488 nm	223 nm
max	610 nm	630 nm	223 nm
z	1.45 $\mu\text{m}$	1.46 $\mu\text{m}$	885 nm
Asymmetry	0.773		
Theta	78.5°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.939$



Parameters:

A = 868.931 (brightness)

B = 124.416 (background)

a = 0.594 px

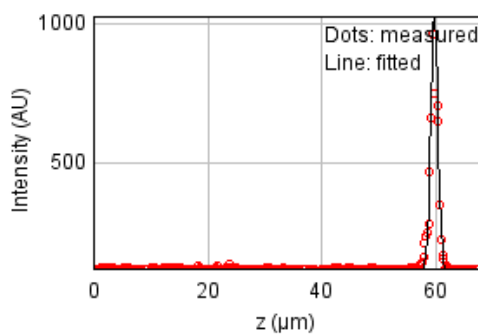
b = 0.047 px

c = 0.370 px

xc = 6.486 px

yc = 5.386 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 172090.966

Standard deviation: 23.67608

$R^2$ : 0.95939

Parameters:

a = 113.52161

b = 1033.03482

c = 59.76911

d = 0.61673

## Bead 2696

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

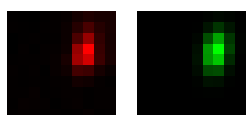
Coordinates : -26.0  $\mu\text{m}$  (x), 62.2  $\mu\text{m}$  (y), 59.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

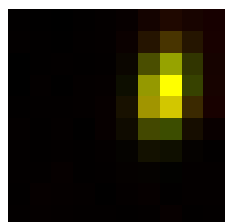
FWHM	Non corrected	Corrected	Theoretical
min	374 nm	387 nm	223 nm
max	638 nm	660 nm	223 nm
z	1.08 $\mu\text{m}$	1.08 $\mu\text{m}$	885 nm
Asymmetry	0.586		
Theta	79.5°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1609.561 (brightness)

B = 140.306 (background)

a = 0.937 px

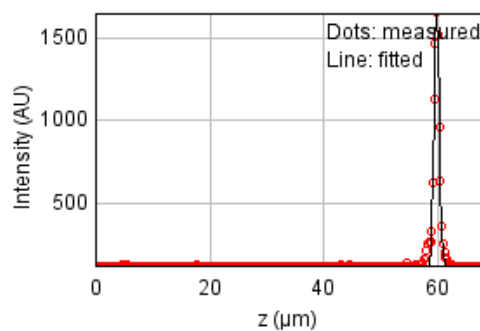
b = 0.113 px

c = 0.350 px

xc = 6.746 px

yc = 3.222 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 102272.259

Standard deviation: 18.25197

$R^2$ : 0.98806

Parameters:

a = 115.76794

b = 1649.03762

c = 59.82832

d = 0.45785



## Bead 2697

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

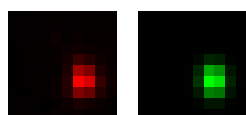
Coordinates : -99.8  $\mu\text{m}$  (x), 38.1  $\mu\text{m}$  (y), 59.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

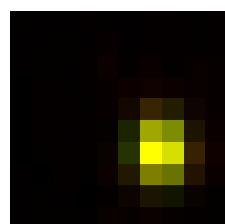
FWHM	Non corrected	Corrected	Theoretical
min	392 nm	405 nm	223 nm
max	490 nm	506 nm	223 nm
z	1.25 $\mu\text{m}$	1.26 $\mu\text{m}$	885 nm
Asymmetry	0.8		
Theta	-86.4°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1308.826 (brightness)

B = 122.622 (background)

a = 0.873 px

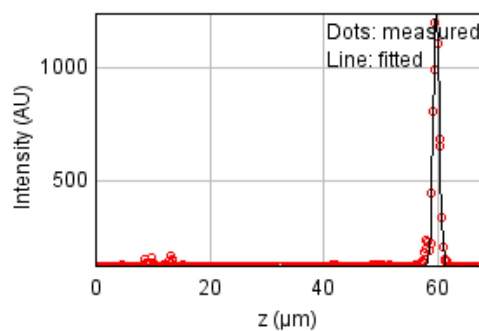
b = -0.020 px

c = 0.561 px

xc = 6.420 px

yc = 5.894 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 115535.794

Standard deviation: 19.39944

$R^2$ : 0.97915

Parameters:

a = 116.06242

b = 1258.09013

c = 59.75850

d = 0.53103

## Bead 2698

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

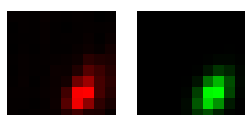
Coordinates : 155  $\mu\text{m}$  (x), 31.2  $\mu\text{m}$  (y), 60.0  $\mu\text{m}$  (z)

Corresponding bead : Not found

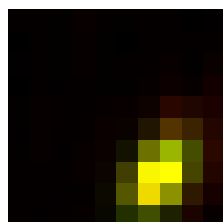
FWHM	Non corrected	Corrected	Theoretical
min	408 nm	421 nm	223 nm
max	652 nm	674 nm	223 nm
z	1.3 $\mu\text{m}$	1.31 $\mu\text{m}$	885 nm
Asymmetry	0.625		
Theta	58.1°		

### XY profile & fitting parameters :

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



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



Parameters:

$A = 1090.939$  (brightness)

$B = 120.328$  (background)

$a = 0.671$  px

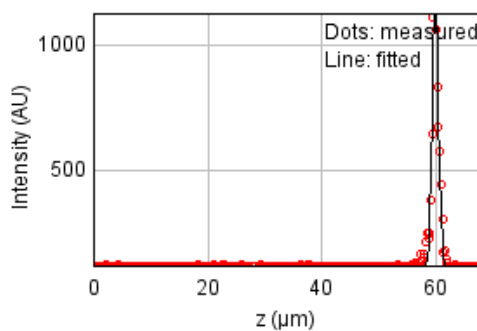
$b = 0.221$  px

$c = 0.453$  px

$x_c = 6.484$  px

$y_c = 7.127$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 176559.503

Standard deviation: 23.98150

$R^2: 0.96327$

Parameters:

$a = 112.25824$

$b = 1145.90429$

$c = 59.95436$

$d = 0.55399$

## Bead 2699

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

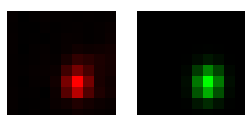
Coordinates : 141  $\mu\text{m}$  (x), 26.4  $\mu\text{m}$  (y), 59.8  $\mu\text{m}$  (z)

Corresponding bead : Not found

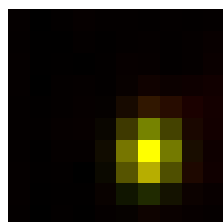
FWHM	Non corrected	Corrected	Theoretical
min	421 nm	435 nm	223 nm
max	507 nm	524 nm	223 nm
z	1.26 $\mu\text{m}$	1.27 $\mu\text{m}$	885 nm
Asymmetry	0.83		
Theta	84.0°		

### XY profile & fitting parameters :

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



Fitted on  $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$   
 $R^2 = 0.973$



Parameters:

A = 979.778 (brightness)

B = 125.880 (background)

a = 0.756 px

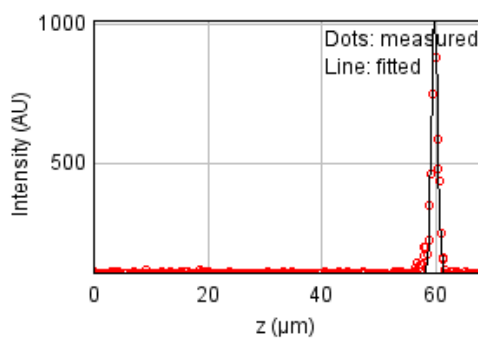
b = 0.024 px

c = 0.525 px

xc = 6.008 px

yc = 6.134 px

### Z profile & fitting parameters:



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

Sum of residuals squared: 149917.262

Standard deviation: 22.09819

$R^2$ : 0.95771

Parameters:

a = 111.64423

b = 1011.40446

c = 59.81108

d = 0.53558

## Bead 2700

Date : Mon Oct 17 13:30:05 PDT 2022

Origin : data\_traditional.tif ( Nikon 40x1.15 water )

Frame size : 10 pixels

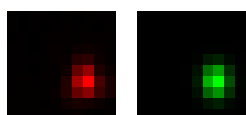
Coordinates : -98.8  $\mu\text{m}$  (x), -54.3  $\mu\text{m}$  (y), 60.2  $\mu\text{m}$  (z)

Corresponding bead : Not found

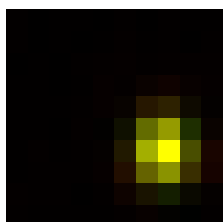
FWHM	Non corrected	Corrected	Theoretical
min	414 nm	428 nm	223 nm
max	505 nm	522 nm	223 nm
z	1.07 $\mu\text{m}$	1.07 $\mu\text{m}$	885 nm
Asymmetry	0.819		
Theta	-87.9°		

### XY profile & fitting parameters :

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



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



Parameters:

A = 1599.498 (brightness)

B = 124.781 (background)

a = 0.784 px

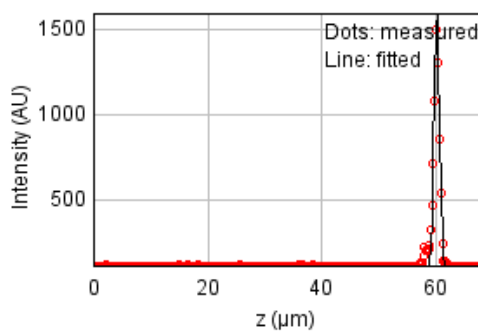
b = -0.010 px

c = 0.526 px

$x_c = 6.743$  px

$y_c = 5.971$  px

### Z profile & fitting parameters:



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

Sum of residuals squared: 110574.709

Standard deviation: 18.97836

$R^2$ : 0.98633

Parameters:

a = 115.39739

b = 1612.19634

c = 60.21314

d = 0.45259