

Bead 701 (Rejected)

Date : Mon Oct 17 13:28:26 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 108 μm (x), -74.4 μm (y), 16.4 μm (z)

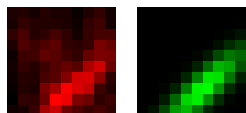
Corresponding bead : Not found

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

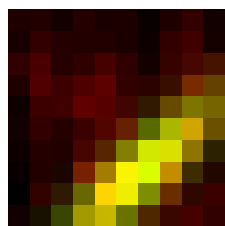
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 470 nm | 486 nm | 223 nm |
| max | 1.69 μm | 1.75 μm | 223 nm |
| z | 2.15 μm | 2.16 μm | 885 nm |
| Asymmetry | 0.277 | | |
| Theta | 43.5° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.862$



Parameters:

A = 112.658 (brightness)

B = 119.861 (background)

a = 0.312 px

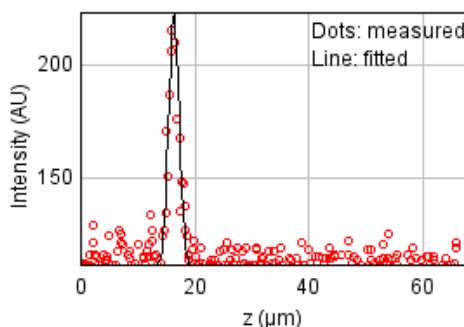
b = 0.280 px

c = 0.342 px

xc = 5.592 px

yc = 6.968 px

Z profile & fitting parameters:



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

Sum of residuals squared: 13735.5710

Standard deviation: 6.68889

R^2 : 0.86314

Parameters:

a = 111.66016

b = 222.88180

c = 16.43125

d = 0.91275

Bead 702 (Rejected)

Date : Mon Oct 17 13:28:26 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : -87.9 μm (x), 95.0 μm (y), 15.7 μm (z)

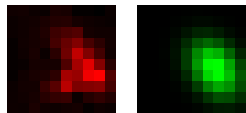
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

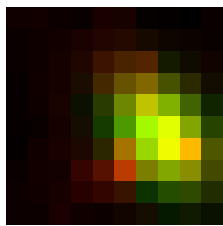
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 692 nm | 715 nm | 223 nm |
| max | 963 nm | 995 nm | 223 nm |
| z | 2.14 μm | 2.15 μm | 885 nm |
| Asymmetry | 0.718 | | |
| Theta | -53.2° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.813$



Parameters:

A = 298.908 (brightness)

B = 128.559 (background)

a = 0.232 px

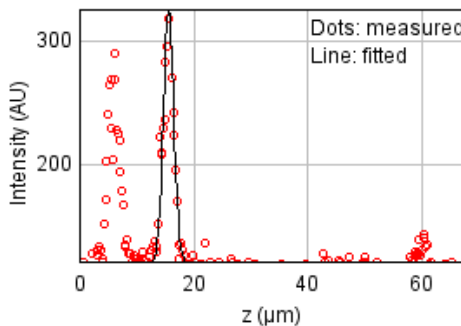
b = -0.065 px

c = 0.193 px

xc = 6.658 px

yc = 5.348 px

Z profile & fitting parameters:



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

Sum of residuals squared: 220516.652

Standard deviation: 26.80103

R^2 : 0.57156

Parameters:

a = 120.88844

b = 326.21911

c = 15.67081

d = 0.90933

Bead 703 (Rejected)

Date : Mon Oct 17 13:28:26 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : -68.9 μm (x), 91.5 μm (y), 15.3 μm (z)

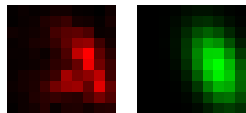
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

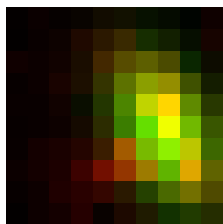
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 727 nm | 752 nm | 223 nm |
| max | 1.23 μm | 1.27 μm | 223 nm |
| z | 2.34 μm | 2.35 μm | 885 nm |
| Asymmetry | 0.592 | | |
| Theta | -65.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.759$



Parameters:

A = 239.895 (brightness)

B = 124.972 (background)

a = 0.226 px

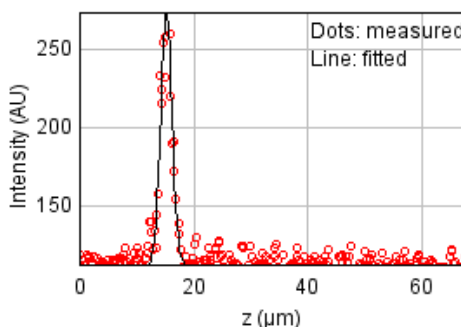
b = -0.062 px

c = 0.117 px

xc = 6.838 px

yc = 5.161 px

Z profile & fitting parameters:



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

Sum of residuals squared: 23371.6594

Standard deviation: 8.72520

R^2 : 0.89395

Parameters:

a = 112.42582

b = 273.48485

c = 15.27446

d = 0.99443

Bead 704

Date : Mon Oct 17 13:28:26 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

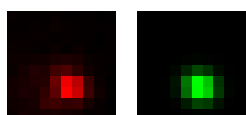
Coordinates : -80.0 μm (x), 61.9 μm (y), 16.7 μm (z)

Corresponding bead : Not found

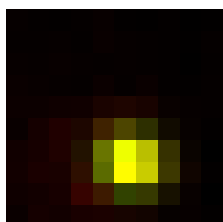
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 446 nm | 461 nm | 223 nm |
| max | 506 nm | 523 nm | 223 nm |
| z | 1.41 μm | 1.41 μm | 885 nm |
| Asymmetry | 0.882 | | |
| Theta | -16.0° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.951$



Parameters:

A = 841.470 (brightness)

B = 132.701 (background)

a = 0.536 px

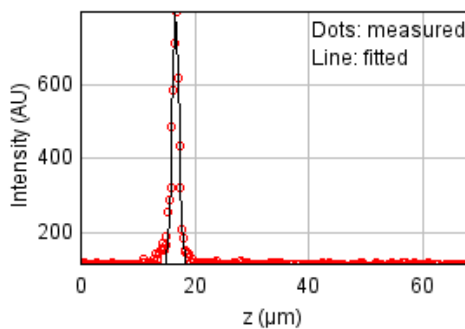
b = -0.040 px

c = 0.664 px

$x_c = 5.265$ px

$y_c = 6.505$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 54239.1189

Standard deviation: 13.29190

R^2 : 0.97564

Parameters:

a = 114.67855

b = 797.52605

c = 16.70832

d = 0.59703

Bead 705

Date : Mon Oct 17 13:28:26 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

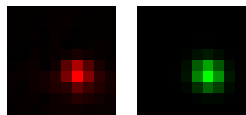
Coordinates : -4.61 μm (x), 37.2 μm (y), 15.8 μm (z)

Corresponding bead : Not found

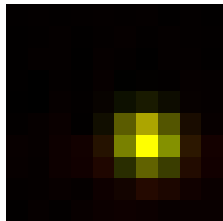
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 431 nm | 446 nm | 223 nm |
| max | 472 nm | 487 nm | 223 nm |
| z | 1.88 μm | 1.89 μm | 885 nm |
| Asymmetry | 0.914 | | |
| Theta | -27.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 769.743 (brightness)

B = 125.562 (background)

a = 0.628 px

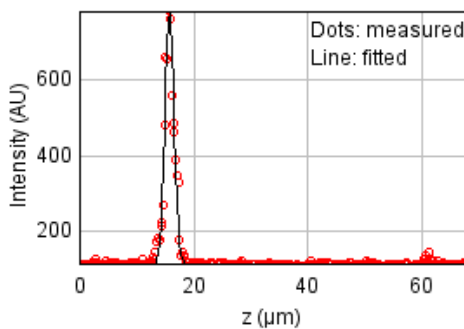
b = -0.048 px

c = 0.697 px

xc = 6.032 px

yc = 5.815 px

Z profile & fitting parameters:



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

Sum of residuals squared: 99504.0894

Standard deviation: 18.00327

R^2 : 0.96471

Parameters:

a = 115.08489

b = 779.23695

c = 15.83174

d = 0.79869

Bead 706

Date : Mon Oct 17 13:28:26 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

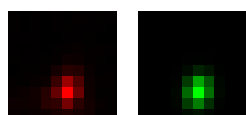
Coordinates : -42.9 μm (x), 27.5 μm (y), 16.6 μm (z)

Corresponding bead : Not found

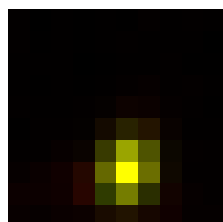
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|-------------------|-------------|
| min | 388 nm | 401 nm | 223 nm |
| max | 490 nm | 507 nm | 223 nm |
| z | 1.4 μm | 1.4 μm | 885 nm |
| Asymmetry | 0.792 | | |
| Theta | 76.4° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 1426.448 (brightness)

B = 130.611 (background)

a = 0.872 px

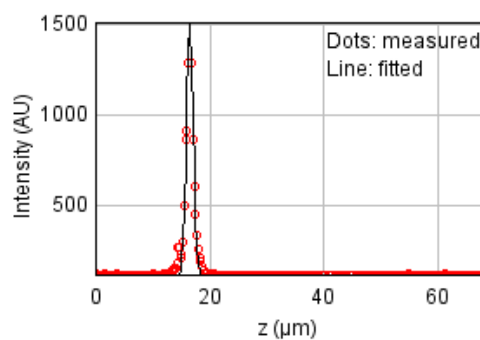
b = 0.076 px

c = 0.576 px

$x_c = 5.025$ px

$y_c = 6.874$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 211944.552

Standard deviation: 26.27495

R^2 : 0.97749

Parameters:

a = 116.79647

b = 1525.83740

c = 16.57715

d = 0.59384

Bead 707 (Rejected)

Date : Mon Oct 17 13:28:26 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : -65.5 μm (x), -24.1 μm (y), 16.6 μm (z)

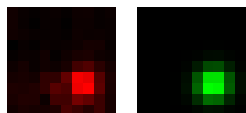
Corresponding bead : Not found

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

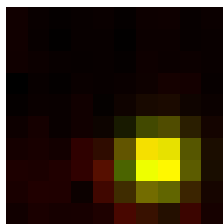
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 514 nm | 531 nm | 223 nm |
| max | 534 nm | 552 nm | 223 nm |
| z | 4.07 μm | 4.09 μm | 885 nm |
| Asymmetry | 0.962 | | |
| Theta | 37.0° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.930$



Parameters:

A = 476.064 (brightness)

B = 128.082 (background)

a = 0.484 px

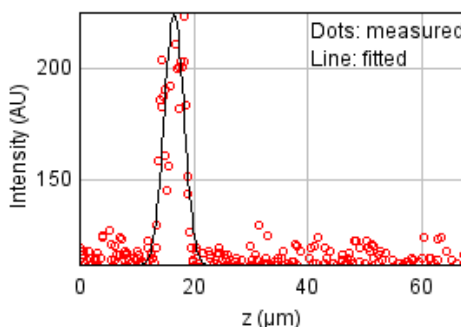
b = 0.018 px

c = 0.494 px

xc = 6.483 px

yc = 6.617 px

Z profile & fitting parameters:



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

Sum of residuals squared: 30683.8855

Standard deviation: 9.99738

R^2 : 0.83913

Parameters:

a = 112.14296

b = 224.54375

c = 16.63057

d = 1.72876

Bead 708

Date : Mon Oct 17 13:28:26 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

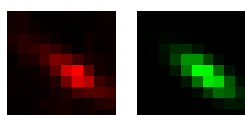
Coordinates : 101 μm (x), -36.1 μm (y), 15.2 μm (z)

Corresponding bead : Not found

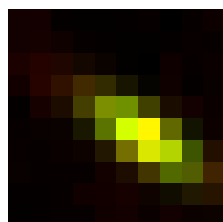
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 371 nm | 384 nm | 223 nm |
| max | 966 nm | 999 nm | 223 nm |
| z | 1.72 μm | 1.73 μm | 885 nm |
| Asymmetry | 0.384 | | |
| Theta | -34.7° | | |

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:

$A = 424.216$ (brightness)

$B = 123.033$ (background)

$a = 0.413$ px

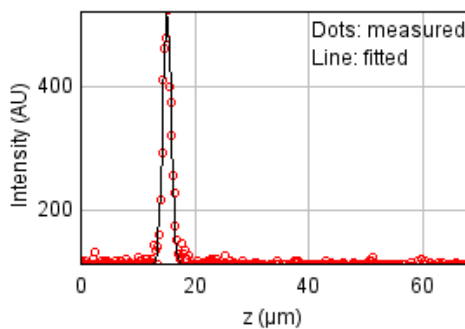
$b = -0.389$ px

$c = 0.705$ px

$x_c = 5.753$ px

$y_c = 5.318$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 22193.0331

Standard deviation: 8.50235

$R^2: 0.97735$

Parameters:

$a = 112.20350$

$b = 523.26226$

$c = 15.19795$

$d = 0.73136$

Bead 709

Date : Mon Oct 17 13:28:27 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

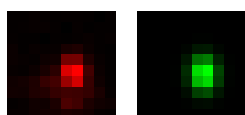
Coordinates : -37.5 μm (x), -47.4 μm (y), 15.7 μm (z)

Corresponding bead : Not found

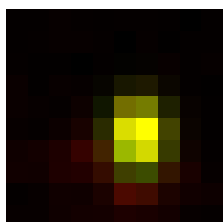
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 424 nm | 439 nm | 223 nm |
| max | 552 nm | 571 nm | 223 nm |
| z | 1.72 μm | 1.73 μm | 885 nm |
| Asymmetry | 0.769 | | |
| Theta | -88.0° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 799.985 (brightness)

B = 136.585 (background)

a = 0.745 px

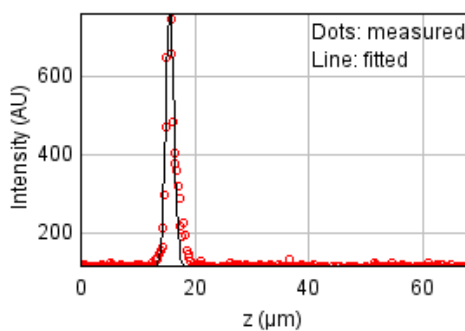
b = -0.011 px

c = 0.441 px

xc = 5.603 px

yc = 5.305 px

Z profile & fitting parameters:



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

Sum of residuals squared: 136569.141

Standard deviation: 21.09148

R^2 : 0.94602

Parameters:

a = 115.61095

b = 765.71974

c = 15.72546

d = 0.73089

Bead 710

Date : Mon Oct 17 13:28:27 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

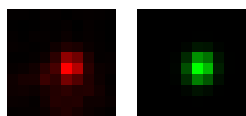
Coordinates : -38.7 μm (x), -50.8 μm (y), 15.9 μm (z)

Corresponding bead : Not found

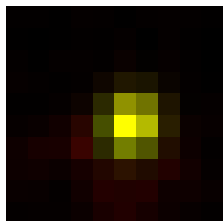
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 420 nm | 434 nm | 223 nm |
| max | 465 nm | 481 nm | 223 nm |
| z | 1.54 μm | 1.55 μm | 885 nm |
| Asymmetry | 0.904 | | |
| Theta | 72.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.927$



Parameters:

A = 773.203 (brightness)

B = 137.033 (background)

a = 0.747 px

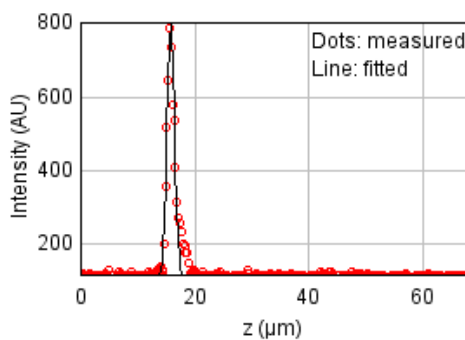
b = 0.040 px

c = 0.634 px

$x_c = 5.292$ px

$y_c = 4.925$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 110173.416

Standard deviation: 18.94389

R^2 : 0.95639

Parameters:

a = 115.06229

b = 803.28656

c = 15.87855

d = 0.65559

Bead 711 (Rejected)

Date : Mon Oct 17 13:28:27 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 143 μm (x), -51.7 μm (y), 14.7 μm (z)

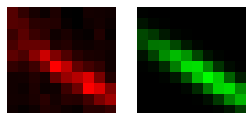
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

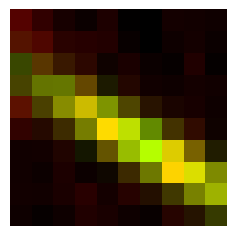
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 383 nm | 396 nm | 223 nm |
| max | 2.39 μm | 2.47 μm | 223 nm |
| z | 2.46 μm | 2.47 μm | 885 nm |
| Asymmetry | 0.16 | | |
| Theta | -30.9° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.889$



Parameters:

A = 136.040 (brightness)

B = 118.942 (background)

a = 0.259 px

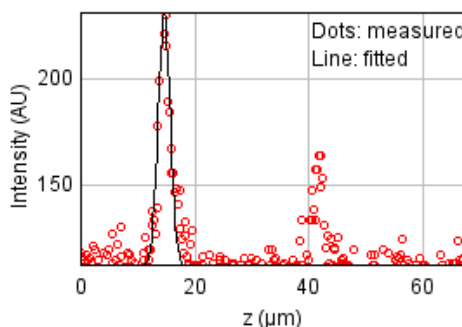
b = -0.392 px

c = 0.679 px

xc = 5.975 px

yc = 5.934 px

Z profile & fitting parameters:



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

Sum of residuals squared: 37528.5994

Standard deviation: 11.05636

R^2 : 0.75102

Parameters:

a = 112.44180

b = 231.63284

c = 14.71808

d = 1.04631

Bead 712

Date : Mon Oct 17 13:28:27 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

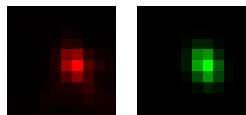
Coordinates : 51.0 μm (x), -60.3 μm (y), 15.9 μm (z)

Corresponding bead : Not found

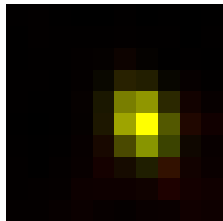
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 405 nm | 419 nm | 223 nm |
| max | 532 nm | 550 nm | 223 nm |
| z | 1.34 μm | 1.35 μm | 885 nm |
| Asymmetry | 0.762 | | |
| Theta | -64.7° | | |

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 = 1594.791 (brightness)

B = 141.956 (background)

a = 0.755 px

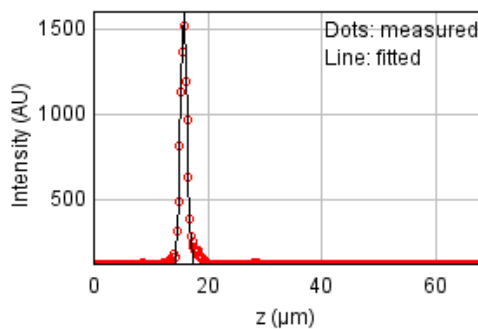
b = -0.133 px

c = 0.537 px

$x_c = 5.784$ px

$y_c = 4.941$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 108452.635

Standard deviation: 18.79537

R^2 : 0.98922

Parameters:

a = 116.13327

b = 1611.00215

c = 15.88858

d = 0.56968

Bead 713

Date : Mon Oct 17 13:28:27 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

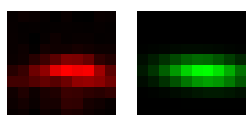
Coordinates : -25.6 μm (x), -93.8 μm (y), 16.0 μm (z)

Corresponding bead : Not found

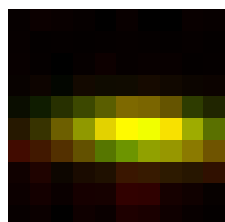
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 440 nm | 455 nm | 223 nm |
| max | 1.36 μm | 1.4 μm | 223 nm |
| z | 2.72 μm | 2.73 μm | 885 nm |
| Asymmetry | 0.324 | | |
| Theta | -2.7° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 418.661$ (brightness)

$B = 124.920$ (background)

$a = 0.074$ px

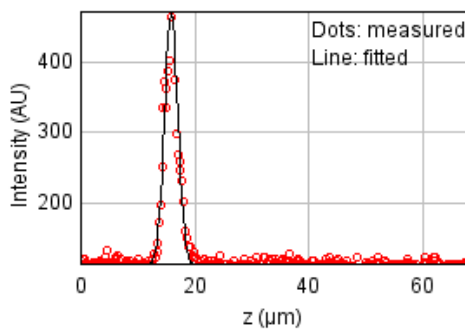
$b = -0.030$ px

$c = 0.692$ px

$x_c = 5.720$ px

$y_c = 5.157$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 50965.2070

Standard deviation: 12.88450

$R^2 = 0.95710$

Parameters:

$a = 112.97212$

$b = 473.69471$

$c = 15.95296$

$d = 1.15440$

Bead 714

Date : Mon Oct 17 13:28:27 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

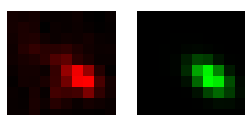
Coordinates : -129 μm (x), 94.5 μm (y), 16.0 μm (z)

Corresponding bead : Not found

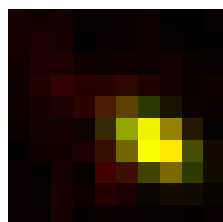
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 390 nm | 403 nm | 223 nm |
| max | 649 nm | 671 nm | 223 nm |
| z | 2.0 μm | 2.01 μm | 885 nm |
| Asymmetry | 0.601 | | |
| Theta | -35.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.923$



Parameters:

A = 426.142 (brightness)

B = 127.412 (background)

a = 0.507 px

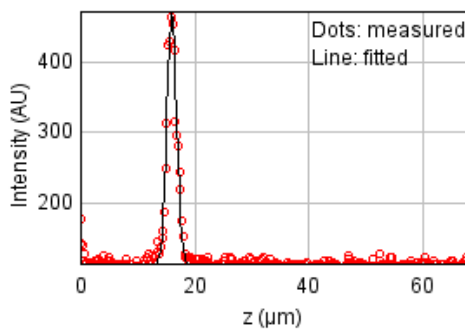
b = -0.266 px

c = 0.695 px

$x_c = 6.203$ px

$y_c = 5.613$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 32561.0774

Standard deviation: 10.29865

R^2 : 0.96285

Parameters:

a = 112.65657

b = 472.00777

c = 16.04986

d = 0.84892

Bead 715 (Rejected)

Date : Mon Oct 17 13:28:28 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 51.3 μm (x), 94.0 μm (y), 16.7 μm (z)

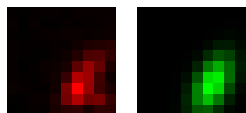
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

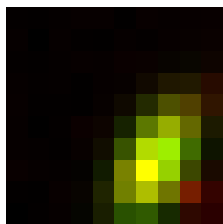
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 512 nm | 530 nm | 223 nm |
| max | 935 nm | 966 nm | 223 nm |
| z | 1.94 μm | 1.95 μm | 885 nm |
| Asymmetry | 0.548 | | |
| Theta | 63.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.899$



Parameters:

A = 580.578 (brightness)

B = 121.834 (background)

a = 0.439 px

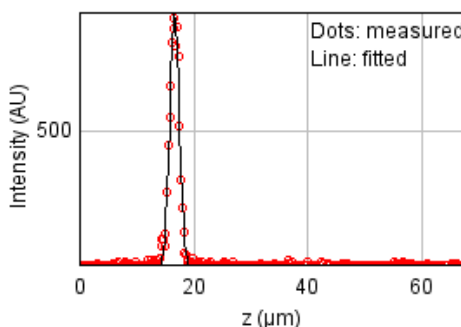
b = 0.143 px

c = 0.225 px

xc = 6.405 px

yc = 6.586 px

Z profile & fitting parameters:



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

Sum of residuals squared: 43672.5548

Standard deviation: 11.92711

R^2 : 0.98717

Parameters:

a = 113.10613

b = 840.03523

c = 16.70215

d = 0.82455

Bead 716

Date : Mon Oct 17 13:28:28 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

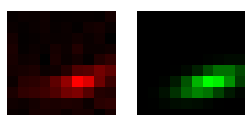
Coordinates : 126 μm (x), 78.5 μm (y), 15.3 μm (z)

Corresponding bead : Not found

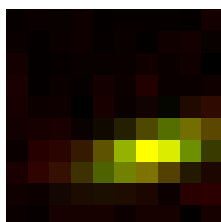
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 350 nm | 361 nm | 223 nm |
| max | 970 nm | 1.0 μm | 223 nm |
| z | 2.02 μm | 2.02 μm | 885 nm |
| Asymmetry | 0.361 | | |
| Theta | 15.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.928$



Parameters:

$A = 176.412$ (brightness)

$B = 113.744$ (background)

$a = 0.211$ px

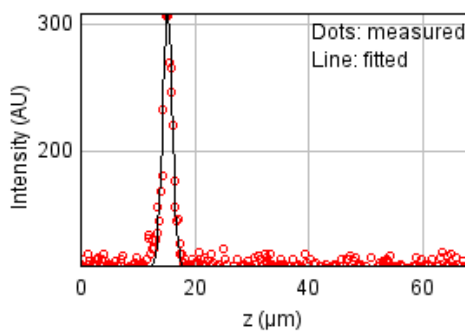
$b = 0.245$ px

$c = 1.030$ px

$x_c = 6.277$ px

$y_c = 6.043$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 14963.7909

Standard deviation: 6.98155

$R^2: 0.94587$

Parameters:

$a = 110.27770$

$b = 309.46850$

$c = 15.29241$

$d = 0.85633$

Bead 717

Date : Mon Oct 17 13:28:28 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

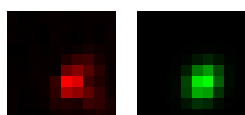
Coordinates : 50.7 um (x), 75.9 um (y), 16.6 um (z)

Corresponding bead : Not found

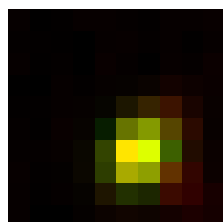
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|---------------|-----------|-------------|
| min | 468 nm | 484 nm | 223 nm |
| max | 563 nm | 582 nm | 223 nm |
| z | 1.99 um | 2.0 um | 885 nm |
| Asymmetry | 0.832 | | |
| Theta | 54.0° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.909$



Parameters:

A = 544.031 (brightness)

B = 121.151 (background)

a = 0.547 px

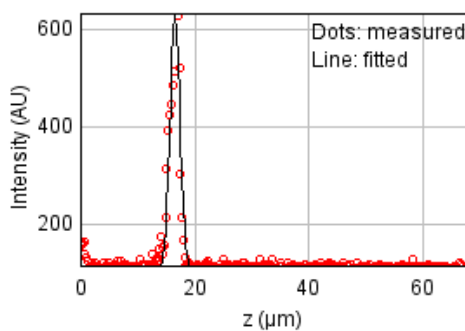
b = 0.089 px

c = 0.489 px

xc = 5.587 px

yc = 6.091 px

Z profile & fitting parameters:



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

Sum of residuals squared: 150874.423

Standard deviation: 22.16862

R^2 : 0.92215

Parameters:

a = 113.59150

b = 637.67565

c = 16.61114

d = 0.84501

Bead 718

Date : Mon Oct 17 13:28:28 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

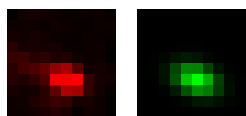
Coordinates : -141 μm (x), 66.0 μm (y), 16.1 μm (z)

Corresponding bead : Not found

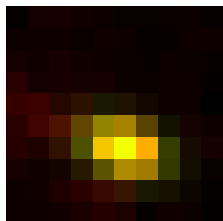
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 441 nm | 456 nm | 223 nm |
| max | 701 nm | 725 nm | 223 nm |
| z | 2.03 μm | 2.03 μm | 885 nm |
| Asymmetry | 0.63 | | |
| Theta | -20.1° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.907$



Parameters:

A = 386.156 (brightness)

B = 119.639 (background)

a = 0.322 px

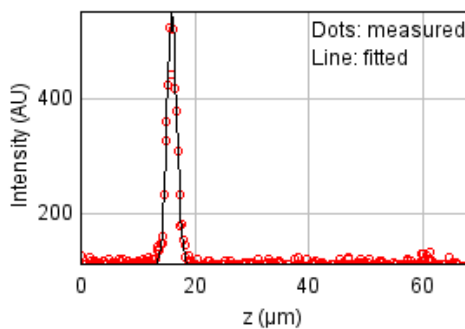
b = -0.134 px

c = 0.640 px

xc = 4.897 px

yc = 6.003 px

Z profile & fitting parameters:



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

Sum of residuals squared: 46286.8973

Standard deviation: 12.27891

R^2 : 0.96495

Parameters:

a = 112.42753

b = 551.25951

c = 16.06542

d = 0.86007

Bead 719

Date : Mon Oct 17 13:28:28 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

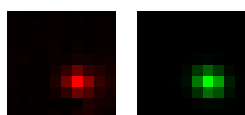
Coordinates : 81.0 μm (x), 23.3 μm (y), 16.1 μm (z)

Corresponding bead : Not found

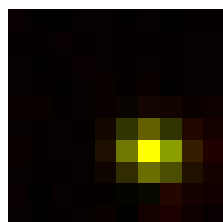
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 379 nm | 392 nm | 223 nm |
| max | 473 nm | 489 nm | 223 nm |
| z | 1.46 μm | 1.47 μm | 885 nm |
| Asymmetry | 0.802 | | |
| Theta | -12.6° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.964$



Parameters:

$A = 641.554$ (brightness)

$B = 118.262$ (background)

$a = 0.617$ px

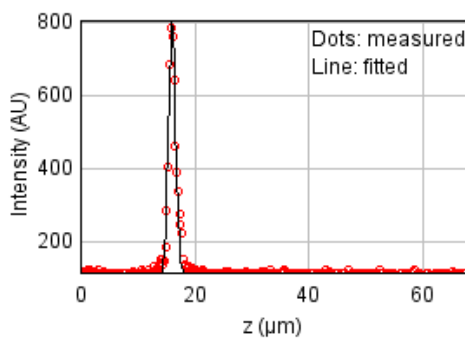
$b = -0.071$ px

$c = 0.917$ px

$x_c = 6.117$ 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: 81872.7793

Standard deviation: 16.33054

$R^2: 0.96602$

Parameters:

$a = 113.77300$

$b = 806.93807$

$c = 16.10898$

$d = 0.62156$

Bead 720

Date : Mon Oct 17 13:28:28 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

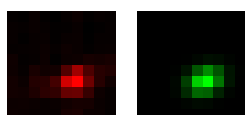
Coordinates : -140 μm (x), 12.1 μm (y), 16.0 μm (z)

Corresponding bead : Not found

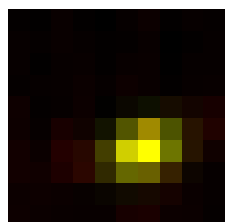
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 397 nm | 410 nm | 223 nm |
| max | 550 nm | 569 nm | 223 nm |
| z | 1.59 μm | 1.59 μm | 885 nm |
| Asymmetry | 0.721 | | |
| Theta | 21.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 589.927 (brightness)

B = 120.449 (background)

a = 0.498 px

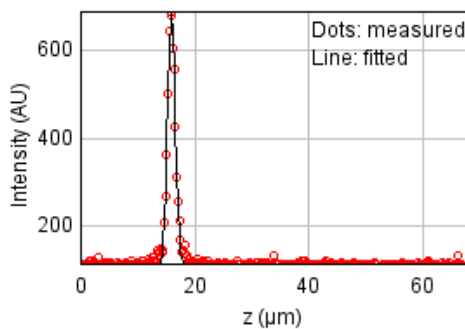
b = 0.139 px

c = 0.797 px

xc = 5.731 px

yc = 5.933 px

Z profile & fitting parameters:



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

Sum of residuals squared: 24472.8499

Standard deviation: 8.92839

R^2 : 0.98618

Parameters:

a = 112.74493

b = 690.34509

c = 15.99830

d = 0.67338

Bead 721 (Rejected)

Date : Mon Oct 17 13:28:28 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : -43.9 μm (x), 10.4 μm (y), 15.7 μm (z)

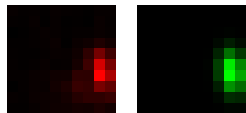
Corresponding bead : Not found

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

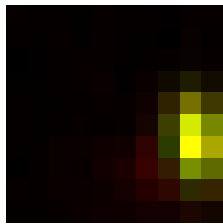
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 376 nm | 389 nm | 223 nm |
| max | 645 nm | 667 nm | 223 nm |
| z | 3.4 μm | 3.41 μm | 885 nm |
| Asymmetry | 0.583 | | |
| Theta | -83.9° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 757.989 (brightness)

B = 128.808 (background)

a = 0.942 px

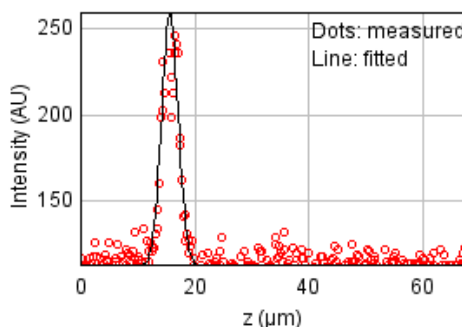
b = -0.067 px

c = 0.329 px

xc = 8.252 px

yc = 5.676 px

Z profile & fitting parameters:



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

Sum of residuals squared: 29822.9357

Standard deviation: 9.85612

R^2 : 0.88726

Parameters:

a = 112.24512

b = 259.97662

c = 15.72381

d = 1.44396

Bead 722 (Rejected)

Date : Mon Oct 17 13:28:29 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 34.9 μm (x), 10.1 μm (y), 9.16 μm (z)

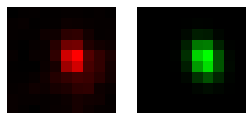
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

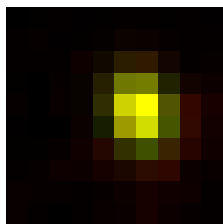
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 443 nm | 458 nm | 223 nm |
| max | 576 nm | 595 nm | 223 nm |
| z | 1.7 μm | 1.71 μm | 885 nm |
| Asymmetry | 0.77 | | |
| Theta | -72.4° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 630.018 (brightness)

B = 129.512 (background)

a = 0.658 px

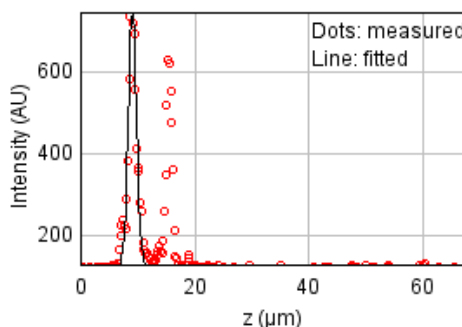
b = -0.080 px

c = 0.430 px

xc = 5.684 px

yc = 4.271 px

Z profile & fitting parameters:



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

Sum of residuals squared: 1244871.44

Standard deviation: 63.67853

R^2 : 0.63446

Parameters:

a = 127.85017

b = 749.27071

c = 9.16262

d = 0.72174

Bead 723 (Rejected)

Date : Mon Oct 17 13:28:29 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 34.2 μm (x), 9.92 μm (y), 14.6 μm (z)

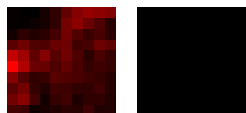
Corresponding bead : Not found

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

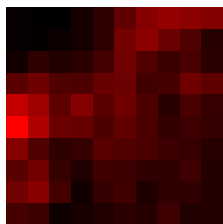
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 449 nm | 464 nm | 223 nm |
| max | 1.75 μm | 1.81 μm | 223 nm |
| z | 2.36 μm | 2.36 μm | 885 nm |
| Asymmetry | 0.257 | | |
| Theta | 0.0° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.591$



Parameters:

A = 53.708 (brightness)

B = 163.708 (background)

a = 0.165 px

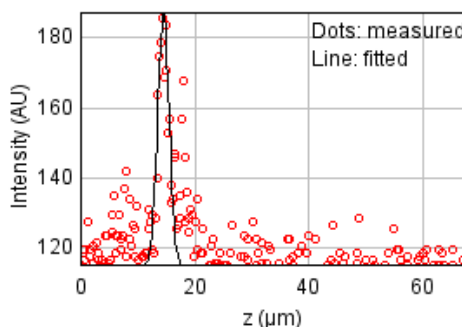
b = 0.324 px

c = 0.458 px

xc = 4.487 px

yc = 1.898 px

Z profile & fitting parameters:



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

Sum of residuals squared: 26827.1122

Standard deviation: 9.34798

R^2 : 0.59665

Parameters:

a = 115.11525

b = 187.20199

c = 14.58149

d = 1.00020

Bead 724

Date : Mon Oct 17 13:28:29 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

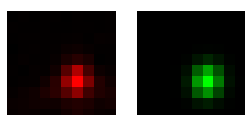
Coordinates : 1.74 μm (x), 673 nm (y), 16.6 μm (z)

Corresponding bead : Not found

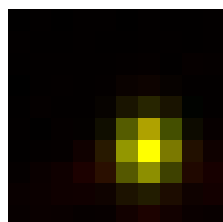
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 456 nm | 471 nm | 223 nm |
| max | 510 nm | 527 nm | 223 nm |
| z | 1.87 μm | 1.88 μm | 885 nm |
| Asymmetry | 0.894 | | |
| Theta | 80.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 1084.955 (brightness)

B = 132.460 (background)

a = 0.642 px

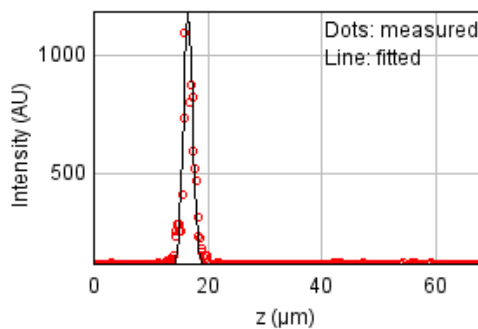
b = 0.020 px

c = 0.519 px

xc = 5.915 px

yc = 5.943 px

Z profile & fitting parameters:



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

Sum of residuals squared: 346281.577

Standard deviation: 33.58501

R^2 : 0.95309

Parameters:

a = 116.62978

b = 1188.33713

c = 16.62385

d = 0.79315

Bead 725

Date : Mon Oct 17 13:28:29 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

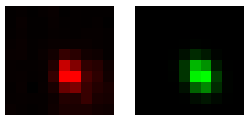
Coordinates : 59.1 μm (x), -5.69 μm (y), 15.9 μm (z)

Corresponding bead : Not found

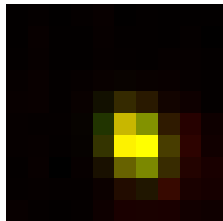
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 403 nm | 417 nm | 223 nm |
| max | 513 nm | 530 nm | 223 nm |
| z | 1.7 μm | 1.71 μm | 885 nm |
| Asymmetry | 0.786 | | |
| Theta | -59.0° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 863.510$ (brightness)

$B = 127.656$ (background)

$a = 0.742$ px

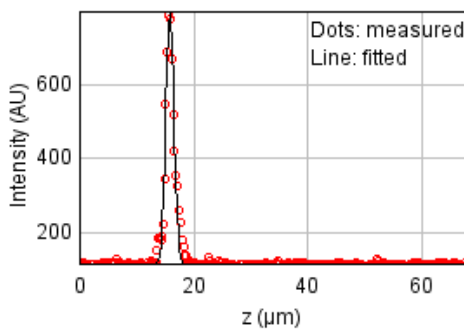
$b = -0.139$ px

$c = 0.593$ px

$x_c = 5.509$ px

$y_c = 5.854$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 82390.0320

Standard deviation: 16.38205

$R^2: 0.96979$

Parameters:

$a = 113.64113$

$b = 801.13322$

$c = 15.89582$

$d = 0.72175$

Bead 726

Date : Mon Oct 17 13:28:29 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

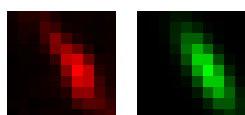
Coordinates : 93.9 μm (x), -70.2 μm (y), 15.5 μm (z)

Corresponding bead : Not found

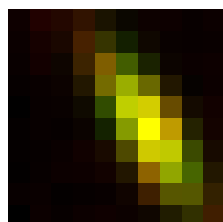
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 453 nm | 468 nm | 223 nm |
| max | 1.31 μm | 1.35 μm | 223 nm |
| z | 1.75 μm | 1.76 μm | 885 nm |
| Asymmetry | 0.346 | | |
| Theta | -59.2° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.947$



Parameters:

A = 424.389 (brightness)

B = 118.942 (background)

a = 0.502 px

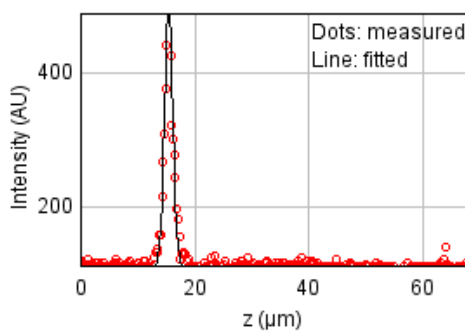
b = -0.253 px

c = 0.229 px

$x_c = 5.970$ px

$y_c = 4.940$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 34816.8127

Standard deviation: 10.64940

R^2 : 0.95956

Parameters:

a = 112.82054

b = 491.89143

c = 15.50284

d = 0.74236

Bead 727 (Rejected)

Date : Mon Oct 17 13:28:29 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 164 μm (x), -71.9 μm (y), 14.9 μm (z)

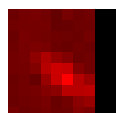
Corresponding bead : Not found

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 | 2.18 μm | 2.19 μm | 885 nm |
| Asymmetry | 0.0 | | |
| Theta | 0.0° | | |

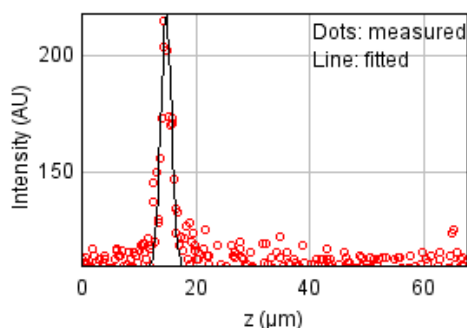
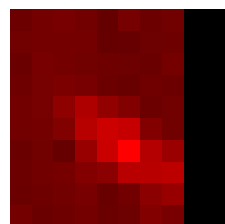
XY profile & fitting parameters :

(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: 16684.9616

Standard deviation: 7.37214

R²: 0.83185

Parameters:

a = 109.90241

b = 217.78388

c = 14.88465

d = 0.92506

Bead 728

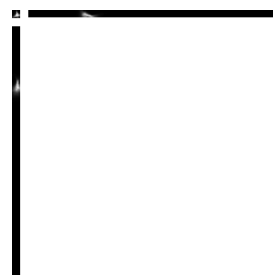
Date : Mon Oct 17 13:28:30 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 25.9 μm (x), -89.5 μm (y), 16.0 μm (z)

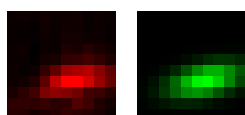
Corresponding bead : Not found



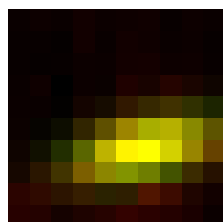
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 485 nm | 501 nm | 223 nm |
| max | 1.15 μm | 1.19 μm | 223 nm |
| z | 2.54 μm | 2.55 μm | 885 nm |
| Asymmetry | 0.422 | | |
| Theta | 13.3° | | |

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:

$A = 427.376$ (brightness)

$B = 128.822$ (background)

$a = 0.127$ px

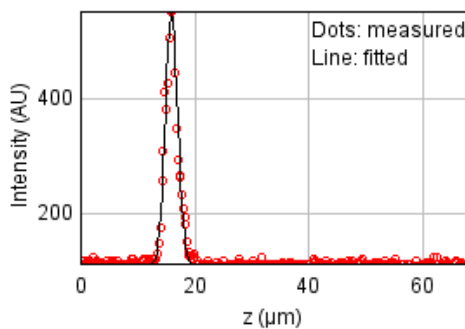
$b = 0.105$ px

$c = 0.546$ px

$x_c = 5.797$ px

$y_c = 5.893$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 56696.0547

Standard deviation: 13.58962

$R^2: 0.96540$

Parameters:

$a = 113.05100$

$b = 552.47656$

$c = 16.00774$

$d = 1.07761$

Bead 729

Date : Mon Oct 17 13:28:30 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

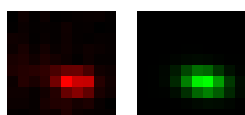
Coordinates : -139 μm (x), 51.0 μm (y), 16.3 μm (z)

Corresponding bead : Not found

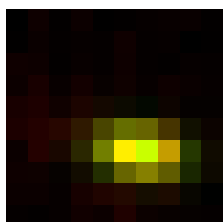
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|-------------------|-------------|
| min | 403 nm | 417 nm | 223 nm |
| max | 710 nm | 734 nm | 223 nm |
| z | 1.8 μm | 1.8 μm | 885 nm |
| Asymmetry | 0.567 | | |
| Theta | -8.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.929$



Parameters:

$A = 374.144$ (brightness)

$B = 118.324$ (background)

$a = 0.278$ px

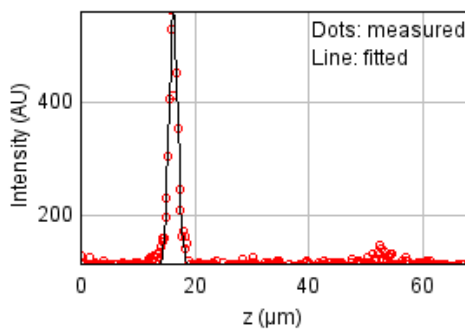
$b = -0.081$ px

$c = 0.815$ px

$x_c = 5.638$ px

$y_c = 6.039$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 60642.5596

Standard deviation: 14.05464

$R^2: 0.95167$

Parameters:

$a = 113.19742$

$b = 563.01315$

$c = 16.33748$

$d = 0.76295$

Bead 730

Date : Mon Oct 17 13:28:30 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

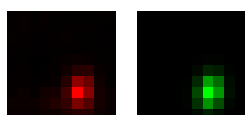
Coordinates : -29.2 μm (x), 43.8 μm (y), 16.7 μm (z)

Corresponding bead : Not found

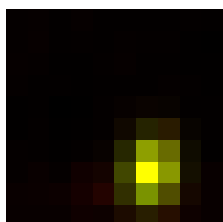
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 383 nm | 396 nm | 223 nm |
| max | 515 nm | 533 nm | 223 nm |
| z | 1.34 μm | 1.34 μm | 885 nm |
| Asymmetry | 0.744 | | |
| Theta | 80.6° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 1124.289$ (brightness)

$B = 129.360$ (background)

$a = 0.902$ px

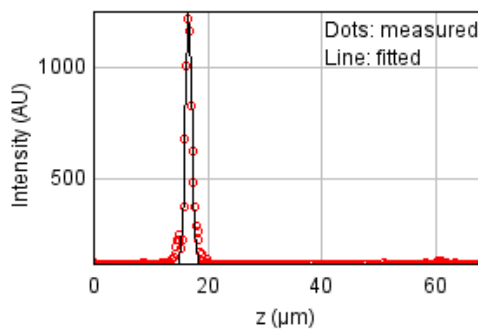
$b = 0.066$ px

$c = 0.516$ px

$x_c = 6.216$ px

$y_c = 6.936$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 150261.818

Standard deviation: 22.12357

$R^2: 0.97436$

Parameters:

$a = 117.91436$

$b = 1251.60806$

$c = 16.71106$

$d = 0.56843$

Bead 731

Date : Mon Oct 17 13:28:30 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

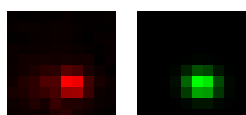
Coordinates : -92.1 μm (x), 39.5 μm (y), 16.7 μm (z)

Corresponding bead : Not found

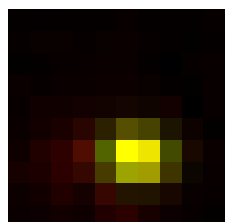
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 406 nm | 420 nm | 223 nm |
| max | 508 nm | 525 nm | 223 nm |
| z | 2.34 μm | 2.35 μm | 885 nm |
| Asymmetry | 0.8 | | |
| Theta | -5.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 569.003 (brightness)

B = 131.573 (background)

a = 0.522 px

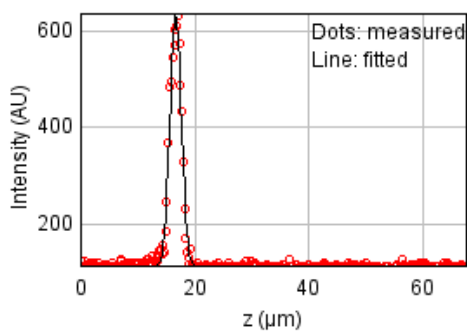
b = -0.027 px

c = 0.810 px

xc = 5.413 px

yc = 6.241 px

Z profile & fitting parameters:



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

Sum of residuals squared: 47894.5639

Standard deviation: 12.49033

R^2 : 0.97752

Parameters:

a = 112.16656

b = 636.20825

c = 16.72411

d = 0.99295

Bead 732

Date : Mon Oct 17 13:28:31 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : -141 μm (x), 37.4 μm (y), 16.5 μm (z)

Corresponding bead : Not found

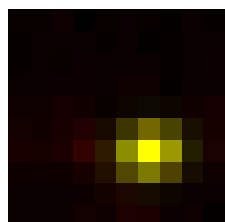
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 401 nm | 415 nm | 223 nm |
| max | 495 nm | 512 nm | 223 nm |
| z | 1.6 μm | 1.61 μm | 885 nm |
| Asymmetry | 0.81 | | |
| Theta | 8.6° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.964$



Parameters:

A = 647.872 (brightness)

B = 123.603 (background)

a = 0.554 px

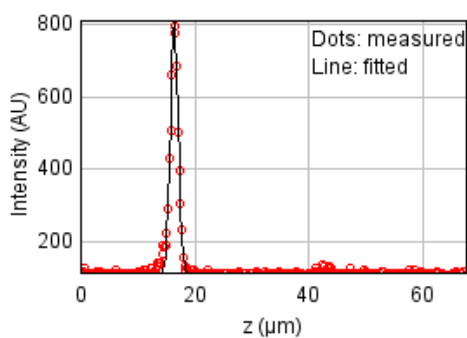
b = 0.042 px

c = 0.827 px

xc = 6.031 px

yc = 6.045 px

Z profile & fitting parameters:



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

Sum of residuals squared: 39476.5686

Standard deviation: 11.33967

R^2 : 0.98490

Parameters:

a = 112.86963

b = 810.45832

c = 16.49208

d = 0.68081

Bead 733

Date : Mon Oct 17 13:28:31 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

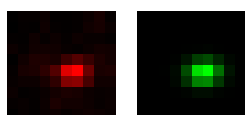
Coordinates : -137 μm (x), 36.9 μm (y), 15.8 μm (z)

Corresponding bead : Not found

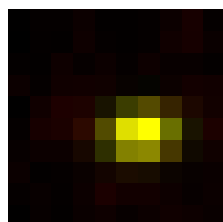
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 380 nm | 393 nm | 223 nm |
| max | 531 nm | 549 nm | 223 nm |
| z | 1.37 μm | 1.38 μm | 885 nm |
| Asymmetry | 0.715 | | |
| Theta | 5.0° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 386.732 (brightness)

B = 119.923 (background)

a = 0.479 px

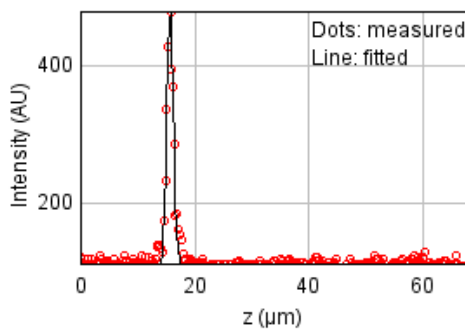
b = 0.040 px

c = 0.927 px

xc = 5.622 px

yc = 5.178 px

Z profile & fitting parameters:



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

Sum of residuals squared: 25763.8746

Standard deviation: 9.16086

R^2 : 0.95956

Parameters:

a = 113.42532

b = 480.08257

c = 15.76489

d = 0.58215

Bead 734

Date : Mon Oct 17 13:28:31 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

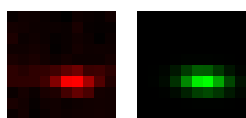
Coordinates : -153 μm (x), 35.7 μm (y), 15.7 μm (z)

Corresponding bead : Not found

| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 342 nm | 353 nm | 223 nm |
| max | 748 nm | 773 nm | 223 nm |
| z | 1.91 μm | 1.92 μm | 885 nm |
| Asymmetry | 0.457 | | |
| Theta | -2.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.945$



Parameters:

A = 309.949 (brightness)

B = 119.948 (background)

a = 0.242 px

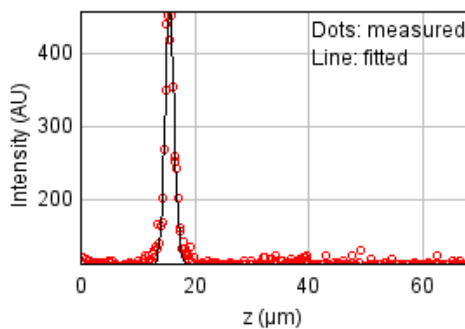
b = -0.045 px

c = 1.148 px

xc = 5.636 px

yc = 5.942 px

Z profile & fitting parameters:



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

Sum of residuals squared: 29021.8999

Standard deviation: 9.72285

R^2 : 0.96293

Parameters:

a = 112.27163

b = 459.21187

c = 15.68175

d = 0.81188

Bead 735

Date : Mon Oct 17 13:28:31 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

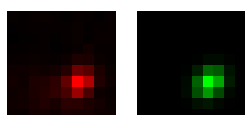
Coordinates : -76.3 μm (x), -12.8 μm (y), 16.6 μm (z)

Corresponding bead : Not found

| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|-------------------|-------------|
| min | 396 nm | 410 nm | 223 nm |
| max | 488 nm | 504 nm | 223 nm |
| z | 1.69 μm | 1.7 μm | 885 nm |
| Asymmetry | 0.812 | | |
| Theta | 42.6° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 747.235$ (brightness)

$B = 131.036$ (background)

$a = 0.697$ px

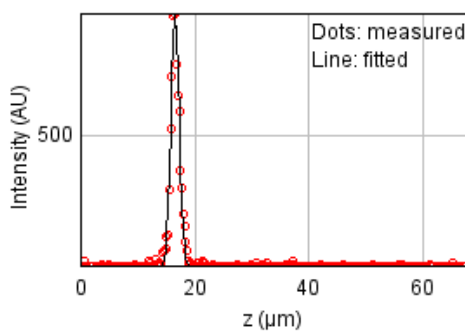
$b = 0.145$ px

$c = 0.721$ px

$x_c = 6.171$ px

$y_c = 6.107$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 57147.0957

Standard deviation: 13.64357

$R^2: 0.98231$

Parameters:

$a = 113.84251$

$b = 868.39603$

$c = 16.62687$

$d = 0.71878$

Bead 736

Date : Mon Oct 17 13:28:31 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

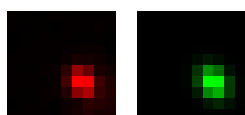
Coordinates : 64.6 μm (x), -14.8 μm (y), 16.2 μm (z)

Corresponding bead : Not found

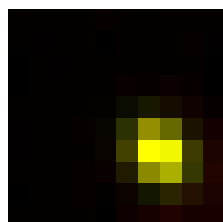
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 409 nm | 423 nm | 223 nm |
| max | 516 nm | 534 nm | 223 nm |
| z | 1.25 μm | 1.25 μm | 885 nm |
| Asymmetry | 0.793 | | |
| Theta | -54.3° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 1160.560 (brightness)

B = 125.391 (background)

a = 0.700 px

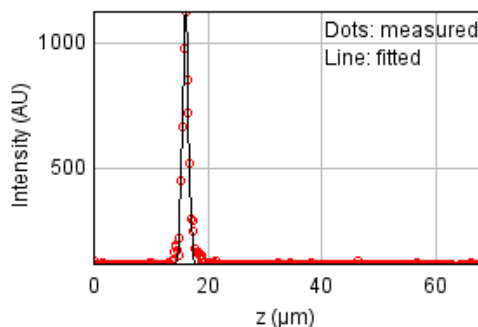
b = -0.141 px

c = 0.604 px

$x_c = 6.495$ px

$y_c = 6.099$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 88957.9530

Standard deviation: 17.02249

R^2 : 0.98017

Parameters:

a = 115.94752

b = 1144.99921

c = 16.17976

d = 0.53000

Bead 737

Date : Mon Oct 17 13:28:31 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

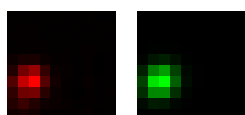
Coordinates : -60.1 μm (x), -66.2 μm (y), 28.0 μm (z)

Corresponding bead : Not found

| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 468 nm | 483 nm | 223 nm |
| max | 517 nm | 534 nm | 223 nm |
| z | 1.34 μm | 1.34 μm | 885 nm |
| Asymmetry | 0.905 | | |
| Theta | 45.4° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 1107.934 (brightness)

B = 118.386 (background)

a = 0.559 px

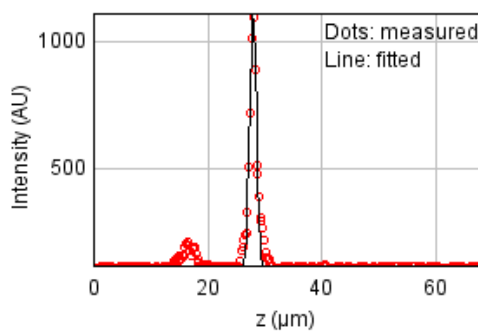
b = 0.056 px

c = 0.557 px

xc = 1.614 px

yc = 5.982 px

Z profile & fitting parameters:



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

Sum of residuals squared: 250461.483

Standard deviation: 28.56283

R^2 : 0.94618

Parameters:

a = 120.58747

b = 1116.09411

c = 28.00584

d = 0.56840

Bead 738 (Rejected)

Date : Mon Oct 17 13:28:31 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 57.2 μm (x), -71.6 μm (y), 17.5 μm (z)

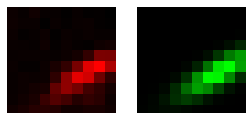
Corresponding bead : Not found

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

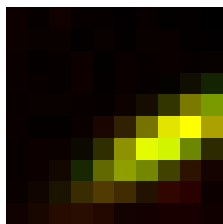
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 386 nm | 399 nm | 223 nm |
| max | 1.28 μm | 1.32 μm | 223 nm |
| z | 1.84 μm | 1.84 μm | 885 nm |
| Asymmetry | 0.301 | | |
| Theta | 30.0° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 605.352 (brightness)

B = 133.389 (background)

a = 0.287 px

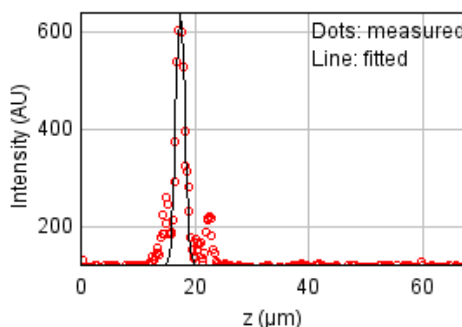
b = 0.355 px

c = 0.697 px

xc = 7.044 px

yc = 5.525 px

Z profile & fitting parameters:



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

Sum of residuals squared: 170933.345

Standard deviation: 23.59632

R^2 : 0.90536

Parameters:

a = 119.71314

b = 640.52207

c = 17.53681

d = 0.78014

Bead 739 (Rejected)

Date : Mon Oct 17 13:28:31 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : -6.72 μm (x), -78.3 μm (y), 14.0 μm (z)

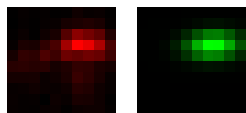
Corresponding bead : Not found

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

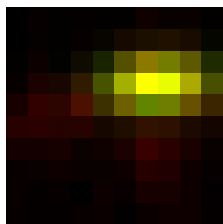
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 438 nm | 453 nm | 223 nm |
| max | 839 nm | 867 nm | 223 nm |
| z | 2.55 μm | 2.56 μm | 885 nm |
| Asymmetry | 0.522 | | |
| Theta | 2.6° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.911$



Parameters:

A = 470.865 (brightness)

B = 138.448 (background)

a = 0.192 px

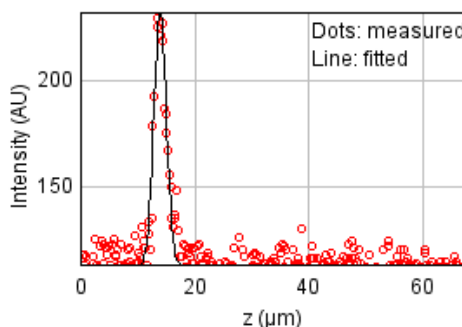
b = 0.023 px

c = 0.698 px

xc = 6.469 px

yc = 3.020 px

Z profile & fitting parameters:



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

Sum of residuals squared: 17150.7996

Standard deviation: 7.47434

R^2 : 0.87083

Parameters:

a = 113.56720

b = 232.10672

c = 14.00167

d = 1.08270

Bead 740 (Rejected)

Date : Mon Oct 17 13:28:32 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : -161 μm (x), -85.9 μm (y), 13.8 μm (z)

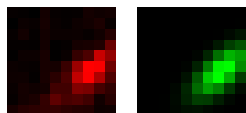
Corresponding bead : Not found

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

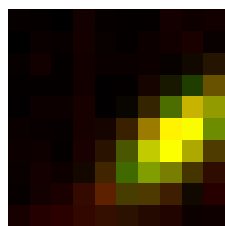
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|-------------------|-------------|
| min | 485 nm | 502 nm | 223 nm |
| max | 1.07 μm | 1.1 μm | 223 nm |
| z | 2.88 μm | 2.9 μm | 885 nm |
| Asymmetry | 0.454 | | |
| Theta | 41.5° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.934$



Parameters:

A = 210.638 (brightness)

B = 115.503 (background)

a = 0.316 px

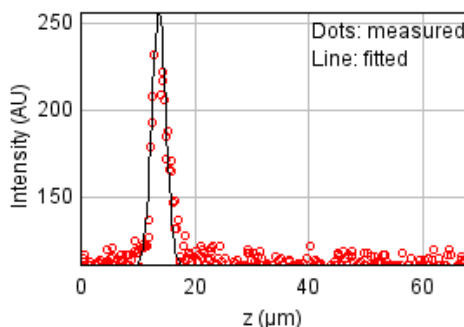
b = 0.224 px

c = 0.371 px

xc = 7.288 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: 23606.0382

Standard deviation: 8.76884

R^2 : 0.89224

Parameters:

a = 110.86662

b = 256.34993

c = 13.79558

d = 1.22471

Bead 741

Date : Mon Oct 17 13:28:32 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

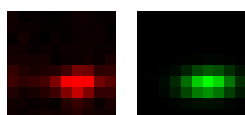
Coordinates : -151 μm (x), 41.1 μm (y), 16.0 μm (z)

Corresponding bead : Not found

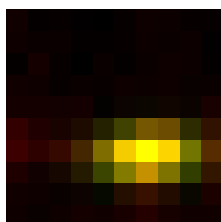
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 404 nm | 418 nm | 223 nm |
| max | 817 nm | 845 nm | 223 nm |
| z | 2.13 μm | 2.14 μm | 885 nm |
| Asymmetry | 0.495 | | |
| Theta | 2.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.932$



Parameters:

A = 275.989 (brightness)

B = 116.789 (background)

a = 0.202 px

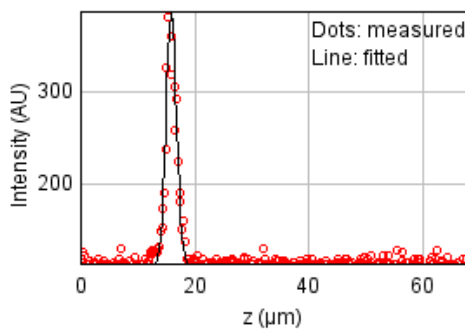
b = 0.025 px

c = 0.820 px

xc = 6.032 px

yc = 6.158 px

Z profile & fitting parameters:



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

Sum of residuals squared: 35415.5841

Standard deviation: 10.74059

R^2 : 0.93854

Parameters:

a = 111.42945

b = 390.33927

c = 15.96138

d = 0.90588

Bead 742

Date : Mon Oct 17 13:28:32 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

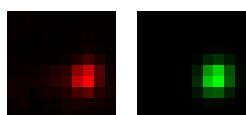
Coordinates : -46.3 μm (x), 7.55 μm (y), 17.4 μm (z)

Corresponding bead : Not found

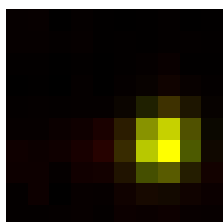
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 442 nm | 457 nm | 223 nm |
| max | 481 nm | 498 nm | 223 nm |
| z | 1.58 μm | 1.58 μm | 885 nm |
| Asymmetry | 0.918 | | |
| Theta | 53.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 988.192 (brightness)

B = 128.677 (background)

a = 0.648 px

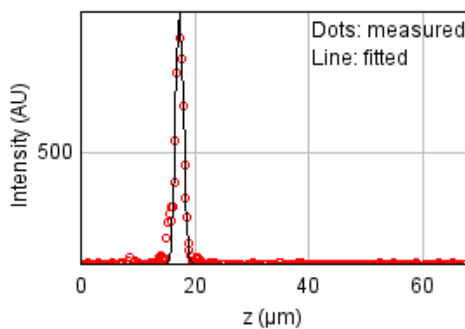
b = 0.052 px

c = 0.618 px

xc = 6.715 px

yc = 5.687 px

Z profile & fitting parameters:



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

Sum of residuals squared: 123671.915

Standard deviation: 20.07088

R^2 : 0.96953

Parameters:

a = 115.42299

b = 984.42511

c = 17.40045

d = 0.67040

Bead 743

Date : Mon Oct 17 13:28:32 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

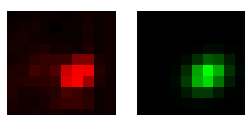
Coordinates : -120 μm (x), 6.52 μm (y), 16.3 μm (z)

Corresponding bead : Not found

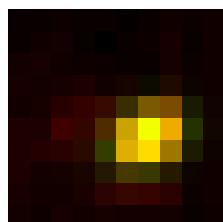
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 453 nm | 469 nm | 223 nm |
| max | 602 nm | 622 nm | 223 nm |
| z | 1.46 μm | 1.47 μm | 885 nm |
| Asymmetry | 0.753 | | |
| Theta | 25.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 438.815$ (brightness)

$B = 123.116$ (background)

$a = 0.424$ px

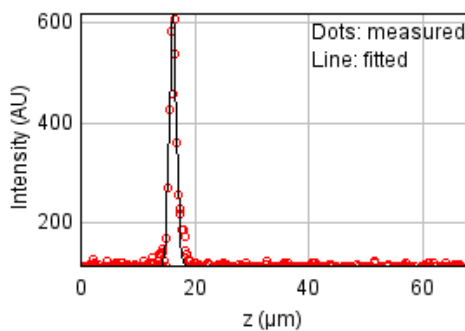
$b = 0.111$ px

$c = 0.600$ px

$x_c = 5.932$ px

$y_c = 5.385$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 79332.7200

Standard deviation: 16.07522

$R^2: 0.93989$

Parameters:

$a = 112.55756$

$b = 618.69765$

$c = 16.25991$

$d = 0.62118$

Bead 744

Date : Mon Oct 17 13:28:32 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

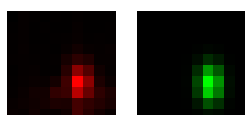
Coordinates : -14.5 μm (x), 5.02 μm (y), 16.8 μm (z)

Corresponding bead : Not found

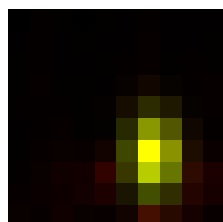
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 380 nm | 393 nm | 223 nm |
| max | 603 nm | 624 nm | 223 nm |
| z | 1.77 μm | 1.78 μm | 885 nm |
| Asymmetry | 0.63 | | |
| Theta | -89.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 941.810 (brightness)

B = 130.929 (background)

a = 0.929 px

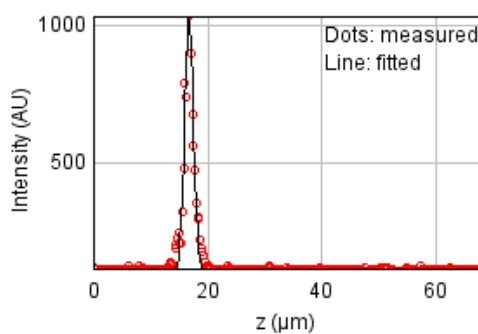
b = -0.005 px

c = 0.369 px

xc = 6.201 px

yc = 6.204 px

Z profile & fitting parameters:



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

Sum of residuals squared: 135499.620

Standard deviation: 21.00873

R^2 : 0.97312

Parameters:

a = 115.25300

b = 1032.98174

c = 16.77854

d = 0.75247

Bead 745

Date : Mon Oct 17 13:28:32 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

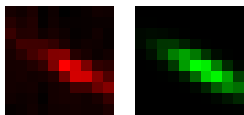
Coordinates : 130 μm (x), -26.5 μm (y), 15.4 μm (z)

Corresponding bead : Not found

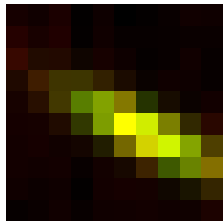
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 361 nm | 373 nm | 223 nm |
| max | 1.34 μm | 1.39 μm | 223 nm |
| z | 1.56 μm | 1.57 μm | 885 nm |
| Asymmetry | 0.269 | | |
| Theta | -27.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.947$



Parameters:

$A = 243.157$ (brightness)

$B = 116.203$ (background)

$a = 0.277$ px

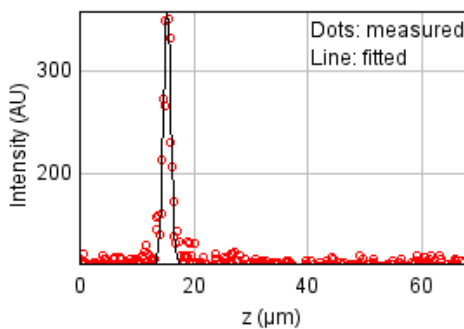
$b = -0.391$ px

$c = 0.830$ px

$x_c = 5.913$ px

$y_c = 5.383$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 19845.0472

Standard deviation: 8.04002

$R^2: 0.94078$

Parameters:

$a = 111.23232$

$b = 358.66747$

$c = 15.40428$

$d = 0.66204$

Bead 746

Date : Mon Oct 17 13:28:32 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

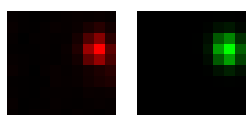
Coordinates : 40.2 μm (x), -45.8 μm (y), 38.4 μm (z)

Corresponding bead : Not found

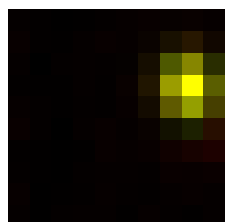
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 422 nm | 436 nm | 223 nm |
| max | 492 nm | 509 nm | 223 nm |
| z | 1.24 μm | 1.24 μm | 885 nm |
| Asymmetry | 0.857 | | |
| Theta | -78.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 866.874$ (brightness)

$B = 117.178$ (background)

$a = 0.746$ px

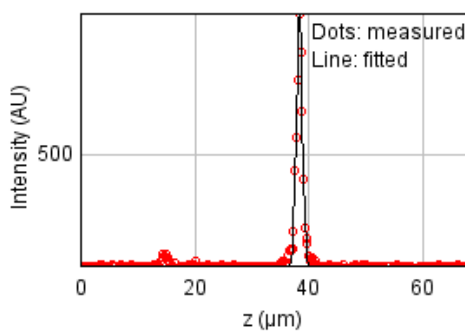
$b = -0.040$ px

$c = 0.562$ px

$x_c = 7.833$ px

$y_c = 3.064$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 52567.0275

Standard deviation: 13.08542

$R^2: 0.98386$

Parameters:

$a = 116.92133$

$b = 998.72428$

$c = 38.41576$

$d = 0.52585$

Bead 747

Date : Mon Oct 17 13:28:33 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

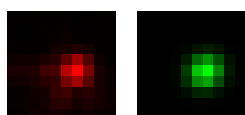
Coordinates : -69.8 μm (x), -50.8 μm (y), 16.9 μm (z)

Corresponding bead : Not found

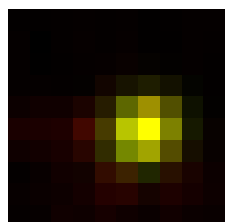
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 501 nm | 518 nm | 223 nm |
| max | 547 nm | 565 nm | 223 nm |
| z | 1.83 μm | 1.84 μm | 885 nm |
| Asymmetry | 0.916 | | |
| Theta | 32.1° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.934$



Parameters:

A = 961.852 (brightness)

B = 143.930 (background)

a = 0.473 px

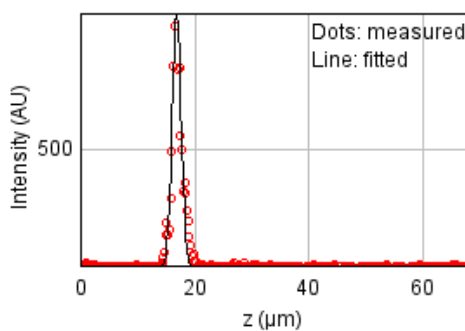
b = 0.039 px

c = 0.510 px

$x_c = 5.771$ px

$y_c = 5.080$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 217284.260

Standard deviation: 26.60388

R^2 : 0.95081

Parameters:

a = 114.38499

b = 949.72430

c = 16.89662

d = 0.77881

Bead 748

Date : Mon Oct 17 13:28:33 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

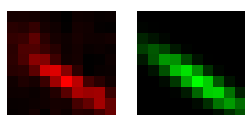
Coordinates : 133 μm (x), -53.2 μm (y), 15.5 μm (z)

Corresponding bead : Not found

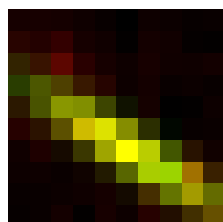
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 360 nm | 372 nm | 223 nm |
| max | 1.86 μm | 1.92 μm | 223 nm |
| z | 1.91 μm | 1.92 μm | 885 nm |
| Asymmetry | 0.194 | | |
| Theta | -32.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 186.434$ (brightness)

$B = 117.760$ (background)

$a = 0.327$ px

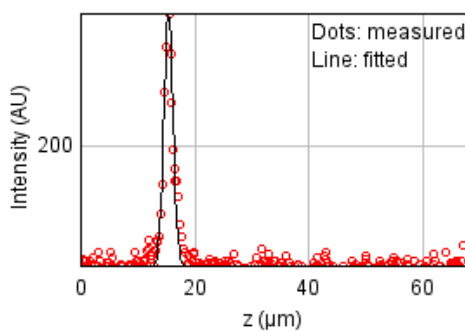
$b = -0.452$ px

$c = 0.747$ px

$x_c = 5.129$ 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: 16498.1212

Standard deviation: 7.33074

$R^2: 0.93119$

Parameters:

$a = 110.82281$

$b = 299.61838$

$c = 15.46416$

$d = 0.81195$

Bead 749

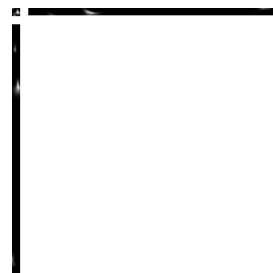
Date : Mon Oct 17 13:28:33 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : -12.6 μm (x), -72.2 μm (y), 16.9 μm (z)

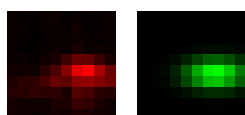
Corresponding bead : Not found



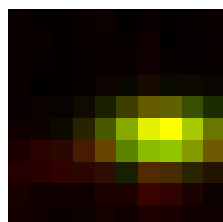
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 468 nm | 483 nm | 223 nm |
| max | 952 nm | 984 nm | 223 nm |
| z | 1.83 μm | 1.83 μm | 885 nm |
| Asymmetry | 0.491 | | |
| Theta | 0.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.904$



Parameters:

$A = 511.420$ (brightness)

$B = 129.611$ (background)

$a = 0.148$ px

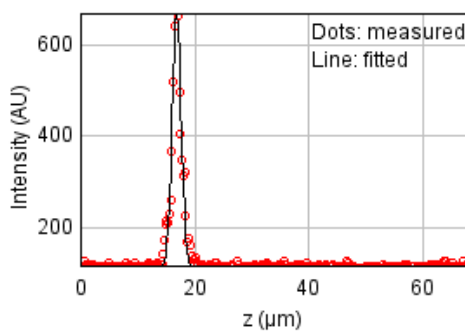
$b = 0.003$ px

$c = 0.613$ px

$x_c = 6.693$ px

$y_c = 5.289$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 68286.9361

Standard deviation: 14.91419

$R^2: 0.96425$

Parameters:

$a = 114.54306$

$b = 668.80801$

$c = 16.89506$

$d = 0.77555$

Bead 750 (Rejected)

Date : Mon Oct 17 13:28:33 PDT 2022

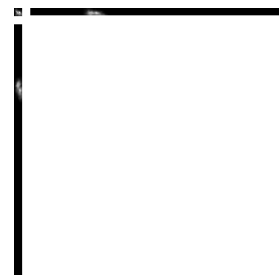
Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 110 μm (x), -91.6 μm (y), 17.7 μm (z)

Corresponding bead : Not found

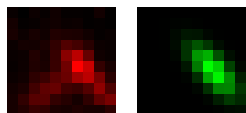
Reason of rejection : R or C parameter off limits.



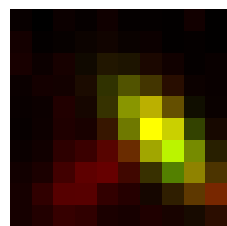
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 428 nm | 442 nm | 223 nm |
| max | 974 nm | 1.01 μm | 223 nm |
| z | 1.89 μm | 1.9 μm | 885 nm |
| Asymmetry | 0.439 | | |
| Theta | -48.5° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.776$



Parameters:

A = 371.069 (brightness)

B = 150.528 (background)

a = 0.473 px

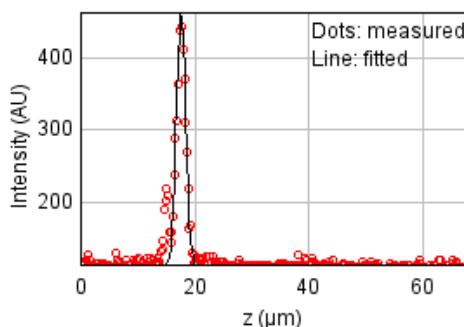
b = -0.293 px

c = 0.401 px

xc = 6.483 px

yc = 5.320 px

Z profile & fitting parameters:



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

Sum of residuals squared: 60596.0119

Standard deviation: 14.04924

R^2 : 0.92579

Parameters:

a = 113.54252

b = 463.04260

c = 17.66934

d = 0.80181

Bead 751

Date : Mon Oct 17 13:28:33 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

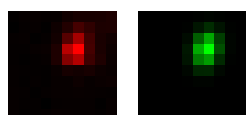
Coordinates : 159 μm (x), 89.8 μm (y), 53.9 μm (z)

Corresponding bead : Not found

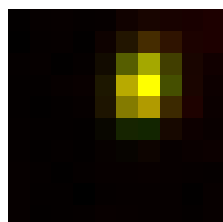
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 407 nm | 421 nm | 223 nm |
| max | 554 nm | 573 nm | 223 nm |
| z | 1.48 μm | 1.49 μm | 885 nm |
| Asymmetry | 0.736 | | |
| Theta | 76.0° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 752.466 (brightness)

B = 118.528 (background)

a = 0.786 px

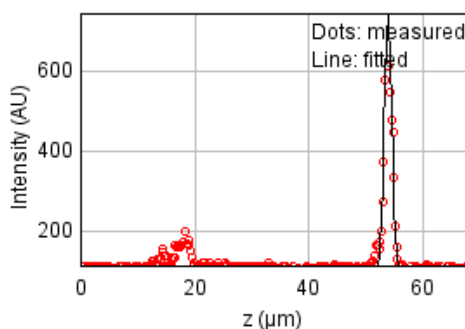
b = 0.087 px

c = 0.459 px

xc = 5.758 px

yc = 3.003 px

Z profile & fitting parameters:



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

Sum of residuals squared: 138549.253

Standard deviation: 21.24383

R^2 : 0.93383

Parameters:

a = 115.10031

b = 746.96988

c = 53.94990

d = 0.62854

Bead 752

Date : Mon Oct 17 13:28:33 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

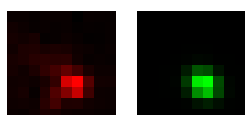
Coordinates : -117 μm (x), 76.1 μm (y), 16.9 μm (z)

Corresponding bead : Not found

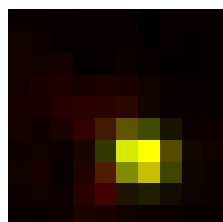
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 401 nm | 414 nm | 223 nm |
| max | 475 nm | 491 nm | 223 nm |
| z | 2.0 μm | 2.01 μm | 885 nm |
| Asymmetry | 0.843 | | |
| Theta | -31.9° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.913$



Parameters:

A = 516.909 (brightness)

B = 130.469 (background)

a = 0.661 px

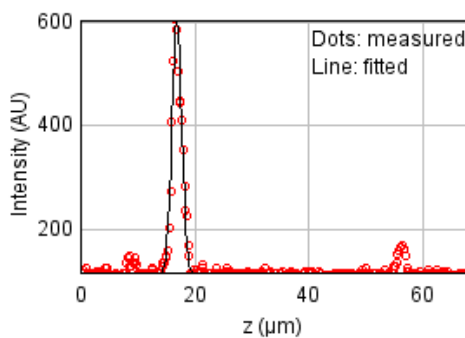
b = -0.108 px

c = 0.768 px

$x_c = 5.607$ px

$y_c = 6.252$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 83862.4381

Standard deviation: 16.52778

R^2 : 0.94883

Parameters:

a = 114.65517

b = 602.59847

c = 16.92519

d = 0.84831

Bead 753

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

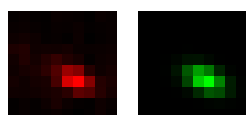
Coordinates : -137 μm (x), 69.6 μm (y), 16.4 μm (z)

Corresponding bead : Not found

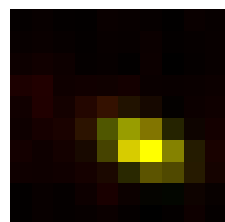
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 356 nm | 368 nm | 223 nm |
| max | 632 nm | 653 nm | 223 nm |
| z | 1.6 μm | 1.61 μm | 885 nm |
| Asymmetry | 0.564 | | |
| Theta | -23.2° | | |

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 = 486.575 (brightness)

B = 121.901 (background)

a = 0.449 px

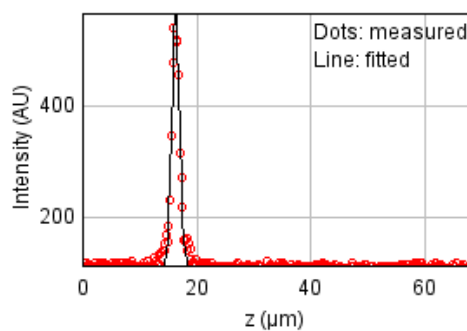
b = -0.262 px

c = 0.946 px

xc = 5.641 px

yc = 5.816 px

Z profile & fitting parameters:



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

Sum of residuals squared: 29262.7919

Standard deviation: 9.76312

R^2 : 0.97402

Parameters:

a = 112.41386

b = 568.25514

c = 16.37891

d = 0.67938

Bead 754

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

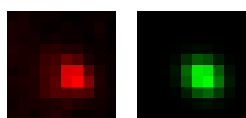
Coordinates : -89.6 μm (x), 62.6 μm (y), 16.9 μm (z)

Corresponding bead : Not found

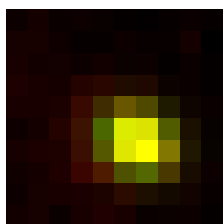
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 493 nm | 510 nm | 223 nm |
| max | 585 nm | 605 nm | 223 nm |
| z | 1.98 μm | 1.98 μm | 885 nm |
| Asymmetry | 0.843 | | |
| Theta | -31.0° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 401.326 (brightness)

B = 129.836 (background)

a = 0.434 px

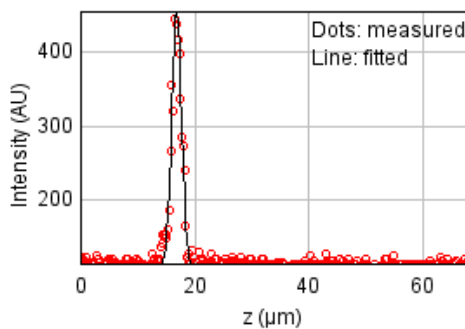
b = -0.070 px

c = 0.509 px

xc = 5.542 px

yc = 5.552 px

Z profile & fitting parameters:



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

Sum of residuals squared: 27147.8460

Standard deviation: 9.40369

R^2 : 0.96529

Parameters:

a = 113.71225

b = 455.44844

c = 16.89535

d = 0.83922

Bead 755

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

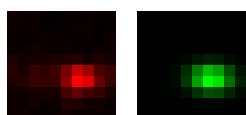
Coordinates : -157 μm (x), 35.9 μm (y), 16.5 μm (z)

Corresponding bead : Not found

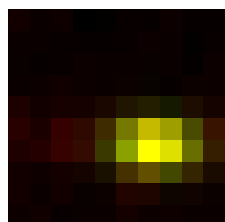
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 424 nm | 439 nm | 223 nm |
| max | 677 nm | 700 nm | 223 nm |
| z | 2.06 μm | 2.07 μm | 885 nm |
| Asymmetry | 0.626 | | |
| Theta | -2.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.945$



Parameters:

A = 355.992 (brightness)

B = 122.085 (background)

a = 0.293 px

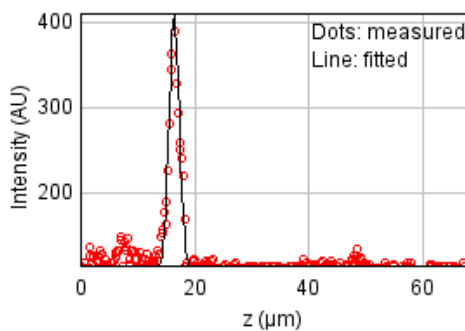
b = -0.019 px

c = 0.744 px

$x_c = 6.270$ px

$y_c = 5.720$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 41924.2974

Standard deviation: 11.68594

R^2 : 0.93398

Parameters:

a = 114.04827

b = 410.72817

c = 16.47258

d = 0.87659

Bead 756

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

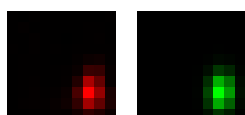
Coordinates : -20.0 μm (x), 15.8 μm (y), 38.4 μm (z)

Corresponding bead : Not found

| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 382 nm | 395 nm | 223 nm |
| max | 585 nm | 605 nm | 223 nm |
| z | 1.16 μm | 1.16 μm | 885 nm |
| Asymmetry | 0.654 | | |
| Theta | 86.9° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 1980.286 (brightness)

B = 121.889 (background)

a = 0.916 px

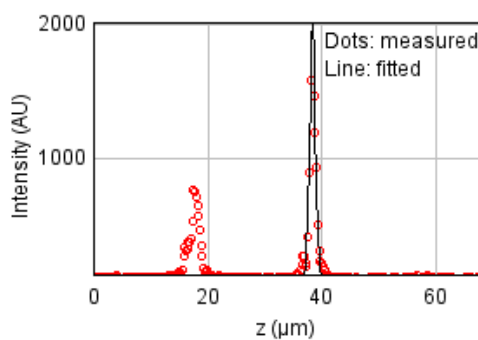
b = 0.028 px

c = 0.394 px

$x_c = 7.223$ px

$y_c = 6.970$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 3072662.87

Standard deviation: 100.04336

R^2 : 0.81629

Parameters:

a = 140.14477

b = 2019.33334

c = 38.44664

d = 0.49257

Bead 757

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

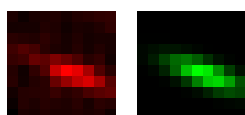
Coordinates : 125 μm (x), -7.99 μm (y), 15.7 μm (z)

Corresponding bead : Not found

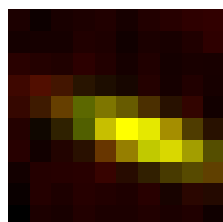
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 373 nm | 385 nm | 223 nm |
| max | 1.2 μm | 1.24 μm | 223 nm |
| z | 2.42 μm | 2.43 μm | 885 nm |
| Asymmetry | 0.311 | | |
| Theta | -19.9° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.944$



Parameters:

$A = 191.314$ (brightness)

$B = 115.832$ (background)

$a = 0.194$ px

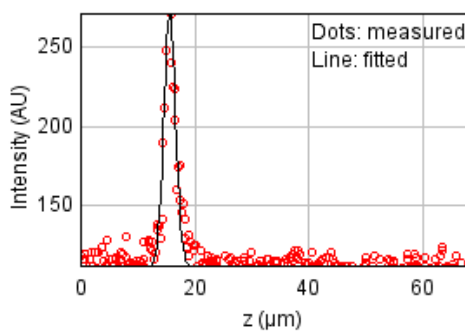
$b = -0.279$ px

$c = 0.865$ px

$x_c = 5.730$ px

$y_c = 5.331$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 21842.7878

Standard deviation: 8.43500

$R^2: 0.90190$

Parameters:

$a = 111.58175$

$b = 271.58966$

$c = 15.68776$

$d = 1.02892$

Bead 758 (Rejected)

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 20.4 μm (x), -21.0 μm (y), 18.1 μm (z)

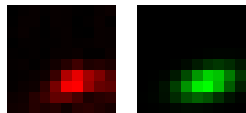
Corresponding bead : Not found

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

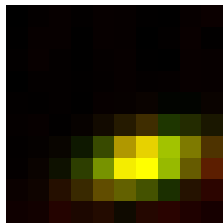
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 439 nm | 453 nm | 223 nm |
| max | 894 nm | 924 nm | 223 nm |
| z | 3.14 μm | 3.15 μm | 885 nm |
| Asymmetry | 0.491 | | |
| Theta | 13.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.942$



Parameters:

A = 556.413 (brightness)

B = 120.435 (background)

a = 0.198 px

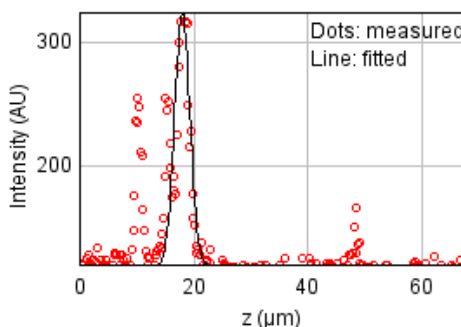
b = 0.123 px

c = 0.667 px

xc = 5.902 px

yc = 6.668 px

Z profile & fitting parameters:



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

Sum of residuals squared: 184040.849

Standard deviation: 24.48431

R^2 : 0.69795

Parameters:

a = 118.30006

b = 324.55983

c = 18.07214

d = 1.33382

Bead 759 (Rejected)

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 142 μm (x), -27.4 μm (y), 15.4 μm (z)

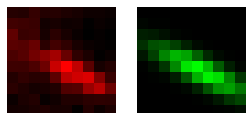
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

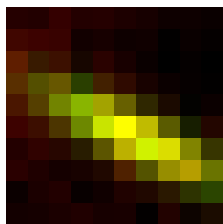
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 404 nm | 417 nm | 223 nm |
| max | 1.66 μm | 1.71 μm | 223 nm |
| z | 1.94 μm | 1.95 μm | 885 nm |
| Asymmetry | 0.244 | | |
| Theta | -26.9° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.899$



Parameters:

A = 134.219 (brightness)

B = 115.269 (background)

a = 0.208 px

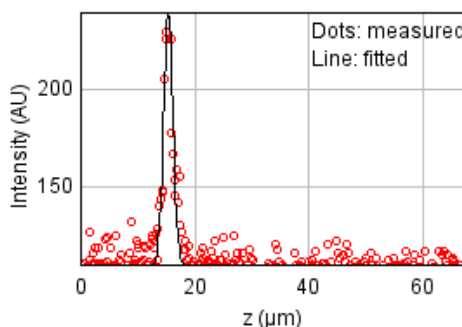
b = -0.313 px

c = 0.665 px

xc = 5.339 px

yc = 5.385 px

Z profile & fitting parameters:



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

Sum of residuals squared: 17767.0803

Standard deviation: 7.60745

R^2 : 0.85499

Parameters:

a = 110.59199

b = 239.00828

c = 15.43894

d = 0.82402

Bead 760

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

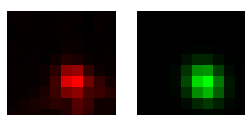
Coordinates : 13.1 μm (x), -55.7 μm (y), 16.8 μm (z)

Corresponding bead : Not found

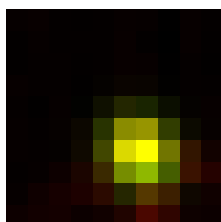
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 512 nm | 530 nm | 223 nm |
| max | 581 nm | 600 nm | 223 nm |
| z | 1.74 μm | 1.75 μm | 885 nm |
| Asymmetry | 0.882 | | |
| Theta | -55.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.920$



Parameters:

A = 878.300 (brightness)

B = 137.359 (background)

a = 0.475 px

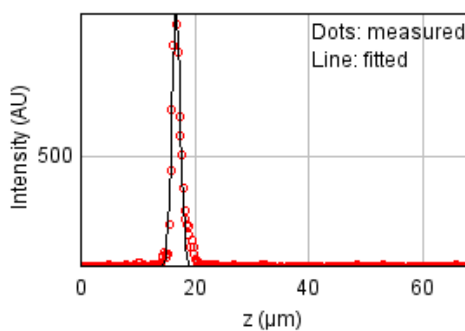
b = -0.053 px

c = 0.435 px

xc = 5.683 px

yc = 6.084 px

Z profile & fitting parameters:



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

Sum of residuals squared: 153640.811

Standard deviation: 22.37093

R^2 : 0.96723

Parameters:

a = 115.44039

b = 1005.39312

c = 16.80351

d = 0.73929

Bead 761

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 96.0 μm (x), -61.3 μm (y), 42.8 μm (z)

Corresponding bead : Not found

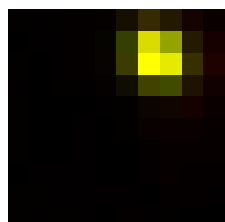
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 394 nm | 407 nm | 223 nm |
| max | 454 nm | 470 nm | 223 nm |
| z | 1.55 μm | 1.56 μm | 885 nm |
| Asymmetry | 0.867 | | |
| Theta | -47.1° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 1827.684$ (brightness)

$B = 126.673$ (background)

$a = 0.765$ px

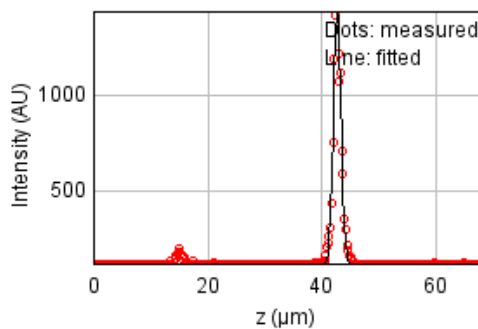
$b = -0.107$ px

$c = 0.749$ px

$x_c = 6.395$ px

$y_c = 1.656$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 238960.783

Standard deviation: 27.89935

$R^2: 0.97439$

Parameters:

$a = 115.91888$

$b = 1447.00247$

$c = 42.75470$

$d = 0.65976$

Bead 762

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

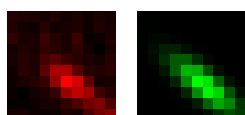
Coordinates : 153 μm (x), -77.3 μm (y), 15.2 μm (z)

Corresponding bead : Not found

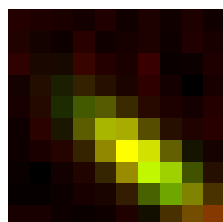
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 413 nm | 427 nm | 223 nm |
| max | 1.25 μm | 1.29 μm | 223 nm |
| z | 1.64 μm | 1.64 μm | 885 nm |
| Asymmetry | 0.331 | | |
| Theta | -39.7° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.902$



Parameters:

$A = 124.522$ (brightness)

$B = 112.977$ (background)

$a = 0.372$ px

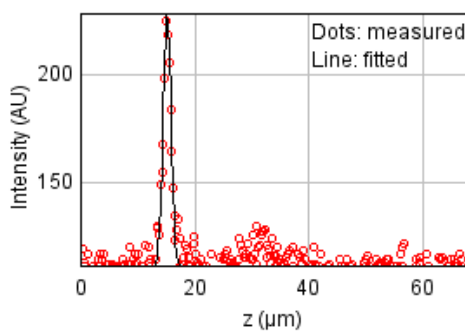
$b = -0.344$ px

$c = 0.500$ px

$x_c = 5.680$ px

$y_c = 6.368$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 13262.7558

Standard deviation: 6.57276

$R^2: 0.85055$

Parameters:

$a = 110.64982$

$b = 228.88942$

$c = 15.22031$

$d = 0.69541$

Bead 763

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 80.3 μm (x), 35.6 μm (y), 16.8 μm (z)

Corresponding bead : Not found

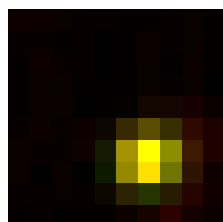
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 447 nm | 462 nm | 223 nm |
| max | 489 nm | 505 nm | 223 nm |
| z | 1.65 μm | 1.66 μm | 885 nm |
| Asymmetry | 0.914 | | |
| Theta | 17.5° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.956$



Parameters:

A = 601.752 (brightness)

B = 119.944 (background)

a = 0.572 px

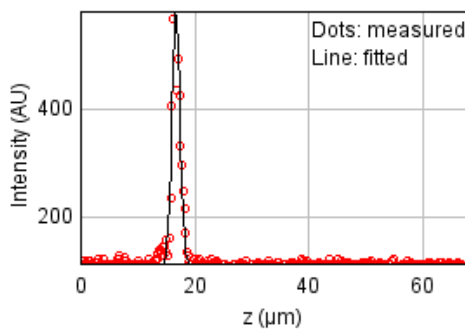
b = 0.032 px

c = 0.663 px

xc = 5.965 px

yc = 6.402 px

Z profile & fitting parameters:



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

Sum of residuals squared: 67030.2742

Standard deviation: 14.77632

R^2 : 0.94675

Parameters:

a = 112.84782

b = 581.03495

c = 16.77252

d = 0.70052

Bead 764

Date : Mon Oct 17 13:28:34 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

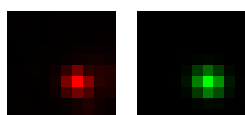
Coordinates : 81.9 μm (x), 26.0 μm (y), 17.5 μm (z)

Corresponding bead : Not found

| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 404 nm | 418 nm | 223 nm |
| max | 464 nm | 480 nm | 223 nm |
| z | 1.51 μm | 1.51 μm | 885 nm |
| Asymmetry | 0.871 | | |
| Theta | -11.9° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 1166.399$ (brightness)

$B = 127.793$ (background)

$a = 0.631$ px

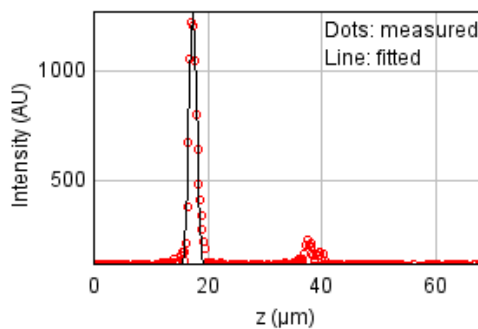
$b = -0.040$ px

$c = 0.813$ px

$x_c = 6.056$ px

$y_c = 6.045$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 235893.436

Standard deviation: 27.71971

$R^2: 0.96627$

Parameters:

$a = 120.07649$

$b = 1284.11476$

$c = 17.46788$

$d = 0.64055$

Bead 765

Date : Mon Oct 17 13:28:35 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

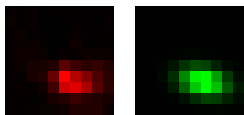
Coordinates : 100 μm (x), 19.3 μm (y), 16.8 μm (z)

Corresponding bead : Not found

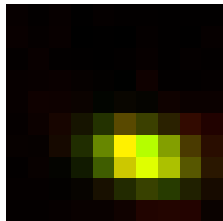
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 434 nm | 449 nm | 223 nm |
| max | 745 nm | 770 nm | 223 nm |
| z | 1.41 μm | 1.42 μm | 885 nm |
| Asymmetry | 0.583 | | |
| Theta | -12.2° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.944$



Parameters:

$A = 572.208$ (brightness)

$B = 119.384$ (background)

$a = 0.263$ px

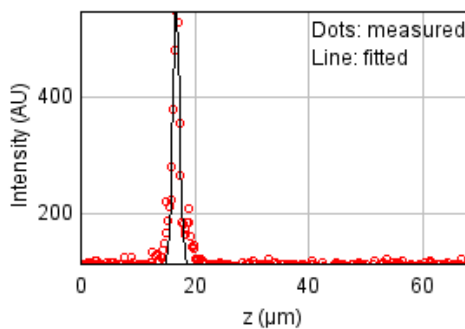
$b = -0.097$ px

$c = 0.691$ px

$x_c = 5.773$ px

$y_c = 6.472$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 67683.3218

Standard deviation: 14.84813

$R^2: 0.92975$

Parameters:

$a = 114.11837$

$b = 551.97809$

$c = 16.81596$

$d = 0.59864$

Bead 766

Date : Mon Oct 17 13:28:35 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

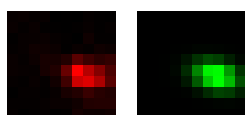
Coordinates : 100 μm (x), 19.3 μm (y), 16.8 μm (z)

Corresponding bead : Not found

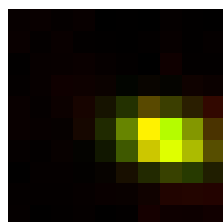
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 432 nm | 447 nm | 223 nm |
| max | 725 nm | 750 nm | 223 nm |
| z | 1.41 μm | 1.42 μm | 885 nm |
| Asymmetry | 0.596 | | |
| Theta | -13.1° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.949$



Parameters:

$A = 580.492$ (brightness)

$B = 119.114$ (background)

$a = 0.279$ px

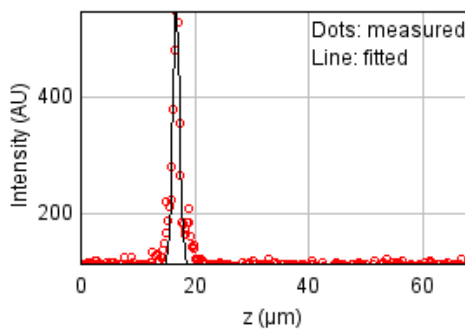
$b = -0.103$ px

$c = 0.695$ px

$x_c = 6.748$ px

$y_c = 5.472$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 67683.3218

Standard deviation: 14.84813

$R^2: 0.92975$

Parameters:

$a = 114.11837$

$b = 551.97809$

$c = 16.81596$

$d = 0.59864$

Bead 767

Date : Mon Oct 17 13:28:35 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

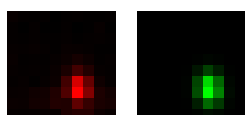
Coordinates : -17.4 μm (x), 14.6 μm (y), 17.2 μm (z)

Corresponding bead : Not found

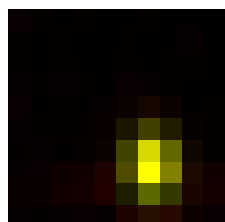
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 375 nm | 388 nm | 223 nm |
| max | 502 nm | 519 nm | 223 nm |
| z | 1.64 μm | 1.65 μm | 885 nm |
| Asymmetry | 0.748 | | |
| Theta | -85.7° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 896.690 (brightness)

B = 129.480 (background)

a = 0.950 px

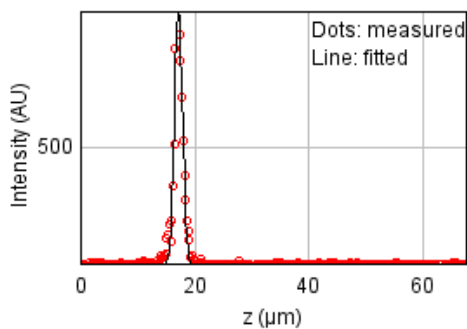
b = -0.032 px

c = 0.535 px

$x_c = 6.130$ px

$y_c = 6.664$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 92912.2398

Standard deviation: 17.39672

R^2 : 0.97611

Parameters:

a = 115.60144

b = 953.13893

c = 17.22792

d = 0.69726

Bead 768

Date : Mon Oct 17 13:28:35 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

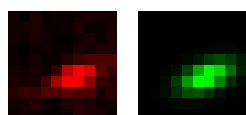
Coordinates : -163 μm (x), -10.0 μm (y), 16.2 μm (z)

Corresponding bead : Not found

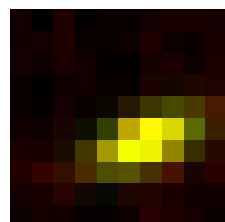
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 392 nm | 405 nm | 223 nm |
| max | 844 nm | 872 nm | 223 nm |
| z | 2.65 μm | 2.66 μm | 885 nm |
| Asymmetry | 0.465 | | |
| Theta | 20.9° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.949$



Parameters:

A = 210.550 (brightness)

B = 113.275 (background)

a = 0.275 px

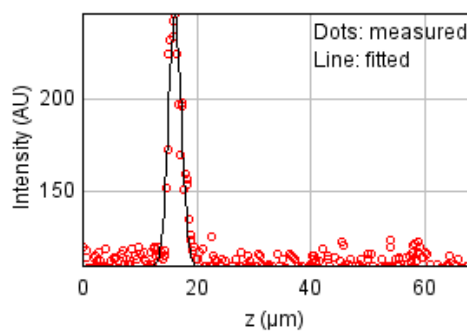
b = 0.228 px

c = 0.786 px

xc = 5.789 px

yc = 5.543 px

Z profile & fitting parameters:



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

Sum of residuals squared: 17729.4662

Standard deviation: 7.59939

R^2 : 0.89778

Parameters:

a = 110.14716

b = 245.33127

c = 16.24793

d = 1.12363

Bead 769

Date : Mon Oct 17 13:28:35 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

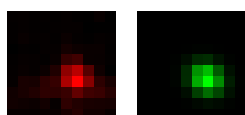
Coordinates : -19.0 μm (x), -34.0 μm (y), 17.3 μm (z)

Corresponding bead : Not found

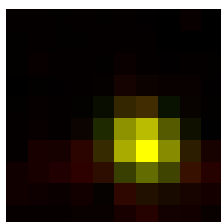
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 464 nm | 479 nm | 223 nm |
| max | 539 nm | 557 nm | 223 nm |
| z | 1.93 μm | 1.94 μm | 885 nm |
| Asymmetry | 0.861 | | |
| Theta | -30.7° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 635.039 (brightness)

B = 130.396 (background)

a = 0.504 px

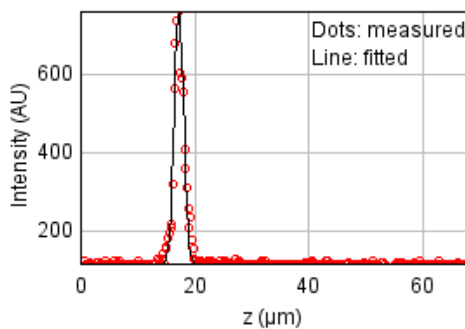
b = -0.071 px

c = 0.582 px

xc = 5.862 px

yc = 5.745 px

Z profile & fitting parameters:



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

Sum of residuals squared: 87352.4695

Standard deviation: 16.86819

R^2 : 0.96814

Parameters:

a = 113.35984

b = 760.88922

c = 17.30088

d = 0.82114

Bead 770

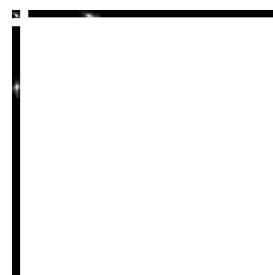
Date : Mon Oct 17 13:28:35 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 127 μm (x), -39.6 μm (y), 16.2 μm (z)

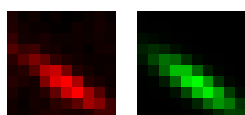
Corresponding bead : Not found



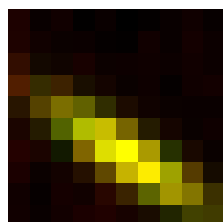
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 384 nm | 397 nm | 223 nm |
| max | 1.47 μm | 1.52 μm | 223 nm |
| z | 1.6 μm | 1.61 μm | 885 nm |
| Asymmetry | 0.262 | | |
| Theta | -33.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 288.001$ (brightness)

$B = 117.460$ (background)

$a = 0.323$ px

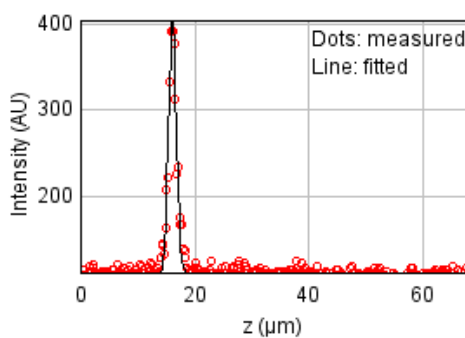
$b = -0.391$ px

$c = 0.647$ px

$x_c = 4.957$ px

$y_c = 6.202$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 21324.4504

Standard deviation: 8.33431

$R^2: 0.95612$

Parameters:

$a = 110.25223$

$b = 406.71950$

$c = 16.17632$

$d = 0.68040$

Bead 771

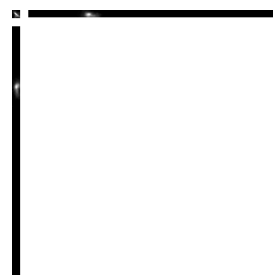
Date : Mon Oct 17 13:28:35 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 121 μm (x), -79.2 μm (y), 16.1 μm (z)

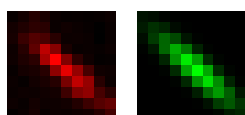
Corresponding bead : Not found



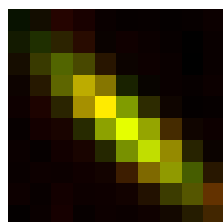
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 382 nm | 395 nm | 223 nm |
| max | 1.57 μm | 1.62 μm | 223 nm |
| z | 1.45 μm | 1.46 μm | 885 nm |
| Asymmetry | 0.243 | | |
| Theta | -42.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.951$



Parameters:

$A = 304.862$ (brightness)

$B = 119.017$ (background)

$a = 0.449$ px

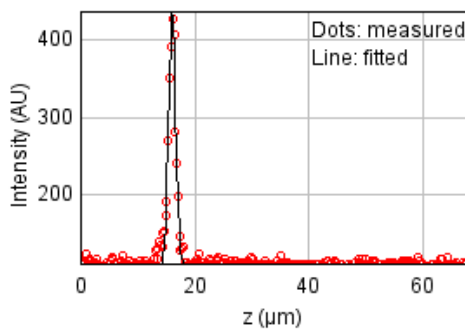
$b = -0.432$ px

$c = 0.527$ px

$x_c = 4.890$ px

$y_c = 4.876$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 15507.1610

Standard deviation: 7.10717

$R^2: 0.97062$

Parameters:

$a = 111.08578$

$b = 437.38325$

$c = 16.12200$

$d = 0.61719$

Bead 772

Date : Mon Oct 17 13:28:35 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 96.8 μm (x), -85.0 μm (y), 16.1 μm (z)

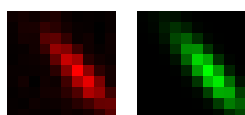
Corresponding bead : Not found



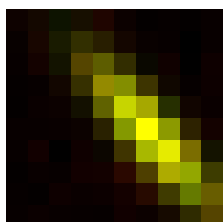
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 404 nm | 417 nm | 223 nm |
| max | 1.52 μm | 1.57 μm | 223 nm |
| z | 1.69 μm | 1.7 μm | 885 nm |
| Asymmetry | 0.266 | | |
| Theta | -50.1° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 318.489$ (brightness)

$B = 119.012$ (background)

$a = 0.509$ px

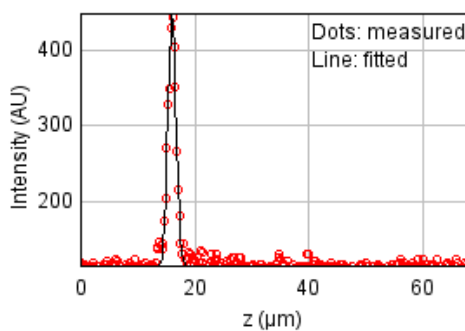
$b = -0.376$ px

$c = 0.372$ px

$x_c = 6.188$ px

$y_c = 5.250$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 20052.1248

Standard deviation: 8.08185

$R^2: 0.96912$

Parameters:

$a = 113.54672$

$b = 449.53444$

$c = 16.09604$

$d = 0.71904$

Bead 773 (Rejected)

Date : Mon Oct 17 13:28:35 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : -111 μm (x), 95.6 μm (y), 15.6 μm (z)

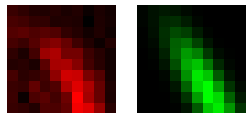
Corresponding bead : Not found

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

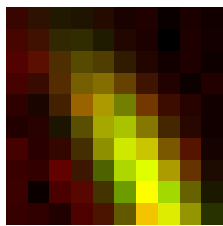
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 571 nm | 590 nm | 223 nm |
| max | 2.06 μm | 2.13 μm | 223 nm |
| z | 1.03 μm | 1.03 μm | 885 nm |
| Asymmetry | 0.276 | | |
| Theta | -60.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.854$



Parameters:

A = 107.137 (brightness)

B = 118.939 (background)

a = 0.319 px

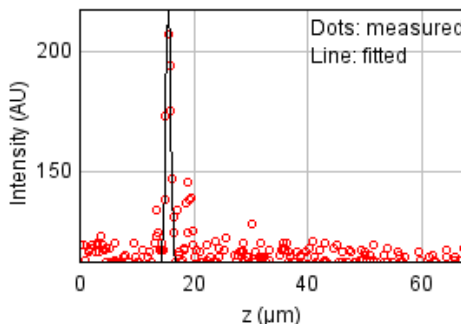
b = -0.163 px

c = 0.124 px

xc = 6.039 px

yc = 7.565 px

Z profile & fitting parameters:



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

Sum of residuals squared: 15054.4483

Standard deviation: 7.00266

R^2 : 0.71577

Parameters:

a = 112.62782

b = 217.80400

c = 15.60737

d = 0.43529

Bead 774

Date : Mon Oct 17 13:28:35 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

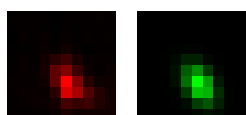
Coordinates : 35.0 μm (x), 68.4 μm (y), 17.7 μm (z)

Corresponding bead : Not found

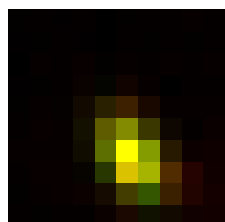
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 412 nm | 426 nm | 223 nm |
| max | 653 nm | 675 nm | 223 nm |
| z | 1.58 μm | 1.58 μm | 885 nm |
| Asymmetry | 0.631 | | |
| Theta | -59.2° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.953$



Parameters:

$A = 779.814$ (brightness)

$B = 122.868$ (background)

$a = 0.665$ px

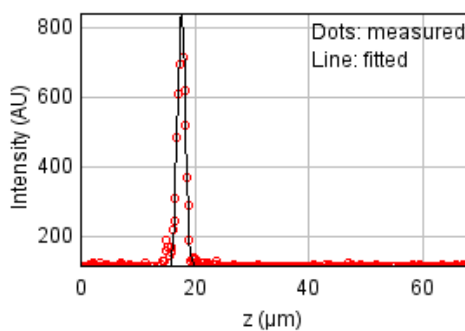
$b = -0.209$ px

$c = 0.440$ px

$x_c = 5.220$ px

$y_c = 6.290$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 42865.6942

Standard deviation: 11.81642

$R^2: 0.98476$

Parameters:

$a = 113.79834$

$b = 843.65396$

$c = 17.73413$

$d = 0.66898$

Bead 775

Date : Mon Oct 17 13:28:36 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

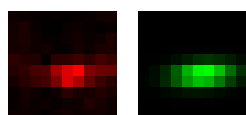
Coordinates : 132 μm (x), 61.3 μm (y), 16.3 μm (z)

Corresponding bead : Not found

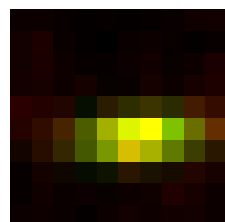
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 367 nm | 380 nm | 223 nm |
| max | 947 nm | 979 nm | 223 nm |
| z | 2.37 μm | 2.38 μm | 885 nm |
| Asymmetry | 0.388 | | |
| Theta | 3.6° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.918$



Parameters:

$A = 236.072$ (brightness)

$B = 116.339$ (background)

$a = 0.153$ px

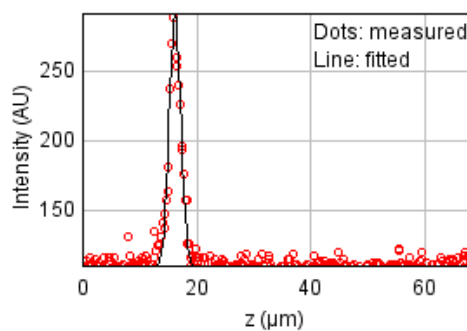
$b = 0.053$ px

$c = 0.990$ px

$x_c = 5.489$ px

$y_c = 5.345$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 15487.8201

Standard deviation: 7.10274

$R^2: 0.94159$

Parameters:

$a = 110.69979$

$b = 290.96207$

$c = 16.26681$

$d = 1.00662$

Bead 776

Date : Mon Oct 17 13:28:36 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

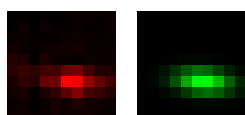
Coordinates : 139 μm (x), 43.6 μm (y), 16.5 μm (z)

Corresponding bead : Not found

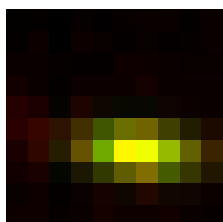
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 386 nm | 399 nm | 223 nm |
| max | 895 nm | 925 nm | 223 nm |
| z | 2.36 μm | 2.37 μm | 885 nm |
| Asymmetry | 0.431 | | |
| Theta | -5.1° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.928$



Parameters:

$A = 257.566$ (brightness)

$B = 114.797$ (background)

$a = 0.173$ px

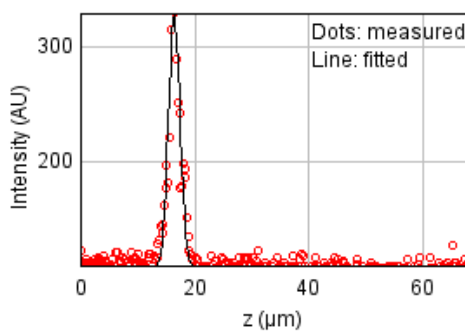
$b = -0.065$ px

$c = 0.896$ px

$x_c = 5.589$ px

$y_c = 5.998$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 29047.3590

Standard deviation: 9.72712

$R^2: 0.92672$

Parameters:

$a = 109.94927$

$b = 329.09584$

$c = 16.47879$

$d = 1.00189$

Bead 777

Date : Mon Oct 17 13:28:36 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

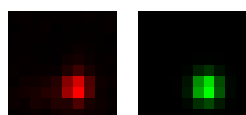
Coordinates : -56.8 μm (x), 27.4 μm (y), 18.1 μm (z)

Corresponding bead : Not found

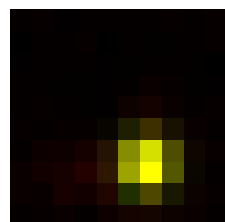
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 420 nm | 434 nm | 223 nm |
| max | 436 nm | 451 nm | 223 nm |
| z | 1.46 μm | 1.47 μm | 885 nm |
| Asymmetry | 0.962 | | |
| Theta | 83.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 866.689 (brightness)

B = 125.086 (background)

a = 0.761 px

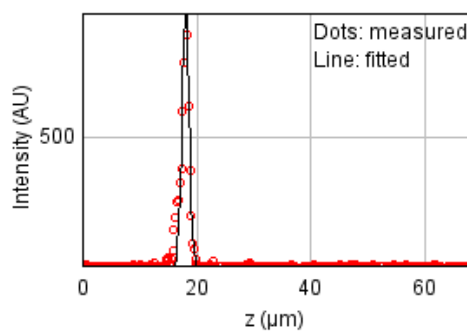
b = 0.006 px

c = 0.706 px

$x_c = 5.795$ px

$y_c = 6.599$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 133618.911

Standard deviation: 20.86242

R^2 : 0.95515

Parameters:

a = 114.89455

b = 881.62708

c = 18.12690

d = 0.62094

Bead 778

Date : Mon Oct 17 13:28:36 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

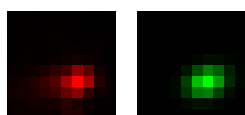
Coordinates : -86.9 μm (x), 13.2 μm (y), 18.2 μm (z)

Corresponding bead : Not found

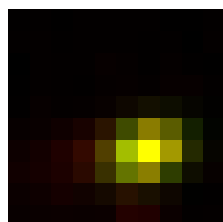
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 424 nm | 439 nm | 223 nm |
| max | 602 nm | 622 nm | 223 nm |
| z | 2.0 μm | 2.01 μm | 885 nm |
| Asymmetry | 0.705 | | |
| Theta | 17.2° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.941$



Parameters:

$A = 755.525$ (brightness)

$B = 131.878$ (background)

$a = 0.403$ px

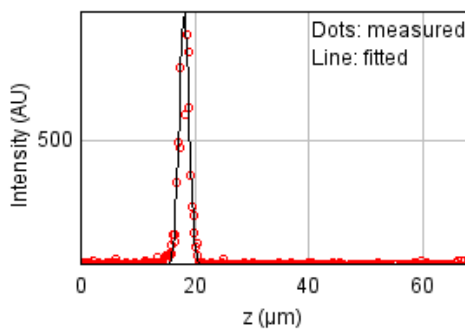
$b = 0.106$ px

$c = 0.712$ px

$x_c = 5.861$ px

$y_c = 6.027$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 160864.108

Standard deviation: 22.89077

$R^2 = 0.96178$

Parameters:

$a = 112.80271$

$b = 899.77669$

$c = 18.22630$

$d = 0.84890$

Bead 779

Date : Mon Oct 17 13:28:36 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

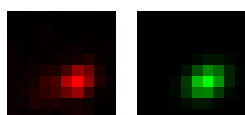
Coordinates : -83.0 μm (x), 11.2 μm (y), 17.8 μm (z)

Corresponding bead : Not found

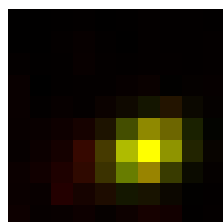
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 437 nm | 452 nm | 223 nm |
| max | 602 nm | 622 nm | 223 nm |
| z | 1.94 μm | 1.95 μm | 885 nm |
| Asymmetry | 0.726 | | |
| Theta | 25.2° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.953$



Parameters:

A = 712.366 (brightness)

B = 125.467 (background)

a = 0.431 px

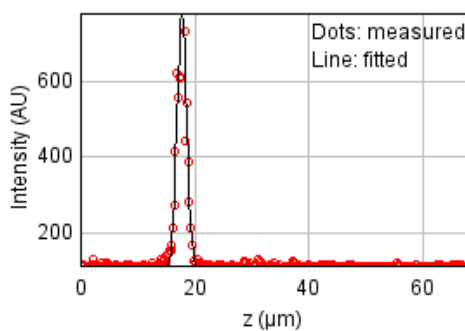
b = 0.128 px

c = 0.643 px

$x_c = 5.858$ px

$y_c = 6.014$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 112766.292

Standard deviation: 19.16551

R^2 : 0.96143

Parameters:

a = 112.92222

b = 777.52063

c = 17.81862

d = 0.82564

Bead 780

Date : Mon Oct 17 13:28:36 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

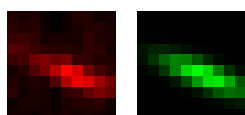
Coordinates : 148 μm (x), -4.49 μm (y), 16.2 μm (z)

Corresponding bead : Not found

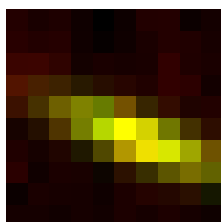
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 377 nm | 390 nm | 223 nm |
| max | 1.4 μm | 1.45 μm | 223 nm |
| z | 2.01 μm | 2.02 μm | 885 nm |
| Asymmetry | 0.269 | | |
| Theta | -21.1° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.940$



Parameters:

$A = 203.190$ (brightness)

$B = 122.219$ (background)

$a = 0.182$ px

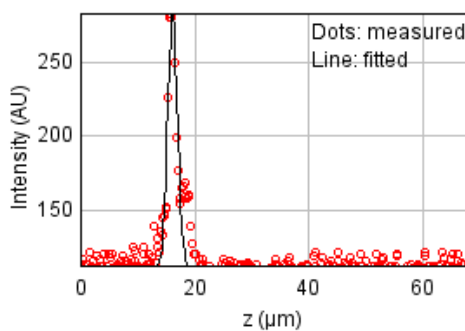
$b = -0.294$ px

$c = 0.831$ px

$x_c = 5.629$ px

$y_c = 5.410$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 31046.6058

Standard deviation: 10.05629

$R^2 = 0.86329$

Parameters:

$a = 111.65093$

$b = 284.35609$

$c = 16.19025$

$d = 0.85402$

Bead 781

Date : Mon Oct 17 13:28:36 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

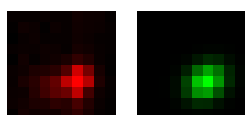
Coordinates : -80.6 μm (x), -13.0 μm (y), 17.4 μm (z)

Corresponding bead : Not found

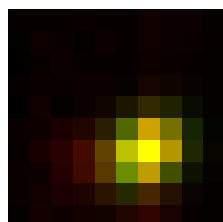
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 505 nm | 522 nm | 223 nm |
| max | 622 nm | 643 nm | 223 nm |
| z | 2.03 μm | 2.04 μm | 885 nm |
| Asymmetry | 0.812 | | |
| Theta | 34.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.912$



Parameters:

A = 670.383 (brightness)

B = 137.448 (background)

a = 0.404 px

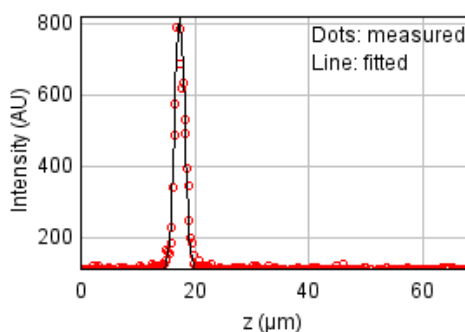
b = 0.083 px

c = 0.470 px

xc = 5.835 px

yc = 6.014 px

Z profile & fitting parameters:



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

Sum of residuals squared: 161113.075

Standard deviation: 22.90848

R^2 : 0.95381

Parameters:

a = 113.41609

b = 821.22823

c = 17.43100

d = 0.86313

Bead 782

Date : Mon Oct 17 13:28:37 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

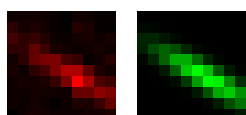
Coordinates : 132 μm (x), -37.5 μm (y), 16.3 μm (z)

Corresponding bead : Not found

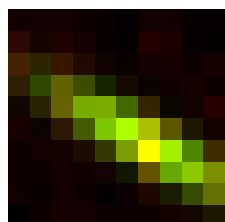
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 381 nm | 394 nm | 223 nm |
| max | 1.77 μm | 1.83 μm | 223 nm |
| z | 1.98 μm | 1.99 μm | 885 nm |
| Asymmetry | 0.215 | | |
| Theta | -30.2° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.916$



Parameters:

$A = 154.821$ (brightness)

$B = 115.984$ (background)

$a = 0.265$ px

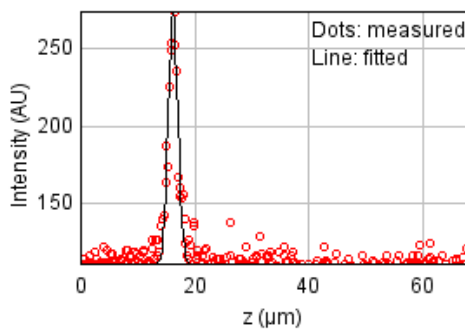
$b = -0.383$ px

$c = 0.703$ px

$x_c = 5.850$ px

$y_c = 5.615$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 21807.1438

Standard deviation: 8.42811

$R^2 = 0.88699$

Parameters:

$a = 111.28287$

$b = 273.71012$

$c = 16.27262$

$d = 0.84234$

Bead 783 (Rejected)

Date : Mon Oct 17 13:28:37 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : -111 μm (x), 95.5 μm (y), 15.6 μm (z)

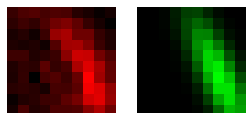
Corresponding bead : Not found

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

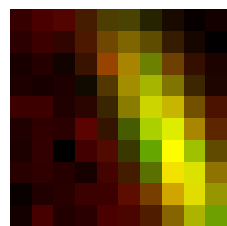
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 576 nm | 595 nm | 223 nm |
| max | 2.11 μm | 2.19 μm | 223 nm |
| z | 1.03 μm | 1.03 μm | 885 nm |
| Asymmetry | 0.272 | | |
| Theta | -65.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.850$



Parameters:

A = 100.199 (brightness)

B = 125.905 (background)

a = 0.341 px

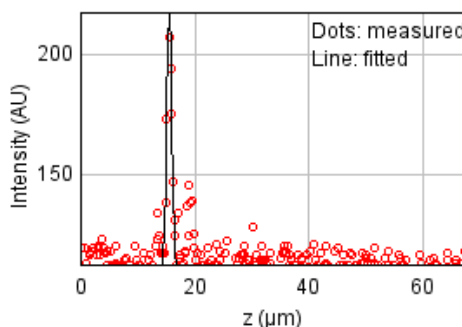
b = -0.140 px

c = 0.093 px

xc = 7.115 px

yc = 6.043 px

Z profile & fitting parameters:



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

Sum of residuals squared: 15054.4483

Standard deviation: 7.00266

R^2 : 0.71577

Parameters:

a = 112.62782

b = 217.80400

c = 15.60737

d = 0.43529

Bead 784 (Rejected)

Date : Mon Oct 17 13:28:37 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 148 μm (x), 86.9 μm (y), 14.5 μm (z)

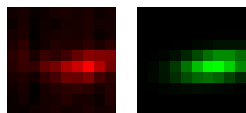
Corresponding bead : Not found

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

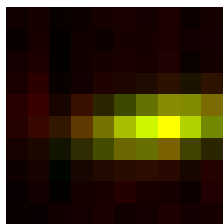
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 411 nm | 425 nm | 223 nm |
| max | 1.14 μm | 1.18 μm | 223 nm |
| z | 4.5 μm | 4.52 μm | 885 nm |
| Asymmetry | 0.36 | | |
| Theta | 7.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 219.929 (brightness)

B = 114.240 (background)

a = 0.114 px

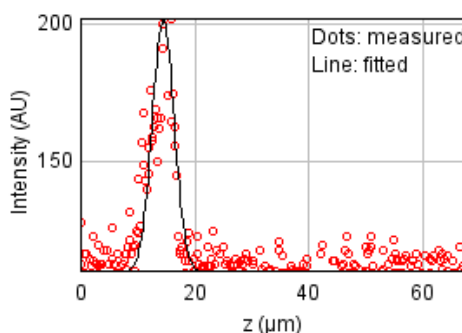
b = 0.089 px

c = 0.783 px

xc = 6.712 px

yc = 4.915 px

Z profile & fitting parameters:



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

Sum of residuals squared: 30885.0364

Standard deviation: 10.03009

R^2 : 0.78983

Parameters:

a = 110.10089

b = 201.61572

c = 14.54716

d = 1.91132

Bead 785

Date : Mon Oct 17 13:28:37 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

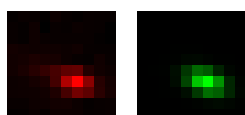
Coordinates : -143 μm (x), 71.5 μm (y), 17.2 μm (z)

Corresponding bead : Not found

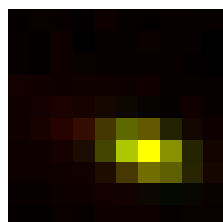
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 361 nm | 374 nm | 223 nm |
| max | 630 nm | 652 nm | 223 nm |
| z | 1.84 μm | 1.85 μm | 885 nm |
| Asymmetry | 0.573 | | |
| Theta | -18.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 461.917 (brightness)

B = 120.425 (background)

a = 0.410 px

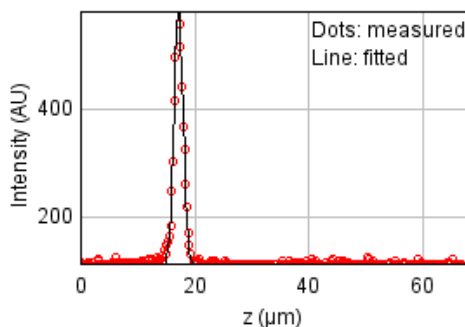
b = -0.211 px

c = 0.956 px

xc = 5.815 px

yc = 6.016 px

Z profile & fitting parameters:



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

Sum of residuals squared: 18770.2968

Standard deviation: 7.81927

R^2 : 0.98641

Parameters:

a = 111.09567

b = 586.29868

c = 17.23582

d = 0.78080

Bead 786

Date : Mon Oct 17 13:28:37 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

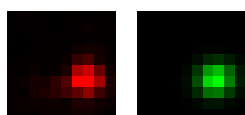
Coordinates : -37.9 μm (x), 61.6 μm (y), 18.2 μm (z)

Corresponding bead : Not found

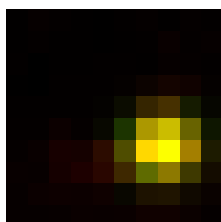
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 502 nm | 519 nm | 223 nm |
| max | 561 nm | 580 nm | 223 nm |
| z | 1.7 μm | 1.71 μm | 885 nm |
| Asymmetry | 0.894 | | |
| Theta | 12.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.966$



Parameters:

$A = 1004.845$ (brightness)

$B = 124.767$ (background)

$a = 0.431$ px

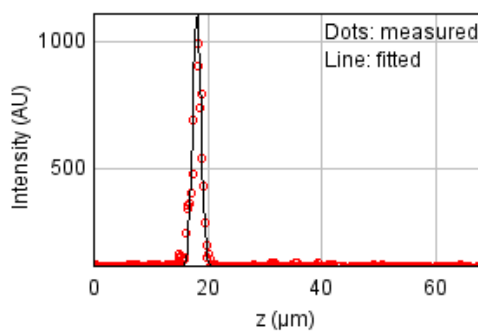
$b = 0.023$ px

$c = 0.527$ px

$x_c = 6.703$ px

$y_c = 5.802$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 340107.237

Standard deviation: 33.28425

$R^2: 0.94309$

Parameters:

$a = 116.54761$

$b = 1118.93788$

$c = 18.17598$

$d = 0.72361$

Bead 787

Date : Mon Oct 17 13:28:37 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

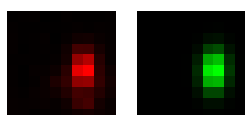
Coordinates : -1.86 μm (x), 48.8 μm (y), 17.9 μm (z)

Corresponding bead : Not found

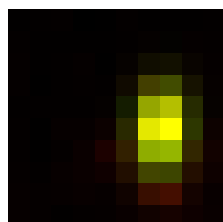
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 405 nm | 419 nm | 223 nm |
| max | 654 nm | 676 nm | 223 nm |
| z | 1.31 μm | 1.32 μm | 885 nm |
| Asymmetry | 0.62 | | |
| Theta | 87.3° | | |

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:

$A = 1261.079$ (brightness)

$B = 133.339$ (background)

$a = 0.816$ px

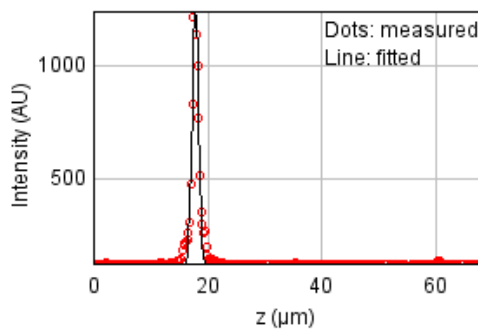
$b = 0.024$ px

$c = 0.315$ px

$x_c = 6.560$ px

$y_c = 4.992$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 144371.772

Standard deviation: 21.68563

$R^2: 0.97513$

Parameters:

$a = 117.36781$

$b = 1256.05622$

$c = 17.90302$

$d = 0.55810$

Bead 788

Date : Mon Oct 17 13:28:37 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

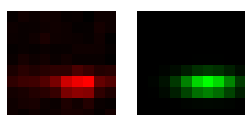
Coordinates : -160 μm (x), 46.6 μm (y), 14.4 μm (z)

Corresponding bead : Not found

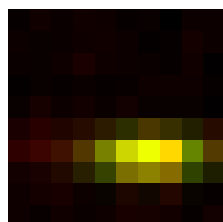
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 349 nm | 361 nm | 223 nm |
| max | 901 nm | 932 nm | 223 nm |
| z | 2.37 μm | 2.38 μm | 885 nm |
| Asymmetry | 0.388 | | |
| Theta | 0.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.931$



Parameters:

$A = 213.319$ (brightness)

$B = 114.731$ (background)

$a = 0.165$ px

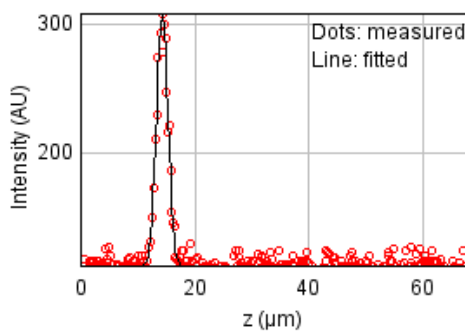
$b = 0.006$ px

$c = 1.099$ px

$x_c = 6.008$ px

$y_c = 6.192$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 15324.2543

Standard deviation: 7.06514

$R^2: 0.95143$

Parameters:

$a = 111.74926$

$b = 309.50077$

$c = 14.38453$

$d = 1.00581$

Bead 789

Date : Mon Oct 17 13:28:38 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

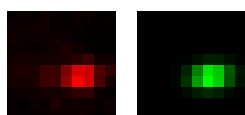
Coordinates : -145 μm (x), 32.0 μm (y), 16.9 μm (z)

Corresponding bead : Not found

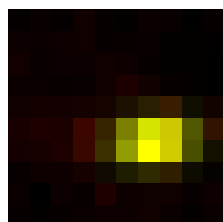
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 375 nm | 387 nm | 223 nm |
| max | 619 nm | 640 nm | 223 nm |
| z | 1.88 μm | 1.89 μm | 885 nm |
| Asymmetry | 0.606 | | |
| Theta | 4.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.956$



Parameters:

$A = 417.738$ (brightness)

$B = 119.951$ (background)

$a = 0.354$ px

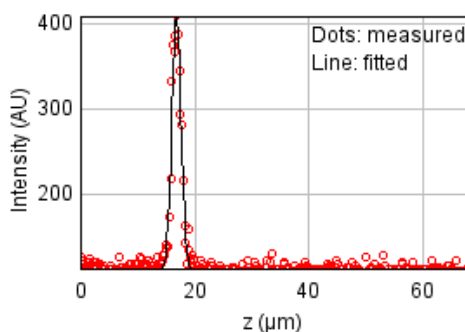
$b = 0.046$ px

$c = 0.952$ px

$xc = 6.247$ px

$yc = 5.546$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 21793.0791

Standard deviation: 8.42539

$R^2: 0.96171$

Parameters:

$a = 111.59250$

$b = 409.69161$

$c = 16.85640$

$d = 0.79774$

Bead 790

Date : Mon Oct 17 13:28:38 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

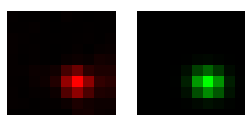
Coordinates : 101 μm (x), 25.7 μm (y), 17.6 μm (z)

Corresponding bead : Not found

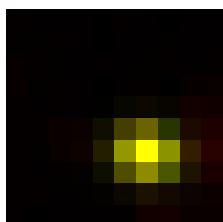
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 414 nm | 428 nm | 223 nm |
| max | 503 nm | 520 nm | 223 nm |
| z | 1.52 μm | 1.53 μm | 885 nm |
| Asymmetry | 0.822 | | |
| Theta | -7.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 812.616 (brightness)

B = 119.167 (background)

a = 0.534 px

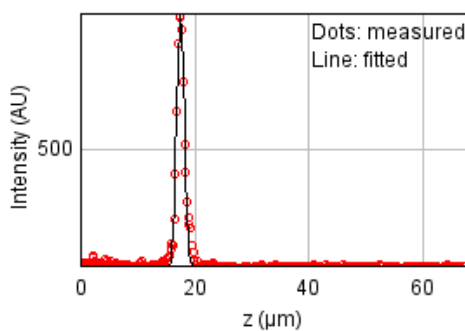
b = -0.034 px

c = 0.780 px

xc = 5.991 px

yc = 6.108 px

Z profile & fitting parameters:



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

Sum of residuals squared: 78213.2013

Standard deviation: 15.96139

R^2 : 0.97802

Parameters:

a = 115.97216

b = 947.25907

c = 17.57411

d = 0.64684

Bead 791

Date : Mon Oct 17 13:28:38 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

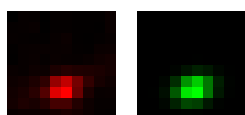
Coordinates : -141 μm (x), 3.59 μm (y), 17.7 μm (z)

Corresponding bead : Not found

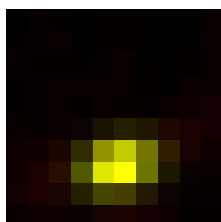
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 397 nm | 411 nm | 223 nm |
| max | 577 nm | 596 nm | 223 nm |
| z | 1.65 μm | 1.65 μm | 885 nm |
| Asymmetry | 0.689 | | |
| Theta | 15.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 637.335$ (brightness)

$B = 120.561$ (background)

$a = 0.434$ px

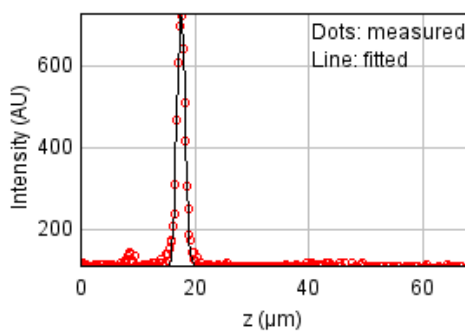
$b = 0.113$ px

$c = 0.819$ px

$x_c = 4.699$ px

$y_c = 6.680$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 31605.0797

Standard deviation: 10.14634

$R^2: 0.98476$

Parameters:

$a = 113.52695$

$b = 727.11280$

$c = 17.66107$

$d = 0.69899$

Bead 792

Date : Mon Oct 17 13:28:38 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

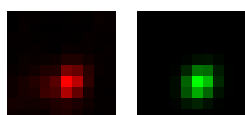
Coordinates : -82.9 μm (x), 2.39 μm (y), 17.8 μm (z)

Corresponding bead : Not found

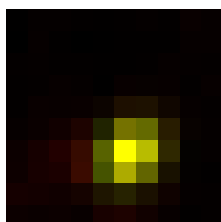
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 429 nm | 444 nm | 223 nm |
| max | 517 nm | 534 nm | 223 nm |
| z | 1.82 μm | 1.83 μm | 885 nm |
| Asymmetry | 0.831 | | |
| Theta | 47.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.950$



Parameters:

A = 804.560 (brightness)

B = 131.559 (background)

a = 0.626 px

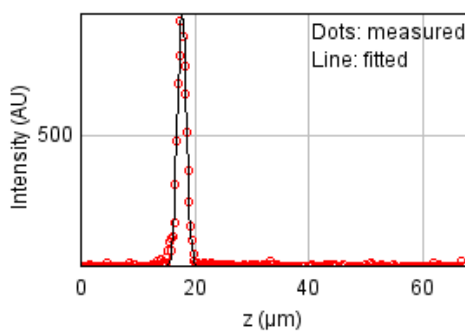
b = 0.112 px

c = 0.604 px

xc = 5.236 px

yc = 6.123 px

Z profile & fitting parameters:



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

Sum of residuals squared: 32178.1218

Standard deviation: 10.23791

R^2 : 0.99048

Parameters:

a = 113.48255

b = 861.19253

c = 17.82616

d = 0.77464

Bead 793

Date : Mon Oct 17 13:28:38 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

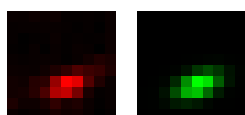
Coordinates : -143 μm (x), 1.47 μm (y), 17.2 μm (z)

Corresponding bead : Not found

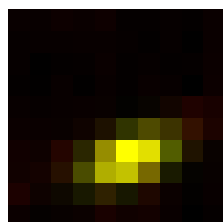
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 361 nm | 373 nm | 223 nm |
| max | 698 nm | 722 nm | 223 nm |
| z | 1.62 μm | 1.62 μm | 885 nm |
| Asymmetry | 0.517 | | |
| Theta | 20.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 510.925$ (brightness)

$B = 121.377$ (background)

$a = 0.366$ px

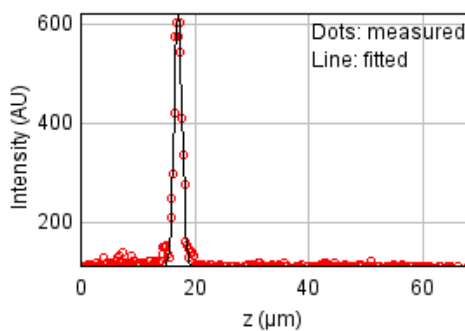
$b = 0.245$ px

$c = 0.940$ px

$x_c = 5.092$ px

$y_c = 6.327$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 33126.6553

Standard deviation: 10.38770

$R^2: 0.97642$

Parameters:

$a = 114.05761$

$b = 621.00688$

$c = 17.16044$

$d = 0.68719$

Bead 794

Date : Mon Oct 17 13:28:38 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

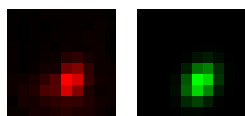
Coordinates : -56.3 μm (x), -1.59 μm (y), 17.5 μm (z)

Corresponding bead : Not found

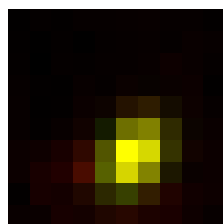
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|-------------------|-------------|
| min | 426 nm | 440 nm | 223 nm |
| max | 579 nm | 599 nm | 223 nm |
| z | 1.69 μm | 1.7 μm | 885 nm |
| Asymmetry | 0.735 | | |
| Theta | 56.0° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.951$



Parameters:

A = 666.023 (brightness)

B = 128.610 (background)

a = 0.633 px

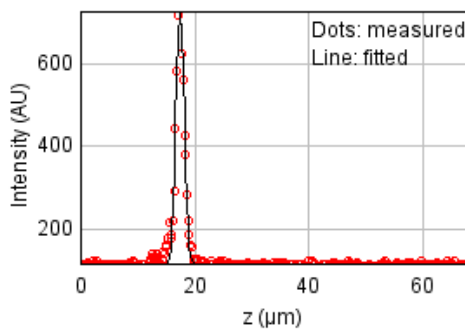
b = 0.157 px

c = 0.506 px

xc = 5.313 px

yc = 6.222 px

Z profile & fitting parameters:



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

Sum of residuals squared: 46548.9977

Standard deviation: 12.31363

R^2 : 0.97865

Parameters:

a = 114.50136

b = 733.00494

c = 17.49792

d = 0.71925

Bead 795

Date : Mon Oct 17 13:28:38 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

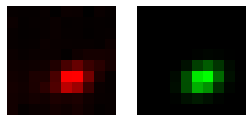
Coordinates : -135 μm (x), -4.23 μm (y), 16.8 μm (z)

Corresponding bead : Not found

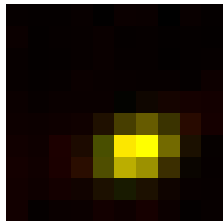
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 397 nm | 410 nm | 223 nm |
| max | 556 nm | 575 nm | 223 nm |
| z | 1.38 μm | 1.39 μm | 885 nm |
| Asymmetry | 0.713 | | |
| Theta | 21.1° | | |

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 = 580.041 (brightness)

B = 120.665 (background)

a = 0.488 px

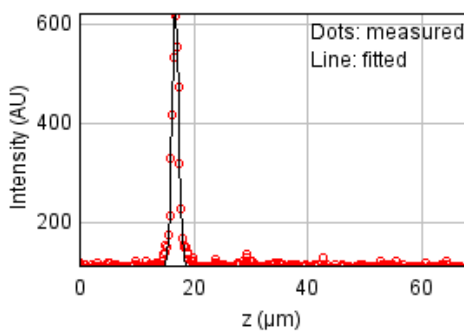
b = 0.141 px

c = 0.799 px

xc = 5.537 px

yc = 6.226 px

Z profile & fitting parameters:



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

Sum of residuals squared: 21508.6899

Standard deviation: 8.37024

R^2 : 0.98256

Parameters:

a = 112.21641

b = 626.43812

c = 16.84957

d = 0.58686

Bead 796

Date : Mon Oct 17 13:28:39 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

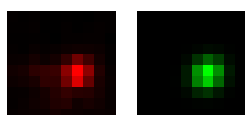
Coordinates : -74.4 μm (x), -57.1 μm (y), 17.5 μm (z)

Corresponding bead : Not found

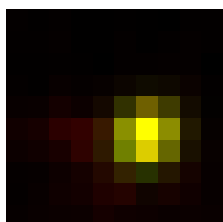
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 457 nm | 472 nm | 223 nm |
| max | 499 nm | 515 nm | 223 nm |
| z | 1.67 μm | 1.68 μm | 885 nm |
| Asymmetry | 0.916 | | |
| Theta | 40.9° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.938$



Parameters:

A = 790.363 (brightness)

B = 133.235 (background)

a = 0.584 px

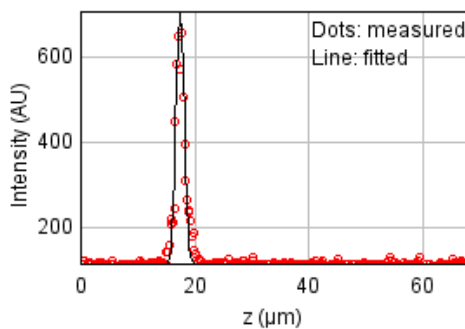
b = 0.051 px

c = 0.599 px

$x_c = 5.963$ px

$y_c = 5.319$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 113369.542

Standard deviation: 19.21671

R^2 : 0.94564

Parameters:

a = 113.46761

b = 712.38485

c = 17.50737

d = 0.70868

Bead 797

Date : Mon Oct 17 13:28:39 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

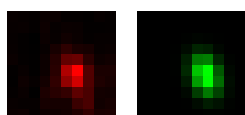
Coordinates : 44.4 μm (x), -75.1 μm (y), 16.9 μm (z)

Corresponding bead : Not found

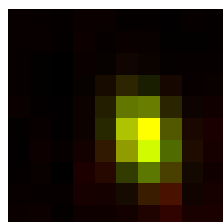
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|-------------------|-------------|
| min | 440 nm | 455 nm | 223 nm |
| max | 641 nm | 662 nm | 223 nm |
| z | 1.2 μm | 1.2 μm | 885 nm |
| Asymmetry | 0.687 | | |
| Theta | -72.4° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 428.209$ (brightness)

$B = 123.787$ (background)

$a = 0.660$ px

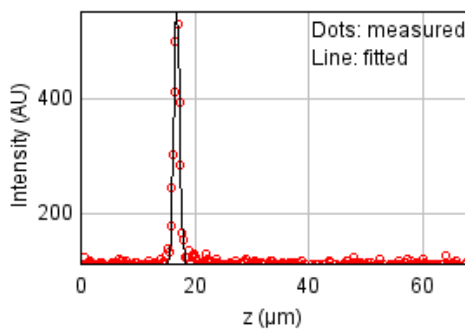
$b = -0.106$ px

$c = 0.360$ px

$x_c = 5.766$ px

$y_c = 5.408$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 17382.5090

Standard deviation: 7.52466

$R^2: 0.97796$

Parameters:

$a = 112.95704$

$b = 553.11248$

$c = 16.91487$

$d = 0.50752$

Bead 798 (Rejected)

Date : Mon Oct 17 13:28:39 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 110 μm (x), -76.1 μm (y), 35.1 μm (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 | 1.96 μm | 1.96 μm | 885 nm |
| Asymmetry | 0.0 | | |
| Theta | 0.0° | | |

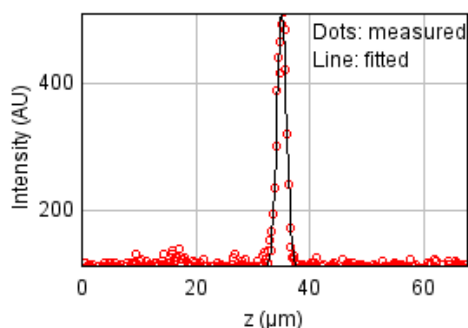
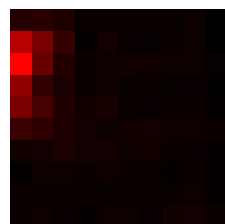
XY profile & fitting parameters :

(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: 29611.9572

Standard deviation: 9.82120

R²: 0.97132

Parameters:

a = 113.06156

b = 508.84219

c = 35.13648

d = 0.83093

Bead 799 (Rejected)

Date : Mon Oct 17 13:28:39 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : -127 μm (x), -80.3 μm (y), 57.1 μm (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 | 77.2 nm | 79.8 nm | 223 nm |
| max | 223 nm | 230 nm | 223 nm |
| z | 1.3 μm | 1.31 μm | 885 nm |
| Asymmetry | 0.347 | | |
| Theta | -75.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.000$



Parameters:

A = -53.505 (brightness)

B = 188.910 (background)

a = 21.020 px

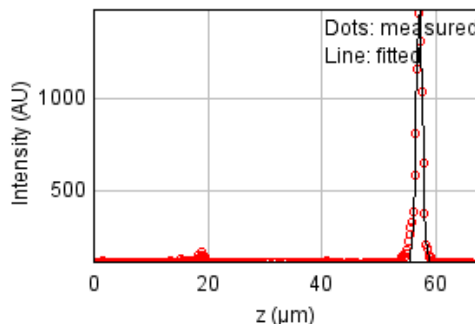
b = -6.011 px

c = -1.187 px

$x_c = 12.667$ px

$y_c = 2.813$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 131622.405

Standard deviation: 20.70598

R^2 : 0.98407

Parameters:

a = 117.11138

b = 1487.89942

c = 57.12915

d = 0.55292

Bead 800

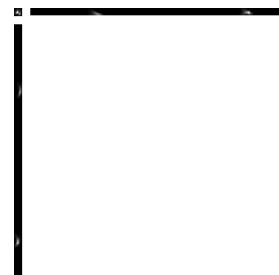
Date : Mon Oct 17 13:28:39 PDT 2022

Origin : data_traditional.tif (Nikon 40x1.15 water)

Frame size : 10 pixels

Coordinates : 23.5 μm (x), 64.8 μm (y), 58.6 μm (z)

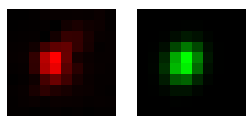
Corresponding bead : Not found



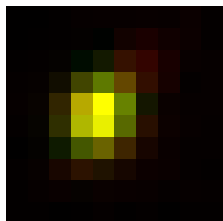
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 481 nm | 498 nm | 223 nm |
| max | 596 nm | 616 nm | 223 nm |
| z | 1.23 μm | 1.23 μm | 885 nm |
| Asymmetry | 0.807 | | |
| Theta | 66.6° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.949$



Parameters:

$A = 1163.450$ (brightness)

$B = 137.646$ (background)

$a = 0.547$ px

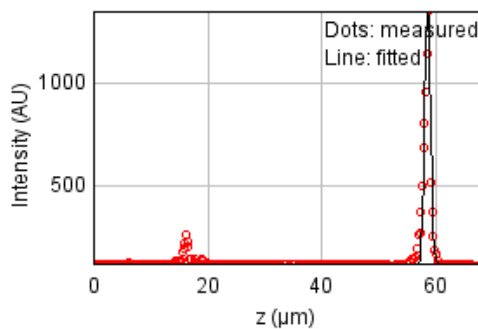
$b = 0.073$ px

$c = 0.409$ px

$x_c = 3.819$ px

$y_c = 4.450$ 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:

$a = 120.09365$

$b = 1363.15811$

$c = 58.60346$

$d = 0.52073$