

Bead 401

Date : Mon Oct 17 13:28:14 PDT 2022

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

Frame size : 10 pixels

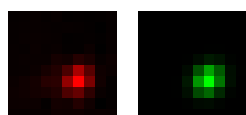
Coordinates : -118 μm (x), 5.09 μm (y), 10.0 μm (z)

Corresponding bead : Not found

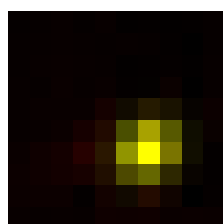
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 418 nm | 432 nm | 223 nm |
| max | 482 nm | 498 nm | 223 nm |
| z | 1.47 μm | 1.48 μm | 885 nm |
| Asymmetry | 0.868 | | |
| Theta | 42.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 642.210 (brightness)

B = 125.331 (background)

a = 0.665 px

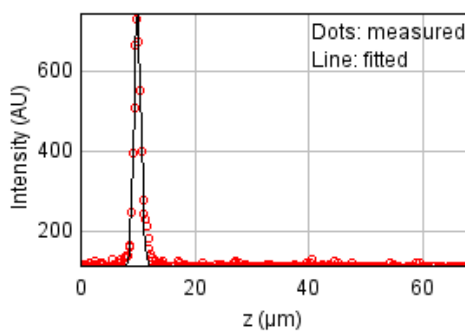
b = 0.094 px

c = 0.680 px

$x_c = 5.926$ px

$y_c = 5.845$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 38376.4325

Standard deviation: 11.18055

R^2 : 0.98084

Parameters:

a = 113.29594

b = 748.65738

c = 10.04611

d = 0.62450

Bead 402

Date : Mon Oct 17 13:28:14 PDT 2022

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

Frame size : 10 pixels

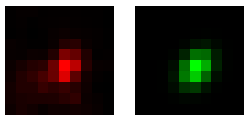
Coordinates : -68.2 μm (x), -7.09 μm (y), 10.1 μm (z)

Corresponding bead : Not found

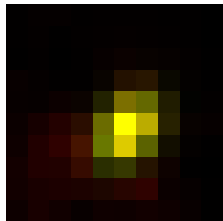
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 423 nm | 437 nm | 223 nm |
| max | 574 nm | 593 nm | 223 nm |
| z | 2.02 μm | 2.03 μm | 885 nm |
| Asymmetry | 0.737 | | |
| Theta | 53.1° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 704.954 (brightness)

B = 133.367 (background)

a = 0.628 px

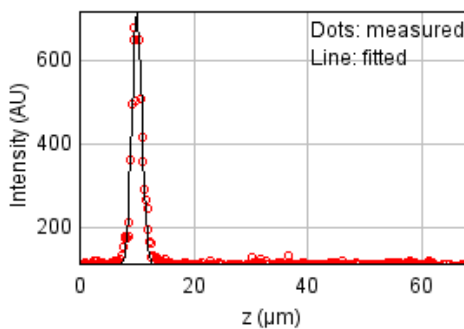
b = 0.165 px

c = 0.532 px

xc = 5.118 px

yc = 5.247 px

Z profile & fitting parameters:



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

Sum of residuals squared: 98986.9724

Standard deviation: 17.95642

R^2 : 0.96049

Parameters:

a = 113.76949

b = 717.66488

c = 10.12395

d = 0.85748

Bead 403 (Rejected)

Date : Mon Oct 17 13:28:14 PDT 2022

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

Frame size : 10 pixels

Coordinates : -68.2 μm (x), -7.06 μm (y), 9.91 μm (z)

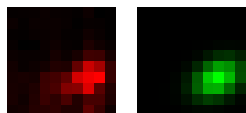
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

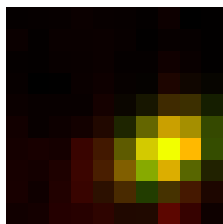
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|-------------------|-------------|
| min | 527 nm | 545 nm | 223 nm |
| max | 775 nm | 801 nm | 223 nm |
| z | 2.59 μm | 2.6 μm | 885 nm |
| Asymmetry | 0.68 | | |
| Theta | 27.5° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.879$



Parameters:

A = 421.053 (brightness)

B = 128.733 (background)

a = 0.279 px

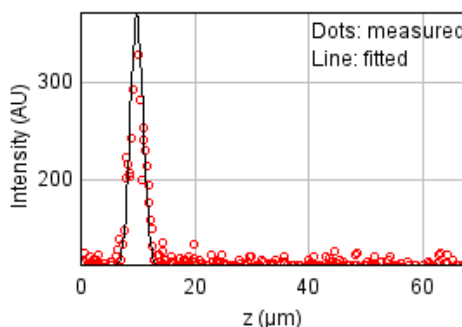
b = 0.106 px

c = 0.428 px

xc = 6.891 px

yc = 6.077 px

Z profile & fitting parameters:



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

Sum of residuals squared: 56546.1971

Standard deviation: 13.57165

R^2 : 0.90877

Parameters:

a = 111.94717

b = 371.80177

c = 9.91179

d = 1.09847

Bead 404

Date : Mon Oct 17 13:28:14 PDT 2022

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

Frame size : 10 pixels

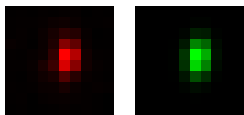
Coordinates : -106 μm (x), -15.0 μm (y), 48.6 μm (z)

Corresponding bead : Not found

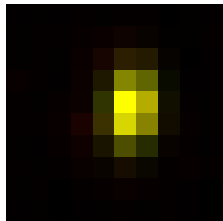
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 367 nm | 379 nm | 223 nm |
| max | 573 nm | 592 nm | 223 nm |
| z | 1.11 μm | 1.11 μm | 885 nm |
| Asymmetry | 0.64 | | |
| Theta | 84.7° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 1314.125$ (brightness)

$B = 126.075$ (background)

$a = 0.993$ px

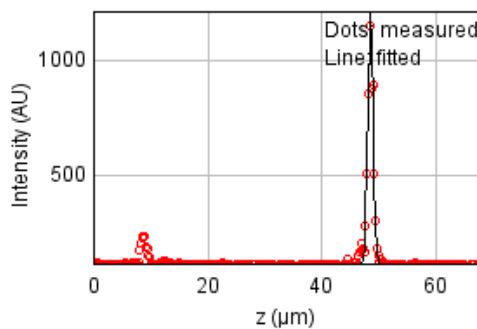
$b = 0.054$ px

$c = 0.414$ px

$x_c = 5.290$ px

$y_c = 4.249$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 175631.407

Standard deviation: 23.91839

$R^2: 0.96156$

Parameters:

$a = 117.97907$

$b = 1208.51071$

$c = 48.59990$

$d = 0.47013$

Bead 405 (Rejected)

Date : Mon Oct 17 13:28:14 PDT 2022

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

Frame size : 10 pixels

Coordinates : 37.0 μm (x), -31.4 μm (y), 10.7 μm (z)

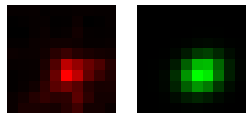
Corresponding bead : Not found

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

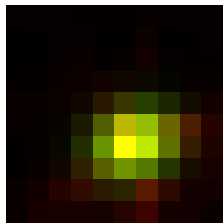
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 540 nm | 558 nm | 223 nm |
| max | 673 nm | 695 nm | 223 nm |
| z | 3.51 μm | 3.52 μm | 885 nm |
| Asymmetry | 0.803 | | |
| Theta | 21.5° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.893$



Parameters:

A = 435.251 (brightness)

B = 129.090 (background)

a = 0.319 px

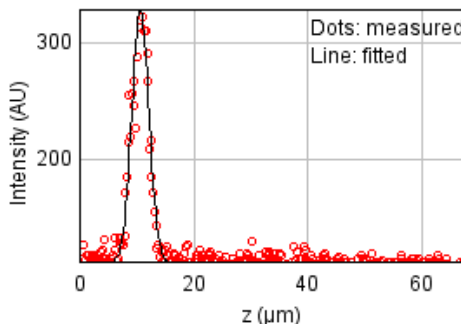
b = 0.056 px

c = 0.439 px

xc = 5.393 px

yc = 5.829 px

Z profile & fitting parameters:



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

Sum of residuals squared: 26803.3031

Standard deviation: 9.34383

R^2 : 0.95023

Parameters:

a = 112.65537

b = 327.74845

c = 10.73051

d = 1.48901

Bead 406 (Rejected)

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

Coordinates : 16.2 μm (x), -76.0 μm (y), 6.55 μm (z)

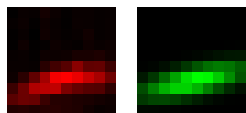
Corresponding bead : Not found

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

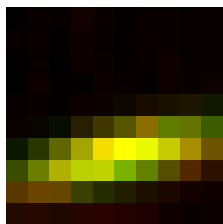
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 419 nm | 433 nm | 223 nm |
| max | 1.63 μm | 1.69 μm | 223 nm |
| z | 2.31 μm | 2.32 μm | 885 nm |
| Asymmetry | 0.256 | | |
| Theta | 12.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.952$



Parameters:

A = 357.347 (brightness)

B = 119.686 (background)

a = 0.083 px

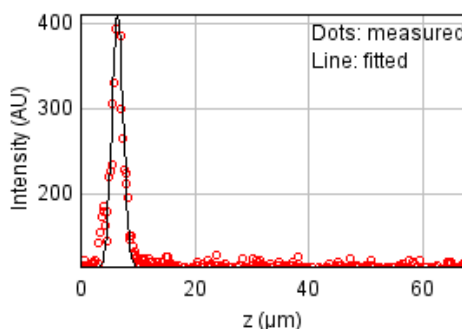
b = 0.150 px

c = 0.732 px

xc = 4.783 px

yc = 6.298 px

Z profile & fitting parameters:



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

Sum of residuals squared: 37745.0116

Standard deviation: 11.08819

R^2 : 0.94591

Parameters:

a = 113.65977

b = 410.49899

c = 6.55352

d = 0.98009

Bead 407 (Rejected)

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

Coordinates : -132 μm (x), -85.3 μm (y), 10.4 μm (z)

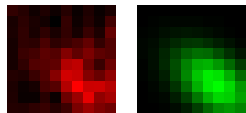
Corresponding bead : Not found

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

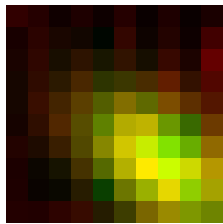
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 854 nm | 882 nm | 223 nm |
| max | 1.45 μm | 1.5 μm | 223 nm |
| z | 3.55 μm | 3.57 μm | 885 nm |
| Asymmetry | 0.588 | | |
| Theta | -38.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.834$



Parameters:

A = 92.729 (brightness)

B = 115.760 (background)

a = 0.110 px

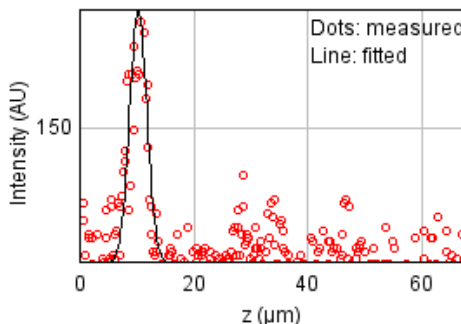
b = -0.059 px

c = 0.138 px

xc = 6.708 px

yc = 6.785 px

Z profile & fitting parameters:



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

Sum of residuals squared: 22725.7611

Standard deviation: 8.60379

R^2 : 0.72364

Parameters:

a = 111.52526

b = 184.43052

c = 10.35976

d = 1.50869

Bead 408

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

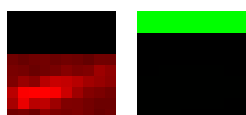
Coordinates : 149 um (x), 96.6 um (y), 8.79 um (z)

Corresponding bead : Not found

| FWHM | Non corrected | Corrected | Theoretical |
|-----------|---------------|-----------|-------------|
| min | 1.09 um | 1.13 um | 223 nm |
| max | 3.77 um | 3.9 um | 223 nm |
| z | 2.95 um | 2.97 um | 885 nm |
| Asymmetry | 0.29 | | |
| Theta | 5.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.905$



Parameters:

A = 228.095 (brightness)

B = -8.388 (background)

a = 0.011 px

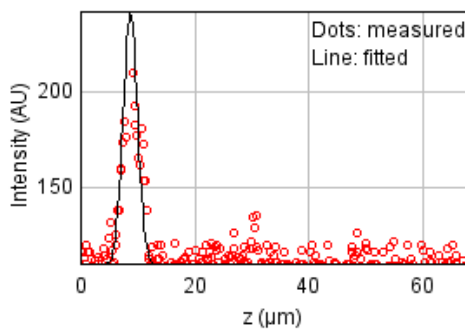
b = 0.010 px

c = 0.111 px

xc = 2.627 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: 27600.3017

Standard deviation: 9.48173

R^2 : 0.85338

Parameters:

a = 110.68126

b = 241.10678

c = 8.79155

d = 1.25446

Bead 409 (Rejected)

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

Coordinates : 88.3 μm (x), 82.7 μm (y), 8.56 μm (z)

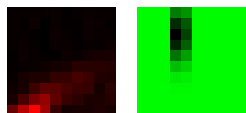
Corresponding bead : Not found

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

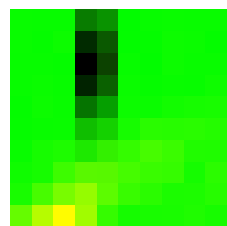
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 144 nm | 149 nm | 223 nm |
| max | 925 nm | 956 nm | 223 nm |
| z | 1.31 μm | 1.31 μm | 885 nm |
| Asymmetry | 0.155 | | |
| Theta | 89.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.040$



Parameters:

A = -284.673 (brightness)

B = 157.262 (background)

a = 6.497 px

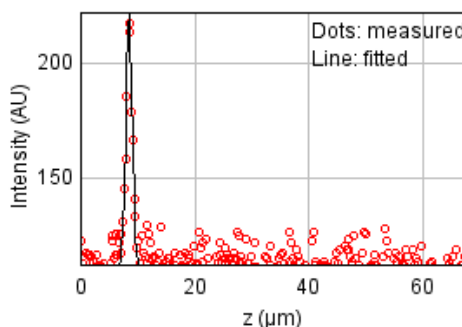
b = 0.021 px

c = 0.157 px

xc = 3.477 px

yc = 1.986 px

Z profile & fitting parameters:



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

Sum of residuals squared: 13919.0106

Standard deviation: 6.73341

R^2 : 0.79213

Parameters:

a = 111.92891

b = 222.46385

c = 8.55808

d = 0.55494

Bead 410

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

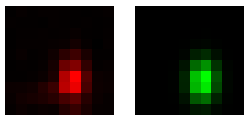
Coordinates : -41.6 μm (x), 70.1 μm (y), 10.8 μm (z)

Corresponding bead : Not found

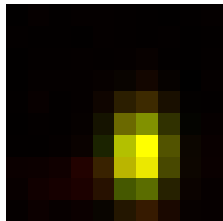
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|-------------------|-------------|
| min | 435 nm | 450 nm | 223 nm |
| max | 637 nm | 658 nm | 223 nm |
| z | 1.49 μm | 1.5 μm | 885 nm |
| Asymmetry | 0.684 | | |
| Theta | 87.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 1013.897$ (brightness)

$B = 127.257$ (background)

$a = 0.707$ px

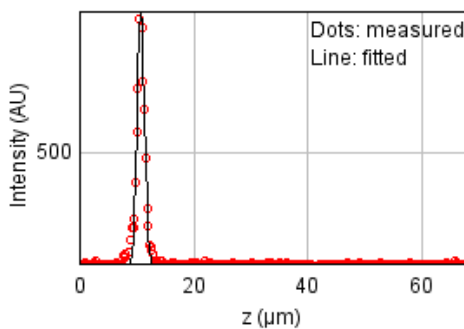
$b = 0.018$ px

$c = 0.332$ px

$x_c = 5.692$ px

$y_c = 6.373$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 56500.8601

Standard deviation: 13.56620

$R^2: 0.98522$

Parameters:

$a = 114.71277$

$b = 987.63223$

$c = 10.80994$

$d = 0.63478$

Bead 411

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

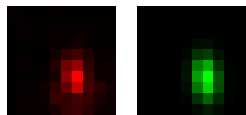
Coordinates : 17.3 μm (x), 45.5 μm (y), 10.2 μm (z)

Corresponding bead : Not found

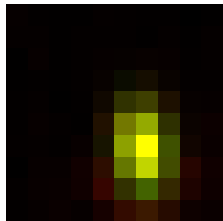
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 406 nm | 420 nm | 223 nm |
| max | 683 nm | 707 nm | 223 nm |
| z | 1.35 μm | 1.36 μm | 885 nm |
| Asymmetry | 0.594 | | |
| Theta | -83.4° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 940.661$ (brightness)

$B = 133.605$ (background)

$a = 0.806$ px

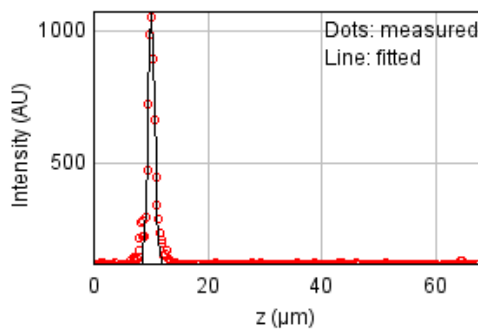
$b = -0.060$ px

$c = 0.294$ px

$x_c = 5.800$ px

$y_c = 6.151$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 131189.118

Standard deviation: 20.67187

$R^2: 0.96992$

Parameters:

$a = 117.11020$

$b = 1087.70276$

$c = 10.21018$

$d = 0.57467$

Bead 412

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

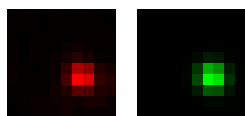
Coordinates : 35.3 μm (x), 30.6 μm (y), 10.8 μm (z)

Corresponding bead : Not found

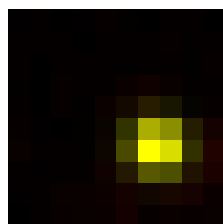
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 425 nm | 439 nm | 223 nm |
| max | 444 nm | 459 nm | 223 nm |
| z | 1.83 μm | 1.83 μm | 885 nm |
| Asymmetry | 0.958 | | |
| Theta | -27.3° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 953.680 (brightness)

B = 125.846 (background)

a = 0.695 px

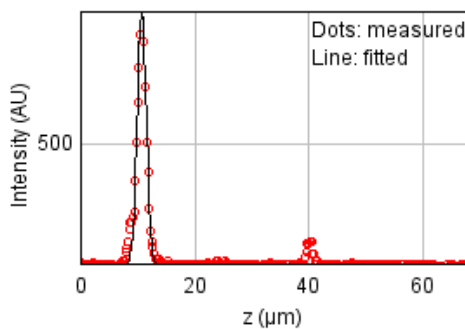
b = -0.025 px

c = 0.730 px

xc = 6.388 px

yc = 5.782 px

Z profile & fitting parameters:



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

Sum of residuals squared: 92622.8265

Standard deviation: 17.36960

R^2 : 0.97641

Parameters:

a = 117.86453

b = 917.37581

c = 10.80557

d = 0.77609

Bead 413

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

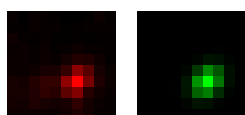
Coordinates : -79.2 μm (x), 17.6 μm (y), 10.4 μm (z)

Corresponding bead : Not found

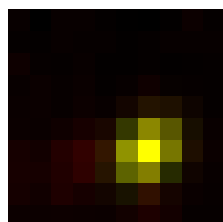
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 402 nm | 415 nm | 223 nm |
| max | 513 nm | 531 nm | 223 nm |
| z | 1.85 μm | 1.85 μm | 885 nm |
| Asymmetry | 0.783 | | |
| Theta | 44.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 565.564 (brightness)

B = 130.889 (background)

a = 0.667 px

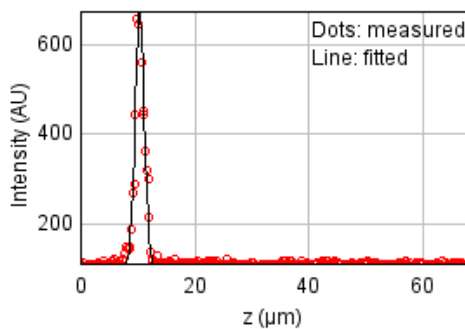
b = 0.161 px

c = 0.673 px

xc = 5.919 px

yc = 5.992 px

Z profile & fitting parameters:



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

Sum of residuals squared: 61030.9653

Standard deviation: 14.09957

R^2 : 0.96918

Parameters:

a = 112.83019

b = 675.80817

c = 10.43636

d = 0.78375

Bead 414

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

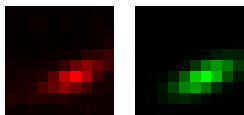
Coordinates : -137 μm (x), -8.58 μm (y), 9.52 μm (z)

Corresponding bead : Not found

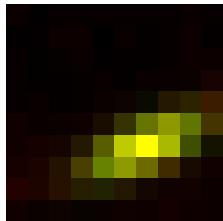
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 373 nm | 386 nm | 223 nm |
| max | 969 nm | 1.0 μm | 223 nm |
| z | 1.63 μm | 1.64 μm | 885 nm |
| Asymmetry | 0.385 | | |
| Theta | 23.6° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 362.008$ (brightness)

$B = 121.297$ (background)

$a = 0.274$ px

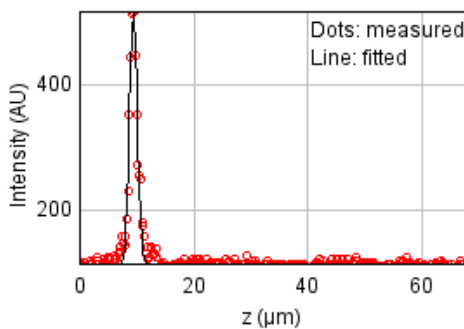
$b = 0.300$ px

$c = 0.831$ px

$x_c = 5.906$ px

$y_c = 6.010$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 33630.8129

Standard deviation: 10.46645

$R^2: 0.96325$

Parameters:

$a = 112.97249$

$b = 517.40716$

$c = 9.51925$

$d = 0.69411$

Bead 415

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

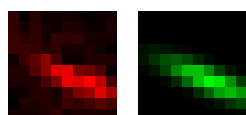
Coordinates : 124 μm (x), -16.7 μm (y), 8.91 μm (z)

Corresponding bead : Not found

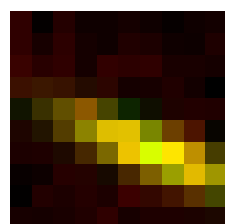
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 378 nm | 391 nm | 223 nm |
| max | 1.56 μm | 1.61 μm | 223 nm |
| z | 2.03 μm | 2.04 μm | 885 nm |
| Asymmetry | 0.242 | | |
| Theta | -22.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.917$



Parameters:

$A = 113.979$ (brightness)

$B = 115.540$ (background)

$a = 0.183$ px

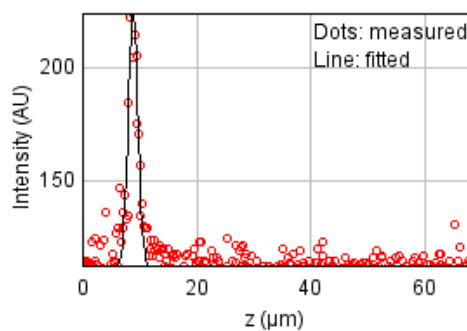
$b = -0.311$ px

$c = 0.812$ px

$x_c = 6.106$ px

$y_c = 5.933$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 15003.2006

Standard deviation: 6.99073

$R^2: 0.84892$

Parameters:

$a = 111.96181$

$b = 224.76775$

$c = 8.91496$

$d = 0.86110$

Bead 416

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

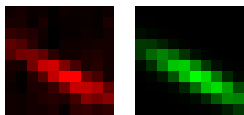
Coordinates : 125 μm (x), -22.9 μm (y), 9.57 μm (z)

Corresponding bead : Not found

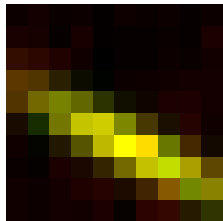
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 374 nm | 387 nm | 223 nm |
| max | 1.85 μm | 1.91 μm | 223 nm |
| z | 1.84 μm | 1.84 μm | 885 nm |
| Asymmetry | 0.203 | | |
| Theta | -27.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 192.074$ (brightness)

$B = 117.441$ (background)

$a = 0.235$ px

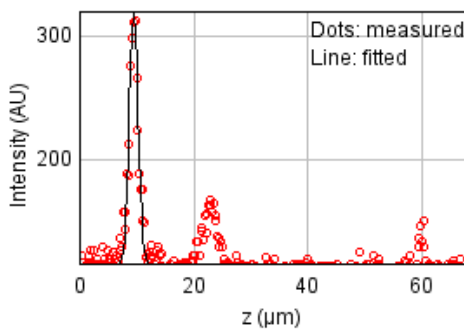
$b = -0.376$ px

$c = 0.762$ px

$x_c = 5.288$ px

$y_c = 6.064$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 48711.9703

Standard deviation: 12.59646

$R^2: 0.84060$

Parameters:

$a = 115.60817$

$b = 322.04056$

$c = 9.57169$

$d = 0.78004$

Bead 417

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

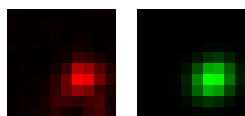
Coordinates : 40.8 μm (x), -61.8 μm (y), 9.99 μm (z)

Corresponding bead : Not found

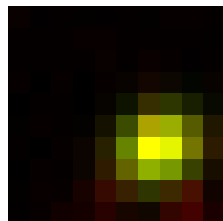
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 553 nm | 571 nm | 223 nm |
| max | 644 nm | 666 nm | 223 nm |
| z | 1.65 μm | 1.65 μm | 885 nm |
| Asymmetry | 0.858 | | |
| Theta | 30.3° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 540.952 (brightness)

B = 124.528 (background)

a = 0.353 px

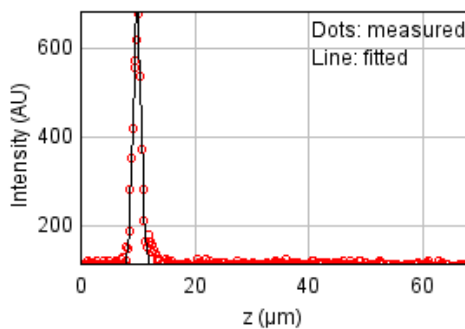
b = 0.051 px

c = 0.410 px

xc = 6.442 px

yc = 5.989 px

Z profile & fitting parameters:



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

Sum of residuals squared: 45496.2125

Standard deviation: 12.17358

R^2 : 0.97502

Parameters:

a = 114.15048

b = 686.10270

c = 9.99244

d = 0.69938

Bead 418

Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

Coordinates : 8.04 μm (x), -89.3 μm (y), 10.4 μm (z)

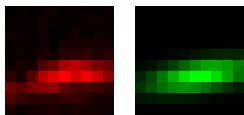
Corresponding bead : Not found



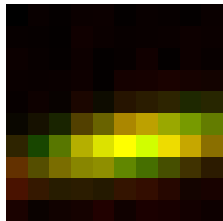
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 453 nm | 468 nm | 223 nm |
| max | 1.62 μm | 1.67 μm | 223 nm |
| z | 2.76 μm | 2.77 μm | 885 nm |
| Asymmetry | 0.28 | | |
| Theta | 9.0° | | |

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:

$A = 314.559$ (brightness)

$B = 120.690$ (background)

$a = 0.066$ px

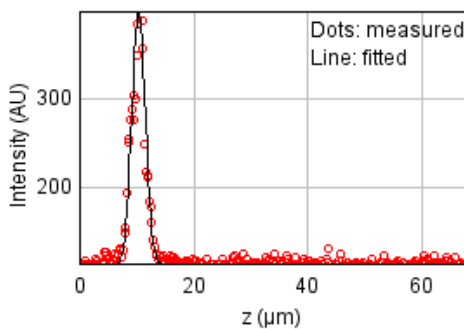
$b = 0.093$ px

$c = 0.640$ px

$x_c = 5.543$ px

$y_c = 5.919$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 53241.4251

Standard deviation: 13.16909

$R^2: 0.93120$

Parameters:

$a = 112.78948$

$b = 397.79401$

$c = 10.40821$

$d = 1.17324$

Bead 419

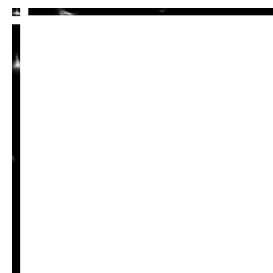
Date : Mon Oct 17 13:28:15 PDT 2022

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

Frame size : 10 pixels

Coordinates : -38.9 μm (x), -96.2 μm (y), 10.7 μm (z)

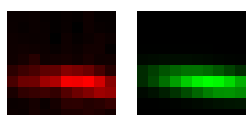
Corresponding bead : Not found



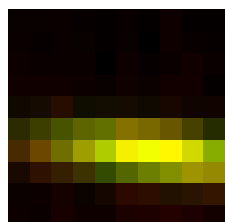
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 407 nm | 421 nm | 223 nm |
| max | 1.82 μm | 1.89 μm | 223 nm |
| z | 1.74 μm | 1.75 μm | 885 nm |
| Asymmetry | 0.223 | | |
| Theta | -5.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.960$



Parameters:

$A = 388.337$ (brightness)

$B = 123.340$ (background)

$a = 0.048$ px

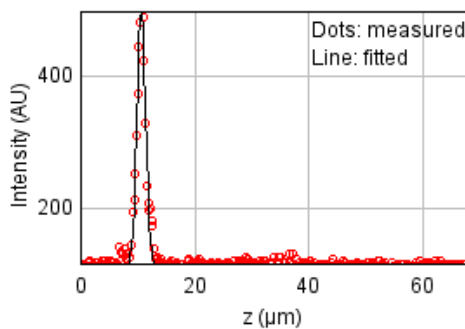
$b = -0.077$ px

$c = 0.802$ px

$x_c = 6.312$ px

$y_c = 6.094$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 27531.5311

Standard deviation: 9.46991

$R^2: 0.96868$

Parameters:

$a = 114.05980$

$b = 499.33582$

$c = 10.71586$

$d = 0.74072$

Bead 420 (Rejected)

Date : Mon Oct 17 13:28:16 PDT 2022

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

Frame size : 10 pixels

Coordinates : -154 μm (x), 32.2 μm (y), 7.98 μm (z)

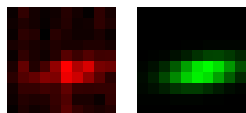
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

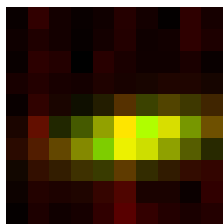
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 422 nm | 436 nm | 223 nm |
| max | 1.11 μm | 1.15 μm | 223 nm |
| z | 2.74 μm | 2.75 μm | 885 nm |
| Asymmetry | 0.378 | | |
| Theta | 8.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.852$



Parameters:

A = 119.981 (brightness)

B = 115.235 (background)

a = 0.122 px

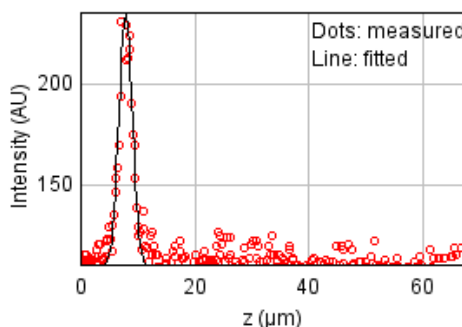
b = 0.092 px

c = 0.741 px

xc = 5.575 px

yc = 5.465 px

Z profile & fitting parameters:



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

Sum of residuals squared: 15088.1716

Standard deviation: 7.01050

R^2 : 0.89910

Parameters:

a = 111.07469

b = 234.74804

c = 7.98211

d = 1.16173

Bead 421

Date : Mon Oct 17 13:28:16 PDT 2022

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

Frame size : 10 pixels

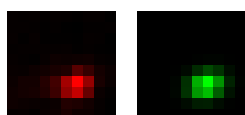
Coordinates : -125 μm (x), 23.5 μm (y), 10.7 μm (z)

Corresponding bead : Not found

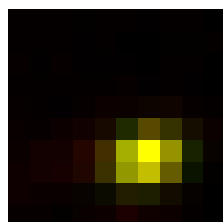
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 410 nm | 424 nm | 223 nm |
| max | 550 nm | 568 nm | 223 nm |
| z | 1.55 μm | 1.56 μm | 885 nm |
| Asymmetry | 0.746 | | |
| Theta | 14.3° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 829.800 (brightness)

B = 121.981 (background)

a = 0.466 px

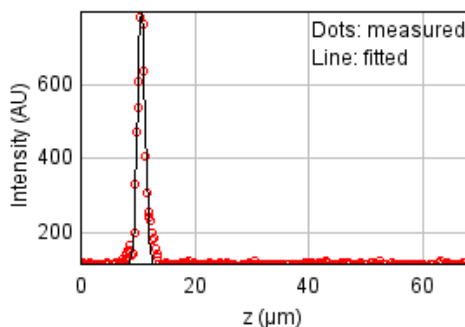
b = 0.085 px

c = 0.777 px

xc = 5.851 px

yc = 6.325 px

Z profile & fitting parameters:



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

Sum of residuals squared: 95821.2966

Standard deviation: 17.66696

R^2 : 0.96200

Parameters:

a = 112.87955

b = 800.69666

c = 10.71937

d = 0.65908

Bead 422 (Rejected)

Date : Mon Oct 17 13:28:16 PDT 2022

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

Frame size : 10 pixels

Coordinates : -86.8 μm (x), 16.0 μm (y), 10.8 μm (z)

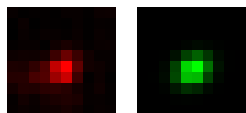
Corresponding bead : Not found

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

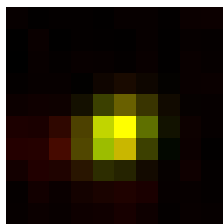
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 434 nm | 449 nm | 223 nm |
| max | 547 nm | 566 nm | 223 nm |
| z | 4.14 μm | 4.16 μm | 885 nm |
| Asymmetry | 0.793 | | |
| Theta | 27.3° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 529.347 (brightness)

B = 126.724 (background)

a = 0.504 px

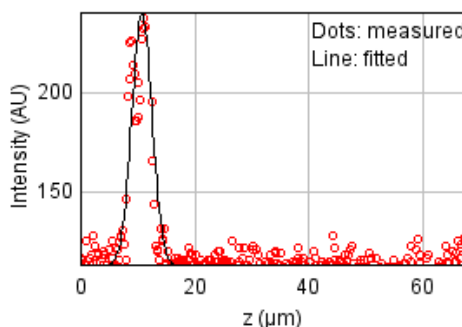
b = 0.108 px

c = 0.657 px

xc = 4.615 px

yc = 5.309 px

Z profile & fitting parameters:



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

Sum of residuals squared: 41558.0479

Standard deviation: 11.63479

R^2 : 0.83597

Parameters:

a = 112.59460

b = 240.87016

c = 10.82621

d = 1.75969

Bead 423

Date : Mon Oct 17 13:28:16 PDT 2022

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

Frame size : 10 pixels

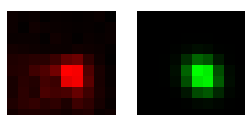
Coordinates : -83.7 μm (x), -18.8 μm (y), 7.2 μm (z)

Corresponding bead : Not found

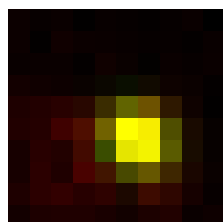
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 479 nm | 495 nm | 223 nm |
| max | 543 nm | 562 nm | 223 nm |
| z | 2.61 μm | 2.62 μm | 885 nm |
| Asymmetry | 0.882 | | |
| Theta | -43.9° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 383.242 (brightness)

B = 129.262 (background)

a = 0.517 px

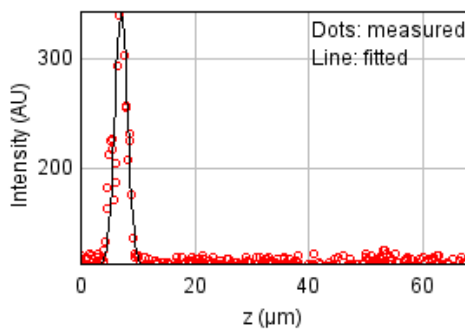
b = -0.065 px

c = 0.522 px

xc = 5.486 px

yc = 5.458 px

Z profile & fitting parameters:



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

Sum of residuals squared: 55955.0351

Standard deviation: 13.50052

R^2 : 0.88848

Parameters:

a = 113.08479

b = 343.18358

c = 7.19950

d = 1.10955

Bead 424

Date : Mon Oct 17 13:28:16 PDT 2022

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

Frame size : 10 pixels

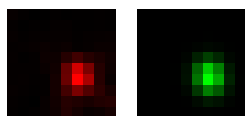
Coordinates : 78.8 μm (x), -21.5 μm (y), 11.0 μm (z)

Corresponding bead : Not found

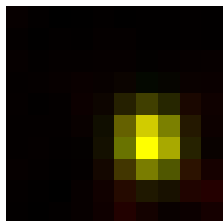
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 470 nm | 486 nm | 223 nm |
| max | 535 nm | 554 nm | 223 nm |
| z | 1.74 μm | 1.75 μm | 885 nm |
| Asymmetry | 0.877 | | |
| Theta | -79.1° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 948.159 (brightness)

B = 130.371 (background)

a = 0.603 px

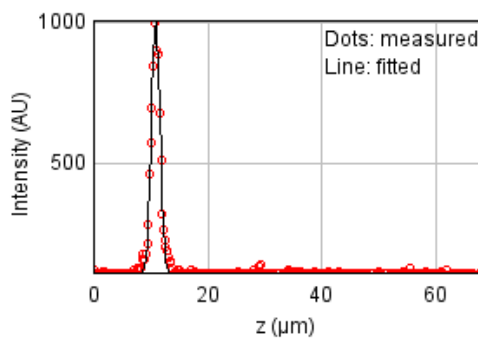
b = -0.026 px

c = 0.473 px

xc = 6.148 px

yc = 5.749 px

Z profile & fitting parameters:



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

Sum of residuals squared: 51297.4241

Standard deviation: 12.92643

R^2 : 0.98891

Parameters:

a = 114.25631

b = 1008.33142

c = 10.96581

d = 0.73890

Bead 425 (Rejected)

Date : Mon Oct 17 13:28:16 PDT 2022

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

Frame size : 10 pixels

Coordinates : 37.0 μm (x), -31.4 μm (y), 10.7 μm (z)

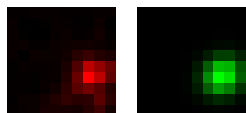
Corresponding bead : Not found

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

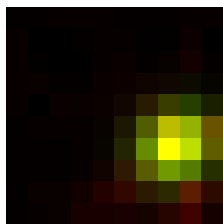
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 554 nm | 573 nm | 223 nm |
| max | 628 nm | 650 nm | 223 nm |
| z | 3.51 μm | 3.52 μm | 885 nm |
| Asymmetry | 0.882 | | |
| Theta | 32.1° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 449.524 (brightness)

B = 124.588 (background)

a = 0.367 px

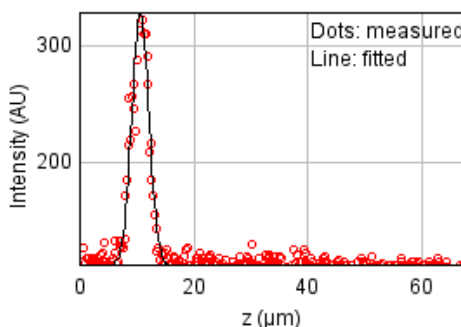
b = 0.044 px

c = 0.409 px

xc = 7.333 px

yc = 5.841 px

Z profile & fitting parameters:



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

Sum of residuals squared: 26803.3031

Standard deviation: 9.34383

R^2 : 0.95023

Parameters:

a = 112.65537

b = 327.74845

c = 10.73051

d = 1.48901

Bead 426

Date : Mon Oct 17 13:28:16 PDT 2022

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

Frame size : 10 pixels

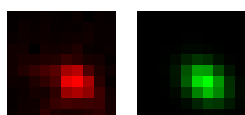
Coordinates : -93.8 μm (x), -54.8 μm (y), 10.2 μm (z)

Corresponding bead : Not found

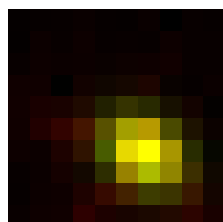
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|-------------------|-------------|
| min | 528 nm | 546 nm | 223 nm |
| max | 696 nm | 719 nm | 223 nm |
| z | 1.89 μm | 1.9 μm | 885 nm |
| Asymmetry | 0.758 | | |
| Theta | -36.0° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 476.215 (brightness)

B = 127.980 (background)

a = 0.348 px

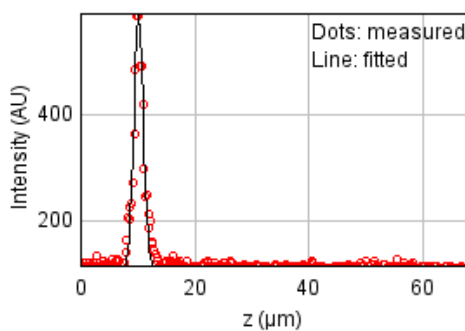
b = -0.097 px

c = 0.411 px

xc = 5.752 px

yc = 6.058 px

Z profile & fitting parameters:



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

Sum of residuals squared: 61751.4829

Standard deviation: 14.18256

R^2 : 0.95849

Parameters:

a = 114.35748

b = 594.19938

c = 10.24244

d = 0.80240

Bead 427

Date : Mon Oct 17 13:28:16 PDT 2022

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

Frame size : 10 pixels

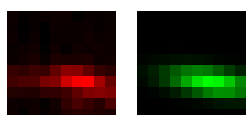
Coordinates : -50.3 μm (x), -79.2 μm (y), 11.0 μm (z)

Corresponding bead : Not found

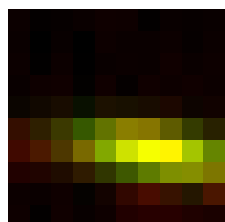
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 416 nm | 430 nm | 223 nm |
| max | 1.38 μm | 1.43 μm | 223 nm |
| z | 1.68 μm | 1.69 μm | 885 nm |
| Asymmetry | 0.301 | | |
| Theta | -8.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.915$



Parameters:

$A = 312.520$ (brightness)

$B = 121.719$ (background)

$a = 0.085$ px

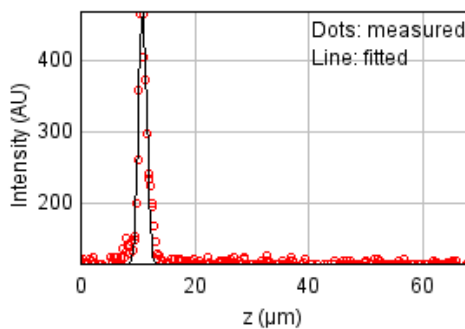
$b = -0.102$ px

$c = 0.759$ px

$x_c = 6.301$ px

$y_c = 6.056$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 44402.9403

Standard deviation: 12.02643

$R^2: 0.94029$

Parameters:

$a = 113.91193$

$b = 469.20321$

$c = 10.95091$

$d = 0.71419$

Bead 428 (Rejected)

Date : Mon Oct 17 13:28:16 PDT 2022

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

Frame size : 10 pixels

Coordinates : -55.2 um (x), -92.2 um (y), 48.2 um (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 | 1.08 um | 1.08 um | 885 nm |
| Asymmetry | 0.0 | | |
| Theta | 0.0° | | |

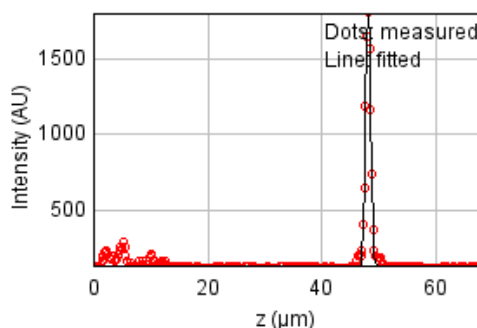
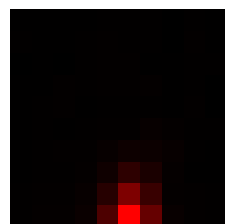
XY profile & fitting parameters :

(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: 304474.753

Standard deviation: 31.49245

R²: 0.97056

Parameters:

a = 127.40696

b = 1797.27145

c = 48.17877

d = 0.45778

Bead 429 (Rejected)

Date : Mon Oct 17 13:28:16 PDT 2022

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

Frame size : 10 pixels

Coordinates : 15.9 μm (x), -94.5 μm (y), 8.9 μm (z)

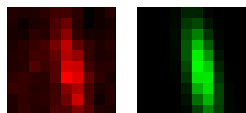
Corresponding bead : Not found

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

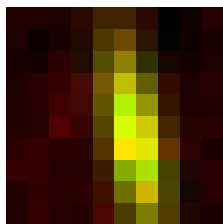
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 420 nm | 434 nm | 223 nm |
| max | 1.47 μm | 1.52 μm | 223 nm |
| z | 1.98 μm | 1.99 μm | 885 nm |
| Asymmetry | 0.286 | | |
| Theta | -79.7° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 124.178 (brightness)

B = 121.865 (background)

a = 0.739 px

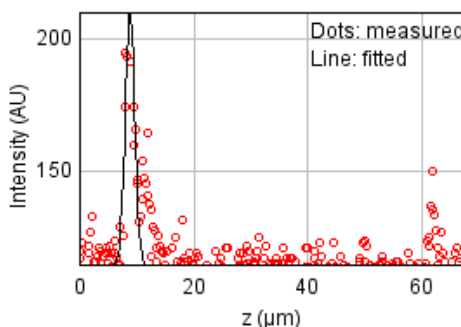
b = -0.123 px

c = 0.085 px

xc = 5.419 px

yc = 5.463 px

Z profile & fitting parameters:



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

Sum of residuals squared: 25218.1303

Standard deviation: 9.06332

R^2 : 0.70530

Parameters:

a = 114.29845

b = 210.81055

c = 8.89815

d = 0.84126

Bead 430

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

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

Frame size : 10 pixels

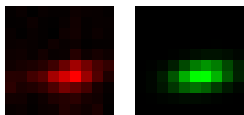
Coordinates : -152 μm (x), 29.5 μm (y), 10.5 μm (z)

Corresponding bead : Not found

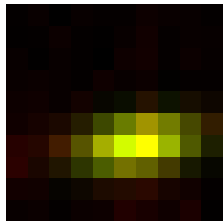
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 418 nm | 432 nm | 223 nm |
| max | 895 nm | 926 nm | 223 nm |
| z | 1.84 μm | 1.85 μm | 885 nm |
| Asymmetry | 0.466 | | |
| Theta | 8.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 305.055$ (brightness)

$B = 118.813$ (background)

$a = 0.180$ px

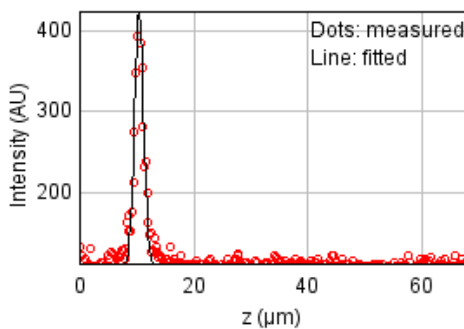
$b = 0.085$ px

$c = 0.758$ px

$x_c = 5.572$ px

$y_c = 5.908$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 28559.9452

Standard deviation: 9.64516

$R^2: 0.95353$

Parameters:

$a = 112.20946$

$b = 423.86763$

$c = 10.49409$

$d = 0.78077$

Bead 431 (Rejected)

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

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

Frame size : 10 pixels

Coordinates : 109 μm (x), 26.3 μm (y), 8.99 μm (z)

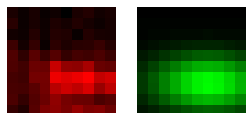
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

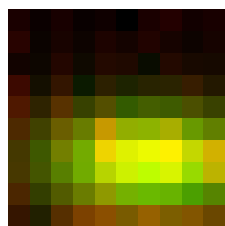
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 908 nm | 939 nm | 223 nm |
| max | 1.79 μm | 1.85 μm | 223 nm |
| z | 1.27 μm | 1.27 μm | 885 nm |
| Asymmetry | 0.506 | | |
| Theta | -0.7° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.840$



Parameters:

A = 88.954 (brightness)

B = 114.401 (background)

a = 0.042 px

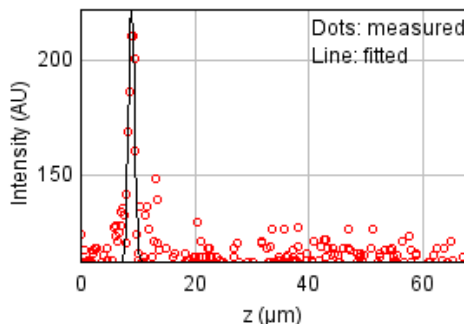
b = -0.002 px

c = 0.163 px

xc = 6.074 px

yc = 6.522 px

Z profile & fitting parameters:



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

Sum of residuals squared: 16690.6521

Standard deviation: 7.37339

R^2 : 0.75065

Parameters:

a = 112.55062

b = 221.77753

c = 8.99127

d = 0.53789

Bead 432 (Rejected)

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

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

Frame size : 10 pixels

Coordinates : -102 μm (x), 23.3 μm (y), 7.11 μm (z)

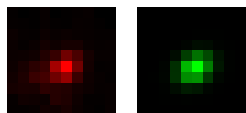
Corresponding bead : Not found

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

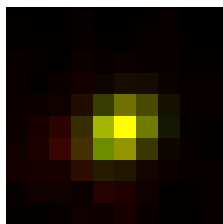
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 418 nm | 433 nm | 223 nm |
| max | 551 nm | 570 nm | 223 nm |
| z | 3.82 μm | 3.84 μm | 885 nm |
| Asymmetry | 0.759 | | |
| Theta | 30.3° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 488.414 (brightness)

B = 125.215 (background)

a = 0.525 px

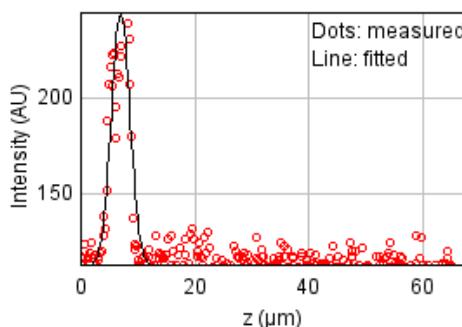
b = 0.141 px

c = 0.684 px

xc = 4.778 px

yc = 5.143 px

Z profile & fitting parameters:



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

Sum of residuals squared: 32404.0761

Standard deviation: 10.27379

R^2 : 0.86772

Parameters:

a = 112.16371

b = 245.44773

c = 7.10827

d = 1.62293

Bead 433

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

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

Frame size : 10 pixels

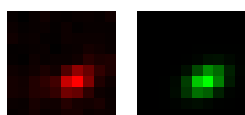
Coordinates : -125 μm (x), 10.1 μm (y), 9.97 μm (z)

Corresponding bead : Not found

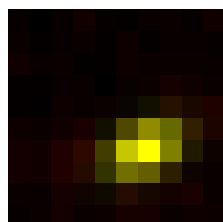
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 385 nm | 398 nm | 223 nm |
| max | 601 nm | 621 nm | 223 nm |
| z | 1.36 μm | 1.36 μm | 885 nm |
| Asymmetry | 0.641 | | |
| Theta | 25.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 410.146 (brightness)

B = 120.410 (background)

a = 0.470 px

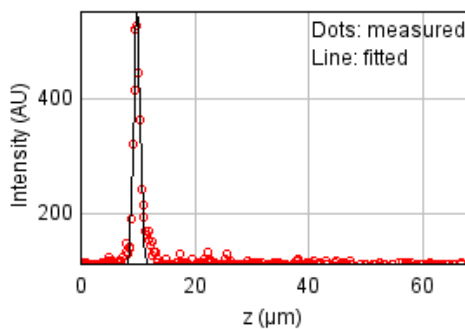
b = 0.207 px

c = 0.806 px

xc = 5.794 px

yc = 5.932 px

Z profile & fitting parameters:



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

Sum of residuals squared: 33976.0124

Standard deviation: 10.52003

R^2 : 0.96223

Parameters:

a = 113.22624

b = 551.83845

c = 9.96679

d = 0.57576

Bead 434

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

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

Frame size : 10 pixels

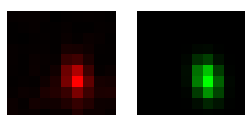
Coordinates : -2.0 μm (x), 7.3 μm (y), 10.9 μm (z)

Corresponding bead : Not found

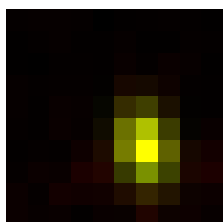
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 393 nm | 406 nm | 223 nm |
| max | 578 nm | 597 nm | 223 nm |
| z | 1.95 μm | 1.96 μm | 885 nm |
| Asymmetry | 0.68 | | |
| Theta | -78.0° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 731.027$ (brightness)

$B = 127.701$ (background)

$a = 0.848$ px

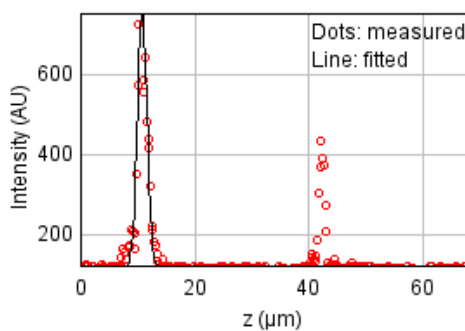
$b = -0.095$ px

$c = 0.422$ px

$x_c = 5.906$ px

$y_c = 5.811$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 564051.796

Standard deviation: 42.86376

$R^2: 0.82064$

Parameters:

$a = 121.62799$

$b = 757.61022$

$c = 10.88129$

$d = 0.82782$

Bead 435

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

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

Frame size : 10 pixels

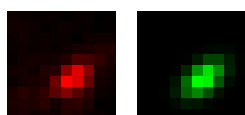
Coordinates : -120 μm (x), -17.5 μm (y), 9.78 μm (z)

Corresponding bead : Not found

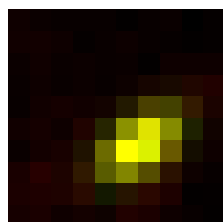
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 412 nm | 426 nm | 223 nm |
| max | 700 nm | 723 nm | 223 nm |
| z | 1.56 μm | 1.57 μm | 885 nm |
| Asymmetry | 0.589 | | |
| Theta | 37.3° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 340.690 (brightness)

B = 119.504 (background)

a = 0.463 px

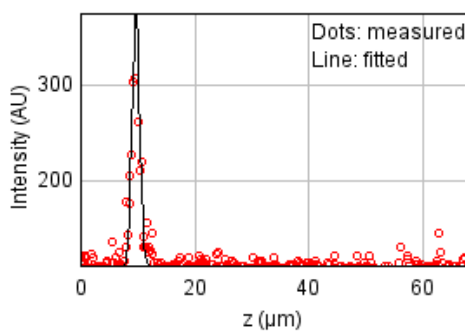
b = 0.249 px

c = 0.601 px

xc = 5.585 px

yc = 5.719 px

Z profile & fitting parameters:



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

Sum of residuals squared: 28587.4359

Standard deviation: 9.64980

R^2 : 0.92687

Parameters:

a = 111.94656

b = 376.89413

c = 9.77887

d = 0.66367

Bead 436

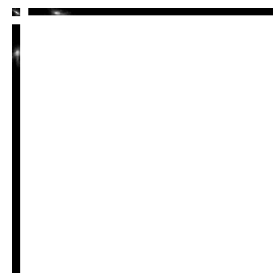
Date : Mon Oct 17 13:28:17 PDT 2022

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

Frame size : 10 pixels

Coordinates : 117 μm (x), -40.2 μm (y), 7.94 μm (z)

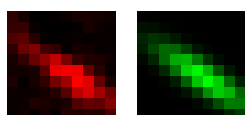
Corresponding bead : Not found



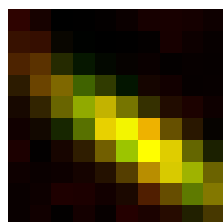
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 449 nm | 465 nm | 223 nm |
| max | 1.74 μm | 1.8 μm | 223 nm |
| z | 2.56 μm | 2.57 μm | 885 nm |
| Asymmetry | 0.258 | | |
| Theta | -33.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 172.576$ (brightness)

$B = 116.674$ (background)

$a = 0.236$ px

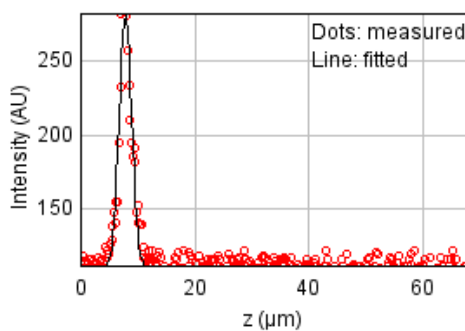
$b = -0.287$ px

$c = 0.473$ px

$x_c = 5.595$ px

$y_c = 5.636$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 18923.5797

Standard deviation: 7.85114

$R^2: 0.92725$

Parameters:

$a = 111.23396$

$b = 282.21953$

$c = 7.93767$

$d = 1.08560$

Bead 437 (Rejected)

Date : Mon Oct 17 13:28:18 PDT 2022

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

Frame size : 10 pixels

Coordinates : 23.1 μm (x), -46.2 μm (y), 27.1 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 | 1.3 μm | 1.3 μm | 885 nm |
| Asymmetry | 0.0 | | |
| Theta | 0.0° | | |

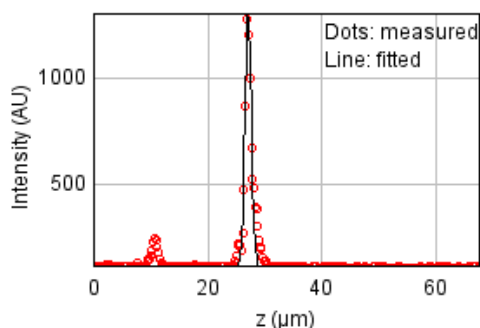
XY profile & fitting parameters :

(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: 400202.538

Standard deviation: 36.10528

R²: 0.93832

Parameters:

a = 121.69863

b = 1309.30502

c = 27.14086

d = 0.55174

Bead 438

Date : Mon Oct 17 13:28:18 PDT 2022

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

Frame size : 10 pixels

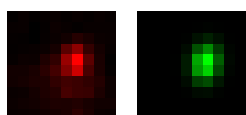
Coordinates : -48.2 μm (x), -46.0 μm (y), 10.2 μm (z)

Corresponding bead : Not found

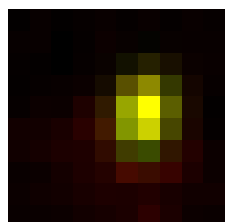
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 431 nm | 446 nm | 223 nm |
| max | 576 nm | 596 nm | 223 nm |
| z | 1.35 μm | 1.35 μm | 885 nm |
| Asymmetry | 0.748 | | |
| Theta | 80.7° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 558.414 (brightness)

B = 136.688 (background)

a = 0.713 px

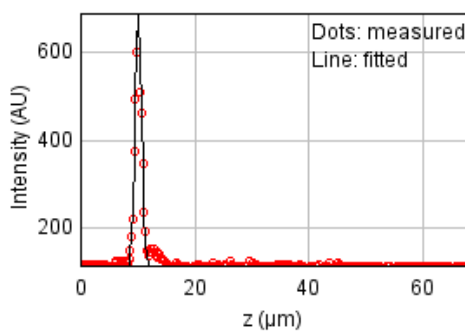
b = 0.051 px

c = 0.412 px

xc = 5.783 px

yc = 4.285 px

Z profile & fitting parameters:



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

Sum of residuals squared: 33109.1590

Standard deviation: 10.38496

R^2 : 0.97831

Parameters:

a = 114.29731

b = 692.15237

c = 10.20441

d = 0.57221

Bead 439

Date : Mon Oct 17 13:28:18 PDT 2022

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

Frame size : 10 pixels

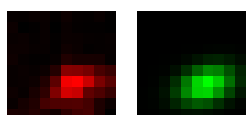
Coordinates : 27.2 μm (x), -59.9 μm (y), 10.7 μm (z)

Corresponding bead : Not found

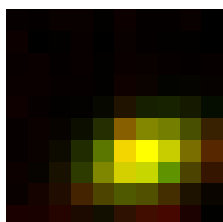
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|-------------------|-------------|
| min | 554 nm | 572 nm | 223 nm |
| max | 873 nm | 903 nm | 223 nm |
| z | 2.19 μm | 2.2 μm | 885 nm |
| Asymmetry | 0.634 | | |
| Theta | 18.4° | | |

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 = 367.028 (brightness)

B = 119.134 (background)

a = 0.202 px

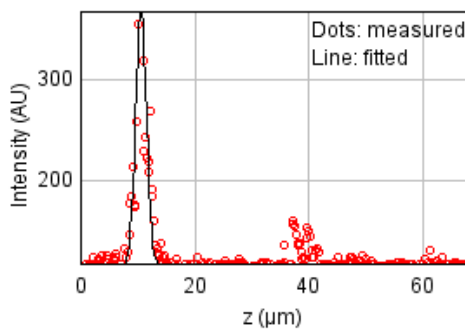
b = 0.078 px

c = 0.412 px

xc = 5.833 px

yc = 6.314 px

Z profile & fitting parameters:



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

Sum of residuals squared: 85582.5790

Standard deviation: 16.69643

R^2 : 0.84355

Parameters:

a = 115.68532

b = 369.87481

c = 10.67420

d = 0.93189

Bead 440 (Rejected)

Date : Mon Oct 17 13:28:18 PDT 2022

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

Frame size : 10 pixels

Coordinates : -1.15 μm (x), -67.6 μm (y), 10.3 μm (z)

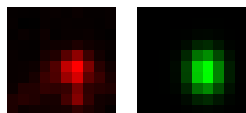
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

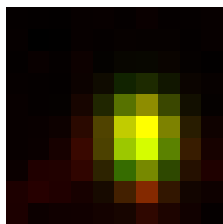
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 547 nm | 566 nm | 223 nm |
| max | 667 nm | 690 nm | 223 nm |
| z | 1.43 μm | 1.44 μm | 885 nm |
| Asymmetry | 0.821 | | |
| Theta | -88.0° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.876$



Parameters:

A = 470.366 (brightness)

B = 127.158 (background)

a = 0.448 px

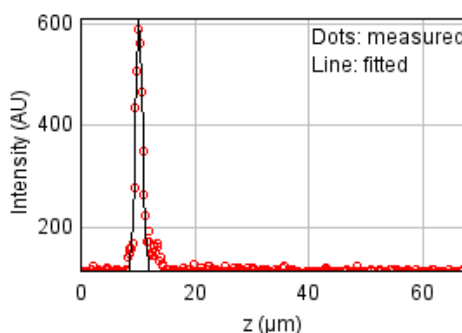
b = -0.005 px

c = 0.302 px

xc = 5.755 px

yc = 5.481 px

Z profile & fitting parameters:



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

Sum of residuals squared: 40377.3309

Standard deviation: 11.46832

R^2 : 0.96646

Parameters:

a = 114.43660

b = 610.00119

c = 10.30888

d = 0.60739

Bead 441

Date : Mon Oct 17 13:28:18 PDT 2022

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

Frame size : 10 pixels

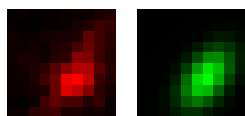
Coordinates : -110 μm (x), -75.2 μm (y), 10.1 μm (z)

Corresponding bead : Not found

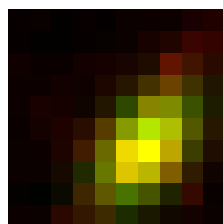
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 596 nm | 616 nm | 223 nm |
| max | 1.01 μm | 1.04 μm | 223 nm |
| z | 2.13 μm | 2.14 μm | 885 nm |
| Asymmetry | 0.592 | | |
| Theta | 53.3° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 239.226 (brightness)

B = 123.488 (background)

a = 0.291 px

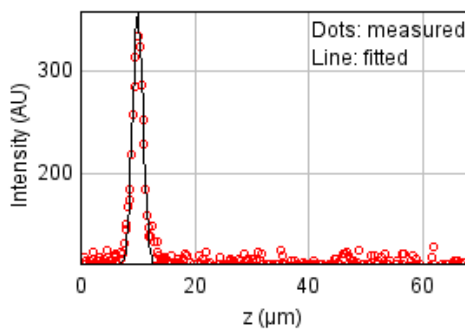
b = 0.118 px

c = 0.220 px

xc = 5.837 px

yc = 5.823 px

Z profile & fitting parameters:



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

Sum of residuals squared: 21482.7101

Standard deviation: 8.36518

R^2 : 0.95144

Parameters:

a = 112.48974

b = 358.59225

c = 10.09876

d = 0.90554

Bead 442 (Rejected)

Date : Mon Oct 17 13:28:18 PDT 2022

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

Frame size : 10 pixels

Coordinates : 89.9 μm (x), -76.5 μm (y), 8.91 μm (z)

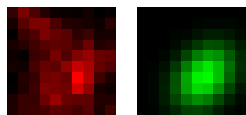
Corresponding bead : Not found

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

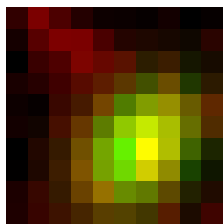
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 803 nm | 830 nm | 223 nm |
| max | 1.09 μm | 1.13 μm | 223 nm |
| z | 3.36 μm | 3.37 μm | 885 nm |
| Asymmetry | 0.735 | | |
| Theta | 51.0° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.703$



Parameters:

A = 71.391 (brightness)

B = 126.708 (background)

a = 0.170 px

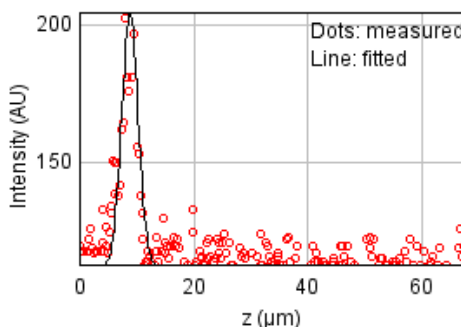
b = 0.047 px

c = 0.150 px

xc = 5.667 px

yc = 5.890 px

Z profile & fitting parameters:



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

Sum of residuals squared: 19307.3259

Standard deviation: 7.93034

R^2 : 0.82372

Parameters:

a = 112.43437

b = 204.57838

c = 8.90781

d = 1.42515

Bead 443

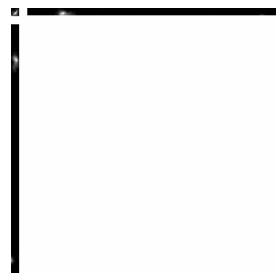
Date : Mon Oct 17 13:28:18 PDT 2022

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

Frame size : 10 pixels

Coordinates : -144 μm (x), -87.3 μm (y), 9.43 μm (z)

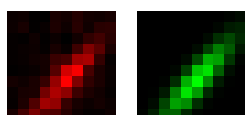
Corresponding bead : Not found



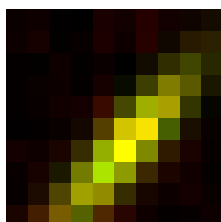
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 404 nm | 417 nm | 223 nm |
| max | 1.59 μm | 1.65 μm | 223 nm |
| z | 1.95 μm | 1.96 μm | 885 nm |
| Asymmetry | 0.253 | | |
| Theta | 49.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 146.850$ (brightness)

$B = 114.673$ (background)

$a = 0.499$ px

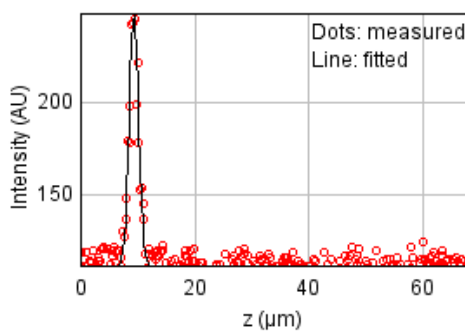
$b = 0.381$ px

$c = 0.378$ px

$x_c = 4.988$ px

$y_c = 5.851$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 11887.4848

Standard deviation: 6.22266

$R^2: 0.91044$

Parameters:

$a = 110.95247$

$b = 248.52017$

$c = 9.43266$

$d = 0.82852$

Bead 444 (Rejected)

Date : Mon Oct 17 13:28:18 PDT 2022

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

Frame size : 10 pixels

Coordinates : 15.9 μm (x), -94.5 μm (y), 8.9 μm (z)

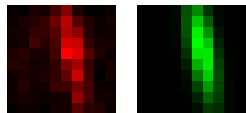
Corresponding bead : Not found

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

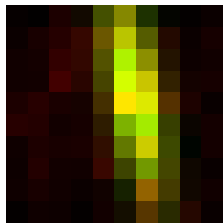
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 406 nm | 419 nm | 223 nm |
| max | 1.59 μm | 1.65 μm | 223 nm |
| z | 1.98 μm | 1.99 μm | 885 nm |
| Asymmetry | 0.255 | | |
| Theta | -80.0° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 121.150 (brightness)

B = 123.075 (background)

a = 0.793 px

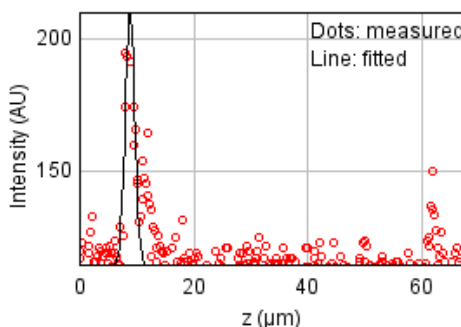
b = -0.131 px

c = 0.076 px

xc = 5.444 px

yc = 3.617 px

Z profile & fitting parameters:



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

Sum of residuals squared: 25218.1303

Standard deviation: 9.06332

R^2 : 0.70530

Parameters:

a = 114.29845

b = 210.81055

c = 8.89815

d = 0.84126

Bead 445

Date : Mon Oct 17 13:28:19 PDT 2022

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

Frame size : 10 pixels

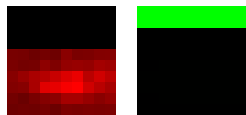
Coordinates : 160 μm (x), 96.7 μm (y), 10.1 μm (z)

Corresponding bead : Not found

| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 1.09 μm | 1.13 μm | 223 nm |
| max | 3.37 μm | 3.48 μm | 223 nm |
| z | 3.0 μm | 3.02 μm | 885 nm |
| Asymmetry | 0.325 | | |
| Theta | 0.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.922$



Parameters:

$A = 230.246$ (brightness)

$B = -10.307$ (background)

$a = 0.012$ px

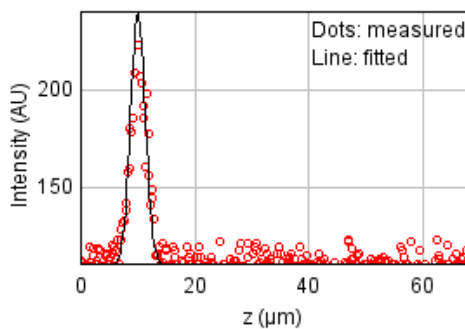
$b = 0.000$ px

$c = 0.112$ px

$x_c = 5.842$ px

$y_c = 6.612$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 23257.0006

Standard deviation: 8.70378

$R^2: 0.87695$

Parameters:

$a = 109.67071$

$b = 241.14488$

$c = 10.12192$

$d = 1.27533$

Bead 446 (Rejected)

Date : Mon Oct 17 13:28:19 PDT 2022

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

Frame size : 10 pixels

Coordinates : -164 μm (x), 94.8 μm (y), 9.38 μm (z)

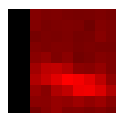
Corresponding bead : Not found

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 | 2.01 μm | 2.02 μm | 885 nm |
| Asymmetry | 0.0 | | |
| Theta | 0.0° | | |

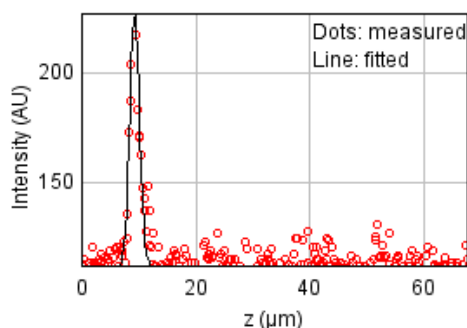
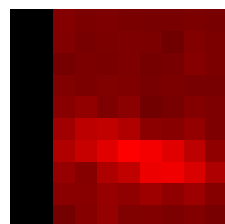
XY profile & fitting parameters :

(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: 16018.1181

Standard deviation: 7.22332

R²: 0.84690

Parameters:

a = 111.78894

b = 227.96268

c = 9.38374

d = 0.85295

Bead 447

Date : Mon Oct 17 13:28:19 PDT 2022

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

Frame size : 10 pixels

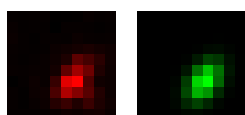
Coordinates : 56.0 um (x), 80.3 um (y), 11.2 um (z)

Corresponding bead : Not found

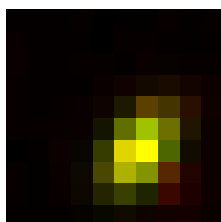
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|---------------|-----------|-------------|
| min | 444 nm | 459 nm | 223 nm |
| max | 684 nm | 707 nm | 223 nm |
| z | 1.21 um | 1.22 um | 885 nm |
| Asymmetry | 0.648 | | |
| Theta | 55.1° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.952$



Parameters:

A = 835.405 (brightness)

B = 125.617 (background)

a = 0.553 px

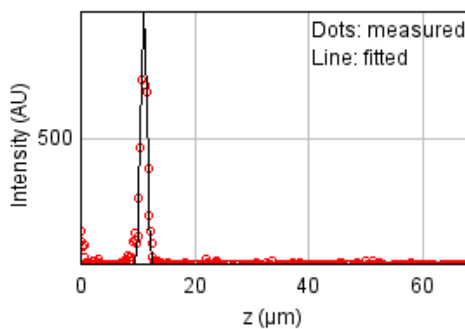
b = 0.185 px

c = 0.416 px

xc = 5.674 px

yc = 5.979 px

Z profile & fitting parameters:



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

Sum of residuals squared: 87437.5227

Standard deviation: 16.87640

R^2 : 0.96550

Parameters:

a = 116.44913

b = 894.34149

c = 11.16447

d = 0.51581

Bead 448

Date : Mon Oct 17 13:28:19 PDT 2022

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

Frame size : 10 pixels

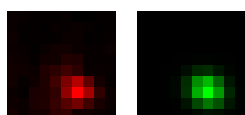
Coordinates : -78.8 μm (x), 77.3 μm (y), 11.4 μm (z)

Corresponding bead : Not found

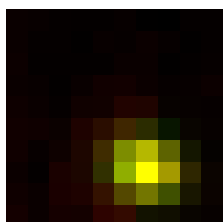
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 483 nm | 499 nm | 223 nm |
| max | 564 nm | 583 nm | 223 nm |
| z | 1.84 μm | 1.85 μm | 885 nm |
| Asymmetry | 0.856 | | |
| Theta | -23.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 397.411 (brightness)

B = 123.336 (background)

a = 0.447 px

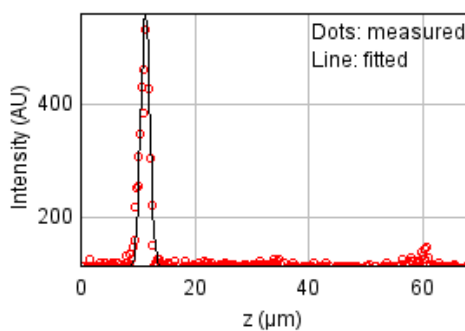
b = -0.057 px

c = 0.551 px

xc = 5.905 px

yc = 6.787 px

Z profile & fitting parameters:



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

Sum of residuals squared: 104386.271

Standard deviation: 18.43964

R^2 : 0.91994

Parameters:

a = 115.16223

b = 560.66064

c = 11.42434

d = 0.78213

Bead 449

Date : Mon Oct 17 13:28:19 PDT 2022

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

Frame size : 10 pixels

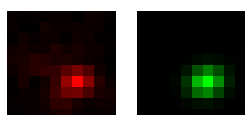
Coordinates : -116 μm (x), 75.0 μm (y), 10.5 μm (z)

Corresponding bead : Not found

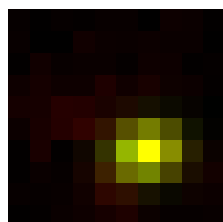
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 437 nm | 452 nm | 223 nm |
| max | 544 nm | 562 nm | 223 nm |
| z | 1.9 μm | 1.91 μm | 885 nm |
| Asymmetry | 0.804 | | |
| Theta | 12.7° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 326.901 (brightness)

B = 123.141 (background)

a = 0.466 px

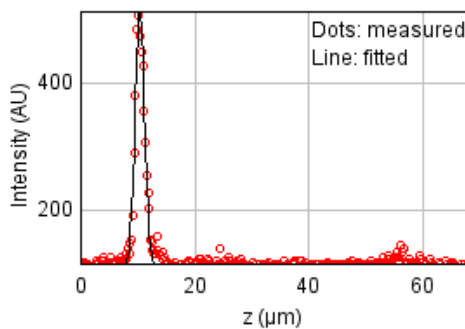
b = 0.053 px

c = 0.691 px

xc = 5.858 px

yc = 6.037 px

Z profile & fitting parameters:



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

Sum of residuals squared: 38182.6433

Standard deviation: 11.15228

R^2 : 0.96357

Parameters:

a = 113.84158

b = 516.27346

c = 10.45344

d = 0.80820

Bead 450

Date : Mon Oct 17 13:28:19 PDT 2022

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

Frame size : 10 pixels

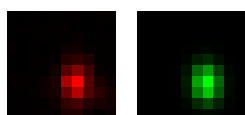
Coordinates : 26.4 μm (x), 65.5 μm (y), 11.0 μm (z)

Corresponding bead : Not found

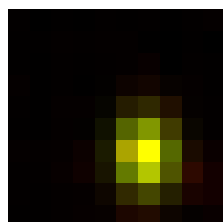
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 446 nm | 461 nm | 223 nm |
| max | 586 nm | 606 nm | 223 nm |
| z | 1.47 μm | 1.48 μm | 885 nm |
| Asymmetry | 0.76 | | |
| Theta | -85.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 998.369 (brightness)

B = 127.782 (background)

a = 0.673 px

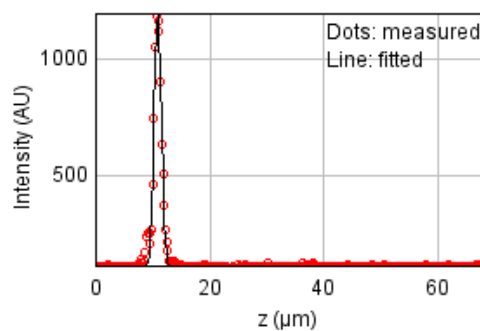
b = -0.021 px

c = 0.392 px

$x_c = 5.836$ px

$y_c = 6.167$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 94276.3495

Standard deviation: 17.52396

R^2 : 0.98354

Parameters:

a = 116.08028

b = 1191.52550

c = 10.97597

d = 0.62499

Bead 451

Date : Mon Oct 17 13:28:19 PDT 2022

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

Frame size : 10 pixels

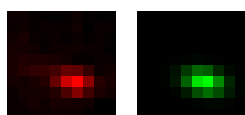
Coordinates : -133 μm (x), 63.8 μm (y), 10.5 μm (z)

Corresponding bead : Not found

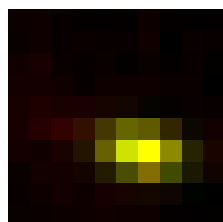
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 372 nm | 385 nm | 223 nm |
| max | 627 nm | 648 nm | 223 nm |
| z | 1.46 μm | 1.46 μm | 885 nm |
| Asymmetry | 0.594 | | |
| Theta | -11.3° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 417.576 (brightness)

B = 121.636 (background)

a = 0.366 px

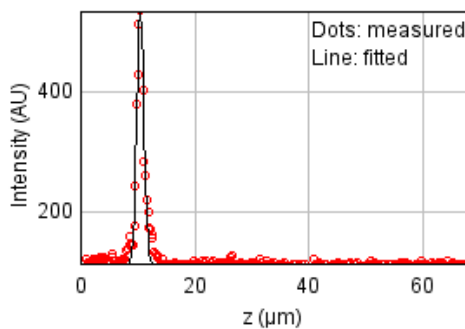
b = -0.121 px

c = 0.945 px

xc = 5.662 px

yc = 6.005 px

Z profile & fitting parameters:



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

Sum of residuals squared: 37734.6051

Standard deviation: 11.08666

R^2 : 0.95799

Parameters:

a = 112.64985

b = 535.11885

c = 10.54996

d = 0.61844

Bead 452

Date : Mon Oct 17 13:28:19 PDT 2022

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

Frame size : 10 pixels

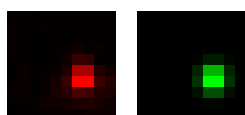
Coordinates : 25.4 μm (x), 43.4 μm (y), 11.3 μm (z)

Corresponding bead : Not found

| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 408 nm | 422 nm | 223 nm |
| max | 419 nm | 434 nm | 223 nm |
| z | 1.55 μm | 1.56 μm | 885 nm |
| Asymmetry | 0.973 | | |
| Theta | 75.7° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 954.079$ (brightness)

$B = 123.779$ (background)

$a = 0.804$ px

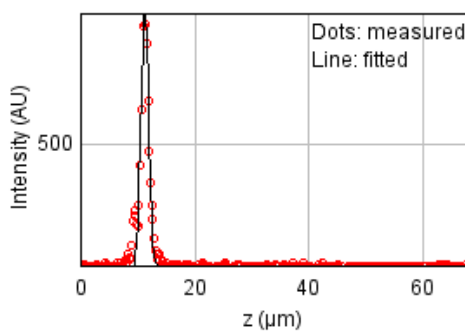
$b = 0.010$ px

$c = 0.766$ px

$x_c = 6.501$ px

$y_c = 5.722$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 141696.161

Standard deviation: 21.48374

$R^2: 0.95921$

Parameters:

$a = 116.47760$

$b = 922.47332$

$c = 11.34032$

$d = 0.65934$

Bead 453

Date : Mon Oct 17 13:28:19 PDT 2022

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

Frame size : 10 pixels

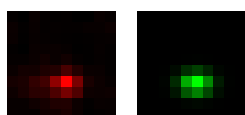
Coordinates : -112 μm (x), 28.6 μm (y), 11.1 μm (z)

Corresponding bead : Not found

| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 358 nm | 371 nm | 223 nm |
| max | 509 nm | 526 nm | 223 nm |
| z | 1.95 μm | 1.95 μm | 885 nm |
| Asymmetry | 0.704 | | |
| Theta | -0.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 530.033$ (brightness)

$B = 123.870$ (background)

$a = 0.517$ px

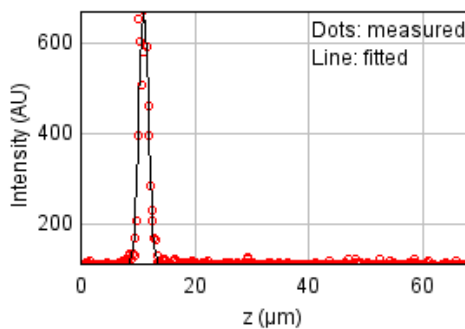
$b = -0.002$ px

$c = 1.045$ px

$x_c = 4.888$ px

$y_c = 6.169$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 88981.7880

Standard deviation: 17.02477

$R^2: 0.95745$

Parameters:

$a = 111.38194$

$b = 672.14579$

$c = 11.13212$

$d = 0.82598$

Bead 454 (Rejected)

Date : Mon Oct 17 13:28:19 PDT 2022

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

Frame size : 10 pixels

Coordinates : -72.1 μm (x), 20.4 μm (y), 8.76 μm (z)

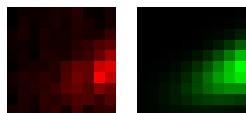
Corresponding bead : Not found

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

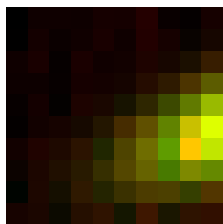
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 759 nm | 784 nm | 223 nm |
| max | 2.23 μm | 2.3 μm | 223 nm |
| z | 2.06 μm | 2.07 μm | 885 nm |
| Asymmetry | 0.34 | | |
| Theta | 21.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.900$



Parameters:

A = 238.920 (brightness)

B = 116.955 (background)

a = 0.054 px

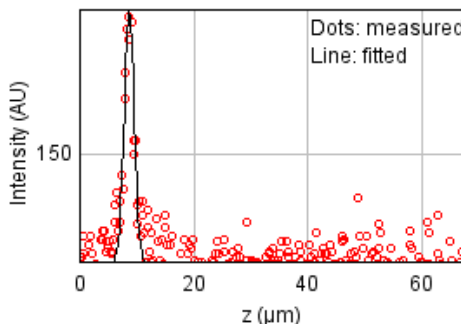
b = 0.070 px

c = 0.206 px

xc = 12.128 px

yc = 4.190 px

Z profile & fitting parameters:



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

Sum of residuals squared: 14869.6442

Standard deviation: 6.95955

R^2 : 0.77123

Parameters:

a = 112.85604

b = 199.11530

c = 8.76457

d = 0.87640

Bead 455

Date : Mon Oct 17 13:28:19 PDT 2022

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

Frame size : 10 pixels

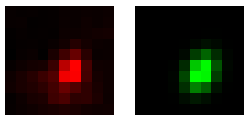
Coordinates : -47.0 μm (x), -8.49 μm (y), 11.2 μm (z)

Corresponding bead : Not found

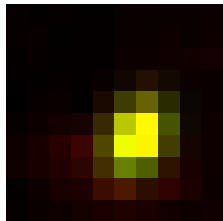
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 426 nm | 440 nm | 223 nm |
| max | 578 nm | 597 nm | 223 nm |
| z | 2.07 μm | 2.08 μm | 885 nm |
| Asymmetry | 0.737 | | |
| Theta | 62.9° | | |

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 = 735.312 (brightness)

B = 136.080 (background)

a = 0.671 px

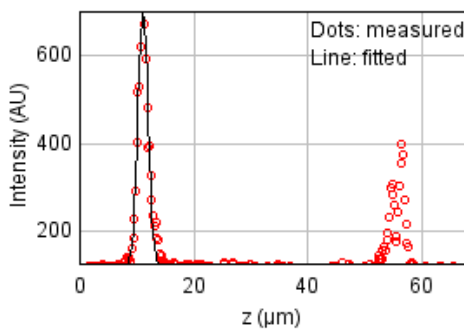
b = 0.137 px

c = 0.472 px

xc = 5.548 px

yc = 5.607 px

Z profile & fitting parameters:



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

Sum of residuals squared: 503707.948

Standard deviation: 40.50608

R^2 : 0.81571

Parameters:

a = 125.77082

b = 700.29764

c = 11.18985

d = 0.87879

Bead 456

Date : Mon Oct 17 13:28:20 PDT 2022

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

Frame size : 10 pixels

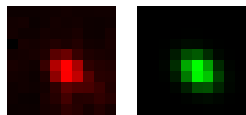
Coordinates : 75.3 μm (x), -8.03 μm (y), 10.4 μm (z)

Corresponding bead : Not found

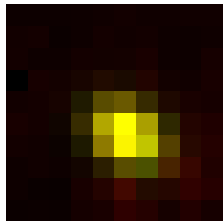
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 457 nm | 473 nm | 223 nm |
| max | 610 nm | 630 nm | 223 nm |
| z | 1.64 μm | 1.65 μm | 885 nm |
| Asymmetry | 0.75 | | |
| Theta | -34.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 441.368 (brightness)

B = 120.976 (background)

a = 0.453 px

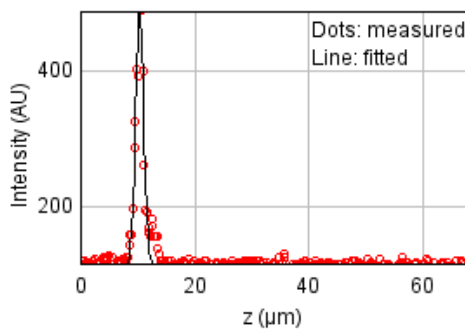
b = -0.132 px

c = 0.551 px

xc = 5.113 px

yc = 5.484 px

Z profile & fitting parameters:



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

Sum of residuals squared: 42000.4525

Standard deviation: 11.69655

R^2 : 0.94873

Parameters:

a = 113.24661

b = 492.02158

c = 10.42107

d = 0.69793

Bead 457

Date : Mon Oct 17 13:28:20 PDT 2022

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

Frame size : 10 pixels

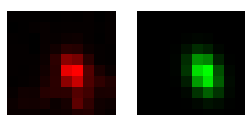
Coordinates : 10.3 μm (x), -21.0 μm (y), 11.1 μm (z)

Corresponding bead : Not found

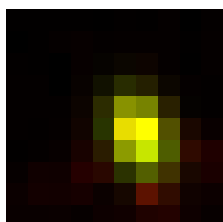
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 437 nm | 452 nm | 223 nm |
| max | 631 nm | 652 nm | 223 nm |
| z | 1.96 μm | 1.97 μm | 885 nm |
| Asymmetry | 0.693 | | |
| Theta | -68.1° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 731.938$ (brightness)

$B = 129.147$ (background)

$a = 0.651$ px

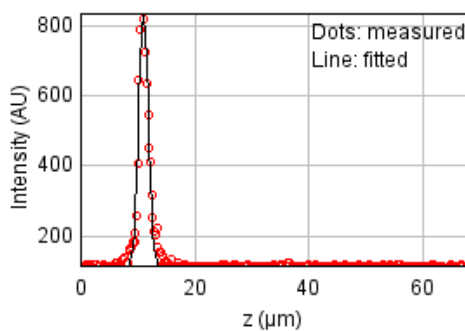
$b = -0.126$ px

$c = 0.388$ px

$x_c = 5.659$ px

$y_c = 5.253$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 91533.3645

Standard deviation: 17.26714

$R^2: 0.97338$

Parameters:

$a = 115.59667$

$b = 838.32153$

$c = 11.10729$

$d = 0.83152$

Bead 458

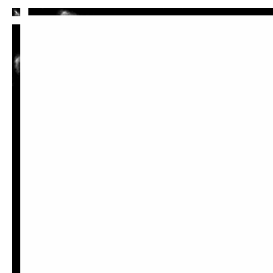
Date : Mon Oct 17 13:28:20 PDT 2022

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

Frame size : 10 pixels

Coordinates : 113 μm (x), -91.5 μm (y), 9.73 μm (z)

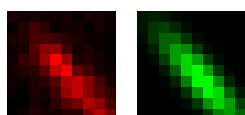
Corresponding bead : Not found



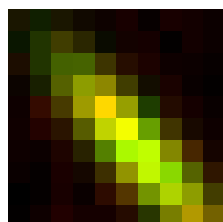
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 504 nm | 521 nm | 223 nm |
| max | 1.91 μm | 1.98 μm | 223 nm |
| z | 2.02 μm | 2.03 μm | 885 nm |
| Asymmetry | 0.264 | | |
| Theta | -49.6° | | |

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:

$A = 121.303$ (brightness)

$B = 111.766$ (background)

$a = 0.321$ px

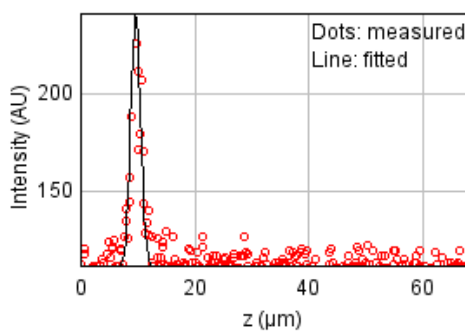
$b = -0.243$ px

$c = 0.244$ px

$x_c = 5.489$ px

$y_c = 5.943$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 19985.7012

Standard deviation: 8.06846

$R^2: 0.84746$

Parameters:

$a = 111.39627$

$b = 241.15080$

$c = 9.73355$

$d = 0.85698$

Bead 459

Date : Mon Oct 17 13:28:20 PDT 2022

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

Frame size : 10 pixels

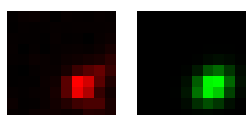
Coordinates : 80.4 um (x), 80.7 um (y), 11.0 um (z)

Corresponding bead : Not found

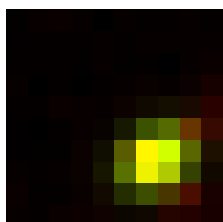
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|---------------|-----------|-------------|
| min | 461 nm | 476 nm | 223 nm |
| max | 581 nm | 600 nm | 223 nm |
| z | 1.86 um | 1.87 um | 885 nm |
| Asymmetry | 0.794 | | |
| Theta | 34.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 566.123 (brightness)

B = 120.957 (background)

a = 0.473 px

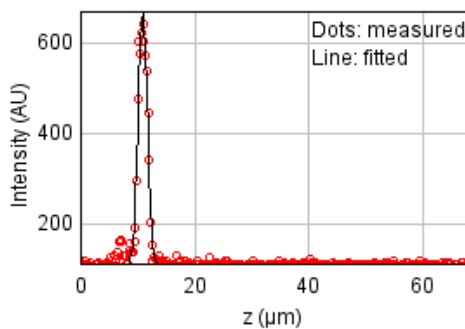
b = 0.109 px

c = 0.557 px

xc = 6.447 px

yc = 6.398 px

Z profile & fitting parameters:



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

Sum of residuals squared: 52893.6273

Standard deviation: 13.12600

R^2 : 0.97277

Parameters:

a = 112.35612

b = 668.99593

c = 10.97899

d = 0.78968

Bead 460 (Rejected)

Date : Mon Oct 17 13:28:20 PDT 2022

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

Frame size : 10 pixels

Coordinates : -106 μm (x), 78.2 μm (y), 11.1 μm (z)

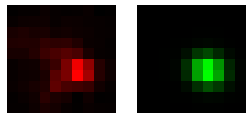
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

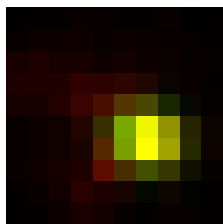
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 469 nm | 485 nm | 223 nm |
| max | 547 nm | 566 nm | 223 nm |
| z | 2.15 μm | 2.16 μm | 885 nm |
| Asymmetry | 0.857 | | |
| Theta | -14.4° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.867$



Parameters:

A = 473.931 (brightness)

B = 134.389 (background)

a = 0.458 px

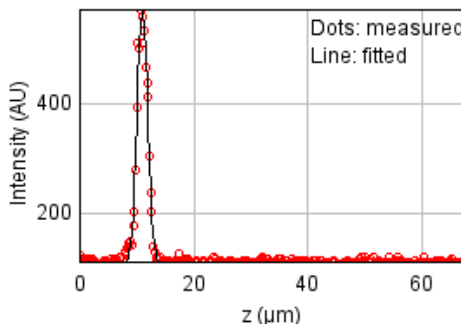
b = -0.039 px

c = 0.601 px

xc = 5.971 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: 27457.0474

Standard deviation: 9.45709

R^2 : 0.98170

Parameters:

a = 112.24777

b = 570.47150

c = 11.08875

d = 0.91453

Bead 461 (Rejected)

Date : Mon Oct 17 13:28:20 PDT 2022

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

Frame size : 10 pixels

Coordinates : 146 μm (x), 76.4 μm (y), 10.1 μm (z)

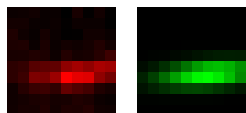
Corresponding bead : Not found

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

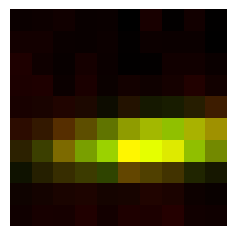
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 394 nm | 407 nm | 223 nm |
| max | 1.55 μm | 1.6 μm | 223 nm |
| z | 2.45 μm | 2.46 μm | 885 nm |
| Asymmetry | 0.254 | | |
| Theta | 4.6° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 216.131 (brightness)

B = 118.341 (background)

a = 0.061 px

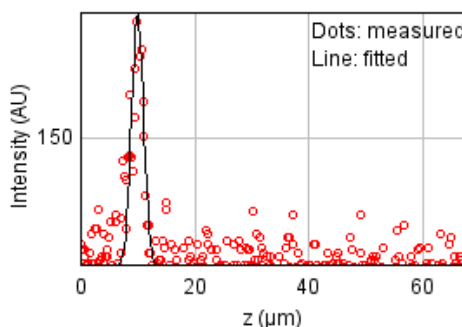
b = 0.065 px

c = 0.859 px

xc = 6.132 px

yc = 5.681 px

Z profile & fitting parameters:



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

Sum of residuals squared: 17264.4029

Standard deviation: 7.49906

R^2 : 0.74411

Parameters:

a = 109.98097

b = 189.61205

c = 10.05977

d = 1.03920

Bead 462

Date : Mon Oct 17 13:28:20 PDT 2022

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

Frame size : 10 pixels

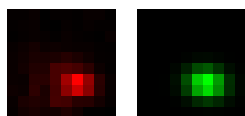
Coordinates : -85.8 μm (x), 72.7 μm (y), 11.8 μm (z)

Corresponding bead : Not found

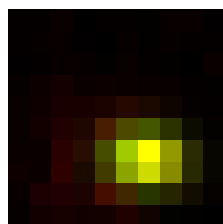
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 465 nm | 481 nm | 223 nm |
| max | 605 nm | 626 nm | 223 nm |
| z | 2.02 μm | 2.02 μm | 885 nm |
| Asymmetry | 0.768 | | |
| Theta | -6.6° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 590.326$ (brightness)

$B = 131.952$ (background)

$a = 0.370$ px

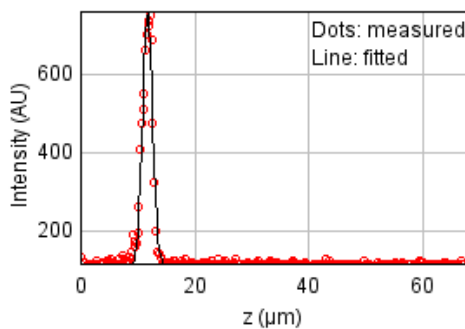
$b = -0.029$ px

$c = 0.617$ px

$x_c = 5.840$ px

$y_c = 6.366$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 81141.4788

Standard deviation: 16.25744

$R^2: 0.97144$

Parameters:

$a = 113.66440$

$b = 760.79461$

$c = 11.82572$

$d = 0.85639$

Bead 463

Date : Mon Oct 17 13:28:20 PDT 2022

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

Frame size : 10 pixels

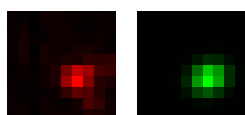
Coordinates : 85.8 μm (x), 68.5 μm (y), 10.8 μm (z)

Corresponding bead : Not found

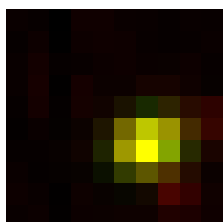
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 440 nm | 455 nm | 223 nm |
| max | 542 nm | 560 nm | 223 nm |
| z | 1.64 μm | 1.65 μm | 885 nm |
| Asymmetry | 0.812 | | |
| Theta | 18.2° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.917$



Parameters:

$A = 430.564$ (brightness)

$B = 119.448$ (background)

$a = 0.480$ px

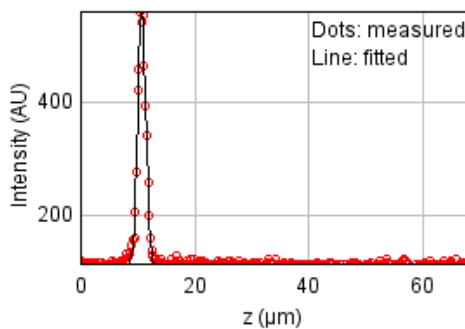
$b = 0.070$ px

$c = 0.670$ px

$x_c = 6.087$ px

$y_c = 5.675$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 15846.6553

Standard deviation: 7.18455

$R^2: 0.98552$

Parameters:

$a = 112.28947$

$b = 559.03034$

$c = 10.81145$

$d = 0.69623$

Bead 464

Date : Mon Oct 17 13:28:20 PDT 2022

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

Frame size : 10 pixels

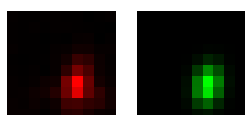
Coordinates : 19.1 μm (x), 61.3 μm (y), 11.1 μm (z)

Corresponding bead : Not found

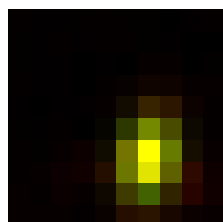
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 418 nm | 432 nm | 223 nm |
| max | 612 nm | 633 nm | 223 nm |
| z | 1.41 μm | 1.42 μm | 885 nm |
| Asymmetry | 0.683 | | |
| Theta | 80.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 899.919 (brightness)

B = 130.199 (background)

a = 0.757 px

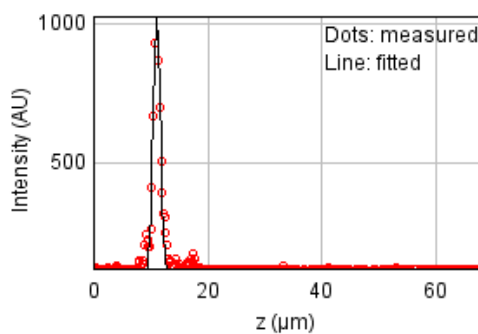
b = 0.067 px

c = 0.369 px

xc = 5.986 px

yc = 6.344 px

Z profile & fitting parameters:



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

Sum of residuals squared: 133636.318

Standard deviation: 20.86378

R^2 : 0.96715

Parameters:

a = 118.11297

b = 1034.20171

c = 11.14588

d = 0.60082

Bead 465

Date : Mon Oct 17 13:28:20 PDT 2022

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

Frame size : 10 pixels

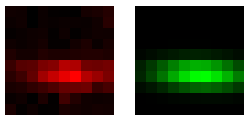
Coordinates : 148 μm (x), 59.9 μm (y), 9.9 μm (z)

Corresponding bead : Not found

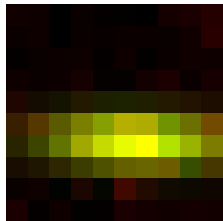
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 453 nm | 468 nm | 223 nm |
| max | 1.48 μm | 1.53 μm | 223 nm |
| z | 2.73 μm | 2.74 μm | 885 nm |
| Asymmetry | 0.307 | | |
| Theta | -1.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 179.342$ (brightness)

$B = 113.588$ (background)

$a = 0.062$ px

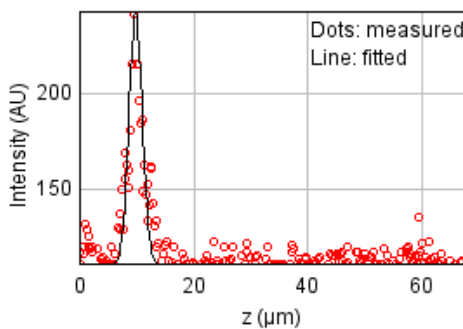
$b = -0.018$ px

$c = 0.654$ px

$x_c = 5.529$ px

$y_c = 5.785$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 30529.2880

Standard deviation: 9.97216

$R^2: 0.83246$

Parameters:

$a = 110.83462$

$b = 242.38355$

$c = 9.89800$

$d = 1.15819$

Bead 466

Date : Mon Oct 17 13:28:21 PDT 2022

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

Frame size : 10 pixels

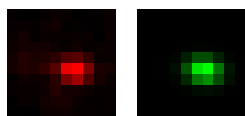
Coordinates : -128 μm (x), 50.3 μm (y), 10.3 μm (z)

Corresponding bead : Not found

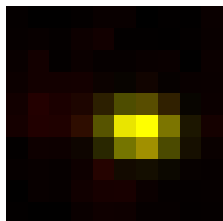
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 389 nm | 402 nm | 223 nm |
| max | 553 nm | 572 nm | 223 nm |
| z | 1.58 μm | 1.59 μm | 885 nm |
| Asymmetry | 0.703 | | |
| Theta | -6.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 388.796 (brightness)

B = 120.771 (background)

a = 0.444 px

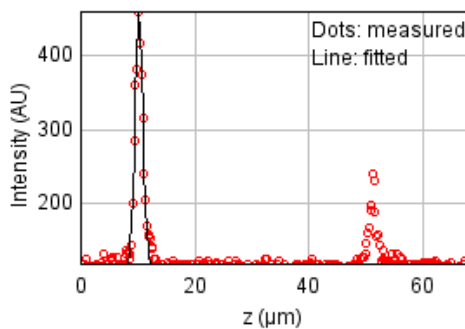
b = -0.053 px

c = 0.881 px

$x_c = 5.643$ px

$y_c = 5.156$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 77914.1939

Standard deviation: 15.93086

R^2 : 0.88749

Parameters:

a = 116.79384

b = 460.13097

c = 10.30454

d = 0.67065

Bead 467

Date : Mon Oct 17 13:28:21 PDT 2022

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

Frame size : 10 pixels

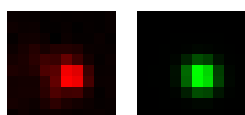
Coordinates : -105 μm (x), 41.7 μm (y), 11.0 μm (z)

Corresponding bead : Not found

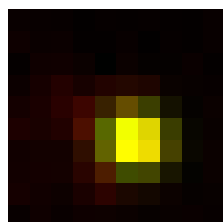
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 470 nm | 486 nm | 223 nm |
| max | 502 nm | 519 nm | 223 nm |
| z | 1.93 μm | 1.94 μm | 885 nm |
| Asymmetry | 0.937 | | |
| Theta | -16.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 575.860$ (brightness)

$B = 128.485$ (background)

$a = 0.539$ px

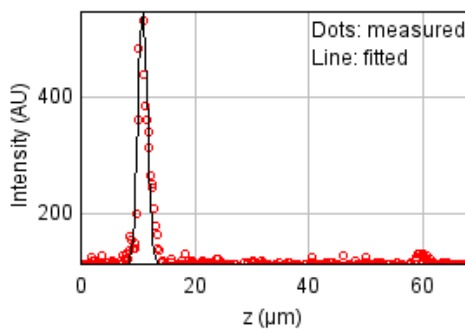
$b = -0.020$ px

$c = 0.601$ px

$x_c = 5.352$ px

$y_c = 5.506$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 118011.511

Standard deviation: 19.60618

$R^2: 0.90977$

Parameters:

$a = 113.90861$

$b = 547.87917$

$c = 10.96662$

$d = 0.81931$

Bead 468

Date : Mon Oct 17 13:28:21 PDT 2022

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

Frame size : 10 pixels

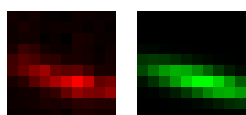
Coordinates : 146 um (x), 29.0 um (y), 9.81 um (z)

Corresponding bead : Not found

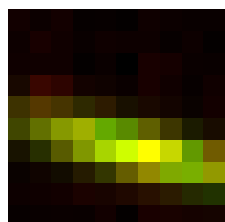
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|---------------|-----------|-------------|
| min | 396 nm | 410 nm | 223 nm |
| max | 1.86 um | 1.92 um | 223 nm |
| z | 1.91 um | 1.91 um | 885 nm |
| Asymmetry | 0.213 | | |
| Theta | -13.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.936$



Parameters:

A = 133.705 (brightness)

B = 113.234 (background)

a = 0.086 px

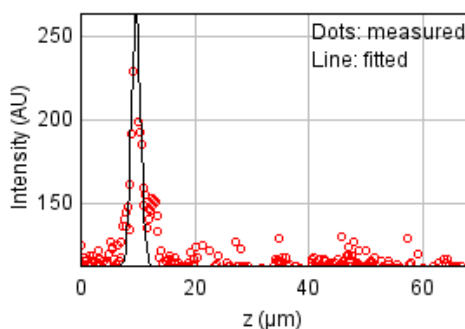
b = -0.189 px

c = 0.808 px

xc = 5.510 px

yc = 5.999 px

Z profile & fitting parameters:



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

Sum of residuals squared: 28537.7284

Standard deviation: 9.64141

R^2 : 0.83470

Parameters:

a = 112.41875

b = 264.31203

c = 9.80752

d = 0.80954

Bead 469 (Rejected)

Date : Mon Oct 17 13:28:21 PDT 2022

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

Frame size : 10 pixels

Coordinates : 109 μm (x), 26.2 μm (y), 8.99 μm (z)

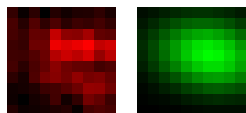
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

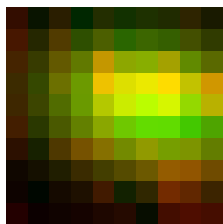
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 1.11 μm | 1.15 μm | 223 nm |
| max | 1.74 μm | 1.8 μm | 223 nm |
| z | 1.27 μm | 1.27 μm | 885 nm |
| Asymmetry | 0.64 | | |
| Theta | -10.0° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.709$



Parameters:

A = 77.719 (brightness)

B = 118.316 (background)

a = 0.046 px

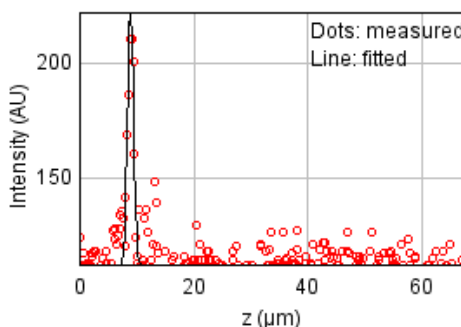
b = -0.011 px

c = 0.106 px

xc = 6.199 px

yc = 3.899 px

Z profile & fitting parameters:



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

Sum of residuals squared: 16690.6521

Standard deviation: 7.37339

R^2 : 0.75065

Parameters:

a = 112.55062

b = 221.77753

c = 8.99127

d = 0.53789

Bead 470

Date : Mon Oct 17 13:28:21 PDT 2022

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

Frame size : 10 pixels

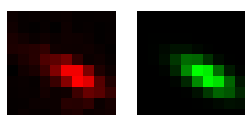
Coordinates : 99.2 μm (x), -2.96 μm (y), 10.9 μm (z)

Corresponding bead : Not found

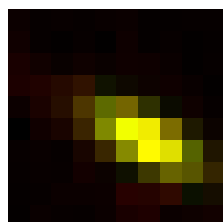
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 375 nm | 387 nm | 223 nm |
| max | 898 nm | 929 nm | 223 nm |
| z | 1.9 μm | 1.91 μm | 885 nm |
| Asymmetry | 0.417 | | |
| Theta | -29.0° | | |

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 = 469.339 (brightness)

B = 120.936 (background)

a = 0.352 px

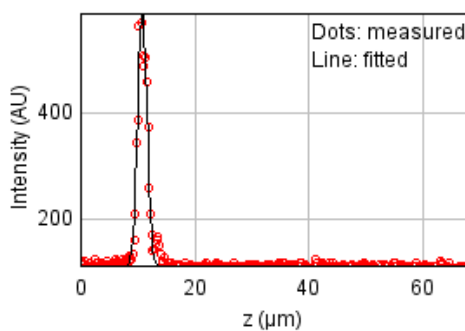
b = -0.335 px

c = 0.770 px

xc = 5.828 px

yc = 5.461 px

Z profile & fitting parameters:



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

Sum of residuals squared: 55938.4080

Standard deviation: 13.49851

R^2 : 0.96213

Parameters:

a = 112.25558

b = 590.32258

c = 10.90156

d = 0.80582

Bead 471

Date : Mon Oct 17 13:28:21 PDT 2022

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

Frame size : 10 pixels

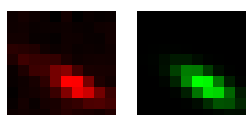
Coordinates : 103 μm (x), -15.0 μm (y), 10.5 μm (z)

Corresponding bead : Not found

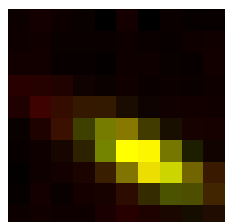
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|-------------------|-------------|
| min | 374 nm | 387 nm | 223 nm |
| max | 930 nm | 961 nm | 223 nm |
| z | 1.99 μm | 2.0 μm | 885 nm |
| Asymmetry | 0.402 | | |
| Theta | -29.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 350.951$ (brightness)

$B = 120.066$ (background)

$a = 0.346$ px

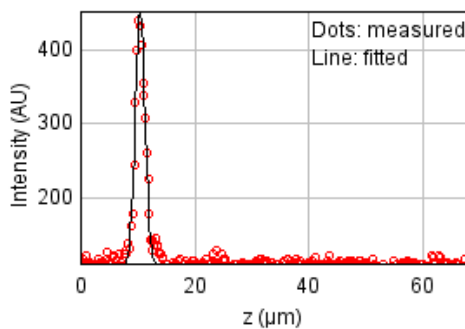
$b = -0.342$ px

$c = 0.768$ px

$x_c = 5.776$ px

$y_c = 6.332$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 26540.1859

Standard deviation: 9.29786

$R^2: 0.96563$

Parameters:

$a = 112.09417$

$b = 450.84133$

$c = 10.51278$

$d = 0.84387$

Bead 472

Date : Mon Oct 17 13:28:21 PDT 2022

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

Frame size : 10 pixels

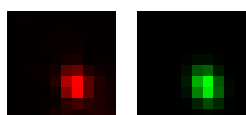
Coordinates : 57.4 μm (x), -16.6 μm (y), 10.7 μm (z)

Corresponding bead : Not found

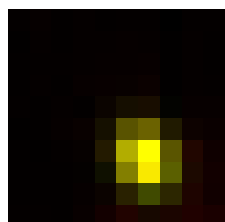
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 411 nm | 425 nm | 223 nm |
| max | 528 nm | 546 nm | 223 nm |
| z | 1.33 μm | 1.33 μm | 885 nm |
| Asymmetry | 0.779 | | |
| Theta | -67.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 977.309 (brightness)

B = 122.484 (background)

a = 0.748 px

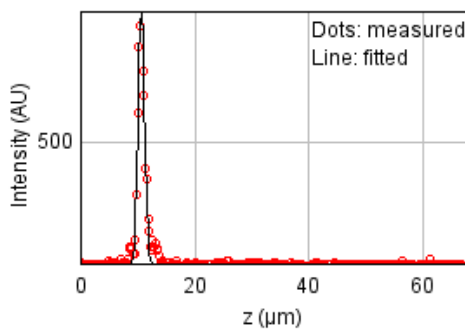
b = -0.109 px

c = 0.526 px

xc = 5.814 px

yc = 6.371 px

Z profile & fitting parameters:



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

Sum of residuals squared: 83782.1502

Standard deviation: 16.51987

R^2 : 0.97120

Parameters:

a = 115.40286

b = 915.96385

c = 10.72116

d = 0.56372

Bead 473

Date : Mon Oct 17 13:28:21 PDT 2022

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

Frame size : 10 pixels

Coordinates : -96.6 μm (x), -67.7 μm (y), 20.0 μm (z)

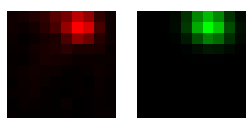
Corresponding bead : Not found



| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 515 nm | 532 nm | 223 nm |
| max | 637 nm | 658 nm | 223 nm |
| z | 1.62 μm | 1.62 μm | 885 nm |
| Asymmetry | 0.809 | | |
| Theta | -11.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 543.114$ (brightness)

$B = 122.884$ (background)

$a = 0.338$ px

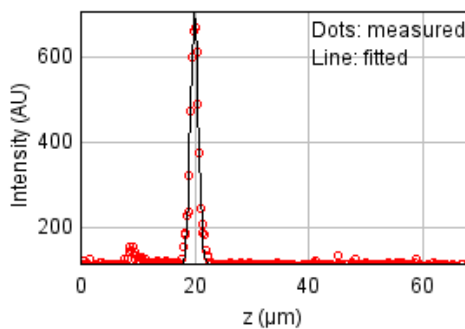
$b = -0.035$ px

$c = 0.499$ px

$x_c = 6.096$ px

$y_c = 0.817$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 39569.4064

Standard deviation: 11.35300

$R^2: 0.97910$

Parameters:

$a = 114.24881$

$b = 703.99114$

$c = 20.03040$

$d = 0.68613$

Bead 474

Date : Mon Oct 17 13:28:22 PDT 2022

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

Frame size : 10 pixels

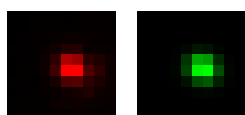
Coordinates : 79.5 μm (x), -73.2 μm (y), 40.6 μm (z)

Corresponding bead : Not found

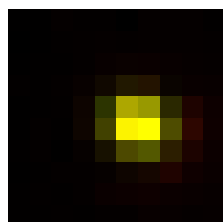
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|-------------------|--------------------|-------------|
| min | 406 nm | 420 nm | 223 nm |
| max | 471 nm | 487 nm | 223 nm |
| z | 1.6 μm | 1.61 μm | 885 nm |
| Asymmetry | 0.862 | | |
| Theta | -20.6° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 1314.256$ (brightness)

$B = 126.829$ (background)

$a = 0.630$ px

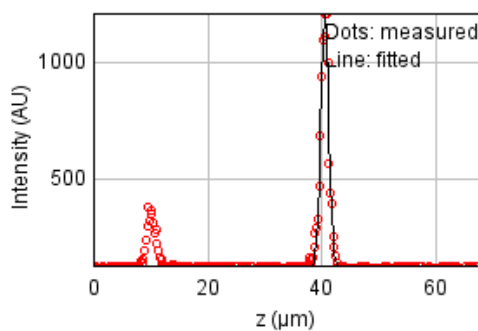
$b = -0.069$ px

$c = 0.787$ px

$x_c = 5.518$ px

$y_c = 4.783$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 476814.526

Standard deviation: 39.40992

$R^2: 0.93035$

Parameters:

$a = 123.41832$

$b = 1221.32496$

$c = 40.59375$

$d = 0.68007$

Bead 475

Date : Mon Oct 17 13:28:22 PDT 2022

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

Frame size : 10 pixels

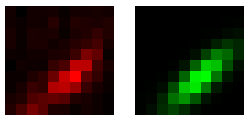
Coordinates : -162 μm (x), -88.5 μm (y), 9.59 μm (z)

Corresponding bead : Not found

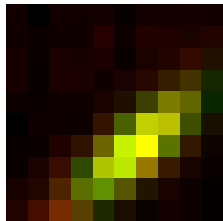
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 407 nm | 421 nm | 223 nm |
| max | 1.22 μm | 1.26 μm | 223 nm |
| z | 1.87 μm | 1.88 μm | 885 nm |
| Asymmetry | 0.335 | | |
| Theta | 42.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.901$



Parameters:

$A = 167.221$ (brightness)

$B = 119.347$ (background)

$a = 0.417$ px

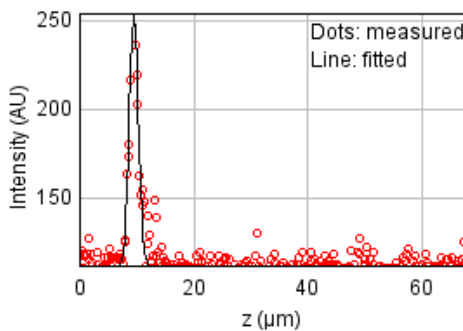
$b = 0.358$ px

$c = 0.483$ px

$x_c = 5.469$ px

$y_c = 6.103$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 16067.3057

Standard deviation: 7.23440

$R^2: 0.88730$

Parameters:

$a = 111.40874$

$b = 254.97707$

$c = 9.59045$

$d = 0.79479$

Bead 476

Date : Mon Oct 17 13:28:22 PDT 2022

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

Frame size : 10 pixels

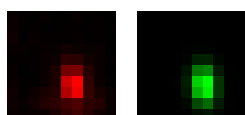
Coordinates : -8.22 μm (x), 41.7 μm (y), 11.3 μm (z)

Corresponding bead : Not found

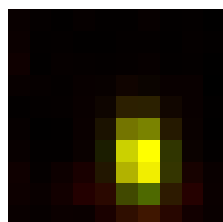
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 388 nm | 401 nm | 223 nm |
| max | 605 nm | 626 nm | 223 nm |
| z | 1.61 μm | 1.61 μm | 885 nm |
| Asymmetry | 0.64 | | |
| Theta | -85.3° | | |

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:

$A = 871.825$ (brightness)

$B = 129.772$ (background)

$a = 0.890$ px

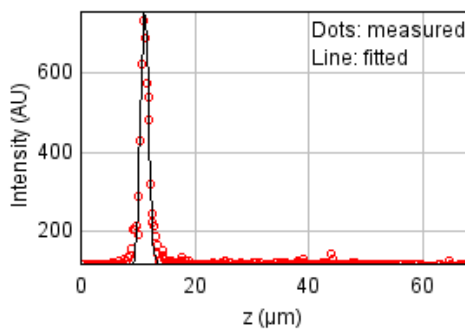
$b = -0.043$ px

$c = 0.370$ px

$xc = 5.631$ px

$yc = 6.359$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 90508.8681

Standard deviation: 17.17024

$R^2: 0.96049$

Parameters:

$a = 116.61621$

$b = 760.96554$

$c = 11.29892$

$d = 0.68217$

Bead 477

Date : Mon Oct 17 13:28:22 PDT 2022

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

Frame size : 10 pixels

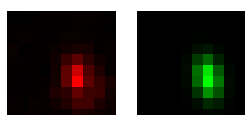
Coordinates : 29.9 μm (x), 29.3 μm (y), 11.5 μm (z)

Corresponding bead : Not found

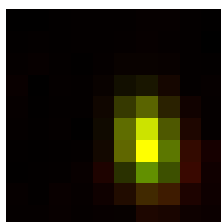
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 397 nm | 410 nm | 223 nm |
| max | 637 nm | 658 nm | 223 nm |
| z | 1.66 μm | 1.66 μm | 885 nm |
| Asymmetry | 0.624 | | |
| Theta | -80.3° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 874.789$ (brightness)

$B = 128.730$ (background)

$a = 0.837$ px

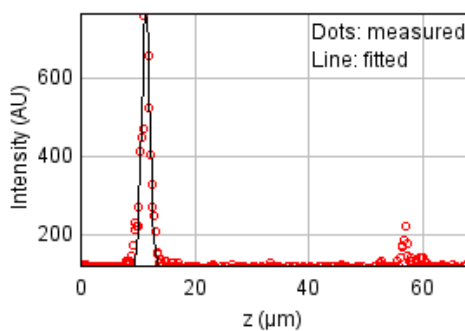
$b = -0.087$ px

$c = 0.346$ px

$x_c = 6.008$ px

$y_c = 5.677$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 124332.591

Standard deviation: 20.12442

$R^2: 0.94926$

Parameters:

$a = 117.55032$

$b = 770.21246$

$c = 11.51106$

$d = 0.70365$

Bead 478 (Rejected)

Date : Mon Oct 17 13:28:22 PDT 2022

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

Frame size : 10 pixels

Coordinates : -141 μm (x), 2.55 μm (y), 9.9 μm (z)

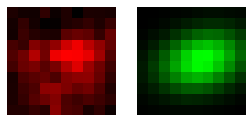
Corresponding bead : Not found

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

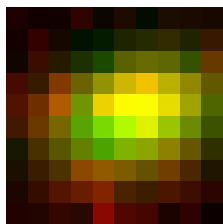
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 894 nm | 925 nm | 223 nm |
| max | 1.34 μm | 1.39 μm | 223 nm |
| z | 1.17 μm | 1.18 μm | 885 nm |
| Asymmetry | 0.666 | | |
| Theta | 15.3° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.726$



Parameters:

A = 126.530 (brightness)

B = 126.615 (background)

a = 0.081 px

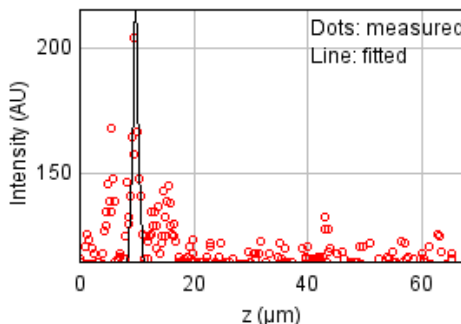
b = 0.024 px

c = 0.161 px

xc = 5.473 px

yc = 4.402 px

Z profile & fitting parameters:



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

Sum of residuals squared: 29153.1358

Standard deviation: 9.74481

R^2 : 0.57610

Parameters:

a = 114.35703

b = 215.10139

c = 9.90340

d = 0.49748

Bead 479

Date : Mon Oct 17 13:28:22 PDT 2022

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

Frame size : 10 pixels

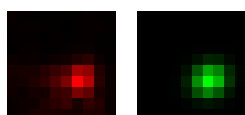
Coordinates : -76.5 μm (x), -34.3 μm (y), 11.7 μm (z)

Corresponding bead : Not found

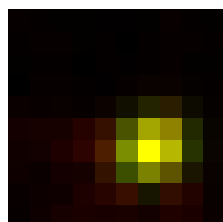
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 481 nm | 498 nm | 223 nm |
| max | 549 nm | 567 nm | 223 nm |
| z | 1.78 μm | 1.78 μm | 885 nm |
| Asymmetry | 0.877 | | |
| Theta | 22.9° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.917$



Parameters:

A = 805.015 (brightness)

B = 139.679 (background)

a = 0.466 px

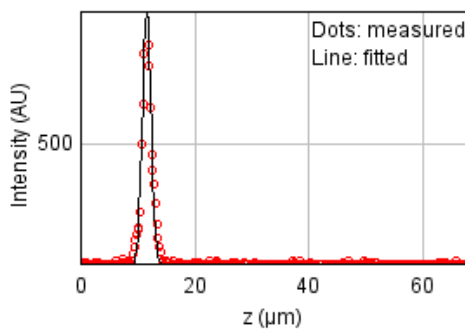
b = 0.048 px

c = 0.559 px

xc = 6.150 px

yc = 5.879 px

Z profile & fitting parameters:



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

Sum of residuals squared: 105121.557

Standard deviation: 18.50447

R^2 : 0.97301

Parameters:

a = 114.42897

b = 920.09651

c = 11.67249

d = 0.75438

Bead 480 (Rejected)

Date : Mon Oct 17 13:28:22 PDT 2022

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

Frame size : 10 pixels

Coordinates : 89.9 μm (x), -76.5 μm (y), 8.91 μm (z)

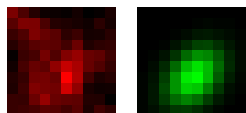
Corresponding bead : Not found

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

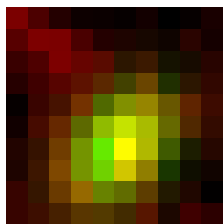
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 736 nm | 761 nm | 223 nm |
| max | 1.05 μm | 1.09 μm | 223 nm |
| z | 3.36 μm | 3.37 μm | 885 nm |
| Asymmetry | 0.701 | | |
| Theta | 49.8° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.699$



Parameters:

A = 71.676 (brightness)

B = 128.839 (background)

a = 0.195 px

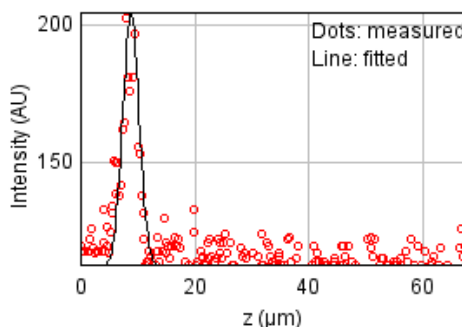
b = 0.062 px

c = 0.174 px

xc = 4.719 px

yc = 5.904 px

Z profile & fitting parameters:



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

Sum of residuals squared: 19307.3259

Standard deviation: 7.93034

R^2 : 0.82372

Parameters:

a = 112.43437

b = 204.57838

c = 8.90781

d = 1.42515

Bead 481 (Rejected)

Date : Mon Oct 17 13:28:23 PDT 2022

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

Frame size : 10 pixels

Coordinates : -143 μm (x), 90.2 μm (y), 24.6 μm (z)

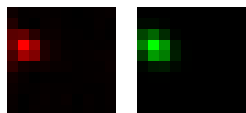
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 400 nm | 413 nm | 223 nm |
| max | 518 nm | 536 nm | 223 nm |
| z | 1.51 μm | 1.52 μm | 885 nm |
| Asymmetry | 0.772 | | |
| Theta | -37.1° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 725.533 (brightness)

B = 115.795 (background)

a = 0.623 px

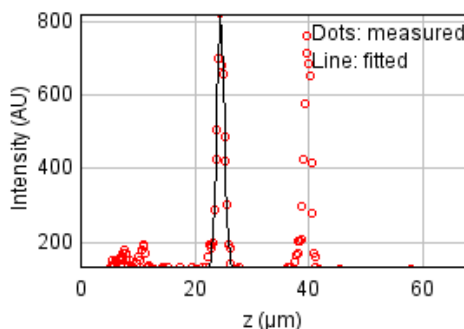
b = -0.163 px

c = 0.716 px

xc = 1.115 px

yc = 3.177 px

Z profile & fitting parameters:



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

Sum of residuals squared: 1936625.81

Standard deviation: 79.42435

R^2 : 0.54983

Parameters:

a = 132.56157

b = 819.79116

c = 24.60175

d = 0.64329

Bead 482

Date : Mon Oct 17 13:28:23 PDT 2022

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

Frame size : 10 pixels

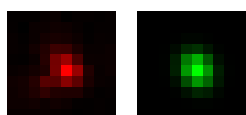
Coordinates : -67.3 μm (x), 84.3 μm (y), 11.9 μm (z)

Corresponding bead : Not found

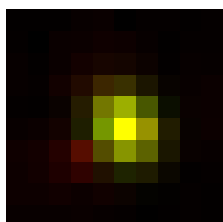
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 480 nm | 496 nm | 223 nm |
| max | 567 nm | 586 nm | 223 nm |
| z | 1.56 μm | 1.56 μm | 885 nm |
| Asymmetry | 0.846 | | |
| Theta | -60.6° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 539.233 (brightness)

B = 130.069 (background)

a = 0.543 px

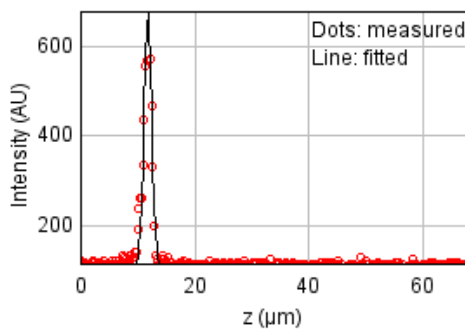
b = -0.071 px

c = 0.457 px

xc = 4.971 px

yc = 4.907 px

Z profile & fitting parameters:



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

Sum of residuals squared: 48724.1105

Standard deviation: 12.59803

R^2 : 0.97110

Parameters:

a = 112.95171

b = 677.37220

c = 11.87207

d = 0.66070

Bead 483

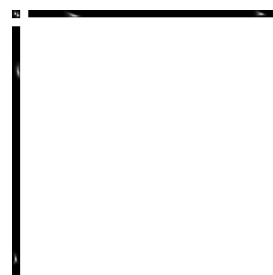
Date : Mon Oct 17 13:28:23 PDT 2022

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

Frame size : 10 pixels

Coordinates : -37.9 μm (x), 55.4 μm (y), 12.4 μm (z)

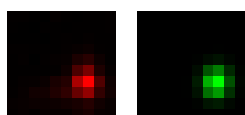
Corresponding bead : Not found



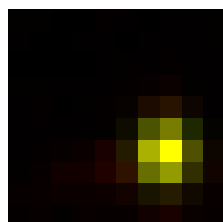
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 419 nm | 433 nm | 223 nm |
| max | 468 nm | 484 nm | 223 nm |
| z | 1.56 μm | 1.56 μm | 885 nm |
| Asymmetry | 0.896 | | |
| Theta | 82.9° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 1123.169$ (brightness)

$B = 132.225$ (background)

$a = 0.761$ px

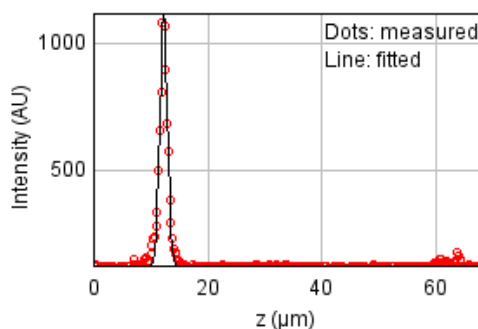
$b = 0.018$ px

$c = 0.615$ px

$x_c = 6.739$ 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: 96107.8578

Standard deviation: 17.69336

$R^2: 0.98169$

Parameters:

$a = 117.63421$

$b = 1118.32137$

$c = 12.35124$

$d = 0.66172$

Bead 484 (Rejected)

Date : Mon Oct 17 13:28:23 PDT 2022

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

Frame size : 10 pixels

Coordinates : -34.5 μm (x), 52.1 μm (y), 11.7 μm (z)

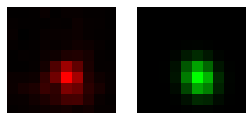
Corresponding bead : Not found

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

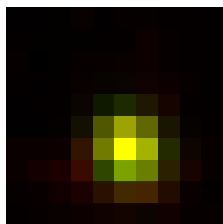
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 484 nm | 500 nm | 223 nm |
| max | 560 nm | 579 nm | 223 nm |
| z | 3.79 μm | 3.81 μm | 885 nm |
| Asymmetry | 0.864 | | |
| Theta | -64.6° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 588.660 (brightness)

B = 123.300 (background)

a = 0.547 px

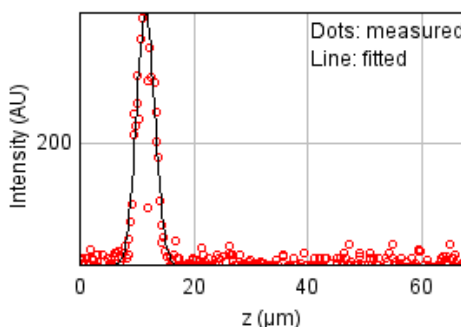
b = -0.056 px

c = 0.455 px

xc = 5.173 px

yc = 6.019 px

Z profile & fitting parameters:



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

Sum of residuals squared: 56444.5274

Standard deviation: 13.55944

R^2 : 0.87582

Parameters:

a = 111.91871

b = 294.98880

c = 11.66408

d = 1.60991

Bead 485 (Rejected)

Date : Mon Oct 17 13:28:23 PDT 2022

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

Frame size : 10 pixels

Coordinates : -34.5 μm (x), 52.1 μm (y), 11.7 μm (z)

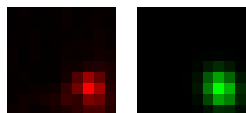
Corresponding bead : Not found

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

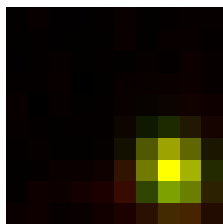
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 486 nm | 502 nm | 223 nm |
| max | 560 nm | 579 nm | 223 nm |
| z | 3.79 μm | 3.81 μm | 885 nm |
| Asymmetry | 0.867 | | |
| Theta | -64.6° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.943$



Parameters:

A = 590.621 (brightness)

B = 121.287 (background)

a = 0.542 px

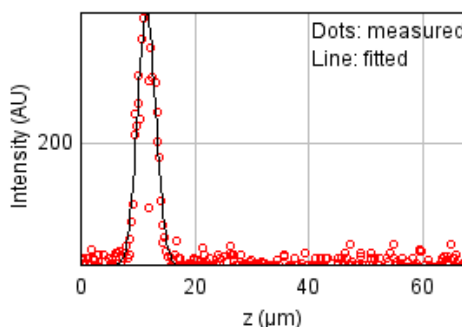
b = -0.055 px

c = 0.453 px

xc = 7.172 px

yc = 7.017 px

Z profile & fitting parameters:



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

Sum of residuals squared: 56444.5274

Standard deviation: 13.55944

R^2 : 0.87582

Parameters:

a = 111.91871

b = 294.98880

c = 11.66408

d = 1.60991

Bead 486

Date : Mon Oct 17 13:28:23 PDT 2022

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

Frame size : 10 pixels

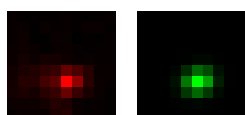
Coordinates : -100 um (x), 38.7 um (y), 11.6 um (z)

Corresponding bead : Not found

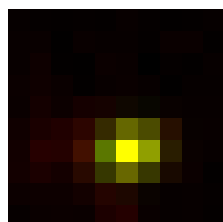
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|---------------|-----------|-------------|
| min | 382 nm | 395 nm | 223 nm |
| max | 473 nm | 489 nm | 223 nm |
| z | 2.4 um | 2.41 um | 885 nm |
| Asymmetry | 0.807 | | |
| Theta | 13.6° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 450.566 (brightness)

B = 124.723 (background)

a = 0.617 px

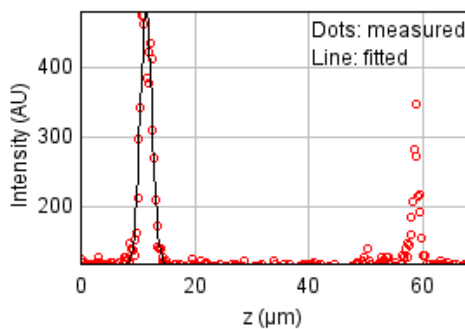
b = 0.073 px

c = 0.903 px

xc = 5.117 px

yc = 5.989 px

Z profile & fitting parameters:



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

Sum of residuals squared: 207749.686

Standard deviation: 26.01363

R^2 : 0.83188

Parameters:

a = 117.01342

b = 480.35765

c = 11.56526

d = 1.02102

Bead 487

Date : Mon Oct 17 13:28:23 PDT 2022

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

Frame size : 10 pixels

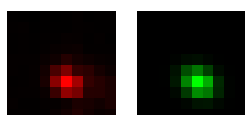
Coordinates : 70.9 μm (x), 8.34 μm (y), 11.7 μm (z)

Corresponding bead : Not found

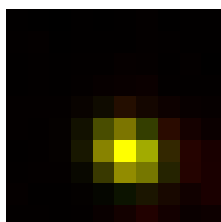
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 421 nm | 436 nm | 223 nm |
| max | 535 nm | 553 nm | 223 nm |
| z | 1.32 μm | 1.32 μm | 885 nm |
| Asymmetry | 0.788 | | |
| Theta | -28.5° | | |

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:

$A = 1127.900$ (brightness)

$B = 132.118$ (background)

$a = 0.535$ px

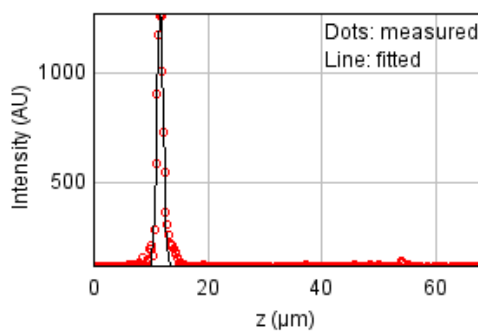
$b = -0.120$ px

$c = 0.690$ px

$x_c = 5.145$ px

$y_c = 6.089$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 128269.484

Standard deviation: 20.44055

$R^2: 0.97868$

Parameters:

$a = 116.99013$

$b = 1277.22548$

$c = 11.74020$

$d = 0.55925$

Bead 488

Date : Mon Oct 17 13:28:23 PDT 2022

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

Frame size : 10 pixels

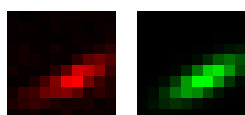
Coordinates : -154 μm (x), -19.5 μm (y), 10.9 μm (z)

Corresponding bead : Not found

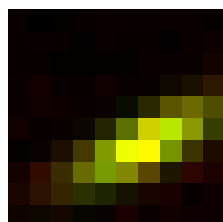
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 388 nm | 401 nm | 223 nm |
| max | 1.17 μm | 1.21 μm | 223 nm |
| z | 2.11 μm | 2.12 μm | 885 nm |
| Asymmetry | 0.332 | | |
| Theta | 26.7° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 284.279$ (brightness)

$B = 116.373$ (background)

$a = 0.258$ px

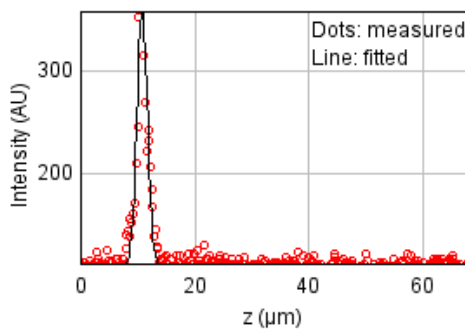
$b = 0.318$ px

$c = 0.730$ px

$x_c = 5.835$ px

$y_c = 5.700$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 36359.6344

Standard deviation: 10.88280

$R^2: 0.92217$

Parameters:

$a = 110.24712$

$b = 360.27638$

$c = 10.87558$

$d = 0.89754$

Bead 489

Date : Mon Oct 17 13:28:23 PDT 2022

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

Frame size : 10 pixels

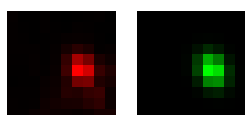
Coordinates : 37.7 μm (x), -35.4 μm (y), 11.2 μm (z)

Corresponding bead : Not found

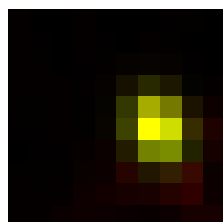
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 411 nm | 425 nm | 223 nm |
| max | 525 nm | 542 nm | 223 nm |
| z | 1.37 μm | 1.37 μm | 885 nm |
| Asymmetry | 0.784 | | |
| Theta | -67.5° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 887.209 (brightness)

B = 132.159 (background)

a = 0.749 px

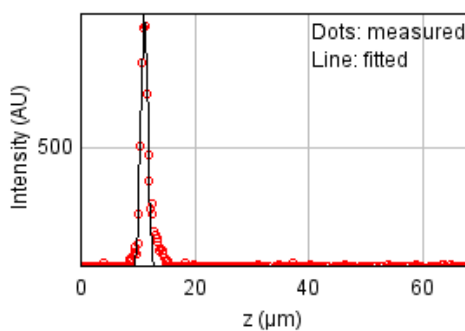
b = -0.108 px

c = 0.532 px

xc = 6.396 px

yc = 4.945 px

Z profile & fitting parameters:



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

Sum of residuals squared: 138012.010

Standard deviation: 21.20261

R^2 : 0.95644

Parameters:

a = 116.70564

b = 934.53187

c = 11.23564

d = 0.57991

Bead 490 (Rejected)

Date : Mon Oct 17 13:28:23 PDT 2022

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

Frame size : 10 pixels

Coordinates : 7.72 μm (x), -51.3 μm (y), 11.2 μm (z)

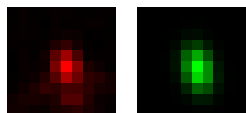
Corresponding bead : Not found

Reason of rejection : R or C parameter off limits.

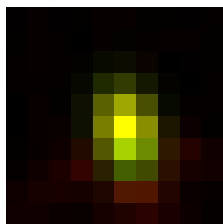
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 447 nm | 462 nm | 223 nm |
| max | 685 nm | 708 nm | 223 nm |
| z | 1.43 μm | 1.43 μm | 885 nm |
| Asymmetry | 0.652 | | |
| Theta | -77.1° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 681.440 (brightness)

B = 133.419 (background)

a = 0.653 px

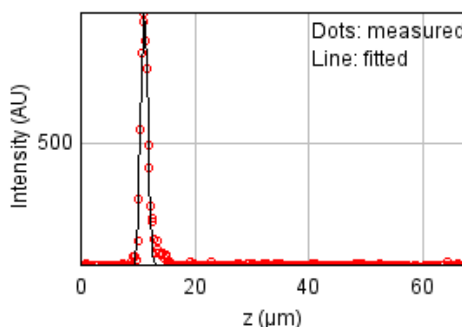
b = -0.084 px

c = 0.305 px

xc = 5.074 px

yc = 5.211 px

Z profile & fitting parameters:



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

Sum of residuals squared: 81624.3094

Standard deviation: 16.30574

R^2 : 0.97382

Parameters:

a = 114.63097

b = 915.88947

c = 11.23153

d = 0.60625

Bead 491

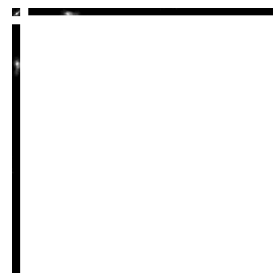
Date : Mon Oct 17 13:28:23 PDT 2022

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

Frame size : 10 pixels

Coordinates : -148 μm (x), -64.1 μm (y), 10.6 μm (z)

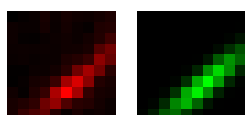
Corresponding bead : Not found



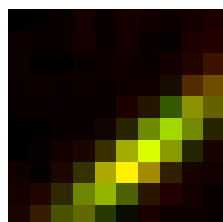
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 364 nm | 376 nm | 223 nm |
| max | 1.65 μm | 1.7 μm | 223 nm |
| z | 2.02 μm | 2.03 μm | 885 nm |
| Asymmetry | 0.221 | | |
| Theta | 40.0° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 220.151$ (brightness)

$B = 114.617$ (background)

$a = 0.449$ px

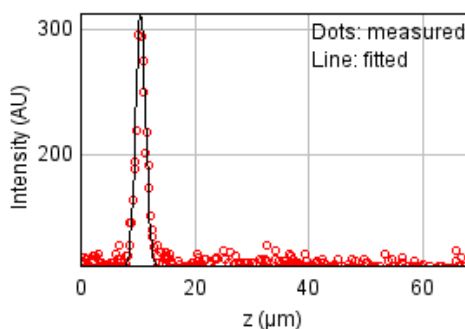
$b = 0.475$ px

$c = 0.615$ px

$x_c = 5.692$ px

$y_c = 6.237$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 19982.0974

Standard deviation: 8.06773

$R^2: 0.93068$

Parameters:

$a = 111.05676$

$b = 312.73861$

$c = 10.60858$

$d = 0.85709$

Bead 492

Date : Mon Oct 17 13:28:24 PDT 2022

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

Frame size : 10 pixels

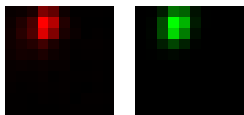
Coordinates : -114 μm (x), -66.9 μm (y), 32.9 μm (z)

Corresponding bead : Not found

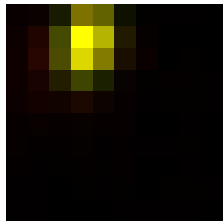
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 403 nm | 416 nm | 223 nm |
| max | 540 nm | 558 nm | 223 nm |
| z | 1.19 μm | 1.19 μm | 885 nm |
| Asymmetry | 0.745 | | |
| Theta | 73.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 1544.087$ (brightness)

$B = 129.130$ (background)

$a = 0.797$ px

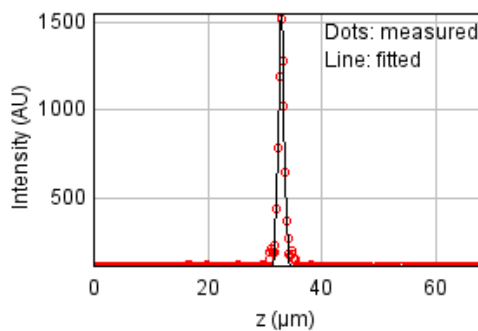
$b = 0.102$ px

$c = 0.491$ px

$x_c = 3.246$ px

$y_c = 1.273$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 80753.3233

Standard deviation: 16.21851

$R^2: 0.99028$

Parameters:

$a = 114.25327$

$b = 1555.94861$

$c = 32.94684$

$d = 0.50443$

Bead 493 (Rejected)

Date : Mon Oct 17 13:28:24 PDT 2022

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

Frame size : 10 pixels

Coordinates : 106 μm (x), -70.8 μm (y), 10.7 μm (z)

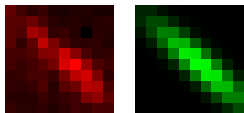
Corresponding bead : Not found

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

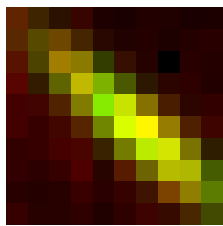
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 434 nm | 449 nm | 223 nm |
| max | 1.92 μm | 1.99 μm | 223 nm |
| z | 1.96 μm | 1.96 μm | 885 nm |
| Asymmetry | 0.226 | | |
| Theta | -41.6° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.853$



Parameters:

A = 129.337 (brightness)

B = 124.147 (background)

a = 0.334 px

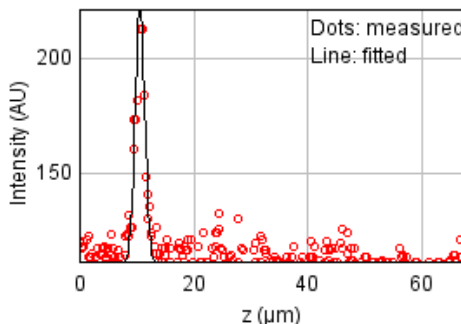
b = -0.336 px

c = 0.415 px

xc = 5.477 px

yc = 5.018 px

Z profile & fitting parameters:



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

Sum of residuals squared: 12656.4646

Standard deviation: 6.42077

R^2 : 0.85937

Parameters:

a = 111.54822

b = 221.47884

c = 10.65561

d = 0.83044

Bead 494

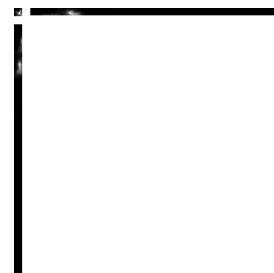
Date : Mon Oct 17 13:28:24 PDT 2022

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

Frame size : 10 pixels

Coordinates : -118 μm (x), -74.0 μm (y), 11.1 μm (z)

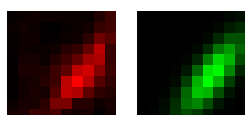
Corresponding bead : Not found



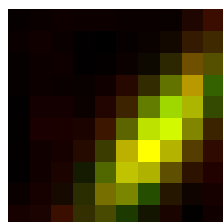
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 503 nm | 520 nm | 223 nm |
| max | 1.43 μm | 1.48 μm | 223 nm |
| z | 2.5 μm | 2.51 μm | 885 nm |
| Asymmetry | 0.352 | | |
| Theta | 52.6° | | |

XY profile & fitting parameters :

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



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



Parameters:

$A = 284.147$ (brightness)

$B = 120.252$ (background)

$a = 0.359$ px

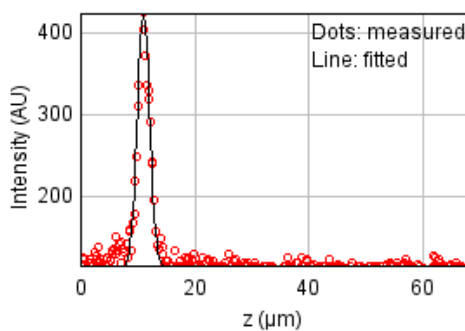
$b = 0.225$ px

$c = 0.238$ px

$x_c = 6.397$ px

$y_c = 5.375$ px

Z profile & fitting parameters:



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

Sum of residuals squared: 43691.3092

Standard deviation: 11.92967

$R^2: 0.94735$

Parameters:

$a = 114.01769$

$b = 425.72342$

$c = 11.10523$

$d = 1.06337$

Bead 495

Date : Mon Oct 17 13:28:24 PDT 2022

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

Frame size : 10 pixels

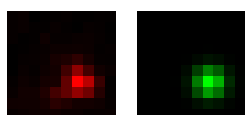
Coordinates : -67.3 μm (x), 84.2 μm (y), 12.0 μm (z)

Corresponding bead : Not found

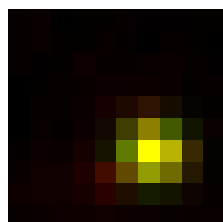
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 473 nm | 489 nm | 223 nm |
| max | 494 nm | 511 nm | 223 nm |
| z | 3.04 μm | 3.05 μm | 885 nm |
| Asymmetry | 0.956 | | |
| Theta | 3.6° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.943$



Parameters:

A = 568.627 (brightness)

B = 126.020 (background)

a = 0.550 px

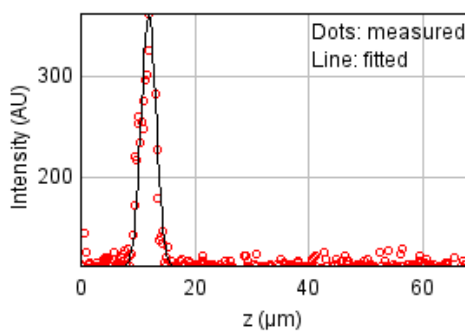
b = 0.003 px

c = 0.601 px

xc = 6.171 px

yc = 6.081 px

Z profile & fitting parameters:



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

Sum of residuals squared: 58984.1101

Standard deviation: 13.86112

R^2 : 0.91125

Parameters:

a = 112.61779

b = 362.45861

c = 12.01990

d = 1.29161

Bead 496

Date : Mon Oct 17 13:28:24 PDT 2022

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

Frame size : 10 pixels

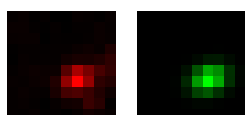
Coordinates : 90.2 μm (x), 65.0 μm (y), 11.9 μm (z)

Corresponding bead : Not found

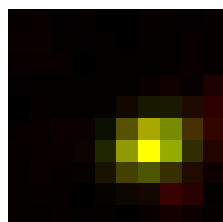
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|-------------------|-------------|
| min | 412 nm | 426 nm | 223 nm |
| max | 567 nm | 586 nm | 223 nm |
| z | 1.99 μm | 2.0 μm | 885 nm |
| Asymmetry | 0.727 | | |
| Theta | 17.6° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 535.805 (brightness)

B = 121.573 (background)

a = 0.451 px

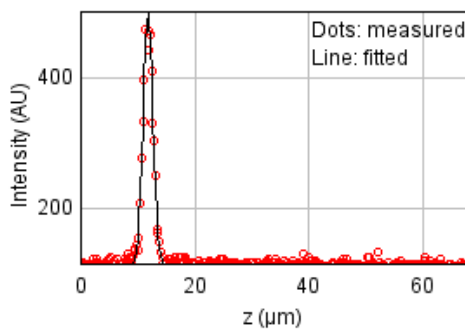
b = 0.107 px

c = 0.755 px

xc = 6.113 px

yc = 5.765 px

Z profile & fitting parameters:



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

Sum of residuals squared: 20404.4940

Standard deviation: 8.15255

R^2 : 0.97985

Parameters:

a = 112.78212

b = 503.09157

c = 11.89648

d = 0.84574

Bead 497

Date : Mon Oct 17 13:28:24 PDT 2022

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

Frame size : 10 pixels

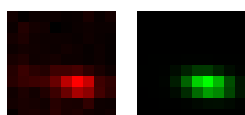
Coordinates : -145 μm (x), 58.7 μm (y), 11.0 μm (z)

Corresponding bead : Not found

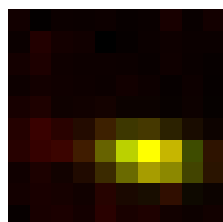
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 363 nm | 376 nm | 223 nm |
| max | 721 nm | 745 nm | 223 nm |
| z | 2.04 μm | 2.05 μm | 885 nm |
| Asymmetry | 0.504 | | |
| Theta | -7.2° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 246.369 (brightness)

B = 118.488 (background)

a = 0.270 px

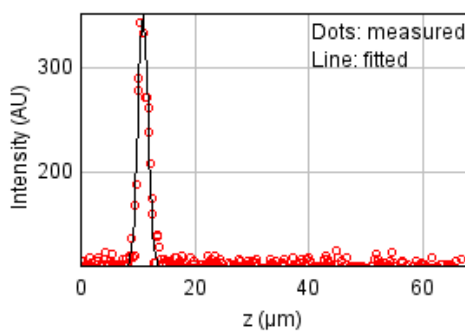
b = -0.095 px

c = 1.004 px

xc = 5.963 px

yc = 6.256 px

Z profile & fitting parameters:



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

Sum of residuals squared: 20796.7536

Standard deviation: 8.23054

R^2 : 0.94857

Parameters:

a = 111.28265

b = 351.21783

c = 11.01476

d = 0.86618

Bead 498

Date : Mon Oct 17 13:28:24 PDT 2022

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

Frame size : 10 pixels

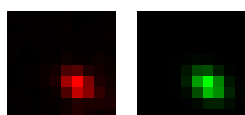
Coordinates : 81.6 μm (x), 4.33 μm (y), 11.7 μm (z)

Corresponding bead : Not found

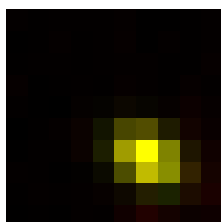
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 389 nm | 402 nm | 223 nm |
| max | 544 nm | 563 nm | 223 nm |
| z | 1.42 μm | 1.43 μm | 885 nm |
| Asymmetry | 0.715 | | |
| Theta | -32.8° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 981.534 (brightness)

B = 123.242 (background)

a = 0.579 px

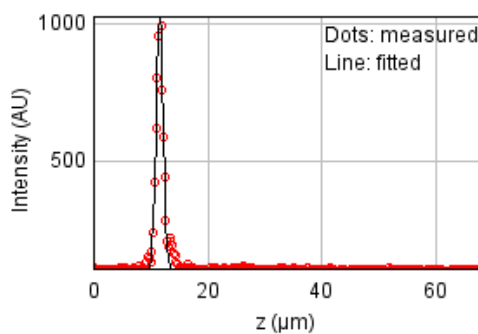
b = -0.197 px

c = 0.759 px

xc = 6.027 px

yc = 6.299 px

Z profile & fitting parameters:



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

Sum of residuals squared: 66650.7755

Standard deviation: 14.73443

R^2 : 0.98311

Parameters:

a = 115.38312

b = 1022.08384

c = 11.66490

d = 0.60499

Bead 499

Date : Mon Oct 17 13:28:25 PDT 2022

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

Frame size : 10 pixels

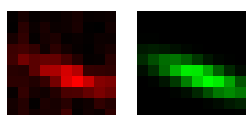
Coordinates : 145 um (x), 4.05 um (y), 10.5 um (z)

Corresponding bead : Not found

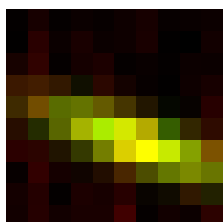
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|---------------|-----------|-------------|
| min | 390 nm | 403 nm | 223 nm |
| max | 1.55 um | 1.6 um | 223 nm |
| z | 2.44 um | 2.45 um | 885 nm |
| Asymmetry | 0.252 | | |
| Theta | -19.2° | | |

XY profile & fitting parameters :

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



Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
 $R^2 = 0.908$



Parameters:

A = 123.385 (brightness)

B = 114.783 (background)

a = 0.145 px

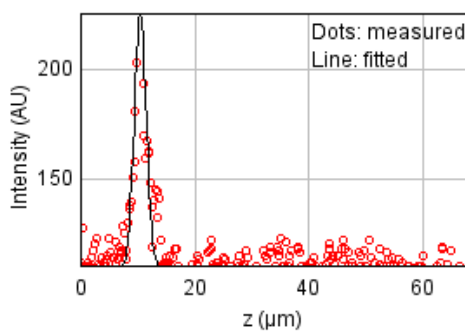
b = -0.257 px

c = 0.794 px

xc = 5.465 px

yc = 5.582 px

Z profile & fitting parameters:



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

Sum of residuals squared: 19712.4886

Standard deviation: 8.01312

R^2 : 0.83925

Parameters:

a = 110.67457

b = 224.89294

c = 10.53487

d = 1.03524

Bead 500

Date : Mon Oct 17 13:28:25 PDT 2022

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

Frame size : 10 pixels

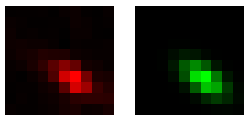
Coordinates : 91.3 μm (x), -11.7 μm (y), 11.7 μm (z)

Corresponding bead : Not found

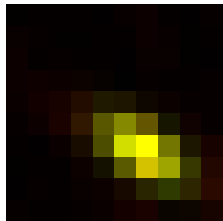
| FWHM | Non corrected | Corrected | Theoretical |
|-----------|--------------------|--------------------|-------------|
| min | 387 nm | 400 nm | 223 nm |
| max | 740 nm | 765 nm | 223 nm |
| z | 1.65 μm | 1.66 μm | 885 nm |
| Asymmetry | 0.522 | | |
| Theta | -34.7° | | |

XY profile & fitting parameters :

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



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



Parameters:

A = 669.592 (brightness)

B = 122.678 (background)

a = 0.457 px

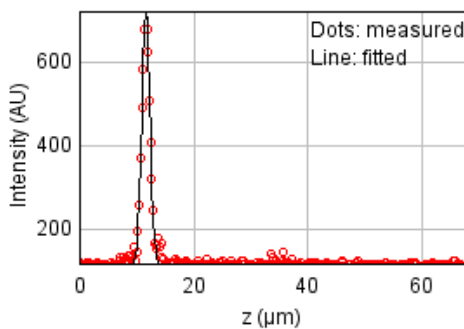
b = -0.306 px

c = 0.686 px

xc = 5.793 px

yc = 6.206 px

Z profile & fitting parameters:



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

Sum of residuals squared: 31175.1255

Standard deviation: 10.07708

R^2 : 0.98464

Parameters:

a = 115.47053

b = 720.88660

c = 11.70375

d = 0.70239