Bead 101 (Rejected)

Date : Mon Oct 17 13:27:37 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

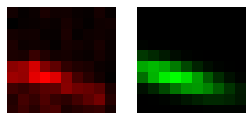Coordinates : -37.9 um (x), -56.3 um (y), 1.73 um (z)
Corresponding bead : Not found
Reason of rejection : The fitted bead is likely to be a different bead from the center bead.
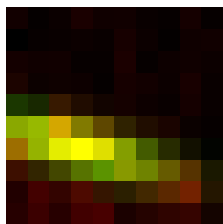
FWHM	Non corrected	Corrected	Theoretical
min	403 nm	417 nm	223 nm
max	1.61 um	1.66 um	223 nm
z	3.31 um	3.33 um	885 nm
Asymmetry	0.25		
Theta	-15.0°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.856$

Parameters:
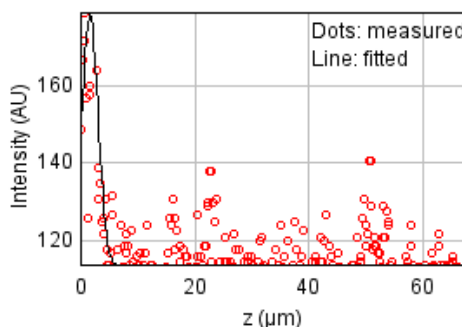 A = 172.464   (brightness)
 B = 120.058   (background)
 a = 0.104 px
 b = -0.194 px
 c = 0.774 px
xc = 2.650 px
yc = 5.891 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 23729.8764
Standard deviation: 8.79182
R^2: 0.64810
Parameters:
 a = 113.65973
 b = 178.84237
 c = 1.72704
 d = 1.40654

Bead 102

Date : Mon Oct 17 13:27:37 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
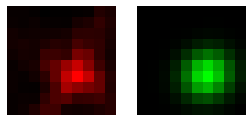Frame size : 10 pixels

Coordinates : -98.6 um (x), -59.8 um (y), 4.2 um (z)
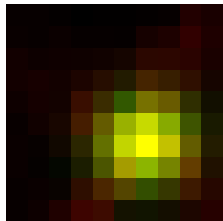Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	720 nm	744 nm	223 nm
max	779 nm	806 nm	223 nm
z	2.83 um	2.84 um	885 nm
Asymmetry	0.924		
Theta	28.4°		

XY profile & fitting parameters :

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

Fitted 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 = 355.751   (brightness)
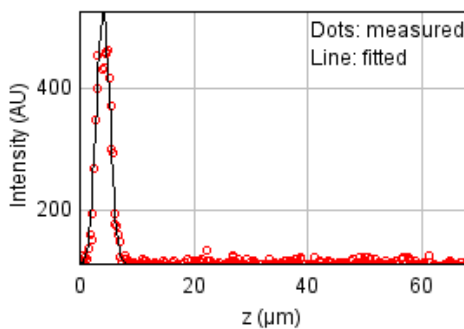B = 136.719   (background)
a = 0.229 px
b = 0.016 px
c = 0.250 px

xc = 5.902 px
yc = 5.818 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 57019.4499
Standard deviation: 13.62832
R^2: 0.96425
Parameters:
 a = 112.12106
 b = 523.97602
 c = 4.20400
 d = 1.20096

Bead 103 (Rejected)

Date : Mon Oct 17 13:27:38 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
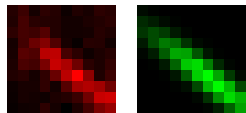
Coordinates : 142 um (x), -61.3 um (y), 2.22 um (z)
Corresponding bead : Not found
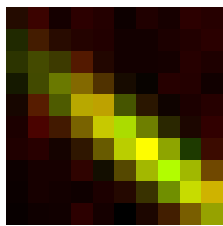Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	410 nm	424 nm	223 nm
max	2.31 um	2.38 um	223 nm
z	1.44 um	1.45 um	885 nm
Asymmetry	0.178		
Theta	-37.9°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.898$

Parameters:
 A = 94.265   (brightness)
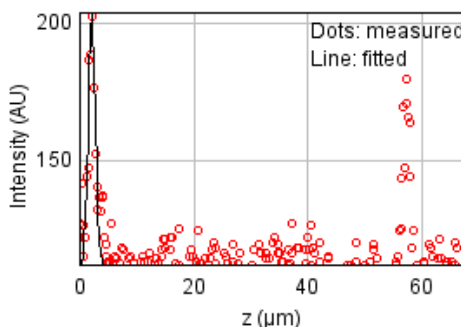 B = 115.105   (background)
 a = 0.317 px
 b = -0.374 px
 c = 0.506 px

xc = 6.324 px
yc = 6.427 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 37657.2796
Standard deviation: 11.07529
R^2: 0.51492
Parameters:
 a = 112.28715
 b = 203.74286
 c = 2.22033
 d = 0.61285

Bead 104 (Rejected)

Date : Mon Oct 17 13:27:38 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
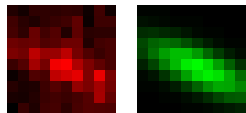
Coordinates : -98.1 um (x), -87.2 um (y), 1.66 um (z)
Corresponding bead : Not found
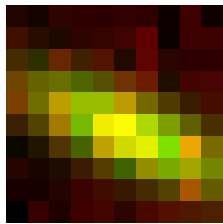Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	596 nm	616 nm	223 nm
max	1.86 um	1.93 um	223 nm
z	3.19 um	3.2 um	885 nm
Asymmetry	0.32		
Theta	-24.3°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
   $R^2 = 0.795$

Parameters:
 A = 64.820   (brightness)
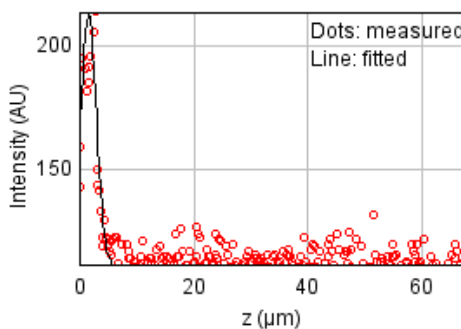 B = 124.383   (background)
 a = 0.096 px
 b = -0.127 px
 c = 0.320 px

xc = 5.259 px
yc = 5.373 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 19706.5252
Standard deviation: 8.01191
R^2: 0.84038
Parameters:
 a = 111.13012
 b = 213.38708
 c = 1.66427
 d = 1.35264

Bead 105 (Rejected)

Date : Mon Oct 17 13:27:38 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
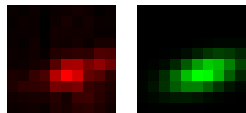
Coordinates : 106 um (x), 88.3 um (y), 3.85 um (z)
Corresponding bead : Not found
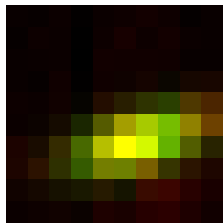Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	465 nm	481 nm	223 nm
max	1.07 um	1.11 um	223 nm
z	2.31 um	2.32 um	885 nm
Asymmetry	0.433		
Theta	16.2°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.896$

Parameters:
A = 291.478   (brightness)
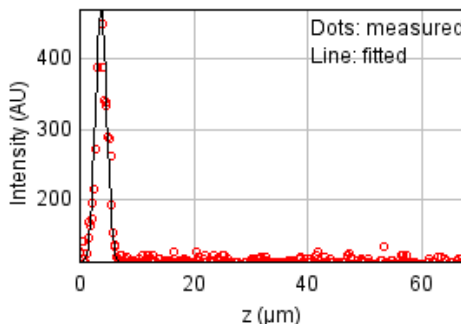B = 118.649   (background)
a = 0.156 px
b = 0.135 px
c = 0.582 px

xc = 5.625 px
yc = 5.766 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 62402.5025
Standard deviation: 14.25712
R^2: 0.93944
Parameters:
a = 111.77374
b = 470.81552
c = 3.85341
d = 0.98263

Bead 106

Date : Mon Oct 17 13:27:39 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
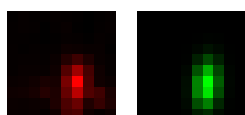Frame size : 10 pixels

Coordinates : 21.5 um (x), 84.6 um (y), 4.13 um (z)
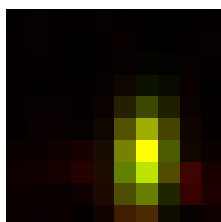Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	396 nm	410 nm	223 nm
max	742 nm	767 nm	223 nm
z	1.39 um	1.39 um	885 nm
Asymmetry	0.534		
Theta	85.7°		

XY profile & fitting parameters :

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

Fitted 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 = 633.351   (brightness)
B = 128.376   (background)
a = 0.850 px
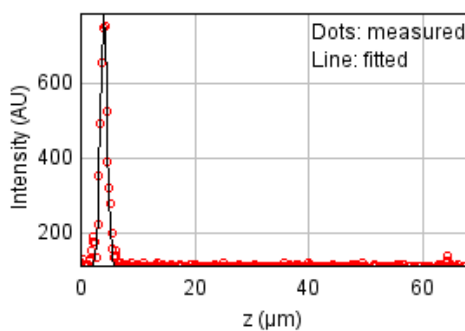b = 0.046 px
c = 0.247 px

xc = 5.880 px
yc = 6.302 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 47462.8878
Standard deviation: 12.43391
R^2: 0.97766
Parameters:
 a = 114.20970
 b = 785.90902
 c = 4.13438
 d = 0.58974

Bead 107

Date : Mon Oct 17 13:27:39 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
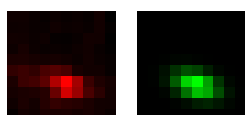Frame size : 10 pixels

Coordinates : -128 um (x), 75.4 um (y), 3.67 um (z)
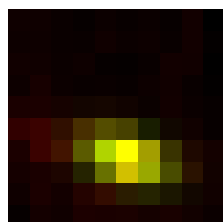Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	392 nm	405 nm	223 nm
max	698 nm	722 nm	223 nm
z	2.02 um	2.03 um	885 nm
Asymmetry	0.562		
Theta	-17.6°		

XY profile & fitting parameters :

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

Fitted 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:
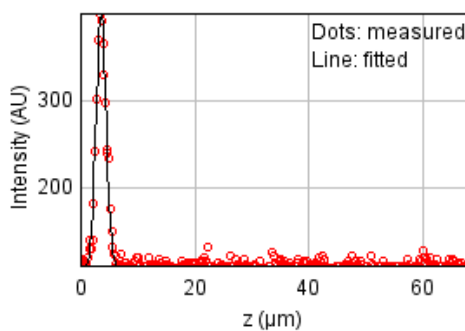 A = 280.617   (brightness)
 B = 118.961   (background)
 a = 0.330 px
 b = -0.172 px
 c = 0.818 px

xc = 4.940 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: 21125.5912
Standard deviation: 8.29536
R^2: 0.96298
Parameters:
 a = 111.43483
 b = 399.97451
 c = 3.67097
 d = 0.85781

Bead 108

Date : Mon Oct 17 13:27:39 PDT 2022
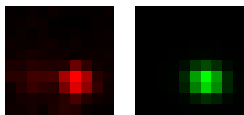Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -121 um (x), 51.6 um (y), 4.08 um (z)
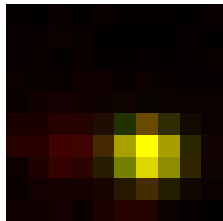Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	434 nm	449 nm	223 nm
max	534 nm	552 nm	223 nm
z	1.93 um	1.93 um	885 nm
Asymmetry	0.813		
Theta	-6.9°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
   $R^2 = 0.910$

Parameters:
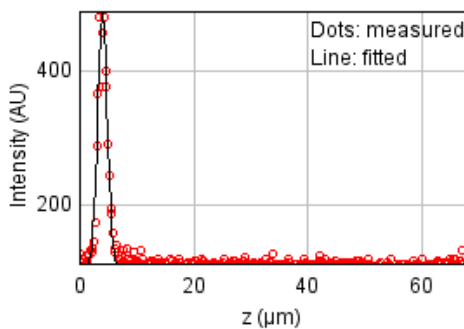 A = 368.143   (brightness)
 B = 125.460   (background)
 a = 0.473 px
 b = -0.029 px
 c = 0.708 px

xc = 6.014 px
yc = 6.372 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 47414.1869
Standard deviation: 12.42753
R^2: 0.95040
Parameters:
 a = 112.10028
 b = 491.60009
 c = 4.08474
 d = 0.81803

Bead 109 (Rejected)

Date : Mon Oct 17 13:27:39 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

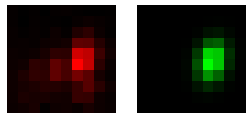Coordinates : -67.2 um (x), 12.6 um (y), 4.2 um (z)
Corresponding bead : Not found
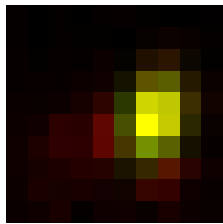Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	431 nm	446 nm	223 nm
max	619 nm	640 nm	223 nm
z	1.72 um	1.72 um	885 nm
Asymmetry	0.697		
Theta	76.1°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
  $R^2 = 0.856$

Parameters:
 A = 597.181   (brightness)
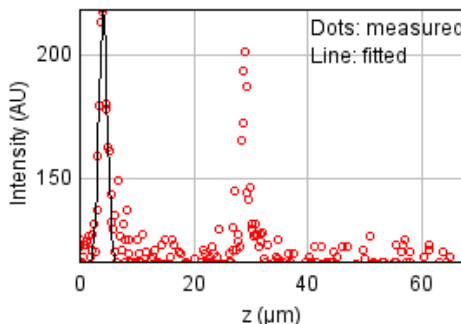 B = 144.171   (background)
 a = 0.700 px
 b = 0.086 px
 c = 0.372 px

xc = 6.371 px
yc = 4.659 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 45301.7554
Standard deviation: 12.14754
R^2: 0.56617
Parameters:
 a = 116.40900
 b = 218.67373
 c = 4.19912
 d = 0.72953

Bead 110 (Rejected)

Date : Mon Oct 17 13:27:40 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
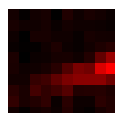
Coordinates : 5.94 um (x), -81.8 um (y), 2.05 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

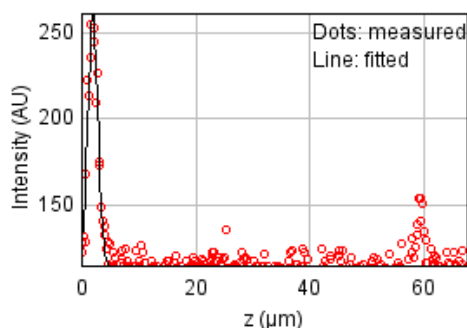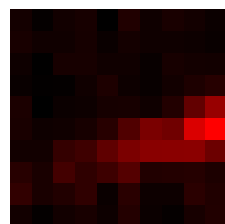| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	2.04 um	2.05 um	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 20602.8766
Standard deviation: 8.19209
R^2: 0.87487
Parameters:
 a = 114.24557
 b = 261.22165
 c = 2.05314
 d = 0.86665

Bead 111 (Rejected)

Date : Mon Oct 17 13:27:40 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
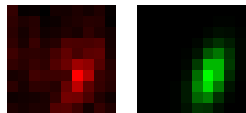
Coordinates : -149 um (x), 75.9 um (y), 2.53 um (z)
Corresponding bead : Not found
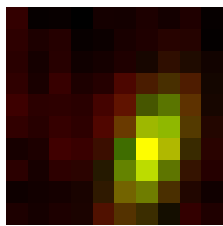Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	459 nm	475 nm	223 nm
max	907 nm	938 nm	223 nm
z	2.54 um	2.55 um	885 nm
Asymmetry	0.507		
Theta	69.5°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.793$

Parameters:
 A = 93.191   (brightness)
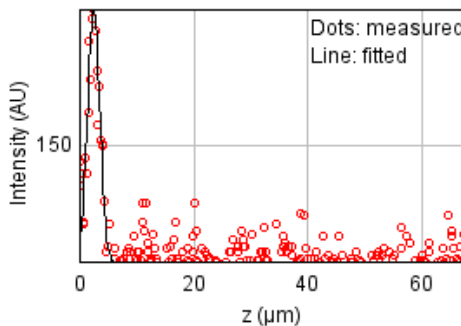 B = 118.057   (background)
 a = 0.578 px
 b = 0.155 px
 c = 0.221 px

 xc = 6.207 px
 yc = 6.056 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 13675.9845
Standard deviation: 6.67437
R^2: 0.80898
Parameters:
 a = 111.28687
 b = 195.27832
 c = 2.53376
 d = 1.07939

Bead 112

Date : Mon Oct 17 13:27:40 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
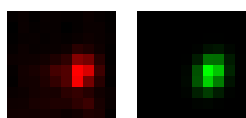Frame size : 10 pixels

Coordinates : -83.8 um (x), -25.6 um (y), 3.97 um (z)
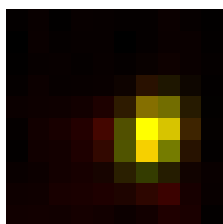Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	416 nm	430 nm	223 nm
max	540 nm	558 nm	223 nm
z	1.36 um	1.36 um	885 nm
Asymmetry	0.771		
Theta	63.9°		

XY profile & fitting parameters :

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

Fitted 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:
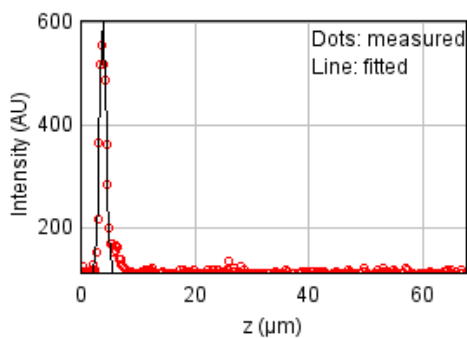 A = 574.150   (brightness)
 B = 129.945   (background)
 a = 0.714 px
 b = 0.124 px
 c = 0.521 px

xc = 6.272 px
yc = 5.237 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 38541.3506
Standard deviation: 11.20455
R^2: 0.96555
Parameters:
 a = 113.51227
 b = 603.35633
 c = 3.97459
 d = 0.57608

Bead 113

Date : Mon Oct 17 13:27:40 PDT 2022
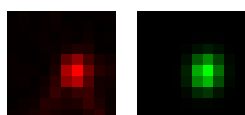Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : 41.5 um (x), -42.7 um (y), 4.09 um (z)
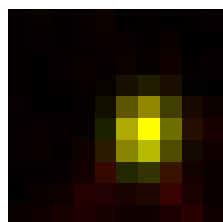Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	463 nm	478 nm	223 nm
max	535 nm	554 nm	223 nm
z	1.44 um	1.45 um	885 nm
Asymmetry	0.864		
Theta	78.3°		

XY profile & fitting parameters :

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

Fitted 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 = 580.445   (brightness)
B = 127.624   (background)
a = 0.620 px
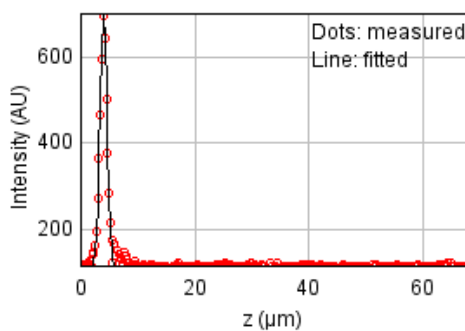b = 0.031 px
c = 0.475 px

xc = 5.821 px
yc = 5.175 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 23495.4251
Standard deviation: 8.74828
R^2: 0.98620
Parameters:
a = 113.06900
b = 706.05331
c = 4.09299
d = 0.61228

Bead 114

Date : Mon Oct 17 13:27:40 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

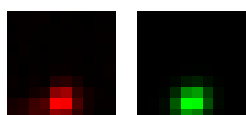Coordinates : -50.3 um (x), -57.9 um (y), 27.5 um (z)
Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	457 nm	472 nm	223 nm
max	527 nm	545 nm	223 nm
z	1.43 um	1.43 um	885 nm
Asymmetry	0.867		
Theta	39.9°		

XY profile & fitting parameters :

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

Fitted 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:
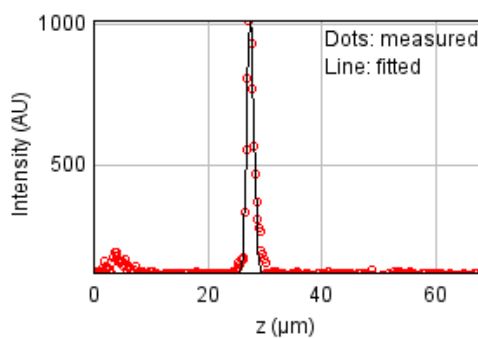A = 1033.444   (brightness)
B = 124.186   (background)
a = 0.549 px
b = 0.078 px
c = 0.578 px

xc = 4.477 px
yc = 7.974 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 163057.625
Standard deviation: 23.04631
R^2: 0.95862
Parameters:
a = 118.75640
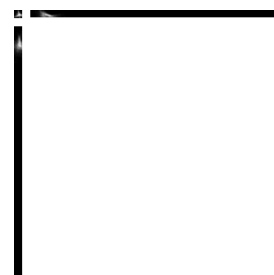b = 1012.92839
c = 27.53878
d = 0.60552

Bead 115

Date : Mon Oct 17 13:27:41 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

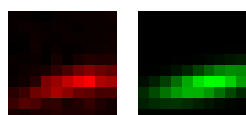Coordinates : 11.5 um (x), -77.2 um (y), 5.0 um (z)
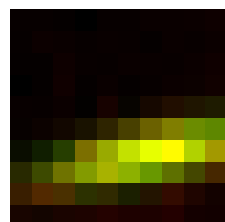Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	417 nm	431 nm	223 nm
max	1.7 um	1.76 um	223 nm
z	2.02 um	2.03 um	885 nm
Asymmetry	0.245		
Theta	11.4°		

XY profile & fitting parameters :

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

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

Parameters:
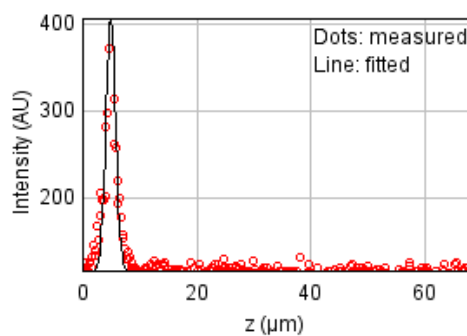 A = 331.632   (brightness)
 B = 118.747   (background)
 a = 0.075 px
 b = 0.141 px
 c = 0.744 px

xc = 6.106 px
yc = 6.133 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 47251.5211
Standard deviation: 12.40620
R^2: 0.92269
Parameters:
 a = 115.08366
 b = 407.52308
 c = 5.00396
 d = 0.85692

Bead 116 (Rejected)

Date : Mon Oct 17 13:27:41 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

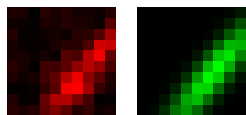Coordinates : -132 um (x), -86.1 um (y), 3.56 um (z)
Corresponding bead : Not found
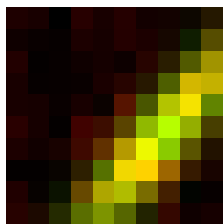Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	493 nm	510 nm	223 nm
max	2.22 um	2.29 um	223 nm
z	1.55 um	1.56 um	885 nm
Asymmetry	0.222		
Theta	50.7°		

XY profile & fitting parameters :

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

Fitted on i(x,y) = A * exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B
$R^2 = 0.897$

Parameters:
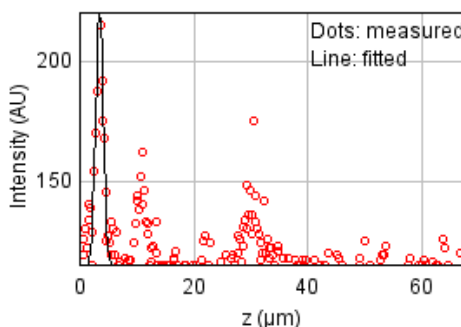 A = 115.947   (brightness)
 B = 115.243   (background)
 a = 0.341 px
 b = 0.257 px
 c = 0.238 px

xc = 6.594 px
yc = 5.477 px

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 35064.7414
Standard deviation: 10.68725
R^2: 0.61844
Parameters:
 a = 115.53821
 b = 220.75517
 c = 3.56380
 d = 0.66001

Bead 117 (Rejected)

Date : Mon Oct 17 13:27:41 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

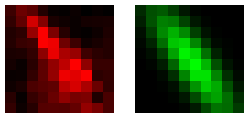Coordinates : 89.7 um (x), -89.7 um (y), 3.75 um (z)
Corresponding bead : Not found
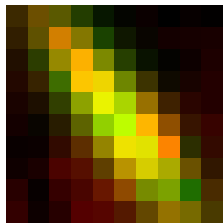Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	593 nm	613 nm	223 nm
max	2.09 um	2.16 um	223 nm
z	1.65 um	1.66 um	885 nm
Asymmetry	0.284		
Theta	-54.7°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.784$

Parameters:
A = 100.539 (brightness)
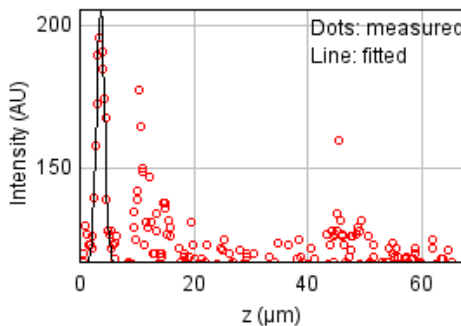B = 120.062 (background)
a = 0.265 px
b = -0.166 px
c = 0.148 px

xc = 4.777 px
yc = 4.834 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 29406.1426
Standard deviation: 9.78701
R^2: 0.59464
Parameters:
a = 116.67534
b = 205.74149
c = 3.75133
d = 0.70063

Bead 118

Date : Mon Oct 17 13:27:41 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
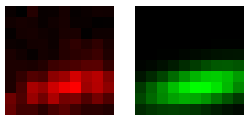Frame size : 10 pixels

Coordinates : 6.74 um (x), -96.5 um (y), 4.59 um (z)
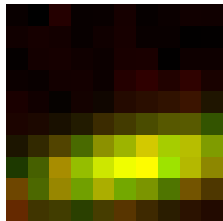Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	588 nm	607 nm	223 nm
max	1.85 um	1.91 um	223 nm
z	3.37 um	3.38 um	885 nm
Asymmetry	0.318		
Theta	10.3°		

XY profile & fitting parameters :

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

Fitted 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:
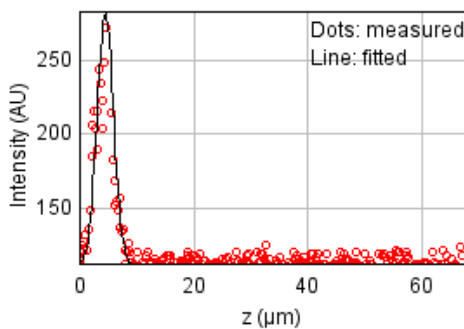 A = 132.450   (brightness)
 B = 119.752   (background)
 a = 0.050 px
 b = 0.061 px
 c = 0.378 px

xc = 5.615 px
yc = 6.858 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 44503.9821
Standard deviation: 12.04010
R^2: 0.87347
Parameters:
 a = 112.77994
 b = 282.48135
 c = 4.59039
 d = 1.43115

Bead 119 (Rejected)

Date : Mon Oct 17 13:27:42 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
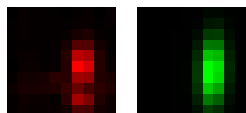
Coordinates : -3.21 um (x), 81.5 um (y), 4.42 um (z)
Corresponding bead : Not found
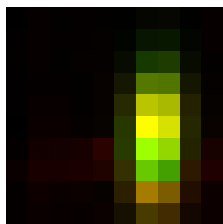Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	402 nm	416 nm	223 nm
max	1.04 um	1.08 um	223 nm
z	1.41 um	1.41 um	885 nm
Asymmetry	0.385		
Theta	87.9°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.873$

Parameters:
 A = 596.106   (brightness)
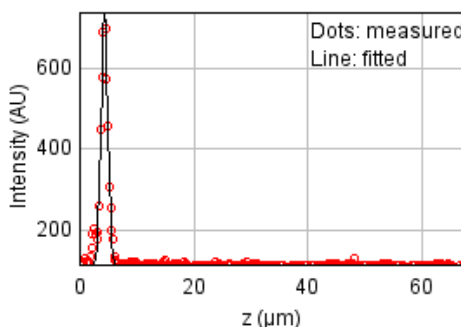 B = 123.495   (background)
 a = 0.828 px
 b = 0.026 px
 c = 0.124 px

xc = 6.413 px
yc = 5.436 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 38058.8626
Standard deviation: 11.13419
R^2: 0.97931
Parameters:
 a = 114.57664
 b = 736.33262
 c = 4.42003
 d = 0.59702

Bead 120 (Rejected)

Date : Mon Oct 17 13:27:42 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
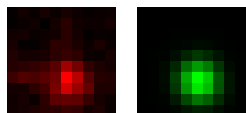
Coordinates : -144 um (x), 65.9 um (y), 4.35 um (z)
Corresponding bead : Not found
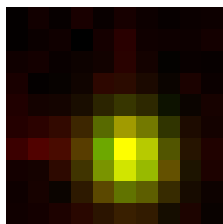Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	644 nm	666 nm	223 nm
max	676 nm	699 nm	223 nm
z	2.72 um	2.74 um	885 nm
Asymmetry	0.953		
Theta	-65.0°		

XY profile & fitting parameters :

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

Fitted 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 = 116.989   (brightness)
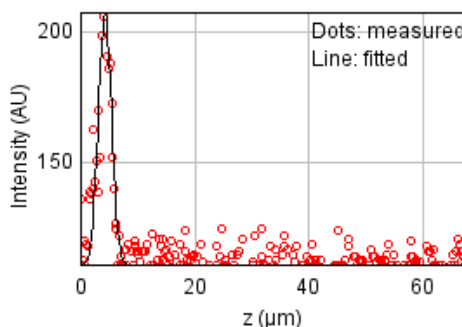 B = 112.385   (background)
 a = 0.318 px
 b = -0.011 px
 c = 0.299 px

xc = 5.158 px
yc = 6.330 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 16062.4180
Standard deviation: 7.23330
R^2: 0.83629
Parameters:
 a = 110.40245
 b = 207.19035
 c = 4.35107
 d = 1.15718

Bead 121 (Rejected)

Date : Mon Oct 17 13:27:42 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
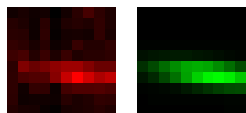
Coordinates : 142 um (x), 58.6 um (y), 2.96 um (z)
Corresponding bead : Not found
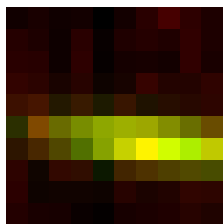Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	367 nm	379 nm	223 nm
max	1.77 um	1.83 um	223 nm
z	2.43 um	2.44 um	885 nm
Asymmetry	0.207		
Theta	-6.1°		

XY profile & fitting parameters :

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

Fitted 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 = 102.059   (brightness)
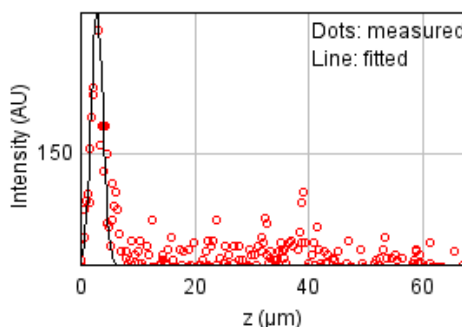 B = 115.494   (background)
 a = 0.054 px
 b = -0.101 px
 c = 0.987 px

xc = 6.397 px
yc = 5.732 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 18022.7708
Standard deviation: 7.66199
R^2: 0.77212
Parameters:
 a = 111.08704
 b = 199.21549
 c = 2.95530
 d = 1.03145

Bead 122

Date : Mon Oct 17 13:27:42 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
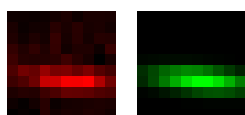Frame size : 10 pixels

Coordinates : 150 um (x), 58.3 um (y), 3.4 um (z)
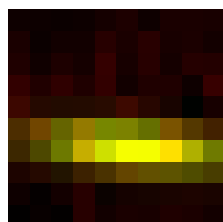Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	367 nm	379 nm	223 nm
max	1.56 um	1.62 um	223 nm
z	1.8 um	1.8 um	885 nm
Asymmetry	0.235		
Theta	-4.9°		

XY profile & fitting parameters :

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

Fitted 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 = 141.627   (brightness)
 B = 115.804   (background)
 a = 0.062 px
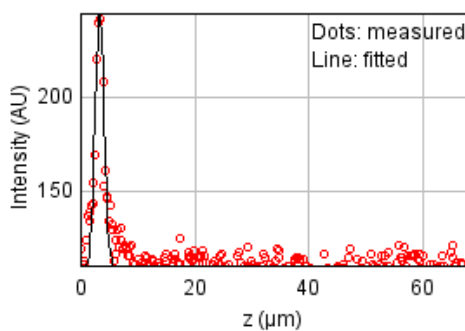 b = -0.079 px
 c = 0.990 px

xc = 5.344 px
yc = 5.863 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 17438.5153
Standard deviation: 7.53678
R^2: 0.86281
Parameters:
 a = 109.94998
 b = 246.23472
 c = 3.40427
 d = 0.76340

Bead 123

Date : Mon Oct 17 13:27:43 PDT 2022
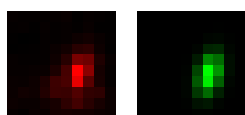Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -36.9 um (x), 30.7 um (y), 4.69 um (z)
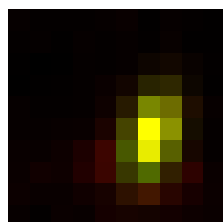Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	368 nm	381 nm	223 nm
max	653 nm	675 nm	223 nm
z	1.72 um	1.72 um	885 nm
Asymmetry	0.564		
Theta	75.0°		

XY profile & fitting parameters :

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

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

R^2 = 0.924

Parameters:
 A = 718.599   (brightness)
 B = 135.267   (background)
 a = 0.944 px
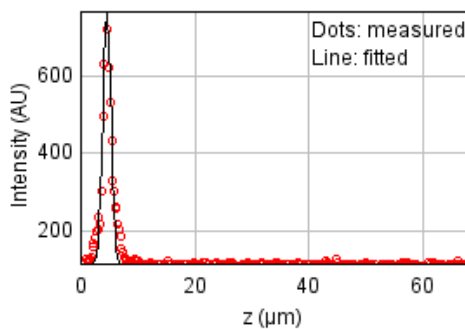 b = 0.169 px
 c = 0.360 px

xc = 6.145 px
yc = 5.321 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 105146.600
Standard deviation: 18.50668
R^2: 0.95790
Parameters:
 a = 115.17536
 b = 766.19273
 c = 4.68689
 d = 0.72841

Bead 124 (Rejected)

Date : Mon Oct 17 13:27:43 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
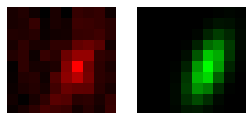
Coordinates : 95.7 um (x), -5.96 um (y), 2.19 um (z)
Corresponding bead : Not found
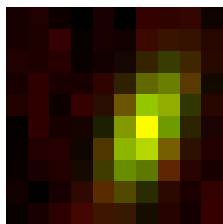Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	480 nm	496 nm	223 nm
max	1.02 um	1.06 um	223 nm
z	2.53 um	2.54 um	885 nm
Asymmetry	0.47		
Theta	65.6°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.846$

Parameters:
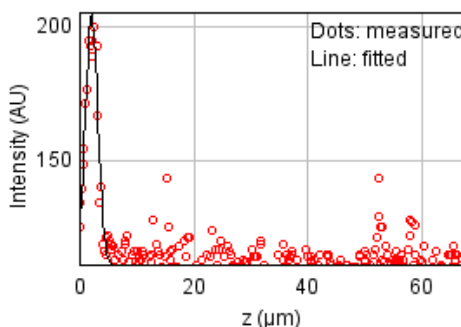A = 80.547   (brightness)
B = 120.057   (background)
a = 0.505 px
b = 0.171 px
c = 0.206 px

xc = 5.976 px
yc = 5.110 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 15661.8309
Standard deviation: 7.14253
R^2: 0.81928
Parameters:
a = 111.68060
b = 204.88278
c = 2.18502
d = 1.07430

Bead 125

Date : Mon Oct 17 13:27:43 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
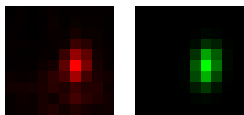Frame size : 10 pixels

Coordinates : -37.6 um (x), -37.8 um (y), 4.5 um (z)
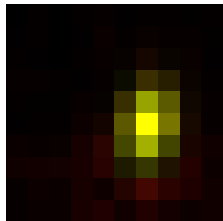Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	379 nm	392 nm	223 nm
max	583 nm	602 nm	223 nm
z	1.48 um	1.49 um	885 nm
Asymmetry	0.651		
Theta	80.9°		

XY profile & fitting parameters :

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

Fitted 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 = 628.895   (brightness)
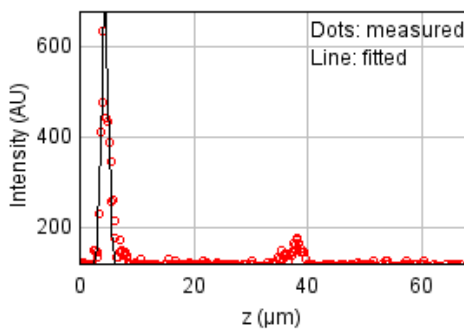 B = 134.671   (background)
 a = 0.919 px
 b = 0.084 px
 c = 0.409 px

xc = 6.079 px
yc = 5.028 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 131587.619
Standard deviation: 20.70324
R^2: 0.92286
Parameters:
 a = 118.42738
 b = 685.27674
 c = 4.50078
 d = 0.62884

Bead 126 (Rejected)

Date : Mon Oct 17 13:27:43 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -30.6 um (x), -64.9 um (y), 63.7 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

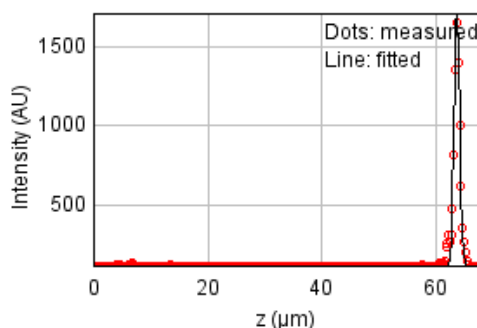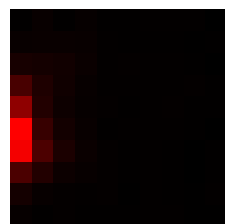| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	1.15 um	1.15 um	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 150610.713
Standard deviation: 22.14924
R^2: 0.98500
Parameters:
 a = 117.27305
 b = 1726.66704
 c = 63.71643
 d = 0.48628

Bead 127 (Rejected)

Date : Mon Oct 17 13:27:43 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

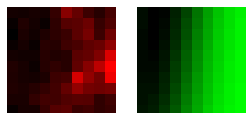Coordinates : 72.7 um (x), -73.2 um (y), 2.92 um (z)
Corresponding bead : Not found
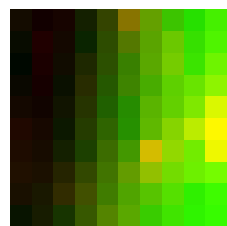Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	1.81 um	1.88 um	223 nm
max	11.6 um	12.0 um	223 nm
z	1.48 um	1.49 um	885 nm
Asymmetry	0.157		
Theta	83.1°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.540$

Parameters:
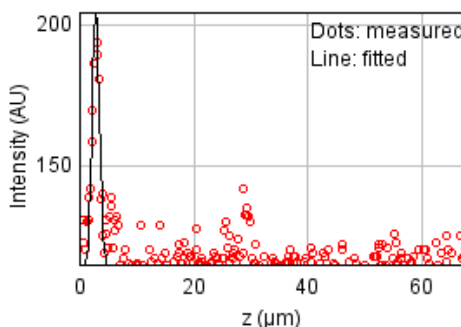A = -66.352   (brightness)
B = 176.859   (background)
a = 0.040 px
b = 0.005 px
c = 0.002 px

xc = 1.255 px
yc = -0.479 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 17347.8437
Standard deviation: 7.51716
R^2: 0.69874
Parameters:
a = 114.33285
b = 204.92692
c = 2.91592
d = 0.62922

Bead 128 (Rejected)

Date : Mon Oct 17 13:27:43 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
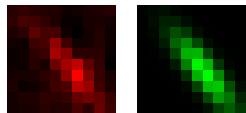
Coordinates : 87.3 um (x), -77.4 um (y), 3.37 um (z)
Corresponding bead : Not found
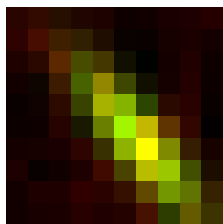Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	425 nm	439 nm	223 nm
max	1.49 um	1.54 um	223 nm
z	2.44 um	2.45 um	885 nm
Asymmetry	0.286		
Theta	-52.1°		

XY profile & fitting parameters :

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

Fitted 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 = 123.498   (brightness)
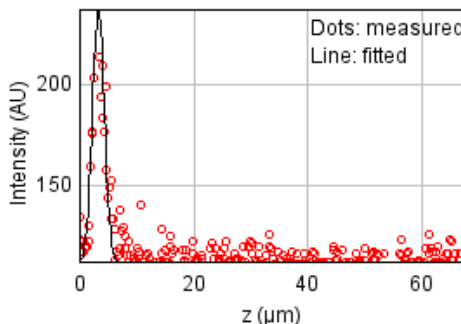 B = 120.268   (background)
 a = 0.486 px
 b = -0.331 px
 c = 0.318 px

xc = 5.623 px
yc = 5.634 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 21474.6910
Standard deviation: 8.36362
R^2: 0.85032
Parameters:
 a = 112.54090
 b = 236.87792
 c = 3.37323
 d = 1.03550

Bead 129 (Rejected)

Date : Mon Oct 17 13:27:44 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : 5.94 um (x), -81.8 um (y), 2.05 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

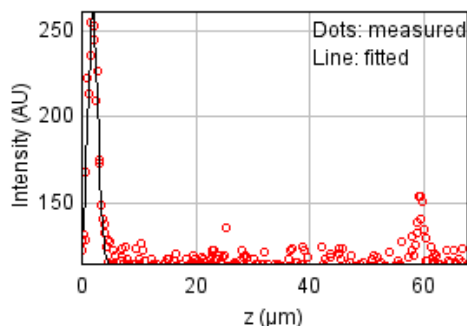| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	2.04 um	2.05 um	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 20602.8766
Standard deviation: 8.19209
R^2: 0.87487
Parameters:
 a = 114.24557
 b = 261.22165
 c = 2.05314
 d = 0.86665

Bead 130 (Rejected)

Date : Mon Oct 17 13:27:44 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

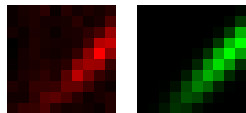Coordinates : -132 um (x), -86.1 um (y), 2.99 um (z)
Corresponding bead : Not found
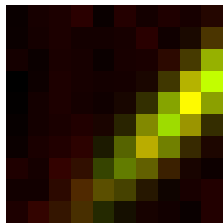Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	406 nm	420 nm	223 nm
max	2.27 um	2.35 um	223 nm
z	1.57 um	1.57 um	885 nm
Asymmetry	0.179		
Theta	45.5°		

XY profile & fitting parameters :

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

Fitted 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:
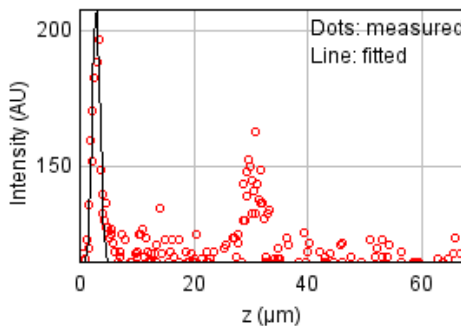 A = 119.994   (brightness)
 B = 112.099   (background)
 a = 0.426 px
 b = 0.394 px
 c = 0.414 px

xc = 8.695 px
yc = 3.228 px

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 29519.6623
Standard deviation: 9.80588
R^2: 0.60897
Parameters:
 a = 114.50960
 b = 208.71526
 c = 2.98976
 d = 0.66618

Bead 131

Date : Mon Oct 17 13:27:44 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
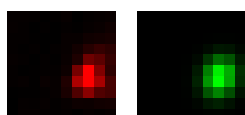Frame size : 10 pixels

Coordinates : 116 um (x), 70.5 um (y), 54.7 um (z)
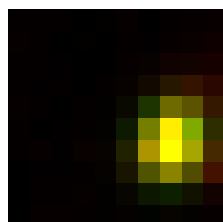Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	516 nm	533 nm	223 nm
max	618 nm	639 nm	223 nm
z	1.49 um	1.5 um	885 nm
Asymmetry	0.834		
Theta	70.1°		

XY profile & fitting parameters :

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

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

Parameters:
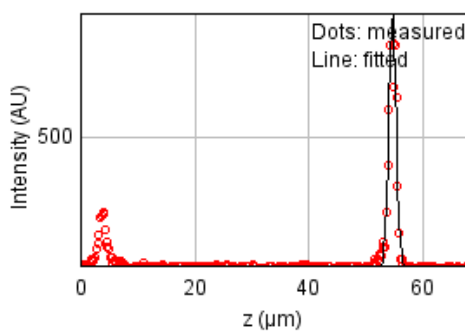 A = 712.651   (brightness)
 B = 117.903   (background)
 a = 0.487 px
 b = 0.049 px
 c = 0.369 px

xc = 7.096 px
yc = 5.583 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 243342.678
Standard deviation: 28.15399
R^2: 0.92071
Parameters:
 a = 117.90653
 b = 873.97863
 c = 54.72762
 d = 0.63460

Bead 132

Date : Mon Oct 17 13:27:44 PDT 2022
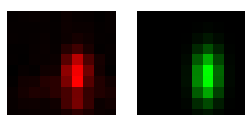Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -10.4 um (x), 60.0 um (y), 4.94 um (z)
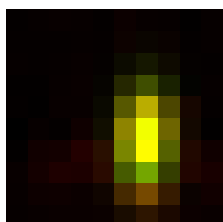Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	412 nm	426 nm	223 nm
max	817 nm	845 nm	223 nm
z	1.71 um	1.72 um	885 nm
Asymmetry	0.504		
Theta	88.8°		

XY profile & fitting parameters :

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

Fitted 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:
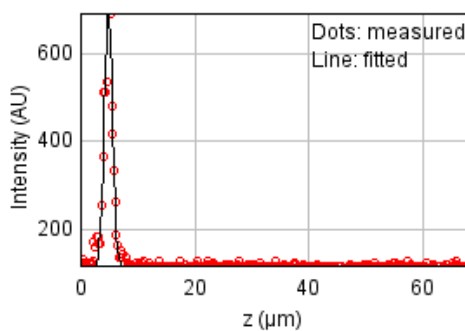 A = 642.117   (brightness)
 B = 126.535   (background)
 a = 0.791 px
 b = 0.012 px
 c = 0.201 px

xc = 5.907 px
yc = 5.472 px

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2)
Sum of residuals squared: 55465.5611
Standard deviation: 13.44134
R^2: 0.97183
Parameters:
 a = 114.97448
 b = 697.97385
 c = 4.93696
 d = 0.72651

Bead 133 (Rejected)

Date : Mon Oct 17 13:27:44 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

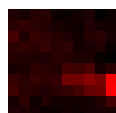Coordinates : 106 um (x), 57.9 um (y), 3.44 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

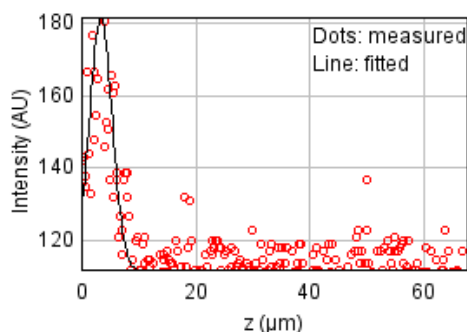| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	4.7 um	4.72 um	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 23089.9879
Standard deviation: 8.67247
R^2: 0.75338
Parameters:
 a = 111.65067
 b = 181.54975
 c = 3.44183
 d = 1.99689

Bead 134 (Rejected)

Date : Mon Oct 17 13:27:45 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

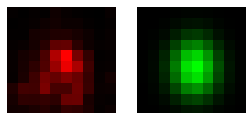Coordinates : -46.7 um (x), 52.8 um (y), 4.2 um (z)
Corresponding bead : Not found
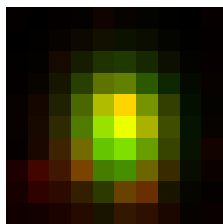Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	746 nm	771 nm	223 nm
max	924 nm	955 nm	223 nm
z	1.91 um	1.92 um	885 nm
Asymmetry	0.807		
Theta	-88.6°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
   $R^2 = 0.806$

Parameters:
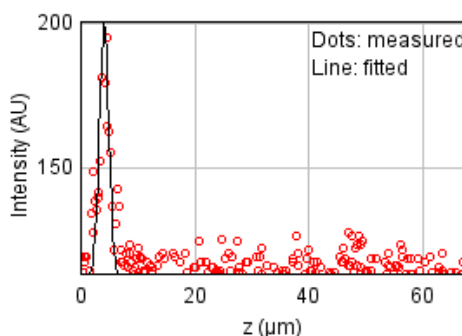 A = 288.085   (brightness)
 B = 121.488   (background)
 a = 0.241 px
 b = -0.002 px
 c = 0.157 px

xc = 4.758 px
yc = 5.078 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 16471.4464
Standard deviation: 7.32482
R^2: 0.74397
Parameters:
 a = 113.39214
 b = 200.85402
 c = 4.19863
 d = 0.81104

Bead 135 (Rejected)

Date : Mon Oct 17 13:27:45 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

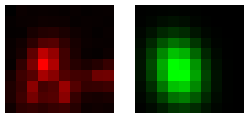Coordinates : -118 nm (x), 23.2 um (y), 6.95 um (z)
Corresponding bead : Not found
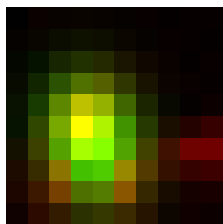Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	760 nm	786 nm	223 nm
max	1.01 um	1.05 um	223 nm
z	5.93 um	5.96 um	885 nm
Asymmetry	0.75		
Theta	-75.9°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.754$

Parameters:
A = 348.517   (brightness)
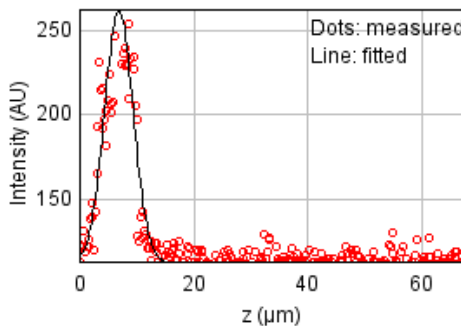B = 142.808   (background)
a = 0.226 px
b = -0.024 px
c = 0.137 px

xc = 3.465 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: 40897.3375
Standard deviation: 11.54193
R^2: 0.90638
Parameters:
a = 112.63659
b = 262.46027
c = 6.94877
d = 2.52005

Bead 136

Date : Mon Oct 17 13:27:45 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
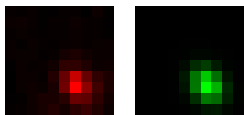Frame size : 10 pixels

Coordinates : 38.5 um (x), 3.13 um (y), 5.27 um (z)
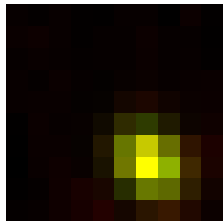Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	454 nm	469 nm	223 nm
max	572 nm	591 nm	223 nm
z	1.69 um	1.69 um	885 nm
Asymmetry	0.794		
Theta	-53.3°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
  $R^2 = 0.955$

Parameters:
 A = 508.047   (brightness)
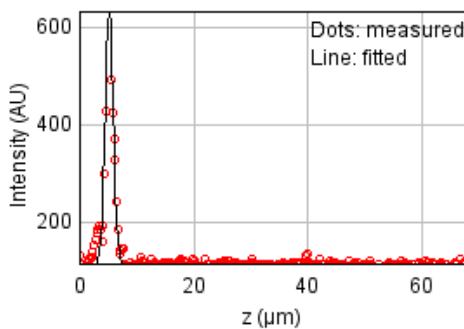 B = 122.350   (background)
 a = 0.565 px
 b = -0.115 px
 c = 0.496 px

xc = 6.129 px
yc = 6.774 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 84174.7591
Standard deviation: 16.55853
R^2: 0.94633
Parameters:
 a = 114.25556
 b = 631.28158
 c = 5.27273
 d = 0.71590

Bead 137

Date : Mon Oct 17 13:27:45 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
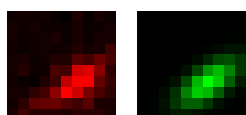Frame size : 10 pixels

Coordinates : -121 um (x), -20.3 um (y), 4.34 um (z)
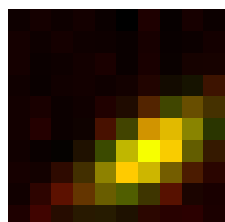Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	475 nm	491 nm	223 nm
max	1.04 um	1.08 um	223 nm
z	2.03 um	2.04 um	885 nm
Asymmetry	0.456		
Theta	35.1°		

XY profile & fitting parameters :

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

Fitted 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:
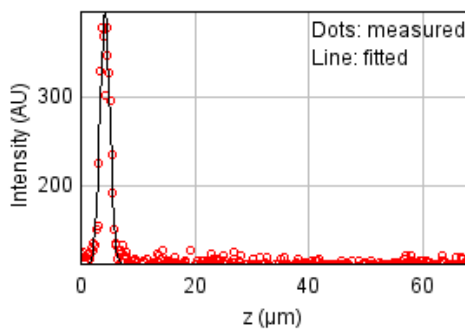 A = 207.630   (brightness)
 B = 119.958   (background)
 a = 0.280 px
 b = 0.222 px
 c = 0.440 px

xc = 6.012 px
yc = 6.107 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 35596.2615
Standard deviation: 10.76795
R^2: 0.93826
Parameters:
 a = 111.65582
 b = 397.38644
 c = 4.33773
 d = 0.86130

Bead 138

Date : Mon Oct 17 13:27:46 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
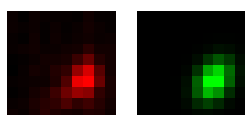Frame size : 10 pixels

Coordinates : -101 um (x), -39.6 um (y), 4.38 um (z)
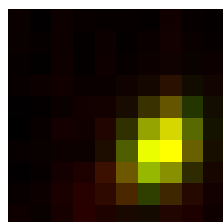Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	486 nm	502 nm	223 nm
max	676 nm	699 nm	223 nm
z	1.43 um	1.43 um	885 nm
Asymmetry	0.718		
Theta	56.8°		

XY profile & fitting parameters :

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

Fitted 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:
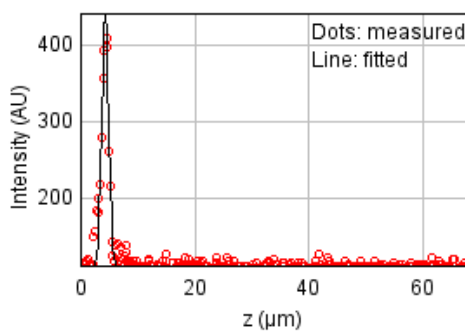 A = 371.923   (brightness)
 B = 121.920   (background)
 a = 0.486 px
 b = 0.126 px
 c = 0.376 px

xc = 6.536 px
yc = 5.892 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 31497.4680
Standard deviation: 10.12905
R^2: 0.94112
Parameters:
 a = 113.20183
 b = 439.55883
 c = 4.38443
 d = 0.60586

Bead 139 (Rejected)

Date : Mon Oct 17 13:27:46 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -7.26 um (x), -65.6 um (y), 46.0 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

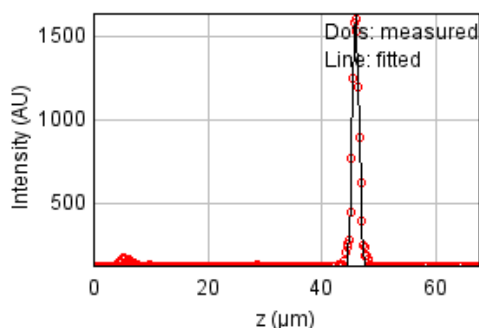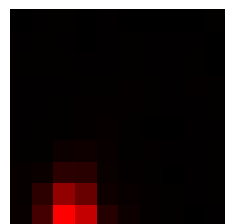| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	1.32 um	1.32 um	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 101718.996
Standard deviation: 18.20253
R^2: 0.99007
Parameters:
 a = 116.77411
 b = 1640.49370
 c = 46.00239
 d = 0.55876

Bead 140

Date : Mon Oct 17 13:27:46 PDT 2022
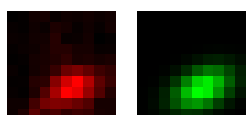Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : 47.0 um (x), -69.0 um (y), 4.86 um (z)
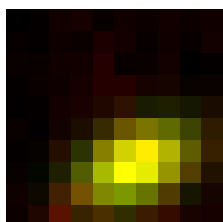Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	579 nm	599 nm	223 nm
max	949 nm	981 nm	223 nm
z	2.06 um	2.07 um	885 nm
Asymmetry	0.611		
Theta	25.1°		

XY profile & fitting parameters :

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

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

Parameters:
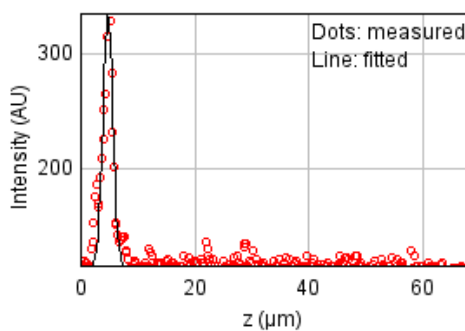 A = 243.037   (brightness)
 B = 118.679   (background)
 a = 0.194 px
 b = 0.097 px
 c = 0.355 px

 xc = 5.480 px
 yc = 6.639 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 31382.1609
Standard deviation: 10.11049
R^2: 0.91243
Parameters:
 a = 114.55986
 b = 334.97428
 c = 4.85825
 d = 0.87545

Bead 141 (Rejected)

Date : Mon Oct 17 13:27:47 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
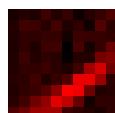
Coordinates : 85.1 um (x), -93.9 um (y), 4.4 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

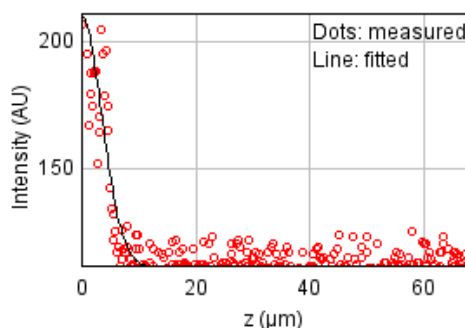| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	8.49 um	8.52 um	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2)
Sum of residuals squared: 22572.8042
Standard deviation: 8.57479
R^2: 0.85387
Parameters:
 a = 112.10265
 b = 211.05463
 c = -0.028299
 d = 3.60399

Bead 142 (Rejected)

Date : Mon Oct 17 13:27:47 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

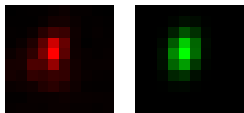Coordinates : -46.7 um (x), 52.6 um (y), 4.91 um (z)
Corresponding bead : Not found
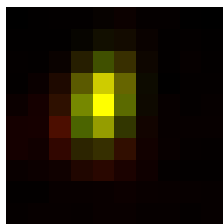Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	415 nm	429 nm	223 nm
max	632 nm	653 nm	223 nm
z	4.77 um	4.79 um	885 nm
Asymmetry	0.658		
Theta	77.9°		

XY profile & fitting parameters :

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

Fitted 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:
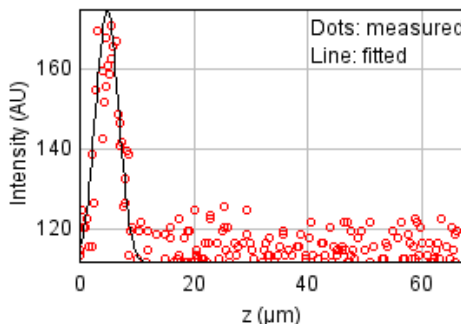 A = 684.507   (brightness)
 B = 130.990   (background)
 a = 0.758 px
 b = 0.091 px
 c = 0.356 px

xc = 3.938 px
yc = 3.833 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 23643.3780
Standard deviation: 8.77578
R^2: 0.70939
Parameters:
 a = 111.93040
 b = 174.80544
 c = 4.90579
 d = 2.02403

Bead 143

Date : Mon Oct 17 13:27:47 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
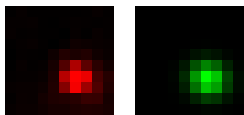Frame size : 10 pixels

Coordinates : 46.2 um (x), 41.1 um (y), 5.68 um (z)
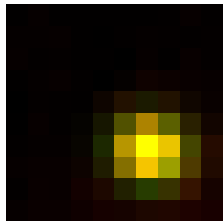Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	532 nm	550 nm	223 nm
max	588 nm	608 nm	223 nm
z	1.89 um	1.89 um	885 nm
Asymmetry	0.905		
Theta	-17.0°		

XY profile & fitting parameters :

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

Fitted 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:
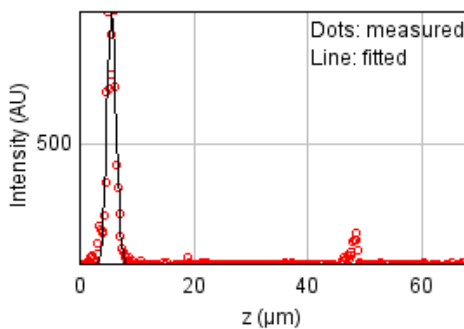A = 683.552   (brightness)
B = 119.607   (background)
a = 0.395 px
b = -0.024 px
c = 0.466 px

xc = 6.184 px
yc = 6.229 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 261491.783
Standard deviation: 29.18501
R^2: 0.93826
Parameters:
 a = 116.67624
 b = 918.59731
 c = 5.67671
 d = 0.80057

Bead 144 (Rejected)

Date : Mon Oct 17 13:27:47 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
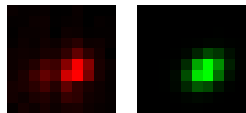
Coordinates : -78.2 um (x), 34.4 um (y), 4.99 um (z)
Corresponding bead : Not found
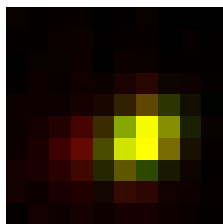Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	430 nm	445 nm	223 nm
max	578 nm	597 nm	223 nm
z	2.23 um	2.24 um	885 nm
Asymmetry	0.745		
Theta	31.5°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
  $R^2 = 0.885$

Parameters:
 A = 460.920   (brightness)
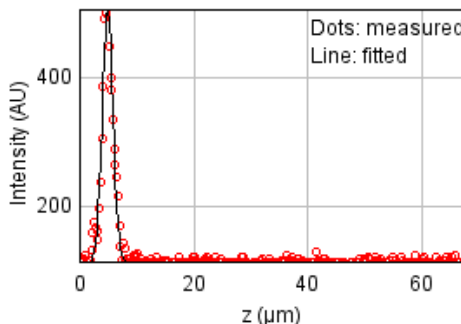 B = 129.301   (background)
 a = 0.490 px
 b = 0.144 px
 c = 0.637 px

xc = 5.751 px
yc = 5.567 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 35146.9801
Standard deviation: 10.69978
R^2: 0.96982
Parameters:
 a = 113.53632
 b = 508.18706
 c = 4.98724
 d = 0.94691

Bead 145

Date : Mon Oct 17 13:27:48 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
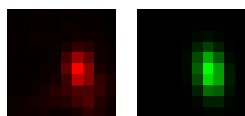Frame size : 10 pixels

Coordinates : 11.0 um (x), -6.0 um (y), 5.57 um (z)
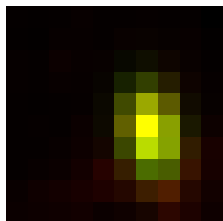Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	427 nm	441 nm	223 nm
max	706 nm	730 nm	223 nm
z	1.62 um	1.63 um	885 nm
Asymmetry	0.605		
Theta	-80.1°		

XY profile & fitting parameters :

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

Fitted on i(x,y) = A * exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B
   R^2 = 0.926

Parameters:
 A = 985.647 (brightness)
 B = 138.287 (background)
 a = 0.722 px
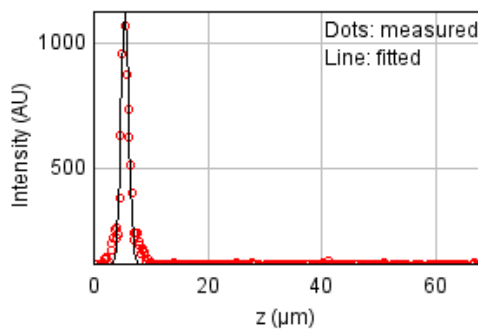 b = -0.079 px
 c = 0.283 px

xc = 6.208 px
yc = 5.295 px

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2)
Sum of residuals squared: 205278.424
Standard deviation: 25.85845
R^2: 0.96417
Parameters:
 a = 117.07295
 b = 1134.10777
 c = 5.57491
 d = 0.68766

Bead 146 (Rejected)

Date : Mon Oct 17 13:27:48 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
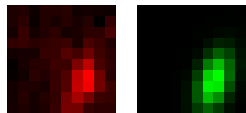
Coordinates : 96.0 um (x), -14.0 um (y), 5.61 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	489 nm	505 nm	223 nm
max	910 nm	941 nm	223 nm
z	2.67 um	2.68 um	885 nm
Asymmetry	0.537		
Theta	71.8°		

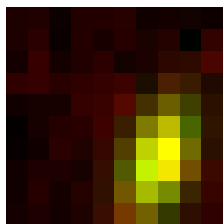## XY profile & fitting parameters :

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

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

Parameters:
 A = 122.059   (brightness)
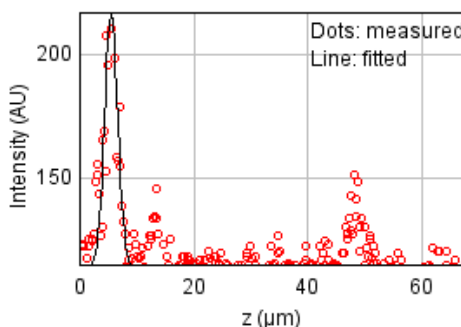 B = 119.442   (background)
 a = 0.523 px
 b = 0.119 px
 c = 0.201 px

xc = 6.560 px
yc = 6.517 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 26809.9679
Standard deviation: 9.34499
R^2: 0.76988
Parameters:
 a = 114.87943
 b = 217.09285
 c = 5.61042
 d = 1.13270

Bead 147 (Rejected)

Date : Mon Oct 17 13:27:48 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

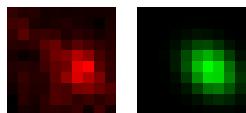Coordinates : 101 um (x), -22.7 um (y), 2.96 um (z)
Corresponding bead : Not found
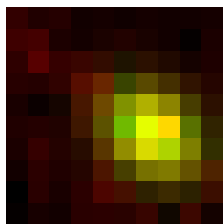Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	653 nm	675 nm	223 nm
max	851 nm	880 nm	223 nm
z	2.87 um	2.88 um	885 nm
Asymmetry	0.767		
Theta	-40.8°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.845$

Parameters:
 A = 111.297   (brightness)
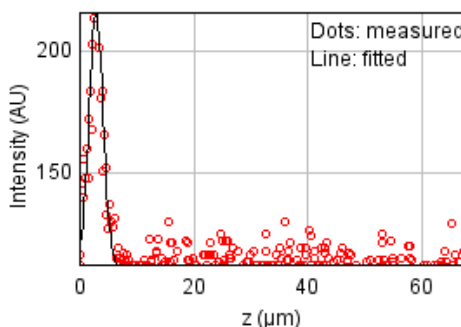 B = 121.681   (background)
 a = 0.241 px
 b = -0.064 px
 c = 0.260 px

xc = 6.235 px
yc = 5.270 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 15622.8391
Standard deviation: 7.13363
R^2: 0.86563
Parameters:
 a = 111.53663
 b = 216.15980
 c = 2.95653
 d = 1.21826

Bead 148

Date : Mon Oct 17 13:27:48 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
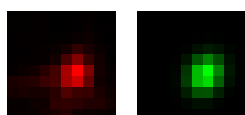Frame size : 10 pixels

Coordinates : -42.3 um (x), -30.2 um (y), 5.4 um (z)
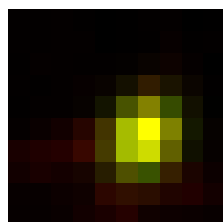Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	501 nm	518 nm	223 nm
max	598 nm	618 nm	223 nm
z	1.9 um	1.9 um	885 nm
Asymmetry	0.838		
Theta	59.3°		

XY profile & fitting parameters :

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

Fitted 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 = 651.692   (brightness)
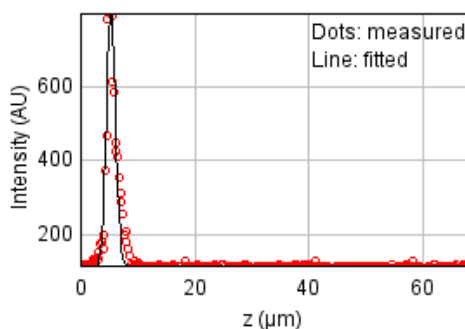B = 133.802   (background)
a = 0.494 px
b = 0.070 px
c = 0.417 px

xc = 5.757 px
yc = 5.360 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 205579.203
Standard deviation: 25.87739
R^2: 0.93416
Parameters:
 a = 115.14423
 b = 800.42403
 c = 5.40456
 d = 0.80477

Bead 149

Date : Mon Oct 17 13:27:48 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
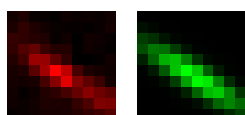Frame size : 10 pixels

Coordinates : 160 um (x), -54.2 um (y), 4.79 um (z)
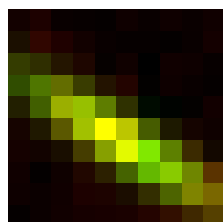Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	407 nm	421 nm	223 nm
max	1.88 um	1.94 um	223 nm
z	1.65 um	1.65 um	885 nm
Asymmetry	0.217		
Theta	-32.6°		

XY profile & fitting parameters :

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

Fitted 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:
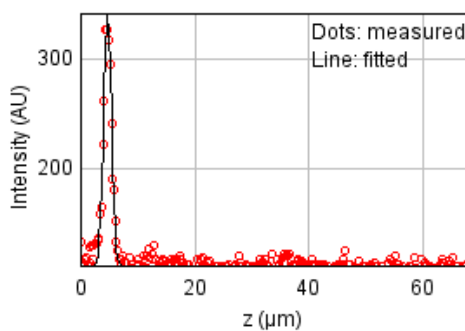 A = 189.431   (brightness)
 B = 116.441   (background)
 a = 0.262 px
 b = -0.350 px
 c = 0.586 px

xc = 4.778 px
yc = 5.568 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 14484.3883
Standard deviation: 6.86880
R^2: 0.95353
Parameters:
 a = 109.24375
 b = 343.18788
 c = 4.78901
 d = 0.69965

Bead 150 (Rejected)

Date : Mon Oct 17 13:27:49 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -50.6 um (x), -74.4 um (y), 57.9 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

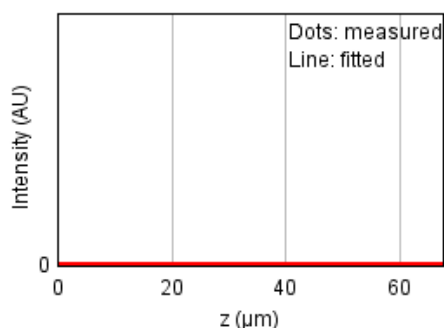| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	263 nm	264 nm	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 0.00000E0
Standard deviation: 0.00000E0
R^2: 0.00000
Parameters:
 a = 0.00000E0
 b = 0.00000E0
 c = -0.11115
 d = 0.11151

Bead 151 (Rejected)

Date : Mon Oct 17 13:27:49 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

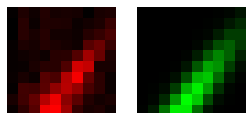Coordinates : -132 um (x), -86.4 um (y), 3.56 um (z)
Corresponding bead : Not found
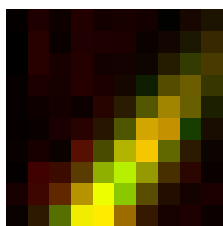Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	478 nm	494 nm	223 nm
max	2.54 um	2.63 um	223 nm
z	1.55 um	1.56 um	885 nm
Asymmetry	0.188		
Theta	52.9°		

XY profile & fitting parameters :

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

Fitted 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:
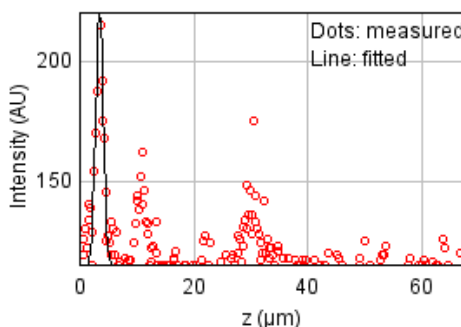A = 122.847 (brightness)
B = 115.239 (background)
a = 0.381 px
b = 0.272 px
c = 0.227 px

xc = 3.772 px
yc = 8.598 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 35064.7414
Standard deviation: 10.68725
R^2: 0.61844
Parameters:
a = 115.53821
b = 220.75517
c = 3.56380
d = 0.66001

Bead 152 (Rejected)

Date : Mon Oct 17 13:27:49 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : 57.0 um (x), -93.7 um (y), 62.2 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

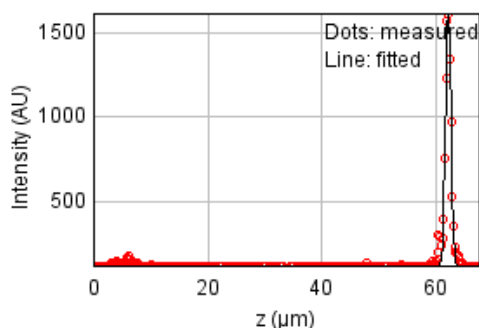| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	1.11 um	1.12 um	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 146889.121
Standard deviation: 21.87387
R^2: 0.98280
Parameters:
 a = 120.11692
 b = 1623.10112
 c = 62.19492
 d = 0.47300

Bead 153 (Rejected)

Date : Mon Oct 17 13:27:50 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

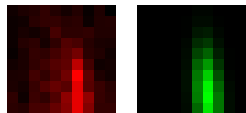Coordinates : 6.81 um (x), -96.3 um (y), 3.35 um (z)
Corresponding bead : Not found
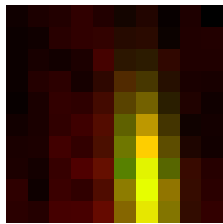Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	423 nm	437 nm	223 nm
max	1.45 um	1.5 um	223 nm
z	2.28 um	2.29 um	885 nm
Asymmetry	0.291		
Theta	-86.2°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
   $R^2 = 0.837$

Parameters:
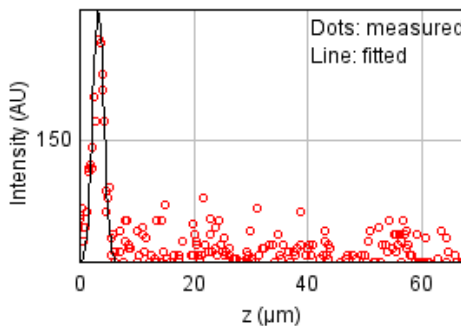 A = 102.975 (brightness)
 B = 119.716 (background)
 a = 0.749 px
 b = -0.045 px
 c = 0.067 px
 xc = 5.967 px
 yc = 7.781 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 16779.1471
Standard deviation: 7.39292
R^2: 0.71493
Parameters:
 a = 113.51224
 b = 188.82812
 c = 3.34539
 d = 0.96999

Bead 154 (Rejected)

Date : Mon Oct 17 13:27:50 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

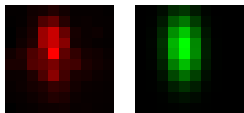Coordinates : -10.4 um (x), 60.0 um (y), 4.61 um (z)
Corresponding bead : Not found
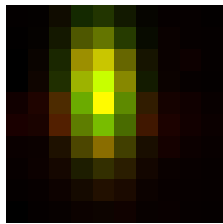Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	522 nm	540 nm	223 nm
max	1000 nm	1.03 um	223 nm
z	4.47 um	4.49 um	885 nm
Asymmetry	0.522		
Theta	-87.6°		

XY profile & fitting parameters :

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

Fitted 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 = 468.985   (brightness)
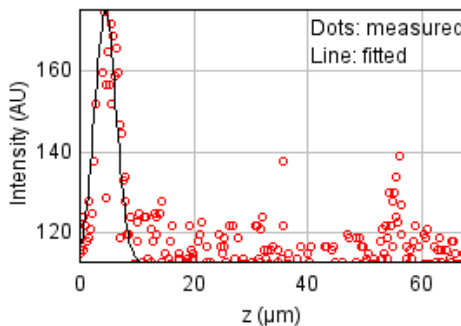 B = 124.758   (background)
 a = 0.491 px
 b = -0.015 px
 c = 0.135 px

xc = 3.873 px
yc = 3.431 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 24695.3422
Standard deviation: 8.96888
R^2: 0.68555
Parameters:
 a = 112.71759
 b = 175.18997
 c = 4.61156
 d = 1.89896

Bead 155

Date : Mon Oct 17 13:27:50 PDT 2022
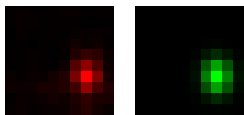Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -25.7 um (x), 32.6 um (y), 5.72 um (z)
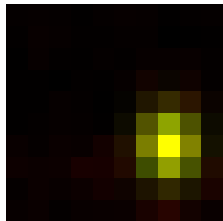Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	440 nm	455 nm	223 nm
max	541 nm	559 nm	223 nm
z	2.8 um	2.82 um	885 nm
Asymmetry	0.814		
Theta	-87.5°		

XY profile & fitting parameters :

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

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

Parameters:
 A = 605.941   (brightness)
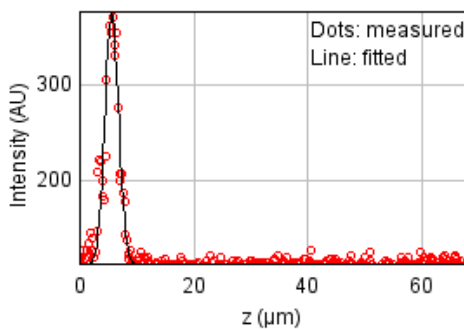 B = 126.448   (background)
 a = 0.692 px
 b = -0.010 px
 c = 0.460 px

 xc = 7.011 px
 yc = 5.981 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 45061.5118
Standard deviation: 12.11529
R^2: 0.93277
Parameters:
 a = 112.09792
 b = 375.73047
 c = 5.72359
 d = 1.19079

Bead 156 (Rejected)

Date : Mon Oct 17 13:27:50 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

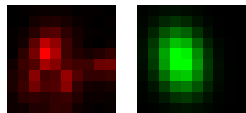Coordinates : -120 nm (x), 23.2 um (y), 6.95 um (z)
Corresponding bead : Not found
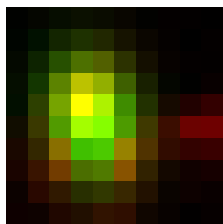Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	727 nm	752 nm	223 nm
max	1.01 um	1.04 um	223 nm
z	5.93 um	5.96 um	885 nm
Asymmetry	0.722		
Theta	-77.2°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * exp(-(a*(x-x_c)^2 + c*(y-y_c)^2 + 2*b*(x-x_c)*(y-y_c))) + B$
  $R^2 = 0.755$

Parameters:
 A = 344.751   (brightness)
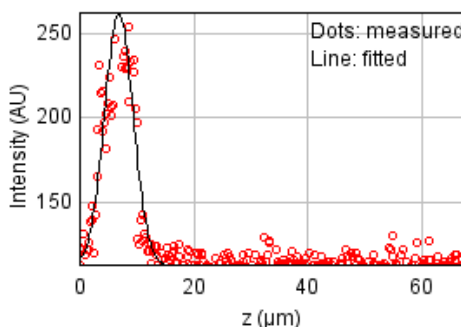 B = 149.693   (background)
 a = 0.248 px
 b = -0.026 px
 c = 0.138 px

xc = 3.454 px
yc = 4.572 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 40897.3375
Standard deviation: 11.54193
R^2: 0.90638
Parameters:
 a = 112.63659
 b = 262.46027
 c = 6.94877
 d = 2.52005

Bead 157

Date : Mon Oct 17 13:27:50 PDT 2022
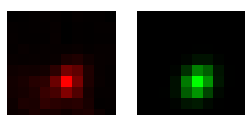Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -71.5 um (x), -9.03 um (y), 6.09 um (z)
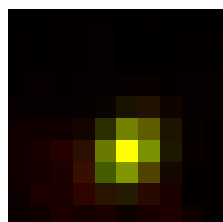Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	420 nm	434 nm	223 nm
max	515 nm	532 nm	223 nm
z	2.08 um	2.08 um	885 nm
Asymmetry	0.815		
Theta	49.2°		

XY profile & fitting parameters :

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

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

$R^2 = 0.916$

Parameters:
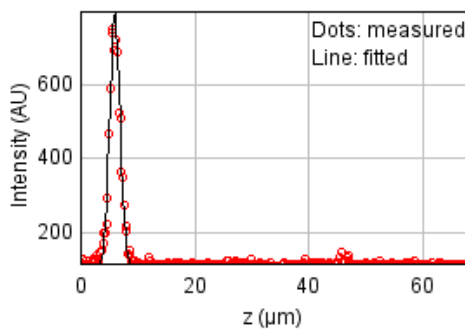A = 698.764   (brightness)
B = 135.672   (background)
a = 0.652 px
b = 0.126 px
c = 0.615 px

xc = 5.061 px
yc = 6.053 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 69432.6773
Standard deviation: 15.03879
R^2: 0.97845
Parameters:
a = 115.11307
b = 797.08651
c = 6.08636
d = 0.88185

Bead 158

Date : Mon Oct 17 13:27:50 PDT 2022
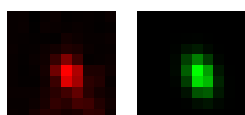Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : 39.4 um (x), -29.4 um (y), 4.75 um (z)
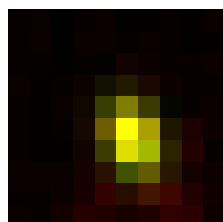Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	409 nm	423 nm	223 nm
max	606 nm	627 nm	223 nm
z	1.31 um	1.31 um	885 nm
Asymmetry	0.675		
Theta	-68.5°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
  $R^2 = 0.926$

Parameters:
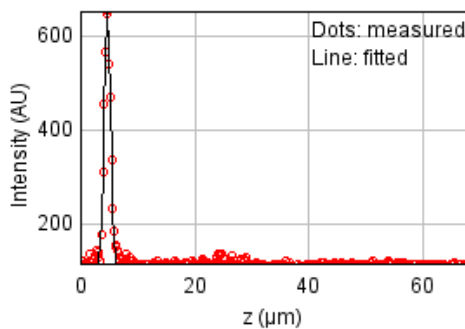 A = 554.410   (brightness)
 B = 128.107   (background)
 a = 0.742 px
 b = -0.148 px
 c = 0.423 px

xc = 5.261 px
yc = 5.423 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 25734.2228
Standard deviation: 9.15559
R^2: 0.98025
Parameters:
 a = 115.73700
 b = 657.99941
 c = 4.75010
 d = 0.55516

Bead 159

Date : Mon Oct 17 13:27:51 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
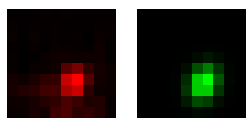Frame size : 10 pixels

Coordinates : -53.8 um (x), -32.4 um (y), 5.42 um (z)
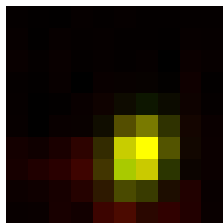Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	431 nm	445 nm	223 nm
max	554 nm	572 nm	223 nm
z	1.57 um	1.58 um	885 nm
Asymmetry	0.778		
Theta	64.3°		

XY profile & fitting parameters :

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

Fitted 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:
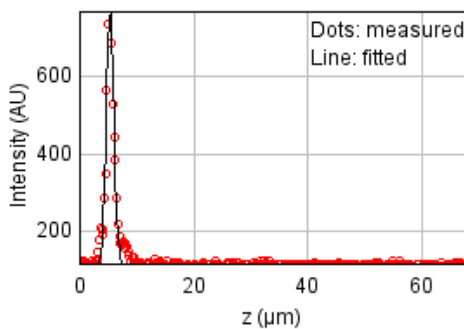 A = 697.610   (brightness)
 B = 133.219   (background)
 a = 0.669 px
 b = 0.111 px
 c = 0.491 px

xc = 5.607 px
yc = 6.347 px

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2)
Sum of residuals squared: 62686.6813
Standard deviation: 14.28955
R^2: 0.97277
Parameters:
 a = 115.56667
 b = 772.82251
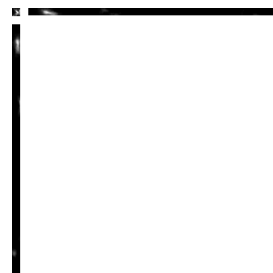 c = 5.42303
 d = 0.66681

Bead 160

Date : Mon Oct 17 13:27:51 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

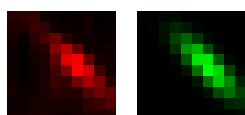Coordinates : 78.5 um (x), -54.2 um (y), 4.76 um (z)
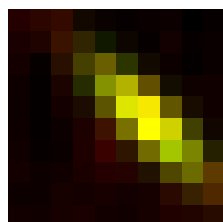Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	387 nm	400 nm	223 nm
max	1.23 um	1.27 um	223 nm
z	1.85 um	1.86 um	885 nm
Asymmetry	0.316		
Theta	-45.7°		

XY profile & fitting parameters :

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

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

Parameters:
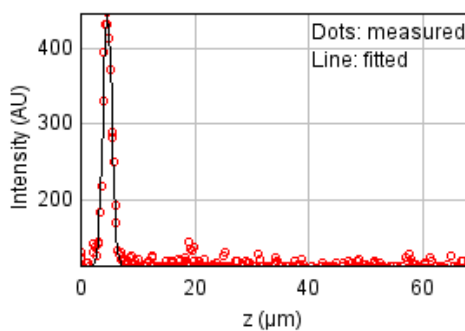 A = 329.825   (brightness)
 B = 124.712   (background)
 a = 0.503 px
 b = -0.403 px
 c = 0.482 px

xc = 5.963 px
yc = 4.571 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 25789.5595
Standard deviation: 9.16543
R^2: 0.96295
Parameters:
 a = 113.98784
 b = 446.29773
 c = 4.76202
 d = 0.78567

Bead 161 (Rejected)

Date : Mon Oct 17 13:27:51 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
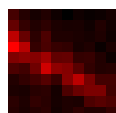
Coordinates : 162 um (x), -55.2 um (y), 3.56 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

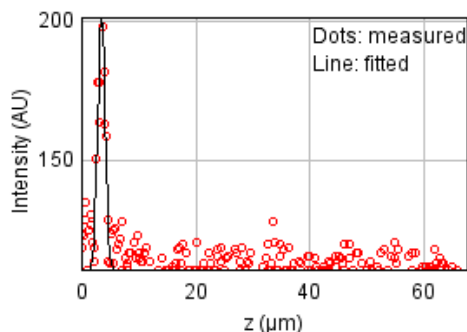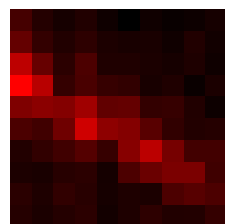| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	1.52 um	1.53 um	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 13431.5067
Standard deviation: 6.61444
R^2: 0.75589
Parameters:
 a = 110.41168
 b = 201.25144
 c = 3.55715
 d = 0.64754

Bead 162

Date : Mon Oct 17 13:27:51 PDT 2022
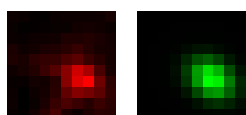Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -87.5 um (x), -63.1 um (y), 5.38 um (z)
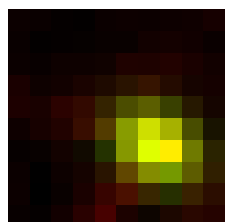Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	566 nm	585 nm	223 nm
max	740 nm	765 nm	223 nm
z	1.16 um	1.17 um	885 nm
Asymmetry	0.764		
Theta	-33.2°		

XY profile & fitting parameters :

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

Fitted 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 = 333.516   (brightness)
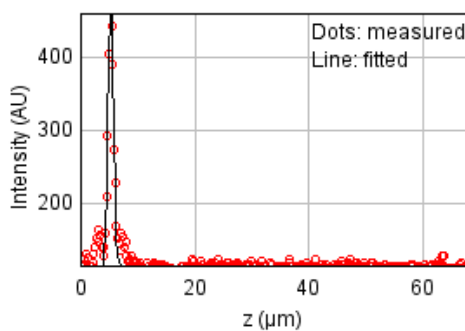 B = 130.461   (background)
 a = 0.297 px
 b = -0.080 px
 c = 0.367 px

xc = 6.310 px
yc = 5.751 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 31413.9449
Standard deviation: 10.11561
R^2: 0.93844
Parameters:
 a = 114.61169
 b = 466.48292
 c = 5.37967
 d = 0.49277

Bead 163

Date : Mon Oct 17 13:27:51 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

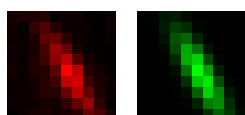Coordinates : 61.2 um (x), -71.4 um (y), 4.45 um (z)
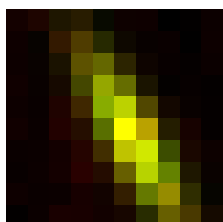Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	407 nm	421 nm	223 nm
max	1.49 um	1.54 um	223 nm
z	1.68 um	1.68 um	885 nm
Asymmetry	0.273		
Theta	-61.7°		

XY profile & fitting parameters :

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

Fitted 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:
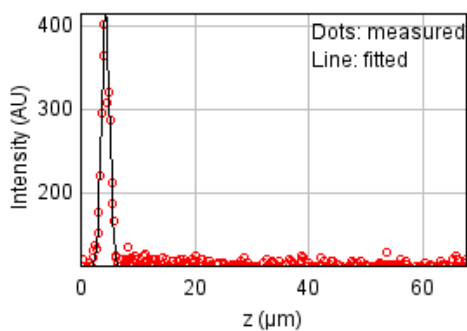A = 287.939   (brightness)
B = 120.360   (background)
a = 0.641 px
b = -0.313 px
c = 0.229 px

xc = 5.325 px
yc = 5.369 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 18478.0262
Standard deviation: 7.75816
R^2: 0.96444
Parameters:
a = 113.69167
b = 415.03356
c = 4.45226
d = 0.71153

Bead 164 (Rejected)

Date : Mon Oct 17 13:27:51 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
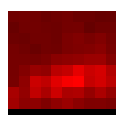
Coordinates : 6.82 um (x), -96.6 um (y), 4.59 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

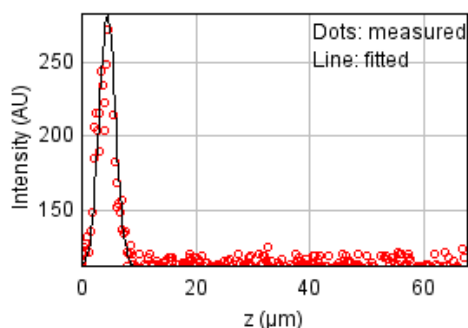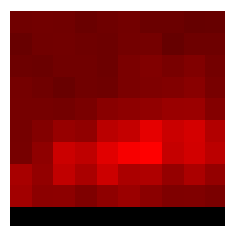| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	3.37 um	3.38 um	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 44503.9821
Standard deviation: 12.04010
R^2: 0.87347
Parameters:
 a = 112.77994
 b = 282.48135
 c = 4.59039
 d = 1.43115

Bead 165

Date : Mon Oct 17 13:27:52 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
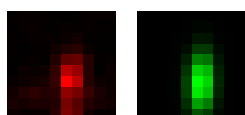Frame size : 10 pixels

Coordinates : -8.72 um (x), 87.3 um (y), 5.37 um (z)
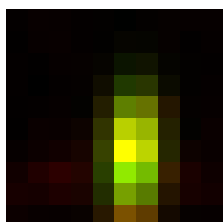Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	418 nm	432 nm	223 nm
max	959 nm	991 nm	223 nm
z	1.21 um	1.21 um	885 nm
Asymmetry	0.436		
Theta	88.1°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
   $R^2 = 0.910$

Parameters:
 A = 513.688   (brightness)
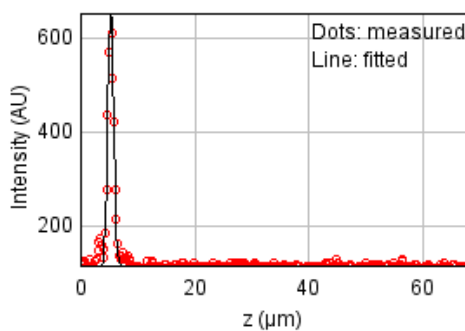 B = 124.199   (background)
 a = 0.769 px
 b = 0.021 px
 c = 0.147 px

xc = 5.376 px
yc = 6.148 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 31798.5858
Standard deviation: 10.17735
R^2: 0.97391
Parameters:
 a = 115.22798
 b = 658.62642
 c = 5.36879
 d = 0.51262

Bead 166

Date : Mon Oct 17 13:27:52 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
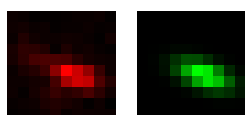Frame size : 10 pixels

Coordinates : -130 um (x), 81.1 um (y), 4.94 um (z)
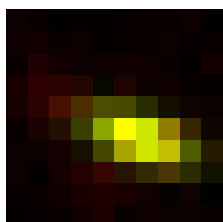Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	385 nm	398 nm	223 nm
max	846 nm	874 nm	223 nm
z	2.28 um	2.29 um	885 nm
Asymmetry	0.455		
Theta	-18.9°		

XY profile & fitting parameters :

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

Fitted 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 = 265.603   (brightness)
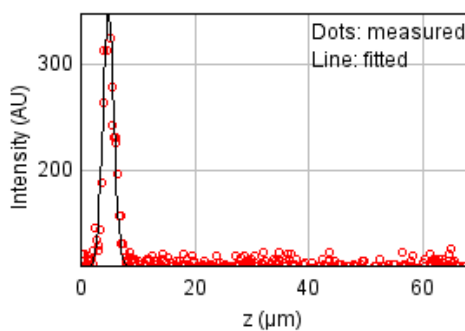 B = 117.842   (background)
 a = 0.263 px
 b = -0.220 px
 c = 0.831 px

xc = 5.644 px
yc = 5.401 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 31326.6555
Standard deviation: 10.10155
R^2: 0.93143
Parameters:
 a = 110.01698
 b = 349.52199
 c = 4.94389
 d = 0.96992

Bead 167

Date : Mon Oct 17 13:27:52 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
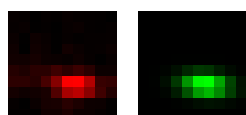Frame size : 10 pixels

Coordinates : -135 um (x), 61.8 um (y), 5.1 um (z)
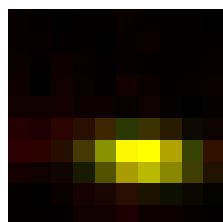Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	368 nm	381 nm	223 nm
max	760 nm	786 nm	223 nm
z	2.09 um	2.1 um	885 nm
Asymmetry	0.484		
Theta	-5.0°		

XY profile & fitting parameters :

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

Fitted 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:
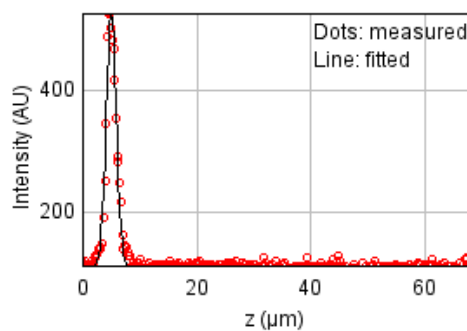 A = 434.377   (brightness)
 B = 122.885   (background)
 a = 0.238 px
 b = -0.065 px
 c = 0.984 px

xc = 5.661 px
yc = 6.310 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 36924.3031
Standard deviation: 10.96698
R^2: 0.96941
Parameters:
 a = 110.88529
 b = 524.82541
 c = 5.09717
 d = 0.88890

Bead 168

Date : Mon Oct 17 13:27:52 PDT 2022
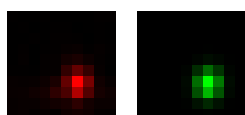Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -39.8 um (x), 58.5 um (y), 6.31 um (z)
Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	407 nm	421 nm	223 nm
max	470 nm	485 nm	223 nm
z	1.47 um	1.47 um	885 nm
Asymmetry	0.866		
Theta	85.7°		

XY profile & fitting parameters :

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

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

Parameters:
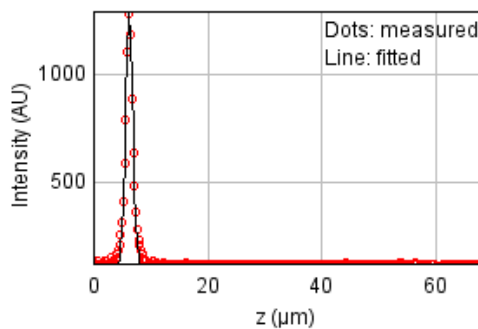 A = 1244.228   (brightness)
 B = 134.404   (background)
 a = 0.809 px
 b = 0.015 px
 c = 0.610 px

xc = 6.031 px
yc = 6.222 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 87466.6385
Standard deviation: 16.87921
R^2: 0.98733
Parameters:
 a = 116.41283
 b = 1300.44545
 c = 6.31033
 d = 0.62368

Bead 169

Date : Mon Oct 17 13:27:52 PDT 2022
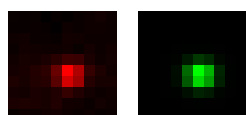Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -118 um (x), 41.3 um (y), 4.81 um (z)
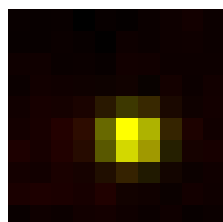Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	399 nm	413 nm	223 nm
max	464 nm	480 nm	223 nm
z	1.5 um	1.51 um	885 nm
Asymmetry	0.861		
Theta	-1.2°		

XY profile & fitting parameters :

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

Fitted 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:
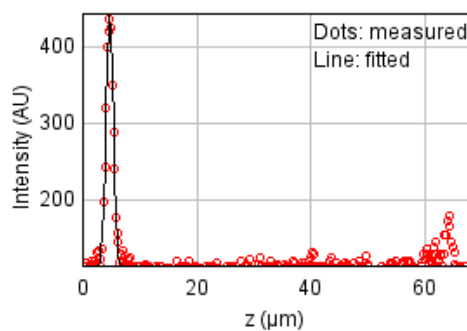A = 363.878 (brightness)
B = 120.440 (background)
a = 0.624 px
b = -0.005 px
c = 0.841 px

xc = 5.220 px
yc = 5.400 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 35988.3379
Standard deviation: 10.82709
R^2: 0.93704
Parameters:
a = 115.18825
b = 443.46873
c = 4.80639
d = 0.63818

Bead 170

Date : Mon Oct 17 13:27:52 PDT 2022
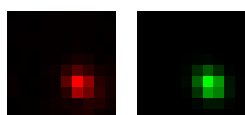Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : 49.3 um (x), 39.3 um (y), 5.64 um (z)
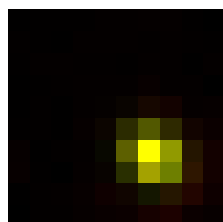Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	390 nm	403 nm	223 nm
max	464 nm	479 nm	223 nm
z	1.76 um	1.77 um	885 nm
Asymmetry	0.841		
Theta	-42.9°		

XY profile & fitting parameters :

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

Fitted 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:
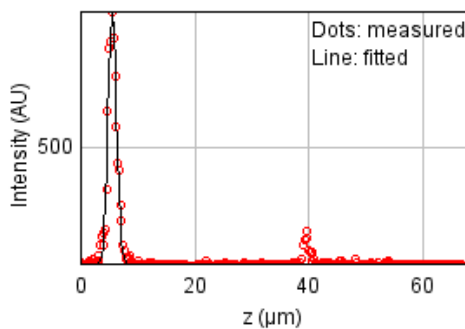 A = 860.262 (brightness)
 B = 123.979 (background)
 a = 0.745 px
 b = -0.129 px
 c = 0.763 px

xc = 6.201 px
yc = 6.235 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 112522.289
Standard deviation: 19.14477
R^2: 0.97261
Parameters:
 a = 118.04313
 b = 948.36797
 c = 5.64023
 d = 0.74877

Bead 171

Date : Mon Oct 17 13:27:52 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
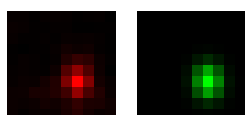Frame size : 10 pixels

Coordinates : -25.7 um (x), 32.6 um (y), 5.72 um (z)
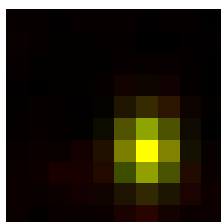Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	440 nm	455 nm	223 nm
max	541 nm	559 nm	223 nm
z	1.81 um	1.82 um	885 nm
Asymmetry	0.814		
Theta	-87.4°		

XY profile & fitting parameters :

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

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

$R^2 = 0.961$

Parameters:
A = 606.037   (brightness)
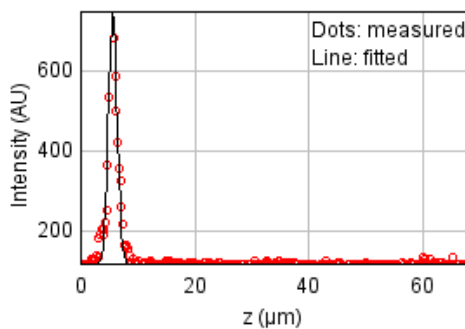B = 126.325   (background)
a = 0.692 px
b = -0.010 px
c = 0.459 px

xc = 6.011 px
yc = 5.981 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 91653.9721
Standard deviation: 17.27852
R^2: 0.96326
Parameters:
a = 114.58774
b = 750.76915
c = 5.72228
d = 0.76788

Bead 172

Date : Mon Oct 17 13:27:52 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
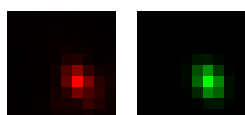Frame size : 10 pixels

Coordinates : 41.8 um (x), 27.9 um (y), 6.27 um (z)
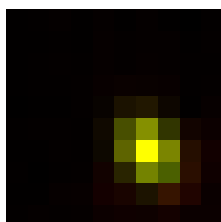Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	386 nm	399 nm	223 nm
max	510 nm	528 nm	223 nm
z	1.92 um	1.92 um	885 nm
Asymmetry	0.756		
Theta	-58.6°		

XY profile & fitting parameters :

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

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

Parameters:
A = 1124.295   (brightness)
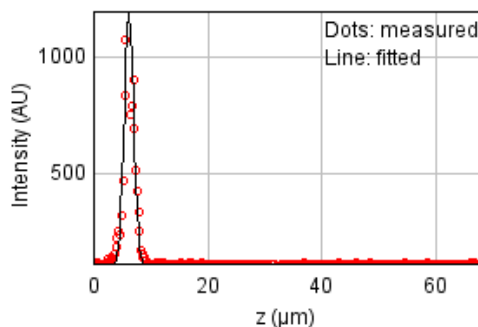B = 131.593   (background)
a = 0.797 px
b = -0.172 px
c = 0.620 px

xc = 6.085 px
yc = 5.987 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 355633.791
Standard deviation: 34.03551
R^2: 0.95439
Parameters:
a = 115.40845
b = 1204.43582
c = 6.26864
d = 0.81343

Bead 173

Date : Mon Oct 17 13:27:53 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
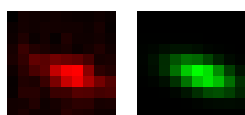Frame size : 10 pixels

Coordinates : 98.0 um (x), 28.1 um (y), 5.0 um (z)
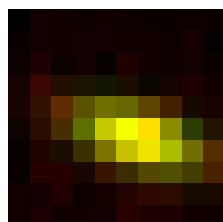Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	459 nm	475 nm	223 nm
max	1.01 um	1.05 um	223 nm
z	2.34 um	2.35 um	885 nm
Asymmetry	0.454		
Theta	-17.8°		

XY profile & fitting parameters :

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

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

Parameters:
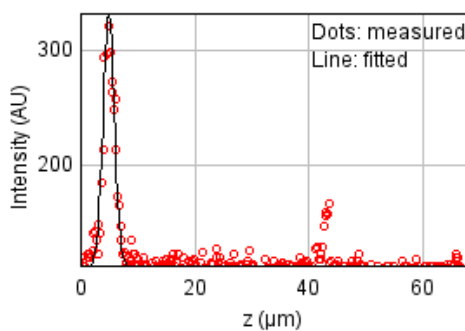A = 216.787   (brightness)
B = 115.290   (background)
a = 0.178 px
b = -0.147 px
c = 0.589 px

xc = 5.462 px
yc = 5.381 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 41077.9851
Standard deviation: 11.56739
R^2: 0.89828
Parameters:
 a = 113.10022
 b = 331.58342
 c = 5.00202
 d = 0.99509

Bead 174 (Rejected)

Date : Mon Oct 17 13:27:53 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
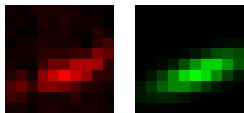
Coordinates : -161 um (x), -4.77 um (y), 4.62 um (z)
Corresponding bead : Not found
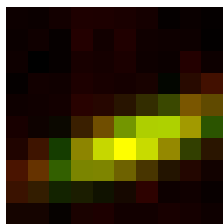Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	403 nm	416 nm	223 nm
max	1.35 um	1.4 um	223 nm
z	2.85 um	2.86 um	885 nm
Asymmetry	0.298		
Theta	19.5°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
   $R^2 = 0.898$

Parameters:
 A = 134.802   (brightness)
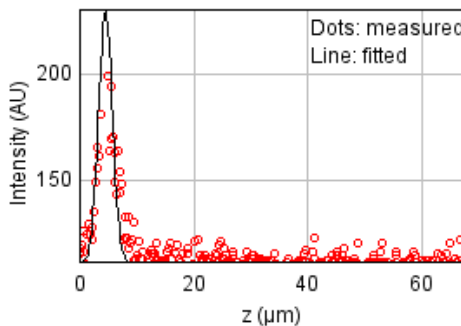 B = 116.902   (background)
 a = 0.157 px
 b = 0.237 px
 c = 0.744 px
xc = 5.470 px
yc = 5.704 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 22016.2818
Standard deviation: 8.46843
R^2: 0.85735
Parameters:
 a = 110.62181
 b = 230.99988
 c = 4.61652
 d = 1.20998

Bead 175 (Rejected)

Date : Mon Oct 17 13:27:53 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

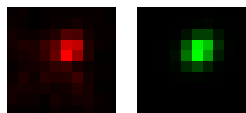Coordinates : -83.8 um (x), -25.6 um (y), 4.18 um (z)
Corresponding bead : Not found
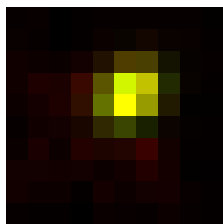Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	410 nm	424 nm	223 nm
max	502 nm	519 nm	223 nm
z	2.92 um	2.93 um	885 nm
Asymmetry	0.817		
Theta	42.3°		

XY profile & fitting parameters :

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

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

Parameters:
 A = 535.230   (brightness)
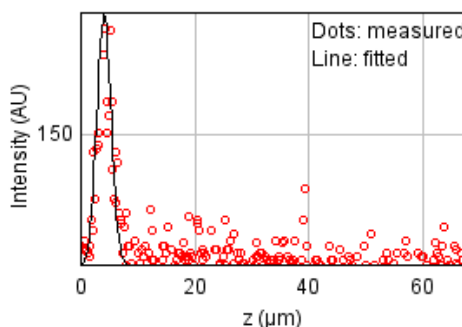 B = 131.349   (background)
 a = 0.652 px
 b = 0.132 px
 c = 0.677 px

xc = 5.222 px
yc = 3.484 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 16144.0837
Standard deviation: 7.25166
R^2: 0.76439
Parameters:
 a = 111.27321
 b = 186.13007
 c = 4.17956
 d = 1.24063

Bead 176 (Rejected)

Date : Mon Oct 17 13:27:53 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
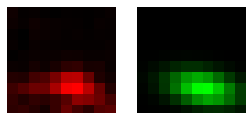
Coordinates : -47.4 um (x), -57.4 um (y), 6.41 um (z)
Corresponding bead : Not found
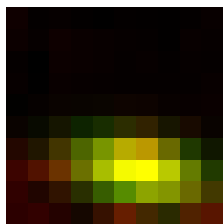Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	522 nm	540 nm	223 nm
max	1.08 um	1.12 um	223 nm
z	2.25 um	2.25 um	885 nm
Asymmetry	0.482		
Theta	-10.8°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.878$

Parameters:
A = 352.125   (brightness)
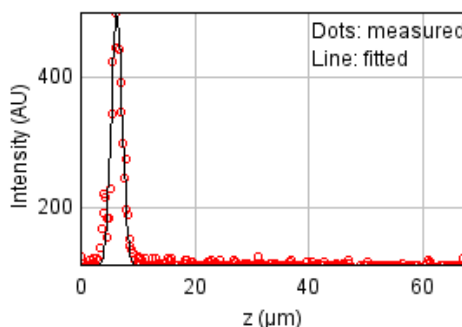B = 121.576   (background)
a = 0.128 px
b = -0.069 px
c = 0.479 px

xc = 5.563 px
yc = 6.977 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 68277.0063
Standard deviation: 14.91310
R^2: 0.94120
Parameters:
a = 112.86961
b = 499.80915
c = 6.41435
d = 0.95361

Bead 177 (Rejected)

Date : Mon Oct 17 13:27:53 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

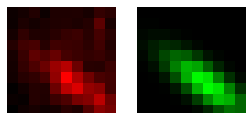Coordinates : -117 um (x), -74.9 um (y), 6.34 um (z)
Corresponding bead : Not found
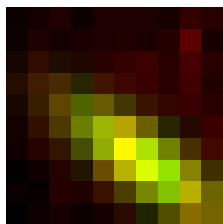Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	501 nm	518 nm	223 nm
max	1.48 um	1.53 um	223 nm
z	1.86 um	1.87 um	885 nm
Asymmetry	0.338		
Theta	-36.4°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.869$

Parameters:
A = 114.095   (brightness)
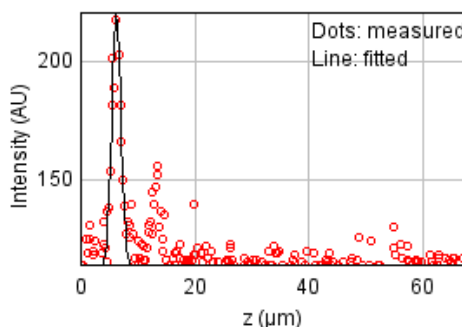B = 125.570   (background)
a = 0.228 px
b = -0.226 px
c = 0.368 px

xc = 5.850 px
yc = 6.562 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 22546.8014
Standard deviation: 8.56985
R^2: 0.75690
Parameters:
a = 113.47923
b = 220.64641
c = 6.33505
d = 0.79146

Bead 178 (Rejected)

Date : Mon Oct 17 13:27:54 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : 37.8 um (x), -82.3 um (y), 49.1 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

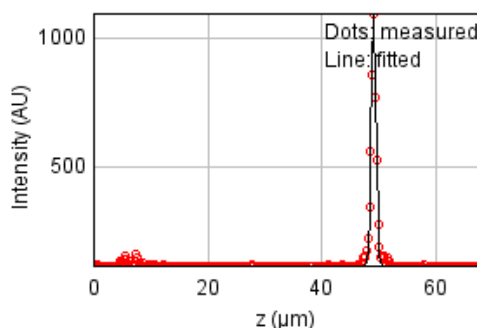| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	1.01 um	1.01 um	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 45851.1826
Standard deviation: 12.22098
R^2: 0.98649
Parameters:
 a = 116.32181
 b = 1114.15568
 c = 49.14765
 d = 0.42685

Bead 179 (Rejected)

Date : Mon Oct 17 13:27:54 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

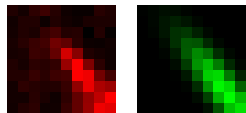Coordinates : 89.7 um (x), -89.6 um (y), 3.75 um (z)
Corresponding bead : Not found
Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

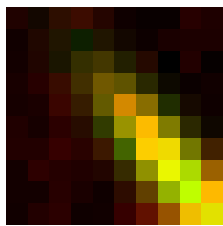| FWHM	Non corrected	Corrected	Theoretical
min	507 nm	525 nm	223 nm
max	2.05 um	2.12 um	223 nm
z	1.65 um	1.66 um	885 nm
Asymmetry	0.248		
Theta	-51.4°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$\qquad R^2 = 0.884$

Parameters:
 A = 109.226   (brightness)
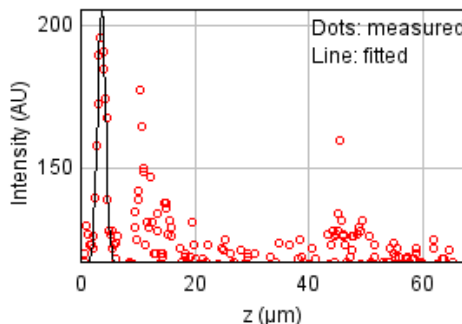 B = 116.518   (background)
 a = 0.331 px
 b = -0.238 px
 c = 0.222 px

xc = 7.657 px
yc = 7.482 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 29406.1426
Standard deviation: 9.78701
R^2: 0.59464
Parameters:
 a = 116.67534
 b = 205.74149
 c = 3.75133
 d = 0.70063

Bead 180 (Rejected)

Date : Mon Oct 17 13:27:54 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

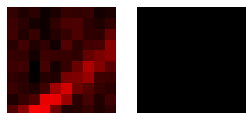Coordinates : 86.4 um (x), -92.8 um (y), 4.4 um (z)
Corresponding bead : Not found
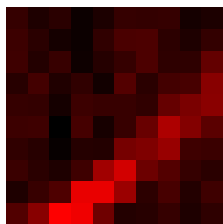Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	352 nm	364 nm	223 nm
max	3.89 um	4.02 um	223 nm
z	8.49 um	8.52 um	885 nm
Asymmetry	0.09		
Theta	0.0°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.882$

Parameters:
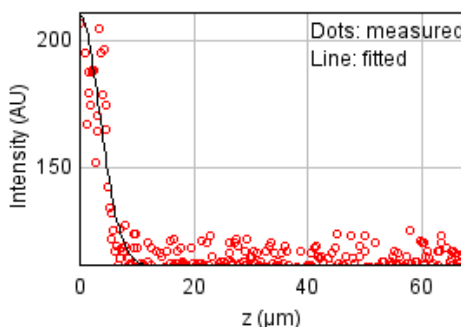 A = 46.292   (brightness)
 B = 115.086   (background)
 a = 0.447 px
 b = 0.539 px
 c = 0.628 px

xc = 9.788 px
yc = 2.903 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 22572.8042
Standard deviation: 8.57479
R^2: 0.85387
Parameters:
 a = 112.10265
 b = 211.05463
 c = -0.028299
 d = 3.60399

Bead 181 (Rejected)

Date : Mon Oct 17 13:27:54 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

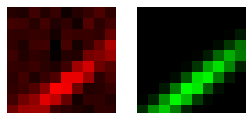Coordinates : 84.9 um (x), -94.1 um (y), 4.4 um (z)
Corresponding bead : Not found
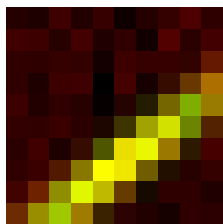Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	351 nm	363 nm	223 nm
max	2.45 um	2.53 um	223 nm
z	8.49 um	8.52 um	885 nm
Asymmetry	0.143		
Theta	37.4°		

XY profile & fitting parameters :

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

Fitted on i(x,y) = A * exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B
$R^2 = 0.891$

Parameters:
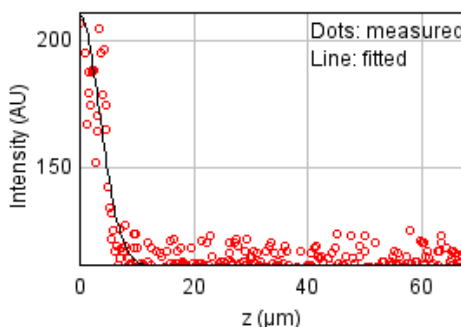A = 88.284 (brightness)
B = 115.698 (background)
a = 0.417 px
b = 0.515 px
c = 0.696 px

xc = 4.686 px
yc = 6.766 px

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 22572.8042
Standard deviation: 8.57479
R^2: 0.85387
Parameters:
a = 112.10265
b = 211.05463
c = -0.028299
d = 3.60399

Bead 182 (Rejected)

Date : Mon Oct 17 13:27:54 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -20.5 um (x), 82.8 um (y), 26.6 um (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	118 nm	122 nm	223 nm
max	7.67 um	7.93 um	223 nm
z	1.17 um	1.18 um	885 nm
Asymmetry	0.015		
Theta	0.1°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.011$

Parameters:
A = -233.167   (brightness)
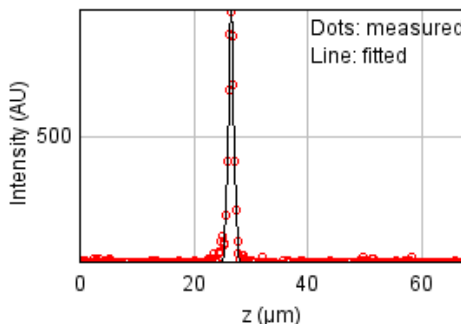B = 145.479   (background)
a = -0.002 px
b = 0.016 px
c = 9.644 px
xc = -6.095 px
yc = 4.522 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 28546.6853
Standard deviation: 9.64292
R^2: 0.98787
Parameters:
a = 115.23587
b = 886.50445
c = 26.62303
d = 0.49824

Bead 183

Date : Mon Oct 17 13:27:54 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
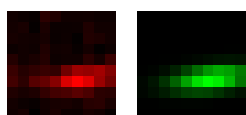Frame size : 10 pixels

Coordinates : 127 um (x), 82.6 um (y), 4.92 um (z)
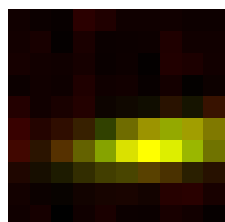Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	372 nm	384 nm	223 nm
max	1.25 um	1.29 um	223 nm
z	2.28 um	2.29 um	885 nm
Asymmetry	0.298		
Theta	6.4°		

XY profile & fitting parameters :

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

Fitted 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:
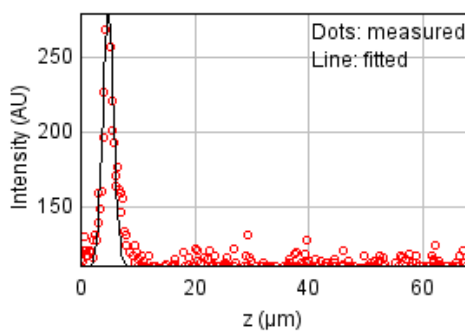A = 192.022   (brightness)
B = 113.310   (background)
a = 0.097 px
b = 0.099 px
c = 0.961 px

xc = 6.399 px
yc = 5.741 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 24501.7129
Standard deviation: 8.93365
R^2: 0.89620
Parameters:
a = 110.96339
b = 279.83423
c = 4.91644
d = 0.96996

Bead 184 (Rejected)

Date : Mon Oct 17 13:27:55 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
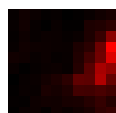
Coordinates : -47.5 um (x), 52.4 um (y), 4.2 um (z)
Corresponding bead : Not found
Reason of rejection : R or C parameter off limits.

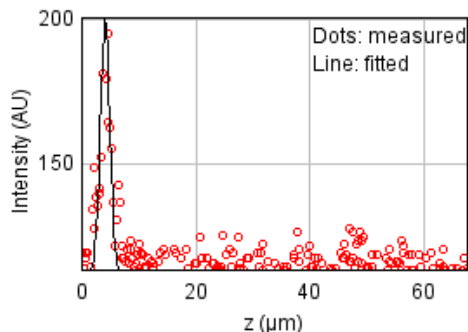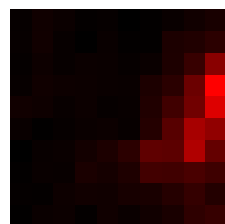| FWHM	Non corrected	Corrected	Theoretical
min	0	0	223 nm
max	0	0	223 nm
z	1.91 um	1.92 um	885 nm
Asymmetry	0.0		
Theta	0.0°		

XY profile & fitting parameters :

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

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

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2))
Sum of residuals squared: 16471.4464
Standard deviation: 7.32482
R^2: 0.74397
Parameters:
 a = 113.39214
 b = 200.85402
 c = 4.19863
 d = 0.81104

Bead 185

Date : Mon Oct 17 13:27:55 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
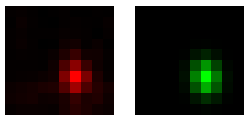Frame size : 10 pixels

Coordinates : -11.4 um (x), 29.9 um (y), 5.99 um (z)
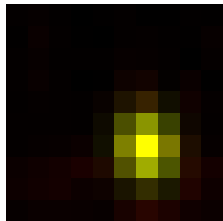Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	427 nm	442 nm	223 nm
max	538 nm	557 nm	223 nm
z	1.92 um	1.93 um	885 nm
Asymmetry	0.794		
Theta	-83.6°		

XY profile & fitting parameters :

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

Fitted 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:
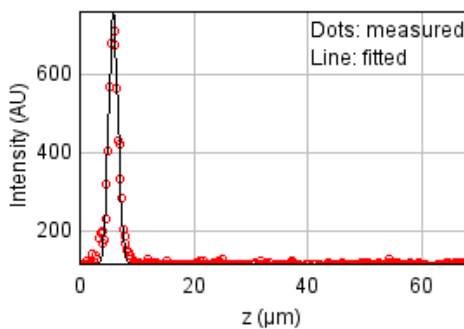A = 637.097   (brightness)
B = 124.932   (background)
a = 0.731 px
b = -0.030 px
c = 0.466 px

xc = 5.978 px
yc = 6.074 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 53032.6873
Standard deviation: 13.14325
R^2: 0.98043
Parameters:
a = 114.23736
b = 763.82766
c = 5.99110
d = 0.81620

Bead 186 (Rejected)

Date : Mon Oct 17 13:27:55 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

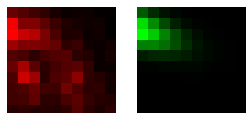Coordinates : 11.0 um (x), 26.4 um (y), 3.91 um (z)
Corresponding bead : Not found
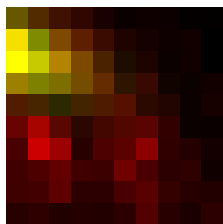Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	548 nm	567 nm	223 nm
max	1.64 um	1.69 um	223 nm
z	1.35 um	1.36 um	885 nm
Asymmetry	0.335		
Theta	-18.8°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
    $R^2 = 0.539$

Parameters:
 A = 235.803   (brightness)
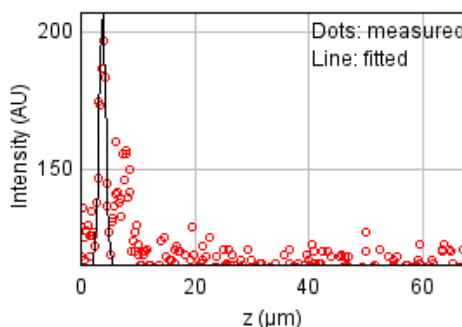 B = 153.011   (background)
 a = 0.091 px
 b = -0.121 px
 c = 0.405 px
xc = -2.039 px
yc = 1.048 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 28497.5920
Standard deviation: 9.63463
R^2: 0.57482
Parameters:
 a = 114.78751
 b = 207.41594
 c = 3.91316
 d = 0.57462

Bead 187 (Rejected)

Date : Mon Oct 17 13:27:55 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
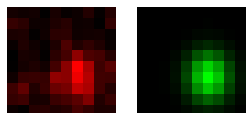
Coordinates : -142 um (x), 22.7 um (y), 3.09 um (z)
Corresponding bead : Not found
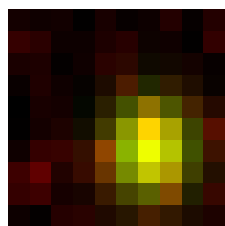Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	664 nm	686 nm	223 nm
max	777 nm	803 nm	223 nm
z	3.85 um	3.87 um	885 nm
Asymmetry	0.854		
Theta	-88.9°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.835$

Parameters:
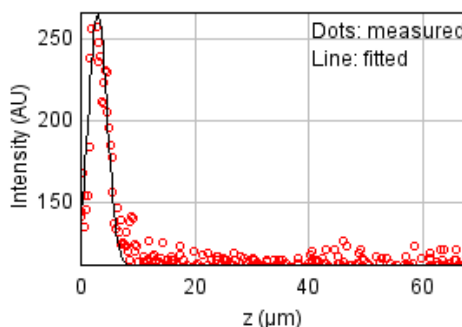 A = 116.675   (brightness)
 B = 121.961   (background)
 a = 0.305 px
 b = -0.002 px
 c = 0.222 px

xc = 6.065 px
yc = 5.914 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 35374.8576
Standard deviation: 10.73441
R^2: 0.89049
Parameters:
 a = 111.75620
 b = 266.13208
 c = 3.09279
 d = 1.63571

Bead 188 (Rejected)

Date : Mon Oct 17 13:27:55 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

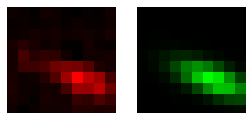Coordinates : 110 um (x), 15.6 um (y), 4.96 um (z)
Corresponding bead : Not found
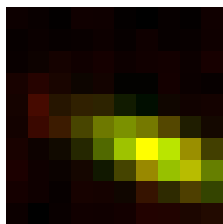Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	418 nm	432 nm	223 nm
max	1.17 um	1.21 um	223 nm
z	1.84 um	1.85 um	885 nm
Asymmetry	0.358		
Theta	-20.9°		

XY profile & fitting parameters :

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

Fitted 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 = 161.123   (brightness)
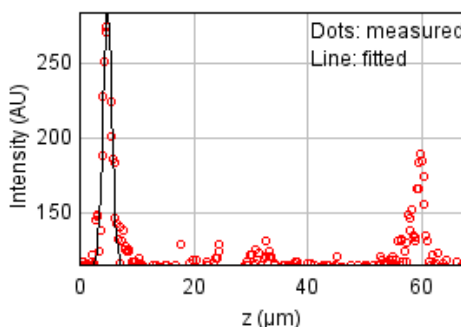 B = 114.415   (background)
 a = 0.183 px
 b = -0.223 px
 c = 0.682 px
xc = 6.459 px
yc = 6.195 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 52704.0095
Standard deviation: 13.10245
R^2: 0.77007
Parameters:
 a = 114.52282
 b = 285.31666
 c = 4.95611
 d = 0.78314

Bead 189 (Rejected)

Date : Mon Oct 17 13:27:55 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
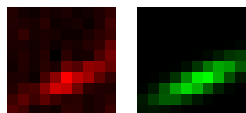
Coordinates : -144 um (x), -36.8 um (y), 4.69 um (z)
Corresponding bead : Not found
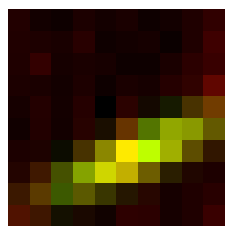Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	357 nm	369 nm	223 nm
max	1.42 um	1.47 um	223 nm
z	2.63 um	2.64 um	885 nm
Asymmetry	0.25		
Theta	23.8°		

XY profile & fitting parameters :

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

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

$R^2 = 0.866$

Parameters:
A = 130.407 (brightness)
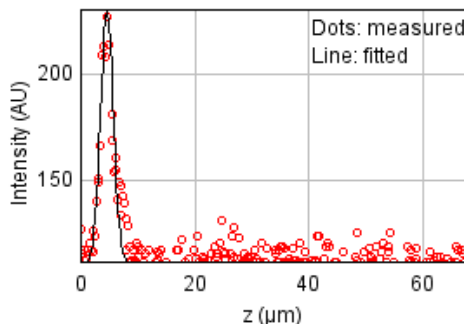B = 115.794 (background)
a = 0.227 px
b = 0.365 px
c = 0.895 px

xc = 5.403 px
yc = 6.177 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 17440.7115
Standard deviation: 7.53725
R^2: 0.87586
Parameters:
a = 110.77257
b = 231.32893
c = 4.69470
d = 1.11610

Bead 190

Date : Mon Oct 17 13:27:55 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
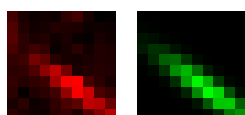Frame size : 10 pixels

Coordinates : 112 um (x), -54.3 um (y), 4.34 um (z)
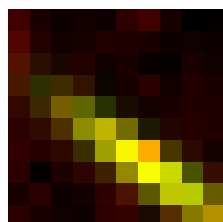Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	352 nm	364 nm	223 nm
max	1.76 um	1.82 um	223 nm
z	2.24 um	2.25 um	885 nm
Asymmetry	0.2		
Theta	-36.0°		

XY profile & fitting parameters :

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

Fitted 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:
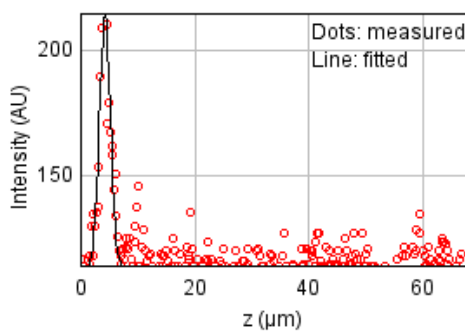A = 116.421   (brightness)
B = 117.331   (background)
a = 0.402 px
b = -0.494 px
c = 0.724 px

xc = 6.011 px
yc = 6.778 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 18082.0318
Standard deviation: 7.67458
R^2: 0.80584
Parameters:
 a = 113.62852
 b = 215.21425
 c = 4.34077
 d = 0.94987

Bead 191 (Rejected)

Date : Mon Oct 17 13:27:55 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

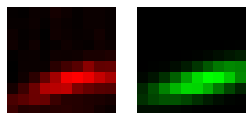Coordinates : 16.2 um (x), -76.0 um (y), 6.55 um (z)
Corresponding bead : Not found
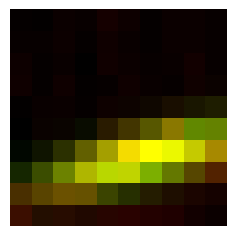Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	418 nm	432 nm	223 nm
max	1.7 um	1.76 um	223 nm
z	2.31 um	2.32 um	885 nm
Asymmetry	0.246		
Theta	14.1°		

XY profile & fitting parameters :

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

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

Parameters:
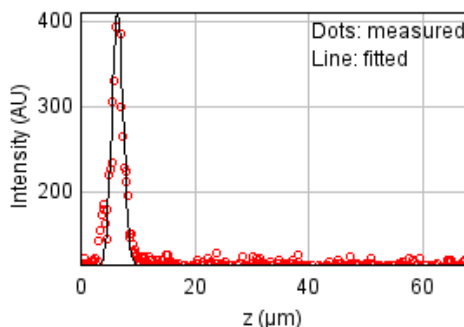A = 354.586 (brightness)
B = 118.880 (background)
a = 0.089 px
b = 0.171 px
c = 0.726 px

xc = 5.783 px
yc = 6.290 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 192 (Rejected)

Date : Mon Oct 17 13:27:56 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

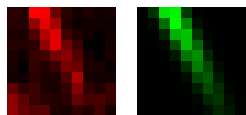Coordinates : 57.8 um (x), -92.1 um (y), 3.96 um (z)
Corresponding bead : Not found
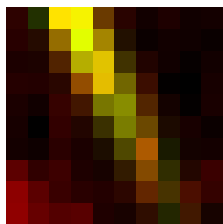Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	375 nm	388 nm	223 nm
max	3.48 um	3.59 um	223 nm
z	1.2 um	1.2 um	885 nm
Asymmetry	0.108		
Theta	-62.3°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
  $R^2 = 0.774$

Parameters:
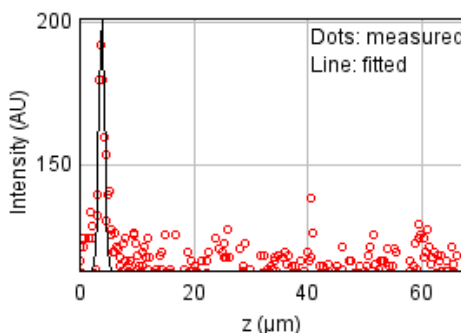 A = 205.516   (brightness)
 B = 125.038   (background)
 a = 0.749 px
 b = -0.387 px
 c = 0.214 px

xc = 0.872 px
yc = -3.236 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 16907.9273
Standard deviation: 7.42123
R^2: 0.64590
Parameters:
 a = 113.07059
 b = 201.05629
 c = 3.95897
 d = 0.50799

Bead 193 (Rejected)

Date : Mon Oct 17 13:27:56 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
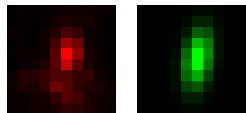
Coordinates : -9.89 um (x), 84.4 um (y), 5.38 um (z)
Corresponding bead : Not found
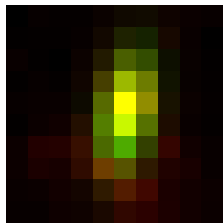Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	422 nm	437 nm	223 nm
max	923 nm	954 nm	223 nm
z	1.13 um	1.13 um	885 nm
Asymmetry	0.457		
Theta	80.4°		

XY profile & fitting parameters :

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

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

$R^2 = 0.851$

Parameters:
 A = 451.435   (brightness)
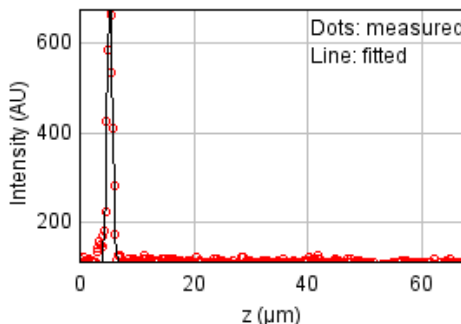 B = 134.744   (background)
 a = 0.736 px
 b = 0.098 px
 c = 0.174 px

xc = 5.043 px
yc = 4.400 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 24471.5508
Standard deviation: 8.92815
R^2: 0.98060
Parameters:
 a = 112.92044
 b = 686.24451
 c = 5.38023
 d = 0.47908

Bead 194

Date : Mon Oct 17 13:27:56 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
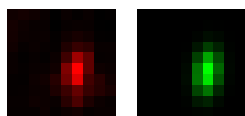Frame size : 10 pixels

Coordinates : 24.0 um (x), 59.8 um (y), 5.97 um (z)
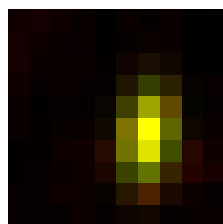Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	392 nm	406 nm	223 nm
max	703 nm	727 nm	223 nm
z	1.43 um	1.43 um	885 nm
Asymmetry	0.558		
Theta	83.2°		

XY profile & fitting parameters :

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

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

Parameters:
 A = 683.616   (brightness)
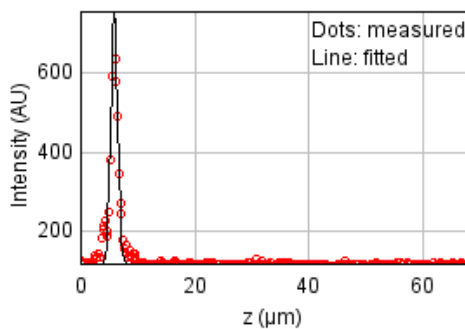 B = 132.217   (background)
 a = 0.864 px
 b = 0.070 px
 c = 0.280 px

xc = 5.941 px
yc = 5.300 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2)$
Sum of residuals squared: 109121.251
Standard deviation: 18.85322
R^2: 0.94682
Parameters:
 a = 116.34083
 b = 757.61068
 c = 5.97421
 d = 0.60563

Bead 195 (Rejected)

Date : Mon Oct 17 13:27:56 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
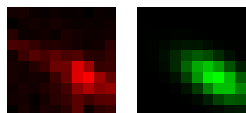
Coordinates : 108 um (x), 1.1 um (y), 5.44 um (z)
Corresponding bead : Not found
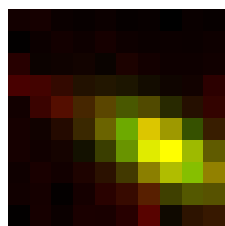Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	524 nm	541 nm	223 nm
max	1.12 um	1.16 um	223 nm
z	2.77 um	2.78 um	885 nm
Asymmetry	0.468		
Theta	-29.0°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
    $R^2 = 0.866$

Parameters:
 A = 150.996   (brightness)
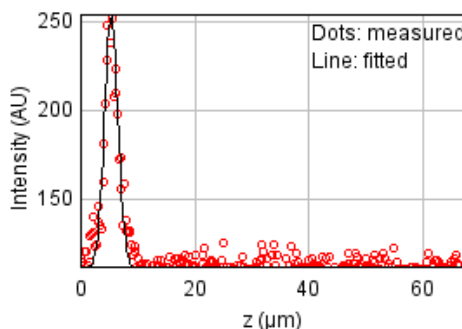 B = 120.869   (background)
 a = 0.197 px
 b = -0.162 px
 c = 0.400 px
xc = 6.701 px
yc = 6.010 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 17258.3415
Standard deviation: 7.49774
R^2: 0.91173
Parameters:
 a = 112.25411
 b = 253.87762
 c = 5.44199
 d = 1.17545

Bead 196

Date : Mon Oct 17 13:27:56 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
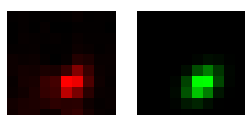Frame size : 10 pixels

Coordinates : -84.8 um (x), -2.02 um (y), 6.34 um (z)
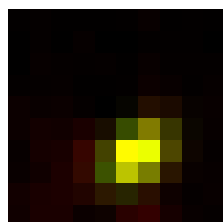Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	381 nm	394 nm	223 nm
max	542 nm	560 nm	223 nm
z	1.94 um	1.95 um	885 nm
Asymmetry	0.703		
Theta	40.9°		

XY profile & fitting parameters :

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

Fitted 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:
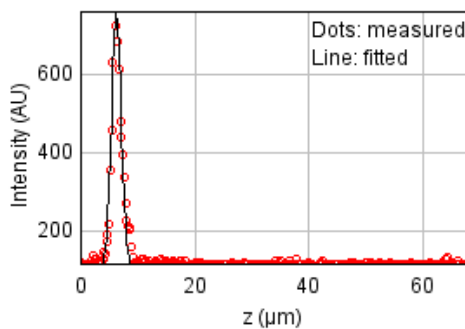A = 728.974   (brightness)
B = 135.678   (background)
a = 0.657 px
b = 0.231 px
c = 0.723 px

xc = 5.449 px
yc = 6.184 px

Z profile & fitting parameters:

Fitted on y = a + (b-a)*exp(-(x-c)^2/(2*d^2)
Sum of residuals squared: 102422.584
Standard deviation: 18.26538
R^2: 0.96287
Parameters:
 a = 113.29291
 b = 760.38415
 c = 6.33987
 d = 0.82286

Bead 197

Date : Mon Oct 17 13:27:56 PDT 2022
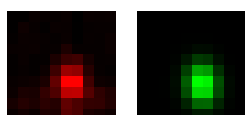Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

Coordinates : -12.9 um (x), -14.4 um (y), 6.18 um (z)
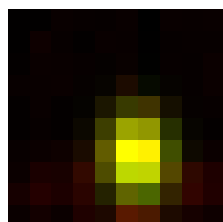Corresponding bead : Not found

FWHM	Non corrected	Corrected	Theoretical
min	500 nm	516 nm	223 nm
max	667 nm	690 nm	223 nm
z	2.12 um	2.12 um	885 nm
Asymmetry	0.748		
Theta	-85.7°		

XY profile & fitting parameters :

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

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

Parameters:
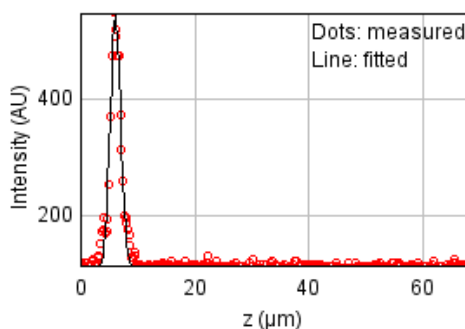 A = 418.067   (brightness)
 B = 121.000   (background)
 a = 0.536 px
 b = -0.018 px
 c = 0.303 px

xc = 5.457 px
yc = 6.253 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 46056.2096
Standard deviation: 12.24827
R^2: 0.96578
Parameters:
 a = 112.86488
 b = 546.92941
 c = 6.18306
 d = 0.89849

Bead 198 (Rejected)

Date : Mon Oct 17 13:27:56 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
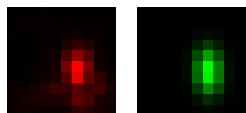
Coordinates : 2.43 um (x), -21.2 um (y), 5.81 um (z)
Corresponding bead : Not found
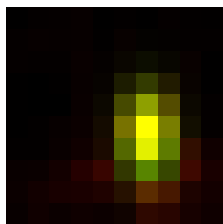Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	421 nm	435 nm	223 nm
max	714 nm	738 nm	223 nm
z	1.76 um	1.76 um	885 nm
Asymmetry	0.59		
Theta	-87.8°		

XY profile & fitting parameters :

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

Fitted 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 = 700.635   (brightness)
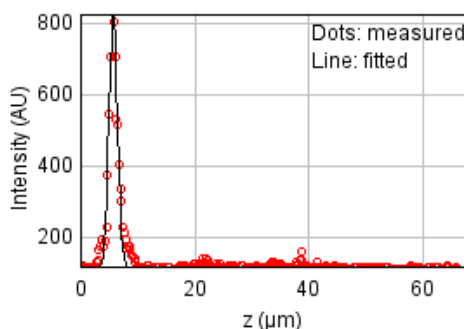B = 137.120   (background)
a = 0.757 px
b = -0.019 px
c = 0.264 px
xc = 6.041 px
yc = 5.387 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 107639.950
Standard deviation: 18.72482
R^2: 0.96458
Parameters:
a = 118.86084
b = 831.36137
c = 5.80528
d = 0.74573

Bead 199 (Rejected)

Date : Mon Oct 17 13:27:57 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels

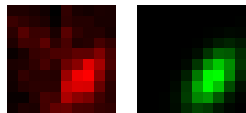Coordinates : 97.1 um (x), -36.4 um (y), 6.32 um (z)
Corresponding bead : Not found
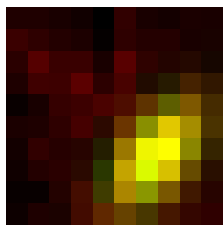Reason of rejection : The fitted bead is likely to be a different bead from the center bead.

FWHM	Non corrected	Corrected	Theoretical
min	545 nm	563 nm	223 nm
max	961 nm	993 nm	223 nm
z	4.34 um	4.36 um	885 nm
Asymmetry	0.567		
Theta	52.6°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * \exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
   $R^2 = 0.890$

Parameters:
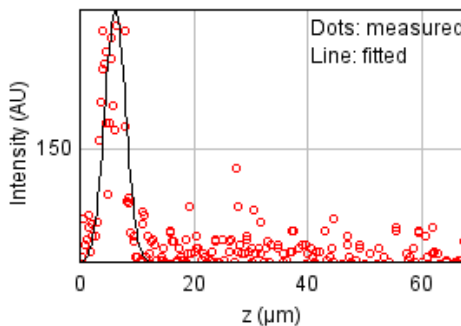 A = 146.948   (brightness)
 B = 125.939   (background)
 a = 0.339 px
 b = 0.148 px
 c = 0.258 px

xc = 6.426 px
yc = 6.289 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*\exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 29683.6745
Standard deviation: 9.83308
R^2: 0.76511
Parameters:
 a = 111.96934
 b = 196.84933
 c = 6.32477
 d = 1.84352

Bead 200 (Rejected)

Date : Mon Oct 17 13:27:57 PDT 2022
Origin : data_traditional.tif (Nikon 40x1.15 water)
Frame size : 10 pixels
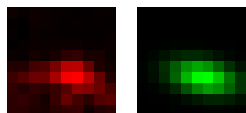
Coordinates : -47.4 um (x), -57.4 um (y), 6.41 um (z)
Corresponding bead : Not found
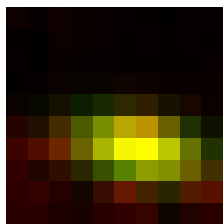Reason of rejection : R or C parameter off limits.

FWHM	Non corrected	Corrected	Theoretical
min	500 nm	517 nm	223 nm
max	1.02 um	1.06 um	223 nm
z	2.25 um	2.25 um	885 nm
Asymmetry	0.49		
Theta	-11.4°		

XY profile & fitting parameters :

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

Fitted on $i(x,y) = A * exp(-(a*(x-xc)^2 + c*(y-yc)^2 + 2*b*(x-xc)*(y-yc))) + B$
$R^2 = 0.861$

Parameters:
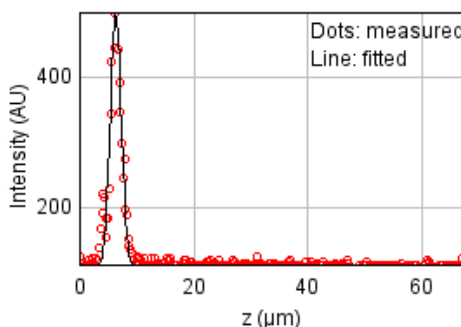A = 353.341   (brightness)
B = 130.217   (background)
a = 0.145 px
b = -0.079 px
c = 0.520 px

xc = 5.586 px
yc = 5.969 px

Z profile & fitting parameters:

Fitted on $y = a + (b-a)*exp(-(x-c)^2/(2*d^2))$
Sum of residuals squared: 68277.0063
Standard deviation: 14.91310
R^2: 0.94120
Parameters:
a = 112.86961
b = 499.80915
c = 6.41435
d = 0.95361