

## Sample

**Name** : GNP\_11.4.16\_2.5\_5k\_3  
**Mesured On** : 11.04.2016 18:03  
**by** : Hannelore **logged as** : Expert

**Comments from Hannelore :**

## SOP

**Name** : defaultSOP  
**Mode** : Statistical  
**Time limitation** : 60 s  
**Temperature** : 25 °C

**Acquisitions** : 5

## Device Settings

<b>Time interval</b>	: 2 µs	<b>Number of channels</b>	: 600
<b>Laser power</b>	: 100 %	<b>Wavelength</b>	: 657 nm
<b>DTC Position</b>	: UP		

## Liquid Medium

<b>Refractive index</b>	: 1.331	<b>Viscosity</b>	: 0.888 cP
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## Particles

<b>Real part</b>	: 1.56	<b>Imaginary part</b>	: 0.01
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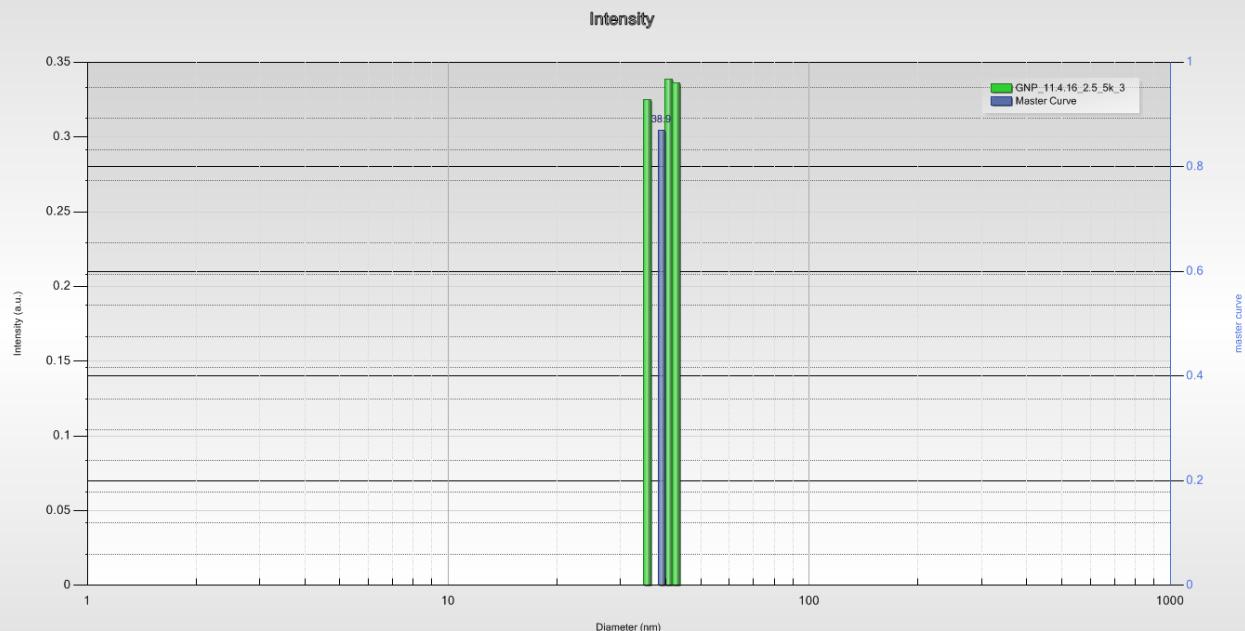
## Algorithm

Pade Laplace	Cumulants
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## Measurement

**Average count rate** : 2013 kcps  
**Number of rejected** : 2

**Duration** : 00:05:09  
**Number of modified** : 0



### Dispersion statistics

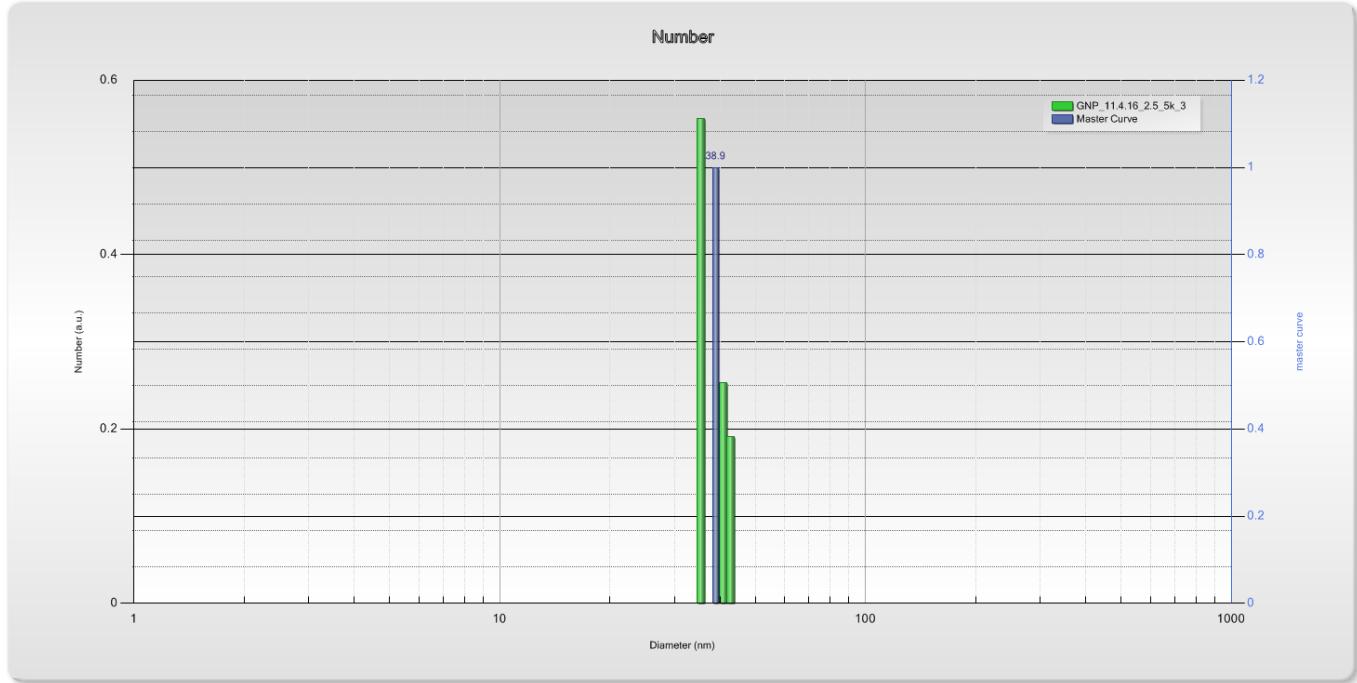
**Di 10%:** 35.5 nm

**Di 50%:** 40.78 nm

**Di 90%:** 42.71 nm

### Dispersion data

Size (nm)	Intensity	Size (nm)	Intensity	Size (nm)	Intensity
35.5	0.32	40.78	0.34	42.71	0.34



### Dispersion statistics

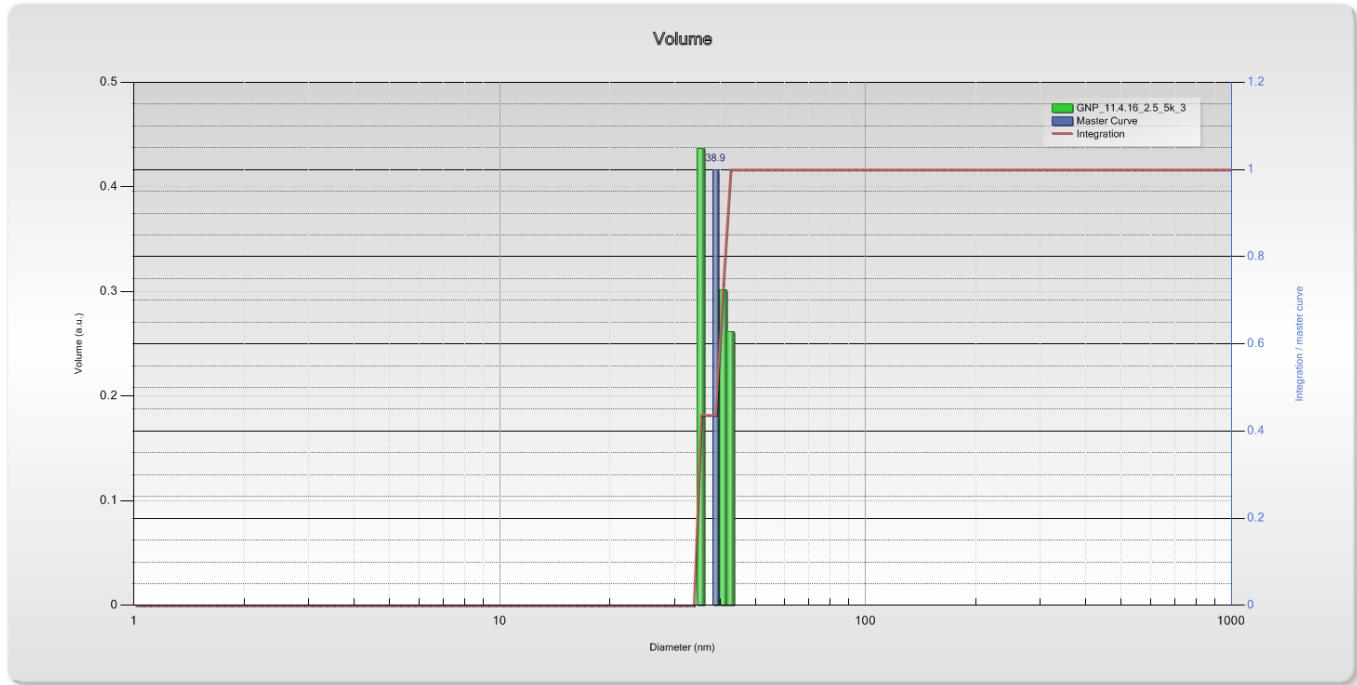
**Dn 10%:** 35.5 nm

**Dn 50%:** 35.5 nm

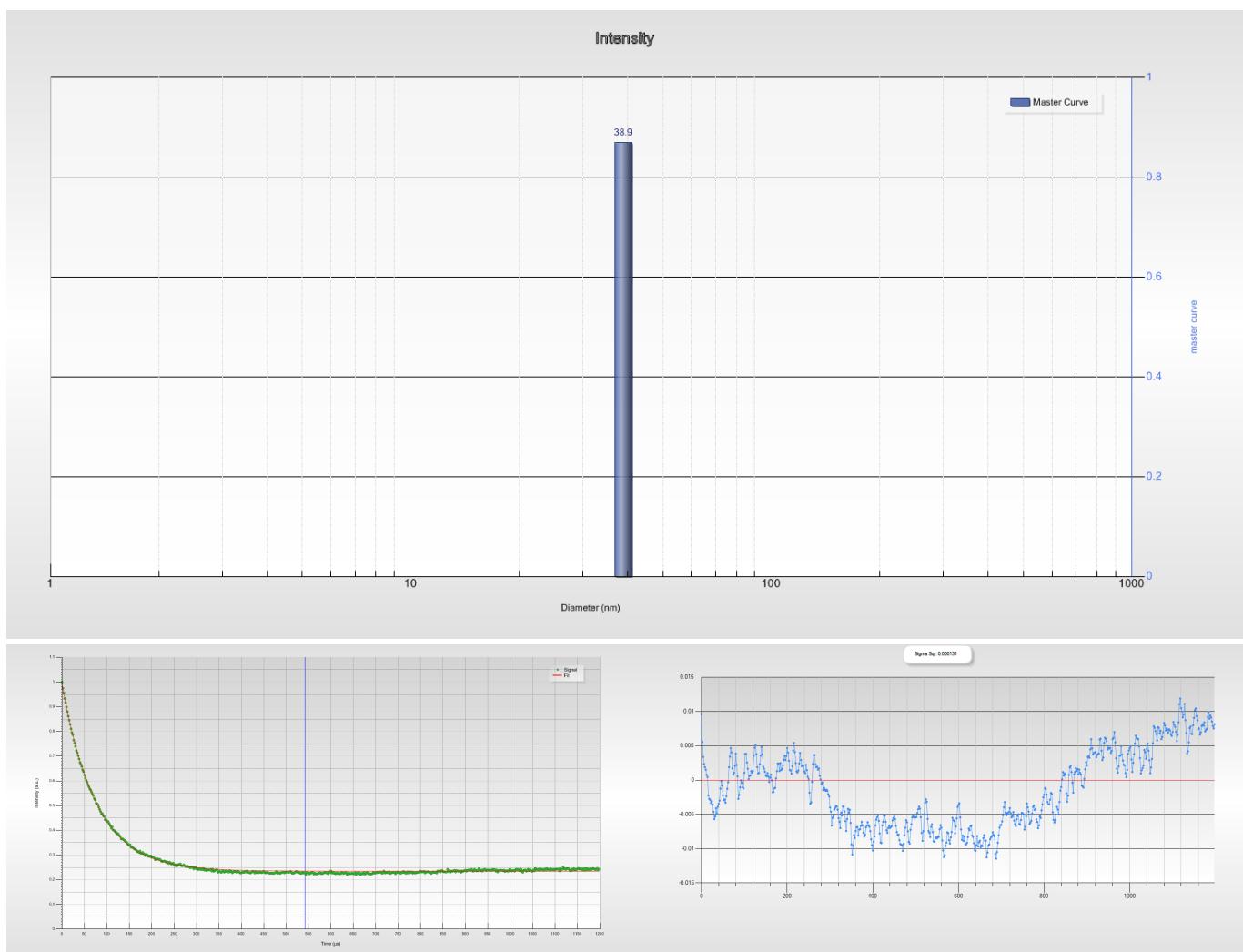
**Dn 90%:** 42.71 nm

### Dispersion data

Size (nm)	Number	Size (nm)	Number	Size (nm)	Number
35.5	0.56	40.78	0.25	42.71	0.19

**Dispersion statistics****D<sub>v</sub> 10%:** 35.5 nm**D<sub>v</sub> 50%:** 40.78 nm**D<sub>v</sub> 90%:** 42.71 nm**Dispersion data**

Size (nm)	Volume	Size (nm)	Volume	Size (nm)	Volume
35.5	0.44	40.78	0.3	42.71	0.26



### Dispersion statistics

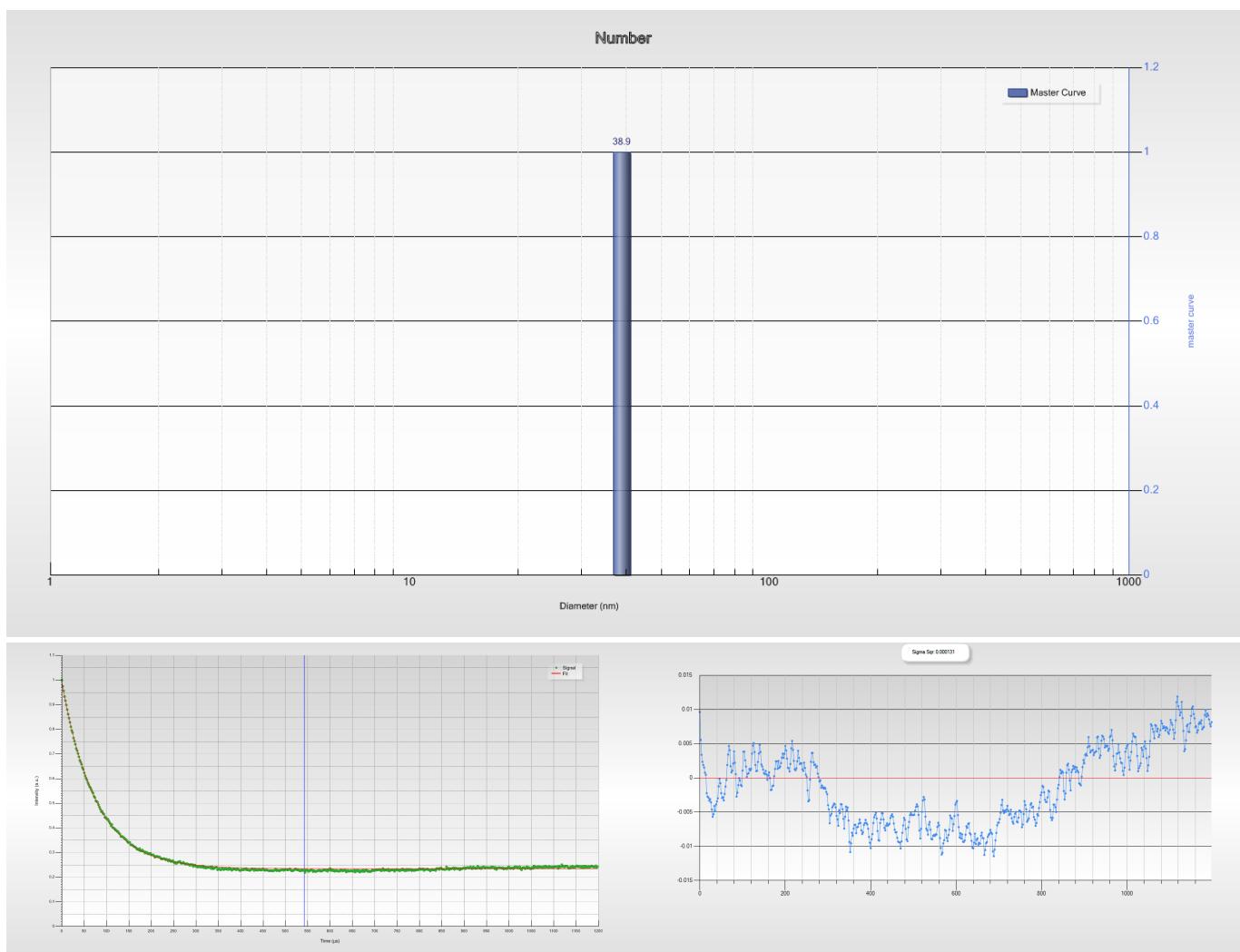
**Di 10%:** 38.94 nm      **Di 50%:** 38.94 nm      **Di 90%:** 38.94 nm  
**Mean Intensity:** 38.94 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.52	0.87	6573.85	12.43666E-012

### Dispersion datas

Size (nm)	Intensity
38.94	1



### Dispersion statistics

**Dn 10%:** 38.94 nm  
**Mean Number:** 38.94 nm

**Dn 50%:** 38.94 nm

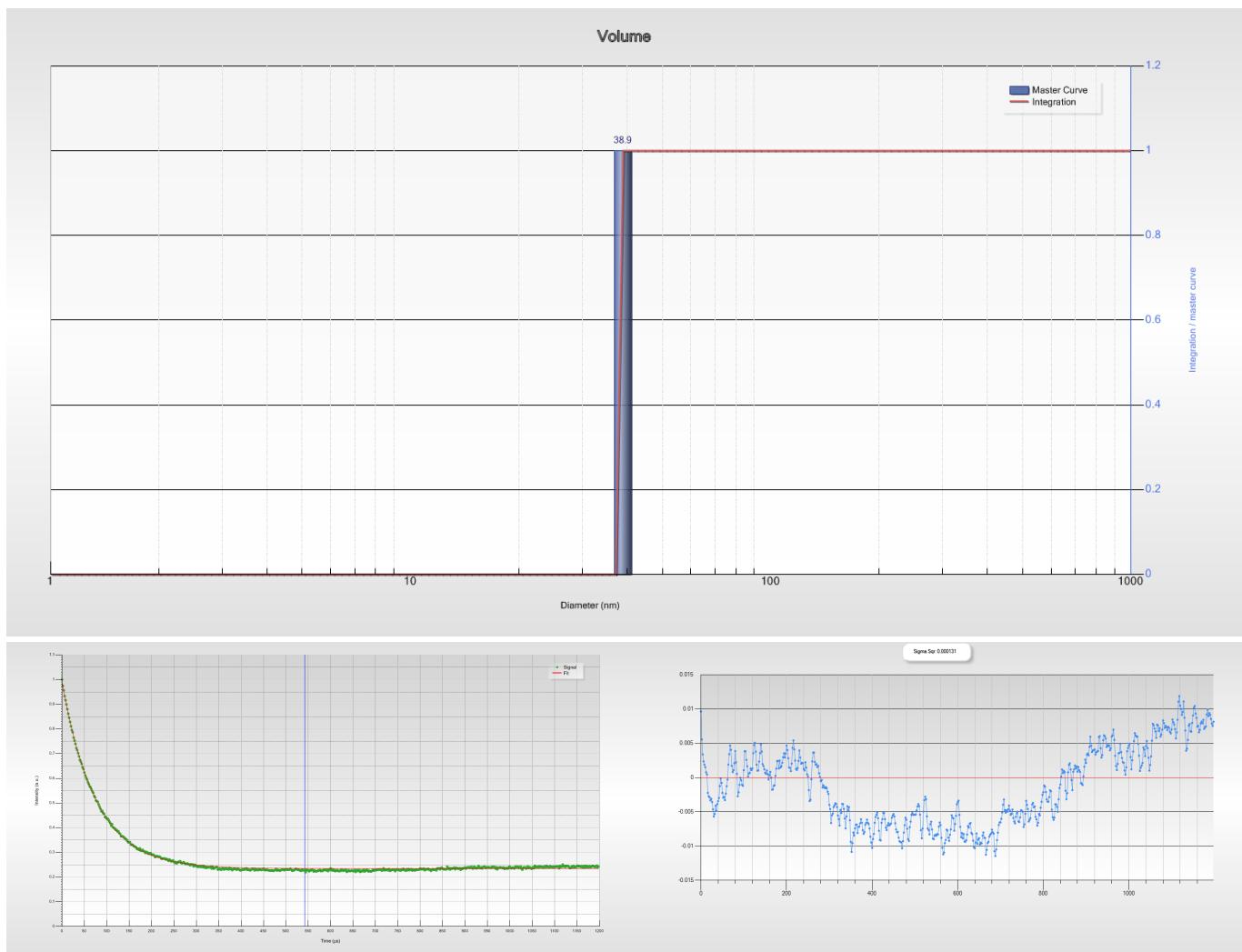
**Dn 90%:** 38.94 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.52	0.87	6573.85	12.43666E-012

### Dispersion data

Size (nm)	Number
38.94	1



### Dispersion statistics

**D<sub>v</sub> 10%:** 38.94 nm  
**Mean Volume:** 38.94 nm

**D<sub>v</sub> 50%:** 38.94 nm

**D<sub>v</sub> 90%:** 38.94 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.52	0.87	6573.85	12.43666E-012

### Dispersion datas

Size (nm)	Volume
38.94	1



### Distribution statistics

<b>Di 10%:</b> 33.89 nm	<b>Di 50%:</b> 40.78 nm	<b>Di 90%:</b> 46.85 nm
<b>Mean Intensity:</b> 40.34 nm		
<b>PDI :</b> 0.06089		<b>Std Dev:</b> 12.34%

### Detected size(s)

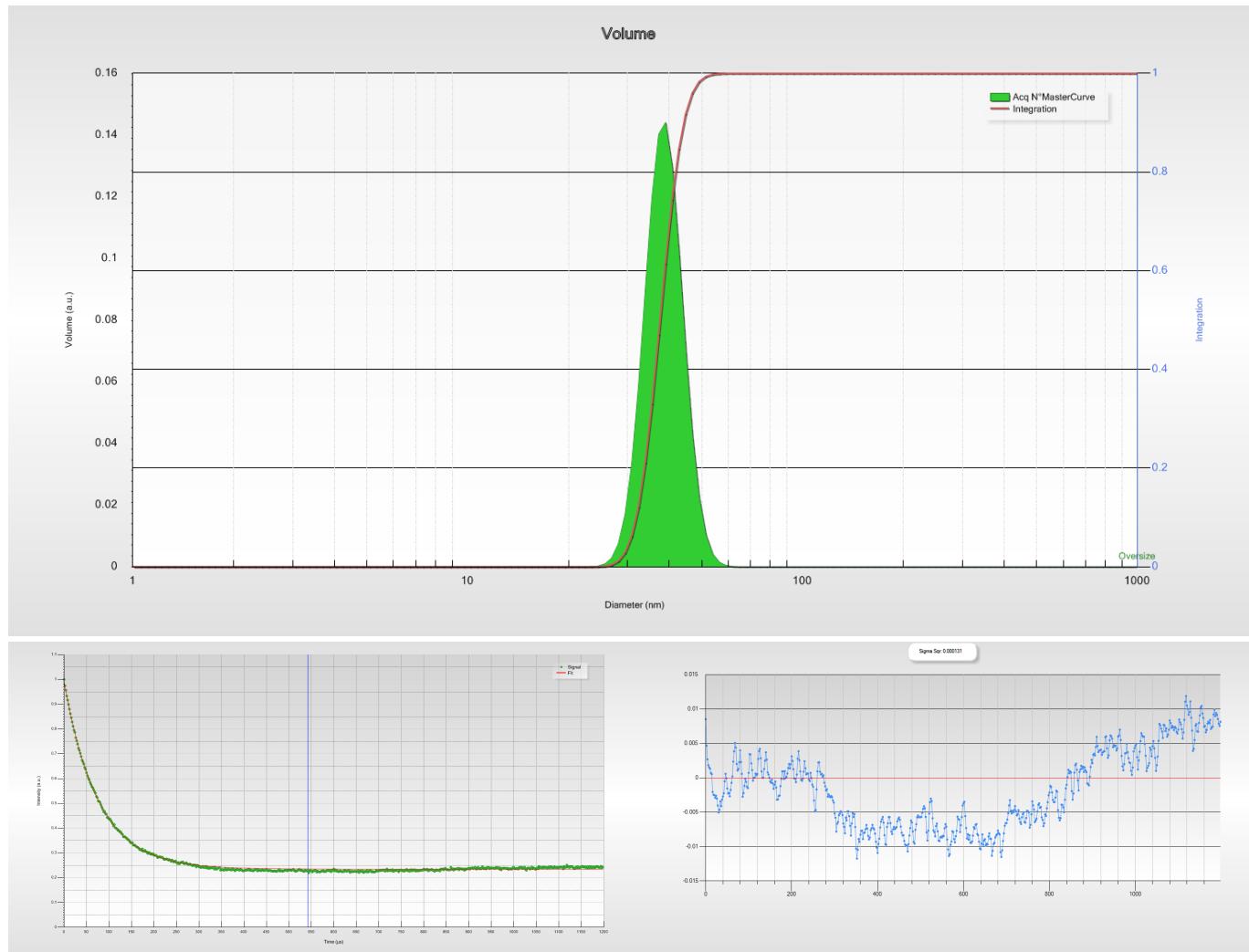
Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.14	0.76	6639.49	12.56084E-012

**Distribution statistics**

<b>Dn 10%:</b> 30.9 nm	<b>Dn 50%:</b> 37.18 nm	<b>Dn 90%:</b> 42.71 nm
<b>Mean Number:</b> 36.88 nm		
<b>PDI</b> : 0.06089		<b>Std Dev:</b> 12.34%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.14	0.76	6639.49	12.56084E-012

**Distribution statistics**

**D<sub>v</sub> 10%:** 32.36 nm  
**Mean Volume:** 38.71 nm  
**PDI :** 0.06089

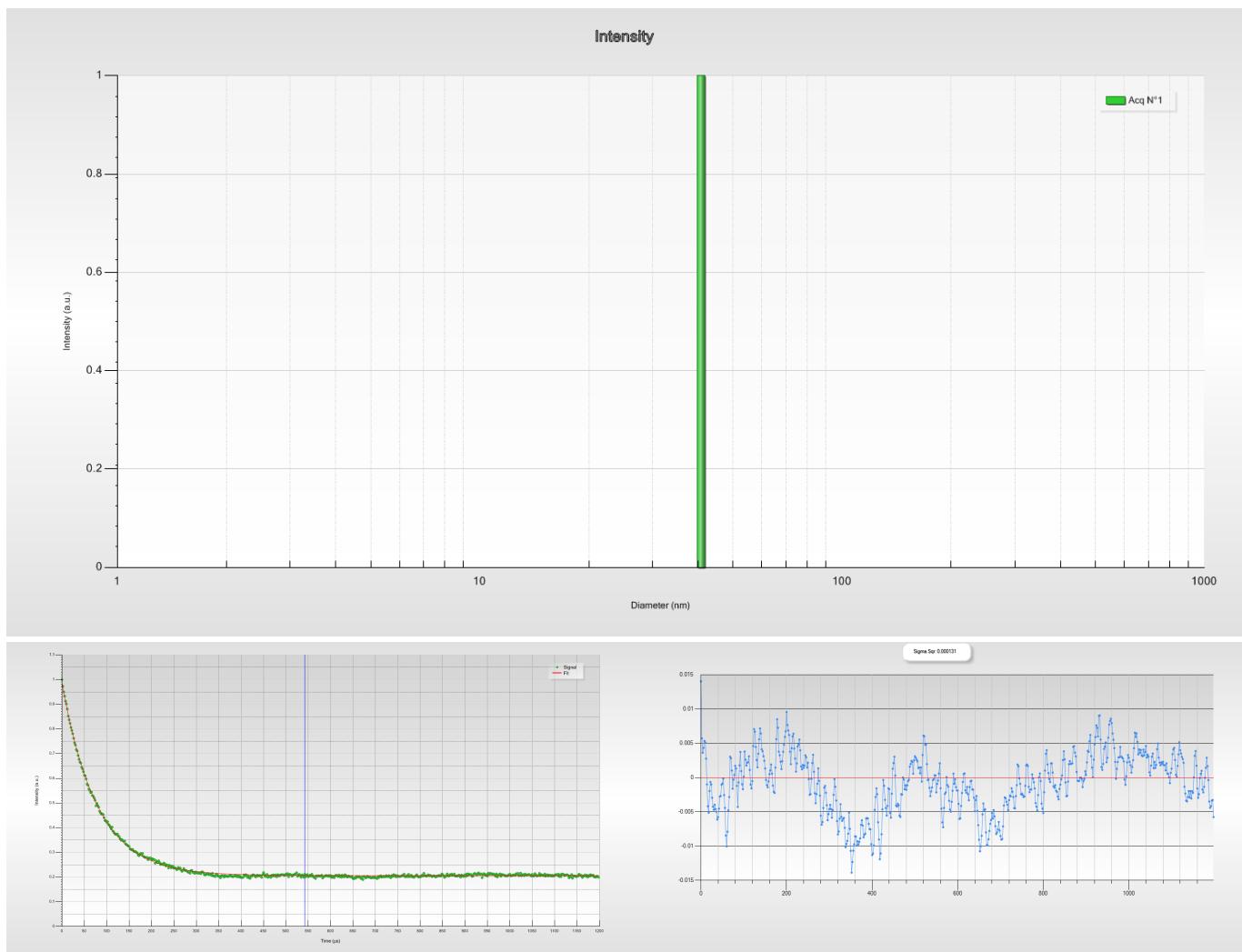
**D<sub>v</sub> 50%:** 38.94 nm

**D<sub>v</sub> 90%:** 44.73 nm

**Std Dev:** 12.34%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.14	0.76	6639.49	12.56084E-012



### Dispersion statistics

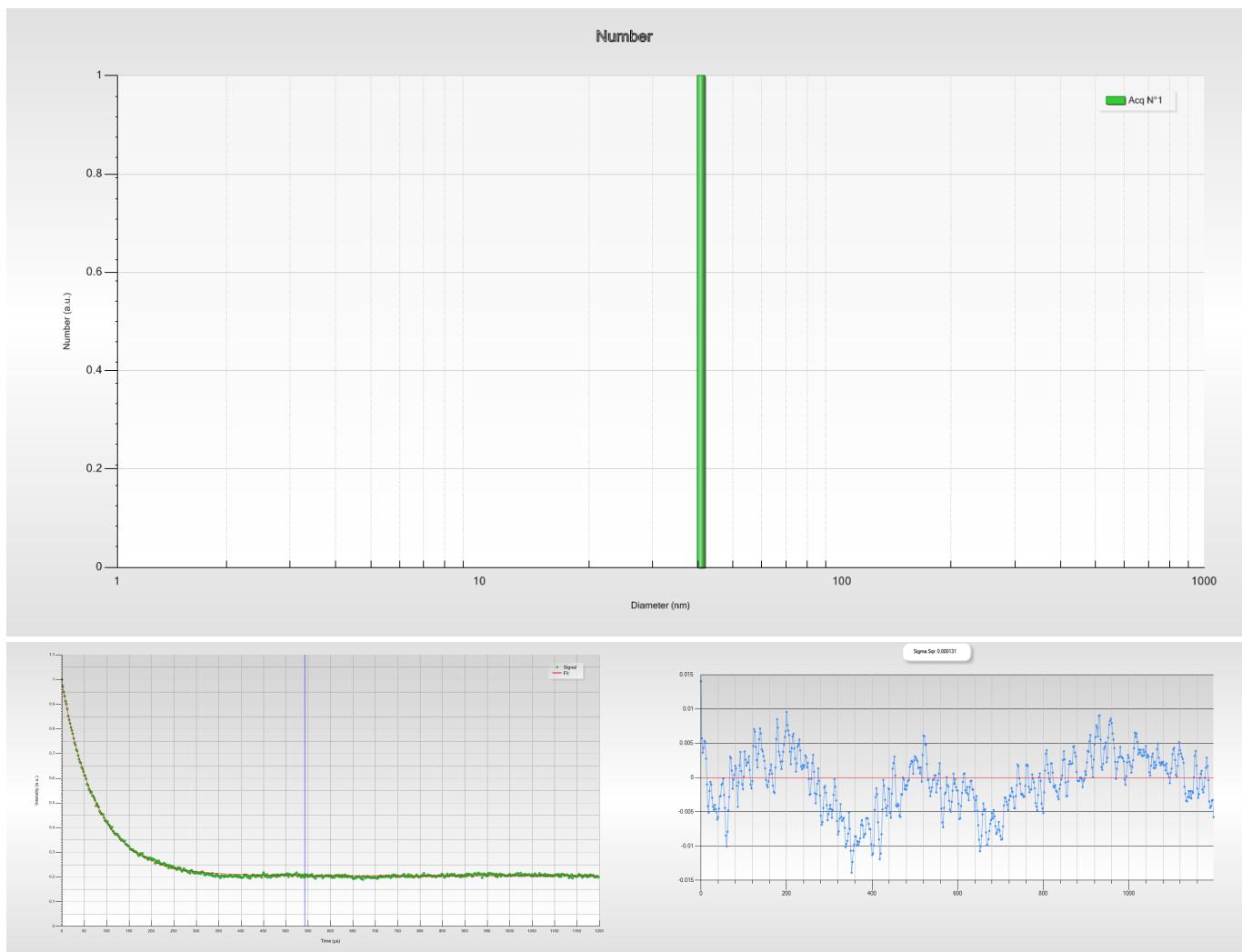
**Di 10%:** 40.78 nm      **Di 50%:** 40.78 nm      **Di 90%:** 40.78 nm  
**Mean Intensity:** 40.78 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.61	0.88	6396.9	12.10189E-012

### Dispersion datas

Size (nm)	Intensity
40.78	1



### Dispersion statistics

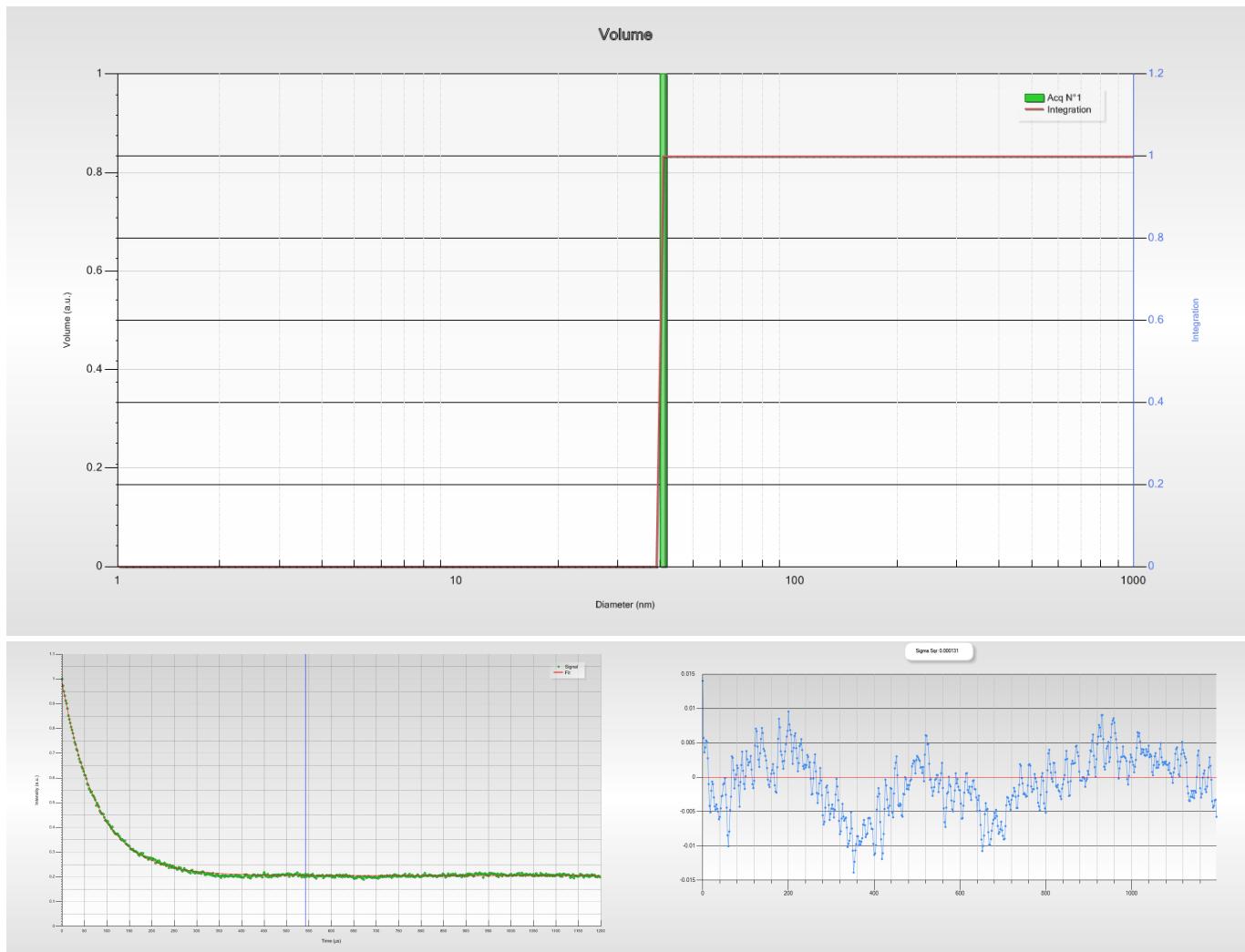
**Dn 10%:** 40.78 nm      **Dn 50%:** 40.78 nm      **Dn 90%:** 40.78 nm  
**Mean Number:** 40.78 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.61	0.88	6396.9	12.10189E-012

### Dispersion datas

Size (nm)	Number
40.78	1



### Dispersion statistics

**D<sub>v</sub> 10%:** 40.78 nm  
**Mean Volume:** 40.78 nm

**D<sub>v</sub> 50%:** 40.78 nm

**D<sub>v</sub> 90%:** 40.78 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.61	0.88	6396.9	12.10189E-012

### Dispersion datas

Size (nm)	Volume
40.78	1



### Distribution statistics

**Di 10%:** 33.89 nm      **Di 50%:** 40.78 nm      **Di 90%:** 51.39 nm  
**Mean Intensity:** 41.92 nm      **Std Dev:** 16.27%  
**PDI** : 0.10591

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m²/s)
39.77	0.78	6531.73	12.35698E-012

**Distribution statistics**

<b>Dn 10%:</b> 28.17 nm	<b>Dn 50%:</b> 35.5 nm	<b>Dn 90%:</b> 42.71 nm
<b>Mean Number:</b> 35.88 nm		
<b>PDI</b> : 0.10591		<b>Std Dev:</b> 16.27%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.77	0.78	6531.73	12.35698E-012

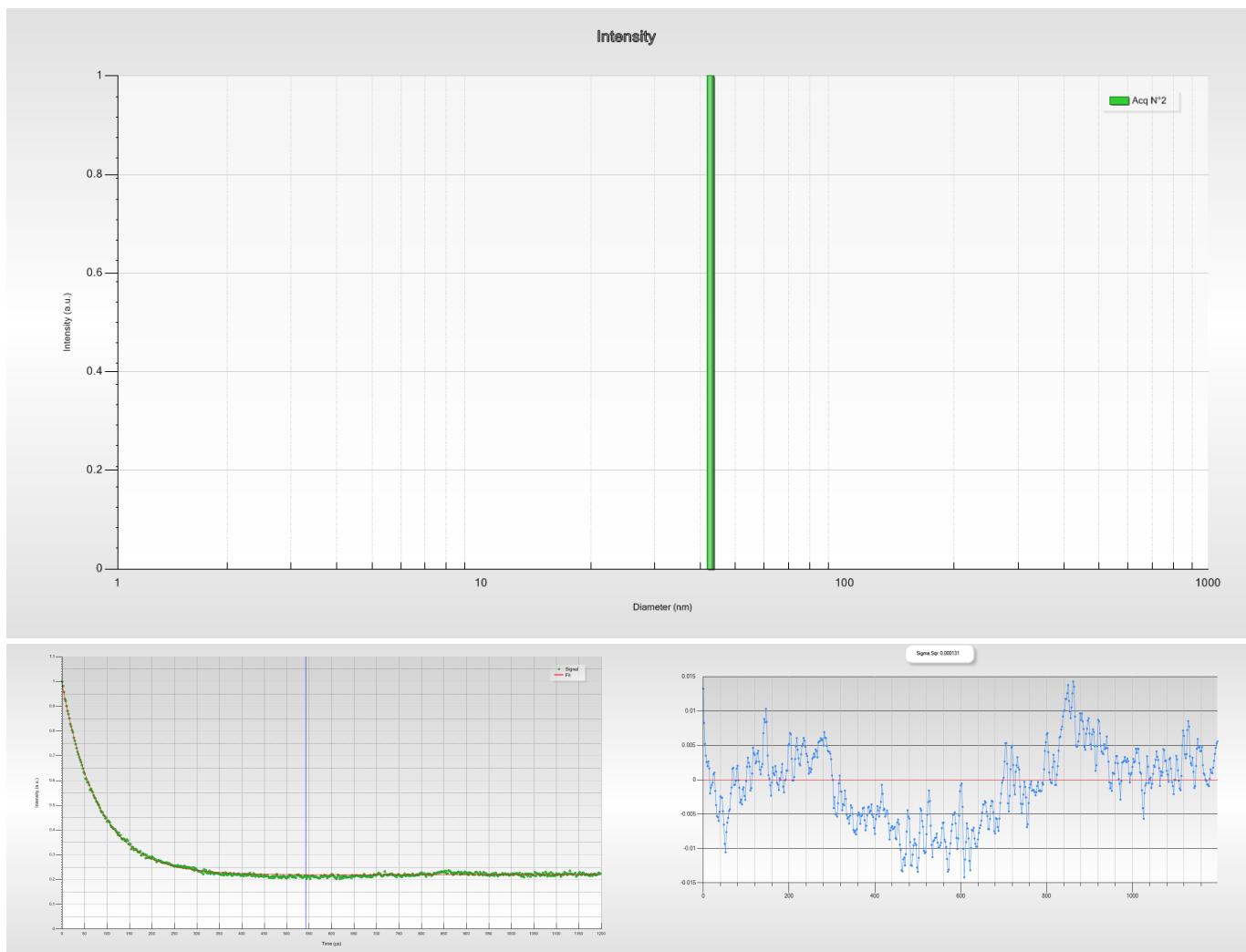


### Distribution statistics

<b>D<sub>v</sub> 10%:</b> 30.9 nm	<b>D<sub>v</sub> 50%:</b> 38.94 nm	<b>D<sub>v</sub> 90%:</b> 46.85 nm
<b>Mean Volume:</b> 38.94 nm		
<b>PDI</b> : 0.10591		<b>Std Dev:</b> 16.27%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.77	0.78	6531.73	12.35698E-012



### Dispersion statistics

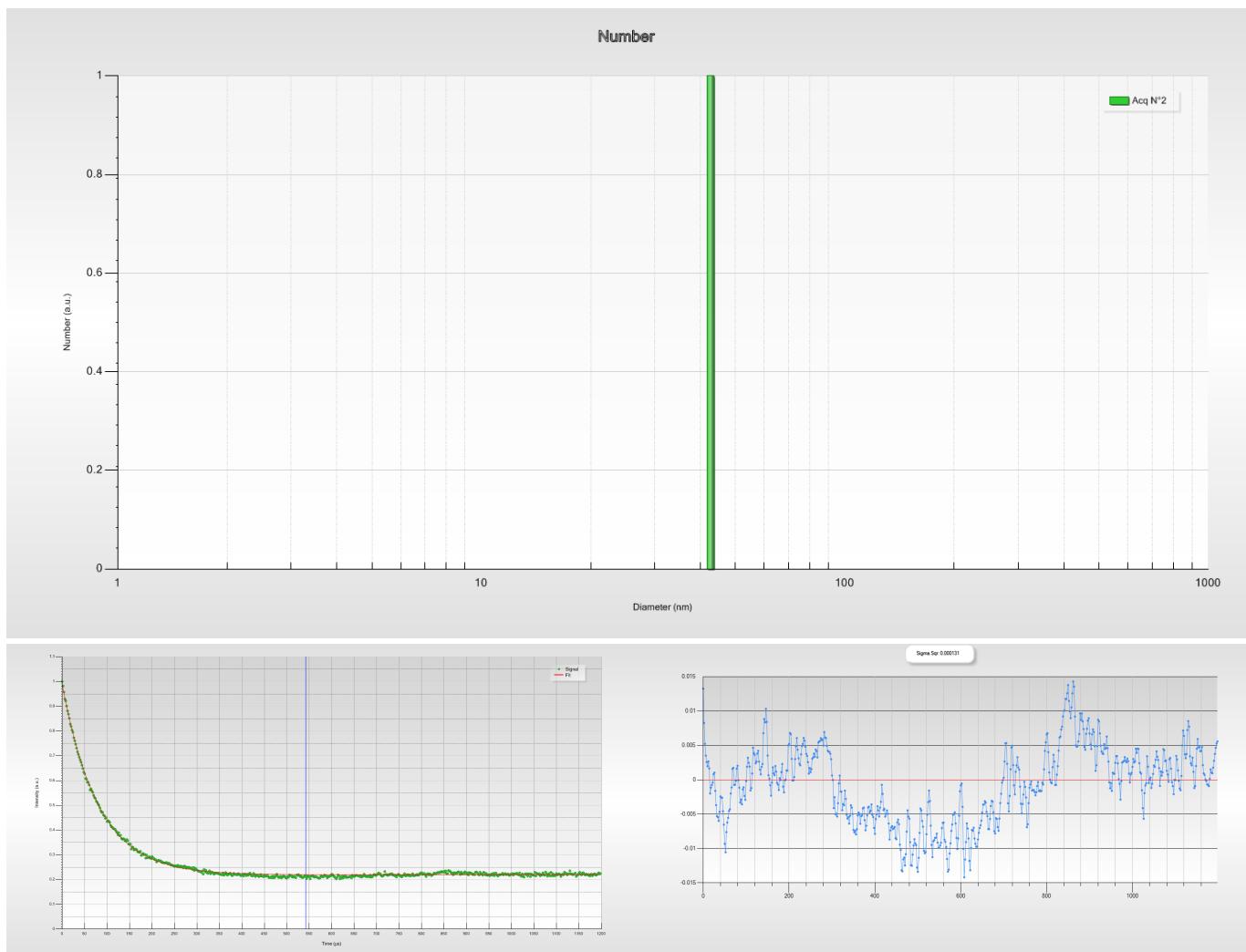
**Di 10%:** 42.71 nm      **Di 50%:** 42.71 nm      **Di 90%:** 42.71 nm  
**Mean Intensity:** 42.71 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
41.79	0.88	6215.98	11.75963E-012

### Dispersion data

Size (nm)	Intensity
42.71	1



### Dispersion statistics

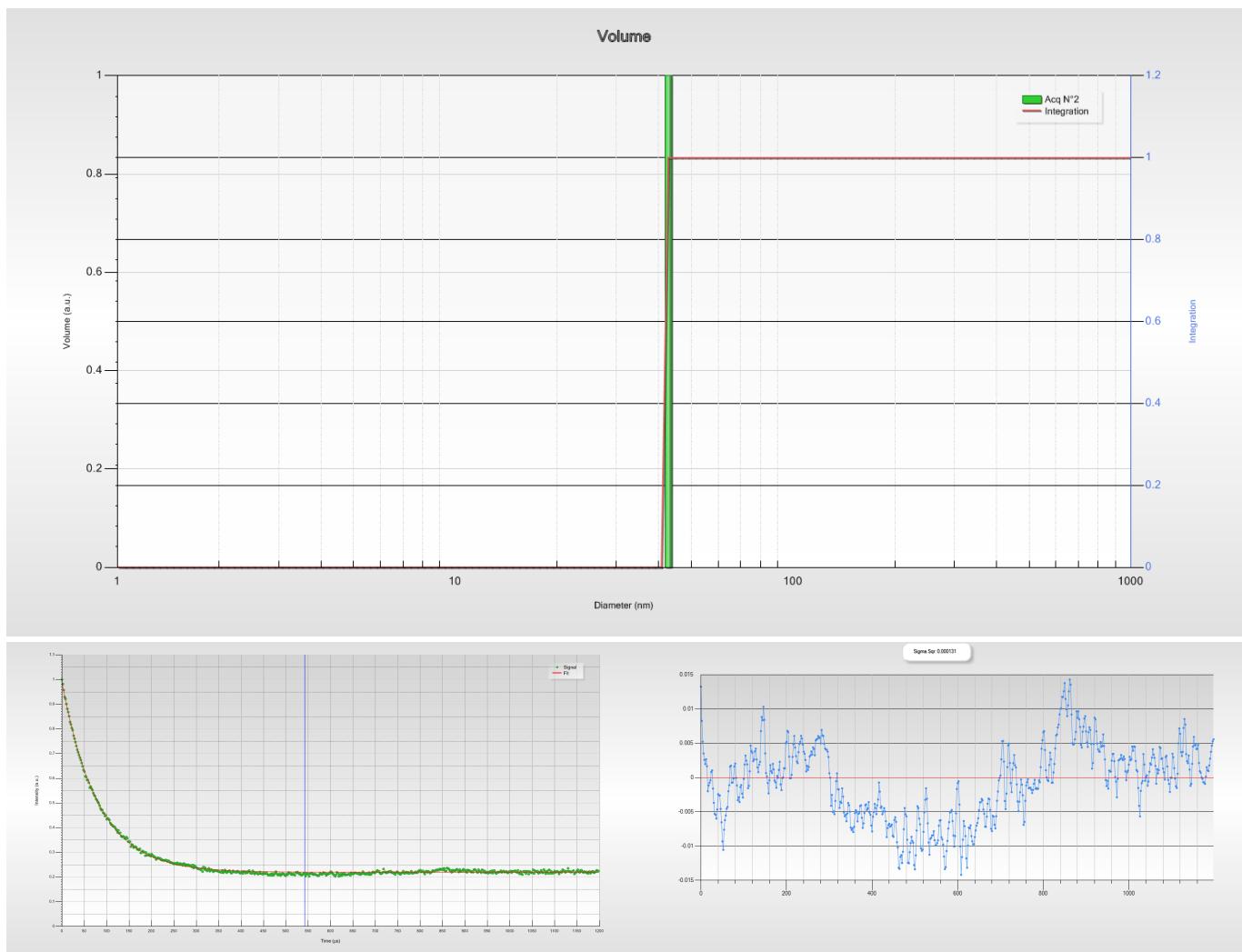
**Dn 10%:** 42.71 nm      **Dn 50%:** 42.71 nm      **Dn 90%:** 42.71 nm  
**Mean Number:** 42.71 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
41.79	0.88	6215.98	11.75963E-012

### Dispersion data

Size (nm)	Number
42.71	1



### Dispersion statistics

**D<sub>v</sub> 10%:** 42.71 nm      **D<sub>v</sub> 50%:** 42.71 nm      **D<sub>v</sub> 90%:** 42.71 nm  
**Mean Volume:** 42.71 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
41.79	0.88	6215.98	11.75963E-012

### Dispersion datas

Size (nm)	Volume
42.71	1



### Distribution statistics

**Di 10%:** 33.89 nm      **Di 50%:** 42.71 nm      **Di 90%:** 53.82 nm  
**Mean Intensity:** 43.51 nm      **Std Dev:** 19.08%  
**PDI** : 0.14567

### Detected size(s)

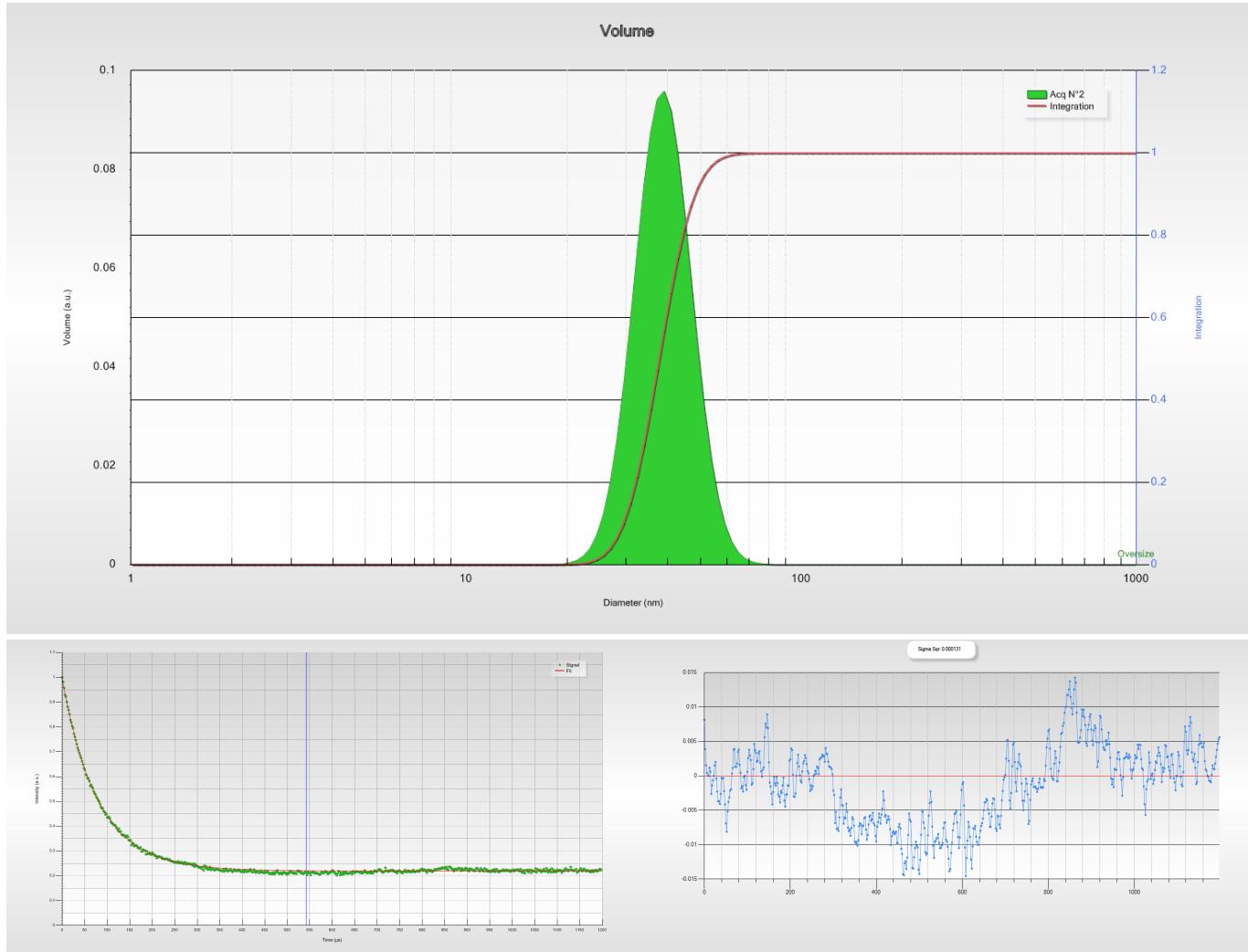
Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.49	0.77	6415.47	12.13703E-012

**Distribution statistics**

<b>Dn 10%:</b> 26.9 nm	<b>Dn 50%:</b> 33.89 nm	<b>Dn 90%:</b> 44.73 nm
<b>Mean Number:</b> 35.16 nm		
<b>PDI</b> : 0.14567		<b>Std Dev:</b> 19.08%

**Detected size(s)**

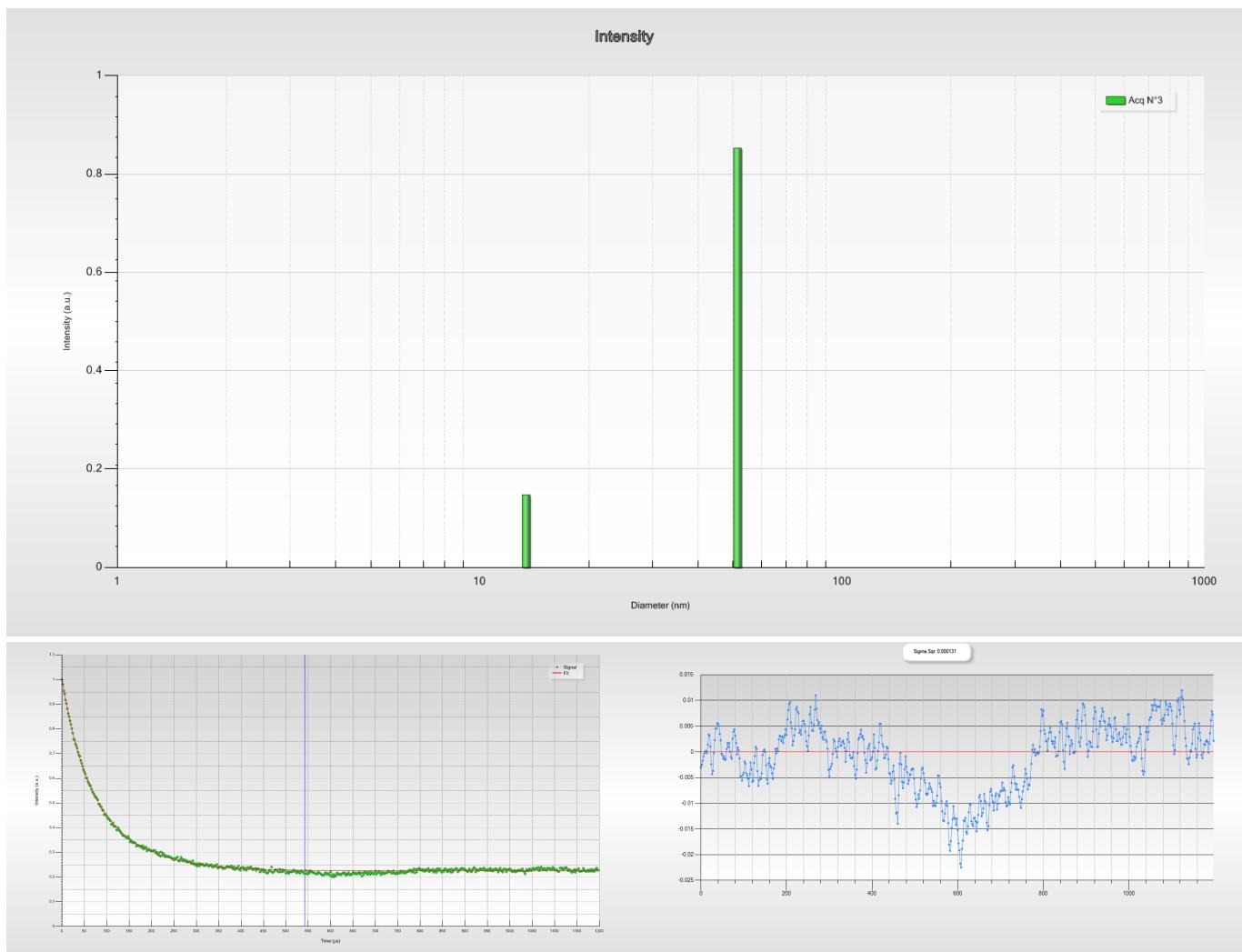
Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.49	0.77	6415.47	12.13703E-012

**Distribution statistics**

<b>D<sub>v</sub> 10%:</b> 29.5 nm	<b>D<sub>v</sub> 50%:</b> 38.94 nm	<b>D<sub>v</sub> 90%:</b> 49.06 nm
<b>Mean Volume:</b> 39.28 nm		
<b>PDI :</b> 0.14567		<b>Std Dev:</b> 19.08%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.49	0.77	6415.47	12.13703E-012



### Dispersion statistics

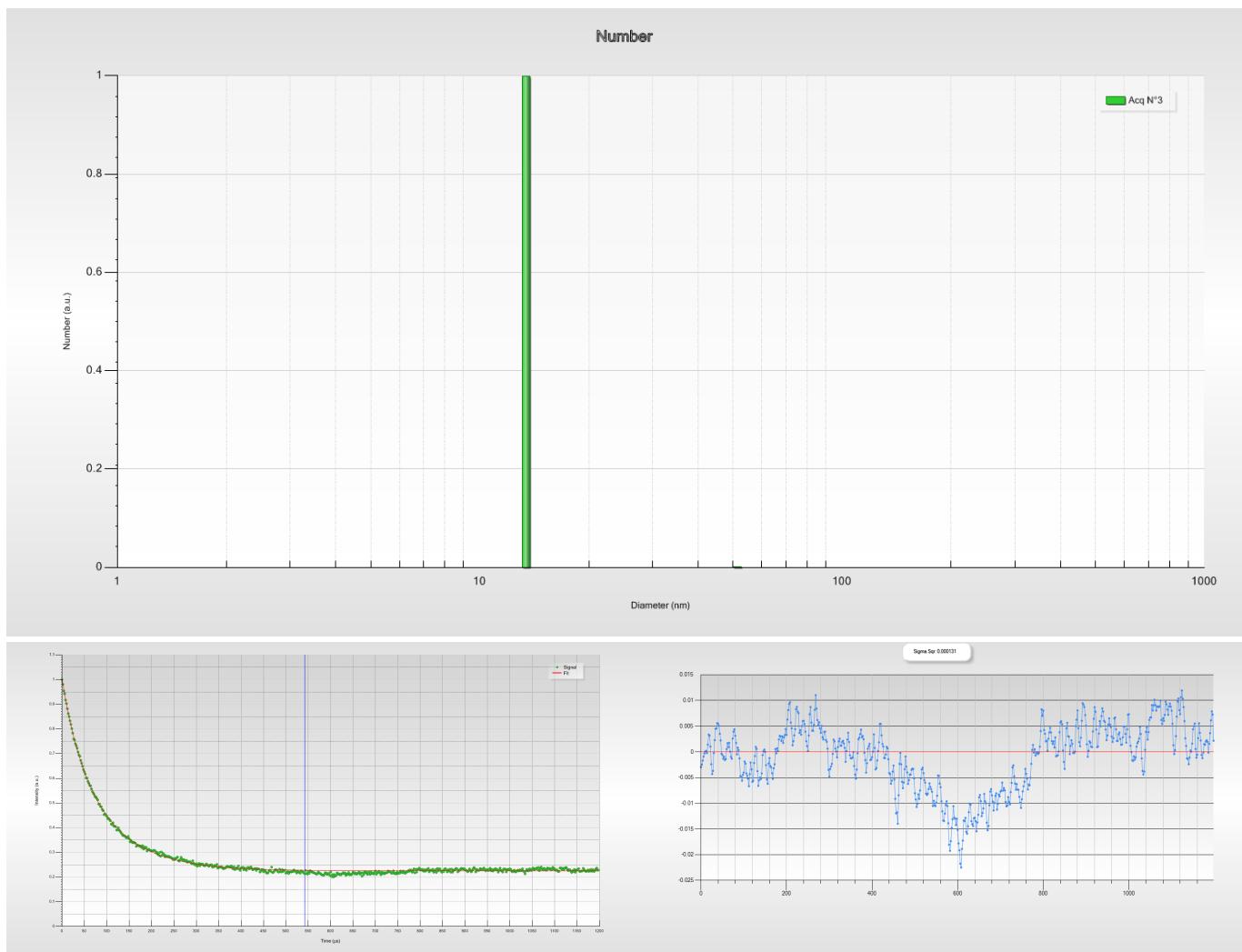
**Di 10%:** 13.44 nm      **Di 50%:** 51.39 nm      **Di 90%:** 51.39 nm  
**Mean Intensity:** 45.78 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
13.21	0.13	19660.36	37.19421E-012
51.73	0.75	5021.91	95.00636E-013

### Dispersion data

Size (nm)	Intensity	Size (nm)	Intensity
13.44	0.15	51.39	0.85



### Dispersion statistics

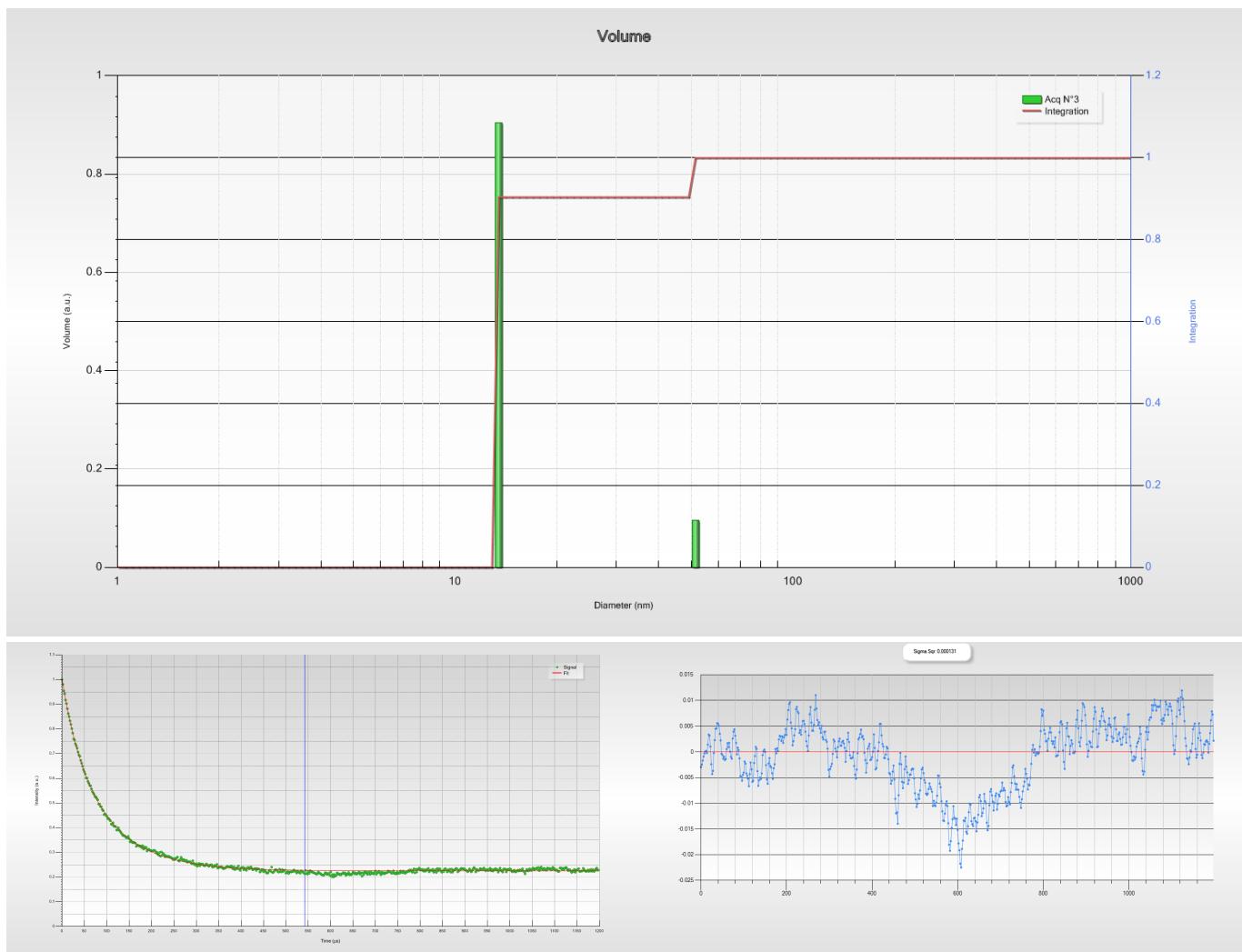
Dn 10%: 13.44 nm      Dn 50%: 13.44 nm      Dn 90%: 13.44 nm  
 Mean Number: 13.52 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
13.21	0.13	19660.36	37.19421E-012
51.73	0.75	5021.91	95.00636E-013

### Dispersion data

Size (nm)	Number
13.44	1



### Dispersion statistics

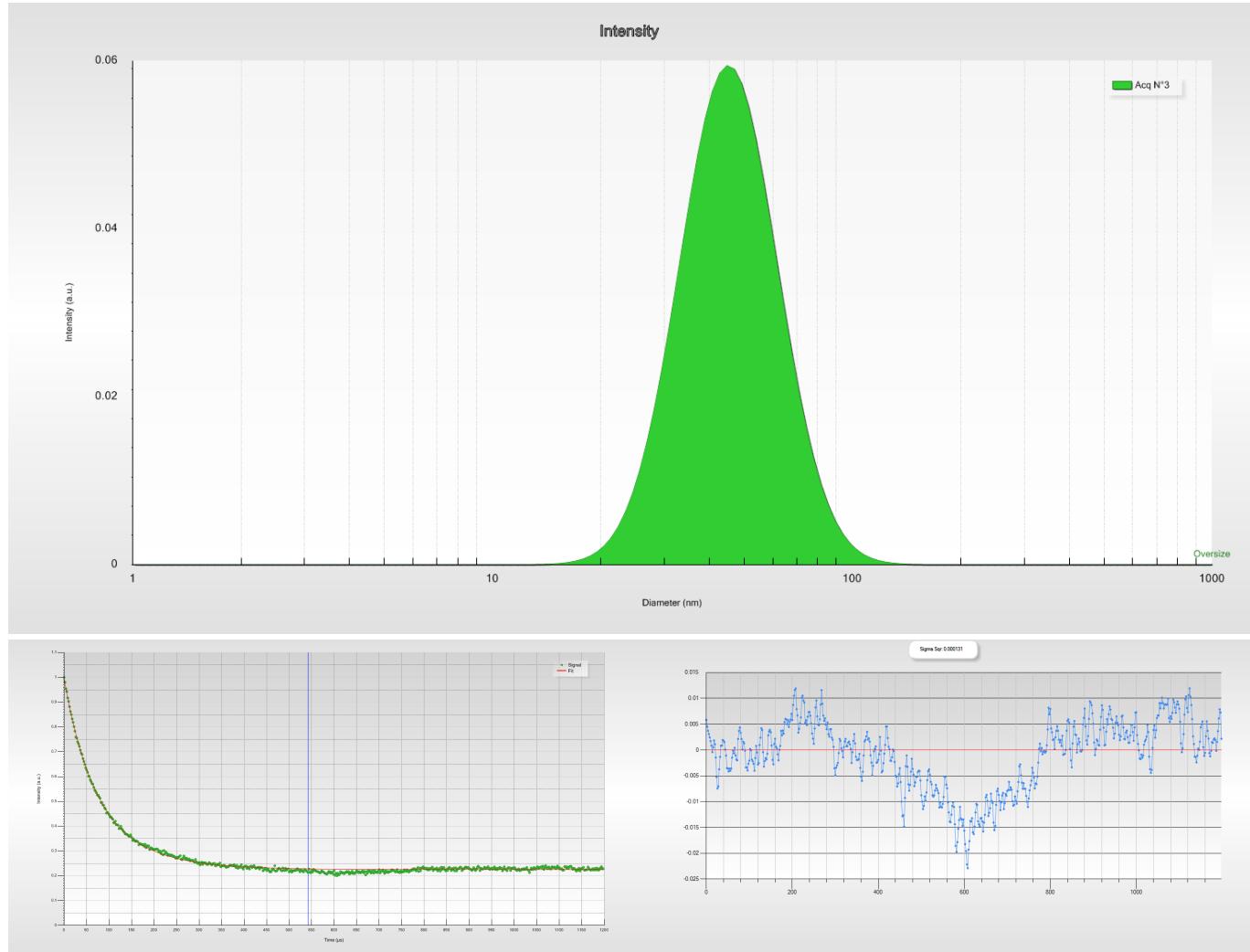
**D<sub>v</sub> 10%:** 13.44 nm      **D<sub>v</sub> 50%:** 13.44 nm      **D<sub>v</sub> 90%:** 13.44 nm  
**Mean Volume:** 17.09 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
13.21	0.13	19660.36	37.19421E-012
51.73	0.75	5021.91	95.00636E-013

### Dispersion data

Size (nm)	Volume	Size (nm)	Volume
13.44	0.9	51.39	0.1



### Distribution statistics

**Di 10%:** 30.9 nm      **Di 50%:** 44.73 nm      **Di 90%:** 67.81 nm  
**Mean Intensity:** 47.37 nm      **PDI :** 0.40421      **Std Dev:** 31.79%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.06	0.77	6650.64	12.58193E-012

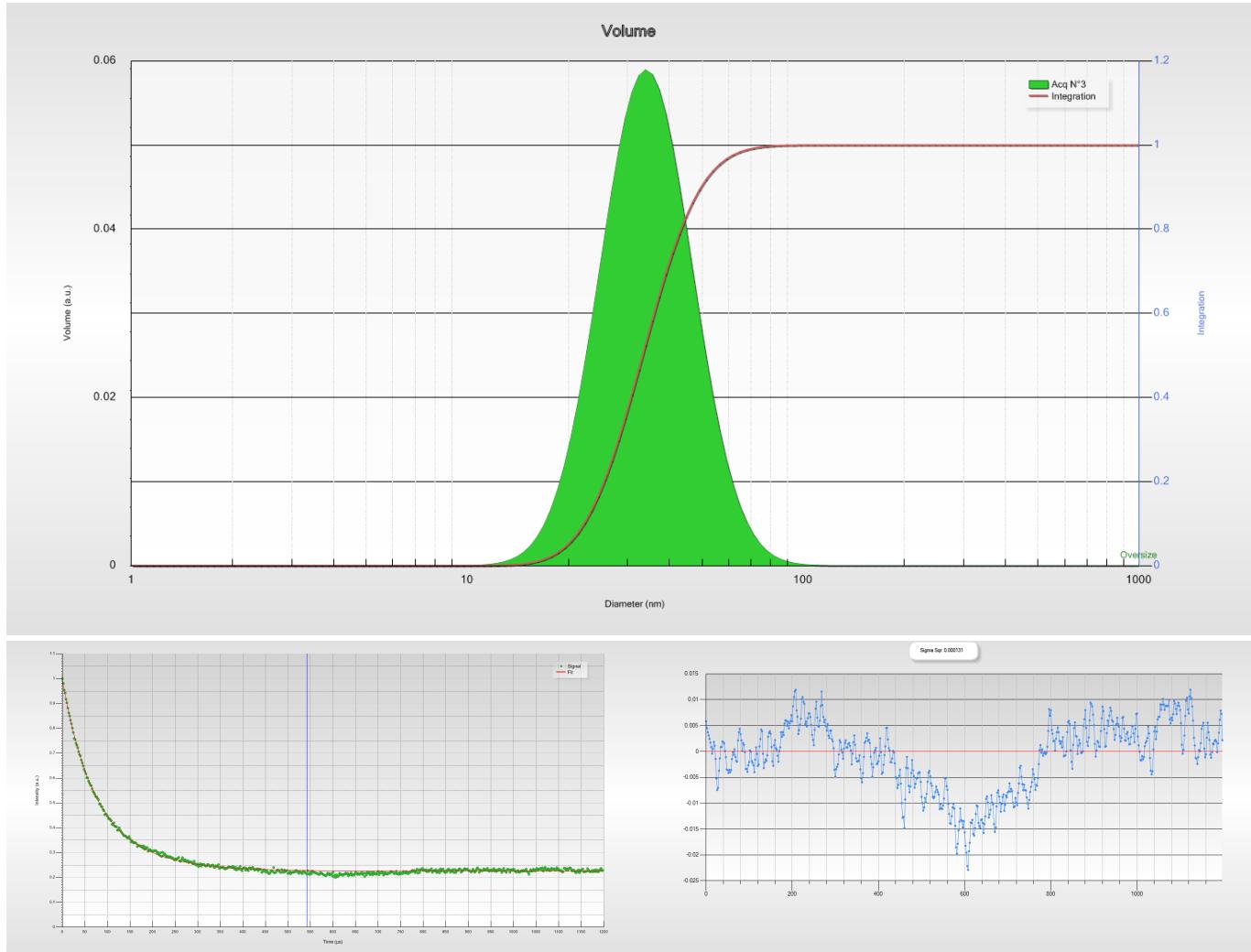


### Distribution statistics

<b>Dn 10%:</b> 16.94 nm	<b>Dn 50%:</b> 25.68 nm	<b>Dn 90%:</b> 37.18 nm
<b>Mean Number:</b> 26.65 nm		
<b>PDI</b> : 0.40421		<b>Std Dev:</b> 31.79%

### Detected size(s)

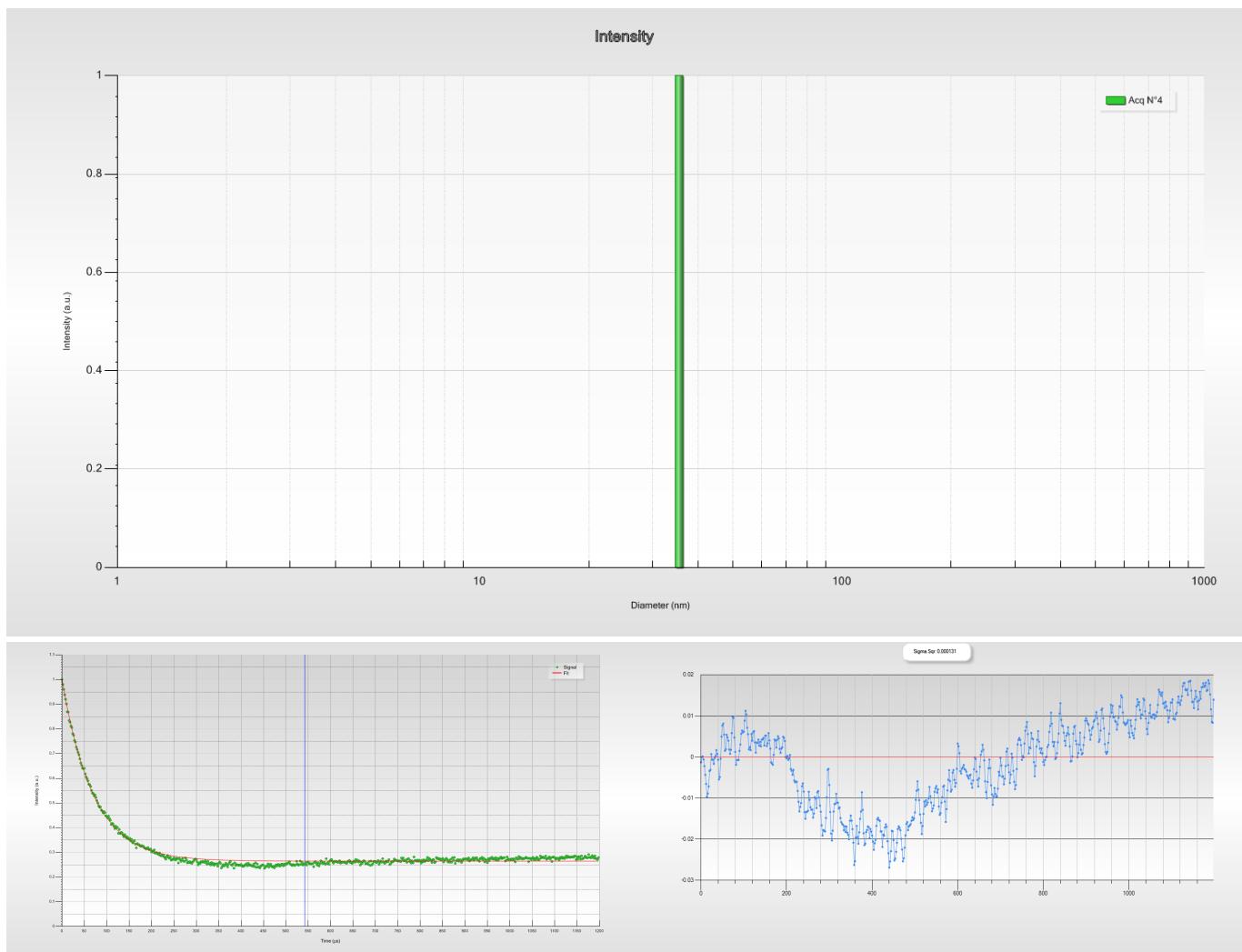
Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.06	0.77	6650.64	12.58193E-012

**Distribution statistics**

<b>D<sub>v</sub> 10%:</b> 22.36 nm	<b>D<sub>v</sub> 50%:</b> 33.89 nm	<b>D<sub>v</sub> 90%:</b> 51.39 nm
<b>Mean Volume:</b> 35.74 nm		
<b>PDI</b> : 0.40421		<b>Std Dev:</b> 31.79%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.06	0.77	6650.64	12.58193E-012



### Dispersion statistics

**Di 10%:** 35.5 nm  
**Mean Intensity:** 35.5 nm

**Di 50%:** 35.5 nm

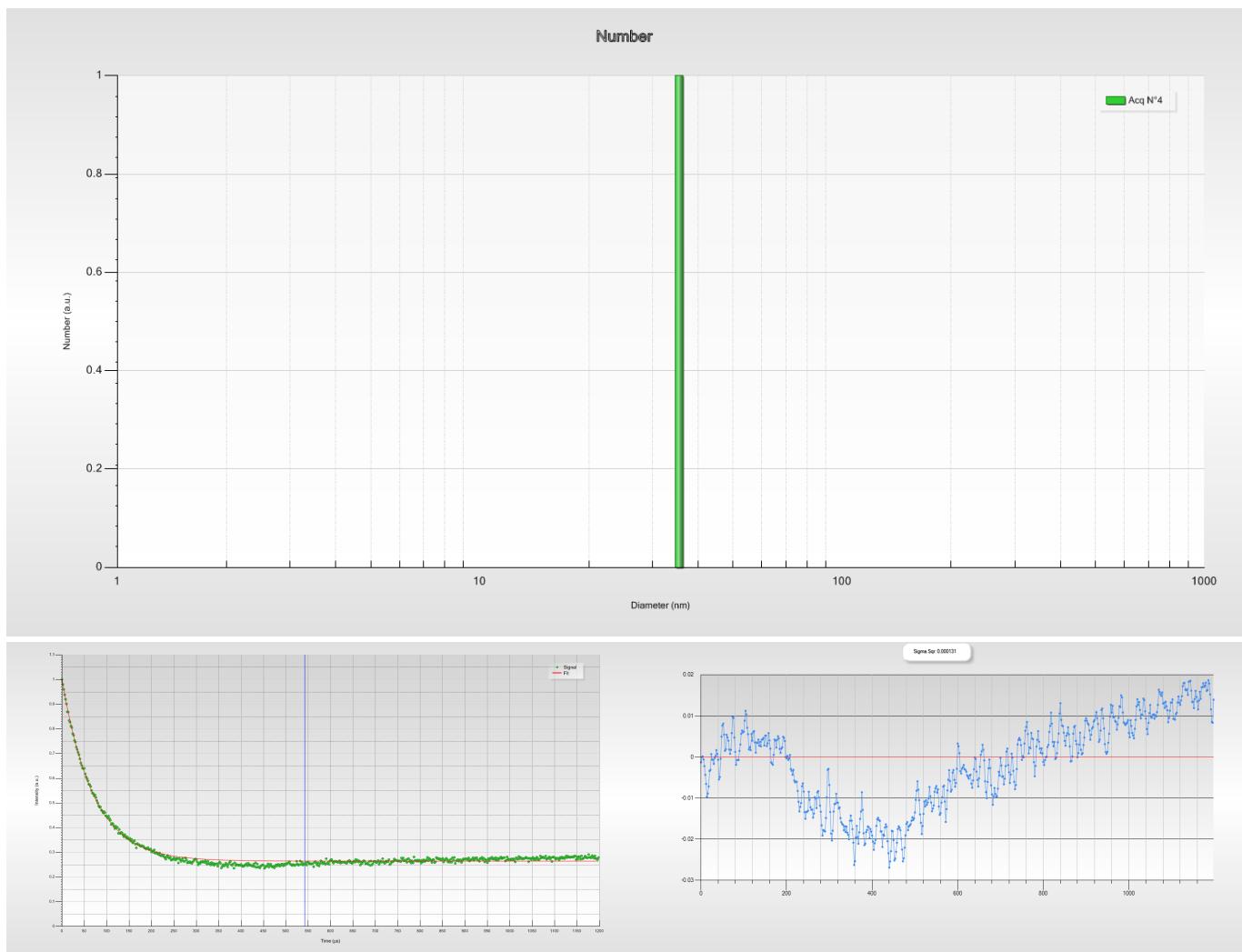
**Di 90%:** 35.5 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.24	0.86	7167.97	13.56063E-012

### Dispersion datas

Size (nm)	Intensity
35.5	1



### Dispersion statistics

**Dn 10%:** 35.5 nm  
**Mean Number:** 35.5 nm

**Dn 50%:** 35.5 nm

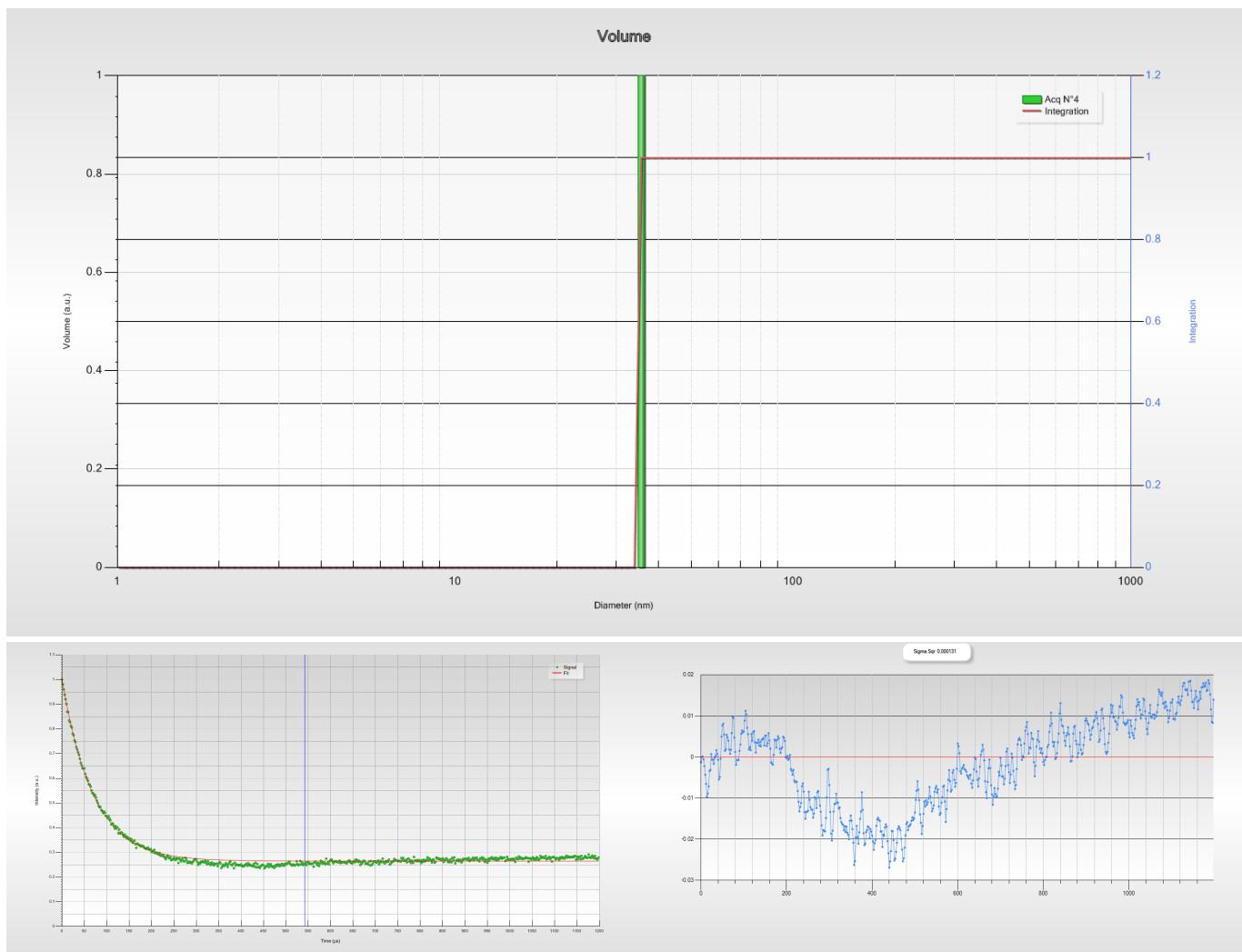
**Dn 90%:** 35.5 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.24	0.86	7167.97	13.56063E-012

### Dispersion datas

Size (nm)	Number
35.5	1



### Dispersion statistics

**Dv 10%:** 35.5 nm  
**Mean Volume:** 35.5 nm

**Dv 50%:** 35.5 nm

**Dv 90%:** 35.5 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.24	0.86	7167.97	13.56063E-012

### Dispersion datas

Size (nm)	Volume
35.5	1



### Distribution statistics

**Di 10%:** 32.36 nm      **Di 50%:** 38.94 nm      **Di 90%:** 46.85 nm  
**Mean Intensity:** 39.06 nm      **Std Dev:** 14.09%  
**PDI** : 0.07941

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
37.55	0.73	6919.16	13.08993E-012

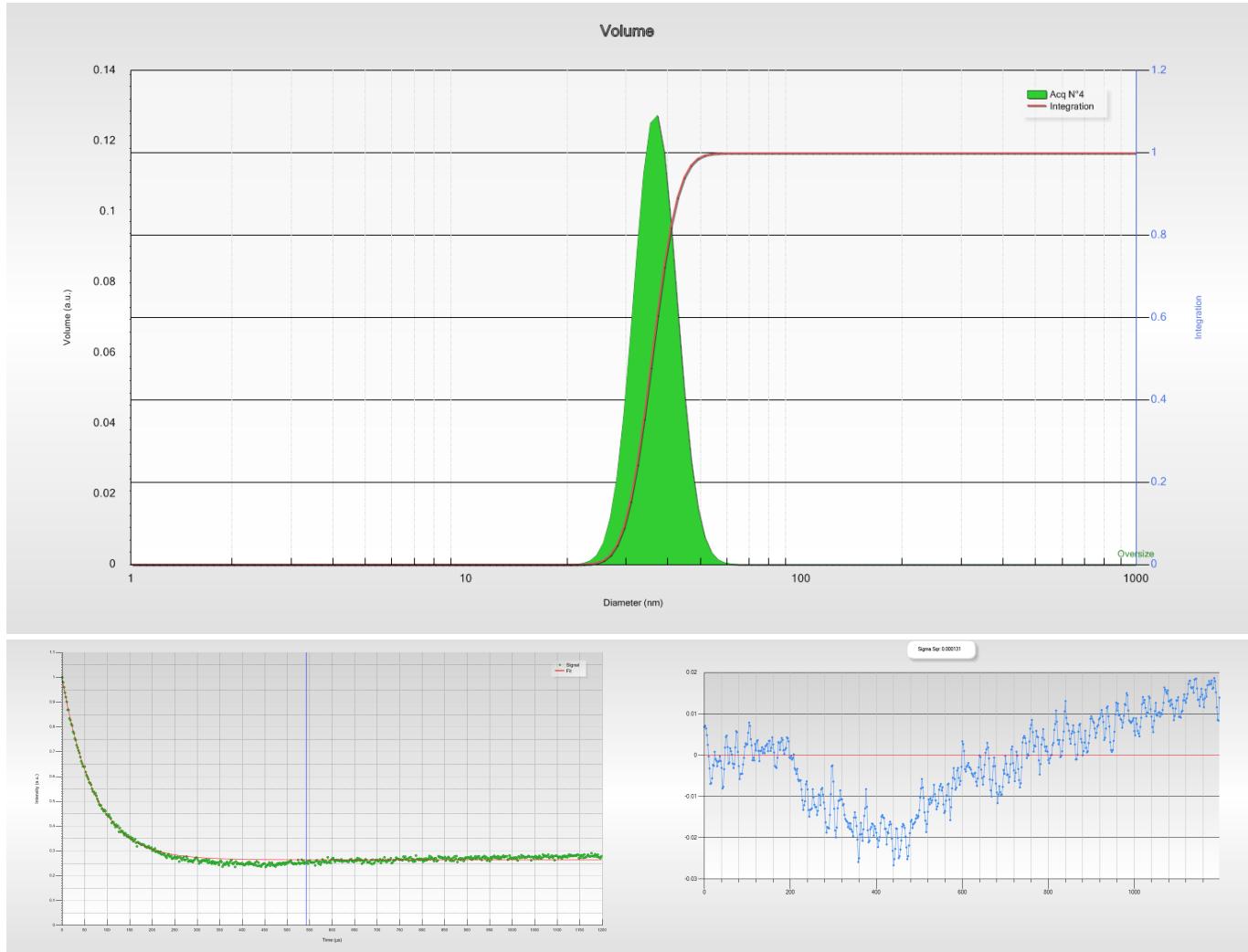


### Distribution statistics

<b>Dn 10%:</b> 28.17 nm	<b>Dn 50%:</b> 33.89 nm	<b>Dn 90%:</b> 40.78 nm
<b>Mean Number:</b> 34.75 nm		
<b>PDI</b> : 0.07941		<b>Std Dev:</b> 14.09%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
37.55	0.73	6919.16	13.08993E-012

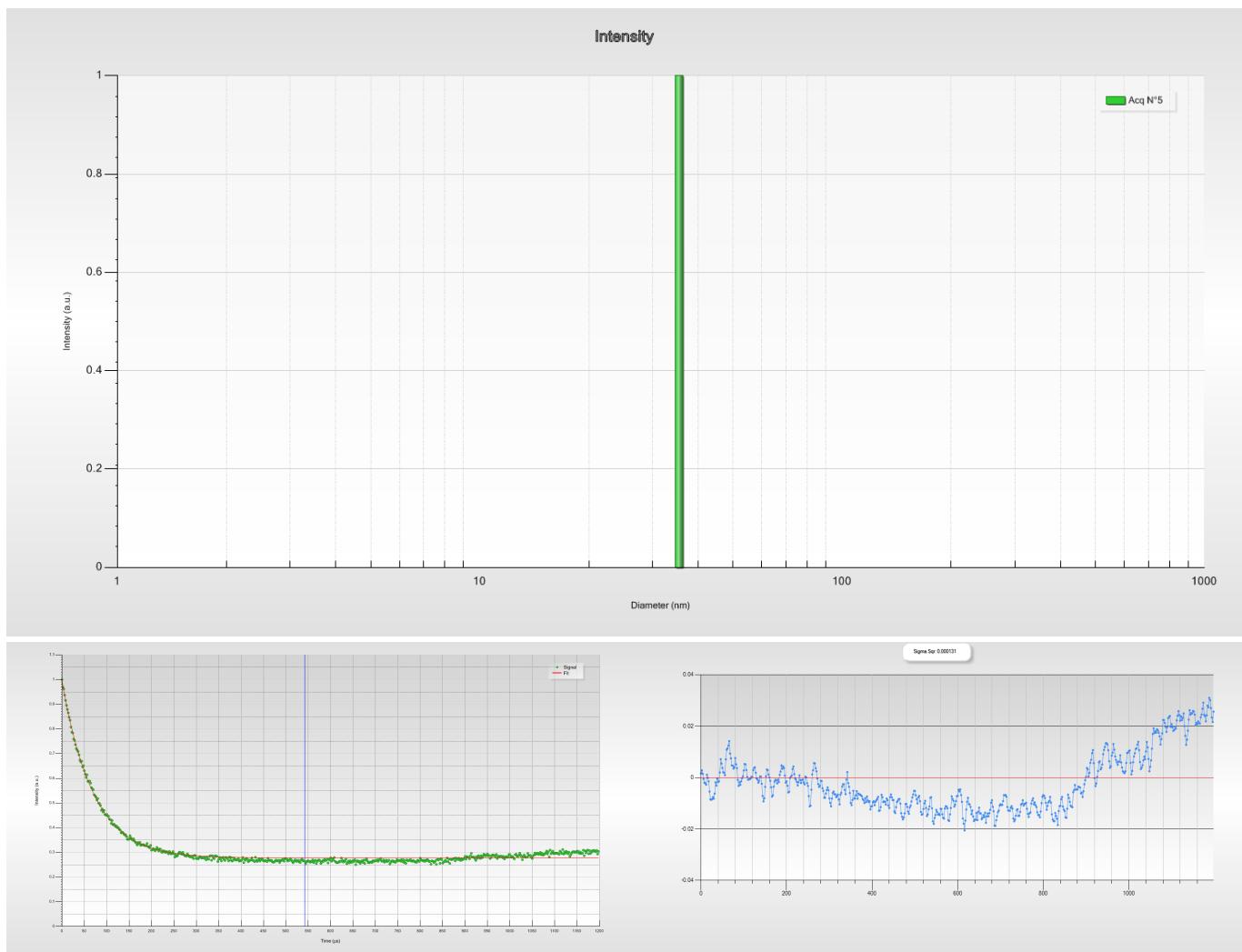


### Distribution statistics

<b>D<sub>v</sub> 10%:</b> 30.9 nm	<b>D<sub>v</sub> 50%:</b> 37.18 nm	<b>D<sub>v</sub> 90%:</b> 44.73 nm
<b>Mean Volume:</b> 36.98 nm		
<b>PDI :</b> 0.07941		<b>Std Dev:</b> 14.09%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
37.55	0.73	6919.16	13.08993E-012



### Dispersion statistics

**Di 10%:** 35.5 nm  
**Mean Intensity:** 35.5 nm

**Di 50%:** 35.5 nm

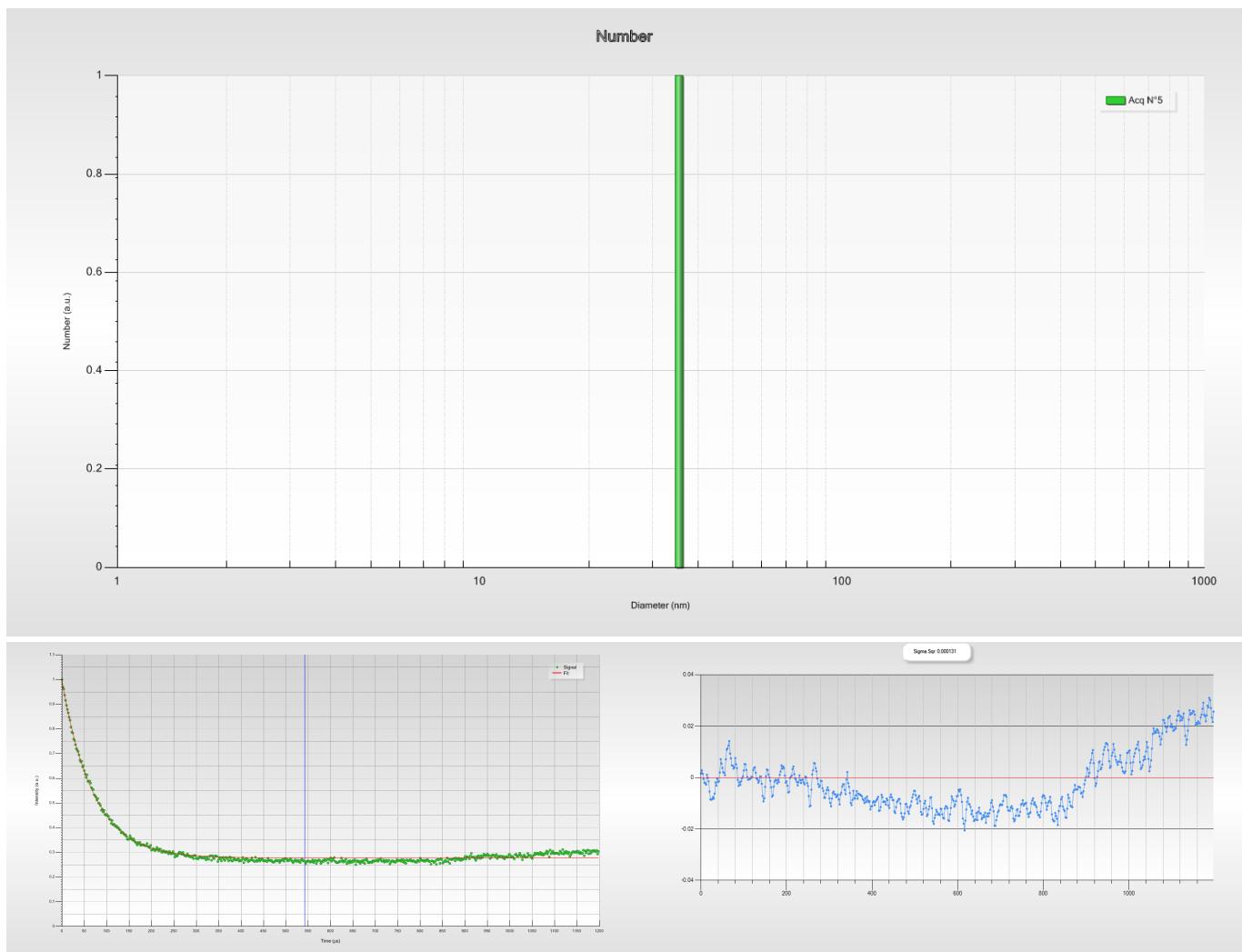
**Di 90%:** 35.5 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.24	0.85	7167.62	13.55997E-012

### Dispersion datas

Size (nm)	Intensity
35.5	1



### Dispersion statistics

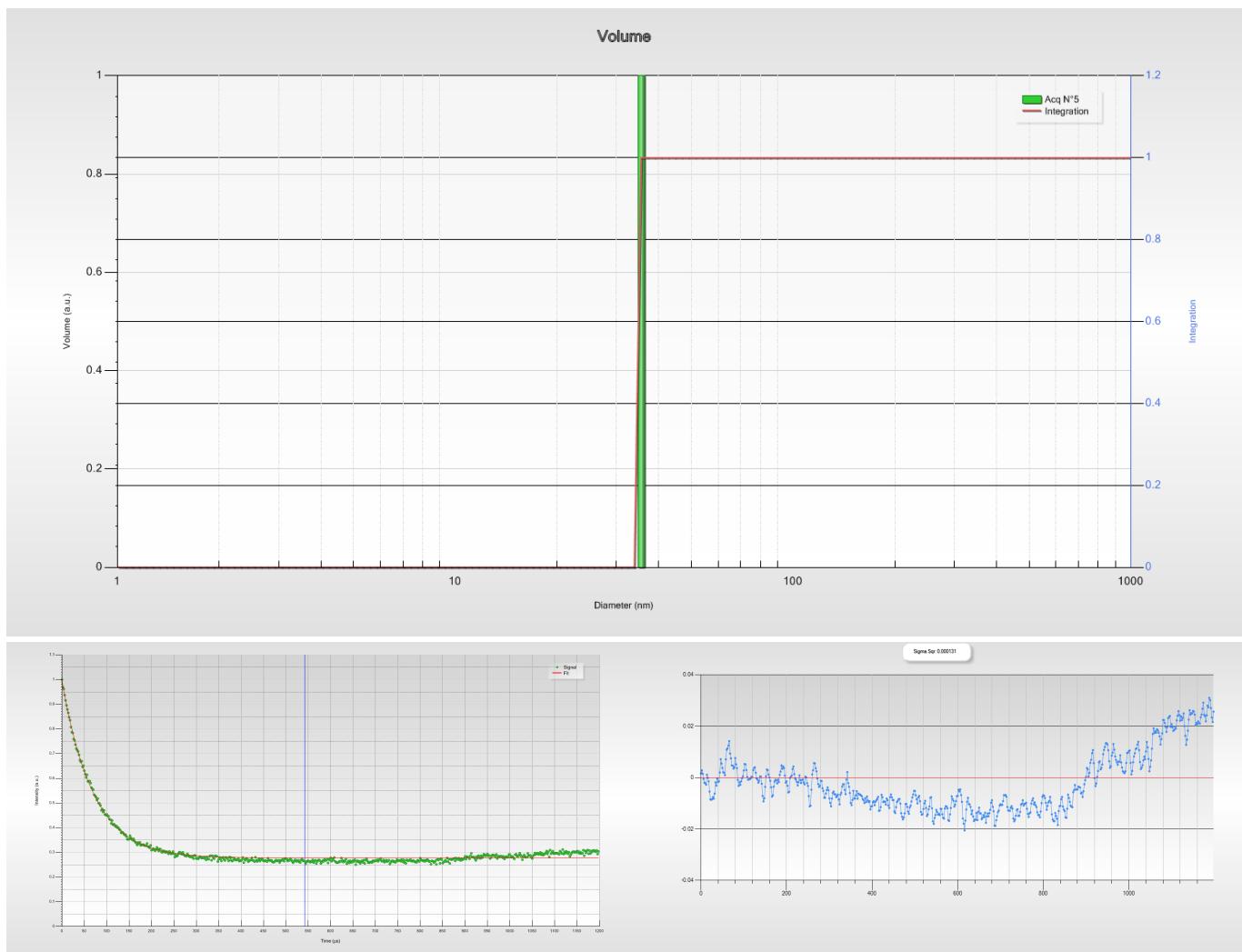
**Dn 10%:** 35.5 nm      **Dn 50%:** 35.5 nm      **Dn 90%:** 35.5 nm  
**Mean Number:** 35.5 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.24	0.85	7167.62	13.55997E-012

### Dispersion datas

Size (nm)	Number
35.5	1



### Dispersion statistics

**Dv 10%:** 35.5 nm  
**Mean Volume:** 35.5 nm

**Dv 50%:** 35.5 nm

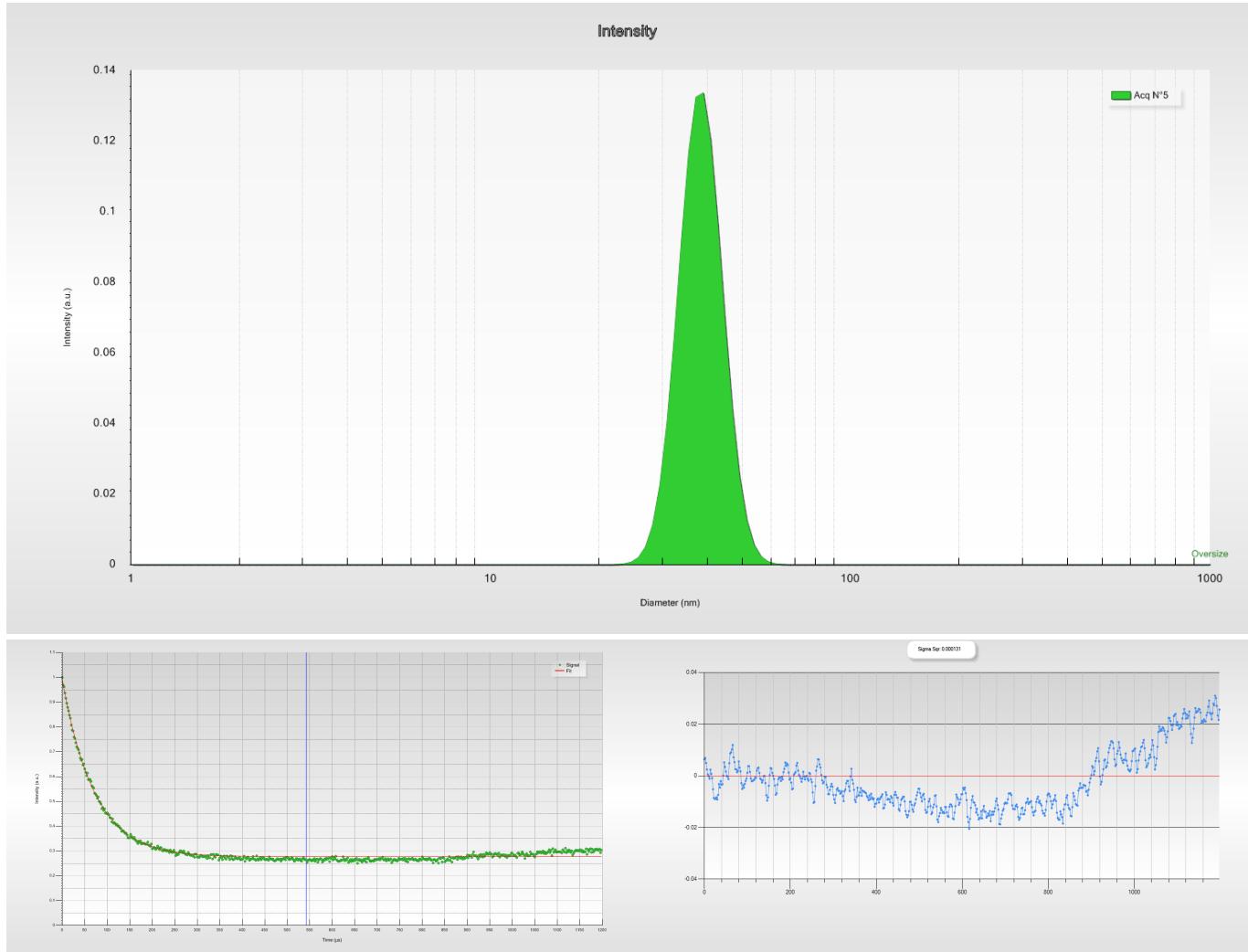
**Dv 90%:** 35.5 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.24	0.85	7167.62	13.55997E-012

### Dispersion datas

Size (nm)	Volume
35.5	1



### Distribution statistics

<b>Di 10%:</b> 32.36 nm	<b>Di 50%:</b> 38.94 nm	<b>Di 90%:</b> 44.73 nm
<b>Mean Intensity:</b> 38.55 nm		
<b>PDI</b> : 0.07529		<b>Std Dev:</b> 13.72%

### Detected size(s)

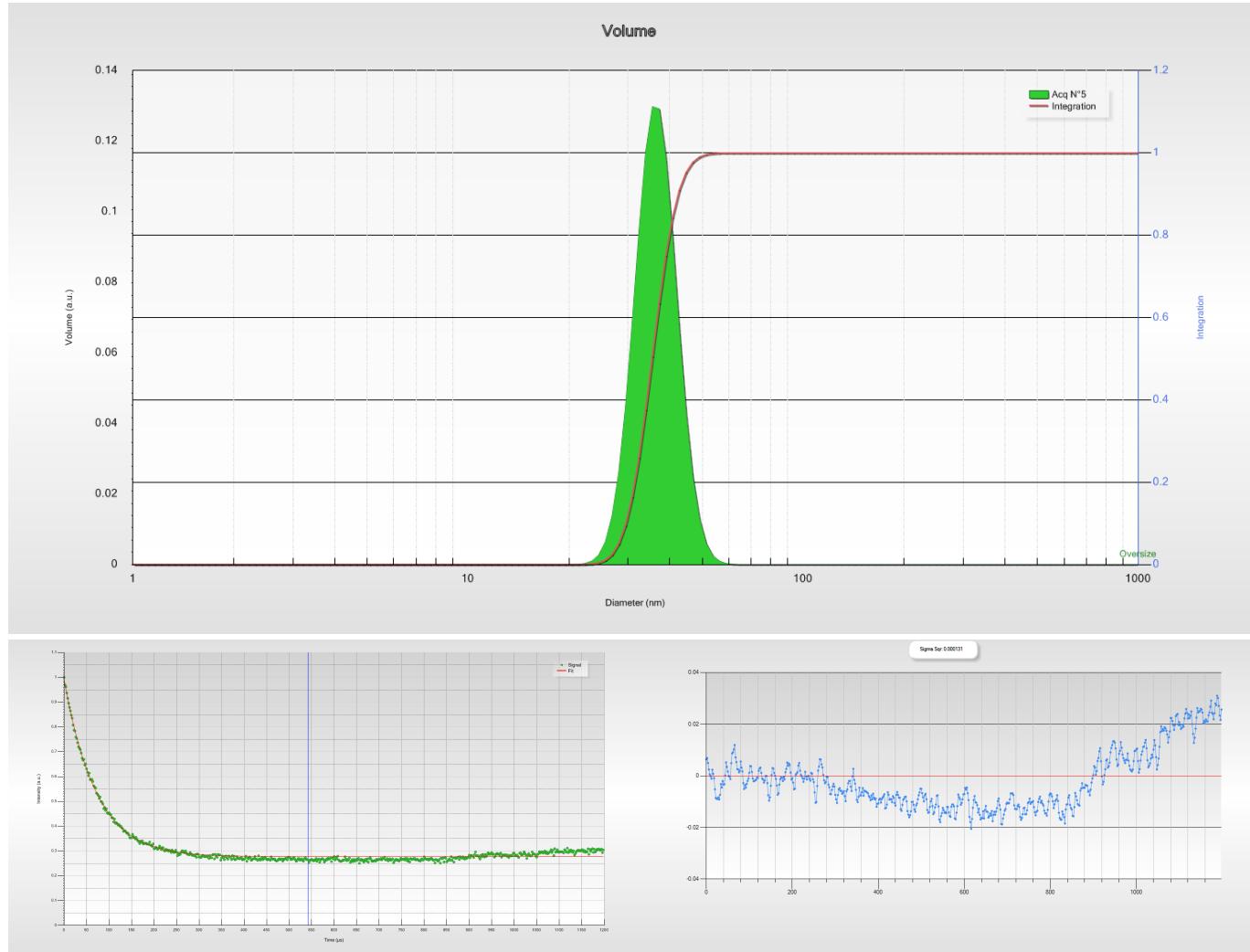
Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
37.13	0.71	6997.06	13.2373E-012

**Distribution statistics**

<b>Dn 10%:</b> 28.17 nm	<b>Dn 50%:</b> 33.89 nm	<b>Dn 90%:</b> 40.78 nm
<b>Mean Number:</b> 34.5 nm		
<b>PDI</b> : 0.07529		<b>Std Dev:</b> 13.72%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
37.13	0.71	6997.06	13.2373E-012

**Distribution statistics**

<b>D<sub>v</sub> 10%:</b> 30.9 nm	<b>D<sub>v</sub> 50%:</b> 35.5 nm	<b>D<sub>v</sub> 90%:</b> 42.71 nm
<b>Mean Volume:</b> 36.61 nm		
<b>PDI :</b> 0.07529		<b>Std Dev:</b> 13.72%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
37.13	0.71	6997.06	13.2373E-012