

## Sample

**Name** : GNP\_11.4.16\_1.24\_5k\_1  
**Mesured On** : 11.04.2016 15:35  
**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>	: 59.6 %	<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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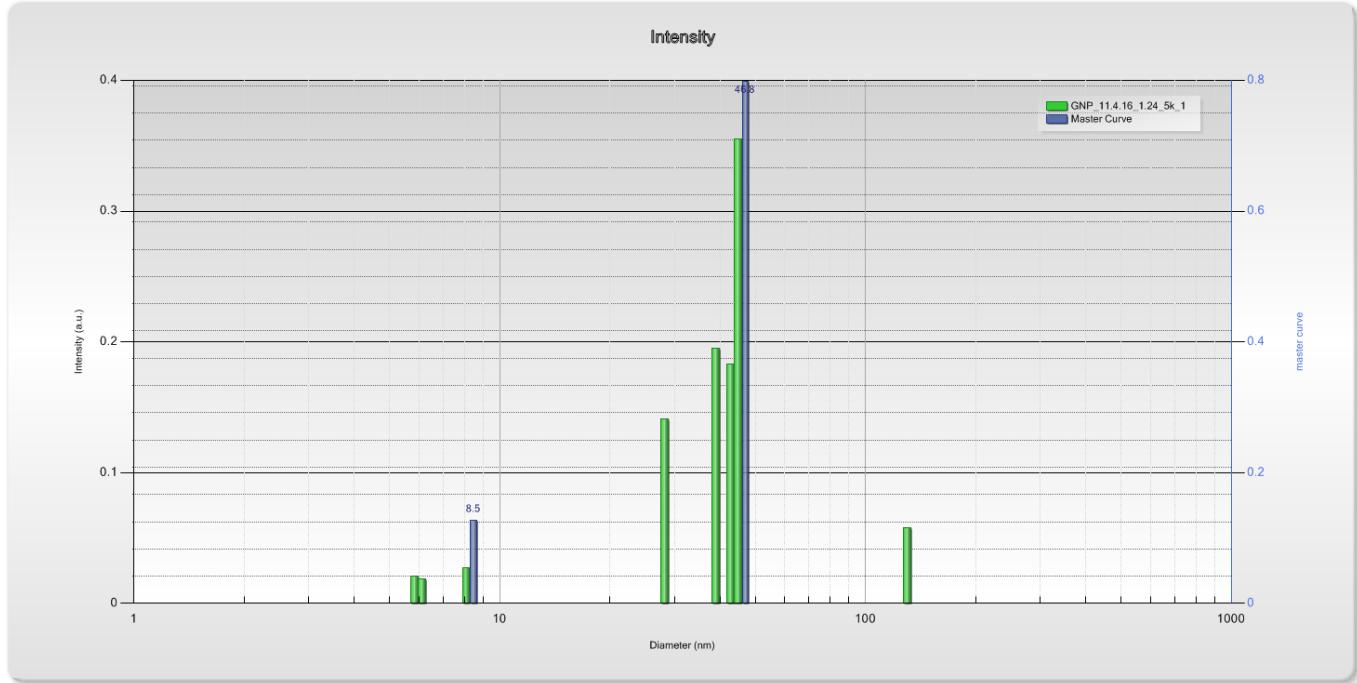
## Algorithm

Pade Laplace	Cumulants
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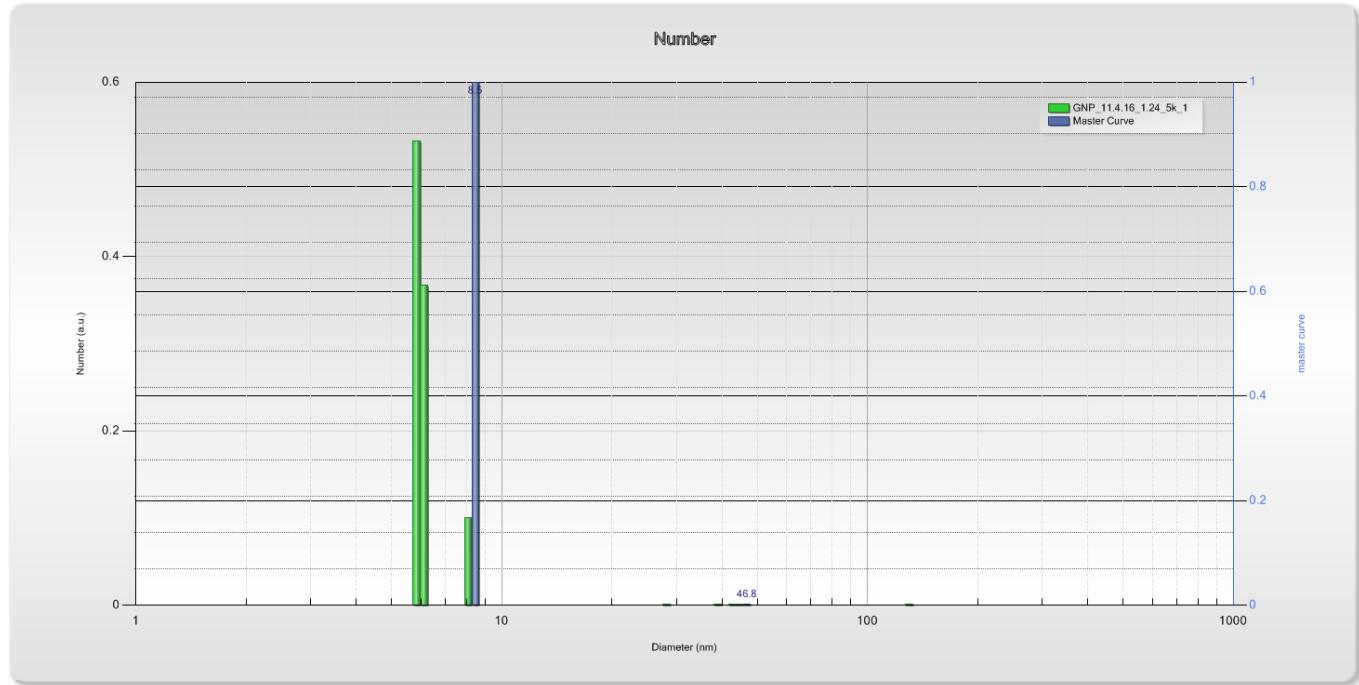
## Measurement

**Average count rate** : 2771 kcps  
**Number of rejected** : 0

**Duration** : 00:05:18  
**Number of modified** : 0

***Dispersion statistics******Di 10%:*** 28.17 nm***Di 50%:*** 42.71 nm***Di 90%:*** 44.73 nm***Dispersion data***

Size (nm)	Intensity						
5.85	0.02	28.17	0.14	44.73	0.36		
6.13	0.02	38.94	0.2	129.55	0.06		
8.08	0.03	42.71	0.18				



### Dispersion statistics

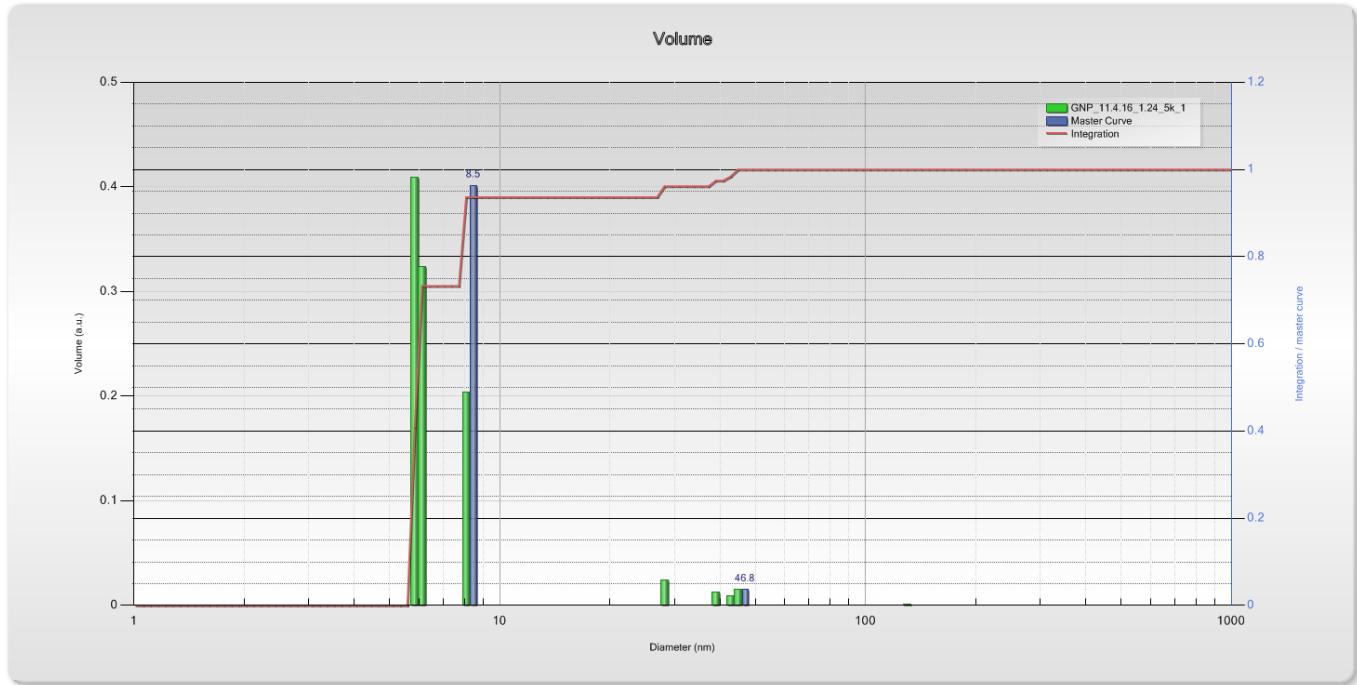
**D<sub>n</sub> 10%:** 5.85 nm

**D<sub>n</sub> 50%:** 5.85 nm

**D<sub>n</sub> 90%:** 8.08 nm

### Dispersion data

Size (nm)	Number	Size (nm)	Number	Size (nm)	Number
5.85	0.53	6.13	0.37	8.08	0.1



### Dispersion statistics

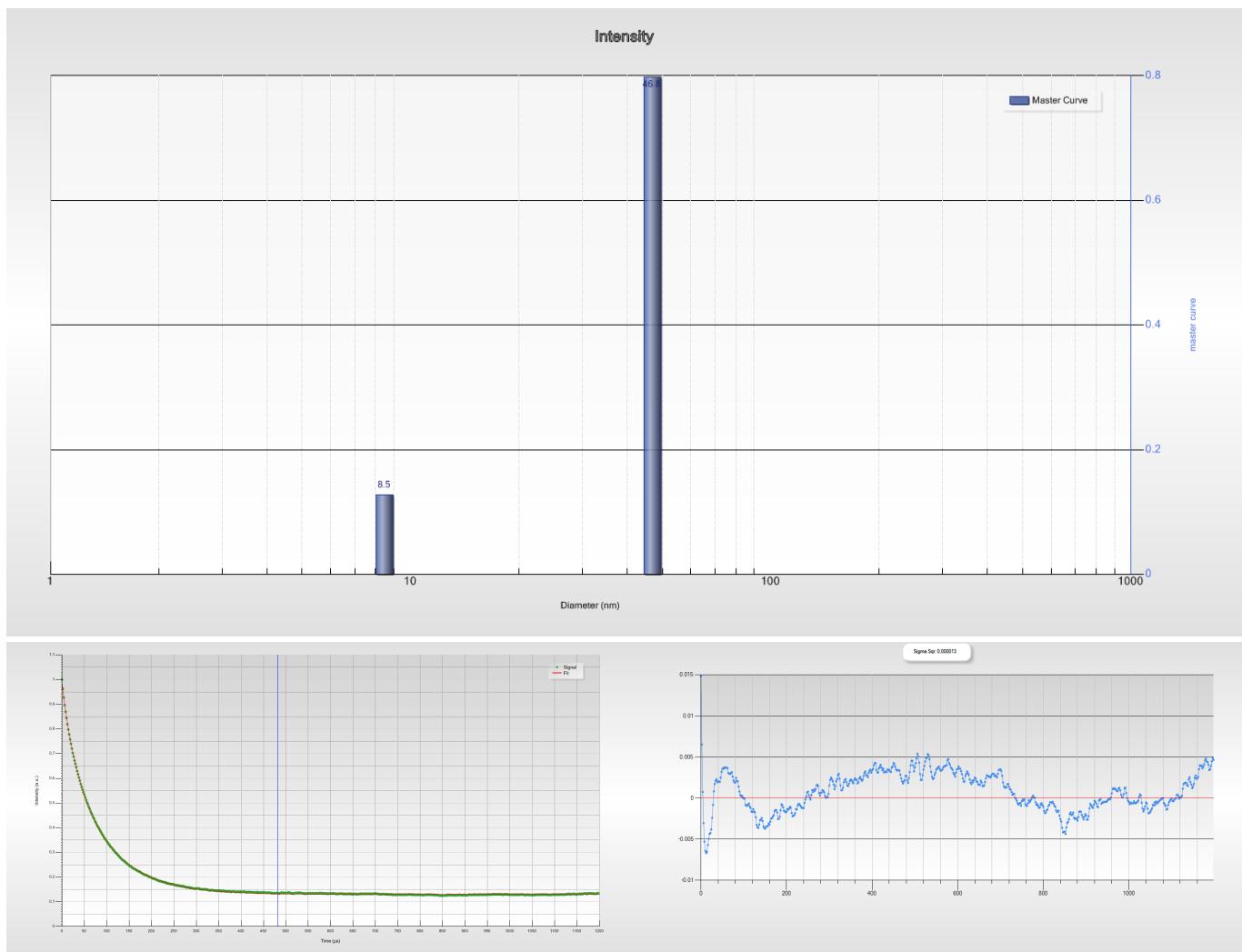
D<sub>v</sub> 10%: 5.85 nm

D<sub>v</sub> 50%: 6.13 nm

D<sub>v</sub> 90%: 8.08 nm

### Dispersion data

Size (nm)	Volume						
5.85	0.41	8.08	0.2	38.94	0.01	44.73	0.02
6.13	0.32	28.17	0.02	42.71	0.01		



### Dispersion statistics

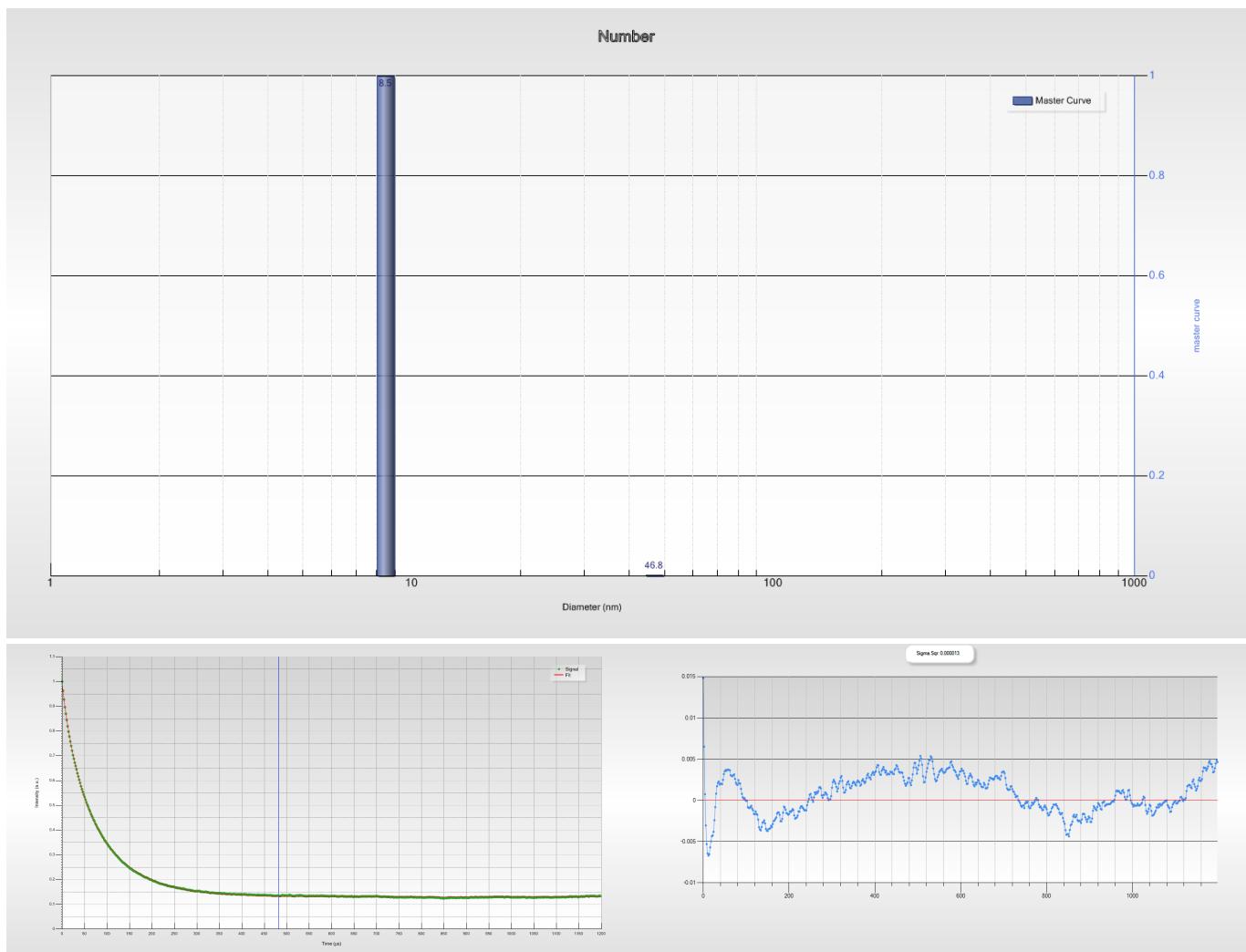
**Di 10%:** 8.47 nm      **Di 50%:** 46.85 nm      **Di 90%:** 46.85 nm  
**Mean Intensity:** 41.57 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
8.59	0.13	30258.85	57.24484E-012
46.87	0.8	5543.03	10.48652E-012

### Dispersion data

Size (nm)	Intensity	Size (nm)	Intensity
8.47	0.14	46.85	0.86



### Dispersion statistics

**Dn 10%:** 8.47 nm  
**Mean Number:** 8.48 nm

**Dn 50%:** 8.47 nm

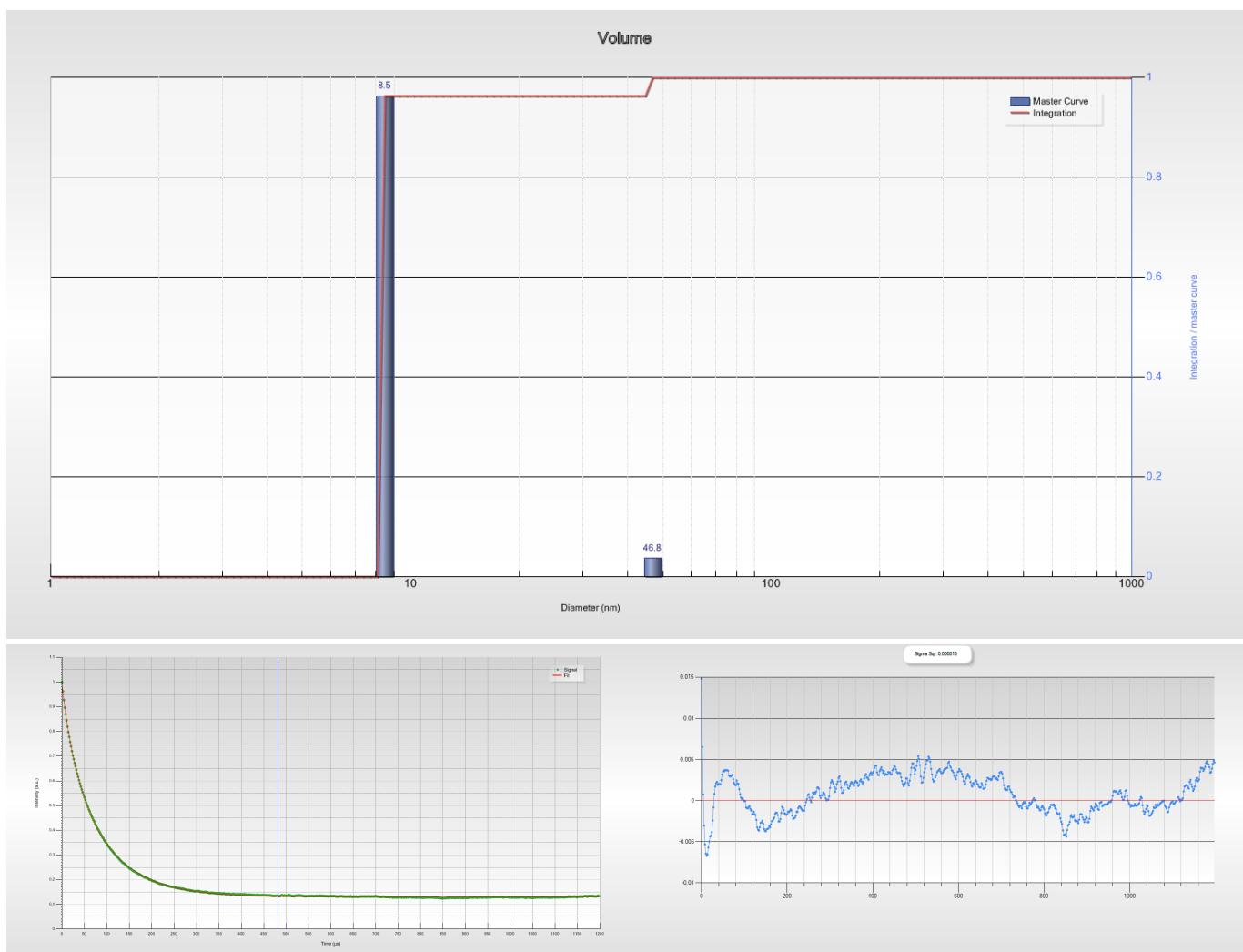
**Dn 90%:** 8.47 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
8.59	0.13	30258.85	57.24484E-012
46.87	0.8	5543.03	10.48652E-012

### Dispersion data

Size (nm)	Number
8.47	1



### Dispersion statistics

**D<sub>v</sub> 10%:** 8.47 nm  
**Mean Volume:** 9.87 nm

**D<sub>v</sub> 50%:** 8.47 nm

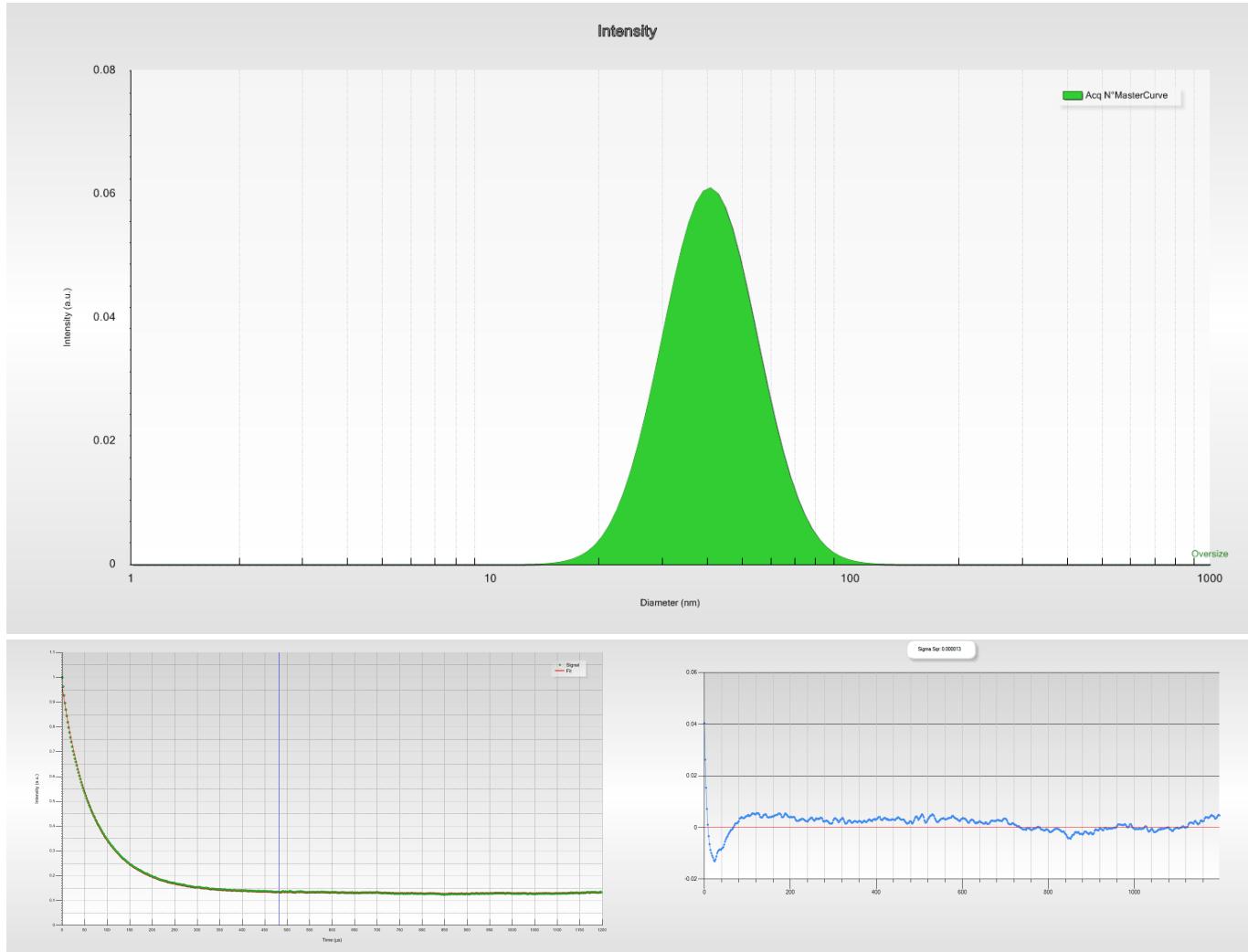
**D<sub>v</sub> 90%:** 8.47 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
8.59	0.13	30258.85	57.24484E-012
46.87	0.8	5543.03	10.48652E-012

### Dispersion data

Size (nm)	Volume	Size (nm)	Volume
8.47	0.96	46.85	0.04

**Distribution statistics**

<b>Di 10%:</b> 28.17 nm	<b>Di 50%:</b> 40.78 nm	<b>Di 90%:</b> 59.03 nm
<b>Mean Intensity:</b> 42.45 nm		
<b>PDI</b> : 0.38249		<b>Std Dev:</b> 30.92%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
35.35	0.83	7348.12	13.90145E-012

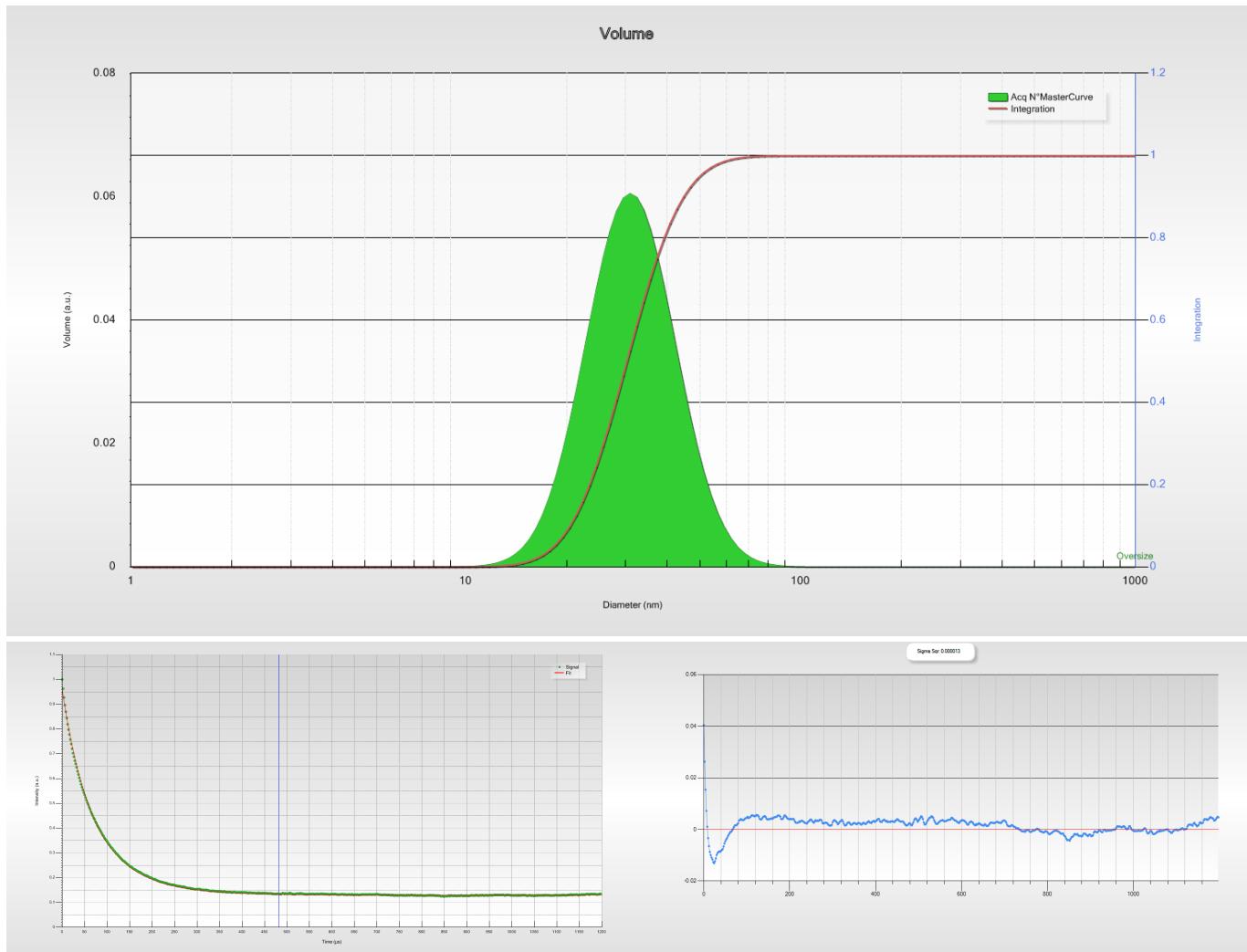


### Distribution statistics

<b>Dn 10%:</b> 16.17 nm	<b>Dn 50%:</b> 23.41 nm	<b>Dn 90%:</b> 33.89 nm
<b>Mean Number:</b> 24.59 nm		
<b>PDI</b> : 0.38249		<b>Std Dev:</b> 30.92%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
35.35	0.83	7348.12	13.90145E-012

**Distribution statistics**

**D<sub>v</sub> 10%:** 21.35 nm  
**Mean Volume:** 32.48 nm  
**PDI** : 0.38249

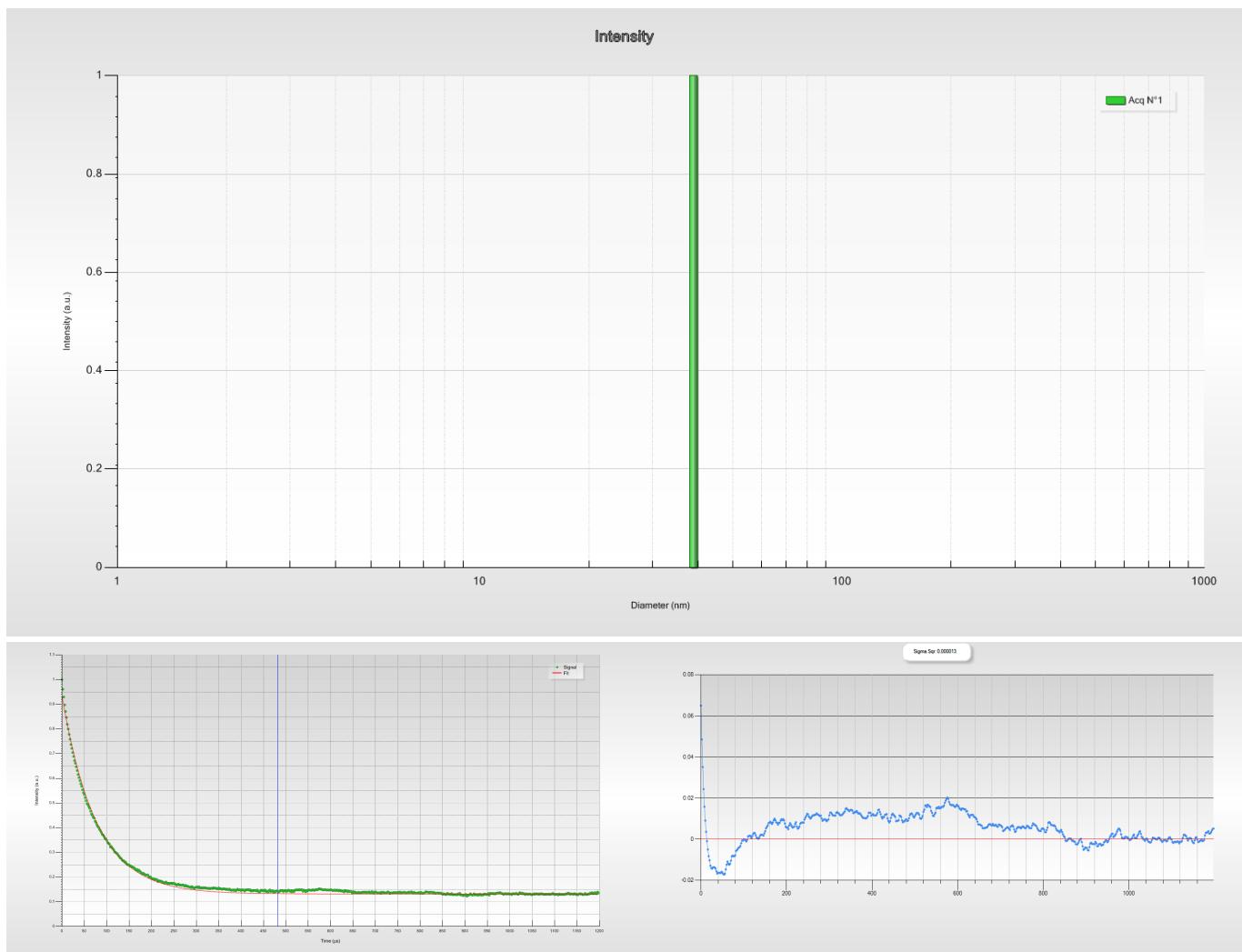
**D<sub>v</sub> 50%:** 30.9 nm

**D<sub>v</sub> 90%:** 46.85 nm

**Std Dev:** 30.92%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
35.35	0.83	7348.12	13.90145E-012



### Dispersion statistics

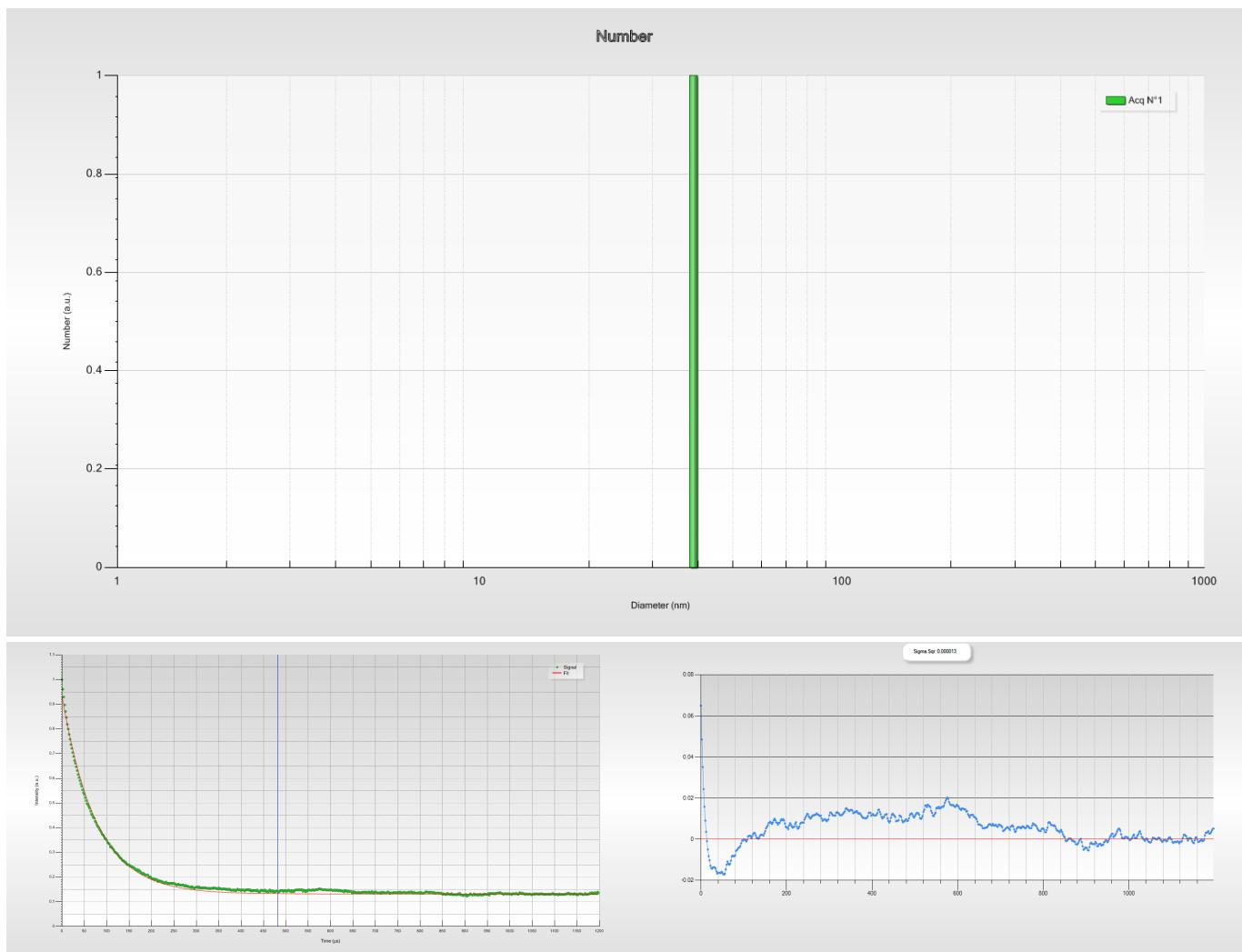
**Di 10%:** 38.94 nm      **Di 50%:** 38.94 nm      **Di 90%:** 38.94 nm  
**Mean Intensity:** 38.94 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.66	0.9	6550.33	12.39216E-012

### Dispersion data

Size (nm)	Intensity
38.94	1



### Dispersion statistics

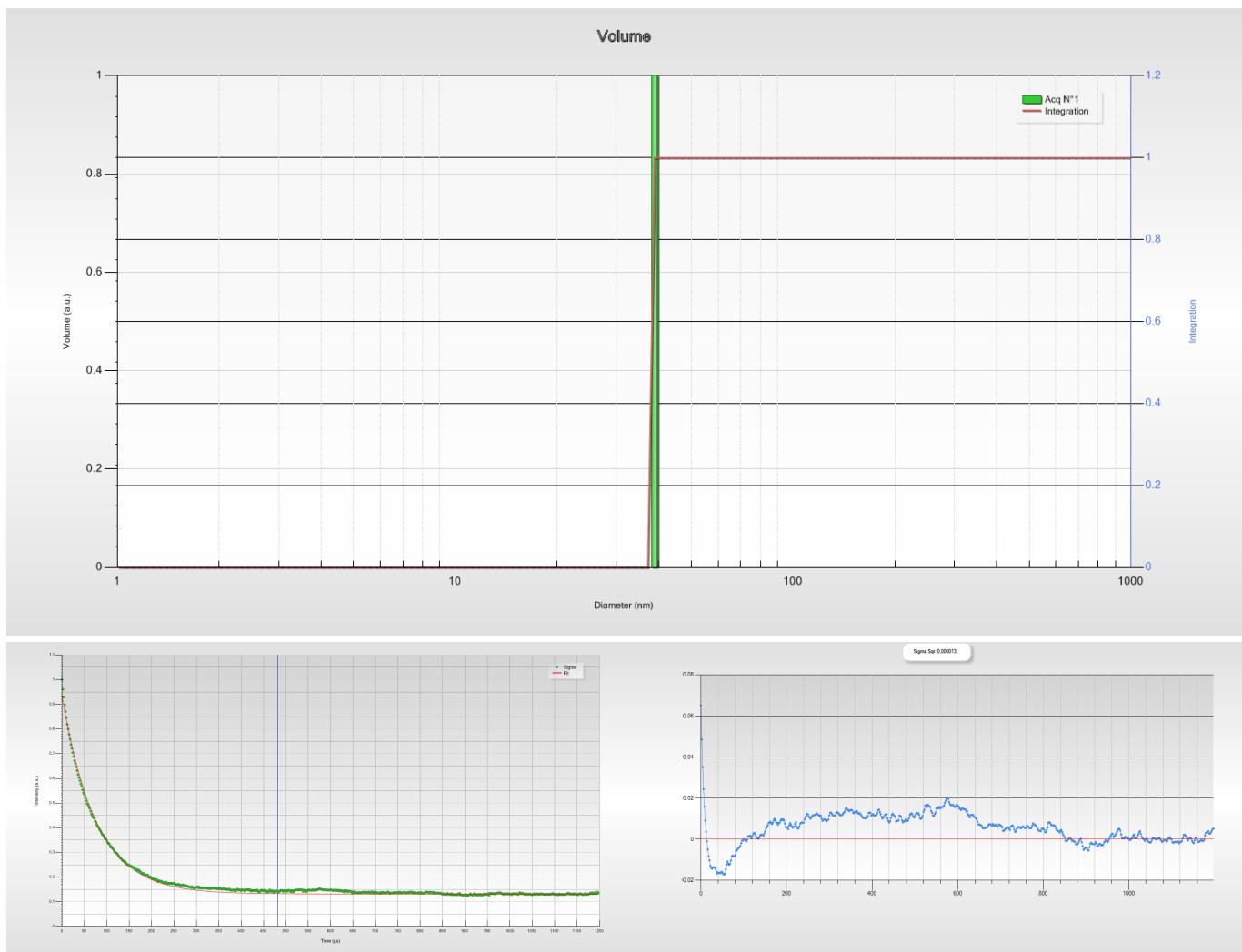
**Dn 10%:** 38.94 nm      **Dn 50%:** 38.94 nm      **Dn 90%:** 38.94 nm  
**Mean Number:** 38.94 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.66	0.9	6550.33	12.39216E-012

### Dispersion datas

Size (nm)	Number
38.94	1



### Dispersion statistics

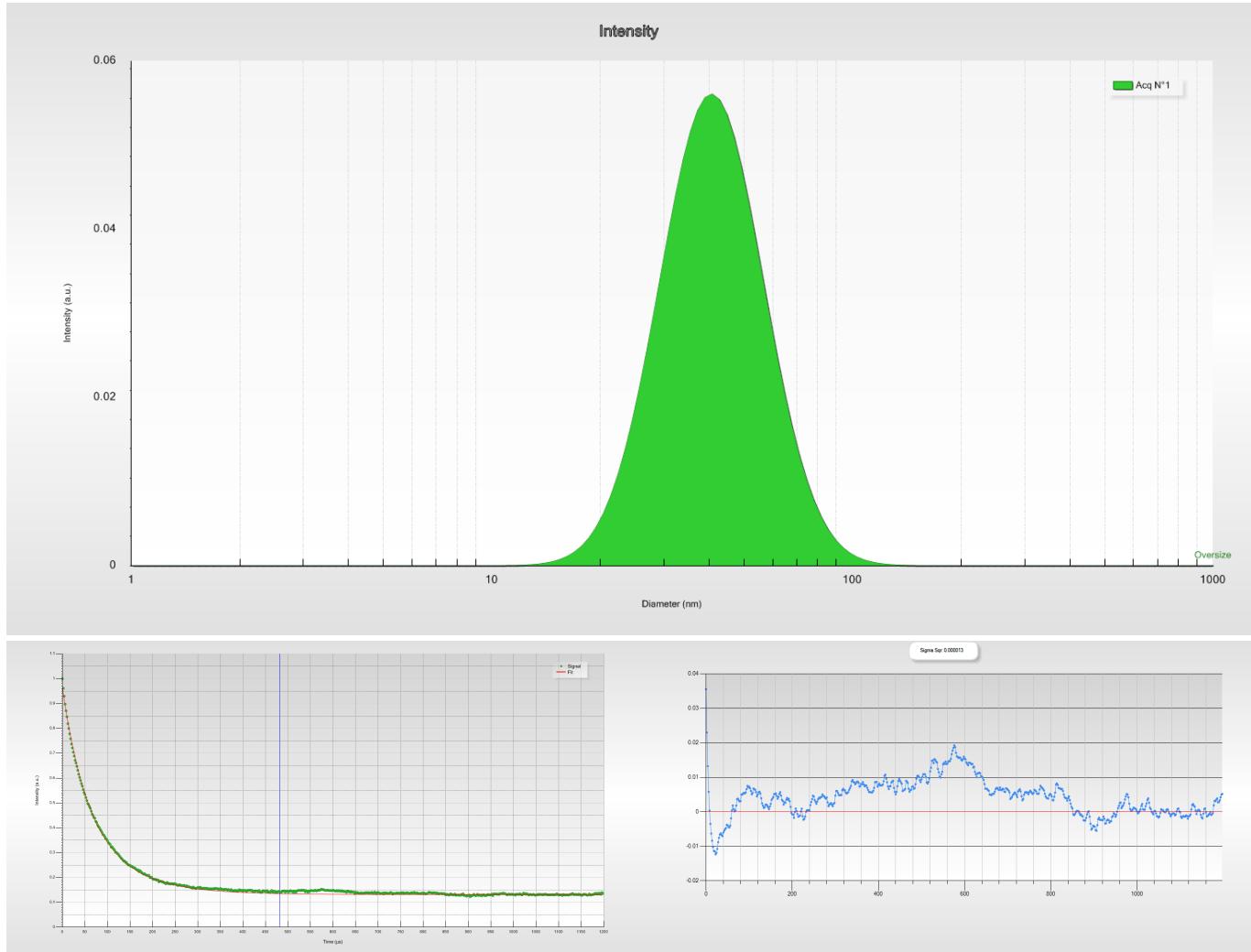
**D<sub>v</sub> 10%:** 38.94 nm      **D<sub>v</sub> 50%:** 38.94 nm      **D<sub>v</sub> 90%:** 38.94 nm  
**Mean Volume:** 38.94 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.66	0.9	6550.33	12.39216E-012

### Dispersion datas

Size (nm)	Volume
38.94	1

**Distribution statistics**

<b>Di 10%:</b> 26.9 nm	<b>Di 50%:</b> 40.78 nm	<b>Di 90%:</b> 61.83 nm
<b>Mean Intensity:</b> 42.84 nm		
<b>PDI</b> : 0.45711		<b>Std Dev:</b> 33.8%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.49	0.83	7531.39	14.24817E-012

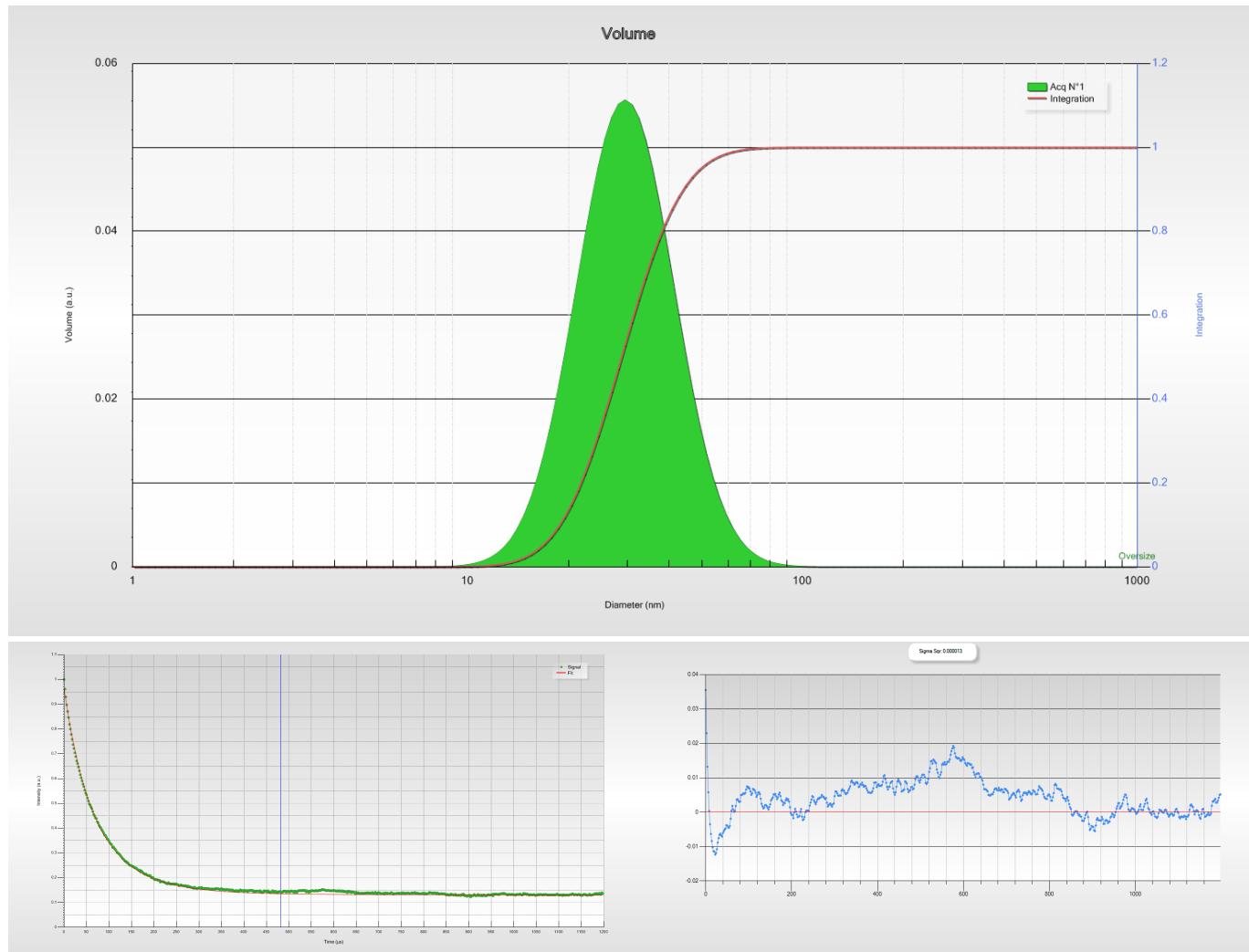


### Distribution statistics

<b>Dn 10%:</b> 14.08 nm	<b>Dn 50%:</b> 21.35 nm	<b>Dn 90%:</b> 32.36 nm
<b>Mean Number:</b> 22.43 nm		
<b>PDI</b> : 0.45711		<b>Std Dev:</b> 33.8%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.49	0.83	7531.39	14.24817E-012

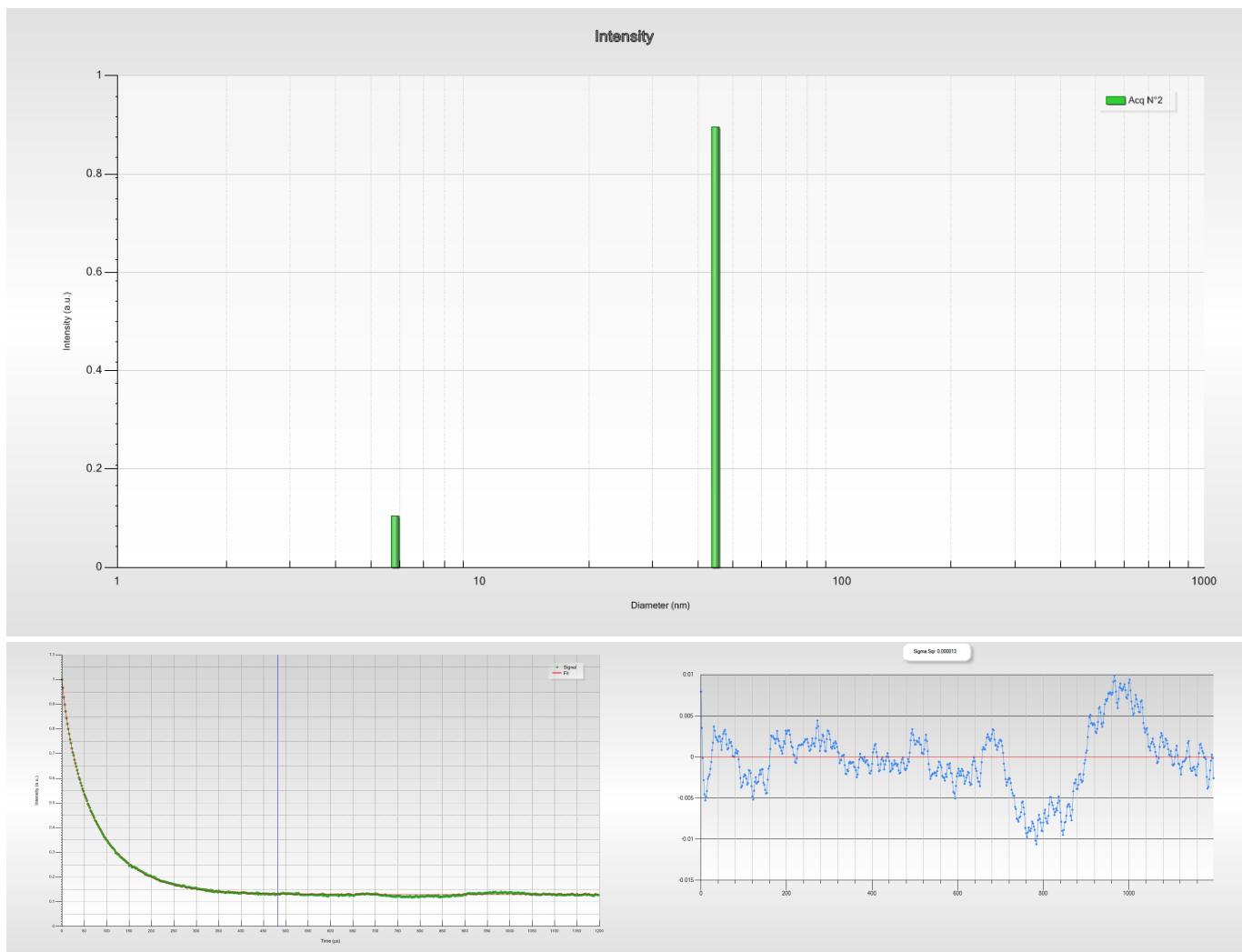


### Distribution statistics

<b>Dv 10%:</b> 19.46 nm	<b>Dv 50%:</b> 29.5 nm	<b>Dv 90%:</b> 44.73 nm
<b>Mean Volume:</b> 31.17 nm		
<b>PDI</b> : 0.45711		<b>Std Dev:</b> 33.8%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.49	0.83	7531.39	14.24817E-012



### Dispersion statistics

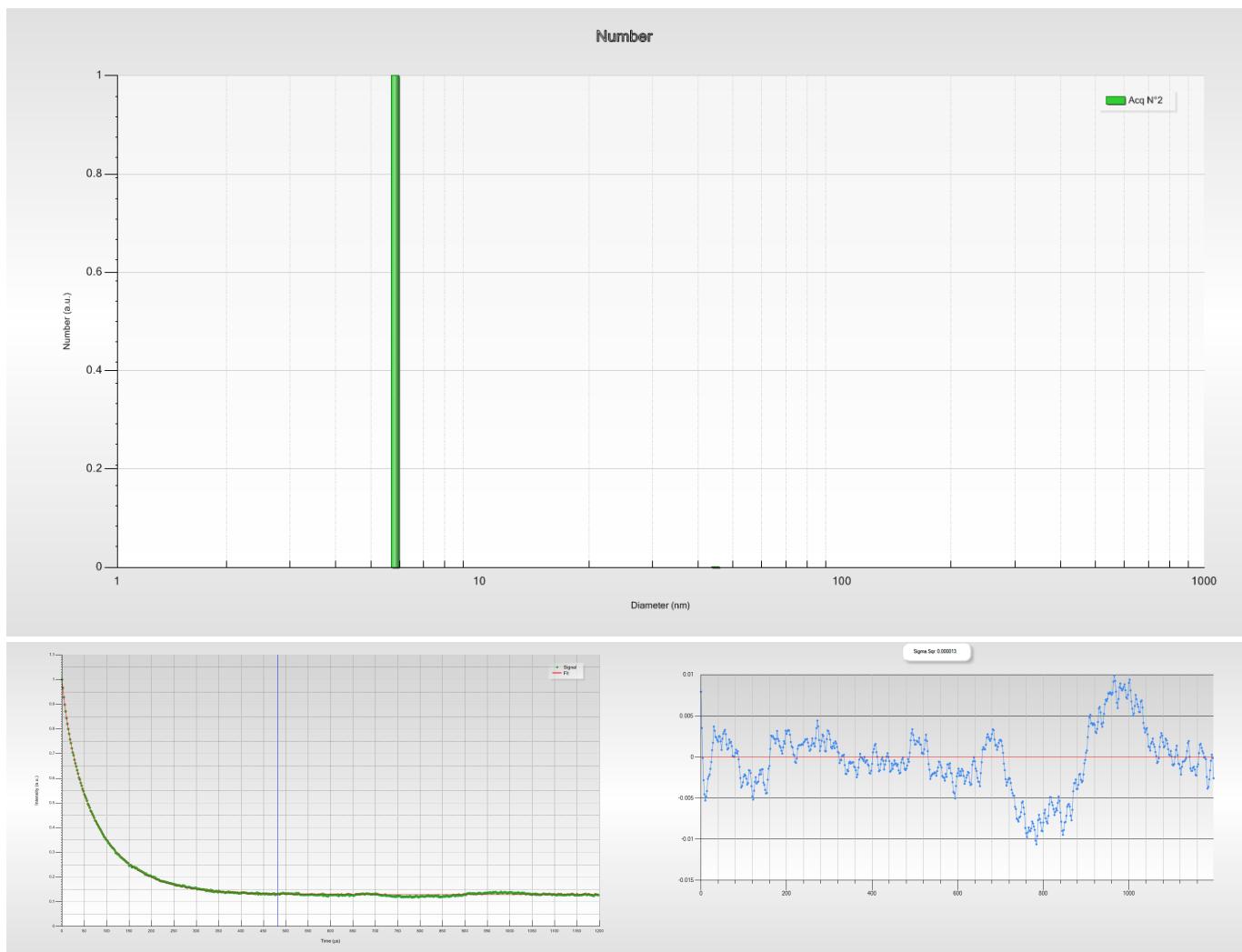
**Di 10%:** 5.85 nm      **Di 50%:** 44.73 nm      **Di 90%:** 44.73 nm  
**Mean Intensity:** 40.7 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
5.93	0.1	43828.15	82.91576E-012
45.52	0.83	5706.89	10.79652E-012

### Dispersion data

Size (nm)	Intensity	Size (nm)	Intensity
5.85	0.1	44.73	0.9



### Dispersion statistics

Dn 10%: 5.85 nm  
Mean Number: 5.85 nm

Dn 50%: 5.85 nm

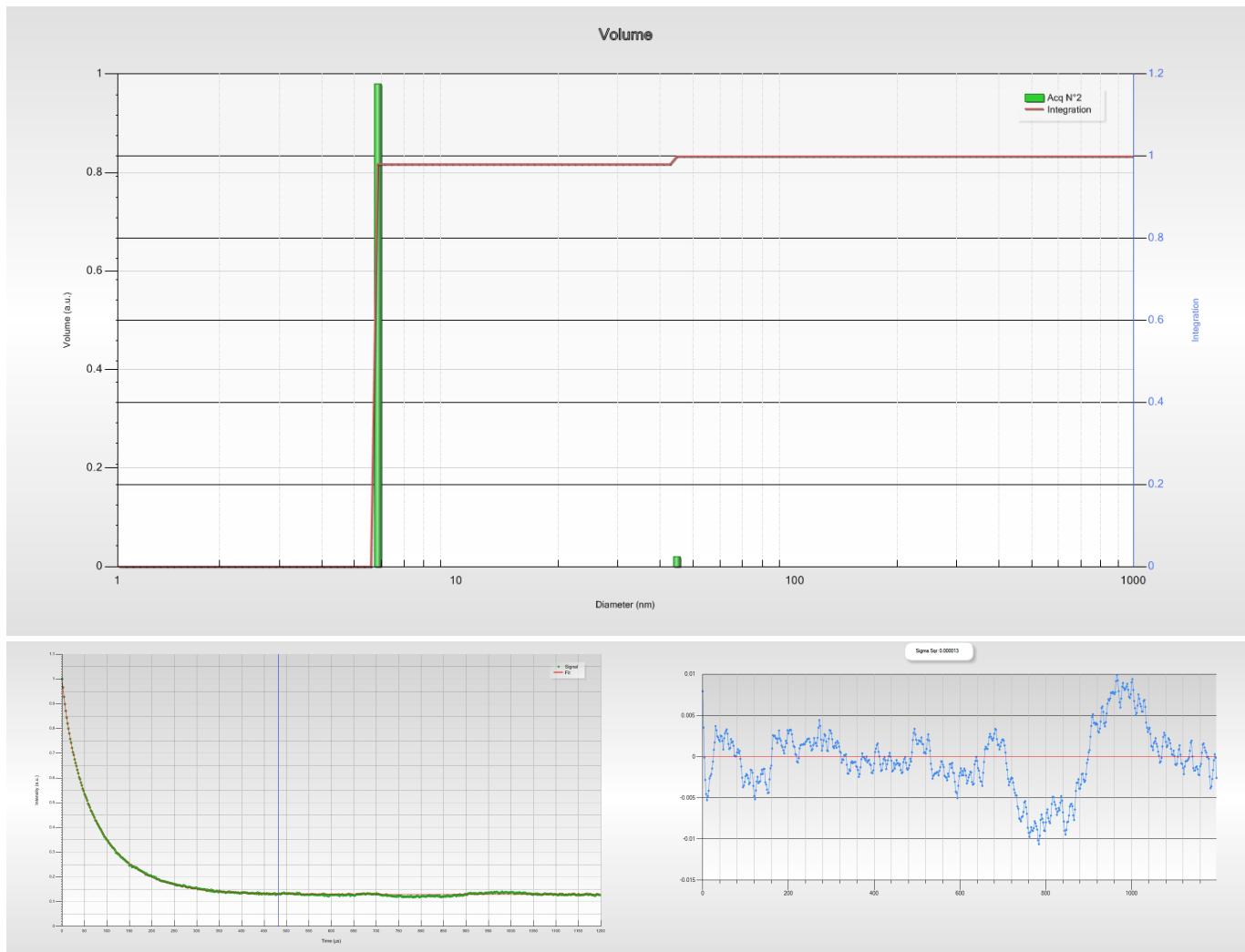
Dn 90%: 5.85 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
5.93	0.1	43828.15	82.91576E-012
45.52	0.83	5706.89	10.79652E-012

### Dispersion data

Size (nm)	Number
5.85	1



### Dispersion statistics

Dv 10%: 5.85 nm  
Mean Volume: 6.6 nm

Dv 50%: 5.85 nm

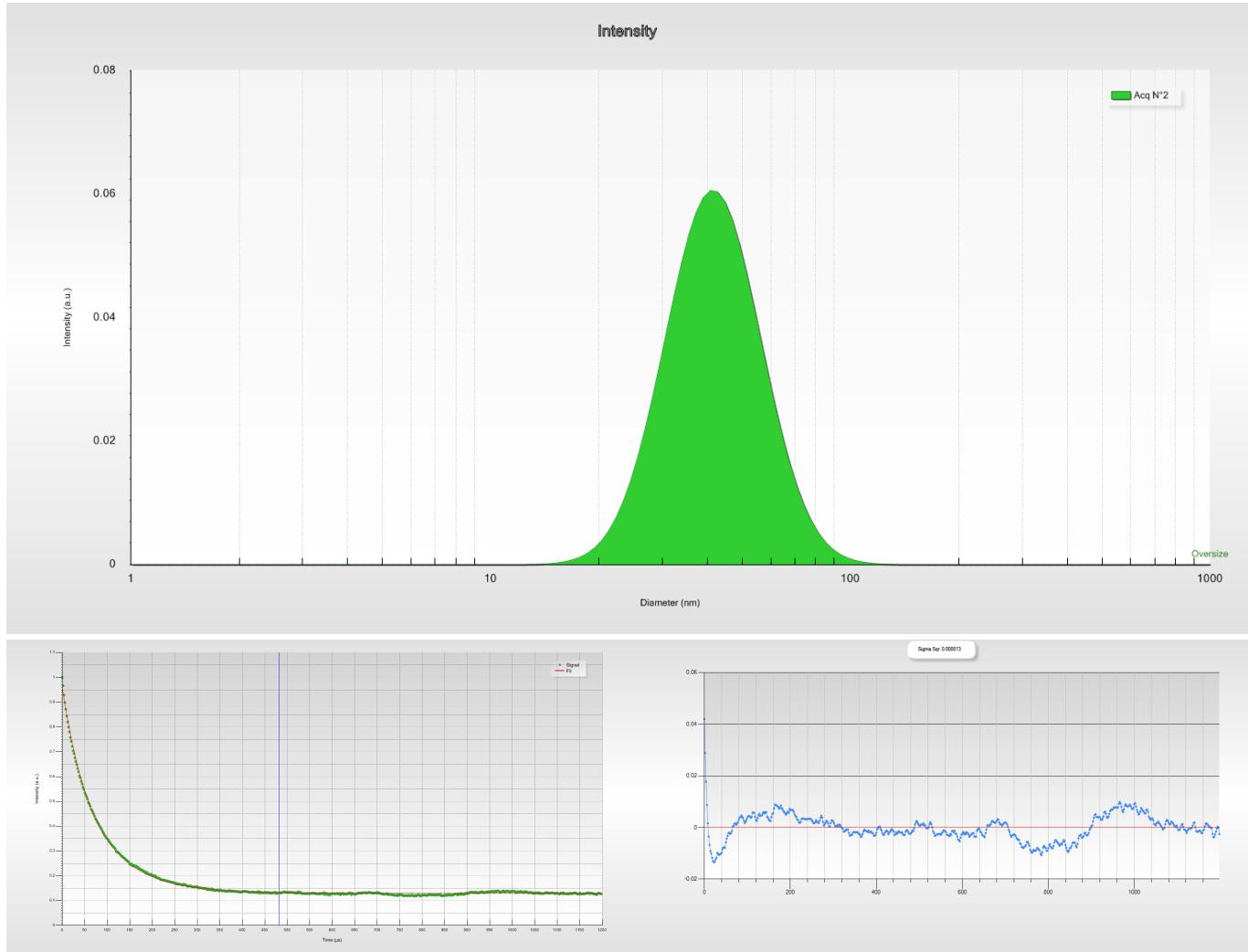
Dv 90%: 5.85 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
5.93	0.1	43828.15	82.91576E-012
45.52	0.83	5706.89	10.79652E-012

### Dispersion data

Size (nm)	Volume	Size (nm)	Volume
5.85	0.98	44.73	0.02

**Distribution statistics**

<b>Di 10%:</b> 28.17 nm	<b>Di 50%:</b> 40.78 nm	<b>Di 90%:</b> 61.83 nm
<b>Mean Intensity:</b> 43.36 nm		
<b>PDI</b> : 0.38724		<b>Std Dev:</b> 31.11%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.04	0.83	7208.96	13.63818E-012

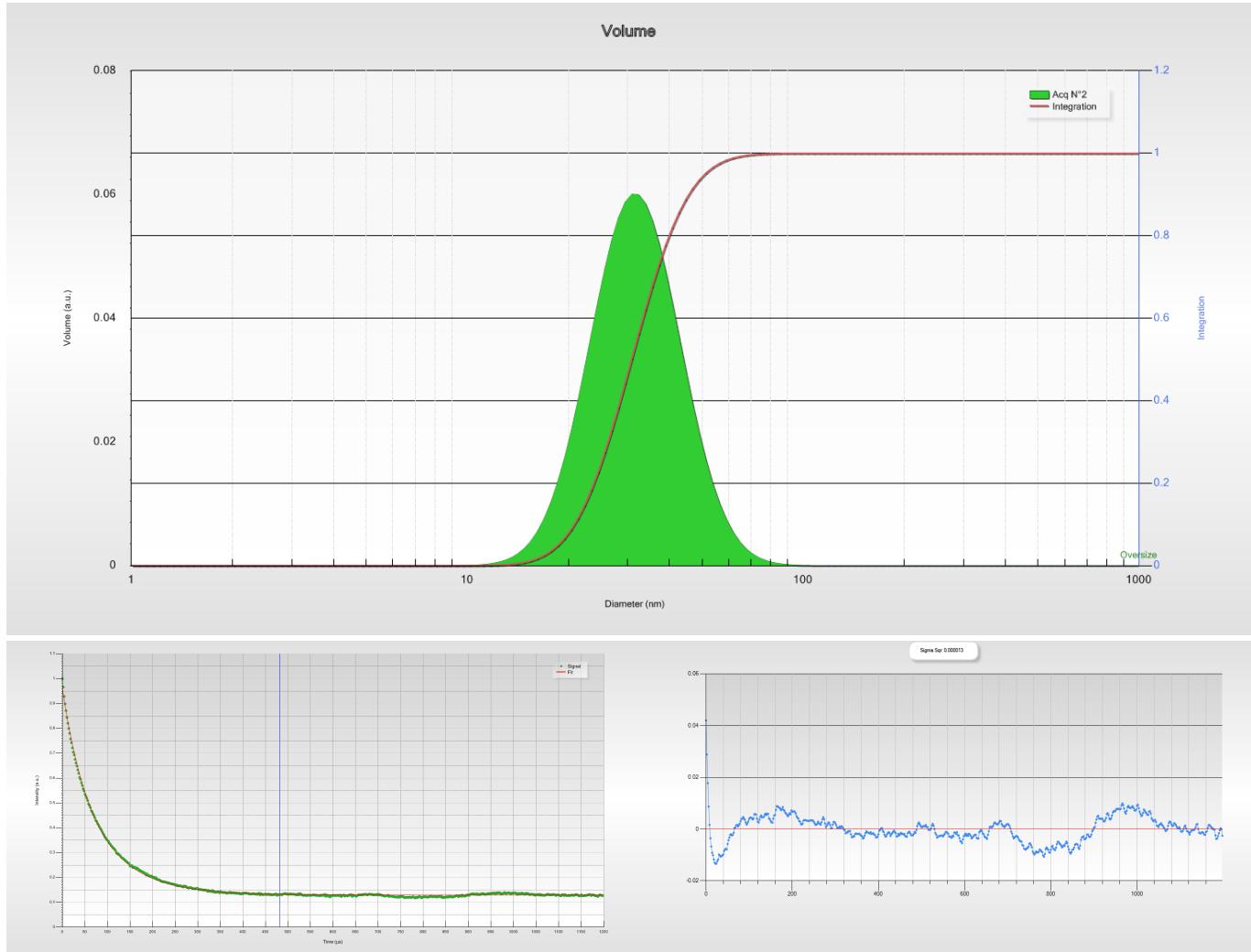


### Distribution statistics

<b>Dn 10%:</b> 16.17 nm	<b>Dn 50%:</b> 23.41 nm	<b>Dn 90%:</b> 35.5 nm
<b>Mean Number:</b> 24.96 nm		
<b>PDI</b> : 0.38724		<b>Std Dev:</b> 31.11%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.04	0.83	7208.96	13.63818E-012

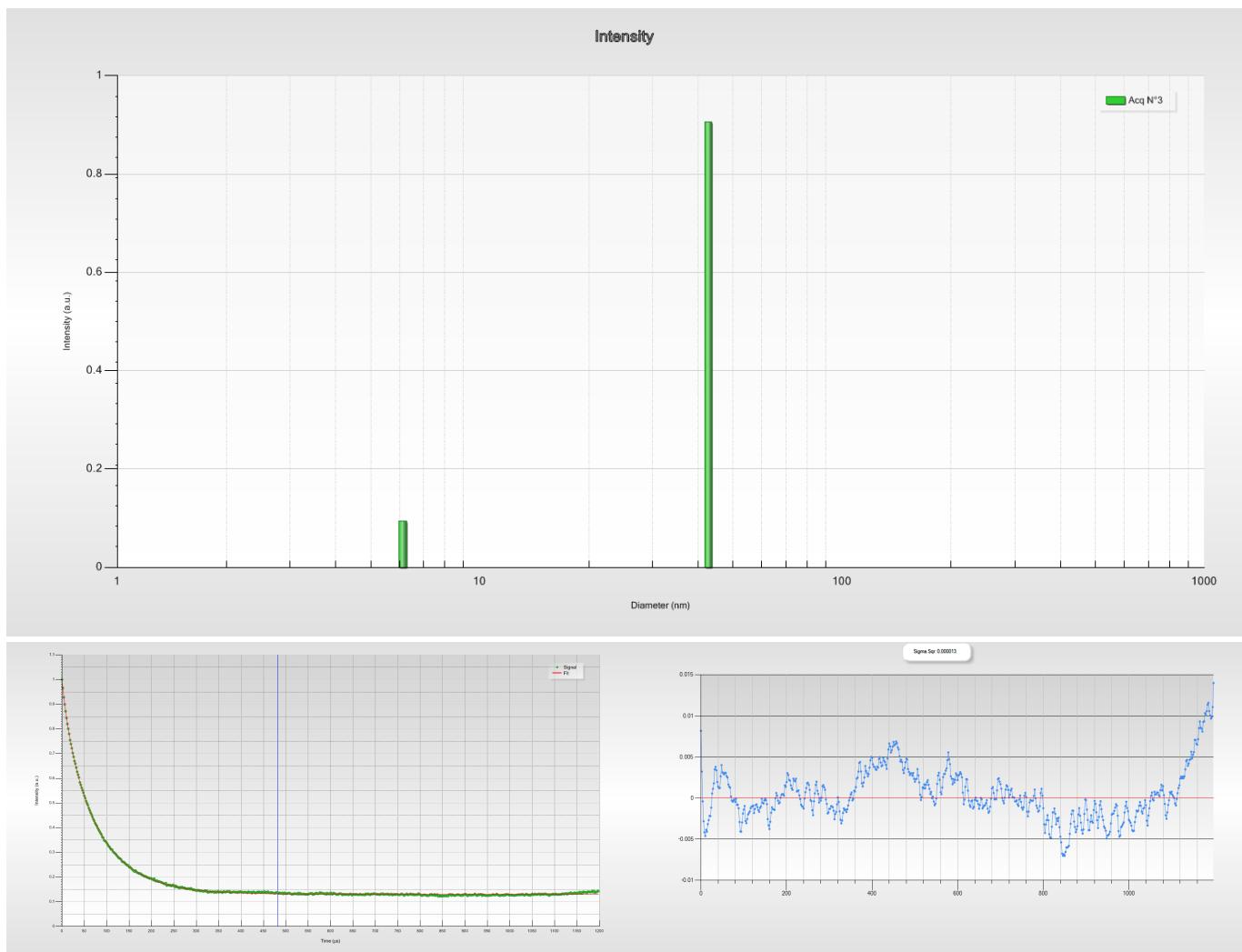


### Distribution statistics

<b>D<sub>v</sub> 10%:</b> 21.35 nm	<b>D<sub>v</sub> 50%:</b> 30.9 nm	<b>D<sub>v</sub> 90%:</b> 46.85 nm
<b>Mean Volume:</b> 33.08 nm		
<b>PDI :</b> 0.38724		<b>Std Dev:</b> 31.11%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.04	0.83	7208.96	13.63818E-012



### Dispersion statistics

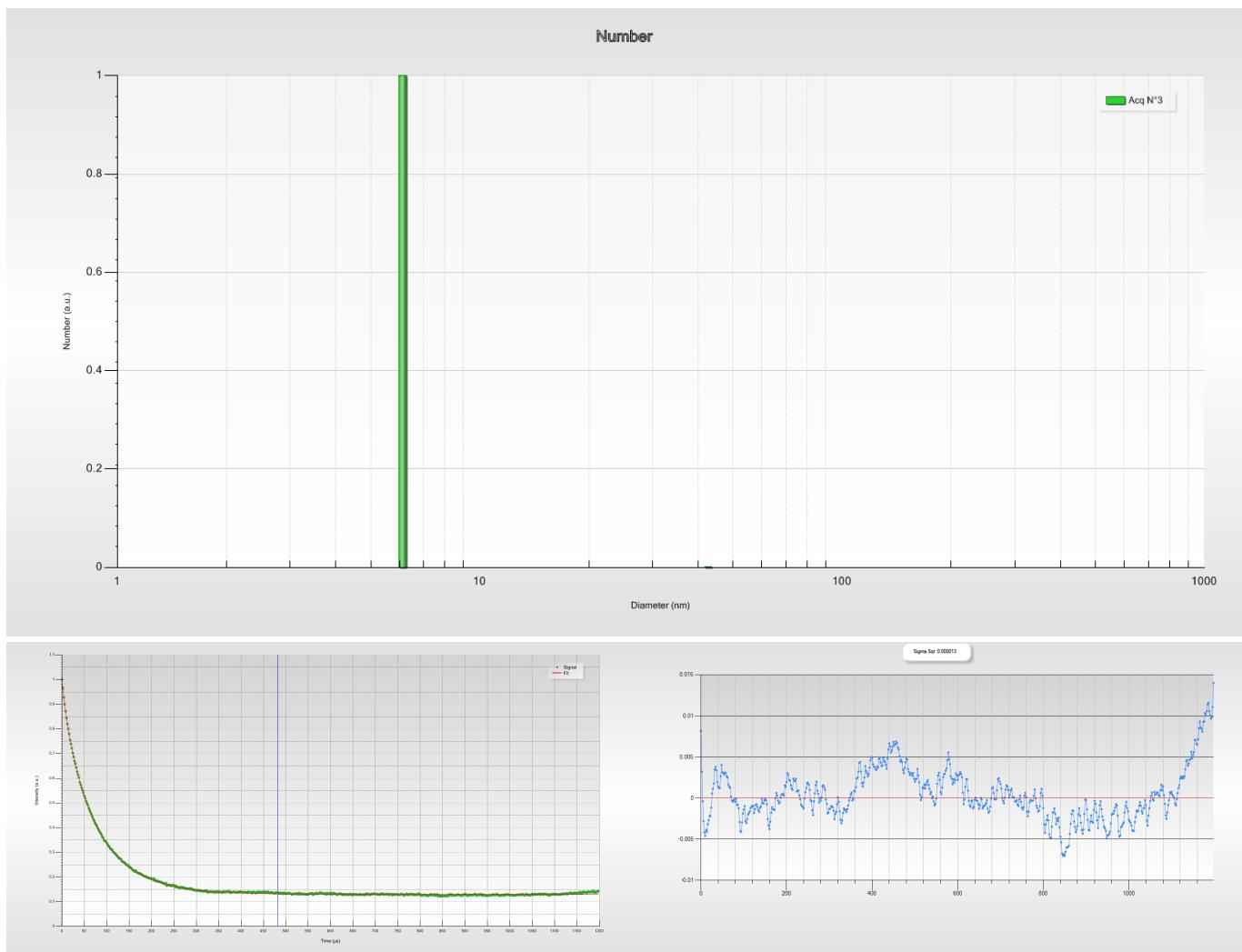
**Di 10%:** 42.71 nm      **Di 50%:** 42.71 nm      **Di 90%:** 42.71 nm  
**Mean Intensity:** 39.25 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
6.13	0.09	42392.52	80.19978E-012
42.45	0.84	6119.41	11.57694E-012

### Dispersion data

Size (nm)	Intensity	Size (nm)	Intensity
6.13	0.09	42.71	0.91



### Dispersion statistics

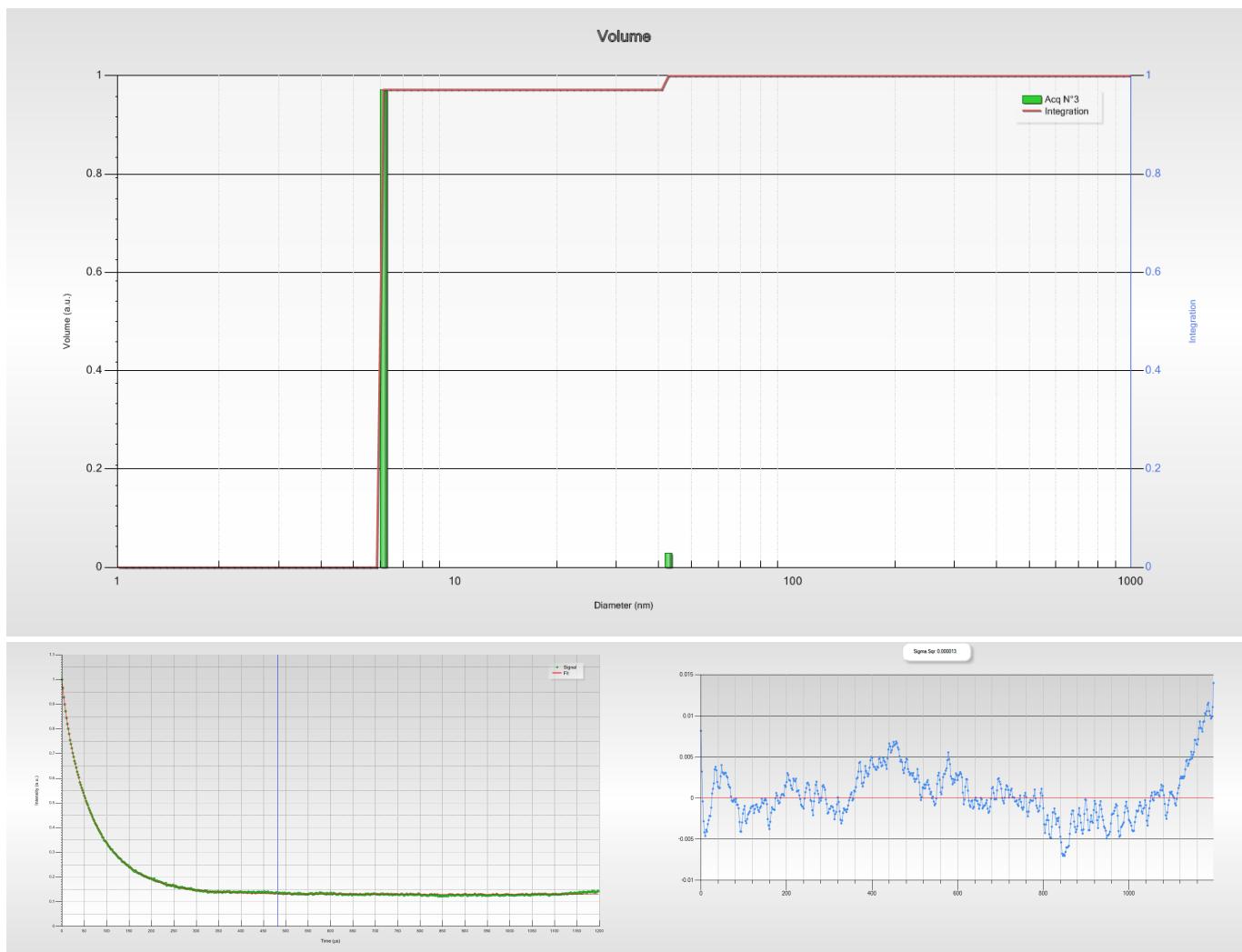
**Dn 10%:** 6.13 nm      **Dn 50%:** 6.13 nm      **Dn 90%:** 6.13 nm  
**Mean Number:** 6.13 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
6.13	0.09	42392.52	80.19978E-012
42.45	0.84	6119.41	11.57694E-012

### Dispersion data

Size (nm)	Number
6.13	1



### Dispersion statistics

**Dv 10%:** 6.13 nm  
**Mean Volume:** 7.15 nm

**Dv 50%:** 6.13 nm

**Dv 90%:** 6.13 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
6.13	0.09	42392.52	80.19978E-012
42.45	0.84	6119.41	11.57694E-012

### Dispersion data

Size (nm)	Volume	Size (nm)	Volume
6.13	0.97	42.71	0.03

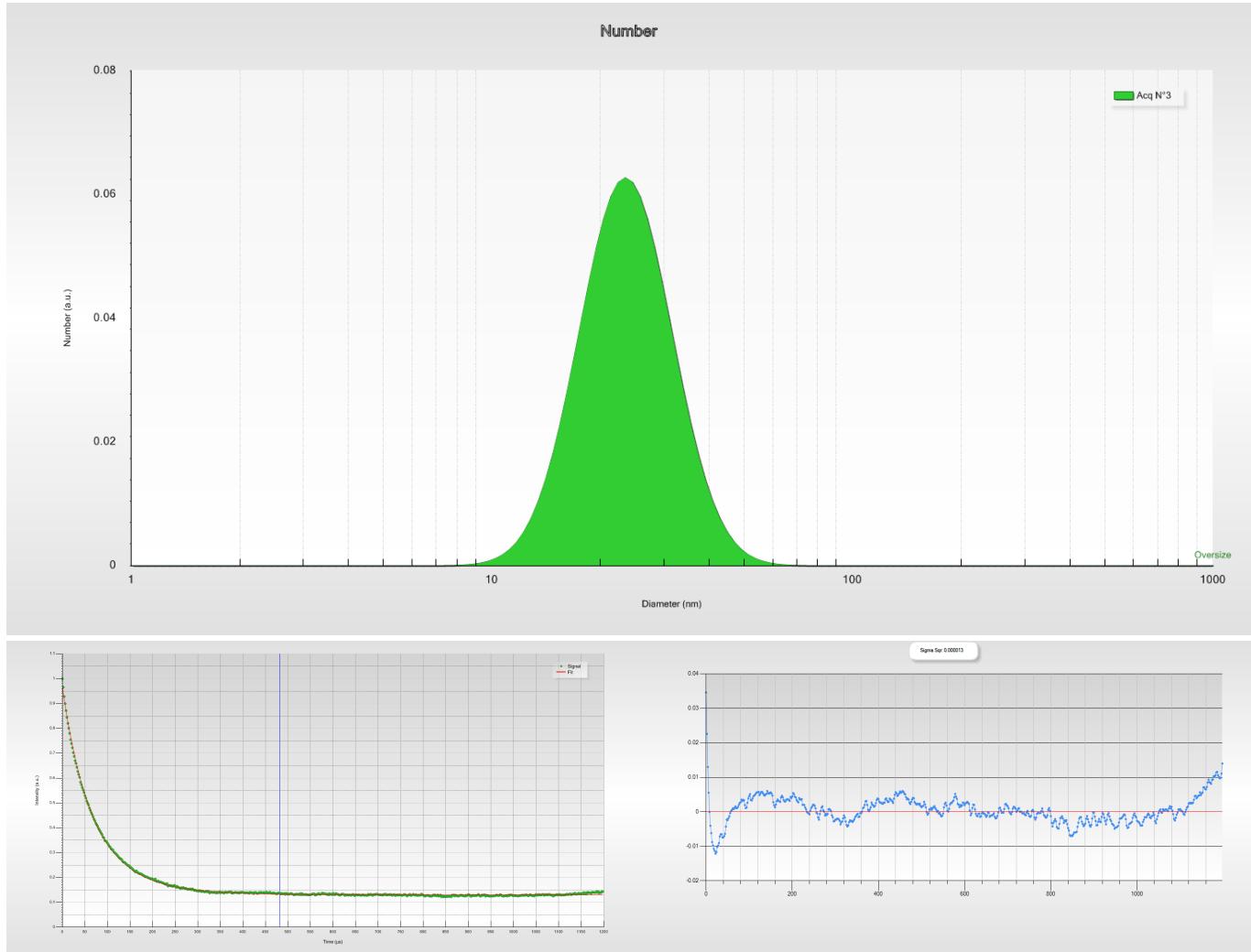


### Distribution statistics

<b>Di 10%:</b> 26.9 nm	<b>Di 50%:</b> 38.94 nm	<b>Di 90%:</b> 56.36 nm
<b>Mean Intensity:</b> 40.71 nm		
<b>PDI :</b> 0.35552		<b>Std Dev:</b> 29.81%

### Detected size(s)

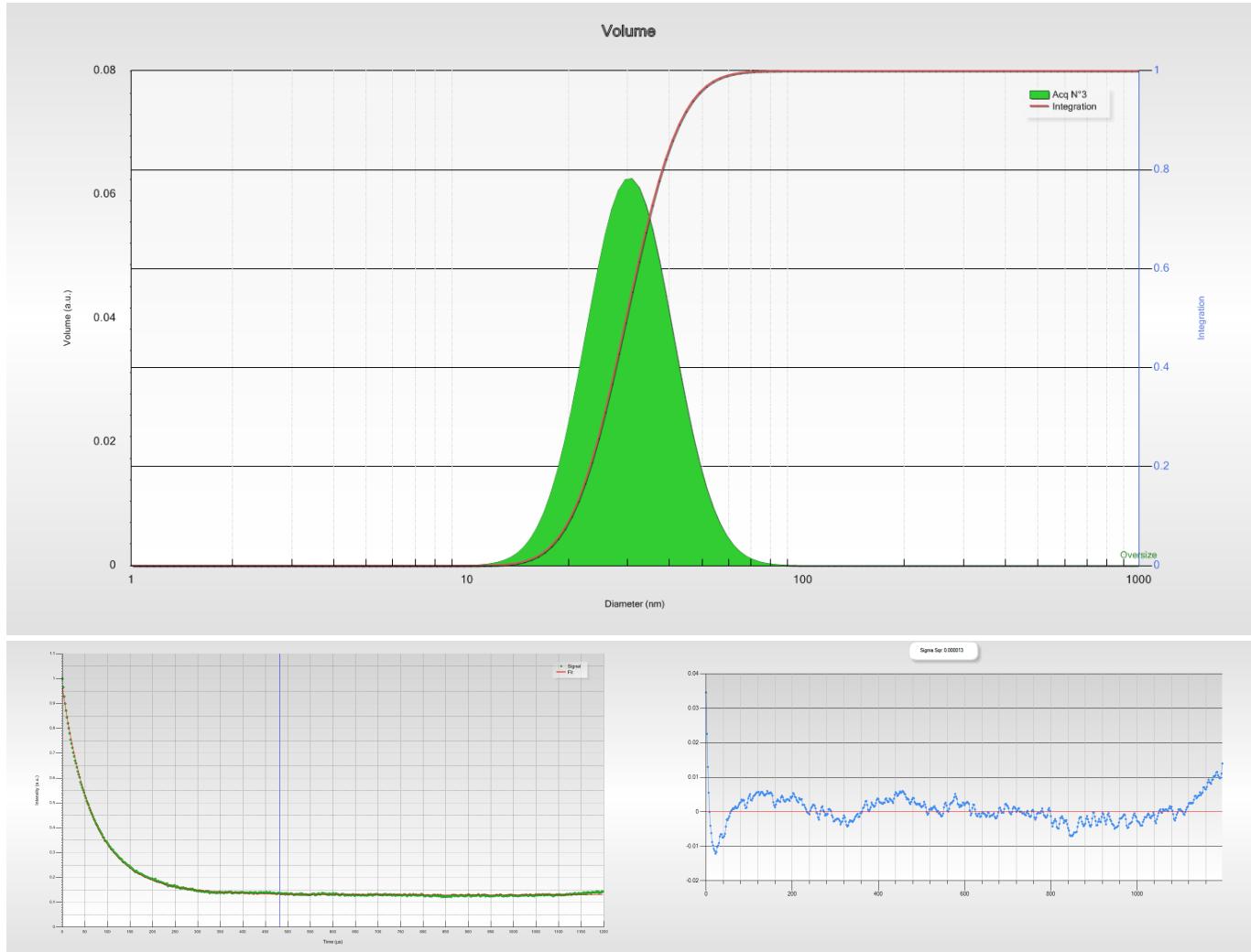
Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.32	0.84	7568.51	14.31839E-012

**Distribution statistics**

<b>Dn 10%:</b> 16.17 nm	<b>Dn 50%:</b> 23.41 nm	<b>Dn 90%:</b> 33.89 nm
<b>Mean Number:</b> 24.47 nm		
<b>PDI</b> : 0.35552		<b>Std Dev:</b> 29.81%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.32	0.84	7568.51	14.31839E-012

**Distribution statistics**

**D<sub>v</sub> 10%:** 20.38 nm  
**Mean Volume:** 31.72 nm  
**PDI** : 0.35552

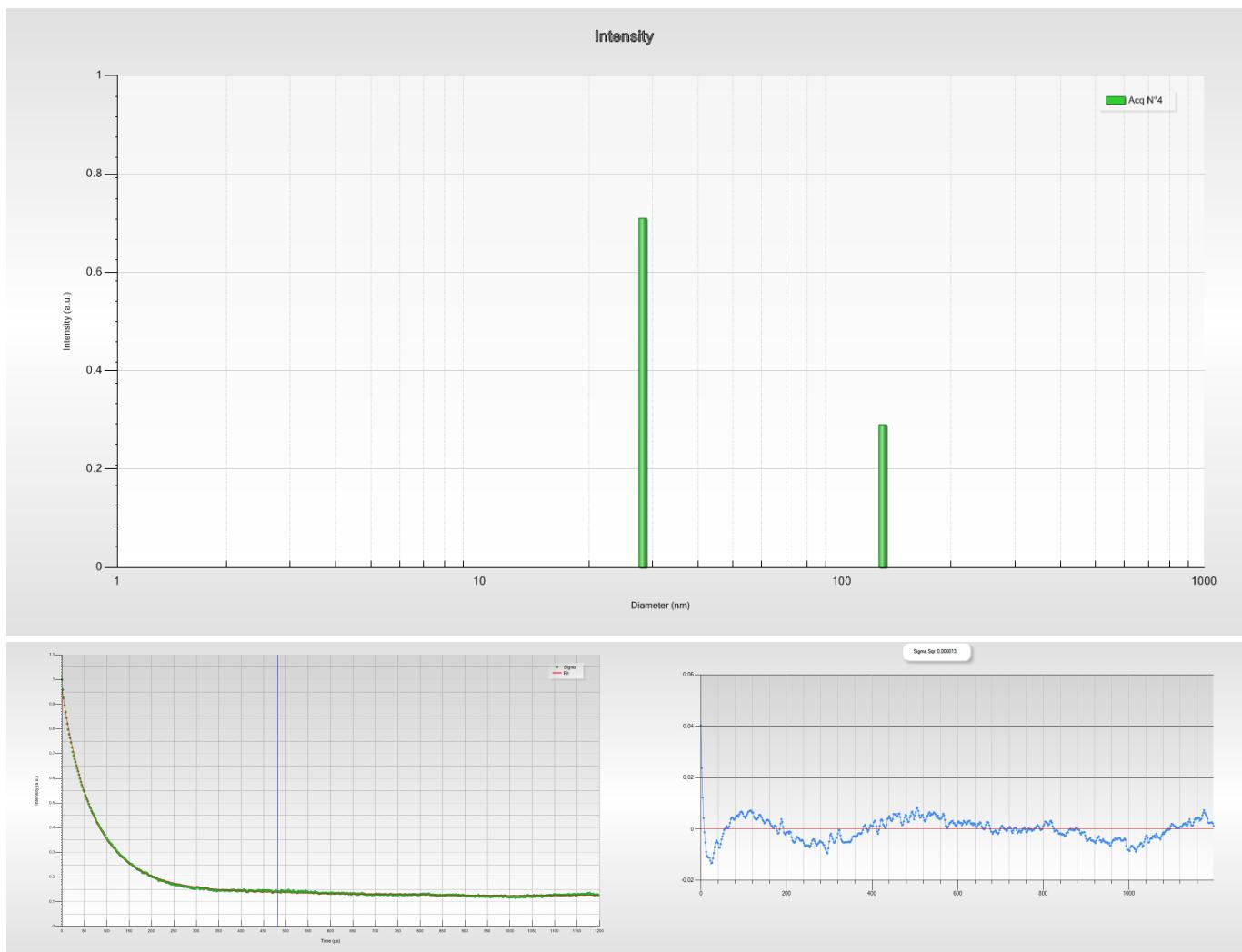
**D<sub>v</sub> 50%:** 30.9 nm

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

**Std Dev:** 29.81%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.32	0.84	7568.51	14.31839E-012



### Dispersion statistics

**Di 10%:** 28.17 nm

**Mean Intensity:** 57.59 nm

**Di 50%:** 28.17 nm

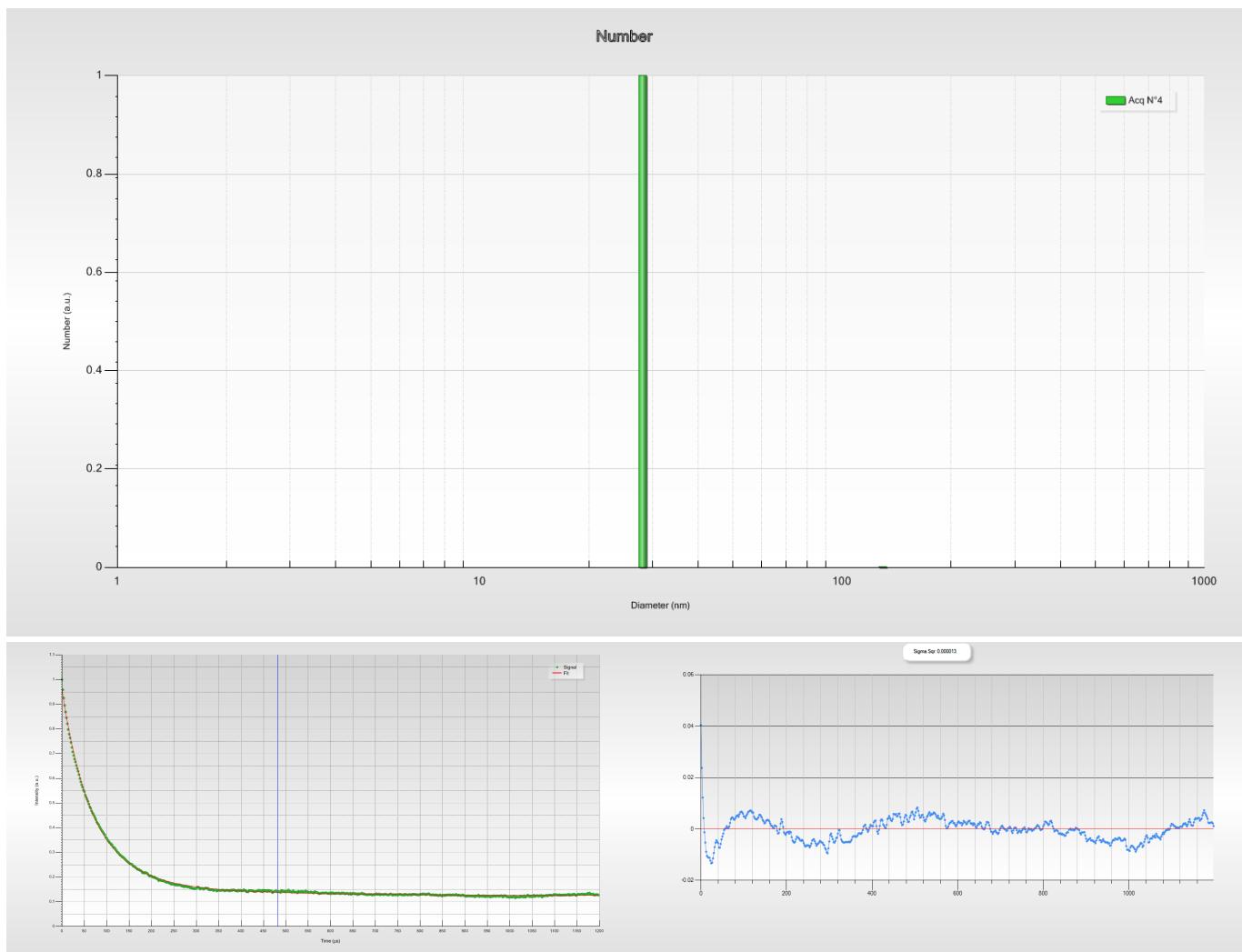
**Di 90%:** 129.55 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
28.2	0.65	9211.85	17.42734E-012
130.65	0.26	1988.39	37.61706E-013

### Dispersion data

Size (nm)	Intensity	Size (nm)	Intensity
28.17	0.71	129.55	0.29



### Dispersion statistics

**Dn 10%:** 28.17 nm  
**Mean Number:** 28.18 nm

**Dn 50%:** 28.17 nm

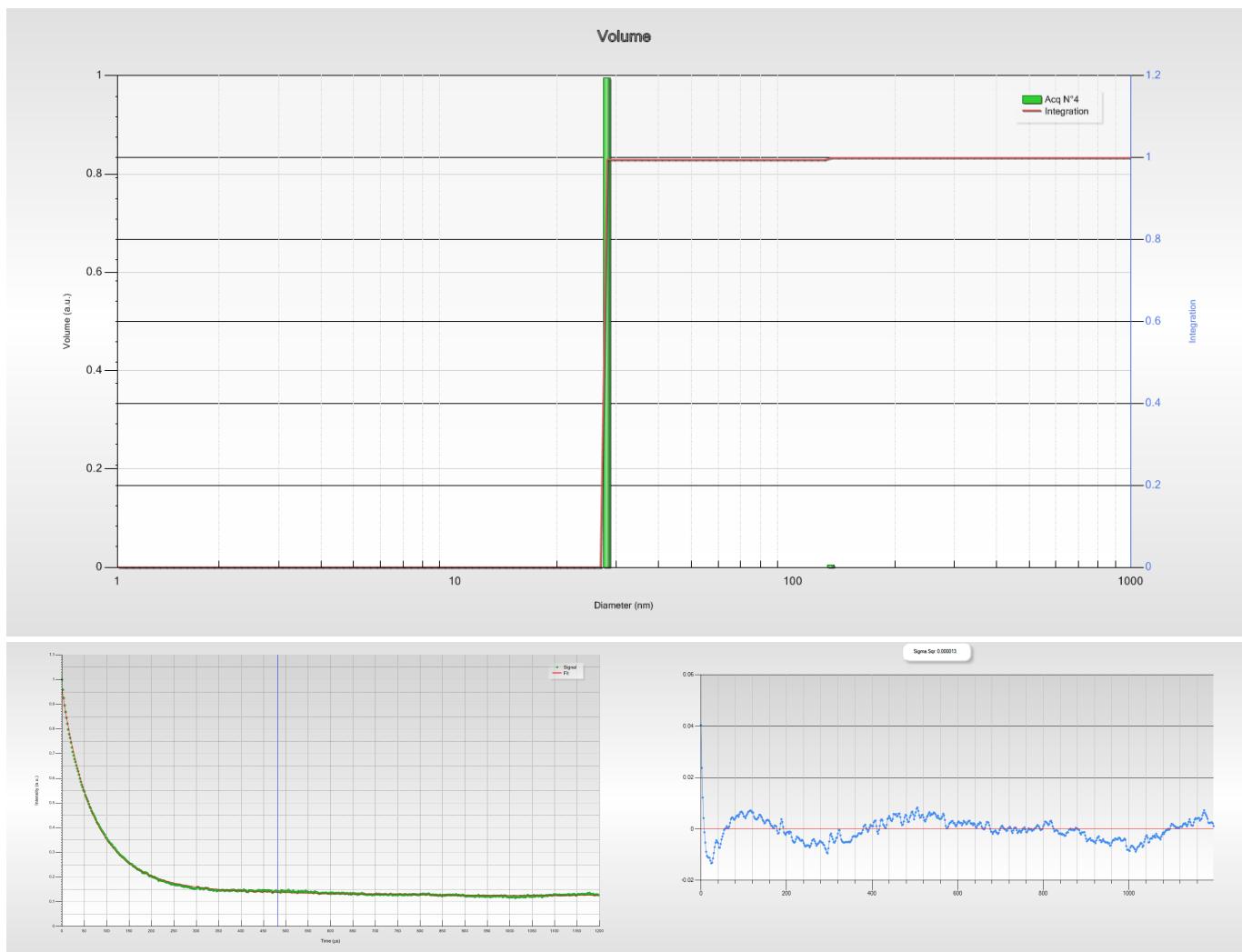
**Dn 90%:** 28.17 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
28.2	0.65	9211.85	17.42734E-012
130.65	0.26	1988.39	37.61706E-013

### Dispersion data

Size (nm)	Number
28.17	1



### Dispersion statistics

**D<sub>v</sub> 10%:** 28.17 nm  
**Mean Volume:** 28.68 nm

**D<sub>v</sub> 50%:** 28.17 nm

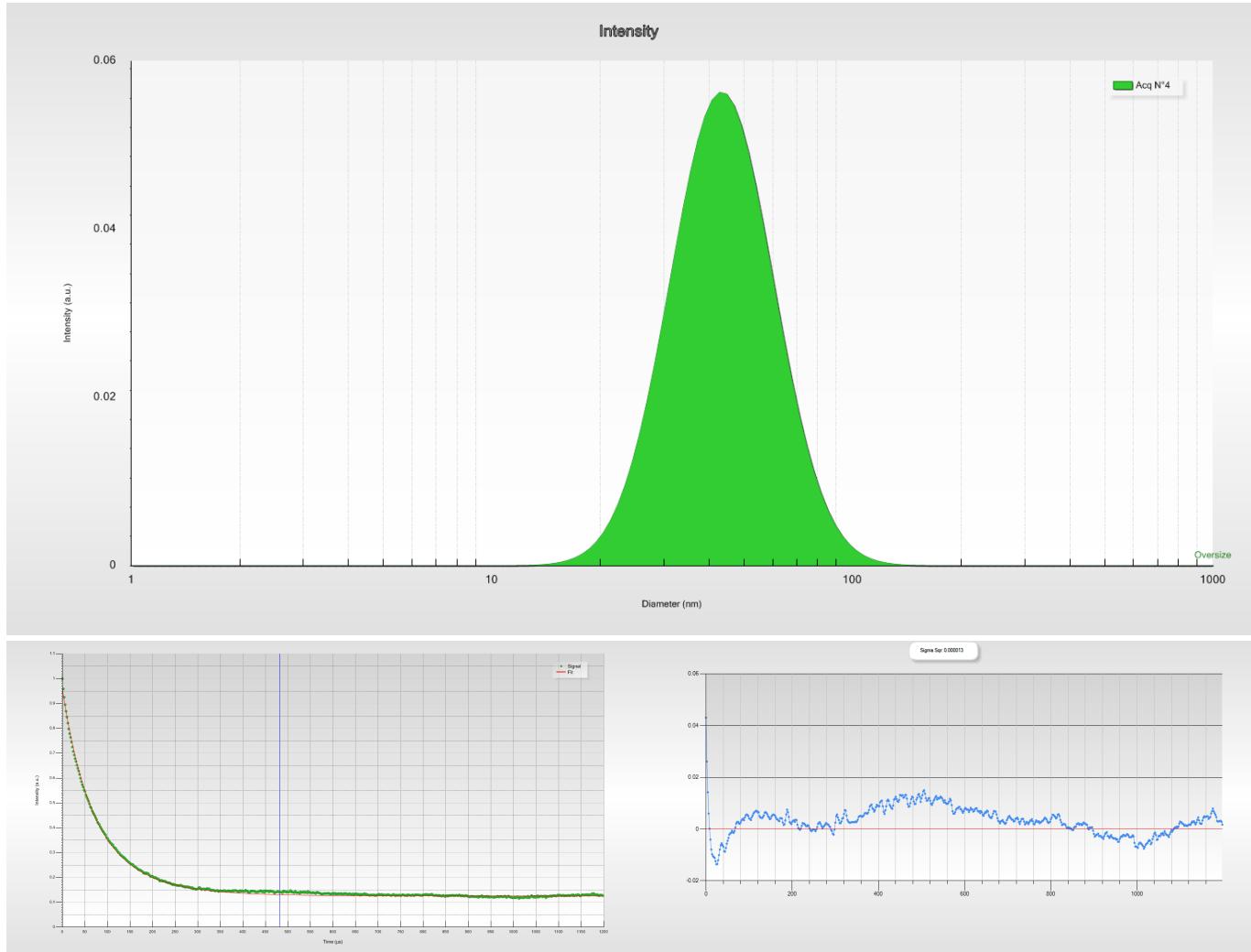
**D<sub>v</sub> 90%:** 28.17 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
28.2	0.65	9211.85	17.42734E-012
130.65	0.26	1988.39	37.61706E-013

### Dispersion data

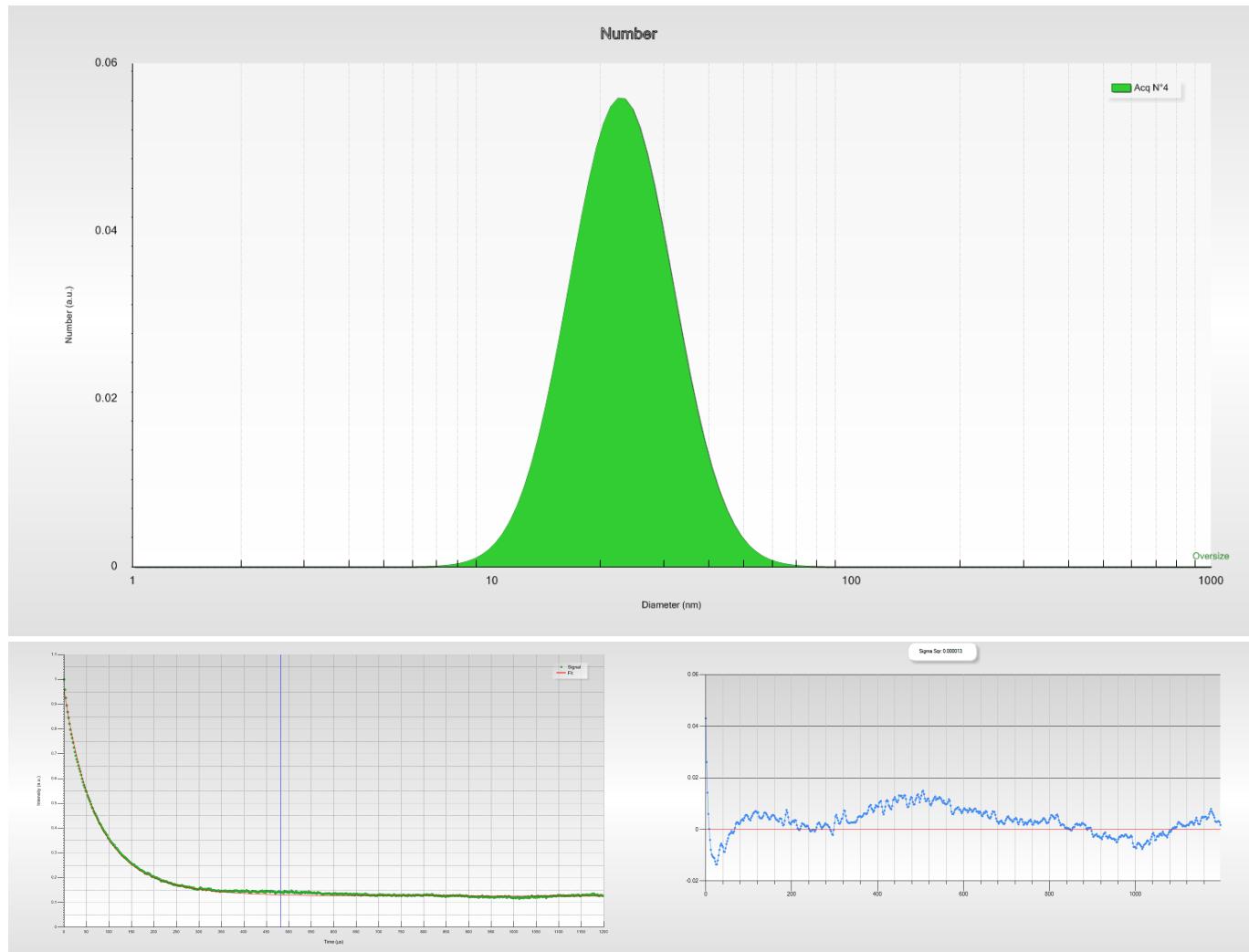
Size (nm)	Volume	Size (nm)	Volume
28.17	0.99	129.55	0.01

**Distribution statistics**

<b>Di 10%:</b> 28.17 nm	<b>Di 50%:</b> 42.71 nm	<b>Di 90%:</b> 64.75 nm
<b>Mean Intensity:</b> 45.72 nm		
<b>PDI</b> : 0.45291		<b>Std Dev:</b> 33.65%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.88	0.83	7043.3	13.32478E-012

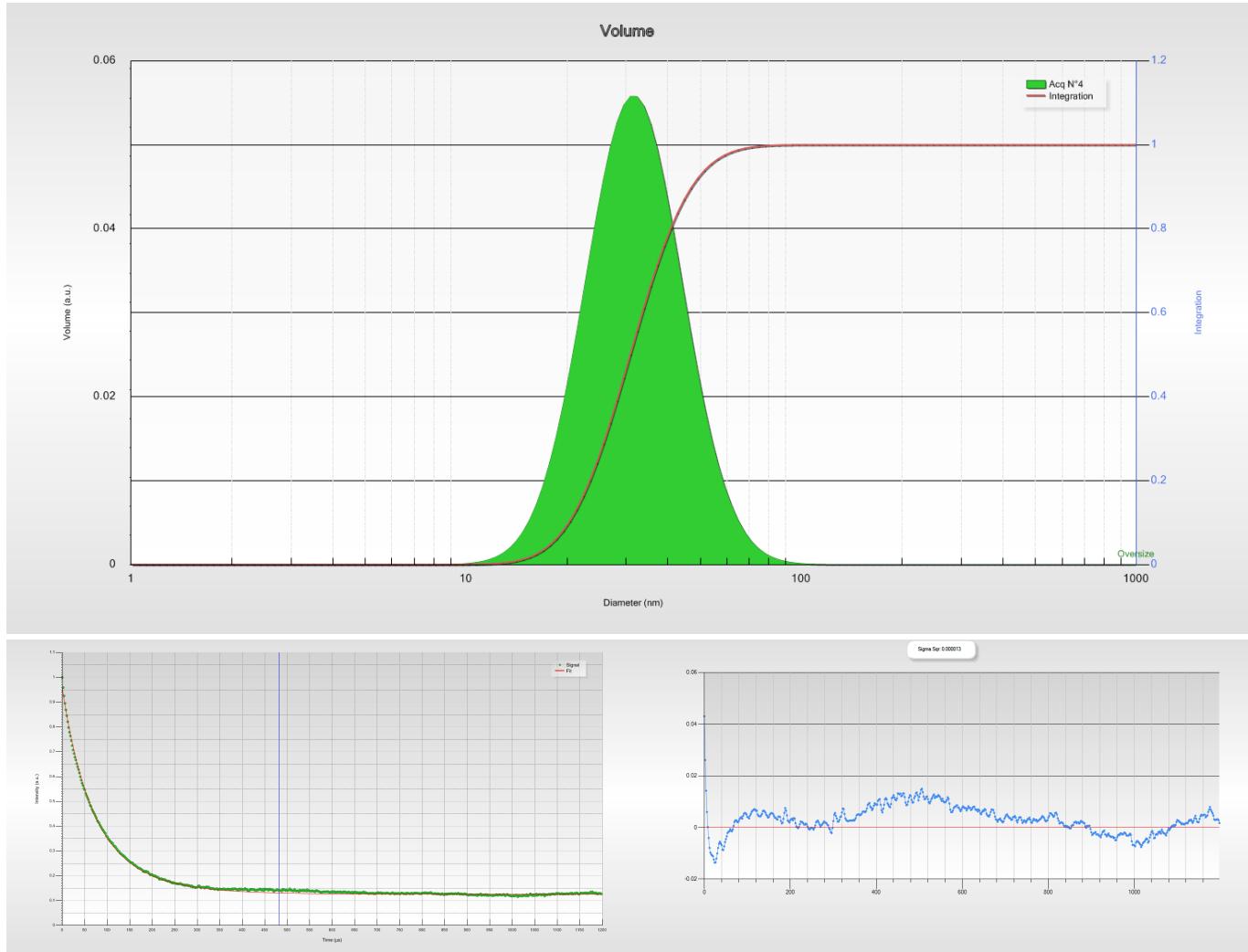


### Distribution statistics

<b>Dn 10%:</b> 14.75 nm	<b>Dn 50%:</b> 22.36 nm	<b>Dn 90%:</b> 35.5 nm
<b>Mean Number:</b> 24.08 nm		
<b>PDI</b> : 0.45291		<b>Std Dev:</b> 33.65%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.88	0.83	7043.3	13.32478E-012

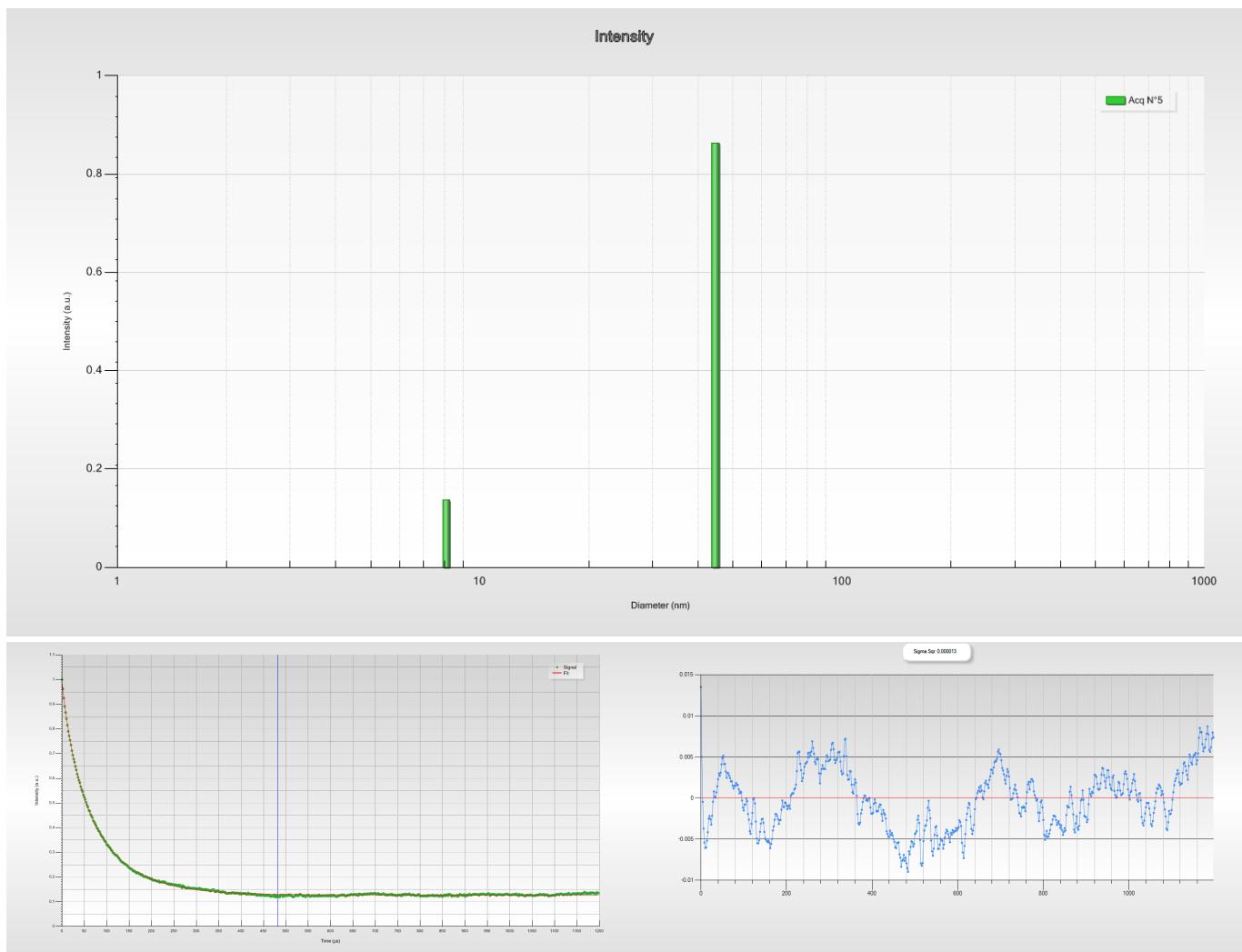


### Distribution statistics

<b>D<sub>v</sub> 10%:</b> 20.38 nm	<b>D<sub>v</sub> 50%:</b> 30.9 nm	<b>D<sub>v</sub> 90%:</b> 49.06 nm
<b>Mean Volume:</b> 33.38 nm		
<b>PDI</b> : 0.45291		<b>Std Dev:</b> 33.65%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
36.88	0.83	7043.3	13.32478E-012



### Dispersion statistics

**Di 10%:** 8.08 nm

**Mean Intensity:** 39.71 nm

**Di 50%:** 44.73 nm

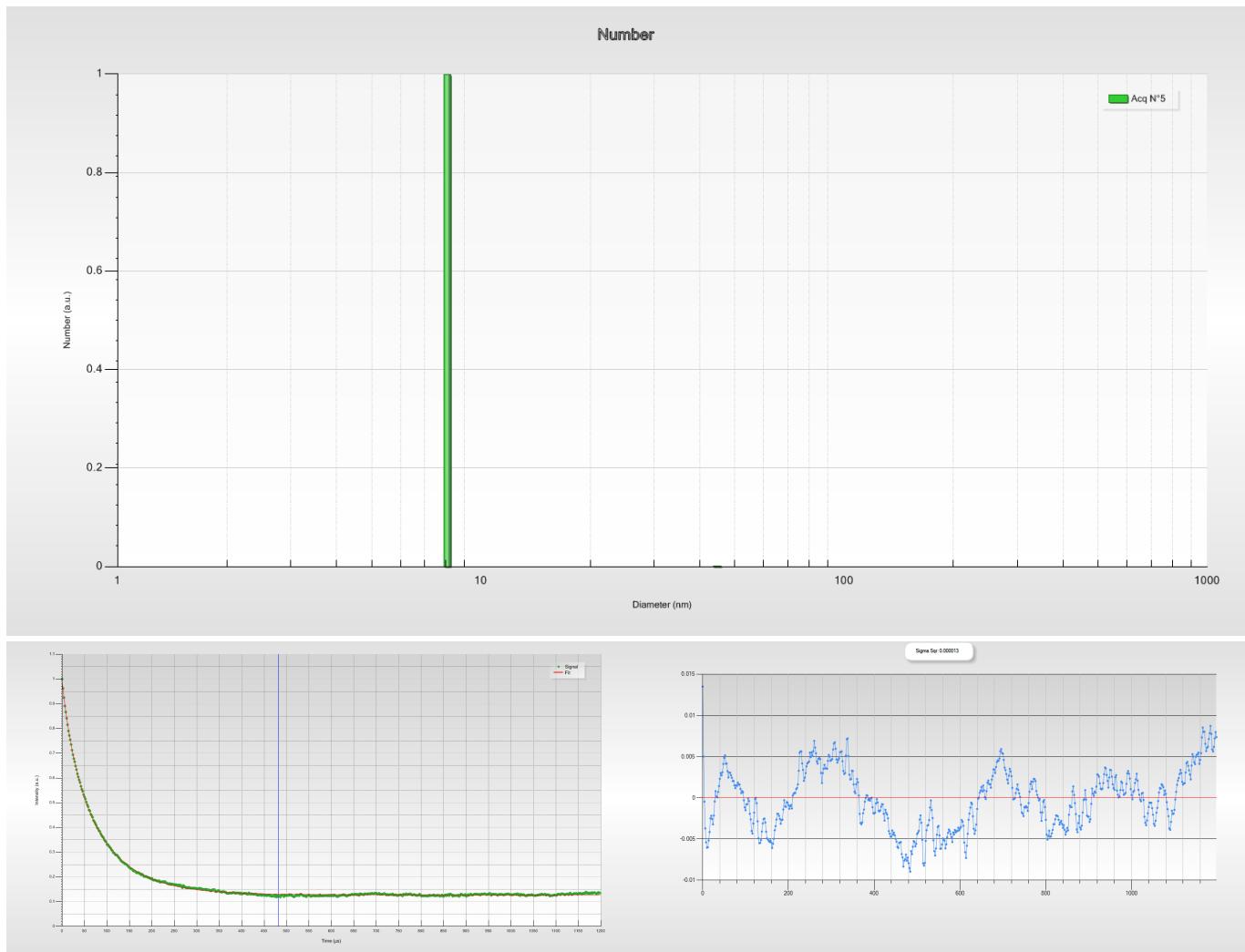
**Di 90%:** 44.73 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
8.01	0.13	32428.81	61.35005E-012
45.27	0.8	5738.81	10.8569E-012

### Dispersion data

Size (nm)	Intensity	Size (nm)	Intensity
8.08	0.14	44.73	0.86



### Dispersion statistics

Dn 10%: 8.08 nm  
Mean Number: 8.09 nm

Dn 50%: 8.08 nm

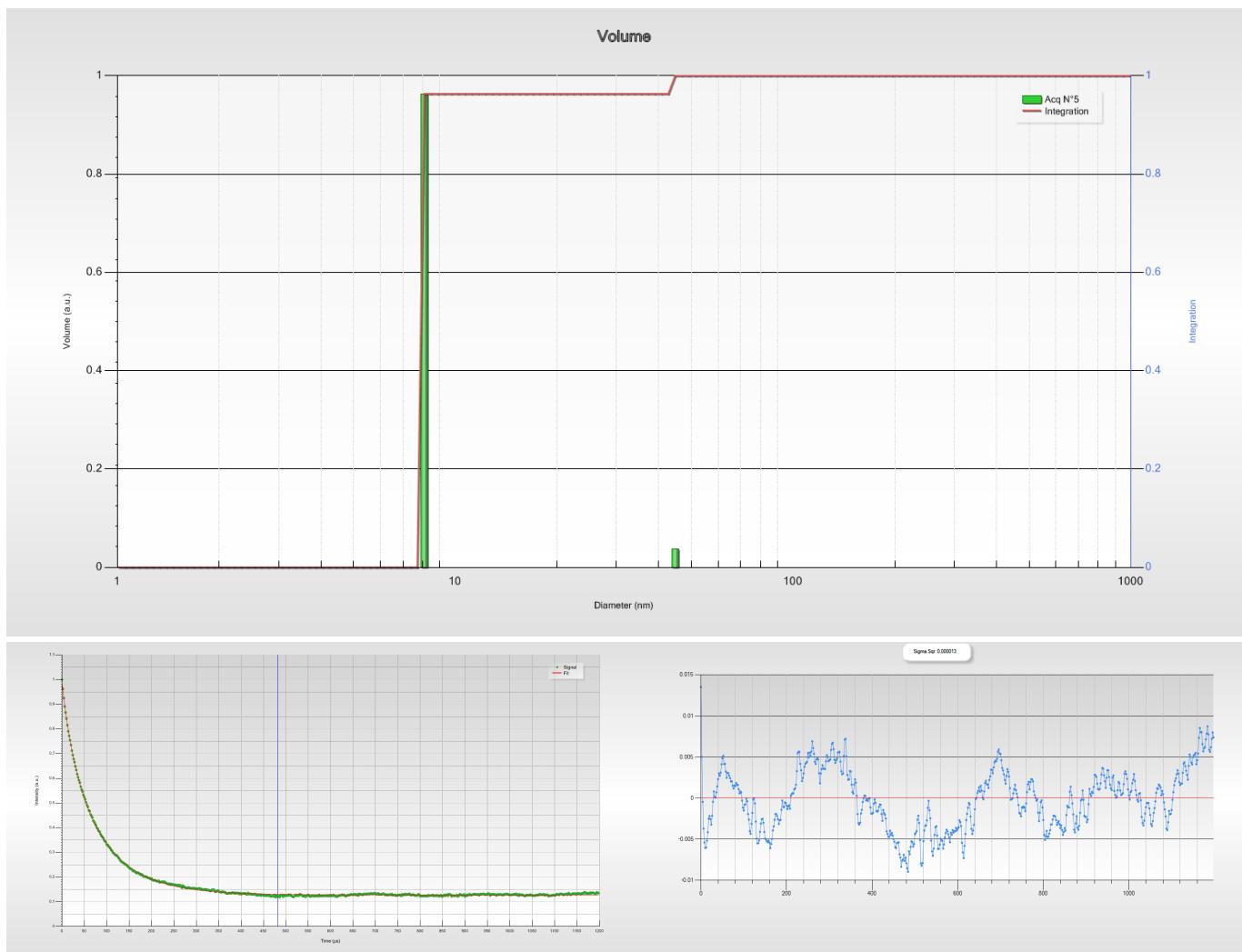
Dn 90%: 8.08 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
8.01	0.13	32428.81	61.35005E-012
45.27	0.8	5738.81	10.8569E-012

### Dispersion data

Size (nm)	Number
8.08	1



### Dispersion statistics

**D<sub>v</sub> 10%:** 8.08 nm  
**Mean Volume:** 9.43 nm

**D<sub>v</sub> 50%:** 8.08 nm

**D<sub>v</sub> 90%:** 8.08 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
8.01	0.13	32428.81	61.35005E-012
45.27	0.8	5738.81	10.8569E-012

### Dispersion data

Size (nm)	Volume	Size (nm)	Volume
8.08	0.96	44.73	0.04



### Distribution statistics

<b>Di 10%:</b> 25.68 nm	<b>Di 50%:</b> 38.94 nm	<b>Di 90%:</b> 59.03 nm
<b>Mean Intensity:</b> 41.31 nm		
<b>PDI</b> : 0.44023		<b>Std Dev:</b> 33.17%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
33.51	0.84	7751.58	14.66473E-012

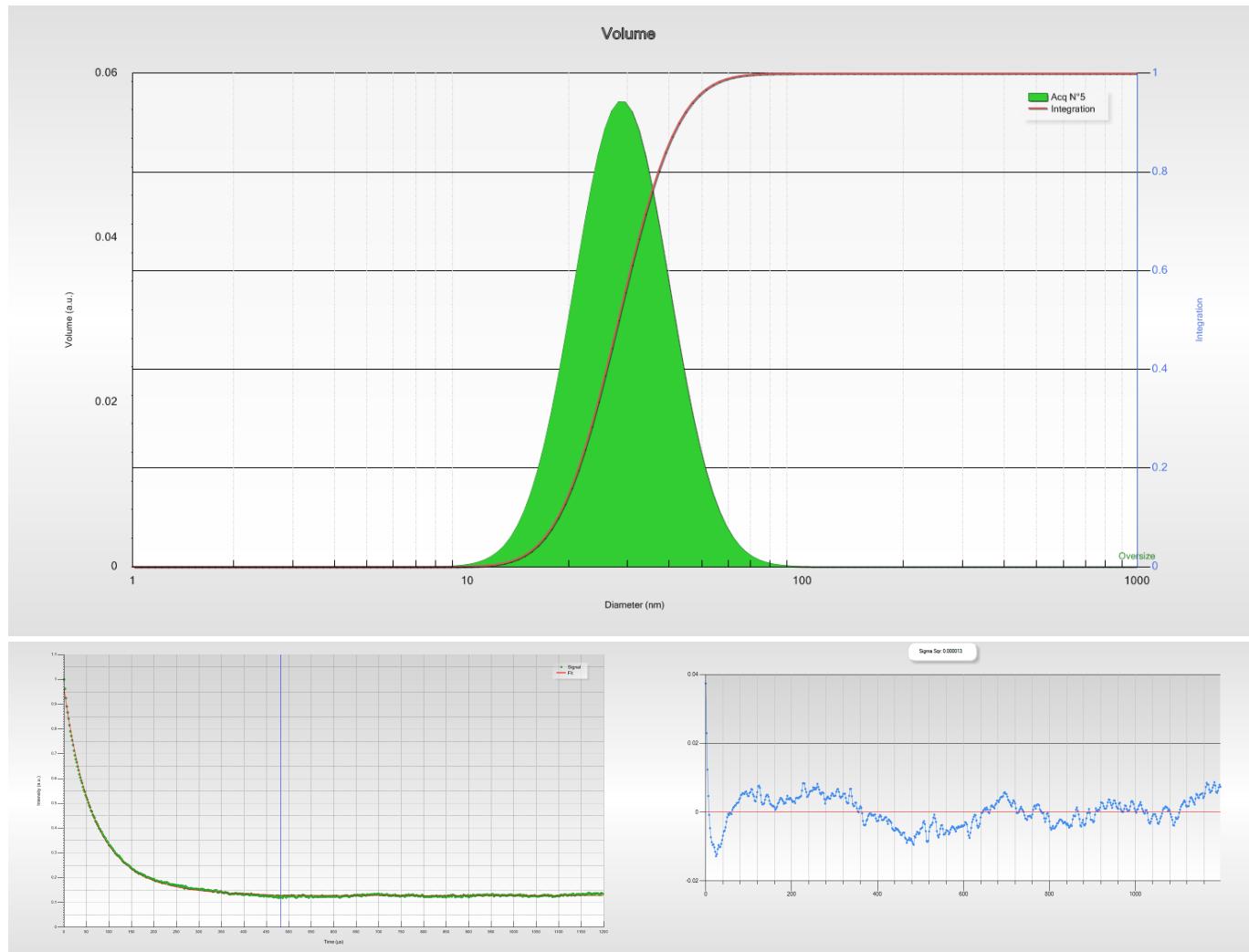


### Distribution statistics

<b>Dn 10%:</b> 14.08 nm	<b>Dn 50%:</b> 21.35 nm	<b>Dn 90%:</b> 32.36 nm
<b>Mean Number:</b> 22.12 nm		
<b>PDI</b> : 0.44023		<b>Std Dev:</b> 33.17%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
33.51	0.84	7751.58	14.66473E-012



### Distribution statistics

<b>D<sub>v</sub> 10%:</b> 18.58 nm	<b>D<sub>v</sub> 50%:</b> 28.17 nm	<b>D<sub>v</sub> 90%:</b> 44.73 nm
<b>Mean Volume:</b> 30.39 nm		
<b>PDI</b> : 0.44023		<b>Std Dev:</b> 33.17%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
33.51	0.84	7751.58	14.66473E-012