

## Sample

**Name** : GNP\_11.4.16\_2.5\_1k\_1  
**Mesured On** : 11.04.2016 18:21  
**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>	: 67.5 %	<b>Wavelength</b>	: 657 nm
<b>DTC Position</b>	: UP		

## Liquid Medium

<b>Refractive index</b>	: 1.331	<b>Viscosity</b>	: 0.888 cP
-------------------------	---------	------------------	------------

## Particles

<b>Real part</b>	: 1.56	<b>Imaginary part</b>	: 0.01
------------------	--------	-----------------------	--------

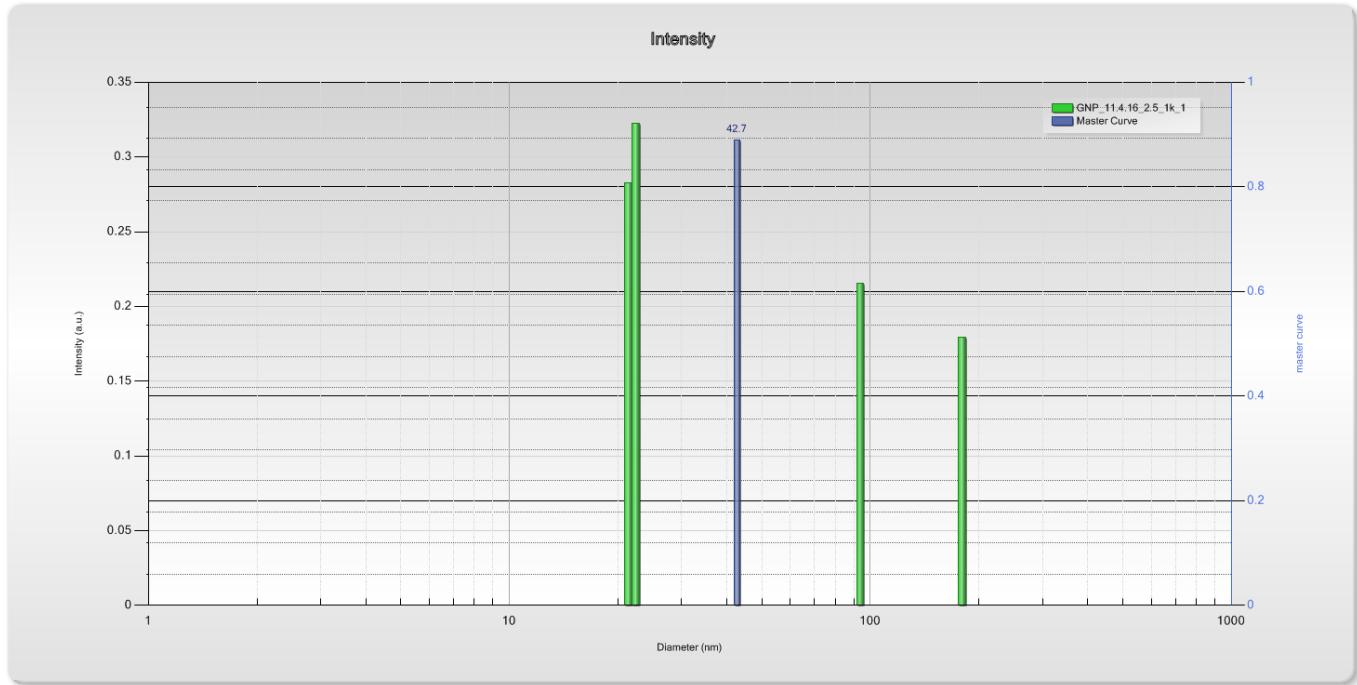
## Algorithm

Pade Laplace	Cumulants
--------------	-----------

## Measurement

**Average count rate** : 2492 kcps  
**Number of rejected** : 3

**Duration** : 00:05:15  
**Number of modified** : 0



### Dispersion statistics

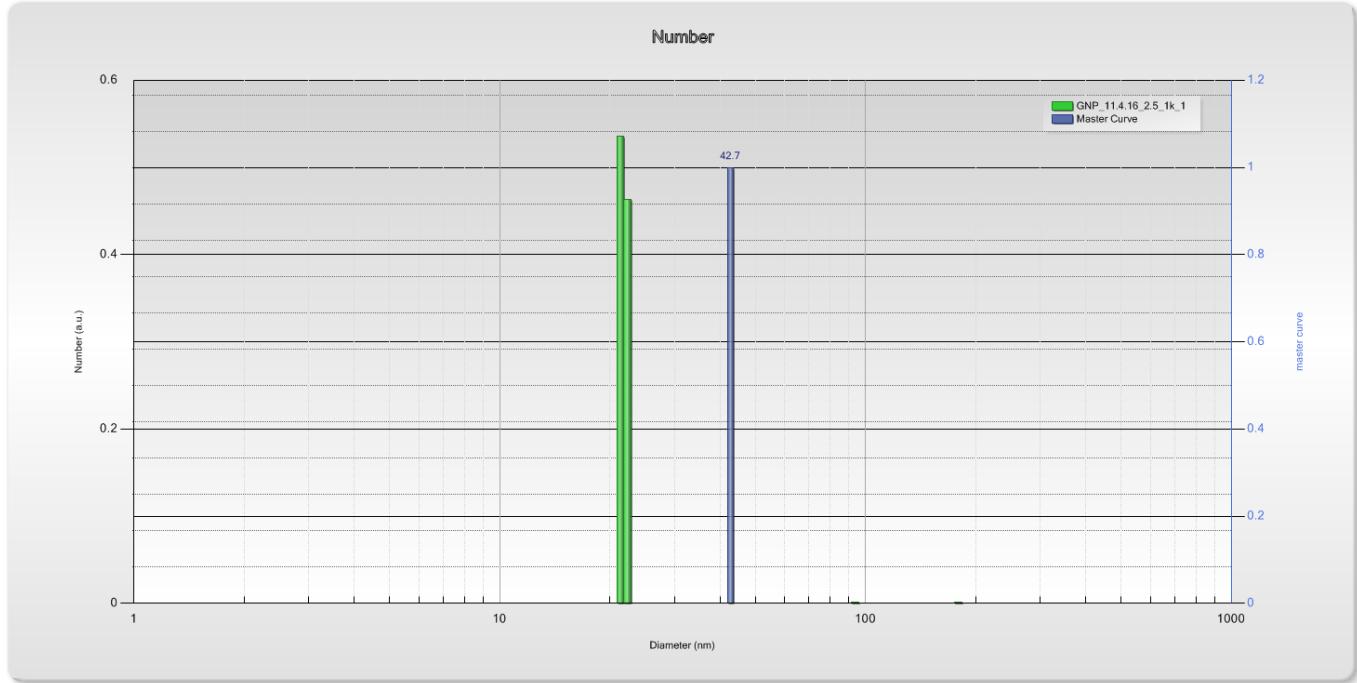
**Di 10%:** 21.35 nm

**Di 50%:** 22.36 nm

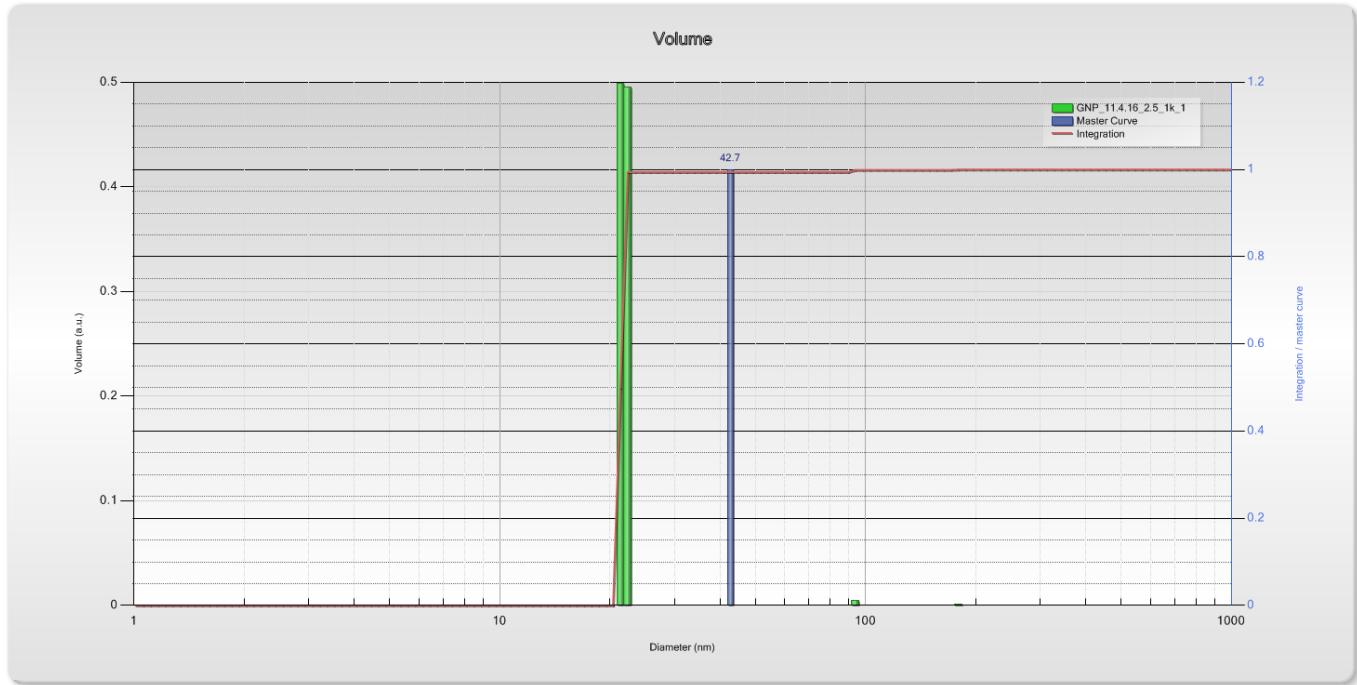
**Di 90%:** 179.07 nm

### Dispersion data

Size (nm)	Intensity						
21.35	0.28	93.73	0.22				
22.36	0.32	179.07	0.18				

***Dispersion statistics******Dn 10%: 21.35 nm******Dn 50%: 21.35 nm******Dn 90%: 22.36 nm******Dispersion data***

Size (nm)	Number	Size (nm)	Number
21.35	0.54	22.36	0.46



### Dispersion statistics

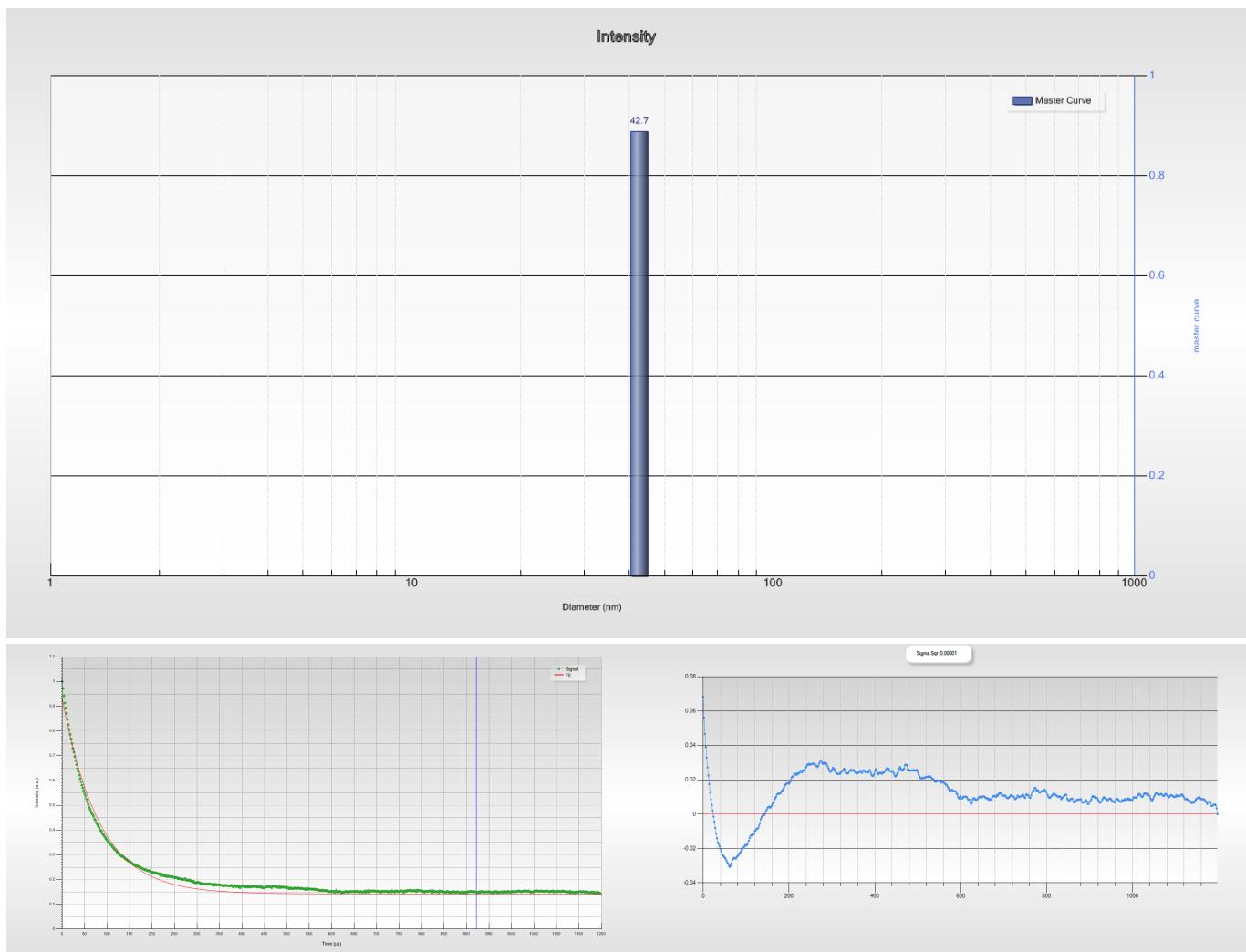
**D<sub>v</sub> 10%:** 21.35 nm

**D<sub>v</sub> 50%:** 22.36 nm

**D<sub>v</sub> 90%:** 22.36 nm

### Dispersion data

Size (nm)	Volume	Size (nm)	Volume
21.35	0.5	22.36	0.5



### Dispersion statistics

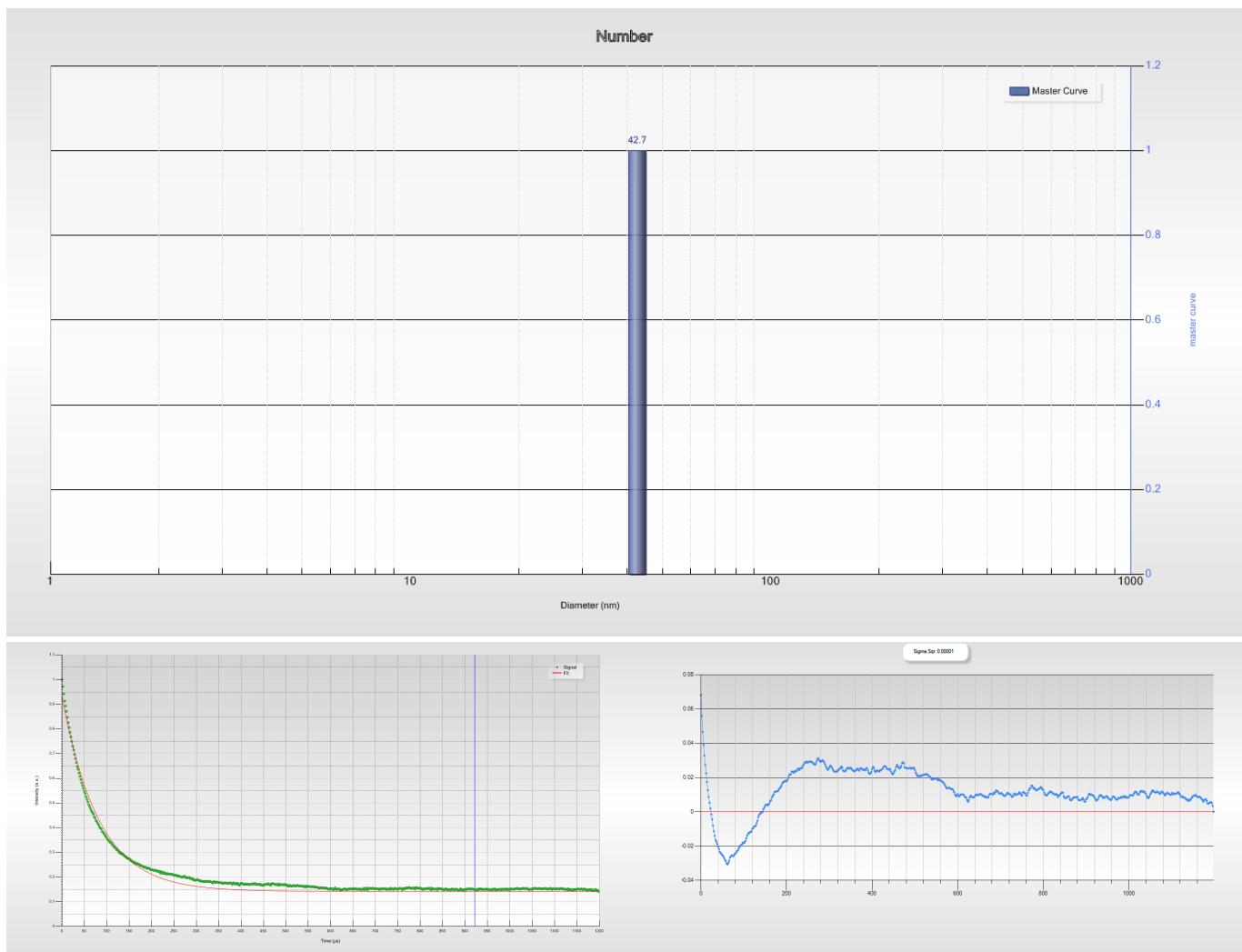
**Di 10%:** 42.71 nm      **Di 50%:** 42.71 nm      **Di 90%:** 42.71 nm  
**Mean Intensity:** 42.71 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
42.82	0.89	6068.71	11.48101E-012

### Dispersion datas

Size (nm)	Intensity
42.71	1



### Dispersion statistics

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

**Dn 50%:** 42.71 nm

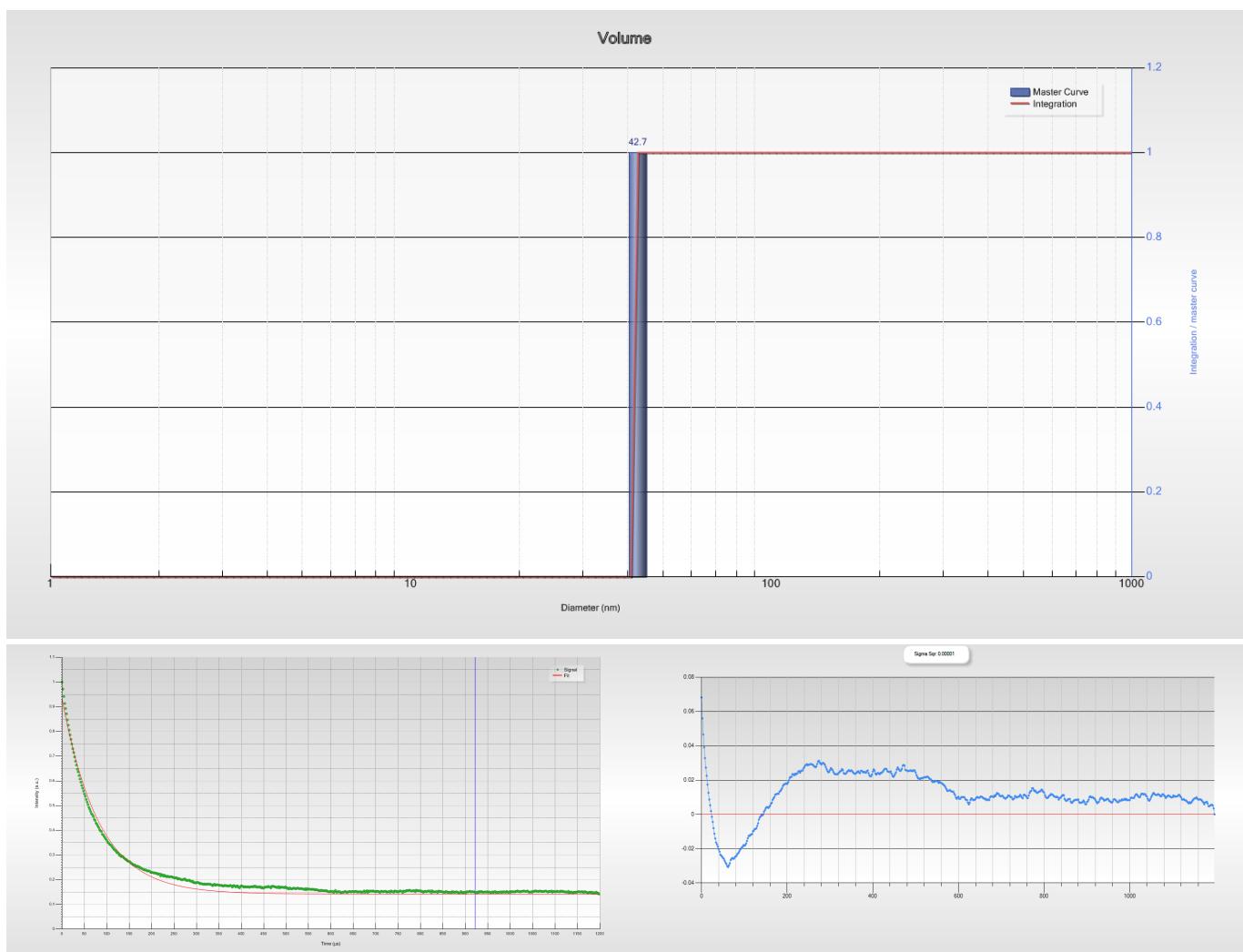
**Dn 90%:** 42.71 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
42.82	0.89	6068.71	11.48101E-012

### Dispersion datas

Size (nm)	Number
42.71	1



### Dispersion statistics

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

**D<sub>v</sub> 50%:** 42.71 nm

**D<sub>v</sub> 90%:** 42.71 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
42.82	0.89	6068.71	11.48101E-012

### Dispersion datas

Size (nm)	Volume
42.71	1

**Distribution statistics**

<b>Di 10%:</b> 30.9 nm	<b>Di 50%:</b> 46.85 nm	<b>Di 90%:</b> 71.02 nm
<b>Mean Intensity:</b> 49.38 nm		
<b>PDI :</b> 0.43449		<b>Std Dev:</b> 32.96%

**Detected size(s)**

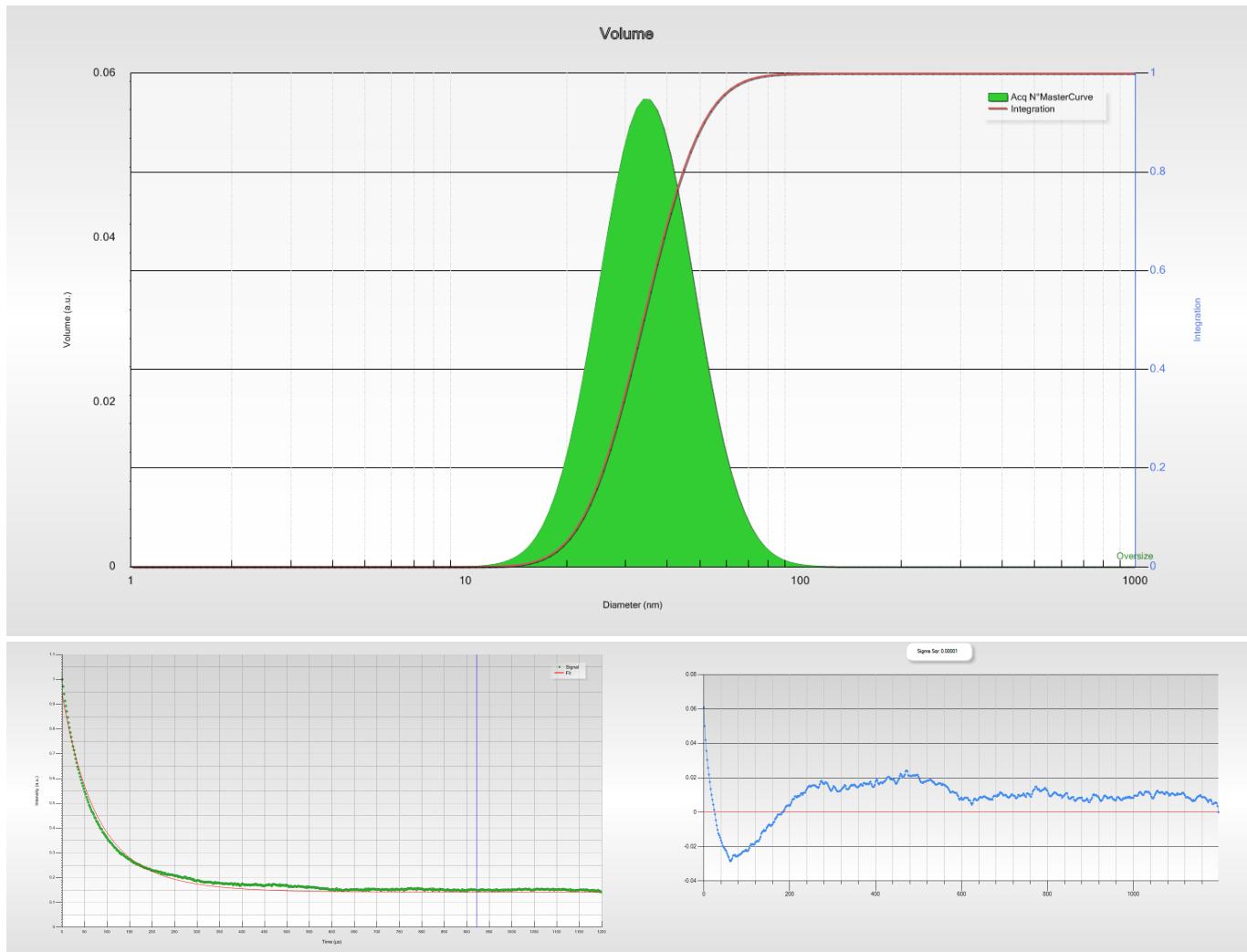
Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.18	0.8	6467.52	12.2355E-012

**Distribution statistics**

<b>Dn 10%:</b> 16.94 nm	<b>Dn 50%:</b> 25.68 nm	<b>Dn 90%:</b> 38.94 nm
<b>Mean Number:</b> 26.67 nm		
<b>PDI</b> : 0.43449		<b>Std Dev:</b> 32.96%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.18	0.8	6467.52	12.2355E-012

**Distribution statistics**

**D<sub>v</sub> 10%:** 23.41 nm  
**Mean Volume:** 36.52 nm  
**PDI :** 0.43449

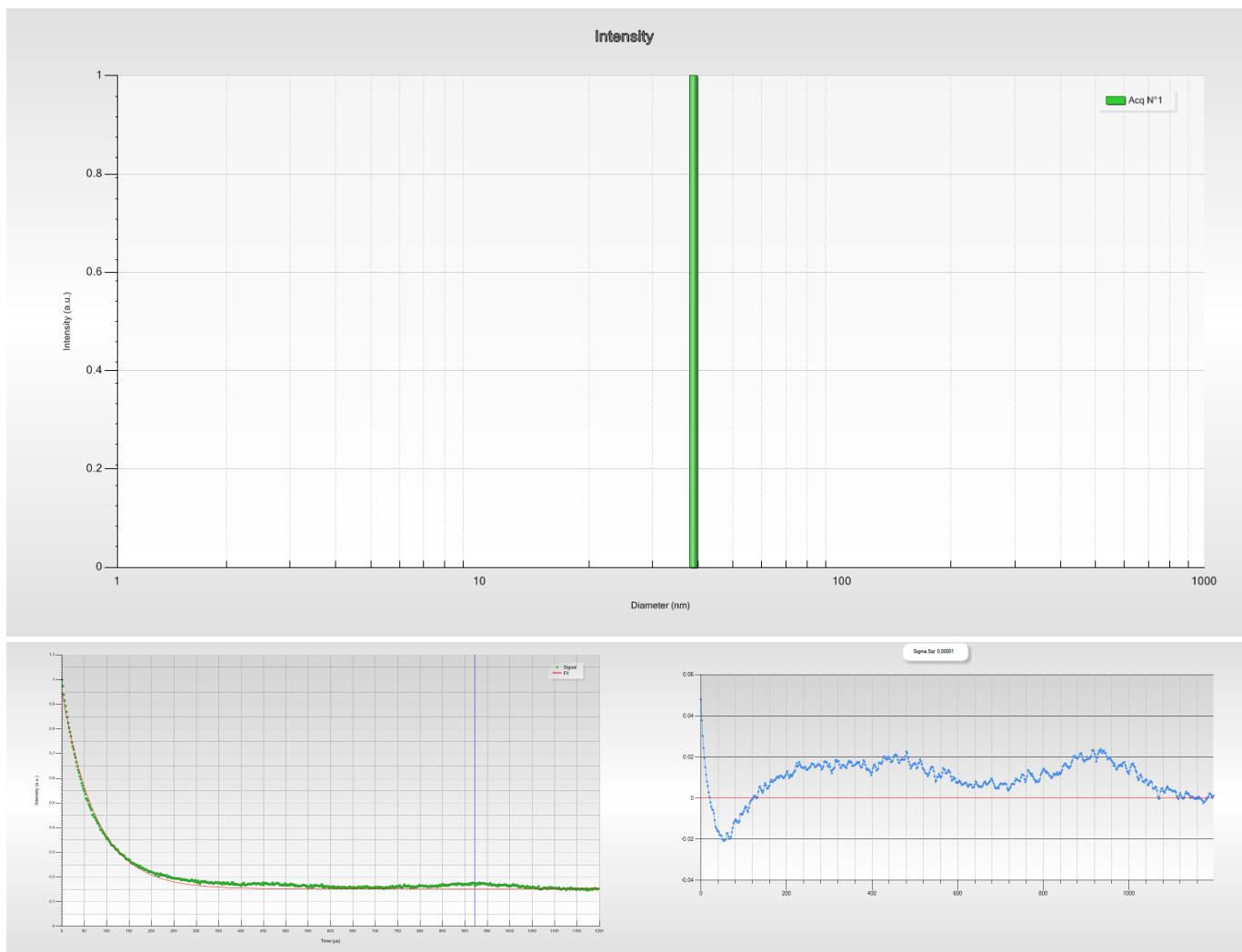
**D<sub>v</sub> 50%:** 33.89 nm

**D<sub>v</sub> 90%:** 51.39 nm

**Std Dev:** 32.96%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.18	0.8	6467.52	12.2355E-012



### Dispersion statistics

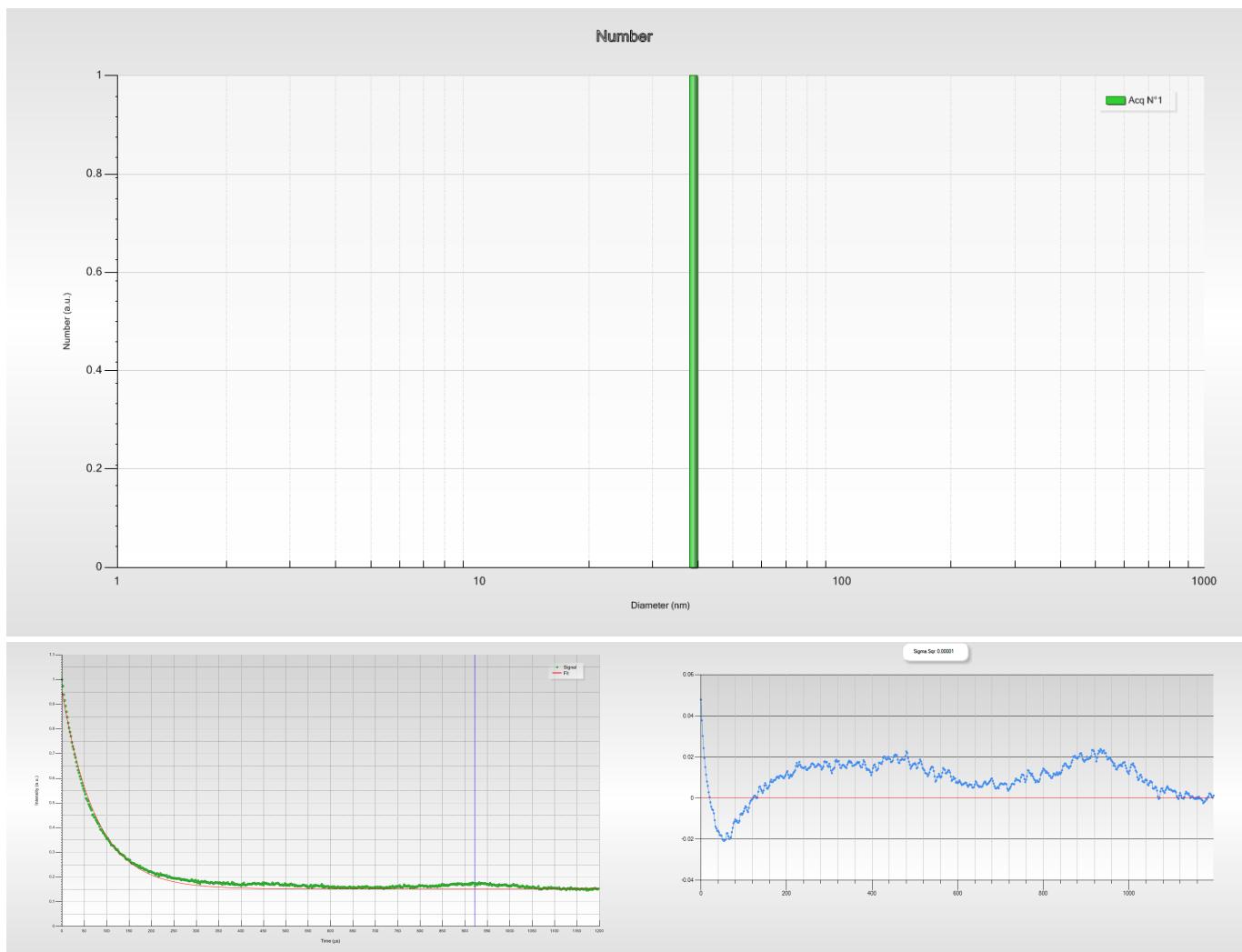
**Di 10%:** 38.94 nm      **Di 50%:** 38.94 nm      **Di 90%:** 38.94 nm  
**Mean Intensity:** 38.94 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.31	0.9	6608.49	12.50219E-012

### Dispersion datas

Size (nm)	Intensity
38.94	1



### Dispersion statistics

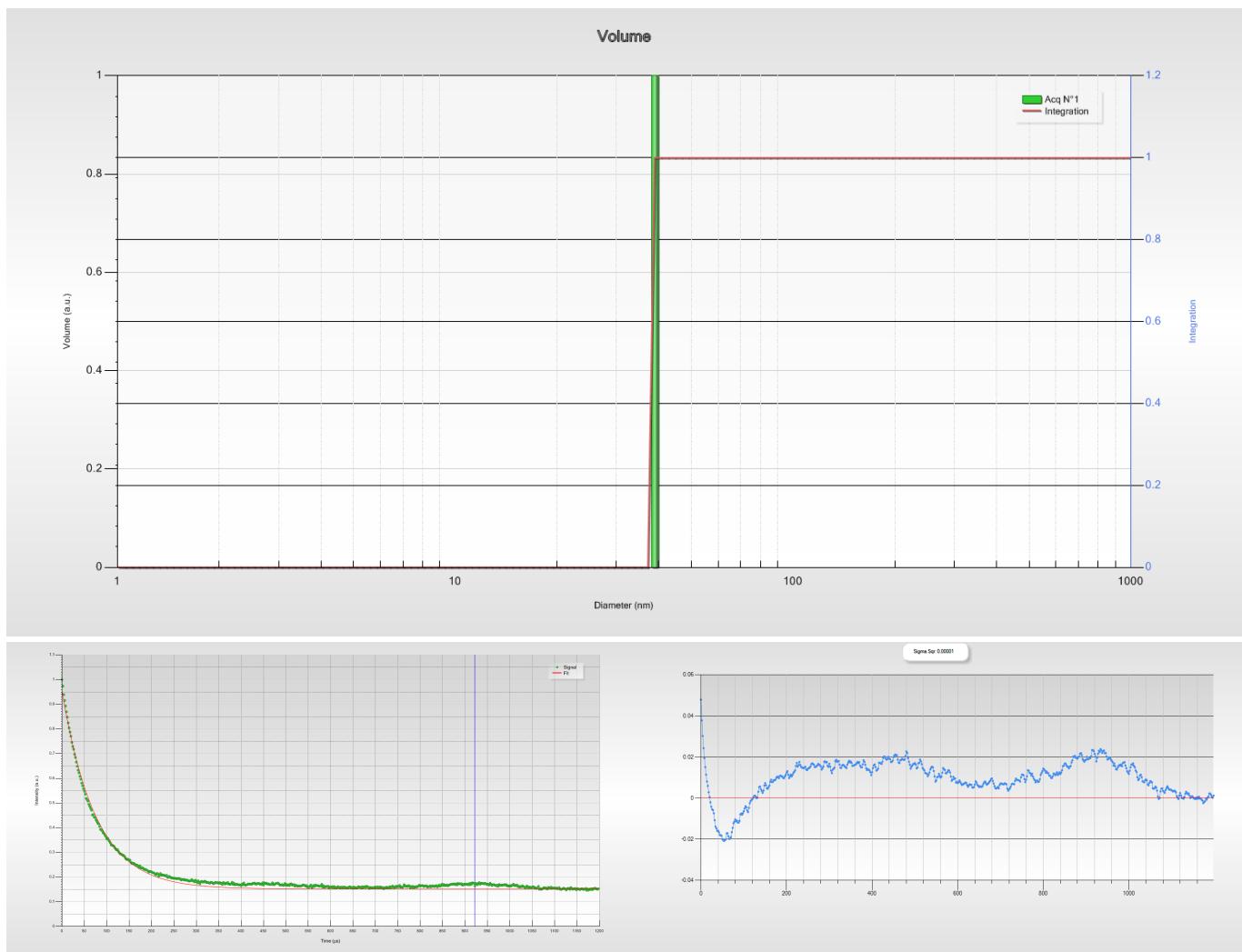
Dn 10%: 38.94 nm      Dn 50%: 38.94 nm      Dn 90%: 38.94 nm  
 Mean Number: 38.94 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.31	0.9	6608.49	12.50219E-012

### Dispersion datas

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

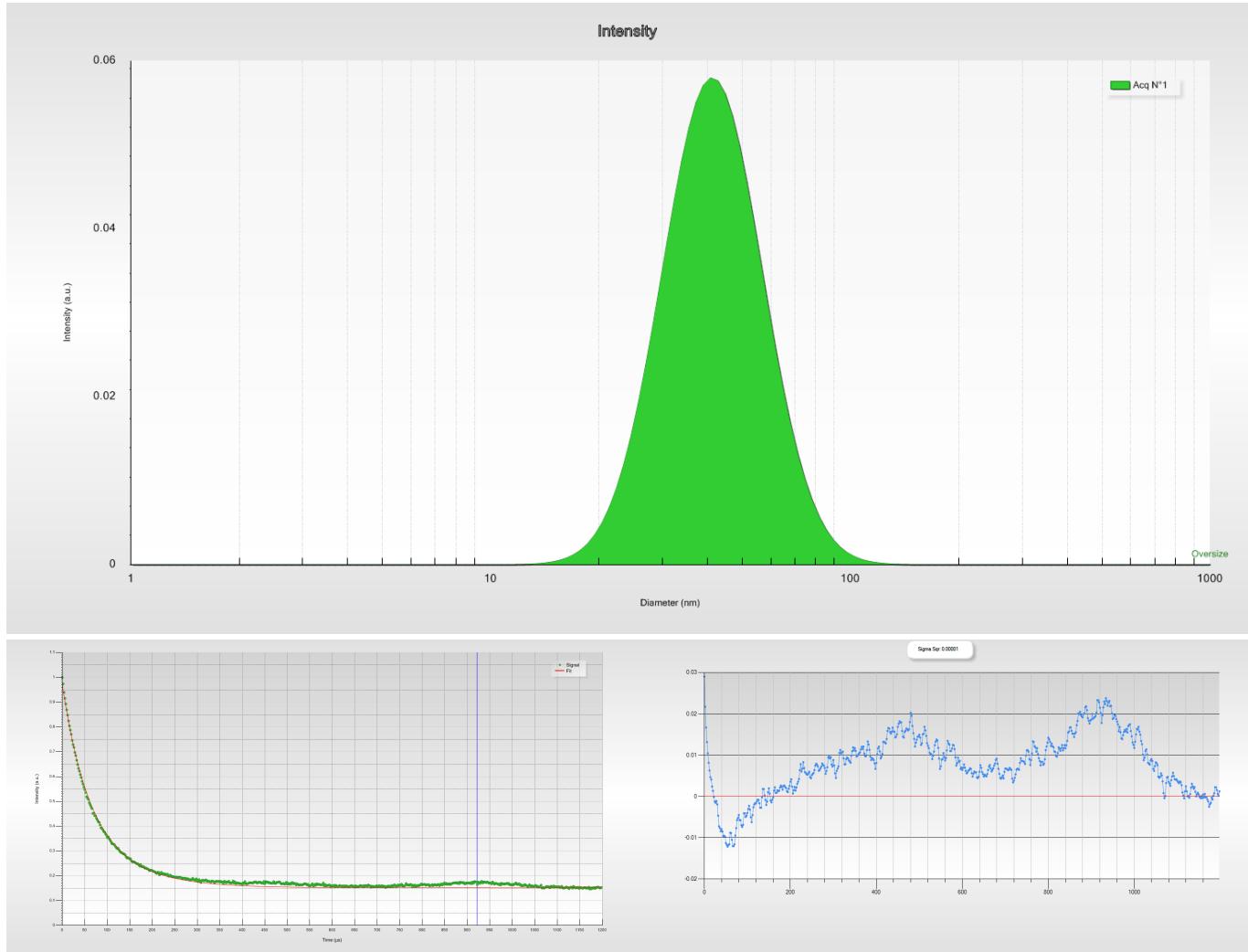
**D<sub>v</sub> 90%:** 38.94 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
39.31	0.9	6608.49	12.50219E-012

### Dispersion datas

Size (nm)	Volume
38.94	1



### Distribution statistics

**Di 10%:** 26.9 nm      **Di 50%:** 40.78 nm      **Di 90%:** 61.83 nm  
**Mean Intensity:** 43.35 nm      **PDI :** 0.4257      **Std Dev:** 32.62%

### Detected size(s)

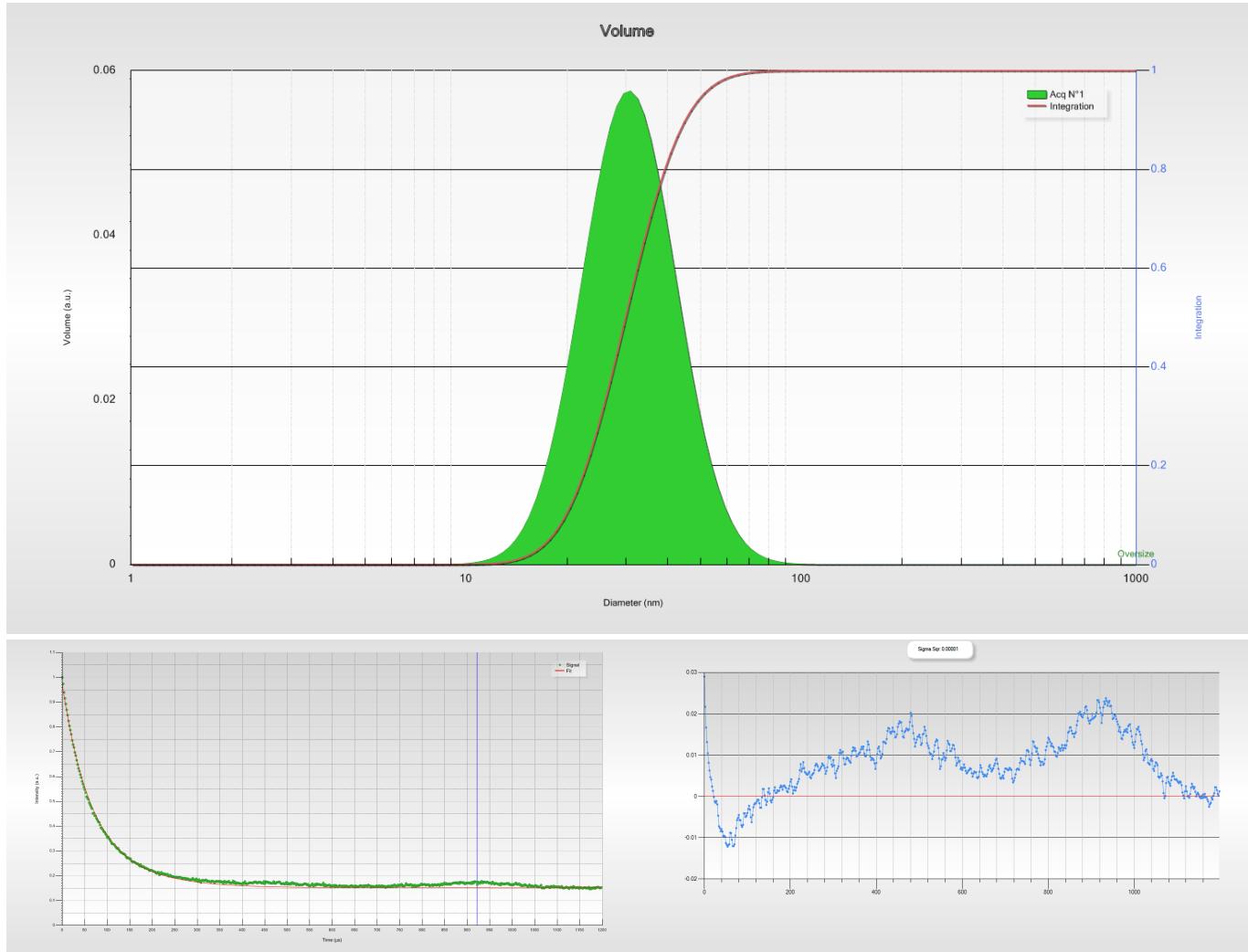
Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
35.4	0.82	7337.94	13.8822E-012

**Distribution statistics**

<b>Dn 10%:</b> 14.75 nm	<b>Dn 50%:</b> 22.36 nm	<b>Dn 90%:</b> 33.89 nm
<b>Mean Number:</b> 23.68 nm		
<b>PDI</b> : 0.4257		<b>Std Dev:</b> 32.62%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
35.4	0.82	7337.94	13.8822E-012

**Distribution statistics**

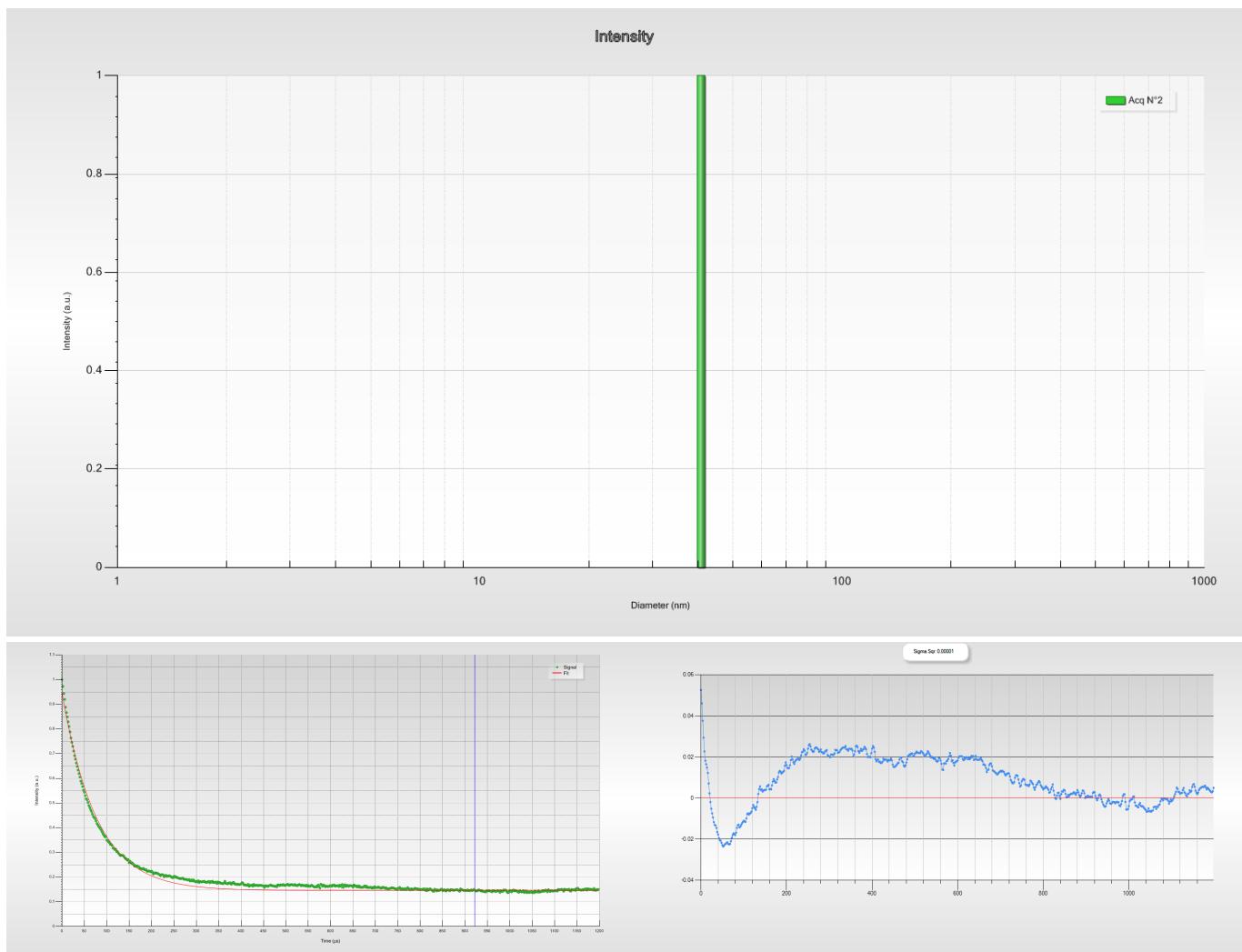
**D<sub>v</sub> 10%:** 20.38 nm  
**Mean Volume:** 32.22 nm  
**PDI :** 0.4257

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

**D<sub>v</sub> 90%:** 46.85 nm  
**Std Dev:** 32.62%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
35.4	0.82	7337.94	13.8822E-012



### Dispersion statistics

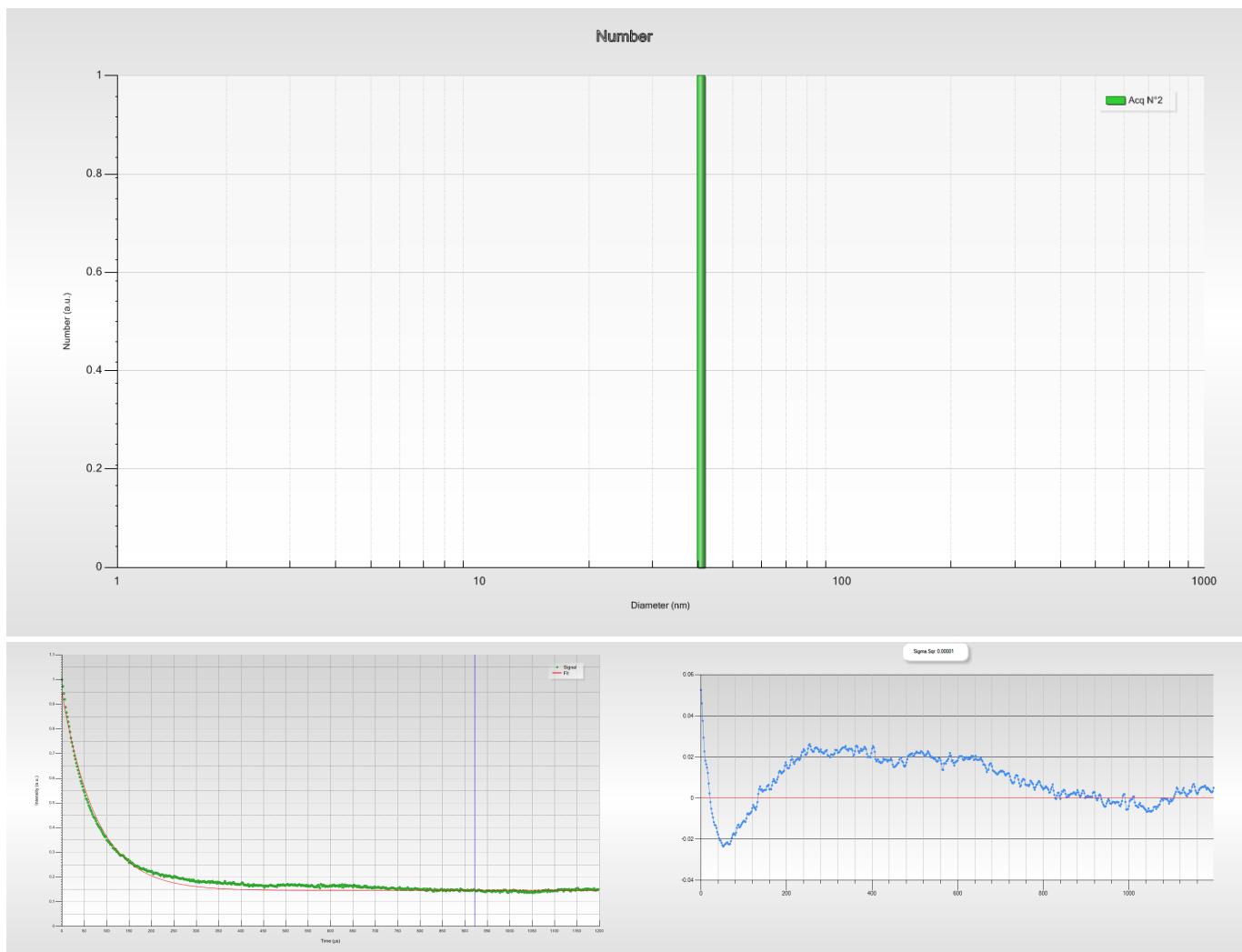
**Di 10%:** 40.78 nm      **Di 50%:** 40.78 nm      **Di 90%:** 40.78 nm  
**Mean Intensity:** 40.78 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.06	0.9	6484.48	12.26759E-012

### Dispersion data

Size (nm)	Intensity
40.78	1



### Dispersion statistics

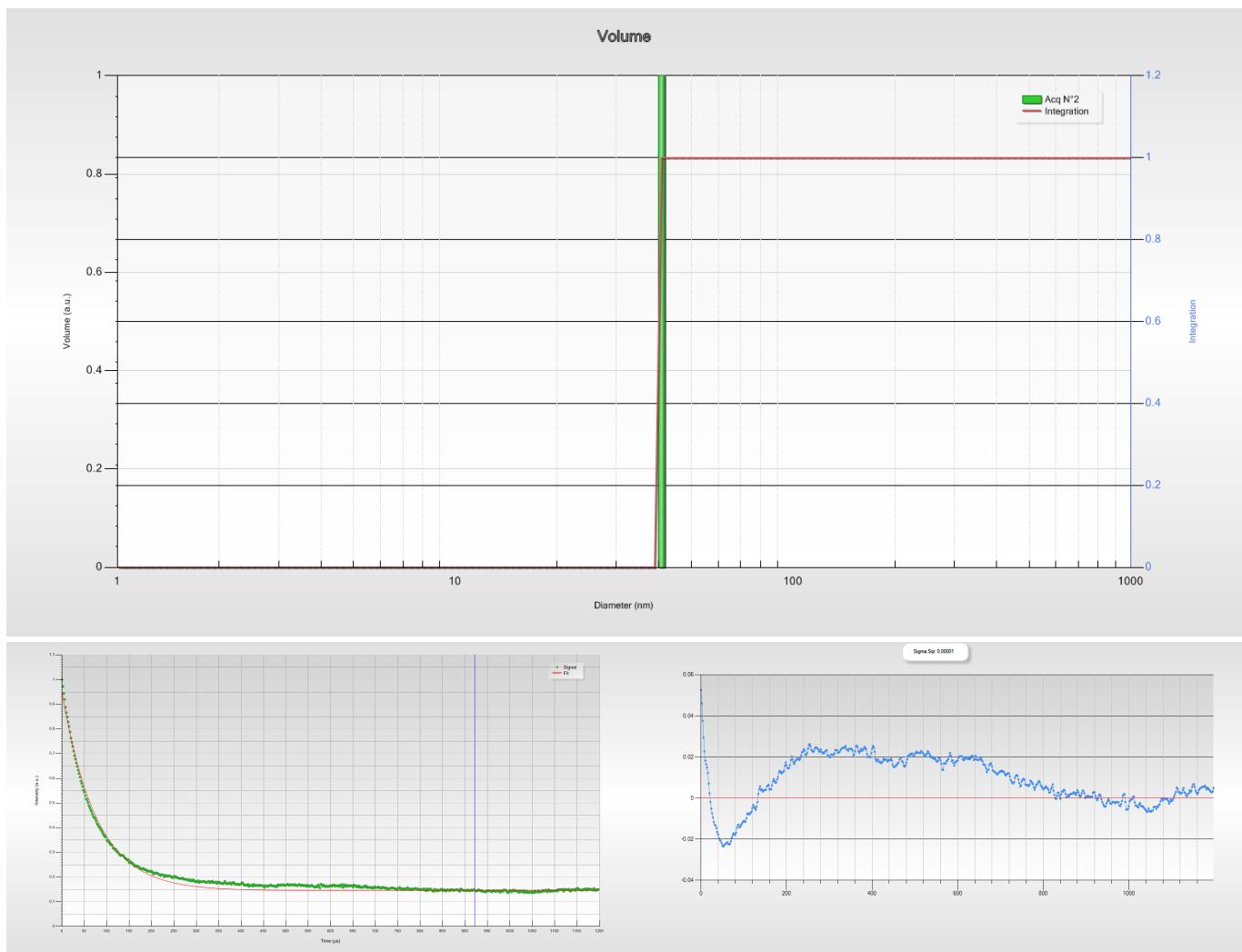
Dn 10%: 40.78 nm      Dn 50%: 40.78 nm      Dn 90%: 40.78 nm  
 Mean Number: 40.78 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.06	0.9	6484.48	12.26759E-012

### Dispersion datas

Size (nm)	Number
40.78	1



### Dispersion statistics

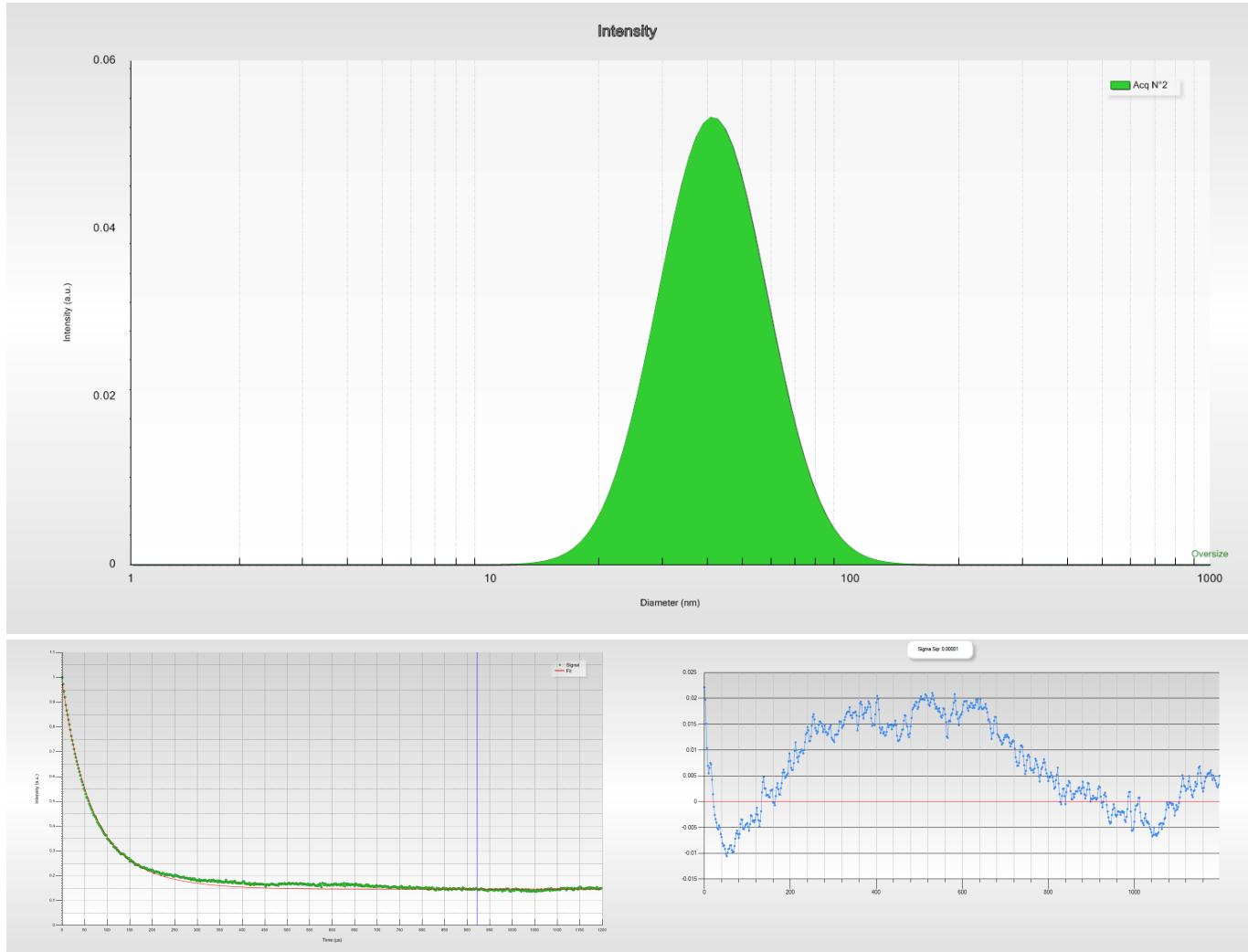
**D<sub>v</sub> 10%:** 40.78 nm      **D<sub>v</sub> 50%:** 40.78 nm      **D<sub>v</sub> 90%:** 40.78 nm  
**Mean Volume:** 40.78 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
40.06	0.9	6484.48	12.26759E-012

### Dispersion datas

Size (nm)	Volume
40.78	1

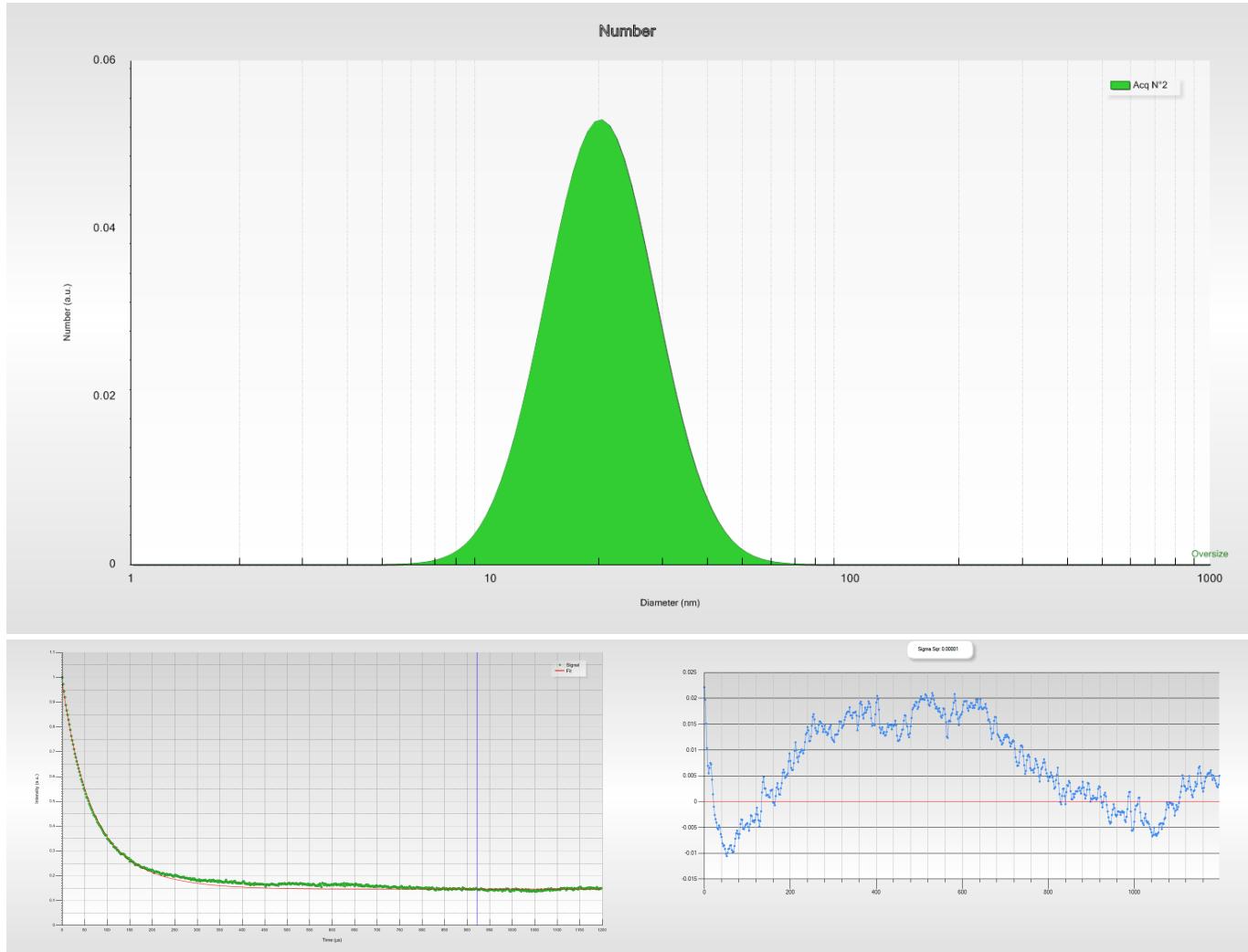


### Distribution statistics

<b>Di 10%:</b> 26.9 nm	<b>Di 50%:</b> 40.78 nm	<b>Di 90%:</b> 64.75 nm
<b>Mean Intensity:</b> 43.88 nm		
<b>PDI :</b> 0.5089		<b>Std Dev:</b> 35.67%

### Detected size(s)

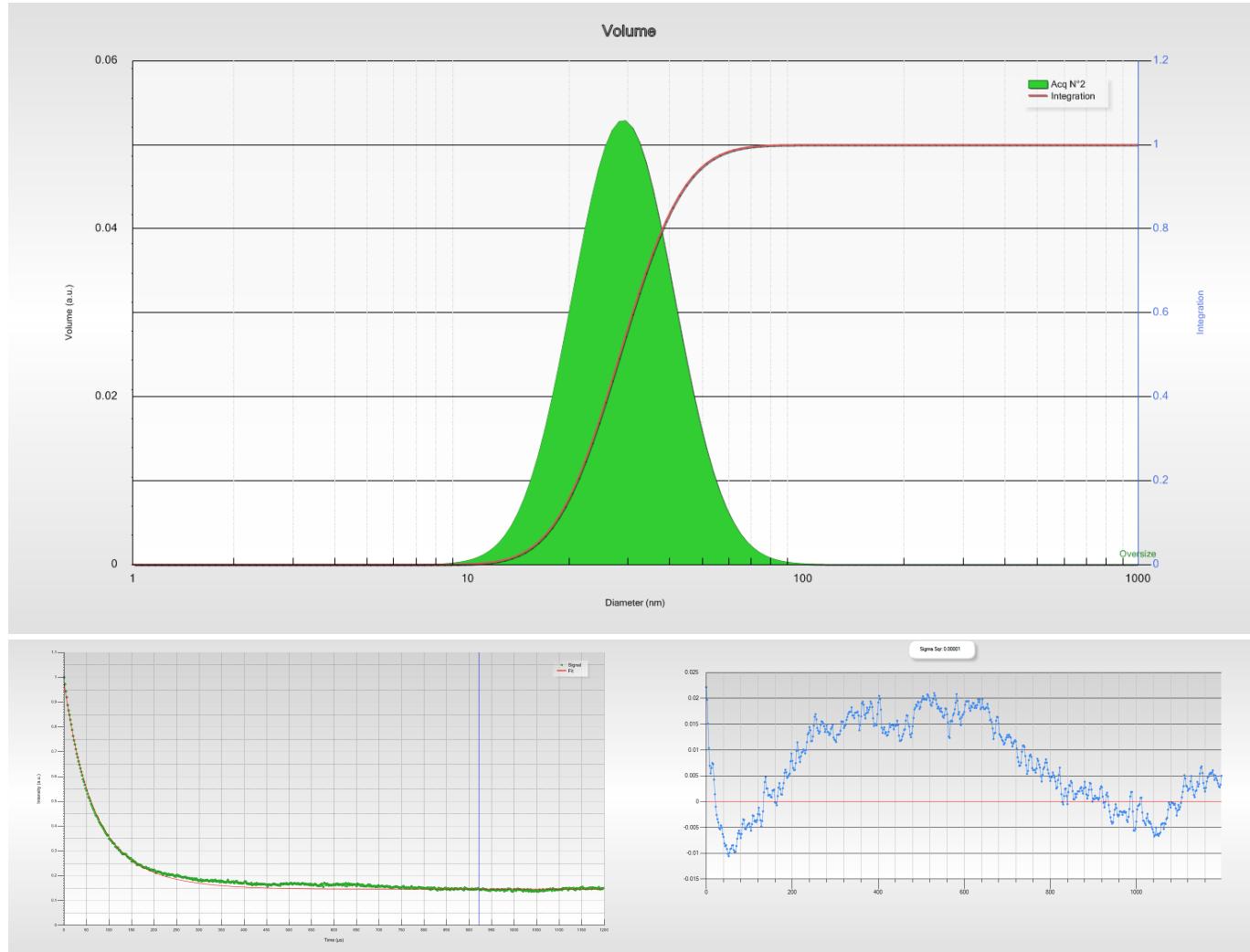
Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.52	0.83	7524.84	14.23579E-012

**Distribution statistics**

<b>Dn 10%:</b> 12.84 nm	<b>Dn 50%:</b> 20.38 nm	<b>Dn 90%:</b> 30.9 nm
<b>Mean Number:</b> 21.43 nm		
<b>PDI</b> : 0.5089		<b>Std Dev:</b> 35.67%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.52	0.83	7524.84	14.23579E-012



### Distribution statistics

<b>Dv 10%:</b> 18.58 nm	<b>Dv 50%:</b> 29.5 nm	<b>Dv 90%:</b> 44.73 nm
<b>Mean Volume:</b> 30.85 nm		
<b>PDI</b> : 0.5089		<b>Std Dev:</b> 35.67%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.52	0.83	7524.84	14.23579E-012



### Dispersion statistics

**Di 10%:** 22.36 nm

**Mean Intensity:** 78.42 nm

**Di 50%:** 22.36 nm

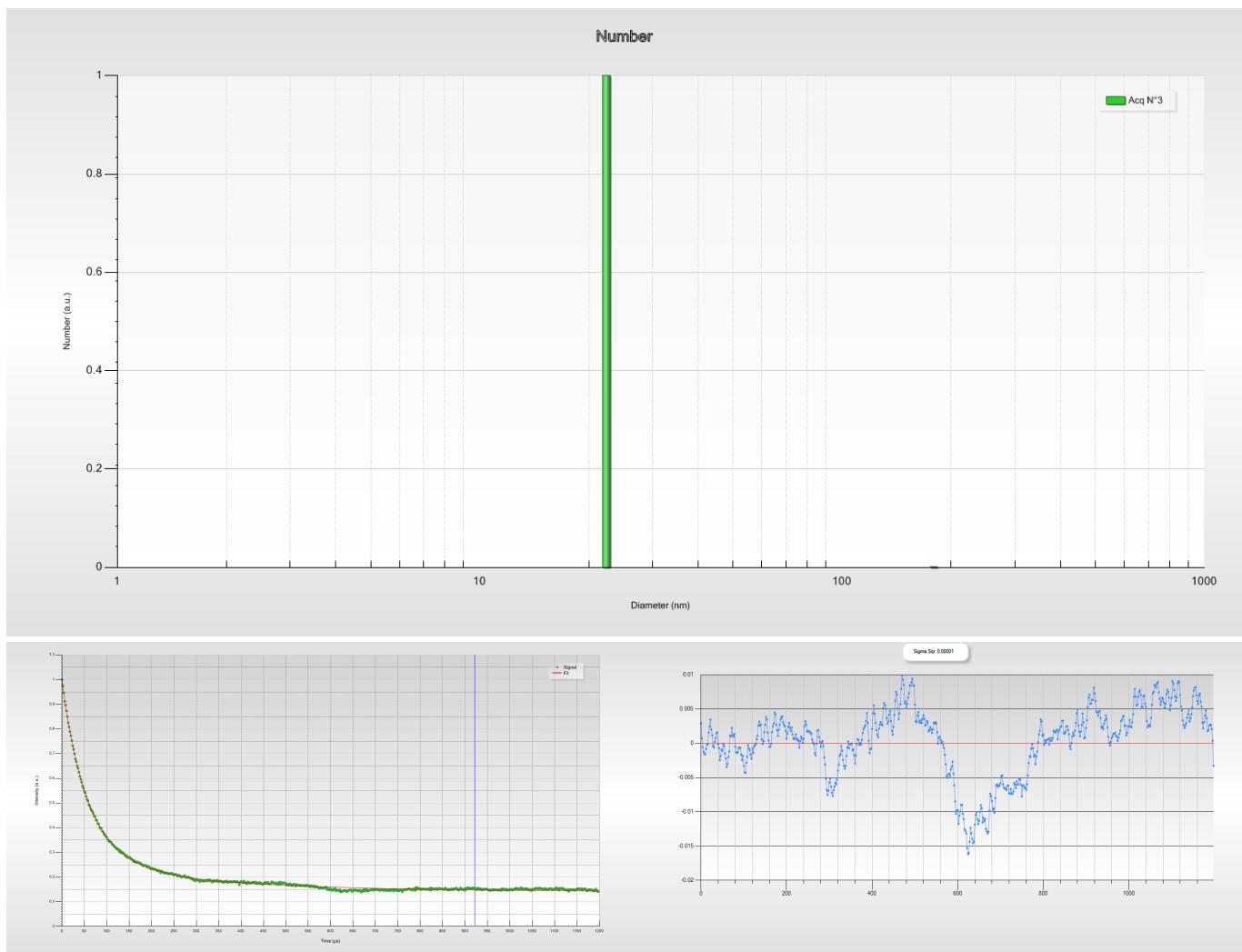
**Di 90%:** 179.07 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
22.21	0.59	11698.08	22.13087E-012
177.53	0.33	1463.33	27.68387E-013

### Dispersion data

Size (nm)	Intensity	Size (nm)	Intensity
22.36	0.64	179.07	0.36



### Dispersion statistics

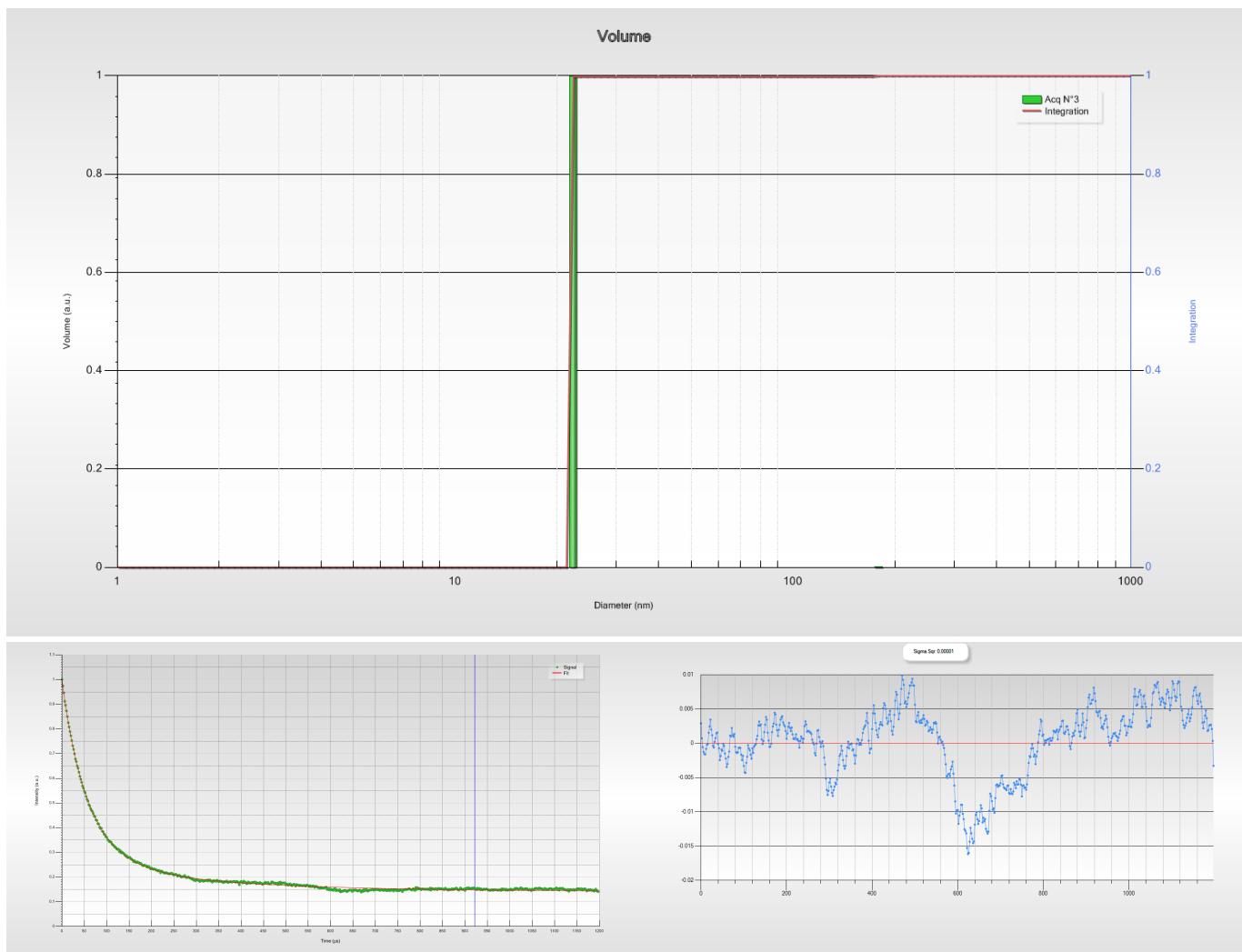
Dn 10%: 22.36 nm      Dn 50%: 22.36 nm      Dn 90%: 22.36 nm  
 Mean Number: 22.36 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
22.21	0.59	11698.08	22.13087E-012
177.53	0.33	1463.33	27.68387E-013

### Dispersion data

Size (nm)	Number
22.36	1



### Dispersion statistics

D<sub>v</sub> 10%: 22.36 nm  
Mean Volume: 22.61 nm

D<sub>v</sub> 50%: 22.36 nm

D<sub>v</sub> 90%: 22.36 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
22.21	0.59	11698.08	22.13087E-012
177.53	0.33	1463.33	27.68387E-013

### Dispersion data

Size (nm)	Volume
22.36	1

**Distribution statistics**

<b>Di 10%:</b> 32.36 nm	<b>Di 50%:</b> 49.06 nm	<b>Di 90%:</b> 74.39 nm
<b>Mean Intensity:</b> 51.97 nm		
<b>PDI</b> : 0.45349		<b>Std Dev:</b> 33.67%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
41.92	0.79	6197.54	11.72474E-012

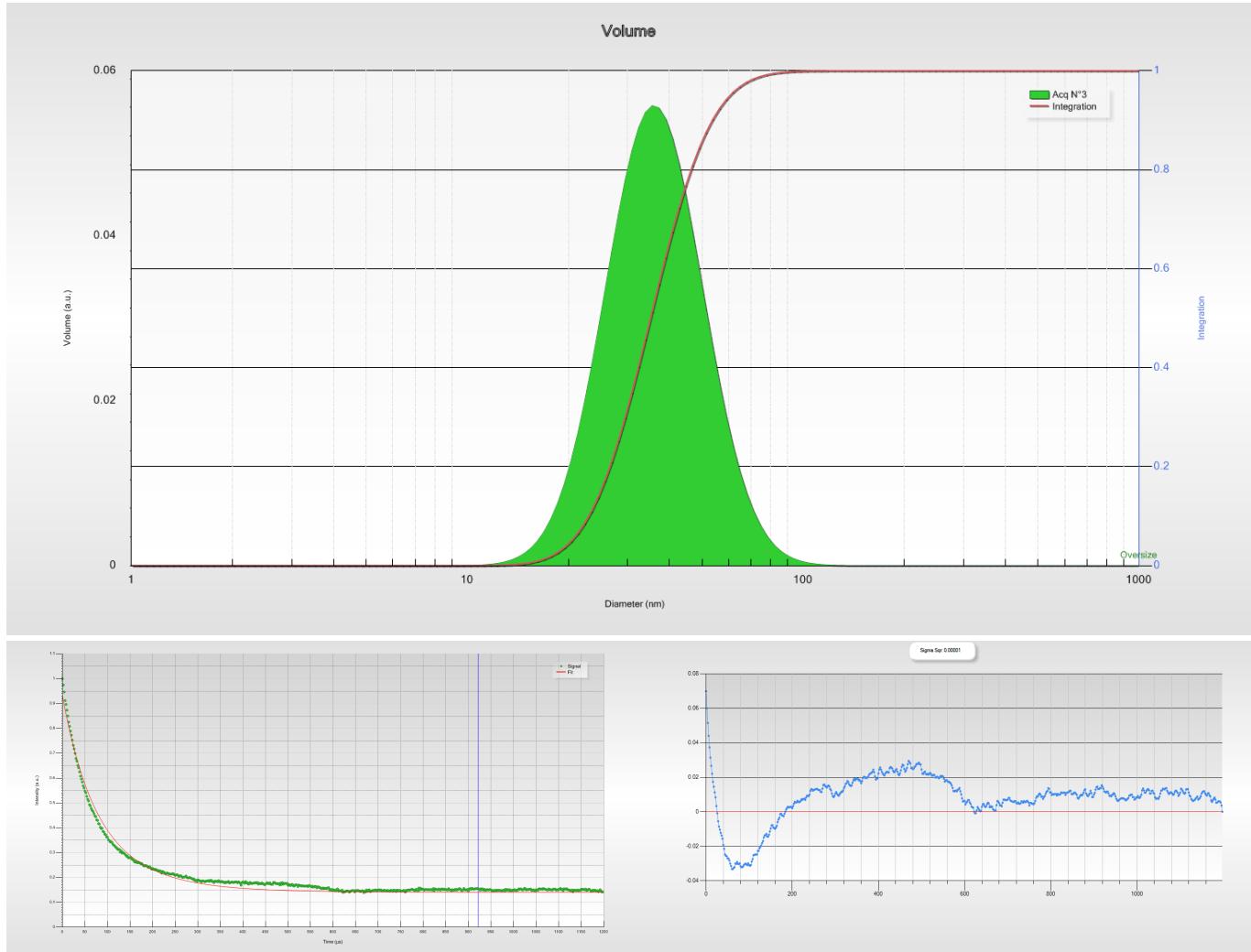


### Distribution statistics

<b>Dn 10%:</b> 16.94 nm	<b>Dn 50%:</b> 25.68 nm	<b>Dn 90%:</b> 38.94 nm
<b>Mean Number:</b> 27.36 nm		
<b>PDI</b> : 0.45349		<b>Std Dev:</b> 33.67%

### Detected size(s)

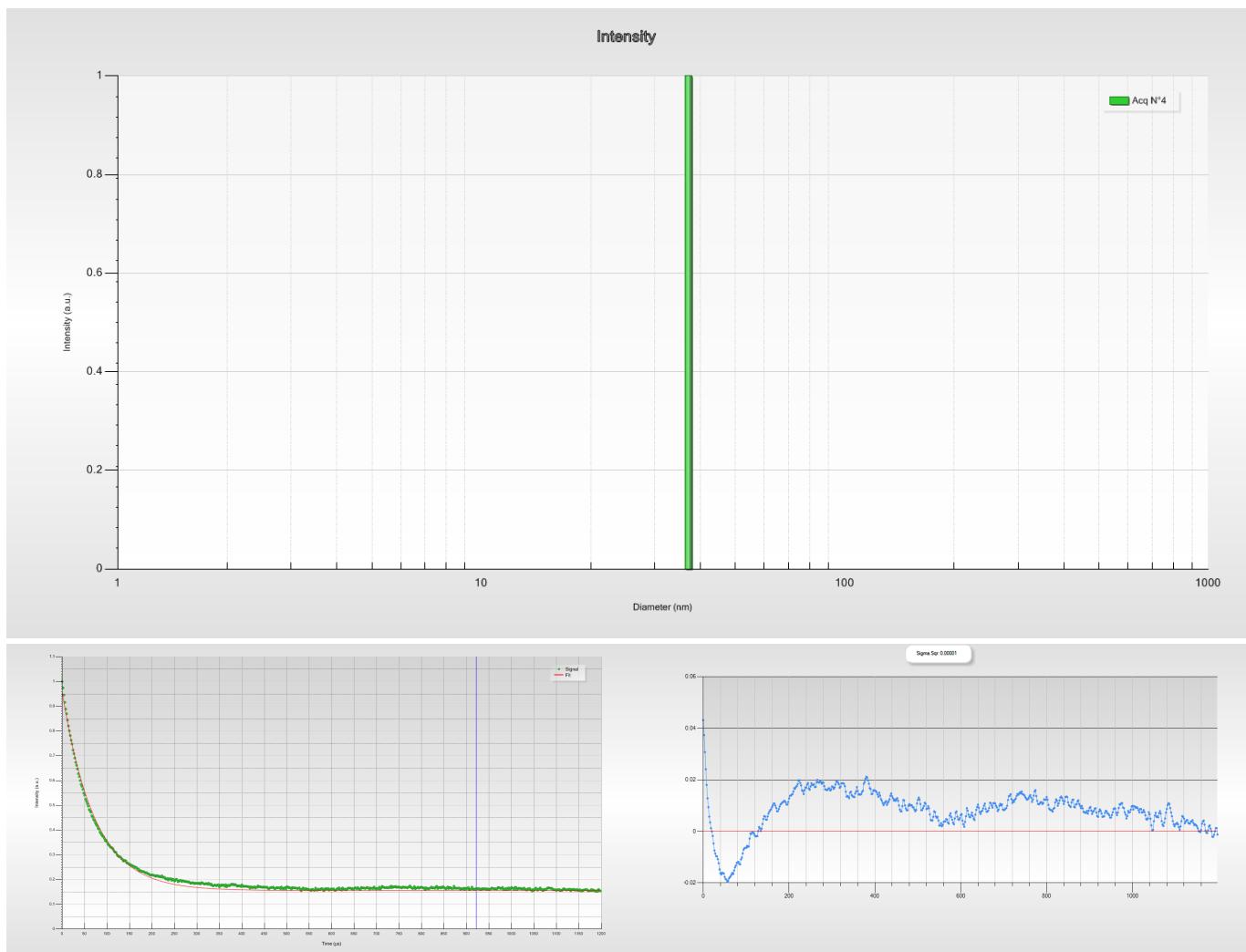
Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
41.92	0.79	6197.54	11.72474E-012

**Distribution statistics**

<b>D<sub>v</sub> 10%:</b> 23.41 nm	<b>D<sub>v</sub> 50%:</b> 35.5 nm	<b>D<sub>v</sub> 90%:</b> 53.82 nm
<b>Mean Volume:</b> 37.96 nm		
<b>PDI</b> : 0.45349		<b>Std Dev:</b> 33.67%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
41.92	0.79	6197.54	11.72474E-012



### Dispersion statistics

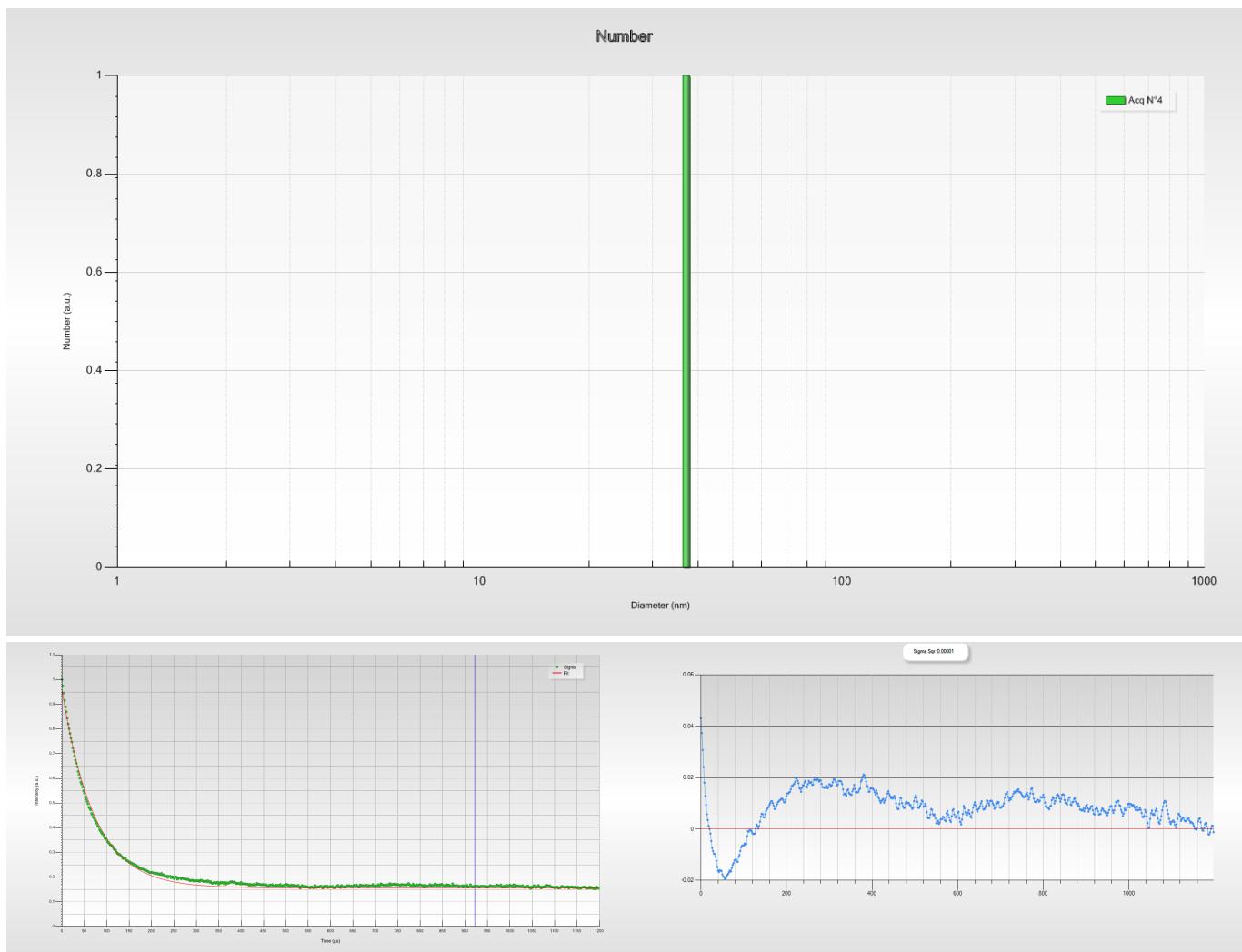
**Di 10%:** 37.18 nm      **Di 50%:** 37.18 nm      **Di 90%:** 37.18 nm  
**Mean Intensity:** 37.18 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
37.57	0.9	6928.74	13.10806E-012

### Dispersion data

Size (nm)	Intensity
37.18	1



### Dispersion statistics

**Dn 10%:** 37.18 nm  
**Mean Number:** 37.18 nm

**Dn 50%:** 37.18 nm

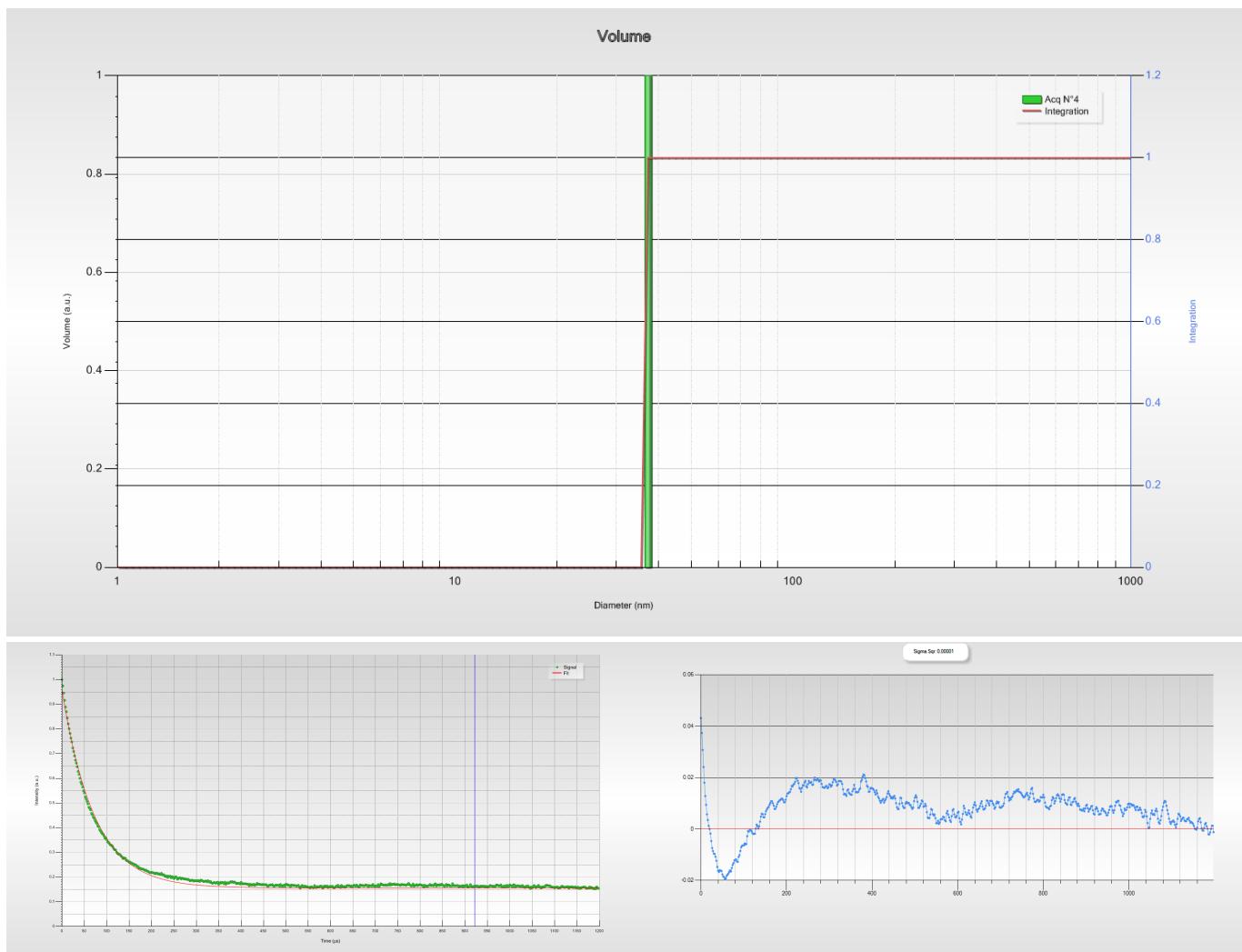
**Dn 90%:** 37.18 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
37.57	0.9	6928.74	13.10806E-012

### Dispersion data

Size (nm)	Number
37.18	1



### Dispersion statistics

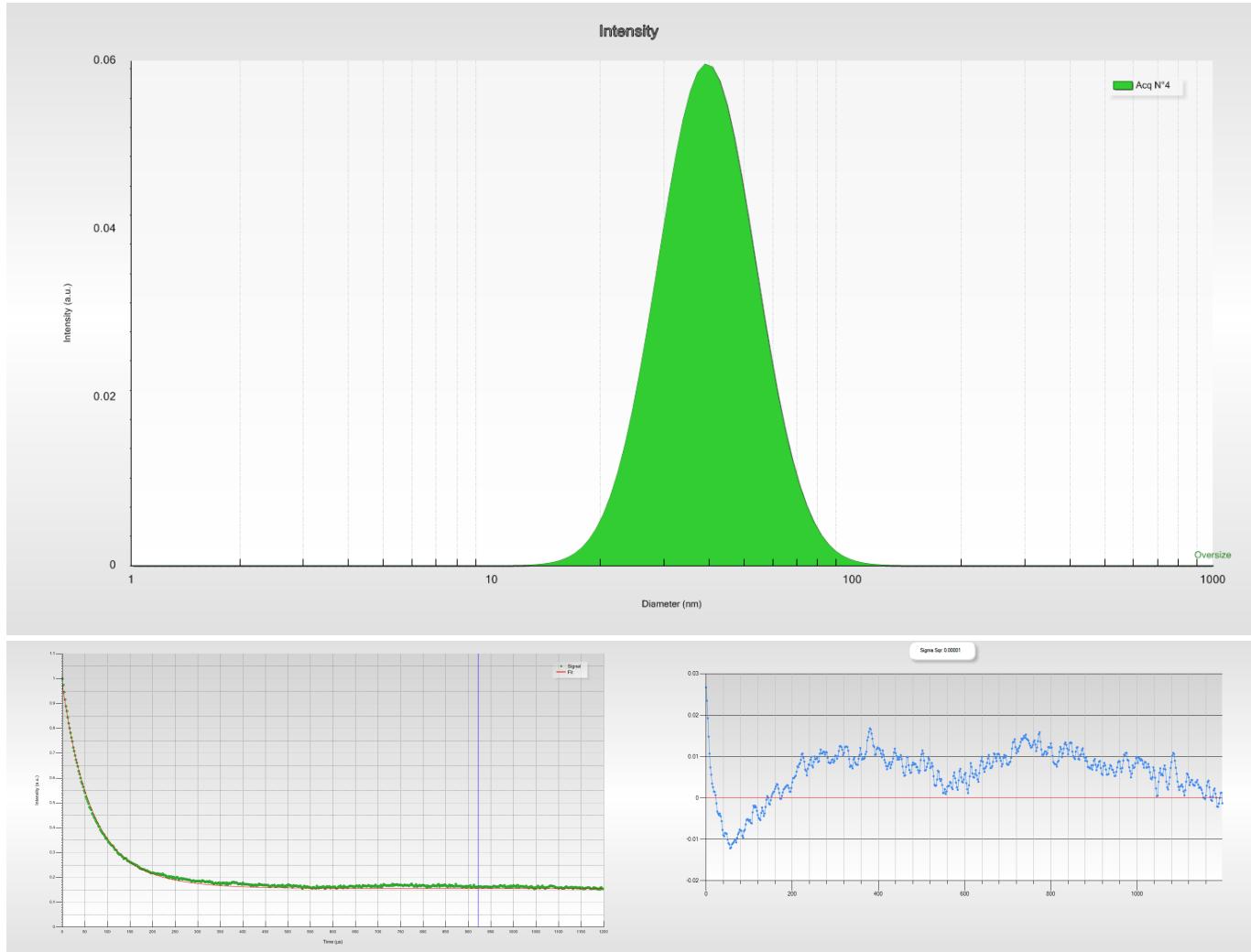
**D<sub>v</sub> 10%:** 37.18 nm      **D<sub>v</sub> 50%:** 37.18 nm      **D<sub>v</sub> 90%:** 37.18 nm  
**Mean Volume:** 37.18 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
37.57	0.9	6928.74	13.10806E-012

### Dispersion datas

Size (nm)	Volume
37.18	1



### Distribution statistics

<b>Di 10%:</b> 26.9 nm	<b>Di 50%:</b> 38.94 nm	<b>Di 90%:</b> 59.03 nm
<b>Mean Intensity:</b> 41.32 nm		
<b>PDI</b> : 0.40111		<b>Std Dev:</b> 31.67%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.19	0.82	7613.38	14.40328E-012

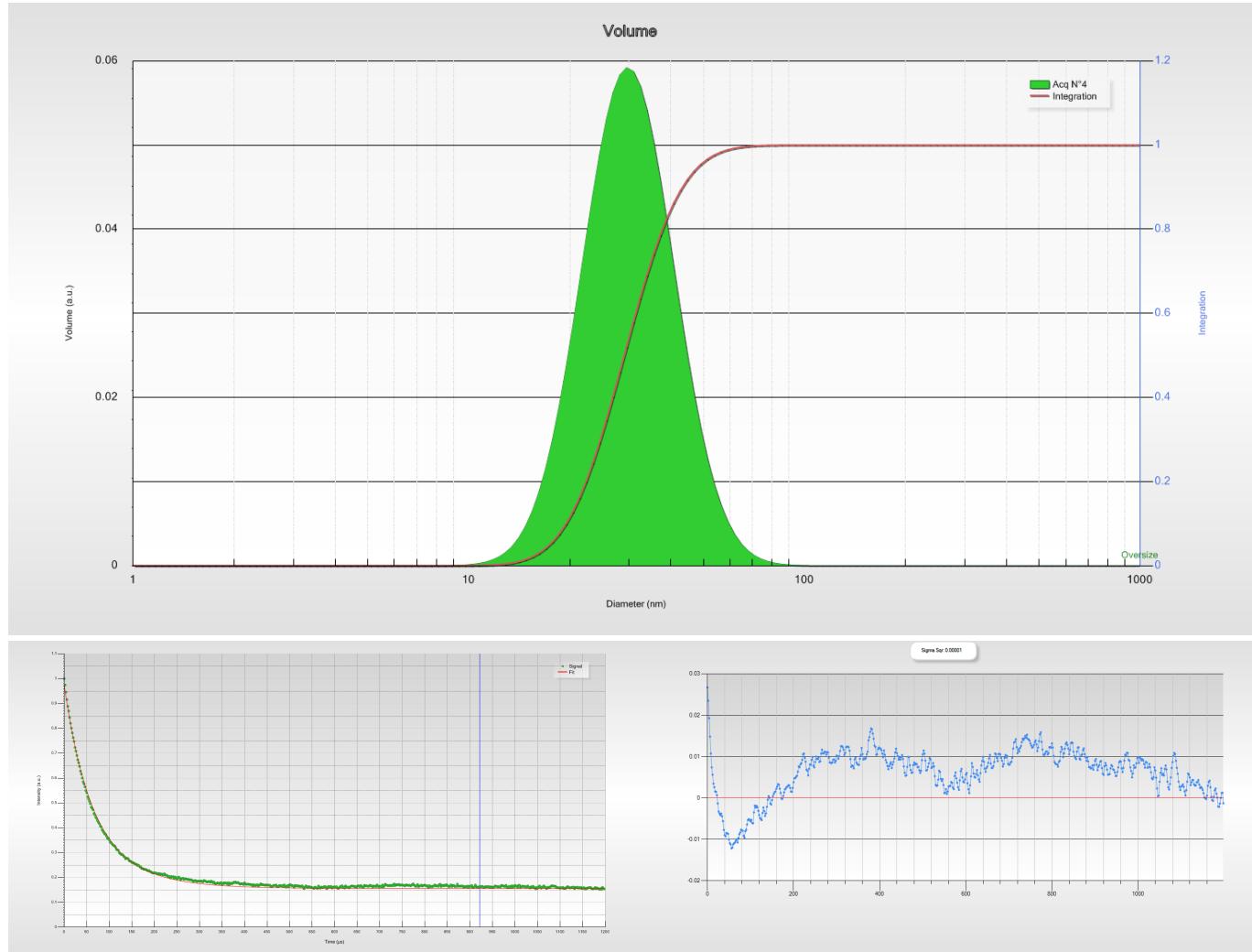


### Distribution statistics

<b>Dn 10%:</b> 14.75 nm	<b>Dn 50%:</b> 22.36 nm	<b>Dn 90%:</b> 32.36 nm
<b>Mean Number:</b> 23.33 nm		
<b>PDI</b> : 0.40111		<b>Std Dev:</b> 31.67%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.19	0.82	7613.38	14.40328E-012

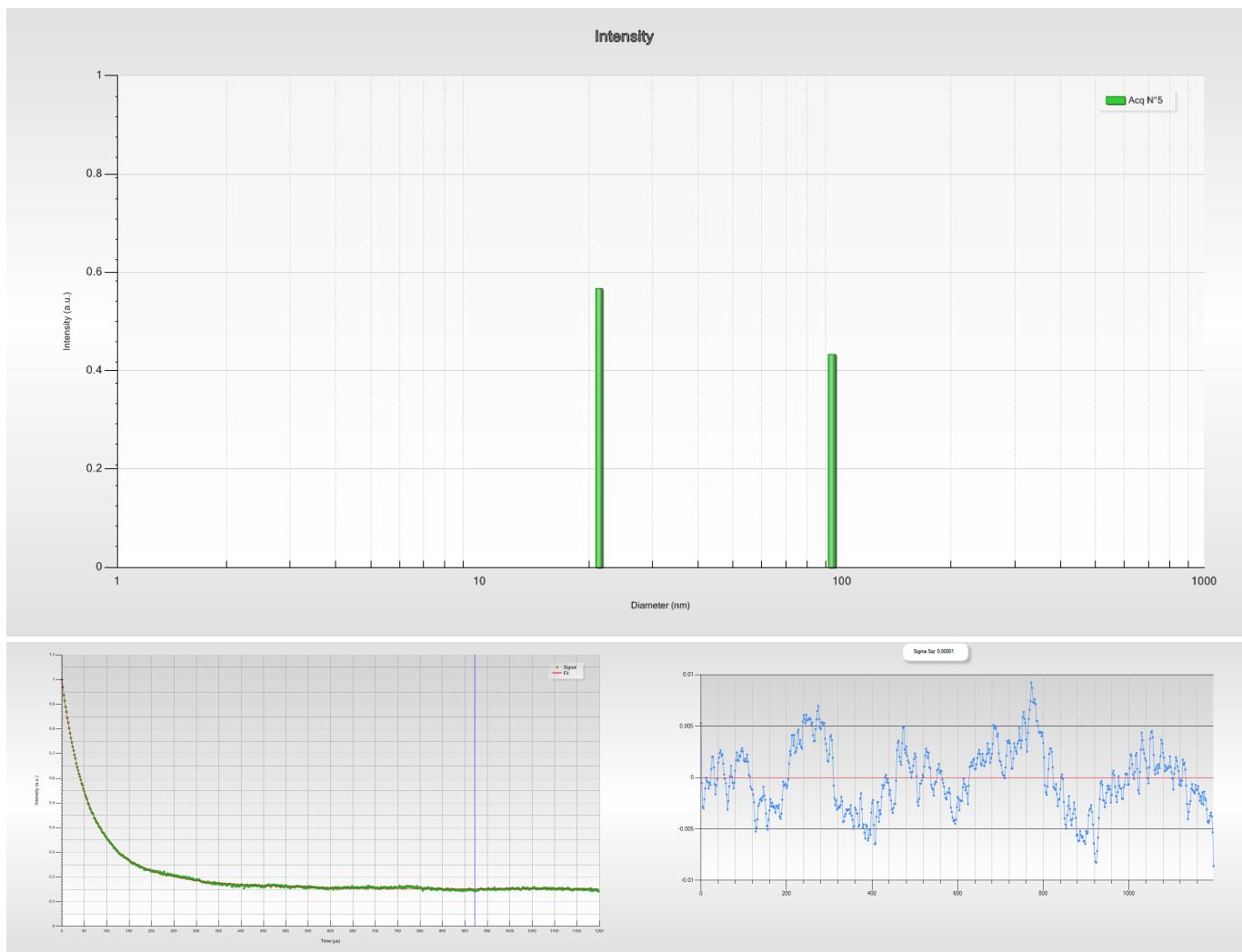


### Distribution statistics

<b>D<sub>v</sub> 10%:</b> 20.38 nm	<b>D<sub>v</sub> 50%:</b> 29.5 nm	<b>D<sub>v</sub> 90%:</b> 44.73 nm
<b>Mean Volume:</b> 31.21 nm		
<b>PDI</b> : 0.40111		<b>Std Dev:</b> 31.67%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.19	0.82	7613.38	14.40328E-012



### Dispersion statistics

**Di 10%:** 21.35 nm  
**Mean Intensity:** 52.66 nm

**Di 50%:** 21.35 nm

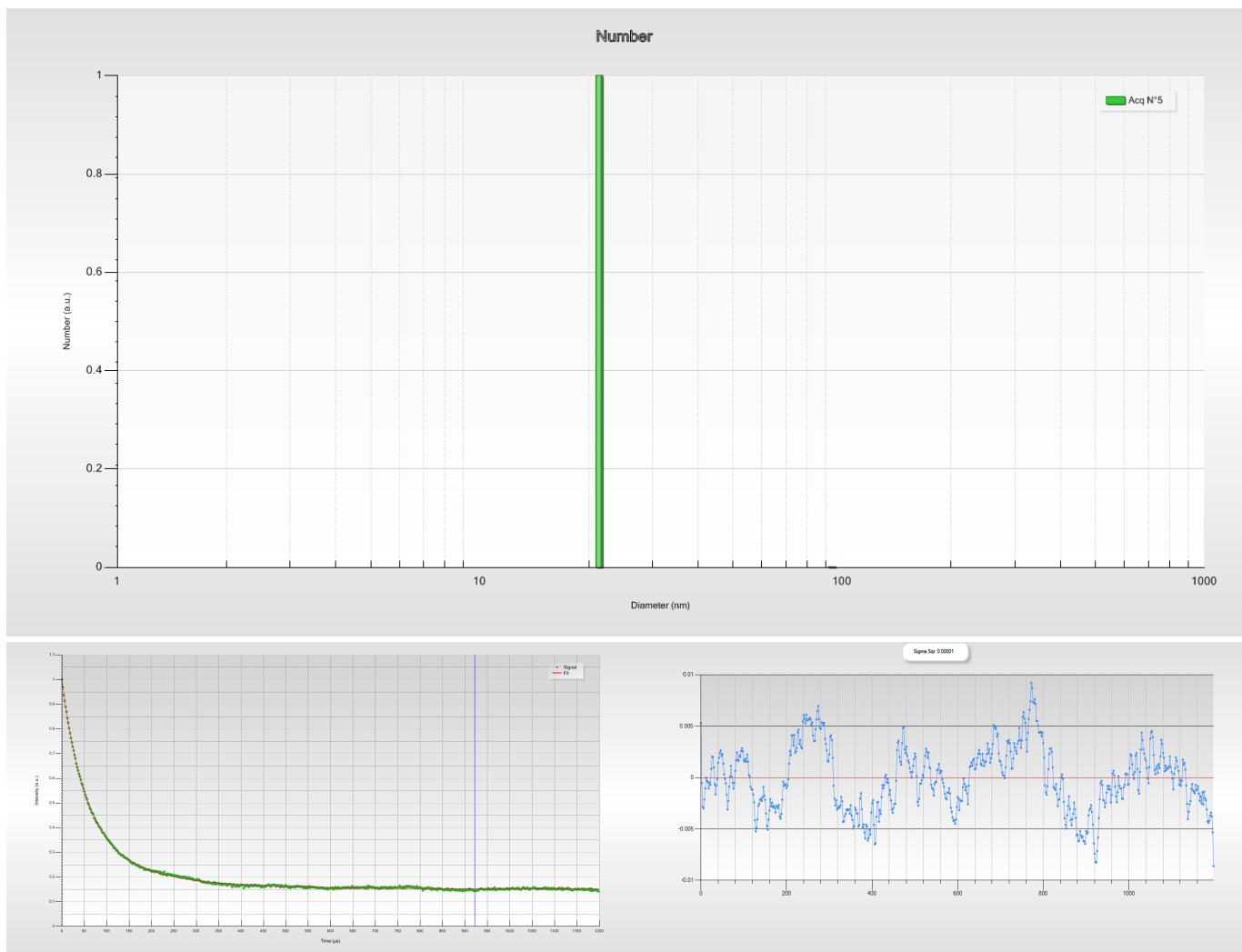
**Di 90%:** 93.73 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
21.01	0.52	12365.95	23.39437E-012
93.92	0.4	2765.96	52.32757E-013

### Dispersion data

Size (nm)	Intensity	Size (nm)	Intensity
21.35	0.57	93.73	0.43



### Dispersion statistics

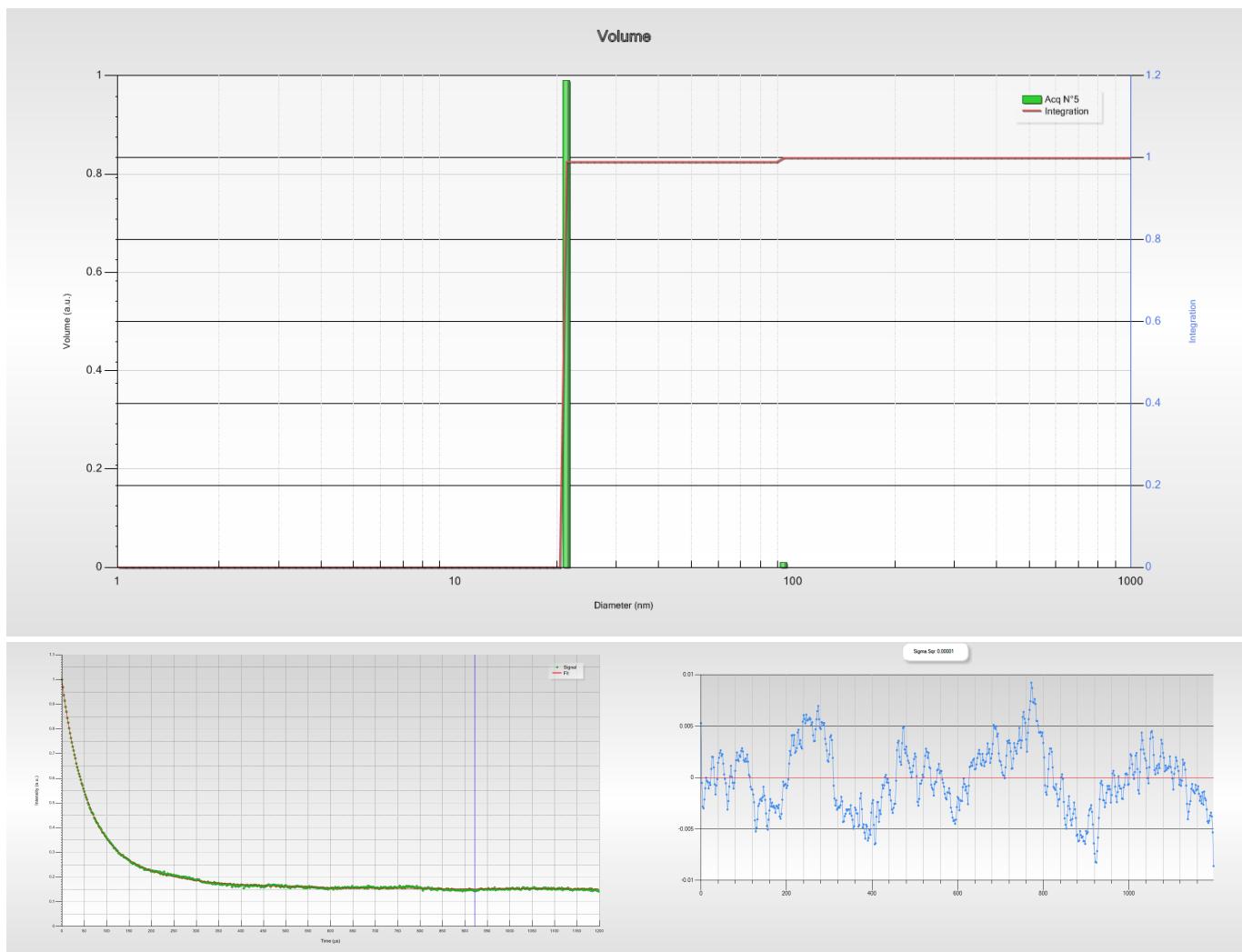
**Dn 10%:** 21.35 nm      **Dn 50%:** 21.35 nm      **Dn 90%:** 21.35 nm  
**Mean Number:** 21.35 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
21.01	0.52	12365.95	23.39437E-012
93.92	0.4	2765.96	52.32757E-013

### Dispersion data

Size (nm)	Number
21.35	1



### Dispersion statistics

**D<sub>v</sub> 10%:** 21.35 nm      **D<sub>v</sub> 50%:** 21.35 nm      **D<sub>v</sub> 90%:** 21.35 nm  
**Mean Volume:** 22.06 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
21.01	0.52	12365.95	23.39437E-012
93.92	0.4	2765.96	52.32757E-013

### Dispersion data

Size (nm)	Volume	Size (nm)	Volume
21.35	0.99	93.73	0.01

**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> 43.18 nm		
<b>PDI</b> : 0.45711		<b>Std Dev:</b> 33.81%

**Detected size(s)**

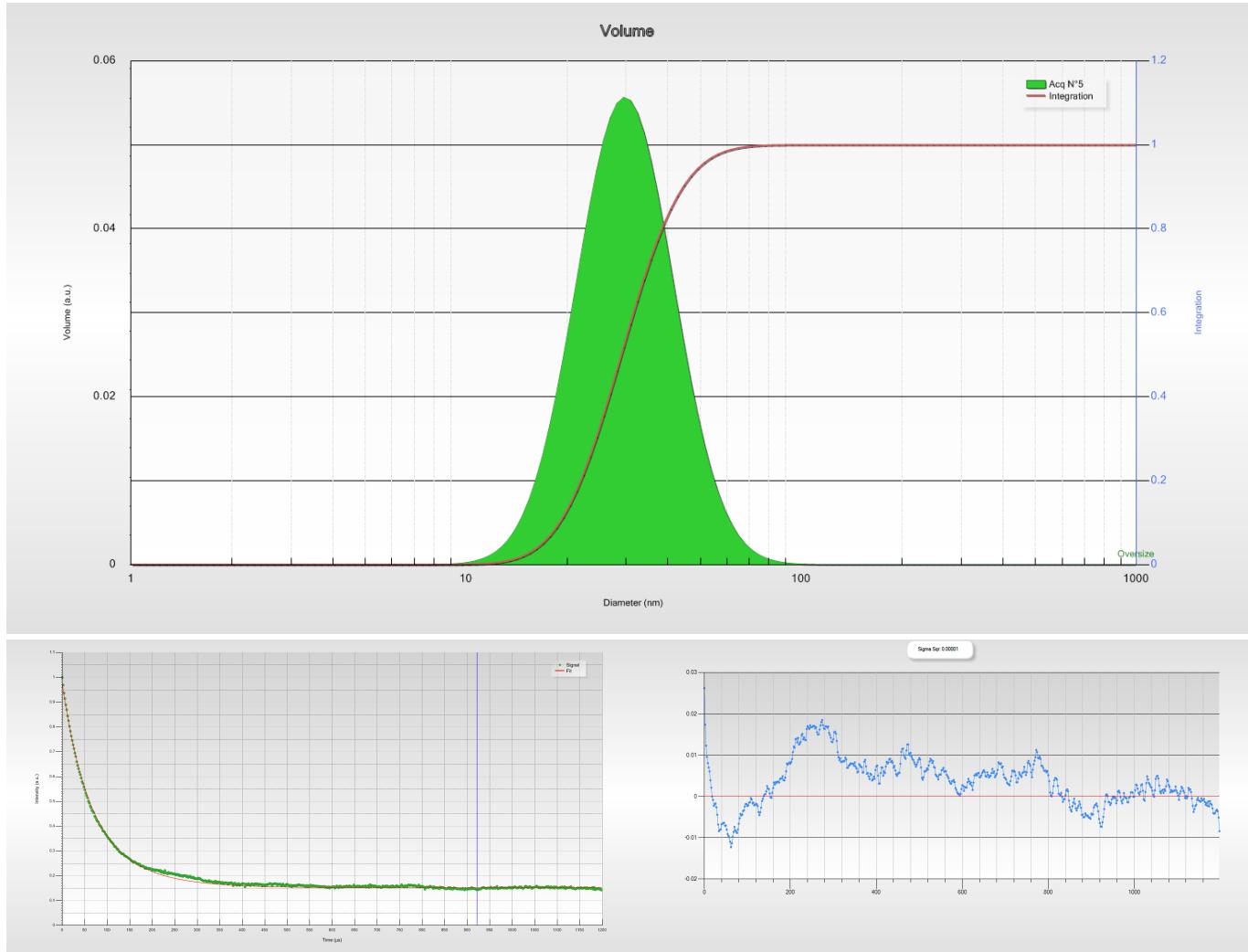
Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.77	0.82	7471.84	14.13552E-012

**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> 22.61 nm		
<b>PDI</b> : 0.45711		<b>Std Dev:</b> 33.81%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.77	0.82	7471.84	14.13552E-012

**Distribution statistics**

<b>D<sub>v</sub> 10%:</b> 19.46 nm	<b>D<sub>v</sub> 50%:</b> 29.5 nm	<b>D<sub>v</sub> 90%:</b> 44.73 nm
<b>Mean Volume:</b> 31.42 nm		
<b>PDI</b> : 0.45711		<b>Std Dev:</b> 33.81%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.77	0.82	7471.84	14.13552E-012