

## Sample

**Name** : GNP\_11.4.16\_0.8\_5k\_1  
**Mesured On** : 11.04.2016 17:34  
**by** : Hannelore **logged as** : Expert  
**Comments from Hannelore :**

## SOP

**Name** : defaultSOP  
**Mode** : Statistical **Acquisitions** : 5  
**Time limitation** : 60 s  
**Temperature** : 25 °C

### Device Settings

<b>Time interval</b>	: 2 $\mu$ s	<b>Number of channels</b>	: 600
<b>Laser power</b>	: 39.7 %	<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

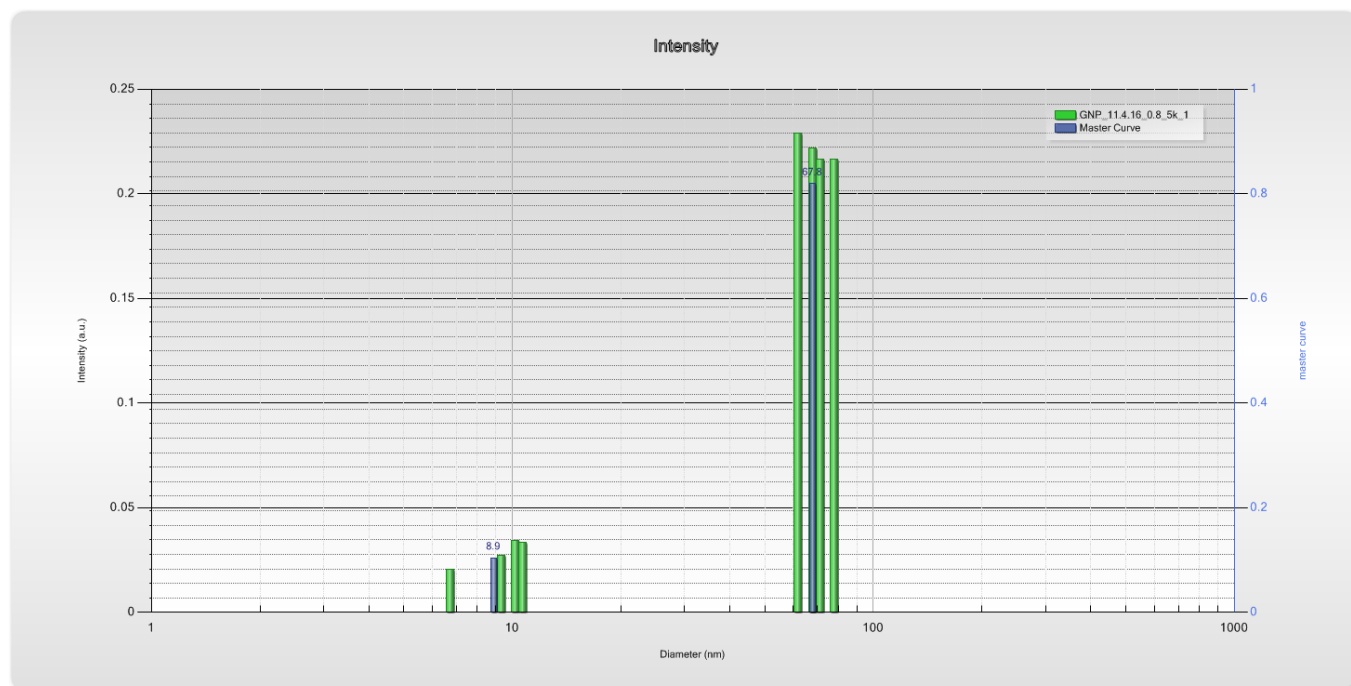
<b>Real part</b>	: 1.56	<b>Imaginary part</b>	: 0.01
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### Algorithm

Pade Laplace	Cumulants
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## Measurement

**Average count rate** : 2390 kcps  
**Number of rejected** : 1  
**Duration** : 00:05:16  
**Number of modified** : 0



### Dispersion statistics

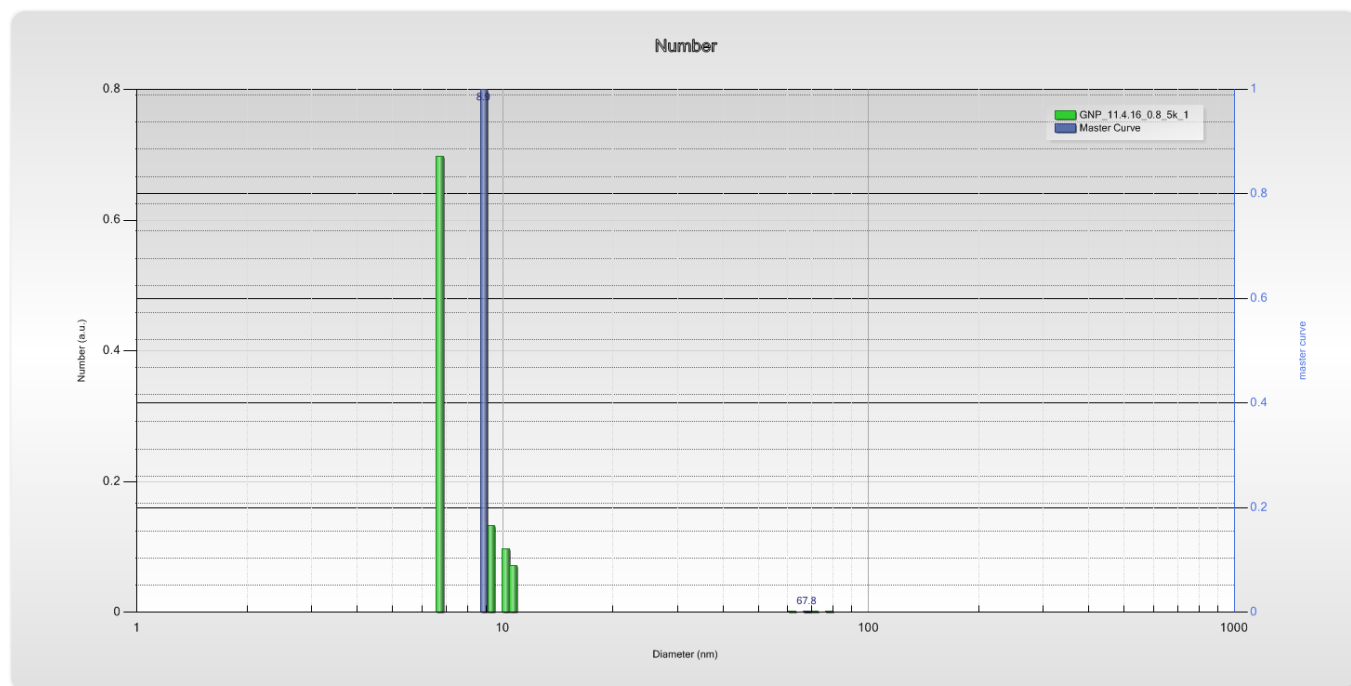
**Di 10%:** 10.67 nm

**Di 50%:** 67.81 nm

**Di 90%:** 77.91 nm

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity	Size (nm)	Intensity	Size (nm)	Intensity
6.72	0.02	10.67	0.03	71.02	0.22		
9.29	0.03	61.83	0.23	77.91	0.22		
10.19	0.03	67.81	0.22				



### Dispersion statistics

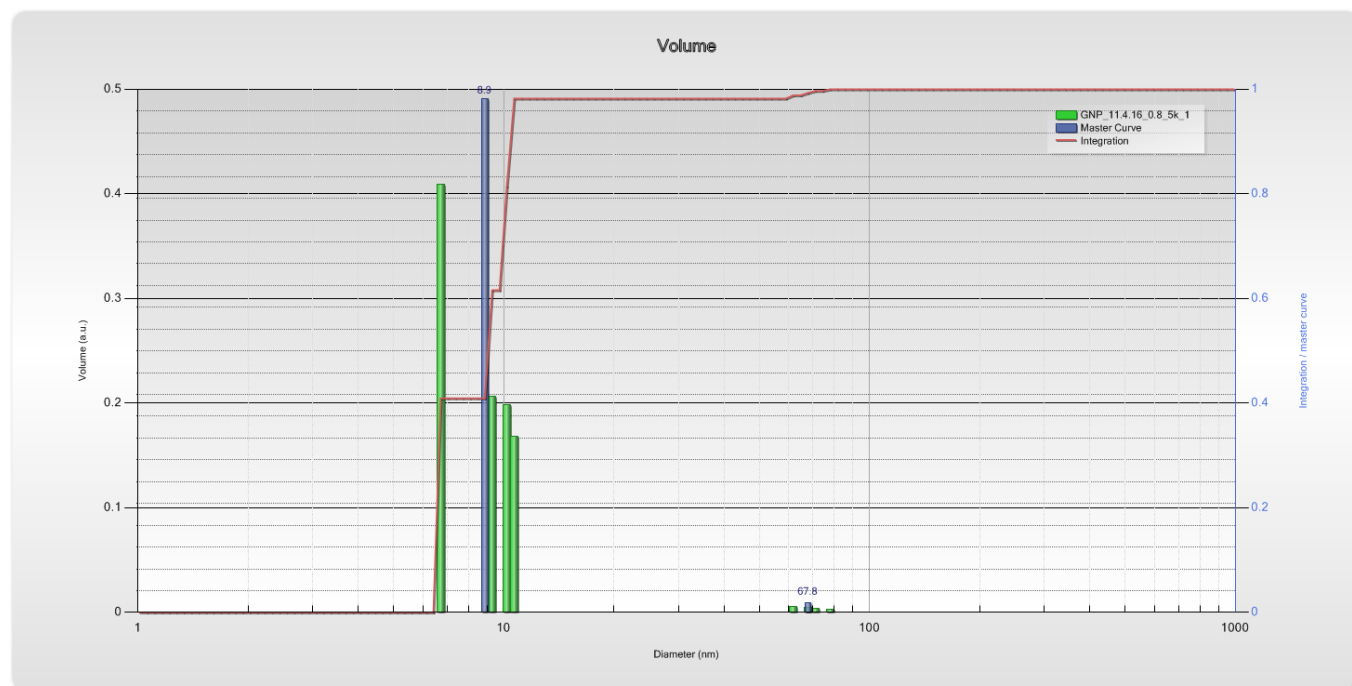
**Dn 10%:** 6.72 nm

**Dn 50%:** 6.72 nm

**Dn 90%:** 10.19 nm

### Dispersion datas

Size (nm)	Number	Size (nm)	Number	Size (nm)	Number	Size (nm)	Number
6.72	0.7	10.19	0.1				
9.29	0.13	10.67	0.07				



### Dispersion statistics

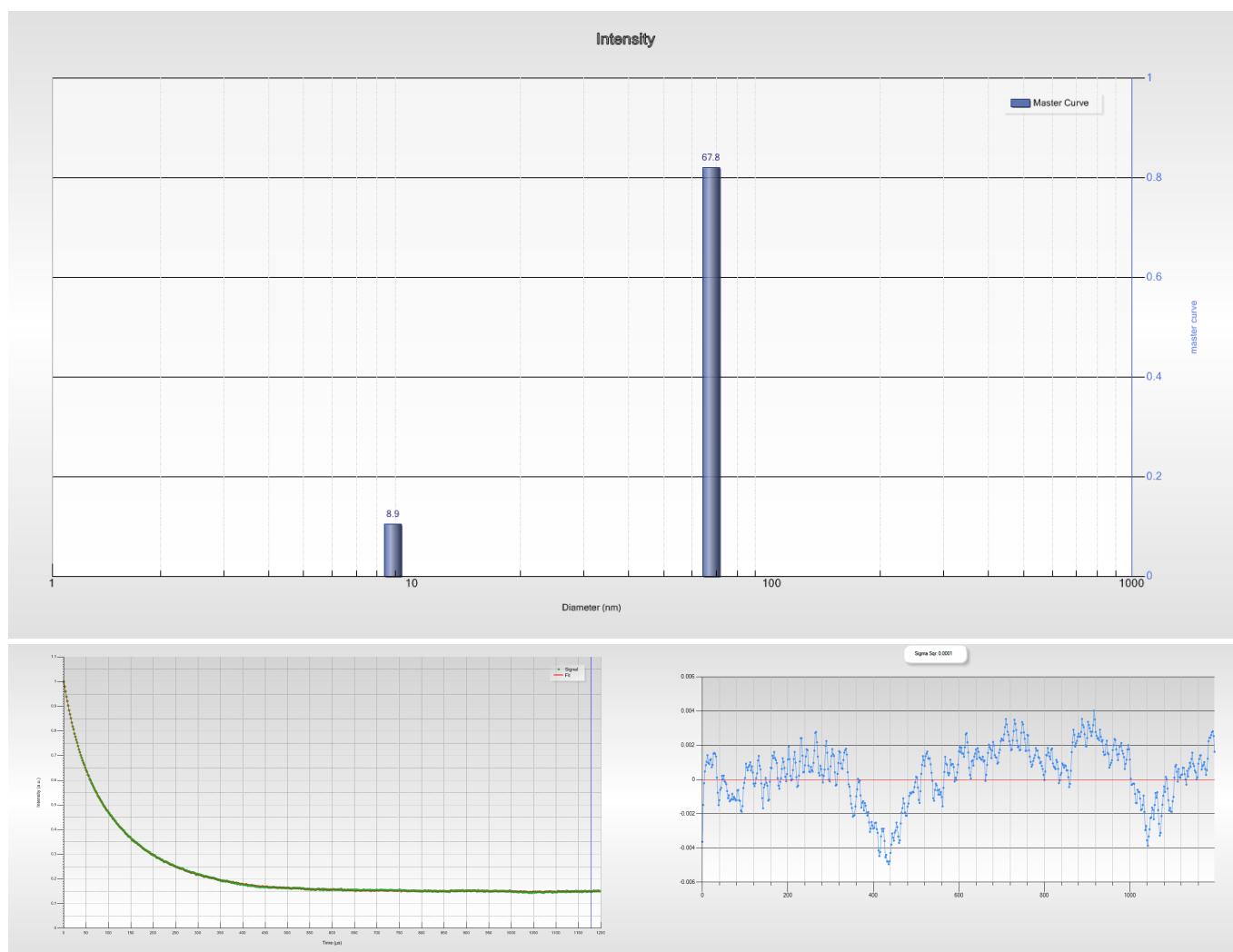
**Dv 10%:** 6.72 nm

**Dv 50%:** 9.29 nm

**Dv 90%:** 10.67 nm

### Dispersion datas

Size (nm)	Volume	Size (nm)	Volume	Size (nm)	Volume	Size (nm)	Volume
6.72	0.41	10.19	0.2	61.83	0.01		
9.29	0.21	10.67	0.17				



### Dispersion statistics

**Di 10%: 8.87 nm**  
**Mean Intensity: 61.15 nm**

**Di 50%: 67.81 nm**

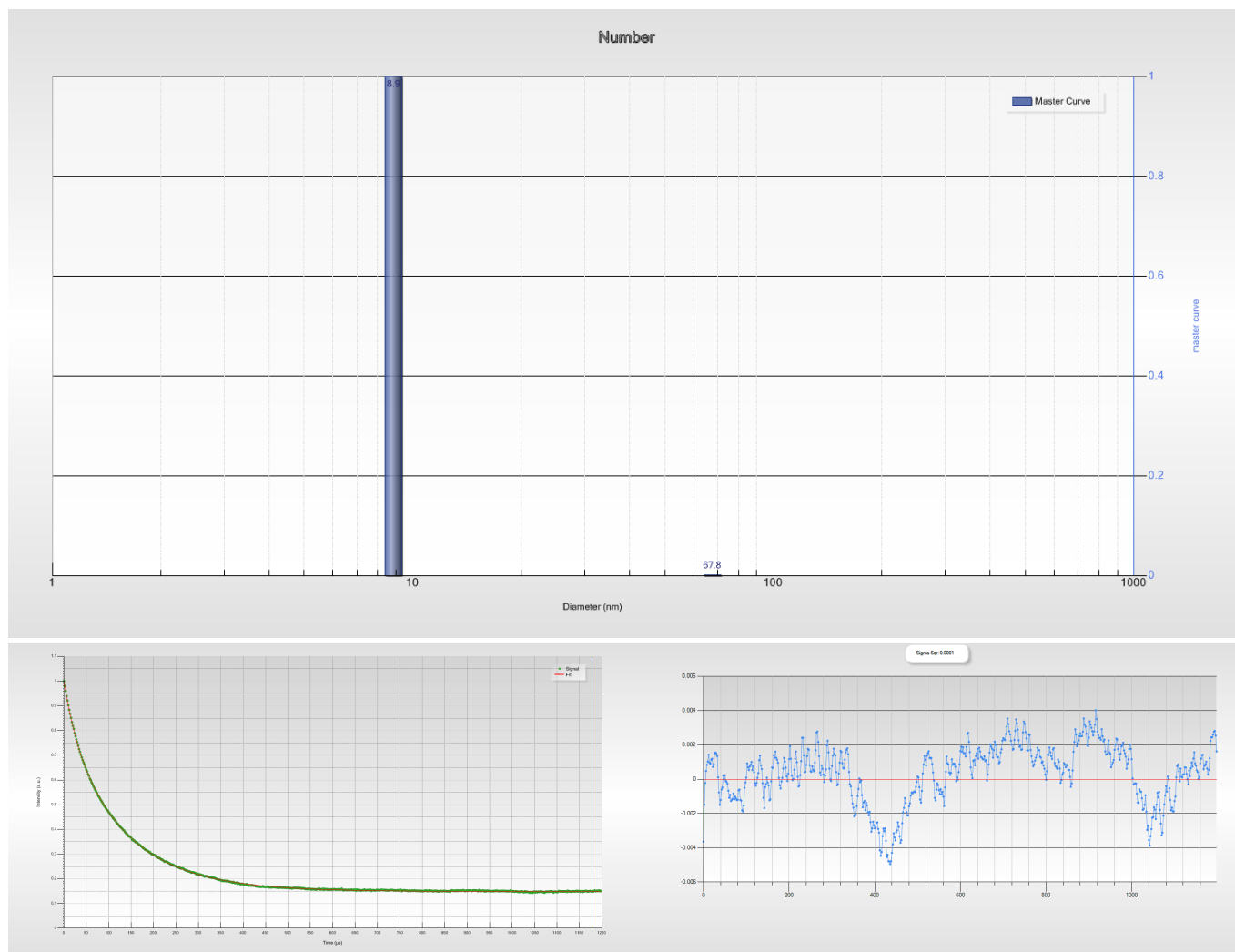
**Di 90%: 67.81 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
8.92	0.1	29196.98	55.23596E-012
68.66	0.82	3792.26	71.74346E-013

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity
8.87	0.11	67.81	0.89



### Dispersion statistics

**Dn 10%: 8.87 nm**  
**Mean Number: 8.87 nm**

**Dn 50%: 8.87 nm**

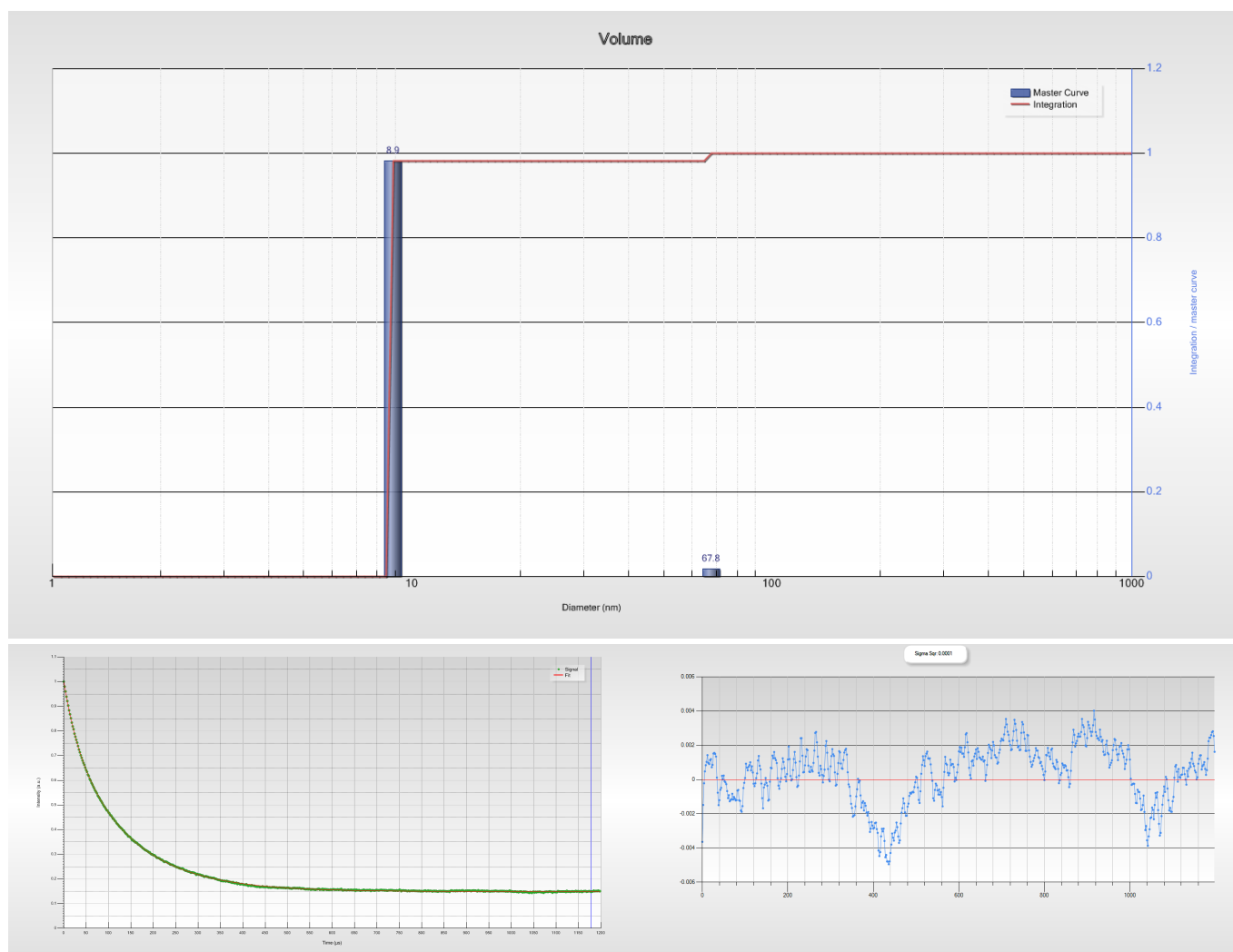
**Dn 90%: 8.87 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
8.92	0.1	29196.98	55.23596E-012
68.66	0.82	3792.26	71.74346E-013

### Dispersion datas

Size (nm)	Number
8.87	1



### Dispersion statistics

**Dv 10%: 8.87 nm**  
**Mean Volume: 9.94 nm**

**Dv 50%: 8.87 nm**

**Dv 90%: 8.87 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
8.92	0.1	29196.98	55.23596E-012
68.66	0.82	3792.26	71.74346E-013

### Dispersion datas

Size (nm)	Volume	Size (nm)	Volume
8.87	0.98	67.81	0.02



### Distribution statistics

**Di 10%:** 42.71 nm  
**Mean Intensity:** 64.43 nm  
**PDI** : 0.36911

**Di 50%:** 61.83 nm

**Di 90%:** 89.5 nm

**Std Dev:** 30.38%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
54	0.81	4811.78	91.031E-013





**Distribution statistics**

**Dn 10%:** 24.52 nm  
**Mean Number:** 38.09 nm  
**PDI** : 0.36911

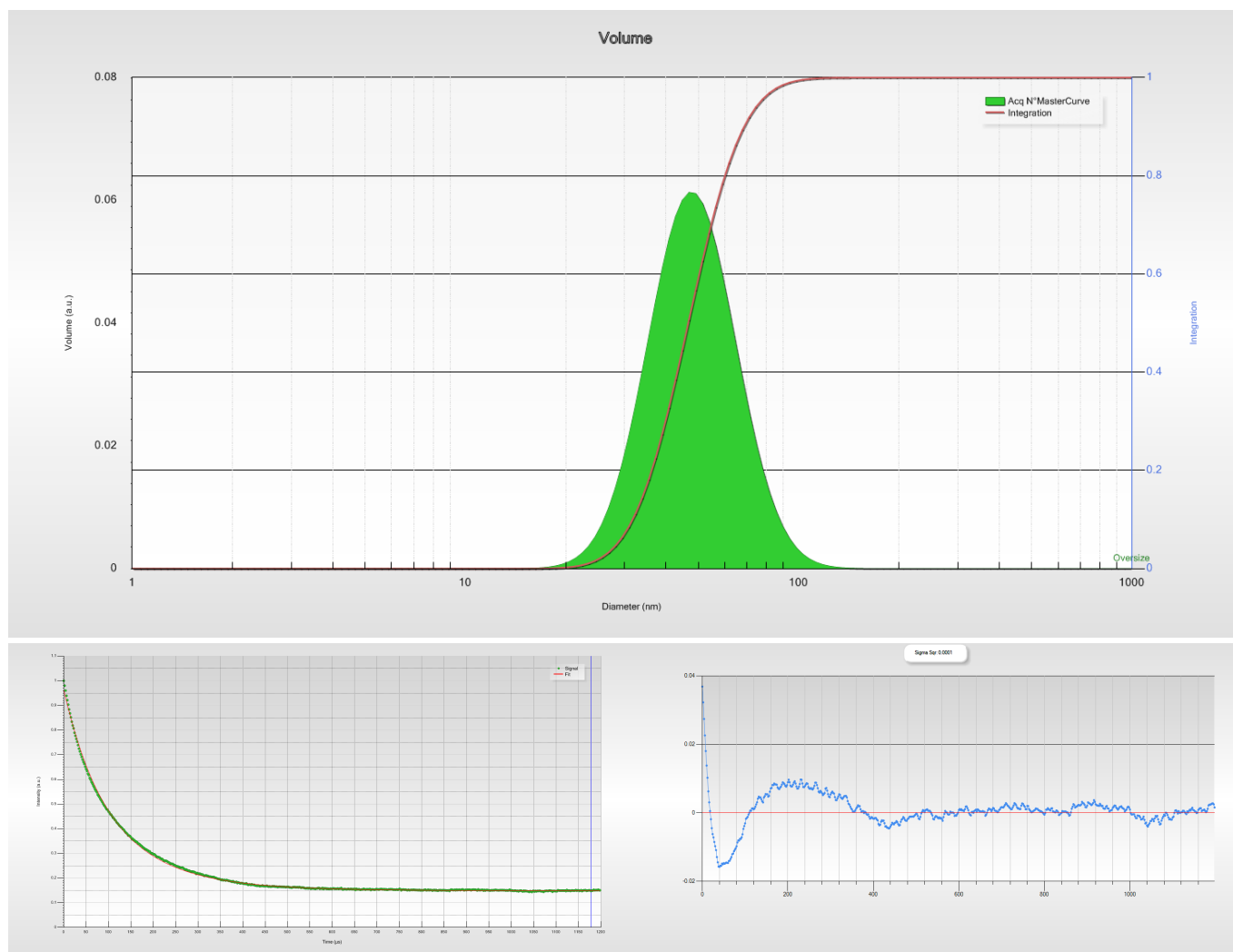
**Dn 50%:** 37.18 nm

**Dn 90%:** 53.82 nm

**Std Dev:** 30.38%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
54	0.81	4811.78	91.031E-013



### Distribution statistics

**Dv 10%:** 32.36 nm  
**Mean Volume:** 49.92 nm  
**PDI** : 0.36911

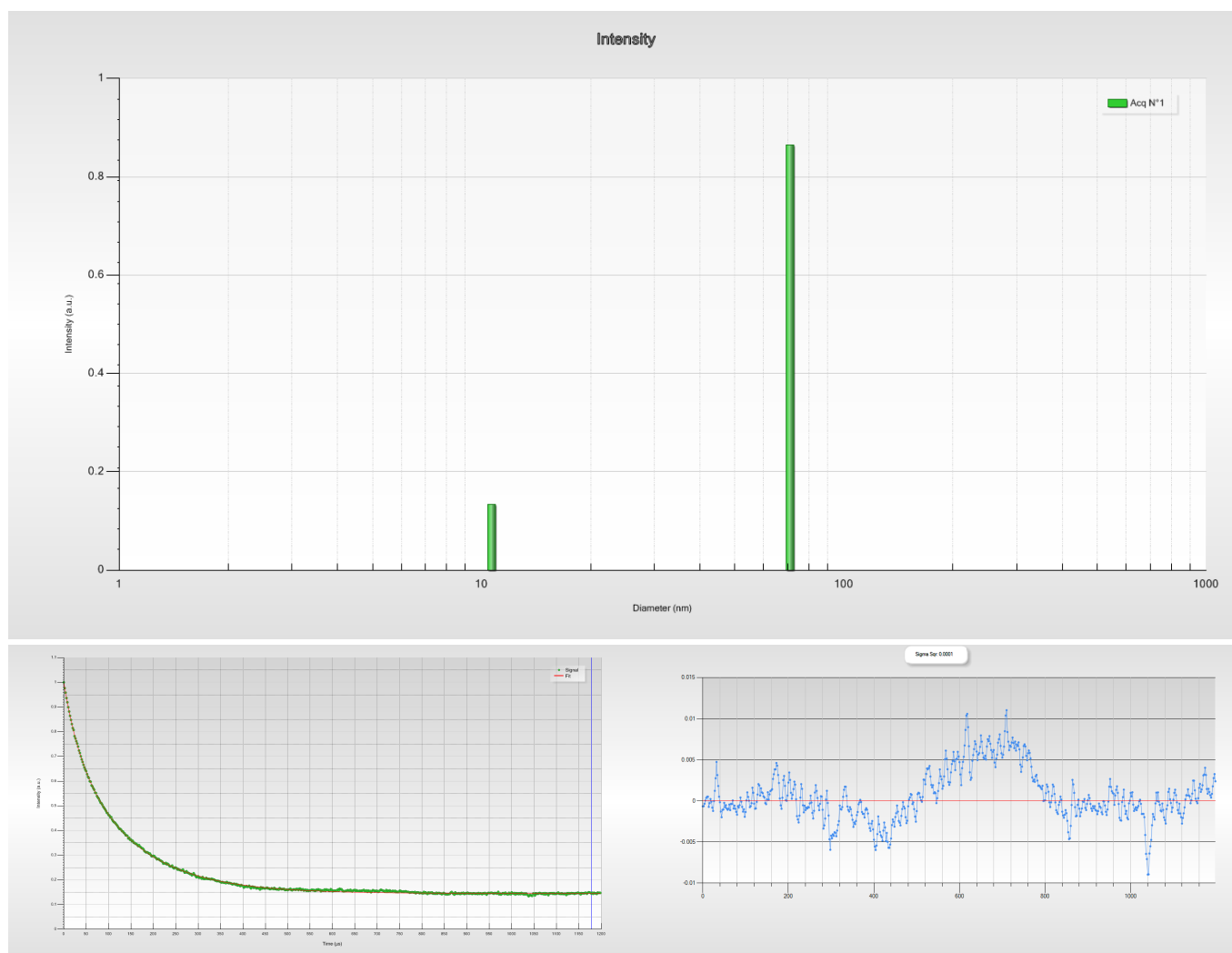
**Dv 50%:** 46.85 nm

**Dv 90%:** 71.02 nm

**Std Dev:** 30.38%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
54	0.81	4811.78	91.031E-013



### Dispersion statistics

**Di 10%:** 10.67 nm  
**Mean Intensity:** 62.91 nm

**Di 50%:** 71.02 nm

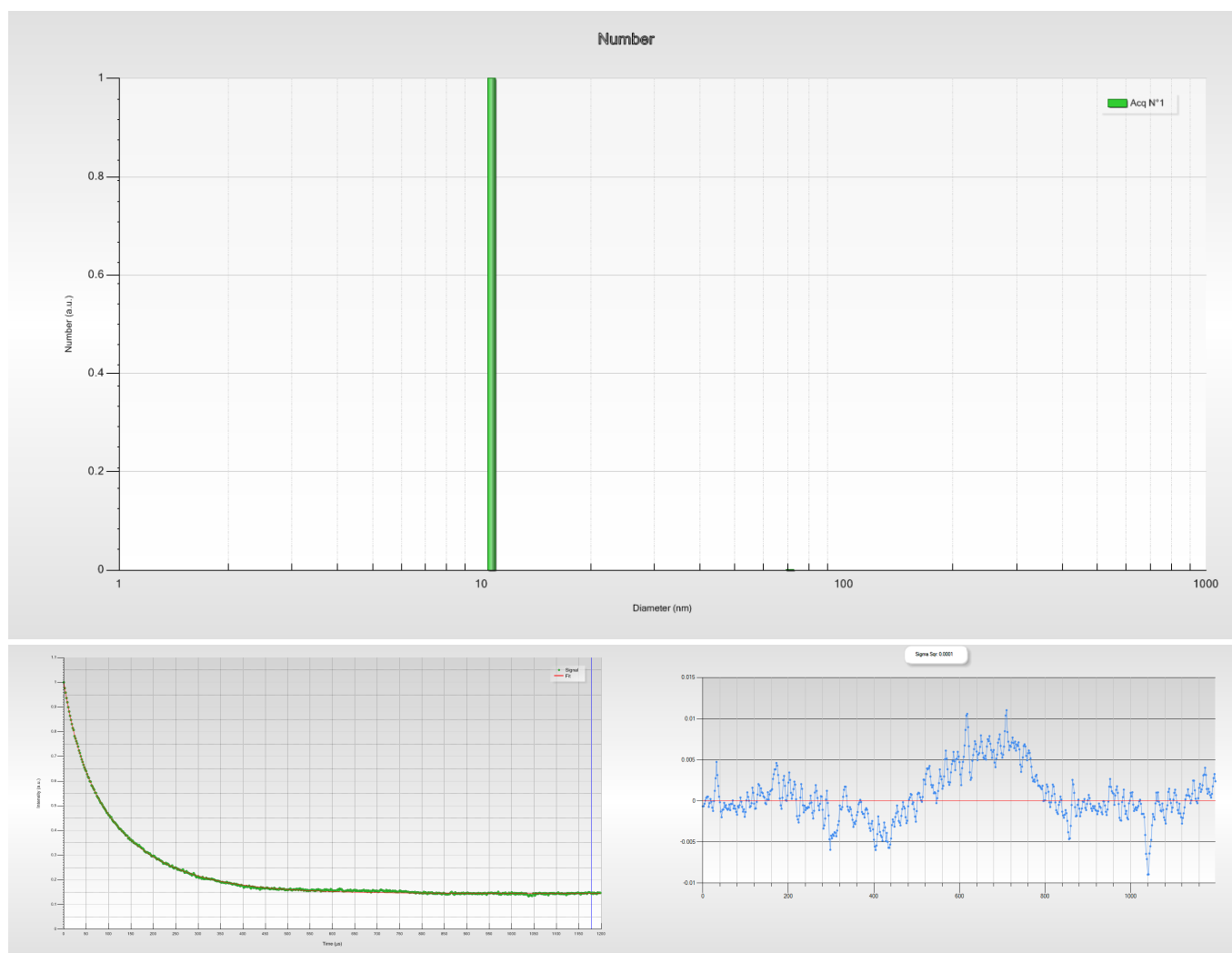
**Di 90%:** 71.02 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
10.5	0.12	24857.38	47.02614E-012
71.37	0.8	3655.22	69.15082E-013

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity
10.67	0.13	71.02	0.87



### Dispersion statistics

**Dn 10%: 10.67 nm**  
**Mean Number: 10.67 nm**

**Dn 50%: 10.67 nm**

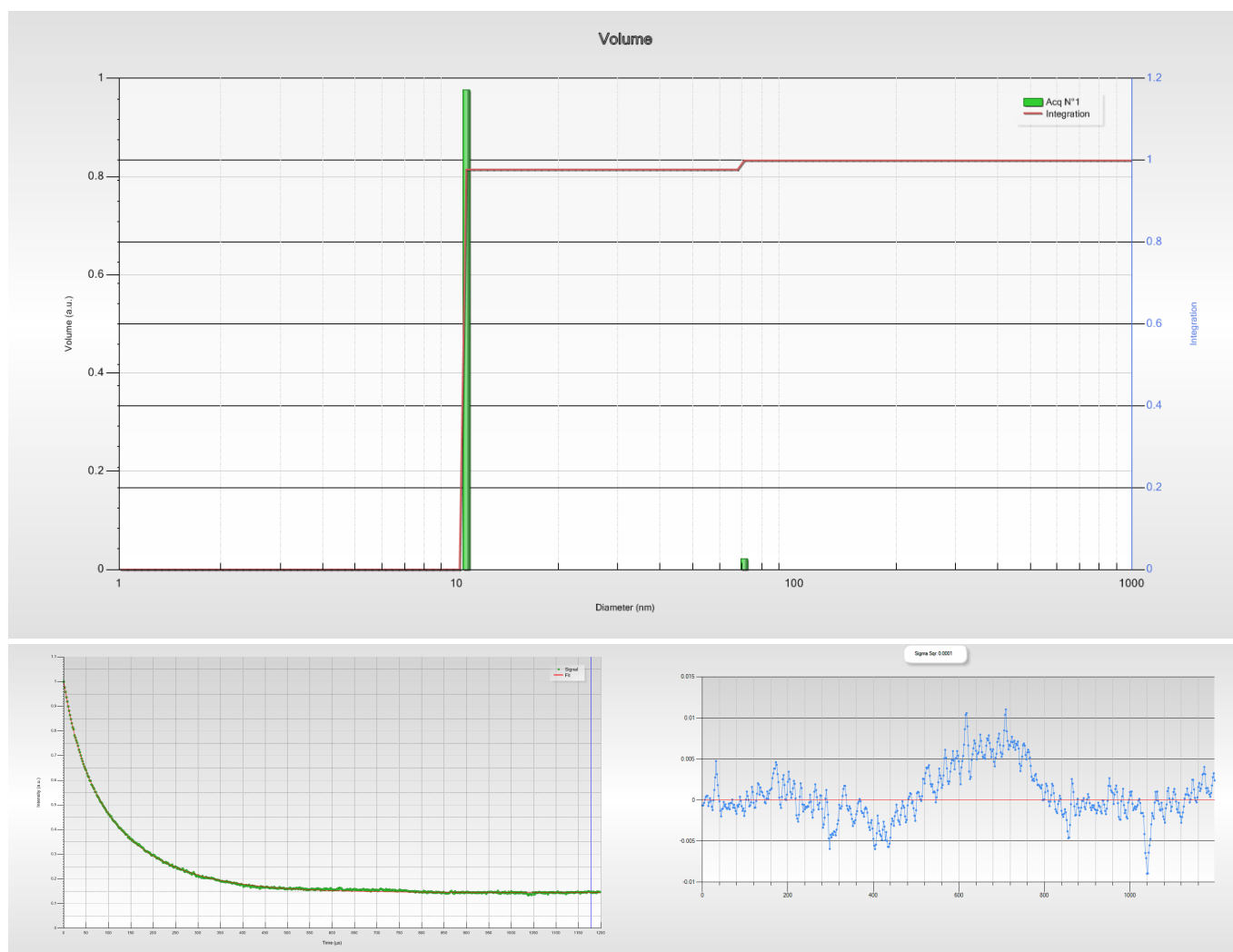
**Dn 90%: 10.67 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m²/s)
10.5	0.12	24857.38	47.02614E-012
71.37	0.8	3655.22	69.15082E-013

### Dispersion datas

Size (nm)	Number
10.67	1



### Dispersion statistics

**Dv 10%:** 10.67 nm  
**Mean Volume:** 12.03 nm

**Dv 50%:** 10.67 nm

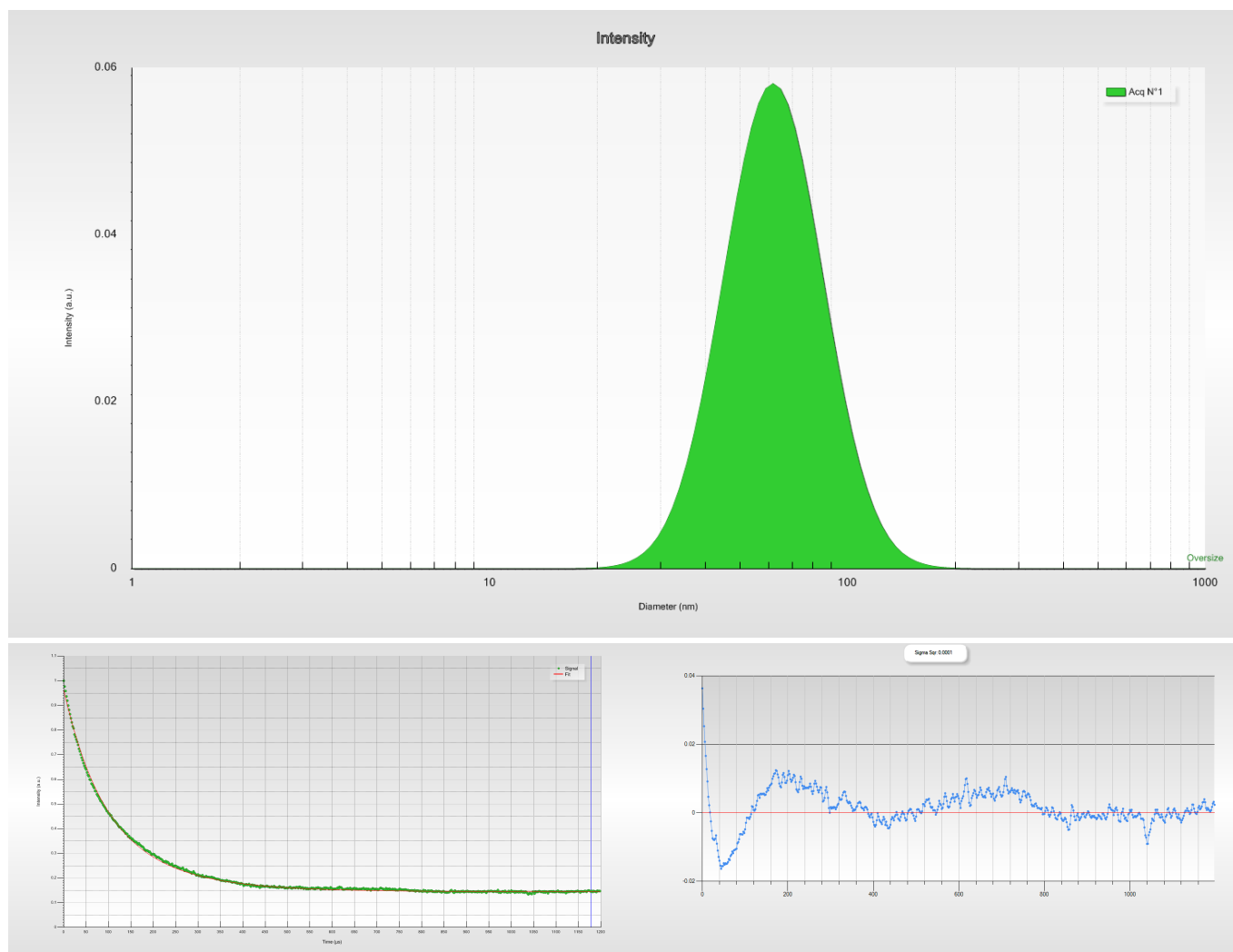
**Dv 90%:** 10.67 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
10.5	0.12	24857.38	47.02614E-012
71.37	0.8	3655.22	69.15082E-013

### Dispersion datas

Size (nm)	Volume	Size (nm)	Volume
10.67	0.98	71.02	0.02

**Distribution statistics**

**Di 10%:** 40.78 nm  
**Mean Intensity:** 65 nm  
**PDI** : 0.42406

**Di 50%:** 61.83 nm

**Di 90%:** 93.73 nm

**Std Dev:** 32.56%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
53.35	0.82	4889.84	92.50794E-013

**Distribution statistics**

**Dn 10%:** 22.36 nm  
**Mean Number:** 35.66 nm  
**PDI** : 0.42406

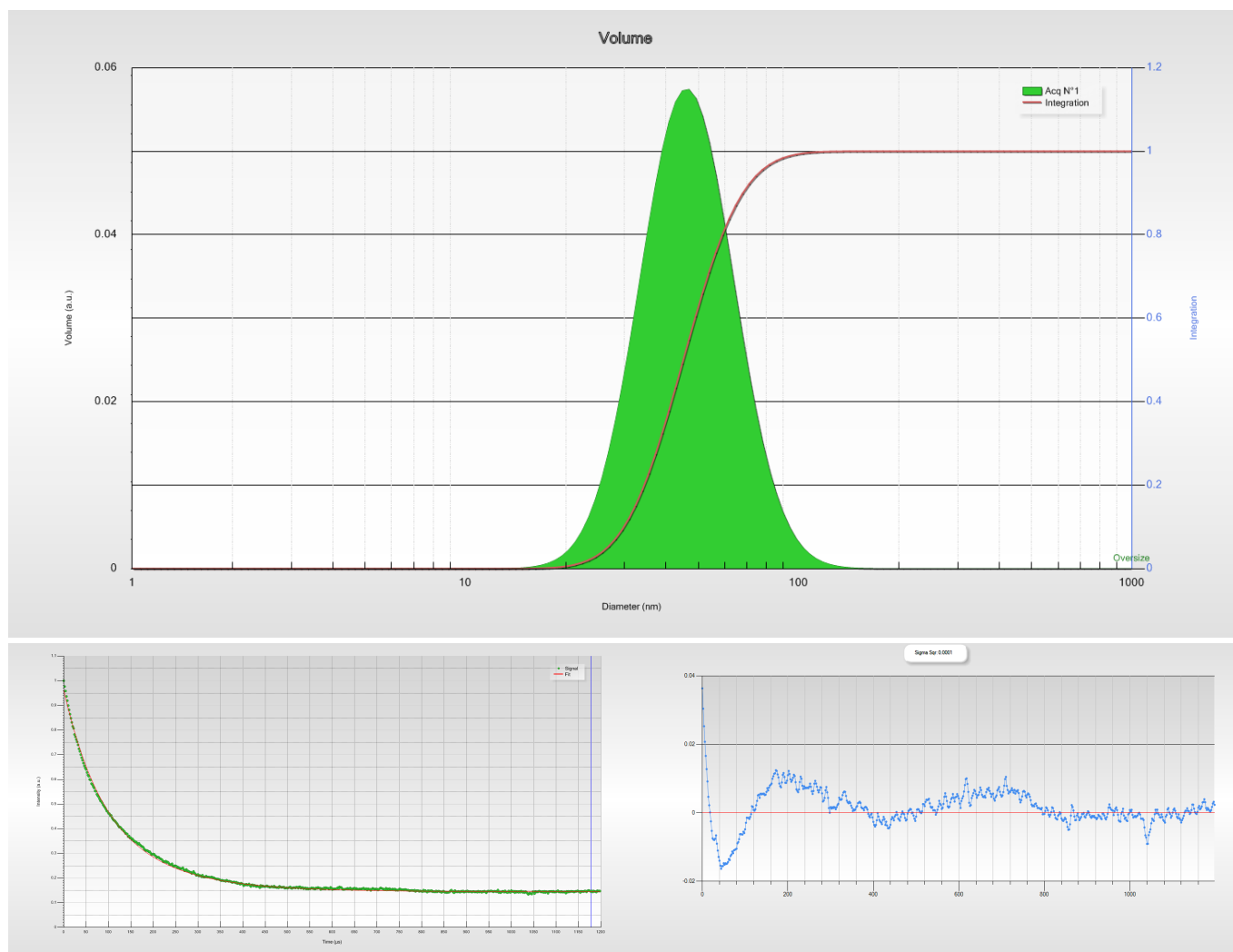
**Dn 50%:** 33.89 nm

**Dn 90%:** 51.39 nm

**Std Dev:** 32.56%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
53.35	0.82	4889.84	92.50794E-013



**Distribution statistics**

**Dv 10%:** 30.9 nm  
**Mean Volume:** 48.55 nm  
**PDI** : 0.42406

**Dv 50%:** 46.85 nm

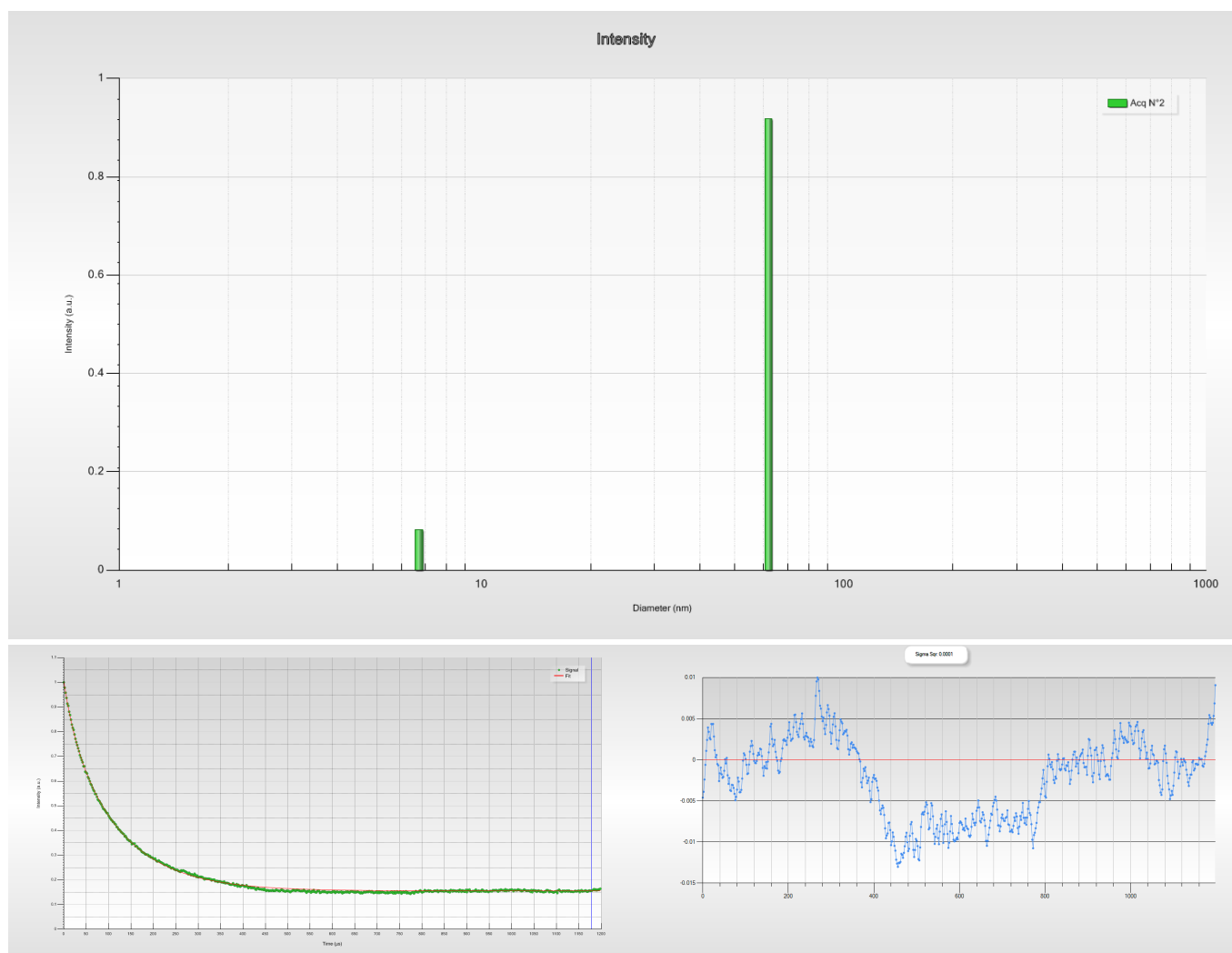
**Dv 90%:** 71.02 nm

**Std Dev:** 32.56%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
53.35	0.82	4889.84	92.50794E-013





### Dispersion statistics

**Di 10%: 61.83 nm**  
**Mean Intensity: 57.3 nm**

**Di 50%: 61.83 nm**

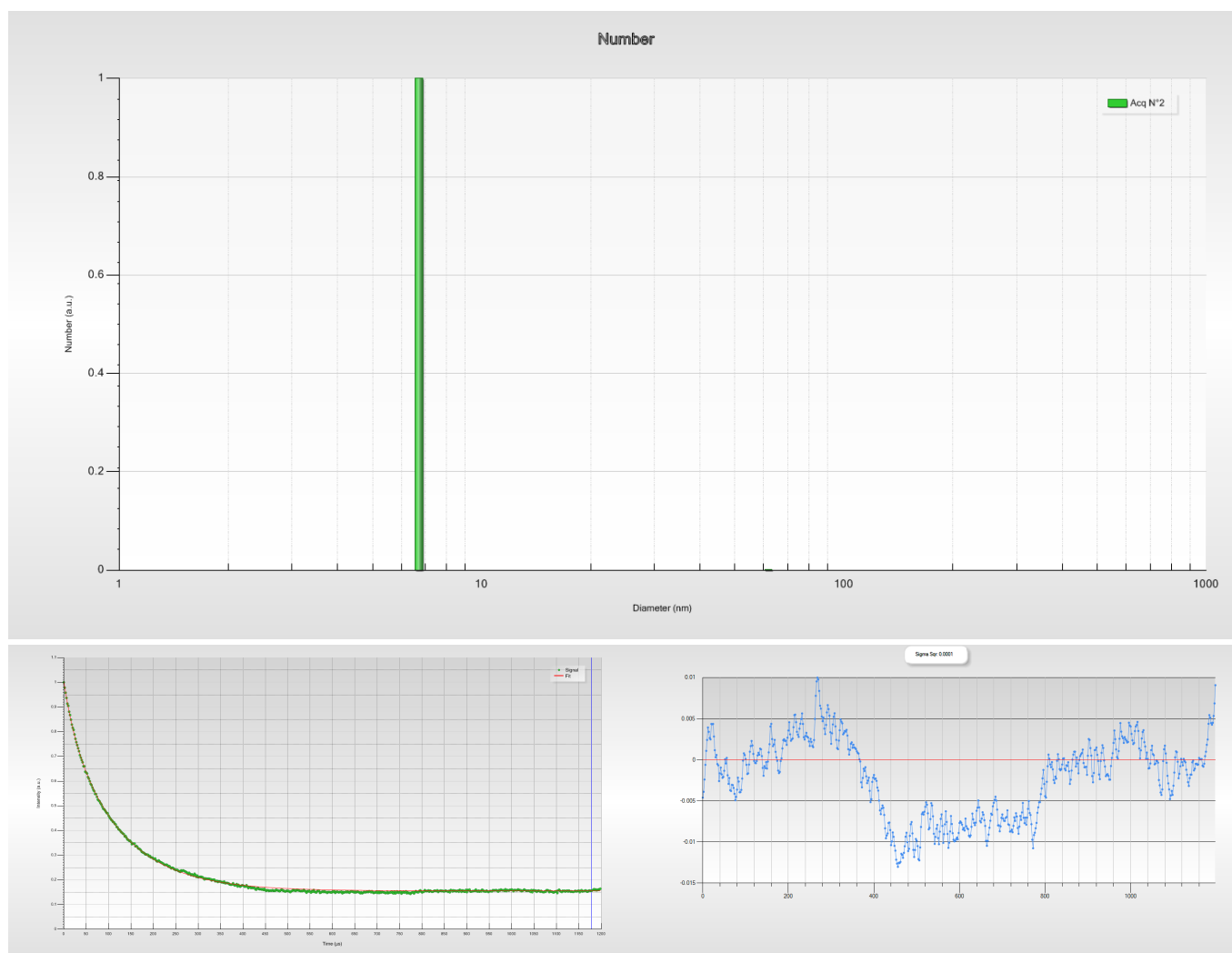
**Di 90%: 61.83 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
6.72	0.08	38736.75	73.28367E-012
60.7	0.85	4288.79	81.13688E-013

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity
6.72	0.08	61.83	0.92



### Dispersion statistics

**Dn 10%: 6.72 nm**  
**Mean Number: 6.72 nm**

**Dn 50%: 6.72 nm**

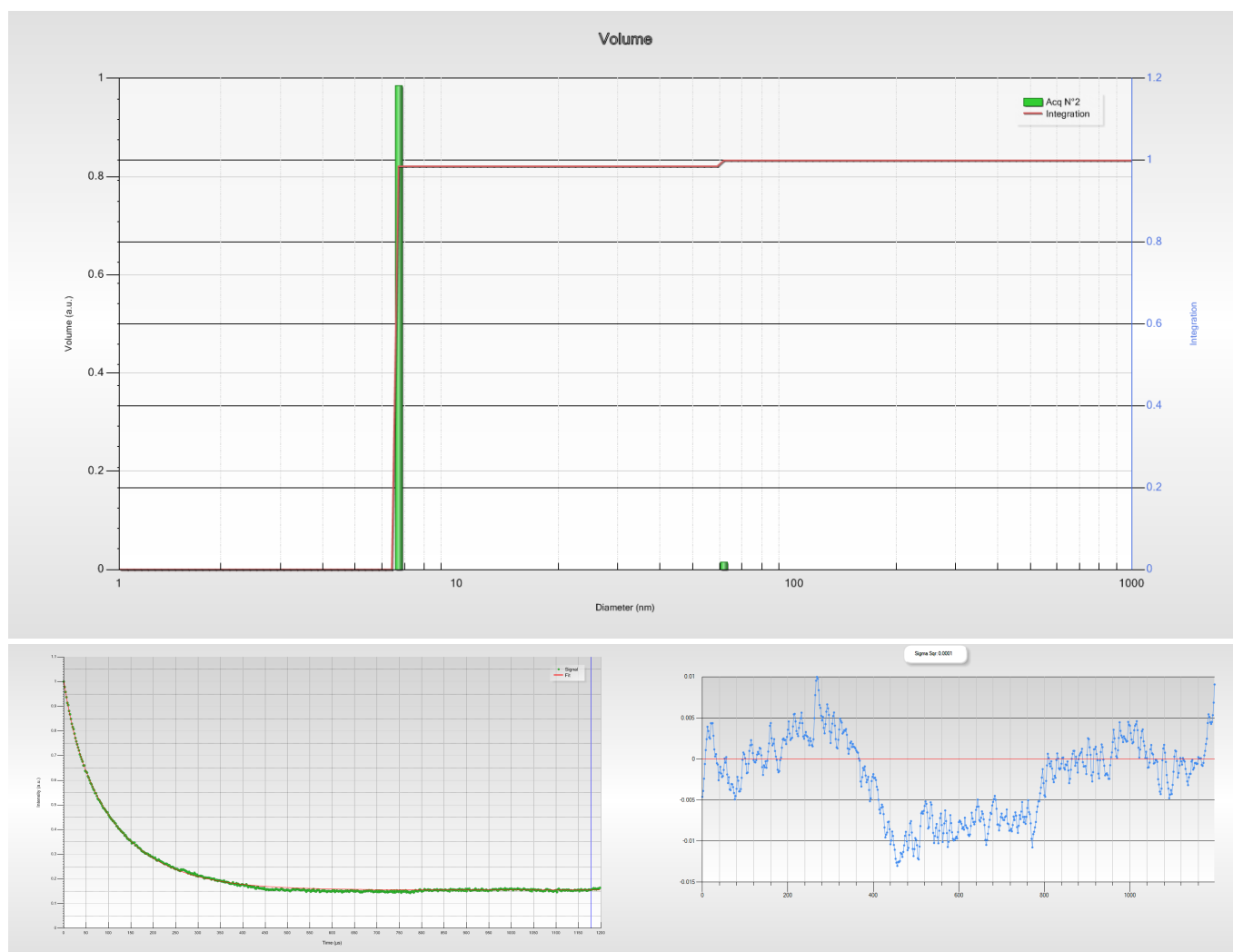
**Dn 90%: 6.72 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
6.72	0.08	38736.75	73.28367E-012
60.7	0.85	4288.79	81.13688E-013

### Dispersion datas

Size (nm)	Number
6.72	1



### Dispersion statistics

**Dv 10%: 6.72 nm**  
**Mean Volume: 7.53 nm**

**Dv 50%: 6.72 nm**

**Dv 90%: 6.72 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
6.72	0.08	38736.75	73.28367E-012
60.7	0.85	4288.79	81.13688E-013

### Dispersion datas

Size (nm)	Volume	Size (nm)	Volume
6.72	0.99	61.83	0.01

**Distribution statistics**

**Di 10%:** 38.94 nm  
**Mean Intensity:** 60.53 nm  
**PDI** : 0.4226

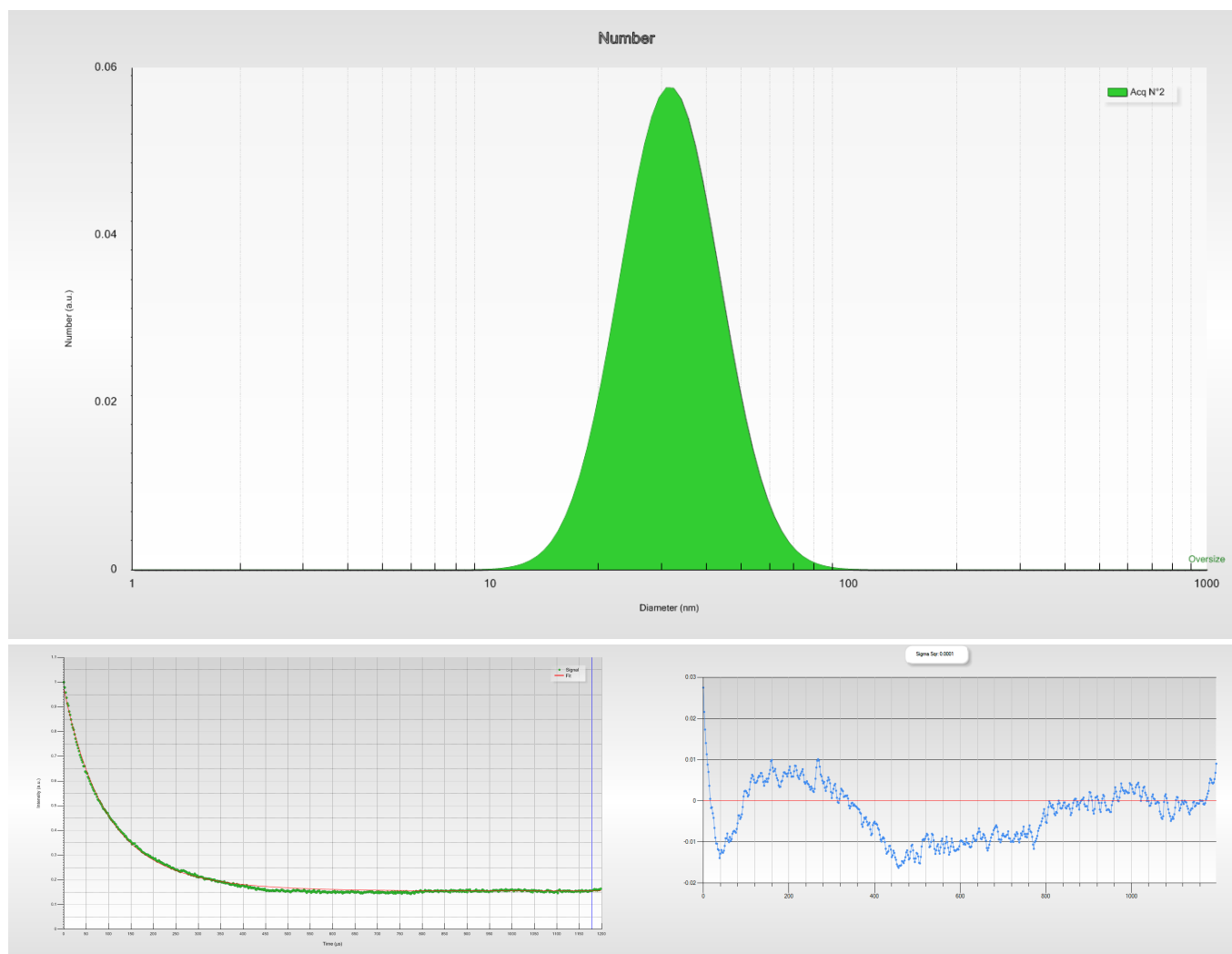
**Di 50%:** 56.36 nm

**Di 90%:** 85.45 nm

**Std Dev:** 32.5%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
49.61	0.82	5247.6	99.27618E-013

**Distribution statistics**

**Dn 10%:** 21.35 nm  
**Mean Number:** 33.25 nm  
**PDI** : 0.4226

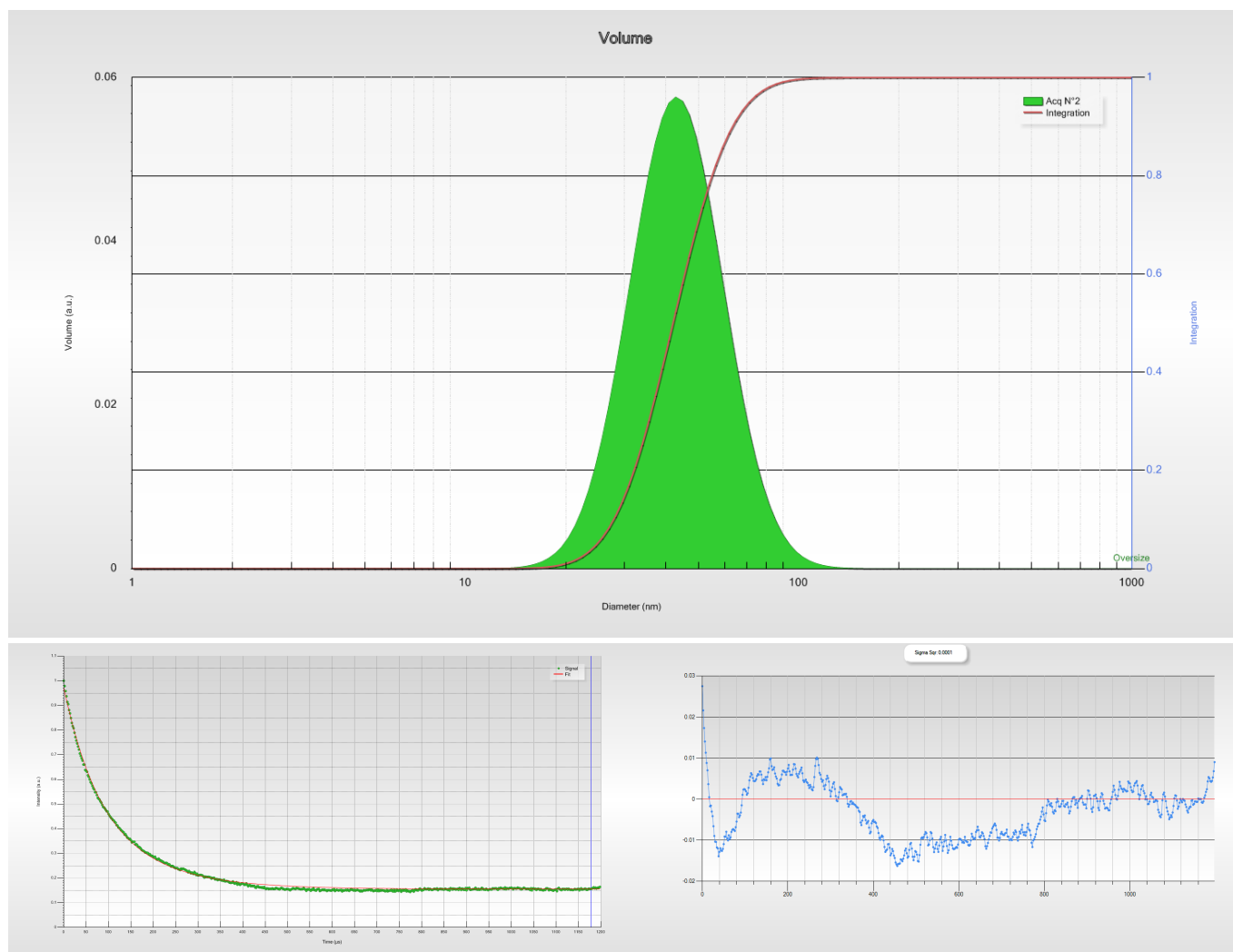
**Dn 50%:** 30.9 nm

**Dn 90%:** 46.85 nm

**Std Dev:** 32.5%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
49.61	0.82	5247.6	99.27618E-013

**Distribution statistics**

**Dv 10%:** 28.17 nm  
**Mean Volume:** 45.21 nm  
**PDI** : 0.4226

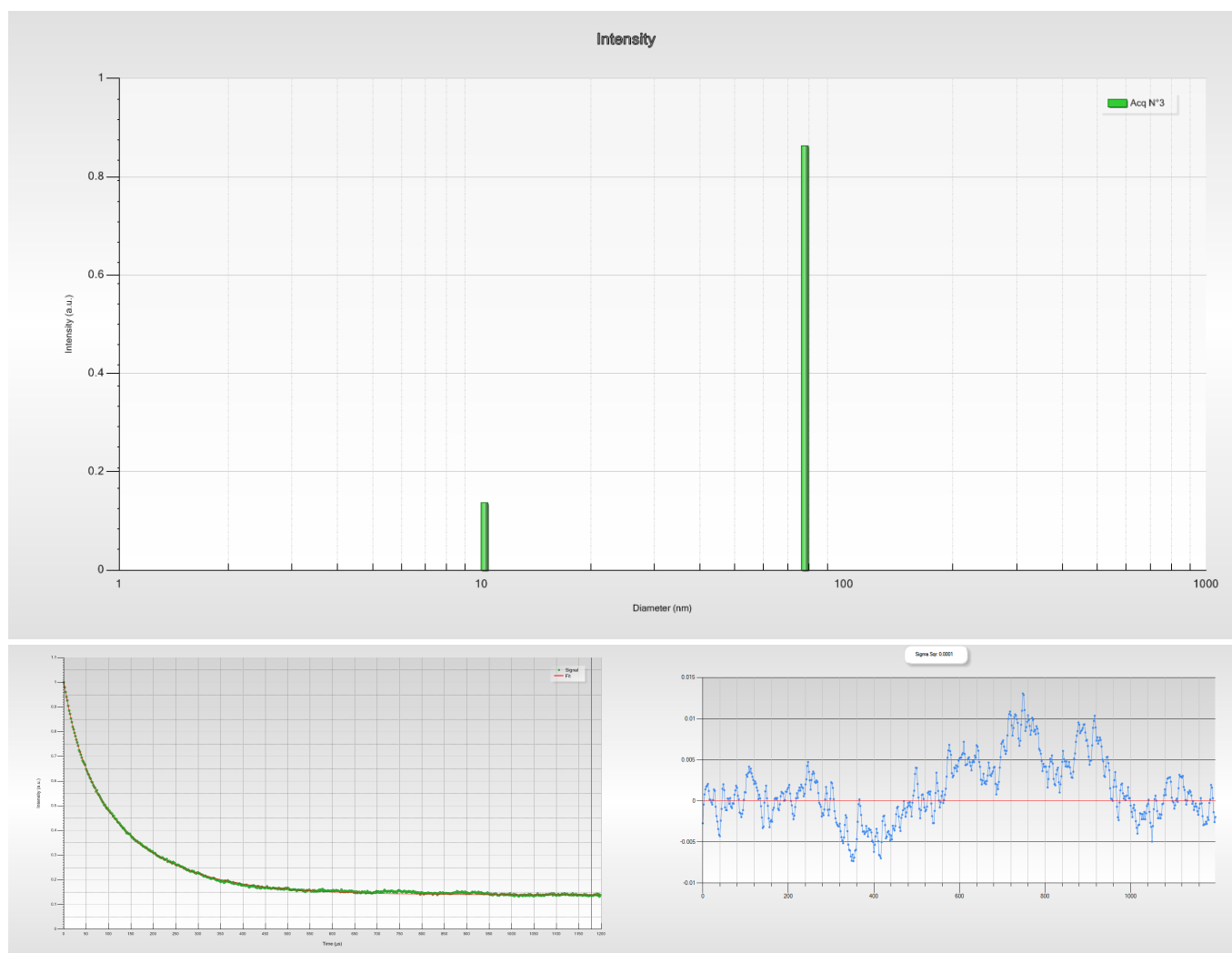
**Dv 50%:** 42.71 nm

**Dv 90%:** 64.75 nm

**Std Dev:** 32.5%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
49.61	0.82	5247.6	99.27618E-013



### Dispersion statistics

**Di 10%:** 10.19 nm  
**Mean Intensity:** 68.59 nm

**Di 50%:** 77.91 nm

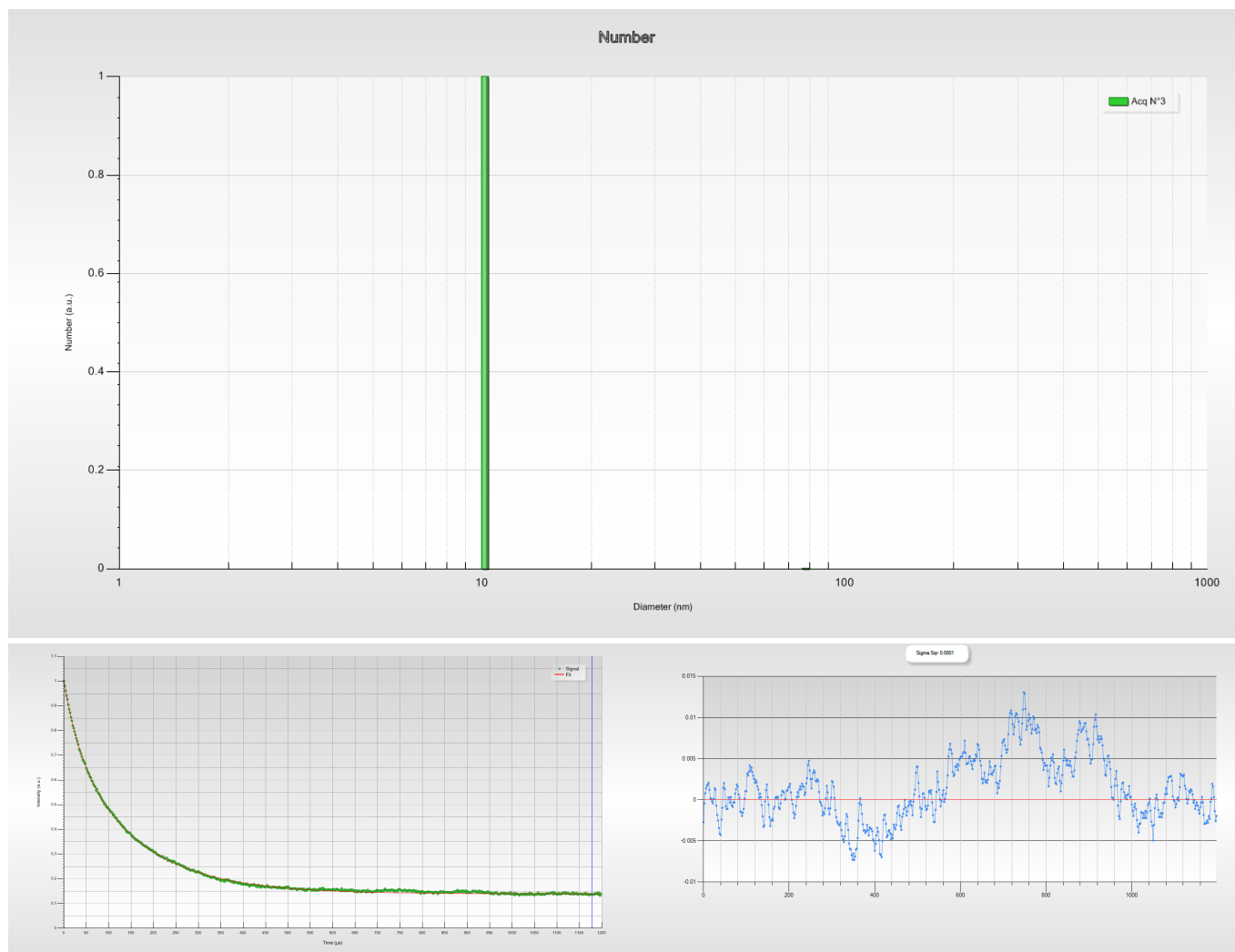
**Di 90%:** 77.91 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m²/s)
10.35	0.13	25163.58	47.60543E-012
78.28	0.8	3325.48	62.91264E-013

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity
10.19	0.14	77.91	0.86



### Dispersion statistics

**Dn 10%: 10.19 nm**  
**Mean Number: 10.19 nm**

**Dn 50%: 10.19 nm**

**Dn 90%: 10.19 nm**

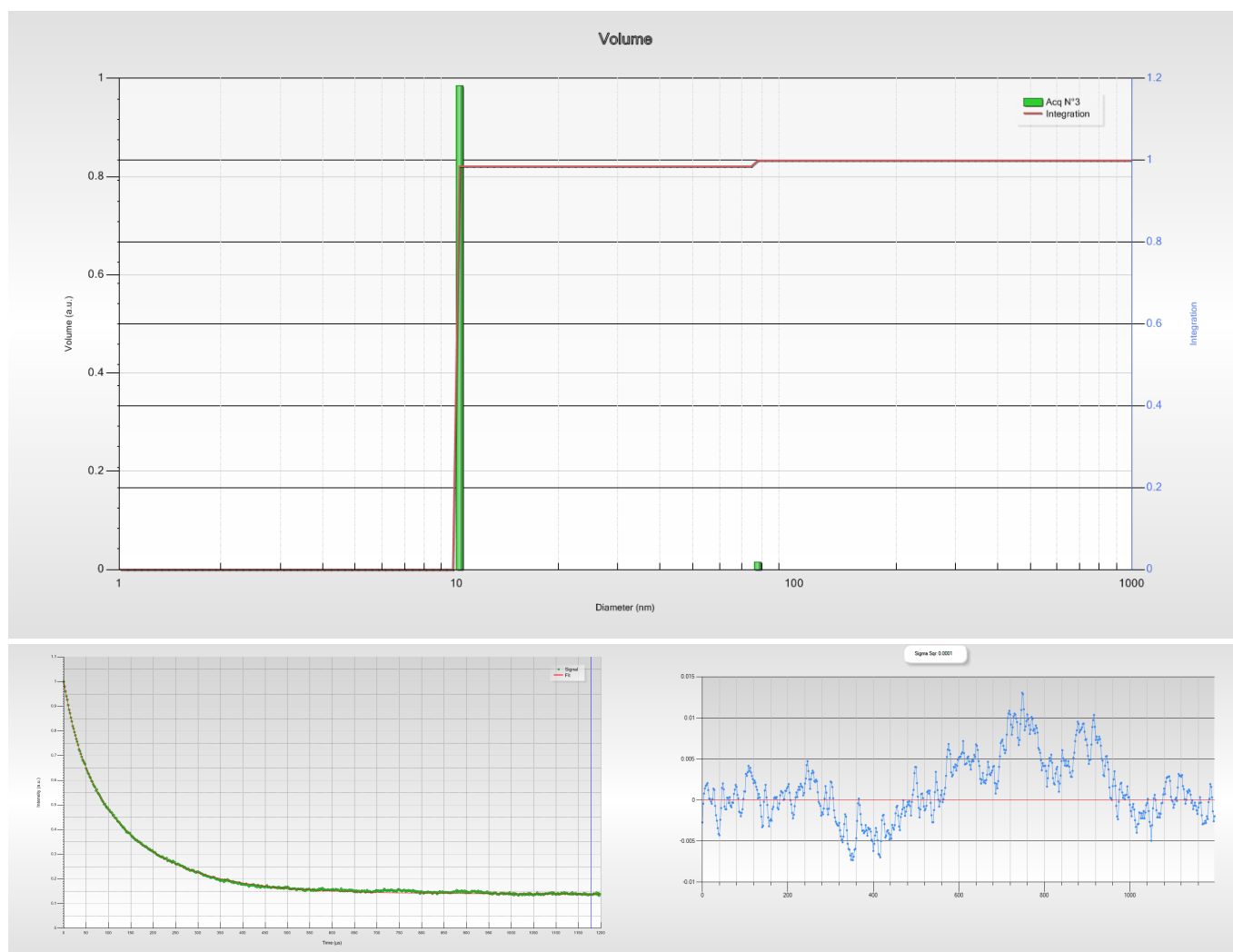
### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
10.35	0.13	25163.58	47.60543E-012
78.28	0.8	3325.48	62.91264E-013

### Dispersion datas

Size (nm)	Number
10.19	1





### Dispersion statistics

**Dv 10%: 10.19 nm**  
**Mean Volume: 11.19 nm**

**Dv 50%: 10.19 nm**

**Dv 90%: 10.19 nm**

### Detected size(s)

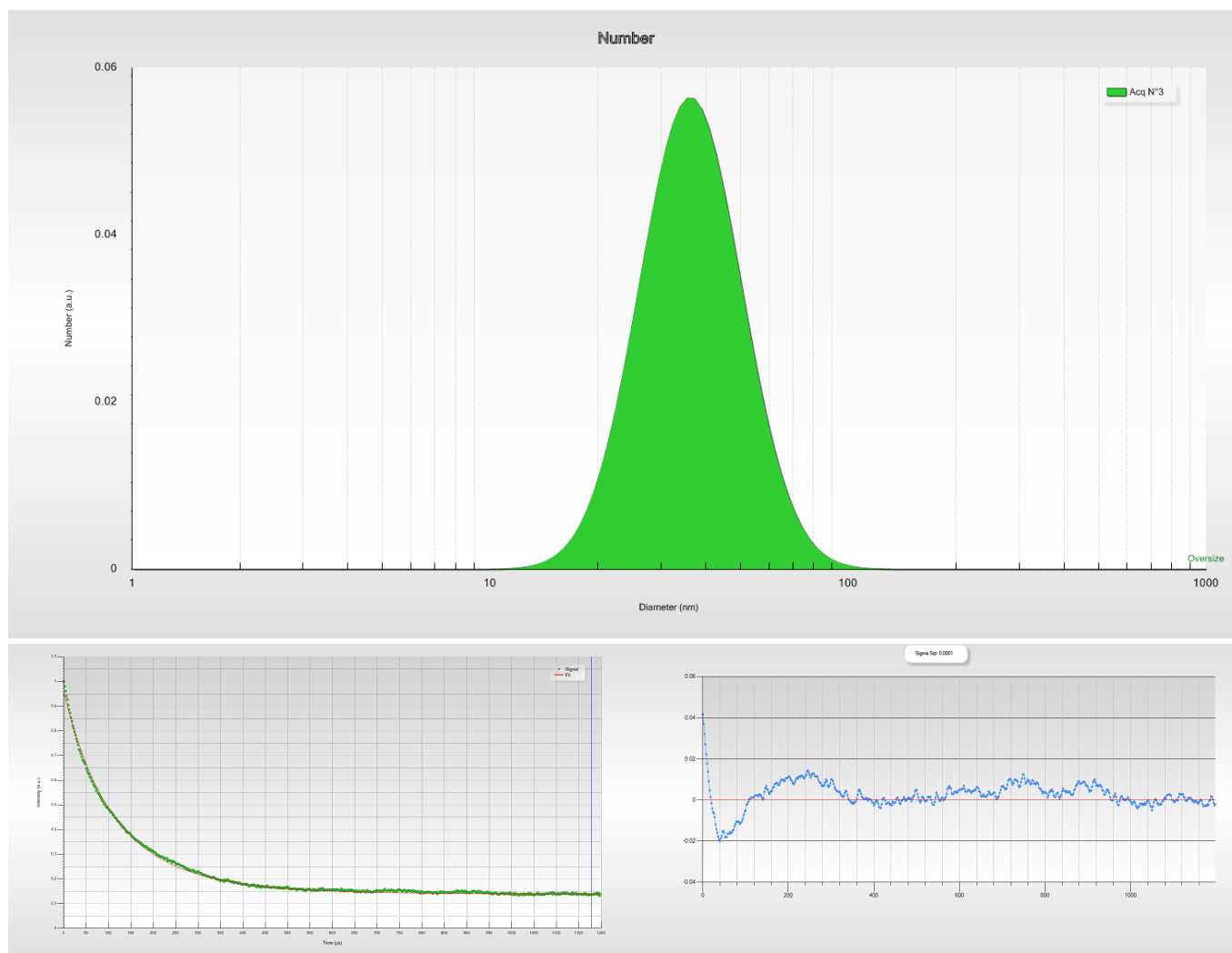
Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
10.35	0.13	25163.58	47.60543E-012
78.28	0.8	3325.48	62.91264E-013

### Dispersion datas

Size (nm)	Volume	Size (nm)	Volume
10.19	0.99	77.91	0.01

**Distribution statistics****Di 10%:** 44.73 nm**Di 50%:** 67.81 nm**Di 90%:** 102.81 nm**Mean Intensity:** 71.27 nm**PDI** : 0.44184**Std Dev:** 33.24%**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
57.91	0.82	4495.82	85.05372E-013

**Distribution statistics**

**Dn 10%:** 23.41 nm  
**Mean Number:** 38.19 nm  
**PDI** : 0.44184

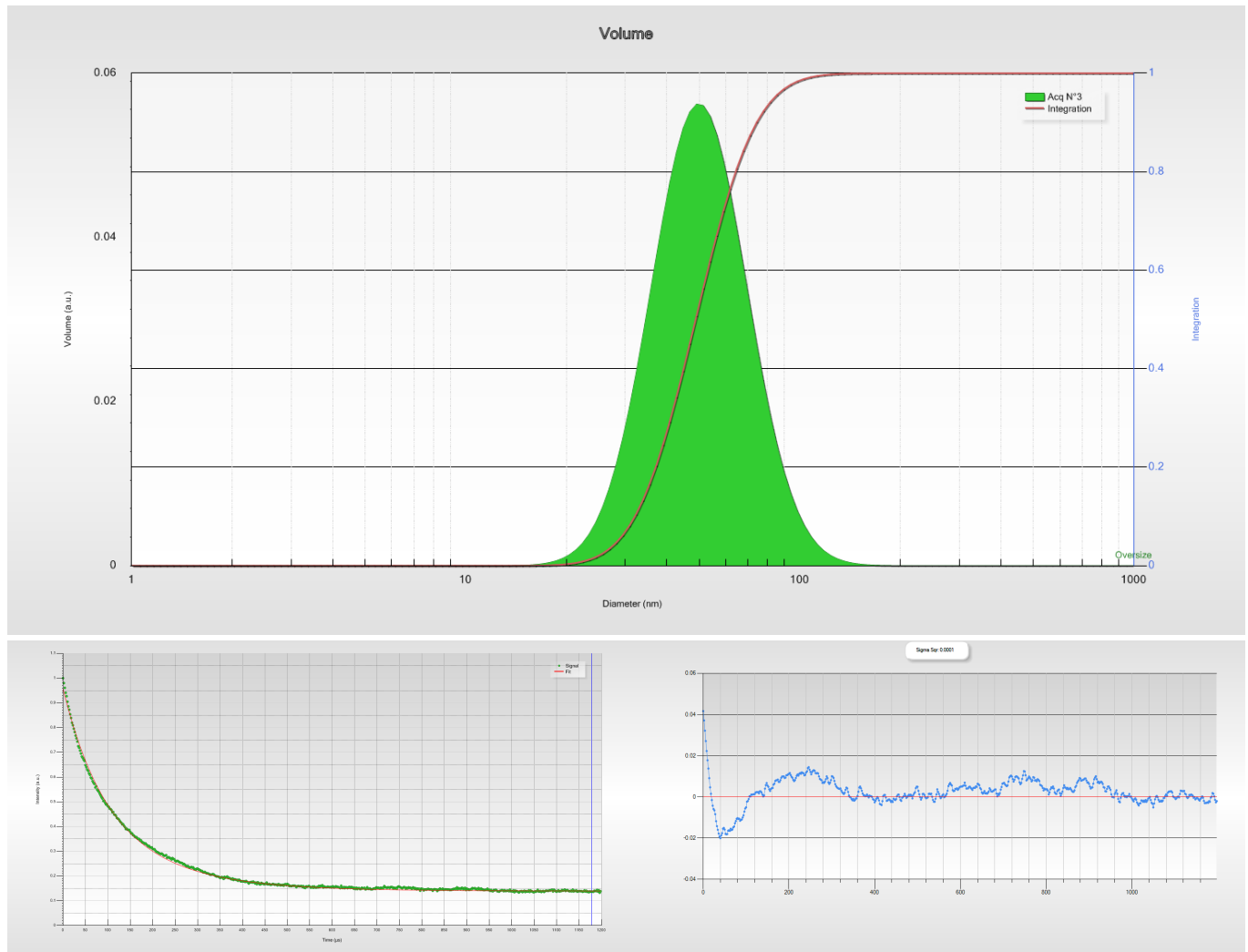
**Dn 50%:** 35.5 nm

**Dn 90%:** 53.82 nm

**Std Dev:** 33.24%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
57.91	0.82	4495.82	85.05372E-013



### Distribution statistics

**Dv 10%:** 32.36 nm  
**Mean Volume:** 52.68 nm  
**PDI** : 0.44184

**Dv 50%:** 49.06 nm

**Dv 90%:** 74.39 nm

**Std Dev:** 33.24%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
57.91	0.82	4495.82	85.05372E-013



### Dispersion statistics

**Di 10%: 9.29 nm**  
**Mean Intensity: 61.41 nm**

**Di 50%: 67.81 nm**

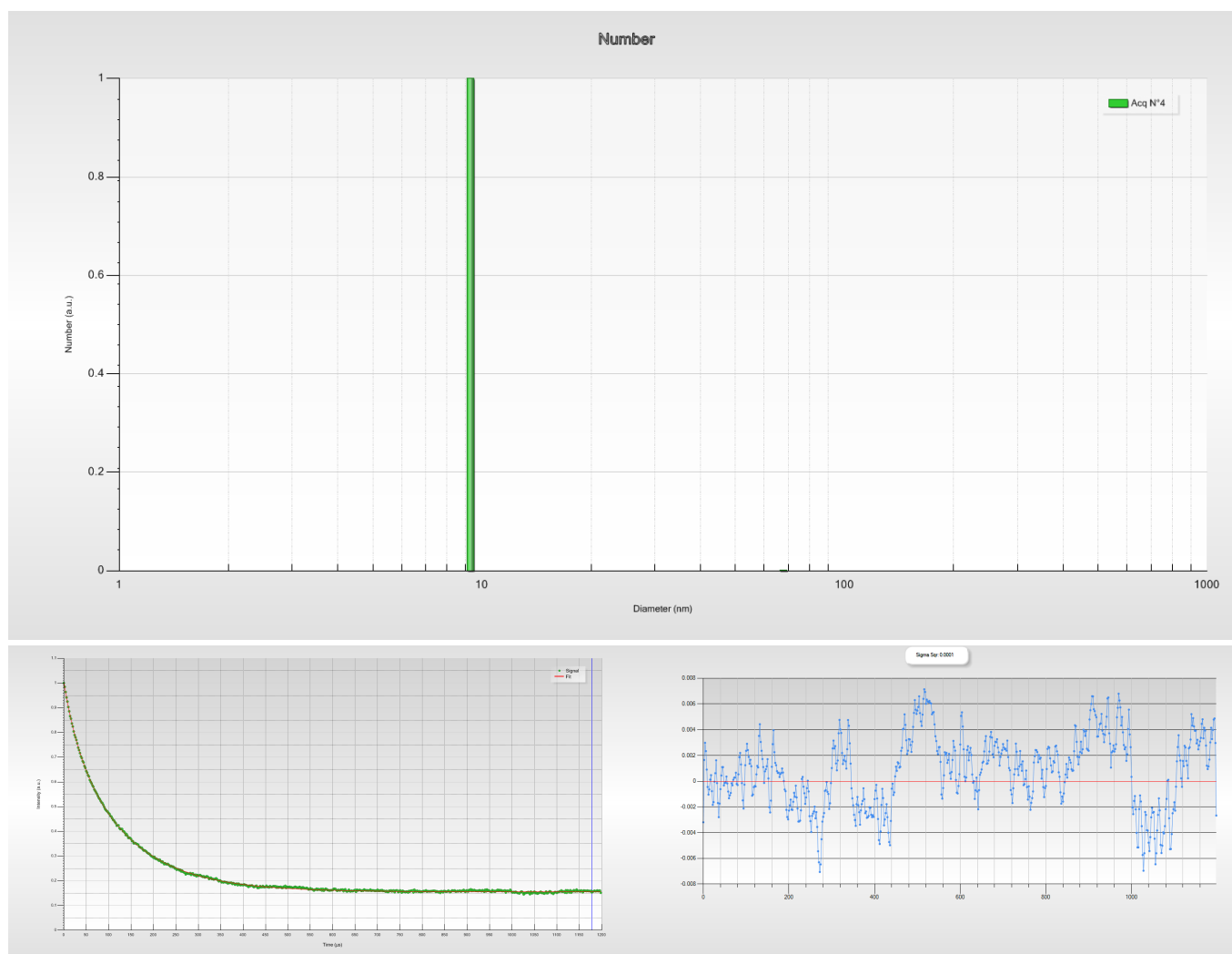
**Di 90%: 67.81 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
9.38	0.1	27760.44	52.51825E-012
67.05	0.82	3882.55	73.45159E-013

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity
9.29	0.11	67.81	0.89



### Dispersion statistics

**Dn 10%: 9.29 nm**  
**Mean Number: 9.29 nm**

**Dn 50%: 9.29 nm**

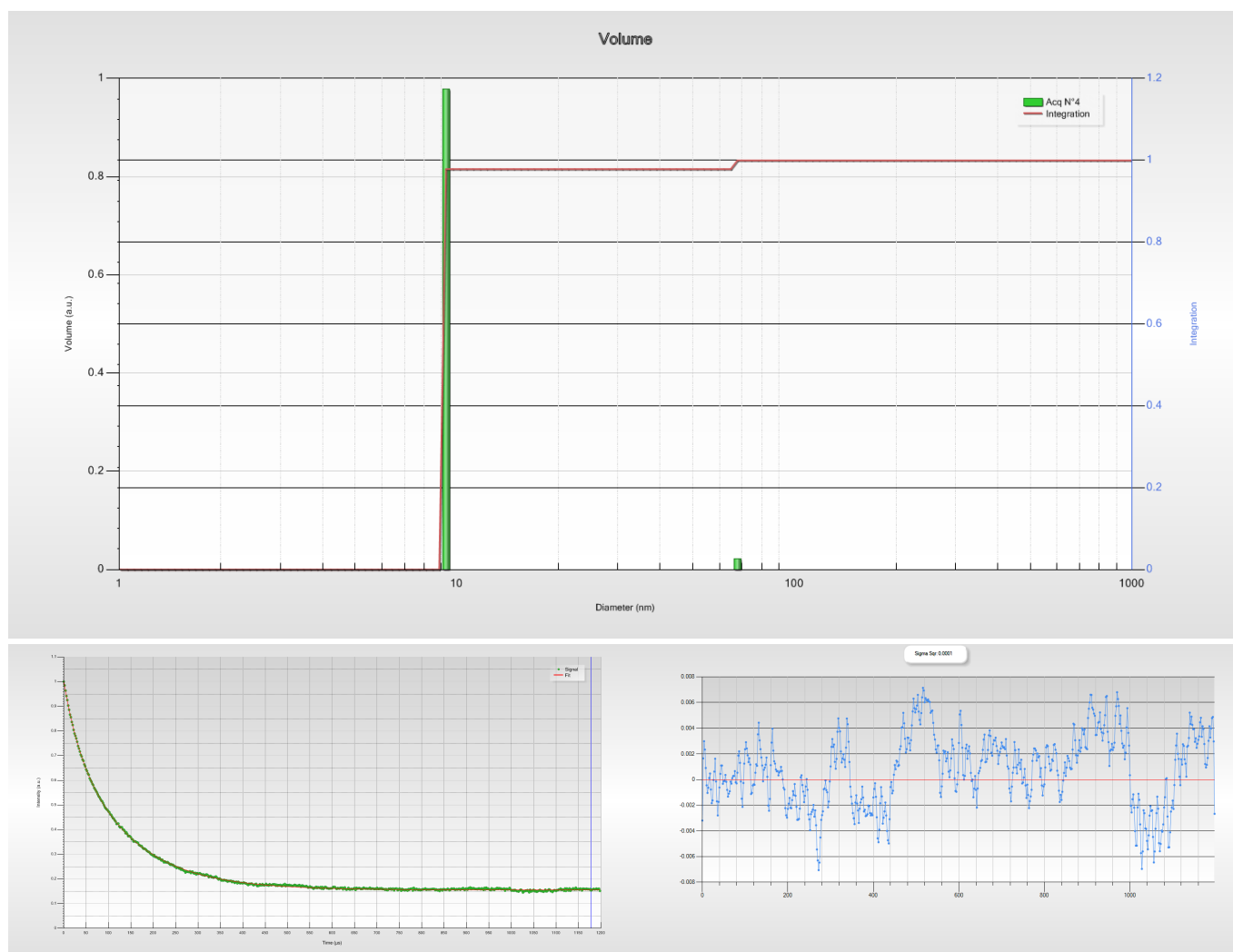
**Dn 90%: 9.29 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
9.38	0.1	27760.44	52.51825E-012
67.05	0.82	3882.55	73.45159E-013

### Dispersion datas

Size (nm)	Number
9.29	1



### Dispersion statistics

**Dv 10%: 9.29 nm**  
**Mean Volume: 10.55 nm**

**Dv 50%: 9.29 nm**

**Dv 90%: 9.29 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
9.38	0.1	27760.44	52.51825E-012
67.05	0.82	3882.55	73.45159E-013

### Dispersion datas

Size (nm)	Volume	Size (nm)	Volume
9.29	0.98	67.81	0.02

**Distribution statistics**

**Di 10%:** 40.78 nm  
**Mean Intensity:** 63.17 nm  
**PDI** : 0.38207

**Di 50%:** 59.03 nm

**Di 90%:** 89.5 nm

**Std Dev:** 30.91%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
52.73	0.82	4936.94	93.39887E-013



**Distribution statistics**

**Dn 10%:** 23.41 nm  
**Mean Number:** 36.68 nm  
**PDI** : 0.38207

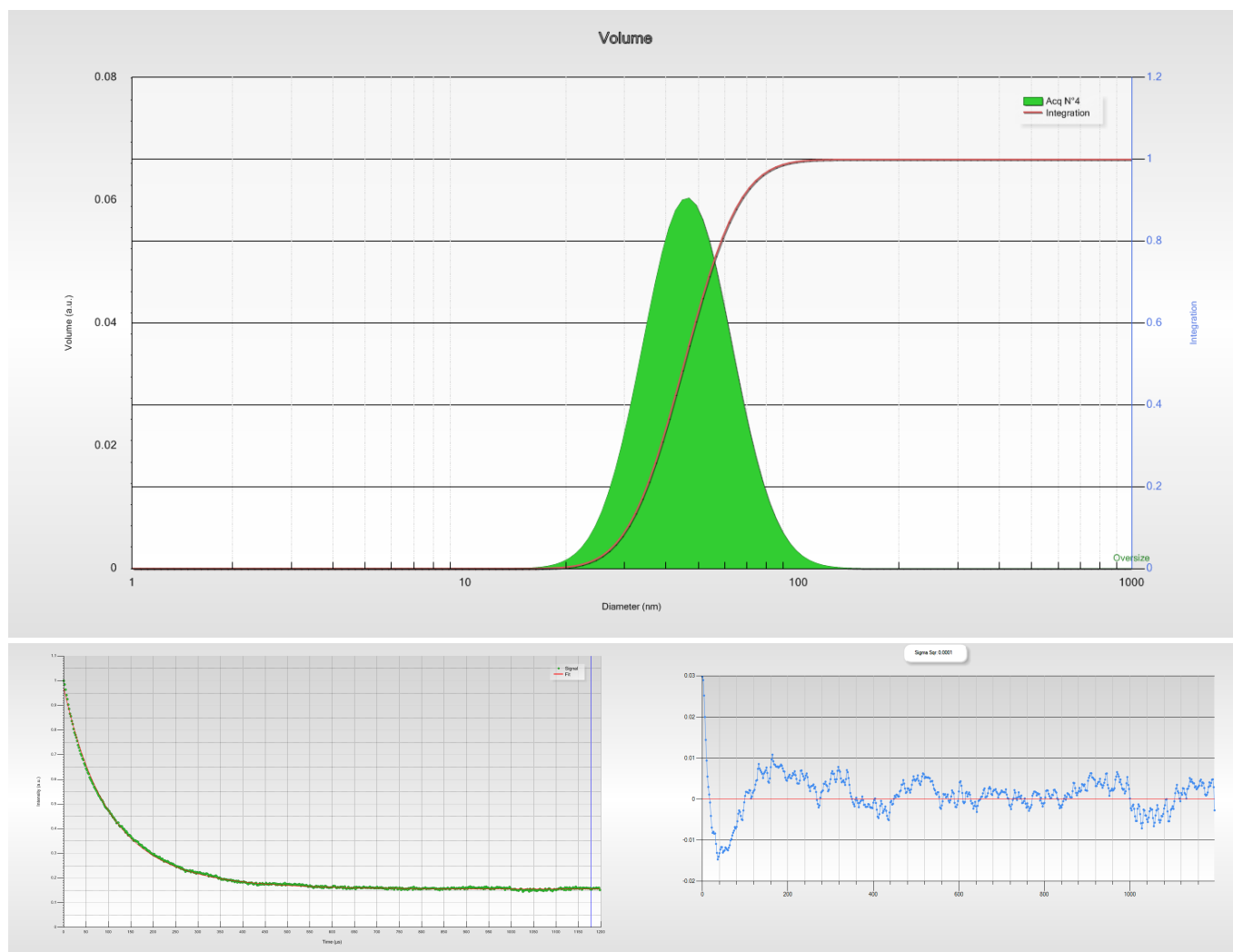
**Dn 50%:** 35.5 nm

**Dn 90%:** 51.39 nm

**Std Dev:** 30.91%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
52.73	0.82	4936.94	93.39887E-013



### Distribution statistics

**Dv 10%:** 30.9 nm  
**Mean Volume:** 48.51 nm  
**PDI** : 0.38207

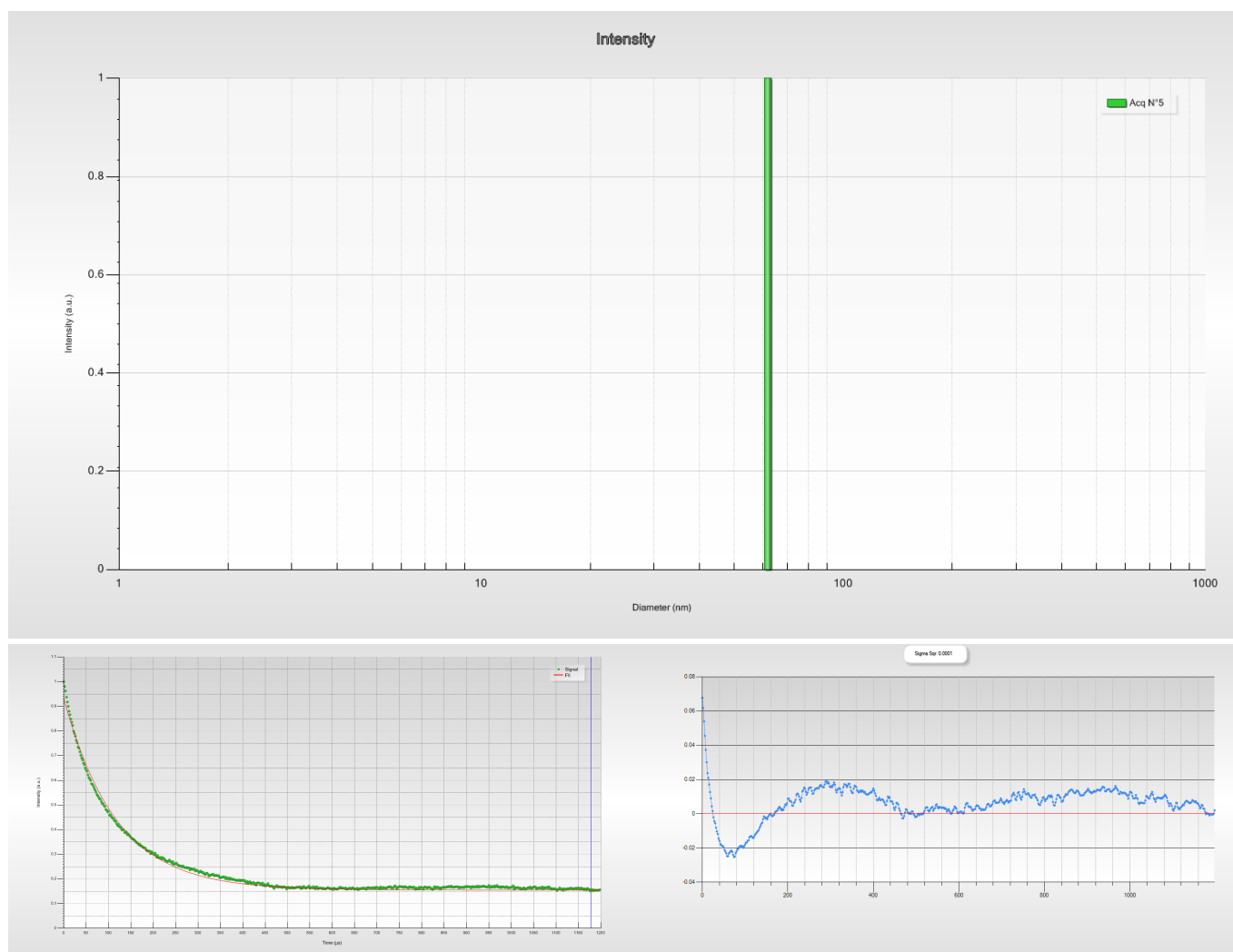
**Dv 50%:** 46.85 nm

**Dv 90%:** 67.81 nm

**Std Dev:** 30.91%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
52.73	0.82	4936.94	93.39887E-013



### Dispersion statistics

**Di 10%:** 61.83 nm  
**Mean Intensity:** 61.83 nm

**Di 50%:** 61.83 nm

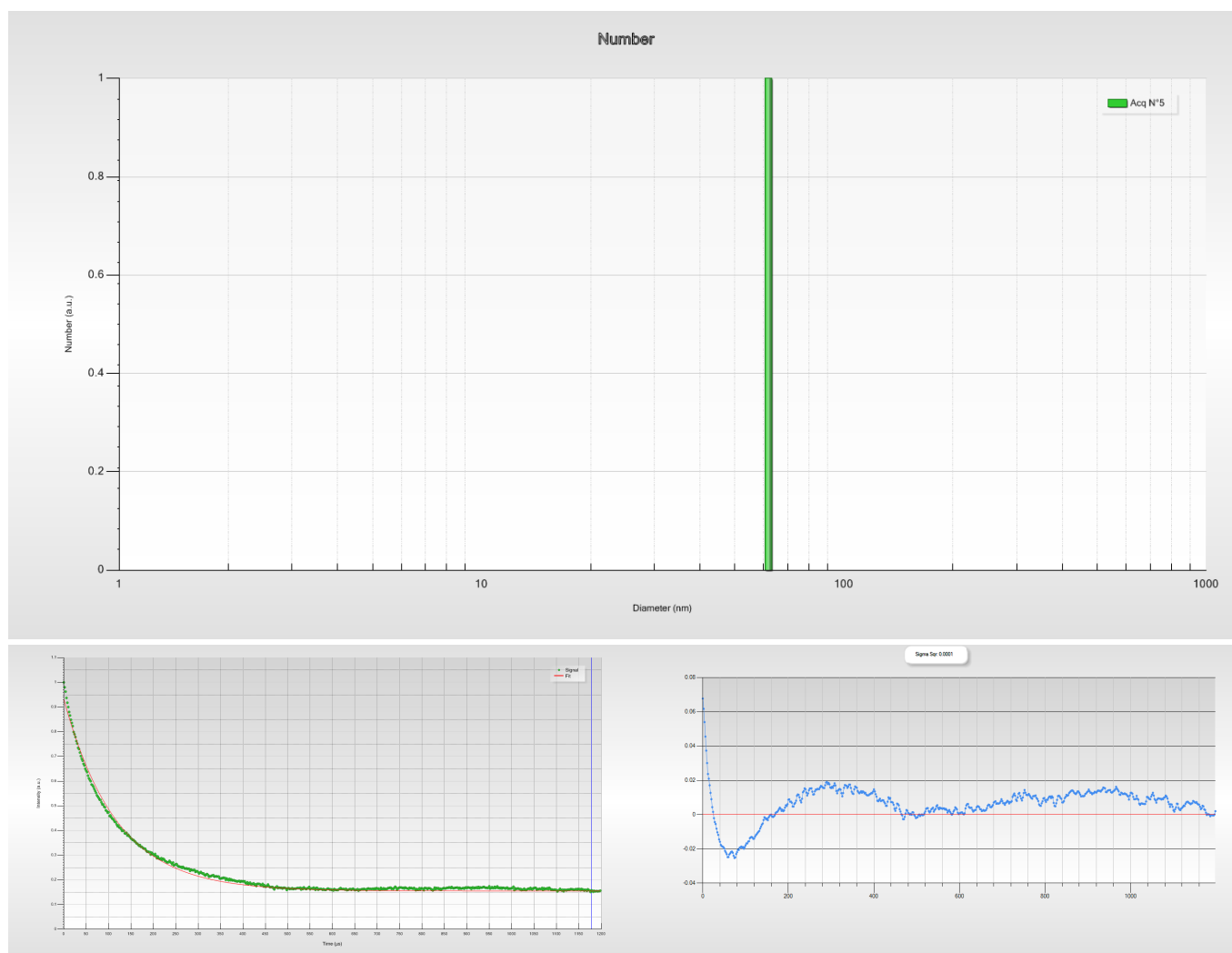
**Di 90%:** 61.83 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
61.2	0.88	4253.96	80.47808E-013

### Dispersion datas

Size (nm)	Intensity
61.83	1



### Dispersion statistics

**Dn 10%: 61.83 nm**  
**Mean Number: 61.83 nm**

**Dn 50%: 61.83 nm**

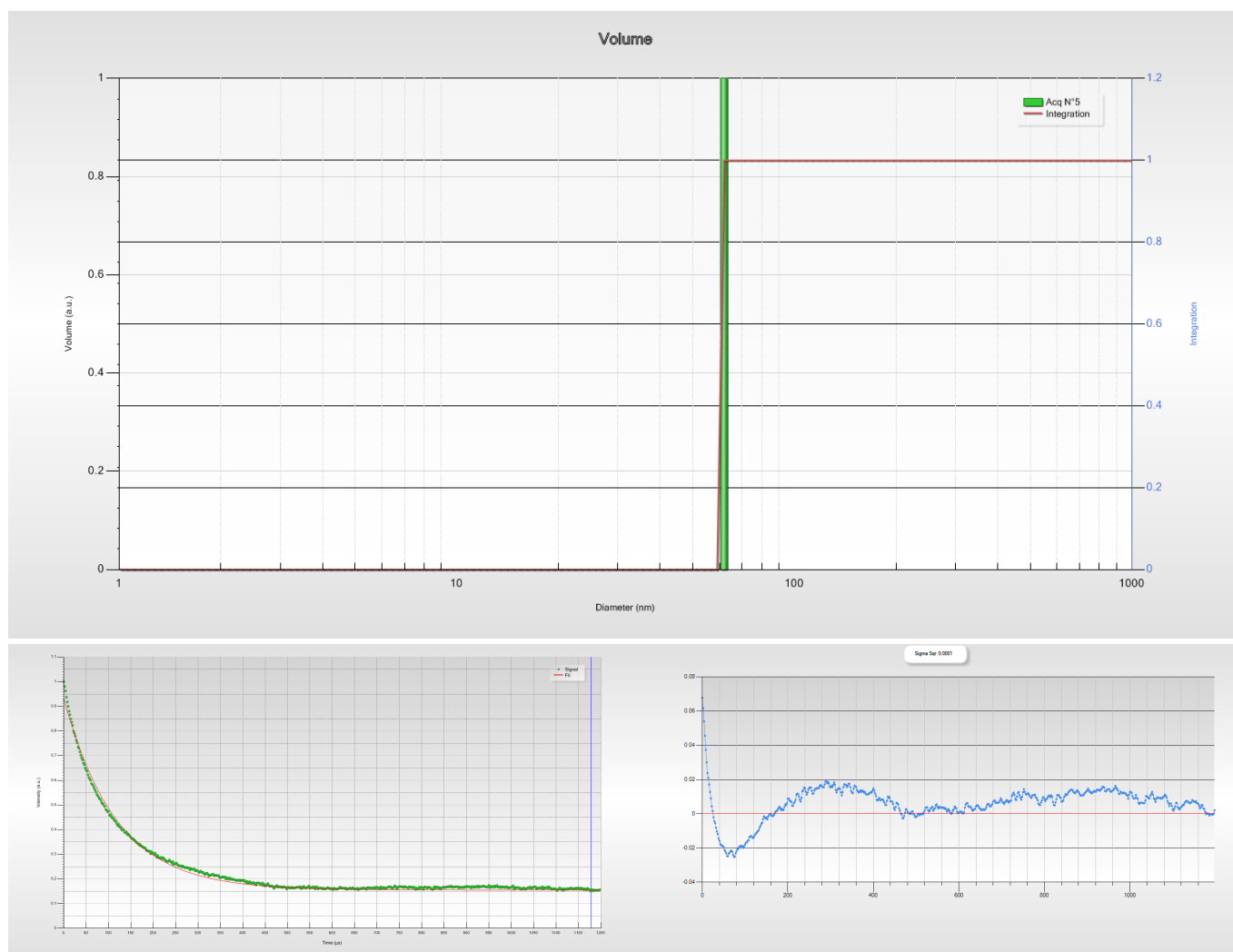
**Dn 90%: 61.83 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m²/s)
61.2	0.88	4253.96	80.47808E-013

### Dispersion datas

Size (nm)	Number
61.83	1



### Dispersion statistics

**Dv 10%: 61.83 nm**  
**Mean Volume: 61.83 nm**

**Dv 50%: 61.83 nm**

**Dv 90%: 61.83 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
61.2	0.88	4253.96	80.47808E-013

### Dispersion datas

Size (nm)	Volume
61.83	1

**Distribution statistics**

**Di 10%:** 40.78 nm  
**Mean Intensity:** 65.99 nm  
**PDI** : 0.4618

**Di 50%:** 61.83 nm

**Di 90%:** 93.73 nm

**Std Dev:** 33.98%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
53.14	0.81	4899.26	92.68613E-013

**Distribution statistics**

**Dn 10%:** 21.35 nm  
**Mean Number:** 34.4 nm  
**PDI** : 0.4618

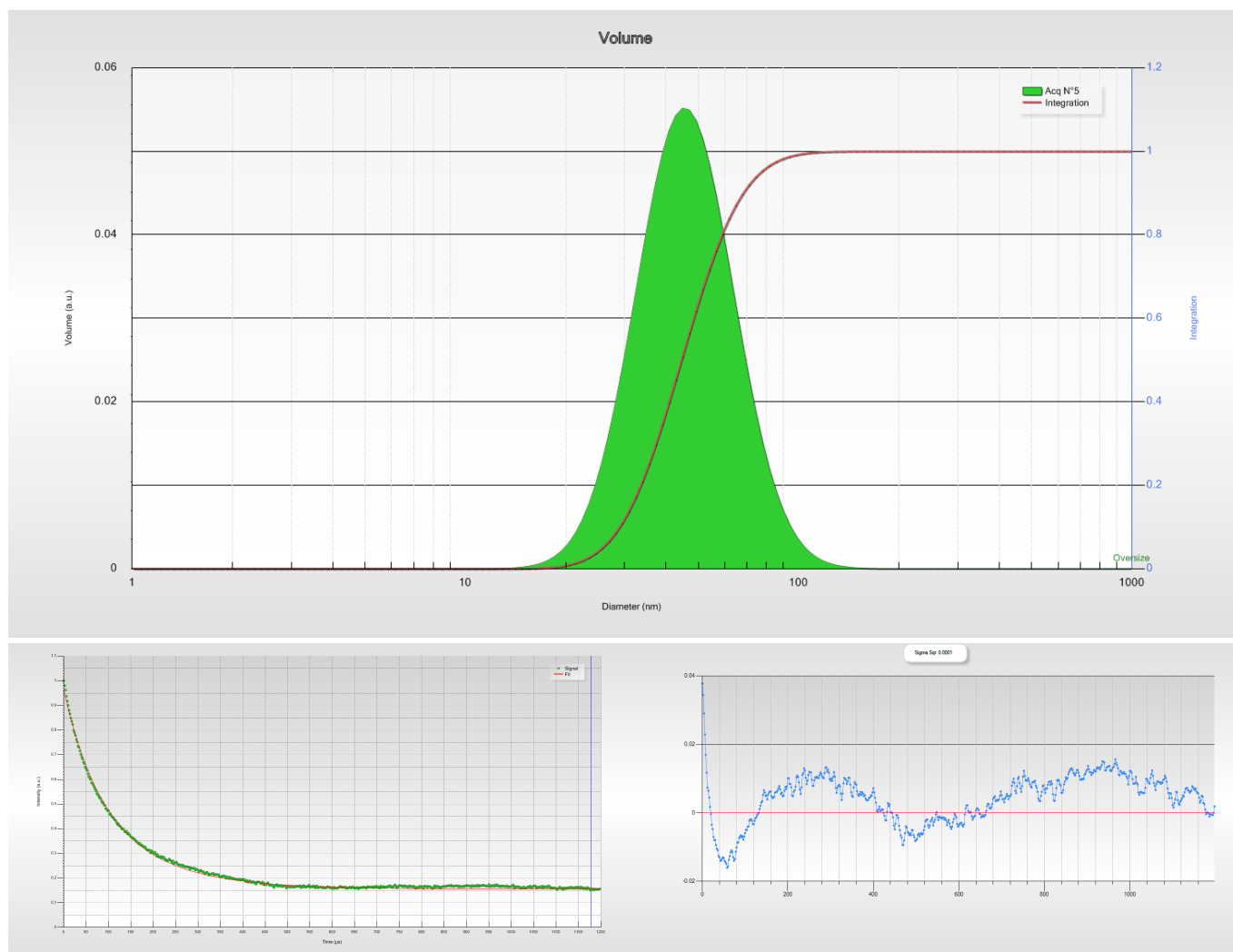
**Dn 50%:** 32.36 nm

**Dn 90%:** 49.06 nm

**Std Dev:** 33.98%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
53.14	0.81	4899.26	92.68613E-013

**Distribution statistics**

**Dv 10%:** 29.5 nm  
**Mean Volume:** 48.07 nm  
**PDI** : 0.4618

**Dv 50%:** 44.73 nm

**Dv 90%:** 71.02 nm

**Std Dev:** 33.98%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
53.14	0.81	4899.26	92.68613E-013