

## Sample

**Name** : GNP\_11.4.16\_1.24\_1k\_3  
**Mesured On** : 11.04.2016 19:10  
**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>	: 54.2 %	<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

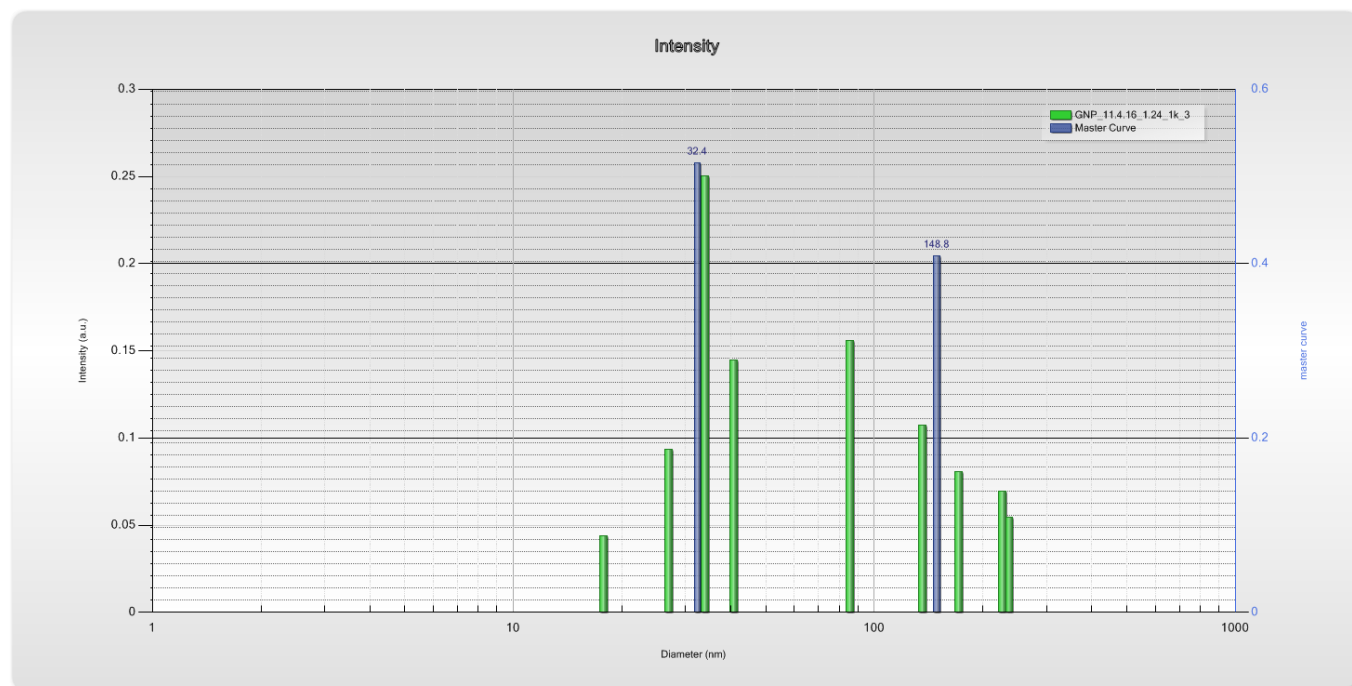
<b>Real part</b>	: 1.56	<b>Imaginary part</b>	: 0.01
------------------	--------	-----------------------	--------

### Algorithm

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

## Measurement

**Average count rate** : 2868 kcps **Duration** : 00:05:18  
**Number of rejected** : 0 **Number of modified** : 0



### Dispersion statistics

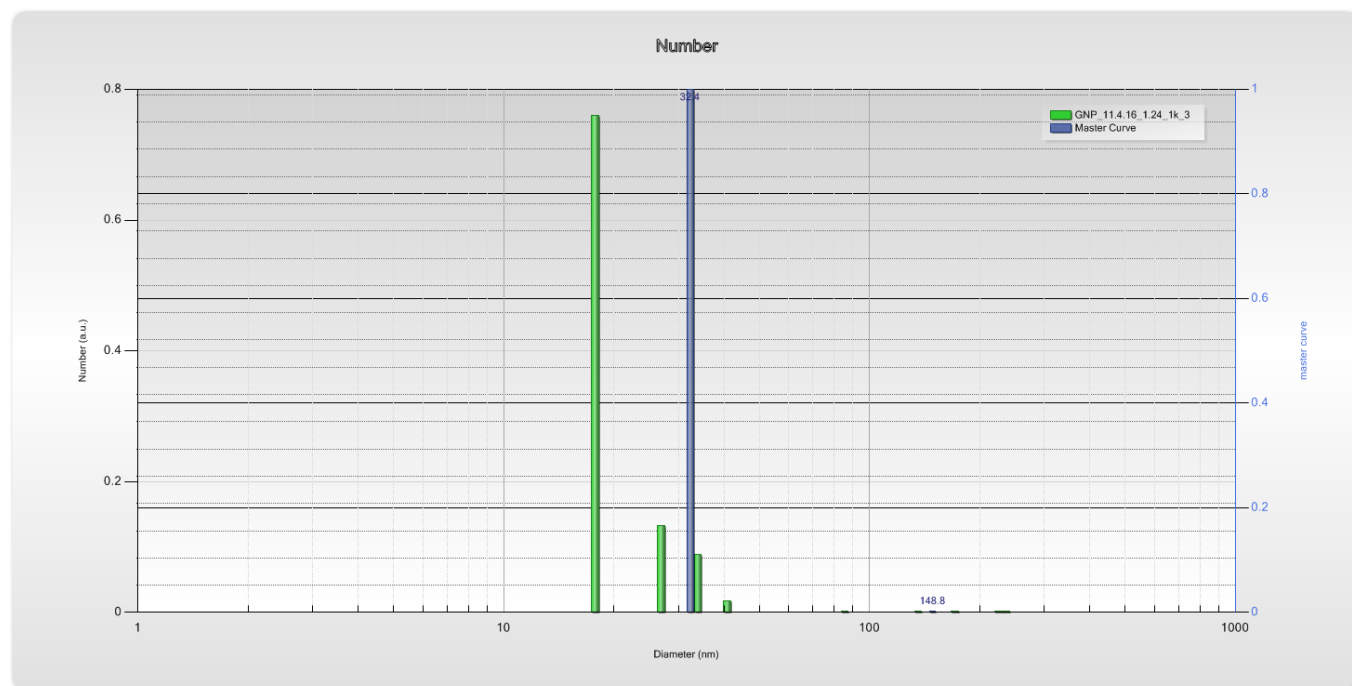
**Di 10%:** 26.9 nm

**Di 50%:** 40.78 nm

**Di 90%:** 225.64 nm

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity	Size (nm)	Intensity	Size (nm)	Intensity
17.74	0.04	40.78	0.14	170.97	0.08		
26.9	0.09	85.45	0.16	225.64	0.07		
33.89	0.25	135.68	0.11	236.32	0.05		



### Dispersion statistics

**Dn 10%:** 17.74 nm

**Dn 50%:** 17.74 nm

**Dn 90%:** 33.89 nm

### Dispersion datas

Size (nm)	Number	Size (nm)	Number	Size (nm)	Number	Size (nm)	Number
17.74	0.76	33.89	0.09				
26.9	0.13	40.78	0.02				



### Dispersion statistics

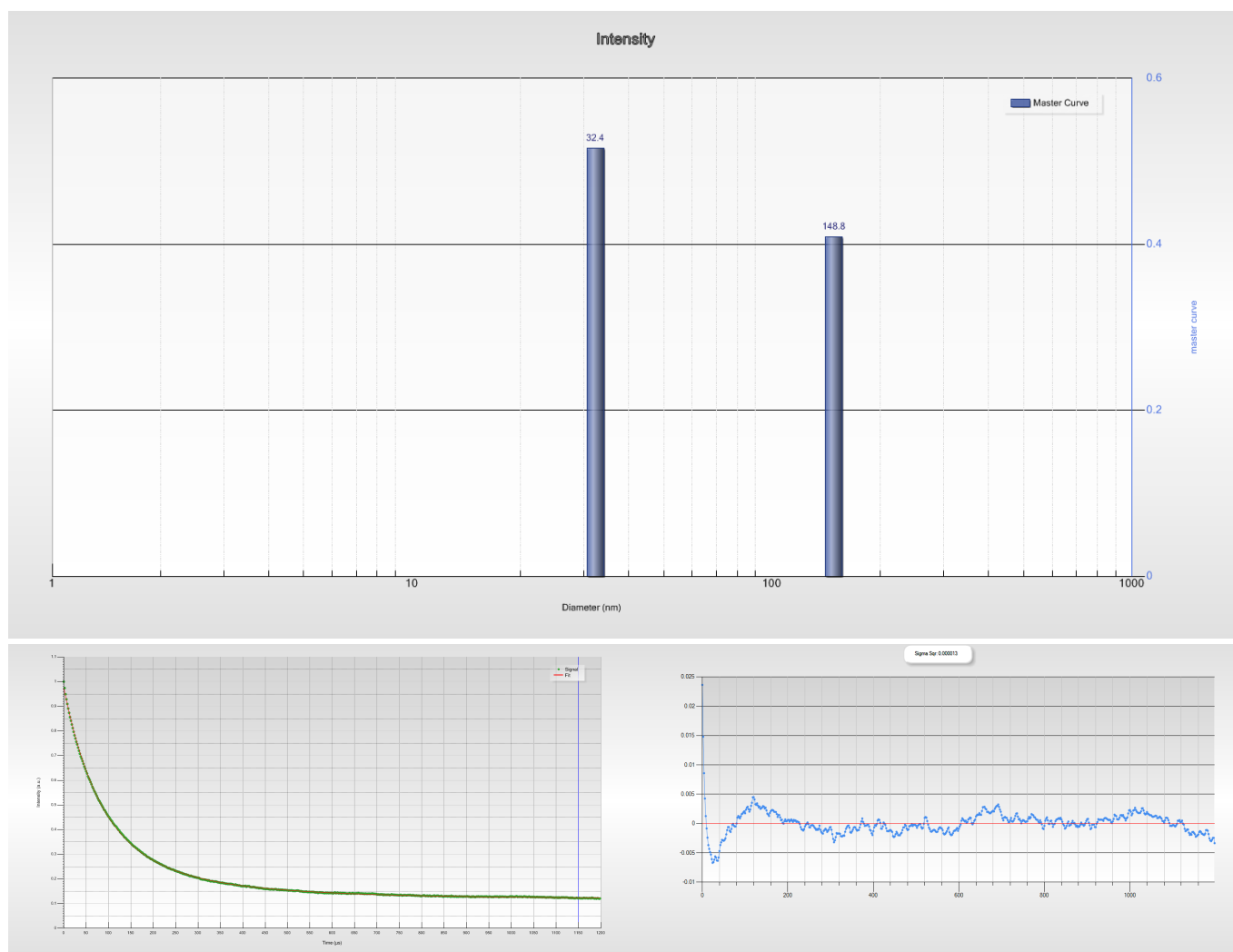
**Dv 10%:** 17.74 nm

**Dv 50%:** 26.9 nm

**Dv 90%:** 40.78 nm

### Dispersion datas

Size (nm)	Volume	Size (nm)	Volume	Size (nm)	Volume	Size (nm)	Volume
17.74	0.36	33.89	0.3	85.45	0.01		
26.9	0.22	40.78	0.1				



### Dispersion statistics

**Di 10%: 32.36 nm**

**Di 50%: 32.36 nm**

**Di 90%: 148.83 nm**

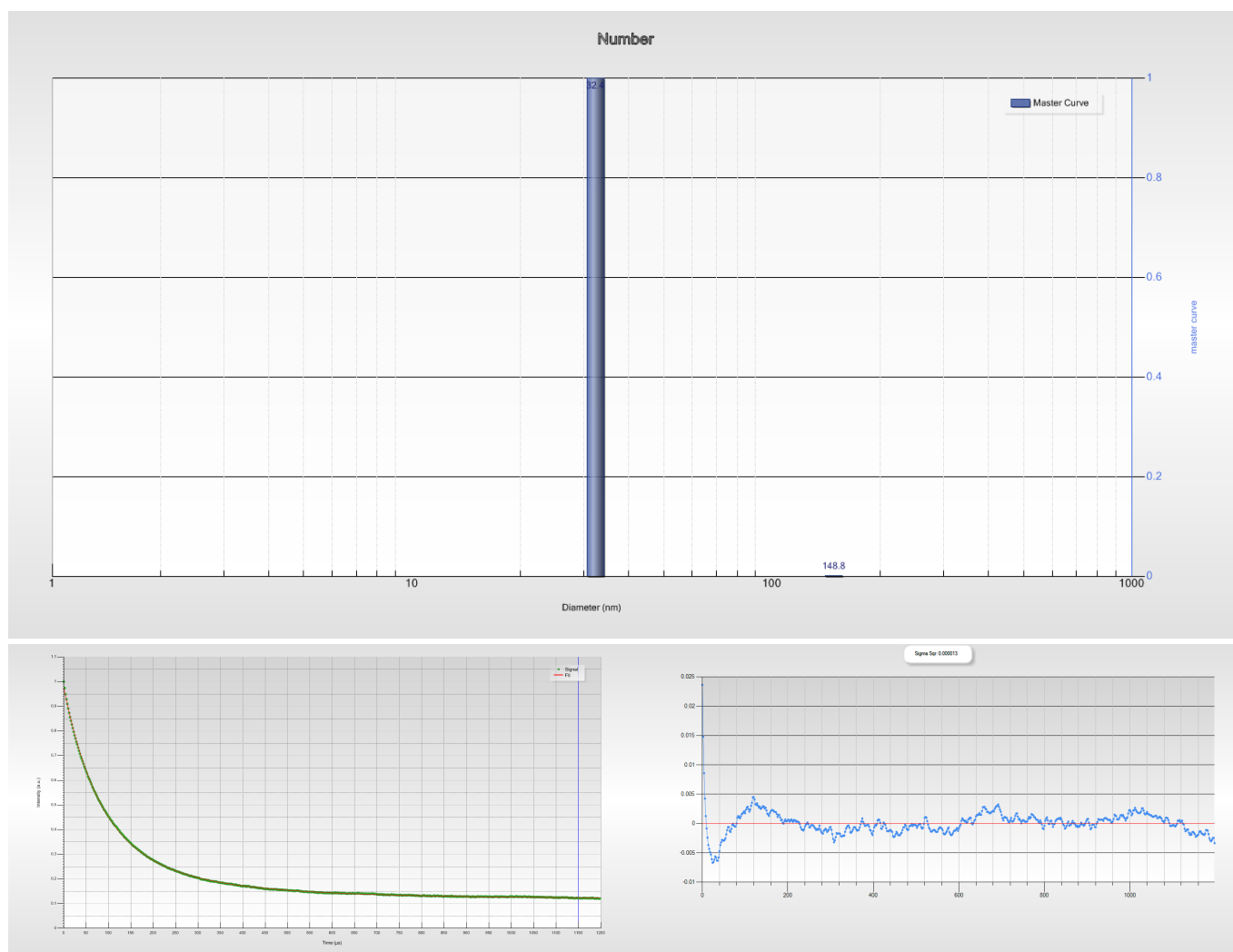
**Mean Intensity: 83.88 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
32.2	0.52	8067.14	15.26172E-012
151.74	0.41	1712.1	32.39012E-013

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity
32.36	0.56	148.83	0.44



### Dispersion statistics

**Dn 10%:** 32.36 nm  
**Mean Number:** 32.38 nm

**Dn 50%:** 32.36 nm

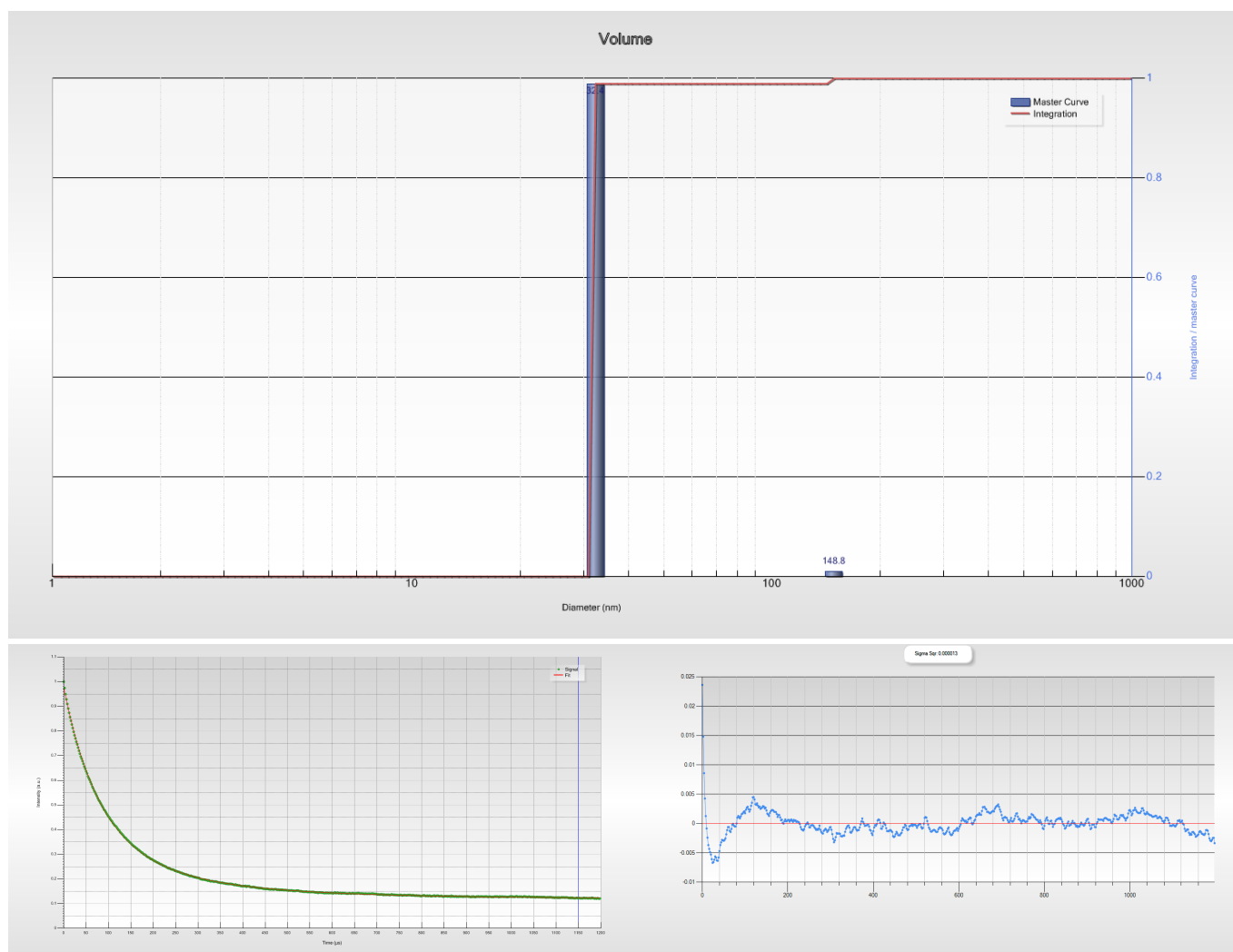
**Dn 90%:** 32.36 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
32.2	0.52	8067.14	15.26172E-012
151.74	0.41	1712.1	32.39012E-013

### Dispersion datas

Size (nm)	Number
32.36	1



### Dispersion statistics

**Dv 10%:** 32.36 nm  
**Mean Volume:** 33.58 nm

**Dv 50%:** 32.36 nm

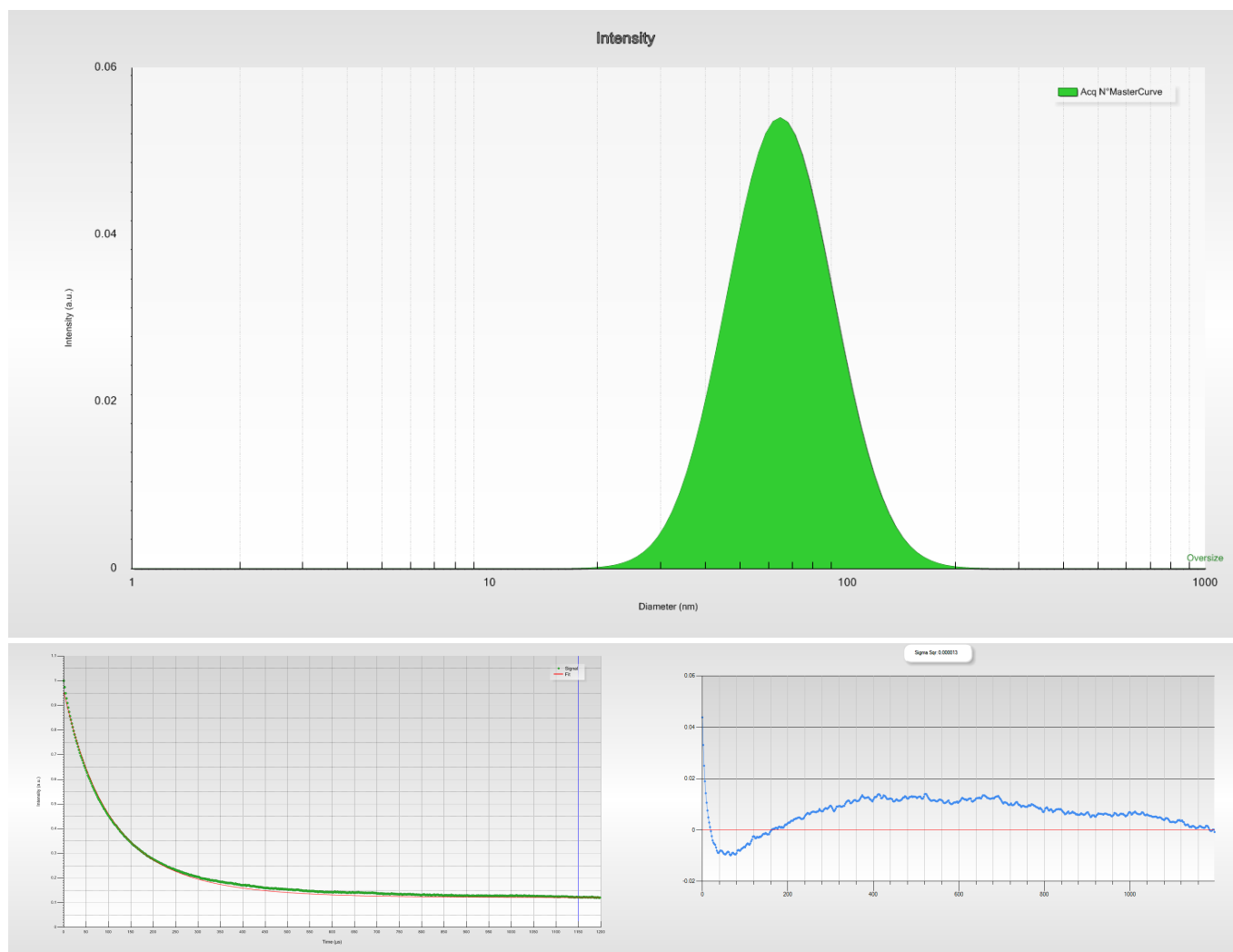
**Dv 90%:** 32.36 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
32.2	0.52	8067.14	15.26172E-012
151.74	0.41	1712.1	32.39012E-013

### Dispersion datas

Size (nm)	Volume	Size (nm)	Volume
32.36	0.99	148.83	0.01

**Distribution statistics**

**Di 10%:** 42.71 nm  
**Mean Intensity:** 68.54 nm  
**PDI** : 0.4946

**Di 50%:** 64.75 nm

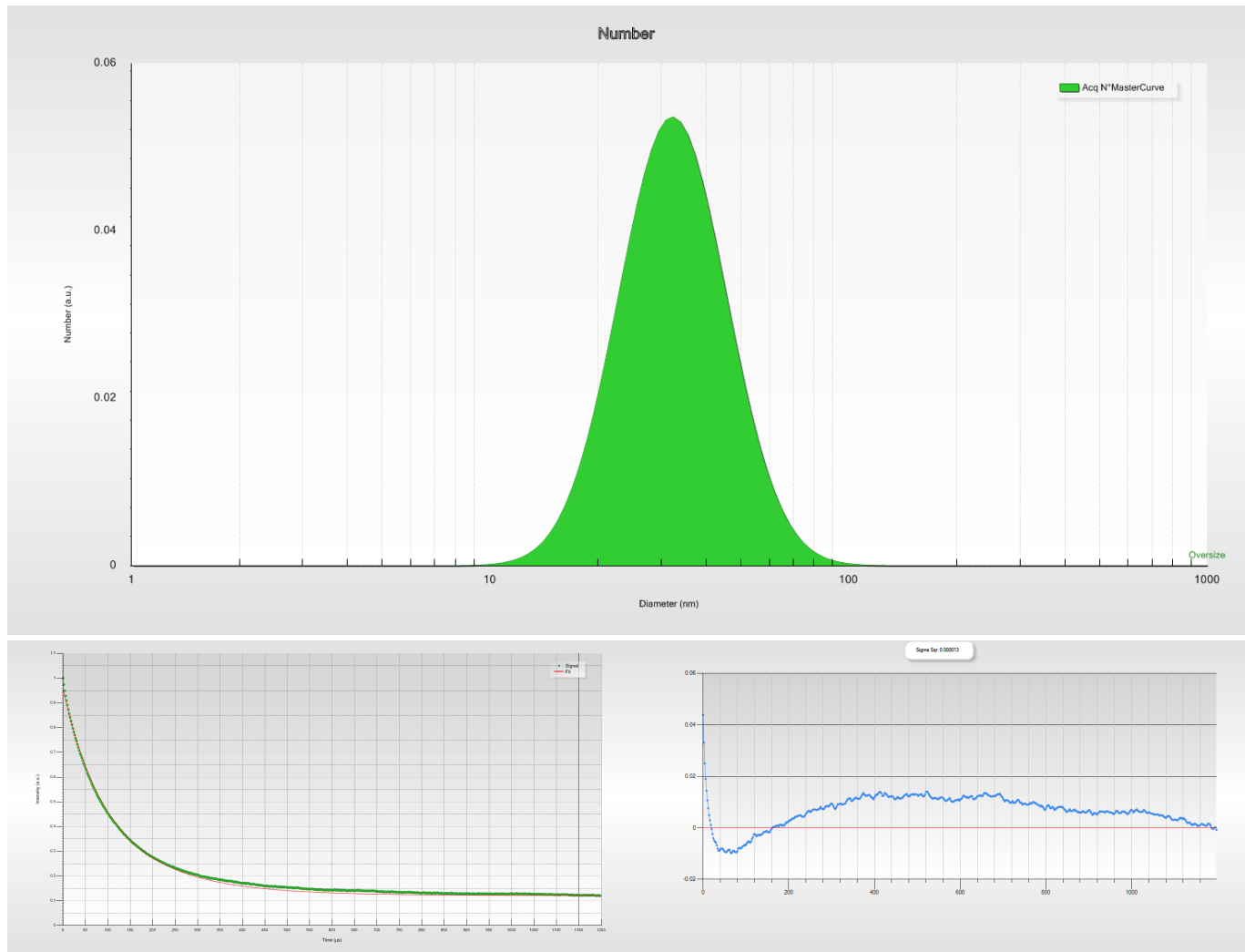
**Di 90%:** 98.17 nm

**Std Dev:** 35.16%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
54.27	0.84	4786.71	90.55672E-013





### Distribution statistics

**Dn 10%:** 20.38 nm  
**Mean Number:** 34.2 nm  
**PDI** : 0.4946

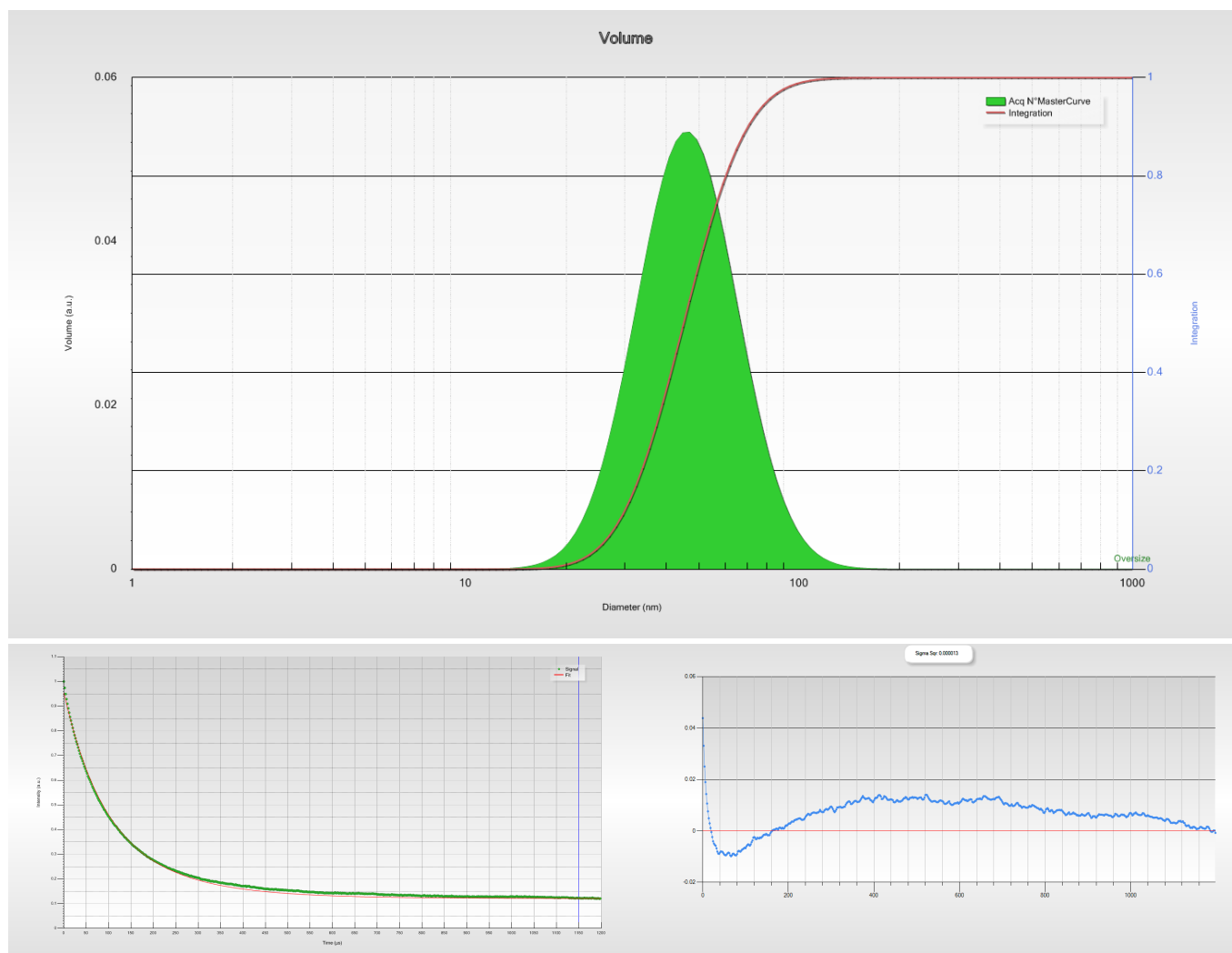
**Dn 50%:** 32.36 nm

**Dn 90%:** 49.06 nm

**Std Dev:** 35.16%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
54.27	0.84	4786.71	90.55672E-013



### Distribution statistics

**Dv 10%:** 29.5 nm  
**Mean Volume:** 48.89 nm  
**PDI** : 0.4946

**Dv 50%:** 46.85 nm

**Dv 90%:** 71.02 nm

**Std Dev:** 35.16%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
54.27	0.84	4786.71	90.55672E-013



### Dispersion statistics

**Di 10%:** 17.74 nm  
**Mean Intensity:** 70.5 nm

**Di 50%:** 85.45 nm

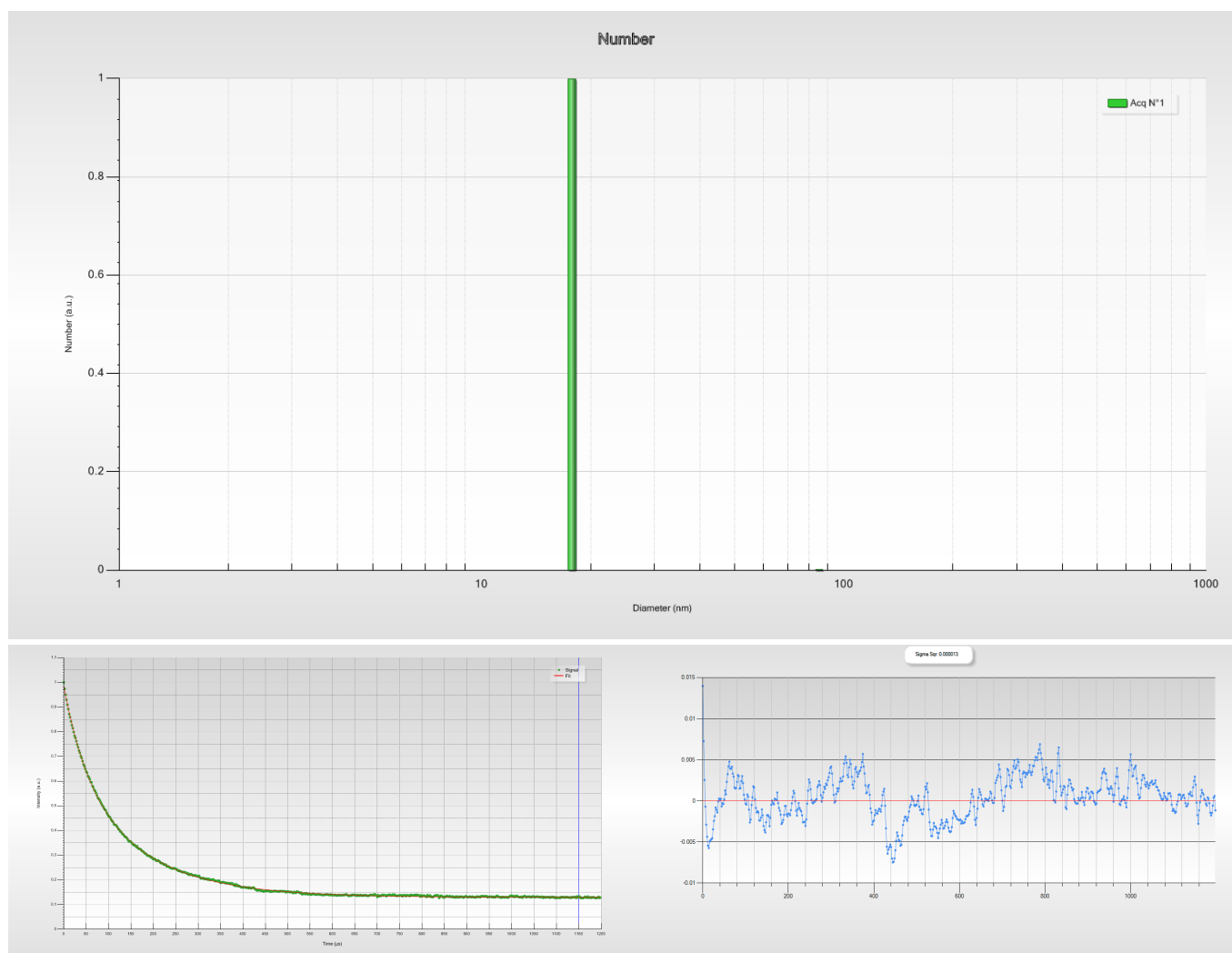
**Di 90%:** 85.45 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
17.53	0.2	14819.12	28.03537E-012
83.83	0.72	3098.82	58.62472E-013

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity
17.74	0.22	85.45	0.78



### Dispersion statistics

**Dn 10%: 17.74 nm**  
**Mean Number: 17.76 nm**

**Dn 50%: 17.74 nm**

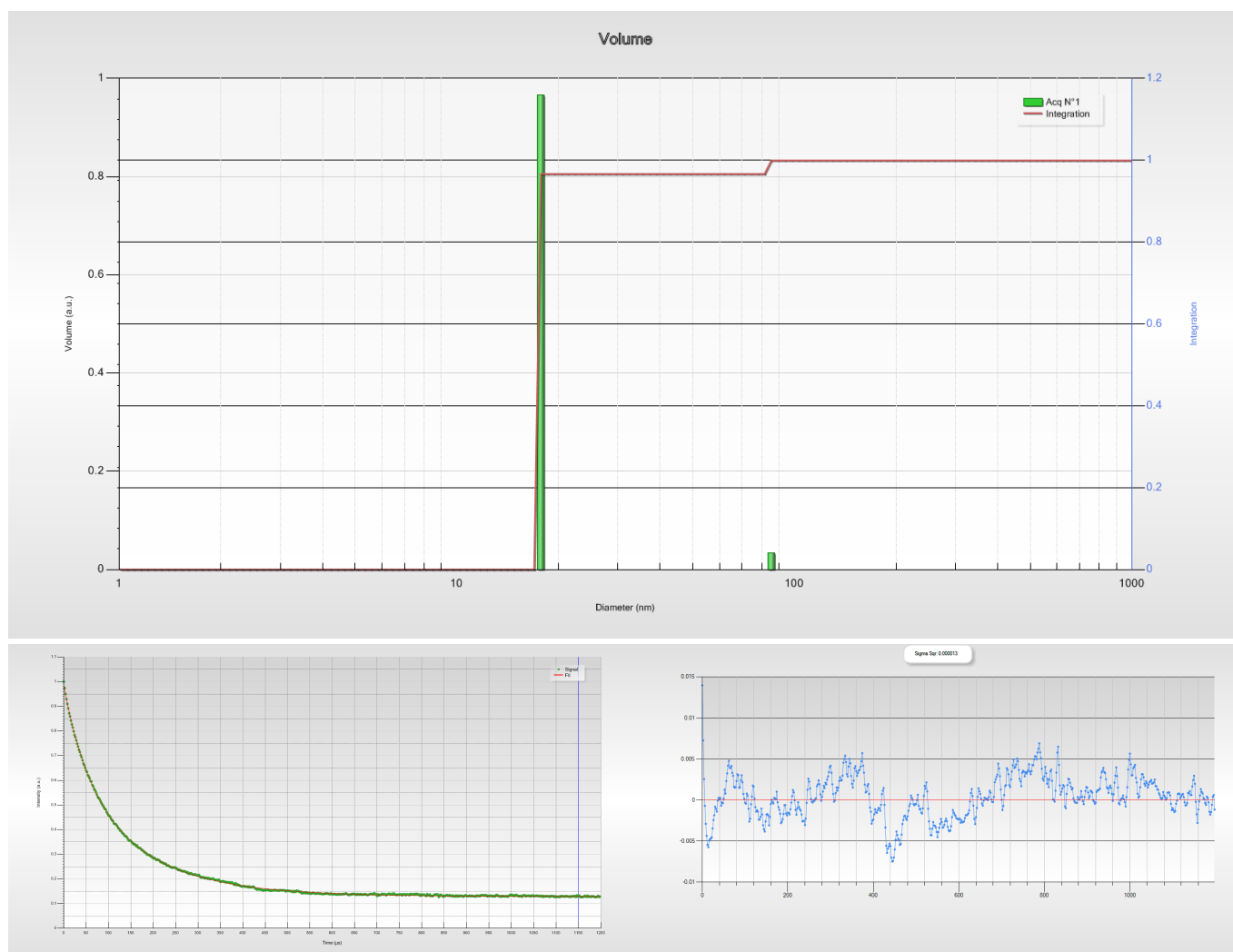
**Dn 90%: 17.74 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
17.53	0.2	14819.12	28.03537E-012
83.83	0.72	3098.82	58.62472E-013

### Dispersion datas

Size (nm)	Number
17.74	1



### Dispersion statistics

**Dv 10%: 17.74 nm**  
**Mean Volume: 19.98 nm**

**Dv 50%: 17.74 nm**

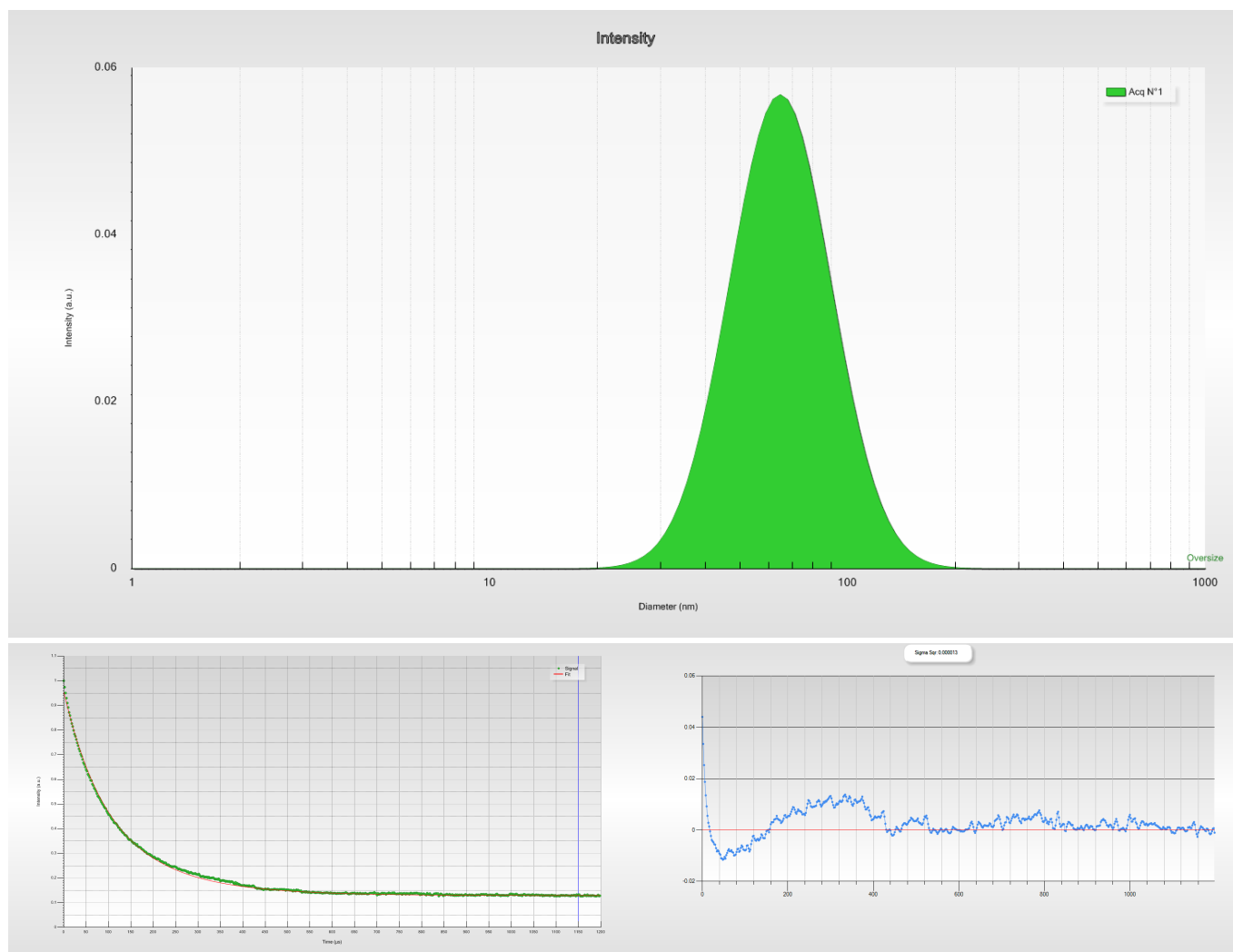
**Dv 90%: 17.74 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
17.53	0.2	14819.12	28.03537E-012
83.83	0.72	3098.82	58.62472E-013

### Dispersion datas

Size (nm)	Volume	Size (nm)	Volume
17.74	0.97	85.45	0.03



**Distribution statistics**

**Di 10%:** 42.71 nm  
**Mean Intensity:** 68.22 nm  
**PDI** : 0.44521

**Di 50%:** 64.75 nm

**Di 90%:** 98.17 nm

**Std Dev:** 33.36%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m²/s)</b>
55.23	0.83	4703.99	88.99195E-013



**Distribution statistics**

**Dn 10%:** 22.36 nm  
**Mean Number:** 36.38 nm  
**PDI** : 0.44521

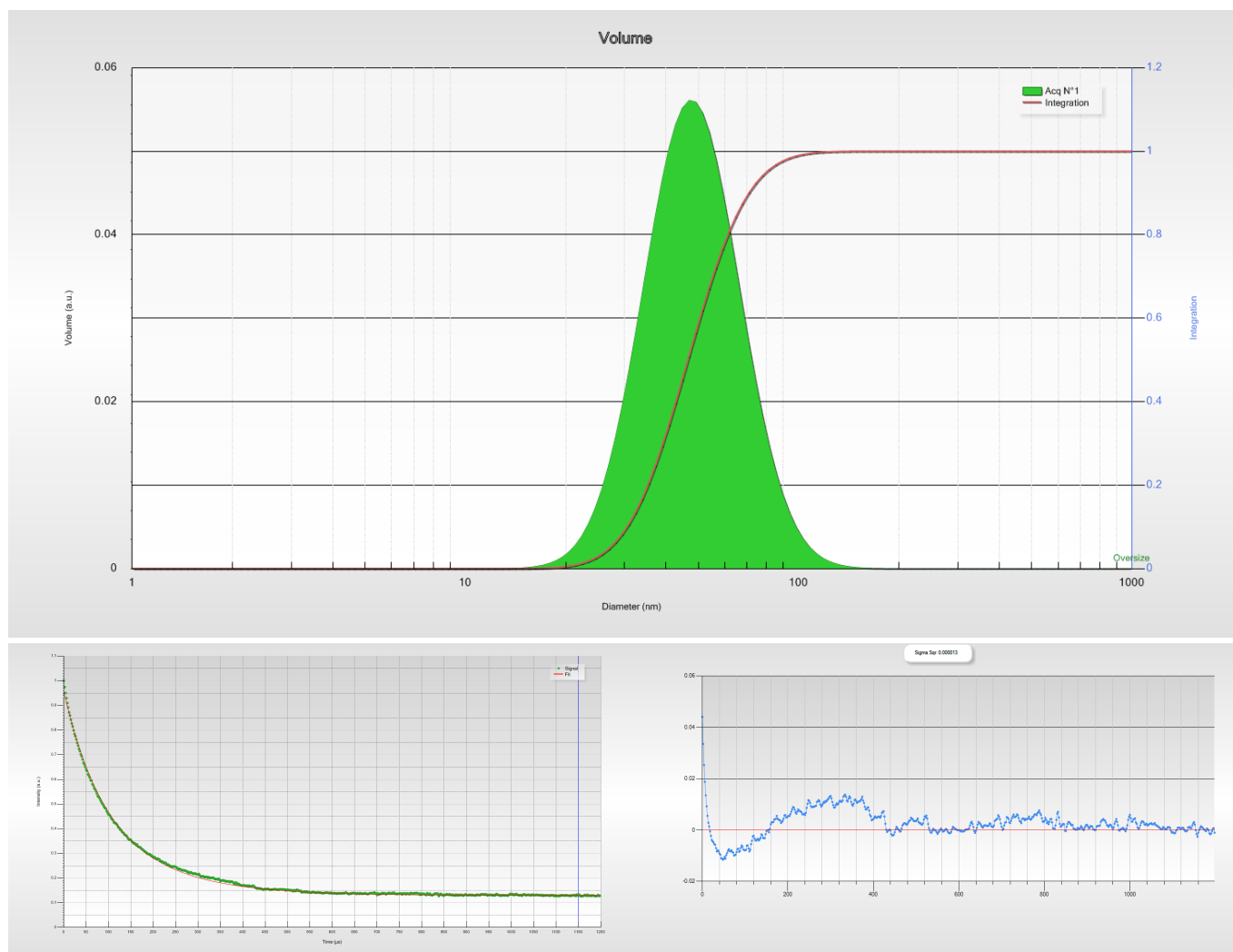
**Dn 50%:** 33.89 nm

**Dn 90%:** 51.39 nm

**Std Dev:** 33.36%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
55.23	0.83	4703.99	88.99195E-013



### Distribution statistics

**Dv 10%:** 30.9 nm  
**Mean Volume:** 50.27 nm  
**PDI** : 0.44521

**Dv 50%:** 46.85 nm

**Dv 90%:** 71.02 nm

**Std Dev:** 33.36%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
55.23	0.83	4703.99	88.99195E-013





### Dispersion statistics

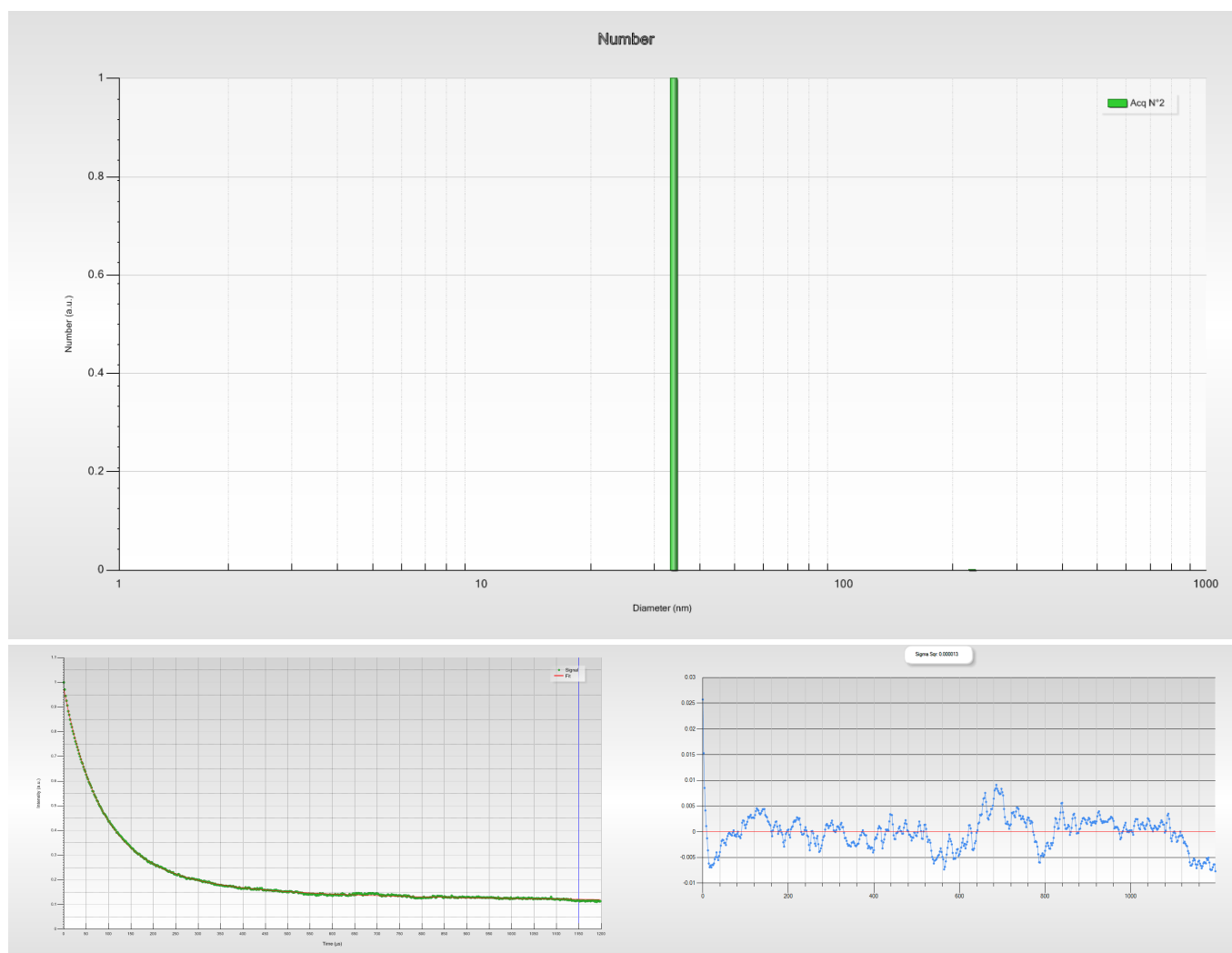
**Di 10%:** 33.89 nm      **Di 50%:** 33.89 nm      **Di 90%:** 225.64 nm  
**Mean Intensity:** 100.31 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m²/s)
34.06	0.61	7627.55	14.43008E-012
230.91	0.32	1125.06	21.28438E-013

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity
33.89	0.65	225.64	0.35



### Dispersion statistics

**Dn 10%:** 33.89 nm  
**Mean Number:** 33.9 nm

**Dn 50%:** 33.89 nm

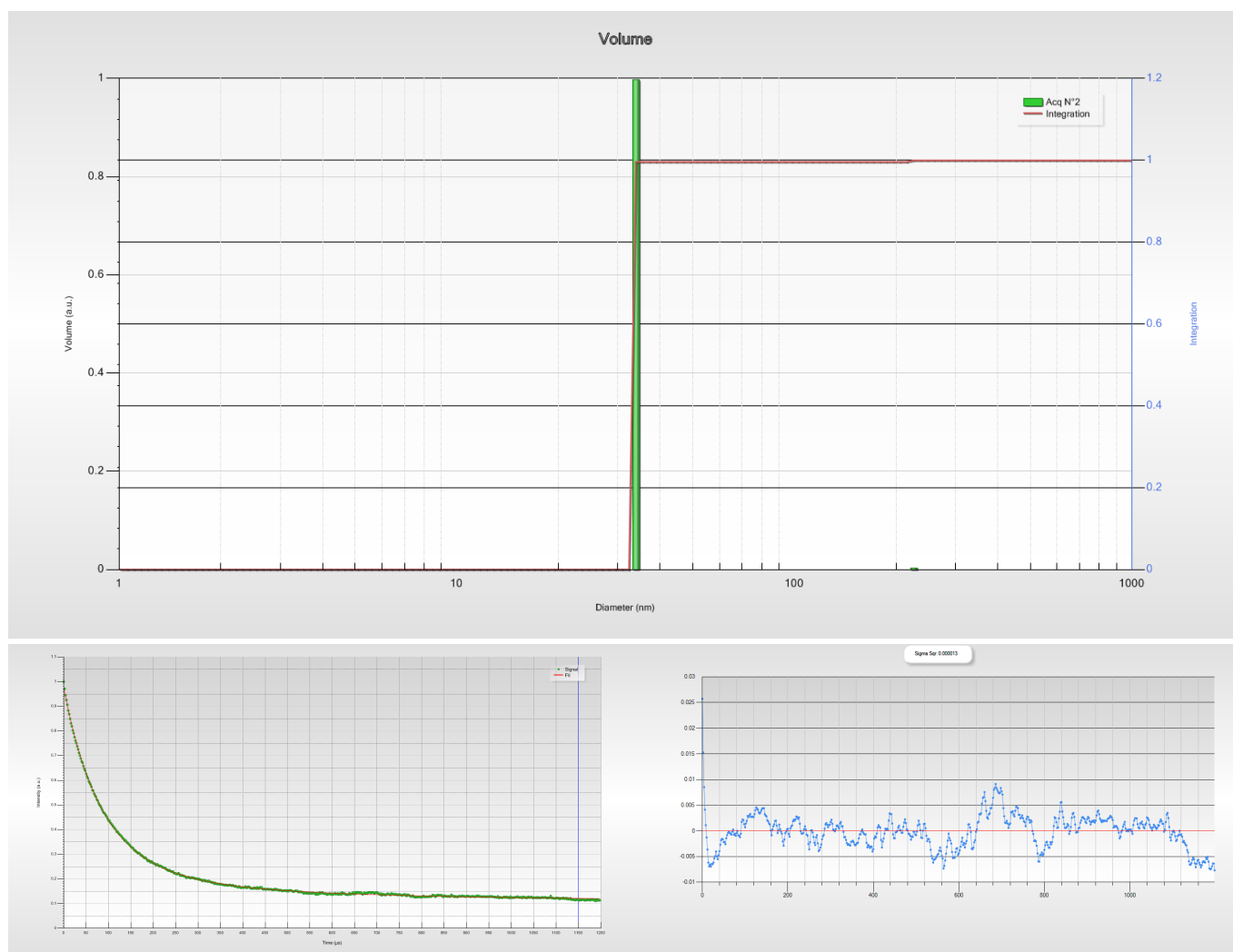
**Dn 90%:** 33.89 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.06	0.61	7627.55	14.43008E-012
230.91	0.32	1125.06	21.28438E-013

### Dispersion datas

Size (nm)	Number
33.89	1



### Dispersion statistics

**Dv 10%: 33.89 nm**  
**Mean Volume: 34.58 nm**

**Dv 50%: 33.89 nm**

**Dv 90%: 33.89 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
34.06	0.61	7627.55	14.43008E-012
230.91	0.32	1125.06	21.28438E-013

### Dispersion datas

Size (nm)	Volume
33.89	1

**Distribution statistics****Di 10%:** 40.78 nm**Di 50%:** 64.75 nm**Di 90%:** 102.81 nm**Mean Intensity:** 68.53 nm**PDI** : 0.52727**Std Dev:** 36.31%**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m²/s)</b>
53.49	0.83	4856.97	91.88609E-013

**Distribution statistics**

**Dn 10%:** 19.46 nm  
**Mean Number:** 32.75 nm  
**PDI** : 0.52727

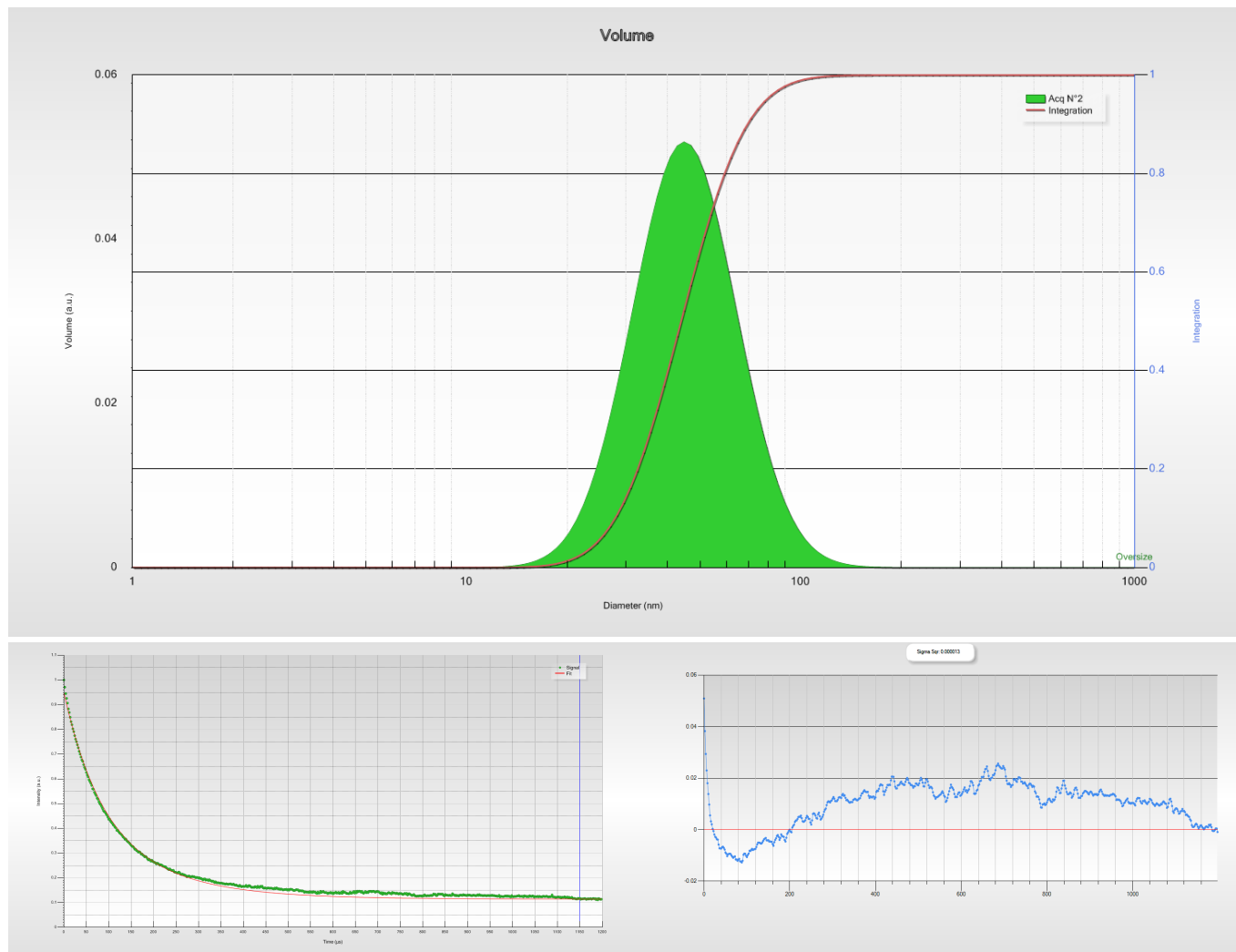
**Dn 50%:** 30.9 nm

**Dn 90%:** 49.06 nm

**Std Dev:** 36.31%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
53.49	0.83	4856.97	91.88609E-013



### Distribution statistics

**Dv 10%:** 28.17 nm  
**Mean Volume:** 47.85 nm  
**PDI** : 0.52727

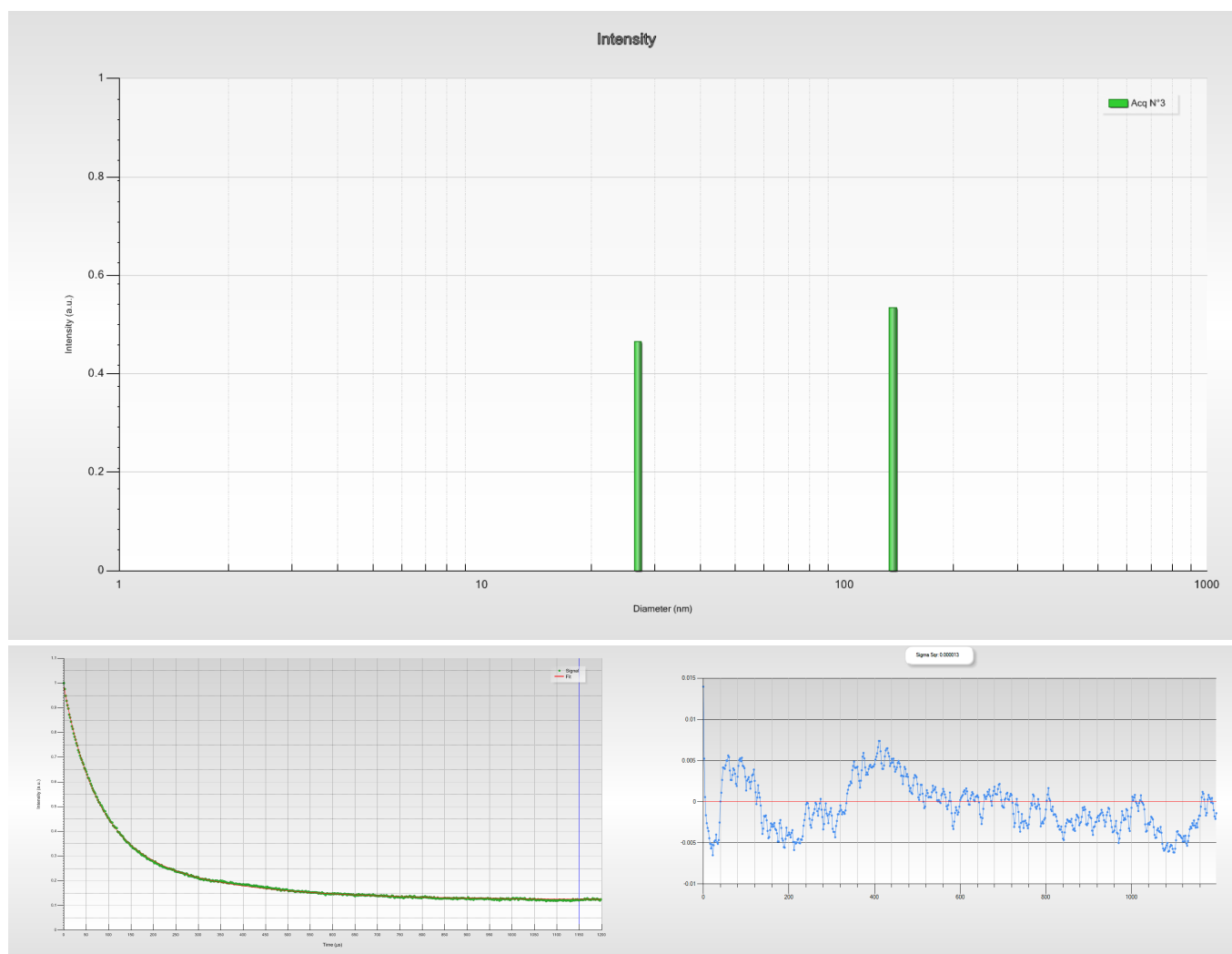
**Dv 50%:** 44.73 nm

**Dv 90%:** 71.02 nm

**Std Dev:** 36.31%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
53.49	0.83	4856.97	91.88609E-013



### Dispersion statistics

**Di 10%: 26.9 nm**

**Di 50%: 135.68 nm**

**Di 90%: 135.68 nm**

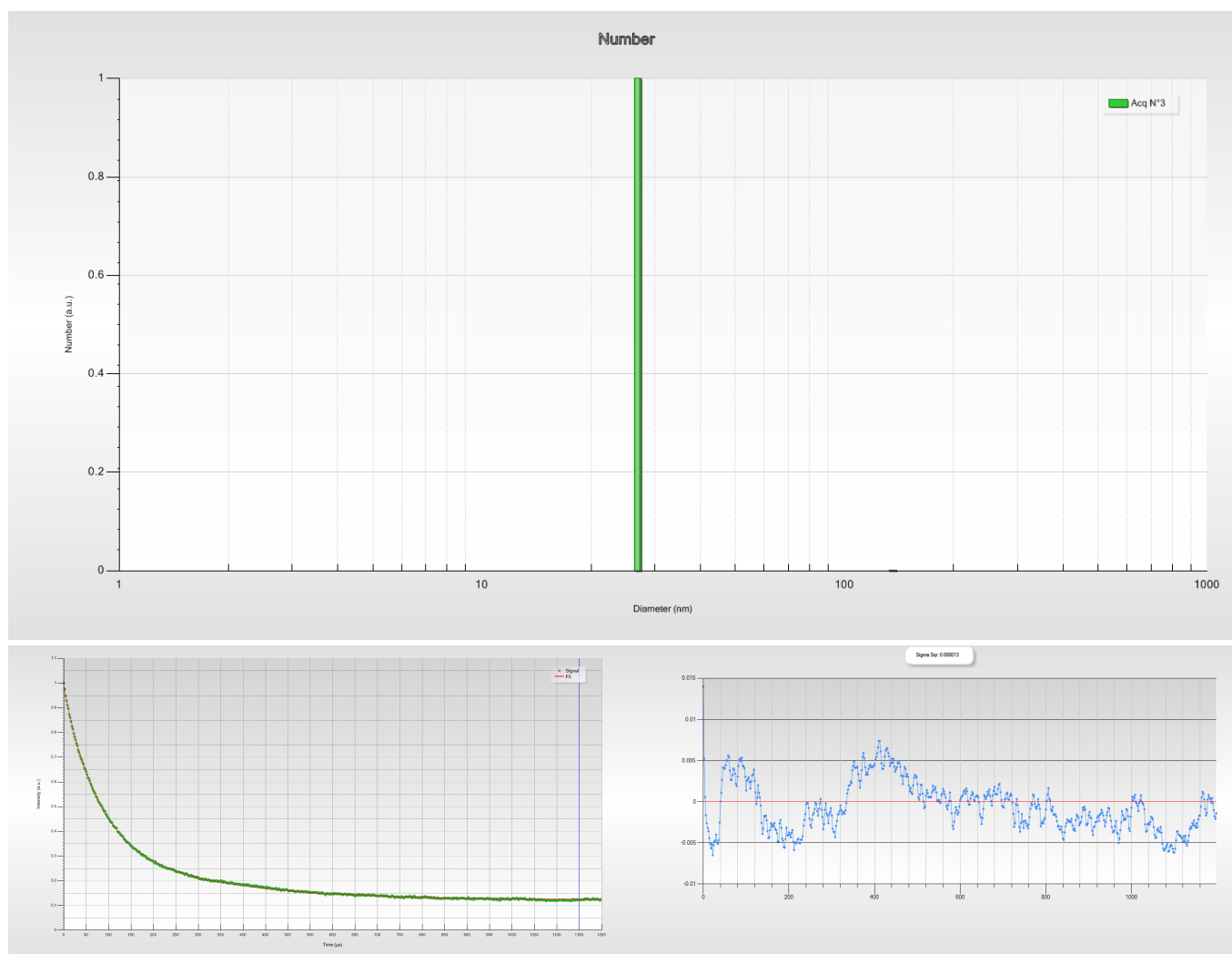
**Mean Intensity: 85.11 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
26.43	0.43	9827.95	18.59289E-012
134.51	0.5	1931.38	36.53849E-013

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity
26.9	0.46	135.68	0.54



### Dispersion statistics

**Dn 10%: 26.9 nm**  
**Mean Number: 26.91 nm**

**Dn 50%: 26.9 nm**

**Dn 90%: 26.9 nm**

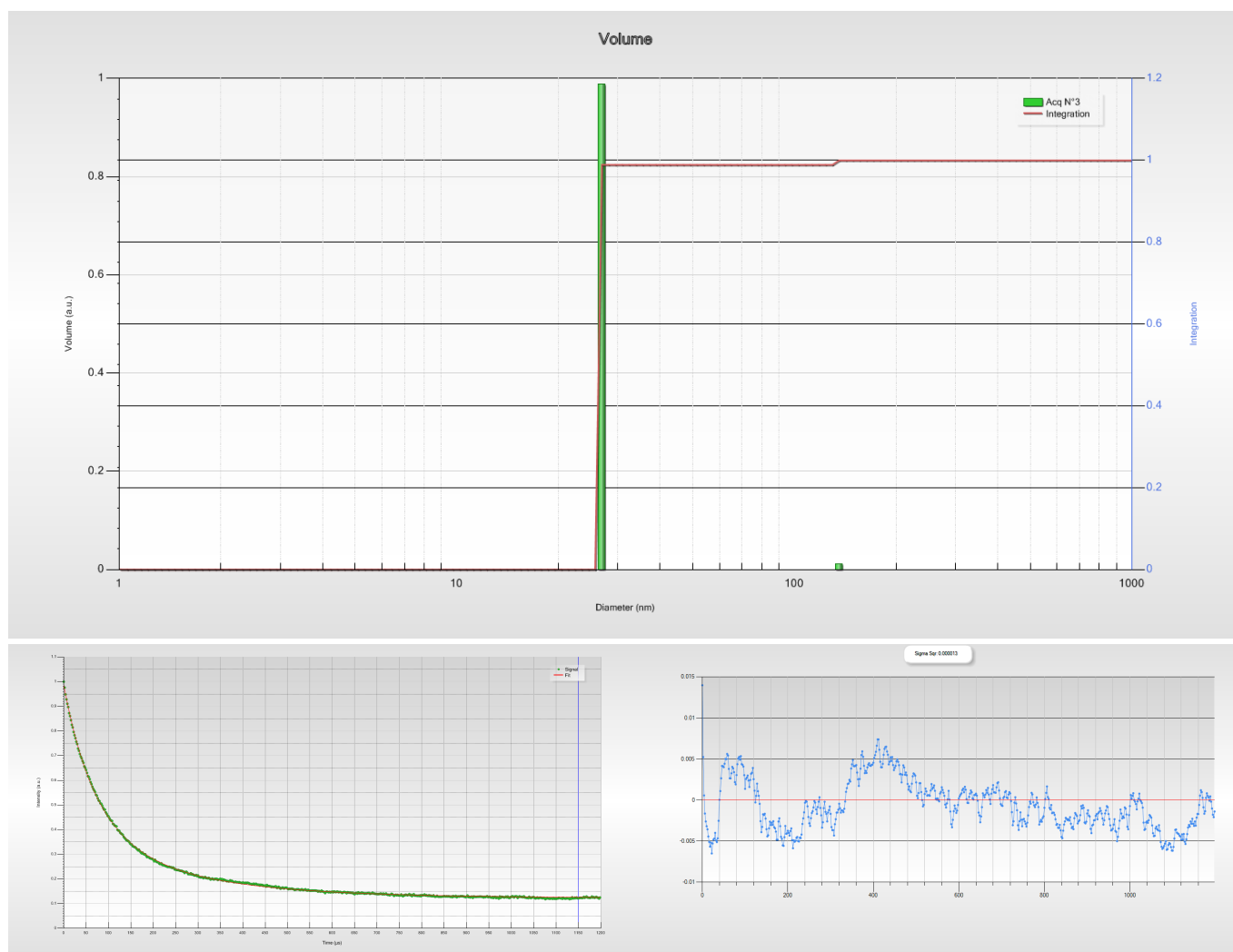
### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
26.43	0.43	9827.95	18.59289E-012
134.51	0.5	1931.38	36.53849E-013

### Dispersion datas

Size (nm)	Number
26.9	1





### Dispersion statistics

**Dv 10%: 26.9 nm**  
**Mean Volume: 28.09 nm**

**Dv 50%: 26.9 nm**

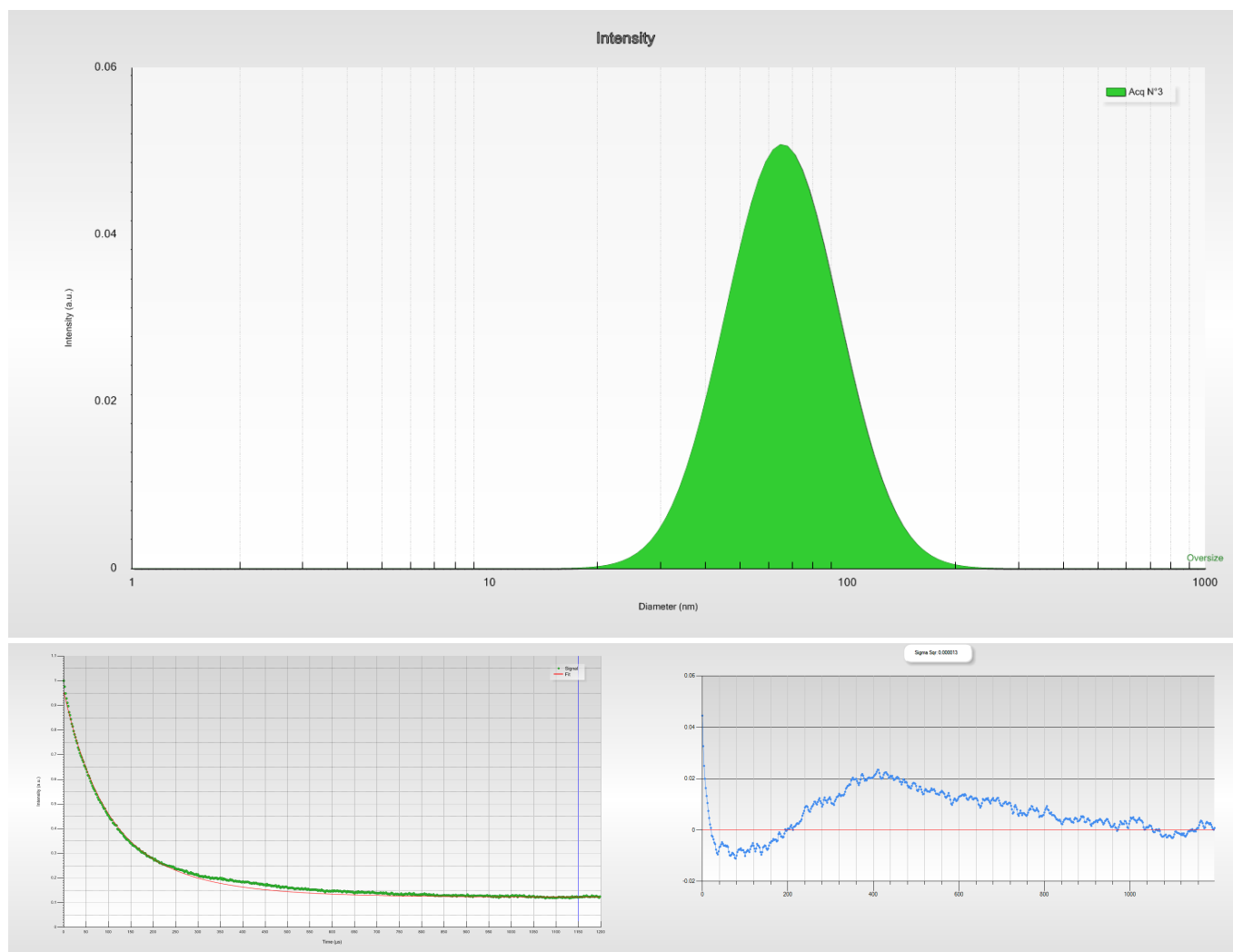
**Dv 90%: 26.9 nm**

### Detected size(s)

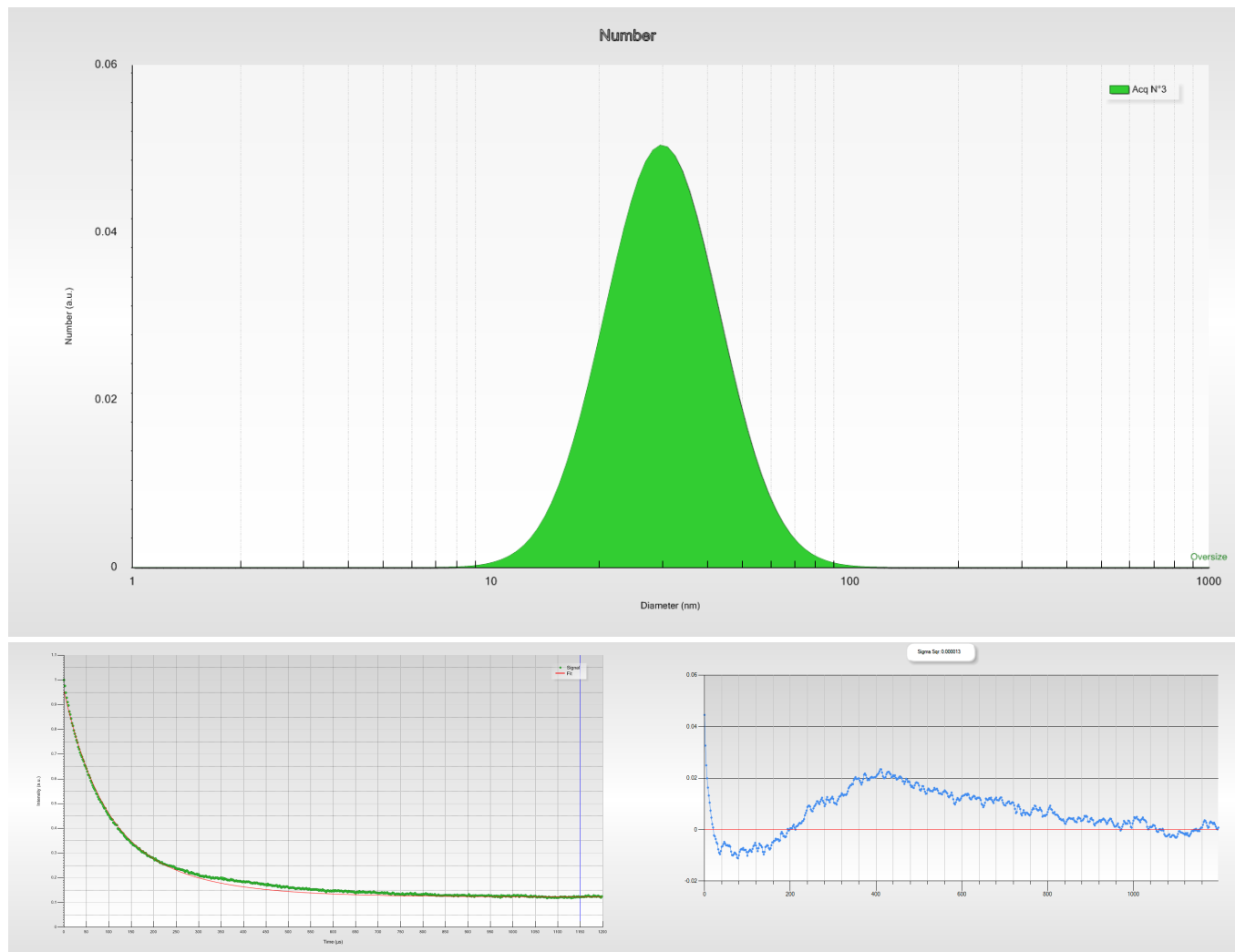
Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
26.43	0.43	9827.95	18.59289E-012
134.51	0.5	1931.38	36.53849E-013

### Dispersion datas

Size (nm)	Volume	Size (nm)	Volume
26.9	0.99	135.68	0.01

**Distribution statistics****Di 10%:** 40.78 nm**Di 50%:** 64.75 nm**Di 90%:** 102.81 nm**Mean Intensity:** 70.02 nm**PDI** : 0.56307**Std Dev:** 37.52%**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
53.8	0.83	4829.09	91.35849E-013

**Distribution statistics**

**Dn 10%:** 18.58 nm  
**Mean Number:** 31.92 nm  
**PDI** : 0.56307

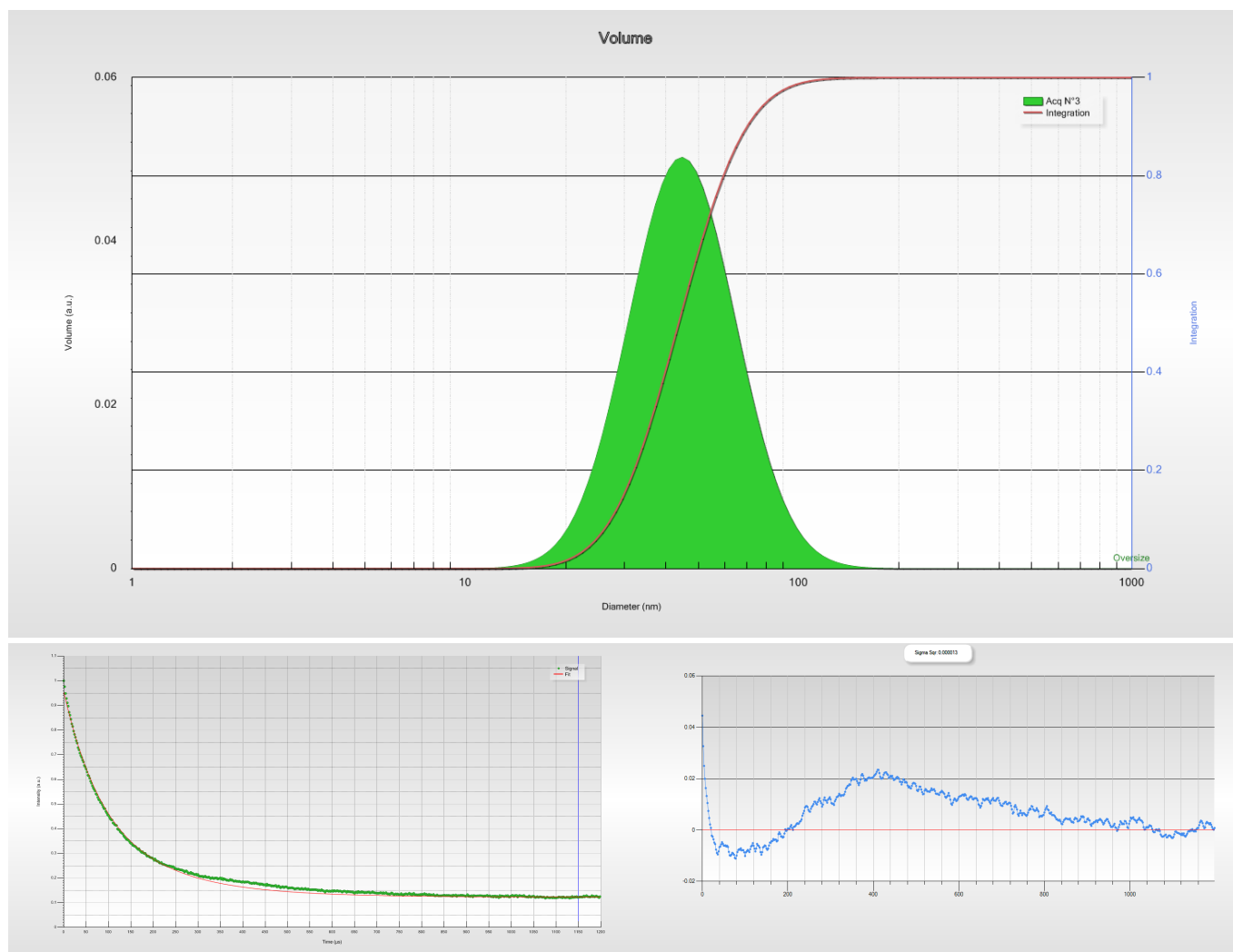
**Dn 50%:** 29.5 nm

**Dn 90%:** 46.85 nm

**Std Dev:** 37.52%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
53.8	0.83	4829.09	91.35849E-013



### Distribution statistics

**Dv 10%:** 28.17 nm  
**Mean Volume:** 47.78 nm  
**PDI** : 0.56307

**Dv 50%:** 44.73 nm

**Dv 90%:** 71.02 nm

**Std Dev:** 37.52%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
53.8	0.83	4829.09	91.35849E-013



### Dispersion statistics

**Di 10%:** 33.89 nm

**Di 50%:** 33.89 nm

**Di 90%:** 170.97 nm

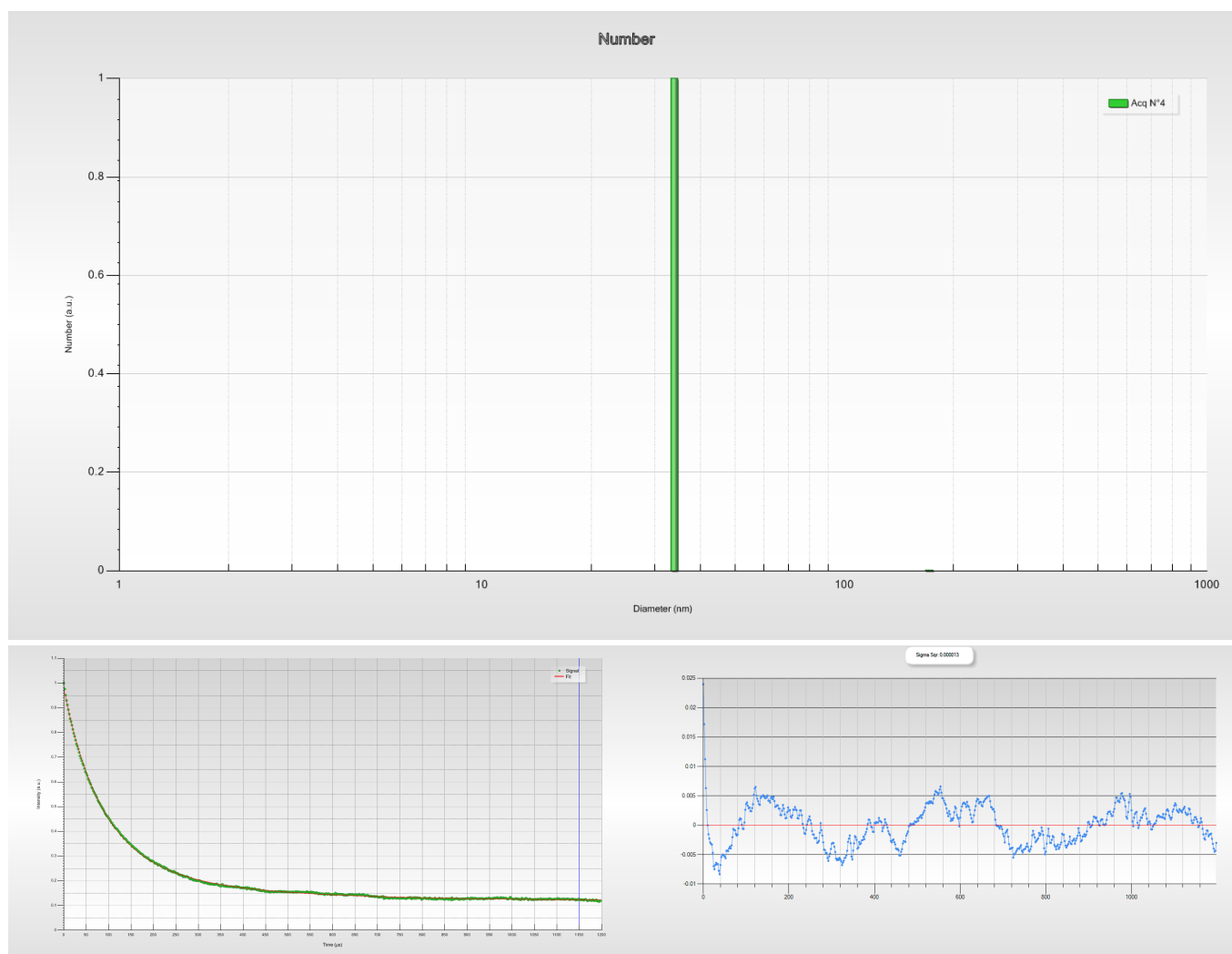
**Mean Intensity:** 89.17 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
33.55	0.55	7742.14	14.64687E-012
174.13	0.37	1491.94	28.22507E-013

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity
33.89	0.6	170.97	0.4



### Dispersion statistics

**Dn 10%:** 33.89 nm  
**Mean Number:** 33.9 nm

**Dn 50%:** 33.89 nm

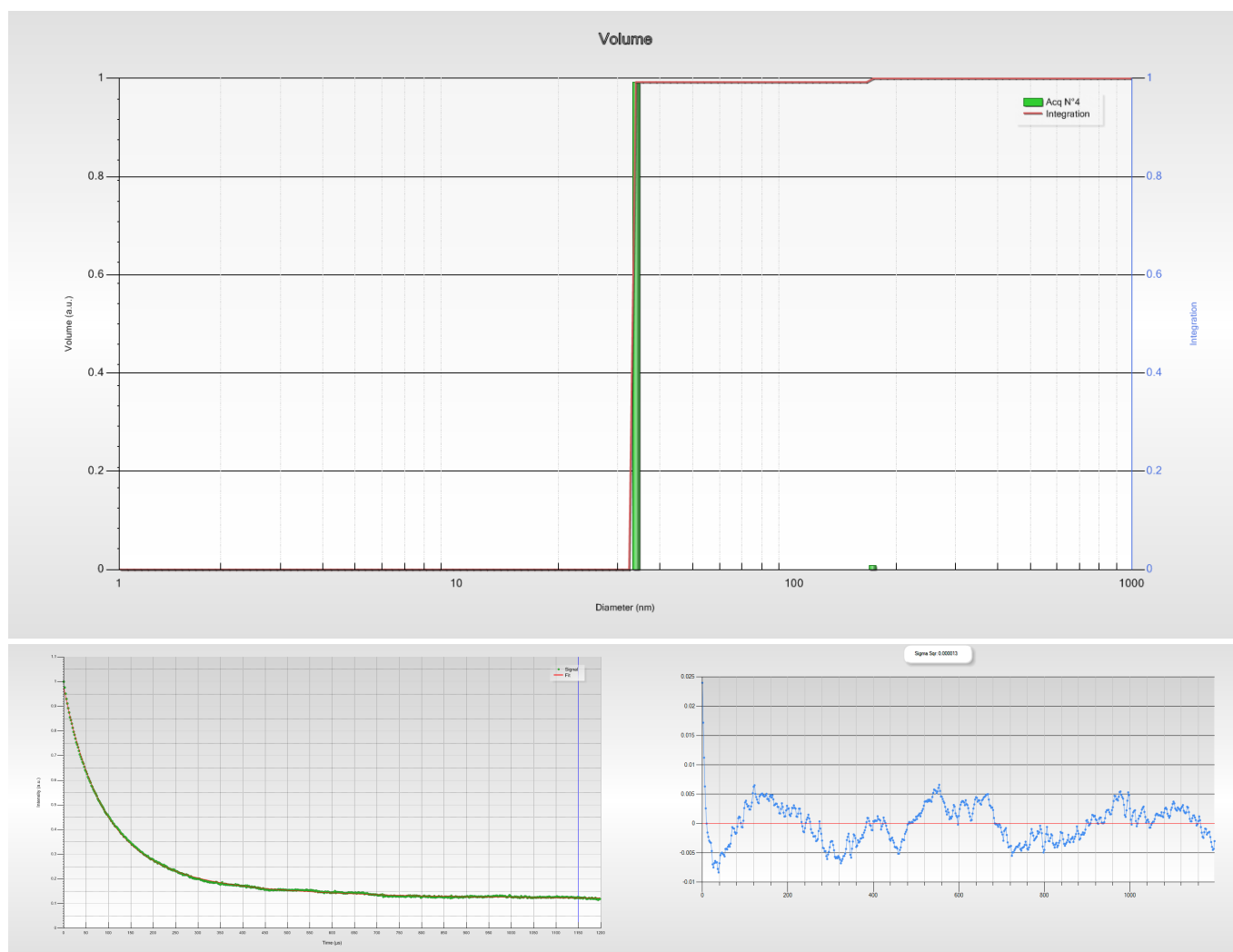
**Dn 90%:** 33.89 nm

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
33.55	0.55	7742.14	14.64687E-012
174.13	0.37	1491.94	28.22507E-013

### Dispersion datas

Size (nm)	Number
33.89	1



### Dispersion statistics

**Dv 10%: 33.89 nm**  
**Mean Volume: 34.92 nm**

**Dv 50%: 33.89 nm**

**Dv 90%: 33.89 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
33.55	0.55	7742.14	14.64687E-012
174.13	0.37	1491.94	28.22507E-013

### Dispersion datas

Size (nm)	Volume	Size (nm)	Volume
33.89	0.99	170.97	0.01

**Distribution statistics****Di 10%:** 42.71 nm**Di 50%:** 64.75 nm**Di 90%:** 102.81 nm**Mean Intensity:** 69.32 nm**PDI** : 0.50146**Std Dev:** 35.41%**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
54.73	0.84	4746.95	89.80456E-013





### Distribution statistics

**Dn 10%:** 20.38 nm  
**Mean Number:** 34.28 nm  
**PDI** : 0.50146

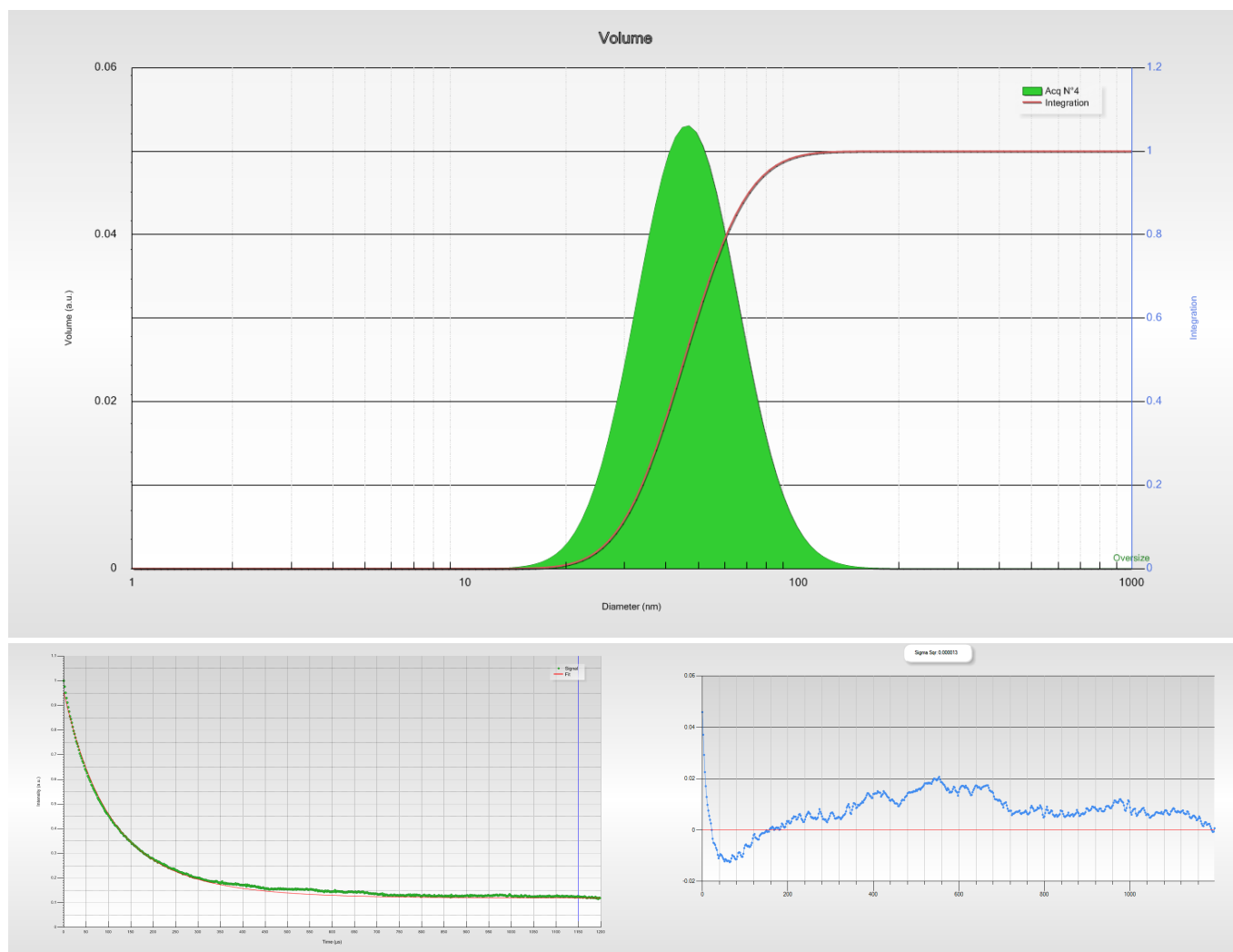
**Dn 50%:** 32.36 nm

**Dn 90%:** 51.39 nm

**Std Dev:** 35.41%

### Detected size(s)

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
54.73	0.84	4746.95	89.80456E-013

**Distribution statistics**

**Dv 10%:** 29.5 nm  
**Mean Volume:** 49.24 nm  
**PDI** : 0.50146

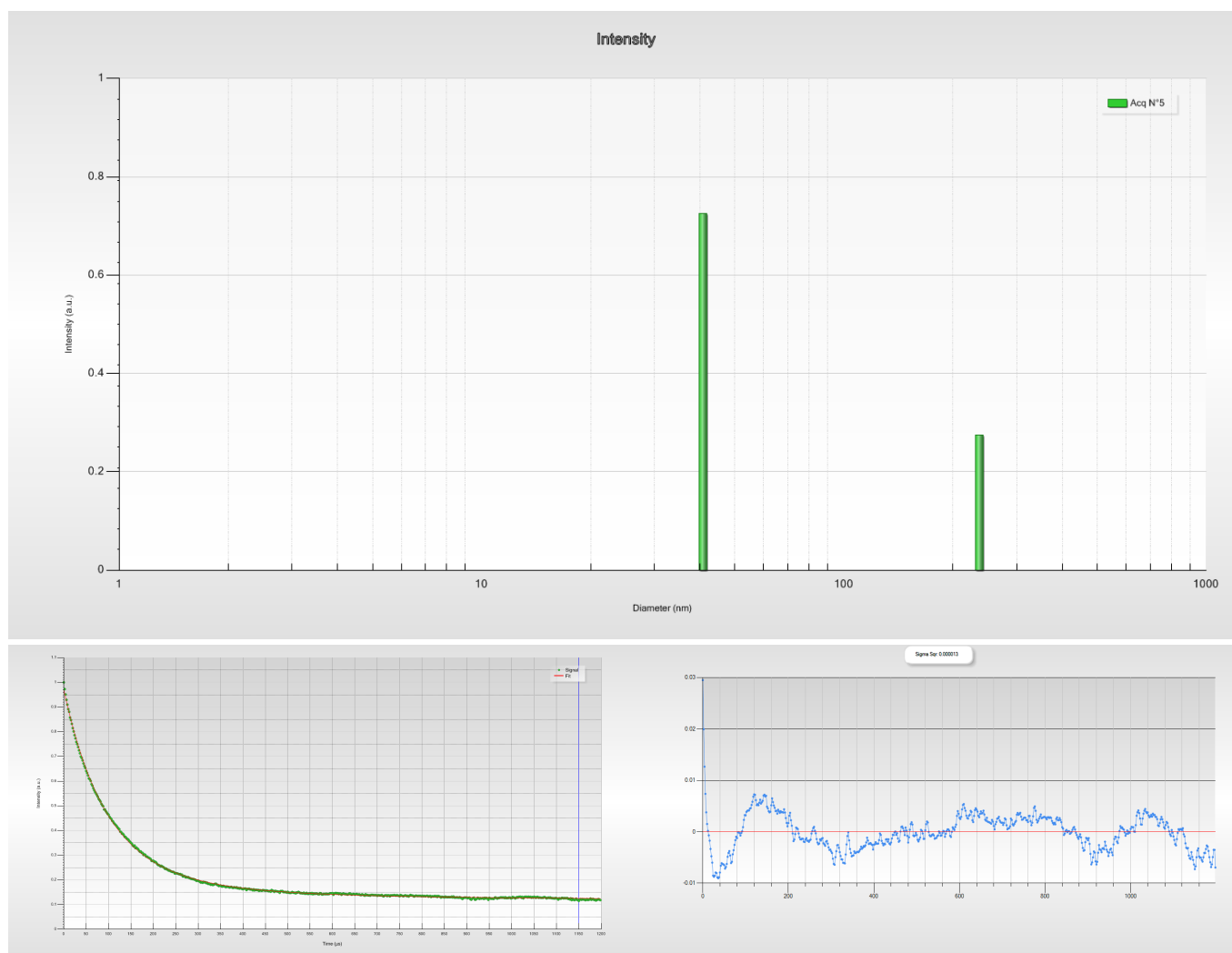
**Dv 50%:** 46.85 nm

**Dv 90%:** 71.02 nm

**Std Dev:** 35.41%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
54.73	0.84	4746.95	89.80456E-013



### Dispersion statistics

**Di 10%: 40.78 nm**

**Di 50%: 40.78 nm**

**Di 90%: 236.32 nm**

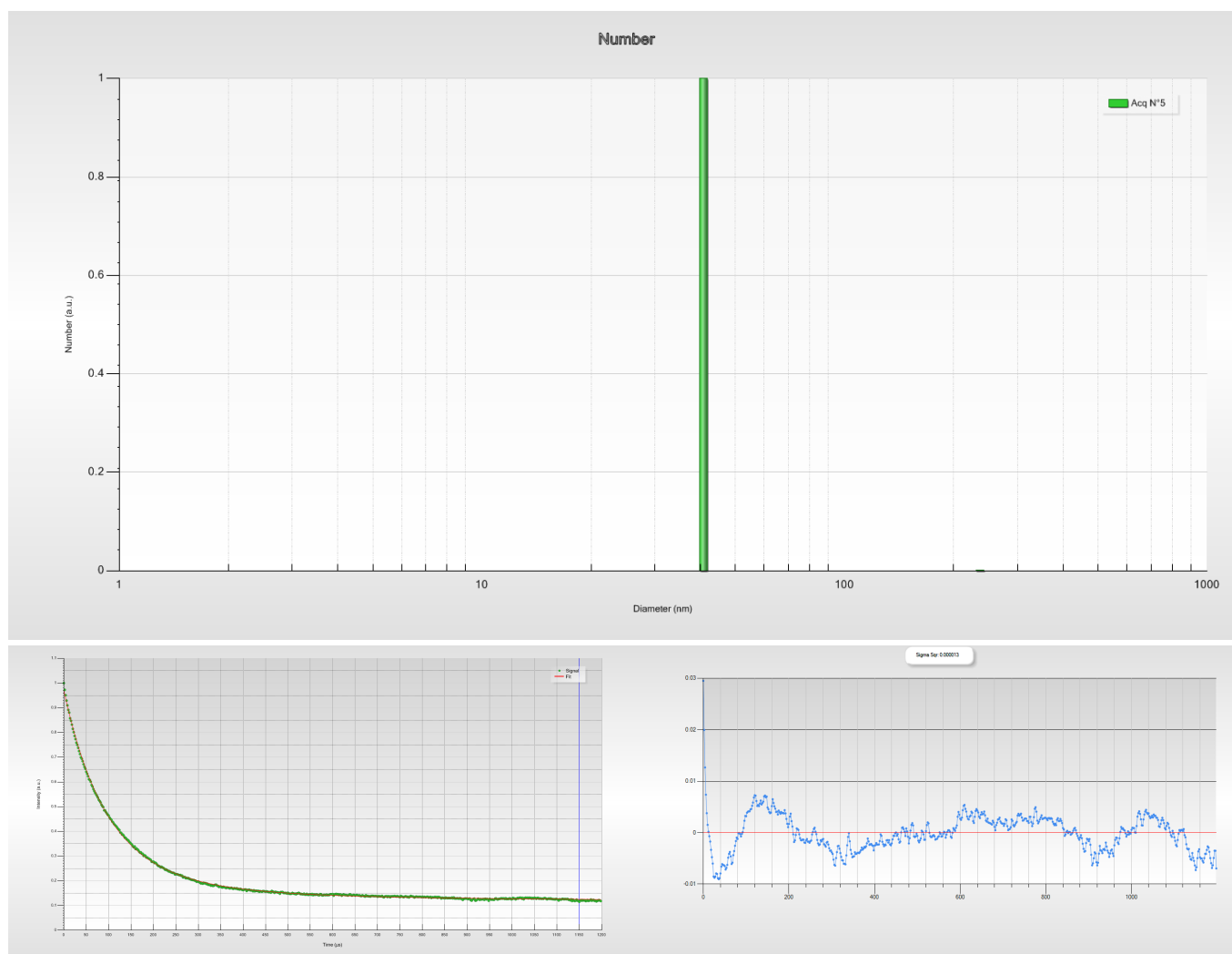
**Mean Intensity: 94.39 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
41.1	0.67	6321.33	11.95894E-012
235.34	0.25	1103.88	20.88366E-013

### Dispersion datas

Size (nm)	Intensity	Size (nm)	Intensity
40.78	0.73	236.32	0.27



### Dispersion statistics

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

**Dn 50%: 40.78 nm**

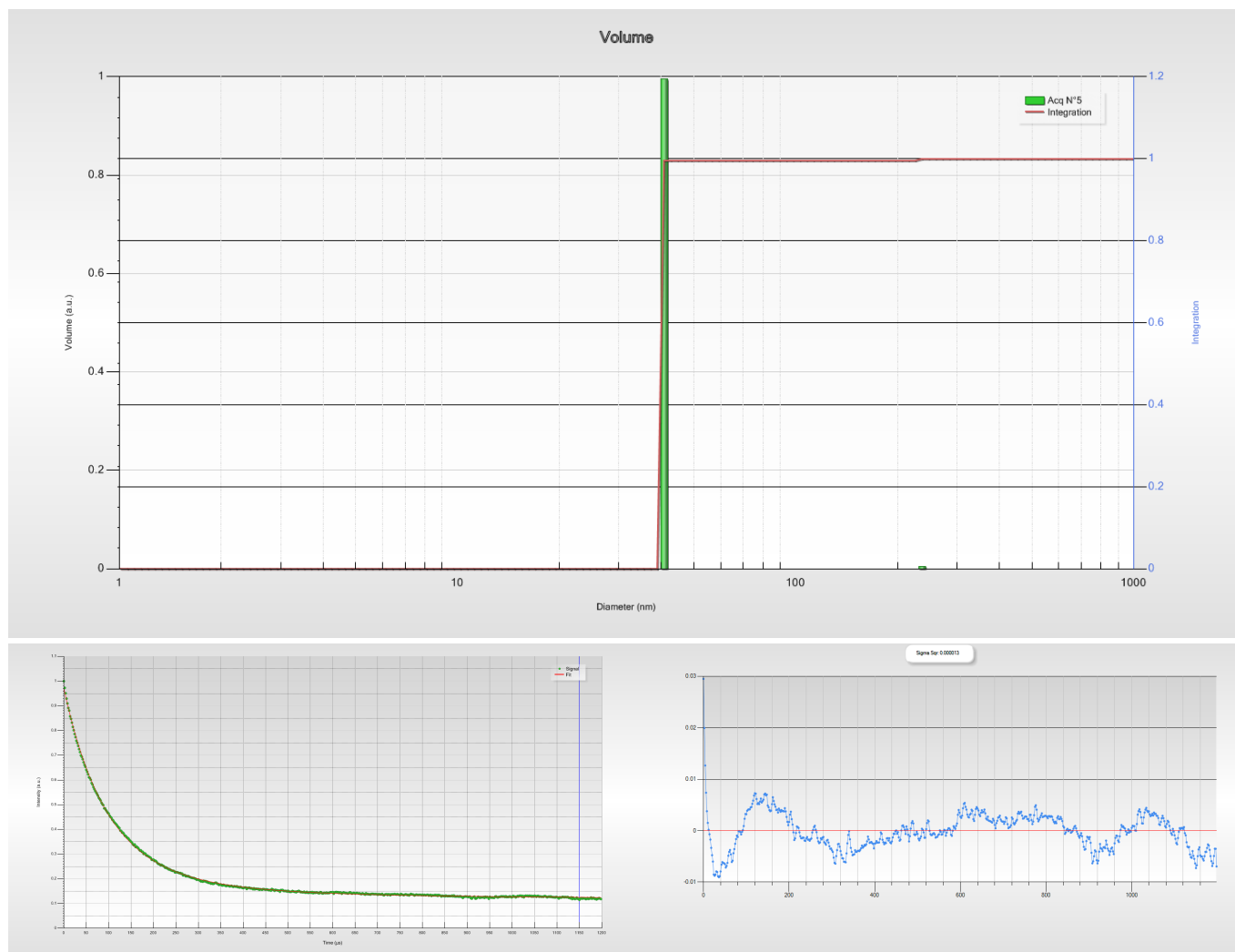
**Dn 90%: 40.78 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
41.1	0.67	6321.33	11.95894E-012
235.34	0.25	1103.88	20.88366E-013

### Dispersion datas

Size (nm)	Number
40.78	1



### Dispersion statistics

**Dv 10%: 40.78 nm**  
**Mean Volume: 41.59 nm**

**Dv 50%: 40.78 nm**

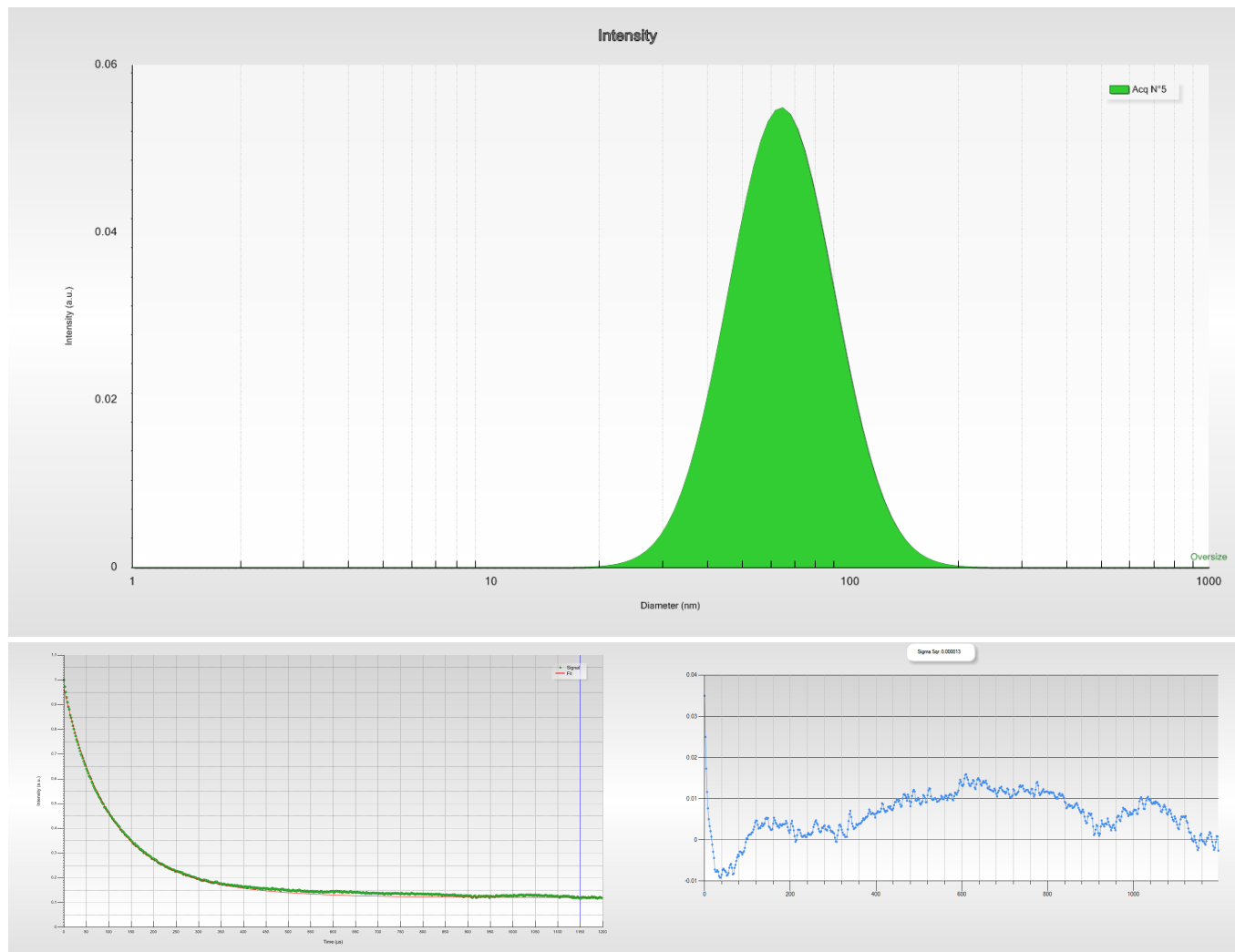
**Dv 90%: 40.78 nm**

### Detected size(s)

Size (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
41.1	0.67	6321.33	11.95894E-012
235.34	0.25	1103.88	20.88366E-013

### Dispersion datas

Size (nm)	Volume
40.78	1

**Distribution statistics**

**Di 10%:** 40.78 nm  
**Mean Intensity:** 67.87 nm  
**PDI** : 0.4775

**Di 50%:** 64.75 nm

**Di 90%:** 98.17 nm

**Std Dev:** 34.55%

**Detected size(s)**

Z average (nm)	Intensity	Decay Rate	Diffusion Coeff. (m <sup>2</sup> /s)
54.15	0.84	4797.29	90.75687E-013

**Distribution statistics**

**Dn 10%:** 21.35 nm  
**Mean Number:** 34.65 nm  
**PDI** : 0.4775

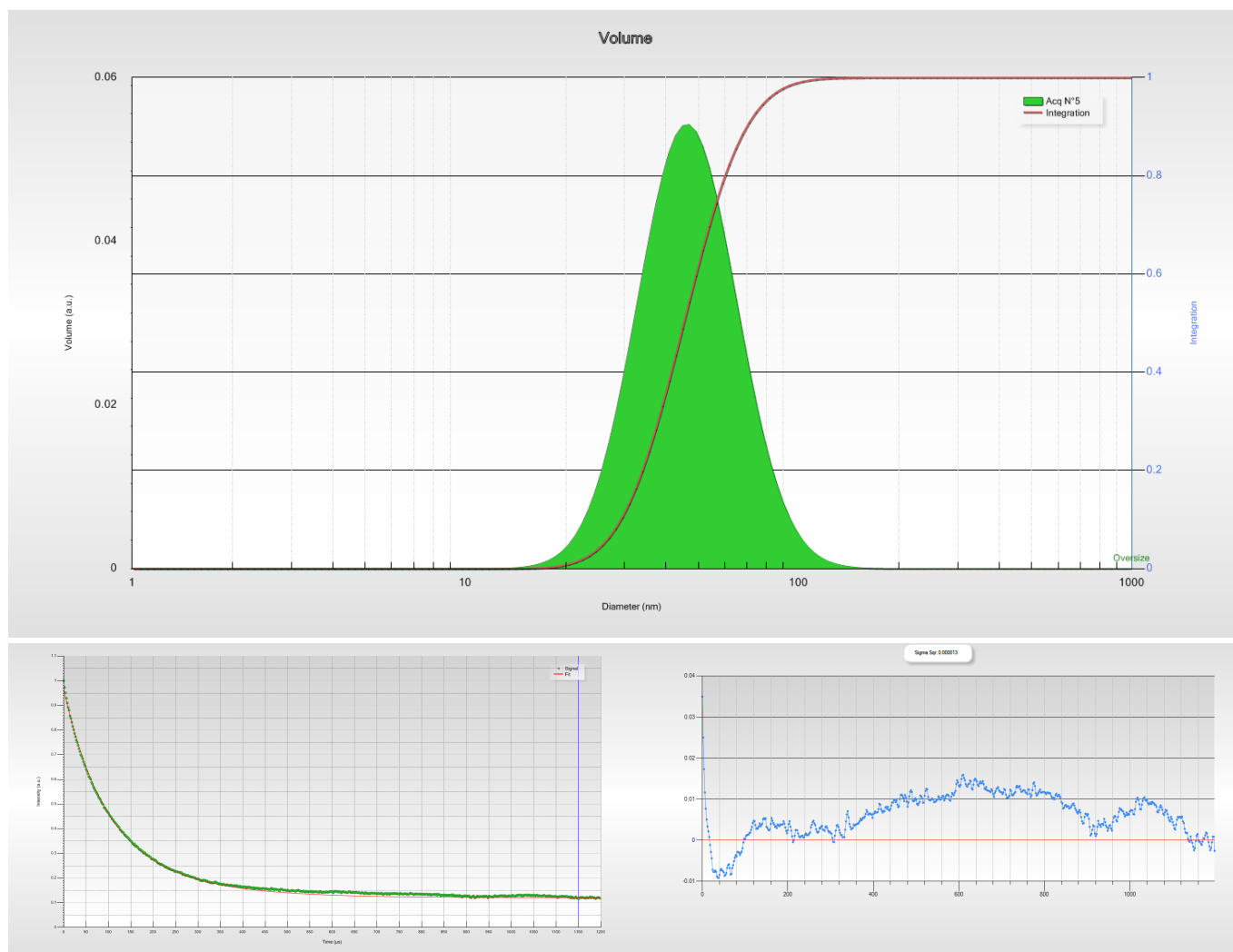
**Dn 50%:** 32.36 nm

**Dn 90%:** 51.39 nm

**Std Dev:** 34.55%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
54.15	0.84	4797.29	90.75687E-013

**Distribution statistics**

**Dv 10%:** 29.5 nm  
**Mean Volume:** 48.95 nm  
**PDI** : 0.4775

**Dv 50%:** 46.85 nm

**Dv 90%:** 71.02 nm

**Std Dev:** 34.55%

**Detected size(s)**

<b>Z average (nm)</b>	<b>Intensity</b>	<b>Decay Rate</b>	<b>Diffusion Coeff. (m<sup>2</sup>/s)</b>
54.15	0.84	4797.29	90.75687E-013