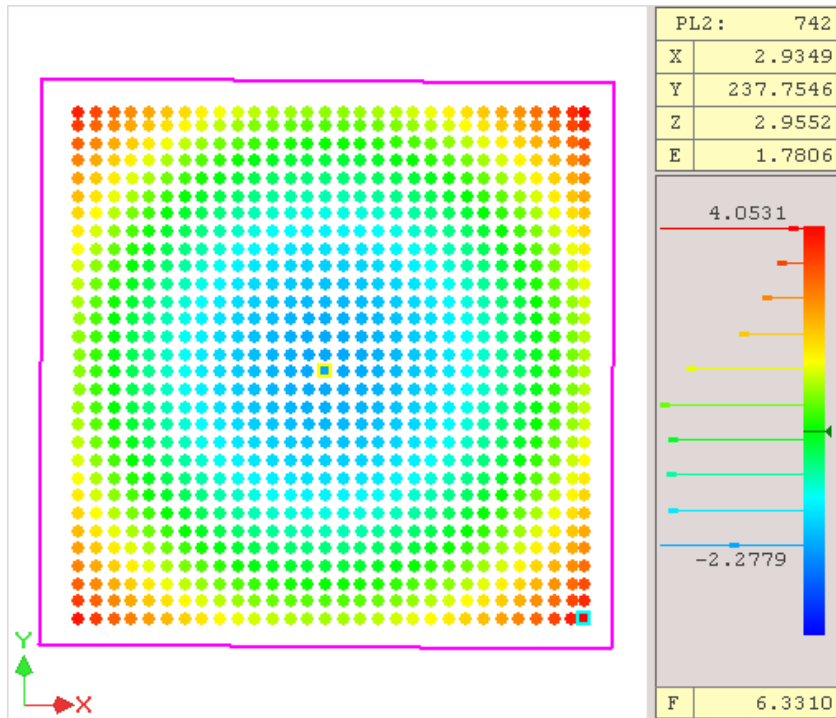


Mirror Measurements

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INFN Ferrara



Left plot
 δr point by point

First measurement

Starting point x 3mm y 3mm
 form the bottom left corner

Second measurement

Starting point x 8mm y 3mm
 form the bottom left corner

Step between 2 points 10 mm

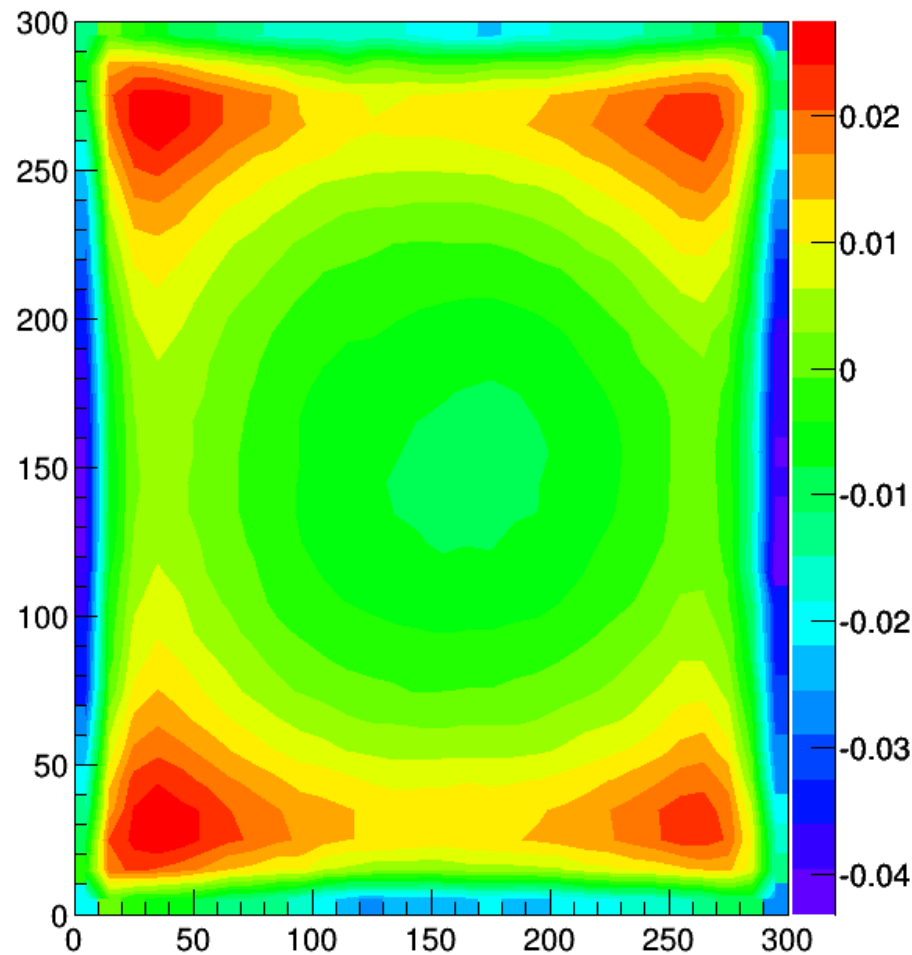
Right plot
 dispersion of δr

$$\delta r = \sqrt{(x - x_0)^2 + (y - y_0)^2 + (z - z_0)^2} - r$$

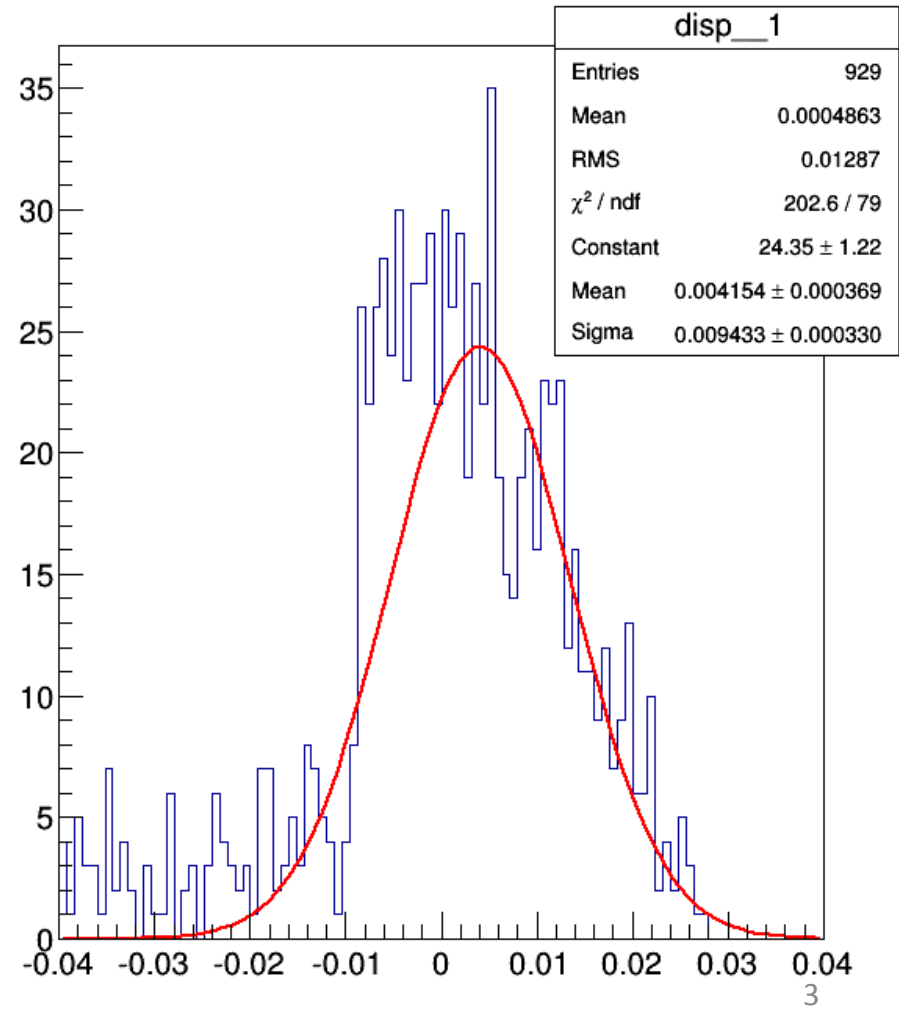
$$\delta r = \sqrt{(x - x_0)^2 + (y - y_0)^2 + (z - z_0)^2} - r$$

r 3485.7 ± 0.4 mm
 min -0.043 mm
 max 0.027 mm
 piccovalle 0.070 mm

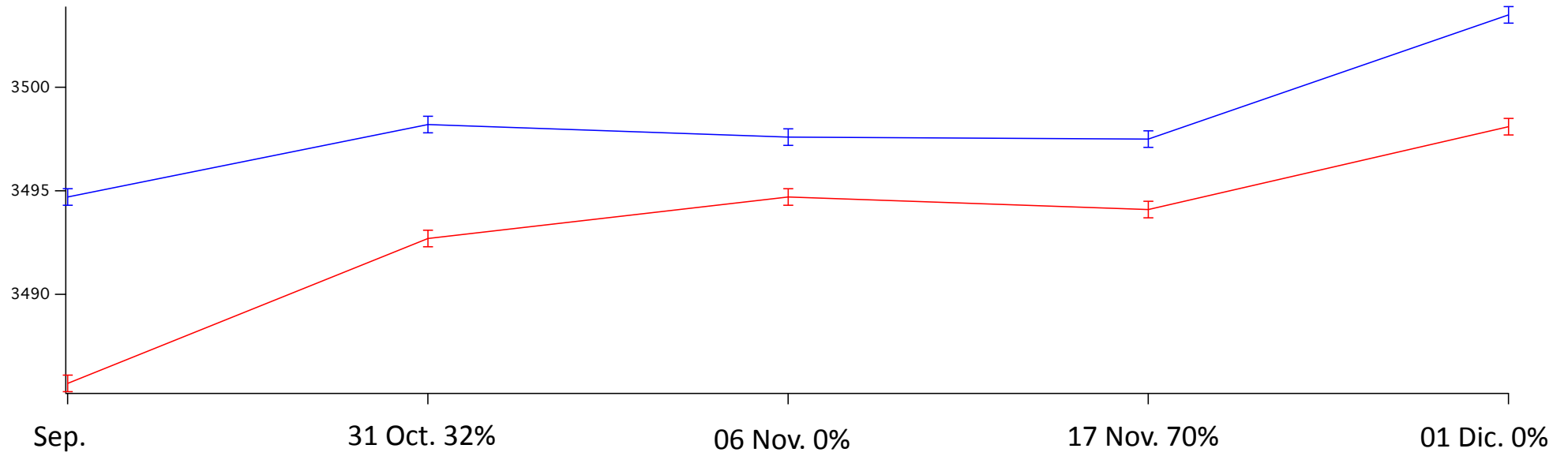
specchio



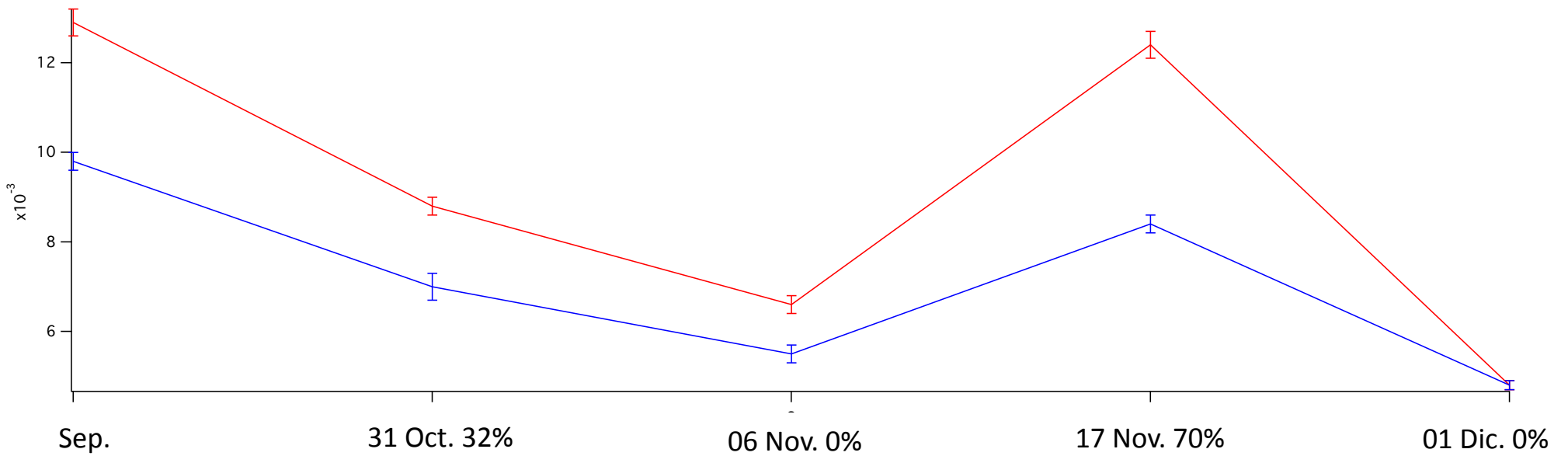
dispersion



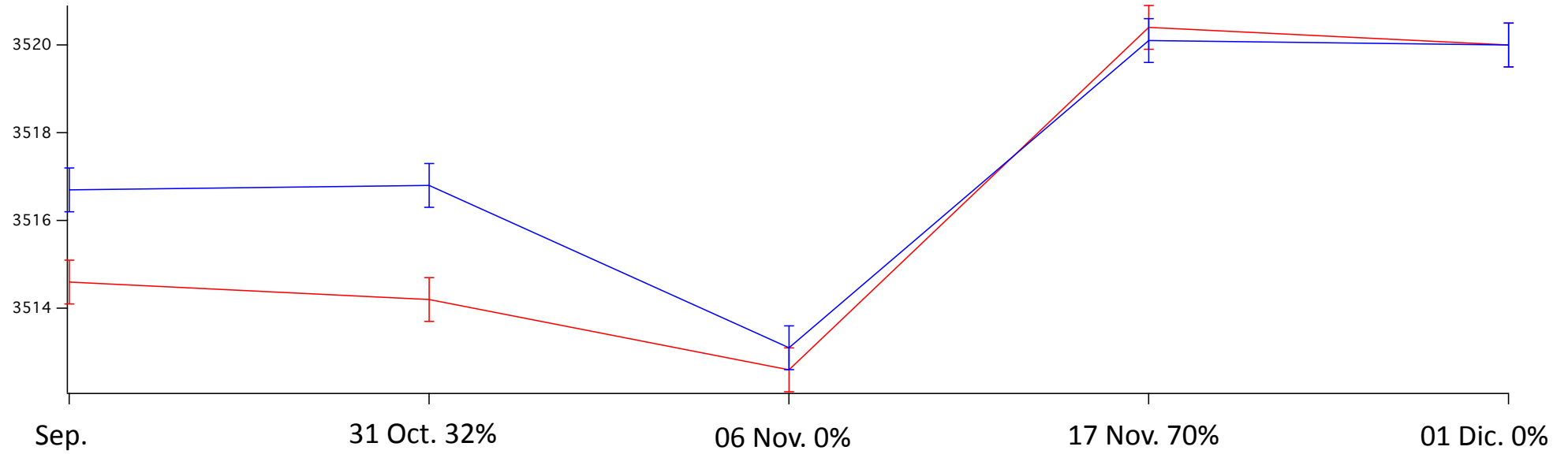
radius of the total mirror



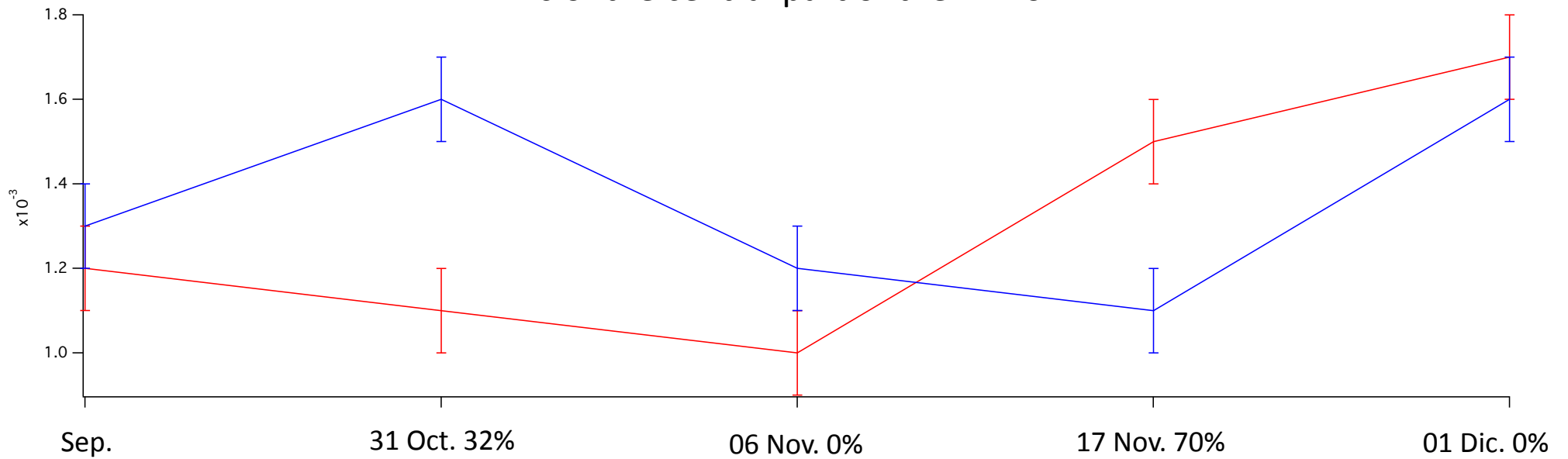
rms of the total mirror



radius of the central part of the mirror

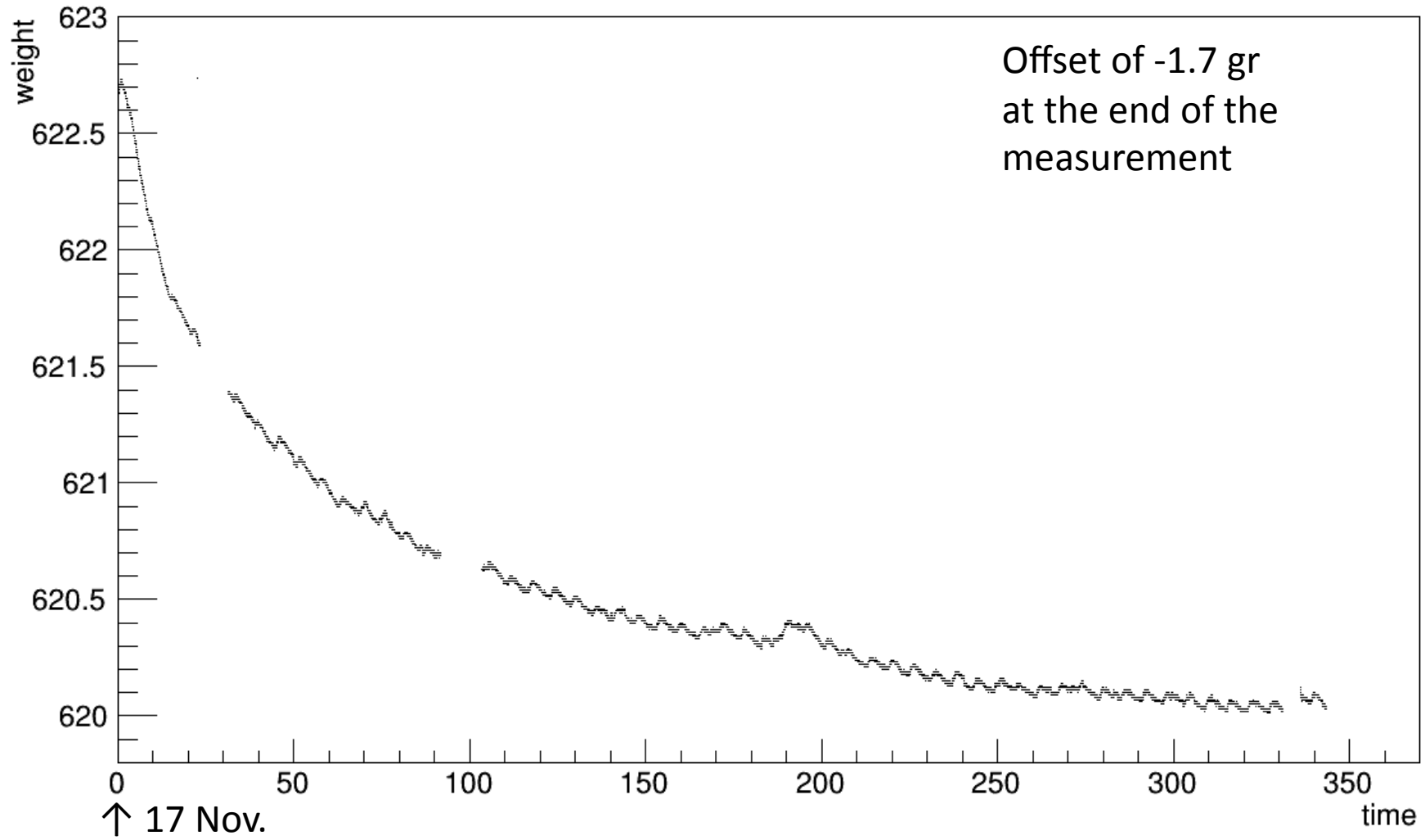


rms of the central part of the mirror

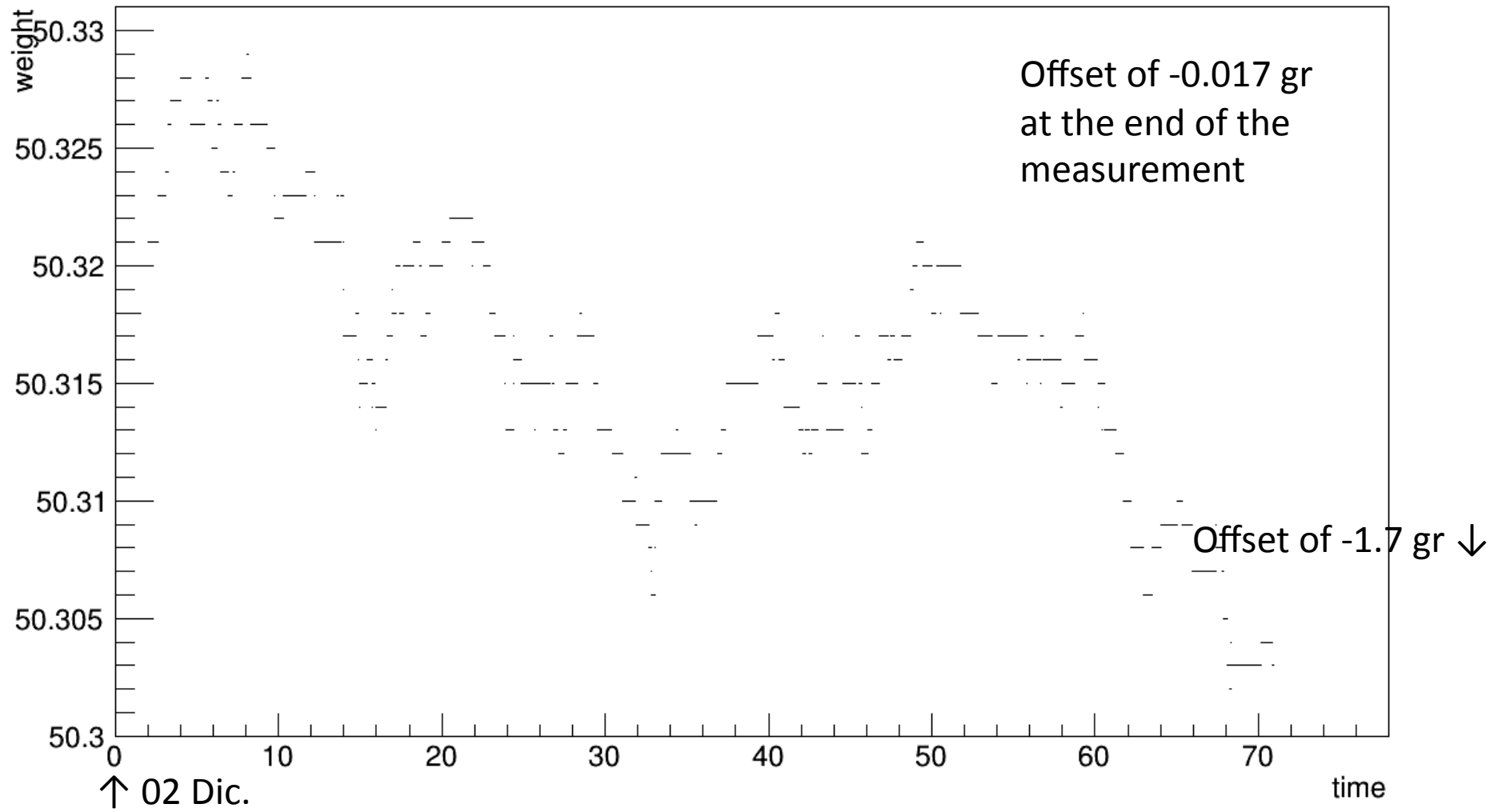


total	humidity _(%)	temperature _(°C)	radius _(mm)	max _(mm)	min _(mm)	piccovalle _(mm)	RMS _(mm)
			3485.7	0.027	-0.043	0.070	0.0129
Sep	room humidity	room temperature	3494.7	0.020	-0.028	0.048	0.0098
			3492.7	0.017	-0.028	0.046	0.0088
31 Oct	30 - 35	23.5 – 26.5	3498.2	0.014	-0.019	0.033	0.0070
			3494.7	0.013	-0.022	0.036	0.0066
06 Nov	0	23.5 – 26.5	3497.6	0.012	-0.017	0.029	0.0055
			3494.1	0.021	-0.038	0.059	0.0124
17 Nov	50 - 80	23.5 – 26.5	3497.5	0.017	-0.024	0.041	0.0084
			3498.1	0.013	-0.016	0.029	0.0048
01 Dic	0	23.5 – 26.5	3503.4	0.010	-0.014	0.024	0.0048
central	humidity _(%)	temperature _(°C)	Radius _(mm)	max _(mm)	min _(mm)	piccovalle _(mm)	RMS _(mm)
			3514.6	0.0034	-0.0030	0.0064	0.0012
Sep	room humidity	room temperature	3516.7	0.0031	-0.0033	0.0064	0.0013
			3514.2	0.0029	-0.0024	0.0053	0.0011
31 Oct	30 - 35	23.5 – 26.5	3516.8	0.0038	-0.0044	0.0082	0.0016
			3512.6	0.0029	-0.0028	0.0057	0.0010
06 Nov	0	23.5 – 26.5	3513.1	0.0027	-0.0029	0.0056	0.0012
			3520.4	0.0045	-0.0037	0.0082	0.0015
17 Nov	50 - 80	23.5 – 26.5	3520.1	0.0025	-0.0032	0.0057	0.0011
			3520.0	0.0036	-0.0039	0.0075	0.0017
01 Dic	0	23.5 – 26.5	3520.0	0.0032	-0.0044	0.0076	0.0016

Weight of the mirror



Aluminum weight test



Aluminum weight test

