Top Jaw Pole Tips

10^{-3}

Y Dev. from Mean

84
72
60
48
36
24
12
12
−24
−36
−48
−60
−72
−84

4 8 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72 76 80 84 88 92 96 100 104 108 112 116 120 124 128 132 136 140 144 148 152 156 160 164 168 172

Mean TOP =   4.9820   Regression Line Ang. (mrad) =   0.0023

Pole Tip Num. ---->   ## Bottom Jaw Pole Tips   Minimum Effective Gap =   9.839

10^{-3}

Y Dev. from Mean

84
72
60
48
36
24
12
12
−24
−36
−48
−60
−72
−84

4 8 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72 76 80 84 88 92 96 100 104 108 112 116 120 124 128 132 136 140 144 148 152 156 160 164 168 172

Mean BTM =   -5.0253   Regression Line Ang. (mrad) =   0.0007

Y Value Scales Centered on Mean Values   Regression Line Through Points =‑‑‑‑‑‑‑‑
Step Between Measured Pole Tips =   1   Dimensions in mm

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LCLS II - SXR Undulator
Nominal Gap = 10   Nominal Taper = 0.000
Gap Reading = 10.0001   US Encoder = 10.0000   DS Encoder = 10.0002

18-JUL-2018
S/N =   013
D/S=   0001
Run=   3

Gap Between Opposing Pole Tips

Mean Gap =   10.0074

Step Between Measured Pole Tips =   1

Dimensions in mm

LCLS II - SXR Undulator

Nominal Gap = 10   Nominal Taper = 0.000

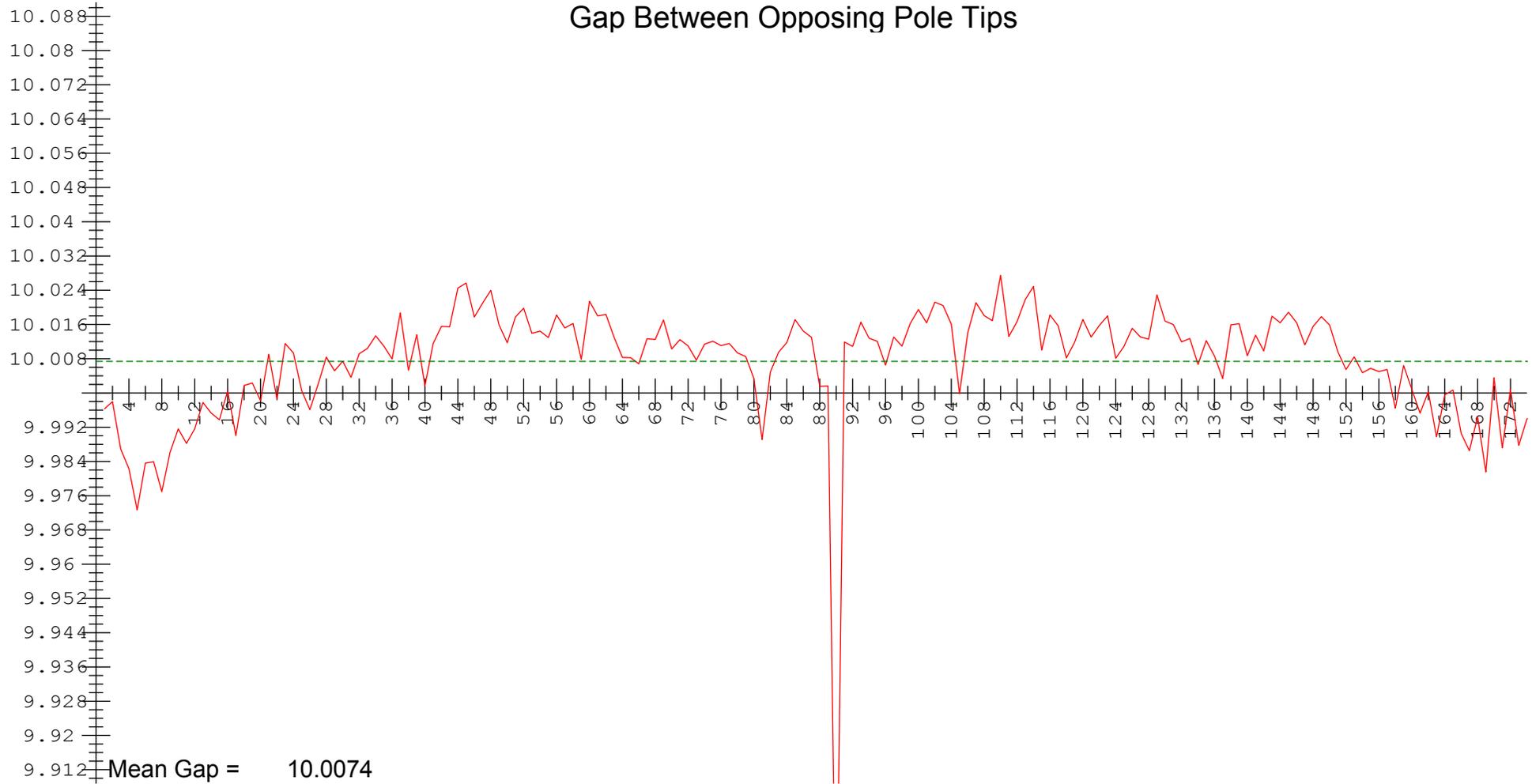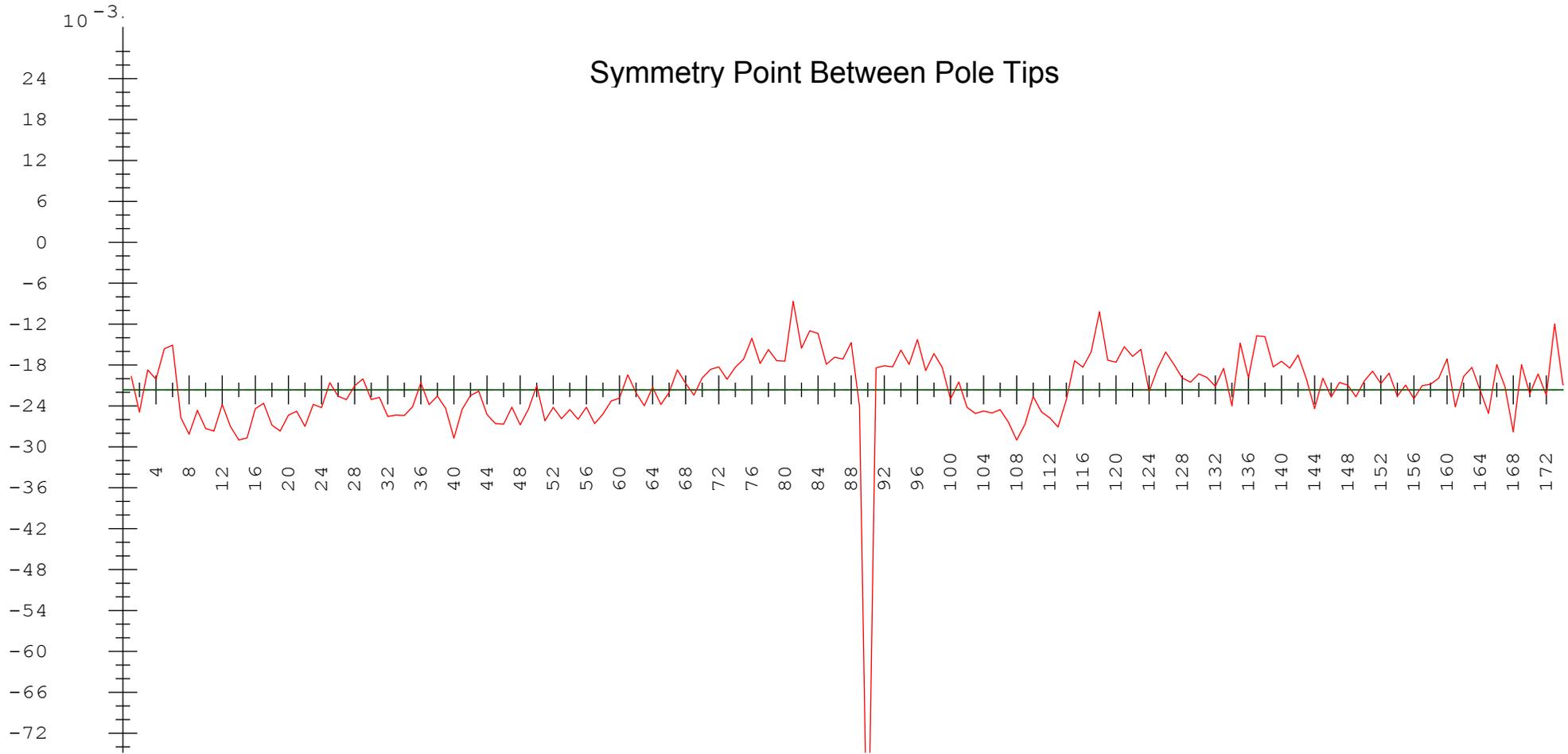Gap Reading = 10.0001   US Encoder = 10.0000   DS Encoder = 10.0002

18-JUL-2018
S/N =   013
D/S=   0001
Run=   3

Symmetry Point Between Pole Tips

Mean Symmetry Value =   -0.0216

Step Between Measured Pole Tips =   1

Dimensions in mm

LCLS II - SXR Undulator

Nominal Gap = 10   Nominal Taper = 0.000

Gap Reading = 10.0001   US Encoder = 10.0000   DS Encoder = 10.0002

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18-JUL-2018
S/N =   013
D/S=   0001
Run=   3

Top and Bottom Jaw
Regression Line Intersect Points

Jaw	First Pole (Pole 1)	US Actuator (Pole 39)	DS Actuator (Pole 135)	Last Pole (Pole 174)
Top	4.9781	4.9798	4.9842	4.9860
Bottom	-5.0265	-5.0260	-5.0247	-5.0242
Gap	10.0046			10.0101
Taper				0.0055

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
4.9820	-5.0253	10.0074	-0.0216

Additional Calculated Values

Bottom Pole #1 Z Value	979.775
Top Jaw Pitch (mrad)	0.002
Bottom Jaw Pitch(mrad)	0.001
Minimum Effective Gap	9.839
Reference Block Gap	6.806

Dimensions in mm

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METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 10   Nominal Taper = 0.000
Gap Reading = 10.0001   US Encoder = 10.0000   DS Encoder = 10.0002

18-JUL-2018
S/N = 013
D/S= 0001
Run= 3