Top Jaw Pole Tips

Y Dev.from Mean

10^{-3}

24
18
12
6
-6
-12
-18
-24

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 = 6.0023   Regression Line Ang. (mrad) = 0.0071

Pole Tip Num. ---->

Bottom Jaw Pole Tips

Minimum Effective Gap = 12.035

Y Dev.from Mean

10^{-3}

24
18
12
6
-6
-12
-18
-24

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 = -6.0756   Regression Line Ang. (mrad) = 0.0040

Y Value Scales Centered on Mean Values
Step Between Measured Pole Tips = 5

Regression Line Through Points =‒‒‒‒‒
Dimensions in mm

LCLS II - SXR Undulator

Nominal Gap = 12   Nominal Taper = 0.000

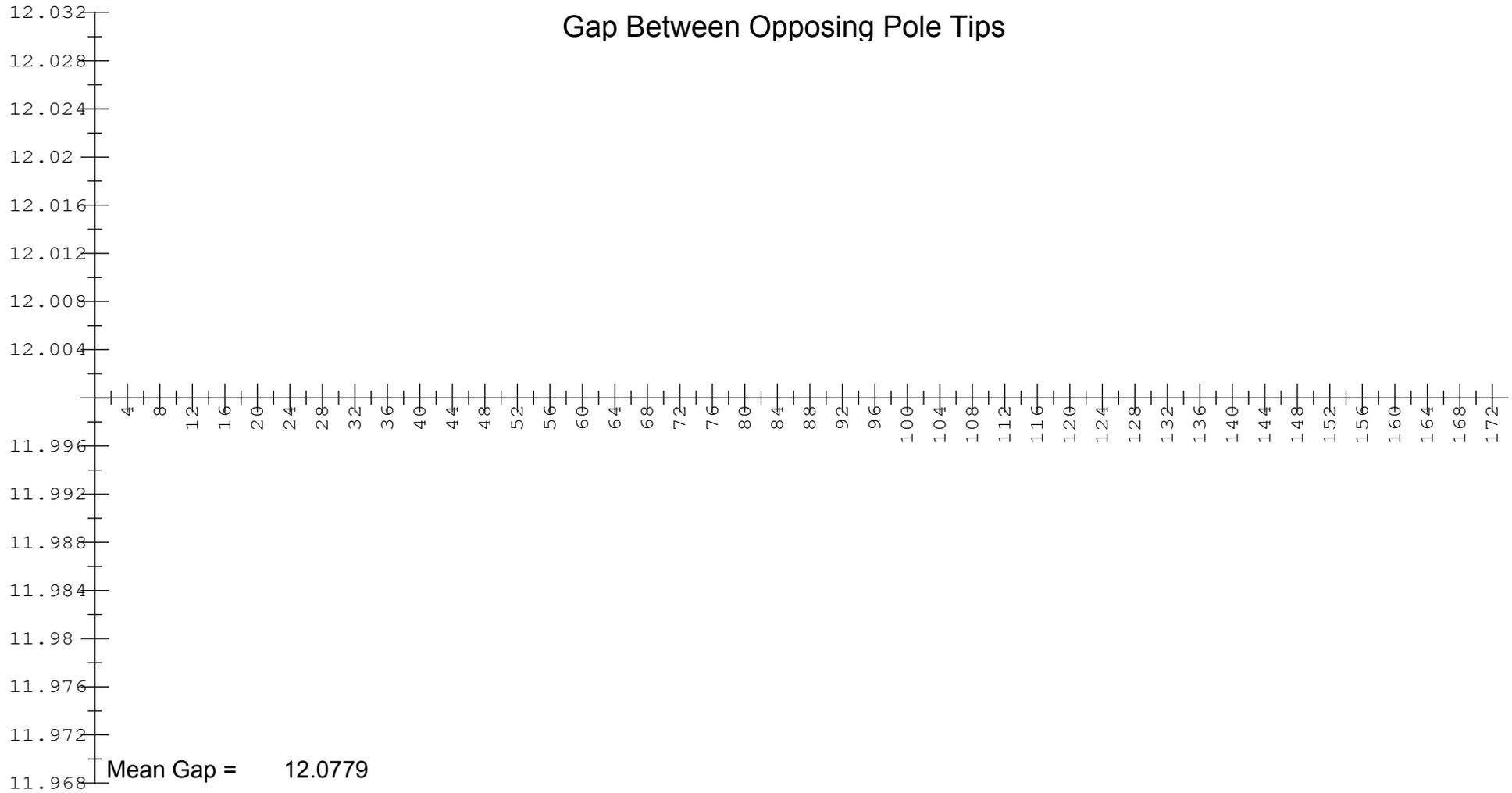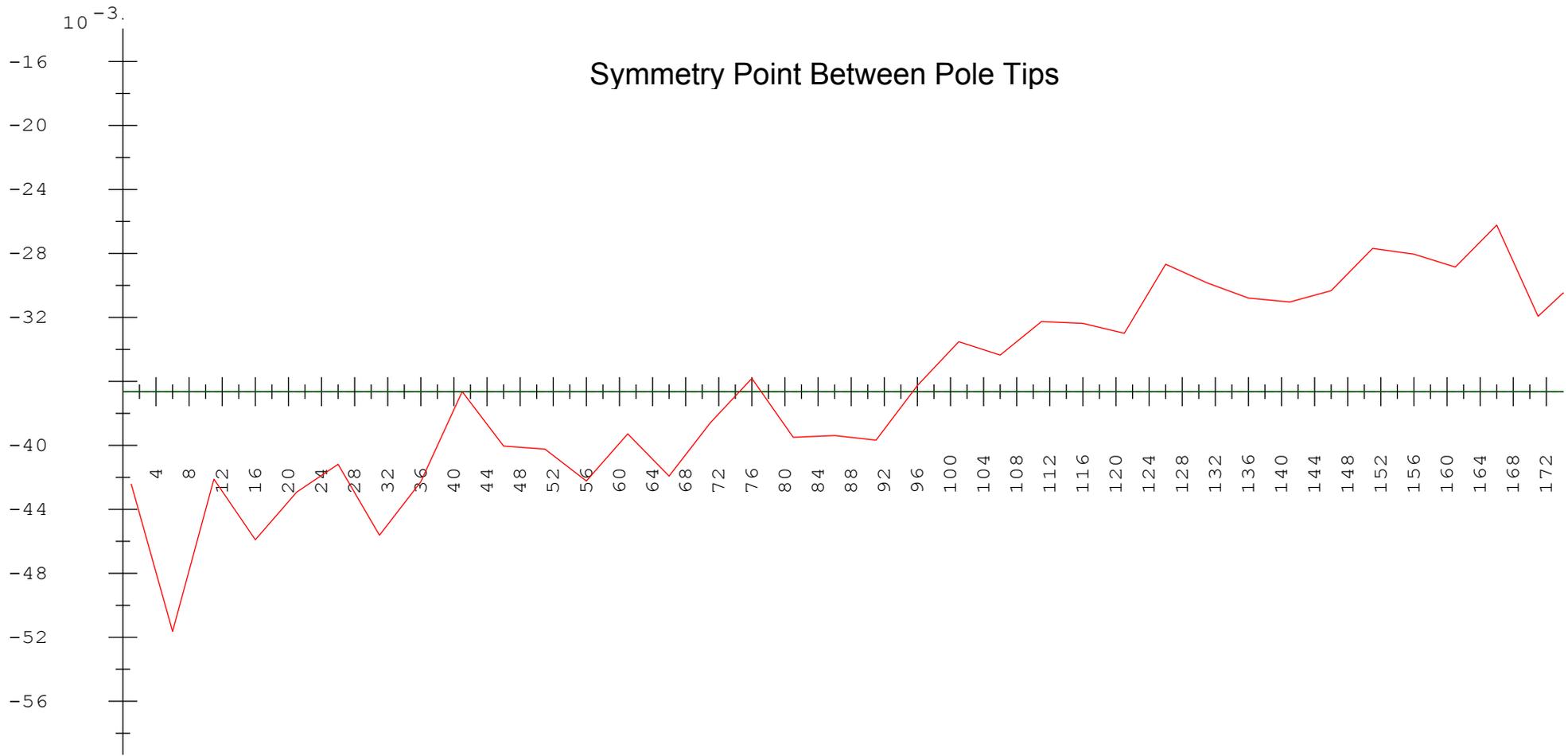Gap Reading = 12.0001   US Encoder = 12.0001   DS Encoder = 12.0001

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METROLOGY

05-APR-2019
S/N = 002
D/S= 0001
Run= 10

Gap Between Opposing Pole Tips

Mean Gap =   12.0779

Step Between Measured Pole Tips =   5   Dimensions in mm

LCLS II - SXR Undulator

Nominal Gap = 12   Nominal Taper = 0.000

Gap Reading = 12.0001   US Encoder = 12.0001   DS Encoder = 12.0001

SLAC
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METROLOGY

05-APR-2019
S/N =   002
D/S=   0001
Run=   10

Symmetry Point Between Pole Tips

Mean Symmetry Value =   -0.0366

Step Between Measured Pole Tips =   5

Dimensions in mm

LCLS II - SXR Undulator

Nominal Gap = 12   Nominal Taper = 0.000

Gap Reading = 12.0001   US Encoder = 12.0001   DS Encoder = 12.0001

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METROLOGY

05-APR-2019
S/N =   002
D/S=   0001
Run=   10

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	5.9907	5.9959	6.0091	6.0145
Bottom	-6.0824	-6.0795	-6.0720	-6.0690
Gap	12.0731			12.0835
Taper				0.0104

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
6.0023	-6.0756	12.0779	-0.0366

Additional Calculated Values

Bottom Pole #1 Z Value	980.303
Top Jaw Pitch (mrad)	0.007
Bottom Jaw Pitch(mrad)	0.004
Minimum Effective Gap	12.035
Reference Block Gap	6.810

Dimensions in mm

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METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 12   Nominal Taper = 0.000
Gap Reading = 12.0001   US Encoder = 12.0001   DS Encoder = 12.0001

05-APR-2019
S/N = 002
D/S = 0001
Run = 10