Top Jaw Pole Tips

Y Dev. from Mean

10^{-3}

16
12
8
4
-4
-8
-12
-16
-20

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 =   4.5735   Regression Line Ang. (mrad) =   0.0027

Pole Tip Num. ---->

Bottom Jaw Pole Tips

Minimum Effective Gap =   8.984

Y Dev. from Mean

10^{-3}

16
12
8
4
-4
-8
-12
-16
-20

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 =   -4.4303   Regression Line Ang. (mrad) =   0.0009

Y Value Scales Centered on Mean Values   Regression Line Through Points =
Step Between Measured Pole Tips =   5   Dimensions in mm

SLAC
NATIONAL ACCELERATOR LABORATORY
METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 9   Nominal Taper = 0.000
Gap Reading = 9.0000   US Encoder = 9.0000   DS Encoder = 9.0000

17-MAY-2018
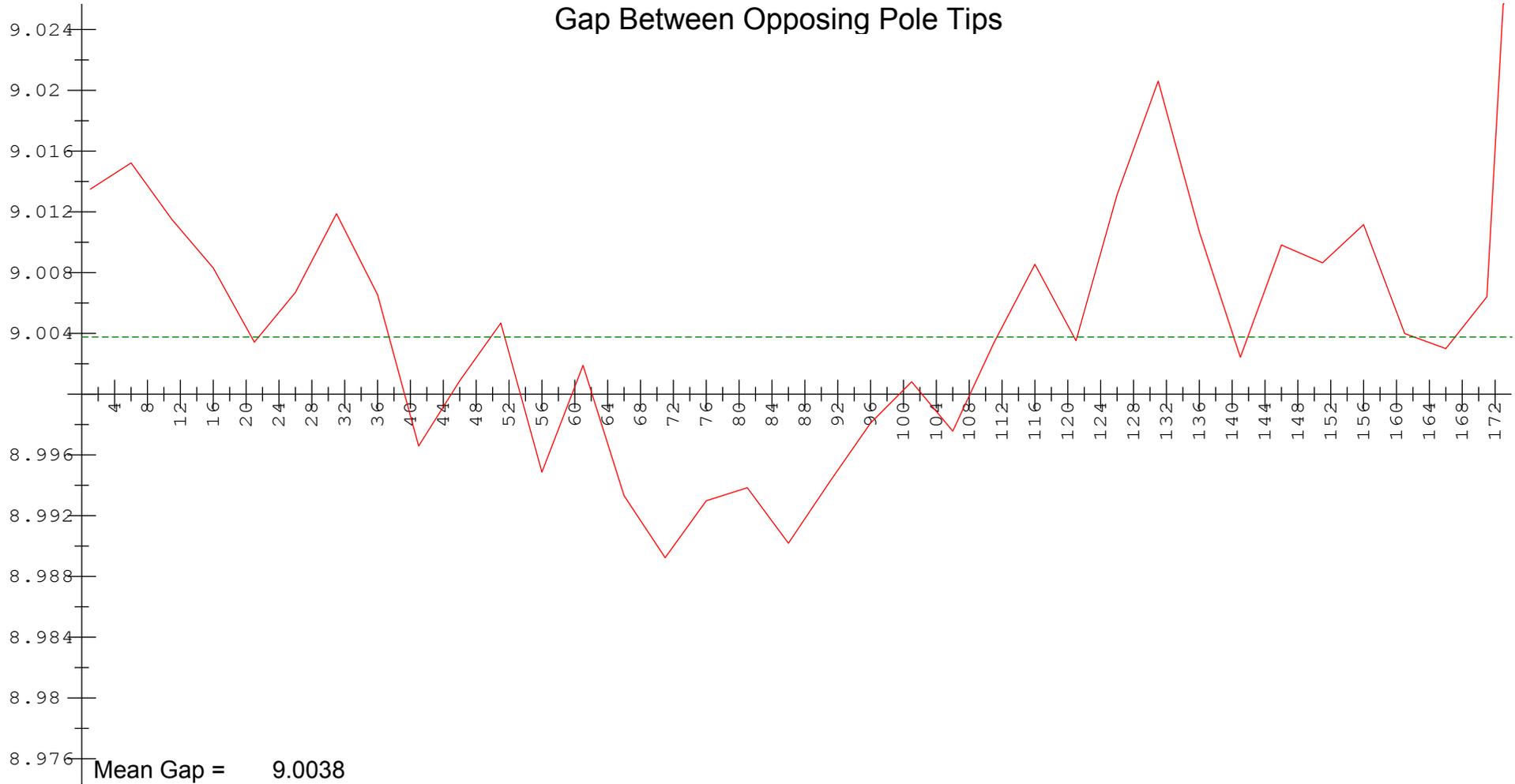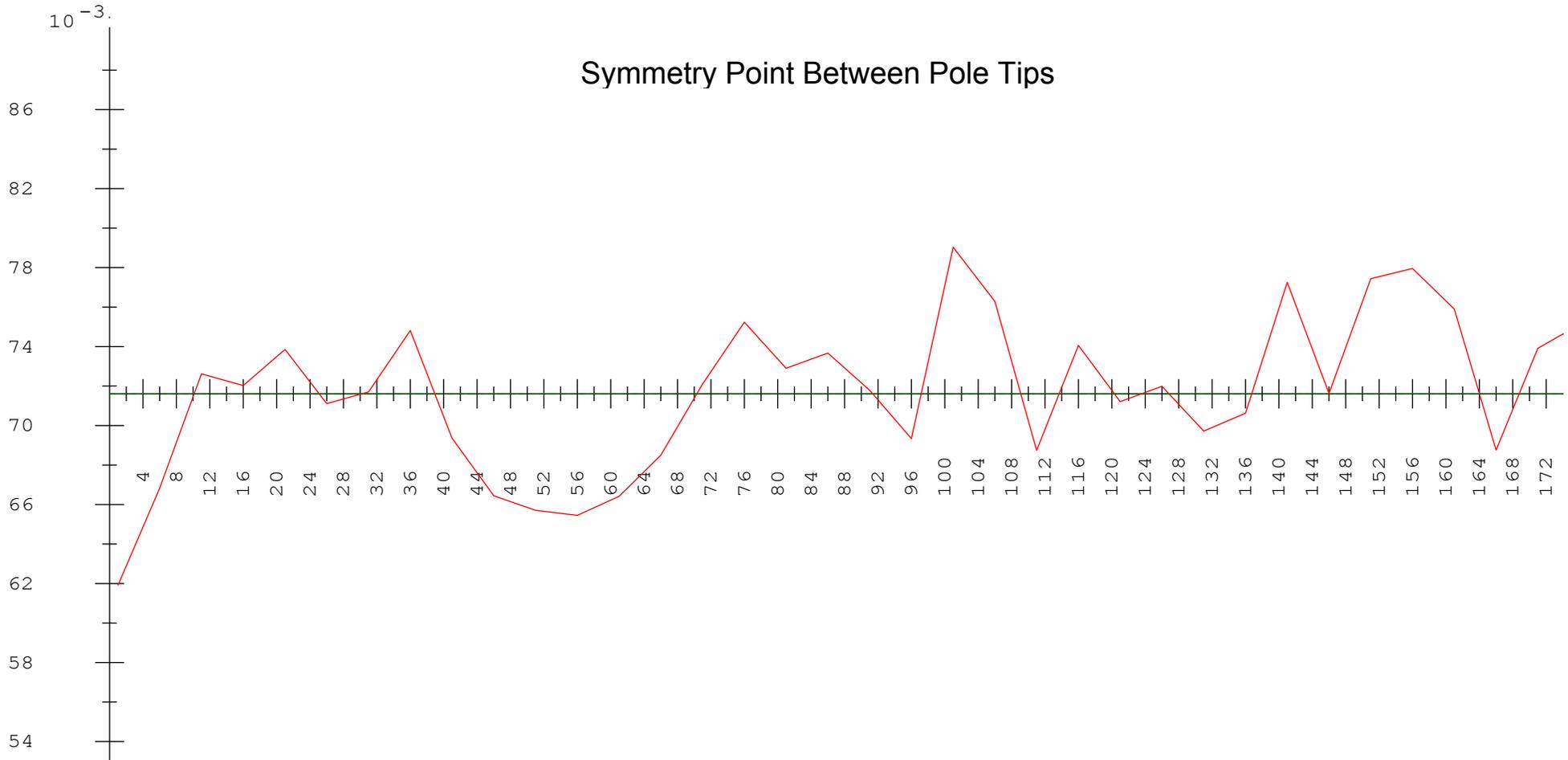S/N =   010
D/S=   0001
Run=   14

Gap Between Opposing Pole Tips

Mean Gap =   9.0038

Step Between Measured Pole Tips =   5

Dimensions in mm

SLAC
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METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 9   Nominal Taper = 0.000
Gap Reading = 9.0000   US Encoder = 9.0000   DS Encoder = 9.0000

17-MAY-2018
S/N =   010
D/S=   0001
Run=   14

Symmetry Point Between Pole Tips

Mean Symmetry Value =   0.0716

Step Between Measured Pole Tips =   5

Dimensions in mm

SLAC NATIONAL ACCELERATOR LABORATORY METROLOGY	**LCLS II - SXR Undulator**

LCLS II - SXR Undulator	17-MAY-2018
Nominal Gap = 9 Nominal Taper = 0.000	S/N = 010
Gap Reading = 9.0000 US Encoder = 9.0000 DS Encoder = 9.0000	D/S= 0001 Run= 14

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	4.5695	4.5714	4.5764	4.5785
Bottom	-4.4322	-4.4315	-4.4298	-4.4291
Gap	9.0017			9.0075
Taper				0.0059

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
4.5735	-4.4303	9.0038	0.0716

Additional Calculated Values

Bottom Pole #1 Z Value	979.704
Top Jaw Pitch (mrad)	0.003
Bottom Jaw Pitch(mrad)	0.001
Minimum Effective Gap	8.984
Reference Block Gap	6.802

Dimensions in mm

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METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 9   Nominal Taper = 0.000
Gap Reading = 9.0000   US Encoder = 9.0000   DS Encoder = 9.0000

17-MAY-2018
S/N = 010
D/S= 0001
Run= 14