Top Jaw Pole Tips

Y Dev.from Mean

Pole Tip Num. ---->

Mean TOP =   4.9300   Regression Line Ang. (mrad) =   -0.0350

Bottom Jaw Pole Tips

Minimum Effective Gap =   9.703

Y Dev.from Mean

Mean BTM =   -5.0230   Regression Line Ang. (mrad) =   -0.0501

Y Value Scales Centered on Mean Values

Step Between Measured Pole Tips =   1

Regression Line Through Points = ————

Dimensions in mm

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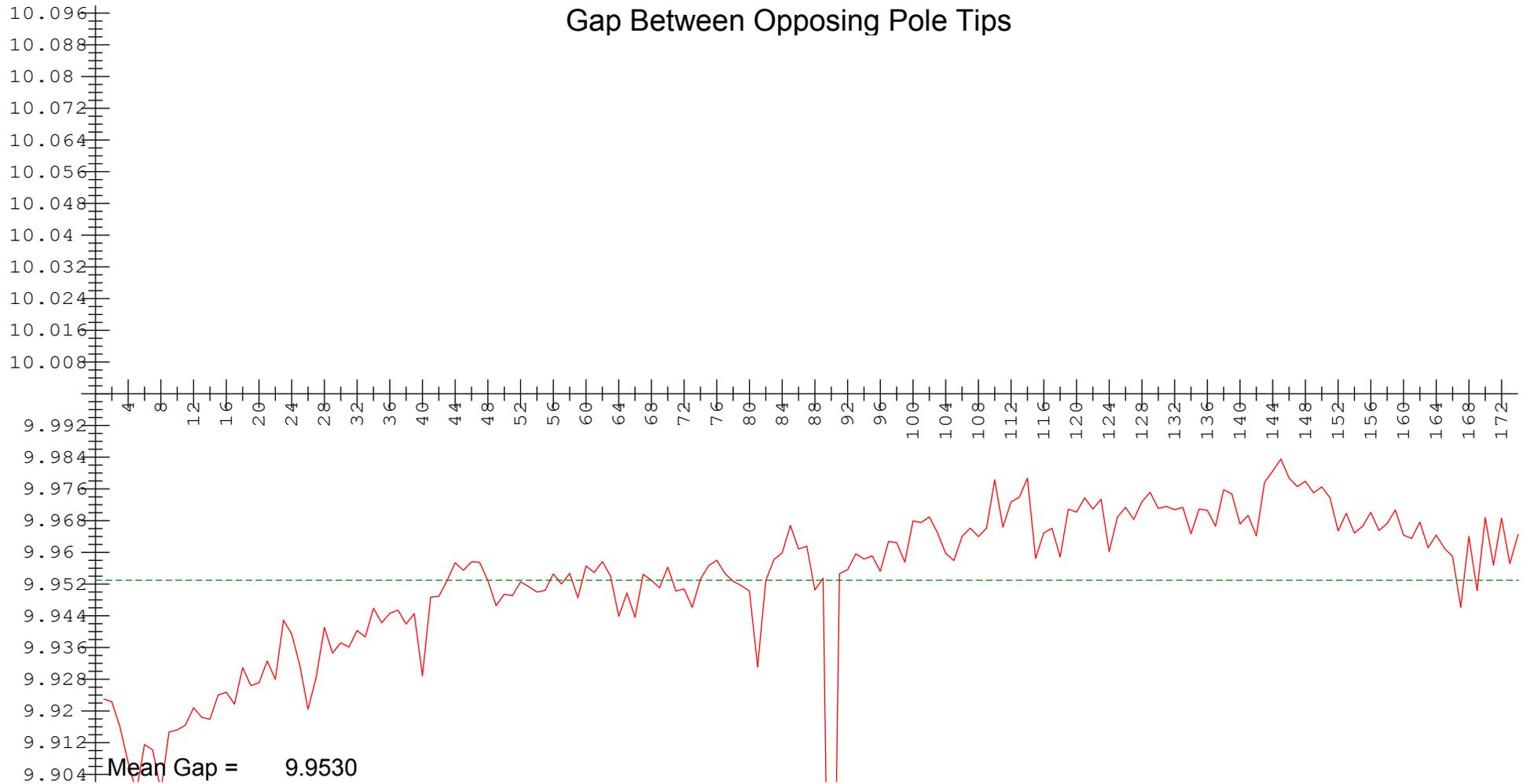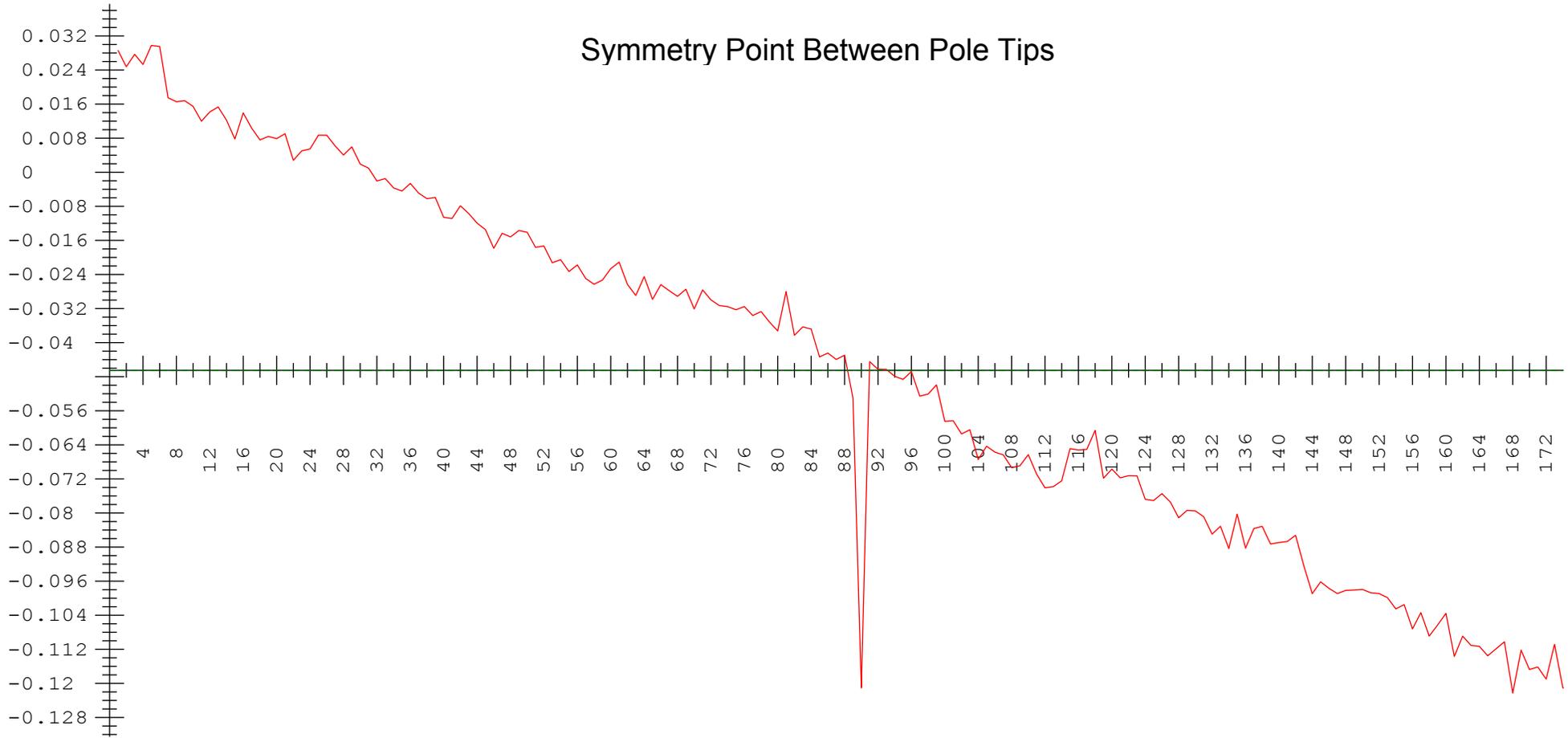METROLOGY

LCLS II - SXR Undulator

Nominal Gap = 10   Nominal Taper = 0.000

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

17-JUL-2018
S/N =   013
D/S=   0001
Run=   1

Gap Between Opposing Pole Tips

10.096	
10.088	
10.08	
10.072	
10.064	
10.056	
10.048	
10.04	
10.032	
10.024	
10.016	
10.008	
9.992	
9.984	
9.976	
9.968	
9.96	
9.952	
9.944	
9.936	
9.928	
9.92	
9.912	
9.904	

Mean Gap =   9.9530

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 = 10.0002   DS Encoder = 10.0001

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METROLOGY

17-JUL-2018
S/N =   013
D/S=   0001
Run=   1

Symmetry Point Between Pole Tips

Mean Symmetry Value =   -0.0465

Step Between Measured Pole Tips =   1

Dimensions in mm

SLAC NATIONAL ACCELERATOR LABORATORY METROLOGY	**LCLS II - SXR Undulator**	17-JUL-2018
	Nominal Gap = 10 Nominal Taper = 0.000	S/N = 013
	Gap Reading = 10.0001 US Encoder = 10.0002 DS Encoder = 10.0001	D/S= 0001
		Run= 1

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	4.9891	4.9631	4.8975	4.8709
Bottom	-4.9385	-4.9756	-5.0694	-5.1074
Gap	9.9276			9.9783
Taper				0.0507

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
4.9300	-5.0230	9.9530	-0.0465

Additional Calculated Values

Bottom Pole #1 Z Value	979.775
Top Jaw Pitch (mrad)	-0.035
Bottom Jaw Pitch(mrad)	-0.050
Minimum Effective Gap	9.703
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 = 10.0002   DS Encoder = 10.0001

17-JUL-2018
S/N =   013
D/S=   0001
Run=   1