## Top Jaw Pole Tips

Mean TOP = 12.5470     Regression Line Ang. (mrad) = 0.0004

Pole Tip Num. ---->

## Bottom Jaw Pole Tips

Minimum Effective Gap = 24.987

Mean BTM = -12.4674     Regression Line Ang. (mrad) = 0.0020

Y Value Scales Centered on Mean Values

Step Between Measured Pole Tips = 5

Regression Line Through Points = ————

Dimensions in mm

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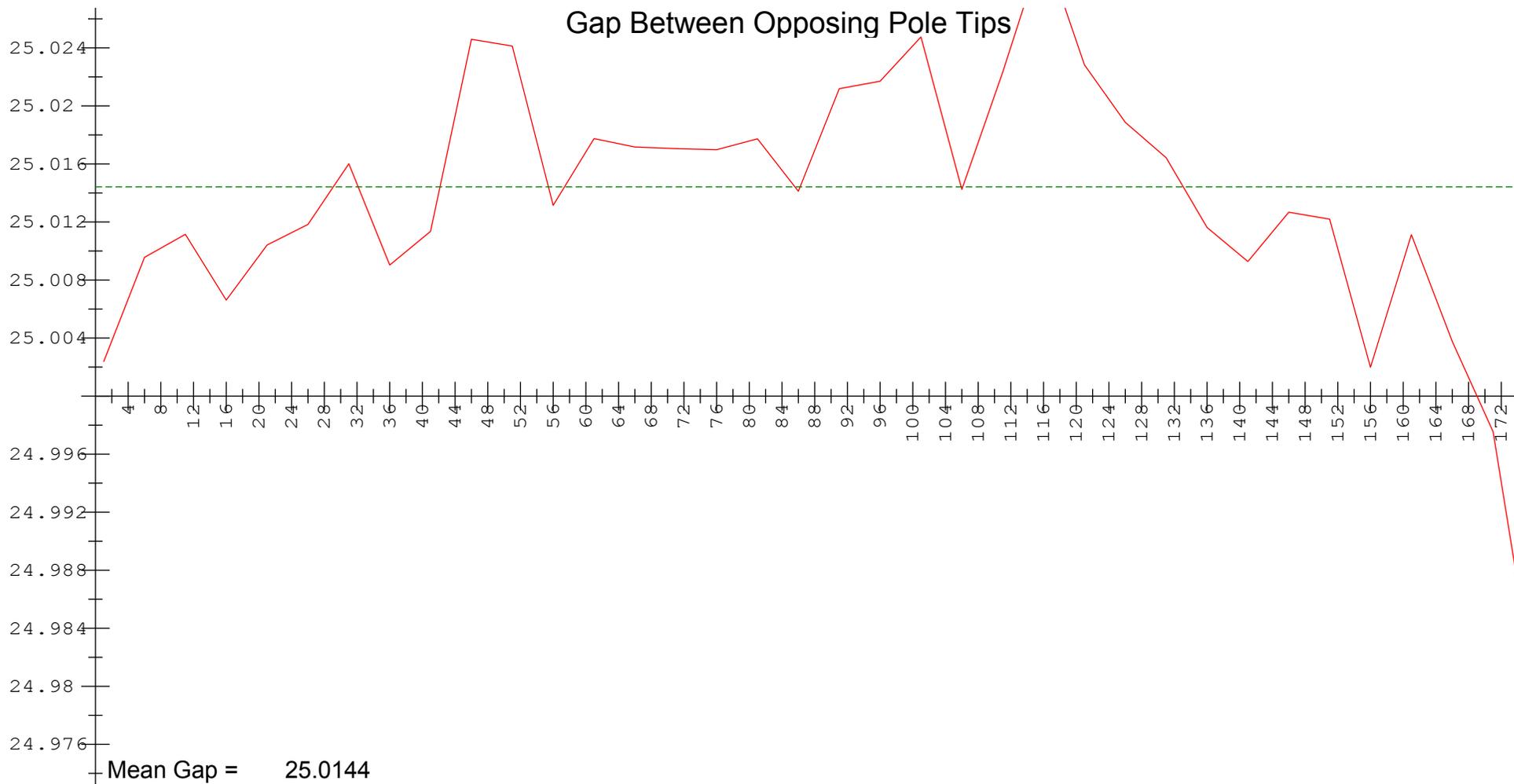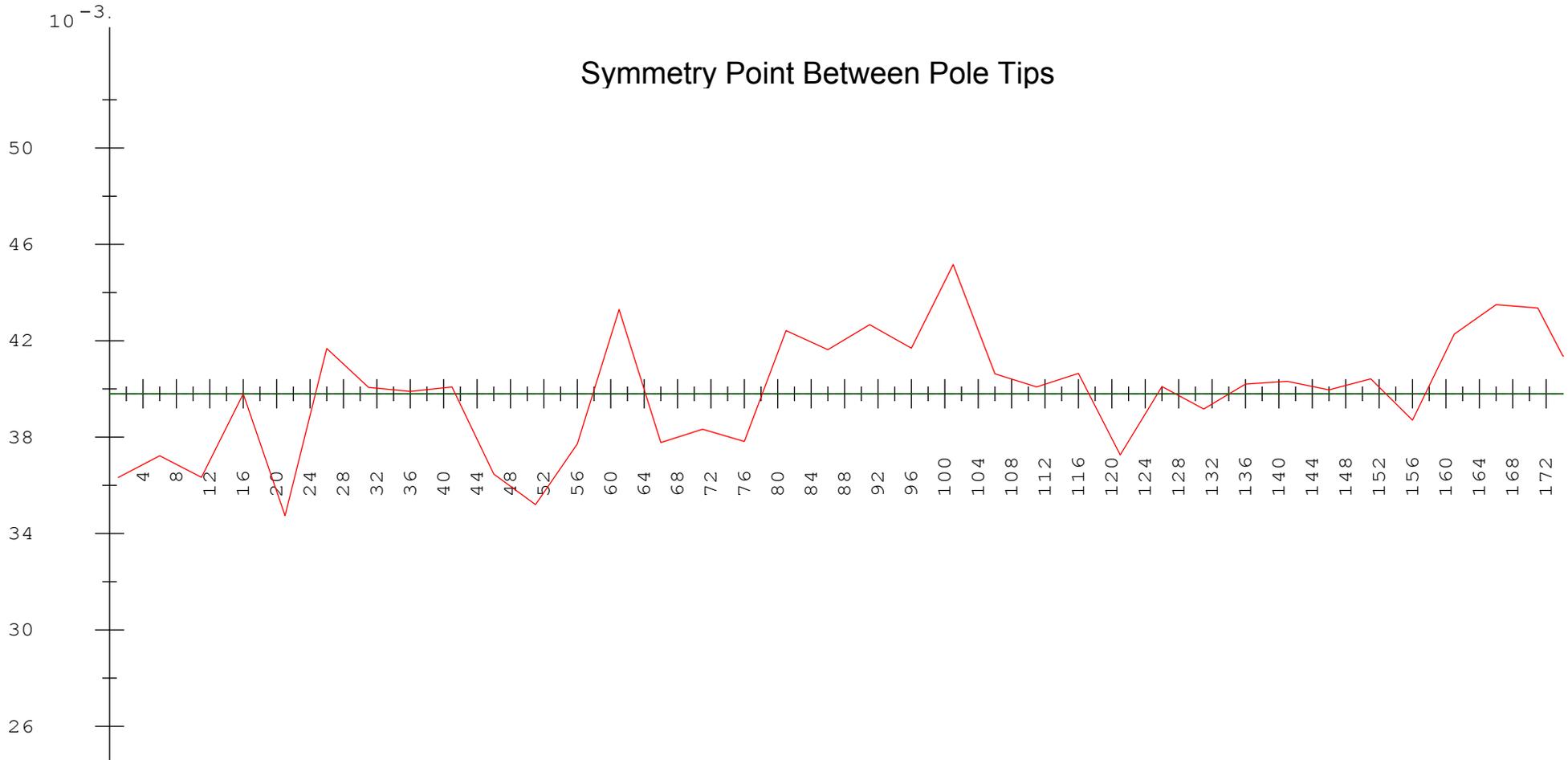METROLOGY

# LCLS II - SXR Undulator
Nominal Gap = 25     Nominal Taper = 0.000
Gap Reading = 25.0000     US Encoder = 25.0000     DS Encoder = 25.0000

13-NOV-2018
S/N = 017
D/S = 0001
Run = 14

Gap Between Opposing Pole Tips

Mean Gap =      25.0144

Step Between Measured Pole Tips =    5

Dimensions in mm

**LCLS II - SXR Undulator**

Nominal Gap = 25      Nominal Taper = 0.000

Gap Reading = 25.0000      US Encoder  = 25.0000      DS Encoder  = 25.0000

**SLAC**
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METROLOGY

13-NOV-2018
S/N =    017
D/S=    0001
Run=    14

## Symmetry Point Between Pole Tips



Mean Symmetry Value =      0.0398

Step Between Measured Pole Tips =      5

Dimensions in mm

| SLAC NATIONAL ACCELERATOR LABORATORY METROLOGY | **LCLS II - SXR Undulator** Nominal Gap = 25      Nominal Taper = 0.000 Gap Reading = 25.0000      US Encoder  = 25.0000      DS Encoder  = 25.0000 | 13-NOV-2018 S/N =   017 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** | 12.5459 | 12.5462 | 12.5471 | 12.5474 |
| **Bottom** | -12.4704 | -12.4689 | -12.4652 | -12.4637 |
| **Gap** | 25.0163 | | | 25.0111 |
| **Taper** | | | | -0.0052 |

## Summary of Mean Values

| Top Jaw Poles | Btm. Jaw Poles | Gap Values | Sym. Pt. Values |
|---|---|---|---|
| 12.5470 | -12.4674 | 25.0144 | 0.0398 |

## Additional Calculated Values

| | |
|---|---|
| **Bottom Pole #1 Z Value** | 980.178 |
| **Top Jaw Pitch (mrad)** | 0.000 |
| **Bottom Jaw Pitch(mrad)** | 0.002 |
| **Minimum Effective Gap** | 24.987 |
| **Reference Block Gap** | 6.806 |

Dimensions in mm

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METROLOGY

# LCLS II - SXR Undulator
Nominal Gap = 25    Nominal Taper = 0.000
Gap Reading = 25.0000    US Encoder = 25.0000    DS Encoder = 25.0000

13-NOV-2018
S/N = 017
D/S = 0001
Run = 14