## Top Jaw Pole Tips

Y Dev. from Mean

$10^{-3}$

Mean TOP = 5.5059    Regression Line Ang. (mrad) = 0.0077

Pole Tip Num. ---->

## Bottom Jaw Pole Tips

Minimum Effective Gap = 11.032

Y Dev. from Mean

$10^{-3}$

Mean BTM = -5.5696    Regression Line Ang. (mrad) = 0.0045

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

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

**SLAC**
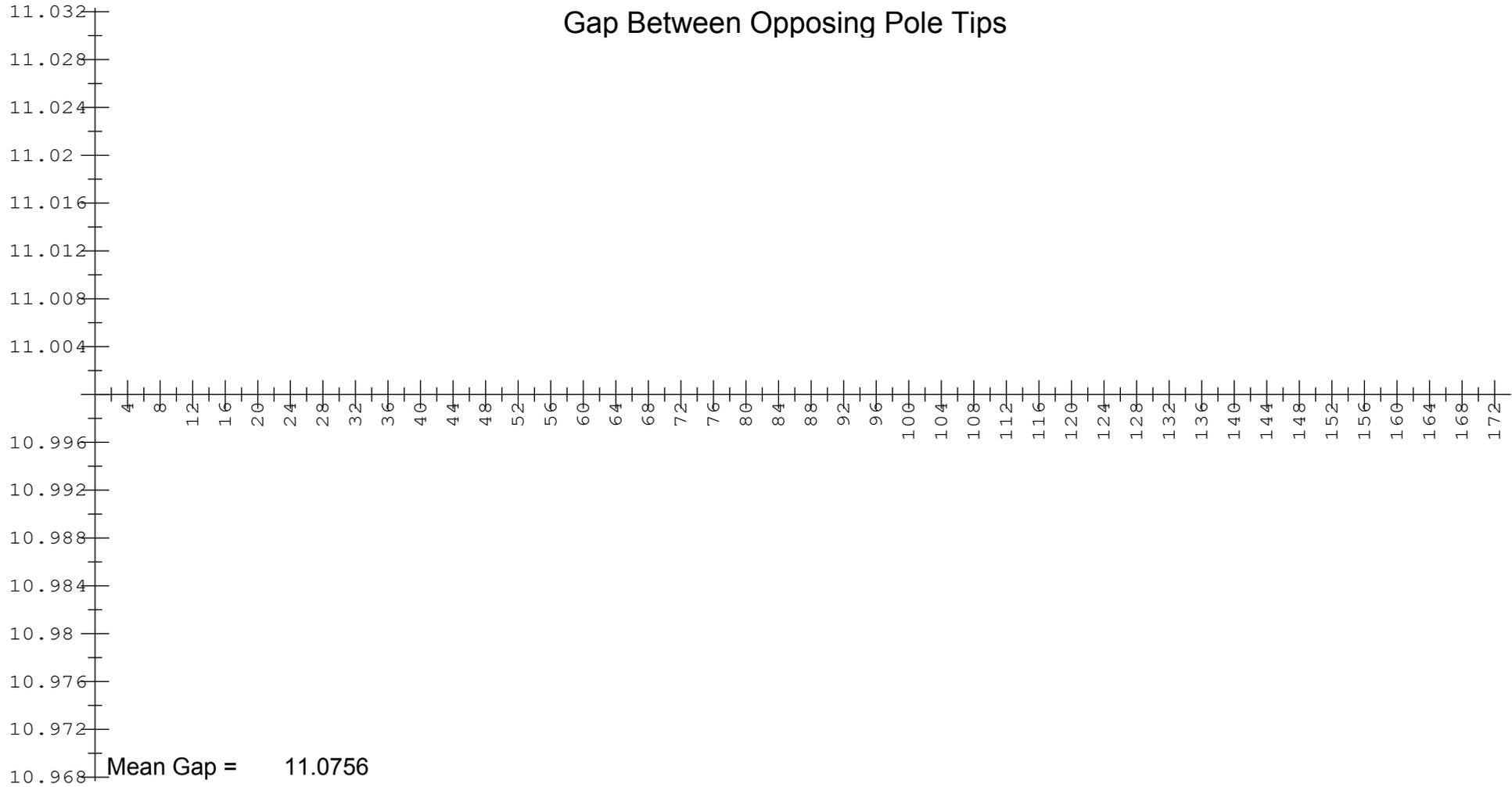NATIONAL ACCELERATOR LABORATORY
METROLOGY

**LCLS II - SXR Undulator**
Nominal Gap = 11    Nominal Taper = 0.000
Gap Reading = 11.0000    US Encoder = 11.0000    DS Encoder = 11.0000

05-APR-2019
S/N = 002
D/S= 0001
Run= 8

## Gap Between Opposing Pole Tips



Mean Gap =        11.0756

Step Between Measured Pole Tips =     5

Dimensions in mm

**SLAC**
NATIONAL ACCELERATOR LABORATORY
METROLOGY
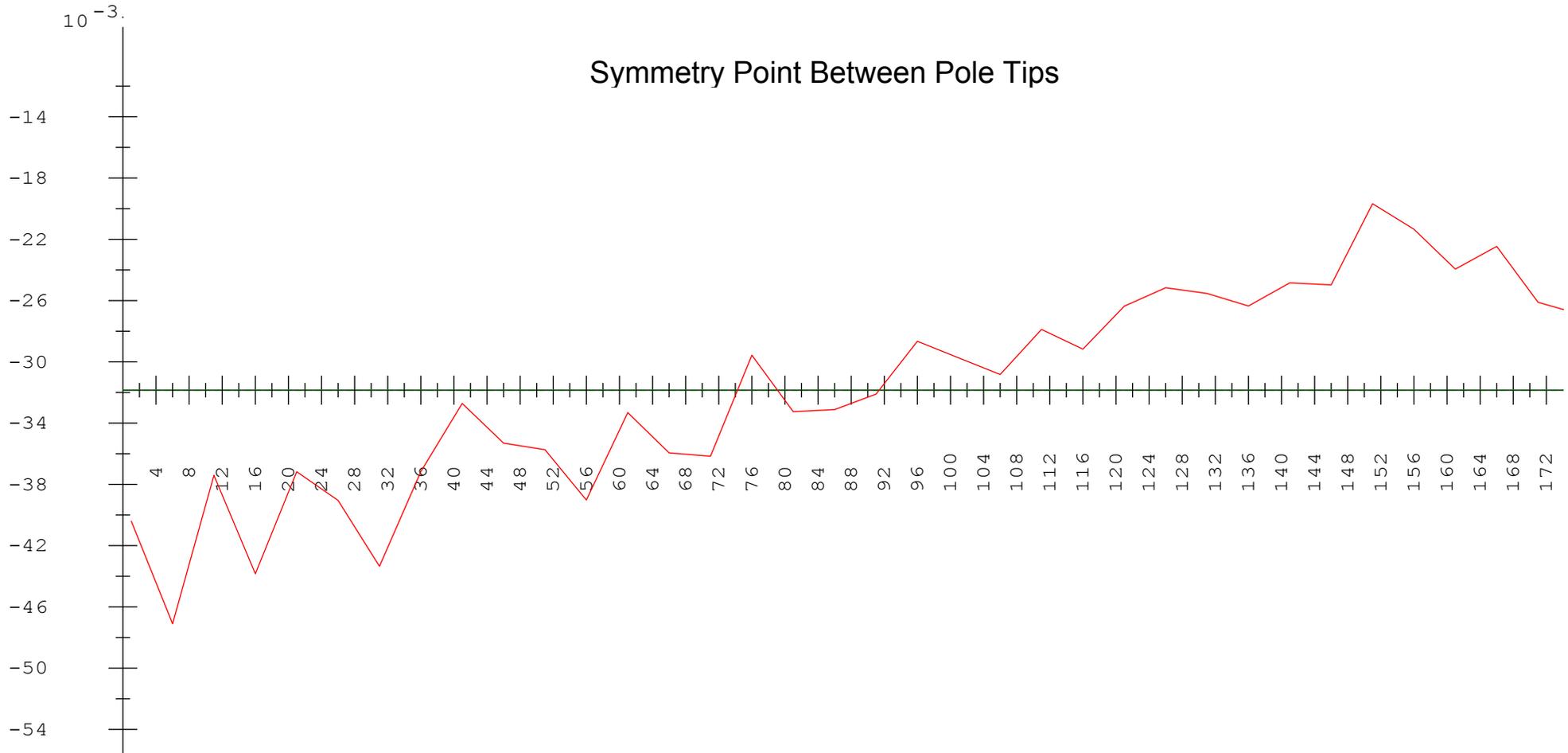
**LCLS II - SXR Undulator**
Nominal Gap = 11        Nominal Taper = 0.000
Gap Reading = 11.0000        US Encoder  = 11.0000        DS Encoder  = 11.0000

05-APR-2019
S/N =    002
D/S=    0001
Run=    8

Symmetry Point Between Pole Tips

Mean Symmetry Value =      -0.0319

Step Between Measured Pole Tips =   5

Dimensions in mm

**LCLS II - SXR Undulator**
Nominal Gap = 11      Nominal Taper = 0.000
Gap Reading = 11.0000      US Encoder = 11.0000      DS Encoder = 11.0000

05-APR-2019
S/N =   002
D/S=   0001
Run=   8

SLAC
NATIONAL ACCELERATOR LABORATORY
METROLOGY

## 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** | 5.4932 | 5.4989 | 5.5133 | 5.5192 |
| **Bottom** | -5.5774 | -5.5741 | -5.5657 | -5.5623 |
| **Gap** | 11.0706 | | | 11.0815 |
| **Taper** | | | | 0.0109 |

## Summary of Mean Values

| Top Jaw Poles | Btm. Jaw Poles | Gap Values | Sym. Pt. Values |
|---|---|---|---|
| 5.5059 | -5.5696 | 11.0756 | -0.0319 |

## Additional Calculated Values

| | |
|---|---|
| **Bottom Pole #1 Z Value** | 980.303 |
| **Top Jaw Pitch (mrad)** | 0.008 |
| **Bottom Jaw Pitch(mrad)** | 0.004 |
| **Minimum Effective Gap** | 11.032 |
| **Reference Block Gap** | 6.810 |

Dimensions in mm

**SLAC**
NATIONAL ACCELERATOR LABORATORY
METROLOGY

## LCLS II - SXR Undulator
Nominal Gap = 11        Nominal Taper = 0.000
Gap Reading = 11.0000      US Encoder = 11.0000      DS Encoder = 11.0000

05-APR-2019
S/N = 002
D/S = 0001
Run = 8