## Top Jaw Pole Tips

Y Value

Pole Tip Num. ---->

Mean TOP = 5.1148    Regression Line Ang. (mrad) = 0.0040

## Bottom Jaw Pole Tips

Minimum Effective Gap = 9.974

Y Value

Mean BTM = -4.8849    Regression Line Ang. (mrad) = 0.0043
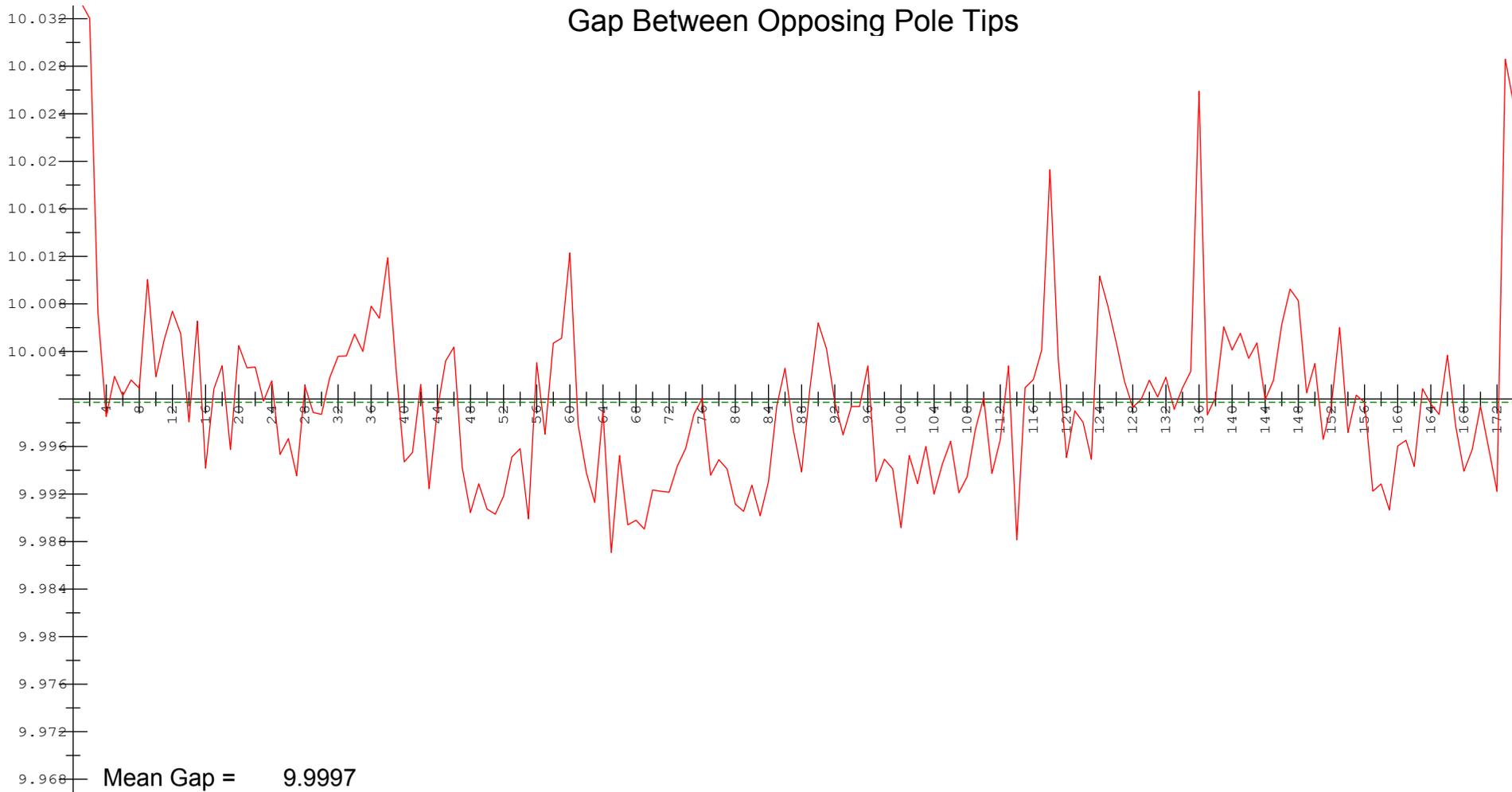
Y Value Scales Centered on Mean Values
Step Between Measured Pole Tips = 1

Regression Line Through Points = ———
Dimensions in mm

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**METROLOGY**

# LCLS II - SXR Undulator
## Nominal Gap = 10
Gap Reading = 10.0000    US Encoder = 10.0000    DS Encoder = 10.0000

13-MAR-2018
S/N = 007
D/S = 0001
Run = 27

# Gap Between Opposing Pole Tips

Mean Gap =    9.9997

Step Between Measured Pole Tips =    1

Dimensions in mm

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**METROLOGY**

**LCLS II - SXR Undulator**
Nominal Gap = 10

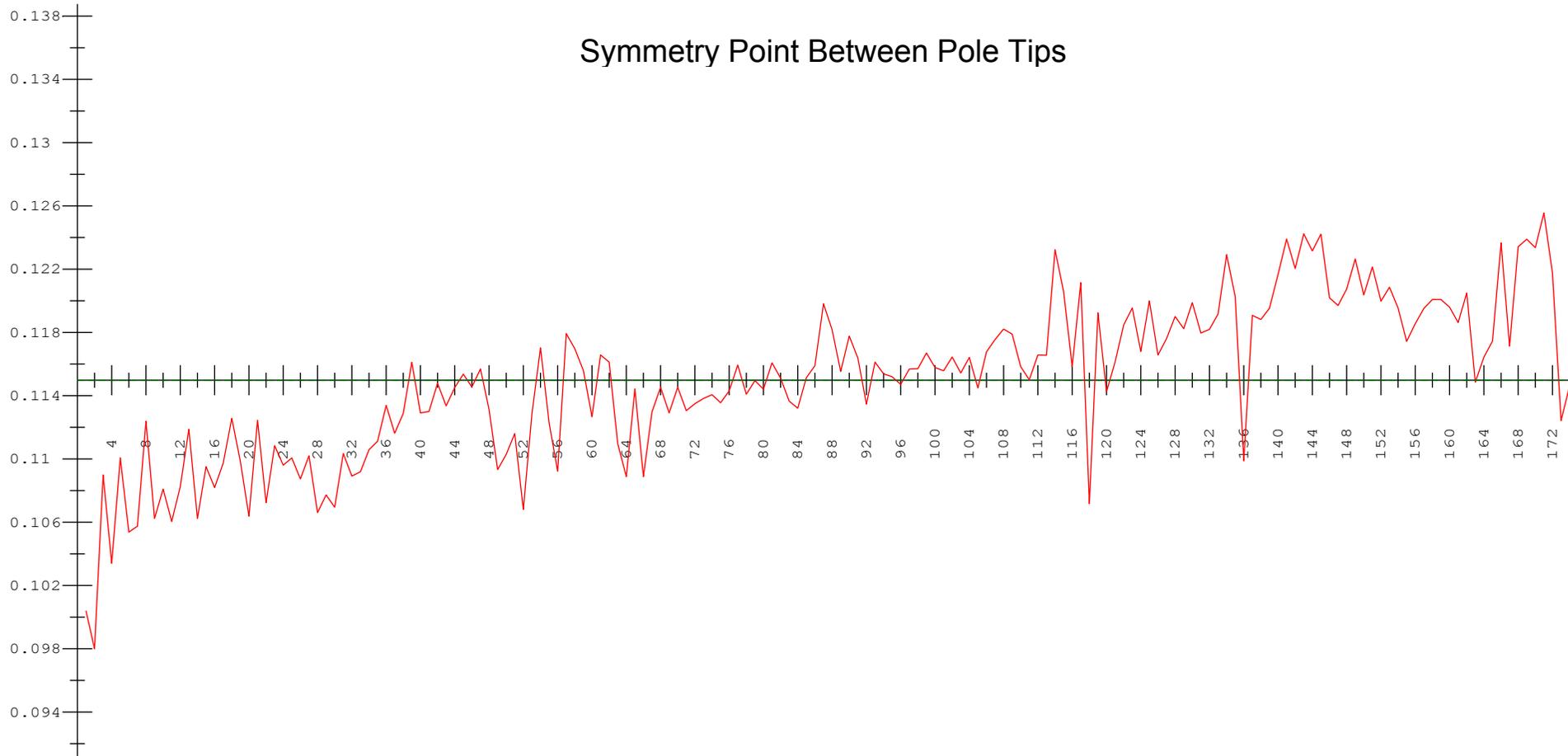Gap Reading = 10.0000     US Encoder  = 10.0000     DS Encoder  = 10.0000

13-MAR-2018
S/N =    007
D/S=    0001
Run=    27

# Symmetry Point Between Pole Tips



Mean Symmetry Value =     0.1150

Step Between Measured Pole Tips =     1

Dimensions in mm

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METROLOGY

## LCLS II - SXR Undulator
### Nominal Gap = 10
Gap Reading = 10.0000     US Encoder  = 10.0000     DS Encoder  = 10.0000

13-MAR-2018
S/N =    007
D/S=    0001
Run=    27

## 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** | 5.1080 | 5.1110 | 5.1186 | 5.1216 |
| **Bottom** | -4.8921 | -4.8889 | -4.8809 | -4.8777 |
| **Gap** | 10.0001 | | | 9.9993 |
| **Taper** | | | | -0.0008 |

## Summary of Mean Values

| Top Jaw Poles | Btm. Jaw Poles | Gap Values | Sym. Pt. Values |
|---|---|---|---|
| 5.1148 | -4.8849 | 9.9997 | 0.1150 |

## Additional Calculated Values

| | |
|---|---|
| **Bottom Pole #1 Z Value** | 979.180 |
| **Top Jaw Pitch (mrad)** | 0.004 |
| **Bottom Jaw Pitch(mrad)** | 0.004 |
| **Minimum Effective Gap** | 9.974 |
| **Reference Block Gap** | 6.811 |

Dimensions in mm

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## LCLS II - SXR Undulator
Nominal Gap = 10
Gap Reading = 10.0000    US Encoder = 10.0000    DS Encoder = 10.0000

13-MAR-2018
S/N = 007
D/S = 0001
Run= 27