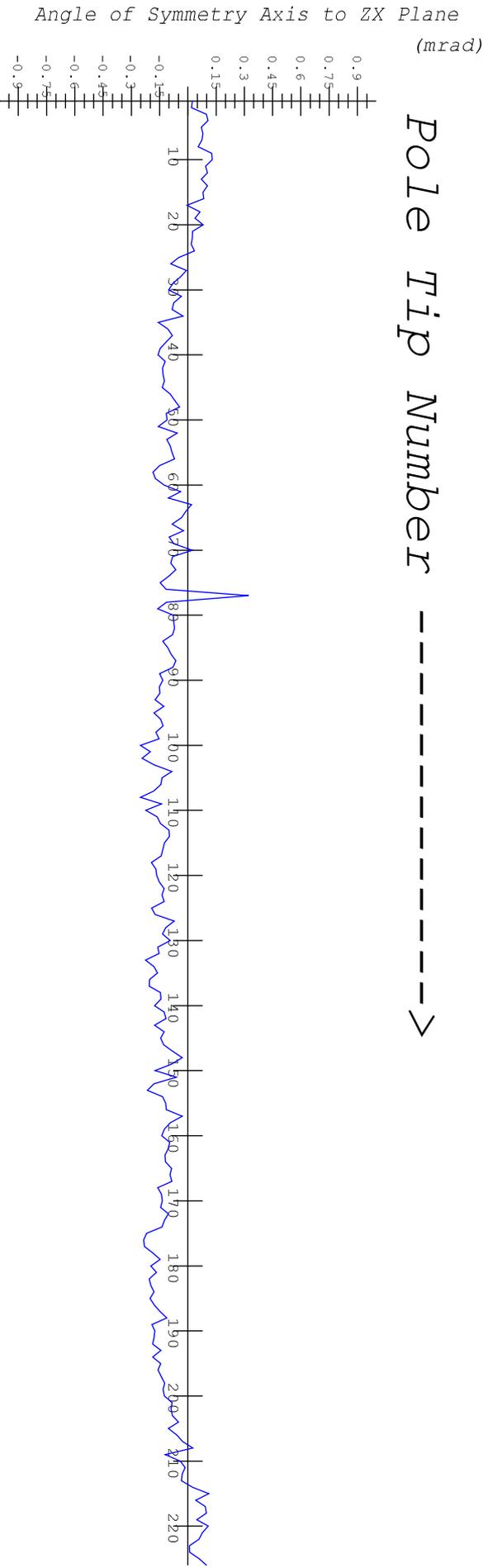


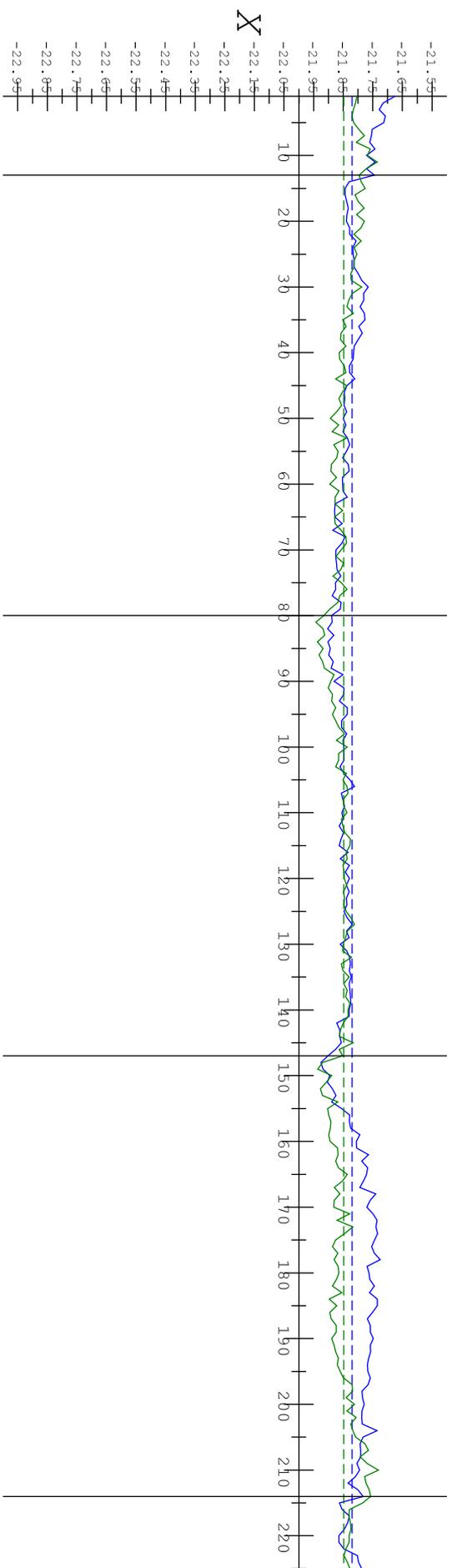
Pole Tip Number ----->



Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips  
 Included Angle is the angle between the Upper and Lower Pole Tips

<p><b>SLAC</b>          LCLS-MMF          LEITZ CMM</p>	<p>Undulator Pole Tip Angles          Post Magnetic Alignment</p>	<p>DATE: 15-JAN-2008          UNDULATOR # 37          DATASET # 0002          PROGRAM VERSION 2.5</p>
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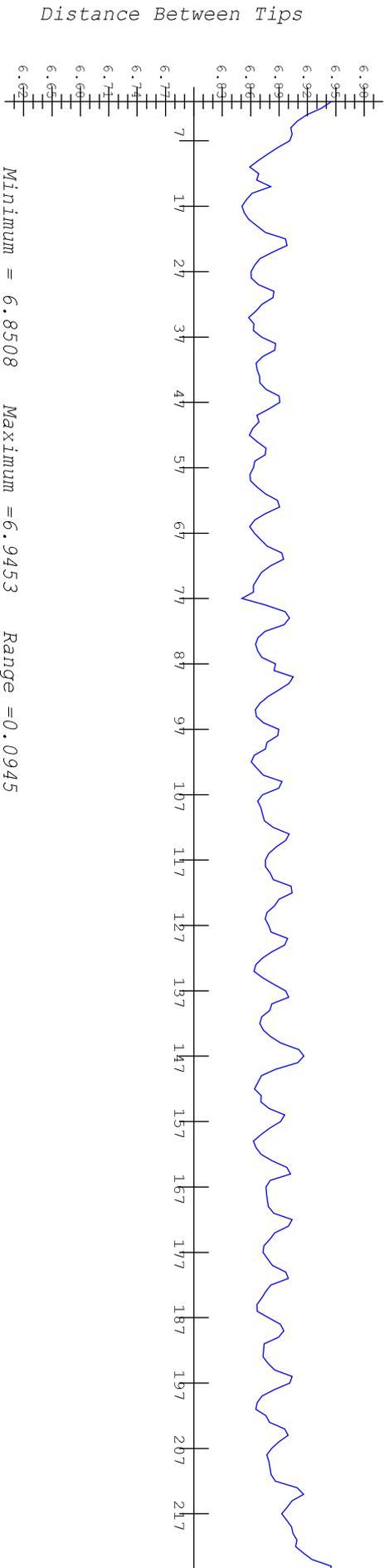
# Pole Tip Number ----->



**SLAC**  
 LCLS-MMF  
 LEITZ CMM

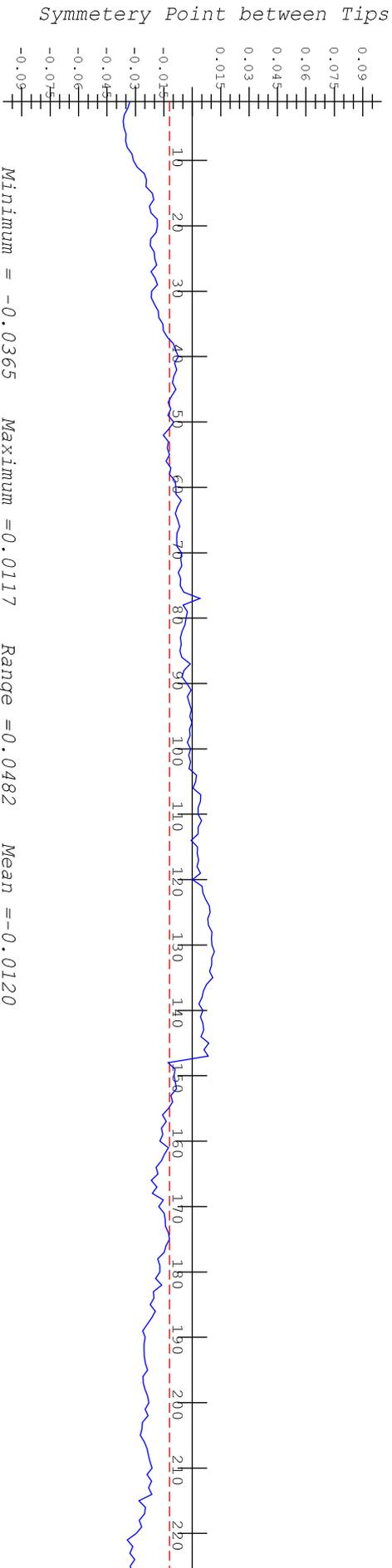
Undulator Pole Tip Location  
 Post Magnetic Alignment

DATE: 15-JAN-2008  
 UNDULATOR # 37  
 DATASET # 0002  
 PROGRAM VERSION 2.5



in mm

Pole Tip Number ----->



Symmetry Point is the symmetry point between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C/L  
 Broken Red line is Mean Value of Symmetry Points  
 Distance Between Tips is the distance between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C/L

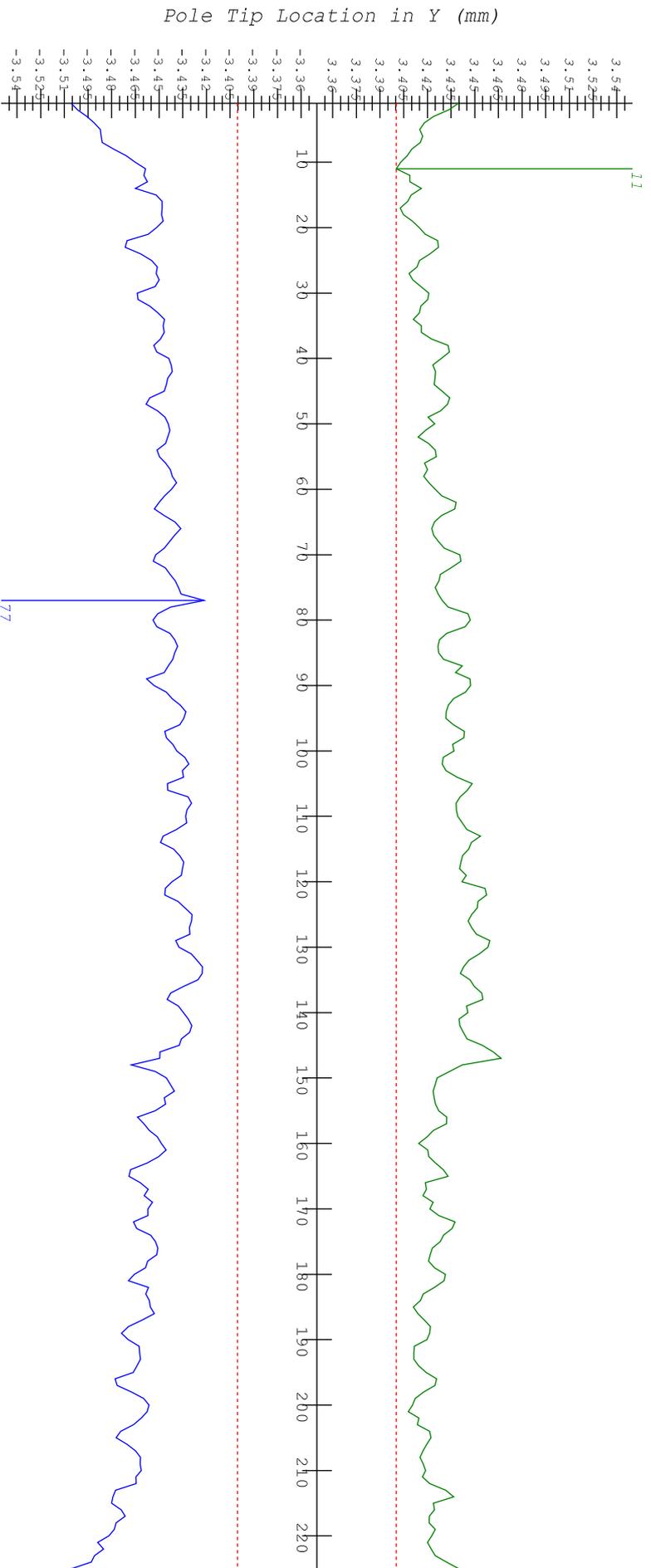
**SLAC**  
 LCLS-MMF  
 LEITZ CMM

Undulator Pole Tip Location  
 Post Magnetic Alignment

DATE: 15-JAN-2008  
 UNDUULATOR # 37  
 DATASET # 0002  
 PROGRAM VERSION 2.5

Maximum Chamber Gap = 6.8007

Minimum = 3.4003    Maximum = 3.4666    Range = 0.0662



Minimum = -3.5056    Maximum = -3.4214    Range = 0.0842

Pole Tip Number ----->

Green = The position of the Upper Pole Tips at Magnetic C\L  
Blue = The position of the Lower Pole Tips at Magnetic C\L  
Max. Chamber Gap = The maximum width vacuum chamber that will fit centered on the Magnetic C\L (2\*Min. Dev. from C\L)

**SLAC**  
LCLS-MMF  
LEITZ CMM

Undulator Pole Tip Location  
Post Magnetic Alignment

DATE: 15-JAN-2008  
UNDULATOR # 37  
DATASET # 0002  
PROGRAM VERSION 2.5



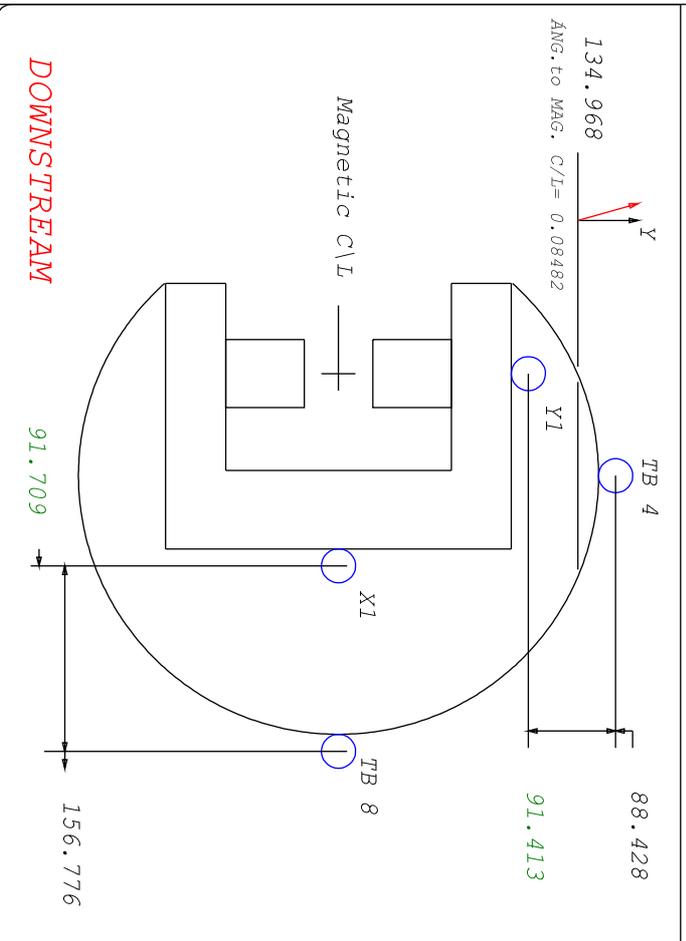
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.2612	179.7797	-1558.338
2	0.4126	179.8860	-584.7073
3	0.0760	179.7489	591.3897
4	0.3952	179.8413	1562.2753
5	248.5292	-0.0058	1558.218
6	248.4102	0.0452	-584.6582
7	248.4327	-0.0639	591.4266
8	248.4845	-0.1044	1562.1183

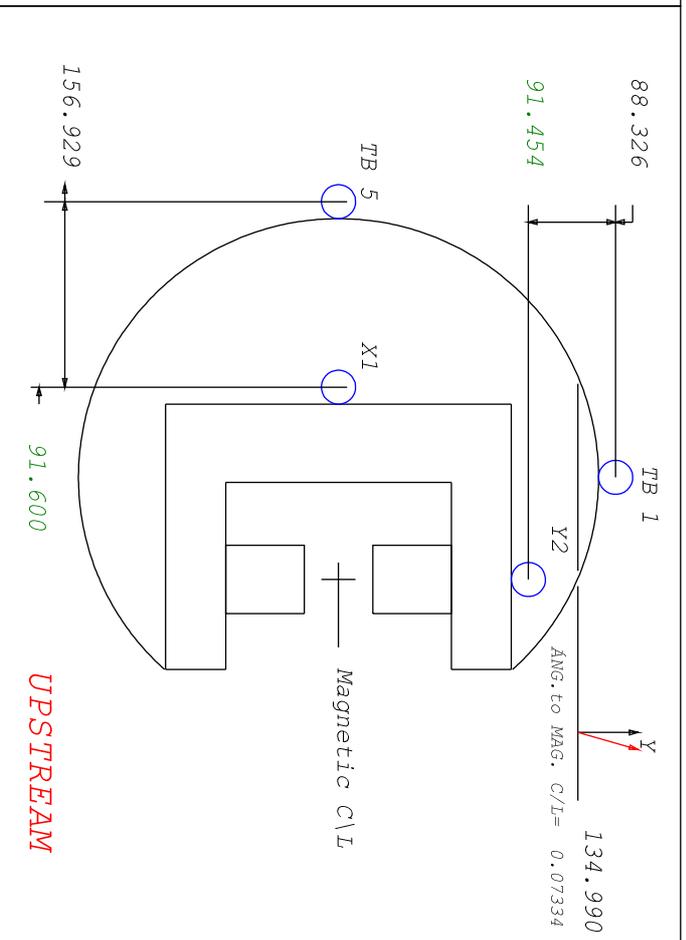
	C/L Offset	Length
Top Magnetic Structure	0.023	3381.121
Bottom Magnetic Structure	-0.023	3380.995
Strongback	0.425	3399.992

Dimensions in mm

Angles in mrad



DOWNSTREAM

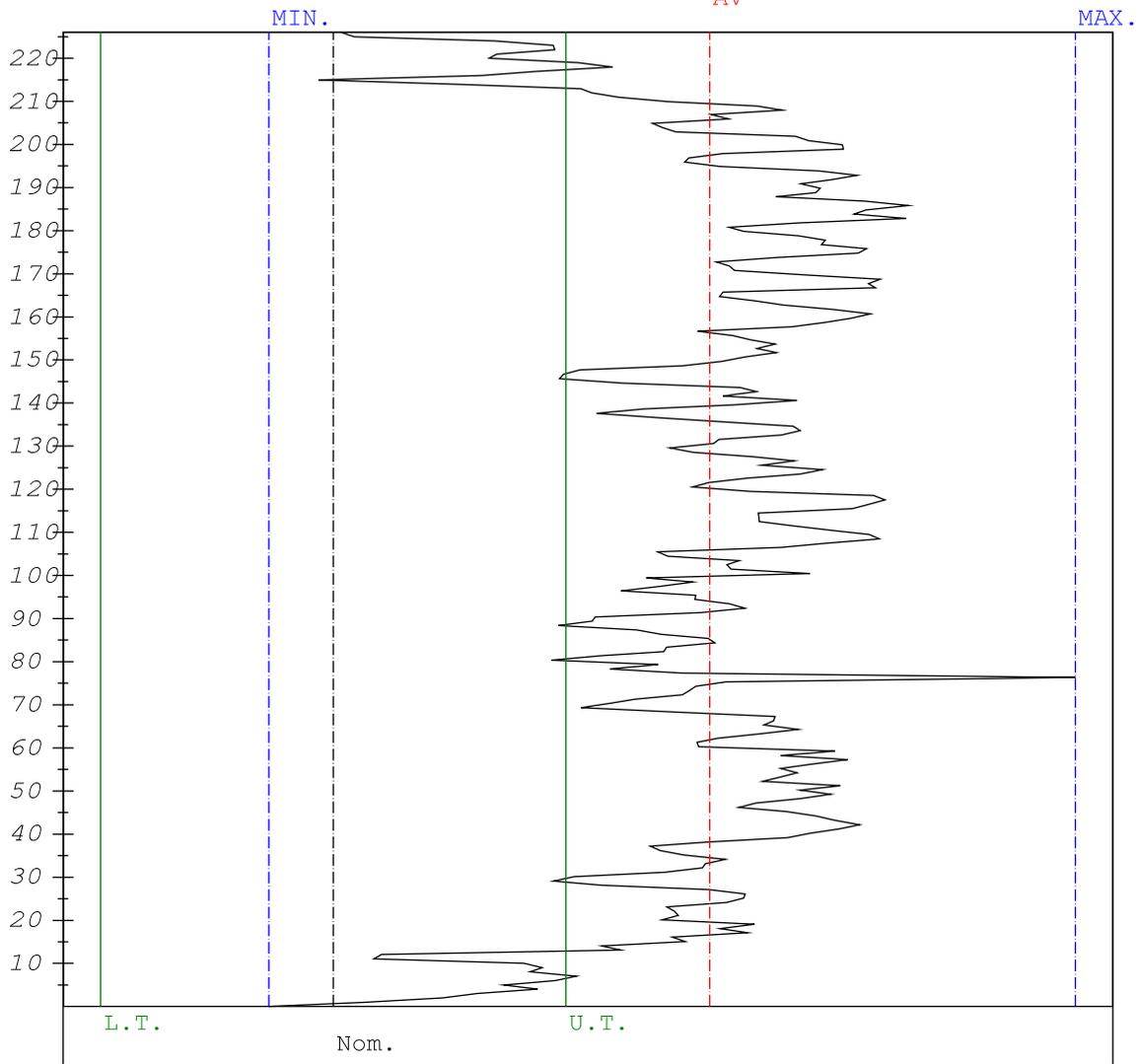
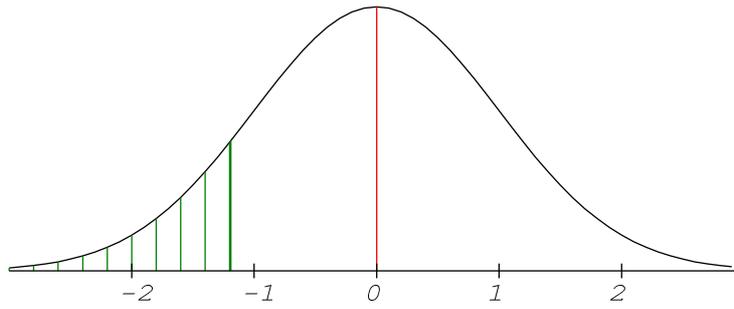


UPSTREAM

**SLAC**  
LCLS-MMF  
LEITZ CMM

Undulator Dimensional Fiducialization  
Post Magnetic Alignment

DATE: 15-JAN-2008  
UNDULATOR # 37  
DATASET # 0002  
PROGRAM VERSION 2.5



Nominal : 4.5000	Averag : 5.3089	Cent.-Dev. : 0.8089
Up. Tol. : 0.5	Maximum : 6.0947	U.Tol.Ex. > : 88.3 %
Low.Tol. : -0.5	Minimum : 4.3615	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2595	In Tolerance: 11.7 %
Outlier : 0	Distribution : NOR	Dimension : mrad

**SLAC**  
LCLS-MMF  
LEITZ CMM

Statistical Evaluation  
Pole Tip Gap Angle  
Post Magnetic Alignment

DATE: 15-JAN-2008  
UNDULATOR # 37  
DATASET # 0002  
PROGRAM VERSION 2.5