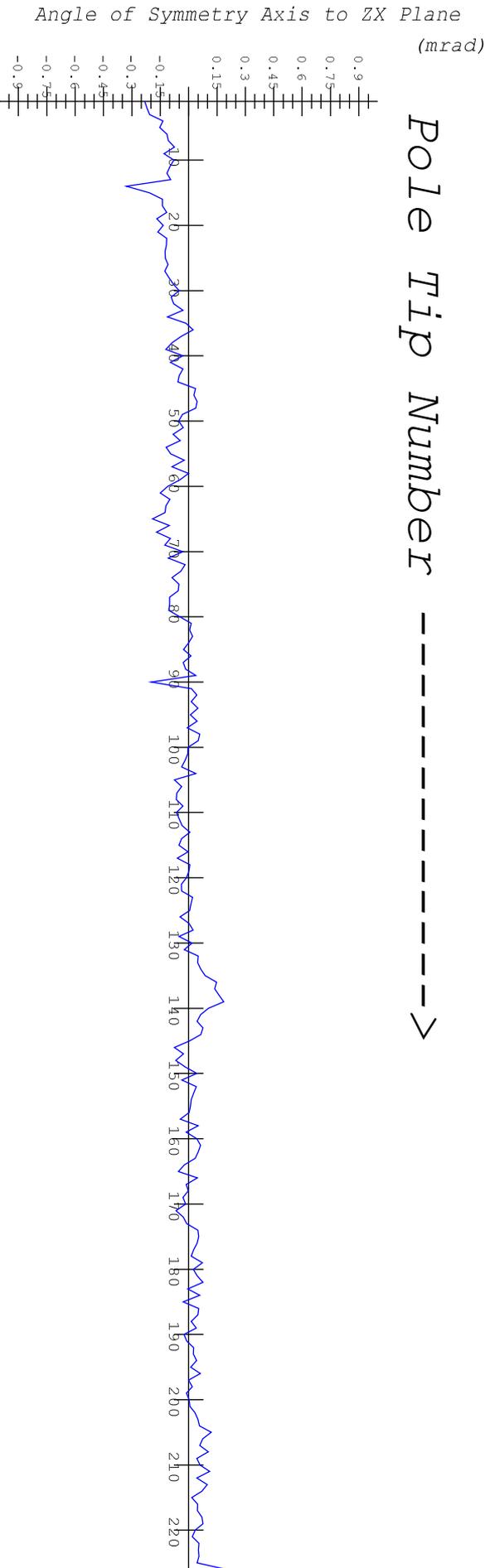


Pole Tip Number ----->



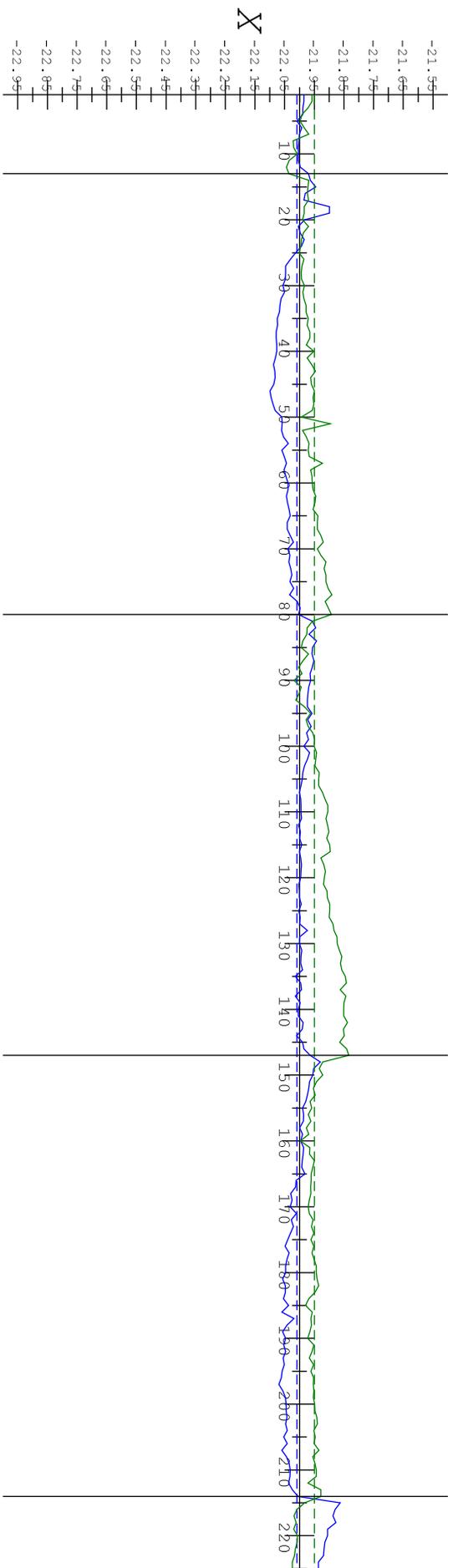
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips  
 Included Angle is the angle between the Upper and Lower Pole Tips

**SLAC**  
 LCLS-MMF  
 LEITZ CMM

Undulator Pole Tip Angles  
 Post Magnetic Alignment

DATE: 15-MAY-2008  
 UNDUULATOR # 30  
 DATASET # 0002  
 PROGRAM VERSION 2.7

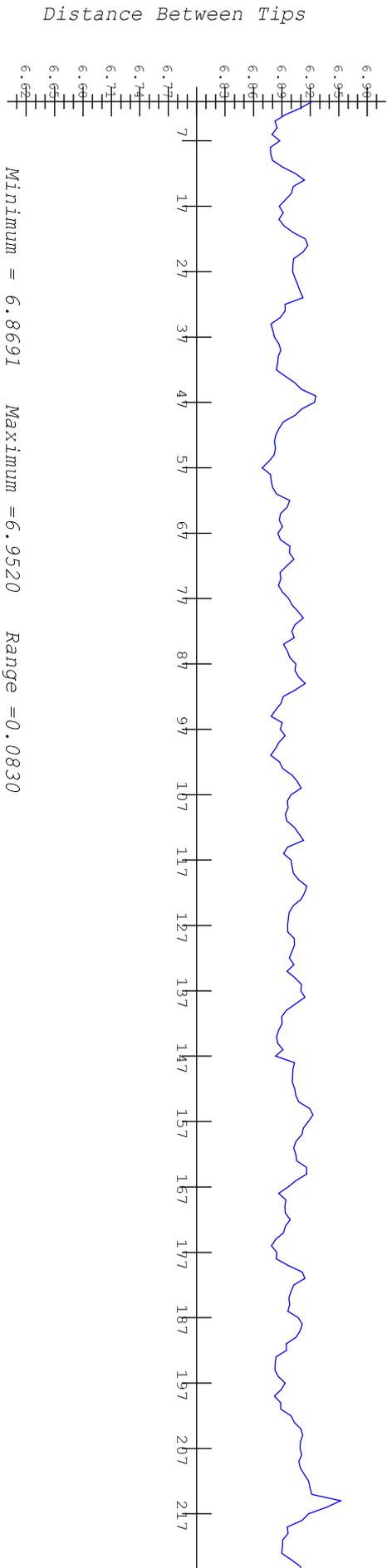
# Pole Tip Number ----->



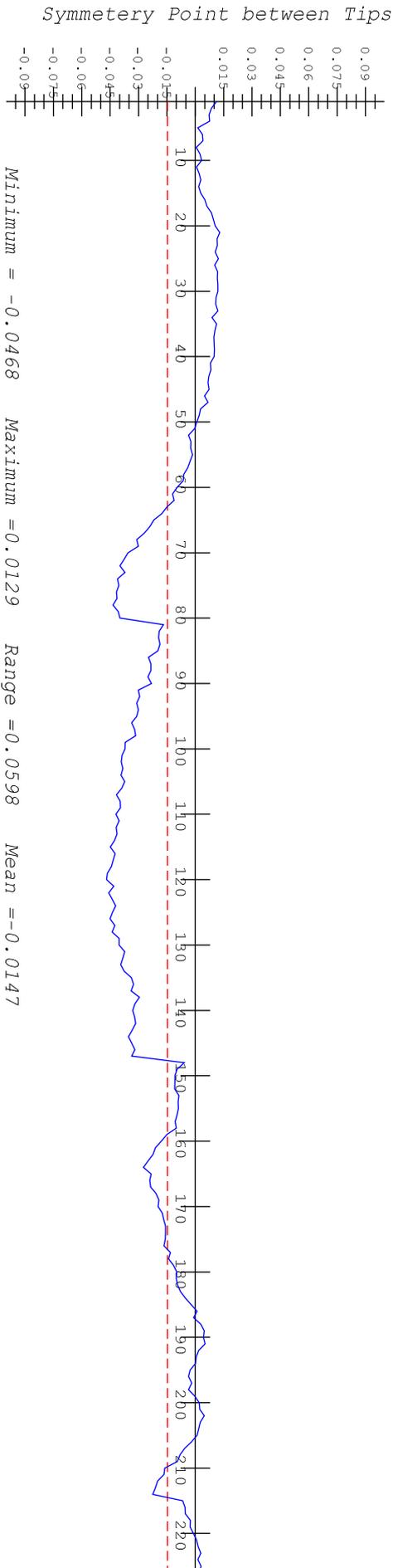
**SLAC**  
 LCLS-MMF  
 LEITZ CMM

Undulator Pole Tip Location  
 Post Magnetic Alignment

DATE: 15-MAY-2008  
 UNDULATOR #30  
 DATASET # 0002  
 PROGRAM VERSION 2.7



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

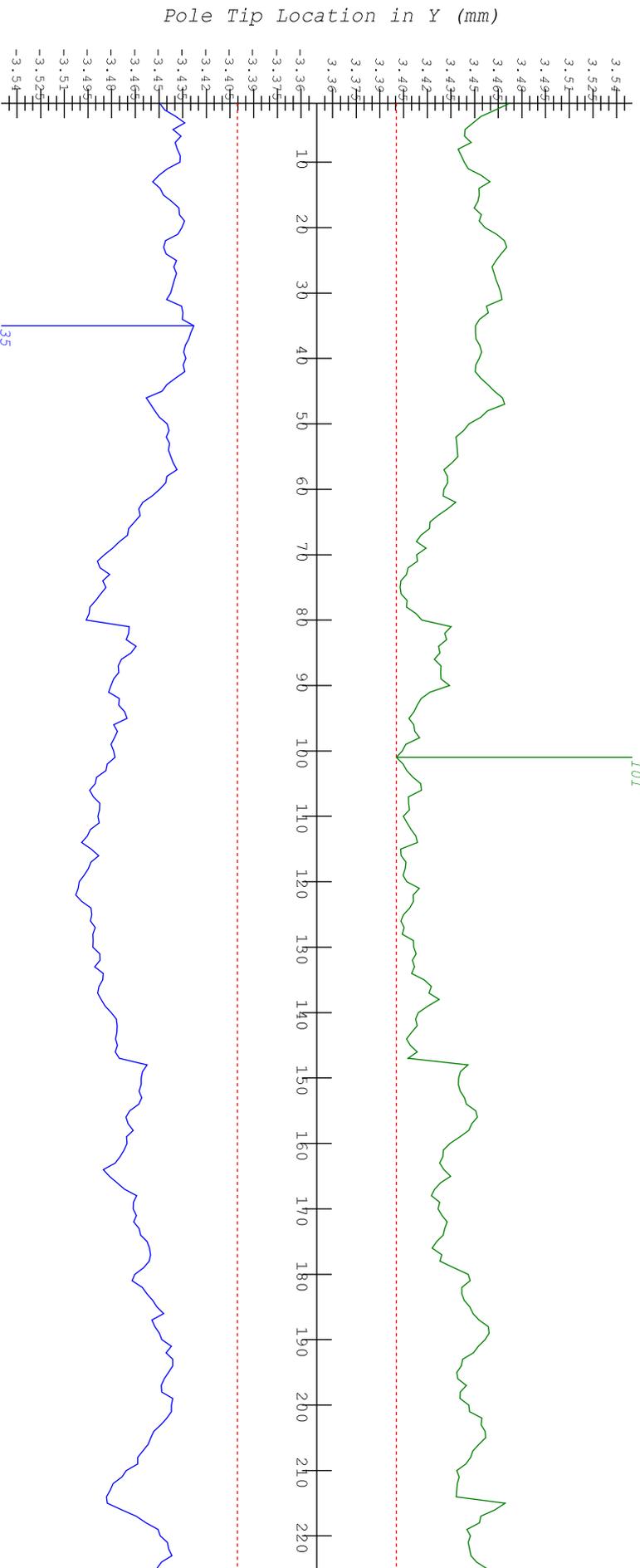
**SLAC**  
 LCLS-MMF  
 LEITZ CMM

Undulator Pole Tip Location  
 Post Magnetic Alignment

DATE: 15-MAY-2008  
 UNDUULATOR # 30  
 DATASET # 0002  
 PROGRAM VERSION 2.7

Maximum Chamber Gap = 6.8008

Minimum = 3.4004    Maximum = 3.4722    Range = 0.0718



Minimum = -3.5027    Maximum = -3.4279    Range = 0.0748

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-MAY-2008  
UNDULATOR #30  
DATASET # 0002  
PROGRAM VERSION 2.7



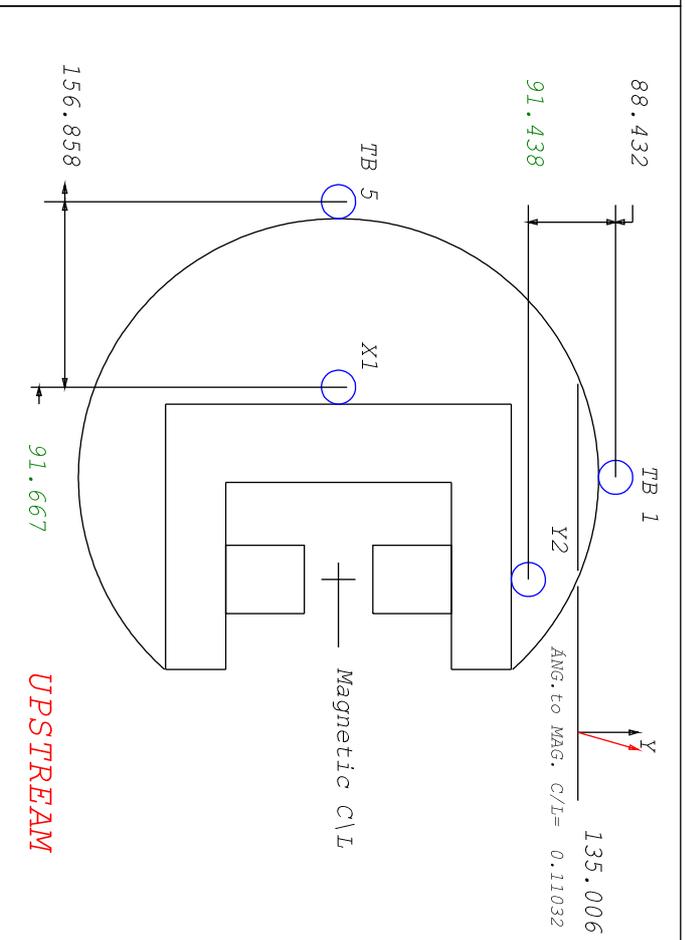
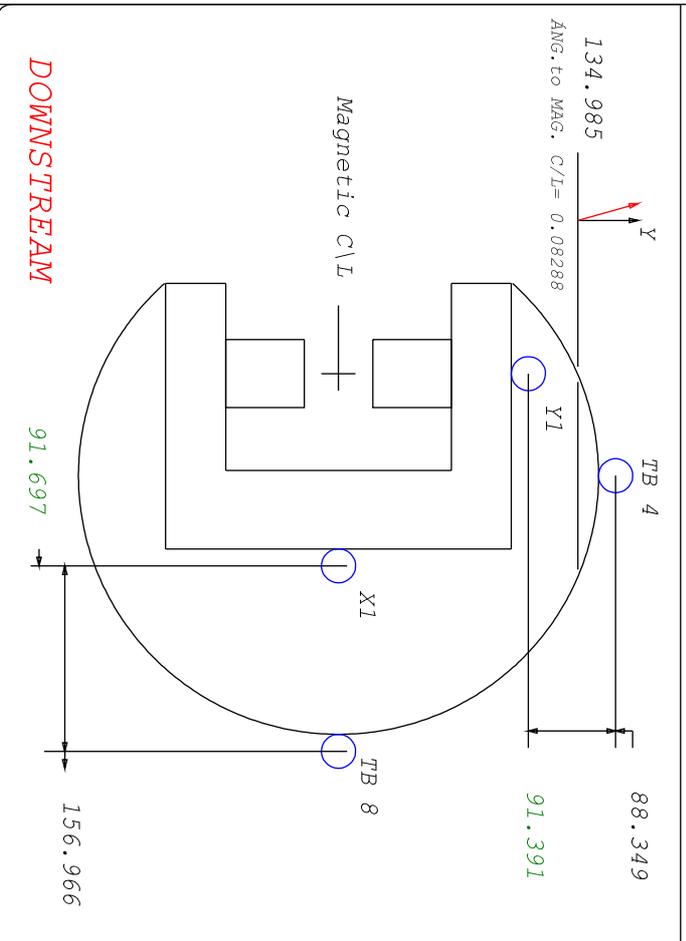
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.2763	179.8702	-1558.359
2	0.4446	179.6969	-584.7594
3	0.5088	179.6981	591.1944
4	0.4646	179.7405	1562.0600
5	248.5249	0.1706	-1558.467
6	248.6303	0.1209	-584.7644
7	248.7166	0.1217	591.2442
8	248.6626	0.0718	1562.1472

	C/L Offset	Length
Top Magnetic Structure	0.012	3381.379
Bottom Magnetic Structure	-0.012	3381.362
Strongback	0.235	3400.065

Dimensions in mm

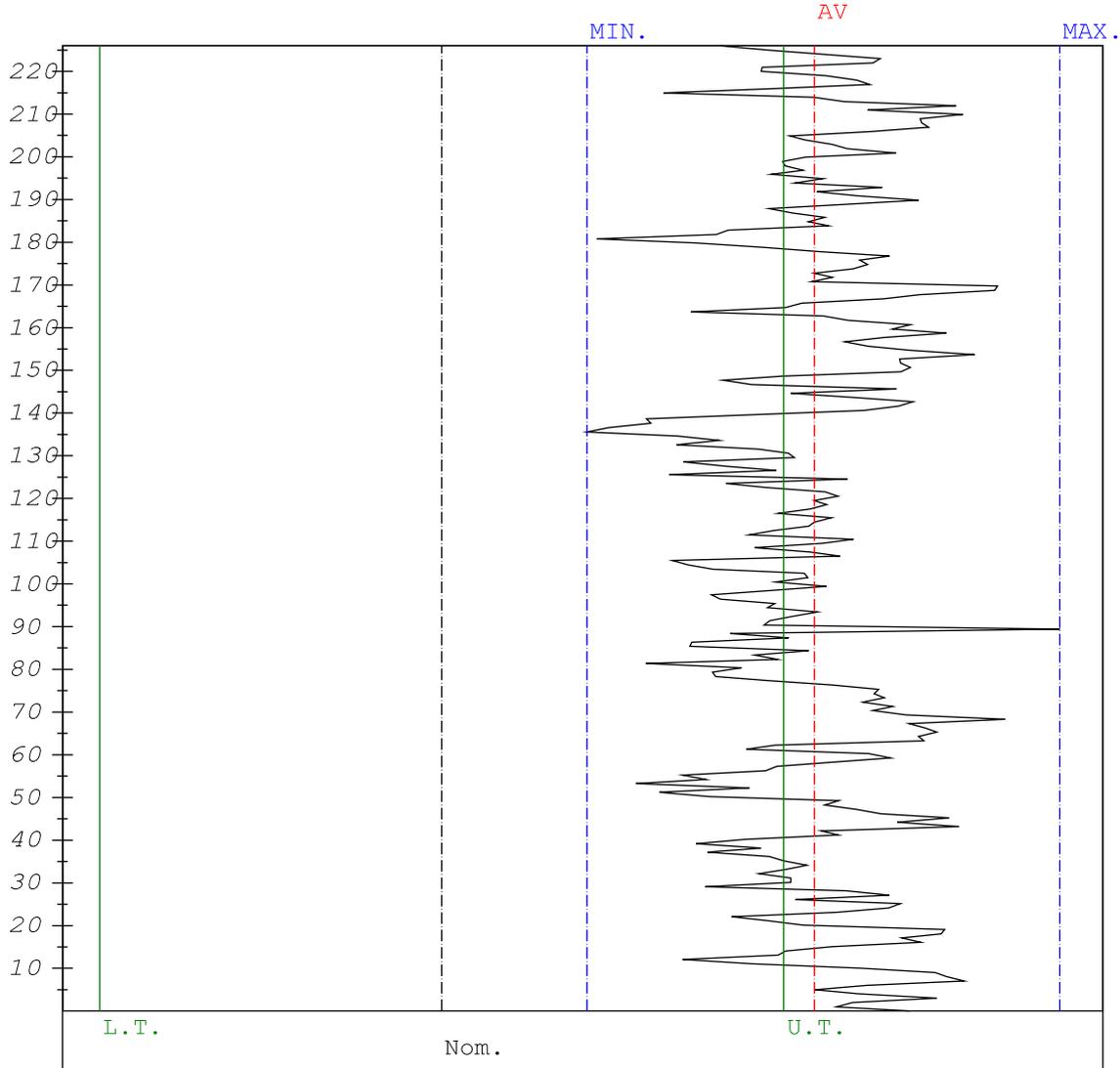
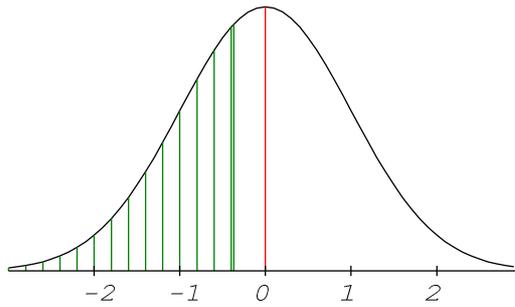
Angles in mrad



**SLAC**  
LCLS-MMF  
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Undulator Dimensional Fiducialization  
Post Magnetic Alignment

DATE: 15-MAY-2008  
UNDULATOR #30  
DATASET # 0002  
PROGRAM VERSION 2.7



Nominal : 4.5000	Averag : 5.0451	Cent.-Dev. : 0.5451
Up. Tol. : 0.5	Maximum : 5.4038	U.Tol.Ex. > : 64.4 %
Low.Tol. : -0.5	Minimum : 4.7123	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1223	In Tolerance: 35.6 %
Outlier : 0	Distribution : NOR	Dimension : mrad

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LCLS-MMF  
LEITZ CMM

Statistical Evaluation  
Pole Tip Gap Angle  
Post Magnetic Alignment

DATE:15-MAY-2008  
UNDULATOR #30  
DATASET # 0002  
PROGRAM VERSION 2.7