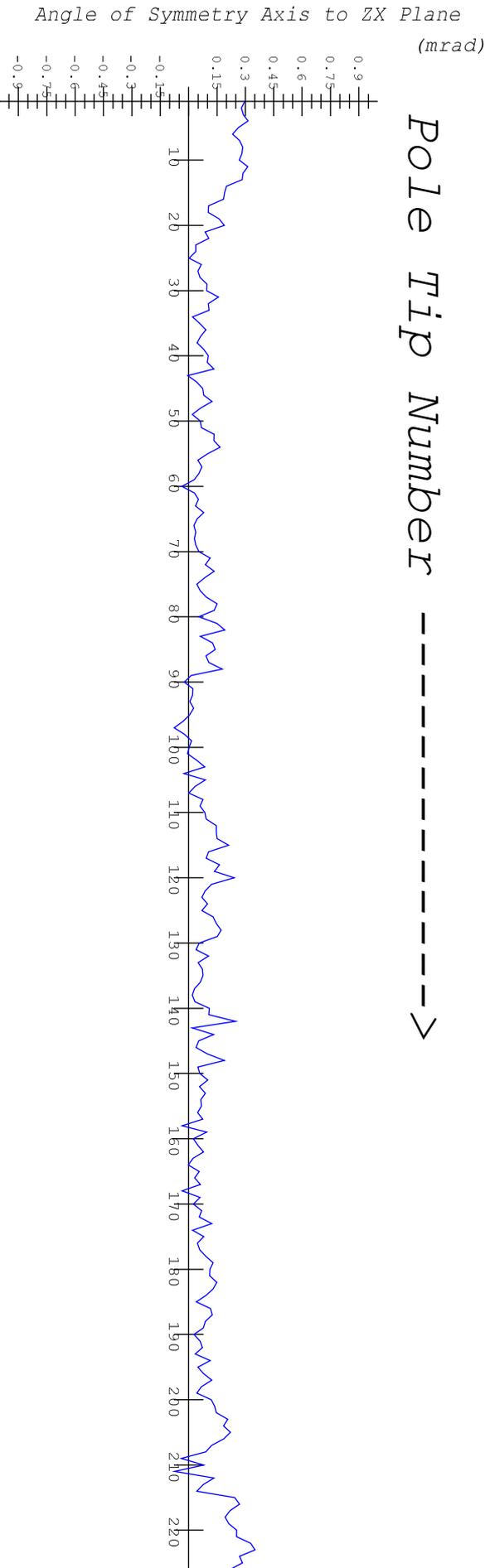


Pole Tip Number ----->



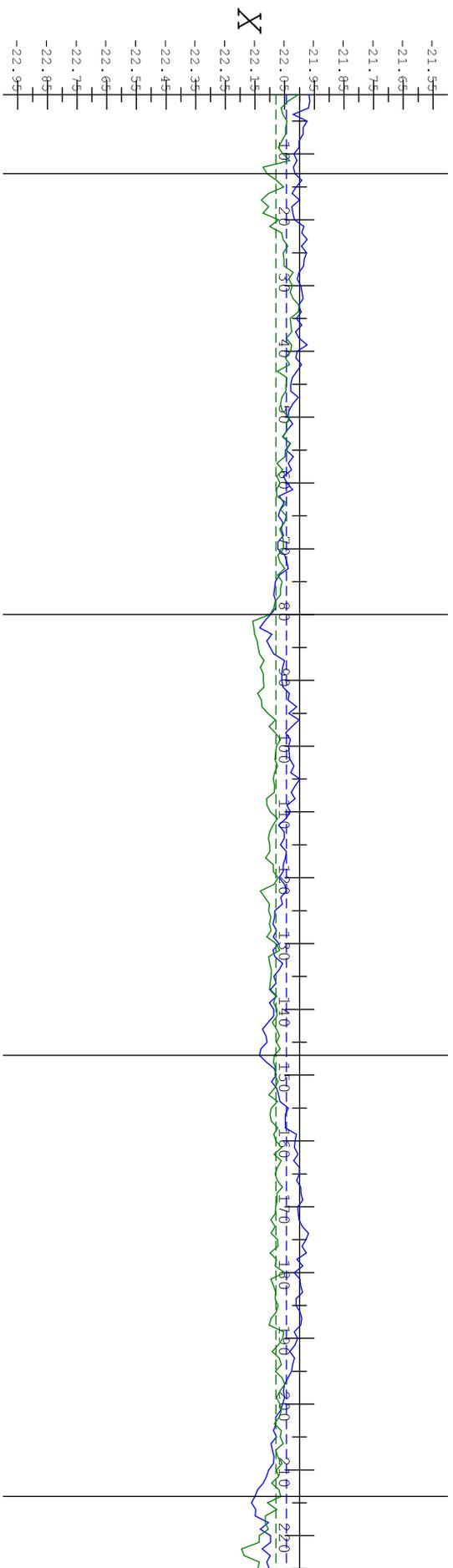
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips

SLAC
 LCLS-MMF
 LEITZ CMM

Undulator Pole Tip Angles
 Post Magnetic Alignment

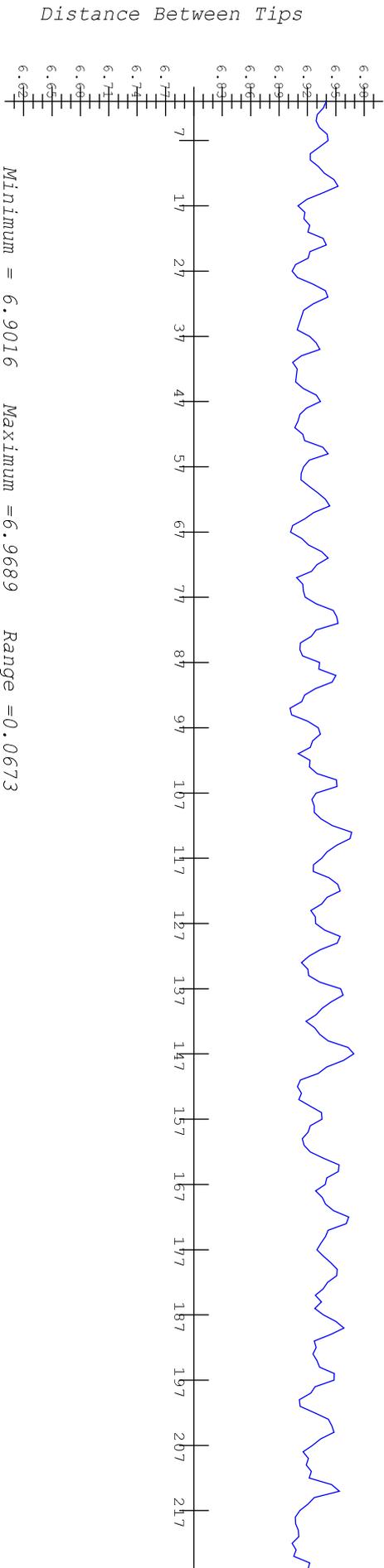
DATE: 07-AUG-2007
 UNDULATOR # 15
 DATASET # 0001
 PROGRAM VERSION 2.1

Pole Tip Number ----->

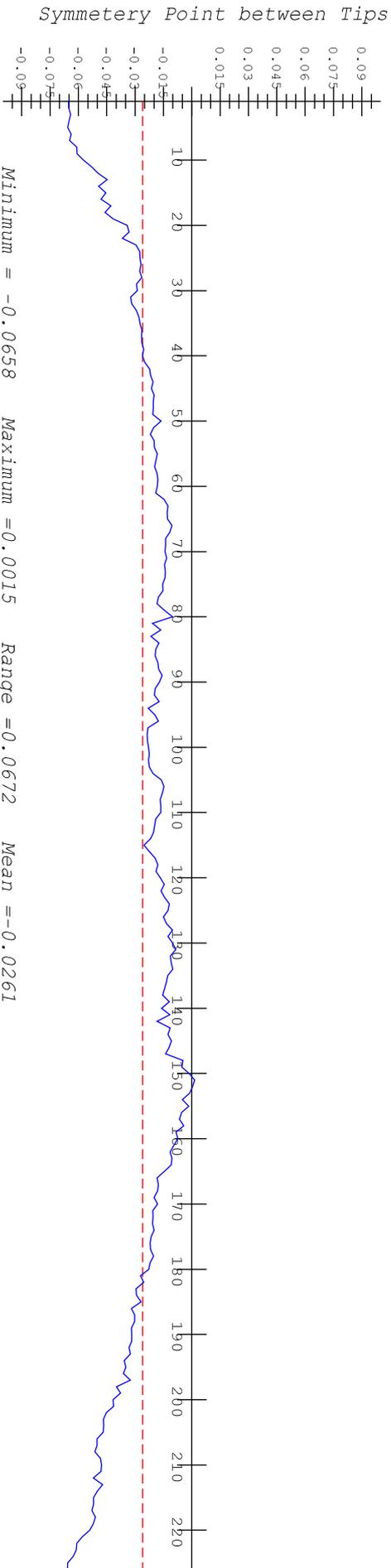


X values in mm
 Green Solid = Point on front face of Upper Pole Tip 10mm above Magnetic C/L
 Green Dash = Mean value of all Upper Pole Tips 10mm above Magnetic C/L Mean value Upper Pole Tips = -22.079
 Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L
 Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -22.044

<p>SLAC LCLS-MMF LEITZ CMM</p>	<p>Undulator Pole Tip Location Post Magnetic Alignment</p>	<p>DATE: 07-AUG-2007 UNDULATOR # 15 DATASET # 0001 PROGRAM VERSION 2.1</p>
---	---	---



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

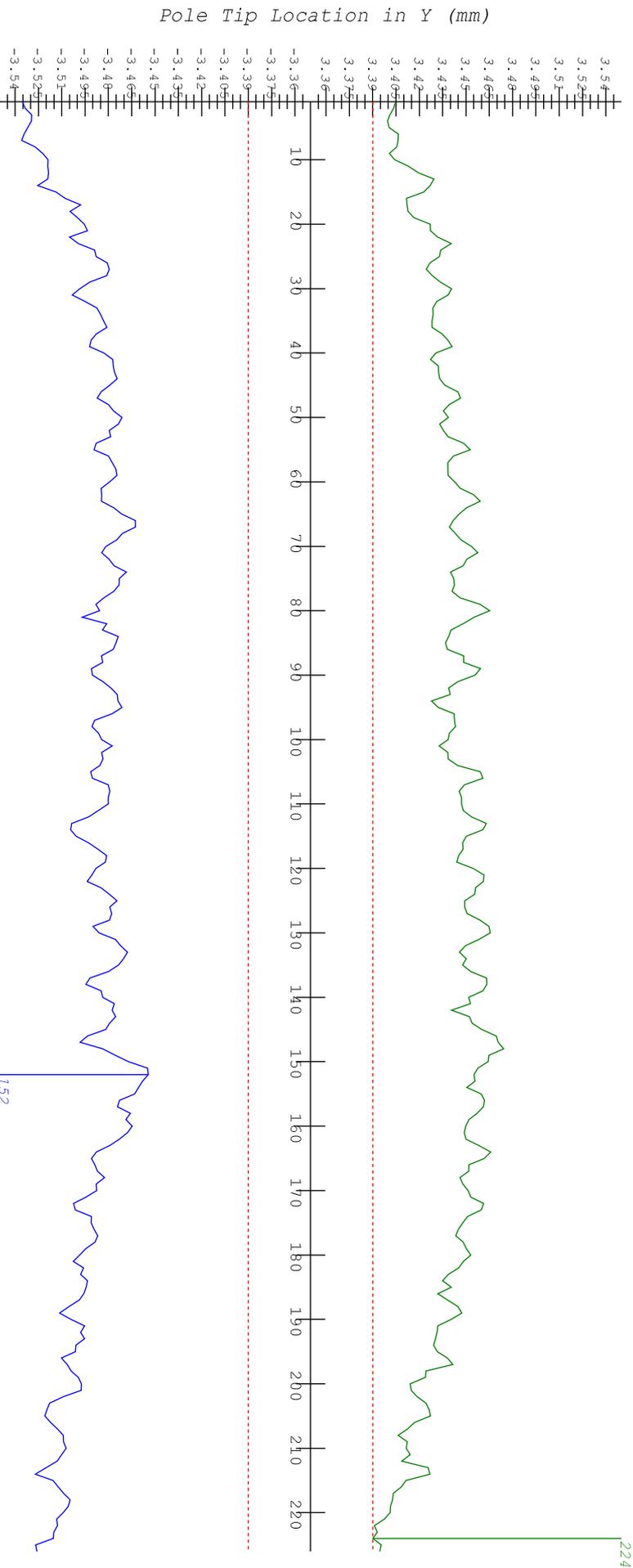
SLAC
 LCLS-MMF
 LEITZ CMM

Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 07-AUG-2007
 UNDUATOR # 15
 DATASET # 0001
 PROGRAM VERSION 2.1

Maximum Chamber Gap = 6.7801

Minimum = 3.3900 Maximum = 3.4742 Range = 0.0842



Minimum = -3.5358 Maximum = -3.4543 Range = 0.0814

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: 07-AUG-2007
UNDULATOR # 15
DATASET # 0001
PROGRAM VERSION 2.1



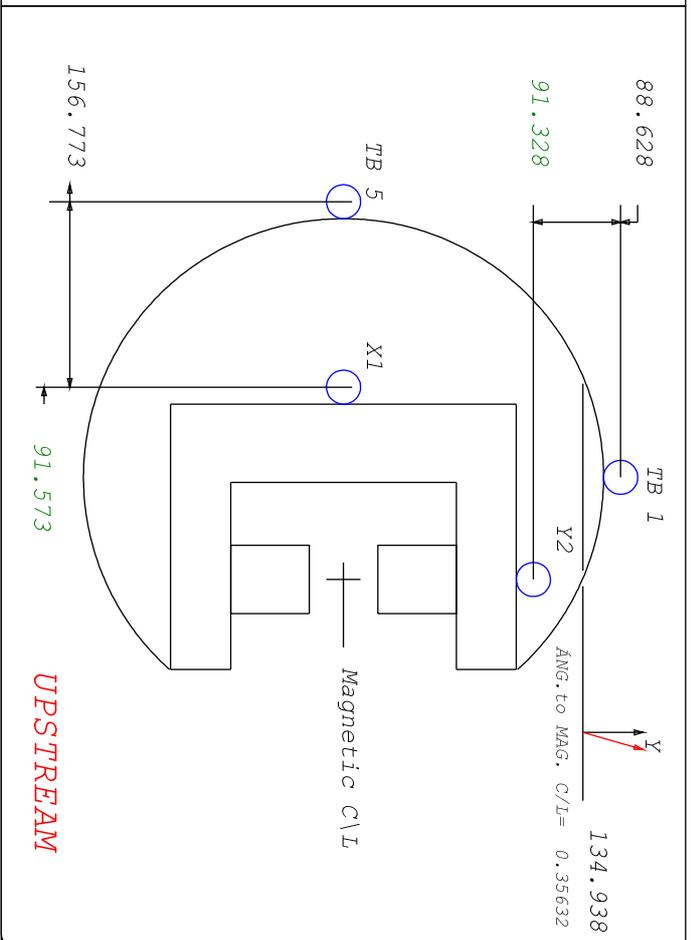
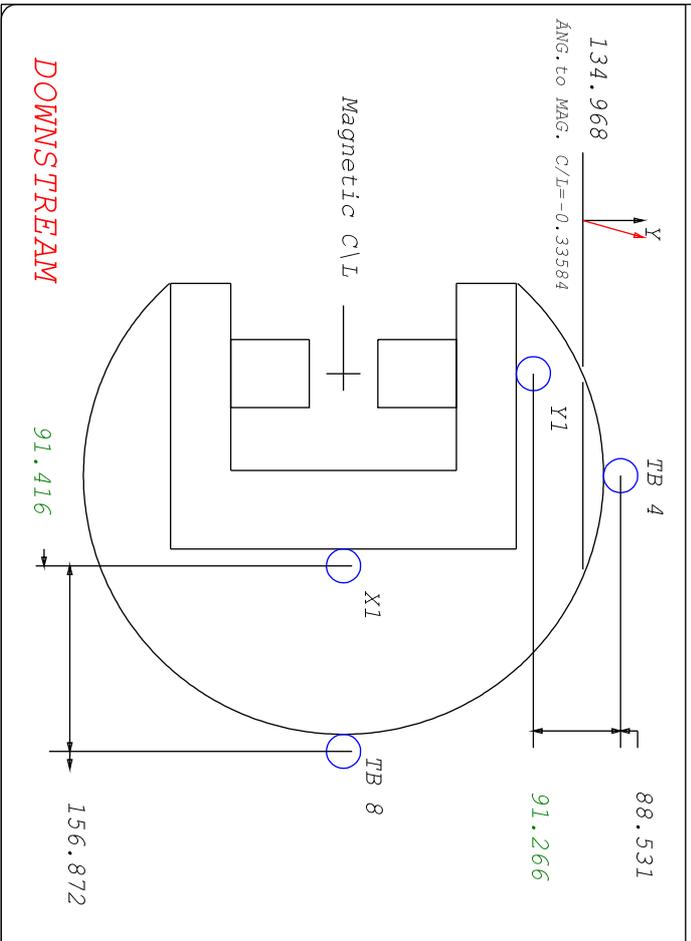
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	-0.0899	179.9562	-1558.210
2	-0.2026	179.9306	-584.5448
3	-0.2280	179.8344	591.4530
4	0.0891	179.7974	1562.2355
5	248.3455	0.0733	1558.078
6	248.2441	0.0068	-584.5135
7	248.3416	-0.0082	591.5023
8	248.2878	-0.1250	1562.3281

	C/L Offset	Length
Top Magnetic Structure	0.003	3380.932
Bottom Magnetic Structure	-0.003	3381.013
Strongback	0.506	3400.010

Dimensions in mm

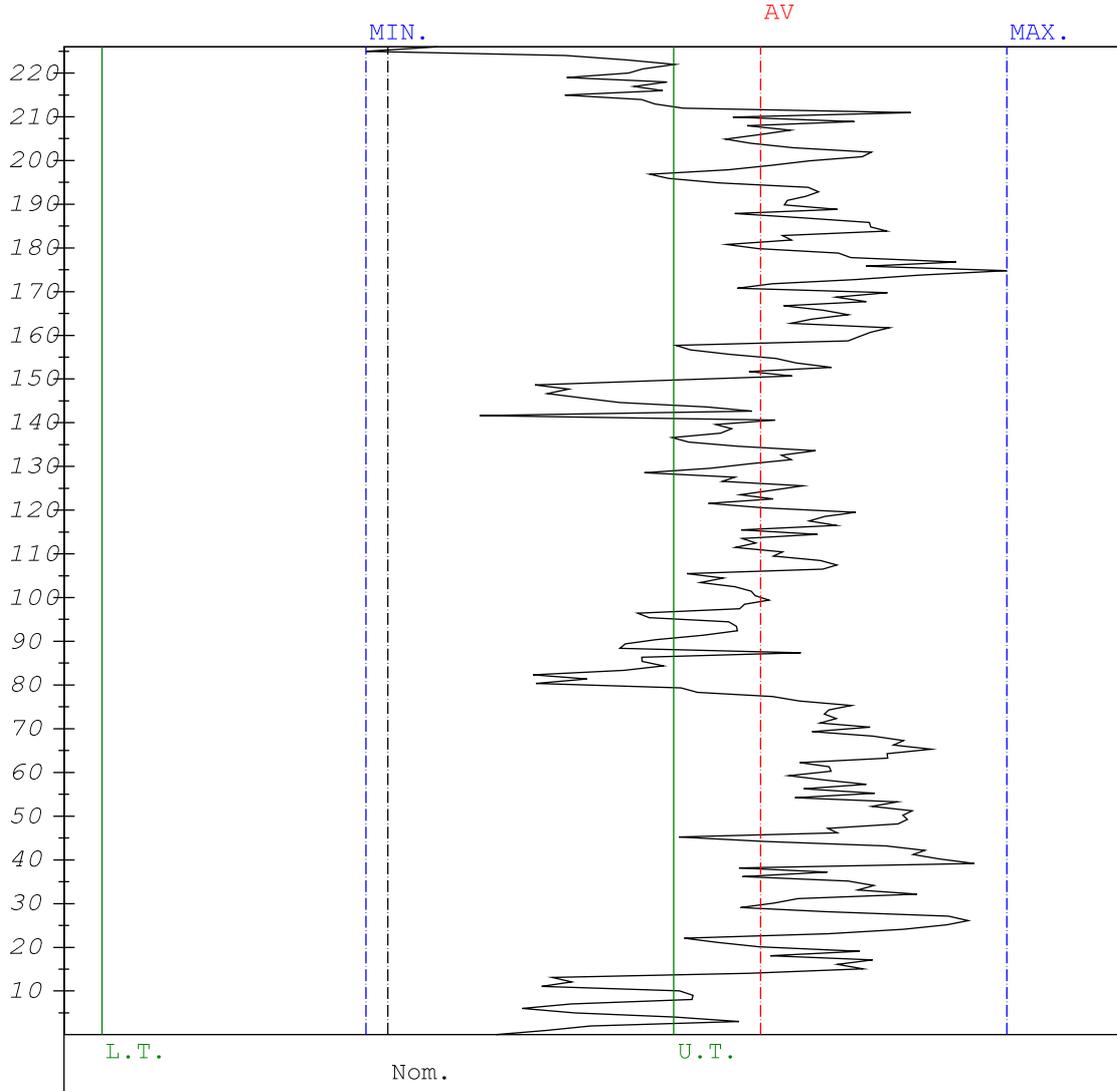
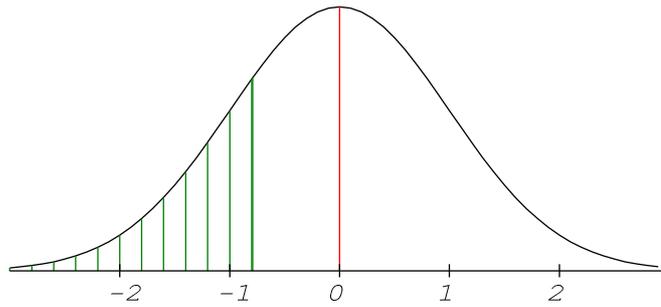
Angles in mrad



SLAC
LCLS-MMF
LEITZ CMM

Undulator Dimensional Fiducialization
Post Magnetic Alignment

DATE: 07-AUG-2007
UNDULATOR # 15
DATASET # 0001
PROGRAM VERSION 2.1



Nominal : 4.5000	Averag : 5.1522	Cent.-Dev. : 0.6522
Up. Tol. : 0.5	Maximum : 5.5831	U.Tol.Ex. > : 78.5 %
Low.Tol. : -0.5	Minimum : 4.4616	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1923	In Tolerance: 21.5 %
Outlier : 0	Distribution : NOR	Dimension : mrad

SLAC
LCLS-MMF
LEITZ CMM

Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE: 07-AUG-2007

UNDULATOR # 15
DATASET # 0001
PROGRAM VERSION 2.1