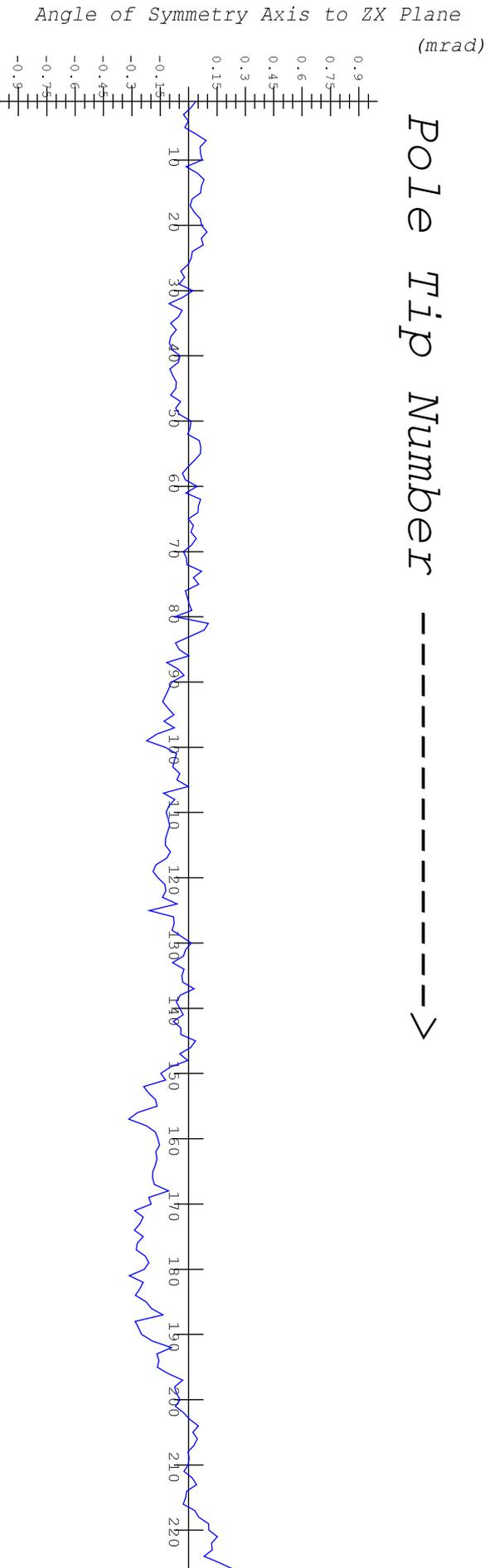


Pole Tip Number ----->



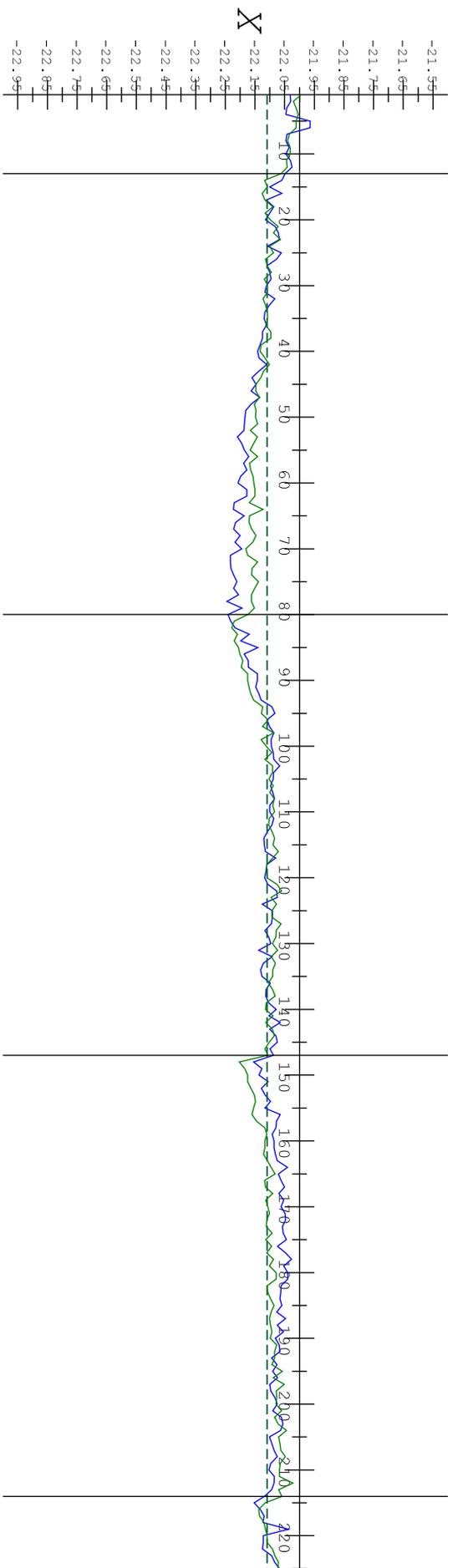
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips

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Undulator Pole Tip Angles
 Post Magnetic Alignment

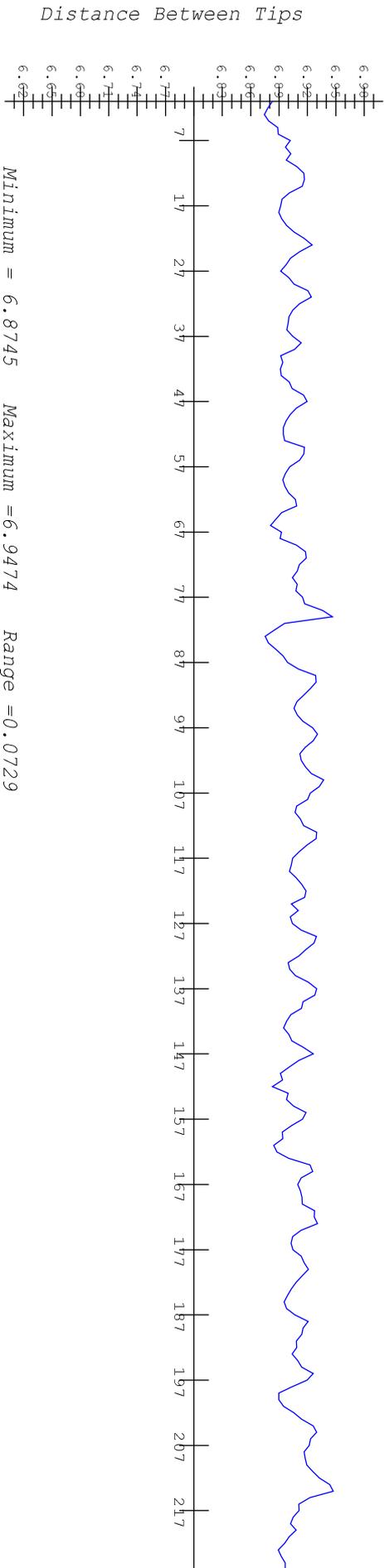
DATE: 11-JAN-2008
 UNDULATOR # 09
 DATASET # 0001
 PROGRAM VERSION 2.5

Pole Tip Number ----->

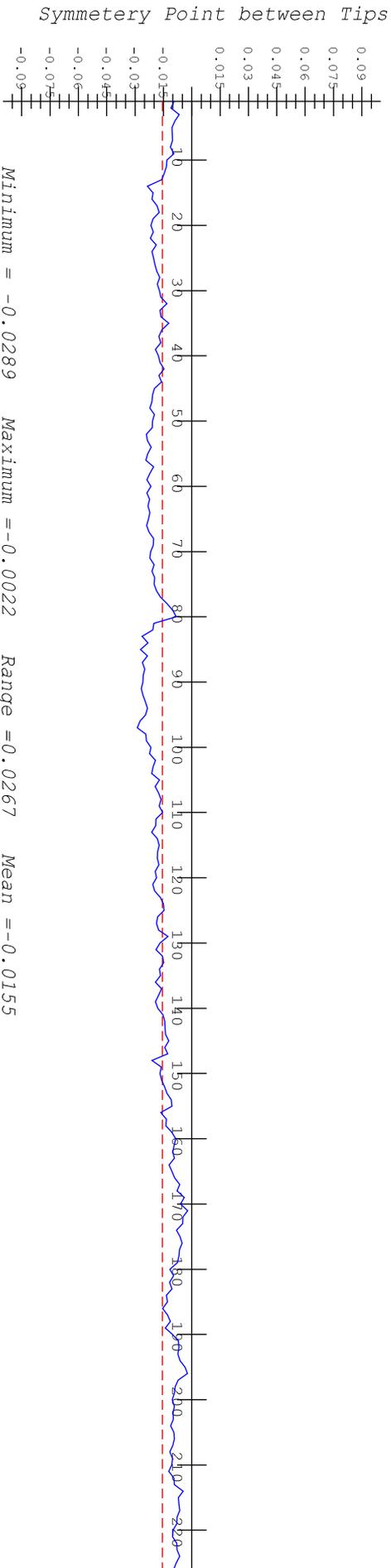


X values in mm
 Green Solid = Point on front face of Upper Pole Tip 10mm above Magnetic C/L
 Green Dash = Mean value of all Upper Pole Tips 10mm above Magnetic C/L Mean value Upper Pole Tips = -22.110
 Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L
 Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -22.109

<p>SLAC LCLS-MMF LEITZ CMM</p>	<p>Undulator Pole Tip Location Post Magnetic Alignment</p>	<p>DATE: 11-JAN-2008 UNDULATOR # 09 DATASET # 0001 PROGRAM VERSION 2.5</p>
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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

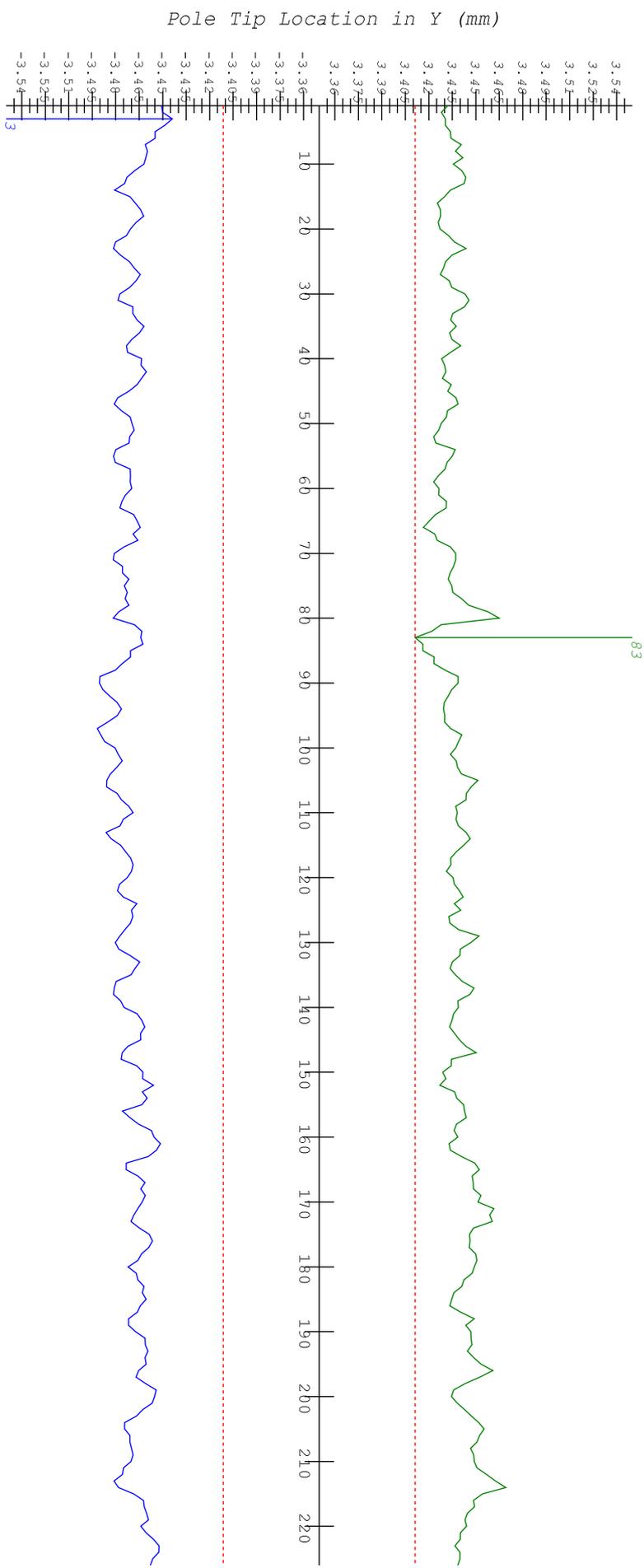
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Undulator Pole Tip Location
 Post Magnetic Alignment

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Maximum Chamber Gap = 6.8226

Minimum = 3.4113 Maximum = 3.4691 Range = 0.0578



Minimum = -3.4917 Maximum = -3.4439 Range = 0.0478

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)

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Undulator Pole Tip Location
Post Magnetic Alignment

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DATASET # 0001
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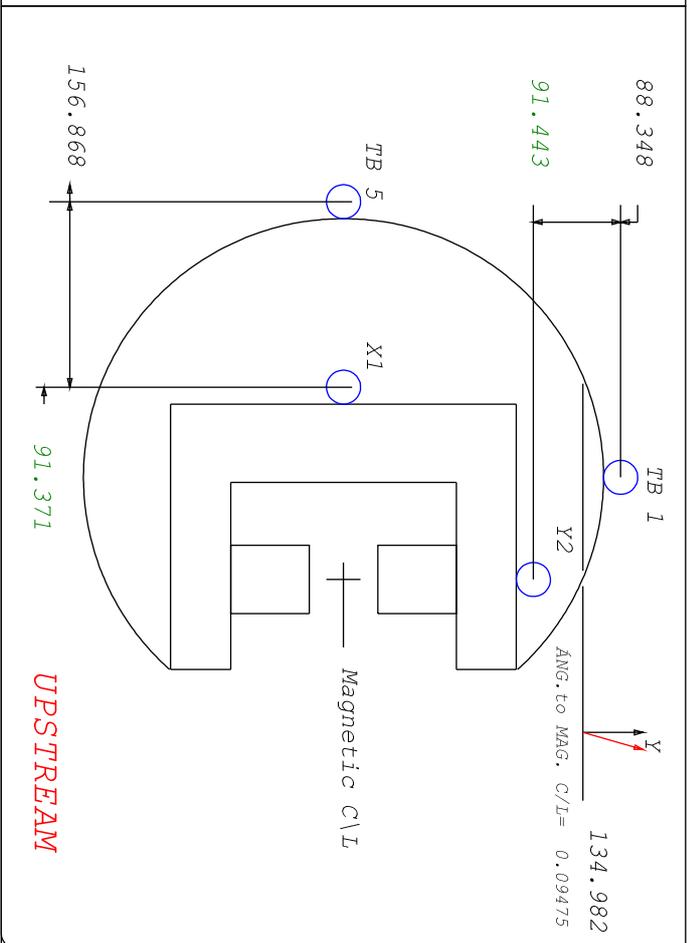
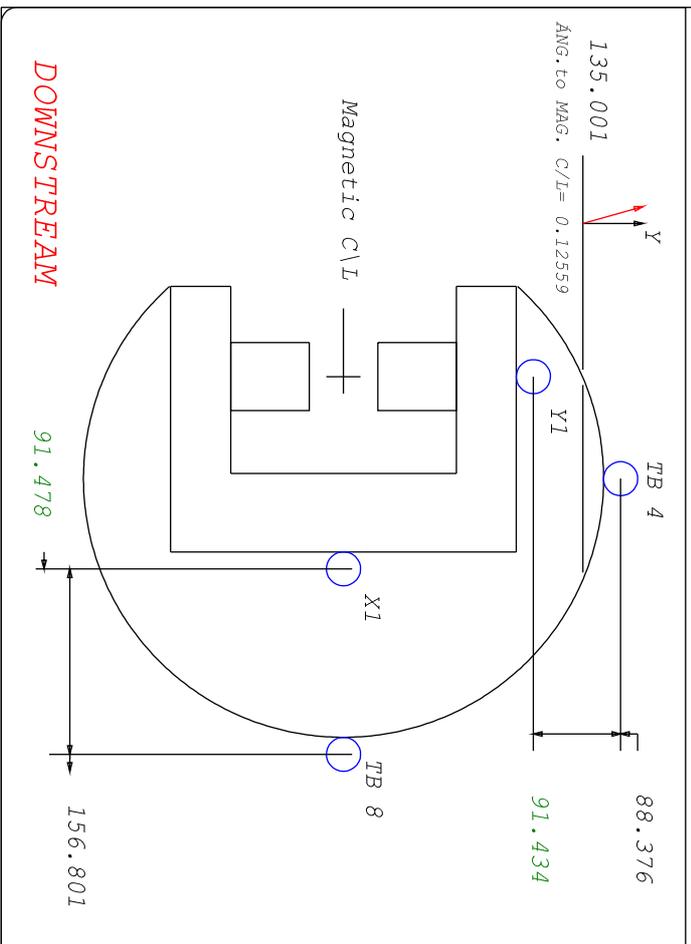
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	-0.0747	179.7910	-1558.237
2	-0.0864	179.7618	-584.7134
3	-0.3238	179.8189	591.4800
4	-0.1155	179.8096	1562.1781
5	248.2394	-0.0146	-1558.185
6	248.3339	0.0725	-584.6877
7	248.3102	0.0182	591.3453
8	248.2794	-0.0040	1562.0777

Top Magnetic Structure C/L Offset Length 3380.876
 Bottom Magnetic Structure 0.095 3381.232
 Strongback 0.310 3399.944

Dimensions in mm

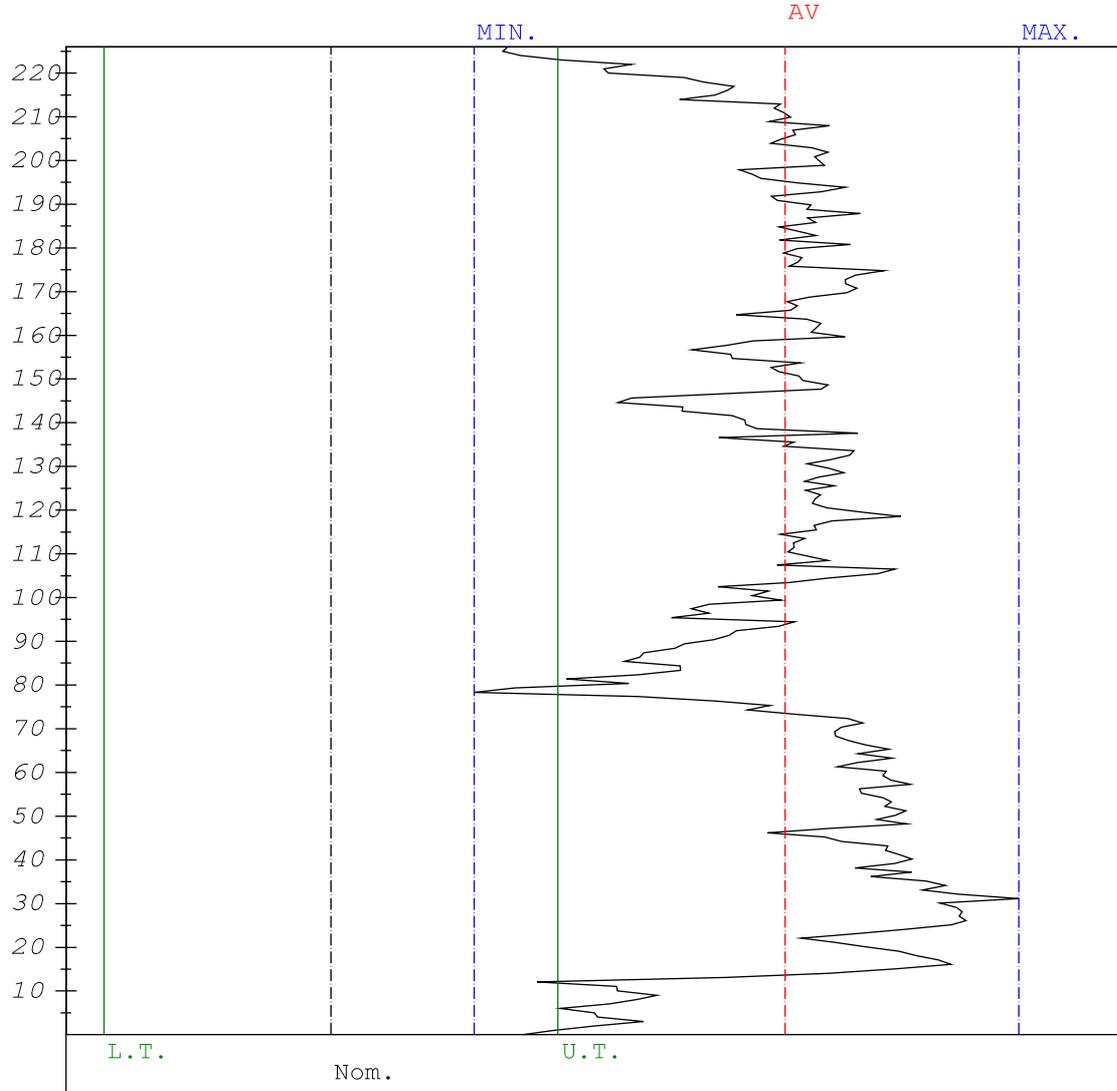
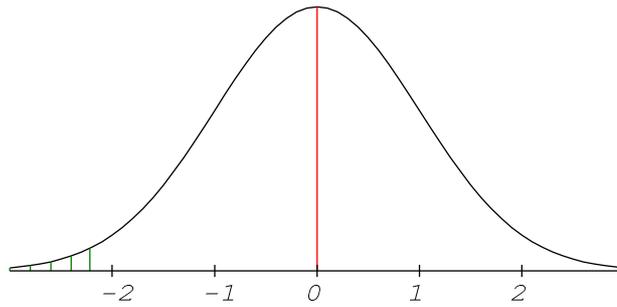
Angles in mrad



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Undulator Dimensional Fiducialization
 Post Magnetic Alignment

DATE: 11-JAN-2008
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 DATASET # 0001
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Nominal : 4.5000	Averag : 5.5	Cent.-Dev. : 1
Up. Tol. : 0.5	Maximum : 6.0147	U.Tol.Ex. > : 98.7 %
Low.Tol. : -0.5	Minimum : 4.8154	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2256	In Tolerance: 1.3 %
Outlier : 0	Distribution : NOR	Dimension : mrad

<p>SLAC LCLS-MMF LEITZ CMM</p>	<p>Statistical Evaluation Pole Tip Gap Angle Post Magnetic Alignment</p>	<p>DATE:11-JAN-2008 UNDULATOR # 09 DATASET # 0001 PROGRAM VERSION 2.5</p>
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