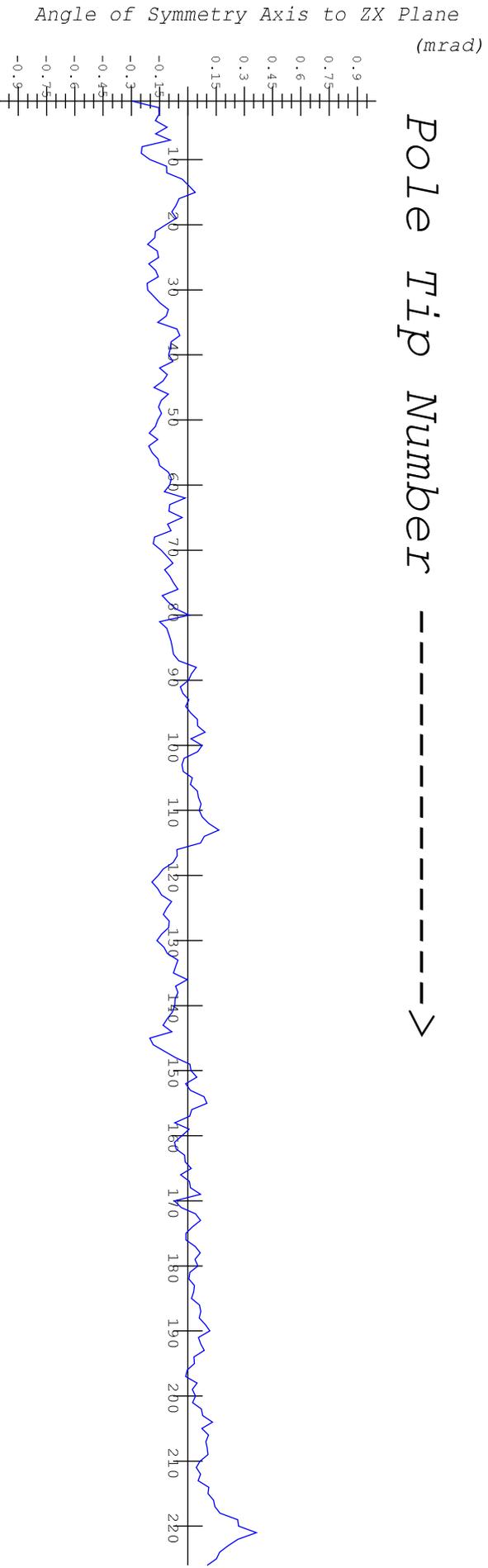


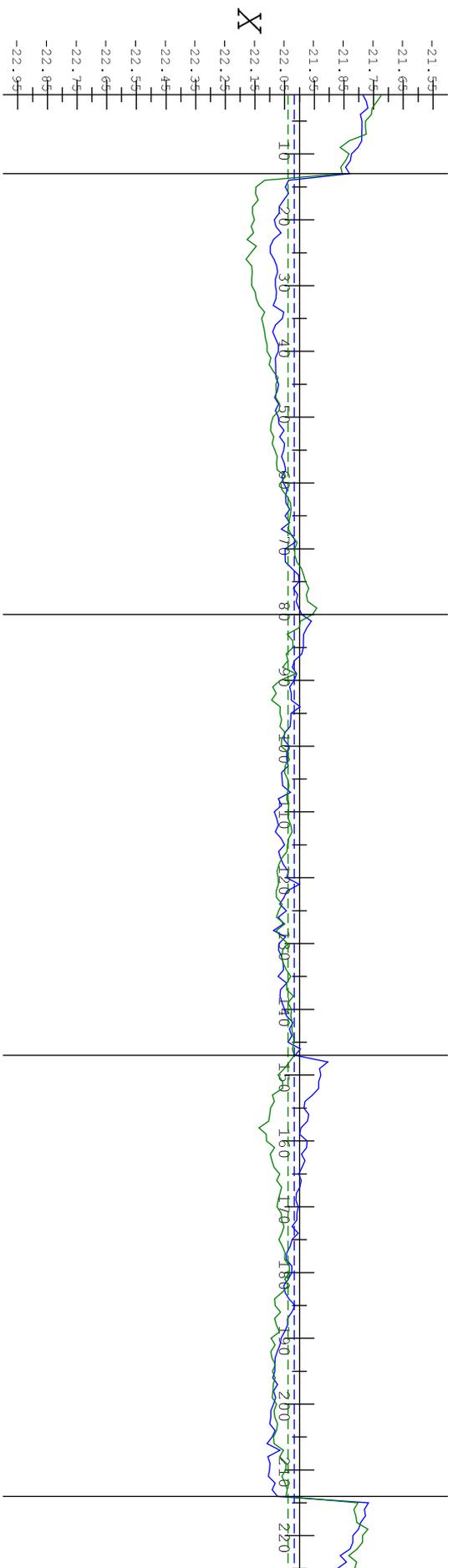
Pole Tip Number ----->



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>SLAC LCLS-MMF LEITZ CMM</p>	<p>Undulator Pole Tip Angles Post Magnetic Alignment</p>	<p>DATE: 03-JUL-2008 UNDULATOR # 16 DATASET # 0002 PROGRAM VERSION 2.7</p>
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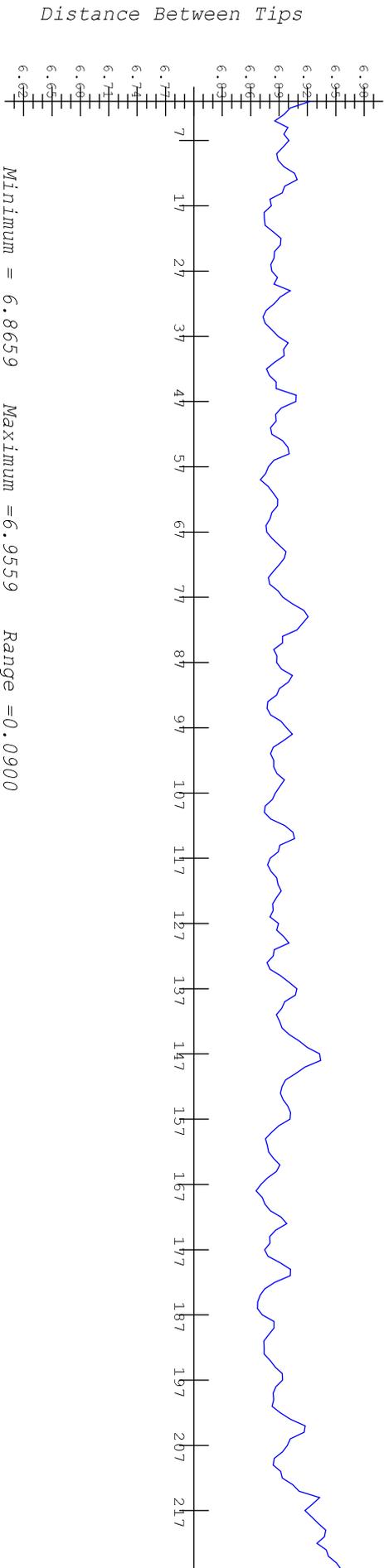
Pole Tip Number ----->



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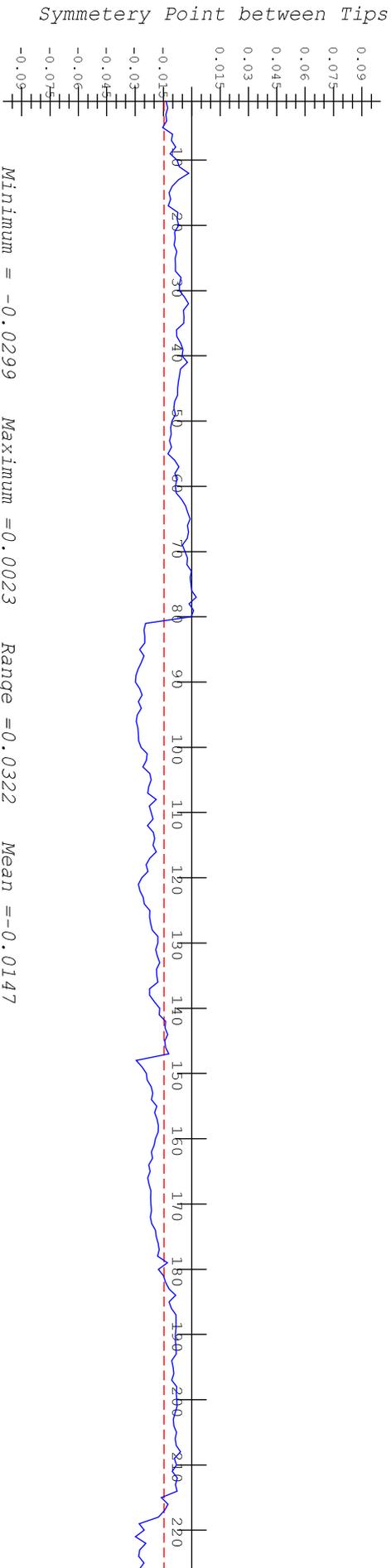
Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 03-JUL-2008
 UNDUULATOR # 16
 DATASET # 0002
 PROGRAM VERSION 2.7



in mm

Pole Tip Number ----->

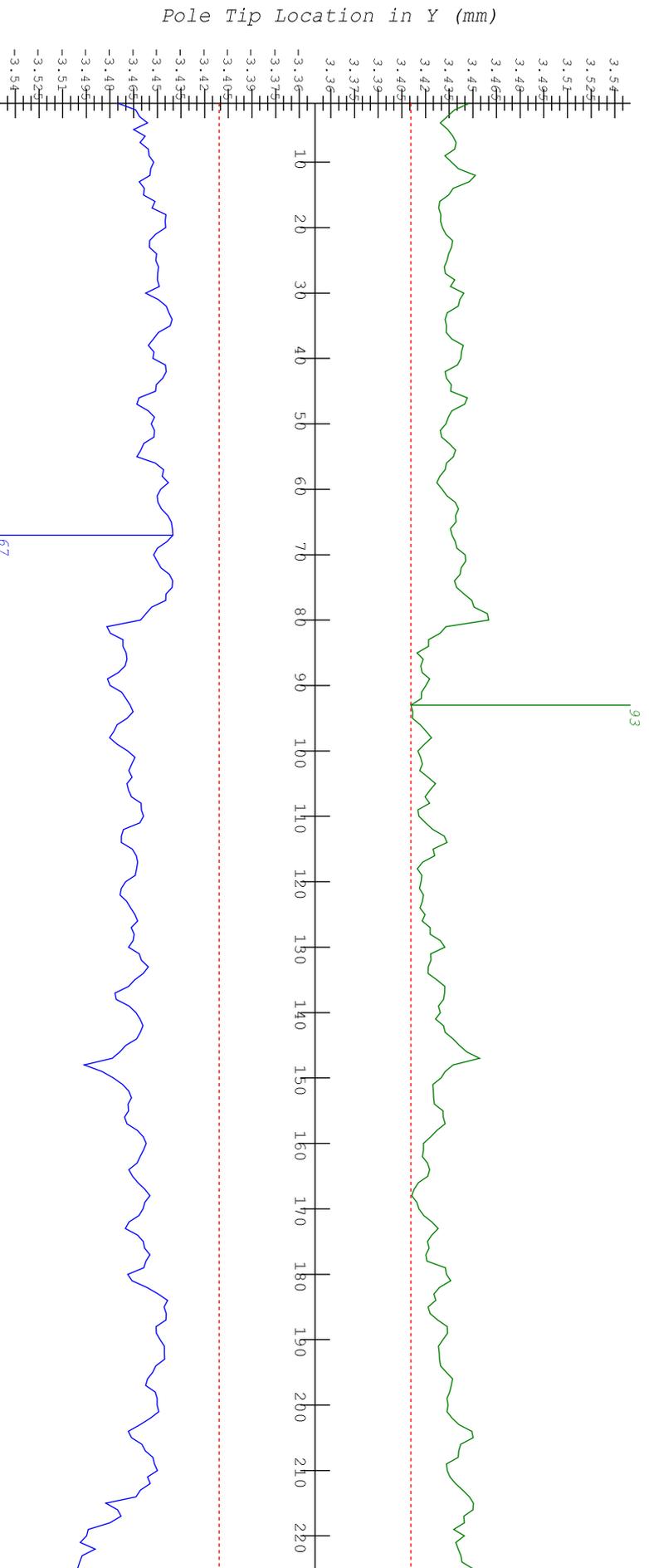


Symmetry Point is the symmetry point between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C/L
 Broken Red line is Mean Value of Symmetry Points
 Distance Between Tips is the distance between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C/L

 	<p>Undulator Pole Tip Location</p> <p>Post Magnetic Alignment</p>	<p>DATE: 03-JUL-2008</p> <p>UNDULATOR # 16</p> <p>DATASET # 0002</p> <p>PROGRAM VERSION 2.7</p>
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Maximum Chamber Gap = 6.8216

Minimum = 3.4108 Maximum = 3.4600 Range = 0.0492



Minimum = -3.5058 Maximum = -3.4402 Range = 0.0657

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

DATE: 03-JUL-2008
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DATASET # 0002
PROGRAM VERSION 2.7



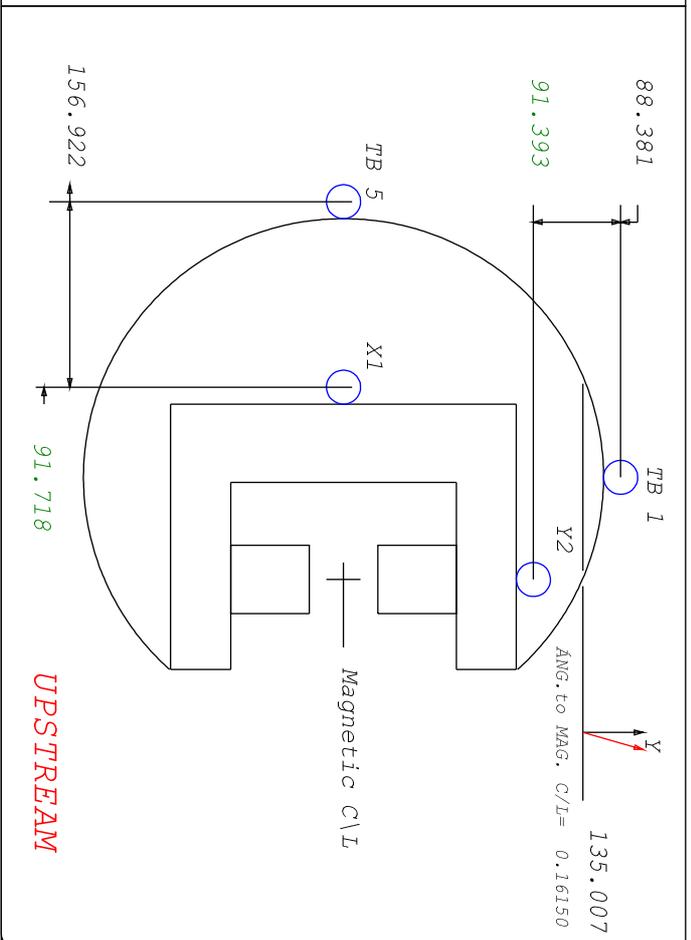
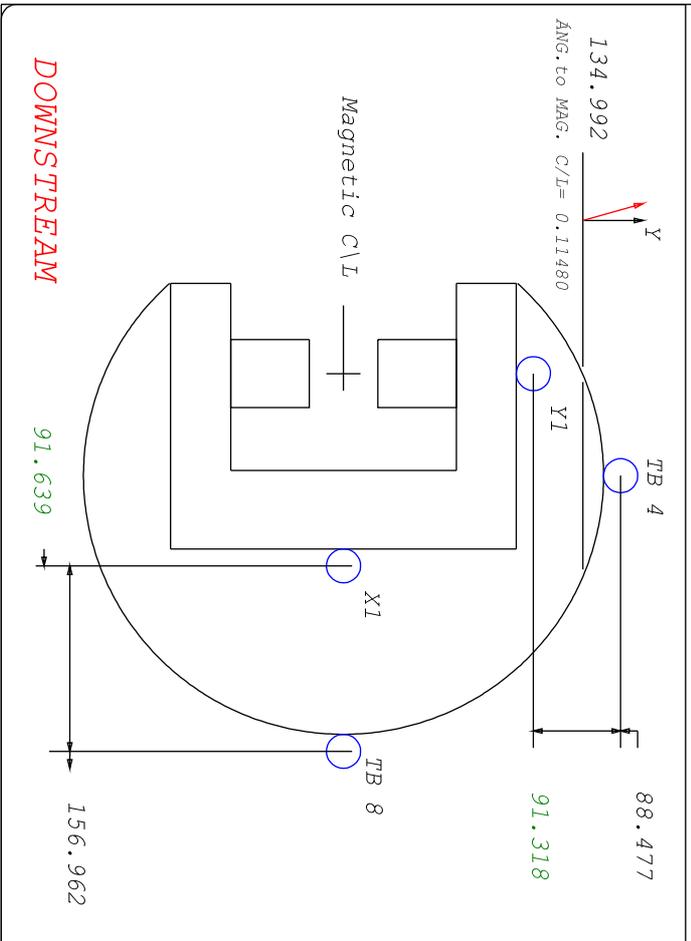
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.3125	179.7742	-1558.435
2	0.4351	179.6649	-584.7345
3	0.4209	179.7336	591.2278
4	0.4024	179.7951	1562.0175
5	248.6397	0.0671	-1558.349
6	248.6275	0.0691	-584.6824
7	248.6329	0.0475	591.3072
8	248.6013	0.0110	1562.1972

	C/L Offset	Length
Top Magnetic Structure	0.097	3381.408
Bottom Magnetic Structure	-0.097	3381.107
Strongback	0.241	3399.969

Dimensions in mm

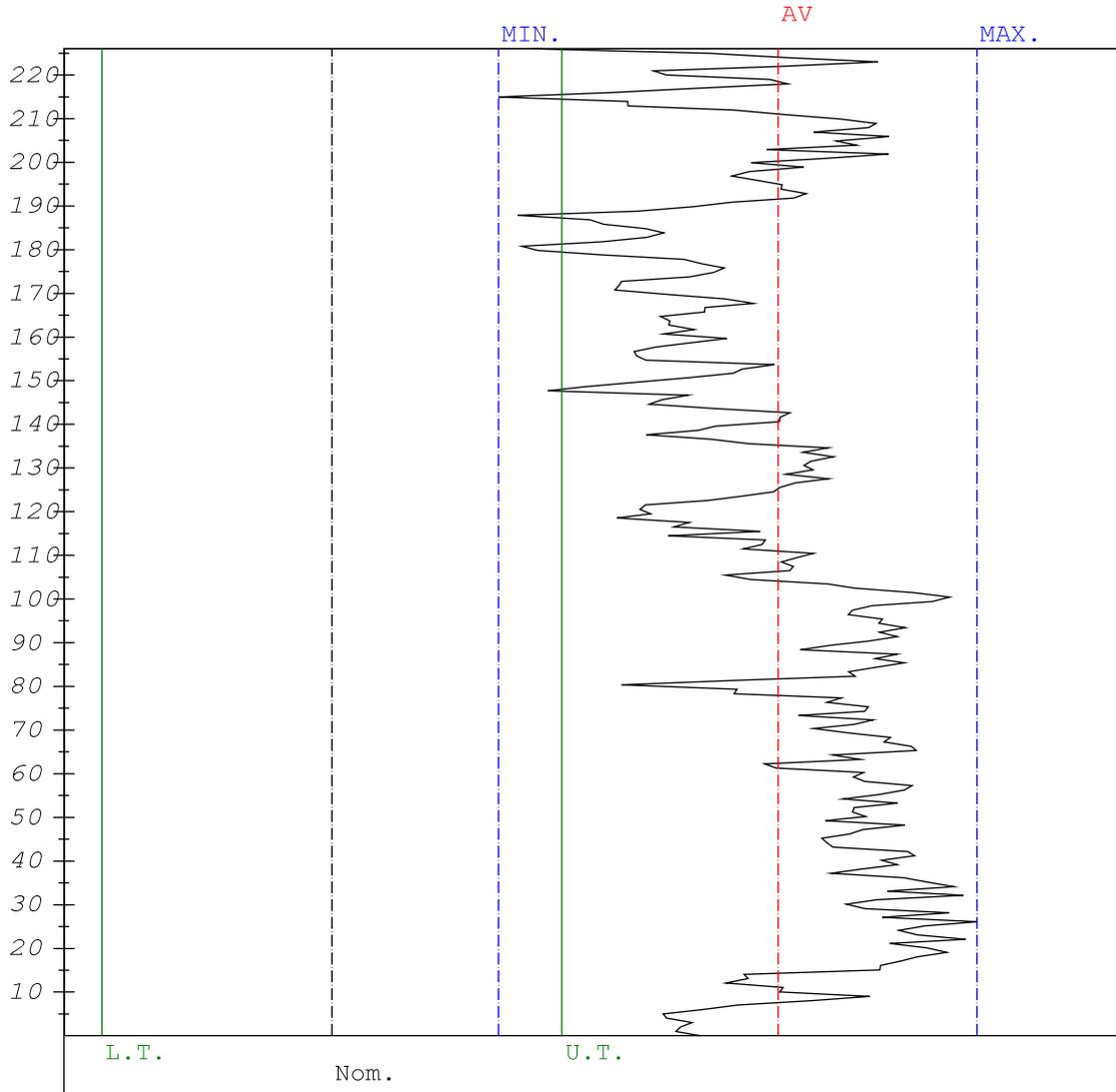
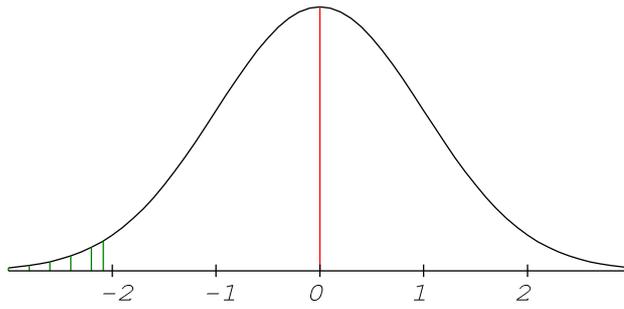
Angles in mrad



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Undulator Fiducialization
Post Magnetic Alignment

DATE: 03-JUL-2008
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DATASET # 0002
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Nominal : 4.5000	Averag : 5.4704	Cent.-Dev. : 0.9704
Up. Tol. : 0.5	Maximum : 5.9026	U.Tol.Ex. > : 98.2 %
Low.Tol. : -0.5	Minimum : 4.8619	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2255	In Tolerance: 1.8 %
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: 03-JUL-2008 UNDULATOR # 16 DATASET # 0002 PROGRAM VERSION 2.7</p>
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