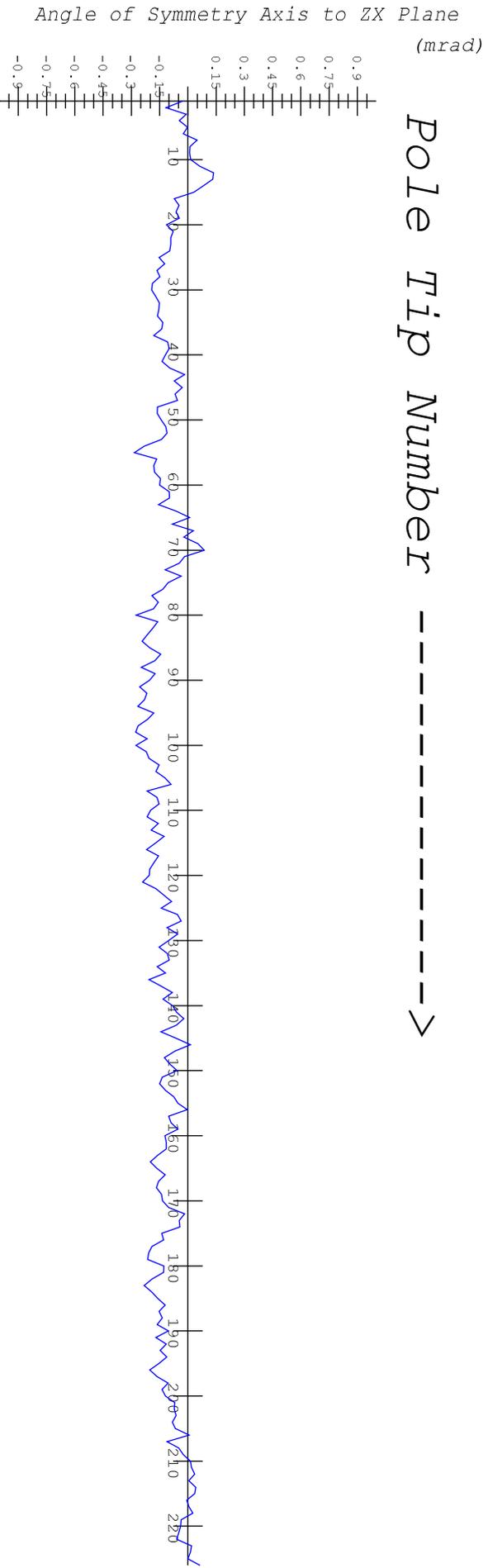


Pole Tip Number ----->



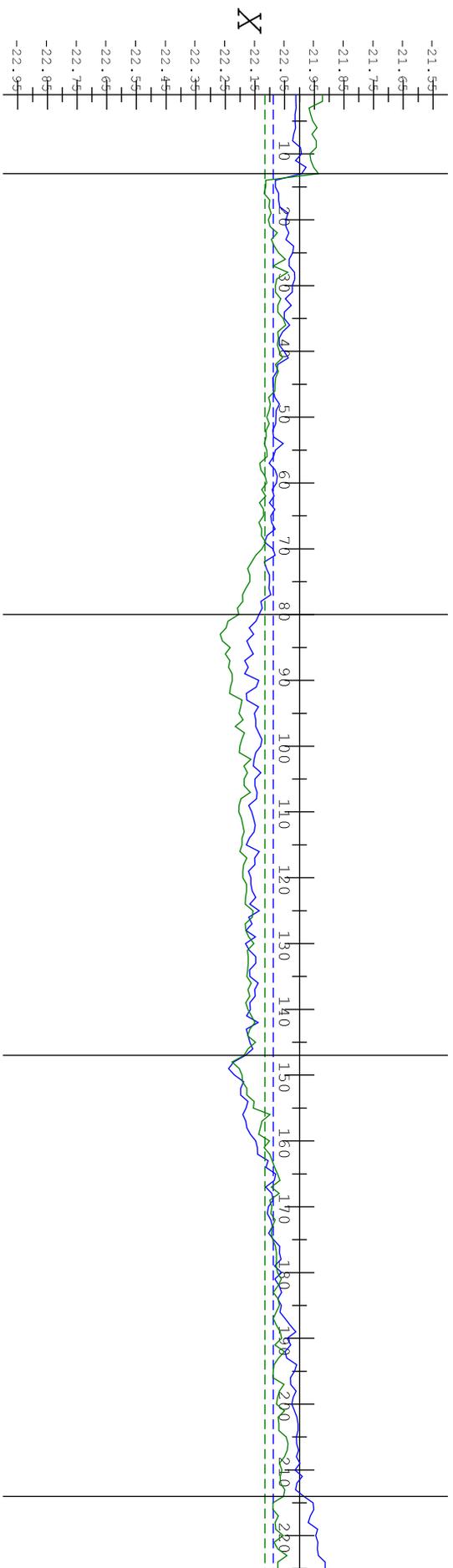
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
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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 = -22.117

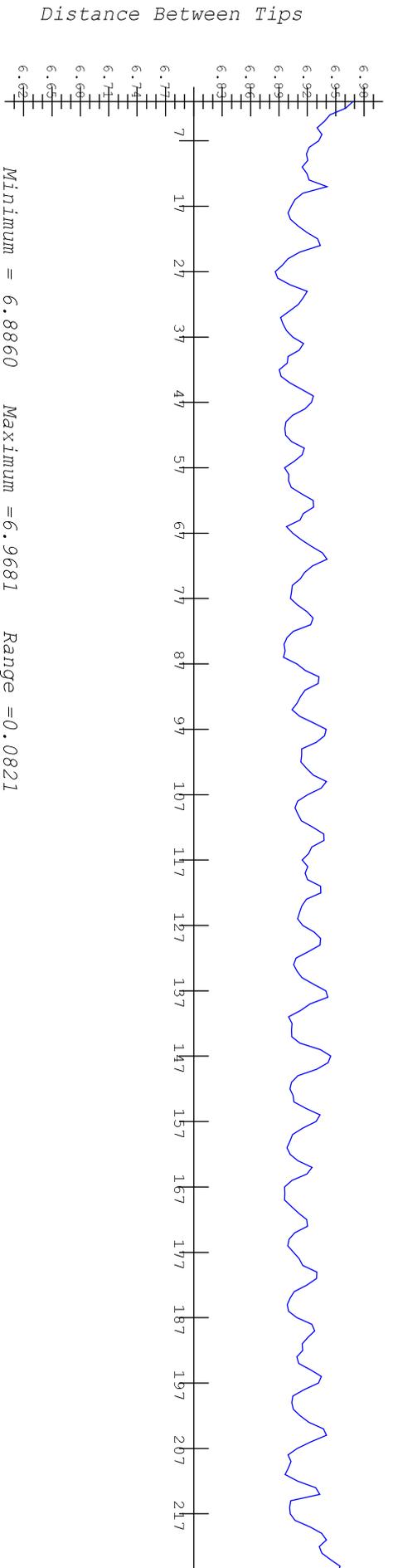
Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L

Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -22.089



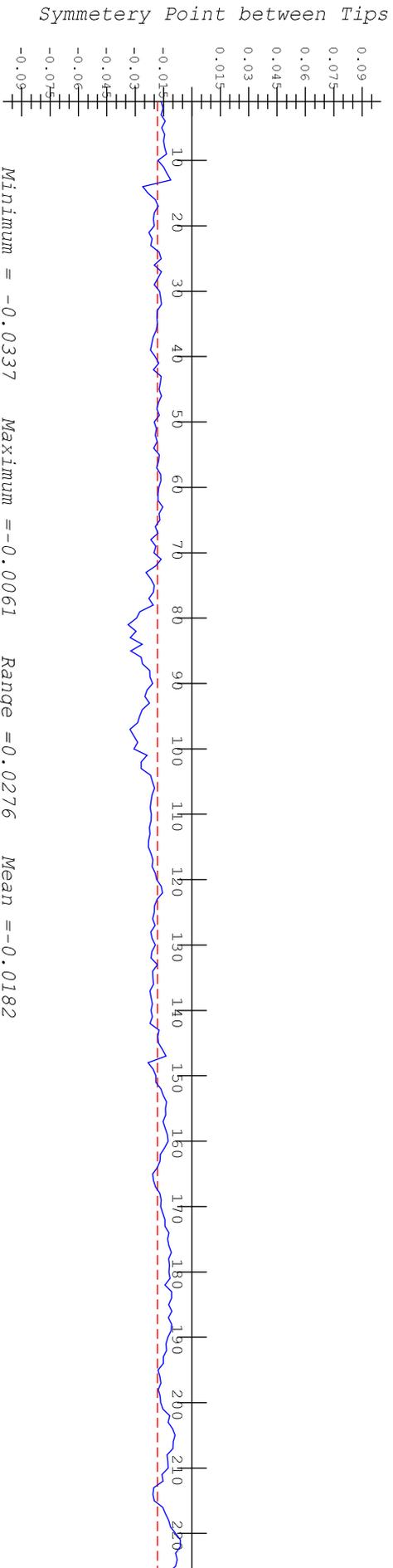
Undulator Pole Tip Location Post Magnetic Alignment

DATE: 23-JUN-2009
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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

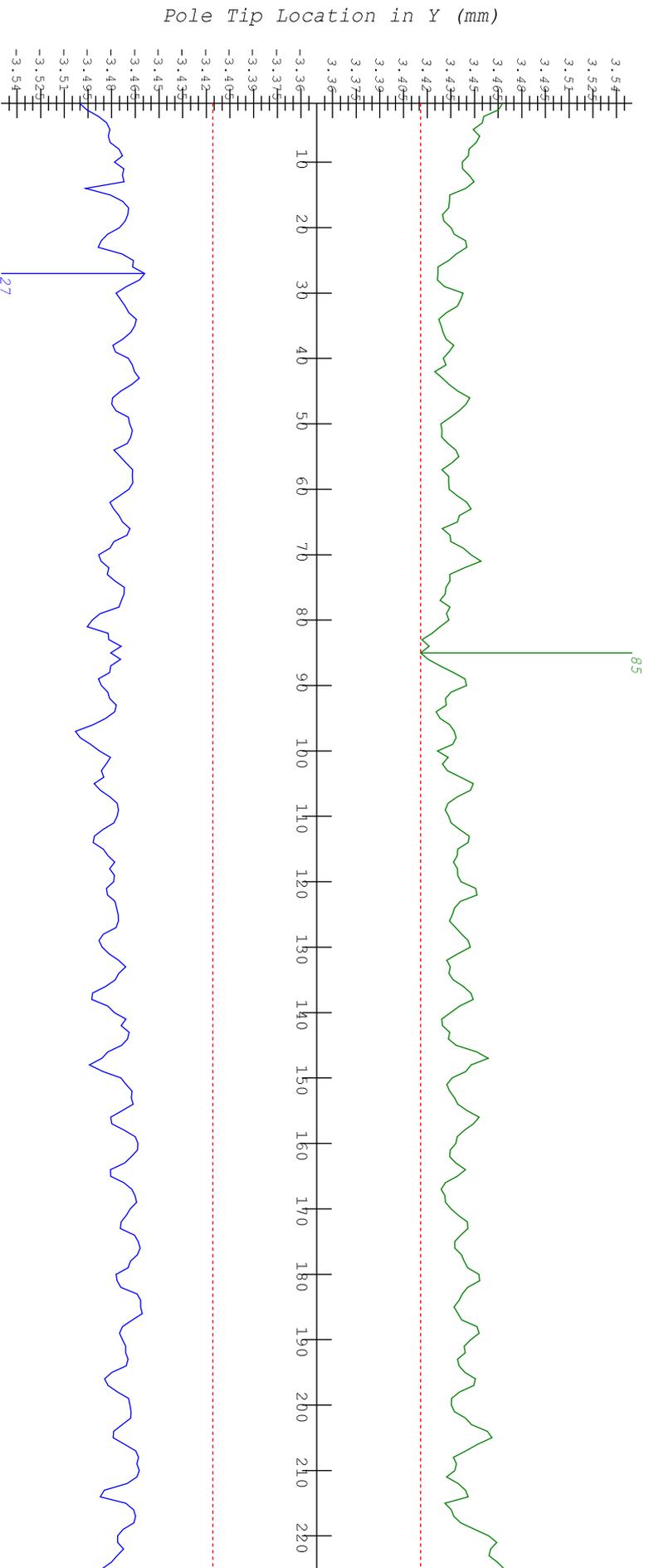


Undulator Pole Tip Location
 Post Magnetic Alignment

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Maximum Chamber Gap = 6.8317

Minimum = 3.4158 Maximum = 3.4687 Range = 0.0529



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)



Undulator Pole Tip Location
Post Magnetic Alignment

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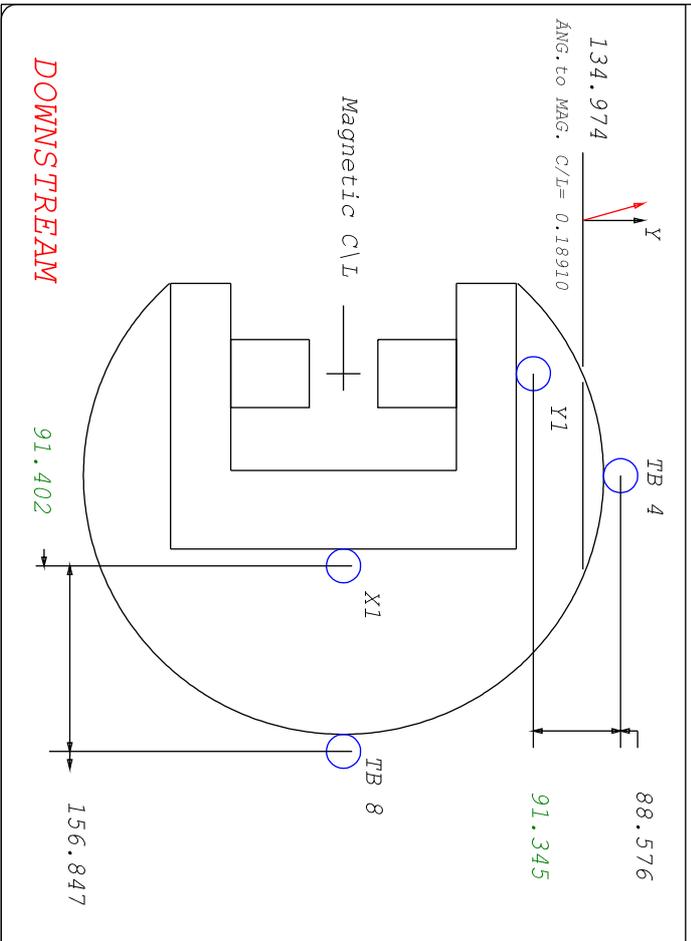
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	-0.0610	179.9735	-1558.369
2	-0.1046	179.7556	-584.6992
3	-0.1024	179.7791	591.2443
4	-0.0843	179.9212	1562.0003
5	248.3236	0.0036	1558.270
6	248.1729	-0.0139	-584.5678
7	248.0457	-0.0677	591.4709
8	248.2488	-0.1141	1562.1166

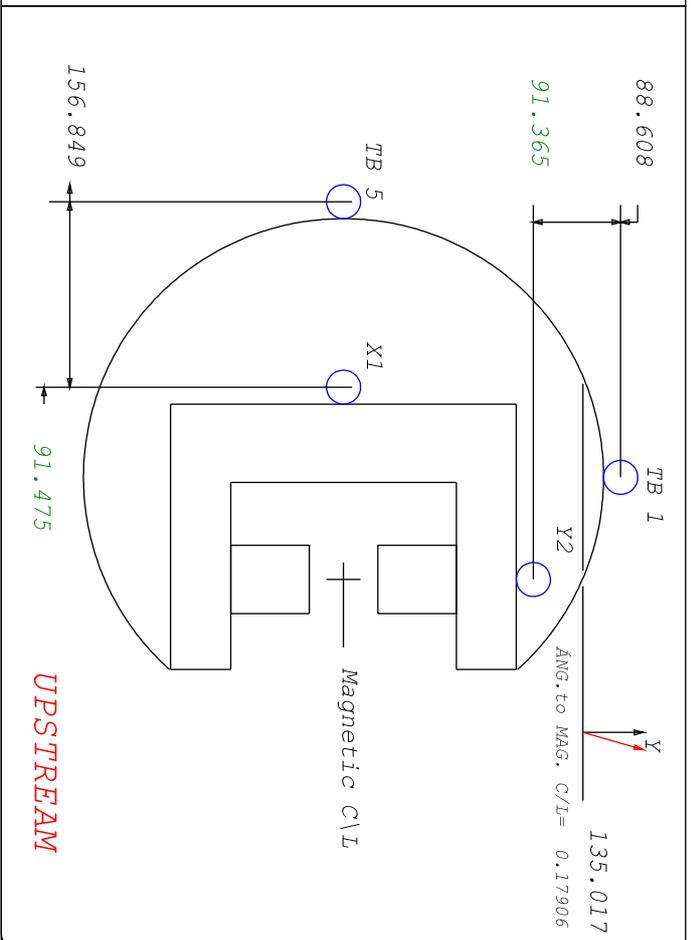
	C/L Offset	Length
Top Magnetic Structure	-0.048	3380.692
Bottom Magnetic Structure	0.048	3381.170
Strongback	0.277	3399.933

Dimensions in mm

Angles in mrad



DOWNSTREAM

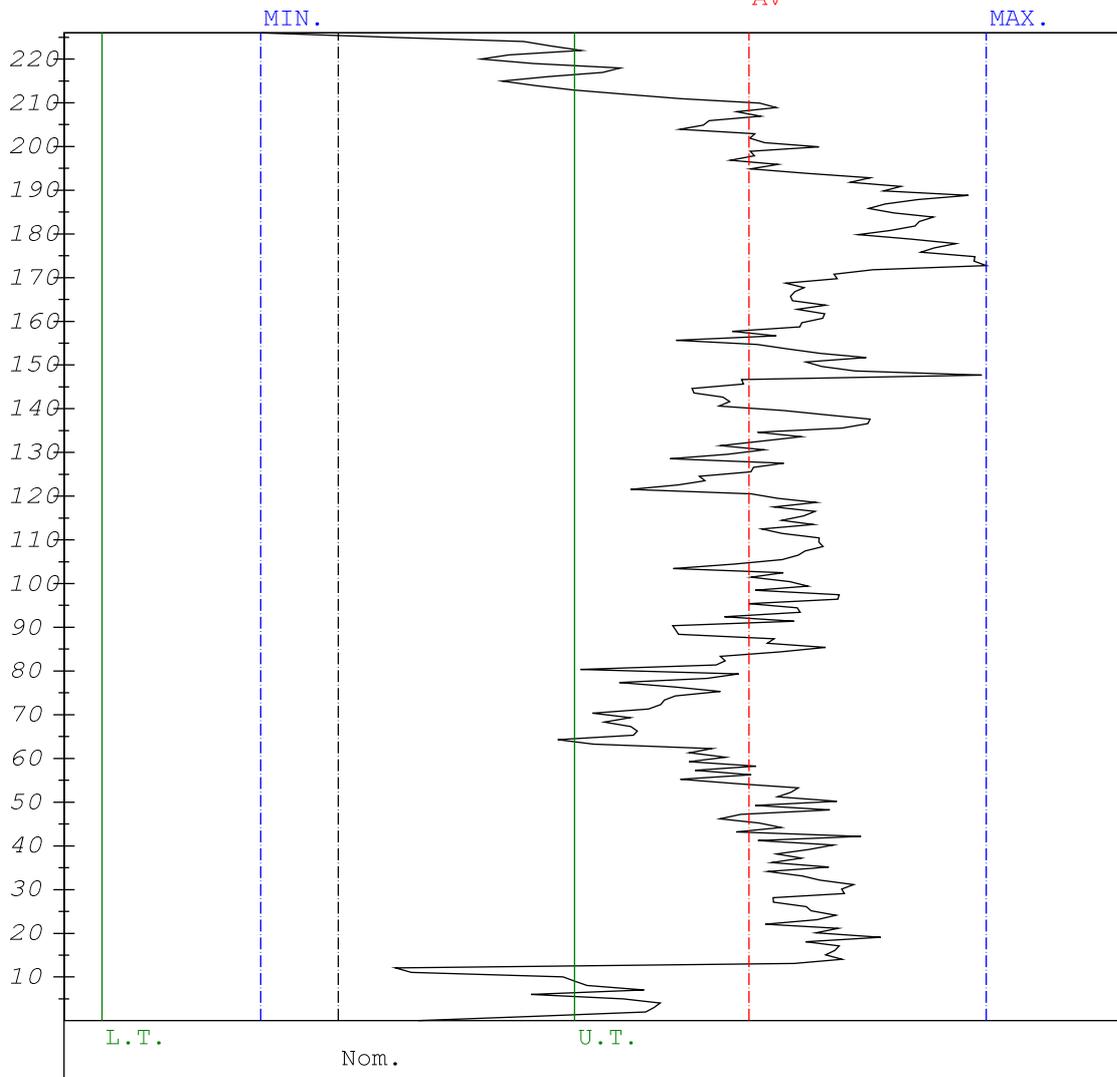
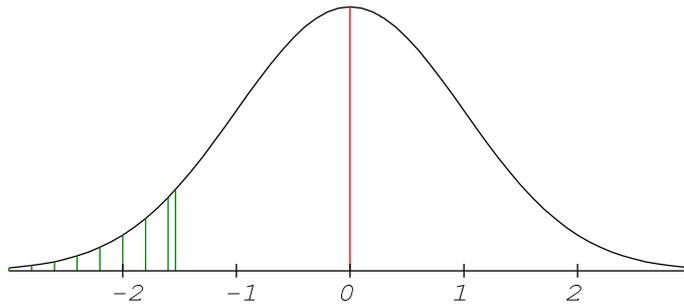


UPSTREAM



Undulator Dimensional Fiducialization Post Magnetic Alignment

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Nominal : 4.5000	Averag : 5.3694	Cent.-Dev. : 0.8694
Up. Tol. : 0.5	Maximum : 5.8713	U.Tol.Ex. > : 93.8 %
Low.Tol. : -0.5	Minimum : 4.3360	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2407	In Tolerance: 6.2 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

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UNDULATOR #17
DATASET #0002
PROGRAM VERSION 2.9