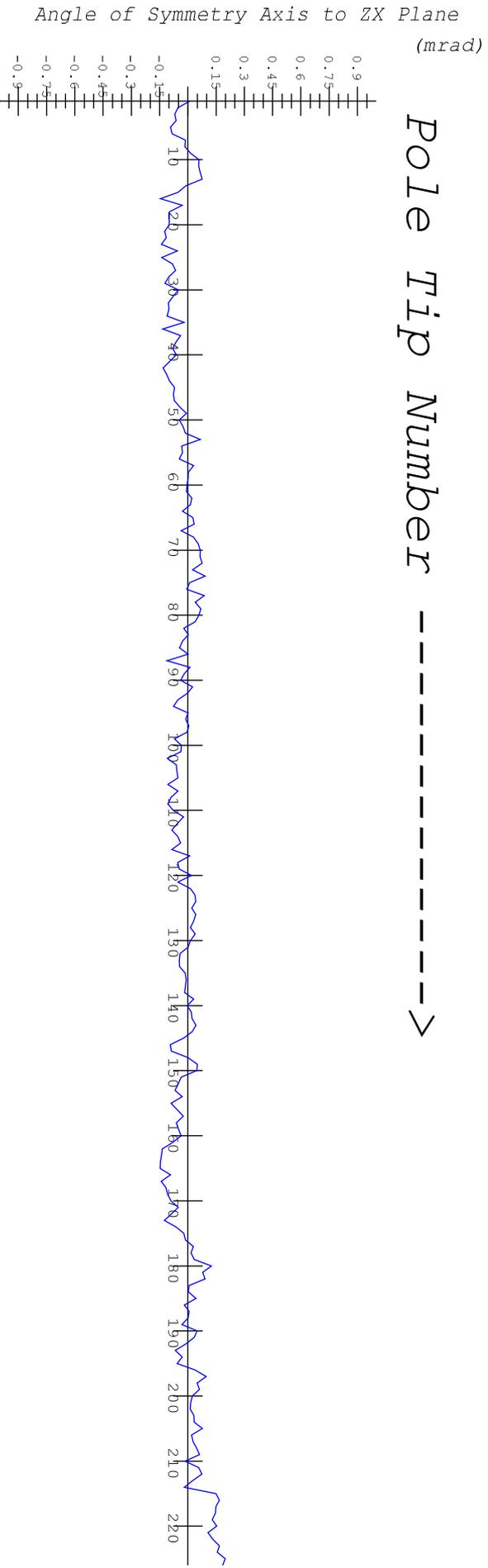


Pole Tip Number ----->



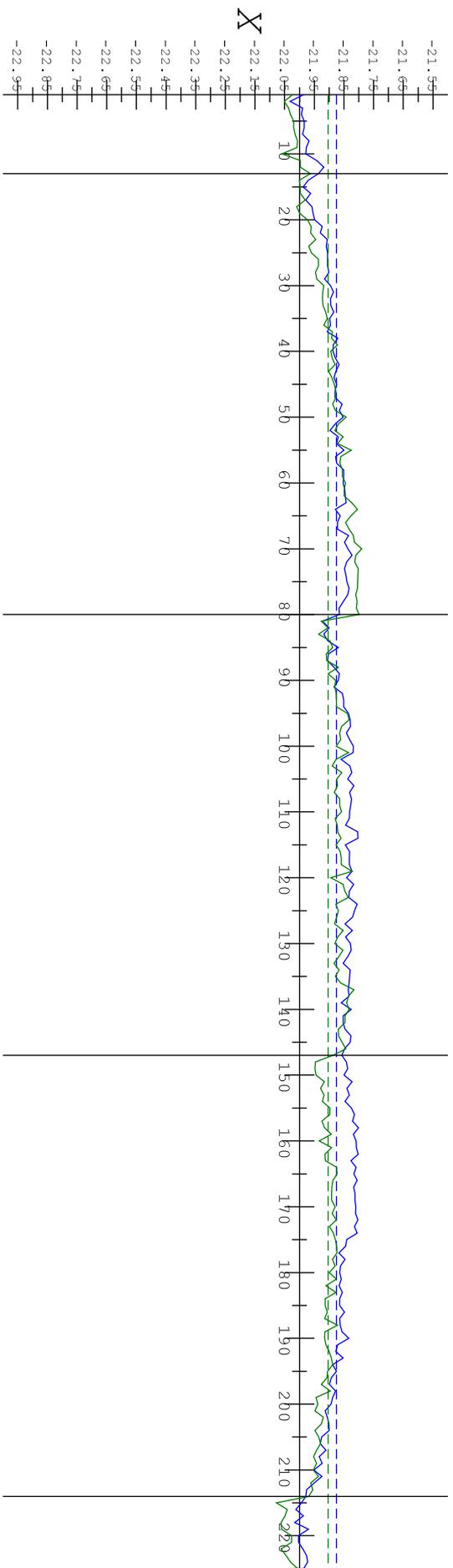
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

DATE: 03-NOV-2009
 UNDULATOR # 34
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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 = -21.904

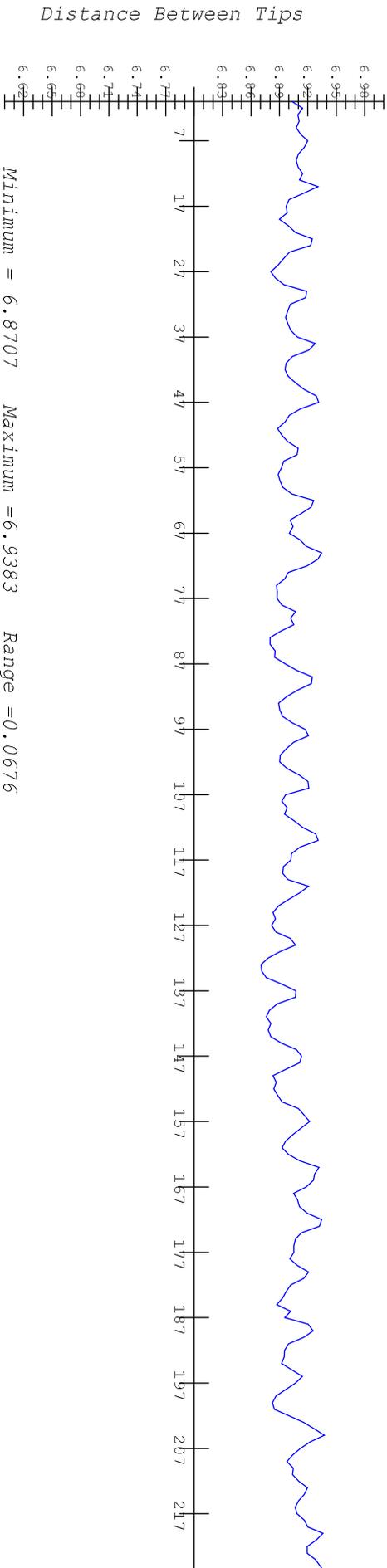
Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L

Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -21.876

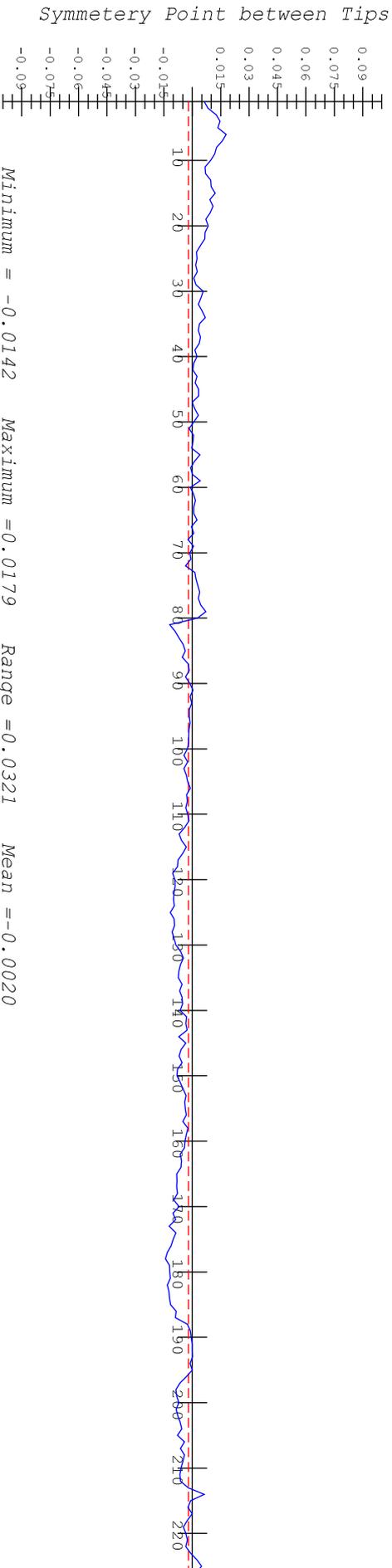


Undulator Pole Tip Location
Post Magnetic Alignment

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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

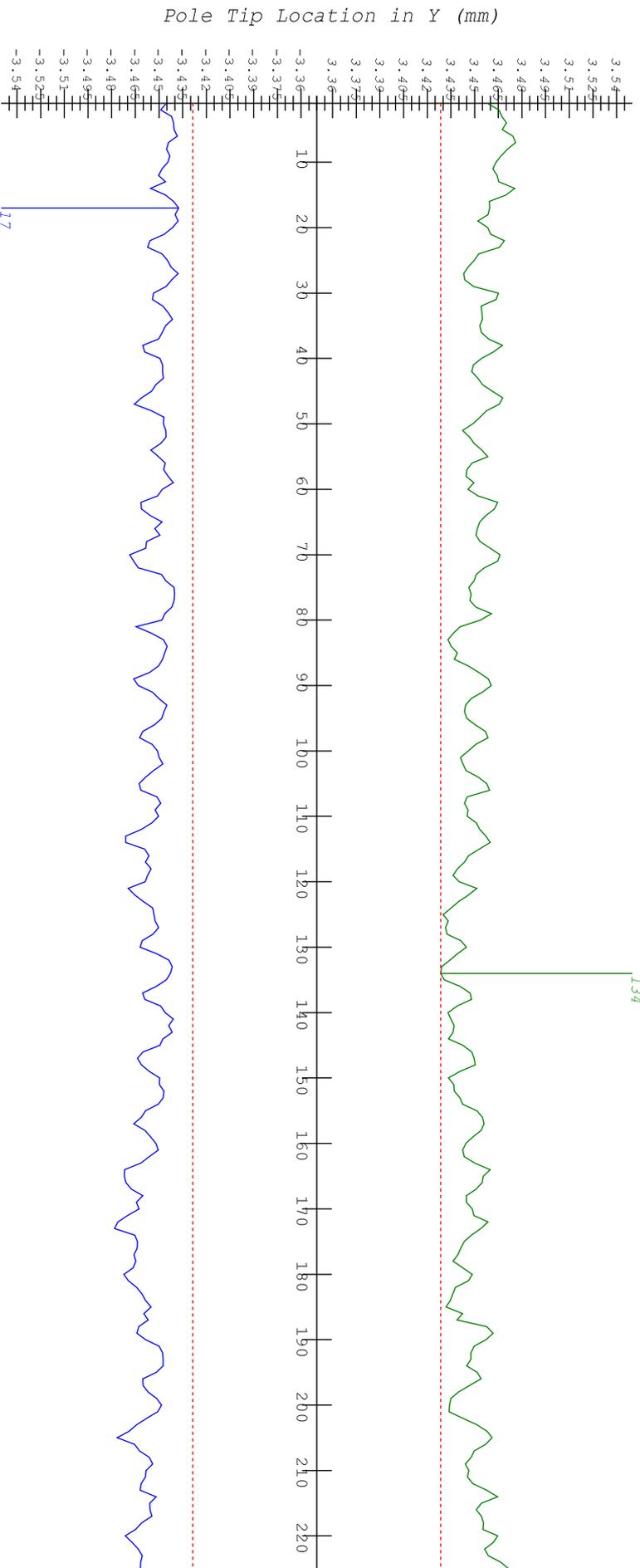


Undulator Pole Tip Location
 Post Magnetic Alignment

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Maximum Chamber Gap = 6.8572

Minimum = 3.4286 Maximum = 3.4759 Range = 0.0473



Minimum = -3.4782 Maximum = -3.4376 Range = 0.0407

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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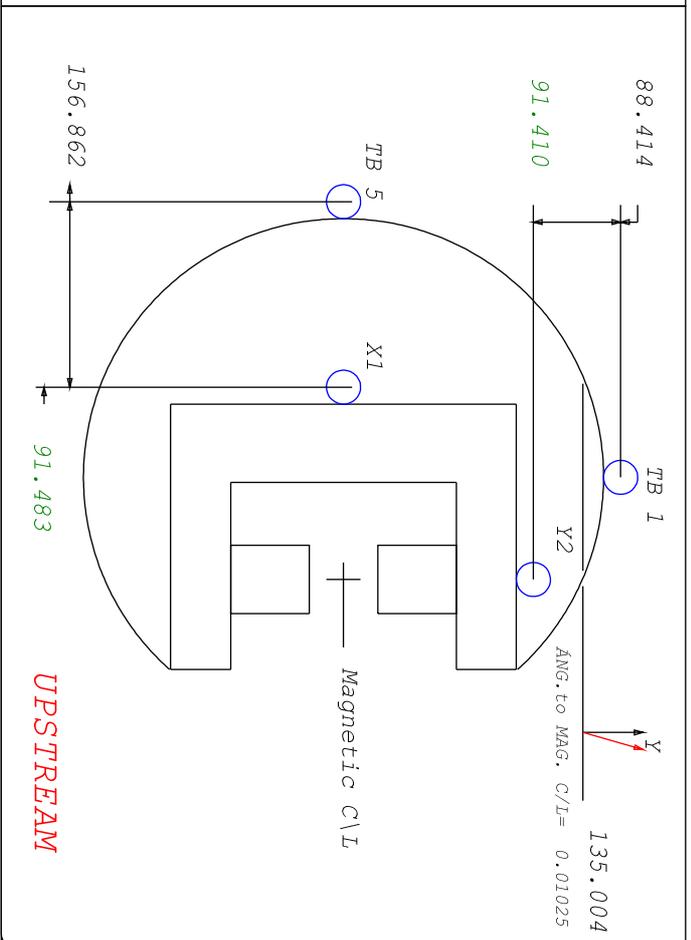
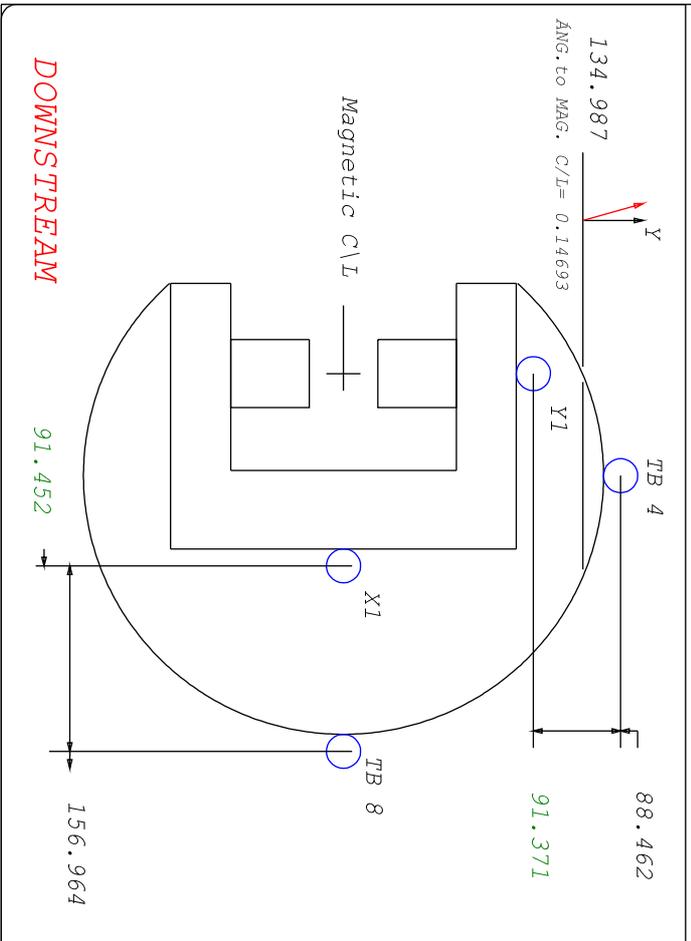
TOOLING BALL LOCATIONS

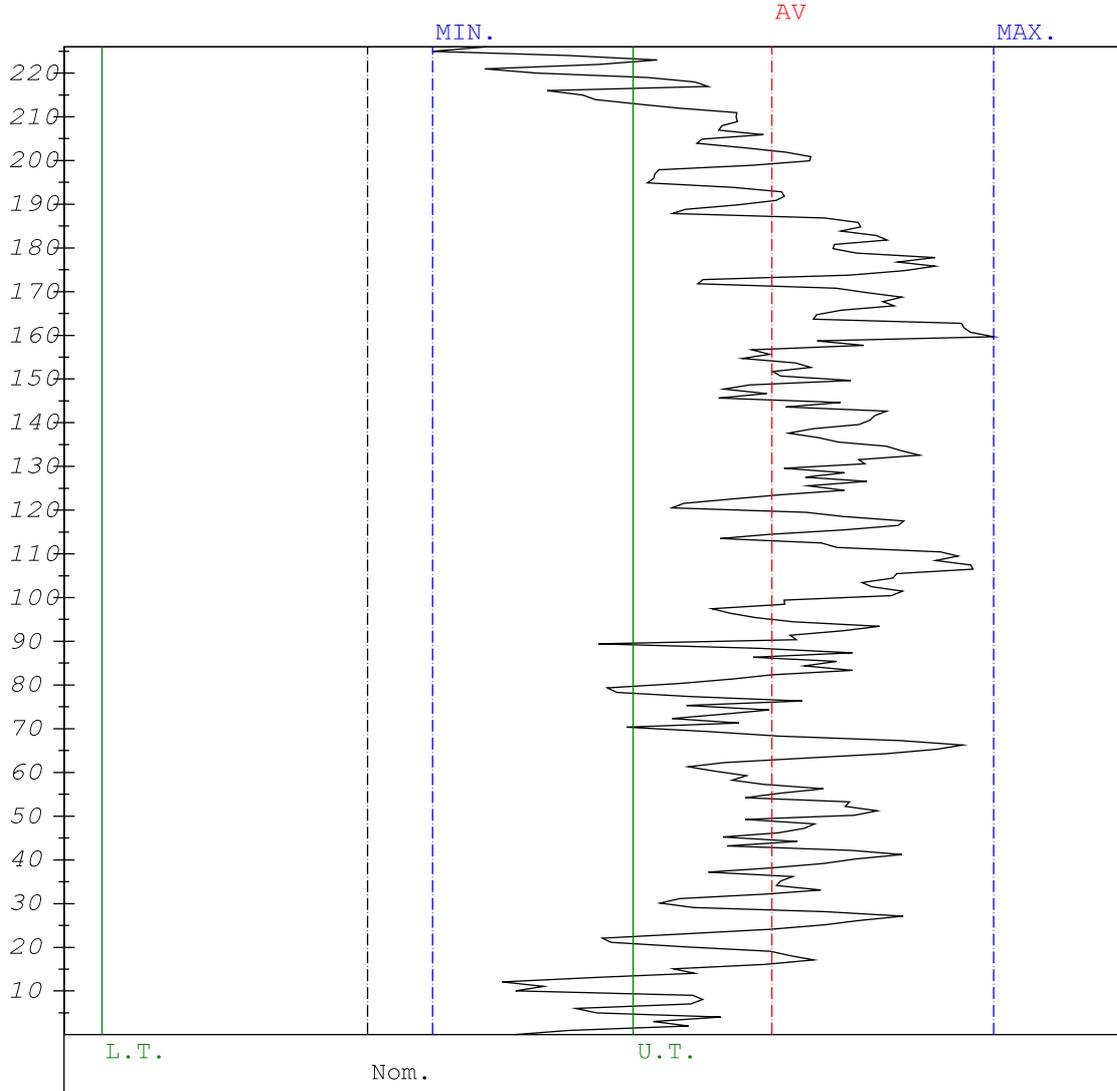
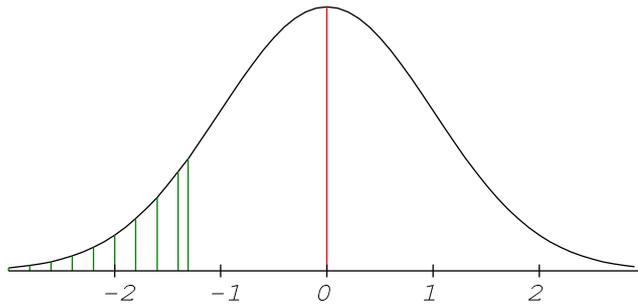
NUM.	X	Y	Z
1	-0.0035	179.8235	-1558.048
2	0.1082	179.7725	-584.3916
3	0.1359	179.7498	591.5311
4	0.1137	179.8331	1562.4708
5	248.3449	0.0834	-1558.076
6	248.4318	0.1270	-584.4114
7	248.4520	0.1269	591.6435
8	248.4164	0.0162	1562.5206

	C/L Offset	Length
Top Magnetic Structure	-0.022	3380.718
Bottom Magnetic Structure	0.022	3380.723
Strongback	0.622	3400.012

Dimensions in mm

Angles in mrad





Nominal : 4.5000	Averag : 5.261	Cent.-Dev. : 0.761
Up. Tol. : 0.5	Maximum : 5.6783	U.Tol.Ex. > : 90.4 %
Low.Tol. : -0.5	Minimum : 4.6226	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1998	In Tolerance: 9.6 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
 Pole Tip Gap Angle
 Post Magnetic Alignment

DATE: 03-NOV-2009
 UNDULATOR # 34
 DATASET # 0003
 PROGRAM VERSION 2.9