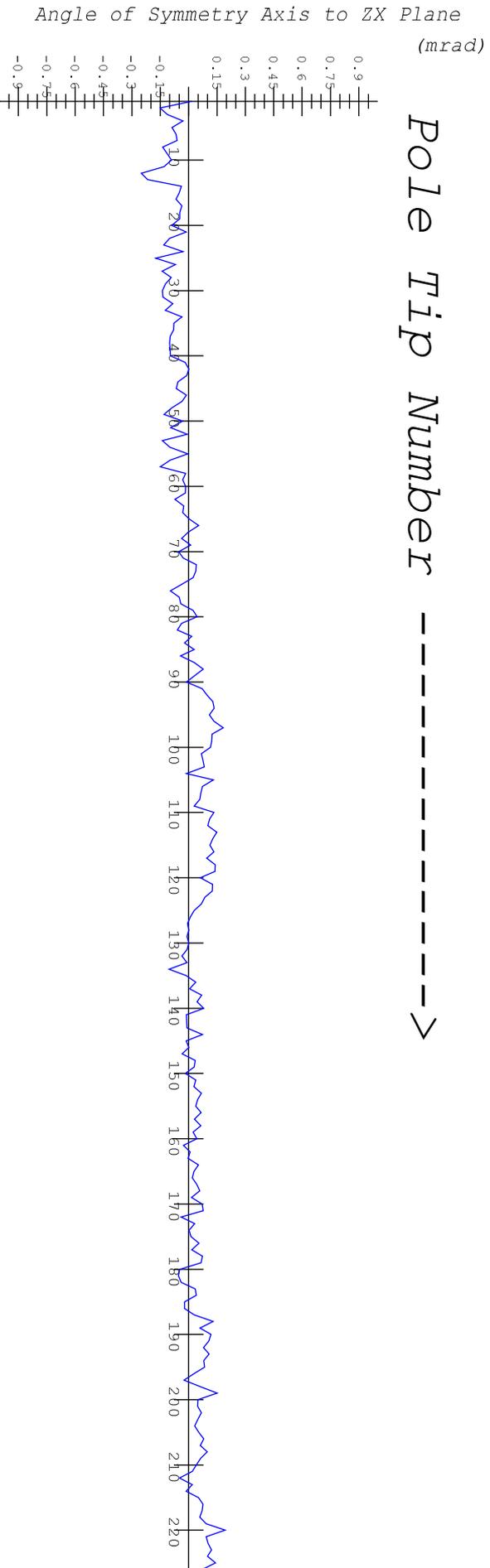


Pole Tip Number ----->



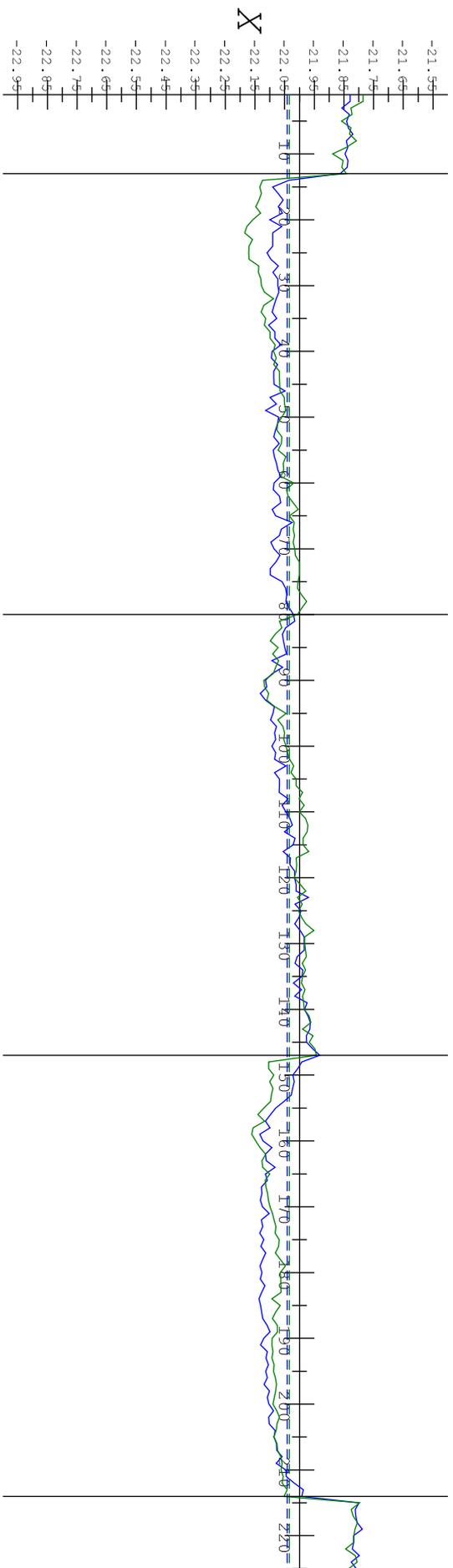
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

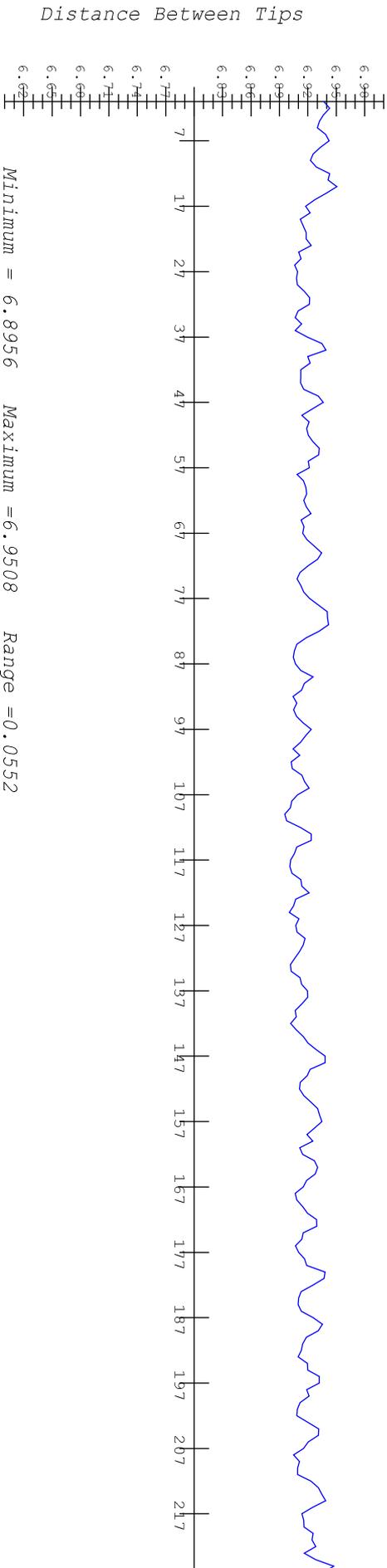
DATE: 09-DEC-2010
 UNDULATOR #14
 DATASET # 0003
 PROGRAM VERSION 2.9

Pole Tip Number ----->

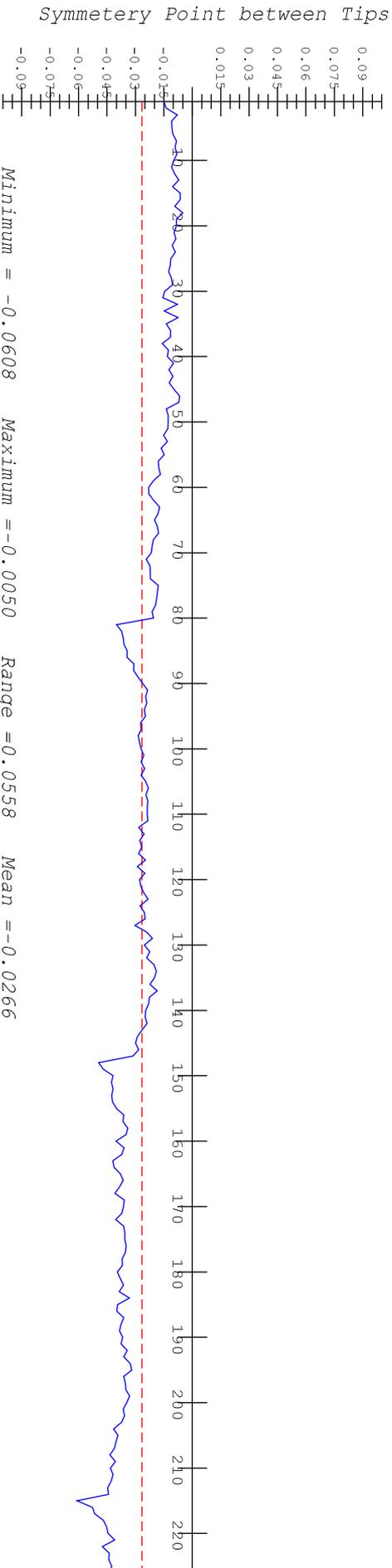


Undulator Pole Tip Location
Post Magnetic Alignment

DATE: 09-DEC-2010
 UNDULATOR #14
 DATASET # 0003
 PROGRAM VERSION 2.9



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

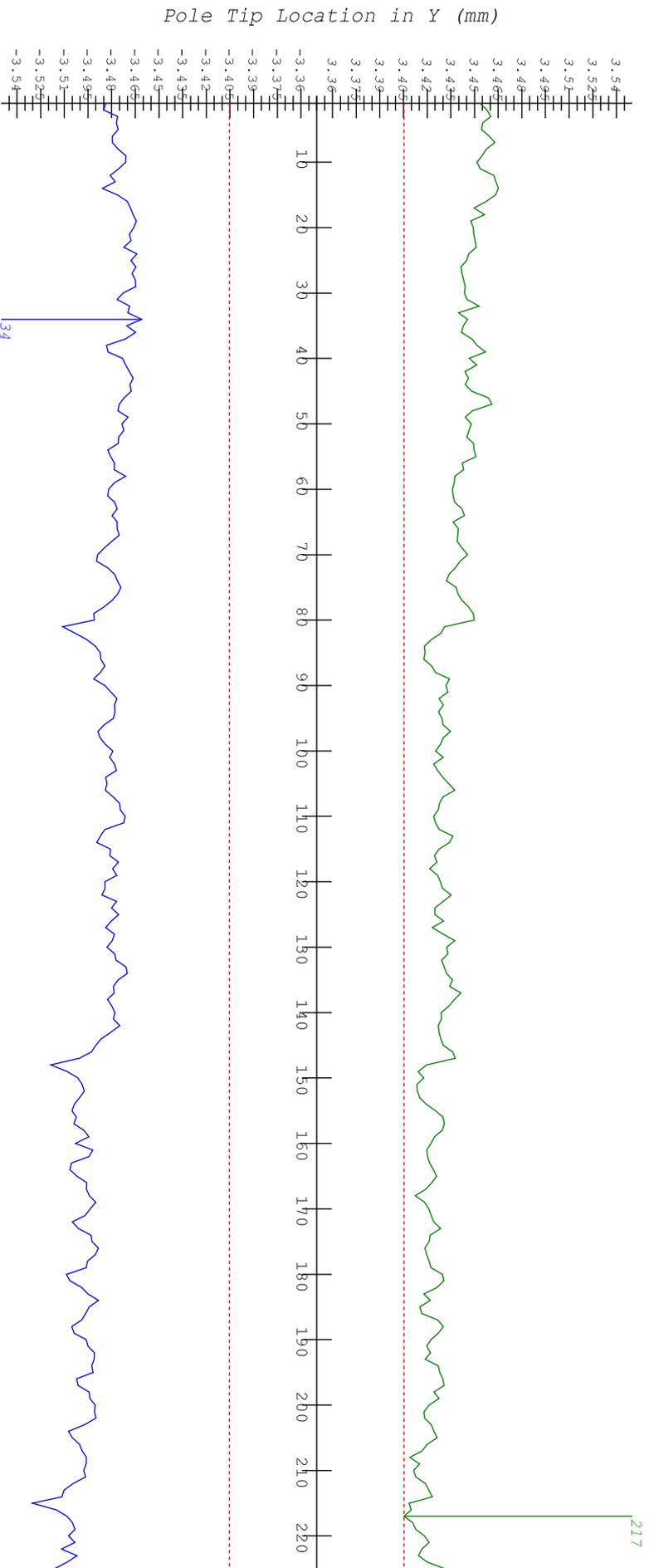


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 09-DEC-2010
 UNDUULATOR #14
 DATASET # 0003
 PROGRAM VERSION 2.9

Maximum Chamber Gap = 6.8106

Minimum = 3.4053 Maximum = 3.4651 Range = 0.0597



Minimum = -3.5302 Maximum = -3.4609 Range = 0.0693

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

DATE: 09-DEC-2010
UNDULATOR #14
DATASET # 0003
PROGRAM VERSION 2.9



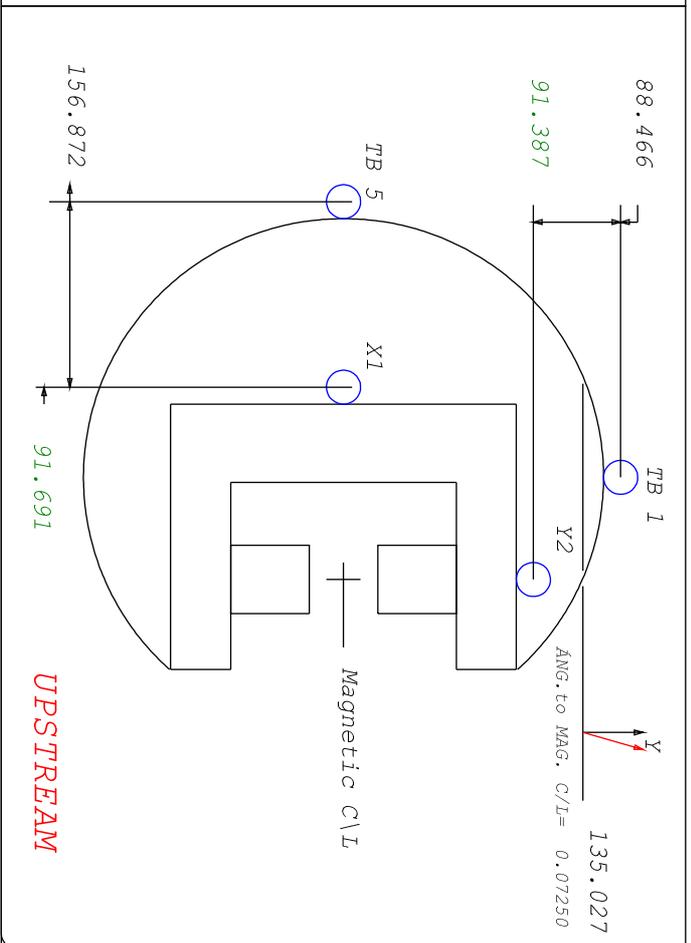
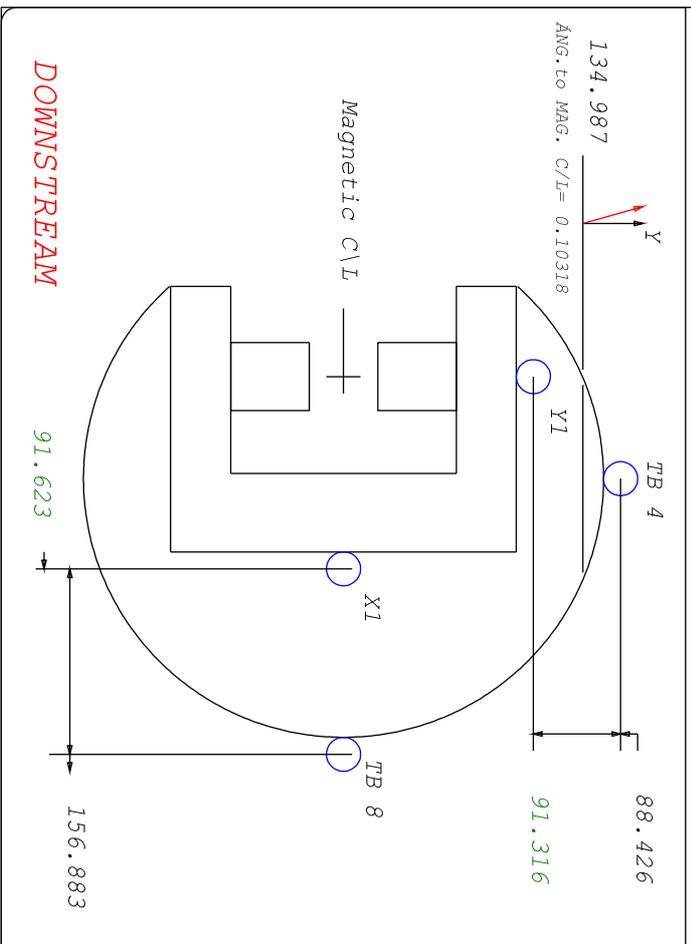
----- TOOLING BALL LOCATIONS -----

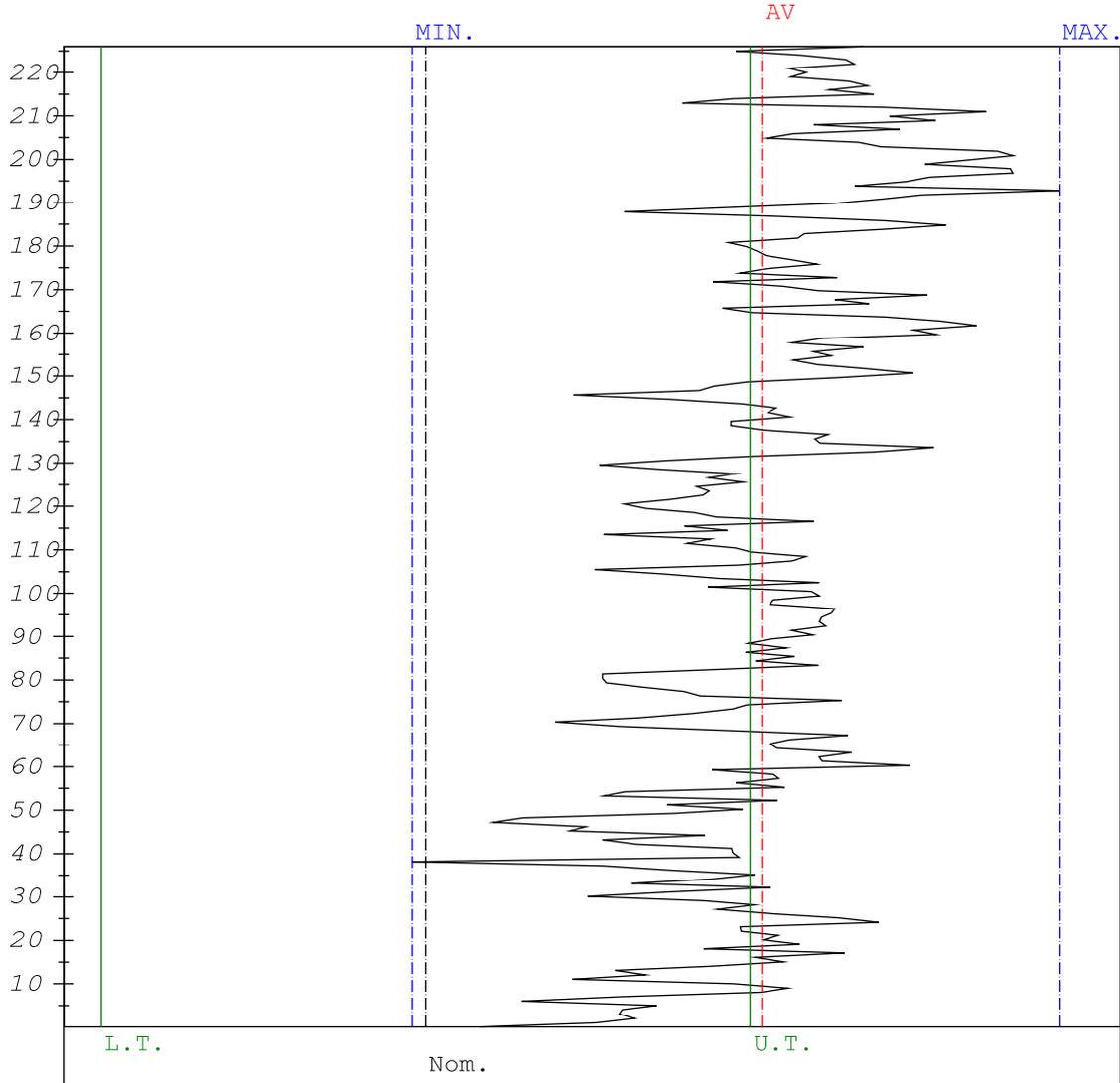
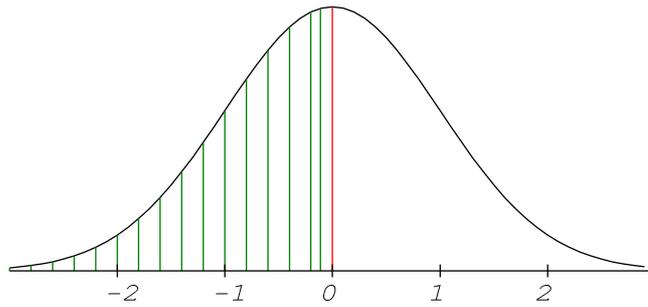
NUM.	X	Y	Z
1	0.2810	179.8527	-1558.206
2	0.3154	179.6959	-584.6253
3	0.4060	179.6977	591.3860
4	0.2846	179.7420	1562.3580
5	248.5632	-0.0437	-1558.266
6	248.5928	0.0379	-584.5698
7	248.6701	0.0512	591.4892
8	248.5062	-0.0093	1562.3228

	C/L Offset	Length
Top Magnetic Structure	0.013	3380.986
Bottom Magnetic Structure	-0.013	3380.913
Strongback	0.425	3399.984

Dimensions in mm

Angles in mrad





Nominal : 4.5000	Averag : 5.0182	Cent.-Dev. : 0.5182
Up. Tol. : 0.5	Maximum : 5.4776	U.Tol.Ex. > : 54.4 %
Low.Tol. : -0.5	Minimum : 4.4794	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1647	In Tolerance: 45.6 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE: 09-DEC-2010
UNDULATOR #14
DATASET # 0003
PROGRAM VERSION 2.9