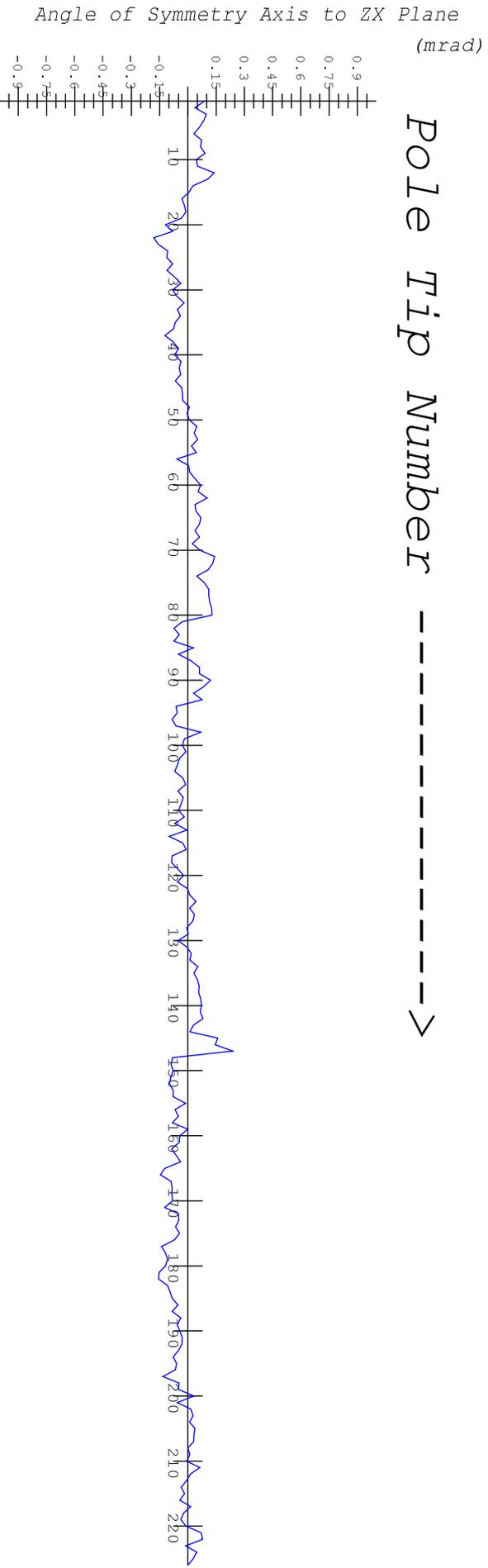


Pole Tip Number ----->



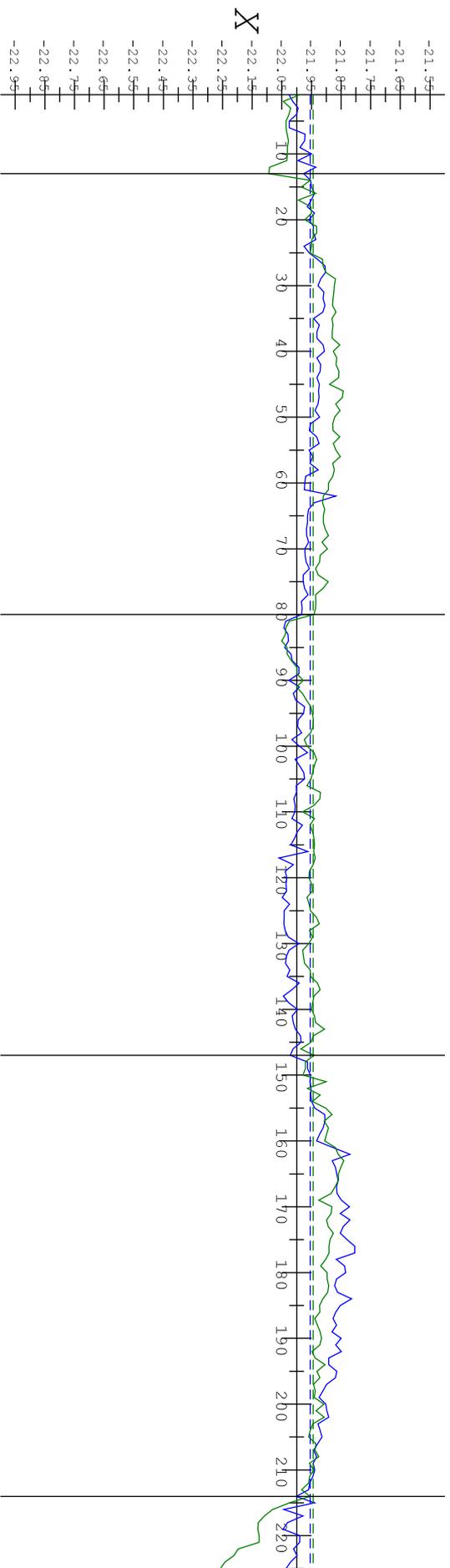
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

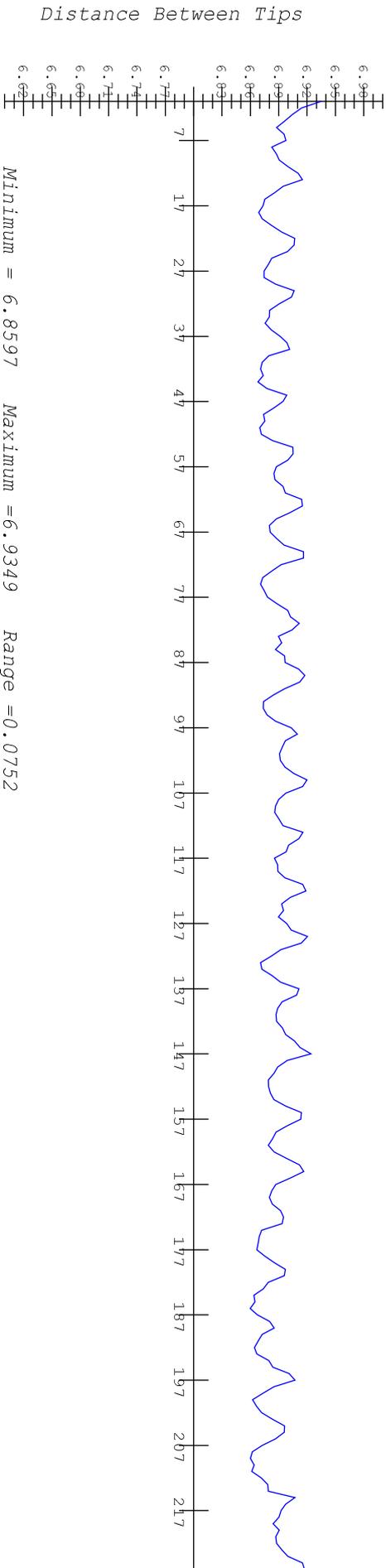
DATE: 17-DEC-2009
 UNDUULATOR # 13
 DATASET # 0026
 PROGRAM VERSION 2.9

Pole Tip Number ----->



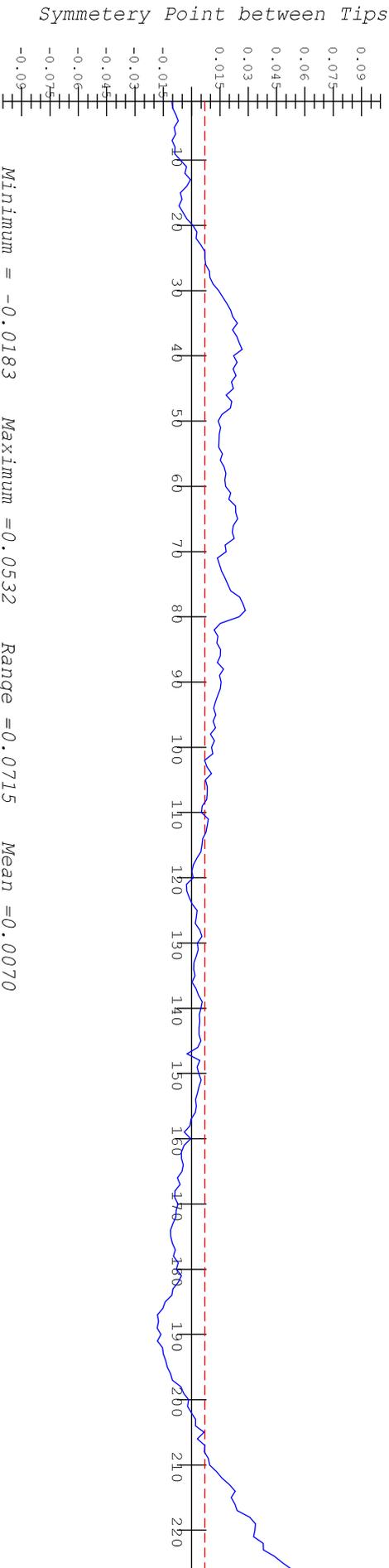
Undulator Pole Tip Location Post Magnetic Alignment

DATE: 17-DEC-2009
 UNDUULATOR # 13
 DATASET # 0026
 PROGRAM VERSION 2.9



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

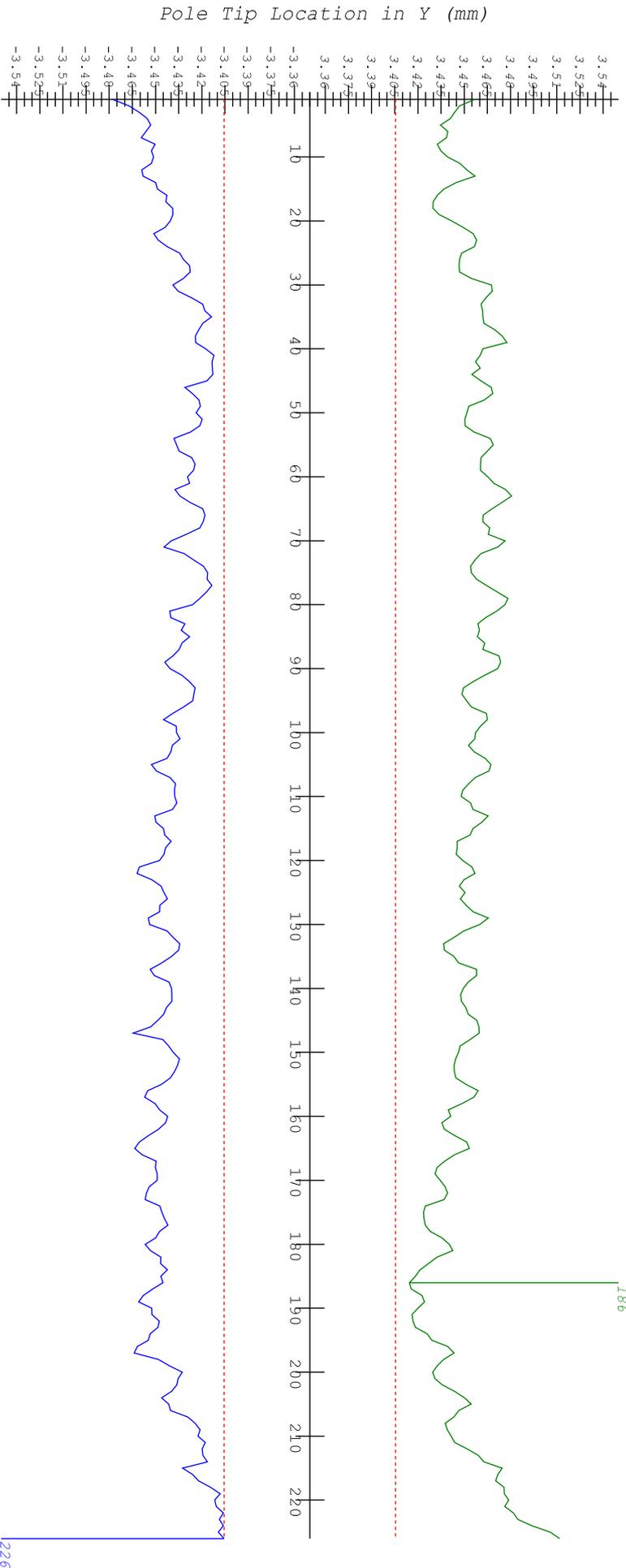


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 17-DEC-2009
 UNDUULATOR # 13
 DATASET # 0026
 PROGRAM VERSION 2.9

Maximum Chamber Gap = 6.8110

Minimum = 3.4146 Maximum = 3.5118 Range = 0.0973



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: 17-DEC-2009
UNDULATOR # 13
DATASET # 0026
PROGRAM VERSION 2.9



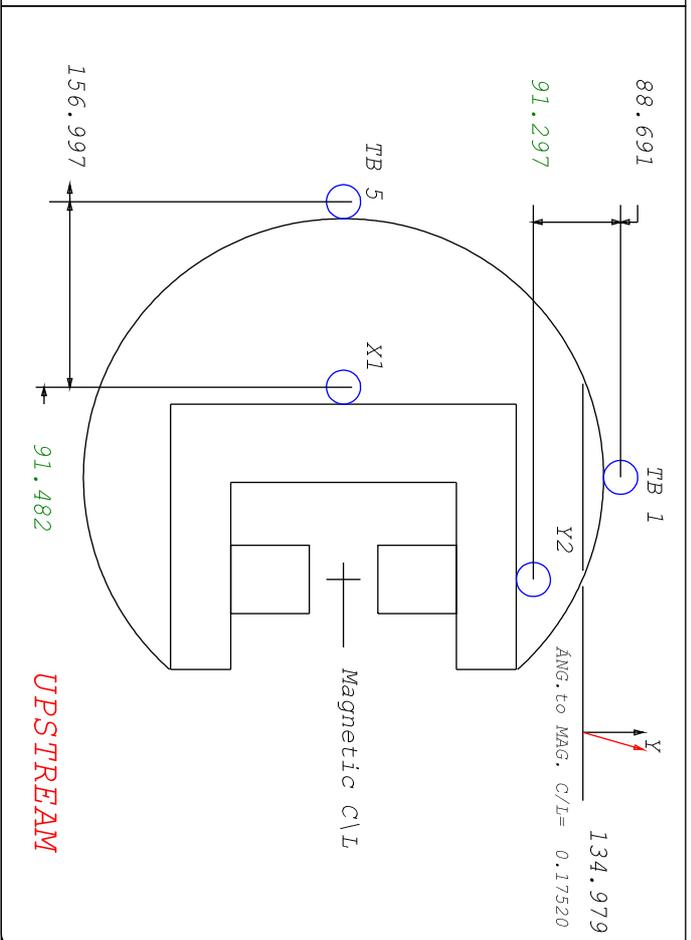
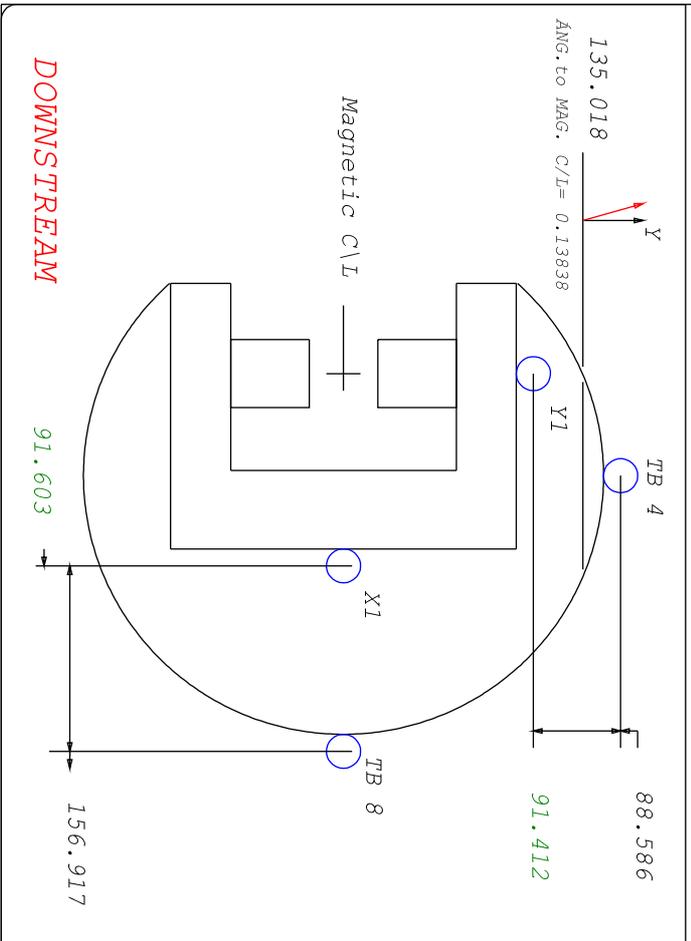
TOOLING BALL LOCATIONS

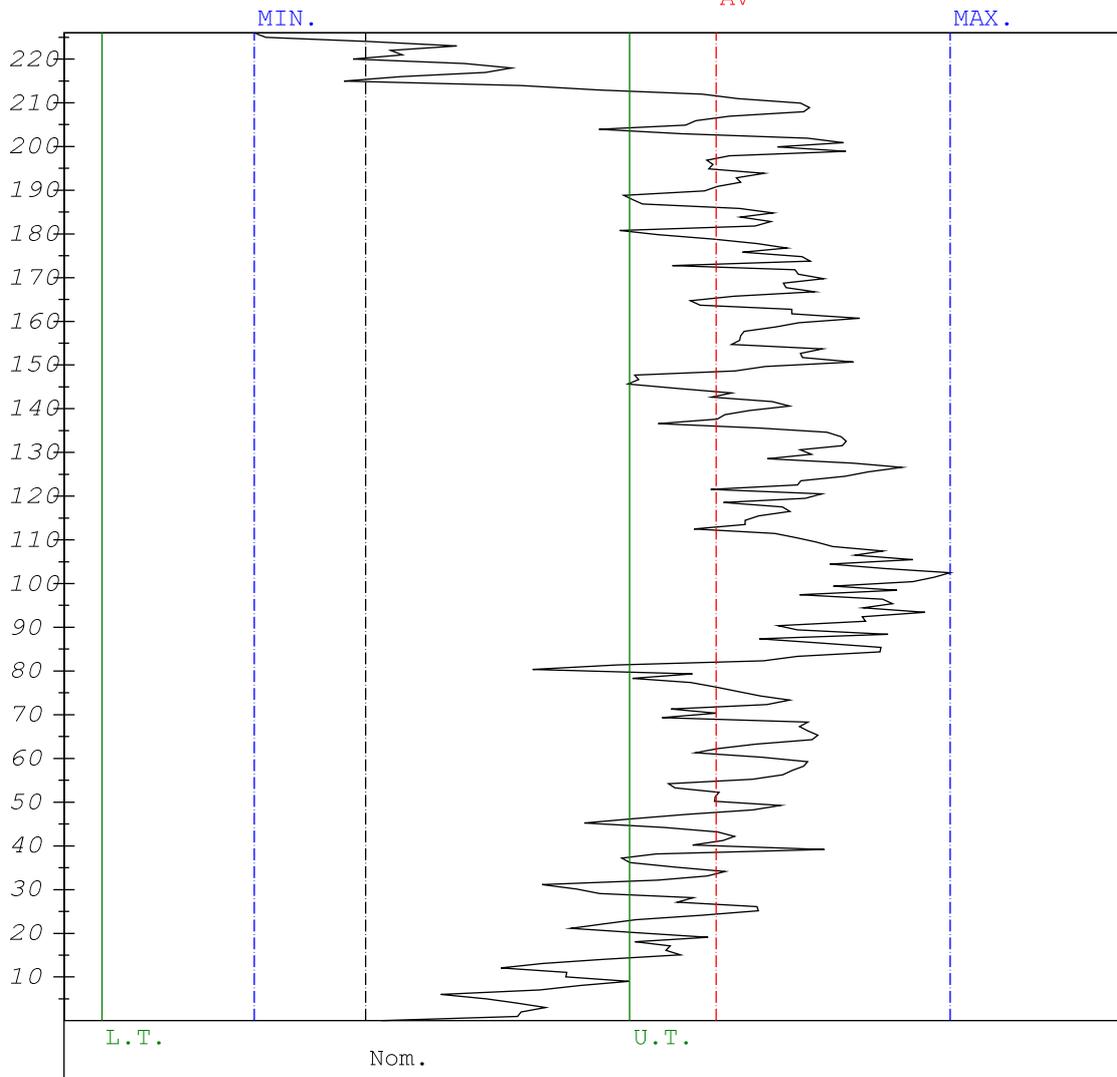
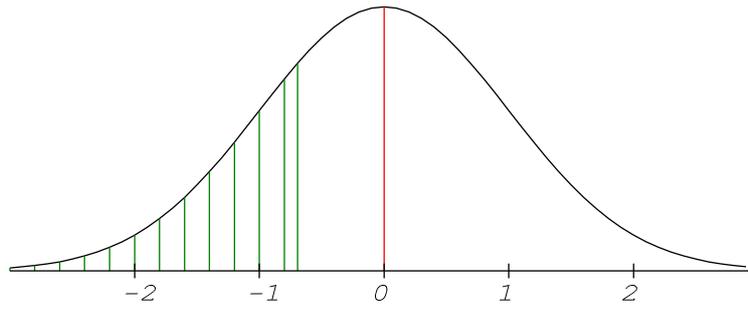
NUM.	X	Y	Z
1	0.1485	179.9882	-1558.283
2	0.2979	180.0154	-584.4484
3	0.2026	179.9081	591.3077
4	0.1661	179.9976	1562.0739
5	248.4793	0.0792	-1558.358
6	248.4431	-0.0154	-584.6037
7	248.4707	0.0585	591.3190
8	248.5201	-0.0530	1562.0785

	C/L Offset	Length
Top Magnetic Structure	-0.097	3381.048
Bottom Magnetic Structure	0.097	3381.270
Strongback	0.253	3399.775

Dimensions in mm

Angles in mrad





Nominal : 4.5000	Averag : 5.1638	Cent.-Dev. : 0.6638
Up. Tol. : 0.5	Maximum : 5.6076	U.Tol.Ex. > : 75.6 %
Low.Tol. : -0.5	Minimum : 4.2887	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2364	In Tolerance: 24.4 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE:17-DEC-2009
UNDULATOR # 13
DATASET # 0026
PROGRAM VERSION 2.9