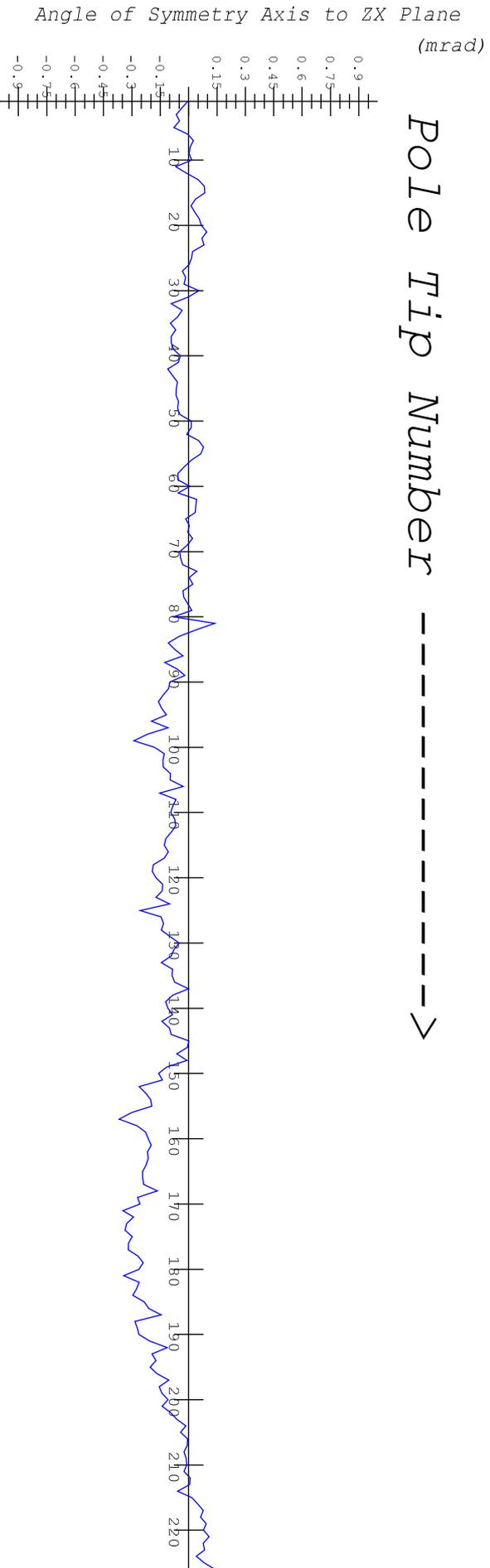


Pole Tip Number ----->



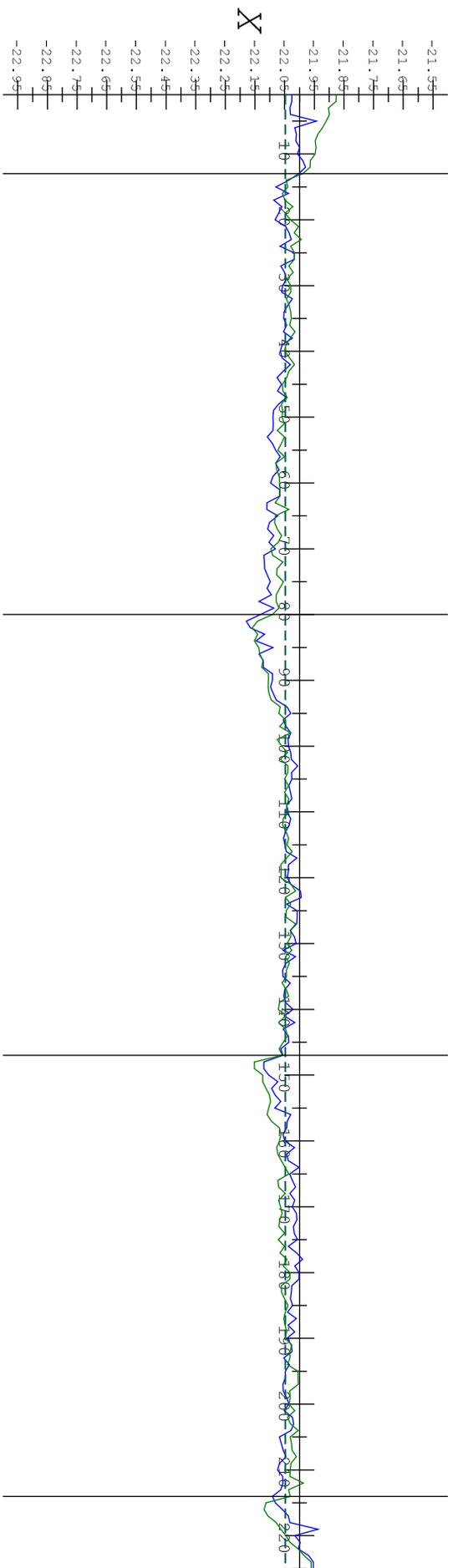
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

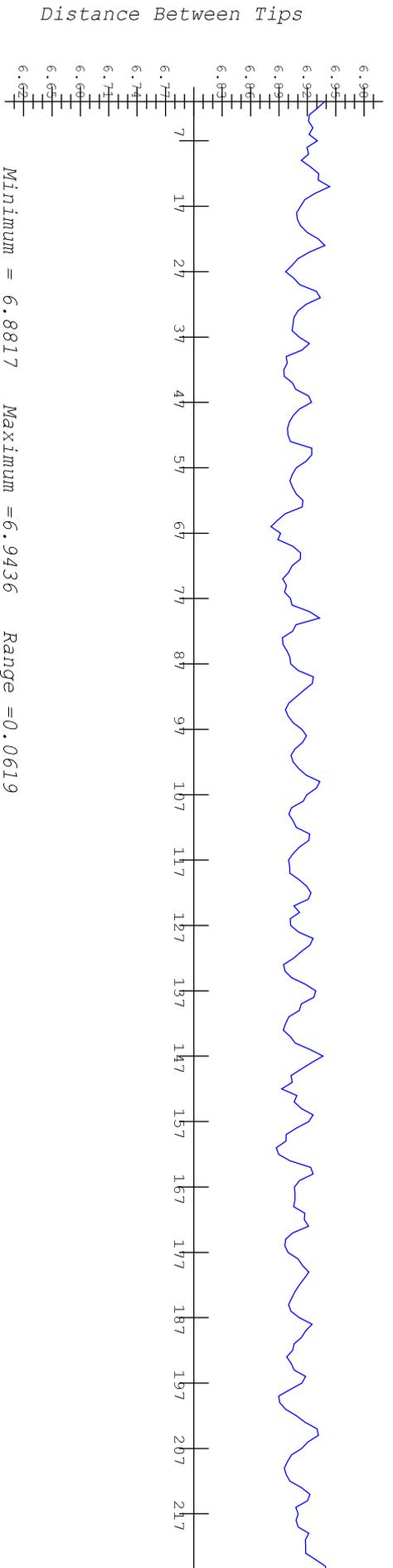
DATE: 23-APR-2009
 UNDULATOR #09
 DATASET #0002
 PROGRAM VERSION 2.9

Pole Tip Number ----->



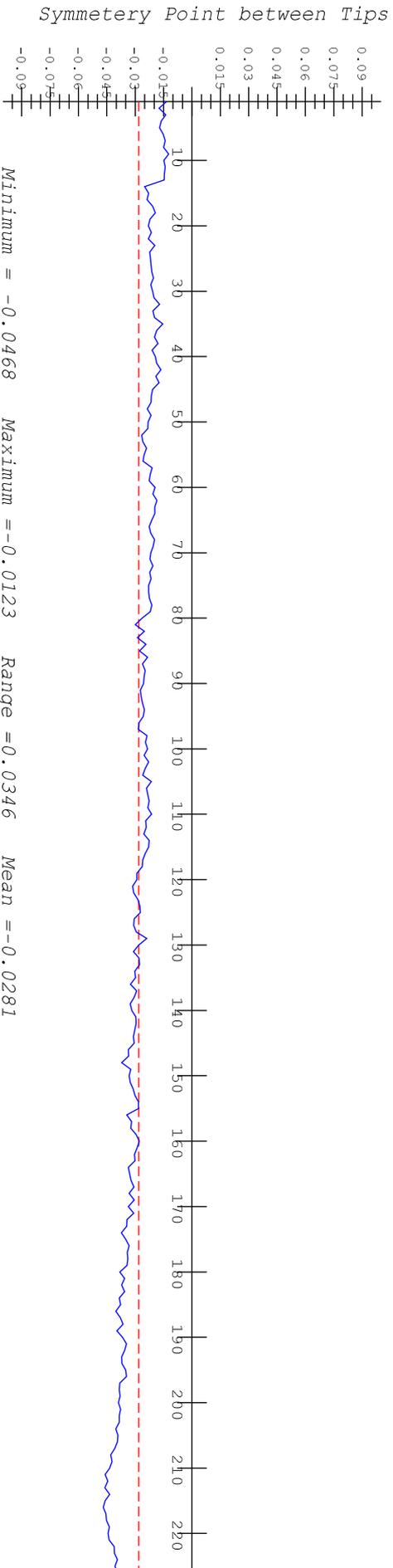
Undulator Pole Tip Location Post Magnetic Alignment

DATE: 23-APR-2009
 UNDULATOR #09
 DATASET #0002
 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

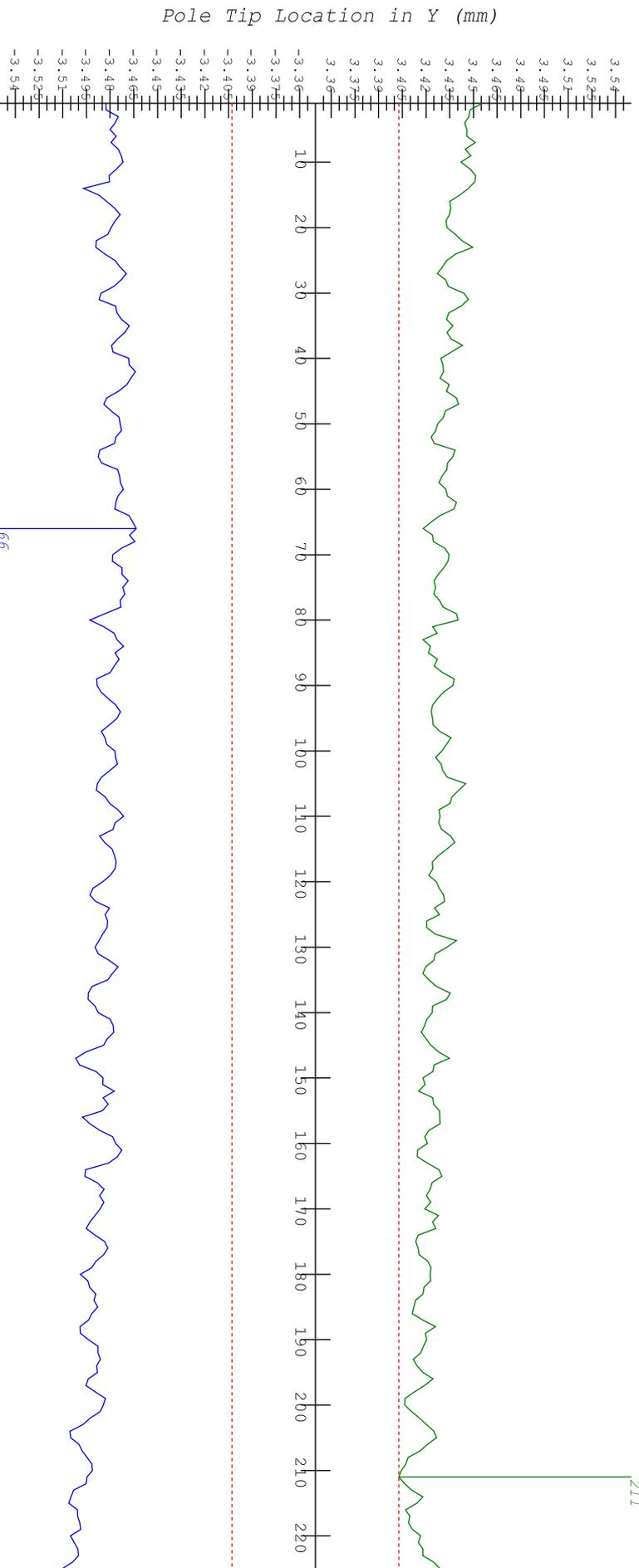


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 23-APR-2009
 UNDUULATOR #09
 DATASET #0002
 PROGRAM VERSION 2.9

Maximum Chamber Gap = 6.8056

Minimum = 3.4028 Maximum = 3.4557 Range = 0.0529



Minimum = -3.5102 Maximum = -3.4634 Range = 0.0468

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: 23-APR-2009
UNDULATOR #09
DATASET #0002
PROGRAM VERSION 2.9



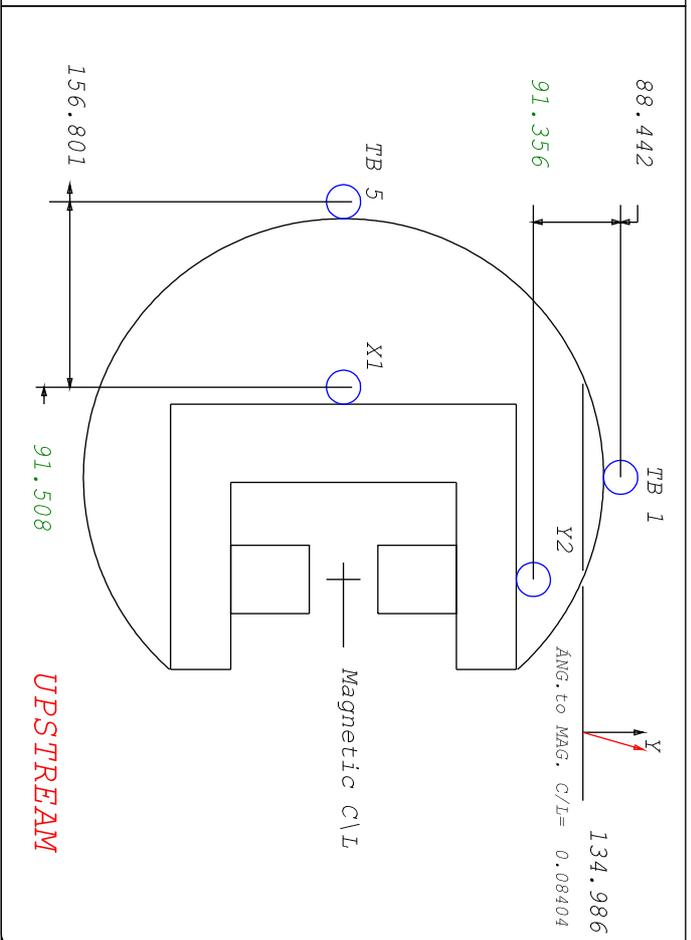
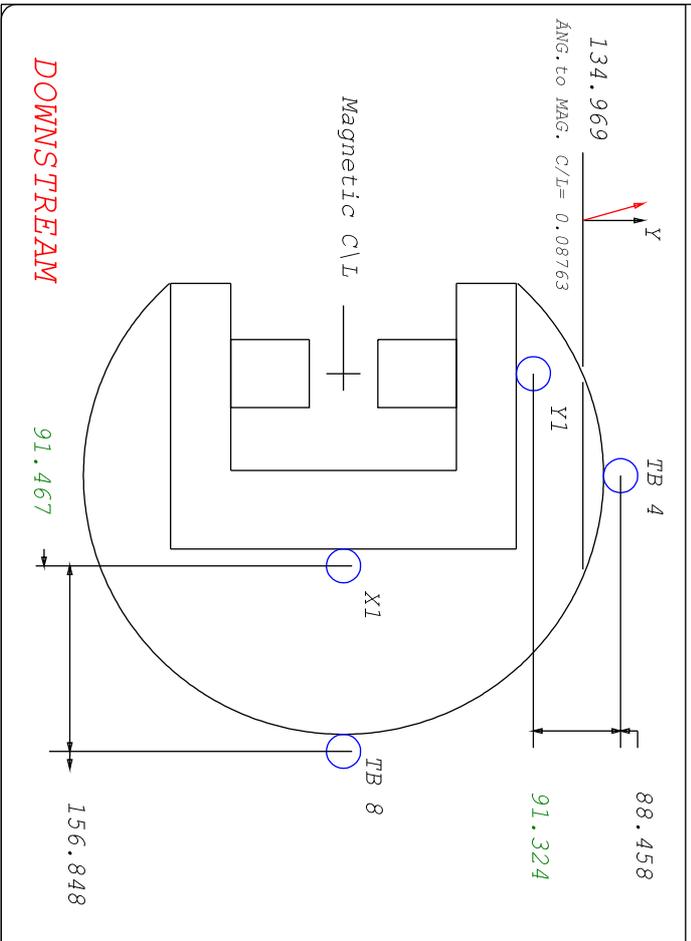
TOOLING BALL LOCATIONS

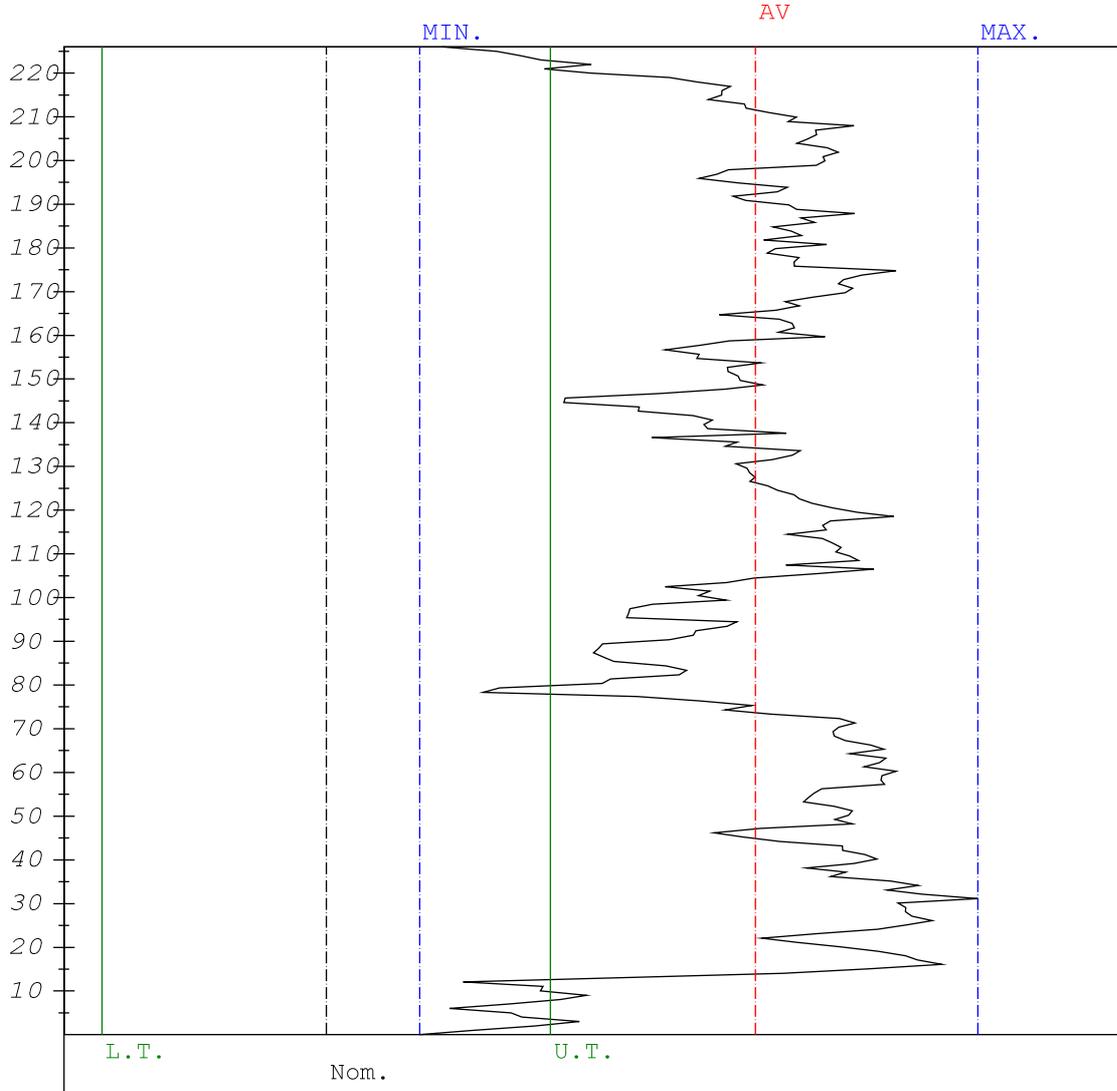
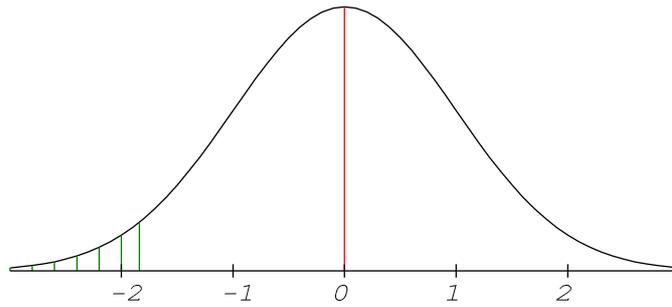
NUM.	X	Y	Z
1	0.0077	179.7975	-1558.244
2	-0.0258	179.7582	-584.7236
3	-0.2684	179.8021	591.4675
4	-0.0705	179.7817	1562.1714
5	248.3085	-0.0129	1558.189
6	248.3880	0.0524	-584.6988
7	248.3509	-0.0108	591.3371
8	248.3150	-0.0445	1562.0773

	C/L Offset	Length
Top Magnetic Structure	-0.073	3380.980
Bottom Magnetic Structure	0.073	3381.153
Strongback	0.296	3399.949

Dimensions in mm

Angles in mrad





Nominal : 4.5000	Averag : 5.4572	Cent.-Dev. : 0.9572
Up. Tol. : 0.5	Maximum : 5.9524	U.Tol.Ex. > : 96.7 %
Low.Tol. : -0.5	Minimum : 4.7083	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2487	In Tolerance: 3.3 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE: 23-APR-2009
UNDULATOR #09
DATASET #0002
PROGRAM VERSION 2.9