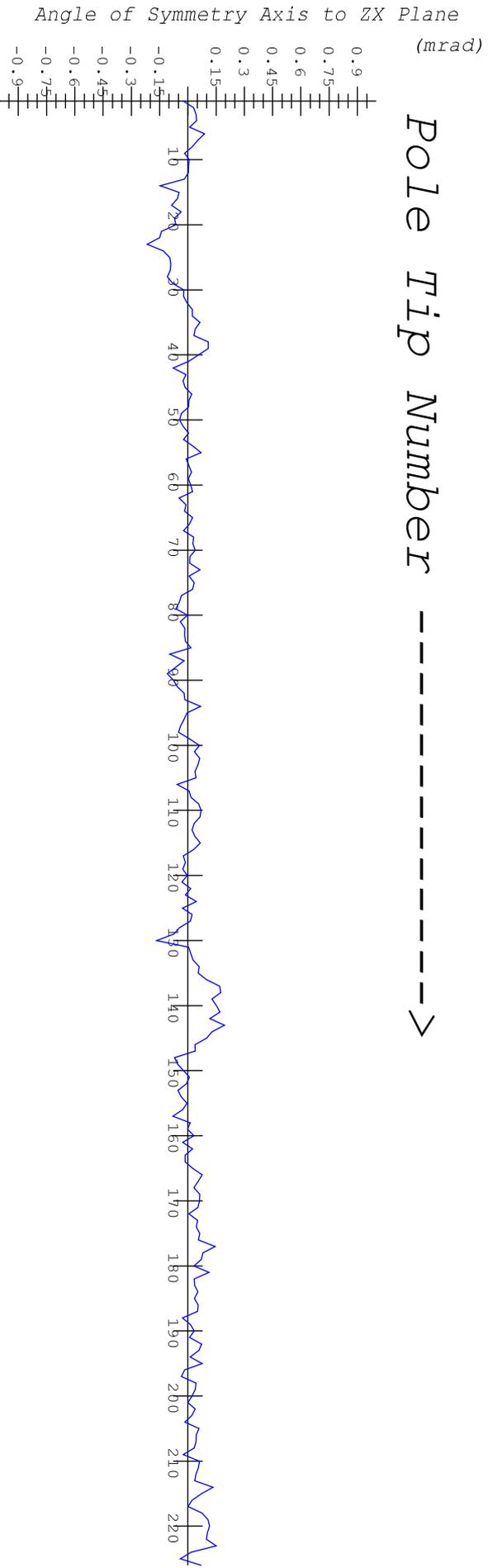


Pole Tip Number ----->



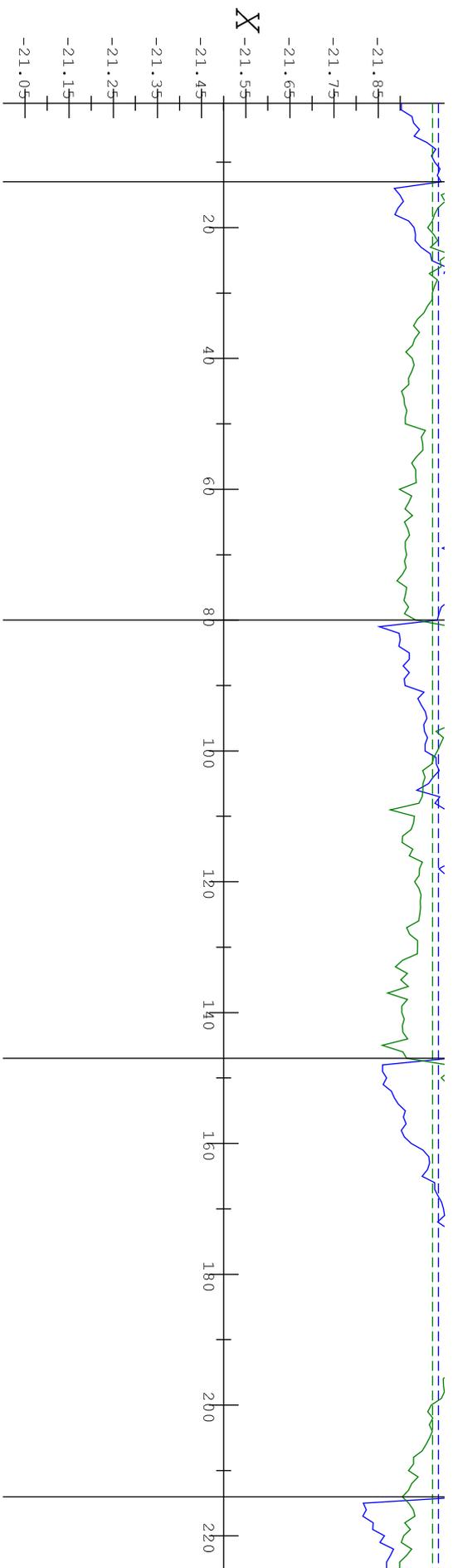
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
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 Wide Gap Undulator

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Pole Tip Number ----->



X values in mm

Green Solid = Point on front face of Upper Pole Tip 11.5mm above Magnetic C/L

Green Dash = Mean value of all Upper Pole Tips 11.5mm above Magnetic C/L Mean value Upper Pole Tips = -21.973

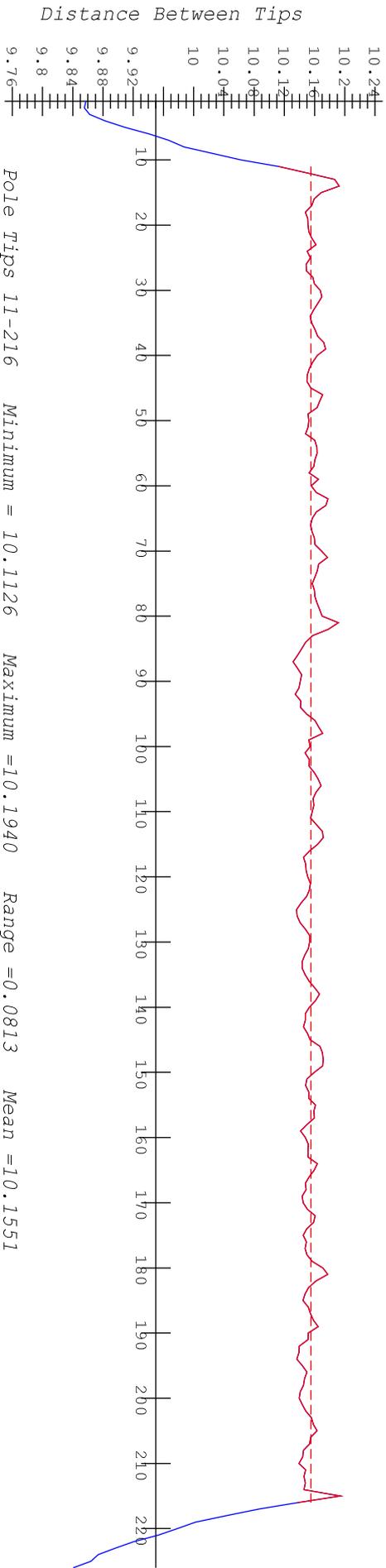
Blue Solid = Point on front face of Lower Pole Tip 11.5mm below Magnetic C/L

Blue Dash = Mean value of all Lower Pole Tips 11.5mm below Magnetic C/L Mean value Lower Pole Tips = -21.986



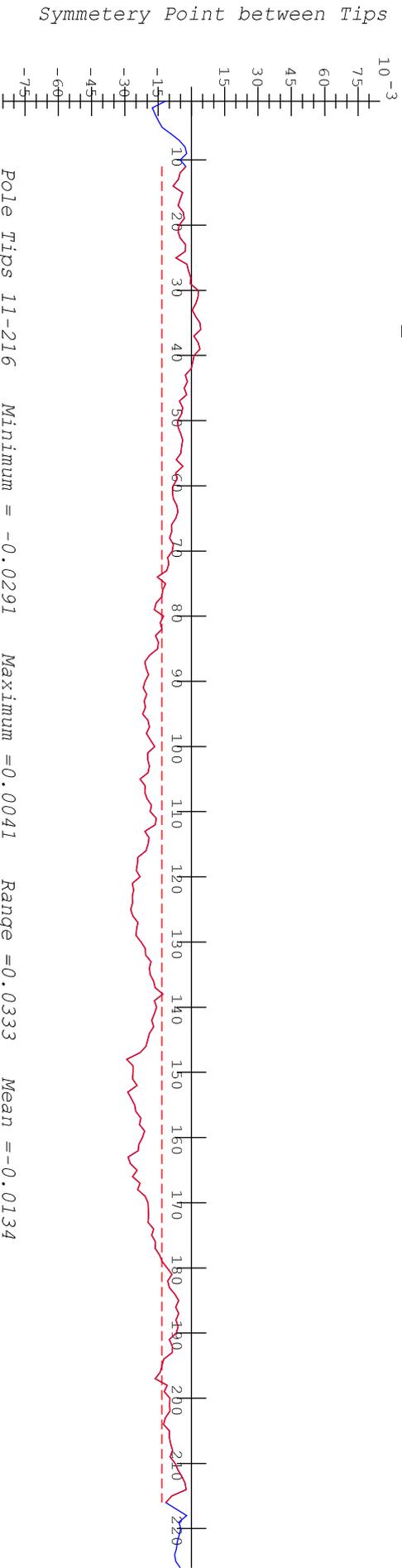
Undulator Pole Tip Location
Post Magnetic Alignment
Wide Gap Undulator

DATE: 08-MAR-2010
UNDULATOR #20
DATASET # 0007
PROGRAM VERSION 4.1



in mm

Pole Tip Number ----->

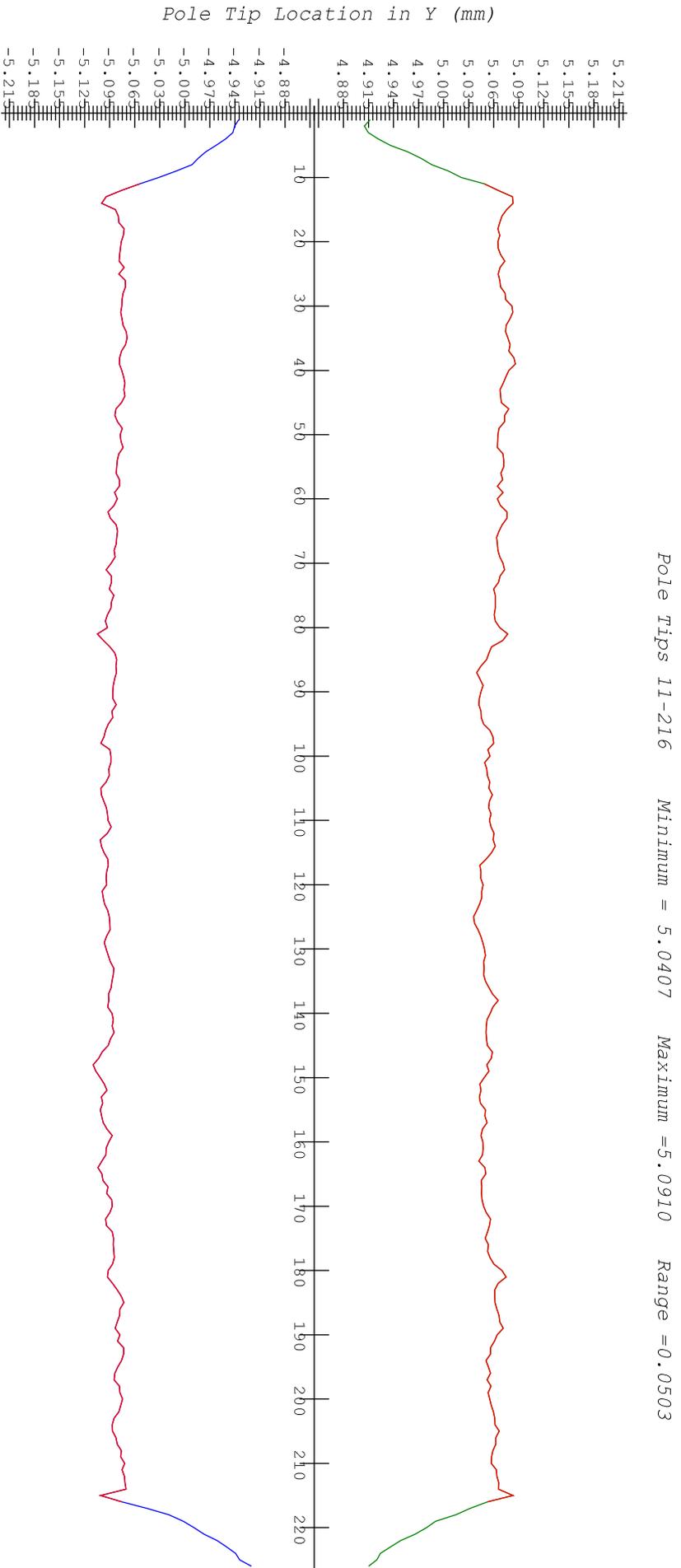


Symmetry Point is the symmetry point between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C\L
 Broken Red line is Mean Value of Symmetry Points and Mean Value of Gap Distance
 Distance Between Tips is the distance between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C\L



Undulator Pole Tip Location
 Post Magnetic Alignment
 Wide Gap Undulator

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Green + Red = The position of the Upper Pole Tips at Magnetic C\I L (Pole Tips 11-216 in Red)
 Blue + Red = The position of the Lower Pole Tips at Magnetic C\I L (Pole Tips 11-216 in Red)



Undulator Pole Tip Location
 Post Magnetic Alignment
 Wide Gap Undulator

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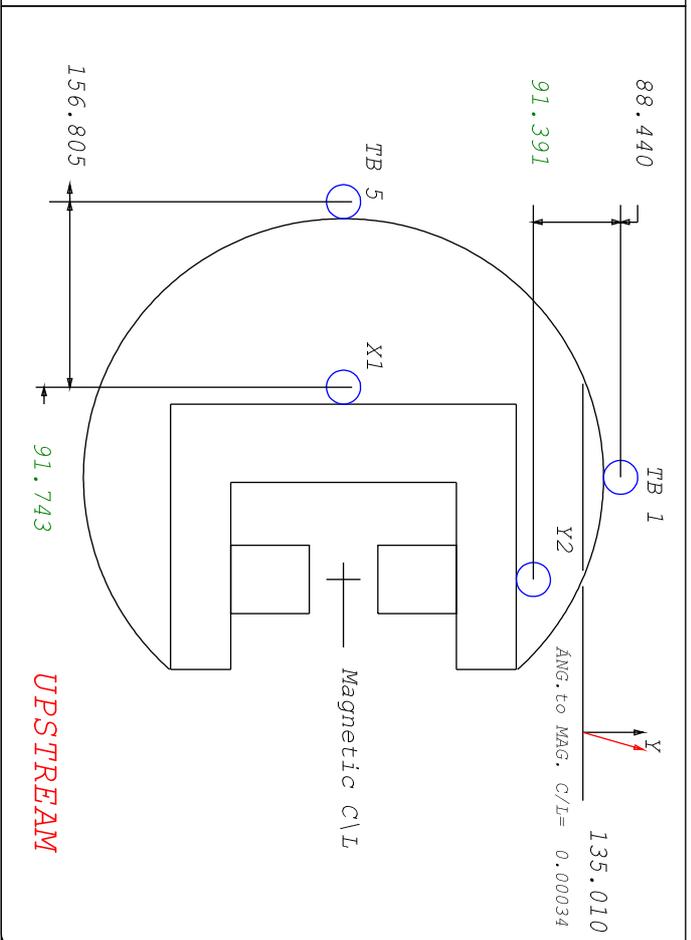
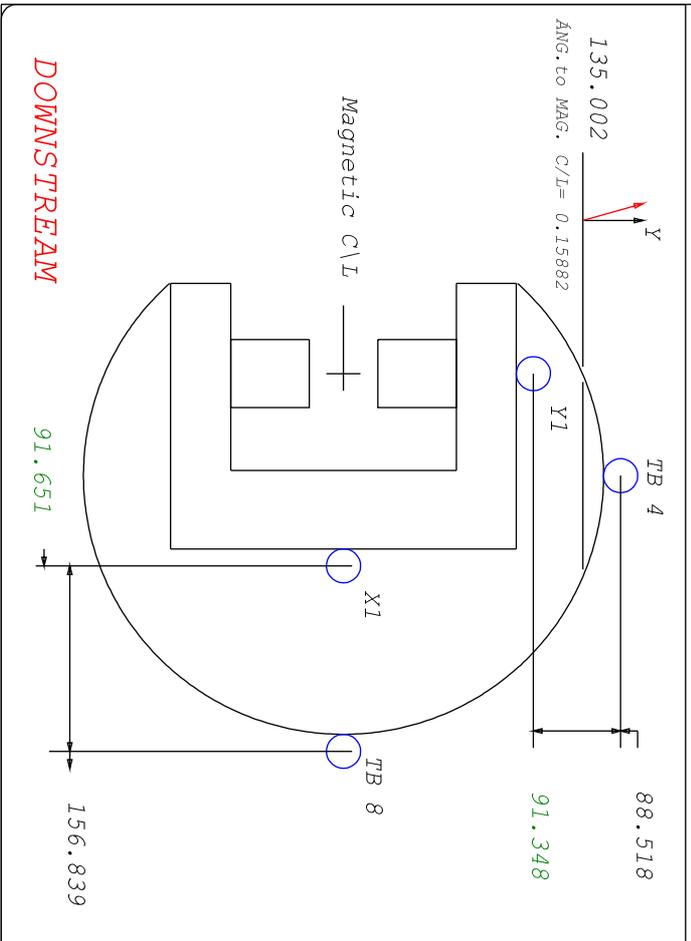
TOOLING BALL LOCATIONS

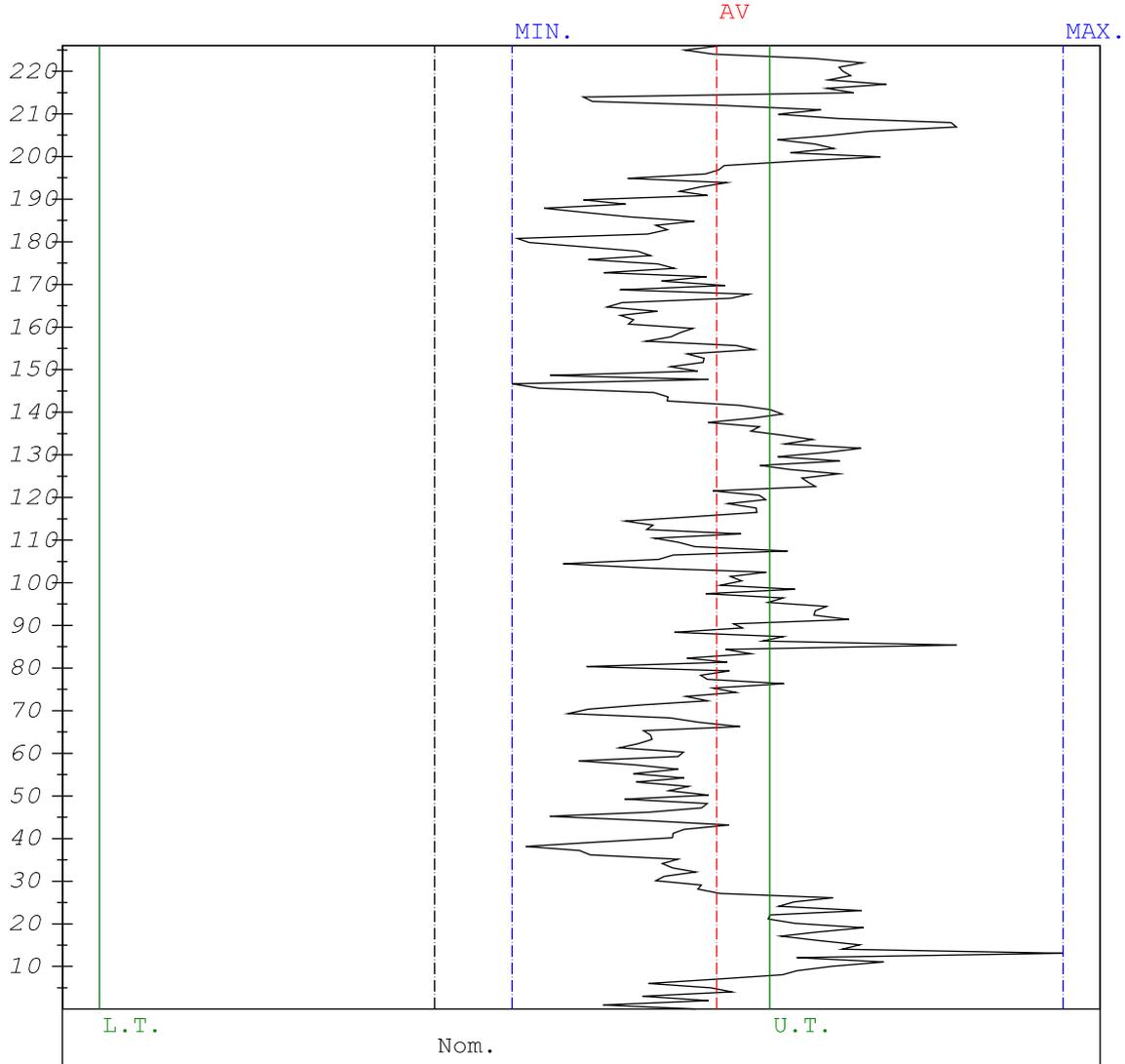
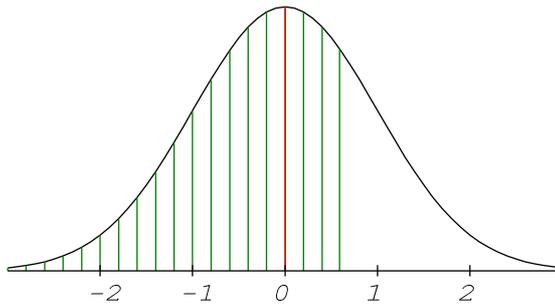
NUM.	X	Y	Z
1	0.1623	179.8305	-1558.431
2	0.2874	179.7389	-584.8048
3	0.2630	179.7545	591.1439
4	0.3635	179.8661	1562.0513
5	248.5482	0.1097	-1558.346
6	248.5368	0.0454	-584.8095
7	248.4786	0.1036	591.3328
8	248.4903	0.0683	1562.1453

	C/L Offset	Length
Top Magnetic Structure	-0.029	3380.524
Bottom Magnetic Structure	0.029	3380.787
Strongback	0.255	3400.007

Dimensions in mm

Angles in mrad





Nominal : 4.5000	Averag : 4.9209	Cent.-Dev. : 0.4209
Up. Tol. : 0.5	Maximum : 5.4376	U.Tol.Ex. > : 27.8 %
Low.Tol. : -0.5	Minimum : 4.6158	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1345	In Tolerance: 72.2 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE: 08-MAR-2010
UNDULATOR #20
DATASET # 0007
PROGRAM VERSION 4.1