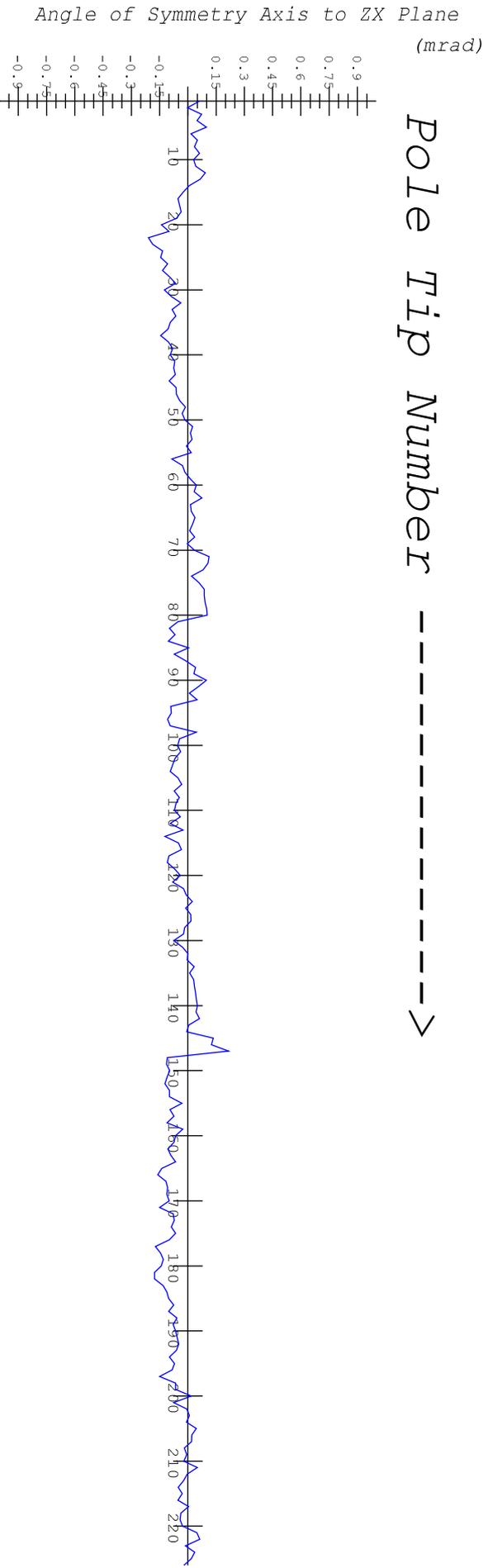


Pole Tip Number ----->



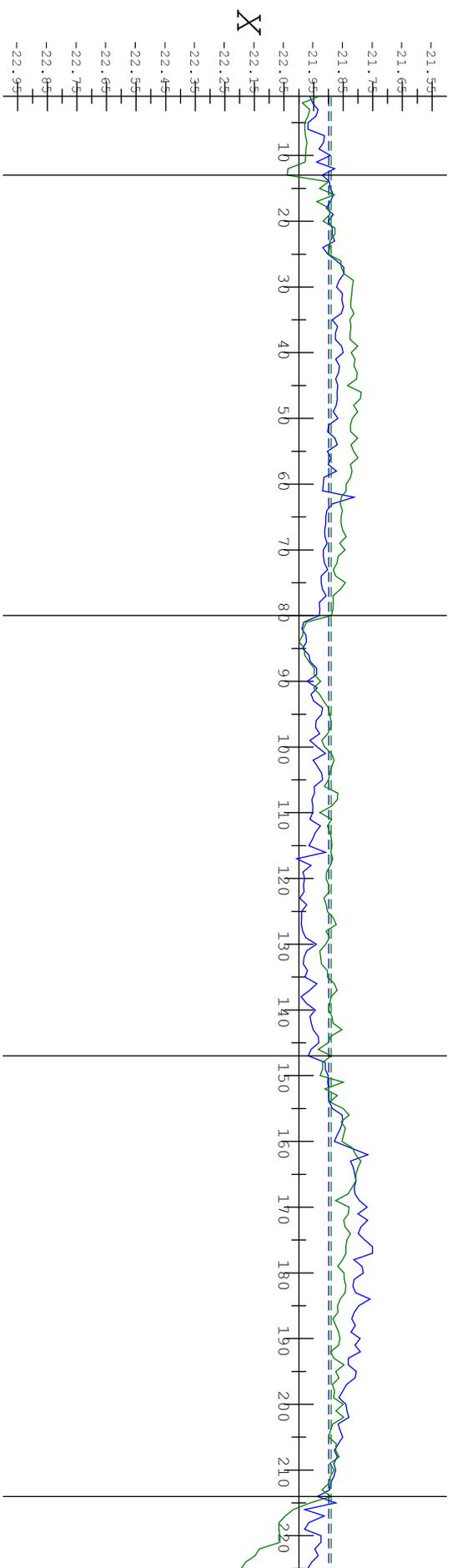
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips

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Undulator Pole Tip Angles
 Post Magnetic Alignment

DATE: 06-JUN-2008
 UNDULATOR #13
 DATASET #0009
 PROGRAM VERSION 2.7

Pole Tip Number ----->



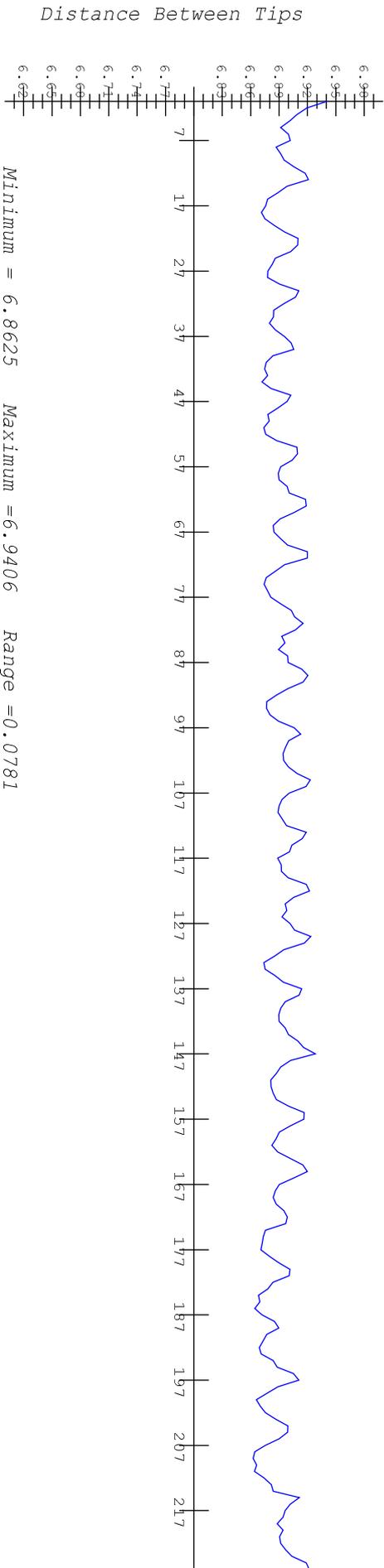
X values in mm

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 = -21.891
 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 = -21.899

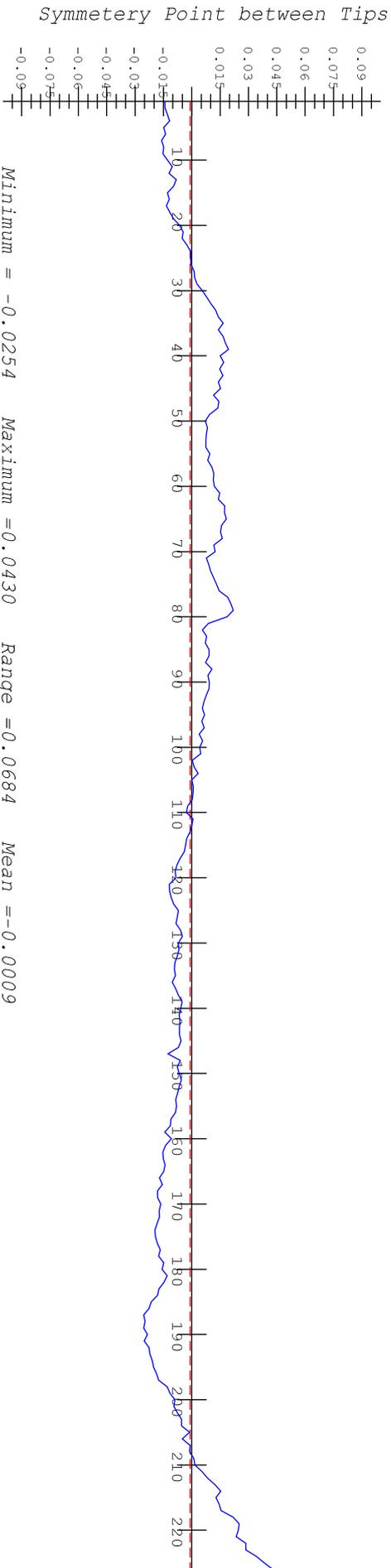
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Undulator Pole Tip Location Post Magnetic Alignment

DATE: 06-JUN-2008
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 PROGRAM VERSION 2.7



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

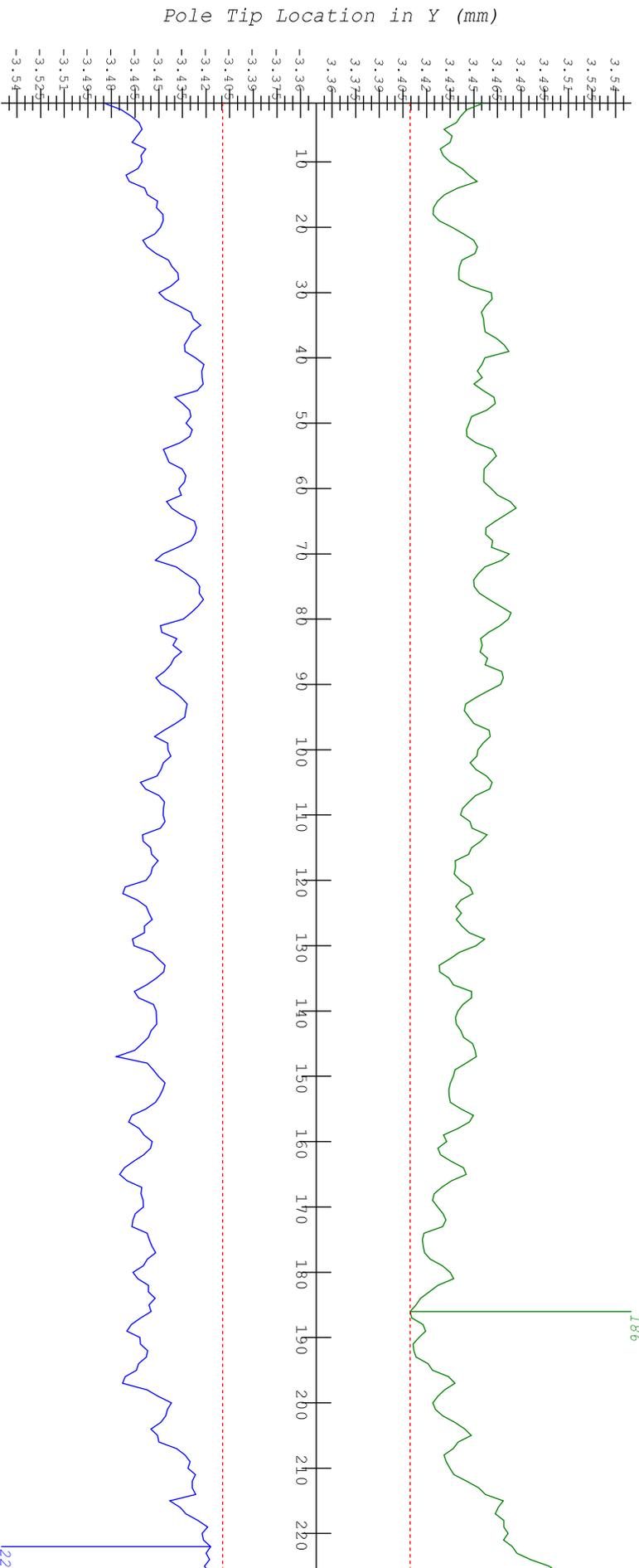
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Undulator Pole Tip Location
 Post Magnetic Alignment

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 UNDUULATOR #13
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 PROGRAM VERSION 2.7

Maximum Chamber Gap = 6.8191

Minimum = 3.4095 Maximum = 3.5039 Range = 0.0944



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)

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Undulator Pole Tip Location
Post Magnetic Alignment

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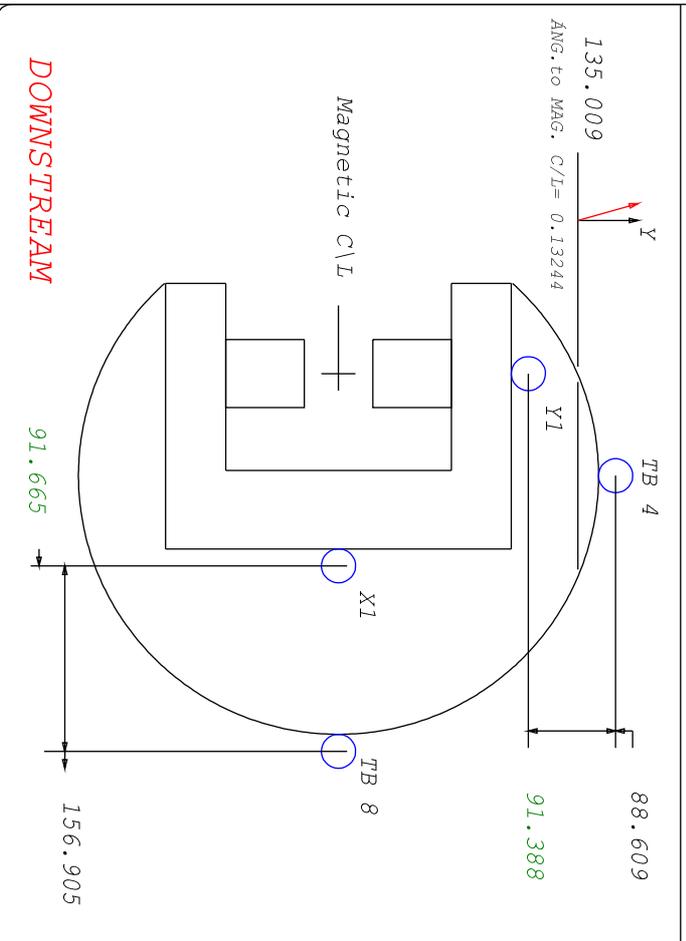


TOOLING BALL LOCATIONS

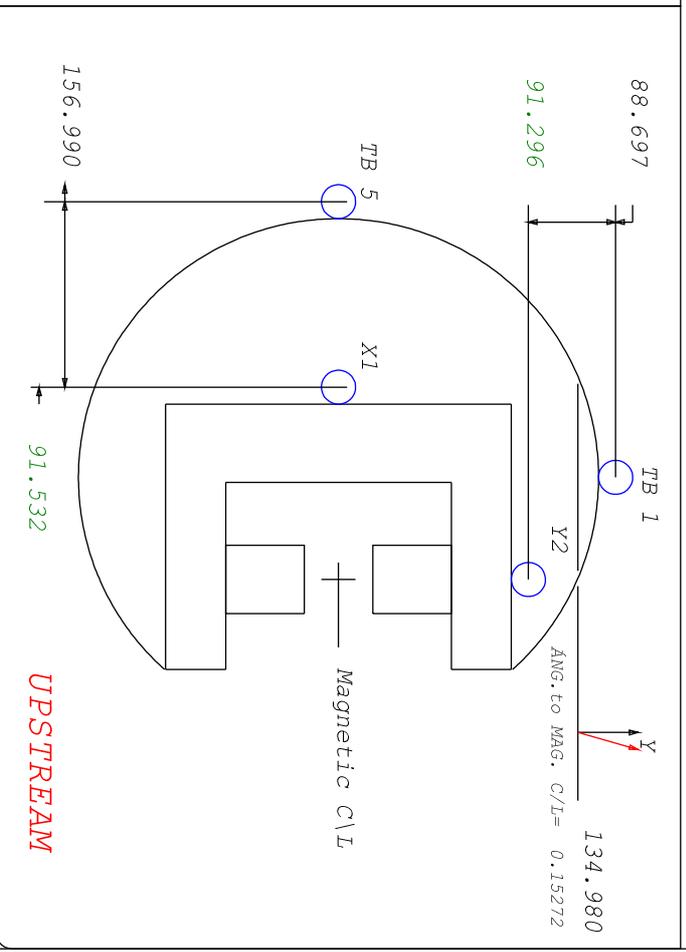
NUM.	X	Y	Z
1	0.1922	179.9935	-1558.286
2	0.3368	180.0183	-584.4537
3	0.2398	179.9050	591.3070
4	0.2137	179.9968	1562.0811
5	248.5216	0.0903	-1558.299
6	248.4836	-0.0175	-584.6009
7	248.5102	0.0488	591.3256
8	248.5704	-0.0612	1562.0847

Top Magnetic Structure C/L Offset Length 3381.072
 Bottom Magnetic Structure 0.096 3381.295
 Strongback 0.252 3399.795

Dimensions in mm Angles in mrad



DOWNSTREAM

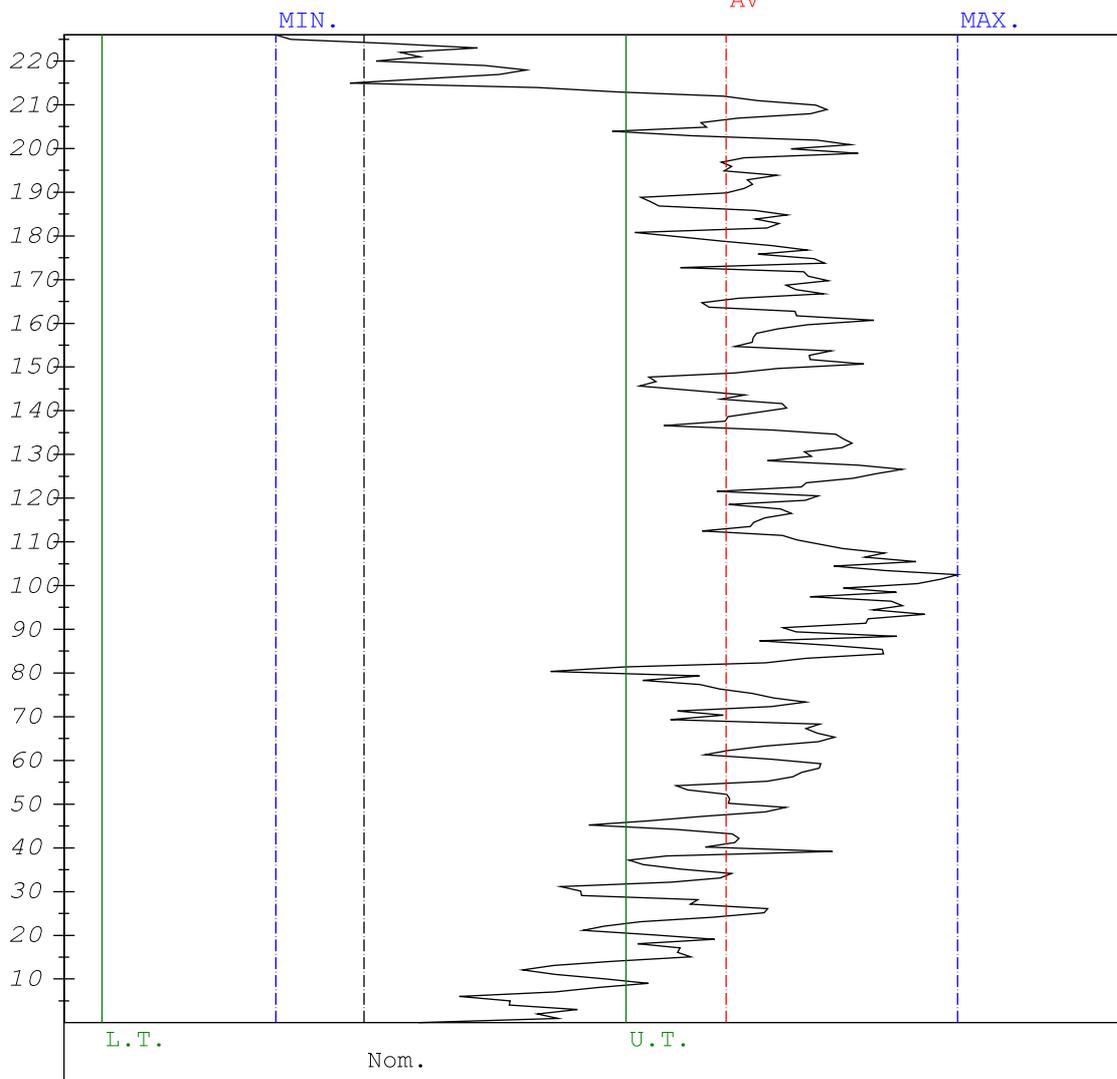
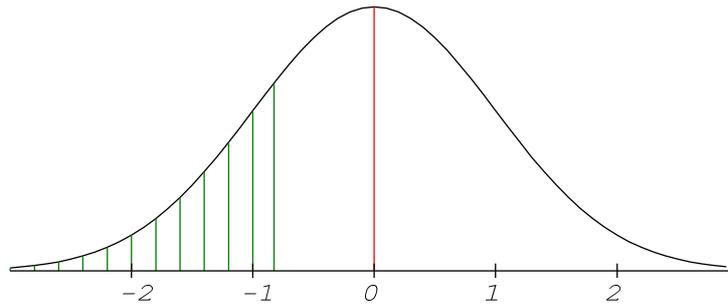


UPSTREAM

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Undulator Dimensional Fiducialization
 Post Magnetic Alignment

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Nominal : 4.5000	Averag : 5.1914	Cent.-Dev. : 0.6914
Up. Tol. : 0.5	Maximum : 5.6330	U.Tol.Ex. > : 79.6 %
Low.Tol. : -0.5	Minimum : 4.3322	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2316	In Tolerance: 20.4 %
Outlier : 0	Distribution : NOR	Dimension : mrad

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Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE: 06-JUN-2008

UNDULATOR #13
DATASET #0009

PROGRAM VERSION 2.7