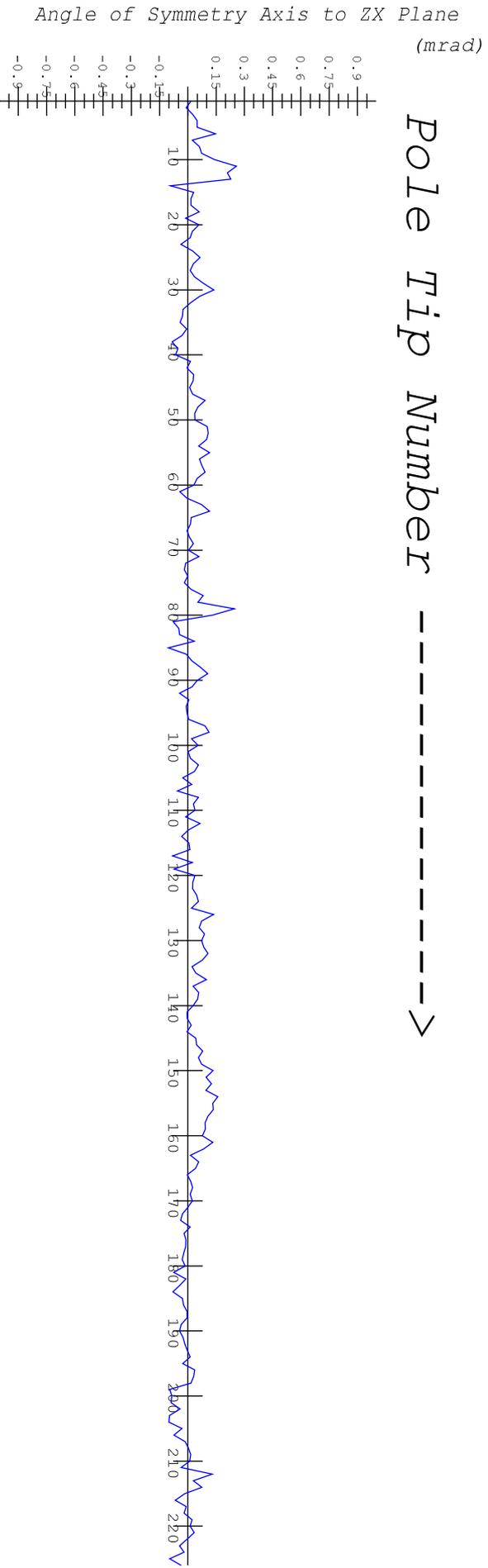


Pole Tip Number ----->



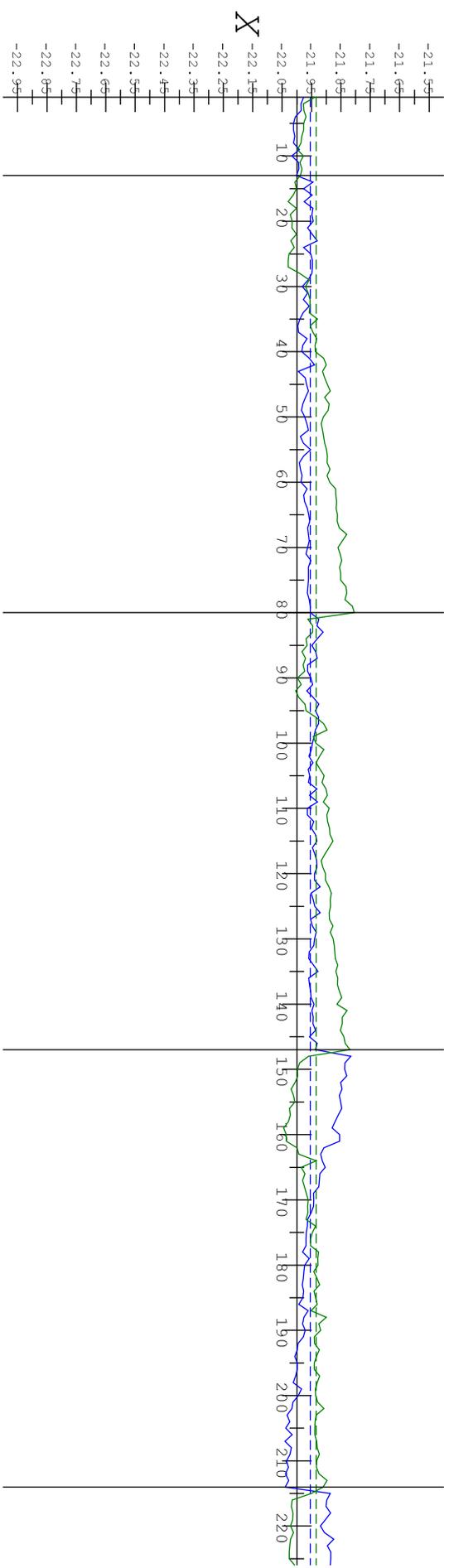
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

DATE: 12-MAR-2009
 UNDULATOR #24
 DATASET #0002
 PROGRAM VERSION 2.9

Pole Tip Number ----->

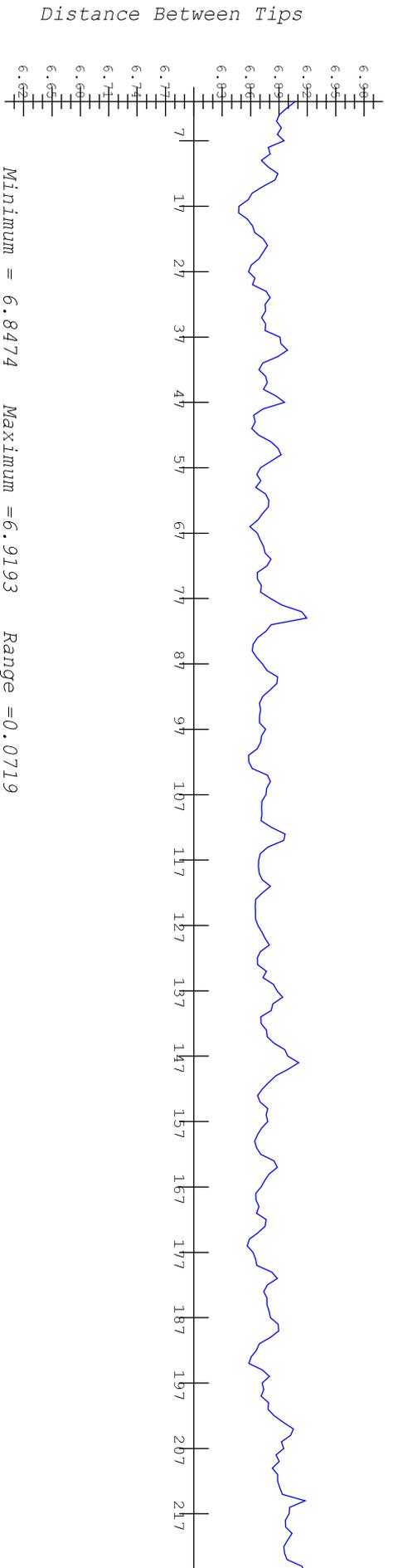


X values in mm
 Green Solid = Point on front face of Upper Pole Tip 10mm above Magnetic C/L
 Green Dash = Mean value of all Upper Pole Tips 10mm above Magnetic C/L Mean value Upper Pole Tips = -21.934
 Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L
 Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -21.954



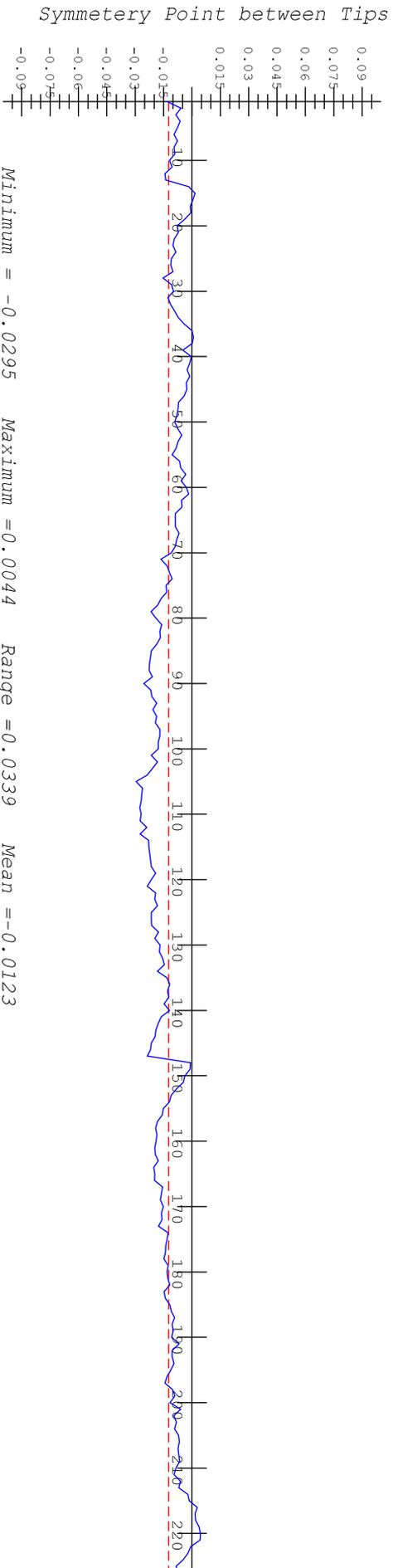
Undulator Pole Tip Location Post Magnetic Alignment

DATE: 12-MAR-2009
 UNDUULATOR #24
 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

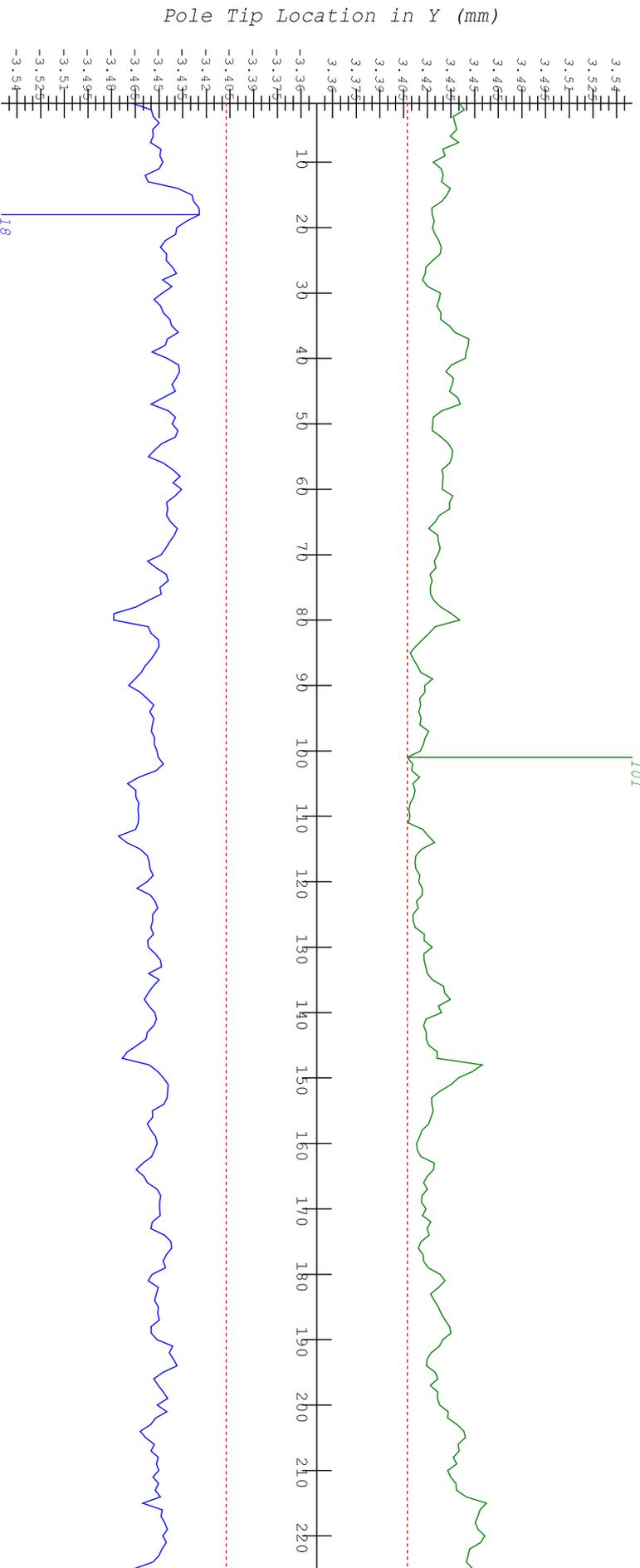


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 12-MAR-2009
 UNDUULATOR #24
 DATASET #0002
 PROGRAM VERSION 2.9

Maximum Chamber Gap = 6.8147

Minimum = 3.4074 Maximum = 3.4574 Range = 0.0501



Minimum = -3.4787 Maximum = -3.4243 Range = 0.0544

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: 12-MAR-2009
UNDULATOR #24
DATASET #0002
PROGRAM VERSION 2.9



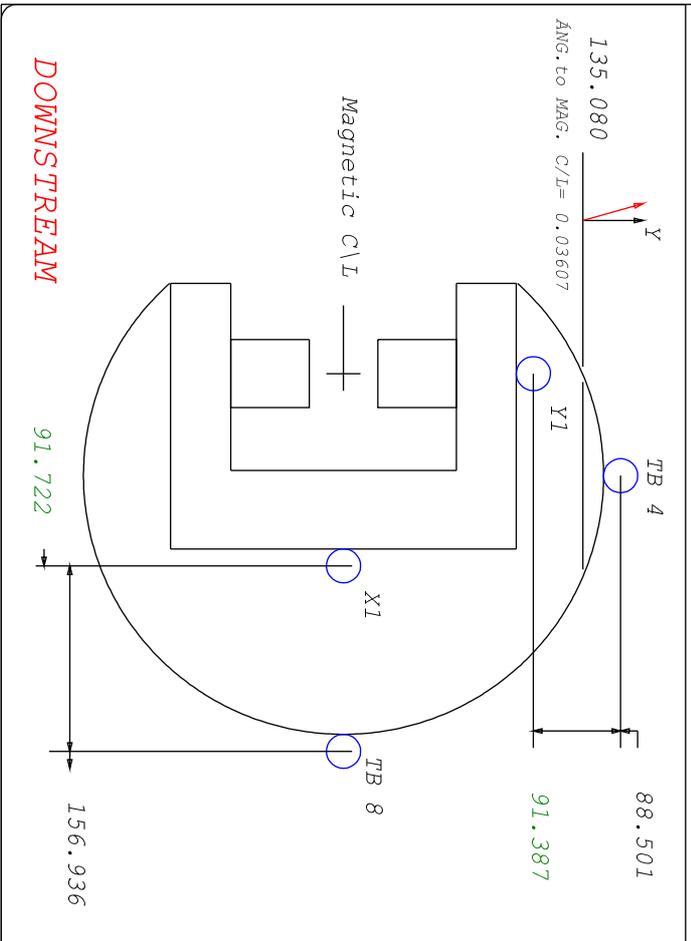
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.2907	179.8353	-1558.187
2	0.4804	179.7765	-584.6021
3	0.4341	179.7822	591.3679
4	0.4344	179.8881	1562.1817
5	248.5907	0.1554	-1558.203
6	248.7387	0.0674	-584.5572
7	248.6175	0.1955	591.3915
8	248.6581	0.2197	1562.2813

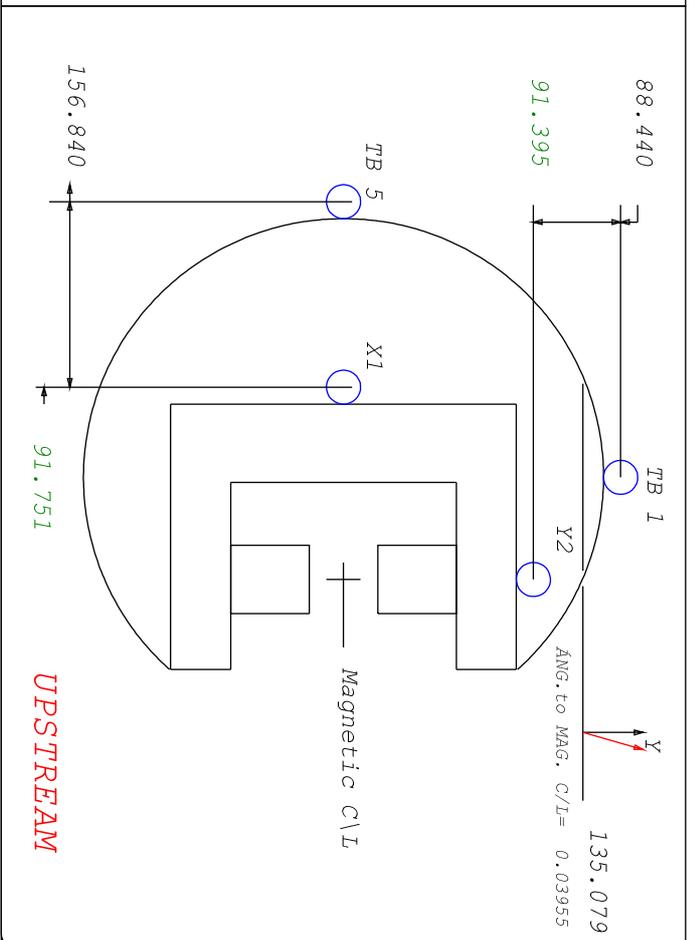
	C/L Offset	Length
Top Magnetic Structure	-0.031	3380.835
Bottom Magnetic Structure	0.031	3380.821
Strongback	0.415	3399.936

Dimensions in mm

Angles in mrad



DOWNSTREAM

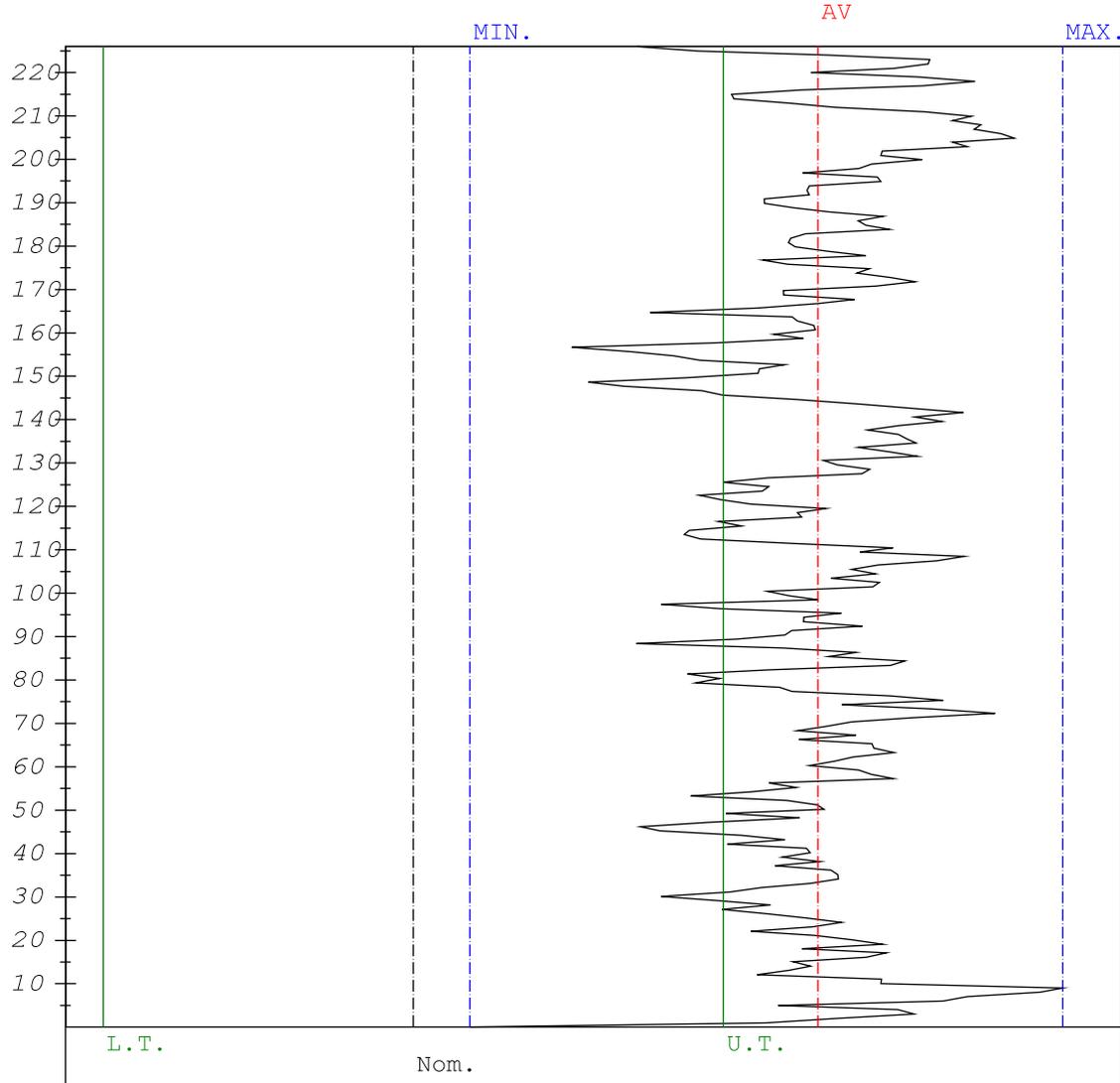
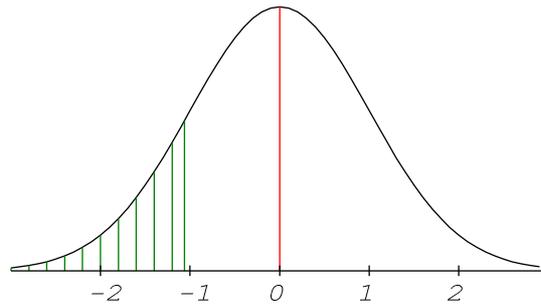


UPSTREAM



Undulator Dimensional Fiducialization Post Magnetic Alignment

DATE: 12-MAR-2009
 UNDULATOR #24
 DATASET #0002
 PROGRAM VERSION 2.9



Nominal : 4.5000	Averag : 5.1524	Cent.-Dev. : 0.6524
Up. Tol. : 0.5	Maximum : 5.5472	U.Tol.Ex. > : 85.6 %
Low.Tol. : -0.5	Minimum : 4.5915	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1434	In Tolerance: 14.4 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
 Pole Tip Gap Angle
 Post Magnetic Alignment

DATE: 12-MAR-2009

UNDULATOR #24
 DATASET #0002

PROGRAM VERSION 2.9