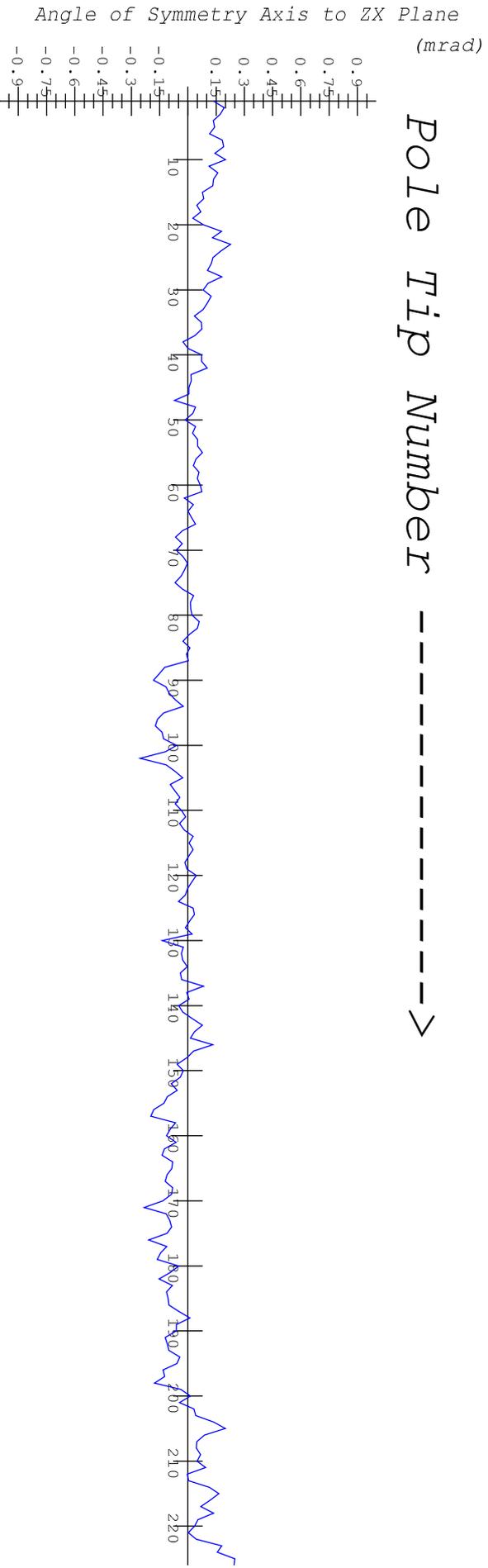


Pole Tip Number ----->

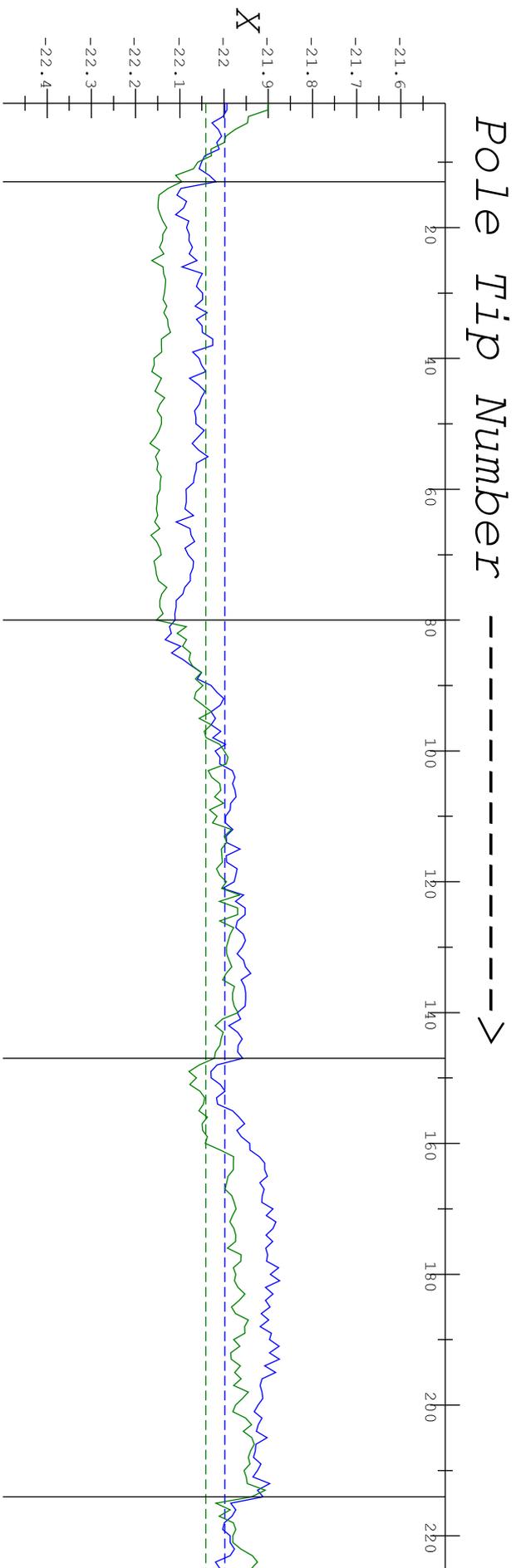


Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips  
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles  
 Inprocess Shim Check  
 6.8mm Gap Undulator

DATE: 29-OCT-2012  
 UNDULATOR #27  
 DATASET #0003  
 PROGRAM VERSION 3.0



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 = -22.041

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 = -21.998



## Undulator Pole Tip Location

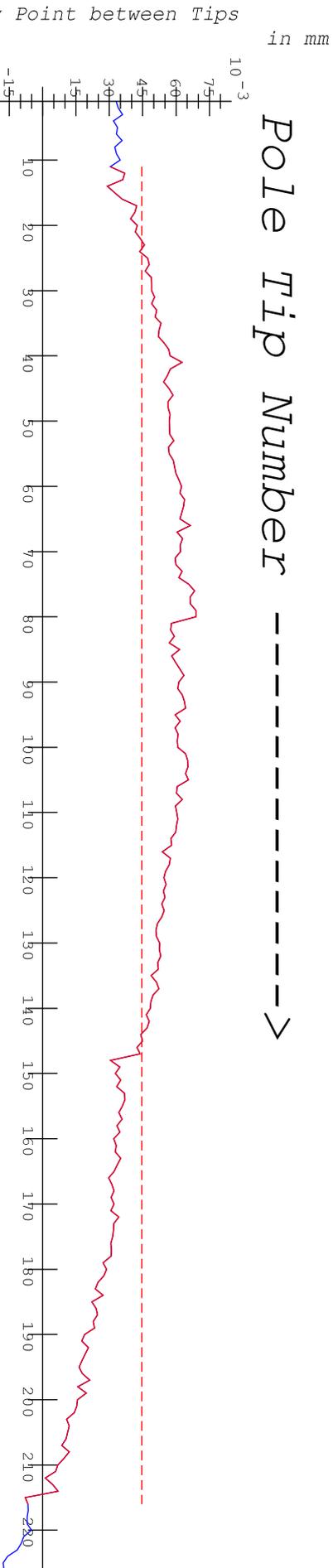
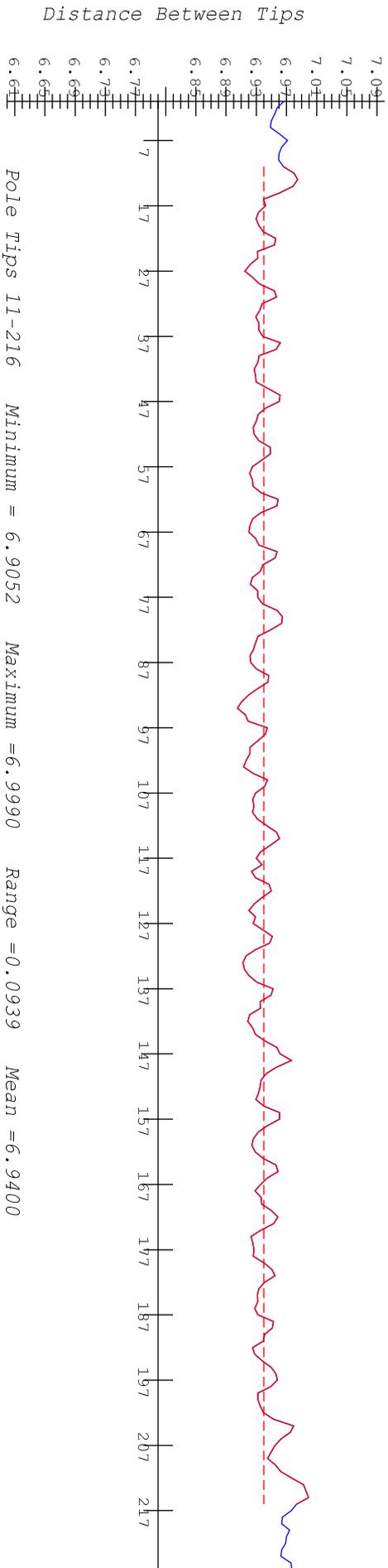
Inprocess Shim Check  
6.8mm Gap Undulator

DATE: 29-OCT-2012

UNDULATOR #27

DATASET #0003

PROGRAM VERSION 3.0

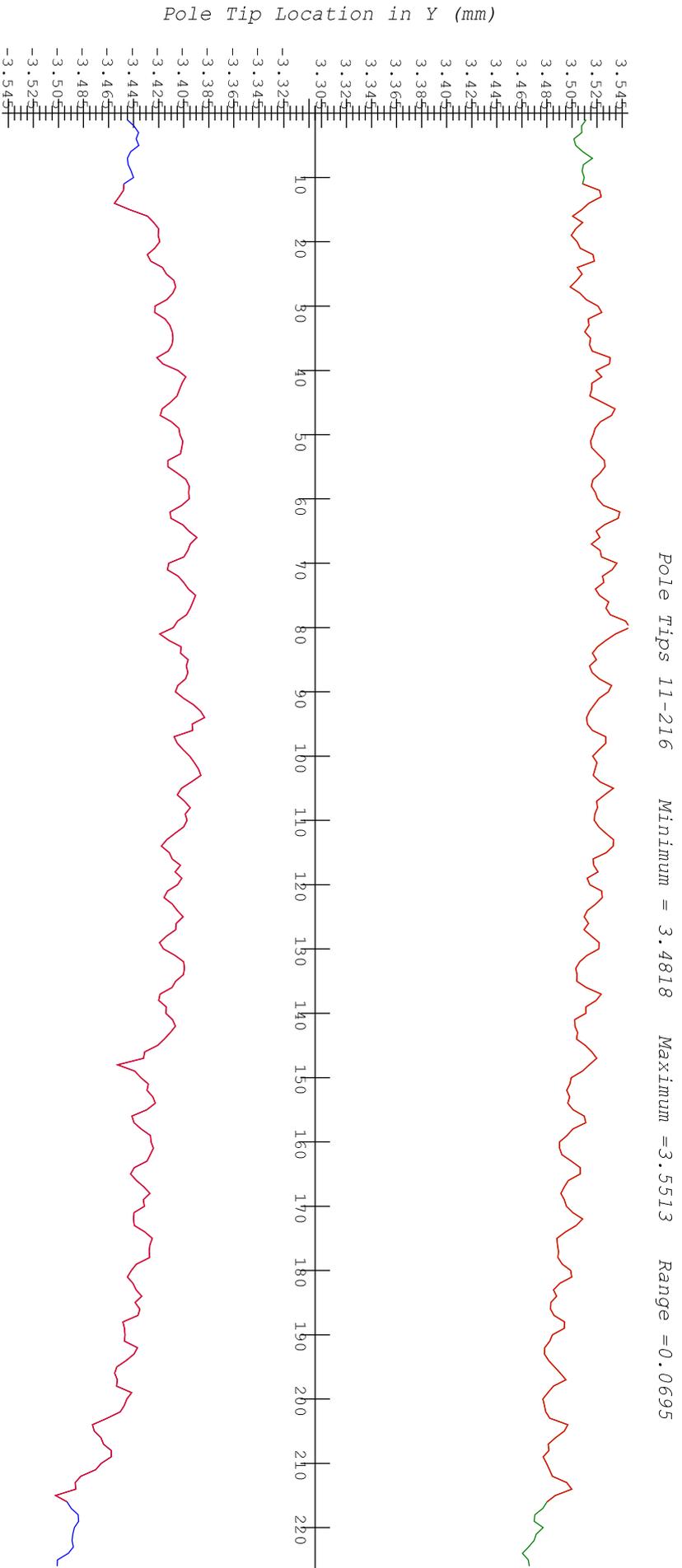


Symmetry Point is the symmetry point between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C\L  
 Broken Red line is Mean Value of Symmetry Points and Mean Value of Gap Distance  
 Distance Between Tips is the distance between the Upper and Lower Pole Tips were they intersect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



Undulator Pole Tip Location  
 Inprocess Shim Check  
 6.8mm Gap Undulator

DATE: 29-OCT-2012  
 UNDUULATOR #27  
 DATASET #0003  
 PROGRAM VERSION 3.0



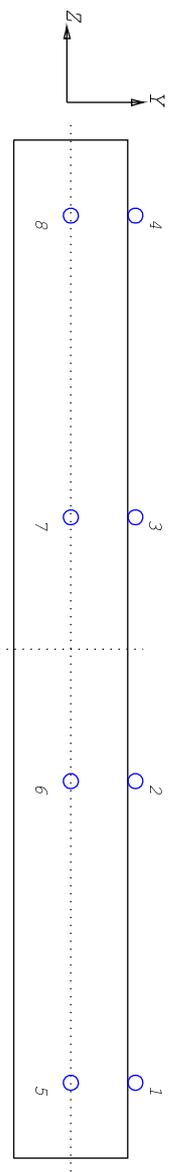
Green + Red = The position of the Upper Pole Tips at Magnetic C/L (Pole Tips 11-216 in Red)  
 Blue + Red = The position of the Lower Pole Tips at Magnetic C/L (Pole Tips 11-216 in Red)



## Undulator Pole Tip Location

Inprocess Shim Check  
 6.8 mm Gap Undulator

DATE: 29-OCT-2012  
 UNDUULATOR #27  
 DATASET #0003  
 PROGRAM VERSION 3.0



Top Magnetic Structure       $\frac{C/L \text{ Offset}}{\text{Length}}$       3380.780  
 Bottom Magnetic Structure      -0.457      -0.373      3380.806  
 Strongback      0.000      3399.796

Dimensions in mm

Angles in mrad

TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.0636	179.8606	-1558.791
2	-0.1085	179.8090	-585.0670
3	-0.0765	179.7490	590.9150
4	-0.1626	179.8034	1561.7593
5	248.3830	0.0461	-1558.525
6	248.2368	0.1546	-584.9937
7	248.1713	0.1033	590.9904
8	248.2371	-0.0080	1561.8506



Undulator Dimensional Fiducialization  
 Inprocess Shim Check  
 6.8MM Gap Undulator

DATE: 29-OCT-2012  
 UNDUULATOR #27  
 DATASET #0003  
 PROGRAM VERSION 3.0