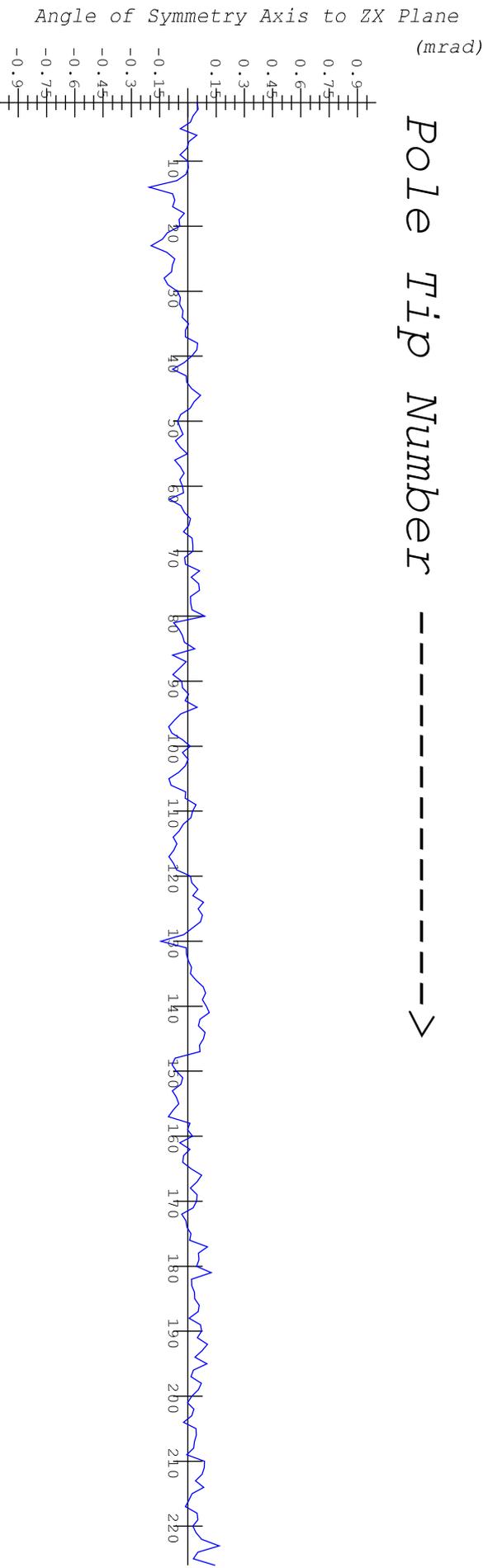


Pole Tip Number ----->

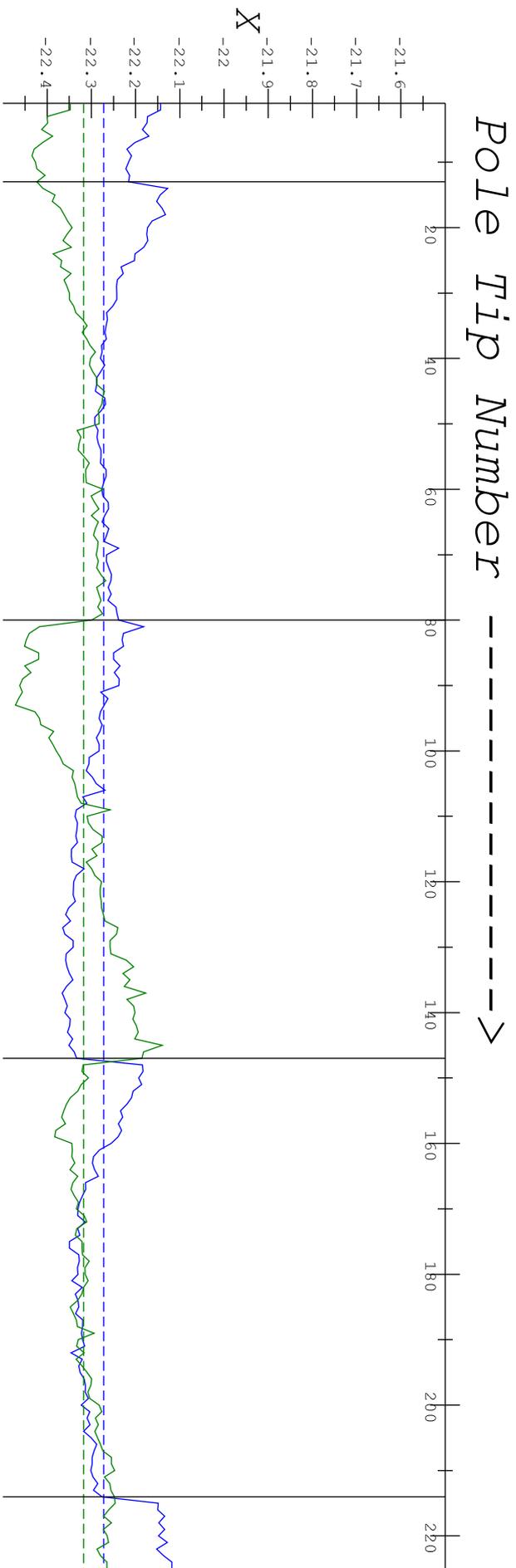


Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips  
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles  
 Inprocess Shim Check  
 6.8mm Gap Undulator

DATE: 30-AUG-2012  
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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 = -22.317

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 = -22.272



### Undulator Pole Tip Location

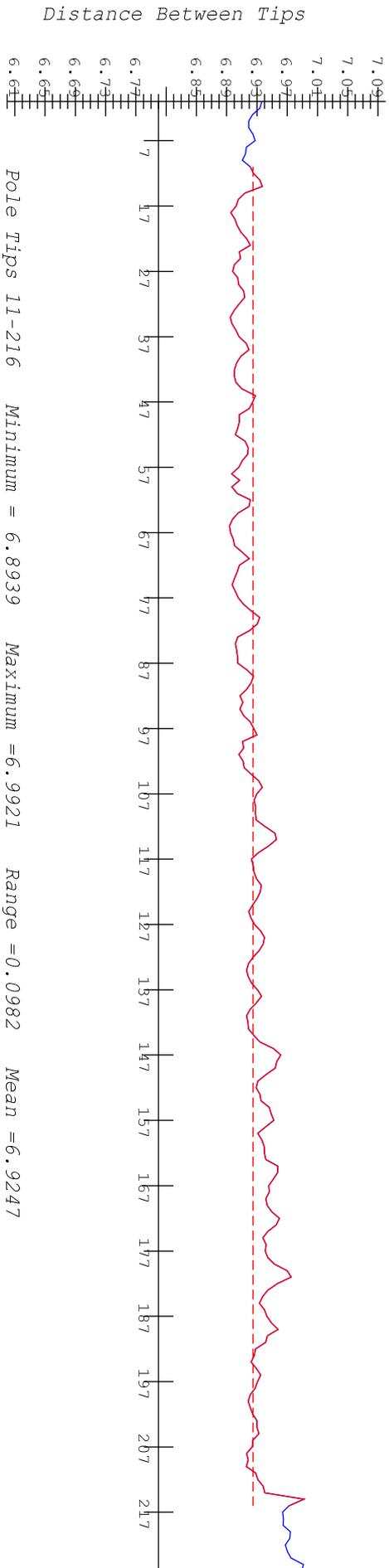
Inprocess Shim Check  
6.8mm Gap Undulator

DATE: 30-AUG-2012

UNDULATOR #20

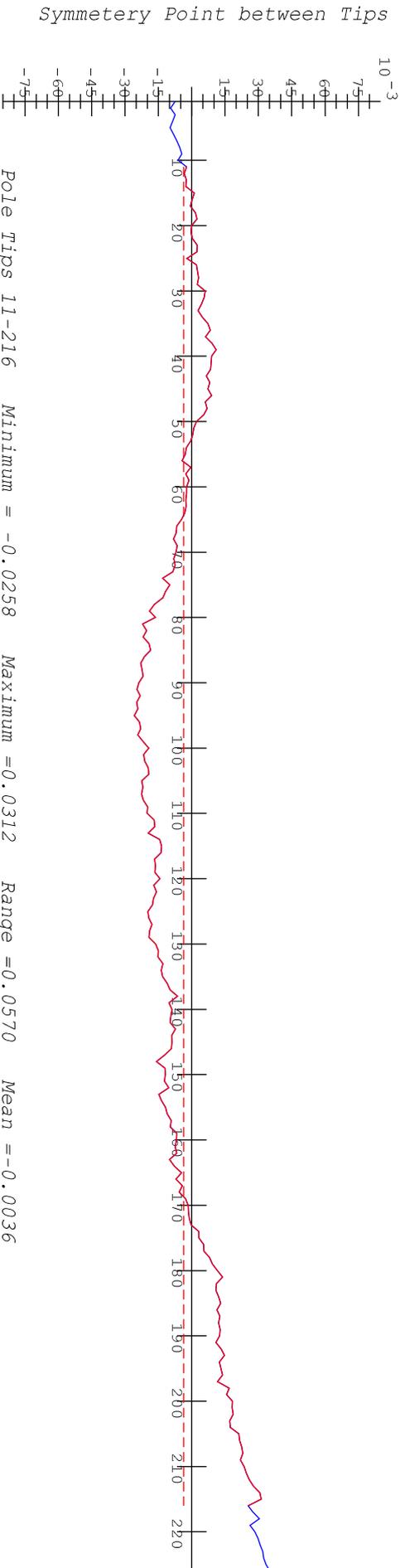
DATASET # 0008

PROGRAM VERSION 3.0



in mm

Pole Tip Number ----->

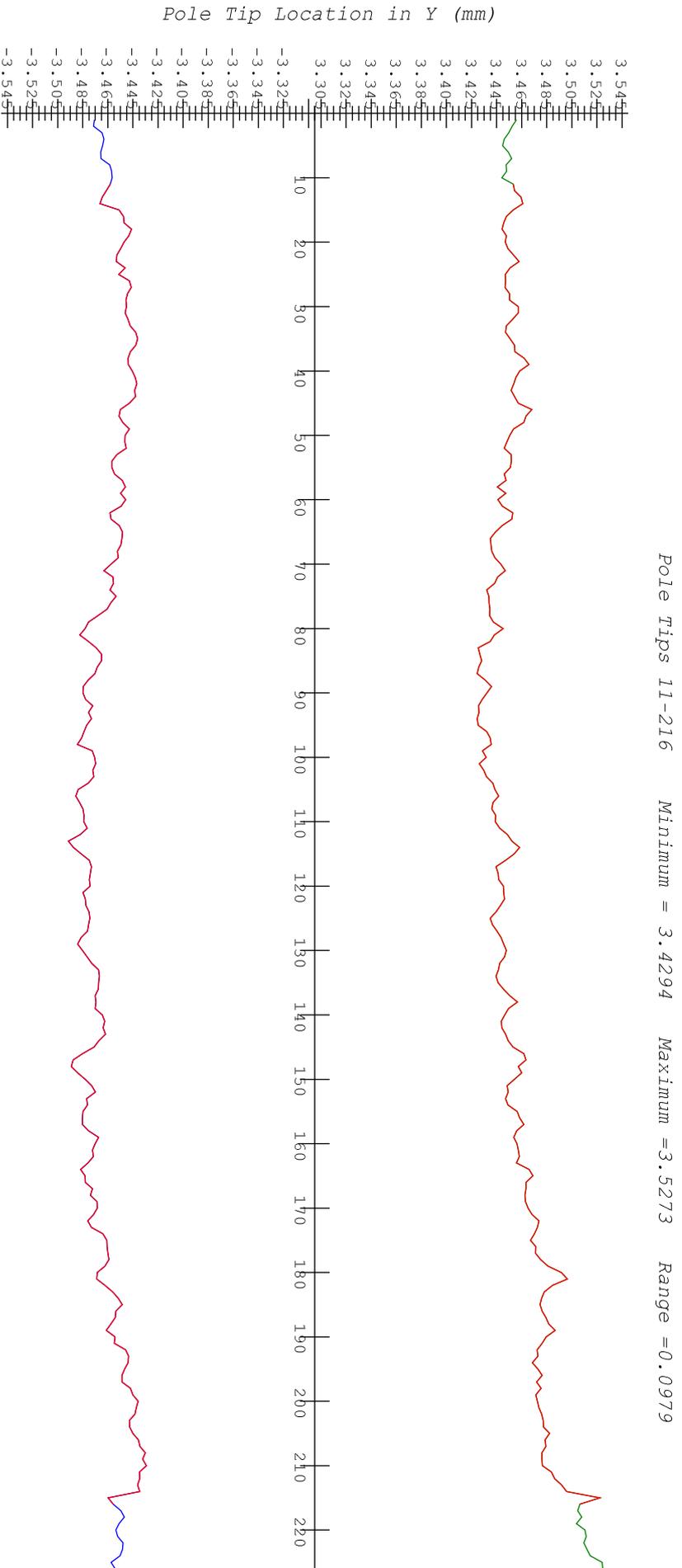


Symmetry Point is the symmetry point between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C\L  
 Broken Red line is Mean Value of Symmetry Points and Mean Value of Gap Distance  
 Distance Between Tips is the distance between the Upper and Lower Pole Tips were they intersect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



Undulator Pole Tip Location  
 Inprocess Shim Check  
 6.8mm Gap Undulator

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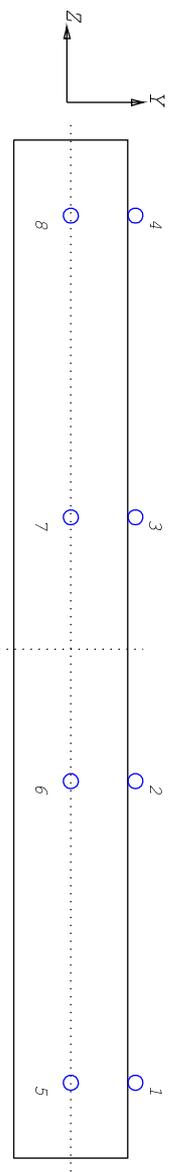
Pole Tip Number ----->

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  
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Top Magnetic Structure       $-0.312$        $3380.701$   
 Bottom Magnetic Structure       $-0.241$        $3380.724$   
 Strongback       $0.000$        $3399.796$

Dimensions in mm      Angles in mrad

----- TOOLING BALL LOCATIONS -----

NUM.	X	Y	Z
1	-0.1742	179.8312	-1558.687
2	-0.0043	179.7407	-585.0606
3	-0.0064	179.7692	590.8830
4	0.0912	179.8989	1561.7913
5	248.2192	0.1158	-1558.613
6	248.2514	0.0498	-585.0741
7	248.2132	0.1200	591.0739
8	248.2229	0.1048	1561.8864



Undulator Dimensional Fiducialization  
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