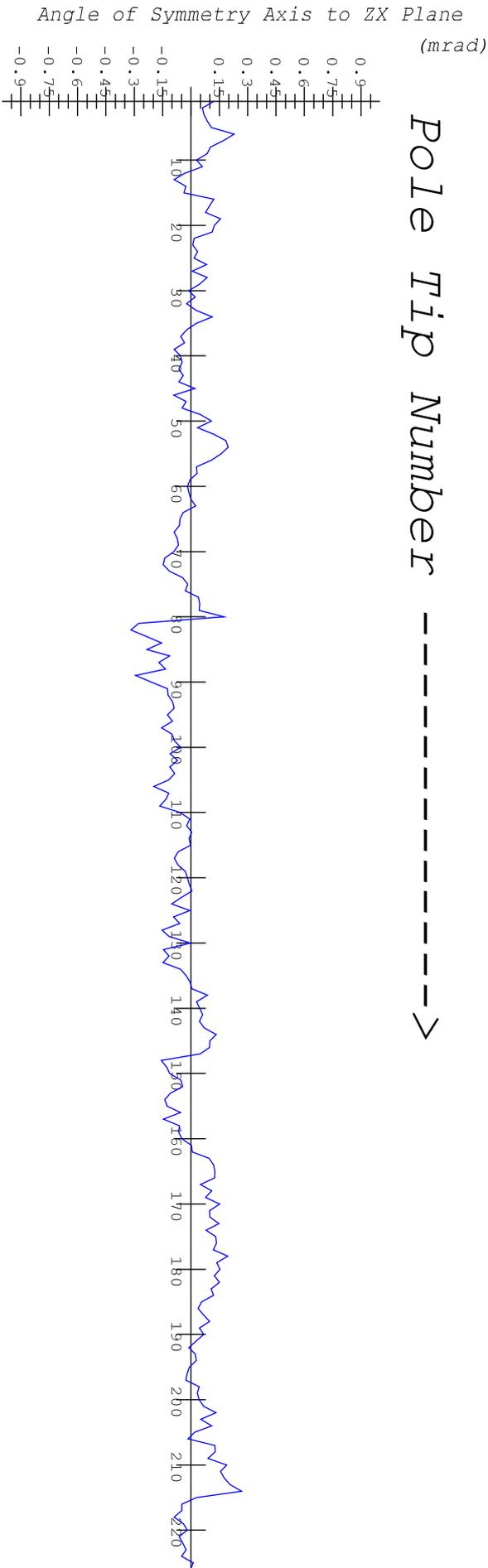


Pole Tip Number ----->

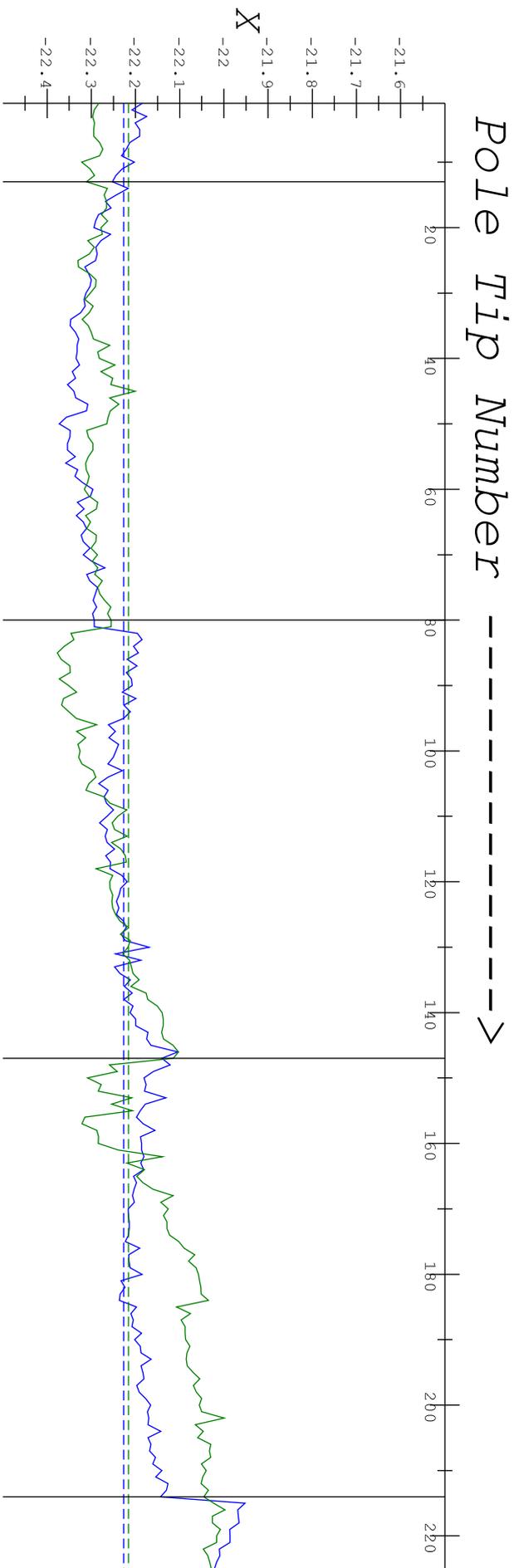


Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips  
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles  
 Inprocess Shim Check  
 6.8mm Gap Undulator

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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 = -22.216

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 = -22.227



## Undulator Pole Tip Location

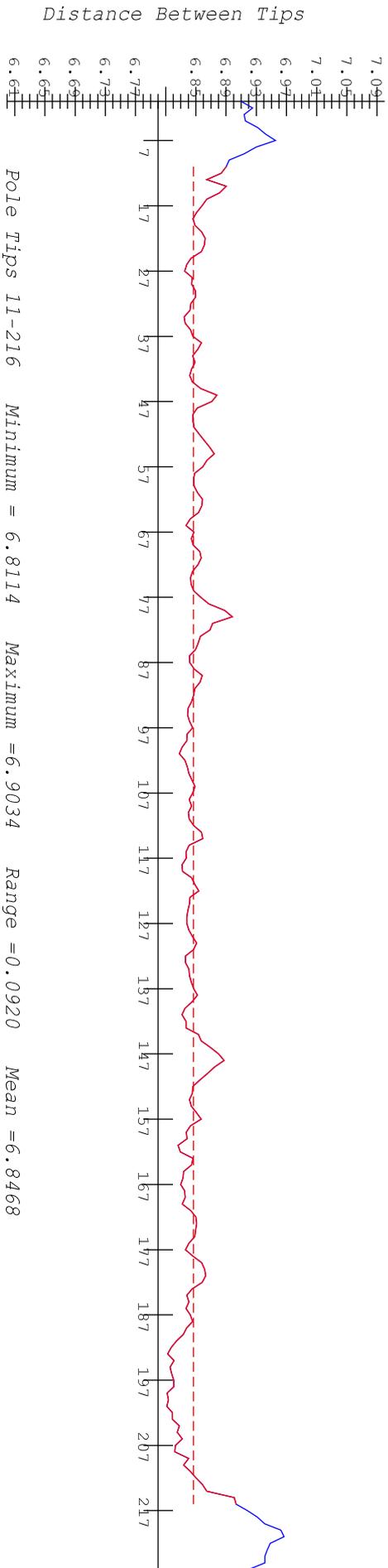
Inprocess Shim Check  
6.8mm Gap Undulator

DATE: 09-APR-2012

UNDULATOR # 31

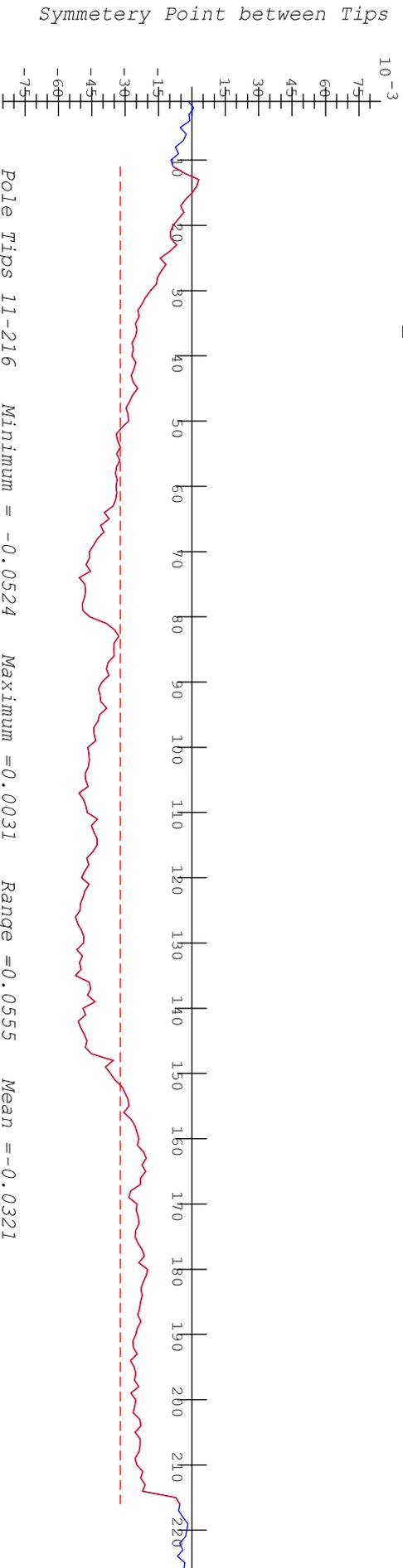
DATASET # 0006

PROGRAM VERSION 3.0



in mm

Pole Tip Number ----->



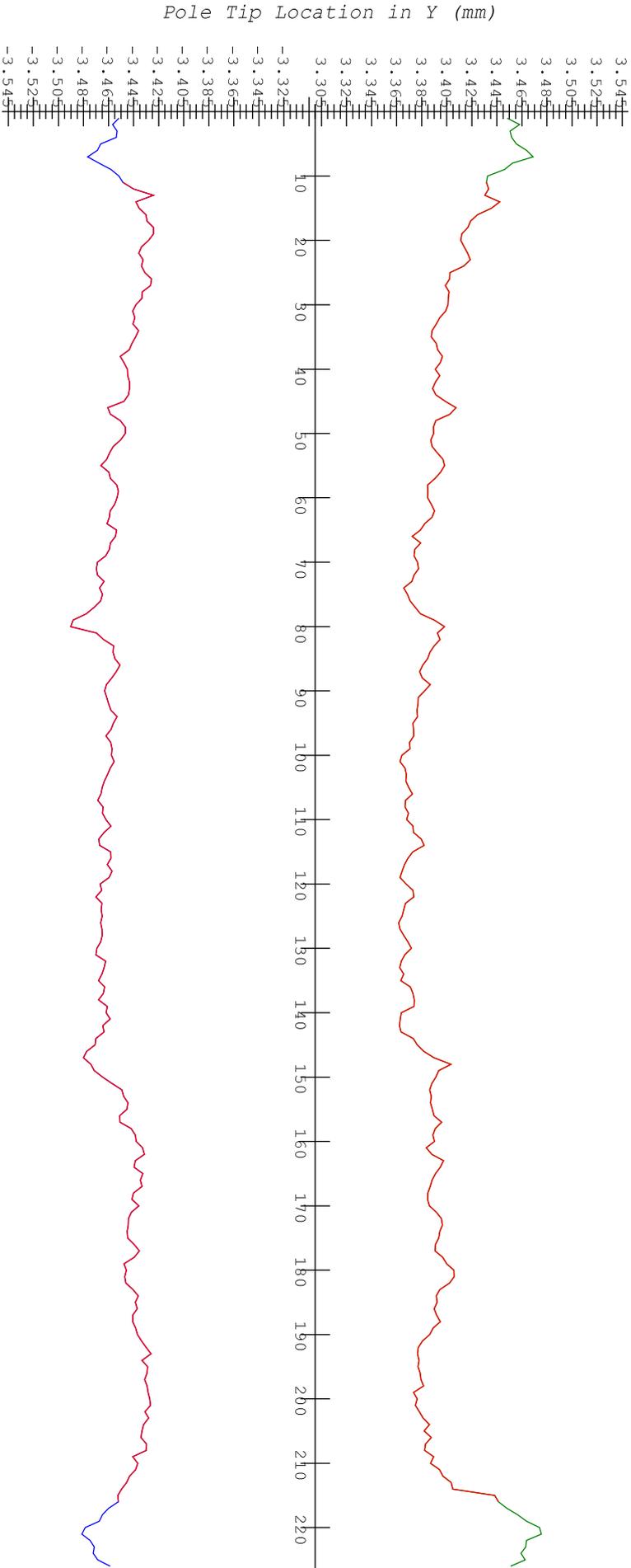
Symmetry Point is the symmetry point between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C\L  
 Broken Red line is Mean Value of Symmetry Points and Mean Value of Gap Distance  
 Distance Between Tips is the distance between the Upper and Lower Pole Tips were they intersect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



Undulator Pole Tip Location  
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Pole Tips 11-216 Minimum = 3.3665 Maximum = 3.4472 Range = 0.0807



Pole Tips 11-216 Minimum = -3.4952 Maximum = -3.4292 Range = 0.0660

Pole Tip Number ----->

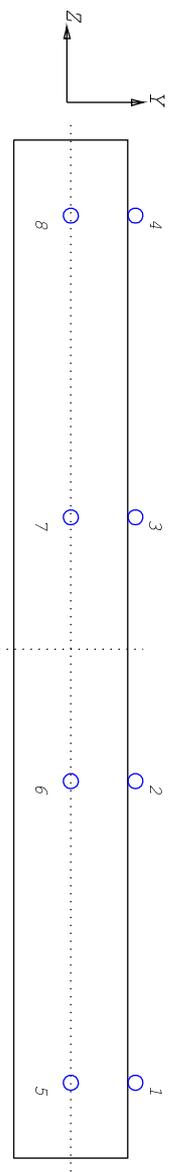
Green + Red = The position of the Upper Pole Tips at Magnetic C/L (Pole Tips 11-216 in Red)  
Blue + Red = The position of the Lower Pole Tips at Magnetic C/L (Pole Tips 11-216 in Red)



### Undulator Pole Tip Location

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Top Magnetic Structure      C/L Offset      Length  
 Bottom Magnetic Structure    -0.272            3380.719  
 Strongback                      -0.301            3380.704  
    0.000            3399.796

Dimensions in mm                      Angles in mrad

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

NUM.	X	Y	Z
1	-0.0440	179.8334	-1558.587
2	0.0705	179.7578	-585.0523
3	0.1051	179.7172	591.0401
4	0.1377	179.8493	1561.9065
5	248.2573	0.0328	-1558.645
6	248.2671	0.0506	-585.0350
7	248.3026	0.0122	591.0773
8	248.2888	0.0460	1561.9030



Undulator Dimensional Fiducialization  
 Inprocess Shim Check  
 6.8MM Gap Undulator

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