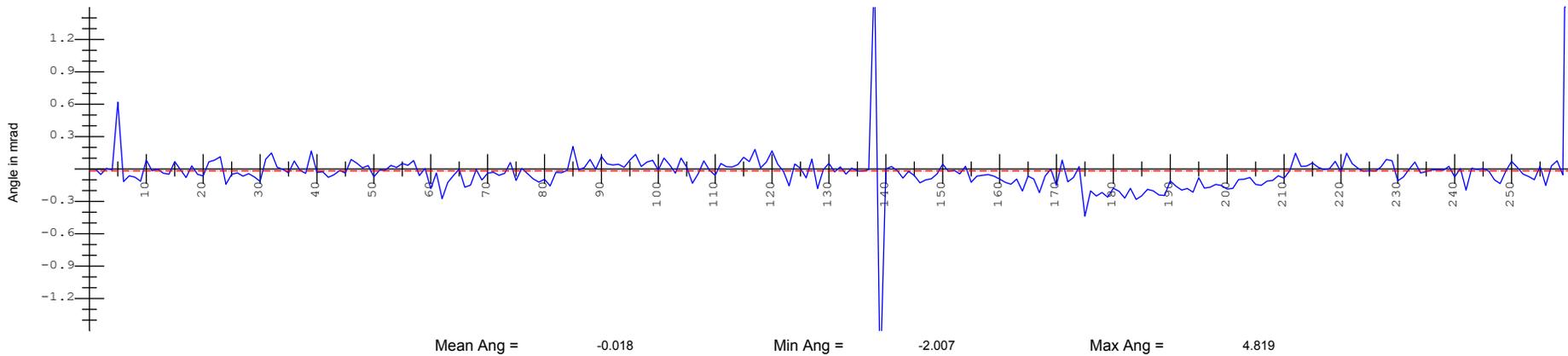


### Included Angle Between Pole Tips

Pole Tip Num. ----->

### Angle of Symmetry Line between Pole Tips to Tuning Gap ZX Plane



Dimensions in MM, Angles in Milliradians

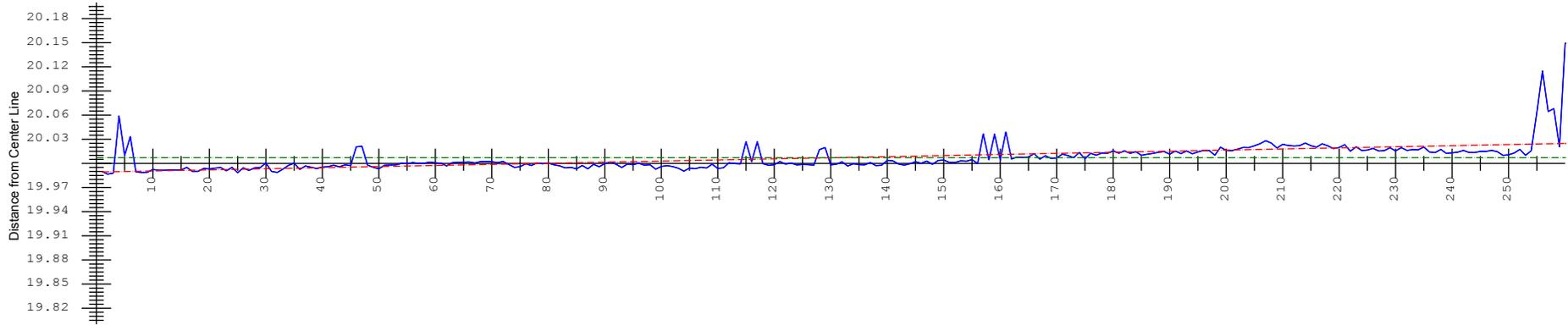


## HGVPU - Pole Tip Angles

<b>Nominal Gap :</b>	<b>40.000</b>	<b>US Full :</b>	<b>39.9999</b>	<b>DS Full :</b>	<b>39.9999</b>
<b>Nom. Taper :</b>	<b>0.000</b>	<b>US Wall Half :</b>	<b>19.9910</b>	<b>DS Wall Half :</b>	<b>19.9931</b>
		<b>US Aisle Half :</b>	<b>19.9917</b>	<b>DS Aisle Half :</b>	<b>19.9908</b>

<b>S/N</b>	<b>: HXU_030</b>
<b>Date</b>	<b>: 18-NOV-2019</b>
<b>Data Set</b>	<b>: 0001</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>

Aisle Pole Mean = 20.007    Aisle Pole Min. = 19.987    Aisle Pole Max. = 20.149    Reg. Line Ang. = 0.011



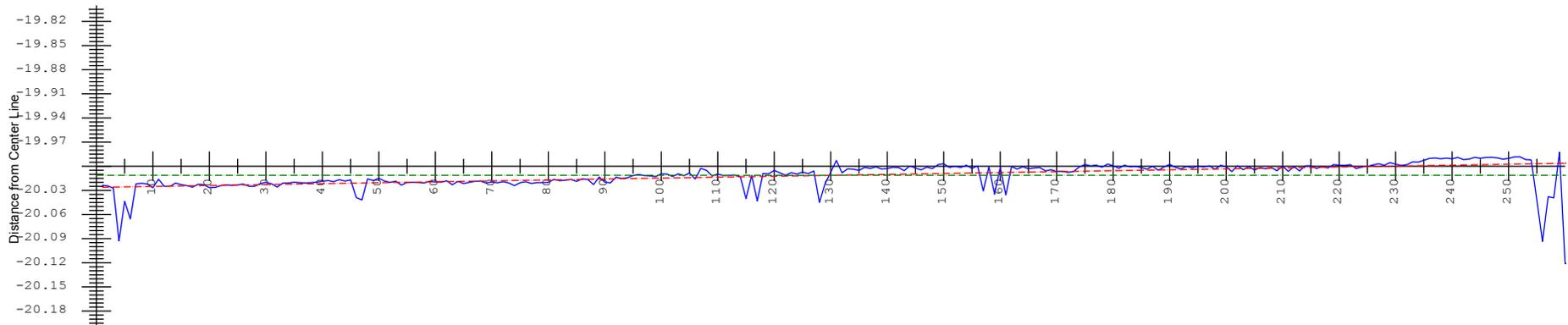
### Aisle Pole Tips at Nom. Beam Height

Blue = Pole Tip points  
 Green = Mean line  
 Red = Regression line thru points

Pole Tip Num. ----->

### Wall Pole Tips at Nom. Beam Height

Minimum Clearance Gap = 39.965



Wall Pole Mean = -20.011    Wall Pole Min. = -20.121    Wall Pole Max. = -19.983    Reg. Line Ang. = 0.009

### Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



### HGVPU - Pole Tip Location from Girder Centerline

<b>Nominal Gap :</b>	<b>40.000</b>	<b>US Full :</b>	<b>39.9999</b>	<b>DS Full :</b>	<b>39.9999</b>
<b>Nom. Taper :</b>	<b>0.000</b>	<b>US Wall Half :</b>	<b>19.9910</b>	<b>DS Wall Half :</b>	<b>19.9931</b>
		<b>US Aisle Half :</b>	<b>19.9917</b>	<b>DS Aisle Half :</b>	<b>19.9908</b>

<b>S/N</b>	<b>: HXU_030</b>
<b>Date</b>	<b>: 18-NOV-2019</b>
<b>Data Set</b>	<b>: 0001</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>

**Values Calculated from Regression Line End Points**

<b>Dimension</b>	<b>X Value</b>	<b>Y Value</b>	<b>Z Value</b>	<b>Calc. Value</b>
<b>US Aisle Pole Tip(1)</b>	<b>19.989</b>	<b>0.000</b>	<b>8.750</b>	
<b>US Wall Pole Tip(1)</b>	<b>-20.026</b>	<b>0.000</b>	<b>8.750</b>	
<b>US Sym. Pt.</b>	<b>-0.018</b>			
<b>US Gap</b>				<b>40.015</b>
<b>DS Aisle Pole Tip(260)</b>	<b>20.025</b>	<b>0.000</b>	<b>3375.750</b>	
<b>DS Wall Pole Tip(260)</b>	<b>-19.996</b>	<b>0.000</b>	<b>3375.750</b>	
<b>DS Sym. Pt.</b>	<b>0.014</b>			
<b>DS Gap</b>				<b>40.021</b>
<b>Taper</b>				<b>0.006</b>

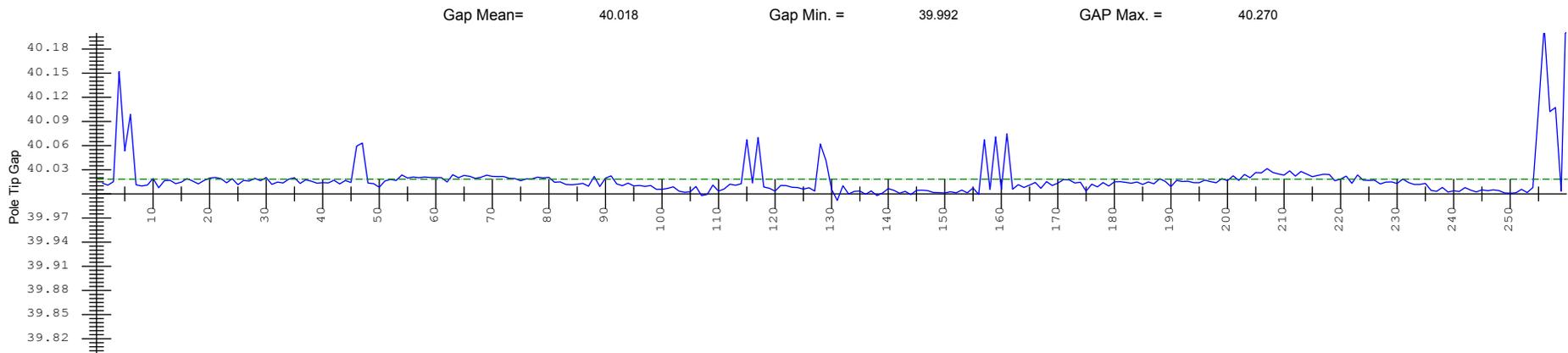
Dimensions in MM



**HGVPU - Gap Calc. from Regression Line End Points**

<b>Nominal Gap :</b>	<b>40.000</b>	<b>US Full :</b>	<b>39.9999</b>	<b>DS Full :</b>	<b>39.9999</b>
<b>Nom. Taper :</b>	<b>0.000</b>	<b>US Wall Half :</b>	<b>19.9910</b>	<b>DS Wall Half :</b>	<b>19.9931</b>
		<b>US Aisle Half :</b>	<b>19.9917</b>	<b>DS Aisle Half :</b>	<b>19.9908</b>

<b>S/N</b>	<b>: HXU_030</b>
<b>Date</b>	<b>: 18-NOV-2019</b>
<b>Data Set</b>	<b>: 0001</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>

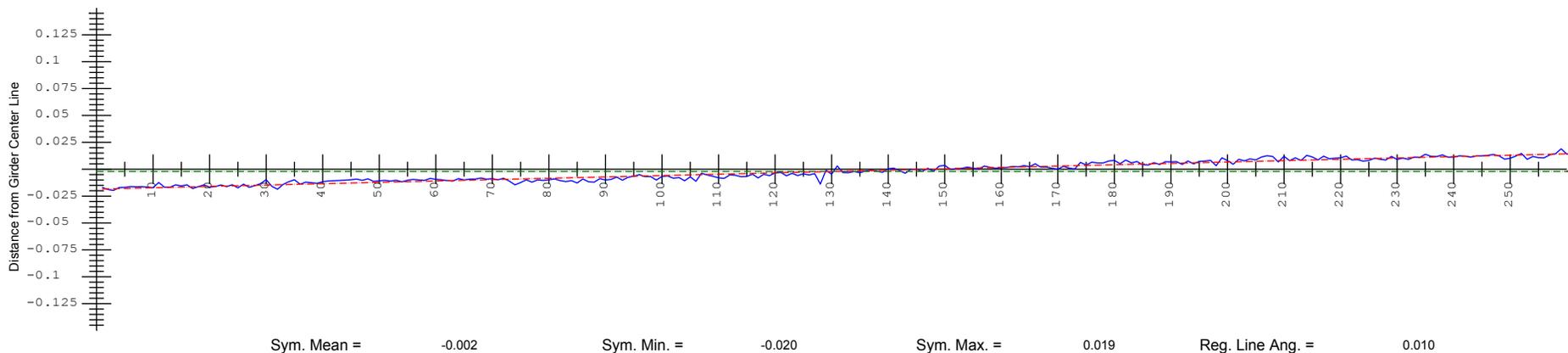


### Pole Tip Gap at Nom. Beam Height

Blue = Pole Tip points  
 Green = Mean line  
 Red = Regression line thru points

Pole Tip Num. ----->

### Pole Tip Symmetry Point at Nom. Beam Height



### Girder centerline in reference to Pointed Magnets

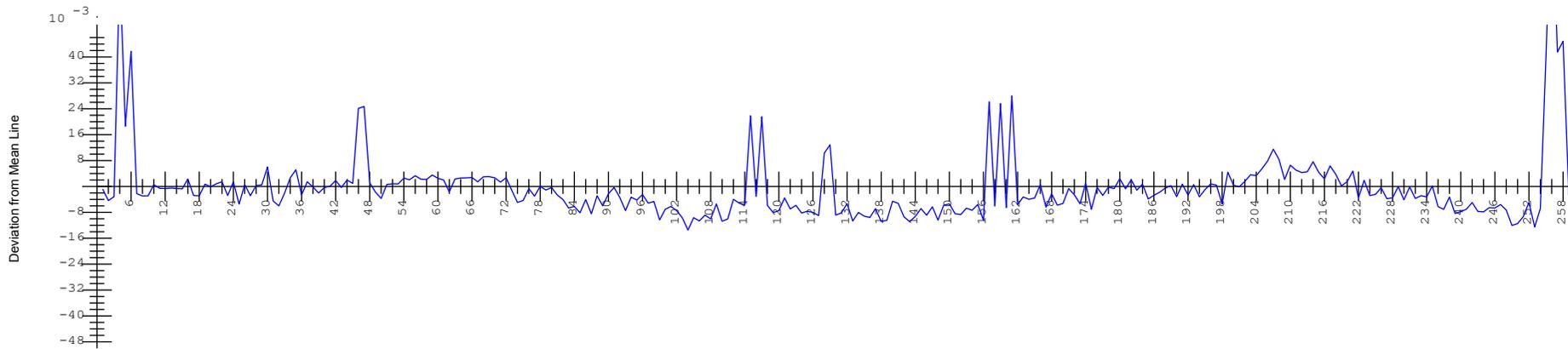
Dimensions in MM, Angles in Milliradians



## HGVPU - Pole Tip Gap and Symmetry Point Location

<b>Nominal Gap :</b>	<b>40.000</b>	<b>US Full :</b>	<b>39.9999</b>	<b>DS Full :</b>	<b>39.9999</b>
<b>Nom. Taper :</b>	<b>0.000</b>	<b>US Wall Half :</b>	<b>19.9910</b>	<b>DS Wall Half :</b>	<b>19.9931</b>
		<b>US Aisle Half :</b>	<b>19.9917</b>	<b>DS Aisle Half :</b>	<b>19.9908</b>

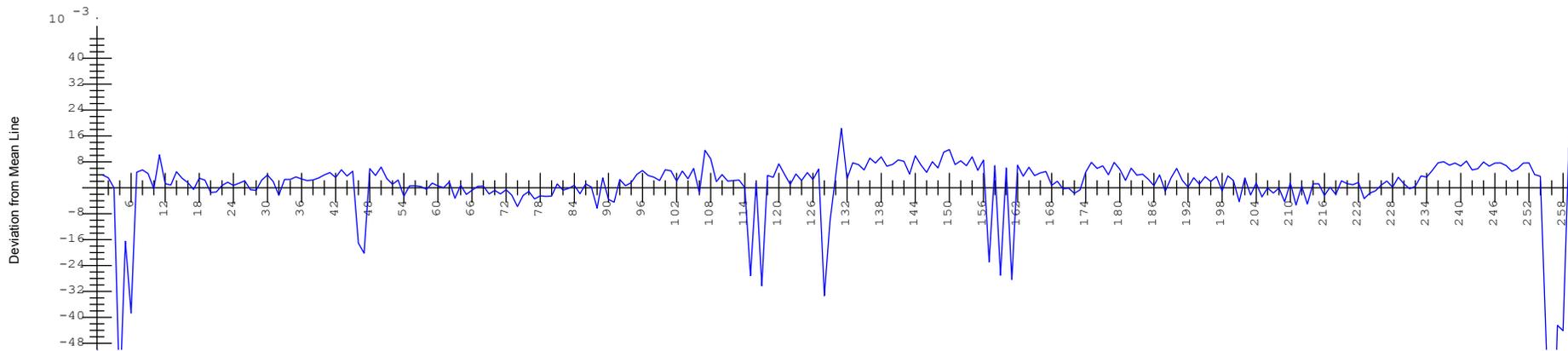
<b>S/N</b>	<b>: HXU_030</b>
<b>Date</b>	<b>: 18-NOV-2019</b>
<b>Data Set</b>	<b>: 0001</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>



### Aisle Pole Tips

Pole Tip Num. ----->

### Wall Pole Tips



### Pole Tip Deviations from Jaw Mean Lines when aligned to actual Gap Sym. Plane

Dimensions in MM



### HGVPU - Pole Tip Deviation from Mean Line

<b>Nominal Gap :</b>	<b>40.000</b>	<b>US Full :</b>	<b>39.9999</b>	<b>DS Full :</b>	<b>39.9999</b>
<b>Nom. Taper :</b>	<b>0.000</b>	<b>US Wall Half :</b>	<b>19.9910</b>	<b>DS Wall Half :</b>	<b>19.9931</b>
		<b>US Aisle Half :</b>	<b>19.9917</b>	<b>DS Aisle Half :</b>	<b>19.9908</b>

<b>S/N</b>	<b>: HXU_030</b>
<b>Date</b>	<b>: 18-NOV-2019</b>
<b>Data Set</b>	<b>: 0001</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>