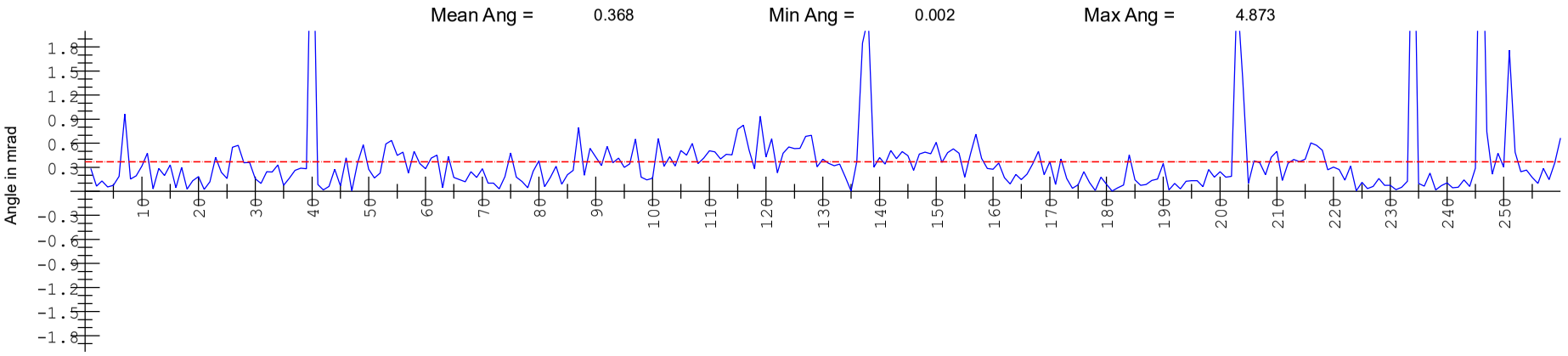
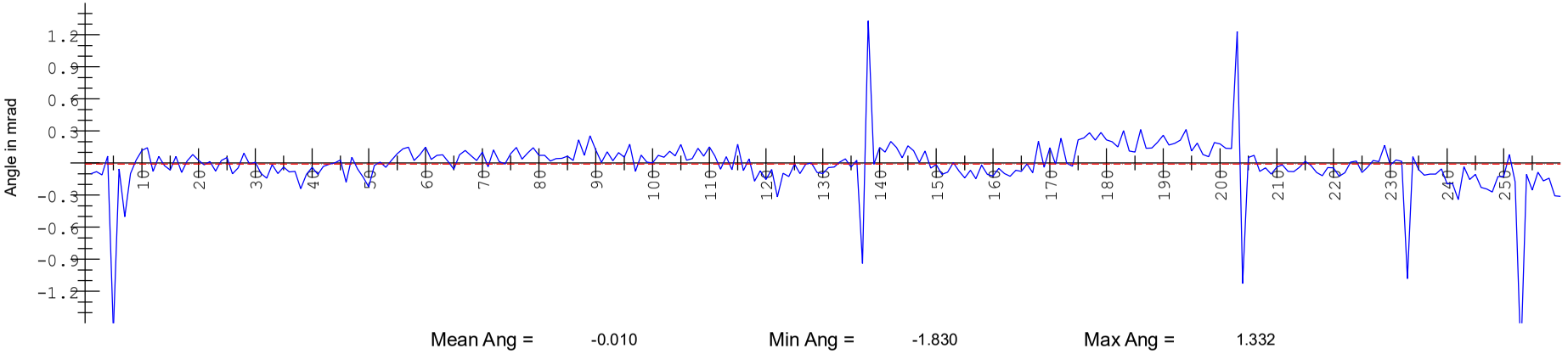


Included Angle Between Pole Tips

Pole Tip Num. ---------->

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



Dimensions in MM, Angles in Milliradians

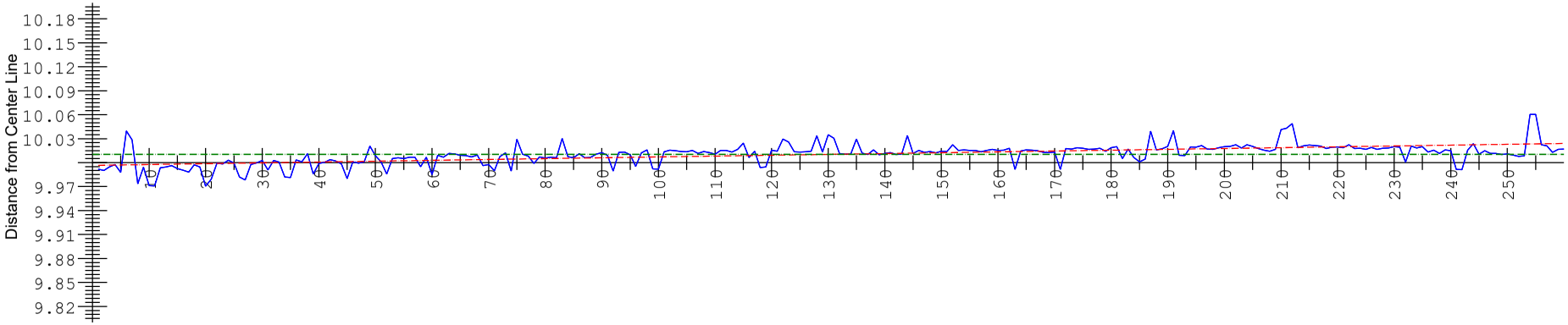
SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Pole Tip Angles

		US Full :	20.0002	DS Full :	20.0005
Nominal Gap :	20.000	US Wall Half :	9.9957	DS Wall Half :	9.9973
Nom. Taper :	0.000	US Aisle Half :	9.9957	DS Aisle Half :	9.9978

S/N	: HXU_017
Date	: 03-NOV-2022
Data Set	: 0002
Run	: FINAL
Cam Pos.	: B

Aisle Pole Mean= 10.010 Aisle Pole Min. = 9.971 Aisle Pole Max. = 10.061 Reg. Line Ang. = 0.008



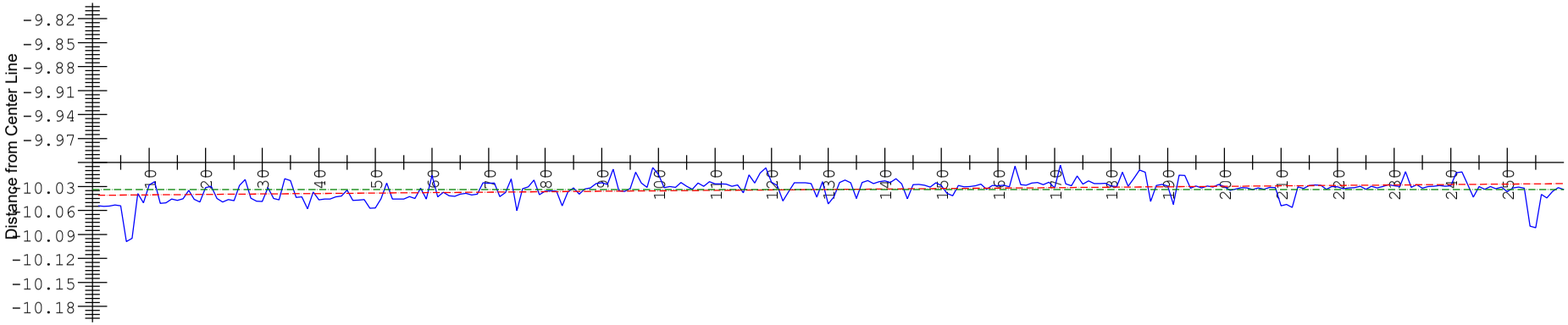
Aisle Pole Tips at Nom. Beam Height

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 = 19.941



Wall Pole Mean = -10.034 Wall Pole Min. = -10.099 Wall Pole Max. = -10.003 Reg. Line Ang. = 0.004

Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians

SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Pole Tip Location from Girder Centerline

		US Full :	20.0002	DS Full :	20.0005
Nominal Gap :	20.000	US Wall Half :	9.9957	DS Wall Half :	9.9973
Nom. Taper :	0.000	US Aisle Half :	9.9957	DS Aisle Half :	9.9978

S/N	: HXU_017
Date	: 03-NOV-2022
Data Set	: 0002
Run	: FINAL
Cam Pos.	: B

Values Calculated from Regression Line End Points

Dimension	X Value	Y Value	Z Value	Calc. Value
US Aisle Pole Tip(1)	9.997	0.000	8.750	
US Wall Pole Tip(1)	-10.041	0.000	8.750	
US Sym. Pt.	-0.022			
US Gap				20.038
DS Aisle Pole Tip(260)	10.024	0.000	3375.750	
DS Wall Pole Tip(260)	-10.026	0.000	3375.750	
DS Sym. Pt.	-0.001			
DS Gap				20.050
Taper				0.013

Dimensions in MM

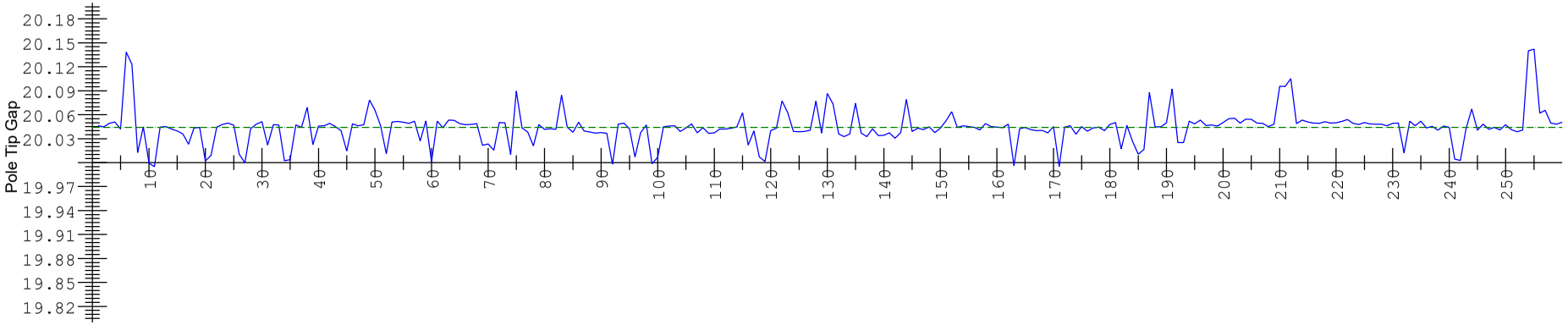
SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Gap Calc. from Regression Line End Points

		US Full :	20.0002	DS Full :	20.0005
Nominal Gap :	20.000	US Wall Half :	9.9957	DS Wall Half :	9.9973
Nom. Taper :	0.000	US Aisle Half :	9.9957	DS Aisle Half :	9.9978

S/N	: HXU_017
Date	: 03-NOV-2022
Data Set	: 0002
Run	: FINAL
Cam Pos.	: B

Gap Mean= 20.044 Gap Min. = 19.995 GAP Max. = 20.142

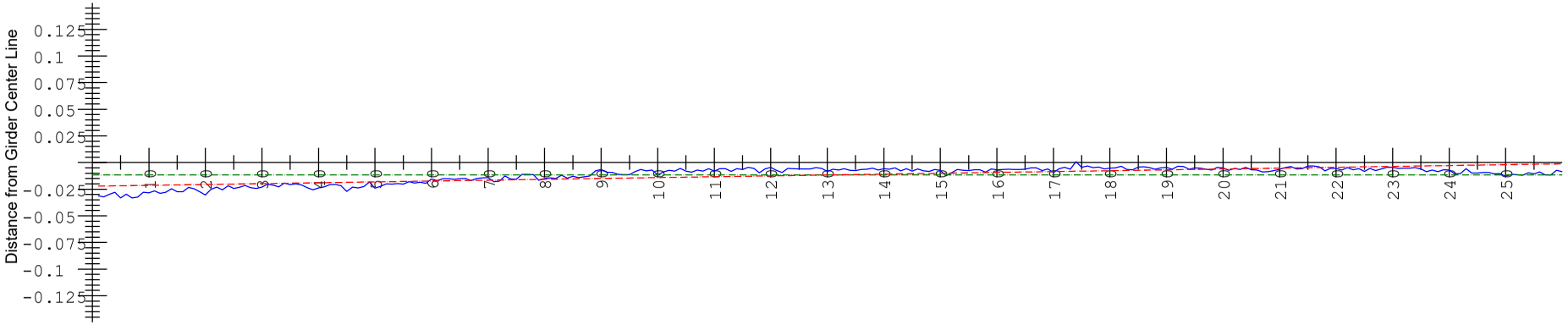


Pole Tip Gap at Nom. Beam Height

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

Pole Tip Num. ---------->

Pole Tip Symmetery Point at Nom. Beam Height



Sym. Mean = -0.012 Sym. Min. = -0.033 Sym. Max. = 0.001 Reg. Line Ang. = 0.006

Girder centerline in reference to Pointed Magnets

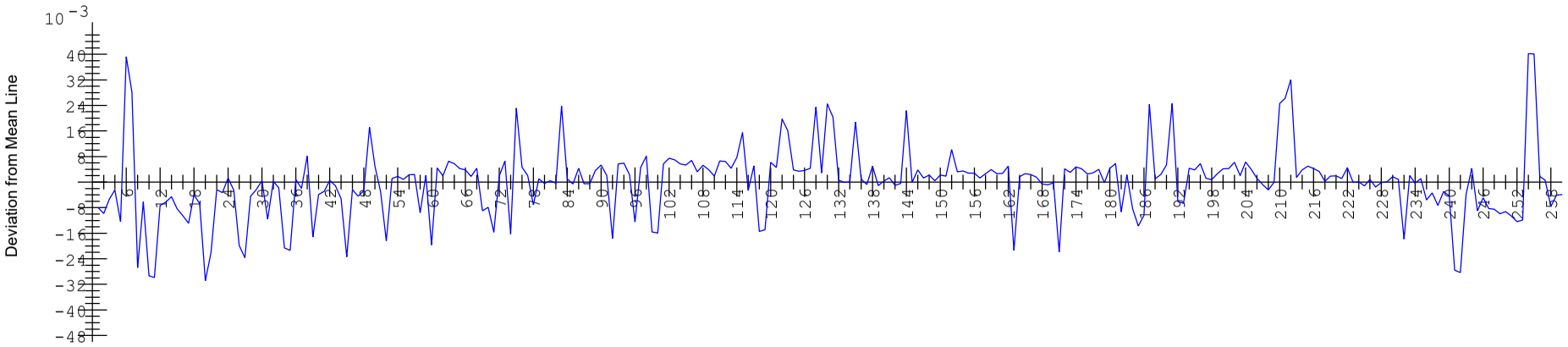
Dimensions in MM, Angles in Milliradians

SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Pole Tip Gap and Symmetry Point Location

		US Full :	20.0002	DS Full :	20.0005
Nominal Gap :	20.000	US Wall Half :	9.9957	DS Wall Half :	9.9973
Nom. Taper :	0.000	US Aisle Half :	9.9957	DS Aisle Half :	9.9978

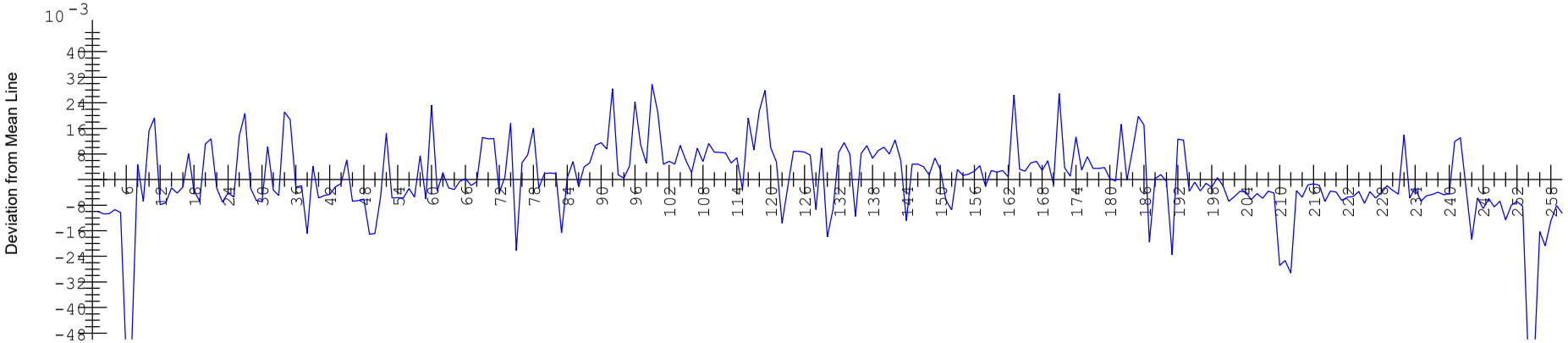
S/N	: HXU_017
Date	: 03-NOV-2022
Data Set	: 0002
Run	: FINAL
Cam Pos.	: B



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

SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Pole Tip Deviation from Mean Line

		US Full	: 20.0002	DS Full	: 20.0005
Nominal Gap :	20.000	US Wall Half	: 9.9957	DS Wall Half	: 9.9973
Nom. Taper :	0.000	US Aisle Half	: 9.9957	DS Aisle Half	: 9.9978

S/N	: HXU_017
Date	: 03-NOV-2022
Data Set	: 0002
Run	: FINAL
Cam Pos.	: B