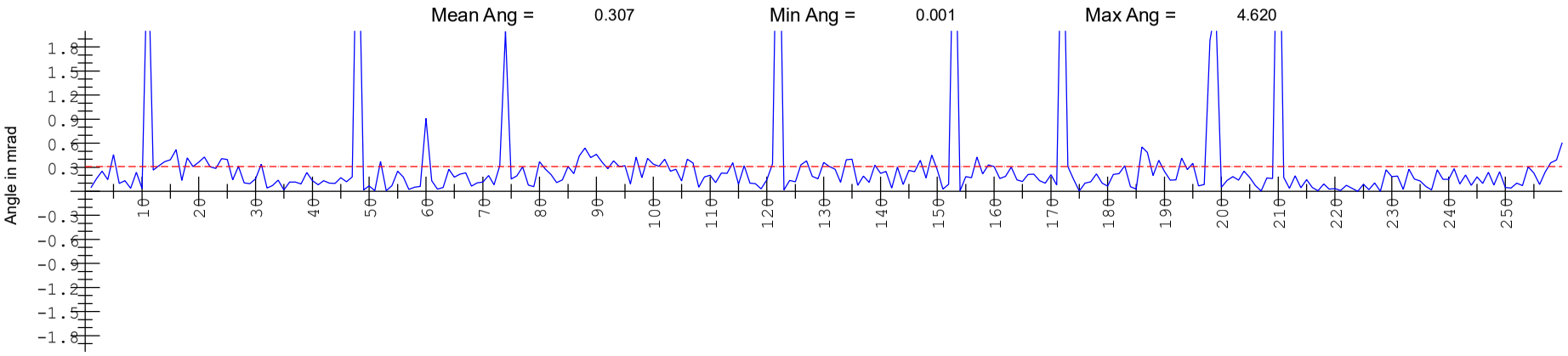
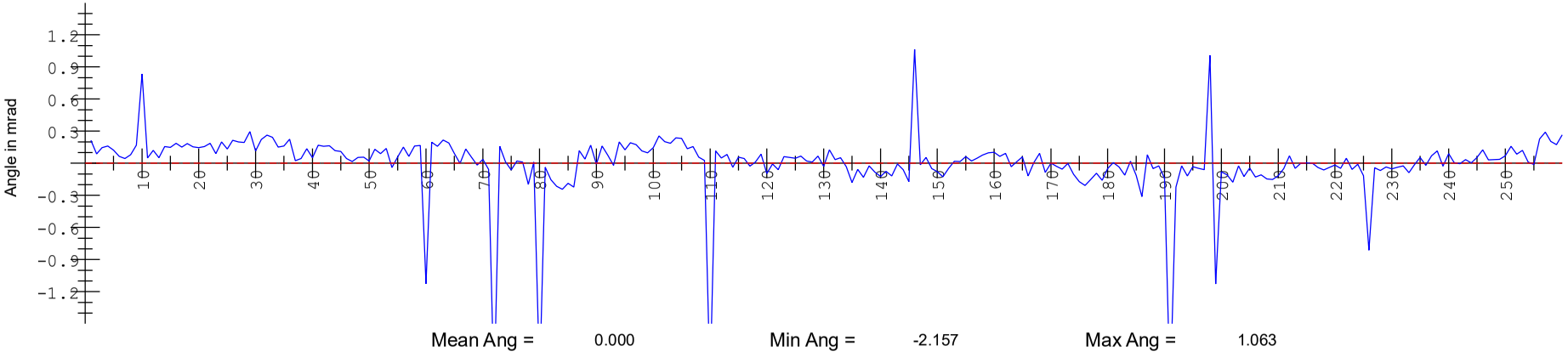


Included Angle Between Pole Tips

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

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



Dimensions in MM, Angles in Milliradians

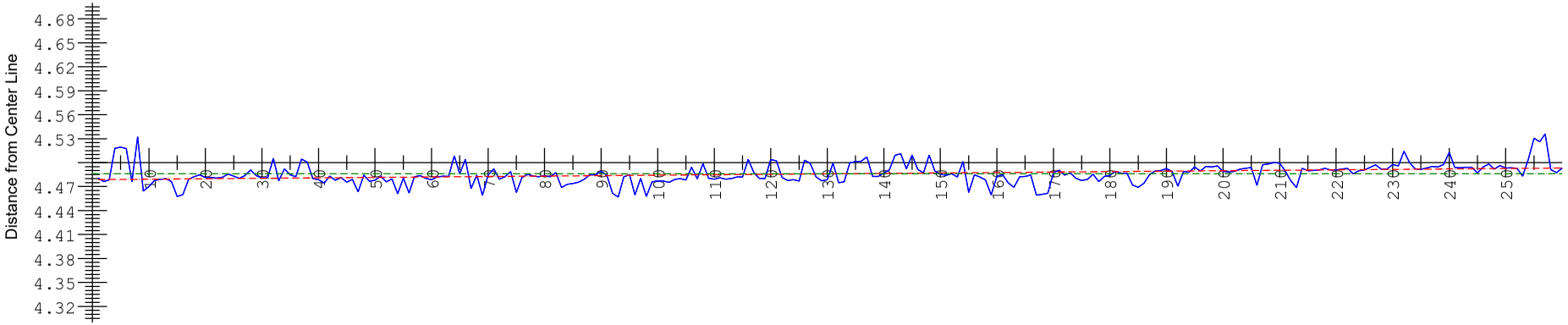
SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Pole Tip Angles

		US Full :	8.9996	DS Full :	8.9998
Nominal Gap :	9.000	US Wall Half :	4.5003	DS Wall Half :	4.4988
Nom. Taper :	0.000	US Aisle Half :	4.4987	DS Aisle Half :	4.5011

S/N	: HXU_016
Date	: 10-SEP-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

Aisle Pole Mean= 4.486 Aisle Pole Min. = 4.457 Aisle Pole Max. = 4.536 Reg. Line Ang. = 0.004



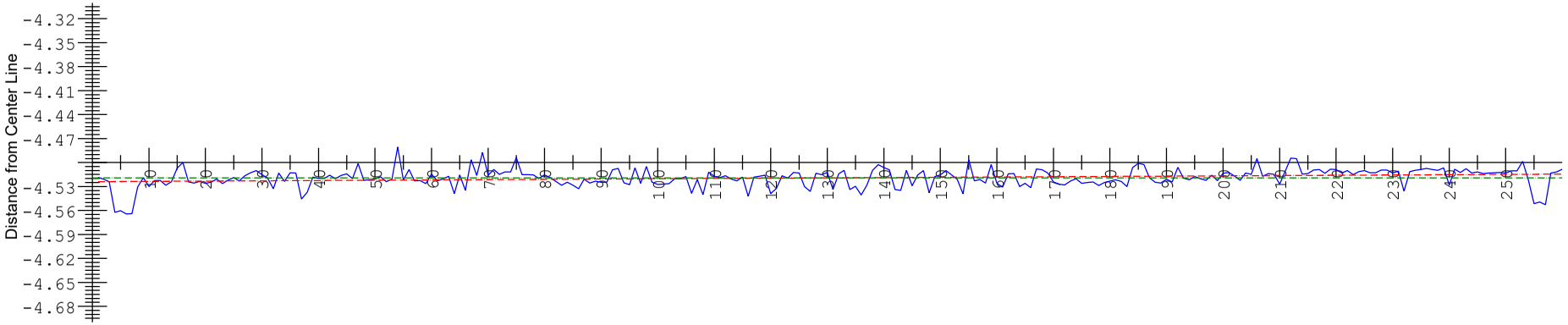
Aisle Pole Tips at Nom. Beam Height

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 = 8.914



Wall Pole Mean = -4.519 Wall Pole Min. = -4.564 Wall Pole Max. = -4.480 Reg. Line Ang. = 0.003

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 :	8.9996	DS Full :	8.9998
Nominal Gap :	9.000	US Wall Half :	4.5003	DS Wall Half :	4.4988
Nom. Taper :	0.000	US Aisle Half :	4.4987	DS Aisle Half :	4.5011

S/N	: HXU_016
Date	: 10-SEP-2020
Data Set	: 0001
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)	4.479	0.000	8.750	
US Wall Pole Tip(1)	-4.524	0.000	8.750	
US Sym. Pt.	-0.023			
US Gap				9.003
DS Aisle Pole Tip(260)	4.493	0.000	3375.750	
DS Wall Pole Tip(260)	-4.514	0.000	3375.750	
DS Sym. Pt.	-0.011			
DS Gap				9.008
Taper				0.005

Dimensions in MM

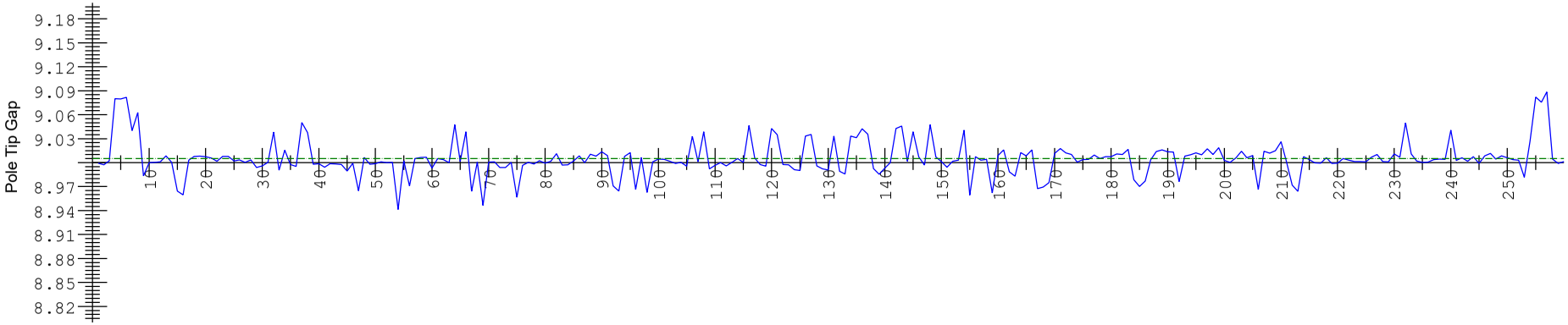
SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Gap Calc. from Regression Line End Points

		US Full :	8.9996	DS Full :	8.9998
Nominal Gap :	9.000	US Wall Half :	4.5003	DS Wall Half :	4.4988
Nom. Taper :	0.000	US Aisle Half :	4.4987	DS Aisle Half :	4.5011

S/N	: HXU_016
Date	: 10-SEP-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

Gap Mean= 9.005 Gap Min. = 8.941 GAP Max. = 9.089

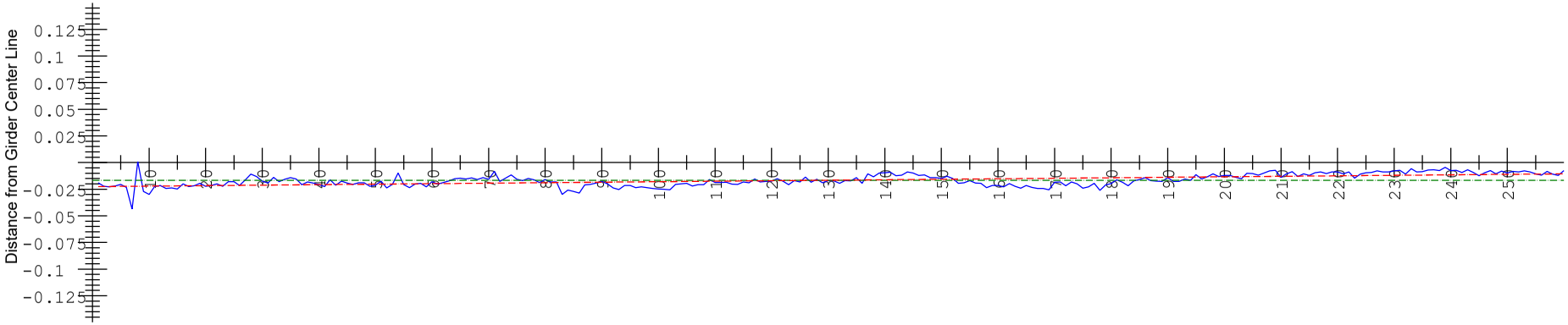


Pole Tip Gap at Nom. Beam Height

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 = -0.017 Sym. Min. = -0.044 Sym. Max. = 0.001 Reg. Line Ang. = 0.004

Girder centerline in reference to Pointed Magnets

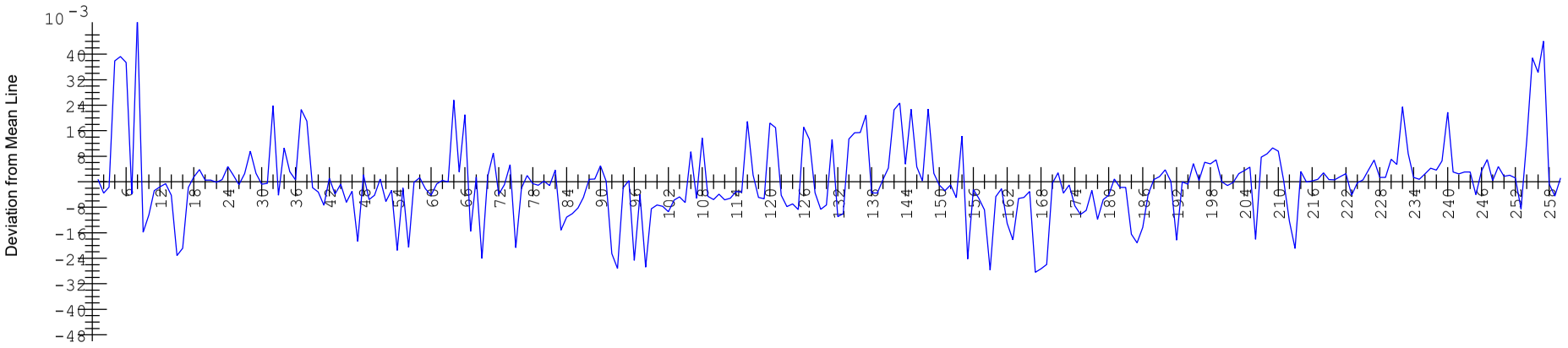
Dimensions in MM, Angles in Milliradians

SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Pole Tip Gap and Symmetry Point Location

		US Full :	8.9996	DS Full :	8.9998
Nominal Gap :	9.000	US Wall Half :	4.5003	DS Wall Half :	4.4988
Nom. Taper :	0.000	US Aisle Half :	4.4987	DS Aisle Half :	4.5011

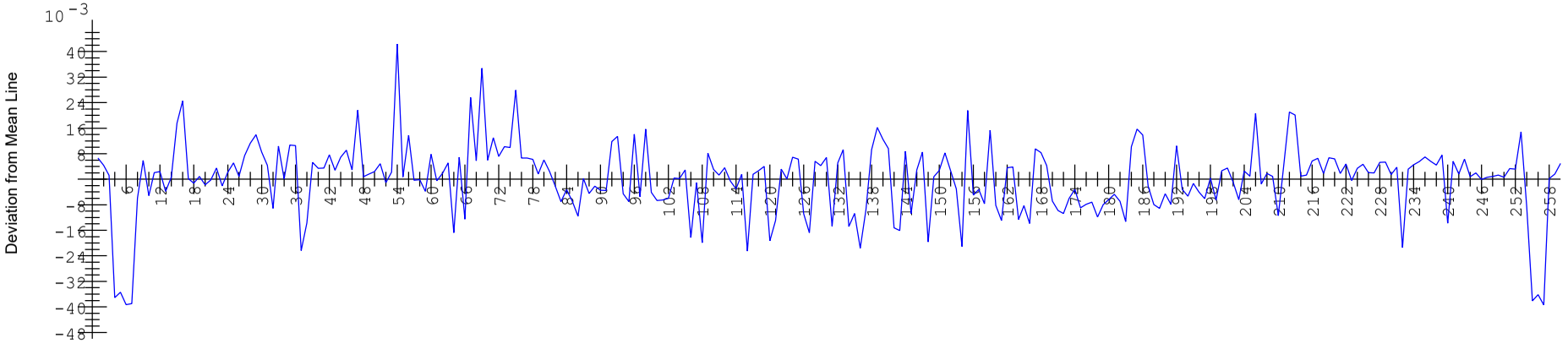
S/N	: HXU_016
Date	: 10-SEP-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B



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	:	8.9996	DS Full	:	8.9998
Nominal Gap	: 9.000	US Wall Half	:	4.5003	DS Wall Half	:	4.4988
Nom. Taper	: 0.000	US Aisle Half	:	4.4987	DS Aisle Half	:	4.5011

S/N	: HXU_016
Date	: 10-SEP-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B