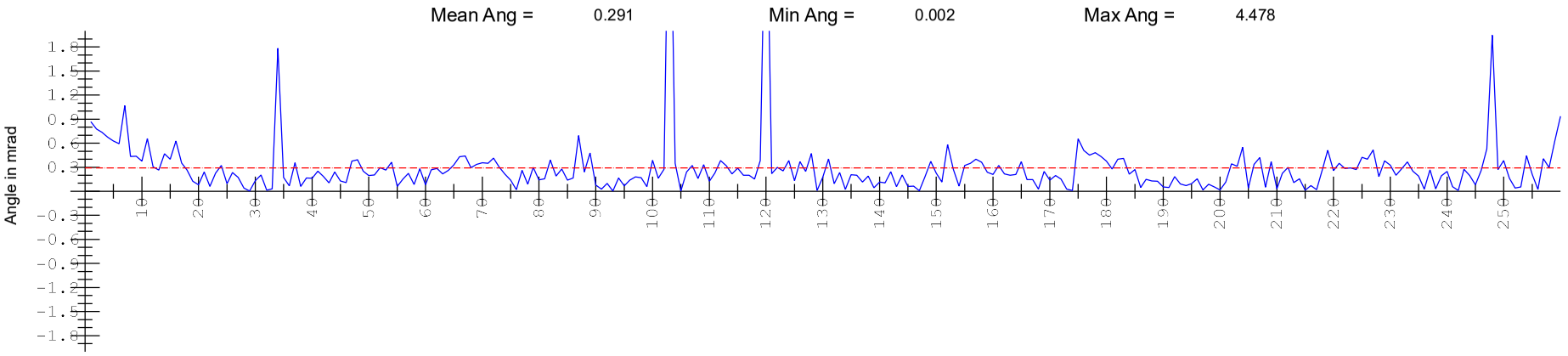
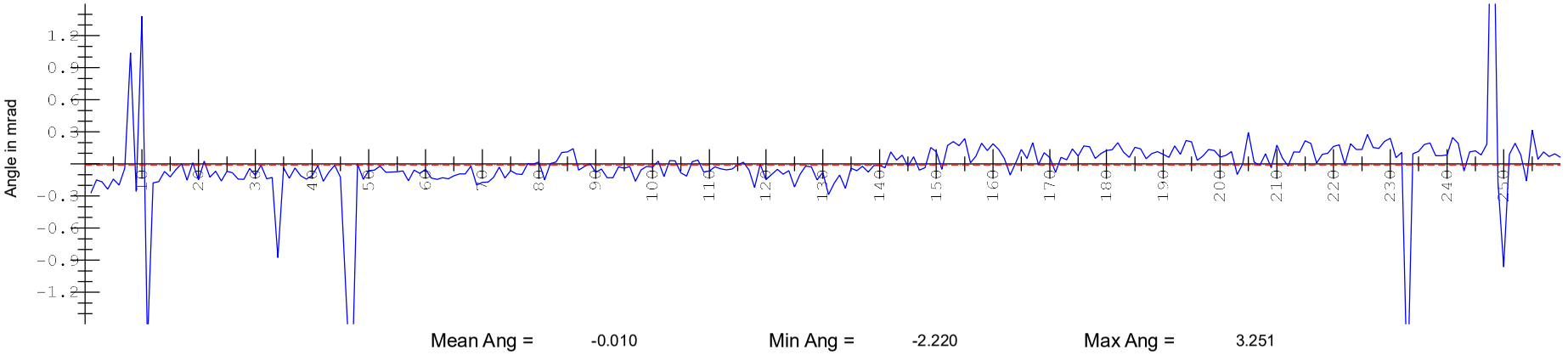


Included Angle Between Pole Tips

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

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



Dimensions in MM, Angles in Milliradians

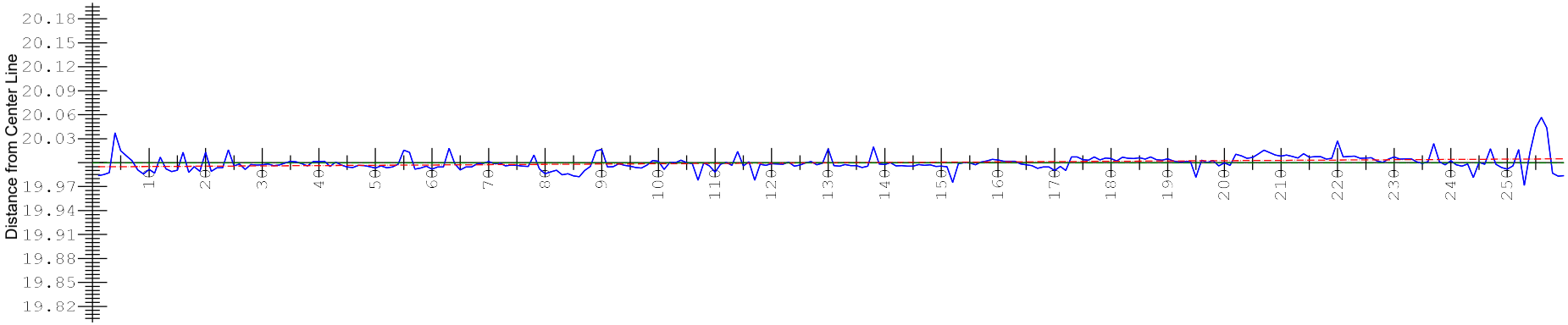
SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Pole Tip Angles

		US Full :	40.0001	DS Full :	40.0001
Nominal Gap :	40.000	US Wall Half :	19.9927	DS Wall Half :	19.9910
Nom. Taper :	0.000	US Aisle Half :	19.9918	DS Aisle Half :	19.9926

S/N	: HXU_012
Date	: 11-MAR-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

Aisle Pole Mean= 20.000 Aisle Pole Min. = 19.971 Aisle Pole Max. = 20.057 Reg. Line Ang. = 0.003



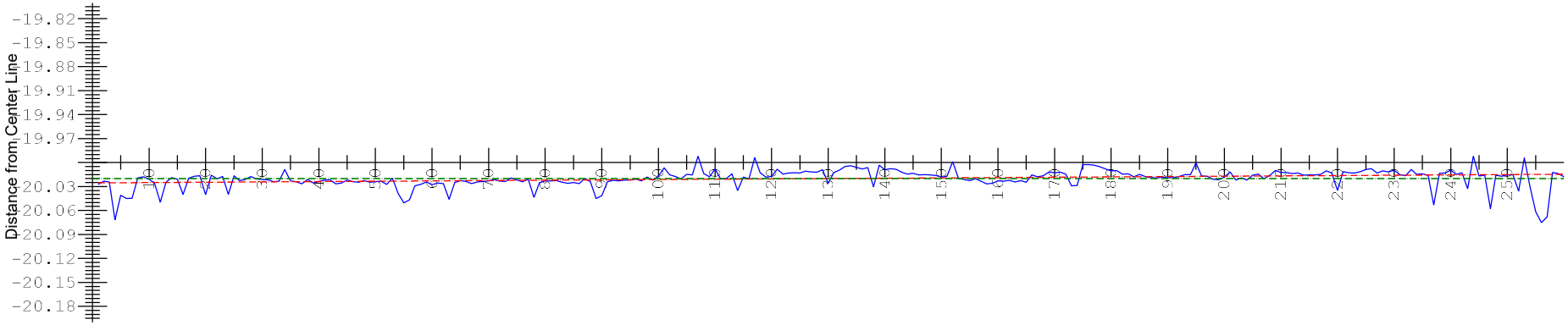
Aisle Pole Tips at Nom. Beam Height

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 = 39.943



Wall Pole Mean = -20.020 Wall Pole Min. = -20.075 Wall Pole Max. = -19.992 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 :	40.0001	DS Full :	40.0001
Nominal Gap :	40.000	US Wall Half :	19.9927	DS Wall Half :	19.9910
Nom. Taper :	0.000	US Aisle Half :	19.9918	DS Aisle Half :	19.9926

S/N	: HXU_012
Date	: 11-MAR-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)	19.995	0.000	8.750	
US Wall Pole Tip(1)	-20.025	0.000	8.750	
US Sym. Pt.	-0.015			
US Gap				40.020
DS Aisle Pole Tip(260)	20.005	0.000	3375.750	
DS Wall Pole Tip(260)	-20.015	0.000	3375.750	
DS Sym. Pt.	-0.005			
DS Gap				40.019
Taper				-0.001

Dimensions in MM

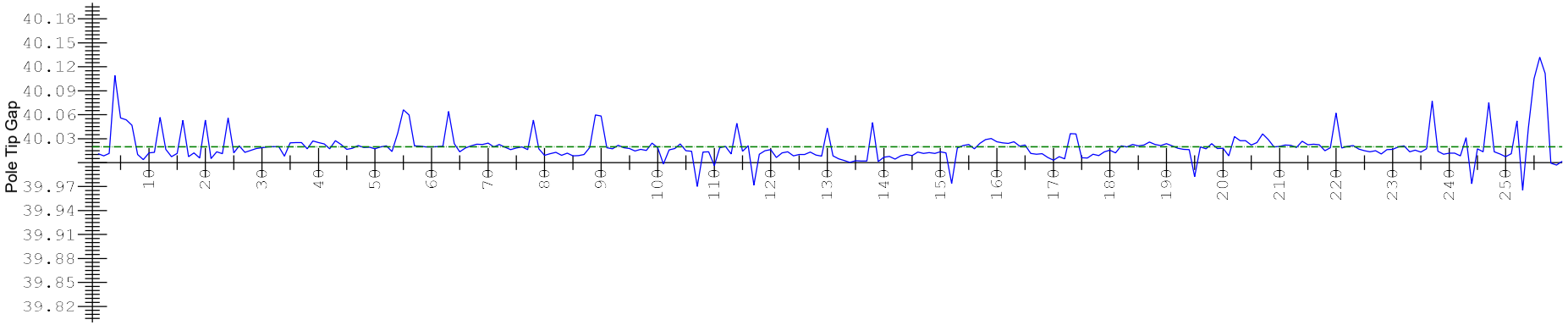
SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Gap Calc. from Regression Line End Points

		US Full :	40.0001	DS Full :	40.0001
Nominal Gap :	40.000	US Wall Half :	19.9927	DS Wall Half :	19.9910
Nom. Taper :	0.000	US Aisle Half :	19.9918	DS Aisle Half :	19.9926

S/N	: HXU_012
Date	: 11-MAR-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

Gap Mean= 40.020 Gap Min. = 39.965 GAP Max. = 40.132

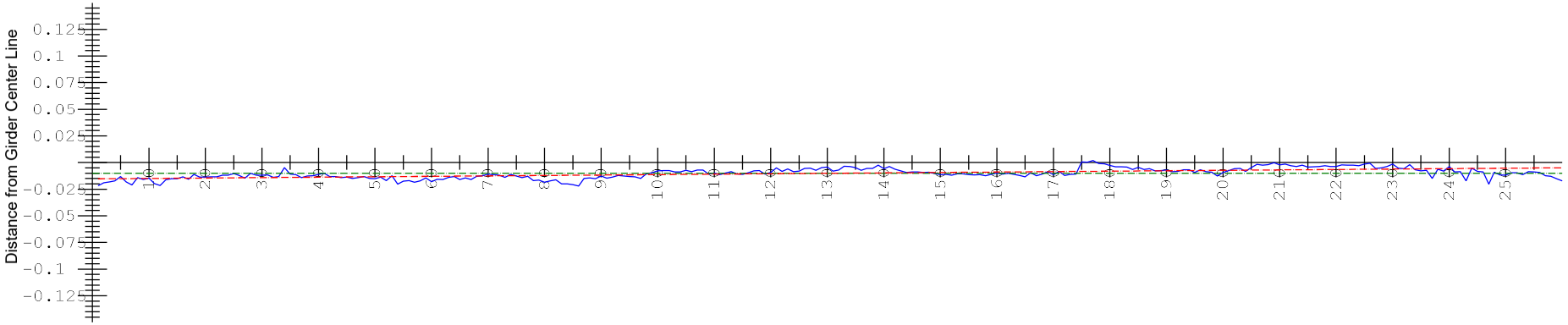


Pole Tip Gap at Nom. Beam Height

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 = -0.010 Sym. Min. = -0.022 Sym. Max. = 0.002 Reg. Line Ang. = 0.003

Girder centerline in reference to Pointed Magnets

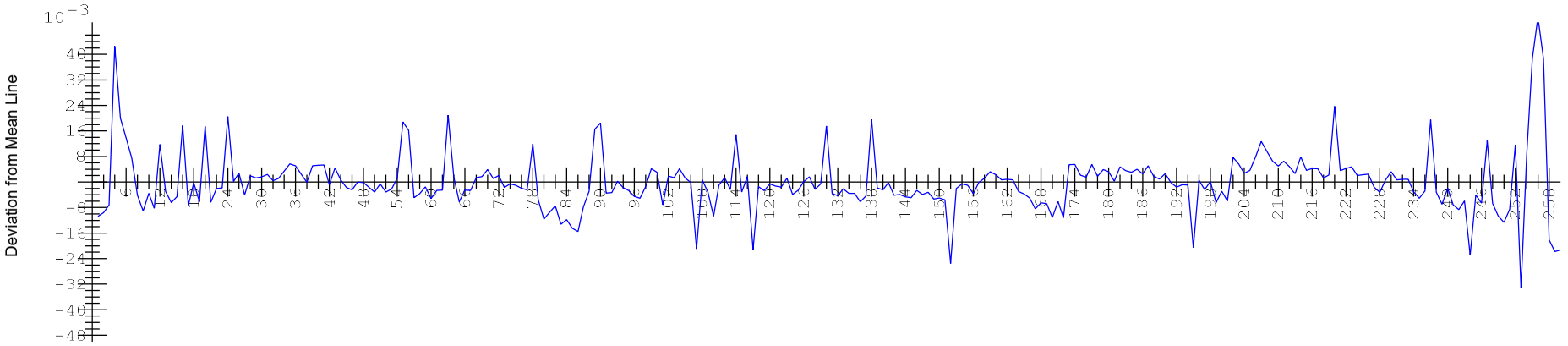
Dimensions in MM, Angles in Milliradians

SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Pole Tip Gap and Symmetry Point Location

		US Full :	40.0001	DS Full :	40.0001
Nominal Gap :	40.000	US Wall Half :	19.9927	DS Wall Half :	19.9910
Nom. Taper :	0.000	US Aisle Half :	19.9918	DS Aisle Half :	19.9926

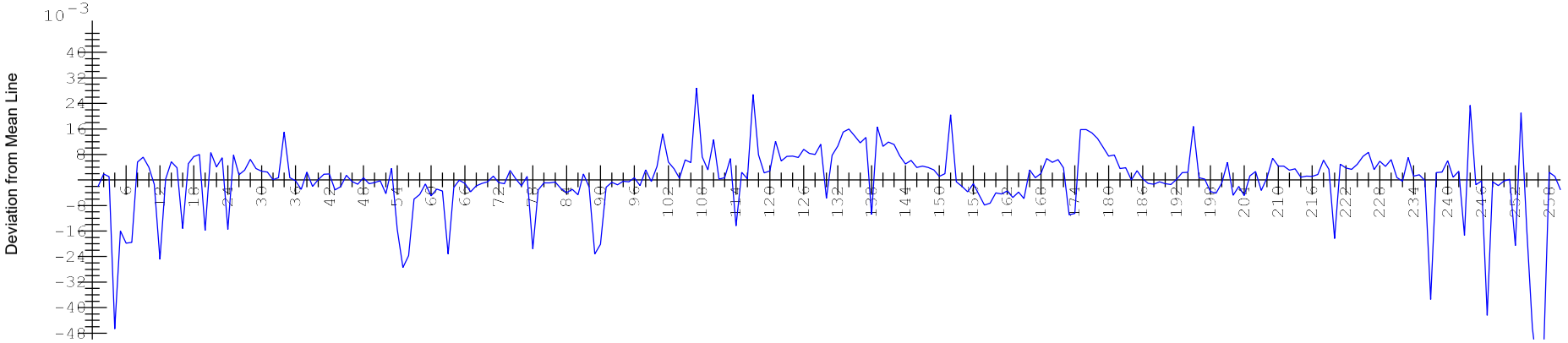
S/N	: HXU_012
Date	: 11-MAR-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B



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 :	40.0001	DS Full :	40.0001
Nominal Gap :	40.000	US Wall Half :	19.9927	DS Wall Half :	19.9910
Nom. Taper :	0.000	US Aisle Half :	19.9918	DS Aisle Half :	19.9926

S/N	: HXU_012
Date	: 11-MAR-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B