The figure on the left shows the ISI position sensors time series calibrated in mm (H1 for horizontal corner 1).

It shows 30 seconds of data when the ISI reaches the steady state regime that will last for several hours.

At this frequency (1.23 Hz), the ISI Stage 1 Capacitive Position Sensors saturate the ADC at +/- 0.15 mm.

The figure on the right is the derivative of the curve shown on the left. Far from the CPS saturations it gives us an estimate of the Stage 1 velocity. The maximum velocities (corresponding to zero position, far from position sensors saturation) should be pretty good estimates.



Similar calibrated plots for a Stage 1 Vertical position Sensor:



Similar calibrated plots for a Stage 2 Horizontal position Sensor (relative motion between Stage 1 and Stage 2)

At this frequency (1.23 Hz), the ISI Stage 2 Capacitive Position Sensors saturate the ADC at +/- 0.038 mm.





