2000  $\mu m$  Capacitive Sensor Acc. Displacement vs. Fringe Count Acc. Displacement Acc. Displacement Measured by Capacitive Sensor (µm) Run 1 Slope 80 Run 1 Slope 2 Run 2 Slope Run 2 Slope 2 60 Run 3 Slope Run 3 Slope 2 Run 4 Slope 40 Run 4 Slope 2 Run 5 Slope 20 0 -20 -20 20 40 60 80 Acc. Displacement Calculated from Fringes ( $\mu m$ )