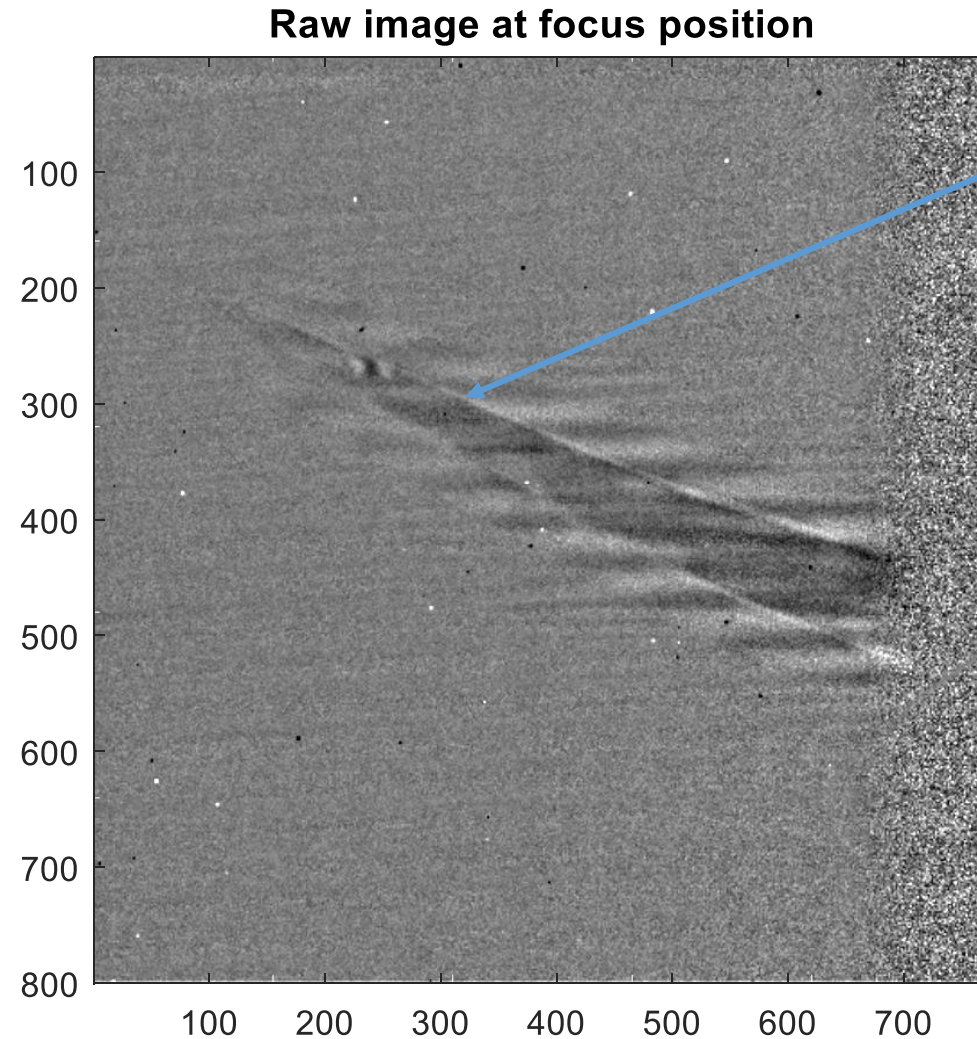


MLL Phase Contrast Line Profile Comparison

Anders F. Pedersen

14-03-2017

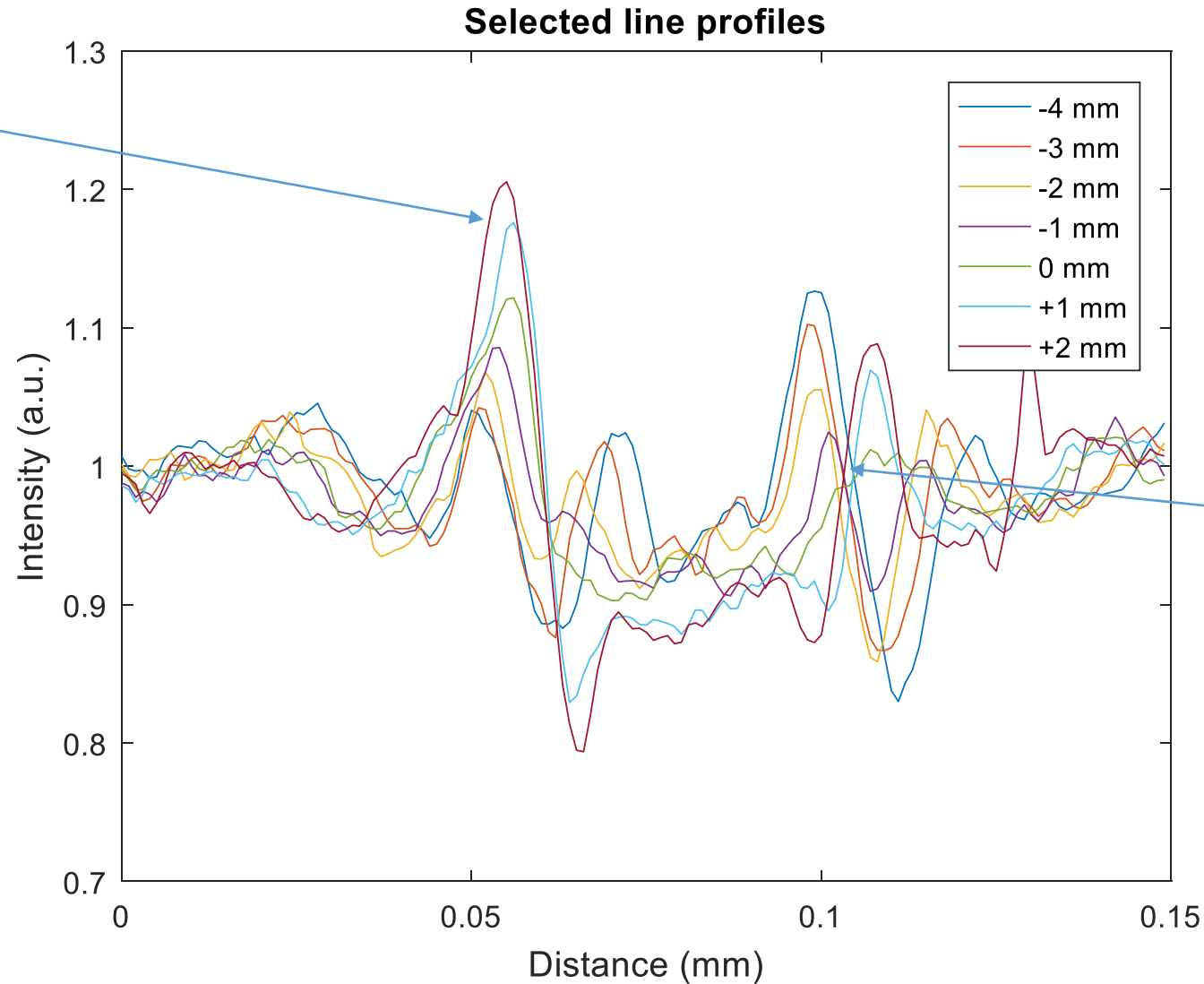
Recorded image estimated at focus position



This line interferes with the profile, but it is only visible on the top side of the rod.

Measured line profiles

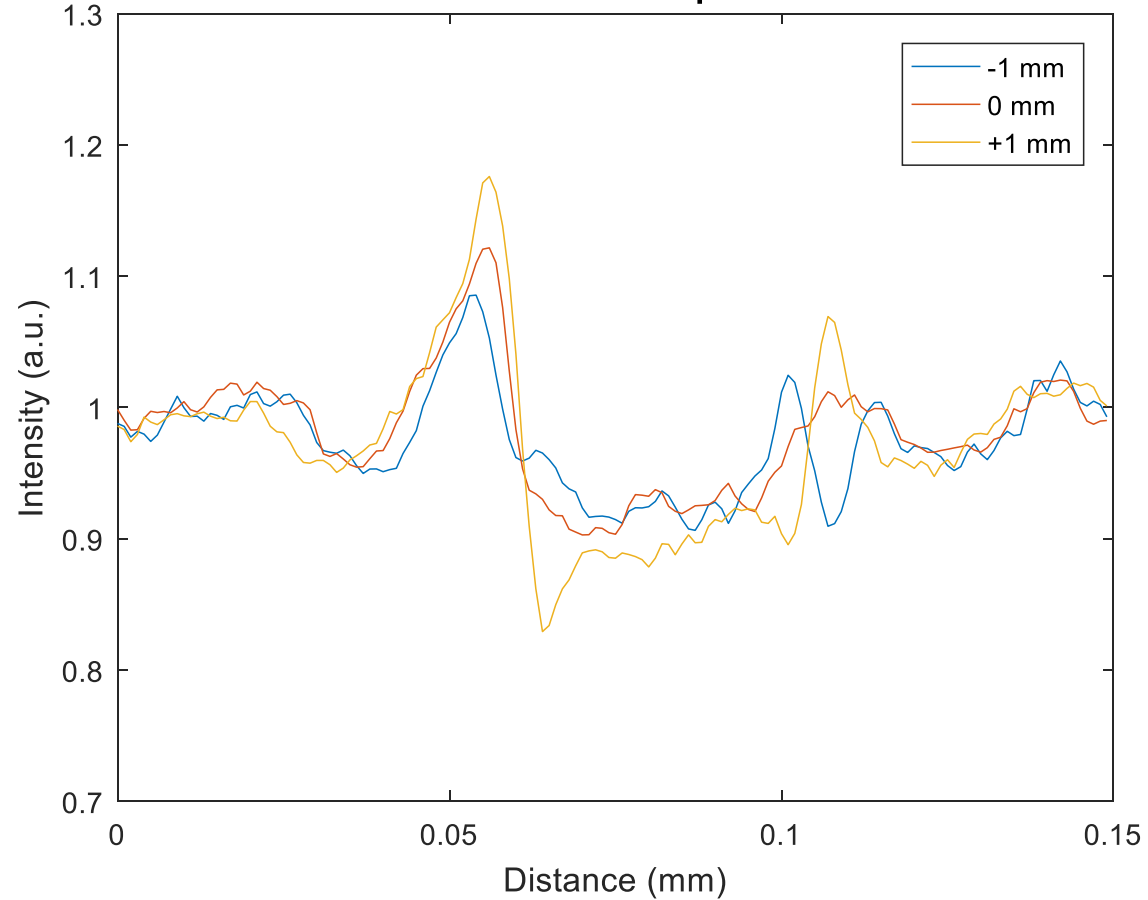
The problematic line mentioned on the previous slide. It is difficult to see the amplitude inversion on this side of the rod.



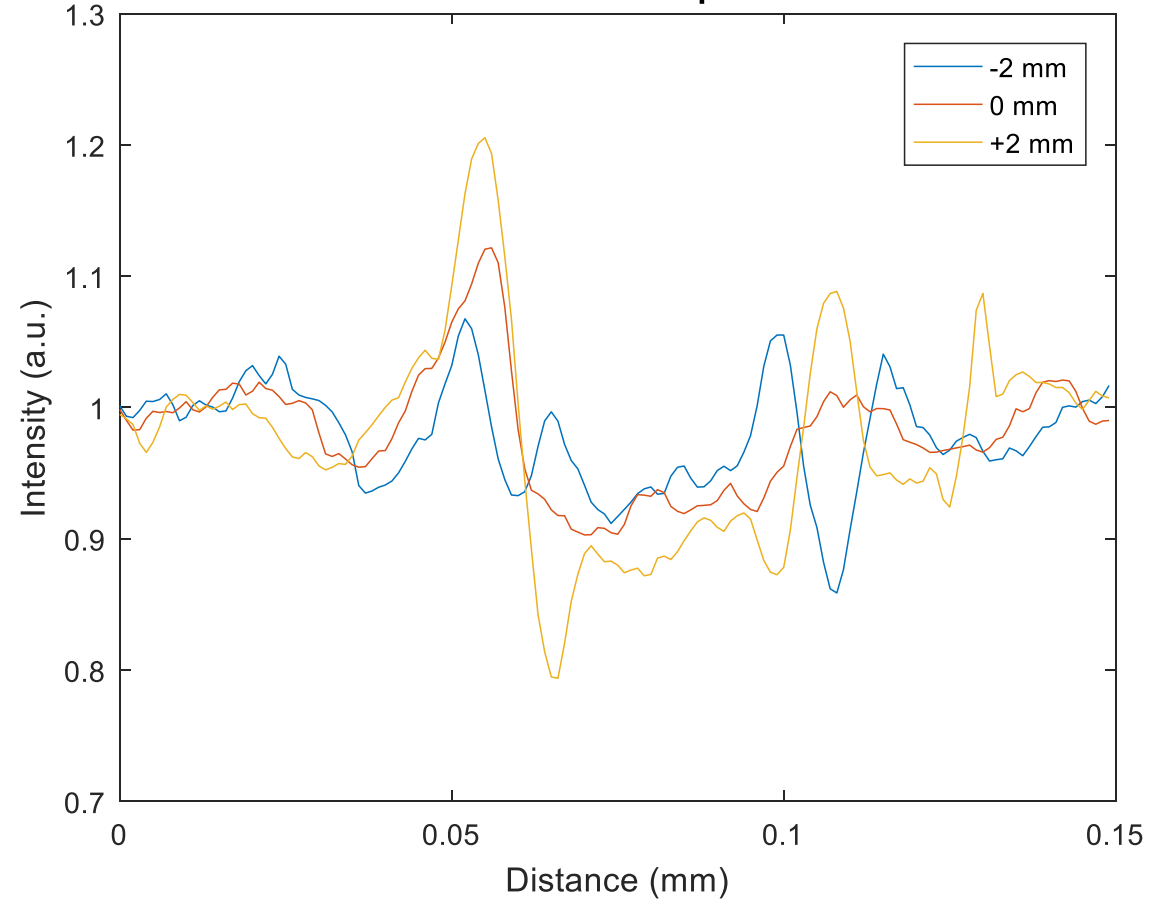
Amplitude inversion is clearly seen on the bottom side of the rod.

Measurement \pm displacement comparison

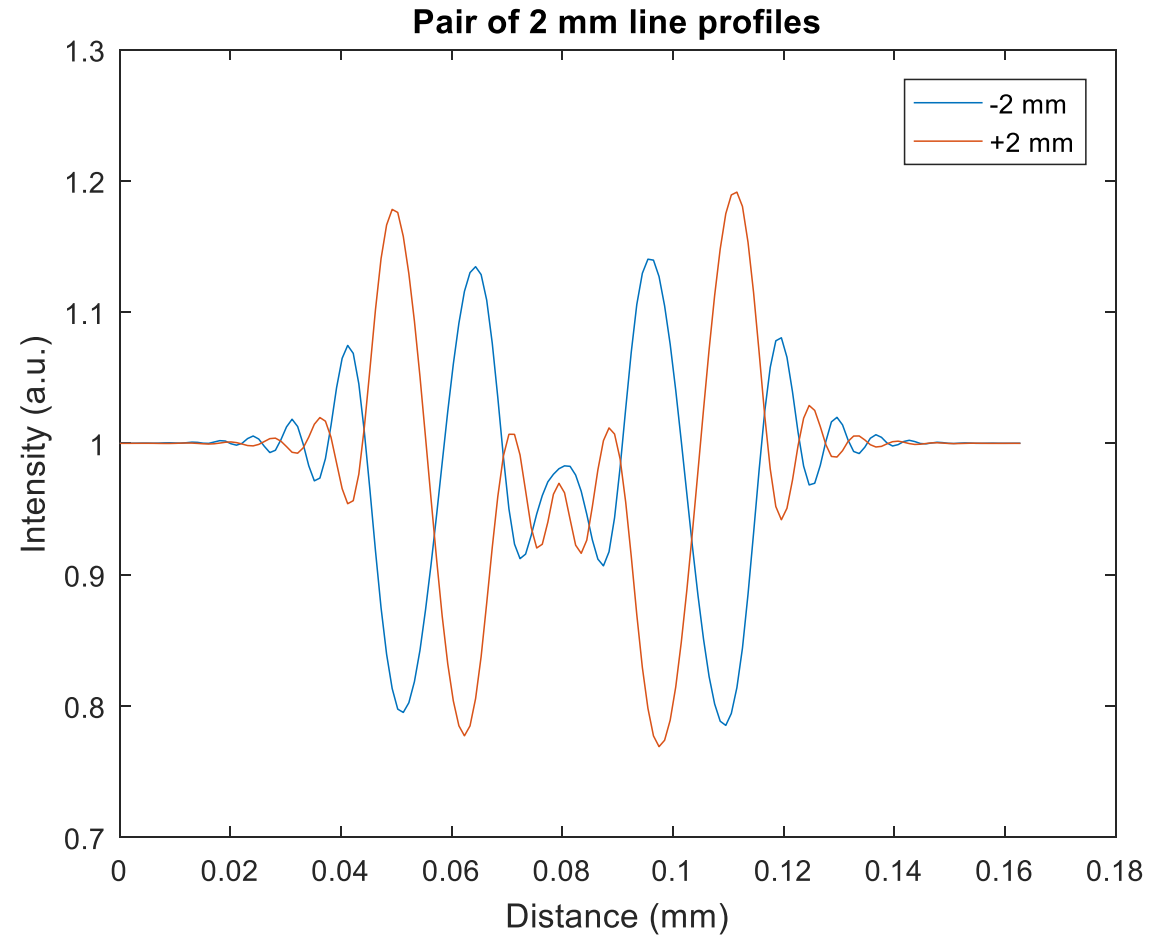
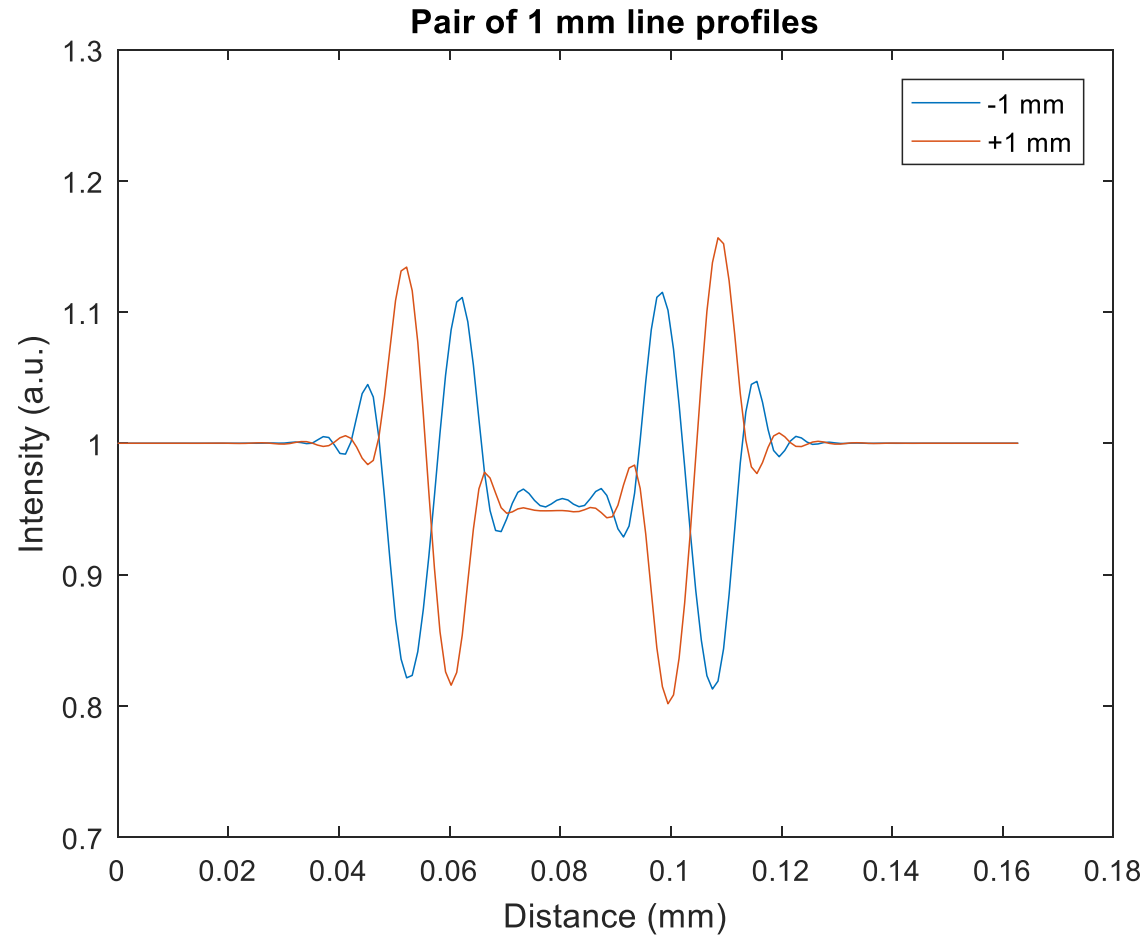
Pair of 1 mm line profiles



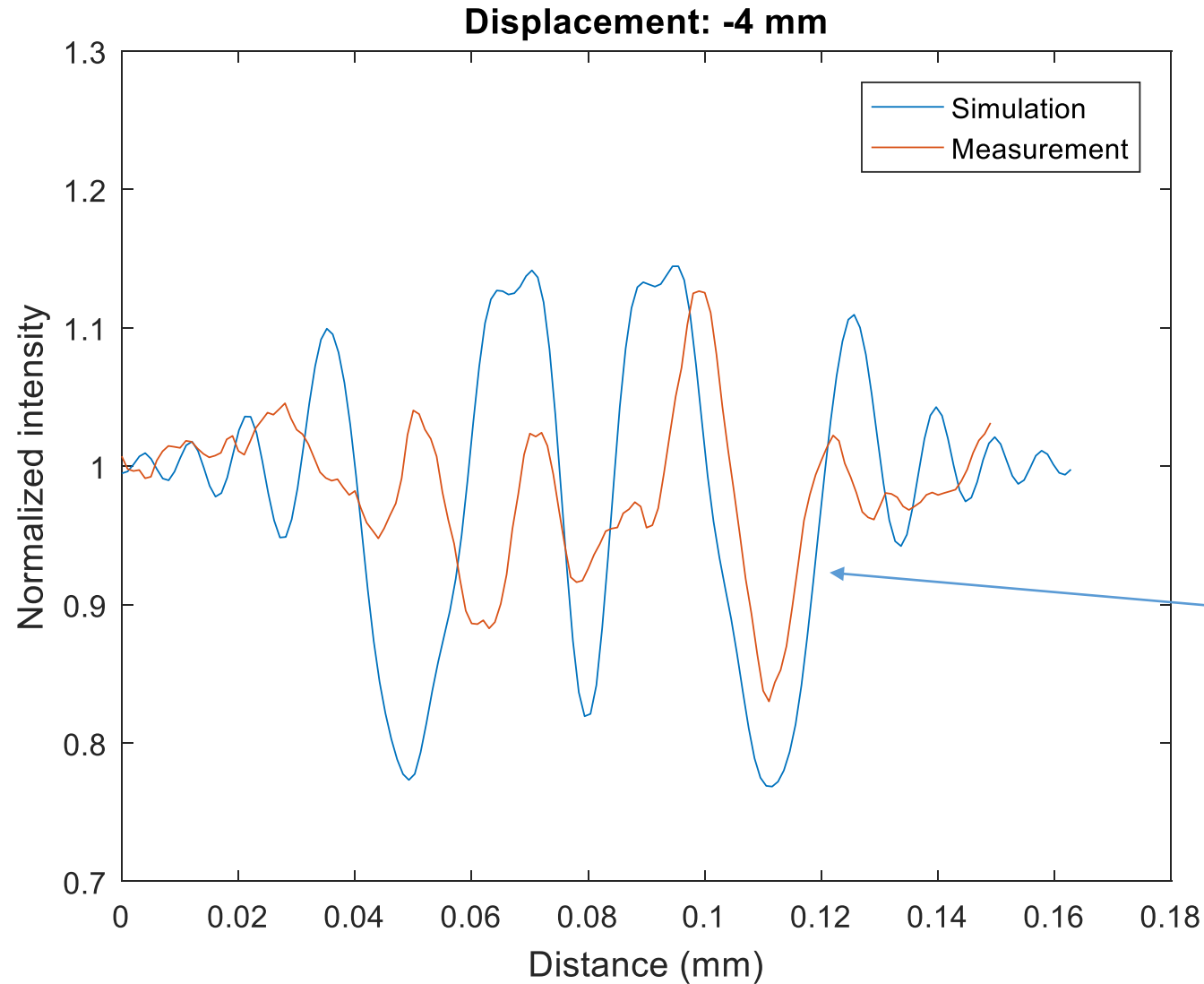
Pair of 2 mm line profiles



Simulation \pm displacement comparison

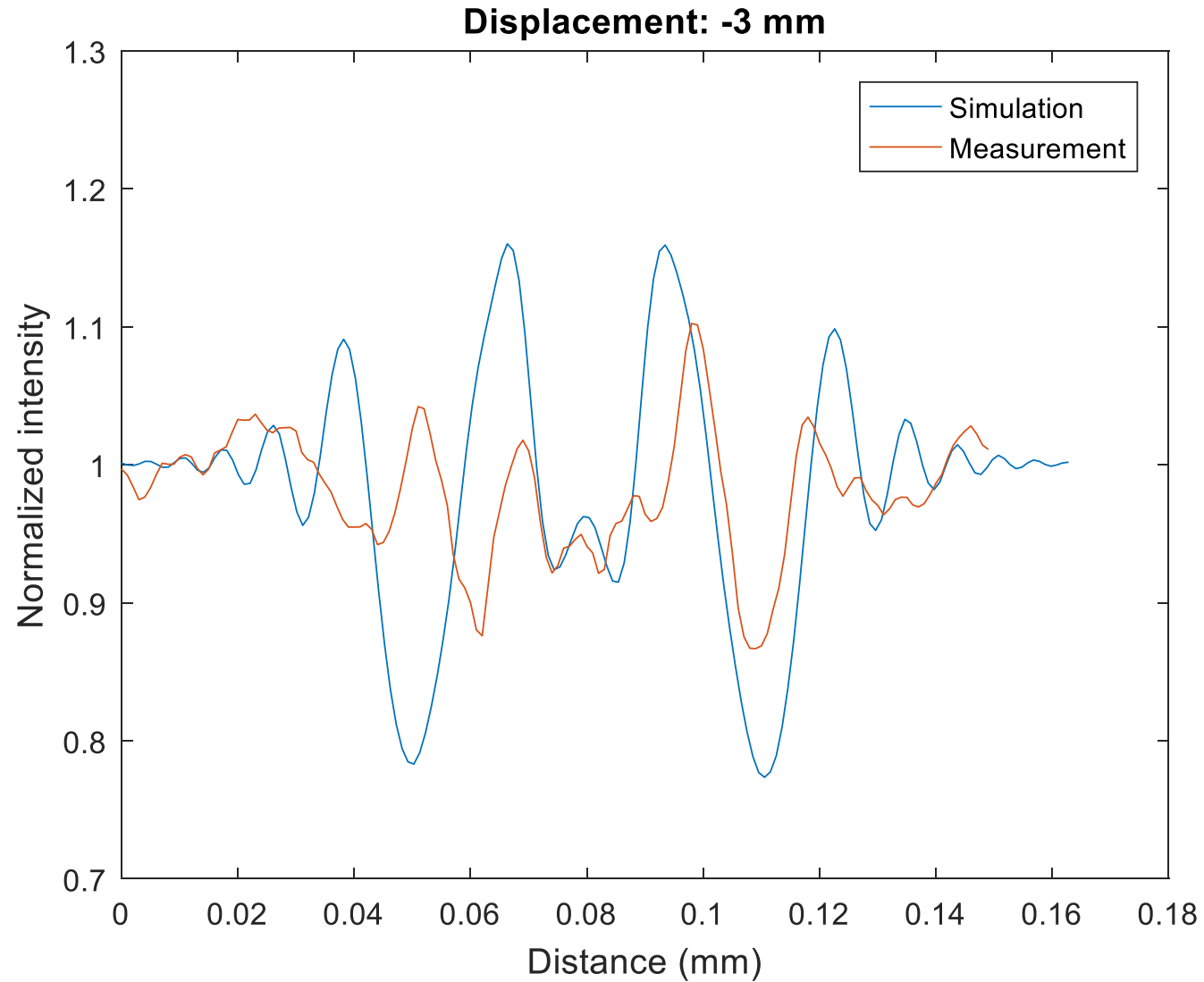


Simulation vs. measurement

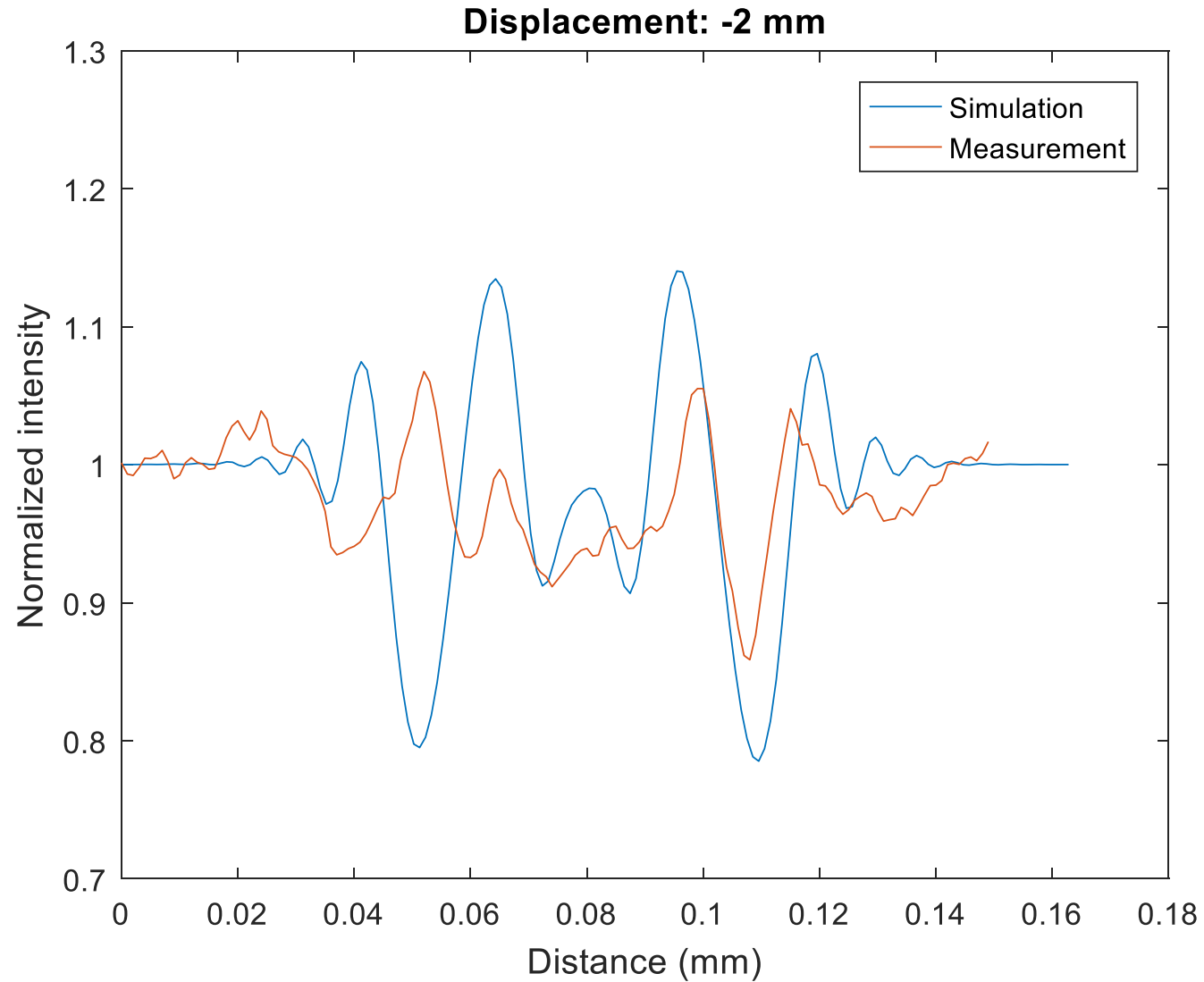


Good agreement between measurement and simulation on this side of rod. The simulation overestimates the amplitude of the oscillations a bit.

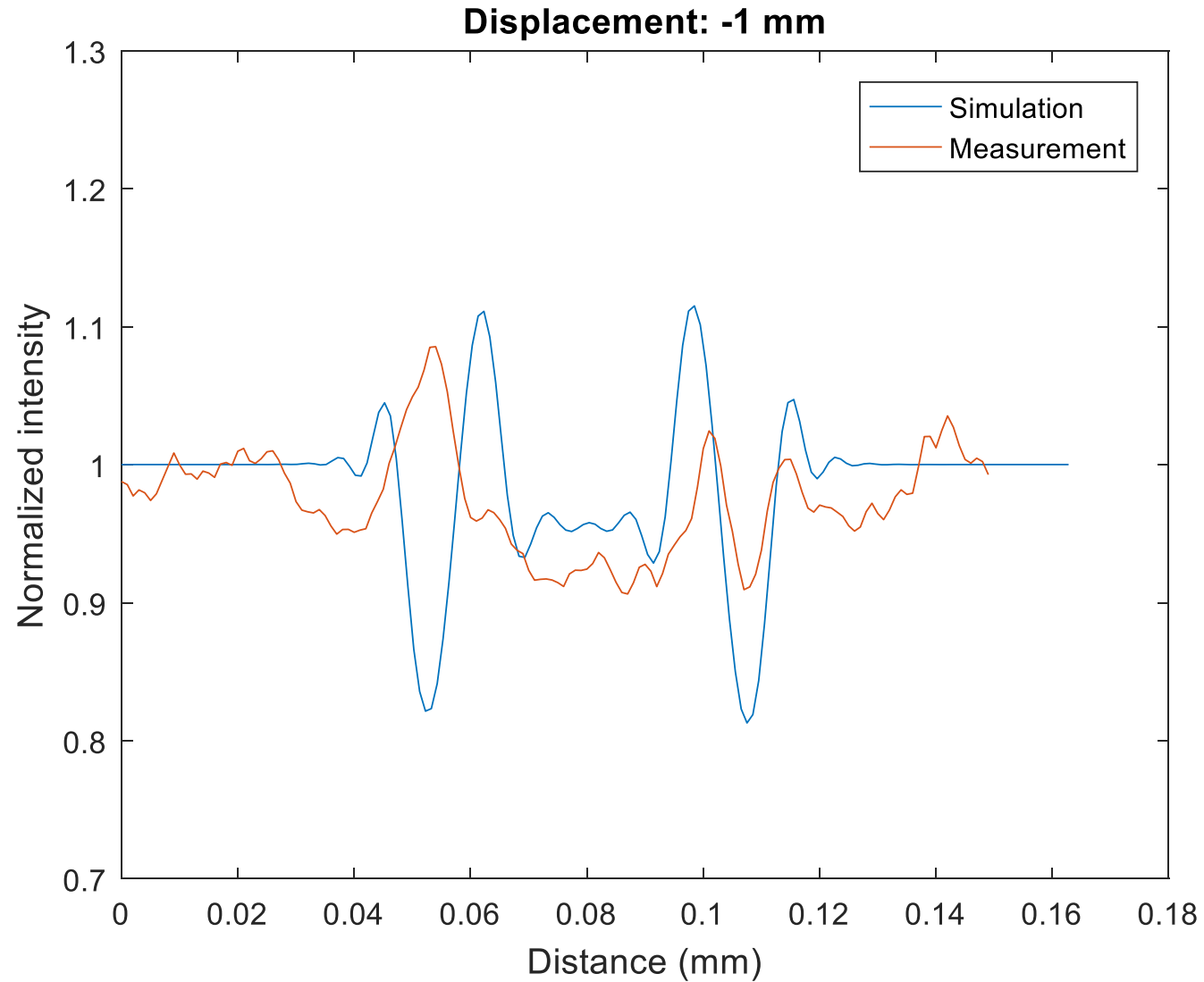
Simulation vs. measurement



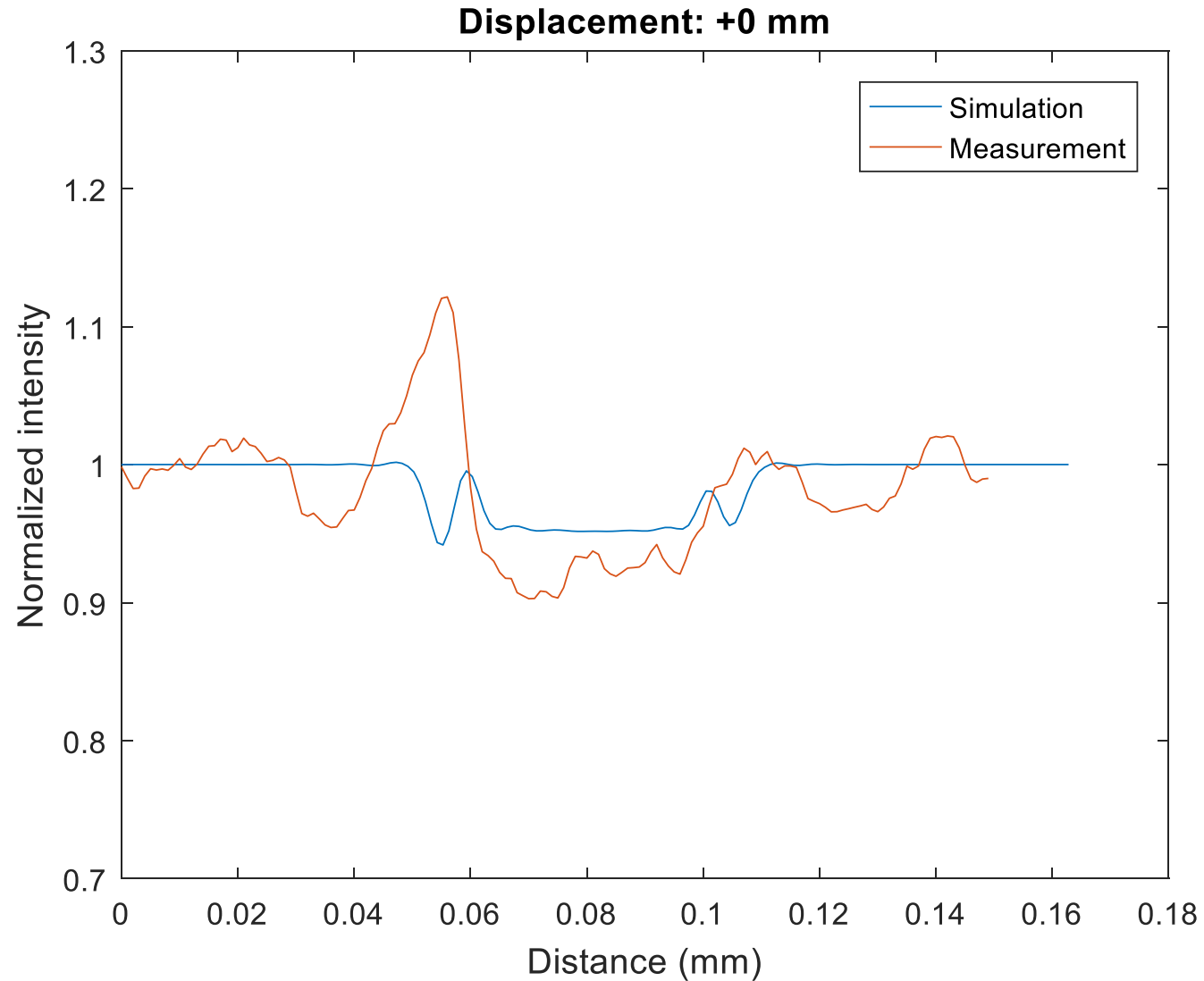
Simulation vs. measurement



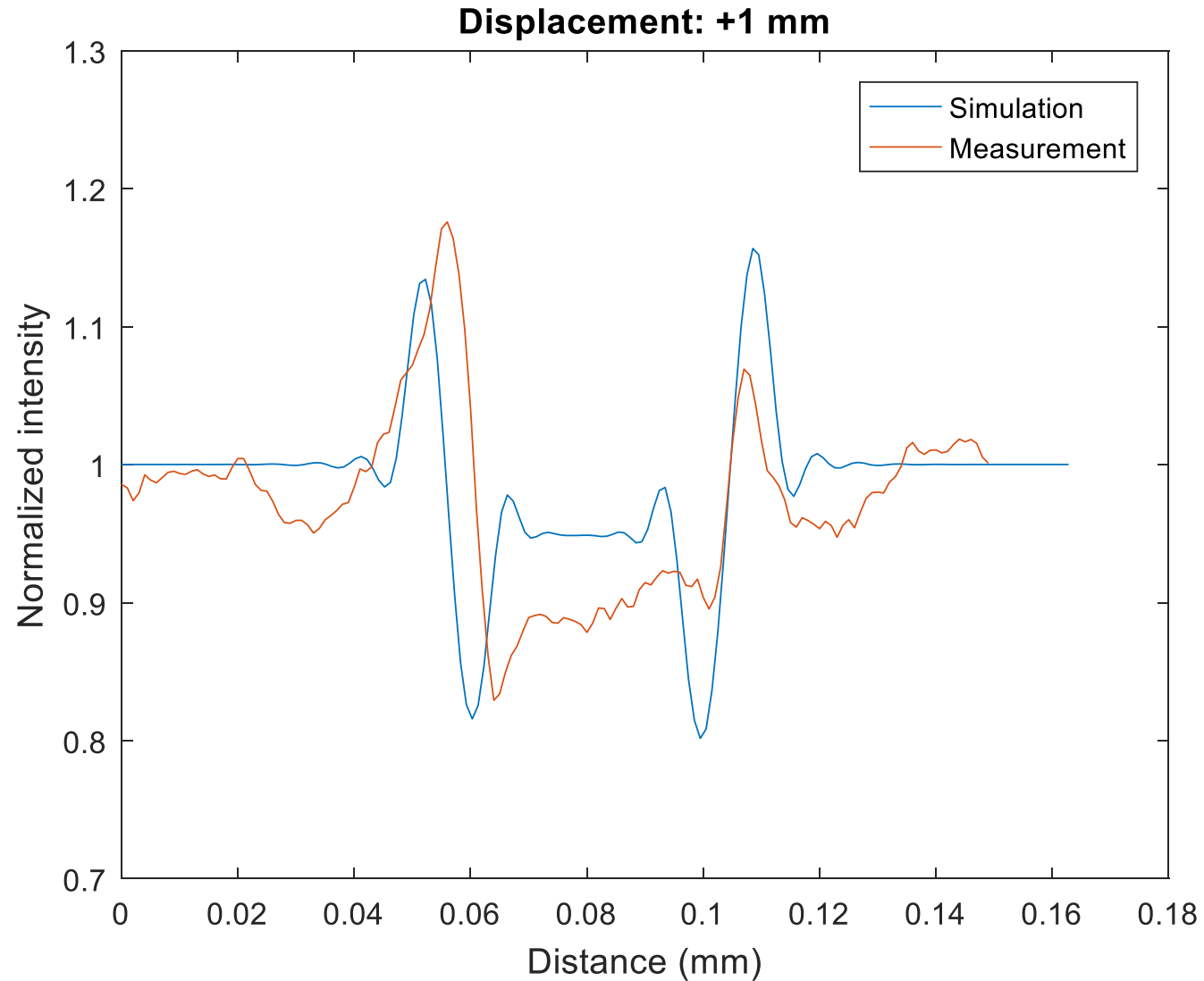
Simulation vs. measurement



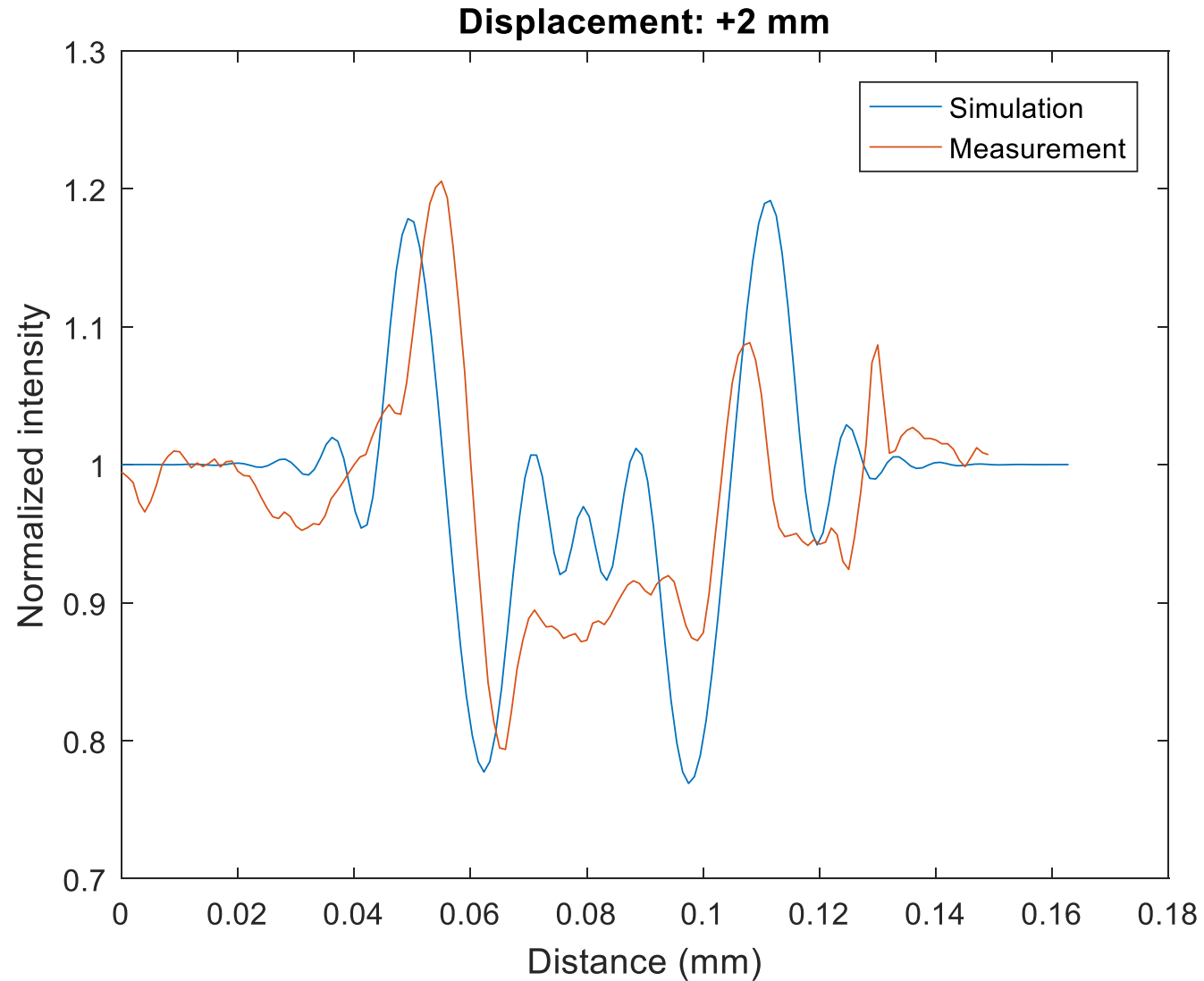
Simulation vs. measurement



Simulation vs. measurement

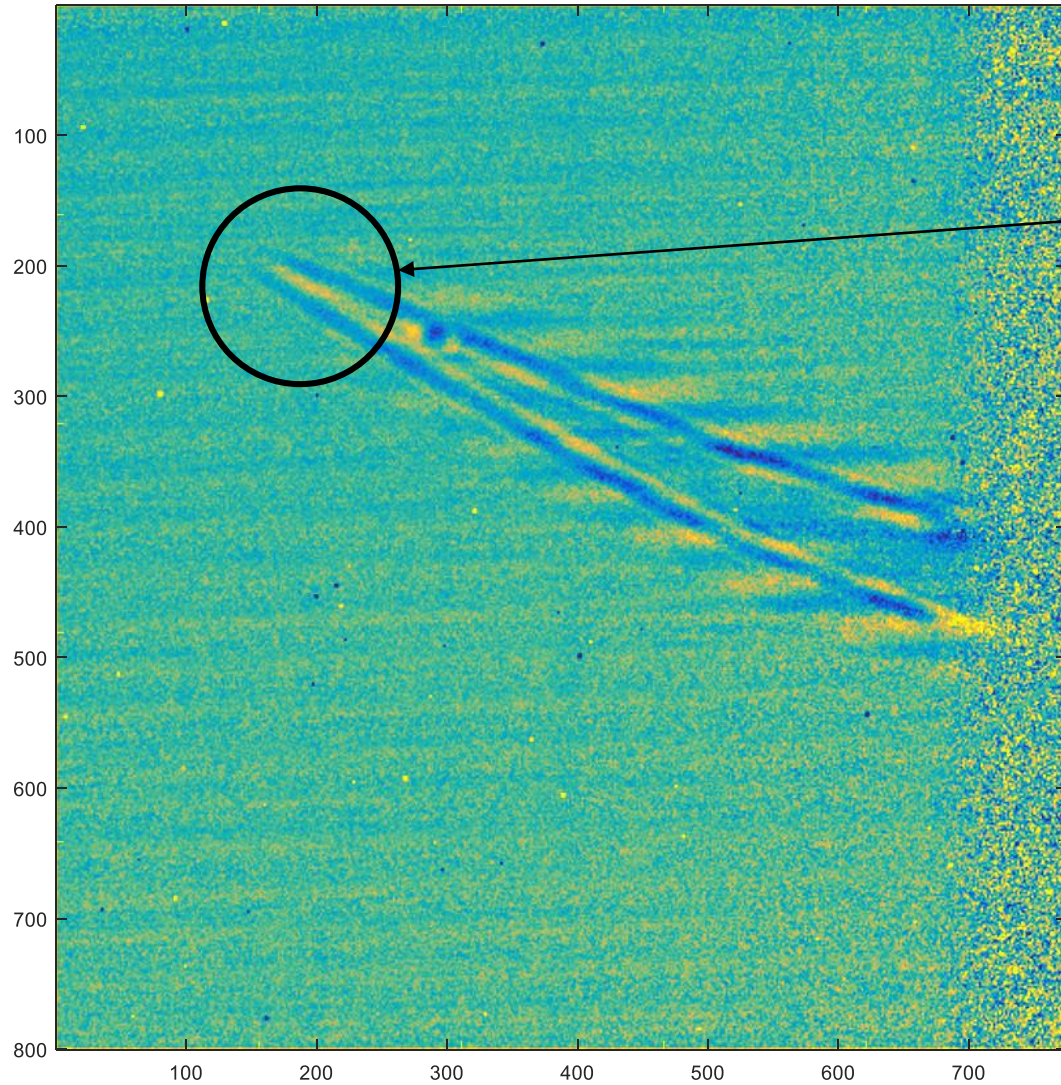


Simulation vs. measurement



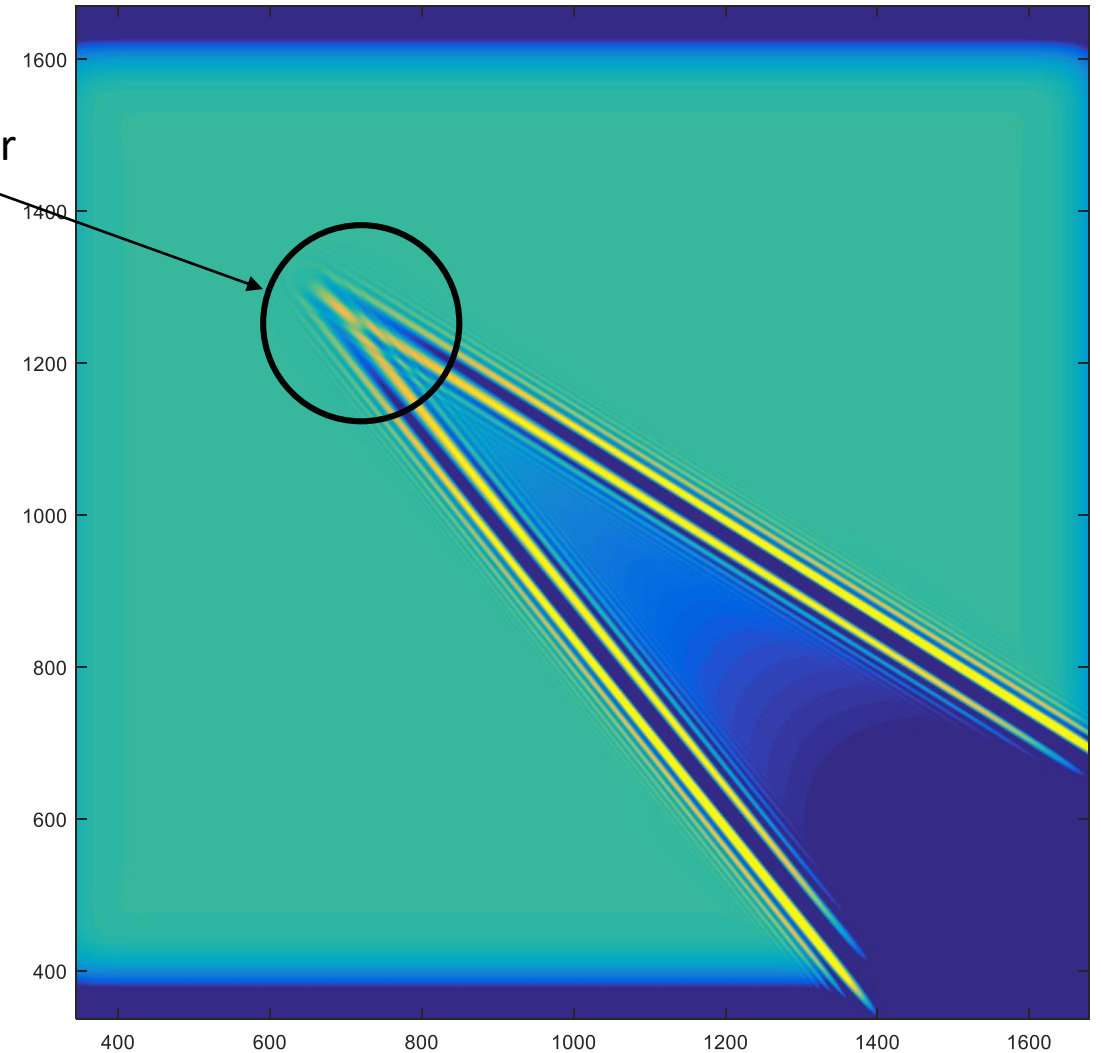
Measured and simulated images

Measurement: -4 mm



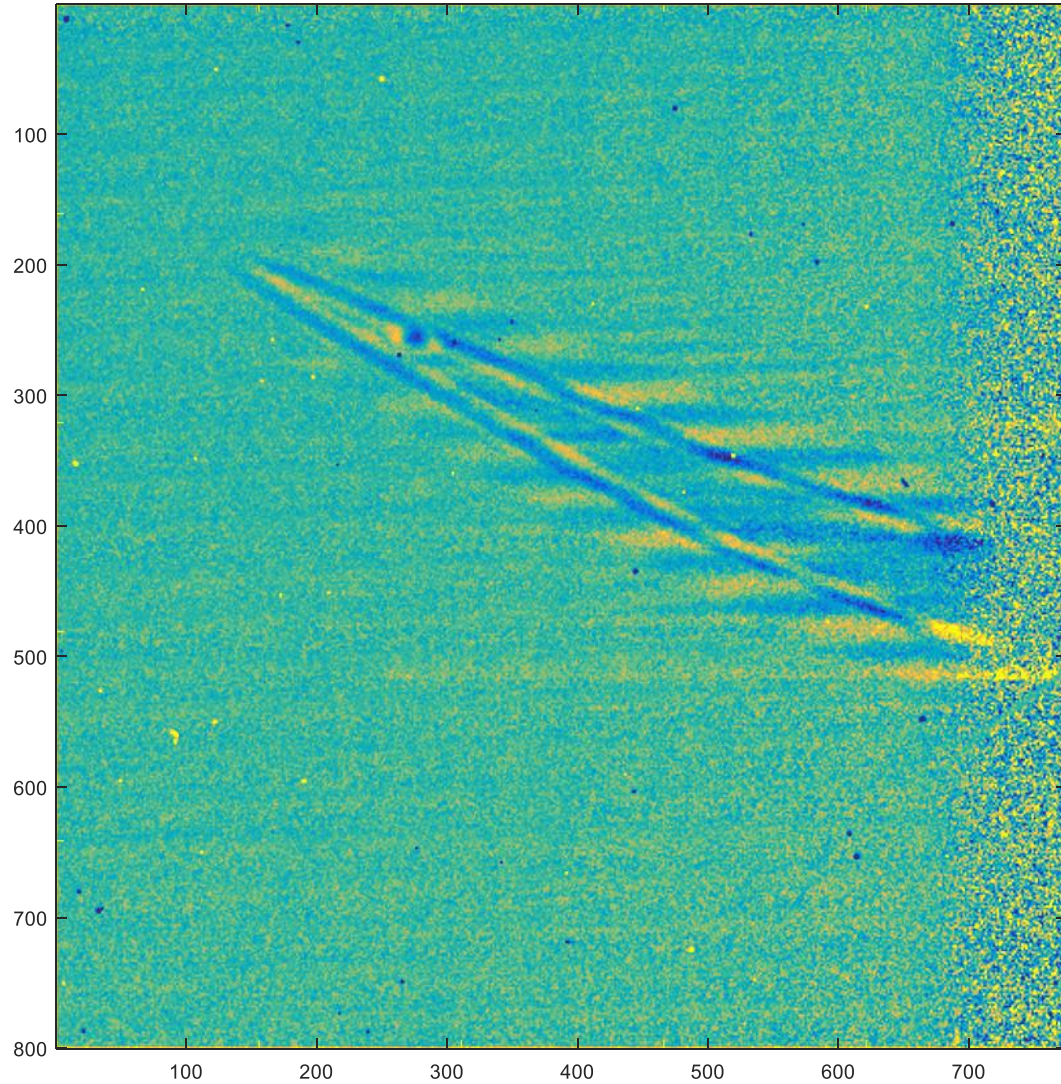
Very similar
features!

Simulation: -4 mm

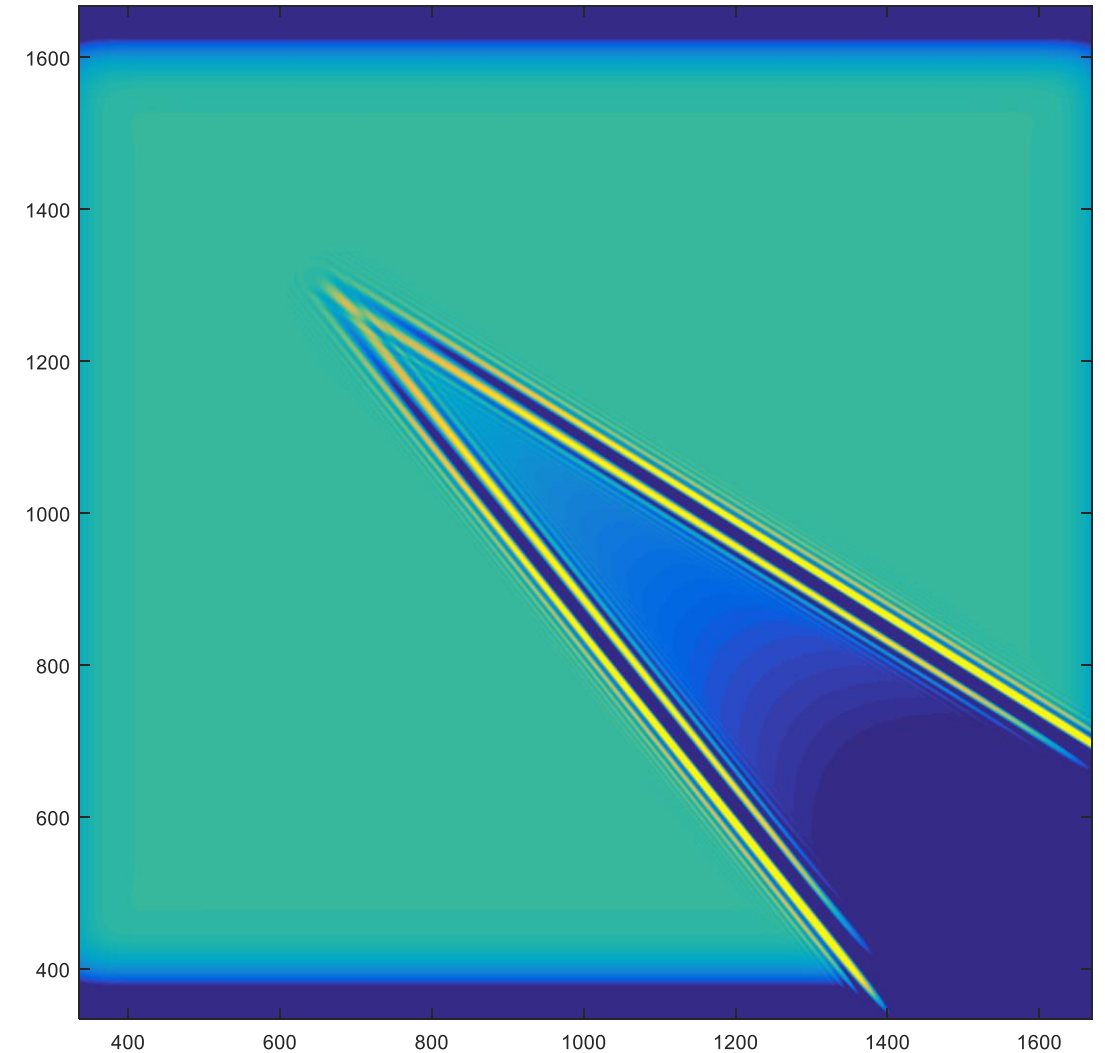


Measured and simulated images

Measurement: -3 mm

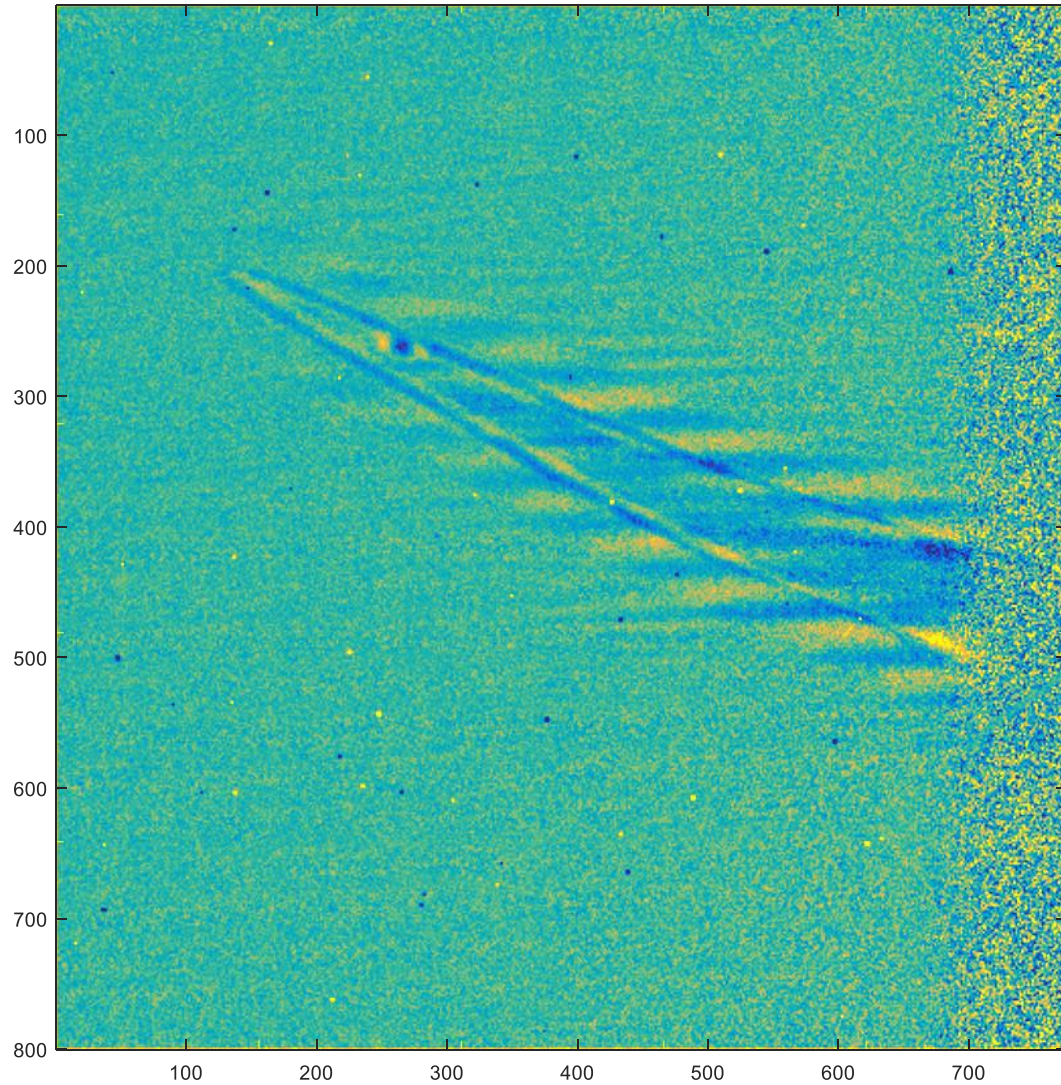


Simulation: -3 mm

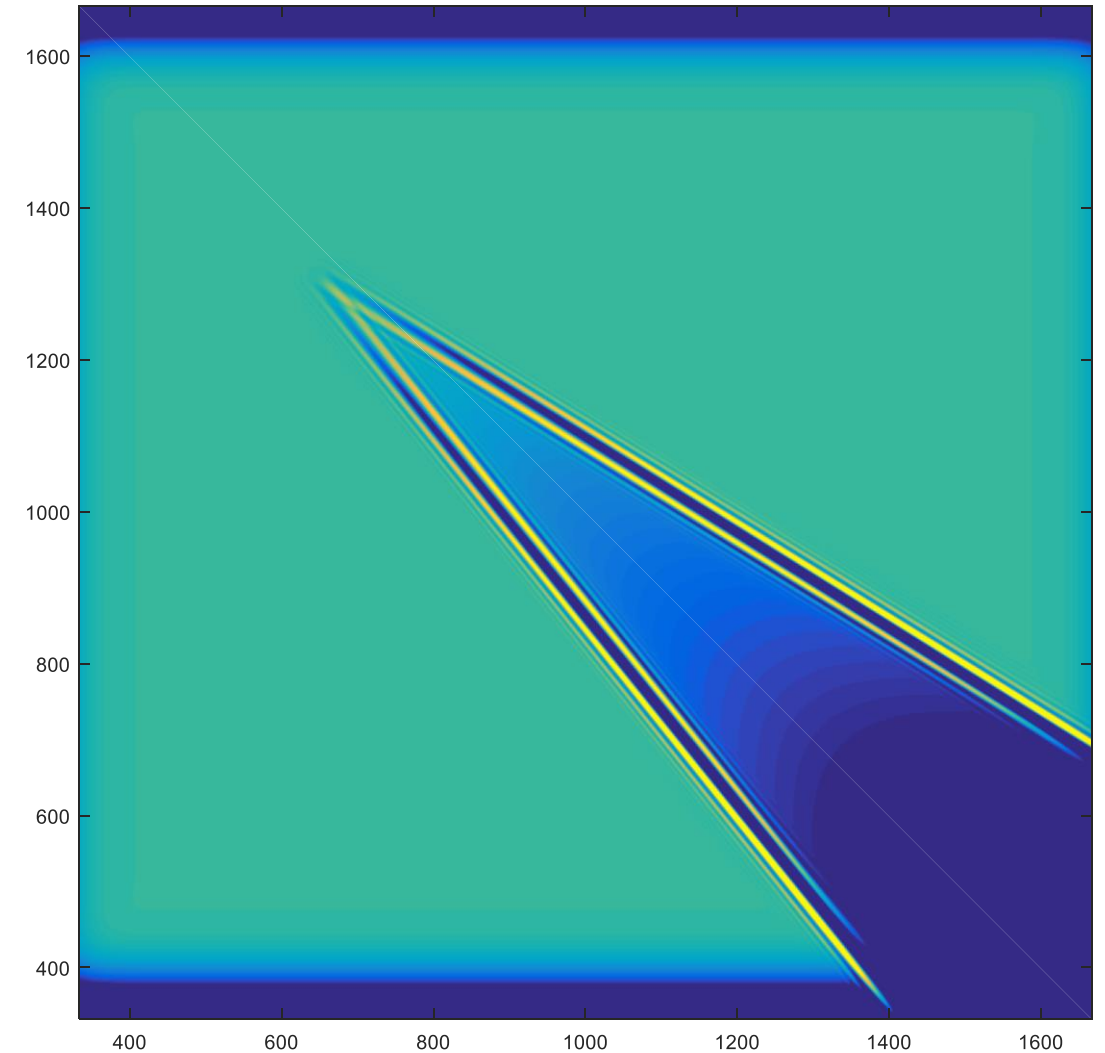


Measured and simulated images

Measurement: -2 mm

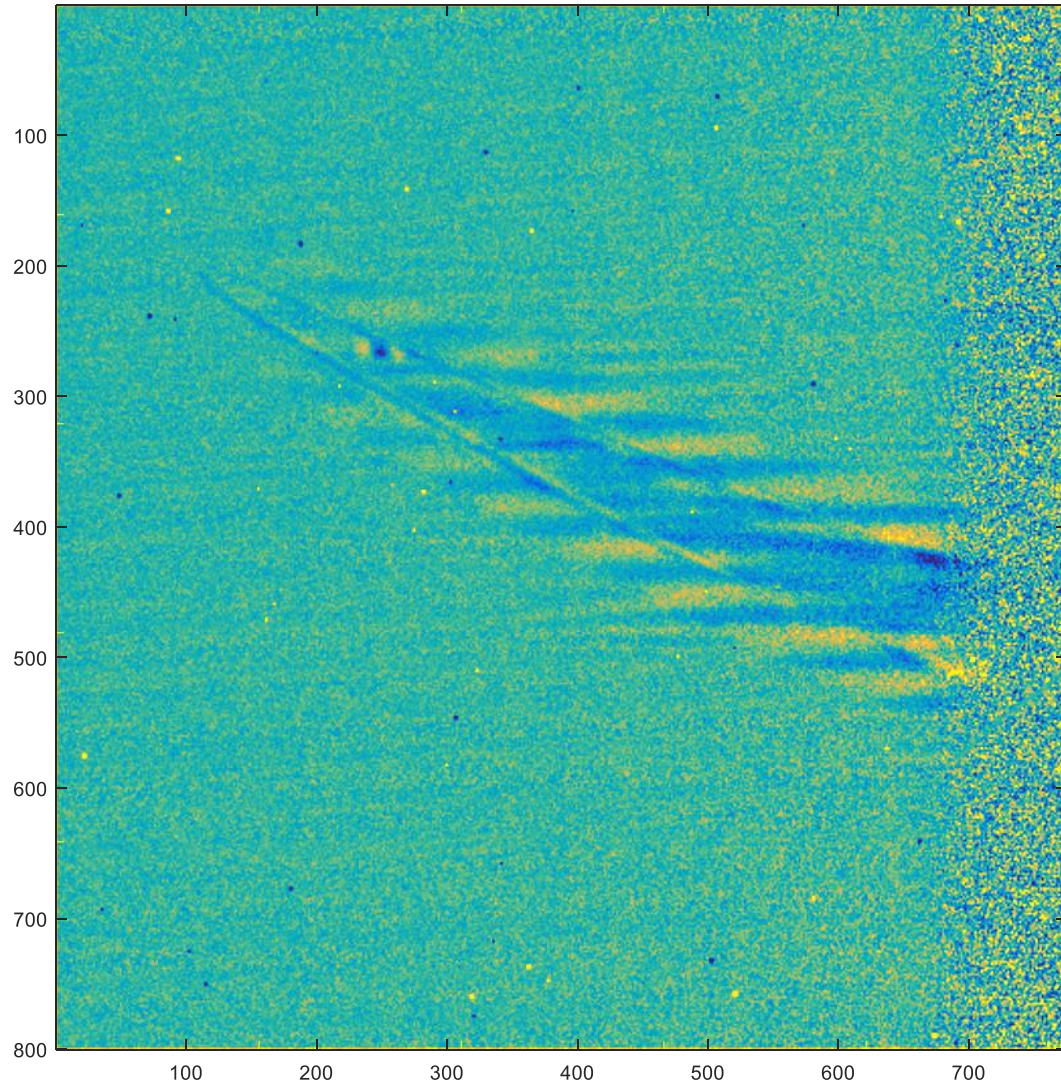


Simulation: -2 mm

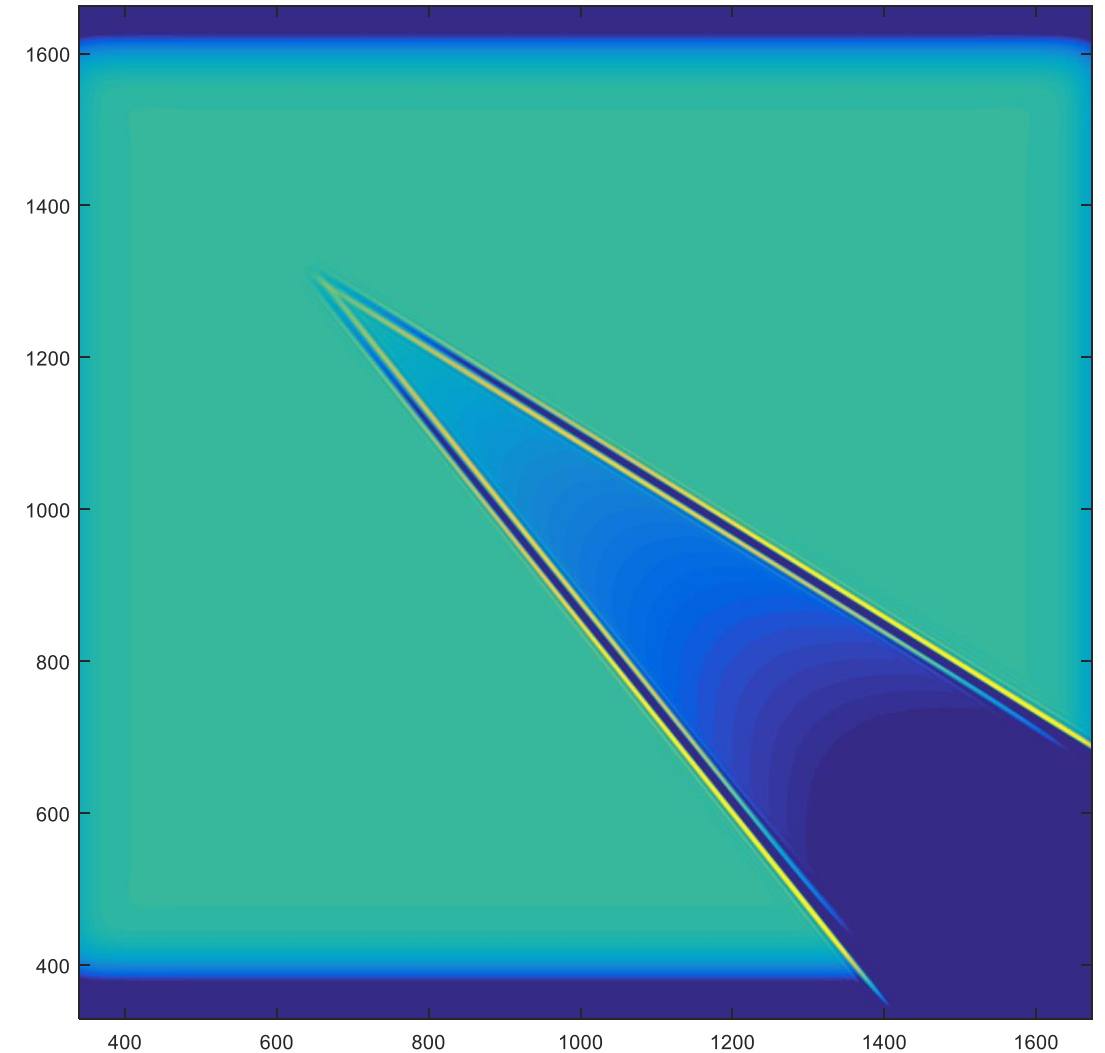


Measured and simulated images

Measurement: -1 mm

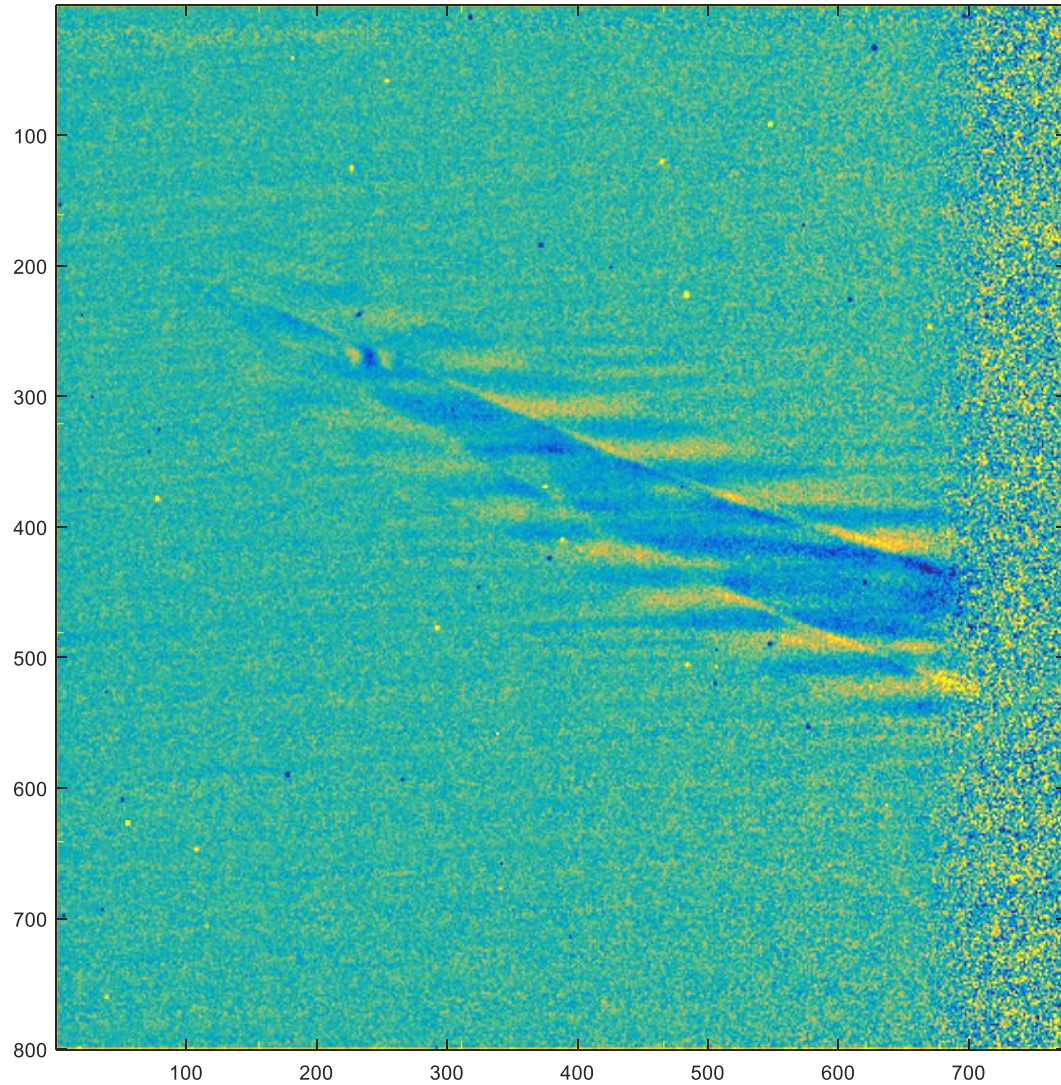


Simulation: -1 mm

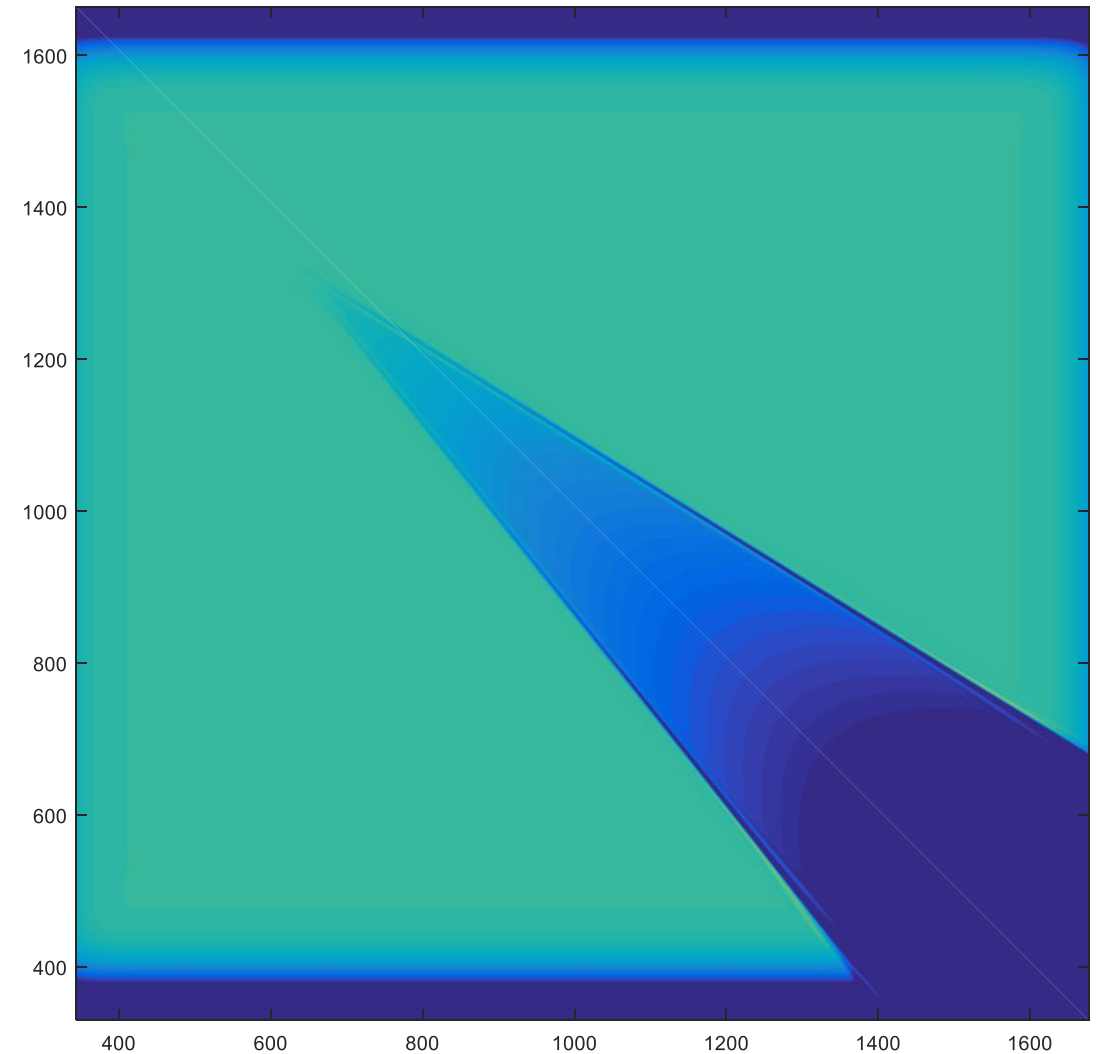


Measured and simulated images

Measurement: +0 mm

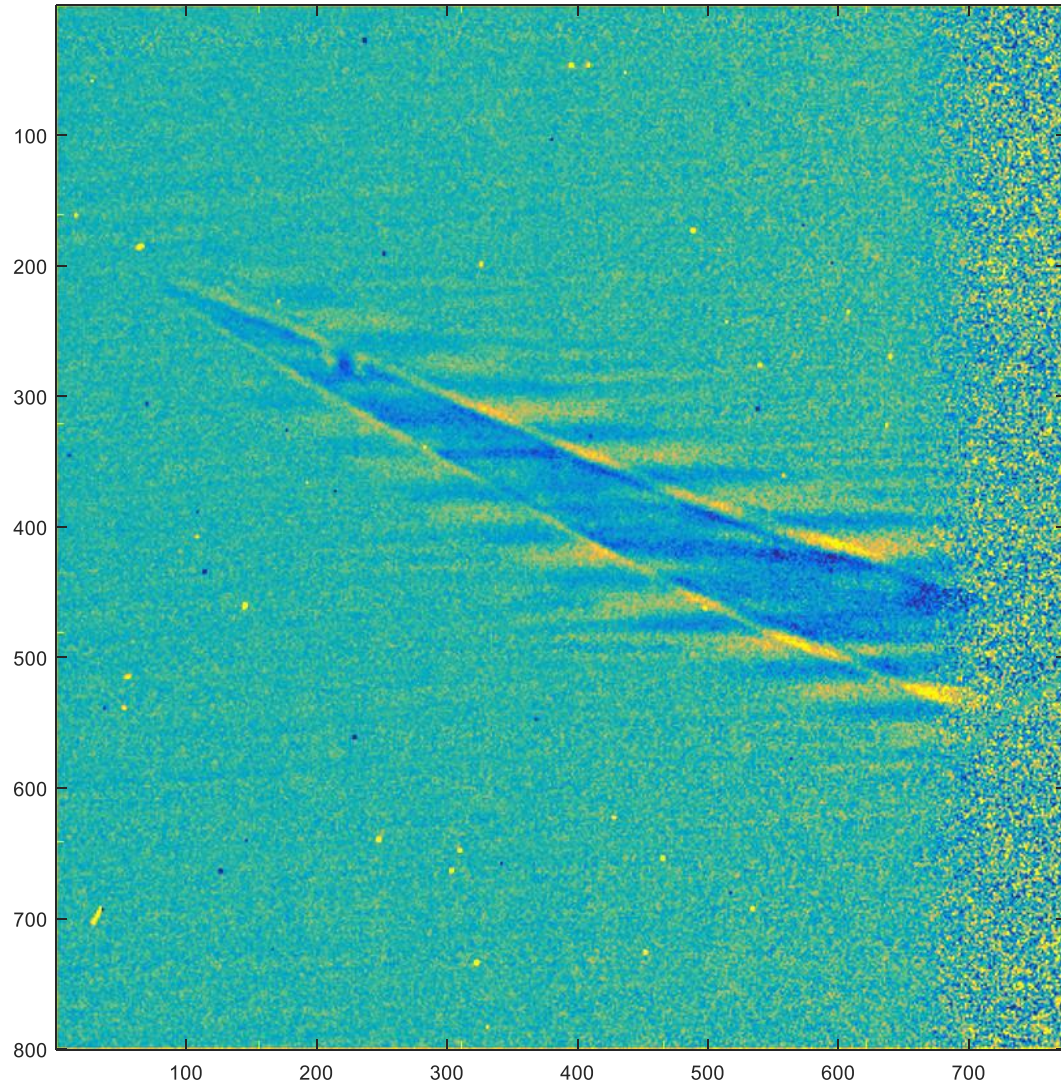


Simulation: +0 mm

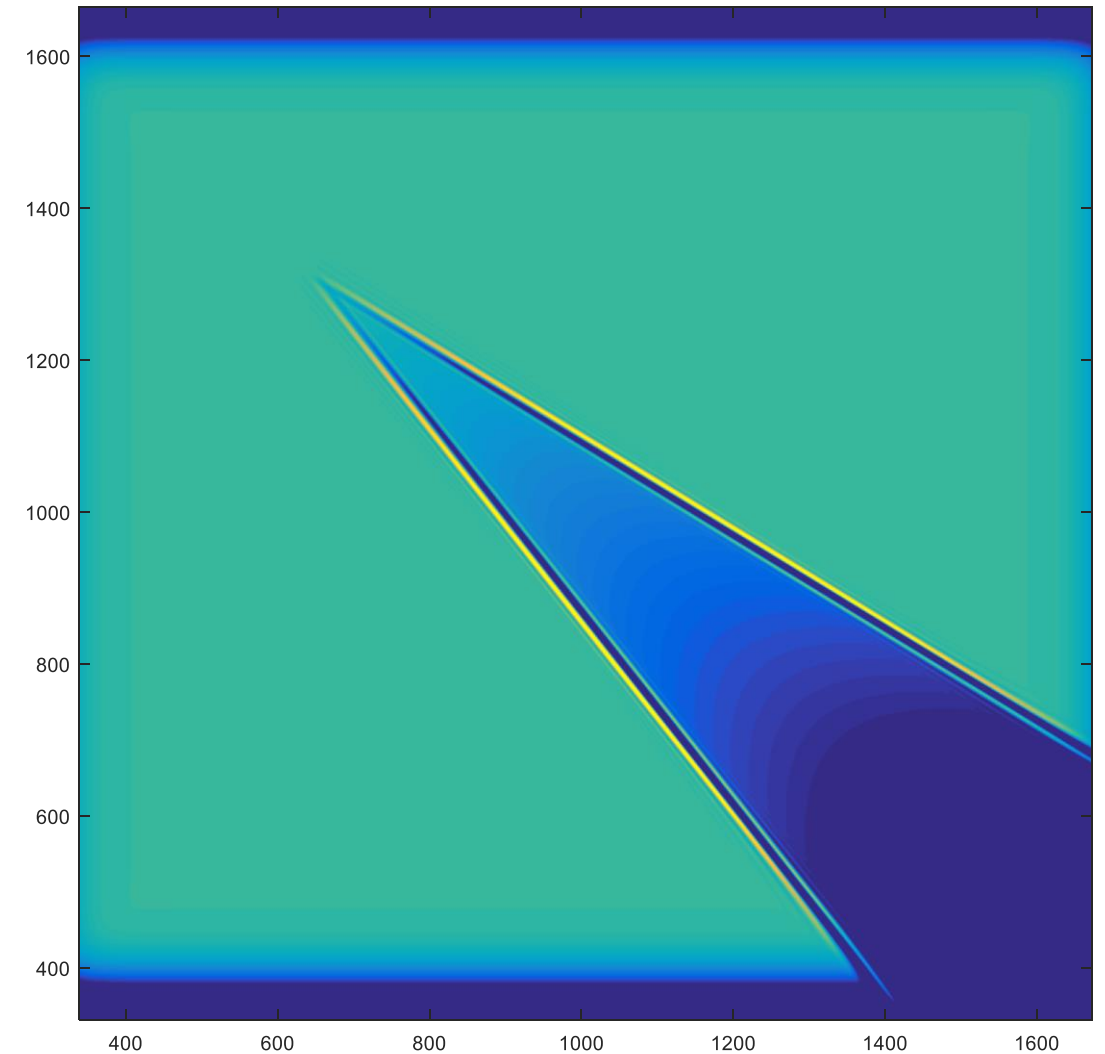


Measured and simulated images

Measurement: +1 mm

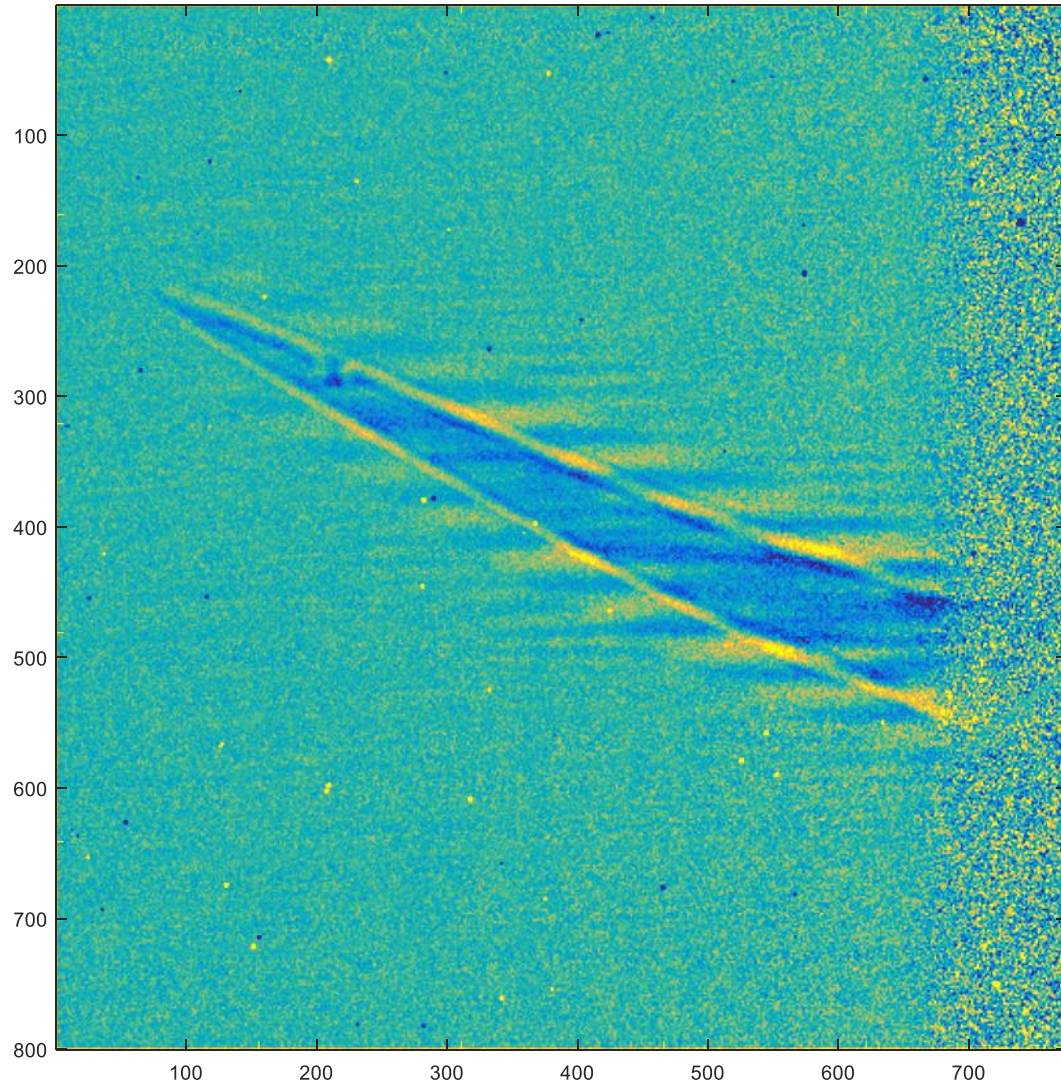


Simulation: +1 mm



Measured and simulated images

Measurement: +2 mm



Simulation: +2 mm

