Finger-Based Manipulation in Immersive Spaces and the Real World - Noise Study -

Category: Research

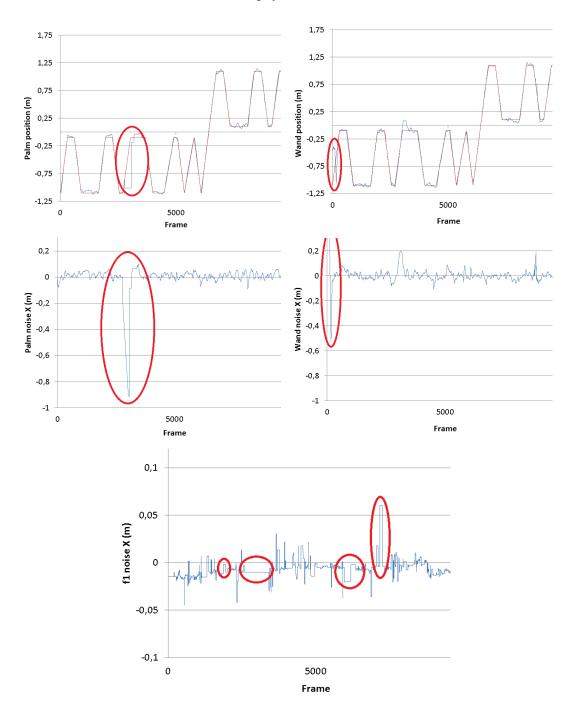


Figure 1: Noise patterns.

First row: Graphs showing the x position in meters of the guide, in blue, and the palm (left) or wand (right), in red. Second row: Difference in meters between the x position of the guide and the palm (left) or wand (right). Third row: Noise in the x position of the thumb, in meters.

In red circles are highlighted losses and jumps of the signal.

Whether the behavior seems similar for the wand and palm, one can see that hand-tracking introduces extra instabilities due to a significant noise on the position of the fingers, with orders of magnitude in centimeters. Since the user keeps her hand steady, the position of the finger should be constant, and thus directly reflects the noise on the signal.