

## Appendix K

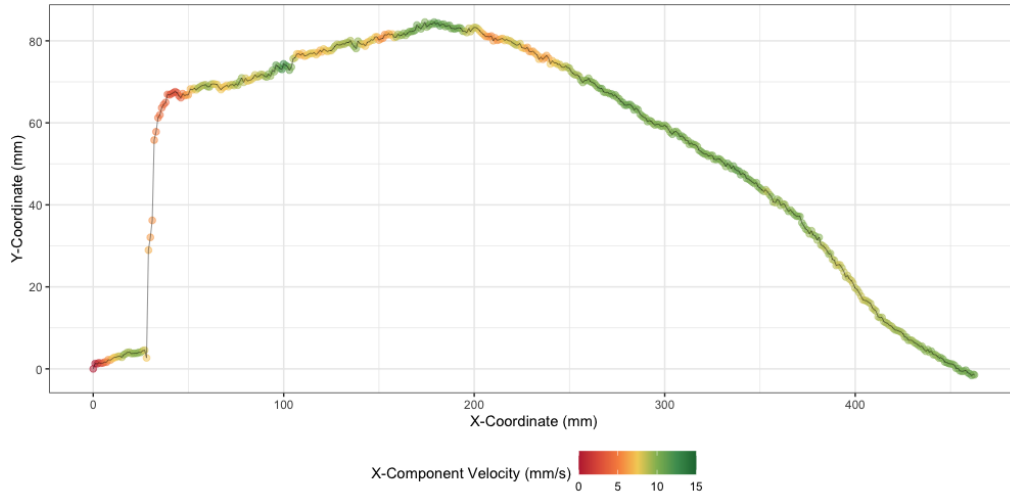


Figure K.1: Representative end effector journey through Auto 1 z-direction scan path x-y coordinates frame with instantaneous velocity at mm intervals.

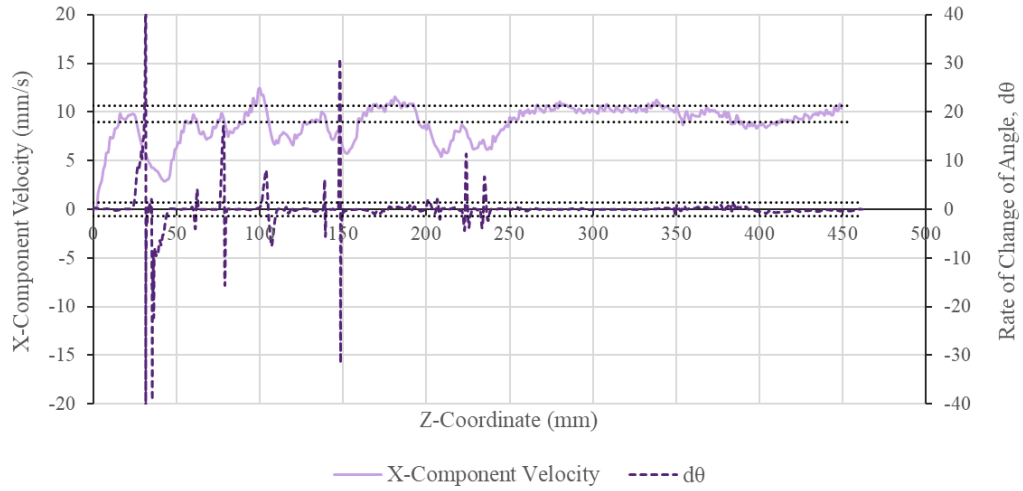


Figure K.2: Representative velocity and  $d\theta$  for a scan path along the z-axis of component Auto 1 with applied thresholds.

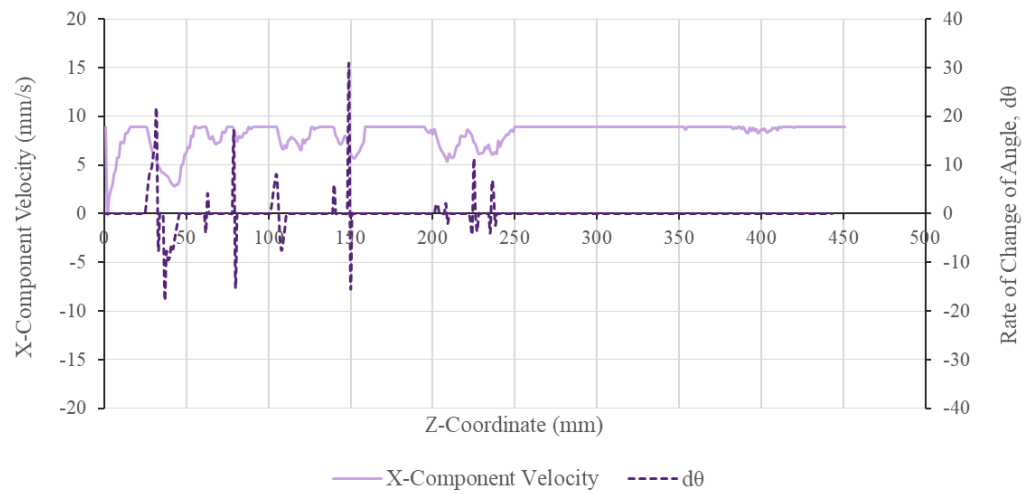


Figure K.3: Representative velocity and  $d\theta$  for a scan path along the z-axis of component Auto 1 after data processing using thresholds.

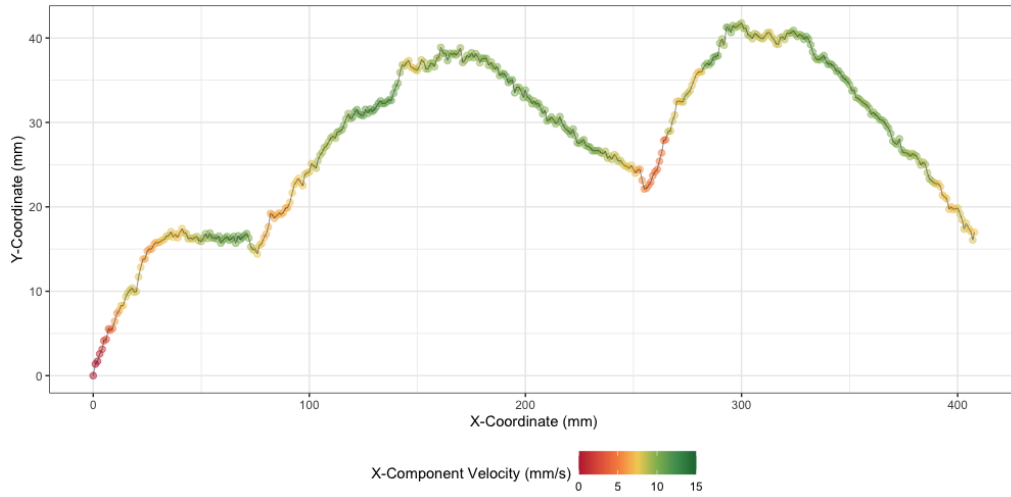


Figure K.4: Representative end effector journey through Auto 2 z-direction scan path x-y coordinates frame with instantaneous velocity at mm intervals.

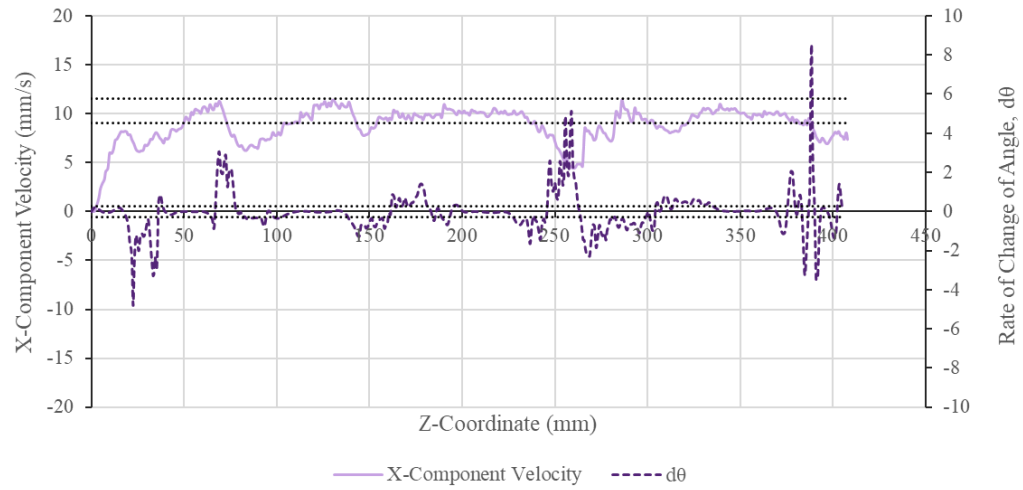


Figure K.5: Representative velocity and  $d\theta$  for a scan path along the z-axis of component Auto 2 with applied thresholds.

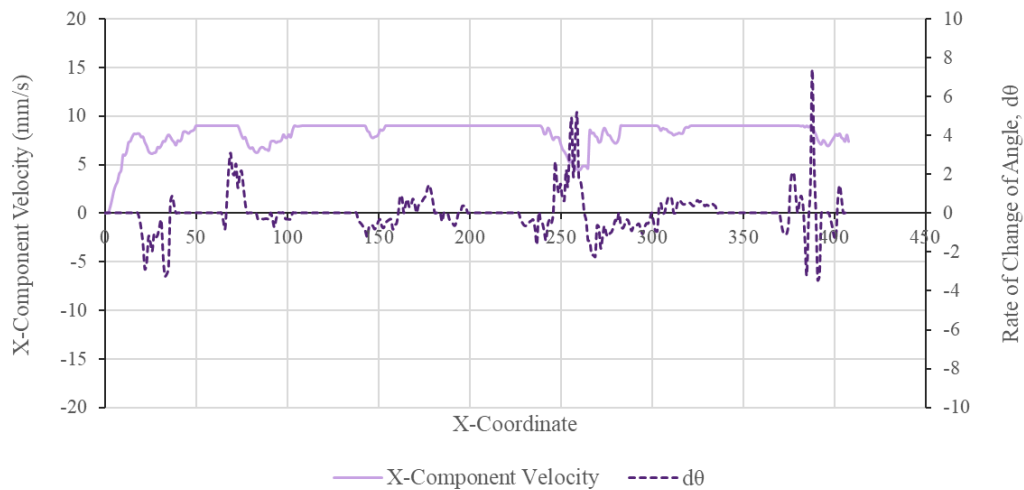


Figure K.6: Representative velocity and  $d\theta$  for a scan path along the z-axis of component Auto 2 after data processing using thresholds.