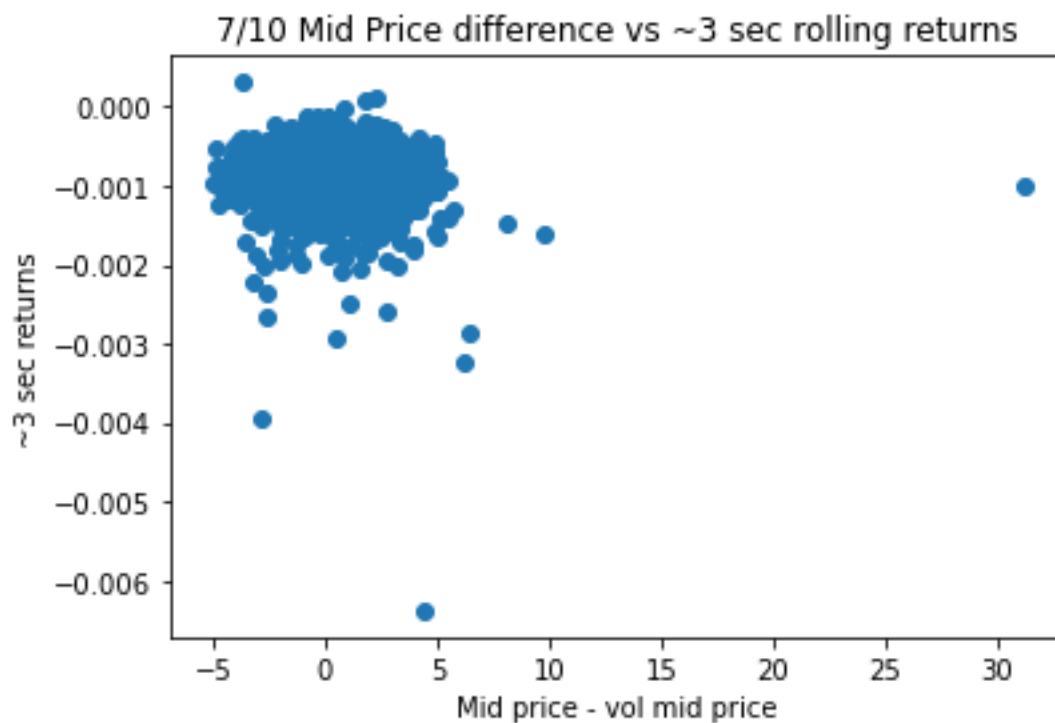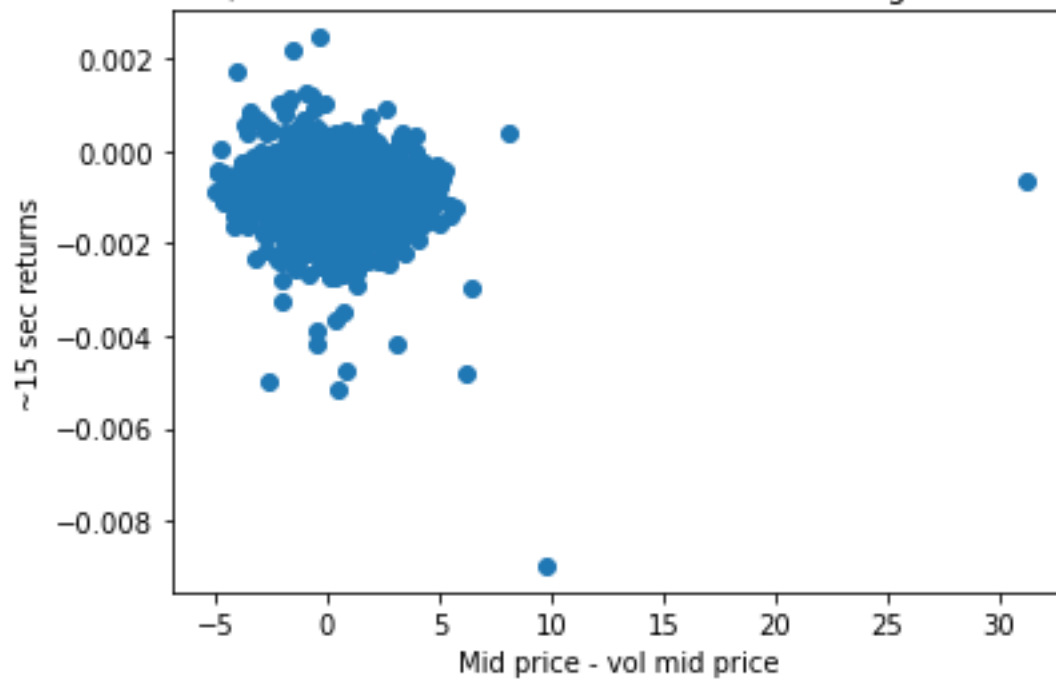X – (Mid Price – Vol Adjusted Mid Price)
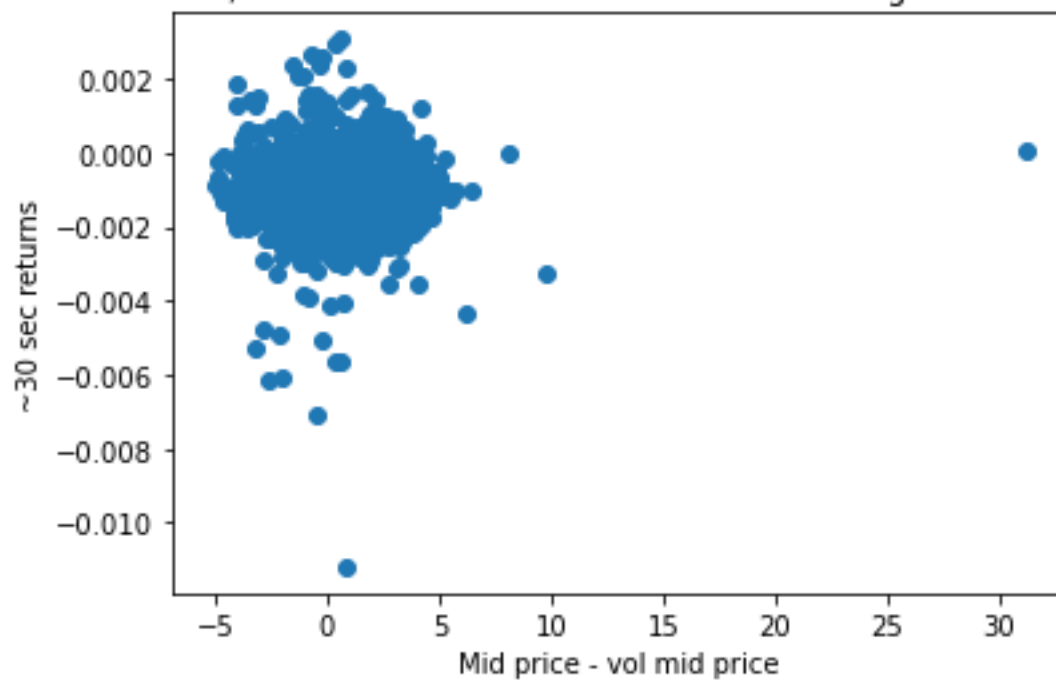
Y – Lagged Returns (at 3, 15, 30, 60 second windows)

Calculated by

1. Computing the average between the best ask/bid and the best vol adjusted bid/ask

2. Computing returns: (best bid– best ask.shift(n))/best ask

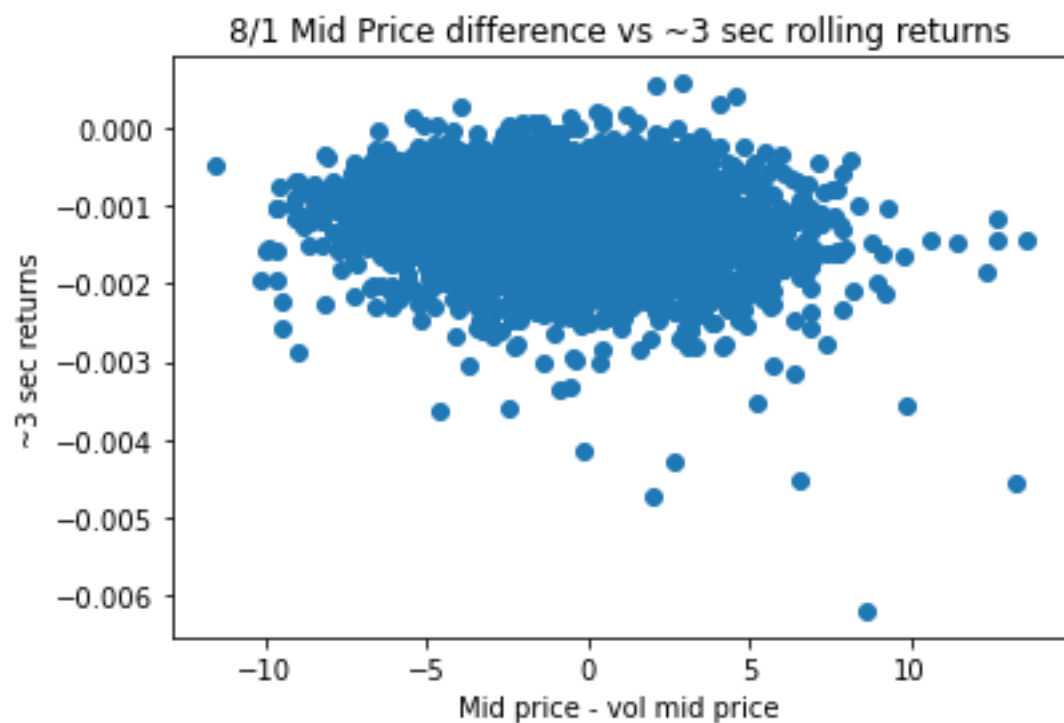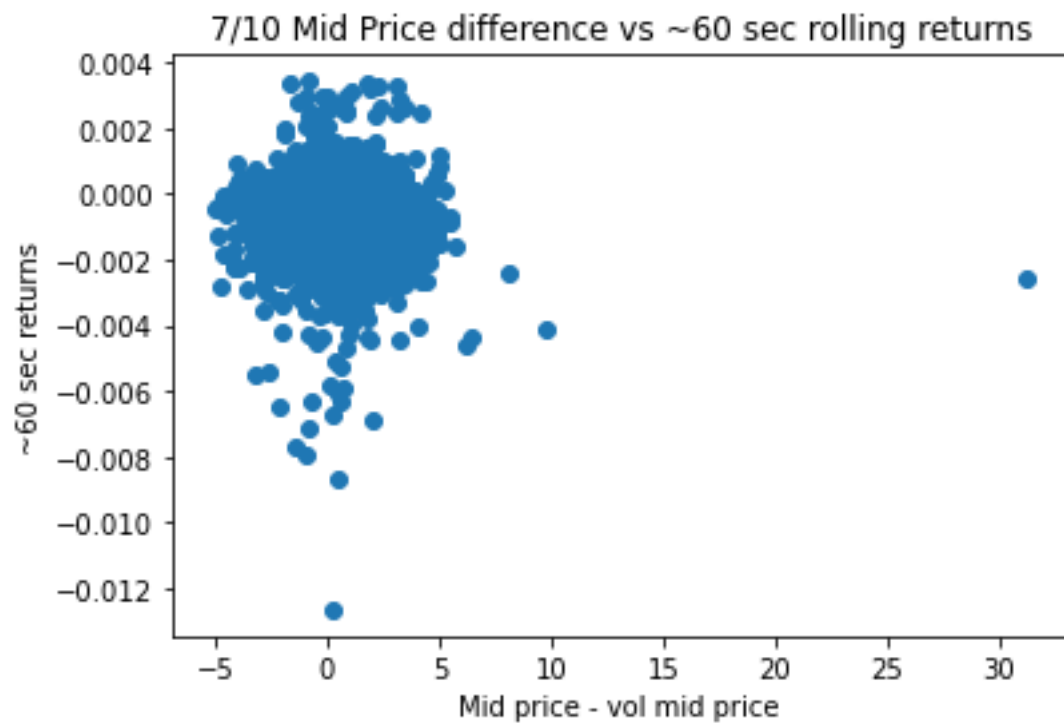7/10 Mid Price difference vs ~3 sec rolling returns

7/10 Mid Price difference vs ~15 sec rolling returns

7/10 Mid Price difference vs ~30 sec rolling returns
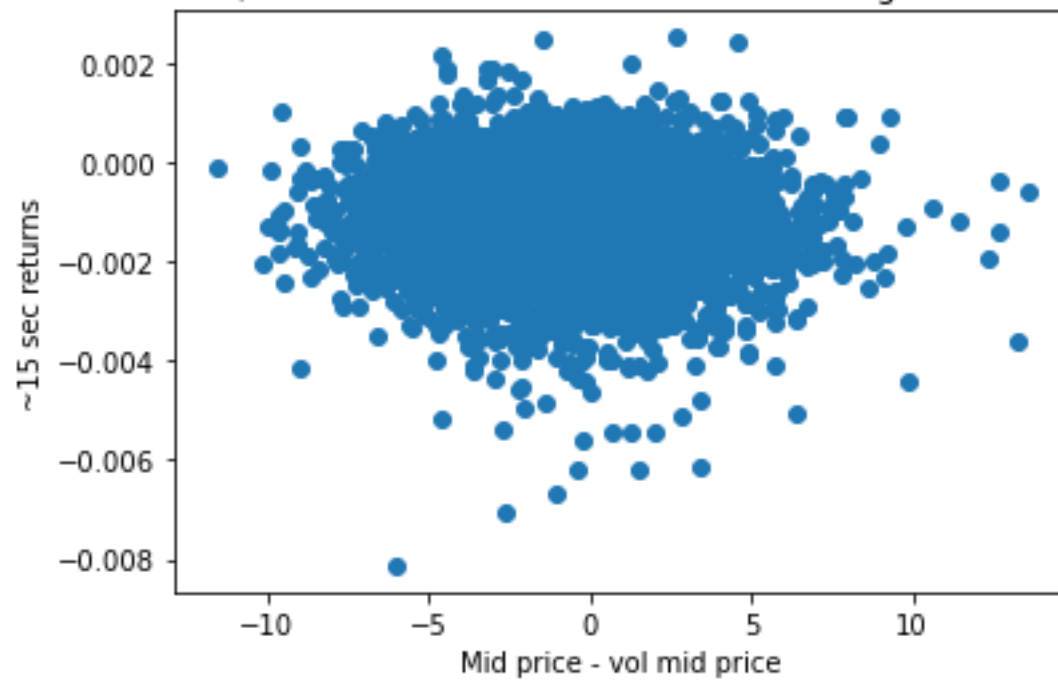
7/10 Mid Price difference vs ~60 sec rolling returns
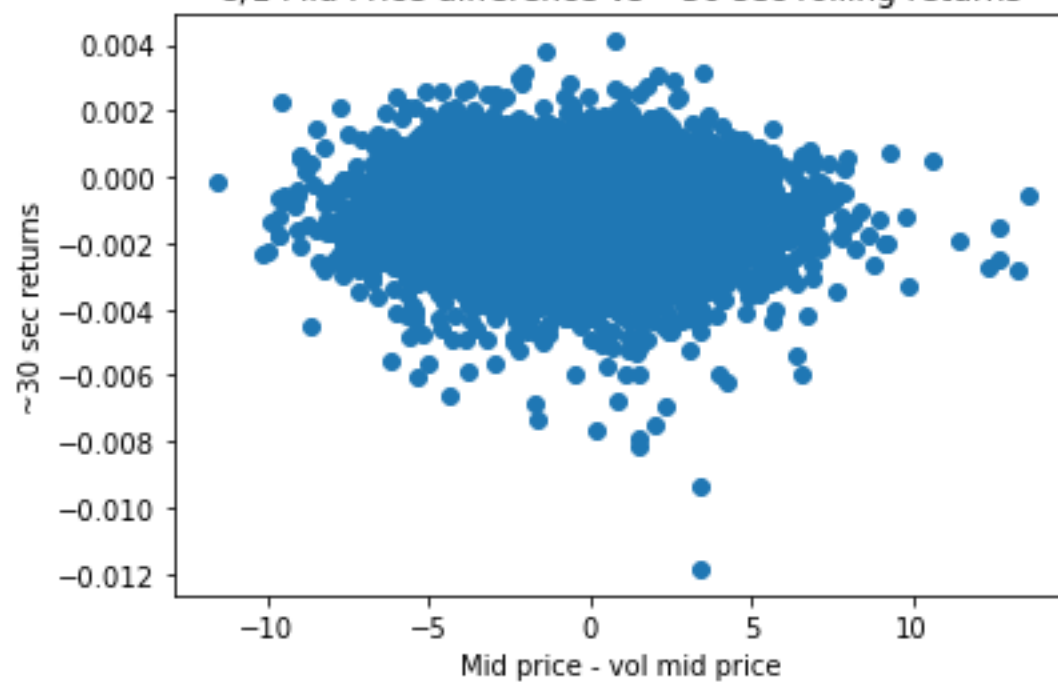
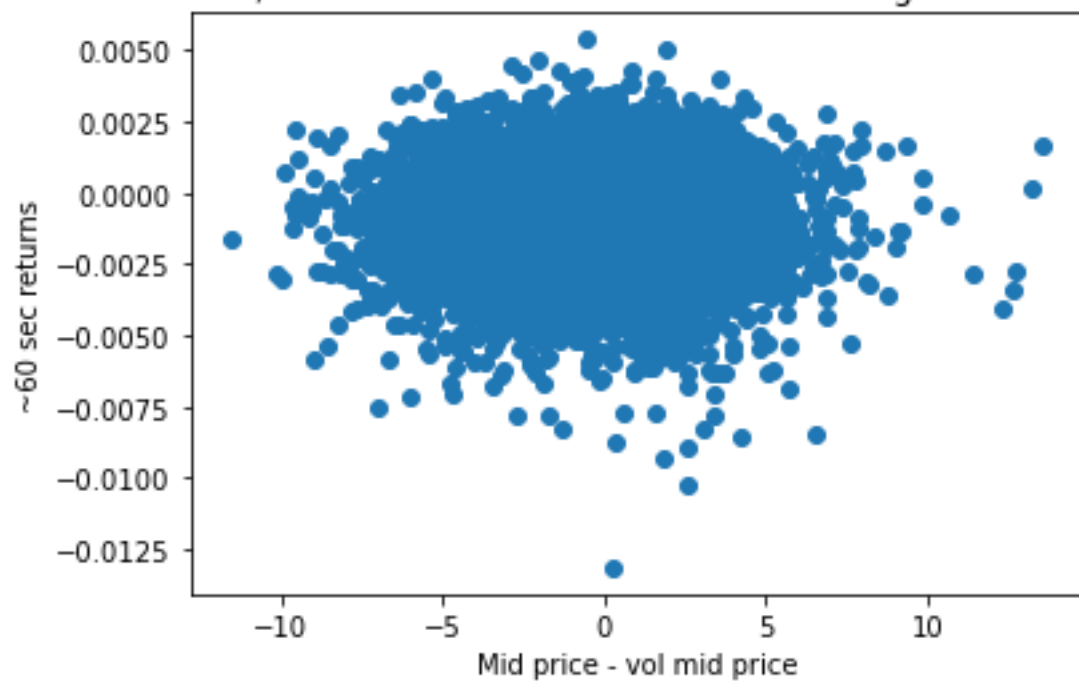8/1 Mid Price difference vs ~3 sec rolling returns

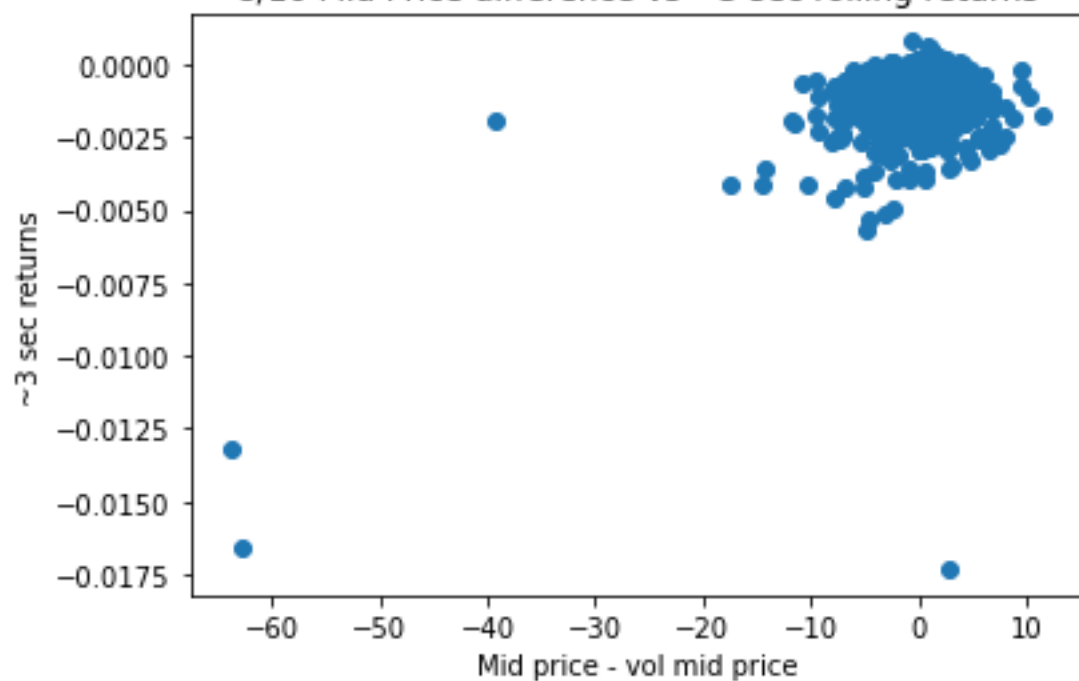8/1 Mid Price difference vs ~15 sec rolling returns

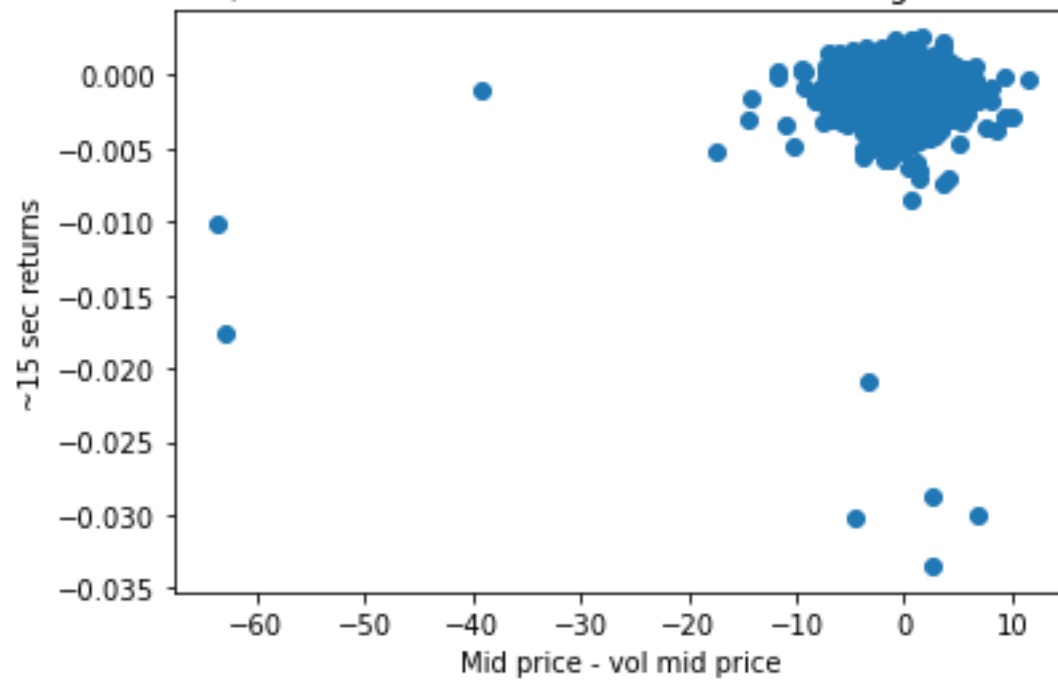8/1 Mid Price difference vs ~30 sec rolling returns

8/1 Mid Price difference vs ~60 sec rolling returns

8/10 Mid Price difference vs ~3 sec rolling returns

8/10 Mid Price difference vs ~15 sec rolling returns

8/10 Mid Price difference vs ~30 sec rolling returns