Spread Capture: Mid-price vs Weighted-mid-price In [22]: include("backtest_spread_capture.jl") plotly() Out[22]: Plots.PlotlyBackend() df, n_profit, n_loss = run_backtest("btctrades.csv", "btcbbo.csv", :mid, bid_spread = 0.1, ask_spread = 0.1, stop_loss = 1.0, order_refresh_time=30); Using MID price Start Time 2022-01-22T16:42:07.350, End Time 2022-01-23T00:28:30.230 Bid spread: 0.1, Ask spread: 0.1, Stop loss: 1.0, Order refresh time: 30 Spreads captured 41 times Failed to capture spread 8 times In [8]: plot_result(df) Out[8]: ---- mid price --- weighted mid price open bid_order 35500 ---- open stop loss open ask_order position open 35000 position closed (profit) position closed (loss) 34500 34000 df, n_profit, n_loss = run_backtest("btctrades.csv", "btcbbo.csv", :weightedmid, bid_spread = 0.1, ask_spread = 0.1, stop_loss = 1.0, order_refresh_time=30); using WEIGHTED MID price Start Time 2022-01-22T16:42:07.350, End Time 2022-01-23T00:28:30.230 Bid spread: 0.1, Ask spread: 0.1, Stop loss: 1.0, Order refresh time: 30 Spreads captured 43 times Failed to capture spread 8 times In [10]: plot_result(df) Out[10]: ---- mid price --- weighted mid price ---- open bid_order 35500 ---- open stop loss ---- open ask_order position open 35000 position closed (profit) position closed (loss) 34500 34000 F df, n_profit, n_loss = run_backtest("btctrades.csv", "btcbbo.csv", :mid, bid_spread = 0.05, ask_spread = 0.05, stop_loss = 1.0, order_refresh_time=10); Using MID price Start Time 2022-01-22T16:42:07.350, End Time 2022-01-23T00:28:30.230 Bid spread: 0.05, Ask spread: 0.05, Stop loss: 1.0, Order refresh time: 10 Spreads captured 61 times Failed to capture spread 9 times In [12]: plot_result(df) Out[12]: ---- mid price --- weighted mid price 35500 open bid_order open stop loss open ask_order position open 35000 position closed (profit) position closed (loss) 34500 34000 df, n_profit, n_loss = run_backtest("btctrades.csv", "btcbbo.csv", :weightedmid, bid_spread = 0.05, ask_spread = 0.05, stop_loss = 1.0, order_refresh_time=10); using WEIGHTED MID price Start Time 2022-01-22T16:42:07.350, End Time 2022-01-23T00:28:30.230 Bid spread: 0.05, Ask spread: 0.05, Stop loss: 1.0, Order refresh time: 10 Spreads captured 66 times Failed to capture spread 9 times In [23]: plot_result(df) Out[23]: ---- mid price 35750 --- weighted mid price 35500 open bid_order ---- open stop loss 35250 open ask_order position open 35000 position closed (profit) 34750 position closed (loss) 34500 34250