Case Study - Uniswap Simulation

Bot Configure

Bot initial config: {:trigger_position=>10000, :trigger_price=>0.0005, :trigger_time_buffer=>14400, :adj_position_ratio=>1}

trigger_position: 10000

10000

trigger_price: 0.0005

0.0005

trigger_time_buffer: 14400

14400

adj_position_ratio: 1

1

Single Simulation [start simulation frontend] [start simulation backend]

Multiple Simulation [add to simulation queue] [run simulation queue]

Liquidity

Lower Price: 0.00294996074650275

-20

Upper Price: 0.004424941119754125

20

[Price Range to 90% – 110%]
[Price Range to 80% – 120%]
[Price Range to 70% – 130%]

Price in Range (2021–05–26 12:52:21 to 2021–06–02 01:05:59): 100 %

PERP : 0

0

ETH : 0

0

[add liquidity]

Liquidity Pool

User Liquidity Rate: 0.07790903934316536
[clean liquidity]

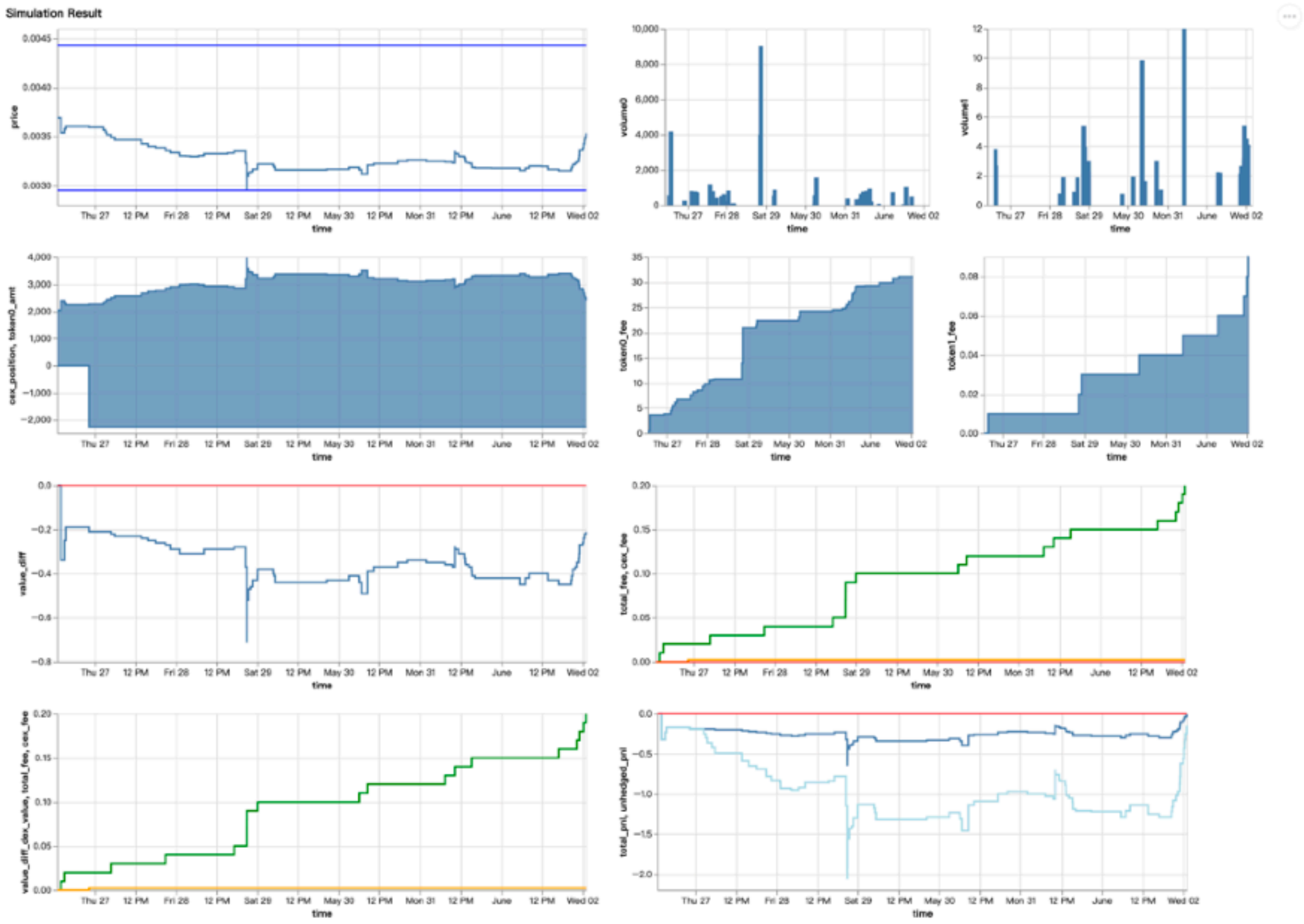
id	price_a	price_b	PERP	ETH	PERP_fee	ETH_fee
0	0.0025812156531899062	0.004793686213066969	2041.1808	10	31095741313465960000	88738724487178690
id	price_a	price_b	PERP	ETH	PERP_fee	ETH_fee

Uniswap Simulation

Simulation Result

Config
token: PERP / ETH = 0.0036874509331284375 (Rate: 0.01)
sim_begin_time: 2021-05-26 12:52:21
sim_end_time: 2021-06-02 01:05:59
bot_config {"trigger_position"=>10000, "trigger_price"=>0.0005, "trigger_time_buffer"=>14400, "adj_position_ratio"=>1}
pool_table: {"price_a"=>0.0025812156531899062, "price_b"=>0.004793686213066969, "l"=>1.008194663290836e+21}

Result
{"total_pnl"=>-0.01, "unhedged_pnl"=>-0.15, "dex_fee"=>0.2, "cex_fee"=>0.0024, "value_diff"=>-0.21}



[download]

time	price	token0_amt	token1_amt	token0_fee	token1_fee	total_fee	dex_value	ddex_value	cex_position	cex_value	value_diff	dprice_percent	value_diff_dex_value_pe
2021-05-26 12:52:21	0.00368745	2041.18	10	0.42	0	0	17.53	0	0	0	0	0	0
2021-05-26 14:01:35	0.00353756	2389.27	8.74	3.67	0	0.01	17.19	-0.34	0	0	-0.34	-4.06	-1.91
2021-05-26 15:02:49	0.0035749	2300.52	9.06	3.67	0	0.02	17.28	-0.25	0	0	-0.25	1.06	-1.41