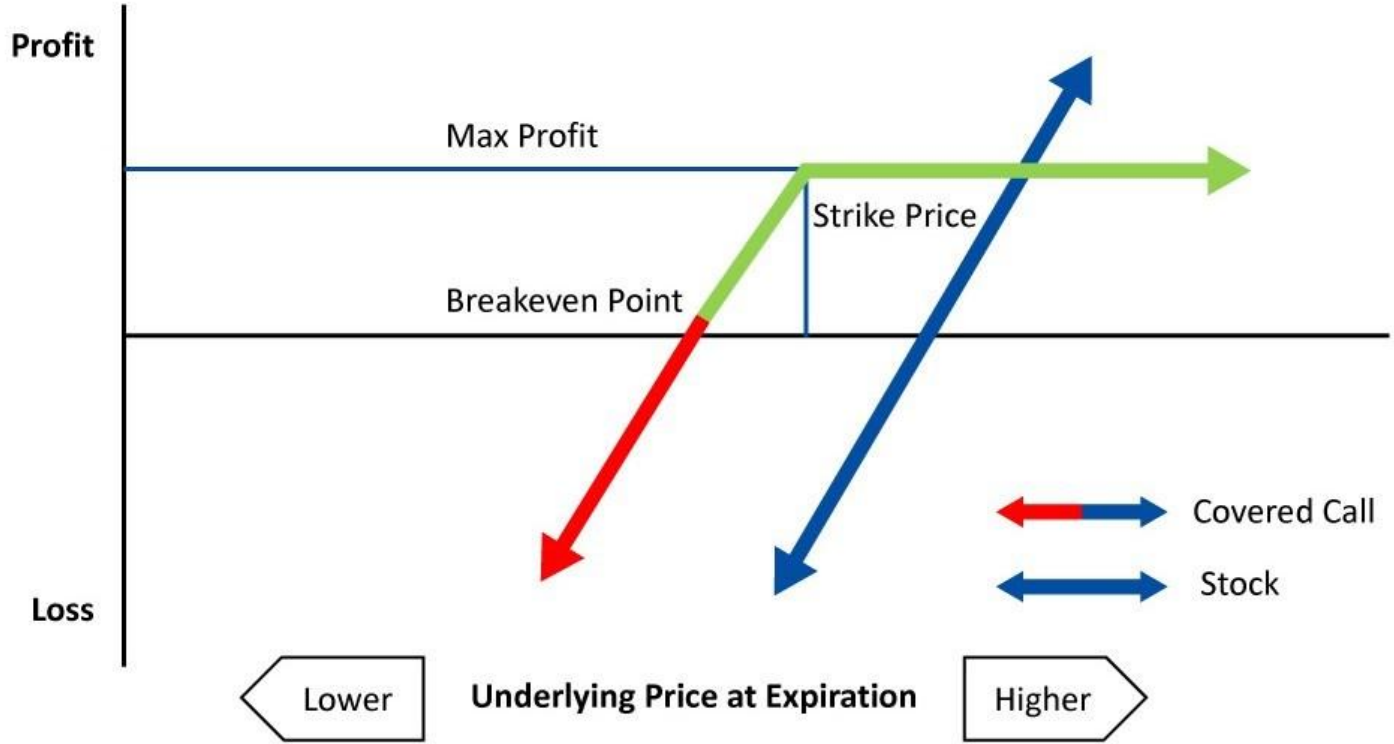
High yield
Structured product

Covered call payoff



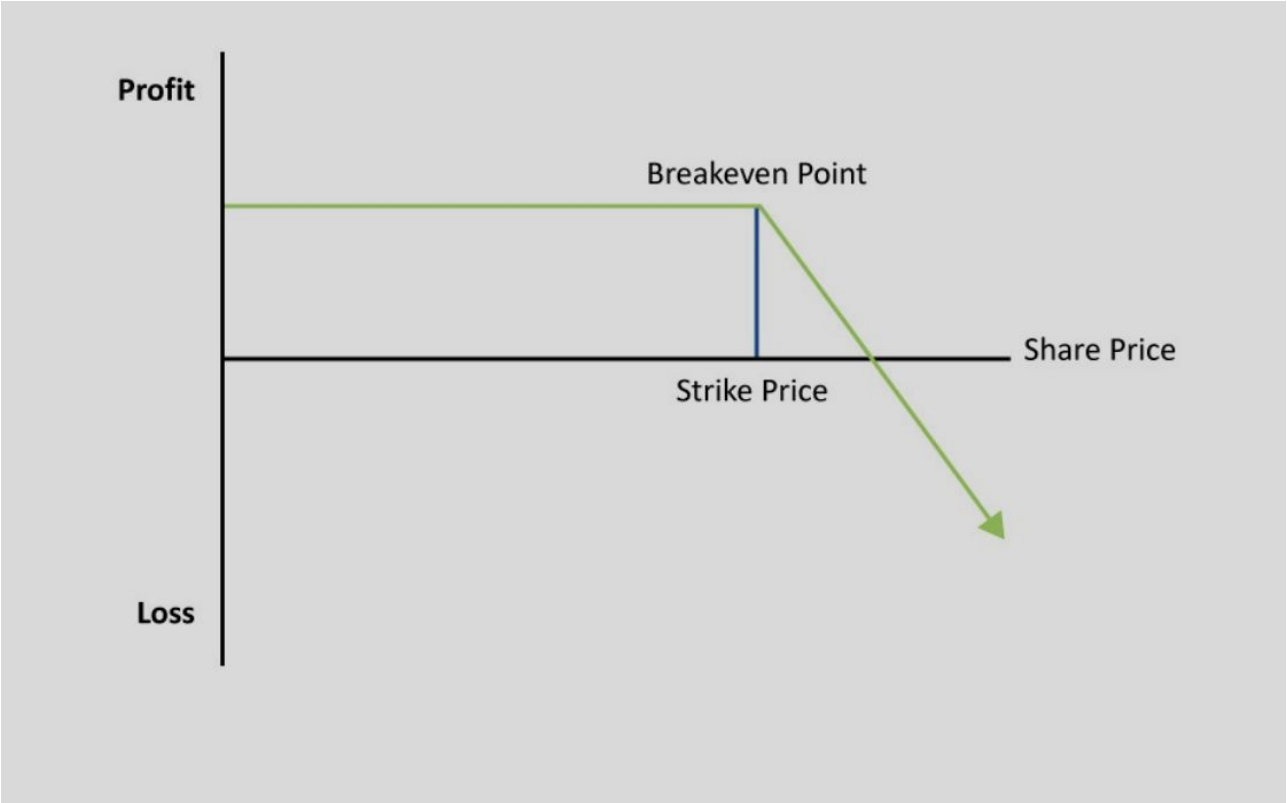
Two obvious strategies

- Low frequency one : triggered by a liquidity need and the will not to sell your BTCs : you sell covered calls in the money with a long duration (> 6months) and you get an immediate huge premium (around 50% of notional) but you have sold the upside of your BTCs, but at least you keep them if the price is under K at expiry

  => high yield structured products

- Middle frequency one : you roll call options on a weekly basis with a strike very unlikely to be hit (cumulated with a stop loss) and you compound the premium.

Put selling

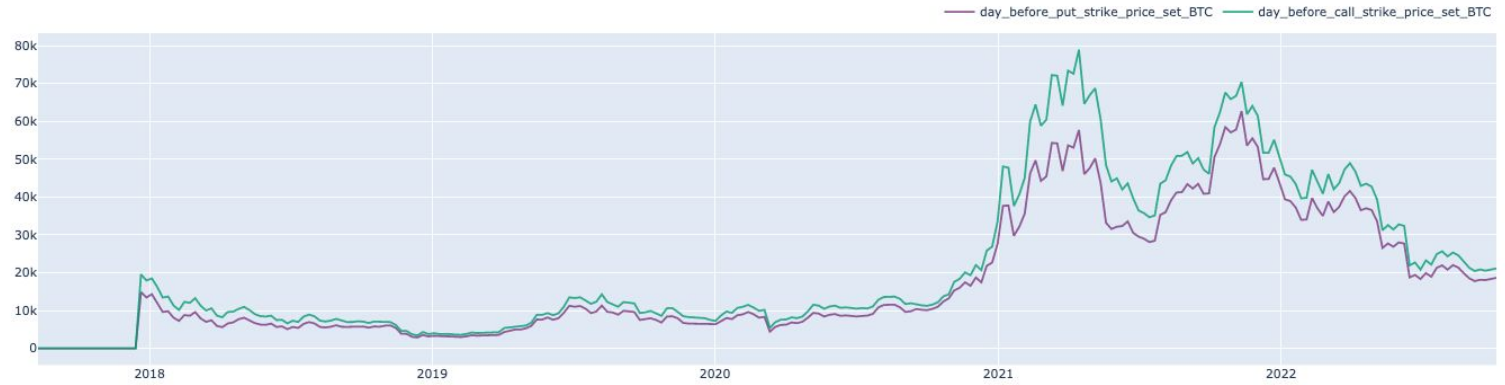


Mix covered call/put selling (strategy combo ½-½)

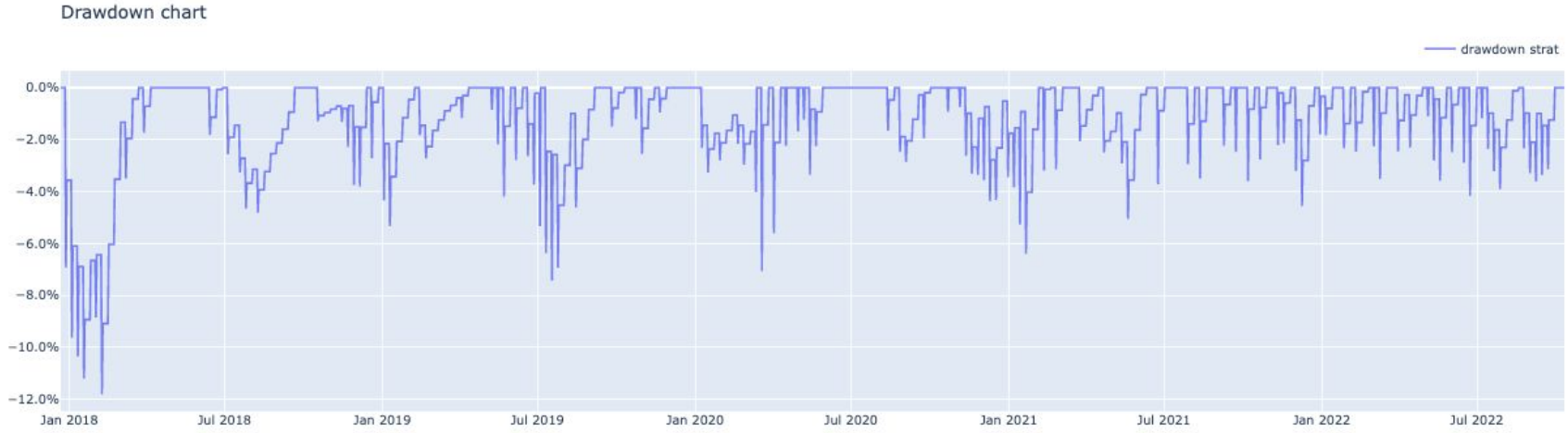
we roll call options on a weekly basis with a tailored strike (cumulated with a stop loss) and compound the premium.

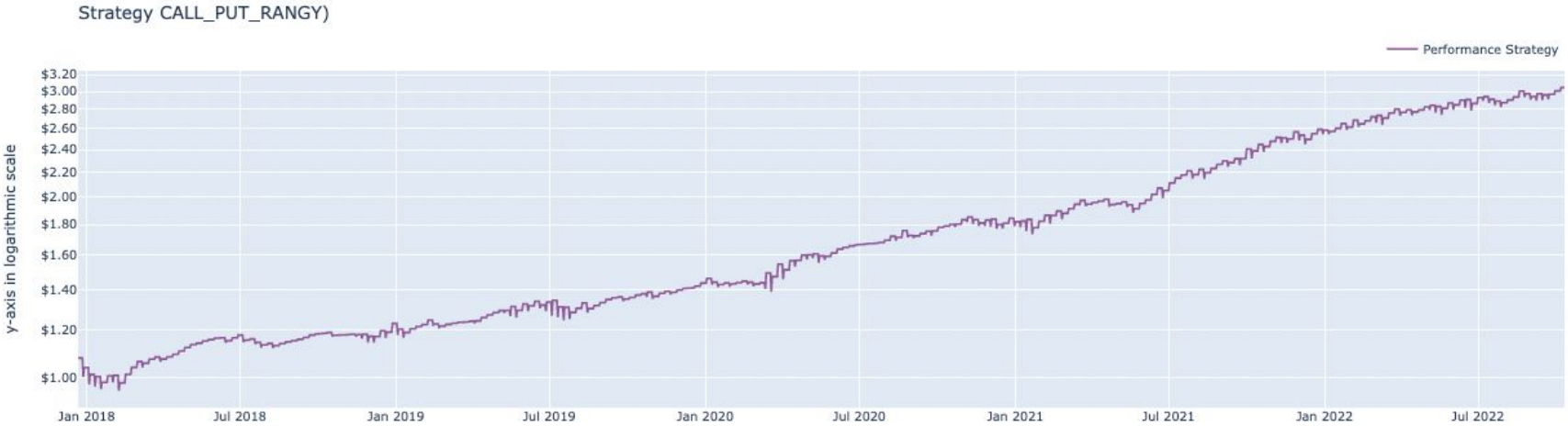
We use a stop loss and epic phase detector to lessen our losses. A very conservative approach of 50% slippage is chosen to compute the premium when the stop loss is hit.

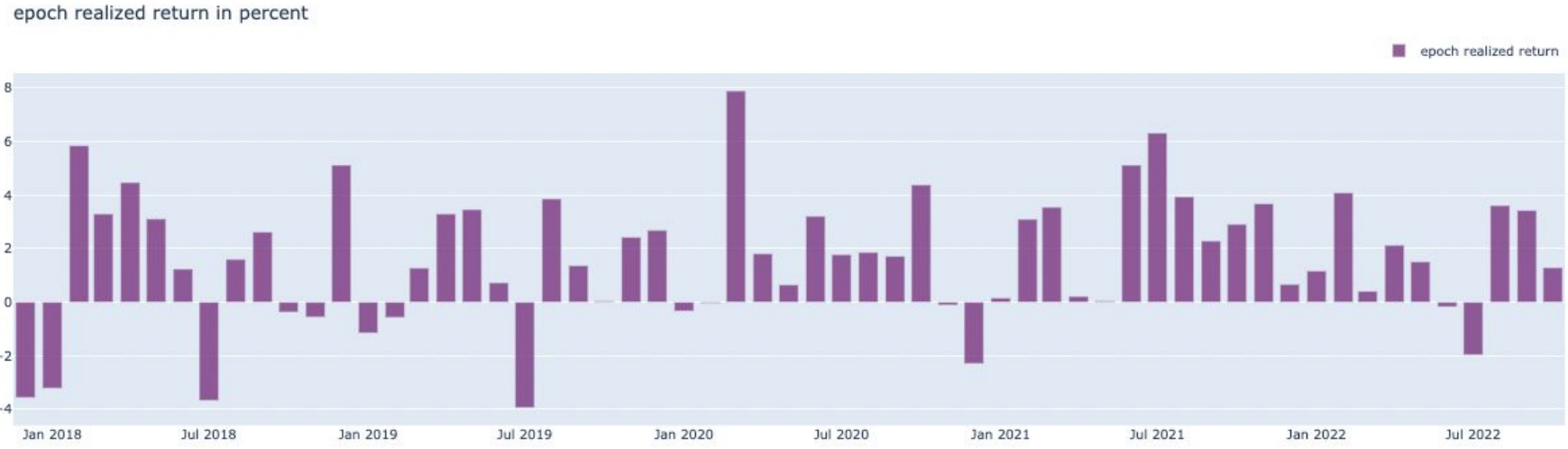
call/put strike price BTC

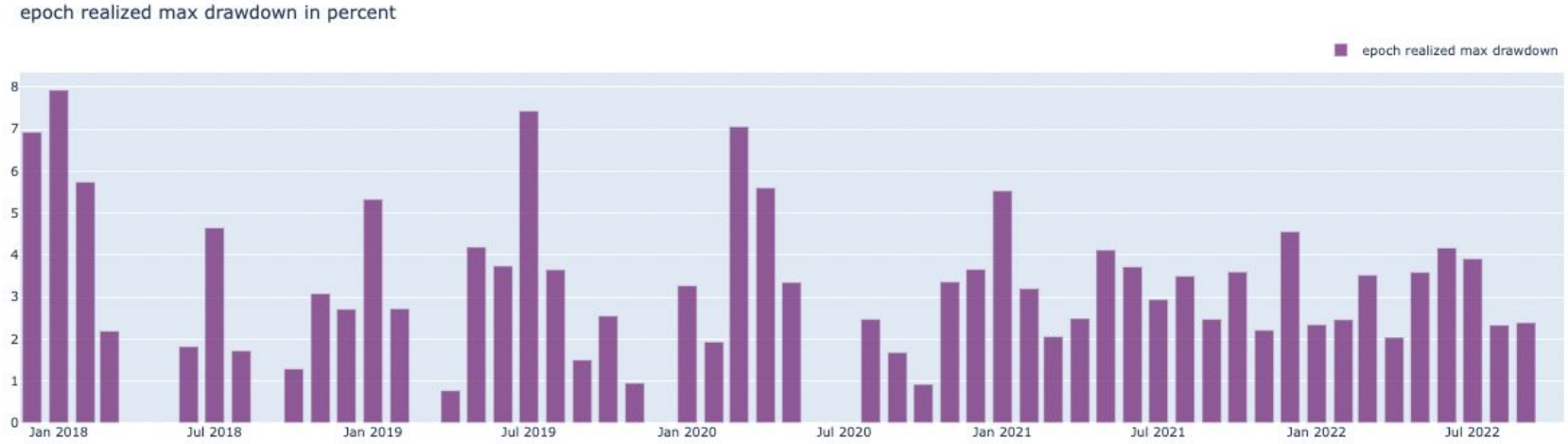


smart strike price from the spot in %

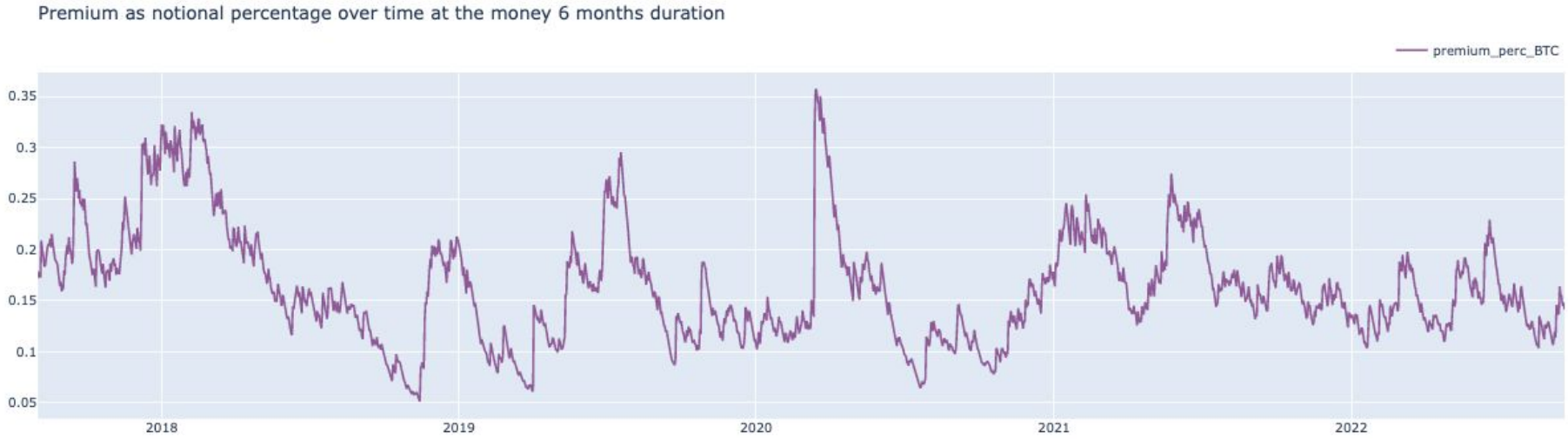

Drawdown chart
drawdown strat
0.0%
−2.0%
−4.0%
−6.0%
−8.0%
−10.0%
−12.0%
Jan 2018
Jul 2018
Jan 2019
Jul 2019
Jan 2020
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022


Strategy CALL_PUT_RANGY)
Performance Strategy
y-axis in logarithmic scale
$3.20
$3.00
$2.80
$2.60
$2.40
$2.20
$2.00
$1.80
$1.60
$1.40
$1.20
$1.00
Jan 2018
Jul 2018
Jan 2019
Jul 2019
Jan 2020
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022

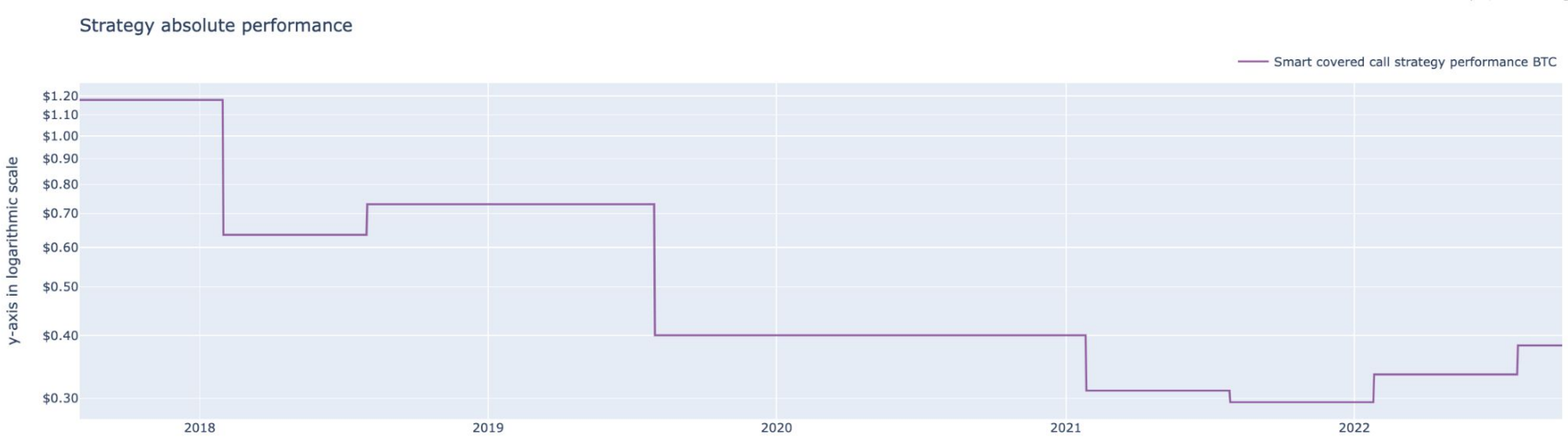

epoch realized return in percent
epoch realized return
8
6
4
2
0
−2
−4
Jan 2018
Jul 2018
Jan 2019
Jul 2019
Jan 2020
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022


epoch realized max drawdown in percent
epoch realized max drawdown
8
7
6
5
4
3
2
1
0
Jan 2018
Jul 2018
Jan 2019
Jul 2019
Jan 2020
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022

Structured Products/low frequency :
huge time to maturity : big premium



Systematic rolling covered call at the money 6 months: losing money



Making sure you earn at least R =15% on your BTC

- Compute the maturity T such that premium P(S0, T) in the money (strike S0) is such S0+P(S0,T) = S0*(1+R)

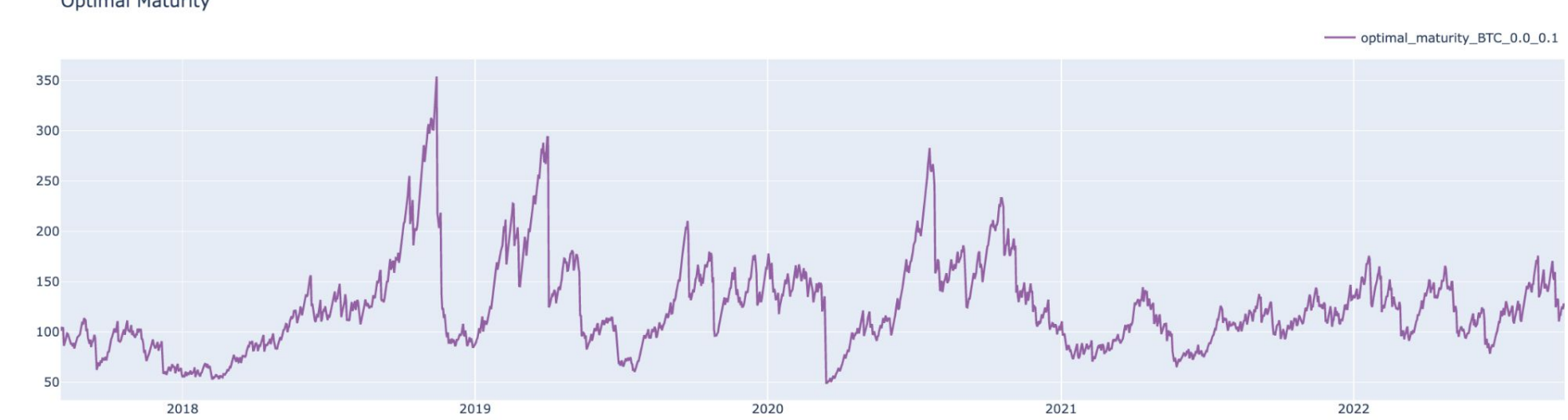
  => sell the call option at Toptim : you guarantee the yield but you cap your gain at S0

- We can adjust the strike price to allow a bullishness flavour : S1 = S0*(1+B), B being the bullishness flavour.

  => Compute the maturity T such that premium P(S1, T) slightly above the money (strike S1) is such S0+P(S1,T) = S0*(1+R)

Making sure you earn at least R% on your BTC (upside totally capped B=0)

Optimal Maturity



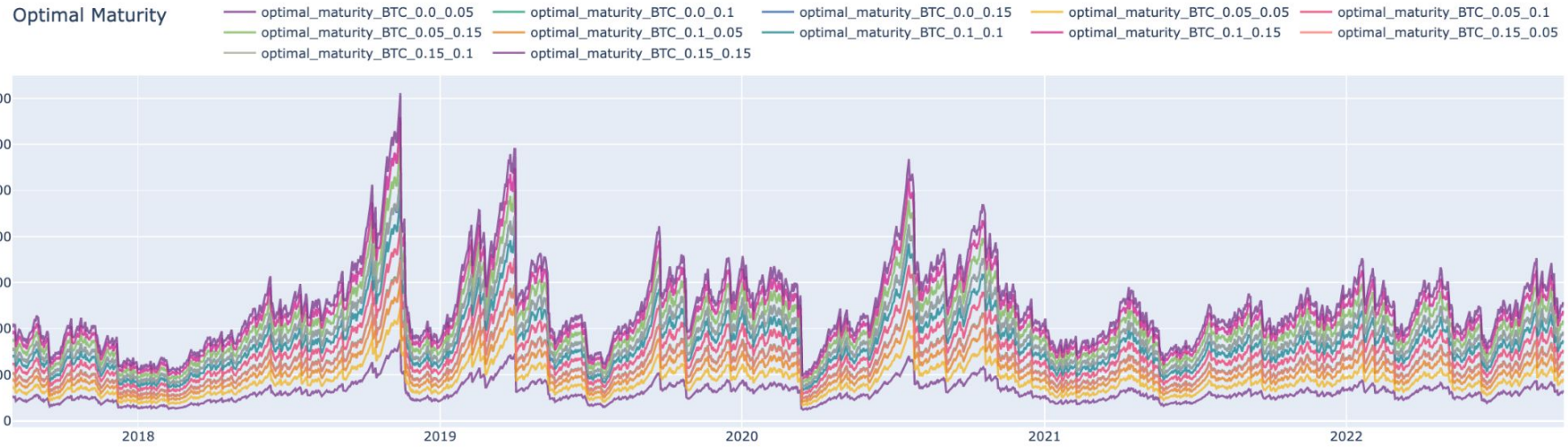
Optimal Maturity

Making sure you earn at least R% on your BTC (upside capped at B=5%)


Optimal Maturity
optimal_maturity_BTC_0.05_0.1
400
350
300
250
200
150
100
50
2018
2019
2020
2021
2022


Optimal Maturity
optimal_maturity_BTC_0.05_0.15
600
500
400
300
200
100
2018
2019
2020
2021
2022

Optimal maturity



Strategy

- Same study must be done but with market call prices for a more accurate backtest