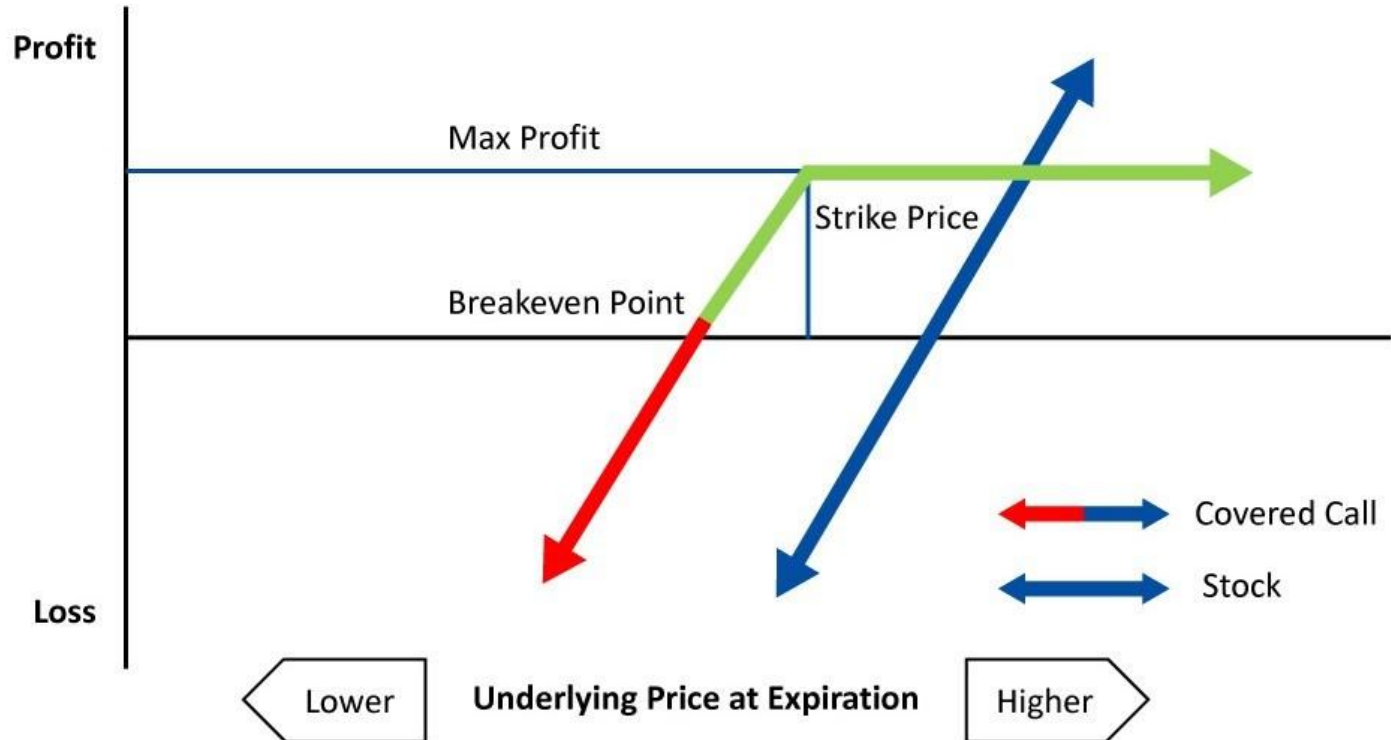
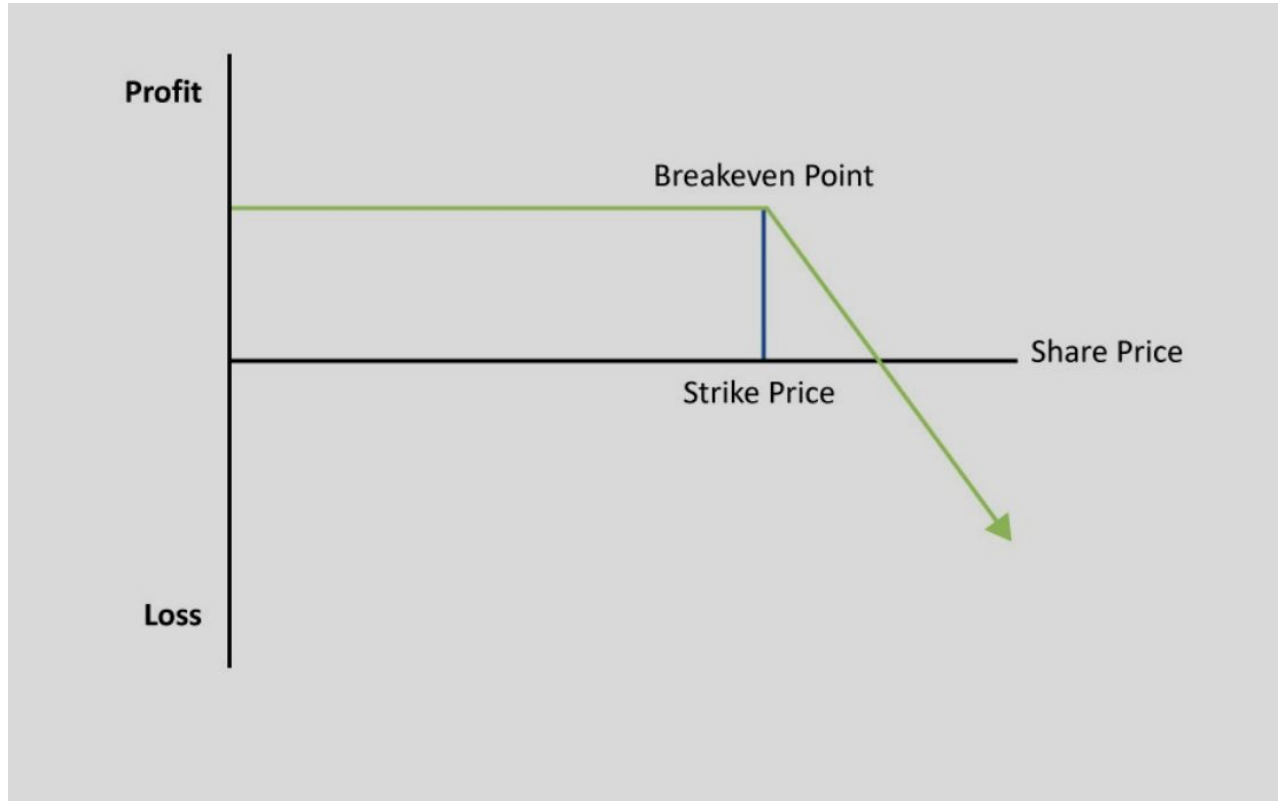


Smart systematic
Short strangle

Covered call payoff



Put selling



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.

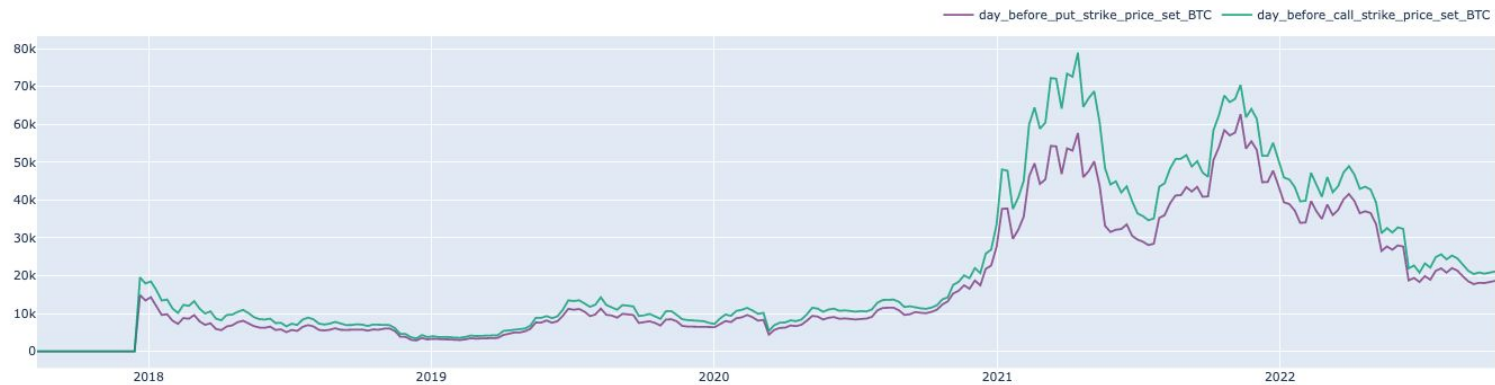
Mix covered call/put selling (strategy combo 1/2-1/2)

we roll call/put options on a weekly basis with a tailored call/put 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.

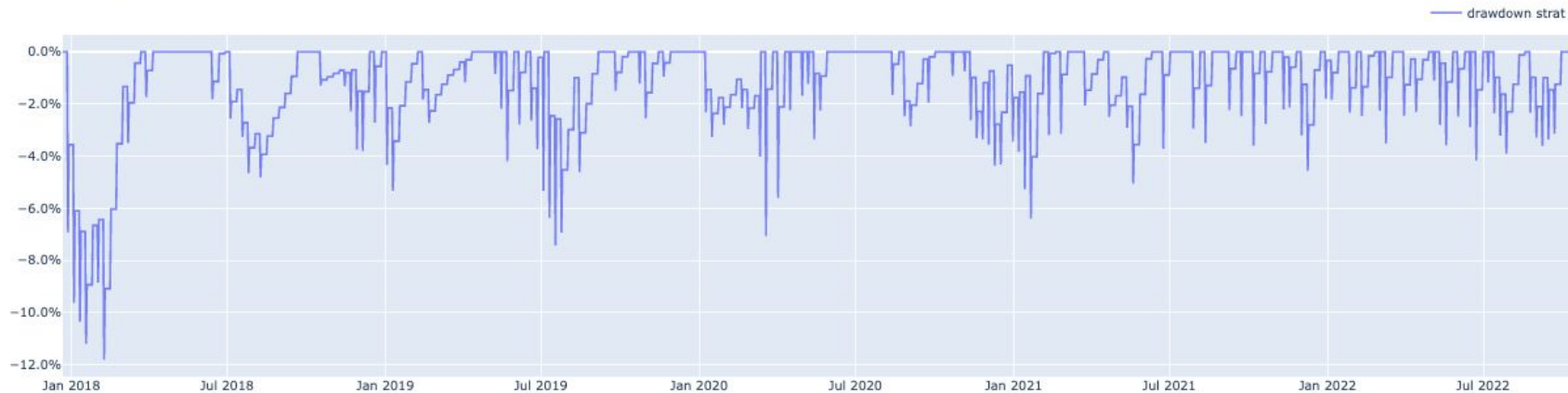
call/put strike price BTC



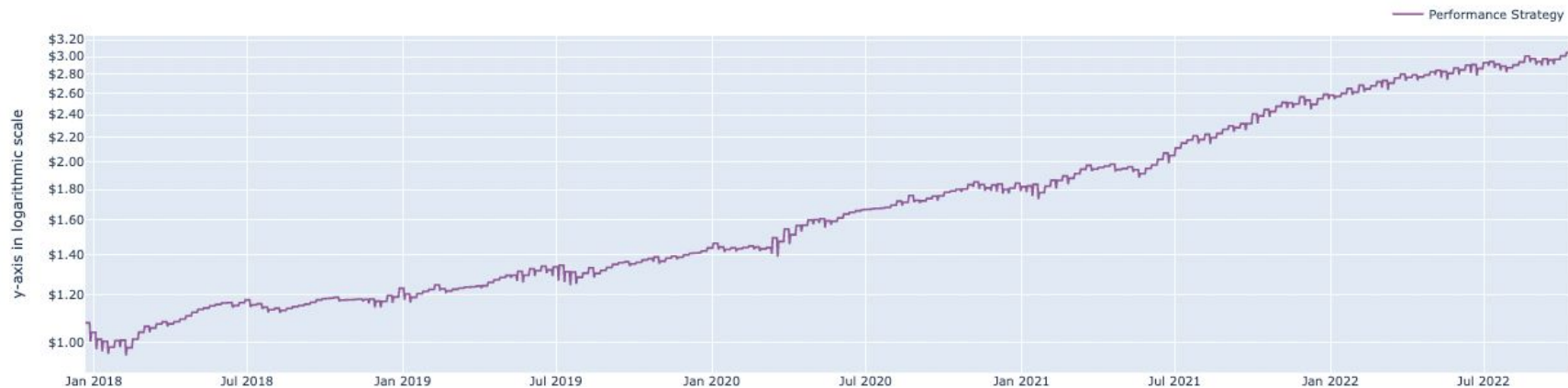
smart strike price from the spot in %



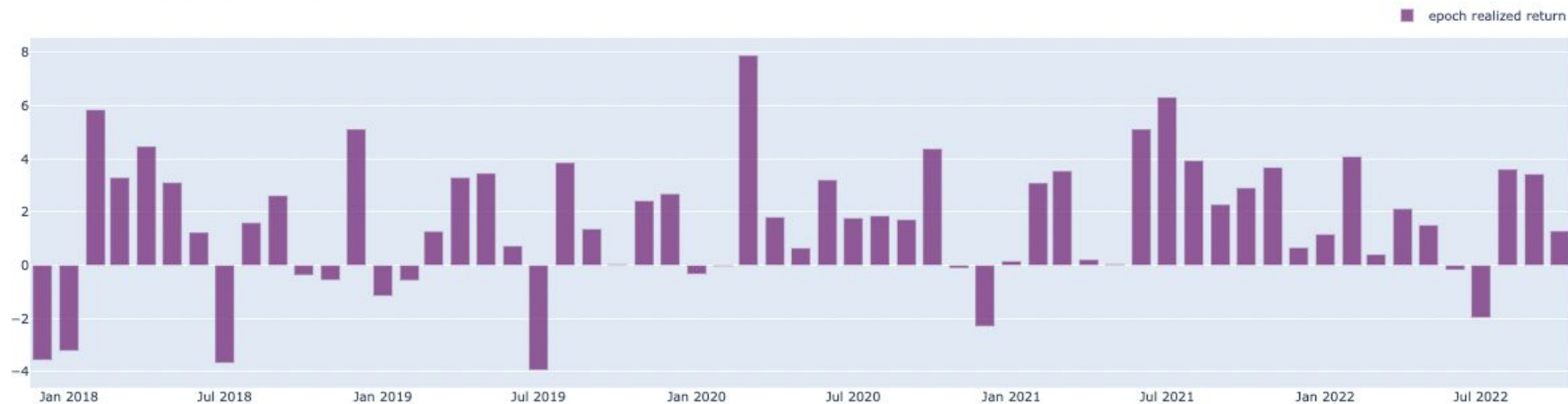
Drawdown chart



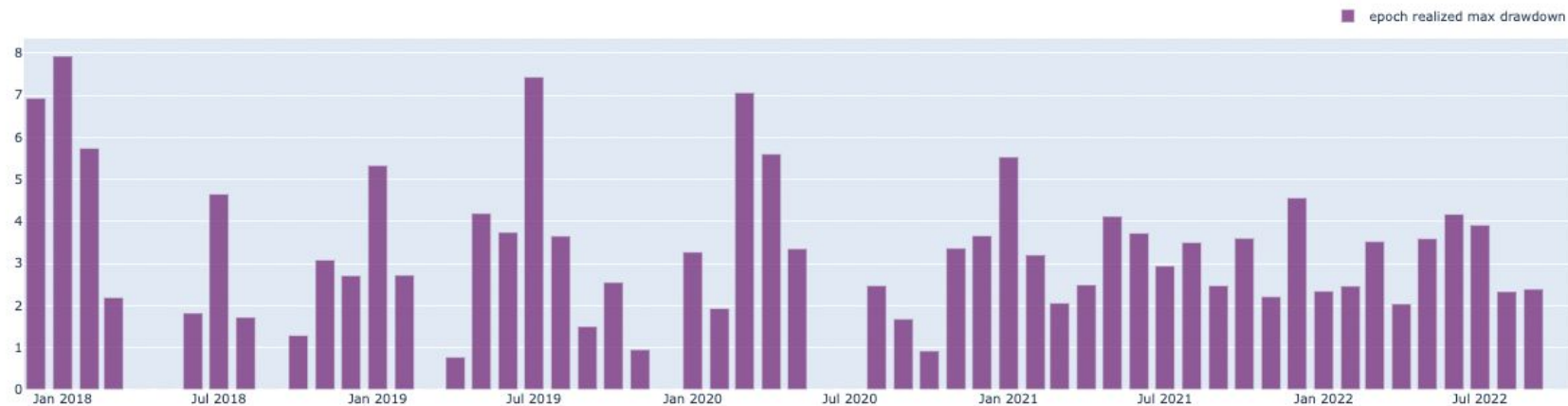
Strategy CALL_PUT_RANGY)



epoch realized return in percent

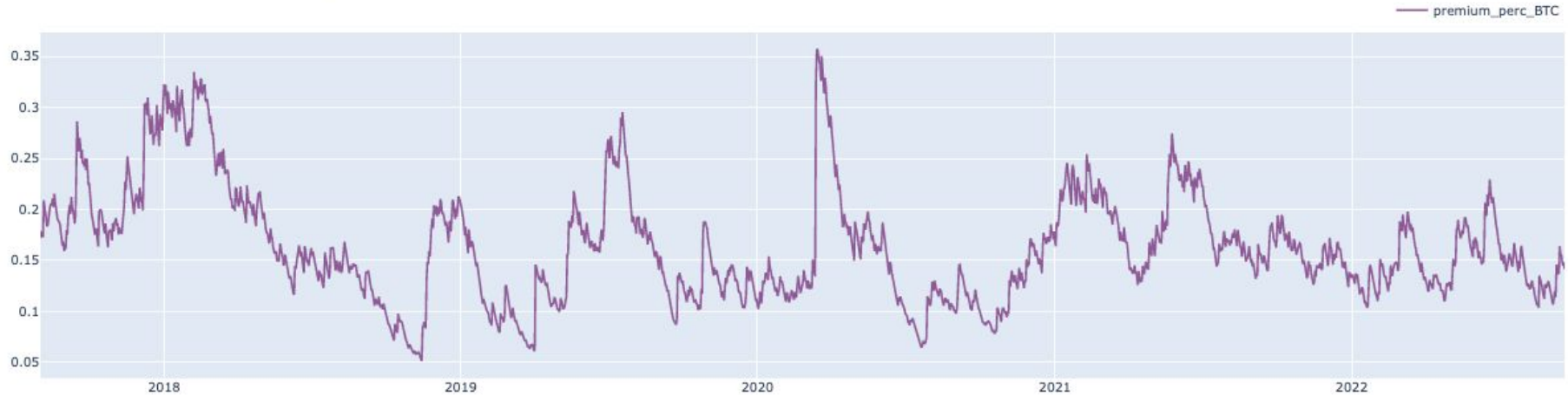


epoch realized max drawdown in percent

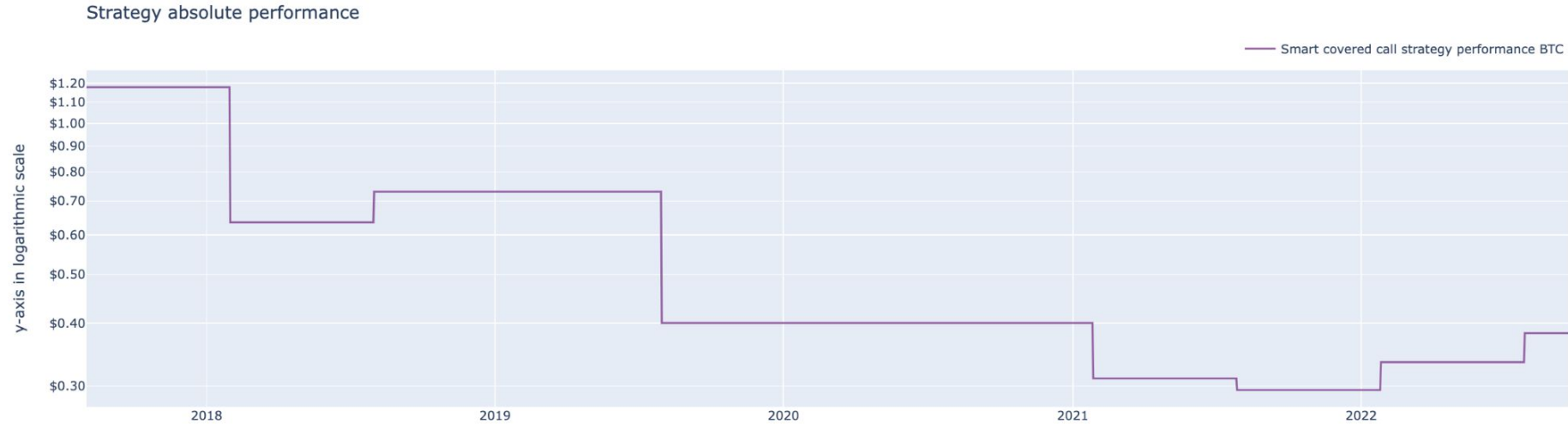


Structured Products/low frequency : huge time to maturity : big premium

Premium as notional percentage over time at the money 6 months duration



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 $P(S_0, T)$ in the money (strike S_0) is such $S_0 + P(S_0, T) = S_0 * (1 + R)$

=> sell the call option at T_{optim} : you guarantee the yield but you cap your gain at S_0

- We can adjust the strike price to allow a bullishness flavour : $S_1 = S_0 * (1 + B)$, B being the bullishness flavour.

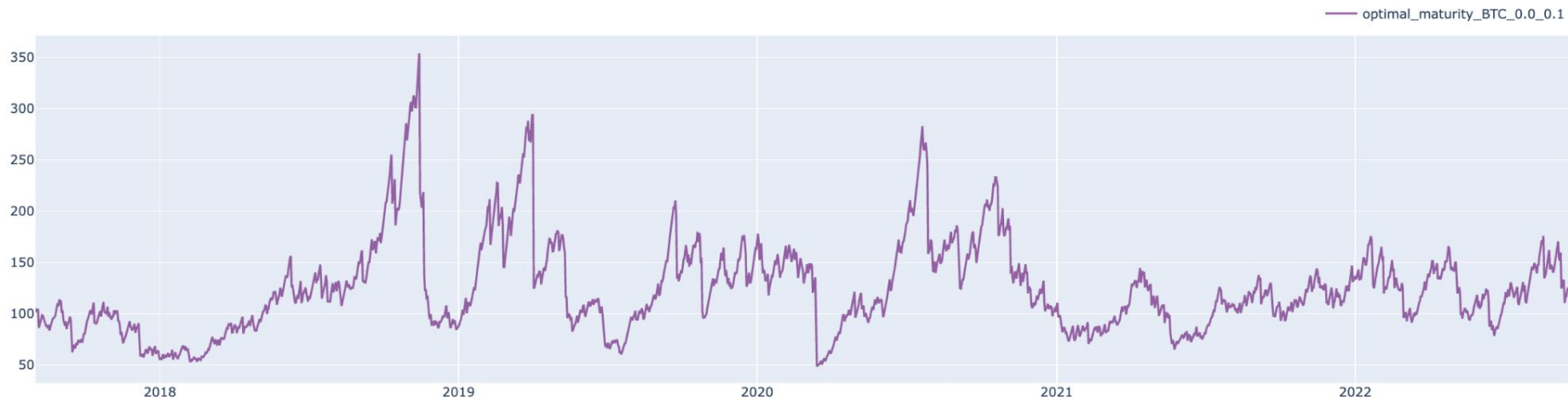
=> Compute the maturity T such that premium $P(S_1, T)$ slightly above the money (strike S_1) is such $S_0 + P(S_1, T) = S_0 * (1 + R)$

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

Optimal Maturity



Optimal Maturity



Optimal Maturity



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



Optimal Maturity



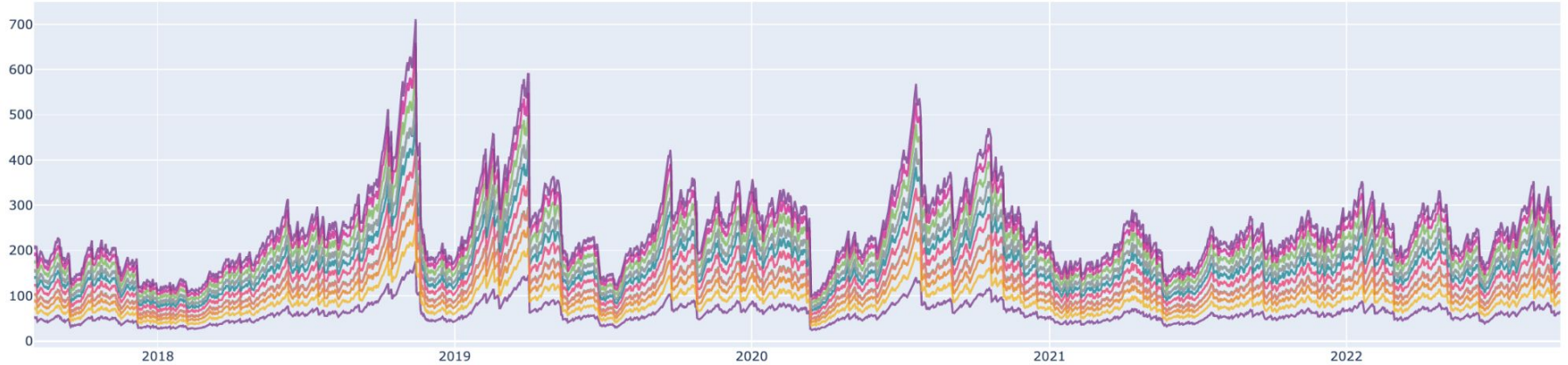
Optimal Maturity



Optimal maturity

Optimal Maturity

optimal_maturity_BTC_0.0_0.05 optimal_maturity_BTC_0.0_0.1 optimal_maturity_BTC_0.0_0.15 optimal_maturity_BTC_0.05_0.05 optimal_maturity_BTC_0.05_0.1
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Strategy

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