

Bowl drawing

Technique

Exponential Moving Average

- Take price average with factor to place more weight on recent price

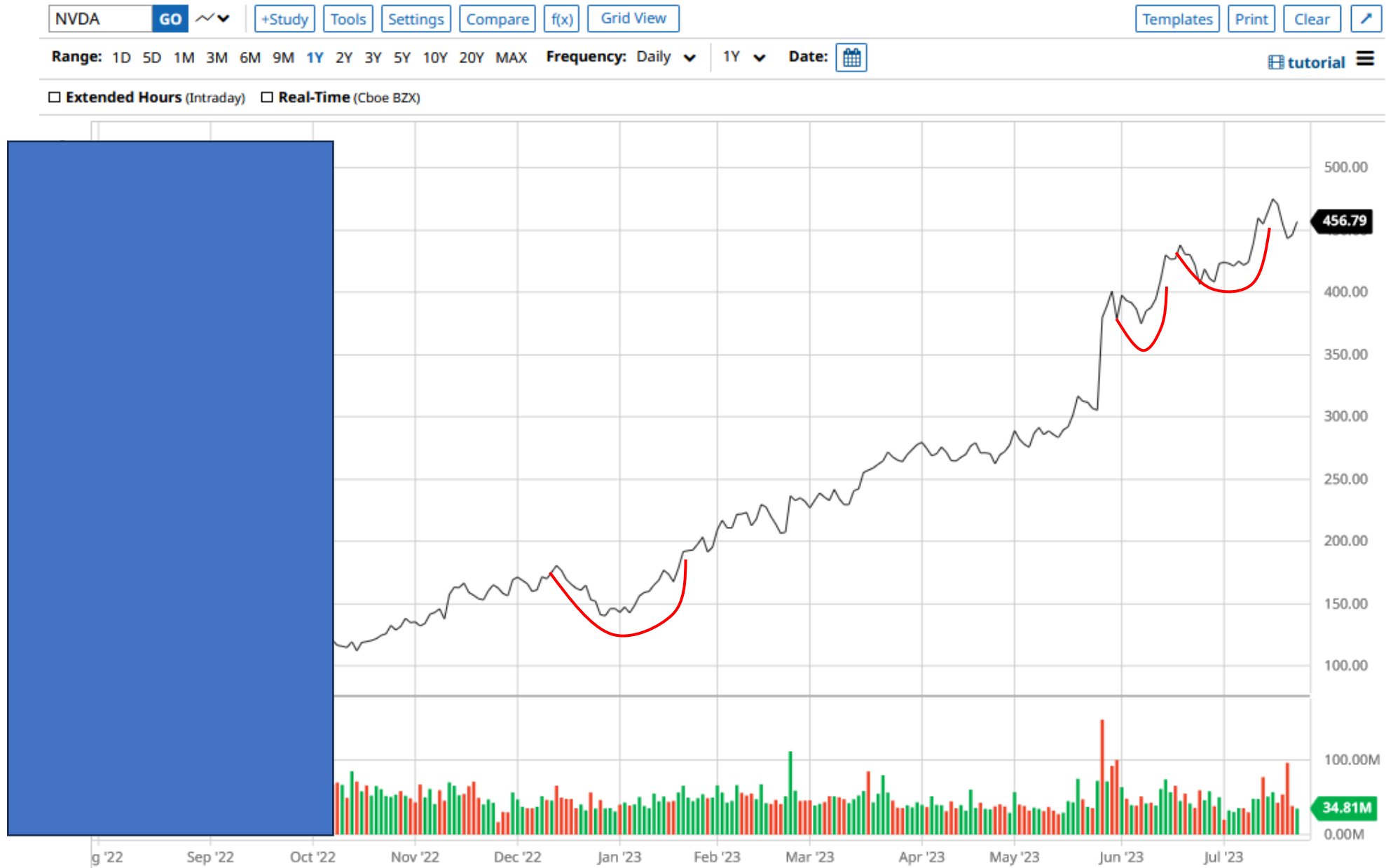
Butterworth low pass filter

- cancel out vibration $<$ specific period
- pros: easy to omit vibration within specific period
- cons: won't look at amplitude, will smoothen away steep vibration

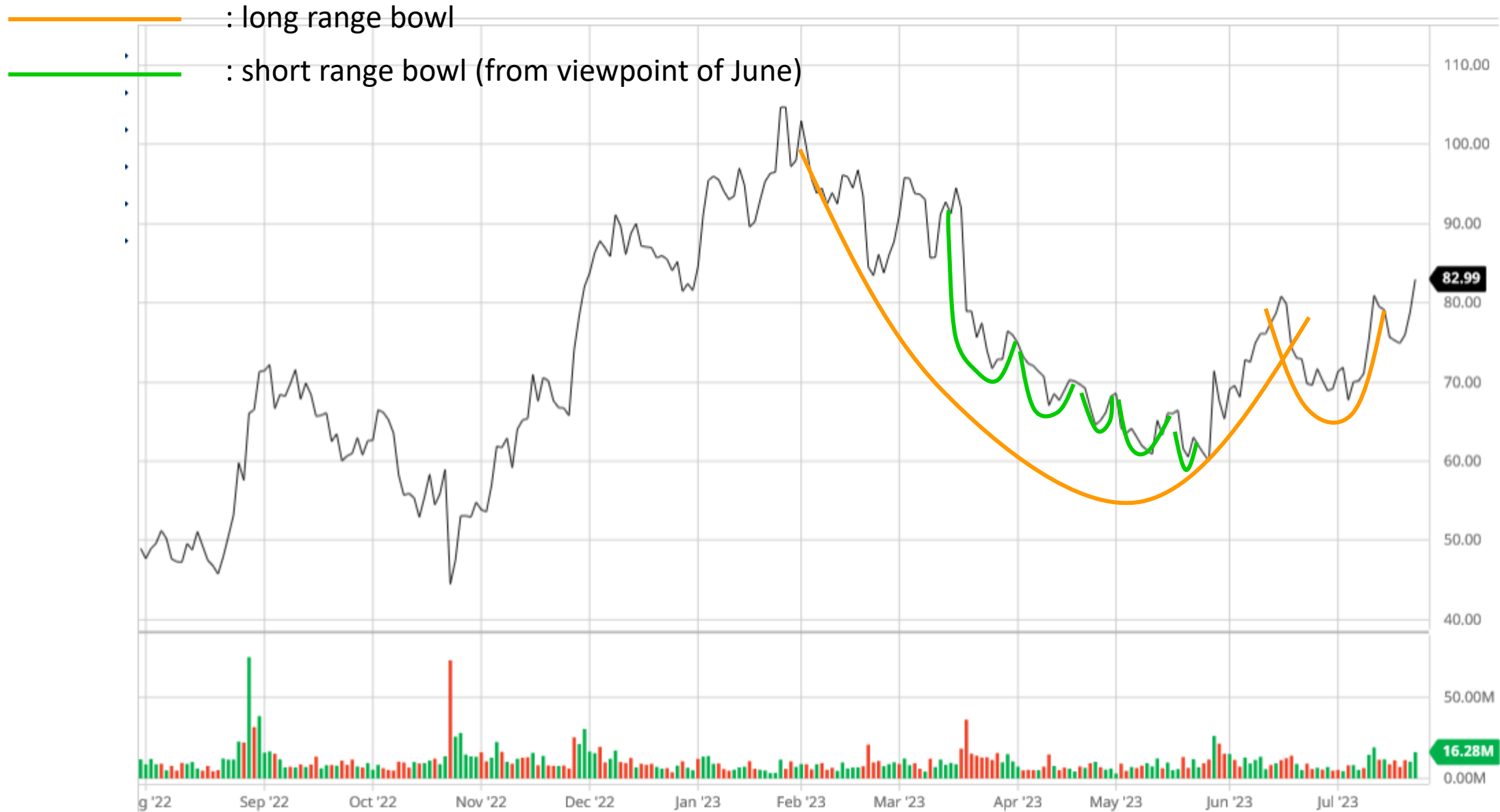
Goal: draw these bowls: NDVA 2022-02 to 2023-07



Goal: draw these bowls: NDVA 2022-10 to 2023-07



Goal: draw these bowls: PDD 2022-07 to 2023-07



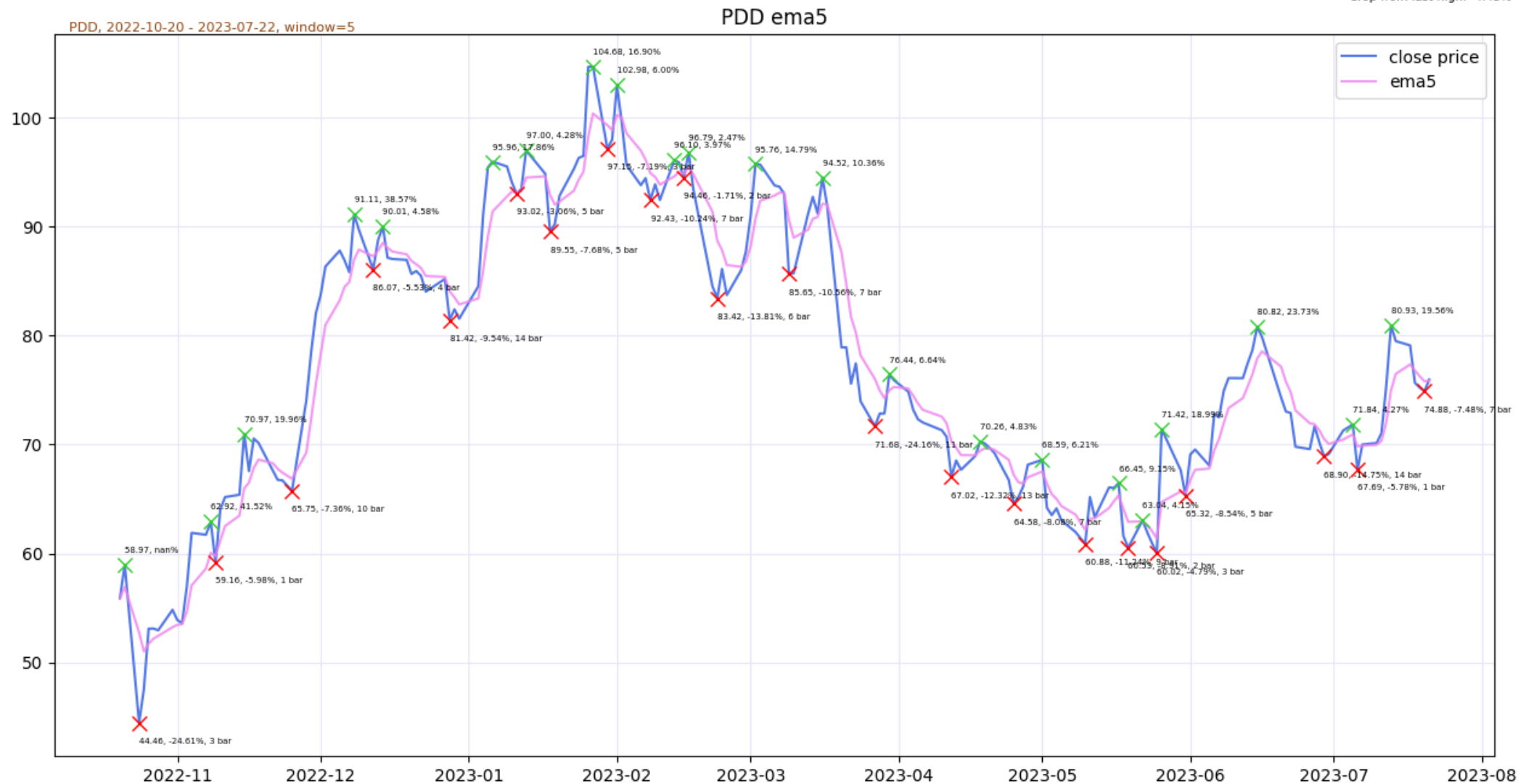
Exponential Moving Average

EMA5

PDD ema5: 9 mo 2022-10-20-2023-07-22

runner('PDD', '2022-10-20', '2023-07-22', method='ema', T=5, wind=5)

latest high: 79.49
current: 75.97
drop from last high: -4.43%



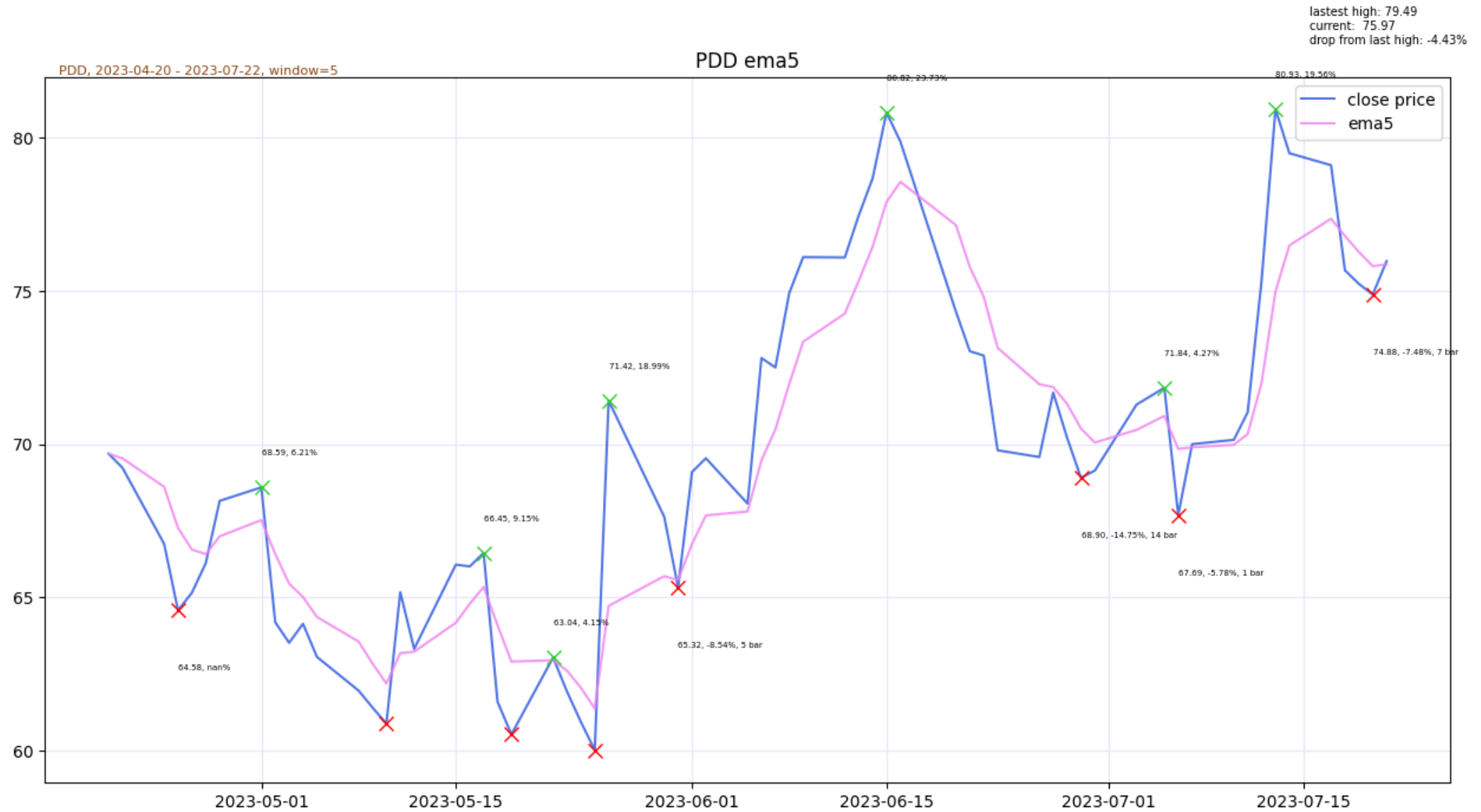
PDD ema5: 6 mo 2023-01-20-2023-07-22

`runner('PDD', '2023-01-20', '2023-07-22', method='ema', T=5, wind=5)`

lastest high: 79.49
current: 75.97
drop from last high: -4.43%

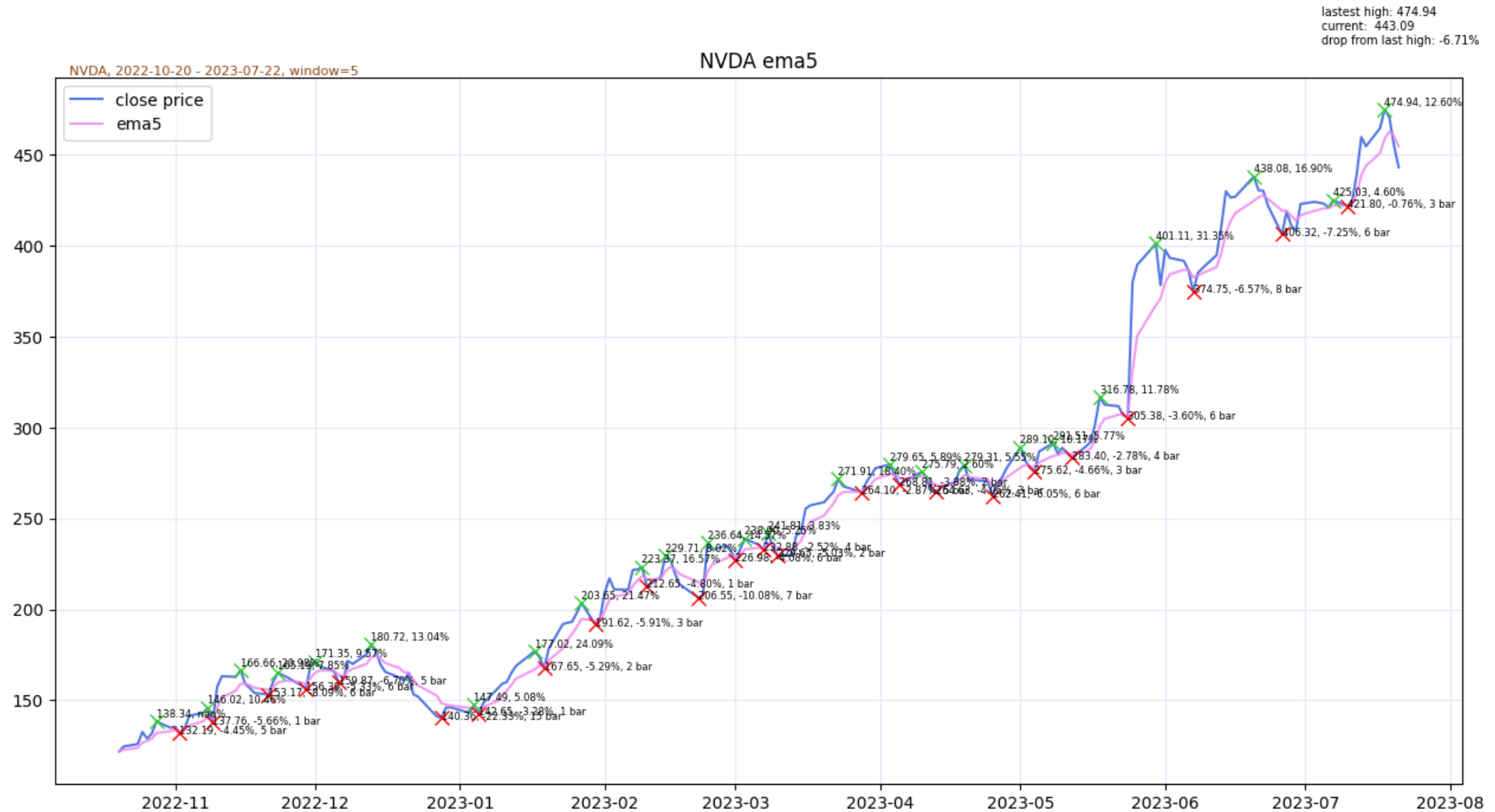


PDD ema5: 3 mo 2023-04-20 to 2023-07-22



NVDA ema5: 9 mo 2022-10-20-2023-07-22

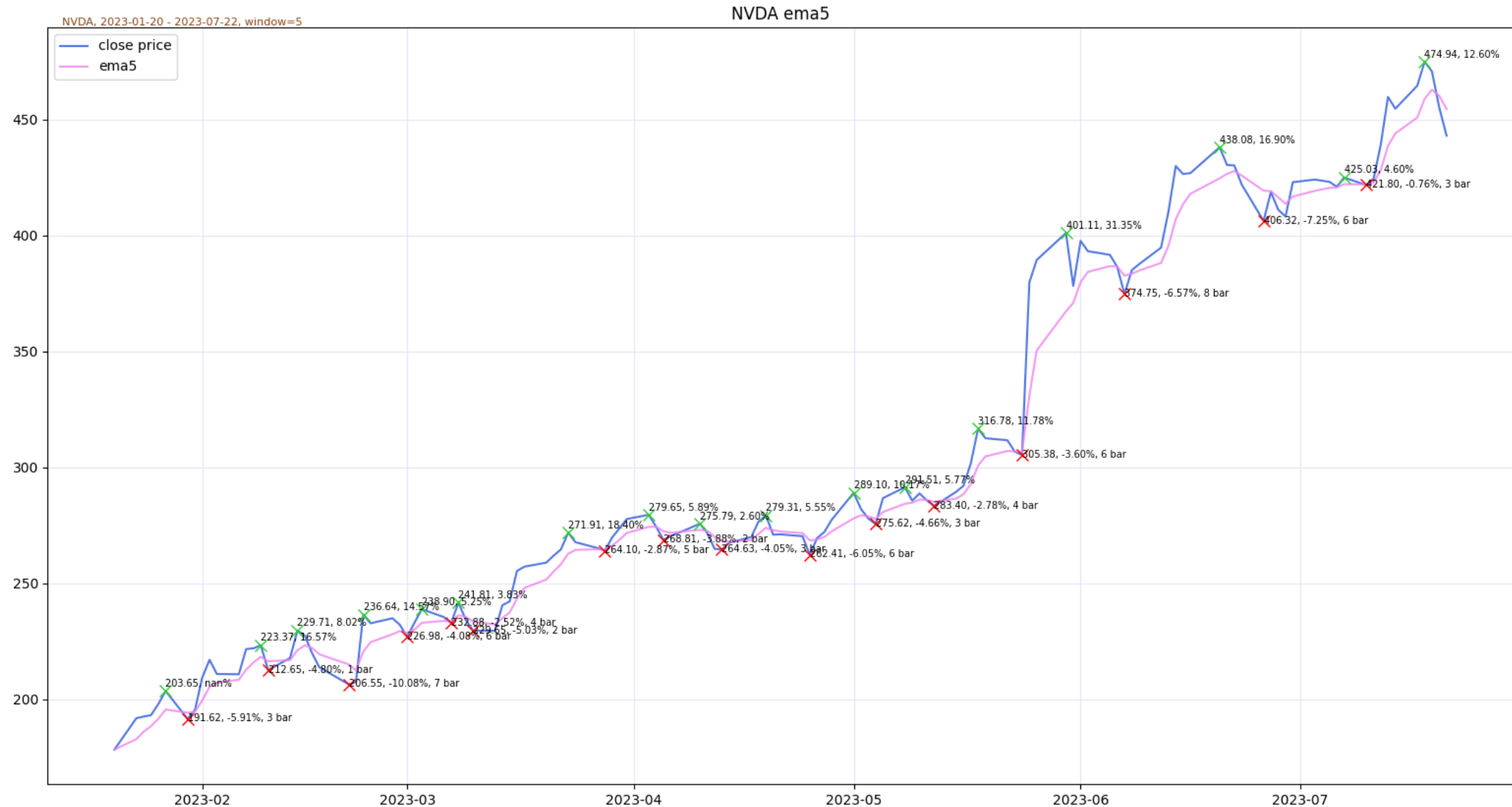
runner('NVDA', '2022-10-20', '2023-07-22', method='ema', T=5, wind=5)



NVDA ema5: 6 mo 2023-01-20-2023-07-22

runner('NVDA', '2023-01-20', '2023-07-22', method='ema', T=5, wind=5)

lastest high: 474.94
current: 443.09
drop from last high: -6.71%



NVDA ema5: 3 mo 2022-04-20-2023-07-22

`runner('NVDA', '2023-04-20', '2023-07-22', method='ema', T=5, wind=5)`



TSLA ema5: 3 mo 2022-04-20 to 2023-07-22

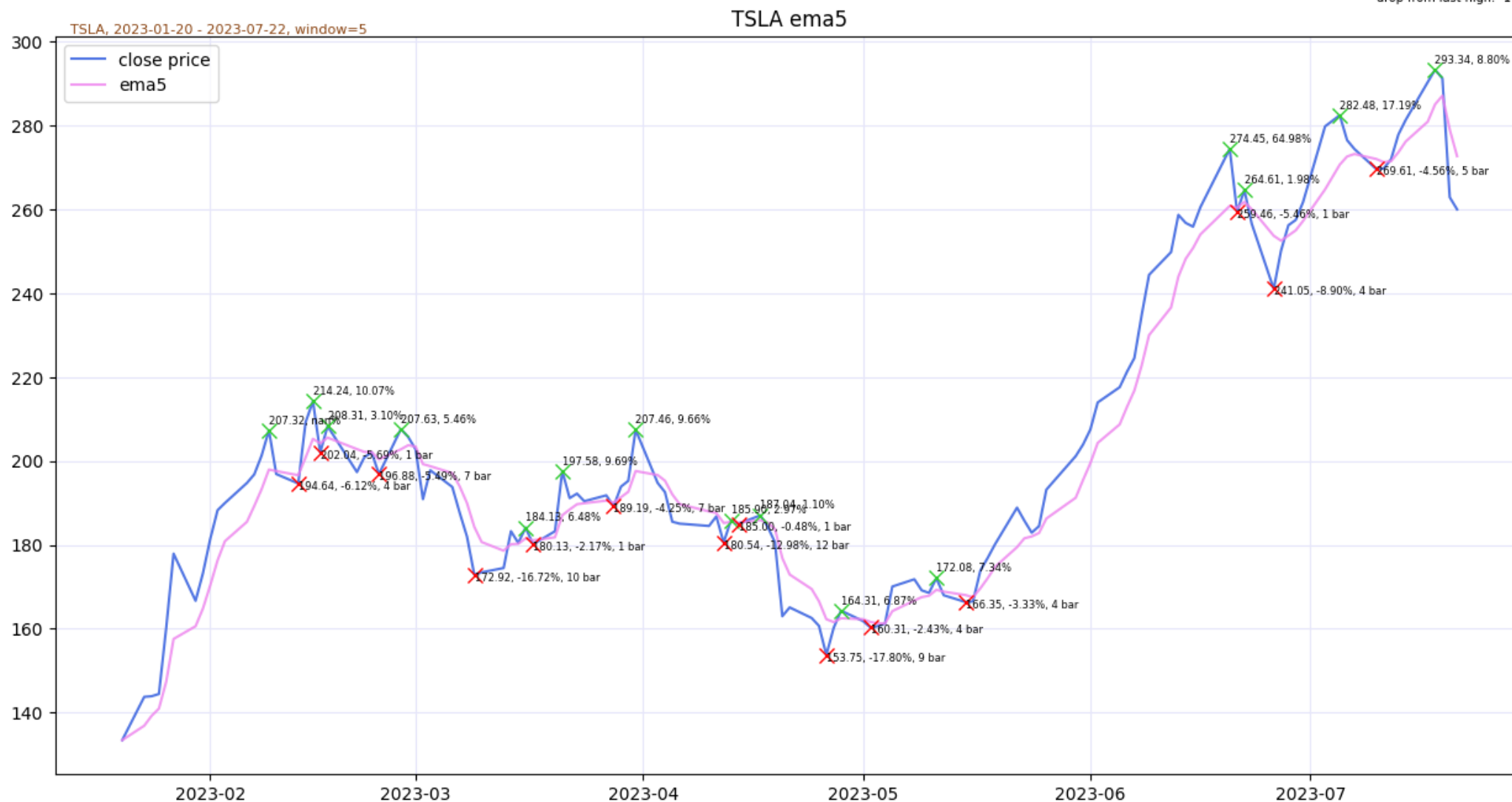
`runner('TSLA', '2023-04-20', '2023-07-22', method='ema', T=5, wind=5)`



TSLA ema5: 6 mo 2023-01-20 to 2023-07-22

`runner('TSLA', '2023-01-20', '2023-07-22', method='ema', T=5, wind=5)`

latest high: 293.34
current: 260.02
drop from last high: -11.36%



TSLA ema5: 9 mo 2022-10-20 to 2023-07-22

runner('TSLA', '2022-10-20', '2023-07-22', method='ema', T=5, wind=5)



Get extrema with EMA10

PDD ema10: 9 mo 2022-10-20 to 2023-07-22

runner('PDD', '2022-10-20', '2023-07-22', method='ema', T=10, wind=5)

latest high: 79.10
current: 75.97
drop from last high: -3.96%



PDD ema10: 6 mo 2023-01-20 to 2023-07-22

`runner('PDD', '2023-01-20', '2023-07-22', method='ema', T=10, wind=5)`

latest high: 79.10
current: 75.97
drop from last high: -3.96%



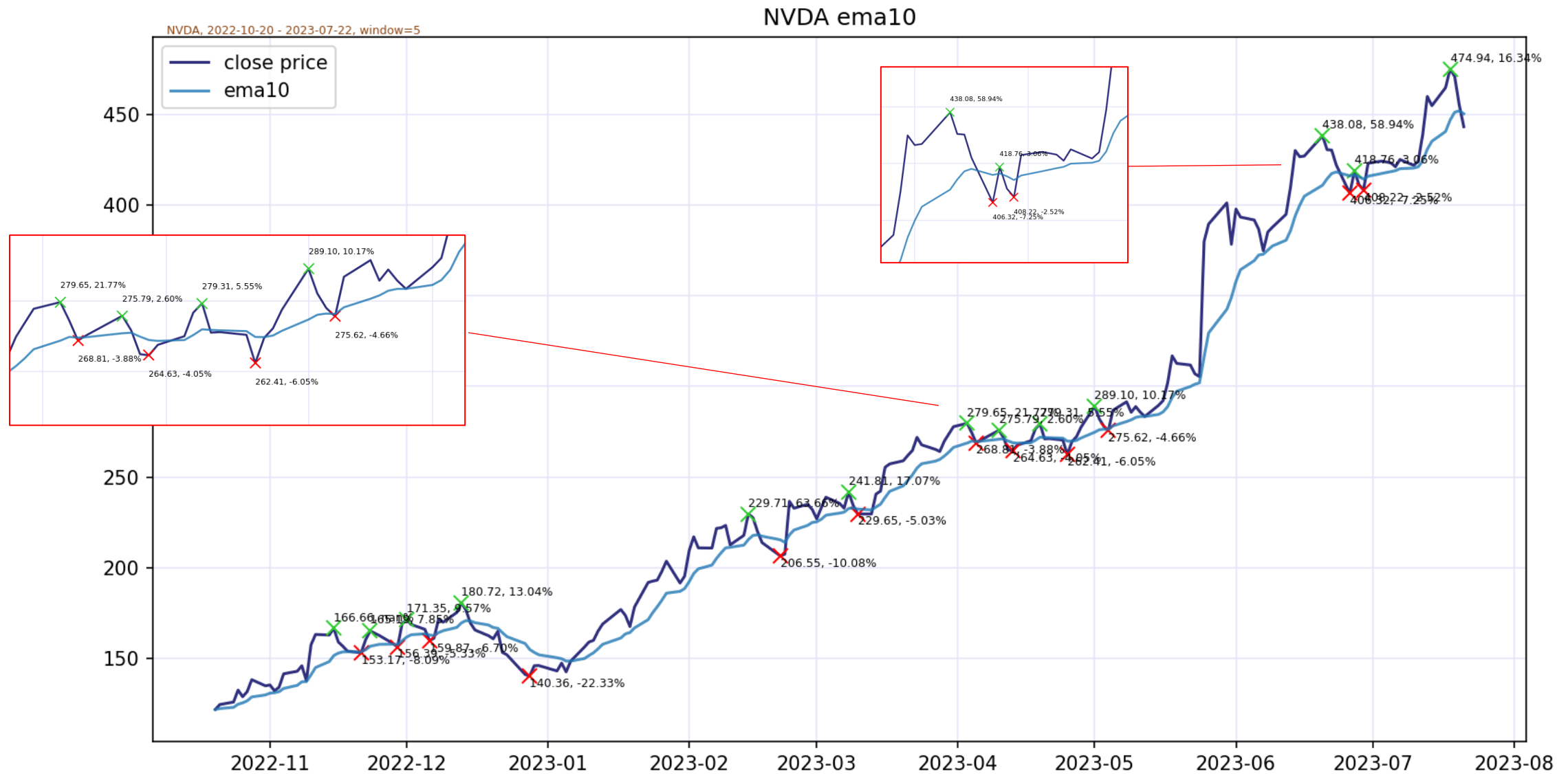
PDD ema10: 3 mo 2023-04-20 to 2023-07-22

`runner('PDD', '2023-04-20', '2023-07-22', method='ema', T=10, wind=5)`



NVDA ema10: 9 mo 2022-10-20-2023-07-22

runner('NVDA', '2022-10-20', '2023-07-22', method='ema', T=10, wind=5)



NVDA ema10: 6 mo 2023-01-20 to 2023-07-22

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runner('NVDA', '2023-01-20', '2023-07-22', method='ema', T=10, wind=5)
```



NVDA ema10: 3 mo 2023-04-20 to 2023-07-22

runner('NVDA', '2023-04-20', '2023-07-22', method='ema', T=10, wind=5)

latest high: 470.77
current: 443.09
drop from last high: -5.88%



TSLA ema10: 9 mo 2022-10-20 to 2023-07-22

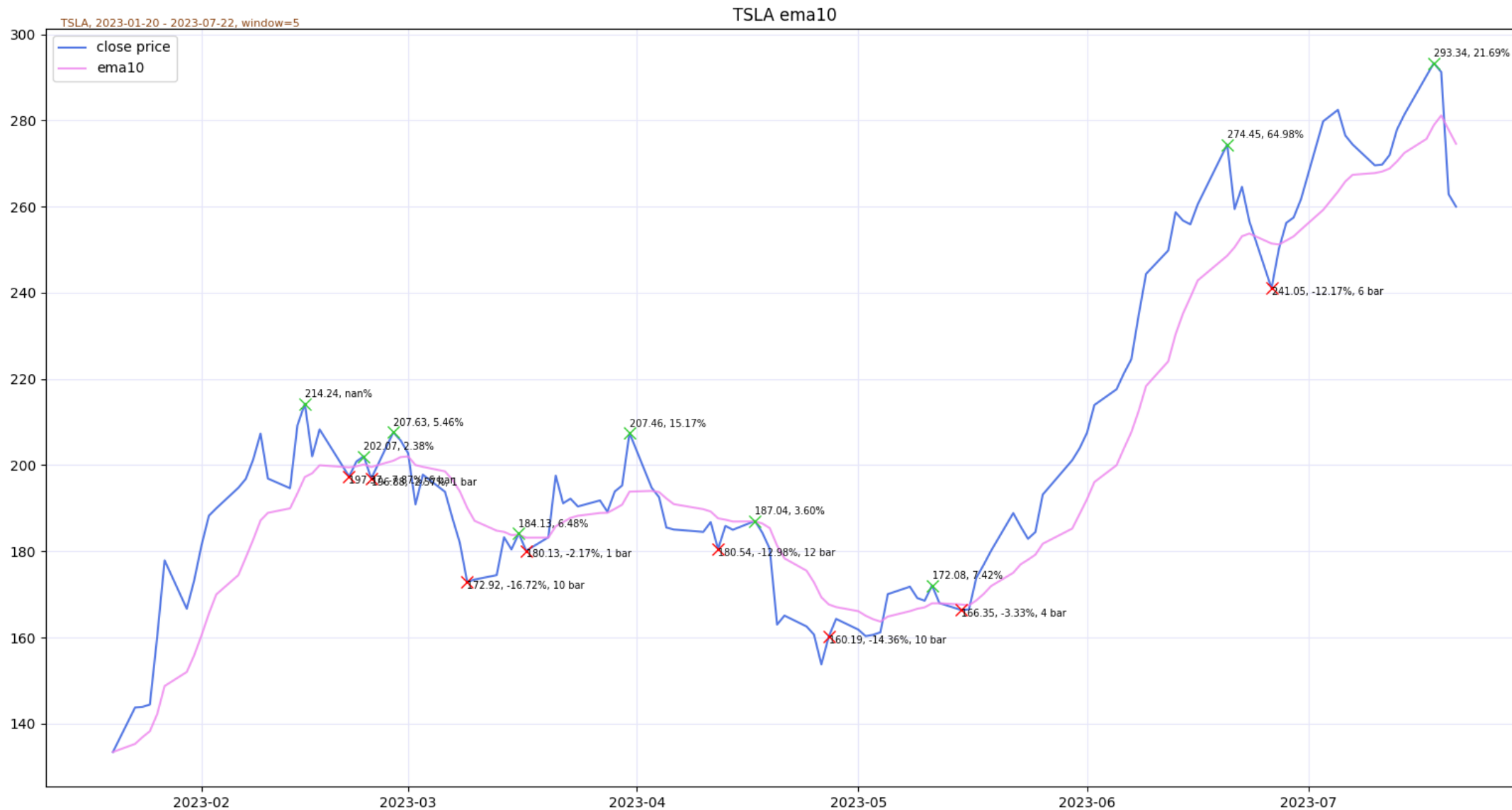
```
runner('TSLA', '2022-10-20', '2023-07-22', method='ema', T=10, wind=5)
```



TSLA ema10: 6 mo 2023-04-20 to 2023-07-22

`runner('TSLA', '2023-01-20', '2023-07-22', method='ema', T=10, wind=5)`

lastest high: 293.34
current: 260.02
drop from last high: -11.36%



TSLA ema10: 3 mo 2023-04-20 to 2023-07-22

`runner('TSLA', '2023-04-20', '2023-07-22', method='ema', T=10, wind=5)`

latest high: 293.34
current: 260.02
drop from last high: -11.36%

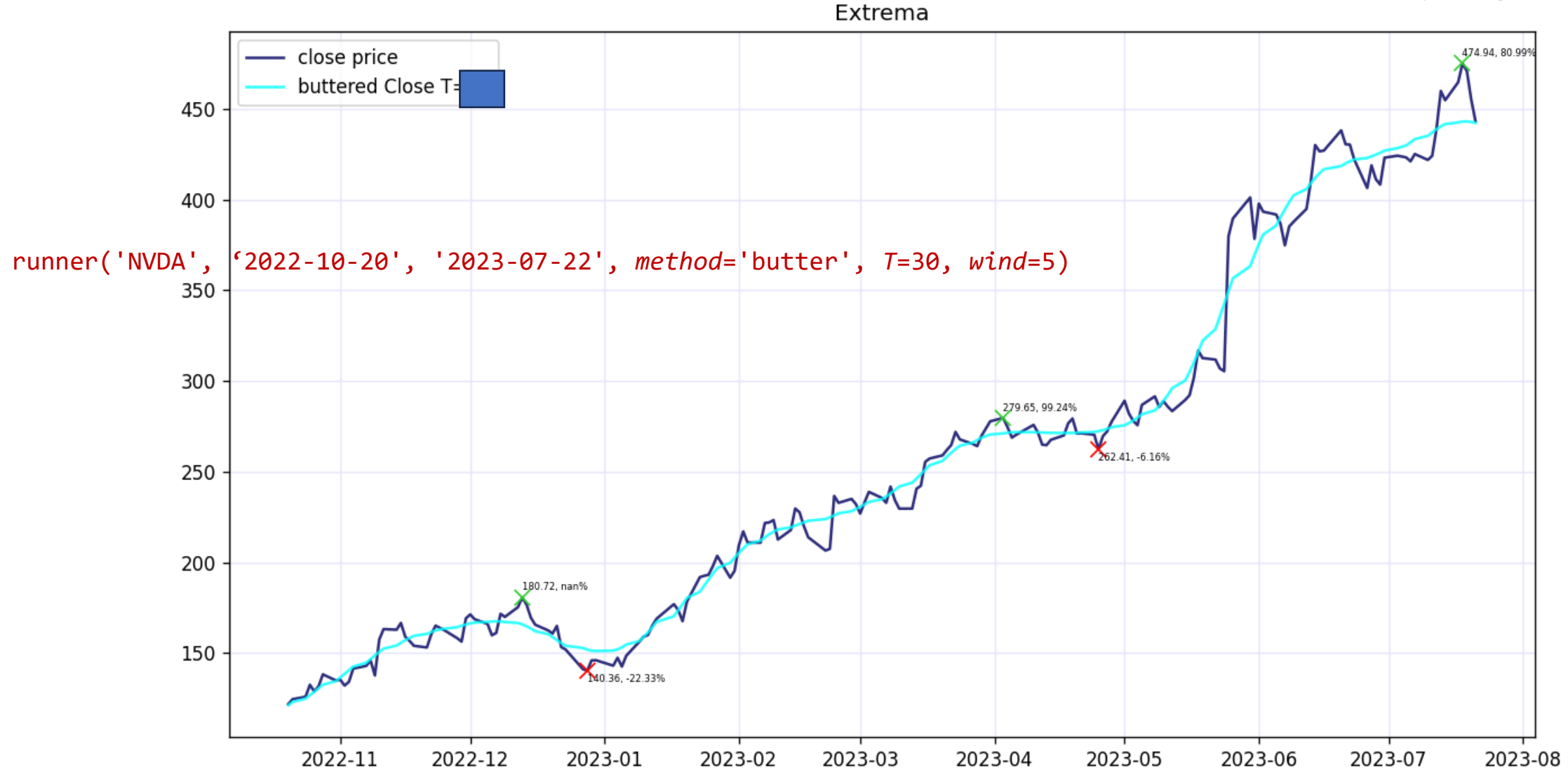


get extrema from
Butterworth low pass filter
period=10 day

NVDA butter T=30: 9mo 2022-10-20-2023-07-22

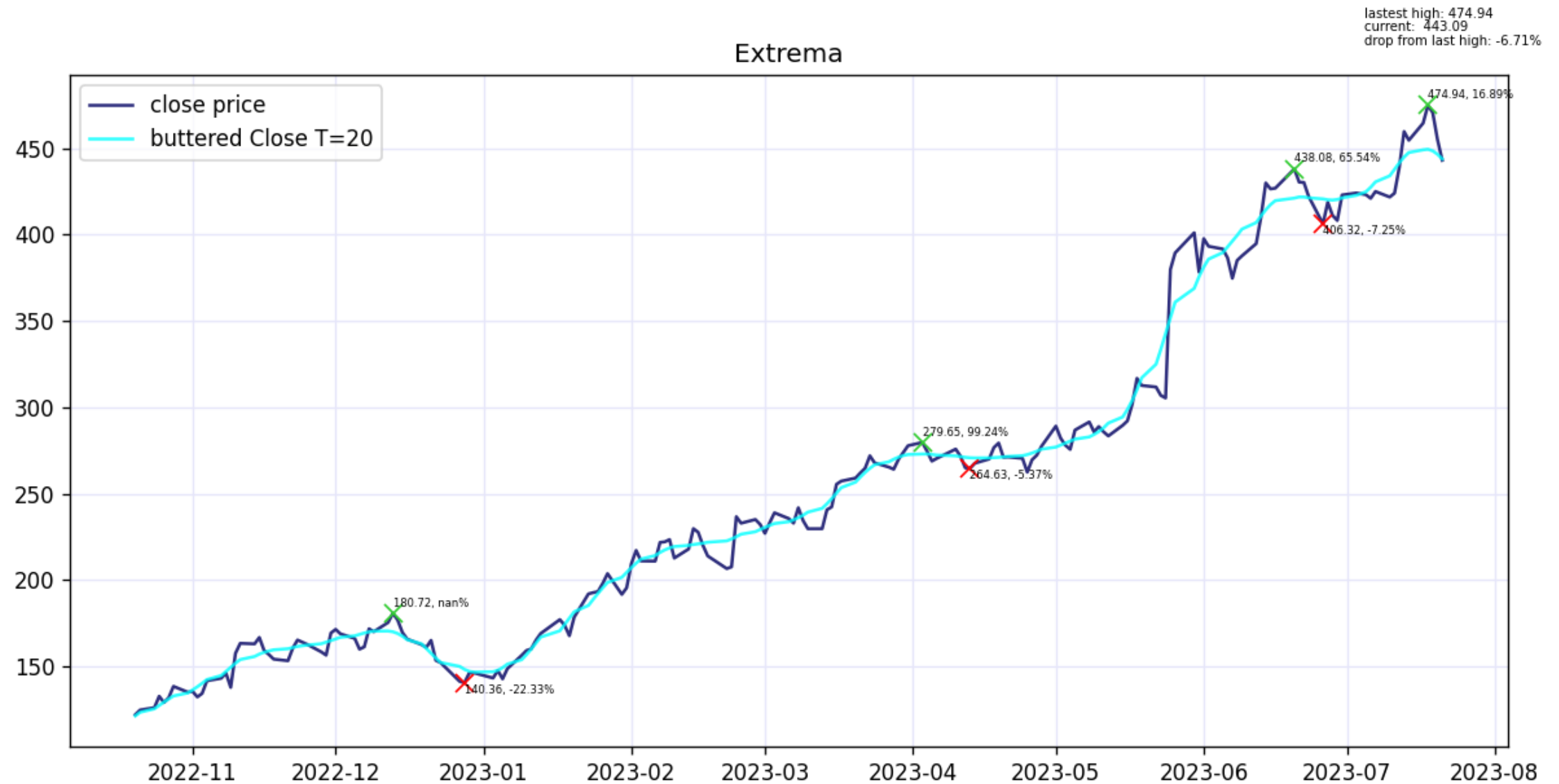
get extrema butterworth from low pass filter T=30

lastest high: 474.94
current: 443.09
drop from last high: -6.71%



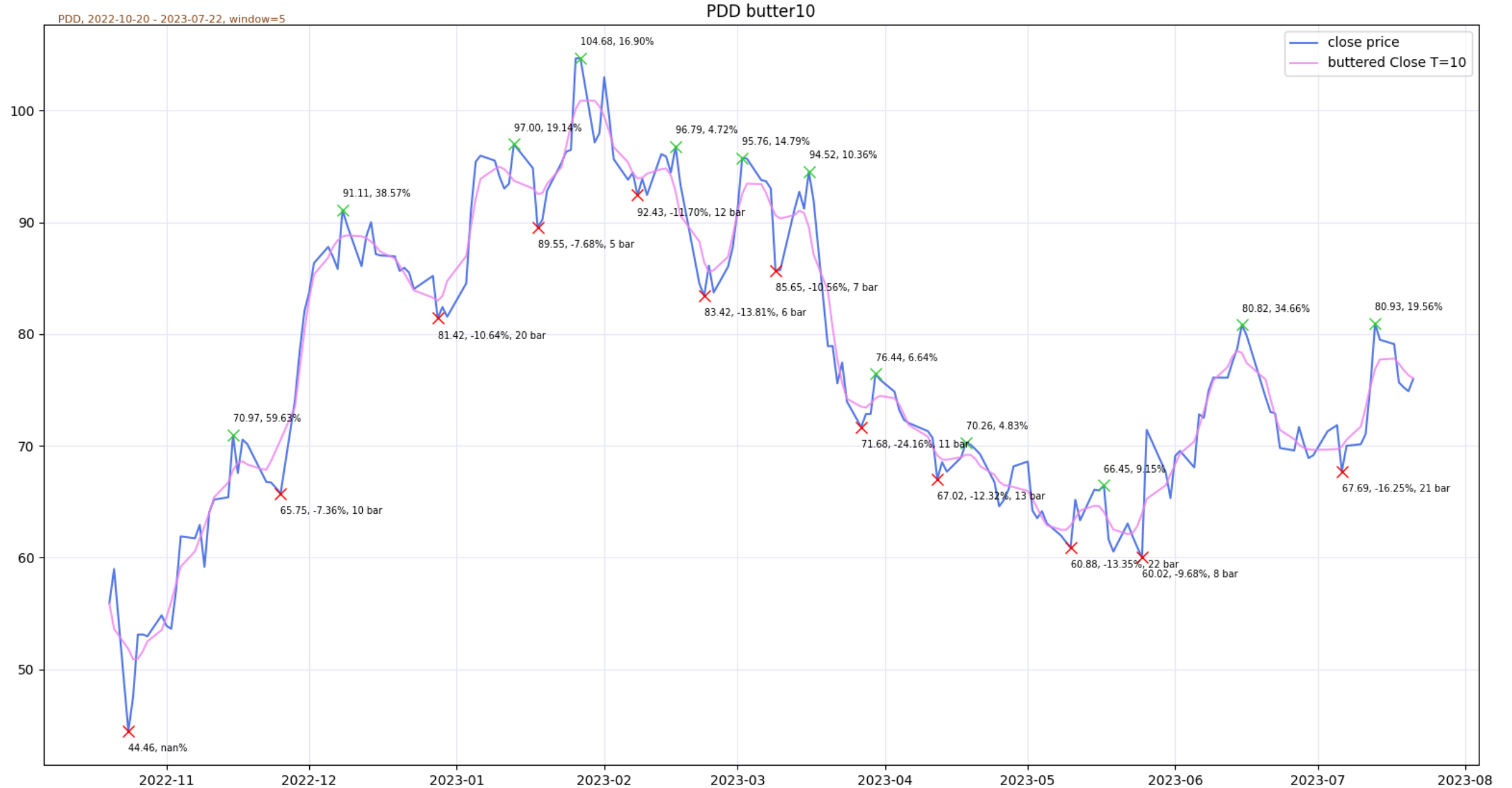
NVDA butter T=20: 9mo 2022-10-20-2023-07-22

get extrema from butterworth low pass filter T=20



PDD butter T=10: 9mo 2022-10-20 to 2023-07-22

latest high: 79.49
current: 75.97
drop from last high: -4.43%



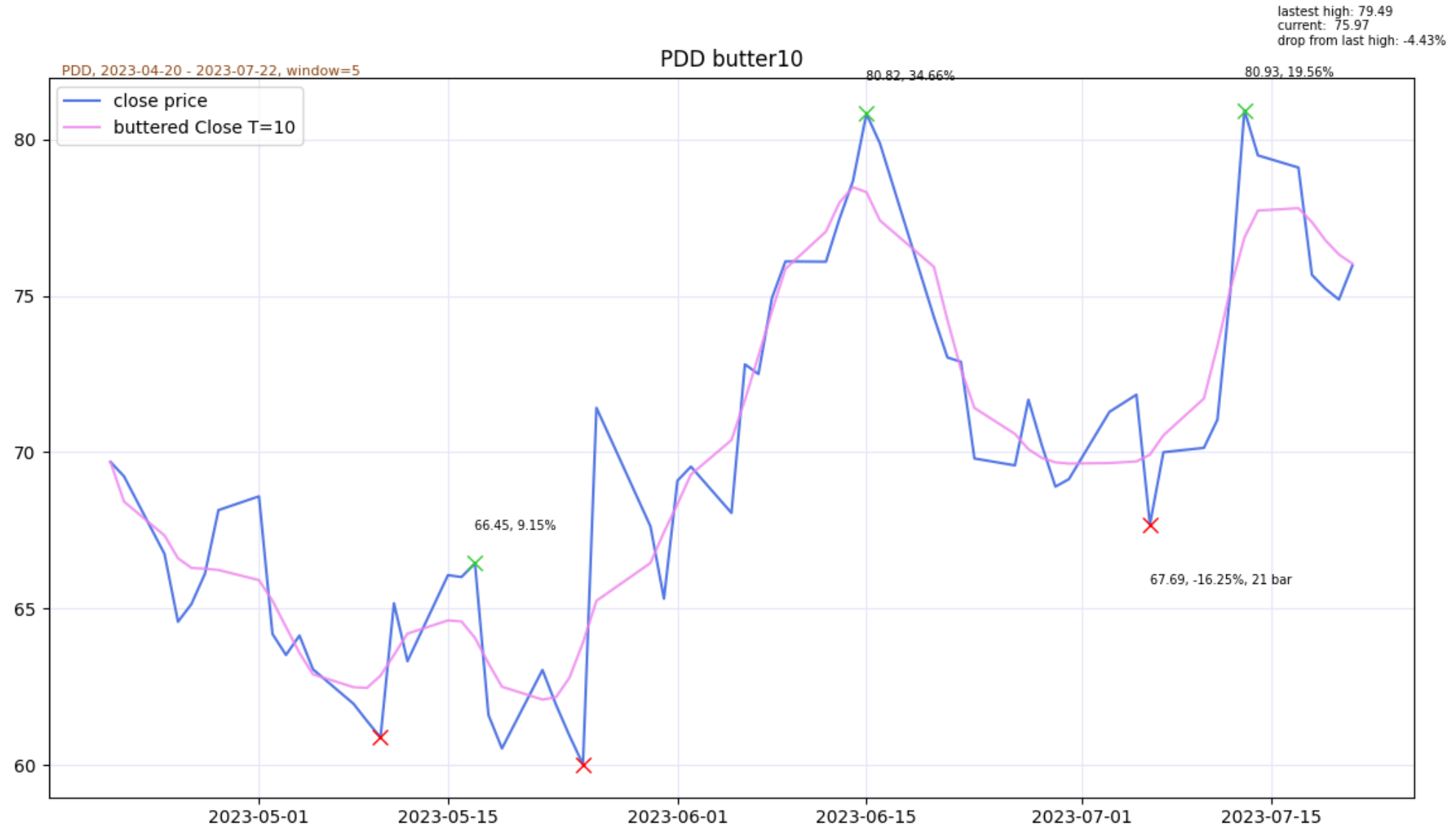
PDD butter T=10: 6 mo 2023-01-20 to 2023-07-22

`runner('PDD', '2023-01-20', '2023-07-22', method='butter', T=10, wind=5)`

latest high: 79.49
current: 75.97
drop from last high: -4.43%



PDD butter T=10: 3 mo 2023-04-20 to 2023-07-22



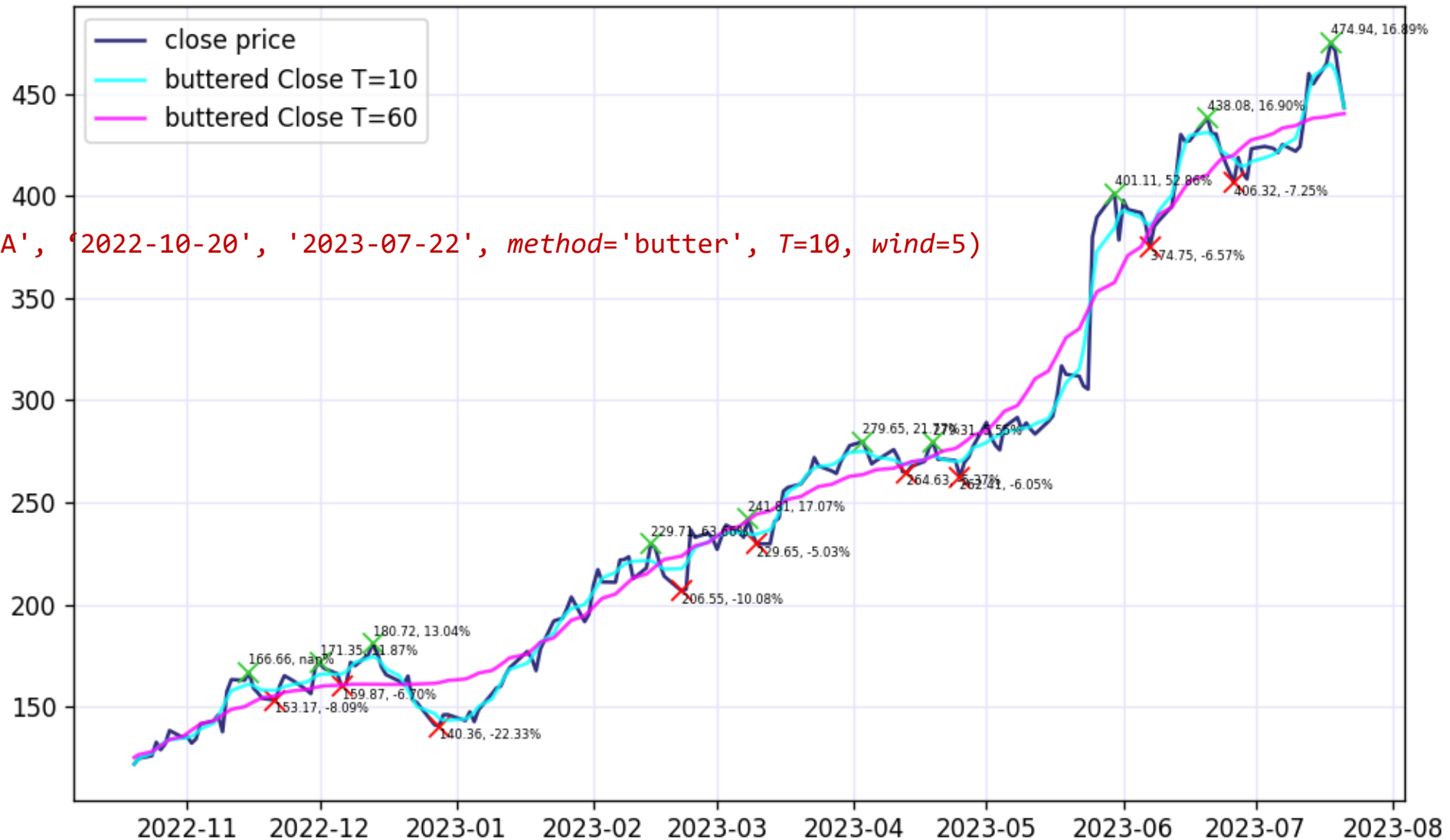
NVDA butter T=10: 9mo 2022-10-20-2023-07-22

get extrema from butterworth low pass filter T=10

Extrema

lastest high: 474.94
current: 443.09
drop from last high: -6.71%

`runner('NVDA', '2022-10-20', '2023-07-22', method='butter', T=10, wind=5)`



NVDA butter T=10: 6mo 2023-01-20 to 2023-07-22

runner('NVDA', '2023-01-20', '2023-07-22', method='butter', T=10, wind=5)



NVDA butter T=10: 3mo 2023-04-20-2023-07-22

`runner('NVDA', '2023-04-20', '2023-07-22', method='butter', T=10, wind=5)`

latest high: 474.94
current: 443.09
drop from last high: -6.71%



TSLA butter T=10: 9mo 2022-10-20-2023-07-22

runner('TSLA', '2022-10-20', '2023-07-22', method='butter', T=10, wind=5)



TSLA butter T=10: 6mo 2023-01-20 to 2023-07-22

`runner('TSLA', '2023-01-20', '2023-07-22', method='butter', T=10, wind=5)`



TSLA butter T=10: 3mo 2023-01-20 to 2023-07-22

`runner('TSLA', '2023-04-20', '2023-07-22', method='butter', T=10, wind=5)`

