

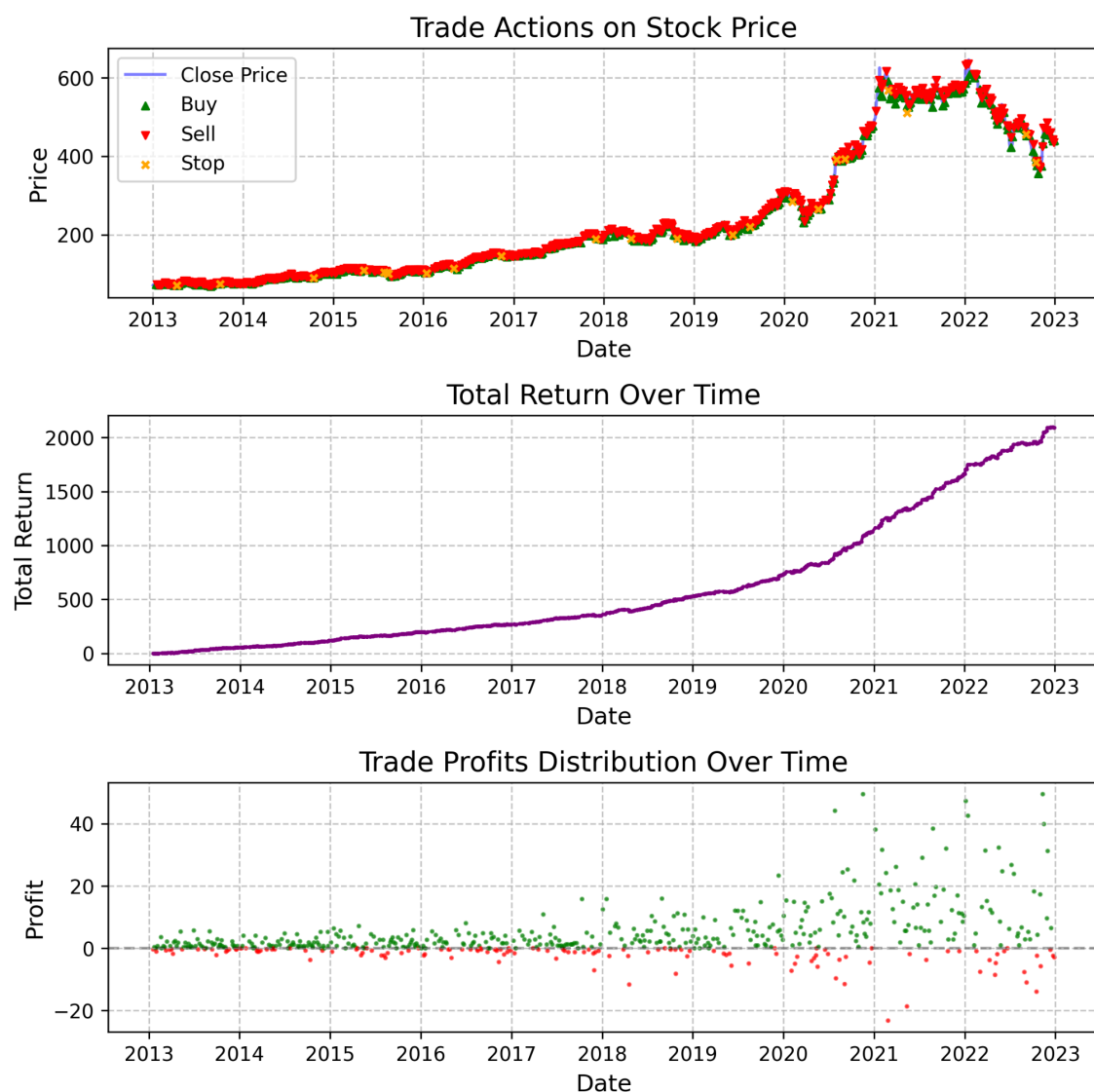
交易策略競賽

都是用一股為單位

證券交易成本：

```
# Define transaction fees and taxes
transaction_fee_rate = 0.001425 # 0.1425%
transaction_tax_rate = 0.003 # 0.3%
```

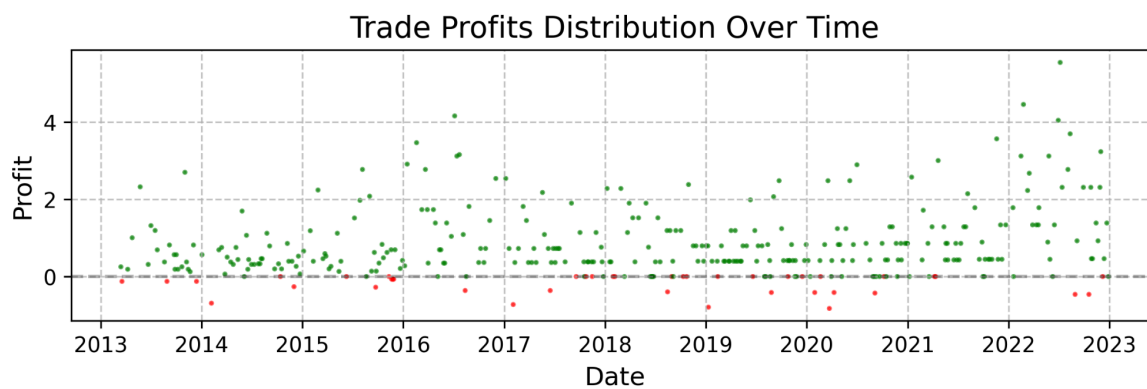
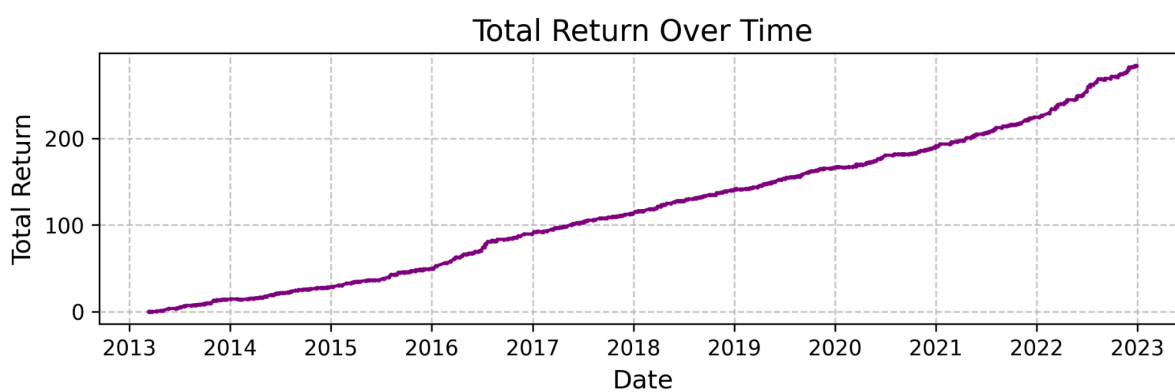
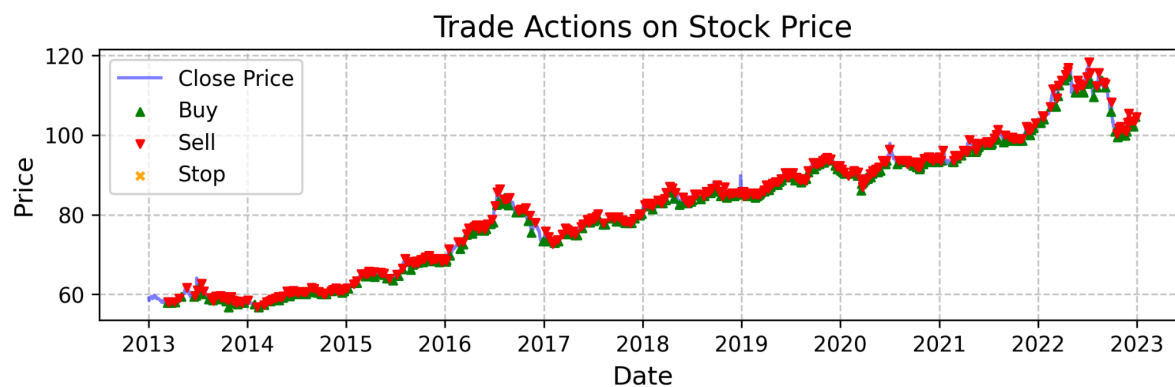
上漲趨勢回測區間最佳報酬-2330.TW



Trading Performance Summary

Metric	Value
Total Profit	2415.80
Total Loss	-323.75
Total Profit Percentage	3316.77%
Profit Factor	7.46
Total Trades	552
Win Probability	74.46%
Average Win	5.88
Average Loss	-2.30
Risk-Reward Ratio	2.56
Annual Volatility	42.79%
Max Drawdown	23.24
Sharpe Ratio	0.47
Expectancy	3.79

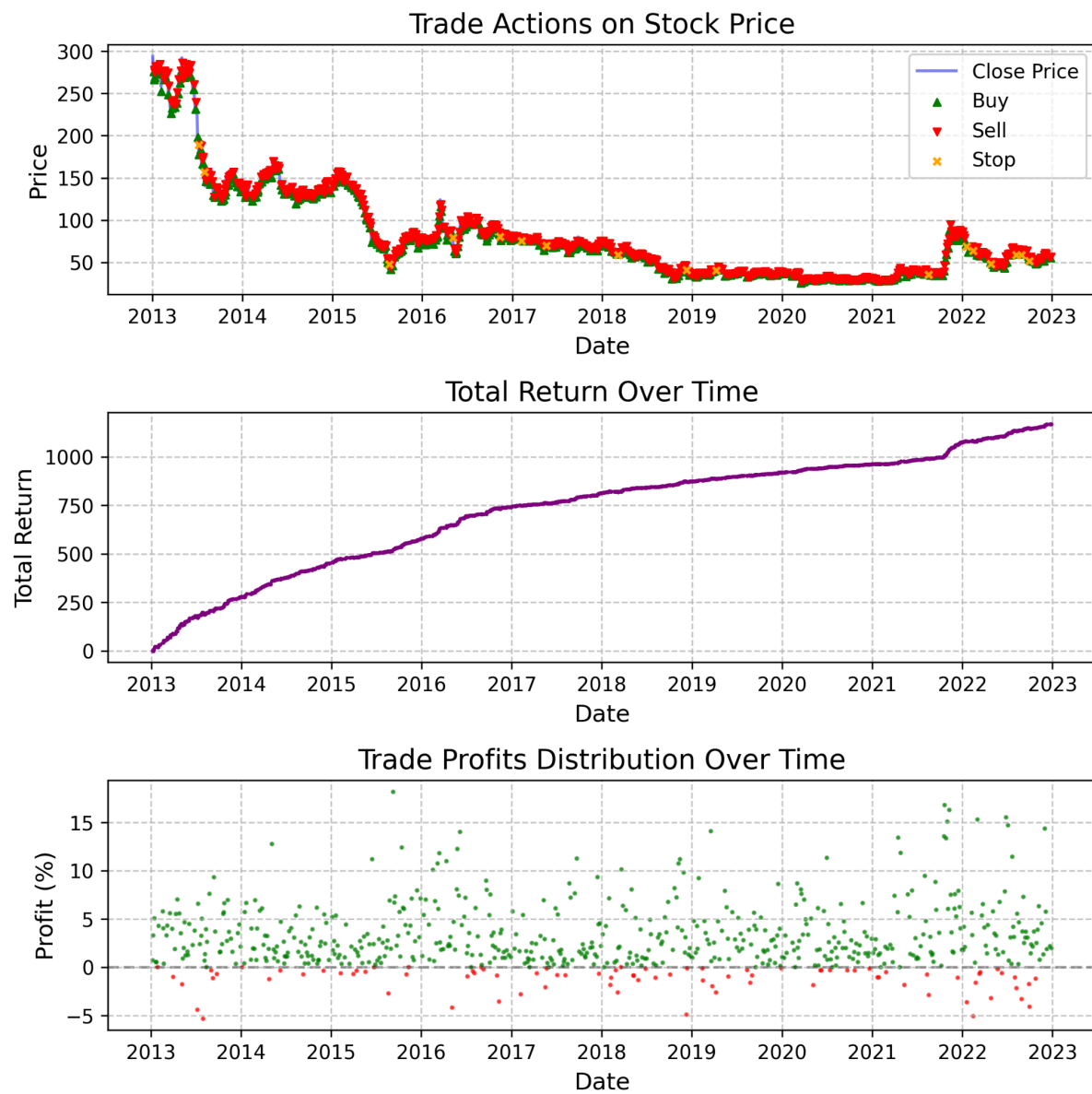
盤整趨勢回測區間最佳報酬-2412



Trading Performance Summary

Metric	Value
Total Profit	291.83
Total Loss	-7.89
Total Profit Percentage	504.35%
Profit Factor	37.01
Total Trades	357
Win Probability	88.52%
Average Win	0.92
Average Loss	-0.19
Risk-Reward Ratio	4.80
Annual Volatility	22.41%
Max Drawdown	0.83
Sharpe Ratio	0.86
Expectancy	0.80

下跌趨勢回測區間最佳報酬-2498.TW



Trading Performance Summary

Metric	Value
Total Profit	1490.49
Total Loss	-86.76
Total Profit Percentage	540.66%
Profit Factor	17.18
Total Trades	639
Win Probability	86.54%
Average Win	2.70
Average Loss	-1.01
Risk-Reward Ratio	2.67
Annual Volatility	75.64%
Max Drawdown	8.84
Sharpe Ratio	0.73
Expectancy	2.20

其他交易策略：

策略核心

方法：固定比例法 (**Fixed Ratio**)

- 目標：通過價格變動增量 (Δ) 動態調整持倉規模。
 - 執行方式：
 - 上漲趨勢中逐步增加部位。
 - 回檔時適時減倉。
 - 設置停損機制以控制風險。
-

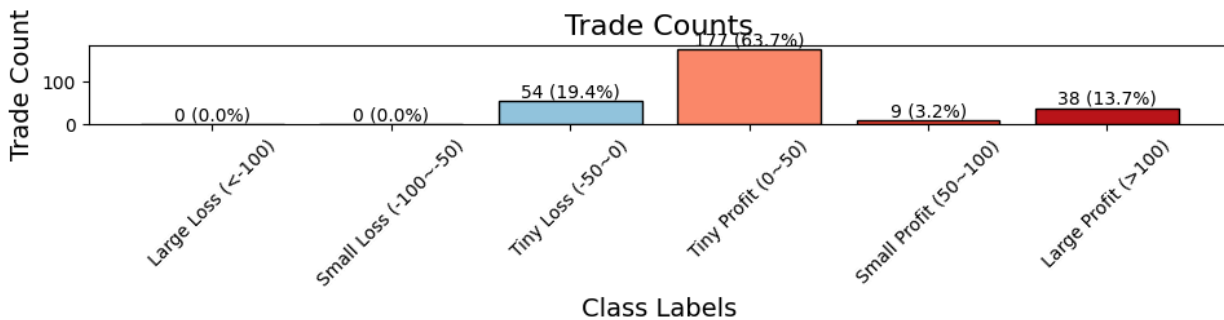
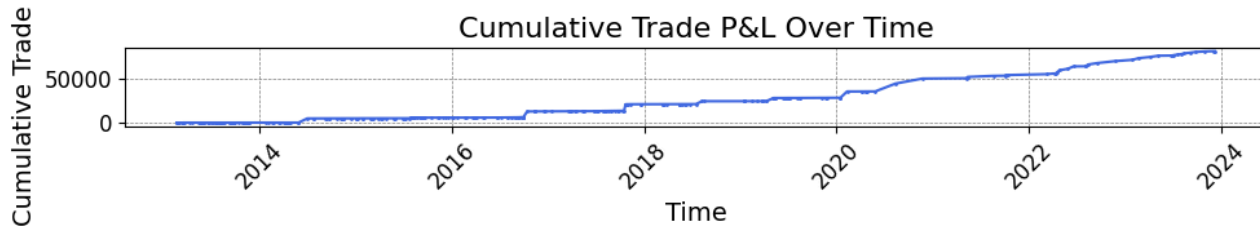
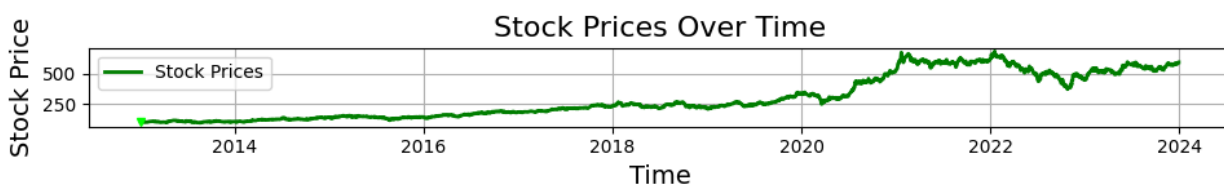
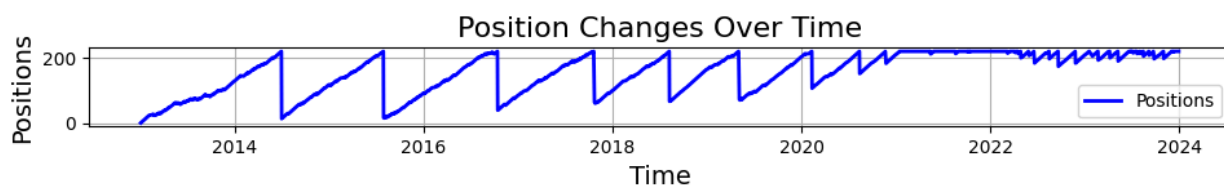
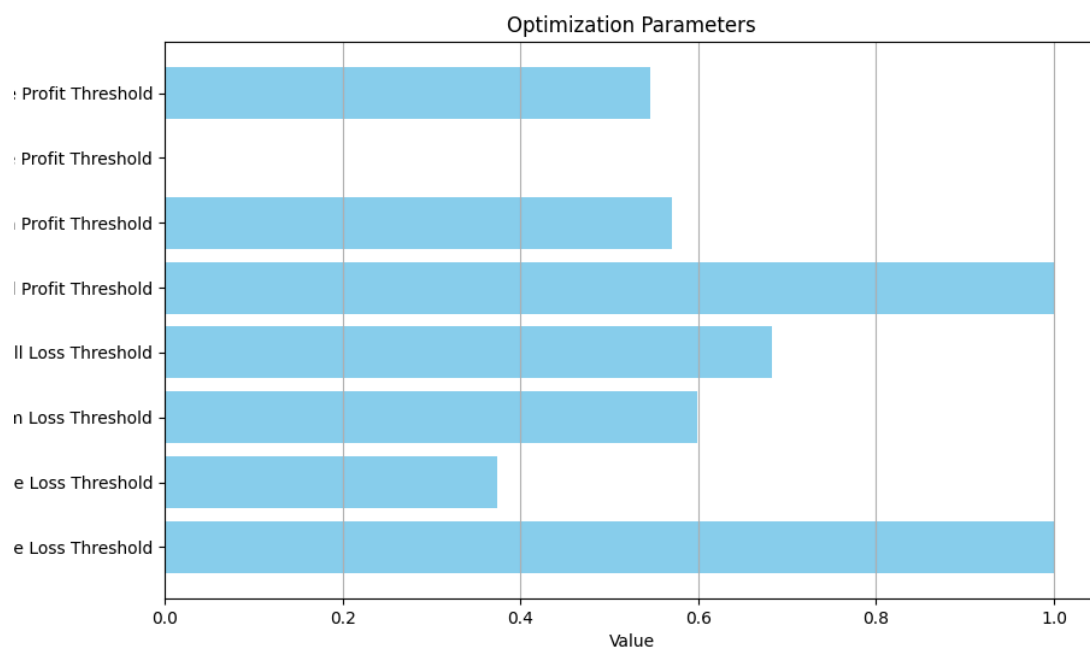
交易結果預測

1. 模型：隨機森林分類器
 - 用於預測交易結果，進一步優化持倉管理。
 - 過濾高風險交易機會。
 2. 結果分類 (8 類別)：
 - 重大虧損 (**Major Loss**)
 - 大額虧損 (**Large Loss**)
 - 中額虧損 (**Medium Loss**)
 - 小額虧損 (**Small Loss**)
 - 小額獲利 (**Small Profit**)
 - 中額獲利 (**Medium Profit**)
 - 大額獲利 (**Large Profit**)
 - 重大獲利 (**Major Profit**)
-

參數優化

算法：粒子群優化 (**PSO**)

- 目標：計算每個參數的閾值，確定大部位持倉數。
- 評估方式：
 - 基於期望值進行評估。
 - 利用交易結果分類 (**class tard counts**)：
 - 分類標準：虧損類別的數量越少，評分越高。



Status
Backtest Completed!

Backtest Results - 2330.TW

Metric	Value
Total Profit	81361 points
Total Trades	278
Win Rate	80.58%
Profit Factor	311.290
Win/Loss Ratio	75.043
Max Drawdown	-18

:: Running enhanced backtest...

Class Trade Counts

Label	Trade Count	Percentage
Large Loss (<-100)	0	0.0%
Small Loss (-100~-50)	0	0.0%
Tiny Loss (-50~0)	54	19.4%
Tiny Profit (0~50)	177	63.7%
Small Profit (50~100)	9	3.2%
Large Profit (>100)	38	13.7%

:: Running enhanced backtest...█

Optimization Parameters

Parameter	Value
Severe Loss Threshold	1.0
Large Loss Threshold	0.37428220926399525
Medium Loss Threshold	0.598371714916299
Small Loss Threshold	0.6824165197609996
Small Profit Threshold	0.9999861085660475
Medium Profit Threshold	0.5709803905300885
Large Profit Threshold	0.0
Severe Profit Threshold	0.5460483654915782
Max Position	10.0
Large Profit Position	2.0
Severe Profit Position	3.0