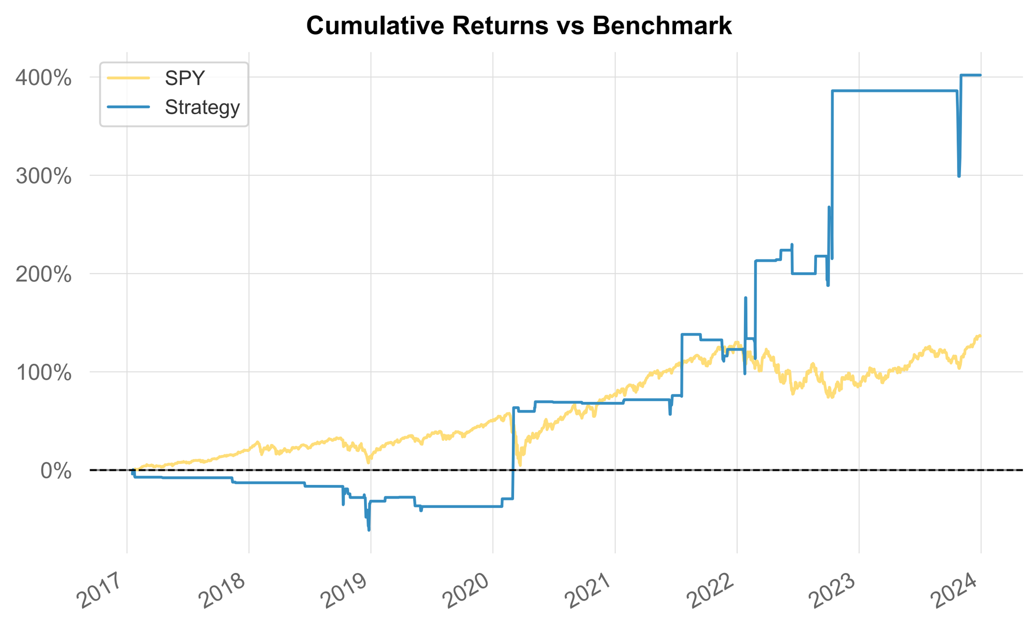
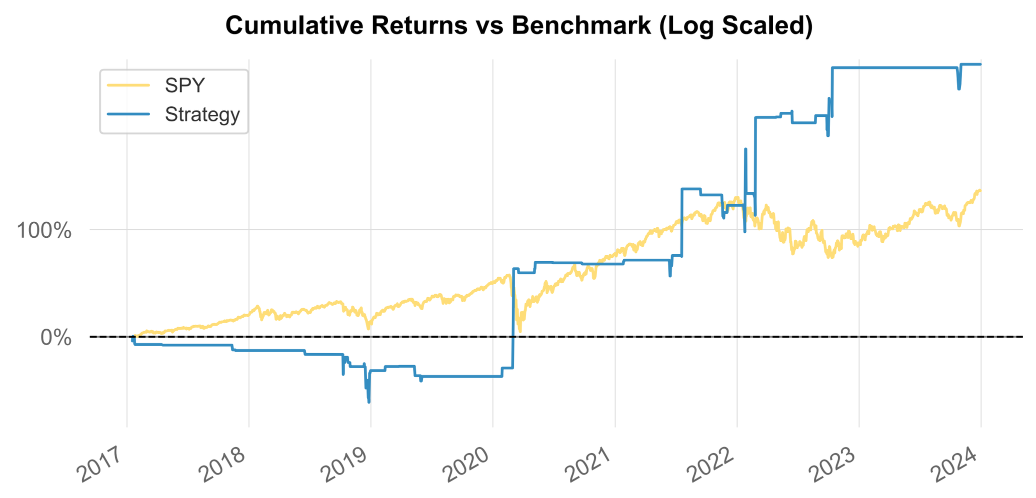
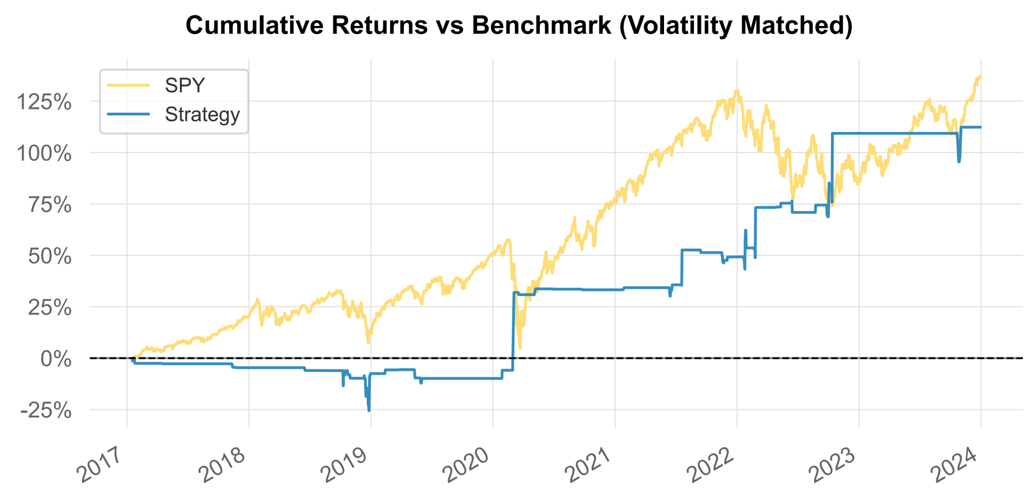
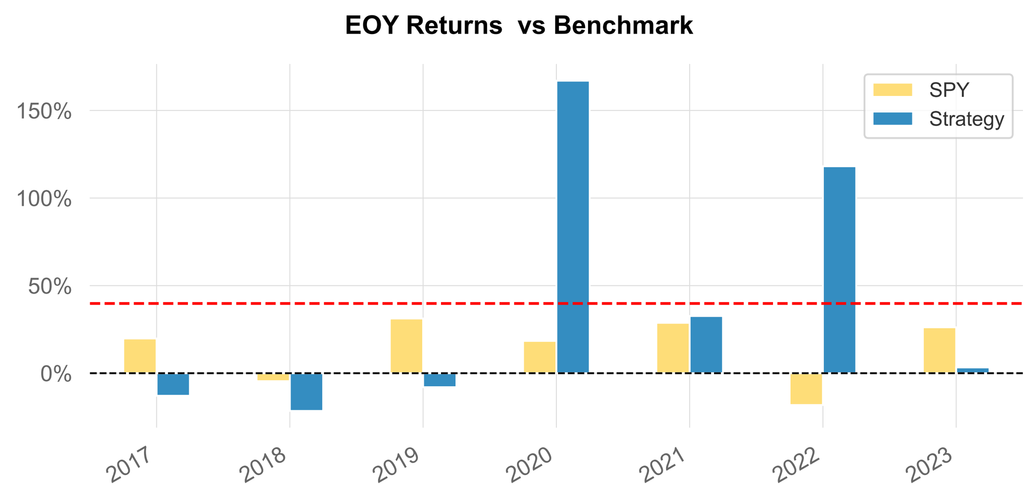
MultiAssetStrategy Compared to SPY 17 Jan, 2017 - 30 Dec, 2023

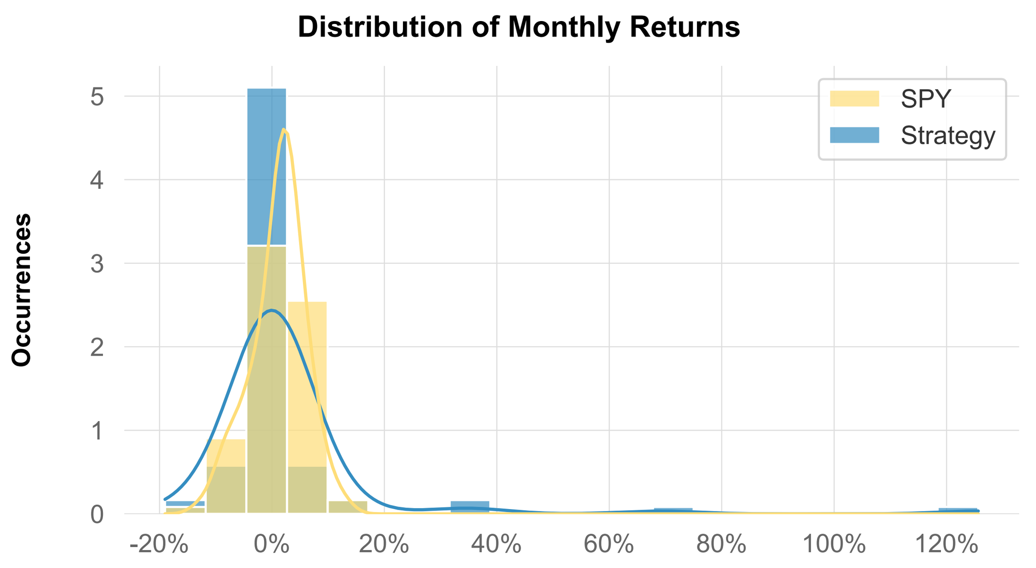
Benchmark is SPY | Generated by QuantStats (v. 0.0.62)

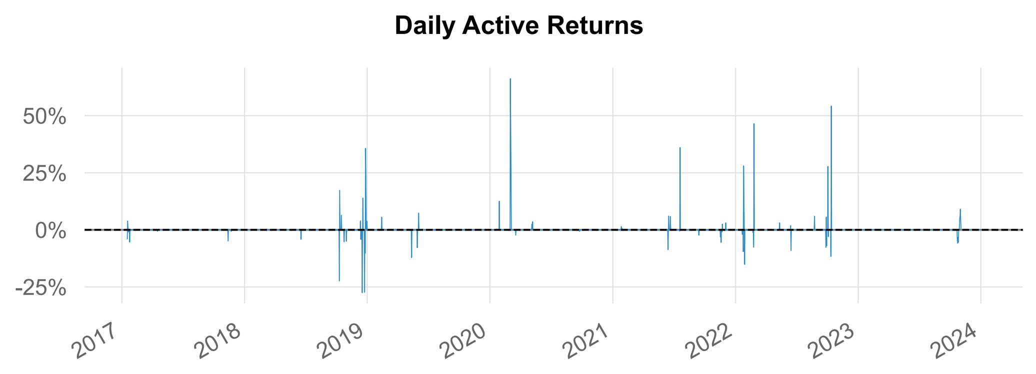


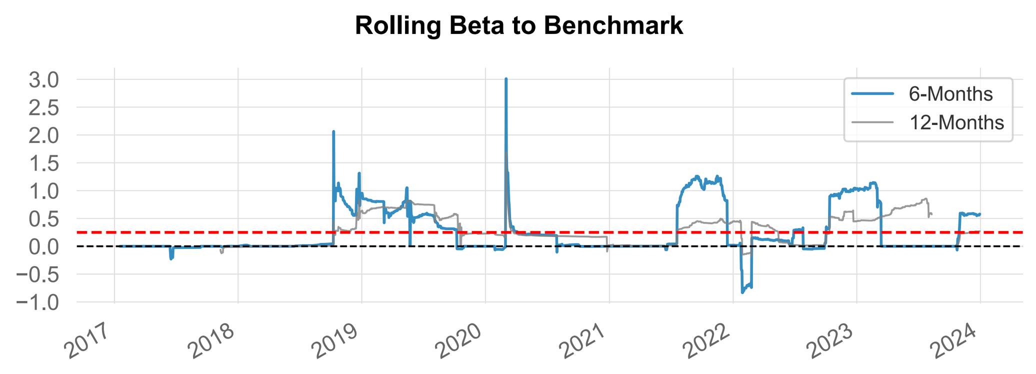


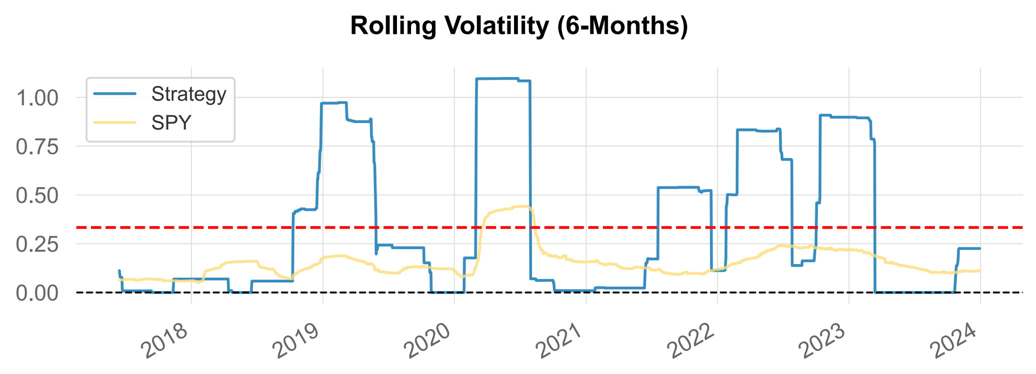


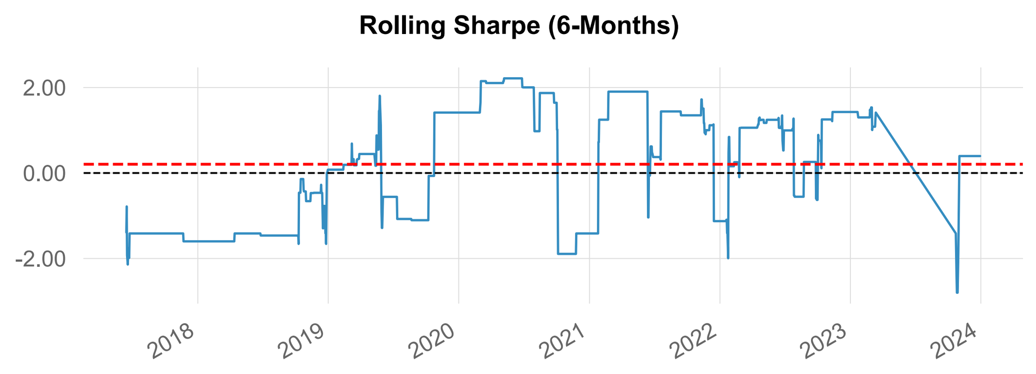


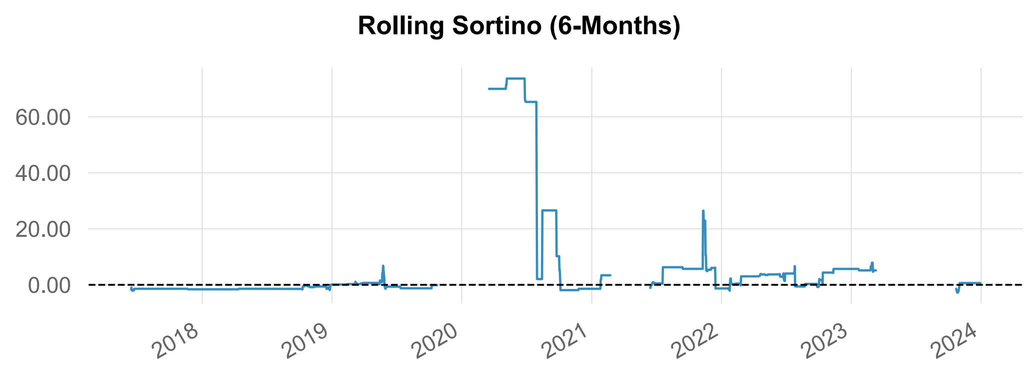


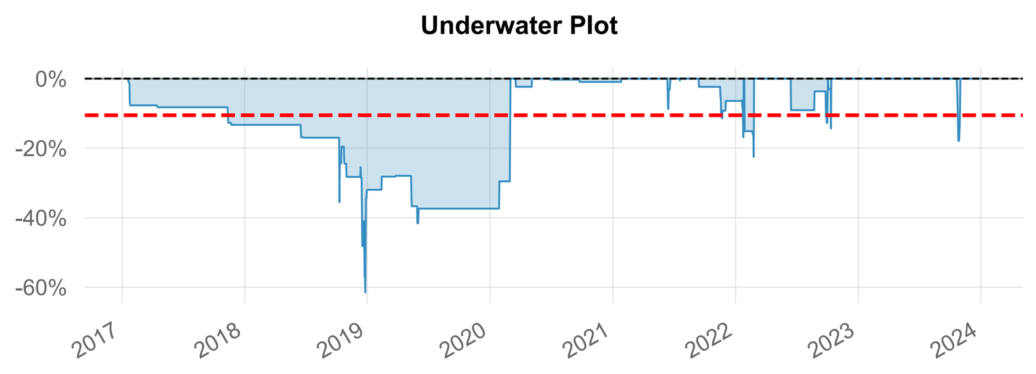


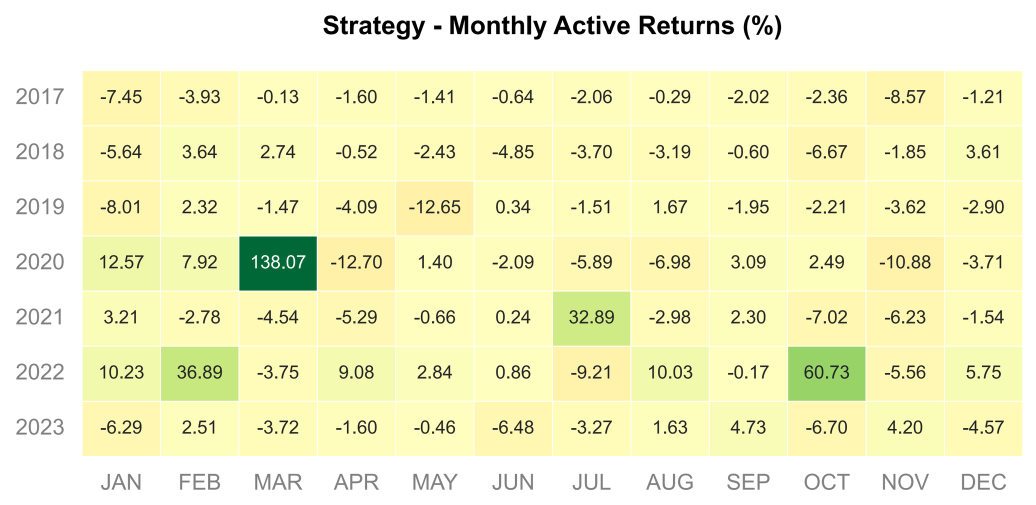












Key Performance Metrics

Metric	SPY	Strategy
Risk-Free Rate	5.19%	5.19%
Time in Market	83.0%	4.0%
Cumulative Return	136.43%	401.99%
CAGR﹪	8.92%	17.37%
Sharpe	0.38	0.49
Prob. Sharpe Ratio	33.54%	20.6%
Smart Sharpe	0.35	0.45
Sortino	0.53	1.2
Smart Sortino	0.49	1.11
Sortino/√2	0.37	0.85
Smart Sortino/√2	0.34	0.78
Omega	1.67	1.67
Max Drawdown	-33.68%	-61.51%
Longest DD Days	708	1136
Volatility (ann.)	17.31%	49.17%
R^2	0.01	0.01
Information Ratio	0.02	0.02
Calmar	0.26	0.28
Skew	-0.6	11.12
Kurtosis	16.23	207.76
Expected Daily	0.04%	0.08%
Expected Monthly	1.03%	1.94%
Expected Yearly	13.08%	25.92%
Kelly Criterion	13.53%	22.95%
Risk of Ruin	0.0%	0.0%
Daily Value-at-Risk	-1.75%	-4.98%
Expected Shortfall (cVaR)	-1.75%	-4.98%
Max Consecutive Wins	5	4
Max Consecutive Losses	5	4
Gain/Pain Ratio	0.16	0.94
Gain/Pain (1M)	0.86	2.99
Payoff Ratio	1.08	2.05
Profit Factor	1.16	1.94
Common Sense Ratio	1.07	-
CPC Index	0.69	1.92
Tail Ratio	0.93	-
Outlier Win Ratio	7.42	16.45
Outlier Loss Ratio	4.85	0.64
MTD	4.57%	0.0%
3M	11.64%	3.28%
6M	9.33%	3.28%
YTD	26.21%	3.28%
1Y	25.88%	3.28%
3Y (ann.)	7.25%	28.94%
5Y (ann.)	9.92%	32.3%
10Y (ann.)	8.92%	17.37%
All-time (ann.)	8.92%	17.37%
Best Day	9.06%	66.21%
Worst Day	-10.94%	-27.52%
Best Month	12.7%	125.64%
Worst Month	-12.44%	-19.02%
Best Year	31.23%	167.0%
Worst Year	-18.16%	-21.55%
Avg. Drawdown	-1.66%	-15.84%
Avg. Drawdown Days	18	169
Recovery Factor	2.93	4.02
Ulcer Index	0.08	0.17
Serenity Index	0.78	1.42
Avg. Up Month	4.36%	14.55%
Avg. Down Month	-5.66%	-8.16%
Win Days	55.07%	48.19%
Win Month	70.24%	54.84%
Win Quarter	75.0%	47.37%
Win Year	71.43%	57.14%
Beta	-	0.27
Alpha	-	0.26
Correlation	-	9.49%
Treynor Ratio	-	1471.11%

EOY Returns vs Benchmark

Year	SPY	Strategy	Multiplier	Won
2017	19.82%	-12.88%	-0.65	-
2018	-4.54%	-21.55%	4.75	-
2019	31.23%	-7.97%	-0.26	-
2020	18.43%	167.00%	9.06	+
2021	28.77%	32.65%	1.14	+
2022	-18.16%	118.16%	-6.51	+
2023	26.21%	3.28%	0.13	-

Worst 10 Drawdowns

Started	Recovered	Drawdown	Days
2017-01-20	2020-02-29	-61.51%	1136
2022-01-28	2022-02-24	-22.55%	28
2023-10-23	2023-11-01	-17.92%	10
2021-09-14	2022-01-24	-16.87%	133
2022-10-04	2022-10-12	-14.33%	9
2022-06-15	2022-10-01	-12.72%	109
2021-06-14	2021-06-19	-8.69%	6
2020-03-18	2020-05-04	-2.33%	48
2020-06-29	2021-01-25	-0.94%	211
2021-07-19	2021-07-19	-0.52%	1