Adaptive Rotation *Blueprint*©

This report provides a complete overview of a model portfolio developed by Tirmann. It is designed to help prospective users assess the structure, performance, and risk profile of a fully automated trading system built from validated algorithmic strategies.

Each strategy included in this portfolio has undergone extensive historical testing and is selected based on its unique market behavior, contribution to diversification, and long-term resilience.

This document does not constitute investment advice. Its purpose is to present transparent, data-driven information so that clients can make an informed decision regarding the adoption of this portfolio within their own trading setup.

Gold futures **S&P500 futures** **Nasdaq futures**

Each system is built using robust research methodologies, including walk-forward optimization, dynamic parameter adjustment, and strict out-of-sample validation. This process is designed to mitigate overfitting and ensure that each strategy is capable of adapting to evolving market conditions with structural integrity.

Quantitative strategies are not static tools. They are dynamic systems whose performance is influenced by the ever-evolving nature of financial markets. Just as markets go through distinct regimes. Strategies have their own performance cycles. A model that excels during one regime may underperform in another. For this reason, strategy rotation is a critical component of the portfolio management process.

At Tirmann, we implement a structured, data-driven rotation mechanism, reviewed monthly, to ensure that each portfolio remains aligned with current market conditions and continues to deliver on its objectives. This process is governed by a blend of quantitative performance metrics, risk thresholds, and market regime detection tools.

This rotation process is rules-based and driven by objective performance thresholds, ensuring transparency and consistency. Strategies may be reintroduced once they realign with market conditions and regain stability. This disciplined approach keeps portfolios both diversified and adaptive, responding effectively to market shifts and internal performance dynamics.

- **Transparency**
- **Measurable**
- **Auditability**

Objectives of strategies rotation

Mitigate prolonged drawdowns

By rotating out strategies that exhibit structural underperformance or increased volatility, we help protect the overall portfolio from extended capital erosion.

Preserve alignment with market regimes

Strategies are continuously monitored to ensure they remain well-fitted to the prevailing market environment (e.g. high volatility, range-bound periods).

Capture strategy momentum

Just like assets, strategies can exhibit temporary momentum. Our rotation process seeks to capitalize on models in their outperforming phase, while pausing those that are temporarily out of sync.

Extend lifecycle and reduce decay

Even high-performing strategies can suffer from overexposure or statistical degradation. By rotating them out when appropriate, we preserve their long-term efficacy and delay obsolescence.

Each component of your portfolio is independently selected, validated, and monitored. This section provides a detailed view of every strategy currently included. Offering full transparency on their design, historical behavior, and role within the broader system.

By understanding the characteristics and performance of each individual model, you gain deeper insight into how they contribute to overall portfolio balance, risk distribution, and long-term consistency.

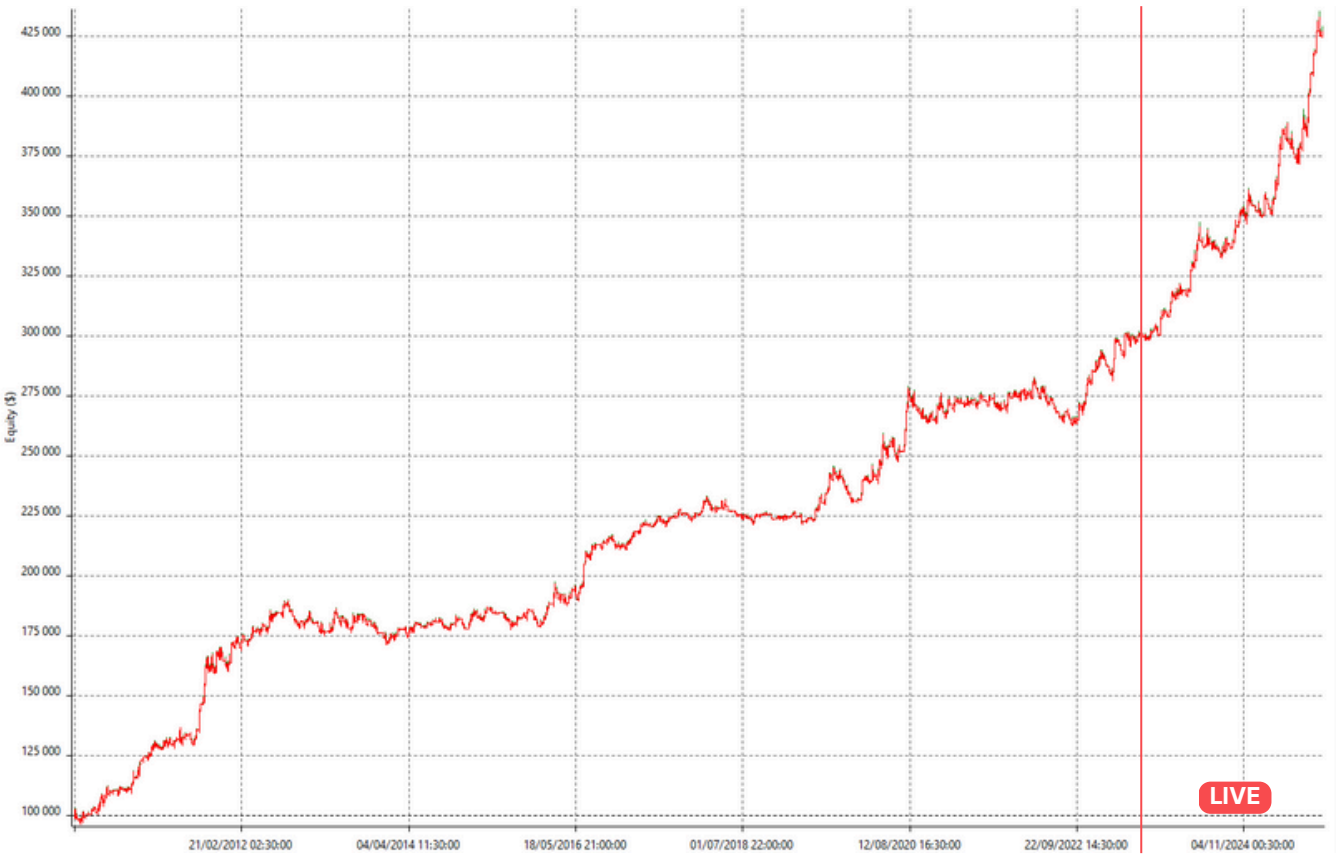
Gold futures strategy

A65-@GC-30'

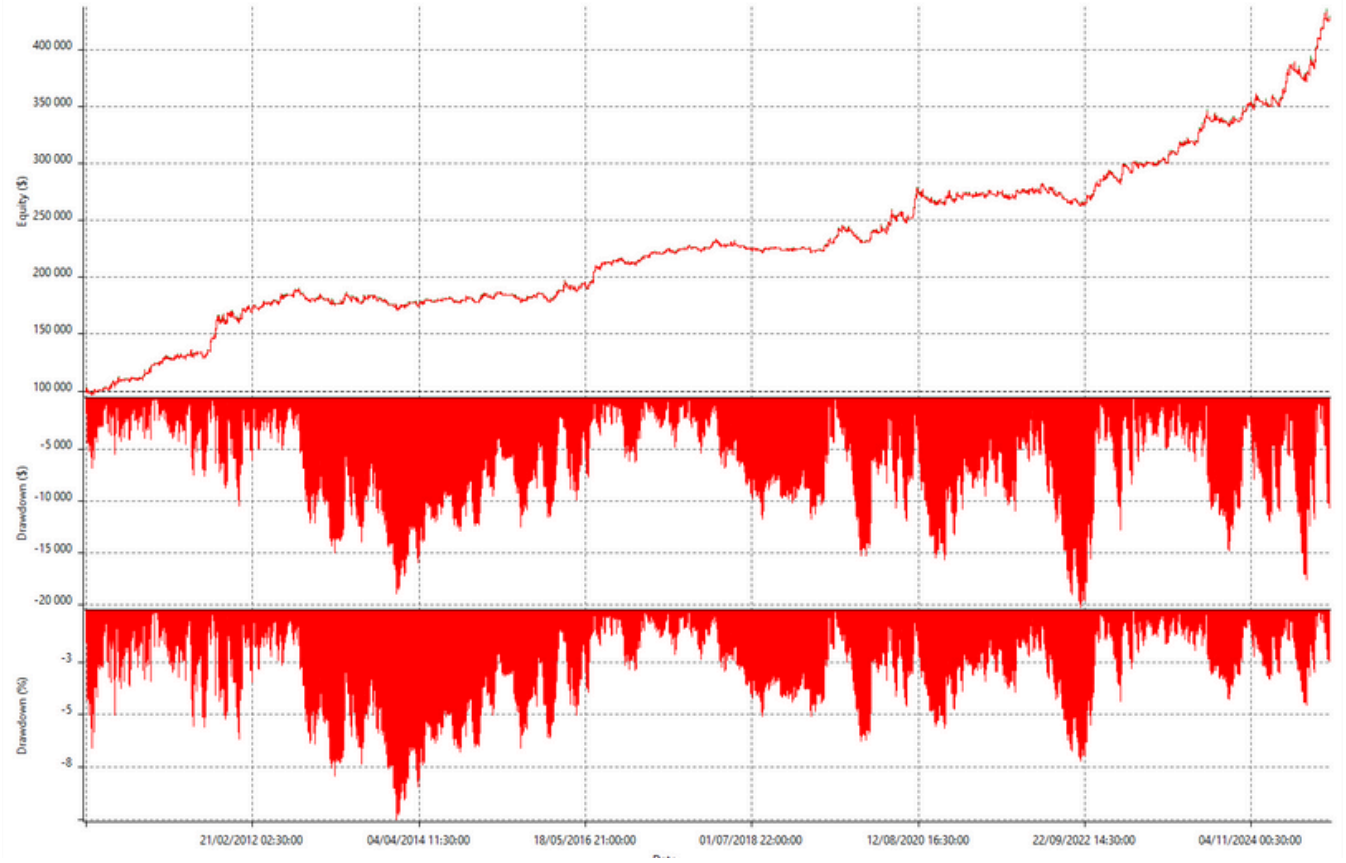
Net profit	325 140,00$
Max strategy drawdown	(20 320,00$)
Max # contracts held	1
Max close to close drawdown	(19 160,00$)
Return on max strategy drawdown	16
Total # of trades	718
Percent profitable	51,53%
Average trade	452,84$
Average winning trade	1 946,59$
Average losing trade	(1 219,44$)
Percent in the market	40,92%
Average # trades per month (last 8 months)	4,87
Last 8 months performance ($)	72 260$

03/25	04/25	05/25	06/25	07/25	08/25	09/25	10/25
11960,00	13080,00	2300,00	-6000	3860,00	21650,00	19110,00	6300,00

Equity curve detailed



Equity curve detailed with drawdown



Equity curve close to close

Buy and hold comparison

Stop loss	(2 000$)
Break-even	3 600$
Take profit	8 300$
Developed from	01-01-2010
Developed to	31-12-2023
Out-of-sample validation	✓
Stress-testing validation	✓
Effectiveness of optimizations post-validation	✓

Strategy description

This strategy targets intraday cycles in the gold market. The algorithm is programmed to systematically open a long position every Thursday at a specific hour aiming to capture recurring intraday volatility or trend patterns.

To manage risk and prevent level rejections, a smart exit condition is applied: if the price returns to the session open level while the unrealized gain is below $2,700 and the time is between a specific time window, the trade is closed automatically. This ensures capital protection when the anticipated move does not fully develop.

Additionally, trades are time-limited, automatically closing after few bars. Each trade is protected by a $2,000 stop-loss, an $8,300 take-profit, and a $3,600 break-even, securing profits once the position moves favorably.

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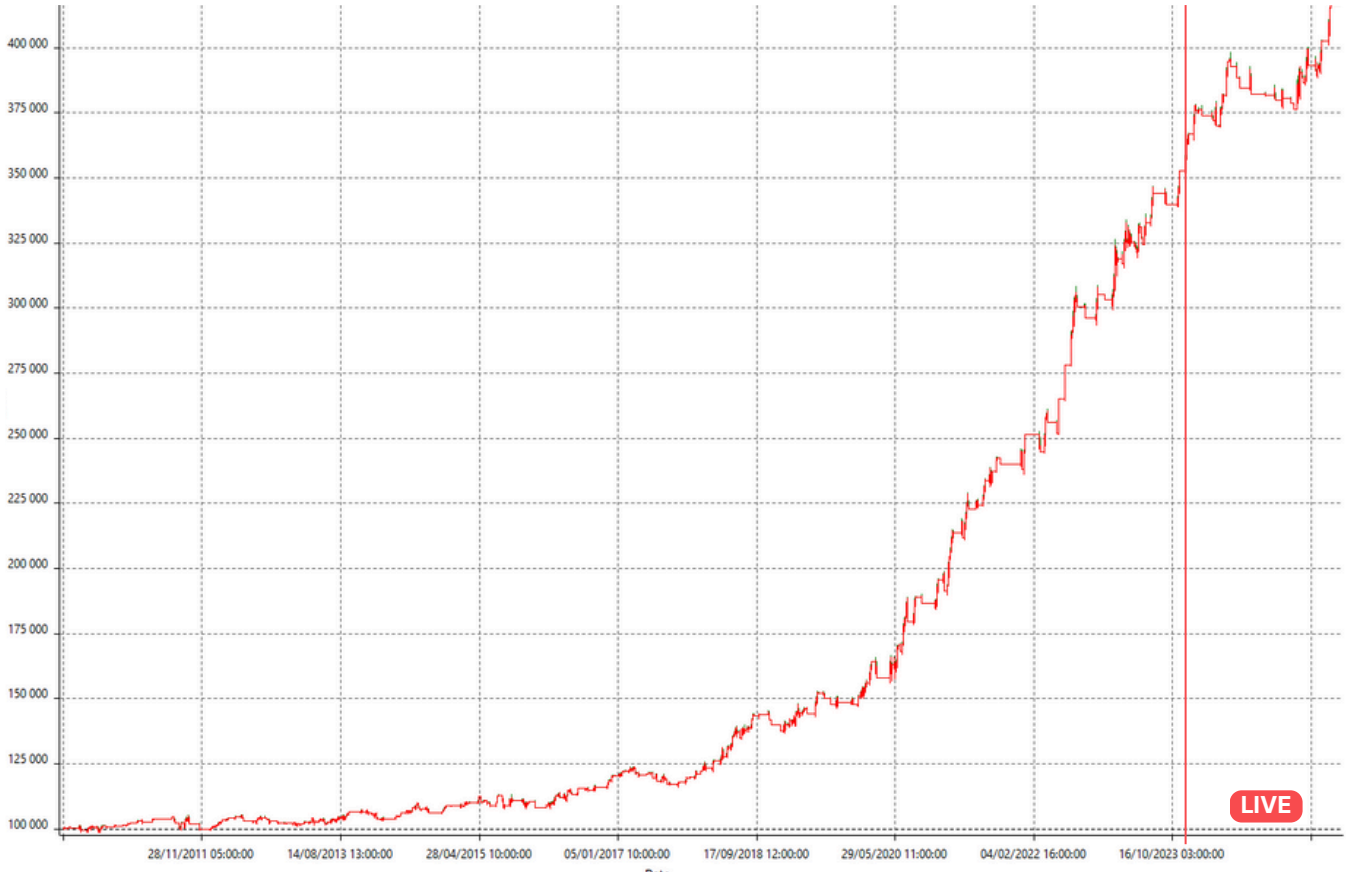
Nasdaq futures strategy

A54-@NQ-60'-240'

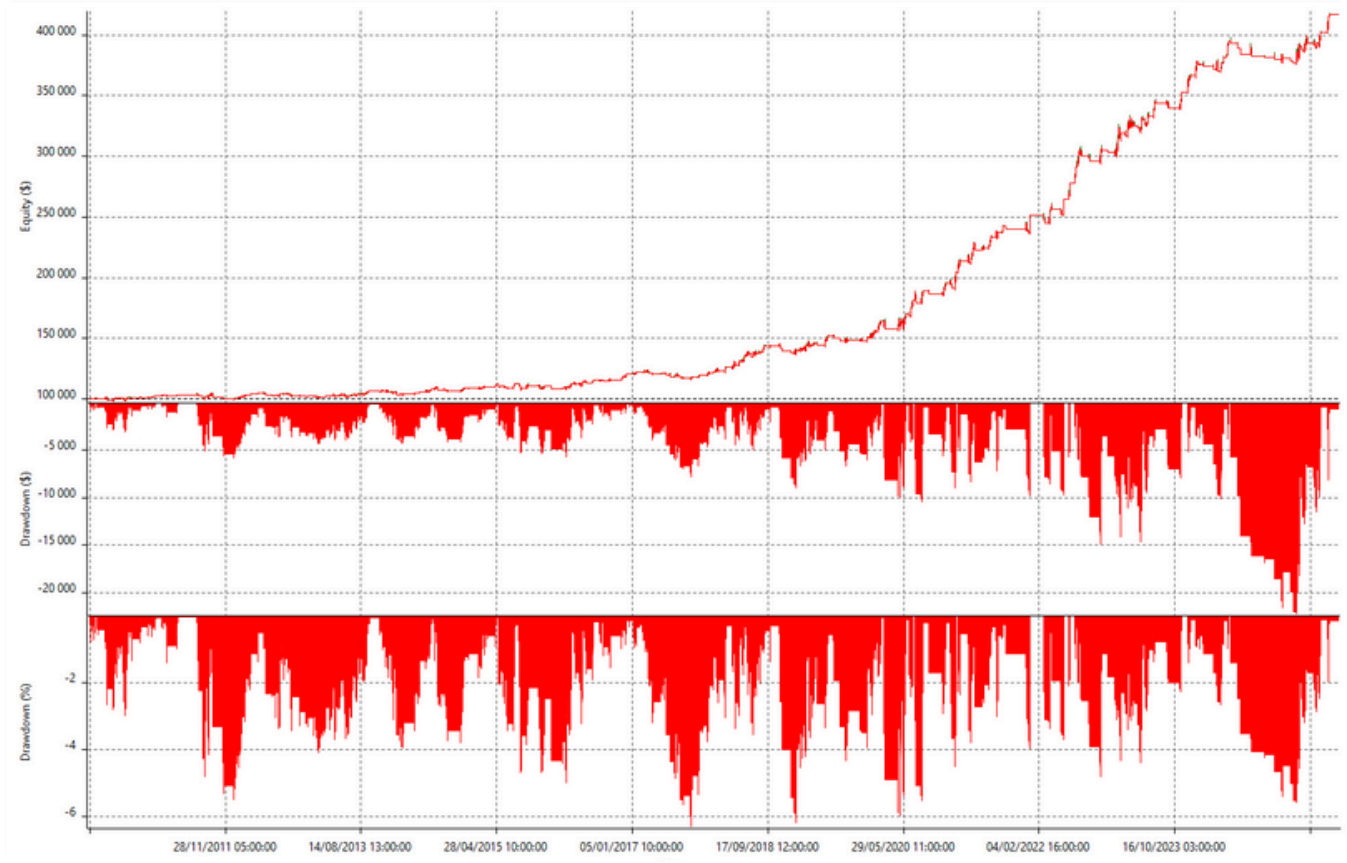
Net profit	317 145,00$
Max strategy drawdown	(22 210,00$)
Max # contracts held	1
Max close to close drawdown	(18 510,00$)
Return on max strategy drawdown	14,28
Total # of trades	353
Percent profitable	52,12%
Average trade	898,43$
Average winning trade	2 926,77$
Average losing trade	(1 341,70$)
Percent in the market	24,12%
Average # trades per month (last 8 months)	3
Last 8 months performance ($)	37 210$

02/25	03/25	04/25	05/25	06/25	07/25	08/25	09/25
725,00	(2100,00)	7310,00	620,00	6900,00	(285,00)	9465,00	14575,00

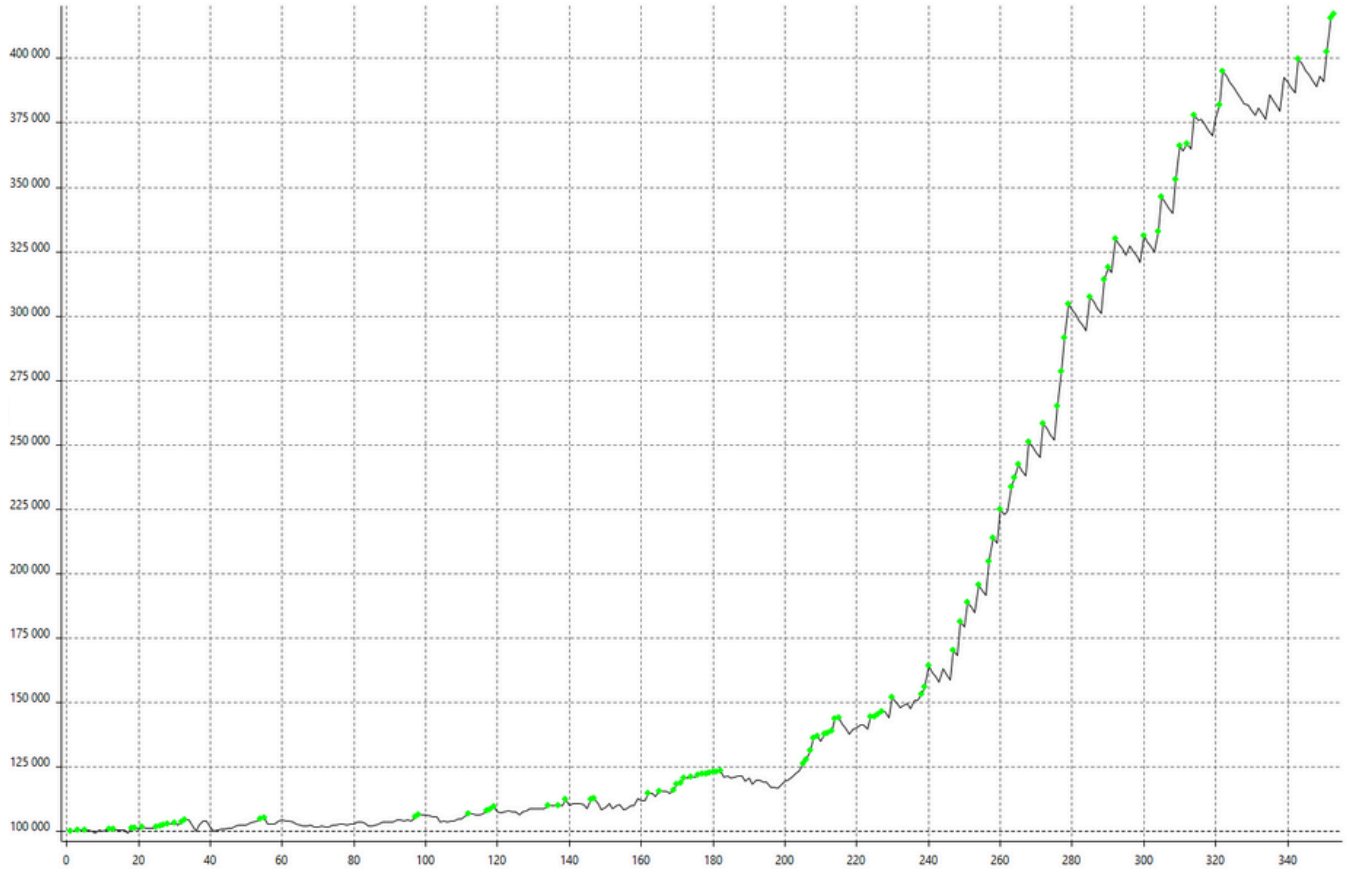
Equity curve detailed



Equity curve detailed with drawdown



Equity curve close to close



Buy and hold comparison

Stop loss	(2 100$)
Break-even	N/A
Take profit	13 200$
Developed from	01-01-2010
Developed to	31-12-2023
Out-of-sample validation	✓
Stress-testing validation	✓
Effectiveness of optimizations post-validation	✓

Strategy description

This strategy is based on price levels observed on Fridays, but it never takes positions on that day. It is also inactive during October. The core idea is to capture significant movements at the start of the following week, referencing previously established price levels as natural support or resistance zones.

Additionally, the current session's open must be below the previous session's close, confirming that the upward movement has not already started prior to the signal.

A pattern filter prevents invalid signals: the trade is ignored if the previous session's candle body represents more than 90% of the range between its high and low, indicating an excessively extreme session not suitable for a reliable signal.

Positions are automatically closed after few bars or if the price returns to the current session's open, to limit the risk of level rejection and protect capital. The strategy includes a fixed $2,100 stop-loss and a $13,200 take-profit, ensuring a consistent risk/reward profile aligned with capturing structured moves based on Friday's price levels.

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By understanding the characteristics and performance of each individual model, you gain deeper insight into how they contribute to overall portfolio balance, risk distribution, and long-term consistency.

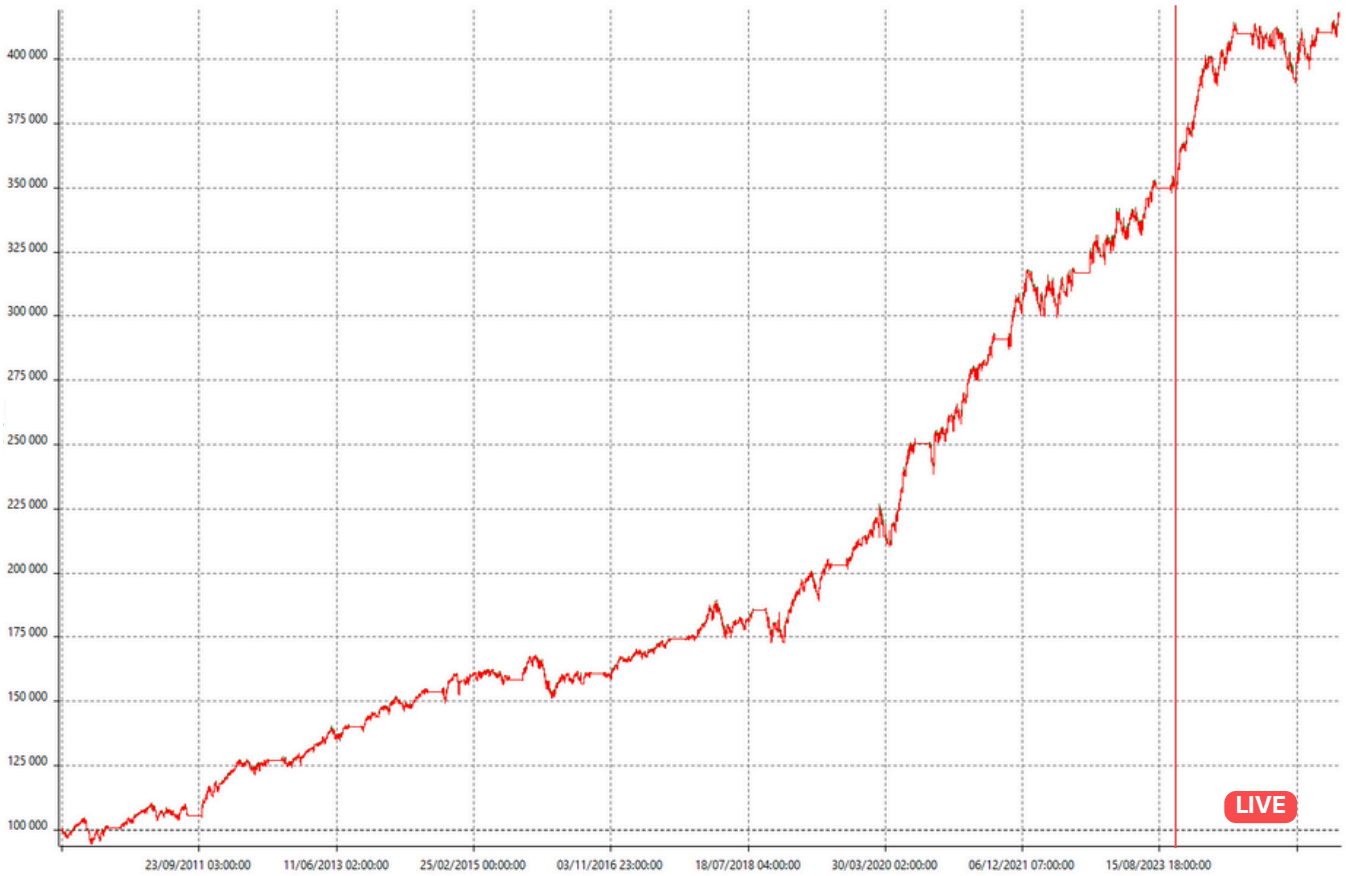
S&P500 futures strategy

A41-@ES-60'-240'

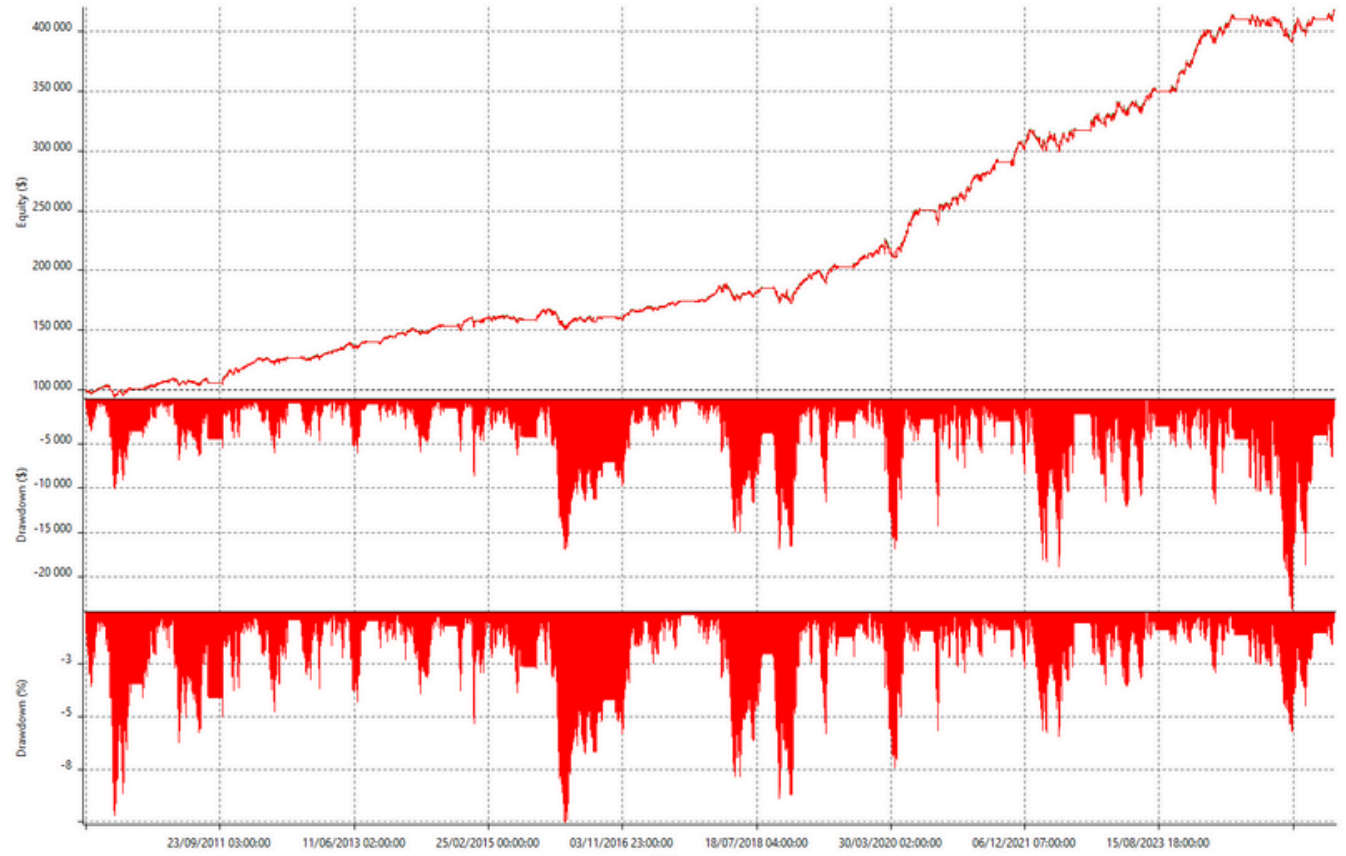
Net profit	316 412,50$
Max strategy drawdown	(23 637,50$)
Max # contracts held	1
Max close to close drawdown	(22 512,50$)
Return on max strategy drawdown	13,39
Total # of trades	719
Percent profitable	32,12%
Average trade	440,07$
Average winning trade	3. 335,98$
Average losing trade	(1 359,88$)
Percent in the market	57,4%
Average # trades per month (last 8 months)	6,37
Last 8 months performance ($)	10 137,00$

03/25	04/25	05/25	06/25	07/25	08/25	09/25	10/25
(9662,50)	5575,00	1475,00	1750,00	5037,00	0,00	0,00	5962,5

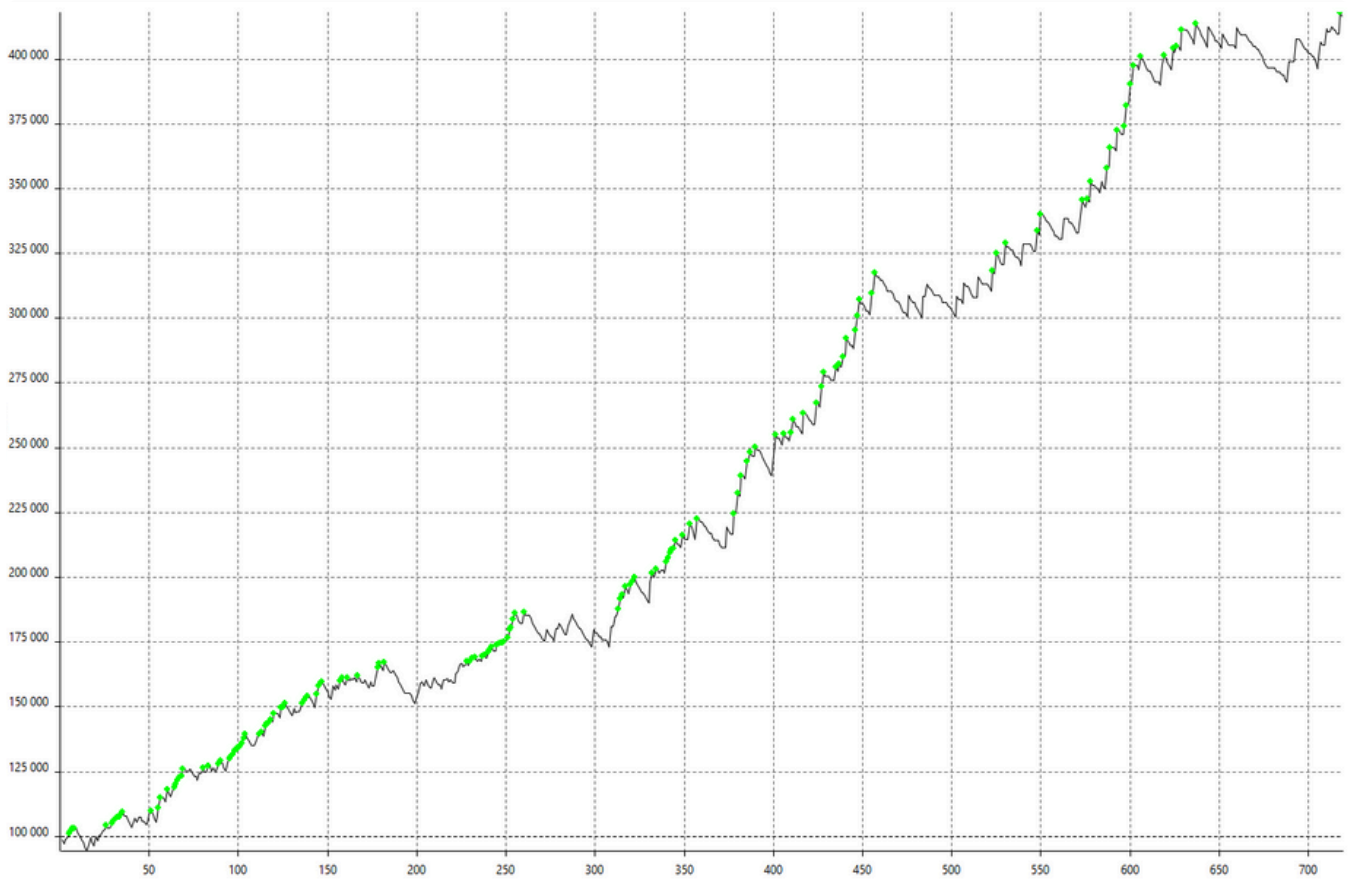
Equity curve detailed



Equity curve detailed with drawdown



Equity curve close to close



Buy and hold comparison

Stop loss	(1 400$)
Break-even	1 600$
Take profit	8 000$
Developed from	01-01-2010
Developed to	31-12-2023
Out-of-sample validation	✓
Stress-testing validation	✓
Effectiveness of optimizations post-validation	✓

Strategy description

The A41 strategy targets moderate directional moves when volatility on the 240-minute timeframe is significantly elevated. Trading is disabled in August and September. The first condition is based on the ATR: if the ATR on the 240-minute timeframe exceeds its a certain period average, the volatility condition is met.

On the 60-minute timeframe, trading is active between 00:00 and 17:00. If the RSI crosses above 50, a market order is triggered.

Each position is automatically closed after few bars. Risk is managed with a $1,400 stop-loss and an $8,000 take-profit, with a breakeven set at $1,600 to secure part of the profits.

This section presents the consolidated view of the portfolio, detailing how the selected strategies interact and contribute to overall performance. By combining uncorrelated systems, the portfolio aims to maximize risk-adjusted returns while maintaining structural resilience across varying market conditions.

Each strategy has been selected based on strict performance, stability, and diversification criteria. The following metrics illustrate the behavior of the portfolio as a whole, including drawdown characteristics, volatility, correlation, and cumulative returns. Offering a comprehensive understanding of its historical robustness and adaptability.

Complete portfolio overview

A54-@NQ-60'-1440' — **@NQZ5**

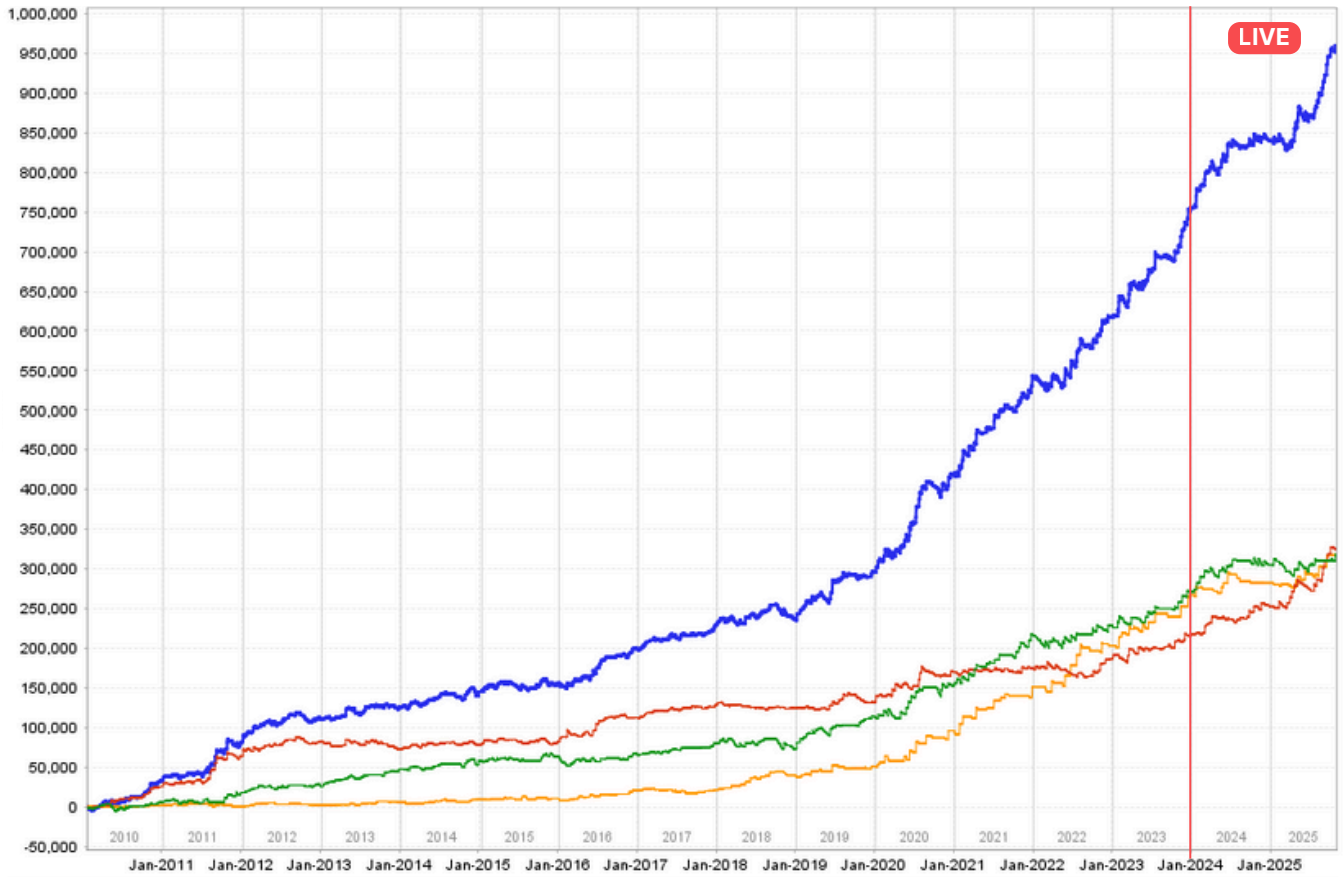
A65-@GC-60' — **@GCZ5**

A41-@ES-60'-240' — **@ESZ5**

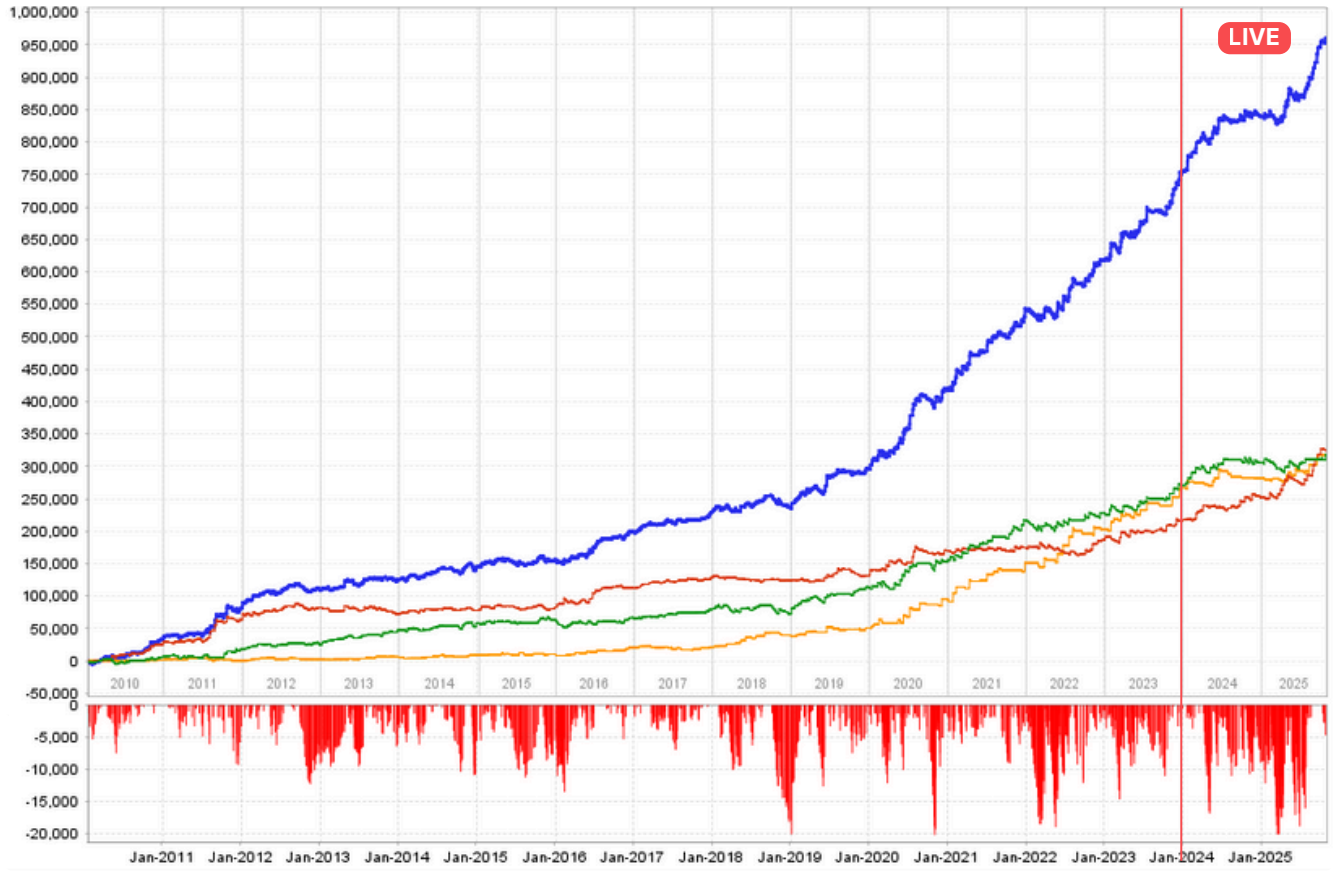
Net profit	958 697,5$
Max portfolio drawdown	(20 330,00$)
Return on max portfolio drawdown	47,16
Total # trades	1790
Percent profitable	43,85%
Average trade	535,59$
Average winning trade	2 585,19$
Average losing trade	(1 065,35$)
Last 8 months performance ($)	121 556,00$

03/25	04/25	05/25	06/25	07/25	08/25	09/25	10/25
(4950)	24330	13850	1425	10277,5	24065	40295	12262,5

Equity curve detailed

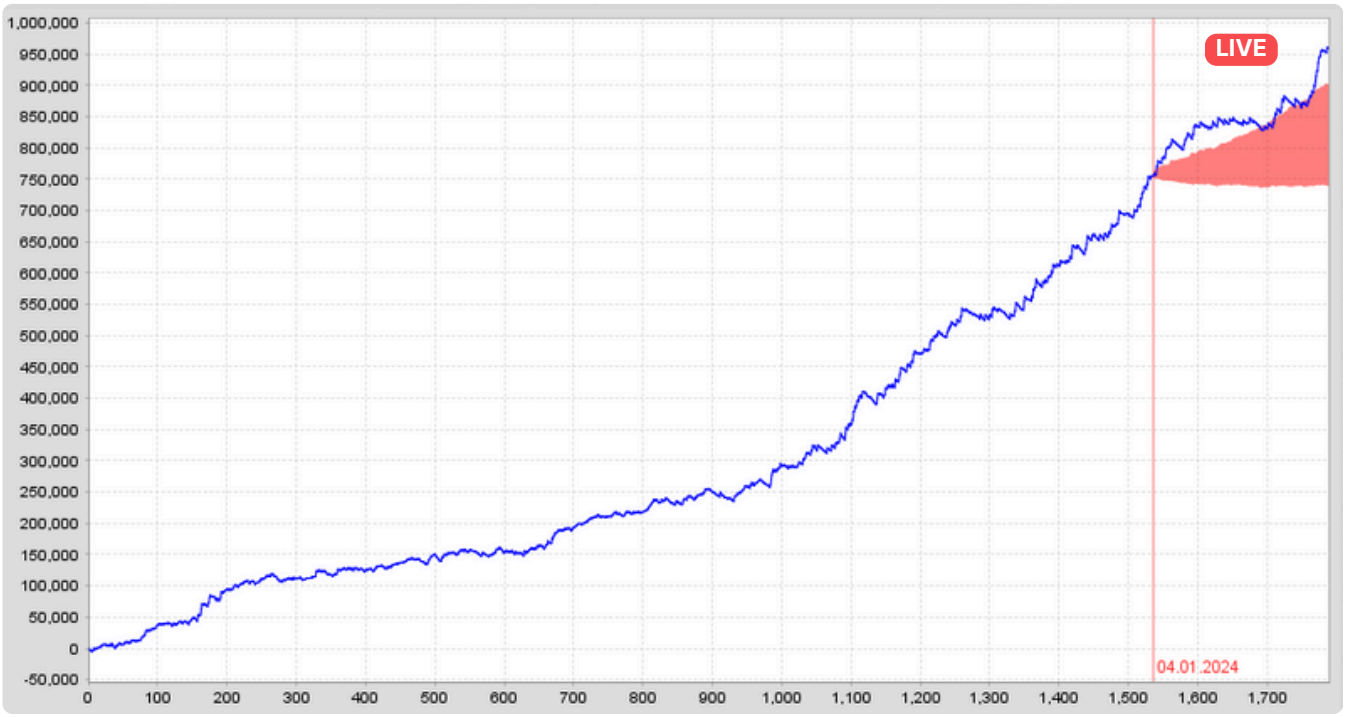


Equity curve with drawdown



Predict and verify curve

10,000 simulations | 5% trades skipped



Monte-carlo confidence levels

10,000 simulations | 5% trades skipped

Confidence level	Net Profit	% Net Profit	Number of tra...	Max DD	Max % DD	Ret/DD	R Exp	AR %	Consecu
Original	$ 958697.5	319.57 %	1790.0	$ 20330	3.64 %	47.16	0.5 R	20.18 %	16
50	$ 843422.79	281.14 %	1709.0	$ 42332.95	4.83 %	19.86	0.45 R	18.68 %	12
60	$ 826387.17	275.46 %	1709.0	$ 45757.29	5.13 %	18.32	0.44 R	18.31 %	12
70	$ 810212.23	270.07 %	1709.0	$ 50212.98	5.48 %	16.79	0.42 R	17.95 %	13
80	$ 790485.6	263.5 %	1709.0	$ 55872.2	5.96 %	15.12	0.41 R	17.53 %	13
90	$ 762184.26	254.06 %	1709.0	$ 65370.23	6.76 %	12.9	0.39 R	16.9 %	15
92	$ 754956.13	251.65 %	1709.0	$ 68451.34	7.02 %	12.33	0.39 R	16.75 %	15
95	$ 738076.81	246.03 %	1709.0	$ 74629.26	7.48 %	11.23	0.38 R	16.39 %	16
97	$ 723317.5	241.11 %	1709.0	$ 81670.22	8 %	10.24	0.37 R	16.07 %	17
98	$ 712301.95	237.43 %	1709.0	$ 87715.5	8.4 %	9.62	0.36 R	15.83 %	17
99	$ 693707.02	231.24 %	1709.0	$ 97585.51	9.09 %	8.58	0.35 R	15.43 %	19
100	$ 594833.55	198.28 %	1709.0	$ 174362.85	15.47 %	5.09	0.31 R	13.22 %	28

Monte Carlo simulations allow us to evaluate the resilience of each strategy under thousands of randomized trade sequences. By reshuffling returns, skipping 5% of trades to simulate execution friction, and generating 10,000 alternate performance paths, we can measure how the algorithm behaves under conditions that no backtest alone can reveal.

Robustness under uncertainty

The simulations show how the strategy behaves when market conditions, trade order, or volatility deviate from history. A model that holds up across thousands of randomized paths is inherently more resilient and less exposed to curve-fitting.

Statistical confidence levels

The confidence intervals highlight the realistic dispersion of outcomes. Instead of relying on a single historical equity curve, you receive a probabilistic view of returns, drawdowns, and risk-adjusted performance.

Portfolio correlation

	@ES A41-@E...	@GC A65-@...	@NQ A54-@...
@ES A41-@E...		-0.02	0
@GC A65-@...	-0.02		-0.02
@NQ A54-@...	0	-0.02	

< 0.4 Moderate 0.4 - 0.7 Moderate high 0.7 - 1.0 high

Lower correlation = better diversification

Higher correlation = worse diversification

Drawdown | strategy 1	(19 160,00$)
Drawdown | strategy 2	(18 510,00$)
Drawdown | strategy 3	(22 512,50$)
Drawdown | Portfolio	(20 330,00$)
Portfolio diversification & synergy validation	

Summary of portfolio risk and diversification

Synergy ratio (must be < 1)	0.903054
Risk reduction through portfolio diversification	9.69%

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2025	360	-2575	-4950	24330	13850	1425	10277.5	24065	40295	12262.5	0	0	119340
2024	21712.5	6385	23427.5	-8305	20122.5	15750	-340	-2790	9020	980	1677.5	-3625	84015
2023	5090	11925	25400	-6035	2080	17407.5	21077.5	410	-3620	7465	29740	26290	137230
2022	-5100	-5120	10900	-5985	15480	8780	15870	3770	-2320	17100	14010	8600	75985
2021	7775	18105	5820	22072.5	5350	87.5	21445	8190	-6140	9272.5	5542.5	26490	124010
2020	16202.5	11875	-5140	9500	9560	20750	36725	15275	-5340	-14870	10650	17520	122707.5
2019	12255	10300	872.5	9495	-12750	25157.5	6297.5	4910	-785	-2522.5	-917.5	5935	58247.5
2018	8587.5	-2780	-2860	-532.5	6042.5	1567.5	5957.5	4027.5	5390	-12220	-1897.5	-3570	7712.5
2017	3792.5	7622.5	1420	450	4352.5	-3190	5225	-2252.5	1265	-567.5	4122.5	8880	31120
2016	-3800	1507.5	6457.5	3662.5	1740	9565	10375	3247.5	2340	2065	1922.5	3422.5	42505
2015	5800	2242.5	1857.5	3212.5	-2150	-5622.5	565	-1420	2000	10062.5	-5217.5	-400	10930
2014	-1382.5	7022.5	-2652.5	1307.5	3925	3732.5	6505	-1760	-4315	2845	8787.5	-5055	18960
2013	2342.5	-2167.5	2797.5	10652.5	1015	-8865	10442.5	2122.5	-80	1022.5	-1360	-1717.5	16205
2012	12960	5615	3547.5	3547.5	237.5	-2075	6640	2945	925	-6740	960	-522.5	28040
2011	5225	2405	-2832.5	4887.5	-615	-1877.5	6710	15995	7940	12185	-5240	3785	48567.5
2010	-2980	2087.5	5595	1835	-3660	2895	3495	1792.5	3365	7005	7745	3947.5	33122.5

LIVE

How do you select the strategies you offer each month?

We always start with a clear, scientifically tested quantitative hypothesis. Our strategies undergo stress testing, out-of-sample validation, and walk-forward validation. Only the most robust ones are integrated into our portfolios.

Why are some strategies retained and others set aside?

We prioritize robustness and repeatability. From dozens of models, only those suited to the current market are selected. They are then combined to maximize decorrelation and create a portfolio with strong synergy.

Why not stick to just one successful strategy?

Because no model can withstand market cycles forever. Our approach is based on diversification and rotation: exploiting what works now, pausing what's running out of steam.

What is strategy rotation?

Each month, we analyze the performance and relevance of our models. Those that demonstrate consistent momentum are activated, while those that become unsuitable are put on hold. This allows us to stay aligned with market cycles without experiencing long drawdowns.

How do you ensure that your models are not over-optimized?

Our strategies are validated through out-of-sample testing, walk-forward testing, and stress testing under extreme conditions. The goal is not to outperform in backtesting, but to be robust in real-world situations.

What does “skin-in-the-game” mean at Tirmann?

We commit our own capital to the same strategies we offer our clients. This ensures a complete alignment of interests: we face the same risks and benefit from the same opportunities.

Do you still use the same markets and underlying assets?

We work exclusively on futures, with monthly or quarterly rotations depending on the market. These transactions are explained and supported to empower the client.

What do I need to do to put a strategy live?

We provide clear guides and comprehensive support (MultiCharts installation, VPS creation, rollovers). You retain final control, but we assist you every step of the way.

What happens if a strategy has several consecutive losses?

Each strategy incorporates controlled risk from the outset: stop-loss, take-profit, capital management, and extreme stress tests. Once deployed in real-life situations, the model is not altered, even in the event of losses. Discipline ensures robustness: any adjustments are only made during the monthly rotation, never by interrupting an ongoing strategy.

Why choose Tirmann rather than a supplier of isolated algorithms?

Because we don't deliver fixed code, but a living, monitored, and evolving architecture. We build a sustainable, transparent, and collaborative performance framework, with ongoing support.

How can I review the basics of using the software?

All the basics are available in your customer area in the form of instructional videos. They cover each step: installation, configuration, strategy launch, and operational monitoring. These materials are designed to be consulted at any time, so you can refresh your knowledge without relying on our support.

Am I left on my own after setup ?

Never. Our support is continuous, expert, and available 7 days a week. You'll also receive monthly updates to ensure your system keeps performing at its best

What capital is needed ?

The minimum capital required is $20,000. This threshold ensures that our users can achieve meaningful profitability while fully benefiting from the quality and scope of our services.

Do you manage my money ?

No. You retain full control. We design and support the algorithmic architecture, not your capital.

What if I don't have enough capital for a standard contract ?

Our algorithms are designed for futures. You can trade micro contracts simply by dividing the displayed results by 10. The algorithm automatically adapts to the contract size, ensuring the same logic and performance whether you trade micro or standard contracts.