

The background of the entire page is a grayscale aerial topographic map. It shows a complex network of rivers and streams, with a prominent, winding river system in the center-right. The terrain is depicted with various shades of gray, representing elevation and land features. The overall appearance is that of a detailed geographical survey or satellite imagery.

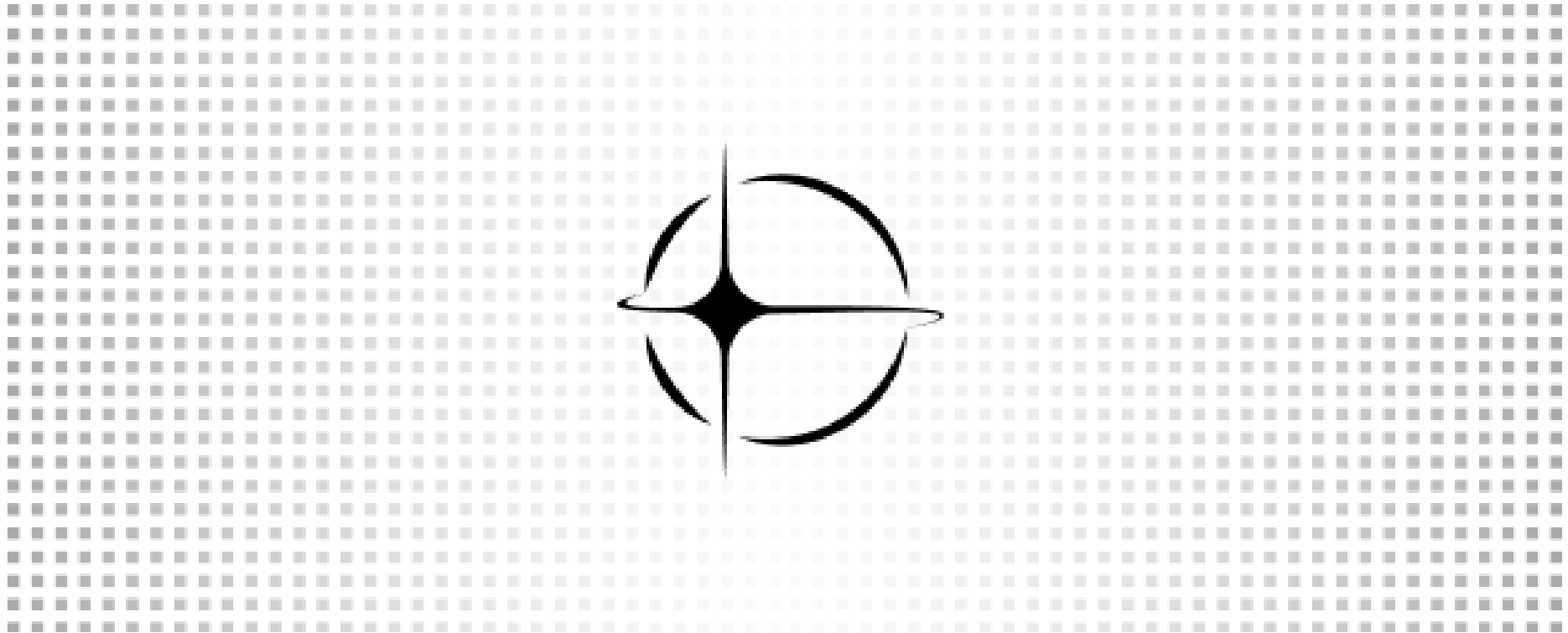
AlphaGe

GeoSense

Making sense of the world through the lens of geography

September 2024
Volume 1, Issue 7

The GeoSense Market Tracking Index



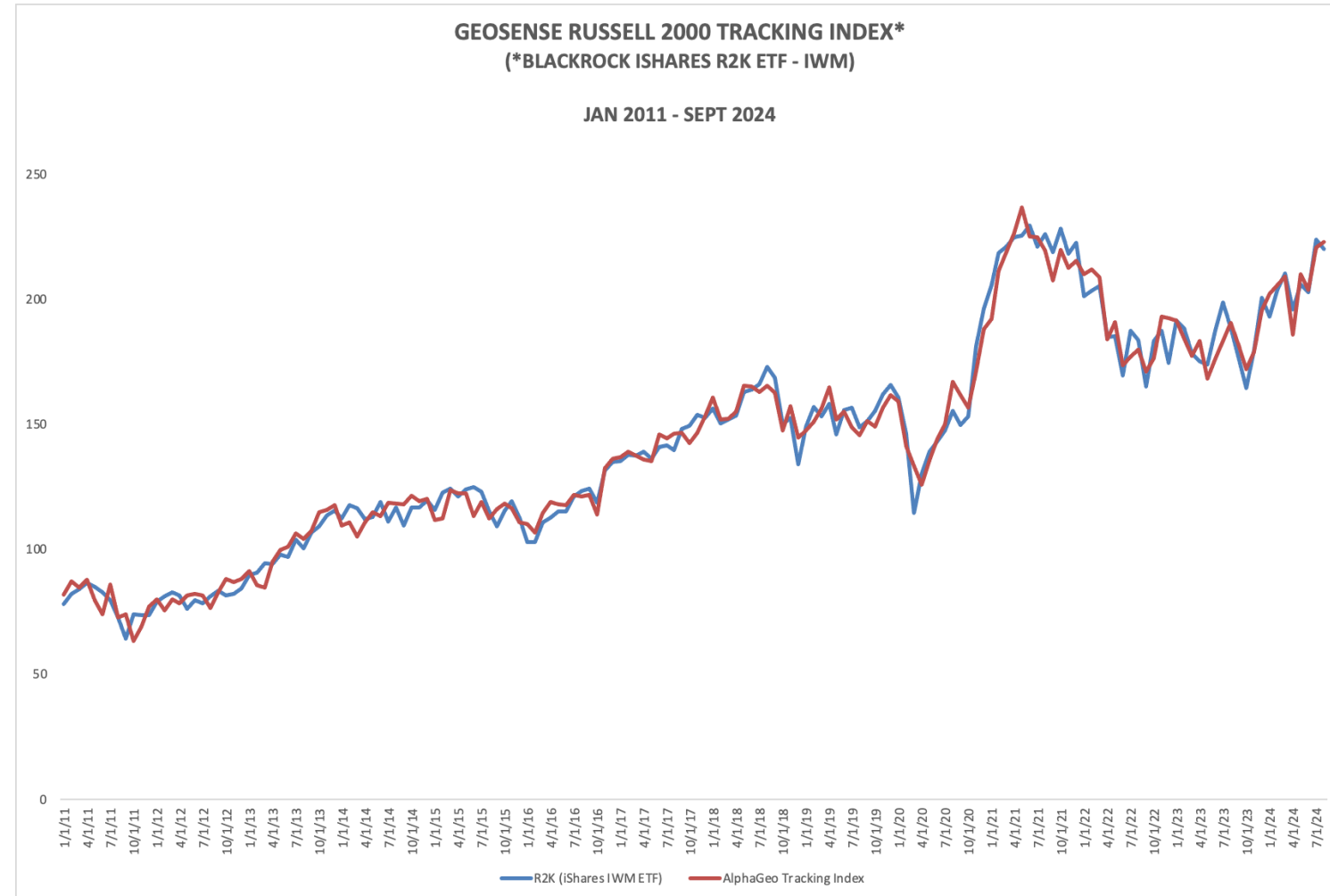
GeoSense's Russell 2000 Market Tracking Index

Strong equity market performance continued into September as our Russell 2000 benchmark ETF (IWM) is still trading in a rangebound pattern between 219 and 222. Once again, our GeoSense tracking index has mirrored the benchmark index, projecting a September month end price of **222**, exhibiting a slight uptick following August; at month end, IWM is currently trading at **219.4**.

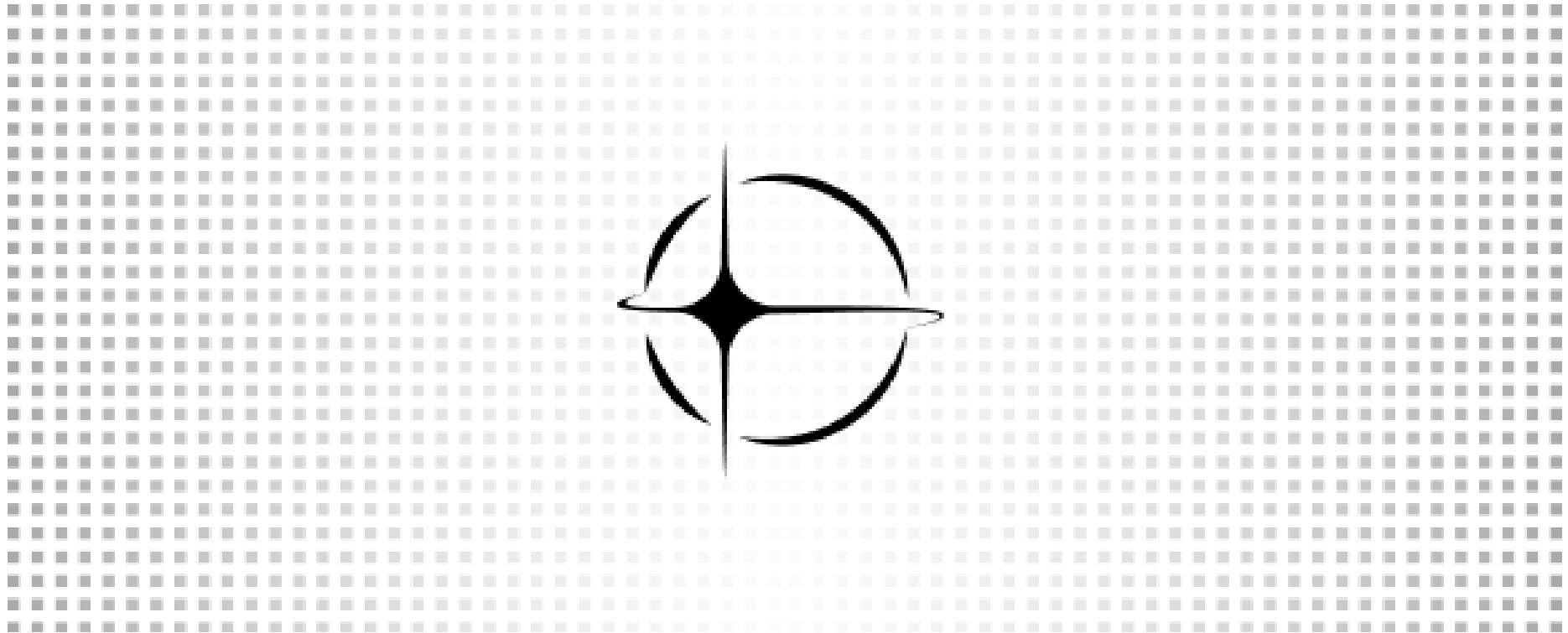
For September 2024, macro factors that the model selected highlighted the following variables:

- Energy prices (primarily oil)
- Currency strength (Dollar/Euro & Dollar/Real)
- Metals (gold, silver, copper)
- Agriculture & soft commodities (cocoa, sugar, wheat)
- Materials (phosphate, urea, iron ore)

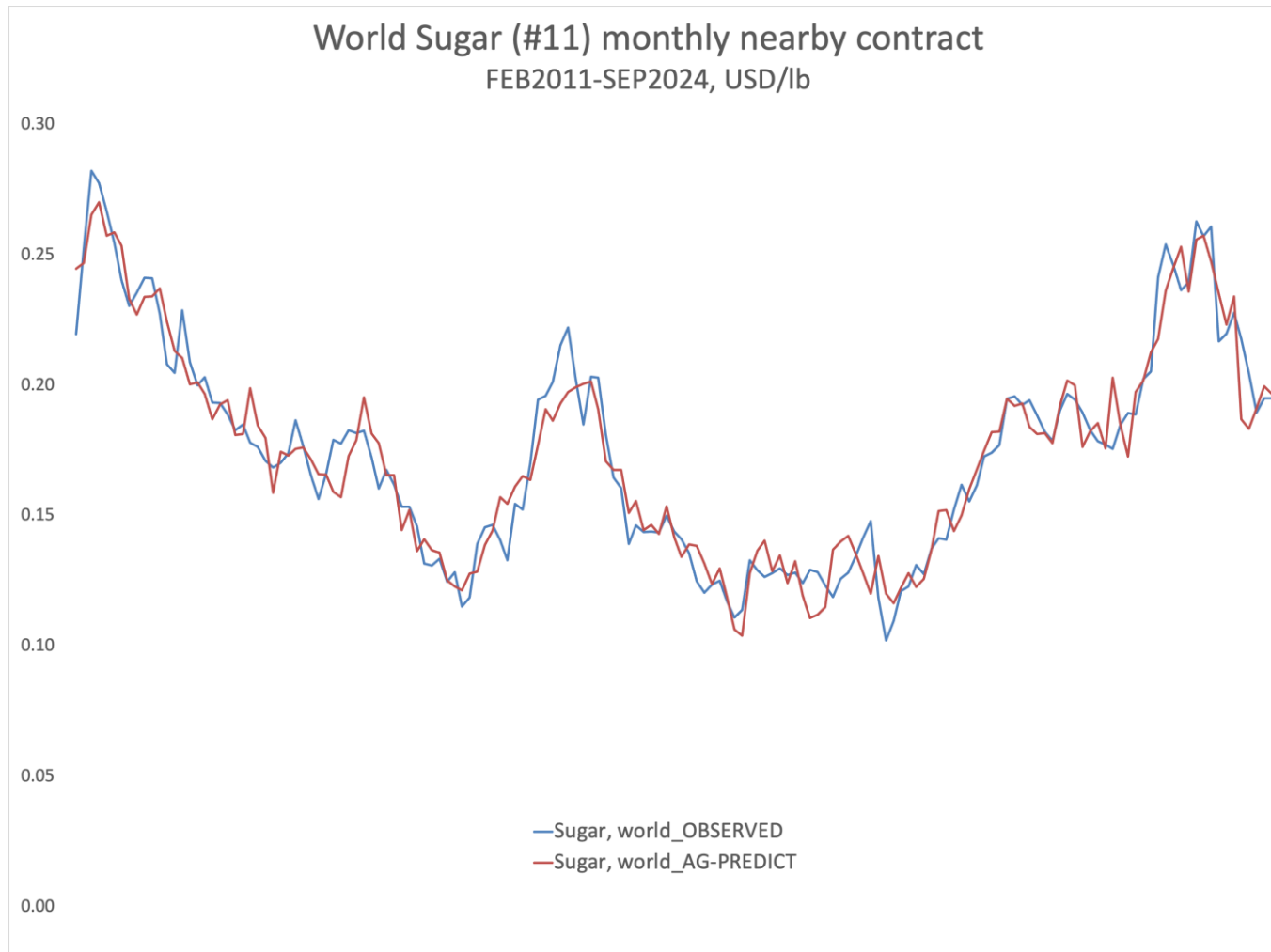
Our tracking index selects predominantly data points with p-values below 0.05; this month the mean absolute percentage error (MAPE) decreased further to 3.5% for in sample statistics, as compared to 5.3% in the previous month.



The GeoSense Commodity Tracker



GeoSense's Commodity Discussion: World Sugar

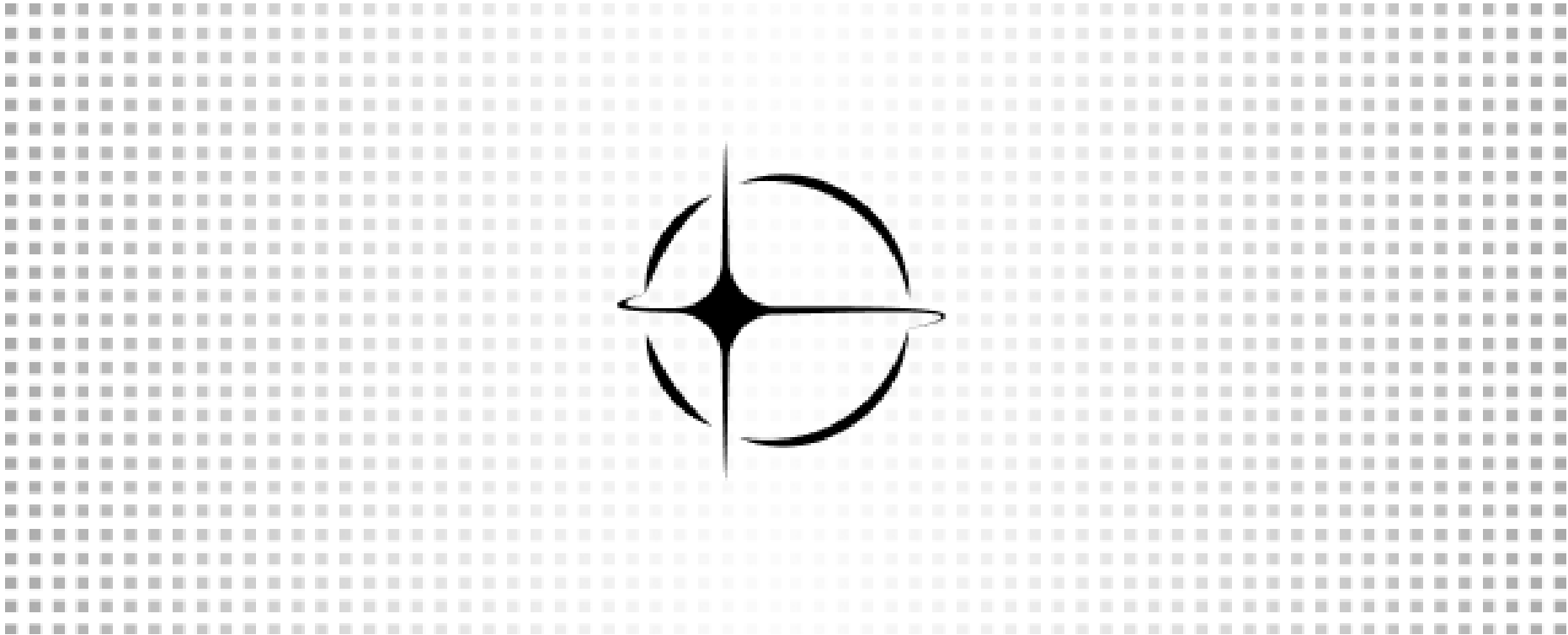


In this month's discussion, we take a deeper dive into the world's most popular sweetener: Sugar.

The world sugar futures market can be characterized by long periods of relative stasis, then a trigger event, usually connected to supply, leads to sharp moves. Model frameworks that aim to capture this volatility attempt to anticipate price swings, and directional positions accordingly. The past year has seen bullish factors stemming from drought in Brazil (the world's largest sugarcane producer), as well as bearish indicators as lower oil prices have reduced demand for sugar derived ethanol in the auto sector. Presently the market is focusing on the bulls as reduced output from Brazil's Centre-South region for the current May/April crop marketing year has the attention of traders and CPG companies hedging their exposures.

Using a multifactorial approach similar to the one that AlphaGeo applies towards the construction of tracking indices, our model aims to capture forward price moves ahead of the market by blending climate and macroeconomic data to project price behavior on a 3-month forward basis. As the chart to the left shows, our approach has been successful in capturing the major price inflection points over the last decade+, and it has also captured the recent rally, evidenced by the data points on the right side of the graph.

The GeoSense Industrial Renaissance Tracker (IRT)

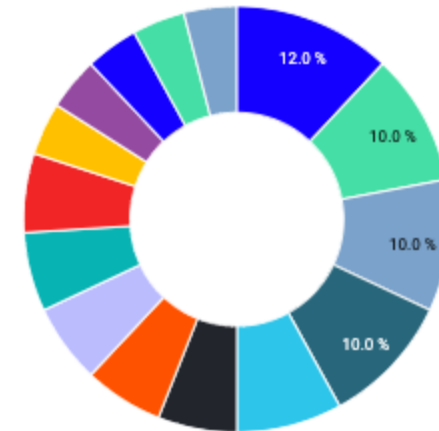


The Industrial Renaissance Tracker (IRT)

AlphaGeo continues to highlight where and how capital can be opportunistically deployed with the global energy transition as a primary thematic market catalyst. To capitalize on a once in a generation investable opportunity, our proprietary Industrial Renaissance Tracker (IRT) was developed to guide investors by:

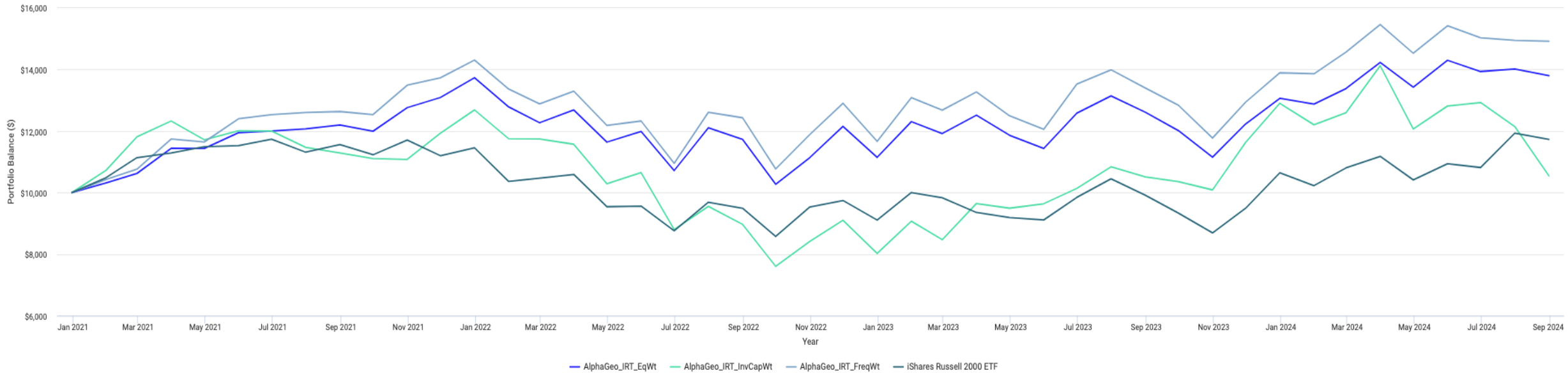
- (a) following announcements and capital flows resulting from legislation or innovation tied to the energy transition,**
- (b) identifying the locations that are poised to benefit and appreciate from these emerging economic opportunities,**
- (c) correlating these geographies to AlphaGeo's proprietary spatial index of risk and resilience indicators, and**
- (d) mapping assets and companies that are most likely to be the winners from this confluence of sustainability drivers.**

Readers can view the IRT portfolio as a "hypothetical ETF" that uses the AlphaGeo investment process to help identify geographically-referenced signals that map to the names that will be leading this transition. Past reports have looked at this portfolio through an equal weighted lens; in July we add a weighting scheme which will allow us to identify and manage assets through an active approach. The new weighting scheme that we are experimenting with is shown below:



The Industrial Renaissance Tracker (IRT)

Portfolio Growth



We continue to display the expanded IRT weighting schemes, depicting the following three categories:

1. *Equal Weight*
2. *Invested Capital-Weighted*
3. *Frequency-Weighted*

Please see our [recent post](#) which describes the weighting schemes and portfolio rebalancing assumptions.

The chart above begins the IRT performance comparison after the initial 2020 COVID market disruption and follows through to the end of the last full trading month (now Sept 2024). We can see that the IRT hypothetical portfolio under all three experimental weighting schemes outperforms the selected benchmark (the BlackRock iShares Russell 2000 ETF) over this period while largely minimizing drawdowns in a diverse and low-concentrated portfolio. The last two months have shown larger drawdowns for the AlphaGeo Invested Capital weighted portfolio, while the other two AG weighting schemes exhibited drawdowns in line with our benchmark.

The Industrial Renaissance Tracker (IRT)

Performance Summary

Metric	AlphaGeo_IRT_EqWt	AlphaGeo_IRT_InvCapWt	AlphaGeo_IRT_FreqWt	iShares Russell 2000 ETF
Start Balance	\$10,000	\$10,000	\$10,000	\$10,000
End Balance	📈 \$13,799	📈 \$10,541	📈 \$14,920	📈 \$11,731
Annualized Return (CAGR)	📈 9.18%	📈 1.45%	📈 11.53%	📈 4.45%
Standard Deviation	21.32%	28.85%	23.09%	20.99%
Best Year	37.34%	60.83%	43.07%	16.84%
Worst Year	-18.85%	-36.77%	-18.45%	-20.48%
Maximum Drawdown	📉 -25.20%	📉 -40.07%	📉 -24.73%	📉 -26.94%
Sharpe Ratio	0.39	0.10	0.47	0.18
Sortino Ratio	0.59	0.14	0.74	0.27
Benchmark Correlation	0.83	0.70	0.82	1.00

While the market tracking period is not very long (2021 -present), we can still begin to judge the GeoSense hypothetical portfolio performance against the benchmark fund to assess how deployed capital would have fared in a passive management strategy. Two of the three AlphaGeo weighting schemes represented by the IRT portfolio outperformed the R2K ETF over the testing period. The third AlphaGeo weighting scheme (weighted on IRT invested capital) suffered larger drawdowns over the last two months; given the more volatile nature of this scheme – see best/worst year statistics – we would advise readers to pay closer attention to the other two AlphaGeo portfolios for comparison.

We encourage readers to focus on capital appreciation over the evaluation period, stressing ending balance and CAGR as performance measures. Also, as we are constructing IRT investment ideas around a longer duration thesis that to date has not been actively managed, we advise readers to pay less attention to Sharpe & Sortino Ratio statistics as they are not relevant as performance indicators in a low turnover/long-horizon investment strategy.

Our Team



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Founder & CEO

GEOGRAPHY and MACROECONOMICS

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Chairman of the Board

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TECH and PRODUCT MANAGEMENT

Former Vice President of Hedge Fund Research and PMO to the Chief Data Office at Preqin, a leading data platform for alternative investors, with expertise in SaaS, client relations, process automation, program management, data management and compliance.

Our global team of seasoned professionals spans the US and Asia – and we plan to hire more data scientists, product managers and sales executives in the months ahead.

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