# Aleph Sigma Strategy Research Note

Systematic Volatility-Spike Model (XAUUSD, 2020–2025)

### **Executive Summary**

Profit Factor	1.2 – 1.4
Sharpe Ratio	1.0 – 1.8
Max Drawdown	19% – 47%
Annual ROI	182% – 479%
Consistency	Net positive each year

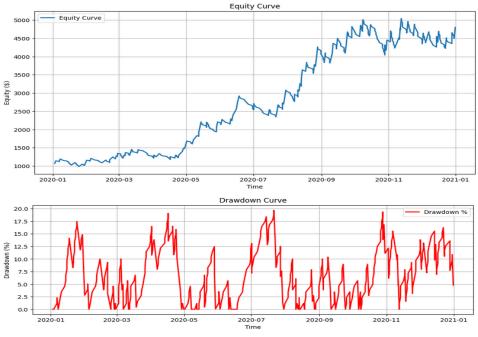
## Methodology

The Aleph Sigma strategy is systematic and rule-based. Signals are generated from volatility spikes, a stop order is armed at the signal price, and if triggered, the trade opens. Only one position may be open at a time. Risk is fixed at 1% of equity per trade with stop-loss set at 70 pips and risk/reward ratio of 7. Broker transaction costs are included: \$4.5 fee per lot and 0.07 spread.

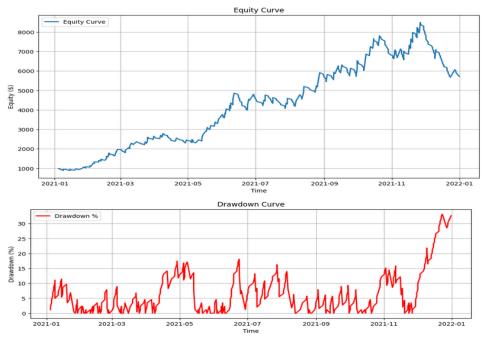
#### **Yearly Performance Summary**

Period	Trades	Win %	PF	Sharpe	Sortino	Calmar	Max DD	Start Bal.	End Bal.	ROI %
2020	411	19.95%	1.34	1.52	8.73	3.76	19.68%	\$106,836	\$480,202	349.5%
2021	416	20.43%	1.28	1.28	7.06	1.68	33.12%	\$98,836	\$572,007	478.9%
2022	412	18.69%	1.32	1.41	7.58	2.06	25.13%	\$98,836	\$321,607	225.4%
2023	408	18.87%	1.43	1.76	10.39	1.44	47.35%	\$106,836	\$337,031	215.5%
2024	504	17.66%	1.21	1.01	8.02	2.05	28.60%	\$98,836	\$278,635	182.0%

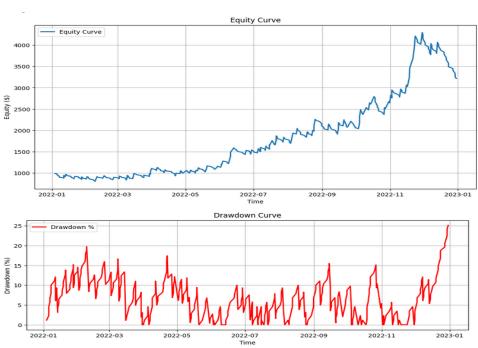
## **Equity & Drawdown Curves**



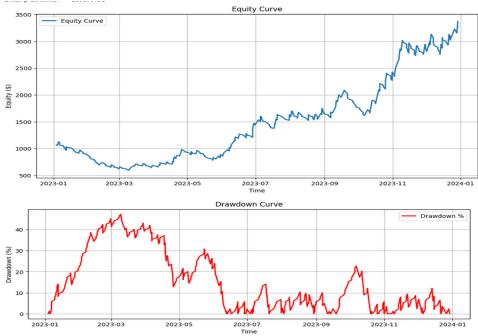
2020 Performance



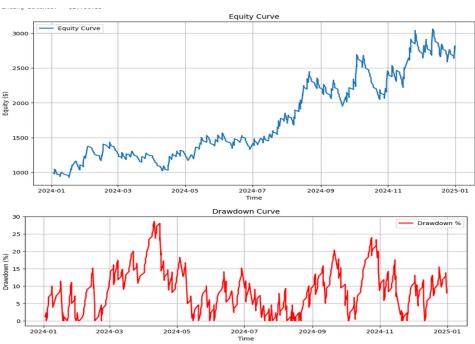
#### 2021 Performance



2022 Performance



2023 Performance



2024 Performance

#### **Conclusion**

Aleph Sigma demonstrated consistent profitability across five years of XAUUSD data. While the win rate remained ~20%, the high reward-to-risk structure and disciplined risk management produced substantial annual returns even through varied market regimes. Drawdowns were significant (up to 47%) but consistently recovered. Future research should test cross-asset generalization and scalability.